Steven P. DenBaars, Ph.D.
Professor, Materials Department
University of California
Santa Barbara, Ca 93106-5050
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Education

Ph.D. 1988	Electrical Engineering, University of Southern California, Los Angeles, California
MS 1986	Materials Science, University of Southern California, Los Angeles, California (Honors)
BS 1984	Materials and Metallurgical Engineering, University of Arizona, Tucson, Arizona (Highest Distinction) Valedictorian

Area of Specialization

Steven DenBaars (Professor of Materials and Electrical and Computer Engineering and the Mitsubishi Chemical Professor in Solid State Lighting and Display) is the Co-Director of SSLEEC. His research areas are in MOCVD growth of wide-bandgap and compound semiconductors, and their application to blue LEDs and laser diodes as well as high power electronic devices.

Previous Academic or Professional Appointments

2014-Present	Executive Director, Solid State Lighting and Energy Electronics Center
2007-2013	Executive Director, Solid State Lighting and Energy Center
2003-2007	Executive Director, Solid State Lighting and Display Center
1998-Present	Professor, University of California, Santa Barbara, Materials Department
1994-1998	Associate Professor, University of California, Santa Barbara, Materials Department
1991-1994	Assistant Professor, University of California, Santa Barbara, Materials Department
1988-1991	Research and Development Engineer, Hewlett-Packard Optoelectrics, San Jose, Ca
1984-1988	Research Assistant, USC Compound Semiconductor Laboratory

Professional Activities

2015-Present	Visiting Honorary Professor, Institute for Advanced Studies
2014	Visiting Honorary Professor, Nanyang Technology Univ. Singapore
2008-2015	Visiting Honorary Professor, Hong Kong University of Science and Technology
2003-2007	Visiting Honorary Professor, Wuhan University
2004	Endowed Chair, Mitsubishi Chemical Chair in Solid State Lighting & Display
2004	Chair, ICMOVPE XII Conference, Maui, Hawaii
2000-Present	Scientific Advisory Board, CREE Inc.
1998-Present	Editorial Board, Compound Semiconductor Magazine
1997-Present	Editor, Materials Research society Conference Proceedings
1997	Visiting Associate Professor, Tokushima University
1996	Visiting Associate Professor, Nagoya University
1995-Present	Editorial Board, MRS Internet Journal of Nitride Research

Awards and Honors

2015-present	Institute for Advanced Studies, Visiting Professor
2015-present	Nanyang Technological Institute, Visiting Professon

Reviewing and Refereeing Activity

2009-Present	Journal of Crystal Growth
2009-Present	Journal of Electronic Materials
2011-Present	Applied Physics Letters
2015-Present	Nature Photonics
2017-Present	Optics Express
2017-Present	Nature Materials
2000-Present	Knut Family Foundation (Sweden)

Special Appointments *(e.g., Editorships, Officer of Professional Organization)*

None at this time.

Other Professional Contributions *(e.g. Consulting or other application of your professional expertise)*

2003-Present	Scientific Advisor, CREE Lighting, Inc.
2007-Present	Consultant, Seoul Semiconductor
2007-Present	Co-Founder,Soraa Inc.
2008-2015	Visiting Professor, Hong Kong University of Science and Technology
2010-Present	Department of Energy Panel on Solid-State Lighting
2013-Present	Co-Founder, Soraa Laser Diode Inc.
2014-Present	Symposium Co-Chair, Japan-America Frontiers of Engineering Conference
2014-Present	Symposium Co-Chair, National Academy of Engineering
2014-Present	Board of Directors, Akoustis Inc.
2015-Present	Visiting Professor, Institute for Advanced Studies, HKUST

[1] Misspelled as "Japan-Americ Fromntiers of Engineering" Conference in previous Bio-Biobib..

Patents

Patent No.	Application Title
8,772,758	Suppression of inclined defect formation and increase in critical thickness by silicon doping on non-c-plane (Al,Ga,In)N
8,790,943	(Al,ga,in)n diode laser fabricated at reduced temperature
8,791,000	Planar nonpolar m-plane group iii nitride films grown on miscut substrates
8,795,430	Method of improving surface morphology of (Ga,Al,In,B)N thin films and devices grown on nonpolar or semipolar (Ga,Al,In,B)N..
8,795,440	Growth of planar non-polar {1-1 00} m-plane gallium nitride with metalorganic chemical vapro deposition(mocvd)
8,809,867	Dislocation reduction in non-polar iii-nitride thin films
8,809,867	Dislocation reduction in non-polar iii-nitride thin films
8,835,200	High light extraction efficiency nitride based light emitting diode by surface roughening
8,835,959	Transparent light emitting diodes
8,841,691	Light emitting diode structure utilizing zinc oxide nanorod arrays on one or more surfaces, and a low cost method of producin
8,853,669	Limiting strain relaxation in iii-nitride heterostructures by substrate and epitaxial layer patterning
8,860,051	Textured phosphor conversion layer light emitting diode

8,866,126	Anisotropic strain control in semipolar nitride quantum wells by partially or fully relaxed aluminum indium gallium nitride
8,866,149	Method for the reuse of gallium nitride epitaxial substrates
8,882,935	Fabrication of nonpolar indium gallium nitride thin films, heterostructures and devices by metalorganic chemical vapor...
8,956,896	Metalorganic chemical vapor deposition (mocvd) growth of high performance non-polar iii-nitride optical devices
9,039,834	Dislocation reduction in non-polar iii-nitride thin films
9,040,326	High light extraction efficiency nitride based light emitting diode by surface roughening
9,040,327	Alxgal-x-n-cladding-free nonpolar iii-nitride based laser diodes and light emitting diodes
9,054,498	(Al,ga,in)n diode laser fabricated at reduced (al,ga,in)n diode laser fabricated at reduced temperature
9,076,927	(In,ga,al)n optoelectronic devices grown on relaxed (in,ga,al)n-on-gan base layers
9,077,151	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
9,130,119	Non-polar and semi-polar light emitting devices
9,136,673	Structure and method for the fabrication of a gallium nitride vertical cavity surface emitting laser
9,147,733	Method for the reuse of gallium nitride epitaxial substrates
9,159,553	Semipolar nitride-based devices on partially or fully relaxed alloys with misfit dislocations at the heterointerface
9,219,205	Optical designs for high-efficacy white-light emitting diodes
9,231,376	Technique for the growth and fabrication of semipolar (ga,al,in,b) n thin films heterostructures, and devices
9,240,529	Textured phosphor conversion layer light emitting diode
9,340,899	Planar nonpolar group-iii nitride films grown on miscut substrates
9,356,431	High power blue-violet iii-nitride semipolar laser diodes
9,396,943	Method for the reuse of gallium nitride epitaxial substrates
9,515,240	Optical designs for high-efficacy white-light emitting diodes
9,574,728	Laser-driven white lighting system for high-brightness applications
9,611,987	White light source employing a iii-nitride based laser diode pumping a phosphor
9,640,947	Structure and method for the fabrication of a gallium nitride vertical cavity surface emitting laser
9,653,655	Light emitting diodes with zinc oxide current spreading and light extraction layers deposited from low temperature aqueous so
9,773,704	Method for the reuse of gallium nitride epitaxial substrates
9,793,435	Technique for the growth and fabrication of semipolar (ga,al,in,b) n thin films heterostructures, and devices
9,828,695	Planar nonpolar group-iii nitride films grown on miscut substrates
9,859,464	Textured phosphor conversion layer light emitting diode

9,893,236	Non-polar (a1,b,in,ga)n quantum well
9,917,422	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
9,927,076	Laser-driven white lighting system for high-brightness applications
9,935,243	Multistep deposition of zinc oxide on gallium nitride
9,951,912	Tunable white light based on polarization sensitive light-emitting diodes

Issed Foreing

FF Country Name	FF Patent No.	Application Title
CHINA	2011800120489	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
CHINA	104798203B	White light source employing a iii-nitride based laser diode pumping a phosphor
GERMANY	20070386977	Textured phosphor conversion layer light emitting diode
EUROPEAN PATENT OFFICE	2087563	Textured phosphor conversion layer light emitting diode
FRANCE	2087563	Textured phosphor conversion layer light emitting diode
UNITED KINGDOM	2087563	Textured phosphor conversion layer light emitting diode
ITALY	2087563	Textured phosphor conversion layer light emitting diode
JAPAN	5570116	Defect reduction of non-polar and semi-polar iii-nitrides with sidewall lateral epitaxial overgrowth (sleo)
JAPAN	5645887	Method for enhancing growth of semipolar (al,in,ga,b)n via metalorganic chemical vapor deposition
JAPAN	5684455	Method for conductivity control of semipolar (al,in,ga,b)n
JAPAN	5706601	Technique for the growth of planar semi-polar gallium nitride
JAPAN	5739824	Method of improving surface morphology of (Ga,Al,In,B)N thin films and devices grown on nonpolar or semipolar (Ga,Al,In,B)N..
JAPAN	5743127	Technique for the growth and fabrication of semipolar (ga,al,in,b) n thin films heterostructures, and devices
JAPAN	5774476	Method of creating a hexagonal wurtzite single crystal and hexagonal wurtzite single crystal substrate
JAPAN	5838523	Method for improved growth of semipolar (al,in,ga,b)n
JAPAN	5896442	Method for improved growth of semipolar (al,in,ga,b)n
JAPAN	5,972,798	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
REPUBLIC OF KOREA (SOUTH KOREA)	1416838	Method for conductivity control of semipolar (al,in,ga,b)n
REPUBLIC OF KOREA (SOUTH KOREA)	1499203	Growth of planar non-polar {1-1 00} m-plane gallium nitride with metalorganic chemical vapro deposition(mocvd)
REPUBLIC OF KOREA (SOUTH KOREA)	1510461	Method for improved growth of semipolar (al,in,ga,b)n

REPUBLIC OF KOREA (SOUTH KOREA)	1515058	Planar nonpolar m-plane group iii nitride films grown on miscut substrates
REPUBLIC OF KOREA (SOUTH KOREA)	10-1537300	Planar nonpolar m-plane group iii-nitride films grown on miscut substrates
REPUBLIC OF KOREA (SOUTH KOREA)	10-1623422	Optical designs for high-efficacy white-light emitting diodes
REPUBLIC OF KOREA (SOUTH KOREA)	1668385	Method of creating a hexagonal wurtzite single crystal and hexagonal wurtzite single crystal substrate
REPUBLIC OF KOREA (SOUTH KOREA)	1810613	Method of creating a hexagonal wurtzite single crystal and hexagonal wurtzite single crystal substrate
NETHERLANDS (HOLLAND)	2087563	Textured phosphor conversion layer light emitting diode
TAIWAN	I445054	Growth of reduced dislocation density non-polar gallium nitride by hybrid vapor phase epitaxy
TAIWAN	I446569	Standing transparent mirrorless light emitting diode
TAIWAN	I452726	High light extraction efficiency nitride based light emitting diode by surface roughening
TAIWAN	I455181	Technique for the growth and fabrication of semipolar (ga,al,in,b) n thin films heterostructures, and devices
TAIWAN	I460881	Transparent light emitting diodes
TAIWAN	I469186	Planar nonpolar m-plane group iii nitride films grown on miscut substrates
TAIWAN	I492411	Non-polar and semi-polar light emitting devices
TAIWAN	I490918	Method for improved growth of semipolar (al,in,ga,b)n
TAIWAN	I518941	Standing transparent mirrorless light emitting diode
TAIWAN	I560963	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
TAIWAN	I604512	Planar nonpolar m-plane group iii nitride films grown on miscut substrates

Pending Patents

Pending US

Full Case	**Application Title**
2002-301-6	Non-polar (al, b, in,ga)n quantum well and heterostructure materials and devices
2005-668-6	Technique for the growth and fabrication of semipolar (ga,al,in,b) n thin films, heterostructures, and devices
2007-282-4	Transparent light emitting diodes
2007-503-6	Optical designs for high-efficacy white-light emitting diodes
2008-004-4	Planar nonpolar group iii-nitride films grown on miscut substrates
2008-411-2	Method of creating a hexagonal wurtzite single crystal and hexagonal wurtzite single crystal substrate

2010-275-2	Semipolar {20-21} iii-nitride laser diodes with etched mirrors
2010-543-4	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
2015-204-2	High intensity solid state white emitter which is laser driven and uses single crystal, ceramic or polycrystalline phosphor
2015-205-2	Flexible arrays of micro light emitting diodes using a photoelectrochemical (pec) liftoff technique
2015-904-2	Hybrid growth method for iii-nitride tunnel junction devices
2016-114-4	Multistep deposition of zinc oxide on gallium nitride
2016-245-2	Iii-nitride tunnel junction with modified p-n interface
2016-324-2	Iii-nitride light emitting diodes with tunnel junctions wafer bonded to a conductive oxide and having optically pumped layers
2018-252-1	Method for thermal treatment of semiconductor layers with reduced evaporation
2018-256-1	Reduction in leakage current and increase in efficiency of iii nitride leds by sidewall passivation using atomic layer deposi
2018-257-1	Laser system for horticultural lighting
2018-260-1	Delta doping for mocvd tunnel junction growth in iii-nitride devices
2018-261-1	Realization of mocvd tunnel junction contacts in large area iii-nitride devices
2018-416-1	Laser lighting system incorporating additional scattered laser
2018-765-1	Undirectional photoluminescence with gan/ingan quantum well metasurface

Pending Foreing

UC Case No.	**Country Name**	**Application Title**
2010-543-2	CHINA	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
2016-114-3	CHINA	Multistep deposition of zinc oxide on gallium nitride
2002-301-2	EUROPEAN PATENT OFFICE	Non-polar (al, b, in,ga)n quantum well and heterostructure materials and devices
2002-301-3	EUROPEAN PATENT OFFICE	Non-polar (al, b, in,ga)n quantum well and heterostructure materials and devices
2005-668-2	EUROPEAN PATENT OFFICE	Technique for the growth and fabrication of semipolar (ga,al,in,b) n thin films heterostructures, and devices
2010-543-2	EUROPEAN PATENT OFFICE	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
2015-904-2	EUROPEAN PATENT OFFICE	Hybrid growth method for iii-nitride tunnel junction devices
2016-114-3	EUROPEAN PATENT OFFICE	Multistep deposition of zinc oxide on gallium nitride
2002-301-3	JAPAN	Non-polar (al, b, in,ga)n quantum well and heterostructure materials and devices

2002-301-5	JAPAN	Non-polar (al, b, in,ga)n quantum well and heterostructure materials and devices
2002-301-6	JAPAN	Non-polar (al, b, in,ga)n quantum well and heterostructure materials and devices
2002-301-6	JAPAN	Non-polar (al, b, in,ga)n quantum well and heterostructure materials and devices
2005-668-2	JAPAN	Technique for the growth and fabrication of semipolar (ga,al,in,b) n thin films heterostructures, and devices
2005-668-2	JAPAN	Technique for the growth and fabrication of semipolar (ga,al,in,b) n thin films heterostructures, and devices
2010-543-2	JAPAN	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
2010-543-2	JAPAN	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
2010-275-2	REPUBLIC OF KOREA (SOUTH KOREA)	Semipolar {20-21} iii-nitride laser diodes with etched mirrors
2010-275-2	REPUBLIC OF KOREA (SOUTH KOREA)	Semipolar {20-21} iii-nitride laser diodes with etched mirrors
2010-183-2	REPUBLIC OF KOREA (SOUTH KOREA)	High brightness light emitting diode covered by zinc oxide layers on multiple surfaces grown in low temperature aqueous solut
2010-543-2	REPUBLIC OF KOREA (SOUTH KOREA)	Semi-polar iii-nitride optoelectronic devices on m-plane substrates with miscuts less than +/-15 degrees in the c-direction
2013-319-2	REPUBLIC OF KOREA (SOUTH KOREA)	White light source employing a iii-nitride based laser diode pumping a phosphor
2017-130-2	PATENT COOPERATION TREATY	Methods for fabricating iii-nitride tunnel junction devices
2017-131-2	PATENT COOPERATION TREATY	Iii-nitride tunnel junction light emitting diode with wall plug efficiency of over seventy percent
2017-132-2	PATENT COOPERATION TREATY	Contact architectures for tunnel junction devices
2017-139-2	PATENT COOPERATION TREATY	Monolithic translucent bamgal10o17:eu2+ phosphors for laser-driven solid state lighting
2007-272-4	TAIWAN	Standing transparent mirrorless light emitting diode
2007-316-2	TAIWAN	Metalorganic chemical vapor deposition (mocvd) growth of high performance non-polar iii-nitride optical devices
2013-044-3	TAIWAN	Structure and method for the fabrication of a gallium nitride vertical cavity surface emitting laser

Cumulative List of Publications: (the first author listed is the major contributor to the publication)

No.	Year	Title and Authors	Publisher	Category
1	1986	"Homogeneous and Heterogeneous Thermal Decomposition Rates of Trimethylgallium and Arsine and Their Relevance to the Growth of GaAs by MOCVD", S.P. DenBaars, B.Y. Maa, P.D. Dapkus, A.D. Danner and H.C. Lee	*J. Crystal Growth, 77, 186*	Refereed Conference Proceedings
2	1987	"The Effects of Hydrodynamics Interrupted Growth and Growth Temperature on the Interface Properties of AlGaAs/GaAs Quantum Well Grown by Metalorganic Chemical Vapor Deposition", S.P. DenBaars, H.C. Lee, A. Hariz, and P.D. Dapkus	*Technical Program of the Electronic Materials Conference, paper N7, 50*	Refereed Conference Proceedings
3	1987	"GaAs/AlGaAs Quantum Well Lasers with Active Regions Grown by Atomic Layer Epitaxy",S.P. DenBaars, C.A. Hariz, and P.D. Dapkus	*Appl. Phys. Lett. 51, 1530*	Journal
4	1987	, "The Growth of AlGaAs/GaAs Heterostructures by Atomic Layer Epitaxy" <u>Epitaxy of Semiconductor Layered Structures</u>, S.P. DenBaars, A. Hariz, C.A. Beyler, B.Y. Maa, Q. Chen, and P.D. Dapkus	*Mat. Res. Soc. Proceedings, Vol. 102,* *p. 527, Boston, MA*	Refereed Conference Proceedings
5	1987	"The Role of Surface and Gas Phase Reactions in Atomic Layer Epitaxy", S.P. DenBaars, P.D. Dapkus, Q. Chen, W.G. Jeong, and B.Y. Maa	*Materials Research Society, Symposium C, Epitaxy of Semiconductor Layered Structures, (Paper C7.9), Boston, MA, December*	Refereed Conference Proceedings
6	1987	"AlGaAs/GaAs Quantum Wells Grown by Atomic Layer Epitaxy", S.P. DenBaars, C.A. Beyler,A. Hariz, and P.D. Dapkus	*Technical Digest Third Biennial OMVPE Workshop, (Paper A2), Brewster, MA, September*	Conference Proceedings
7	1988	"Atomic Layer Epitaxy for the Growth of Heterostructure Devices", S.P. DenBaars, P.D. Dapkus, C.A. Beyler, A. Hariz, and K. Dzurko	*Crystal Growth, 93, 195*	Journal
8	1988	"Thermal and Laser Assisted Atomic Layer Epitaxy of Compound Semiconductors", S.P. DenBaars, P.D. Dapkus, J.S. Osinski, M. Zandian, C.A. Beyler, and K.M. Dzurko	*Int. Symp. GaAs and Related Compounds, Atlanta, GA 1988, Inst. Phys. Conf. Ser. No. 96, 89*	Refereed Conference Proceedings
9	1989	"Reaction Mechanisms in the Thermal Decomposition of Triethylarsenic and Diethylarsine", S.P. DenBaars, B.Y. Maa, P.D. Dapkus, and A. Melas	*J. Electrochem. Soc., 136, No. 7, 2067*	Journal
10	1989	"Minority Carrier Lifetimes in Undoped AlGaAs/GaAs Multiple Quantum Wells", A. Hariz, P.D. Dapkus, H.C. Lee, E.P. Menu, and S.P. DenBaars	*Appl. Phys. Lett., 54, 635*	Journal

11	1989	"The Role of Surface and Gas Phase Reactions in Atomic Layer Epitaxy", P.D. Dapkus, S.P. DenBaars, Q. Chen, W.G. Jeong, and B.Y. Maa	*Prog. Crystal Growth and Charact., 19, 137*	Journal
12	1989	"Atomic Layer Epitaxy of Compound Semiconductors with Metalorganic Precursors", S. P. DenBaars and P.D. Dapkus	*J. Crystal Growth, 98, 195*	Journal
13	1990	"Atmospheric Atomic Layer Epitaxy", P.D. Dapkus, B.Y. Maa, Q. Chen, W.G. Jeong, and S.P. DenBaars,	*Acta Polytechnica Scandivica, Ch. 195, 39*	Journal
14	1991	"Atmospheric Atomic Layer Epitaxy: Mechanisms and Applications", P.D. Dapkus, B.Y. Maa, Q. Chen, W.G. Jeong, and S.P. DenBaars	*J. Crystal Growth, 107, 73*	Journal
15	1992	"Epitaxial AlGaAs/AlAs Distributed Bragg Reflectors for Green (550nm) Lightwaves", D.B. Young, D.I. Babic, S.P. DenBaars, and L.A. Coldren	*Electronic Lett. 28, No.20, 1873*	Journal
16	1992	"Growth of High Quality $In_xGa_{1-x}As$/InP Quantum Wells with Tertiarybutylarsine and Tertiarybutylphosphine", M. P. Mack, C. M. Reaves, P. J. Corvini, S.P. DenBaars, M. S. Leonard, M. Mondry and J. L. Merz	*Technical Program of the Electronic Materials Conference, J. Electronic Materials, 21,No.7, Paper J2, p.39*	Conference Proceedings
17	1992	"Fe-Doped Semi-Insulating InP Grown by Atmospheric Pressure MOCVD Using Tertiarybutylphosphine, Trimethylindium, and Ferrocene", P.J. Corvini, M. Hashemi, S.P. DenBaars, J.E. Bowers	*Technical Program of the Electronic Materials Conference, J. Electronic Materials, 21,No.7, Paper P4, p.54*	Conference Proceedings
18	1992	"Wide tunability and large mode-suppression in a multisection semiconductor laser using sampled gratings", V.J. Jayaraman, L.A. Coldren, S.P. DenBaars, A. Mather, and P.D. Dapkus	*Proceedings of the Integrated Photonics Research Conference, New Orleans, LA, WF-1, pp. 54-55*	Conference Proceedings
19	1992	"High Performance Heterojunction InGaAs/InP JFET grown by MOCVD using Tertiarybutylarsine and Tertiarybutylphosphine", M.M. Hashemi, J.B. Shealy, S.P. DenBaars, U.K. Mishra	*P7, IEDM Tech. Digest, 311*	Journal
20	1992	S.P. DenBaars, "Visible Light Emitting Diodes: Materials Growth and Properties",	Solid State Luminescence-Theory, Materials & Devices, Chapter 8, pp. 263-291. A.H. Kitai, editor (Chapman and Hall, London, England)	Book Chapter
21	1993	"High Speed p+ GaInAs-n-InP Heterojunction JFETs (HJFETs) grown by MOCVD", M.M. Hashemi, J.B. Shealy, S.P. DenBaars, U.K. Mishra	*IEEE Electron. Device Lett. 14, No. 2., 60*	Journal

22	1993	"High Speed Heterojunction JFETs grown by Non-Hydride MOCVD", M.M. Hashemi, J.B. Shealy, S.P. DenBaars, and U.K. Mishra	Proceedings of Ultrafast electronics and Optoelectronics Conference	Conference Proceedings
23	1993	"Low Threshold 1.5 µm Quantum Well Lasers Grown by Atmospheric Pressure MOCVD with Tertiarybutylarsine and Tertiarybutylphosphine", M. E. Heimbuch, A.L. Holmes, S.P. DenBaars, L.A. Coldren, and J.E. Bowers	Electronics Letters, 29, No. 4, pp.340-341	Journal
24	1993	"Novel High Power Heterojunction JFETs (HJFETs) Grown by MOCVD", M.M. Hashemi, J.B. Shealy, S.P. DenBaars, and U.K. Mishra	IEEE Proceedings of the 5th Intl. InP and Related Materials Conf.,Paris, France, ISBN 0-7803-0993-6, pp. 375-378, IEEE Society, Piscataway, New Jersey	Conference Proceedings
25	1993	"High Quality Long Wavelength Lasers Grown by Atmospheric Pressure MOCVD with Liquid Group V Sources", M. E. Heimbuch A.L. Holmes, Jr., S.P. DenBaars, L.A. Coldren, and J.E. Bowers	IEEE Proceedings of the 5th Intl. InP and Related Materials Conf.,Paris, France, ISBN 0-7803-0993-6, pp. 239-242, IEEE Society, Piscataway, New Jersey	Conference Proceedings
26	1993	"Photoluminescence Studies of a Quantum Well Modulated by Faceting on GaAs(11) Surfaces", S. Tomiya, C.M. Reaves, M. Krishnatmurthy, M. Wassermeier, D. Bimberg, P.M. Petroff, S.P. DenBaars	Mat. Research Soc. Proceedings, San Francisco, April	Refereed Conference Proceedings
27	1993	"35 GHz fmax InP JFET Grown by MOCVD Using Tertiarybutylphosphine (TBP)", M.M. Hashemi, J.B. Shealy, S.P. DenBaars, and U.K. Mishra	*Electronics Lett. 29, No. 4, pp.372-374*	Journal
28	1993	"Low Threshold Strained $In_xGa_{1-x}As_yP_{1-y}$/InP Quantum Well Lasers Grown with TBA and TBP", S.P. DenBaars, A.L.Holmes, JR., M. E. Heimbuch, and C. M. Reaves	Late News paper, Extended Abstracts of European Workshop on MOVPE-V, pp. E-19-21, Malmo, Sweden, June	Conference Proceedings
29	1993	"Strained InGaAsP Single Quantum Well Lasers Grown with Tertiarybutylarsine and Tertiarybutylphosphine", A.L. Holmes, M.E. Heimbuch, and S.P. DenBaars	*Appl. Physics Lettters, V63, N25:3417-3419, December*	Journal
30	1993	"Direct Formation of Quantum-sized Dots from Uniform Coherent Islands of InGaAs on GaAs Surfaces", D.Leonard, M. Krishnamurty, C.M. Reaves, P.M. Petroff, and S.P. DenBaars	*, V63, N23:3203-3205, December*	Journal
33	1993	"Low Threshold 1.5 Mu-M Quantum Well Lasers Grown by Atmospheric Pressure MOCVD with Tertiarybutylarsine (TBA) and Tertiarybutylphosphine (TBP)", M. E. Heimbuch, A. L. Holmes, M. P. Mack, S. P. DenBaars	*Electronics Letters, V29, N4: 340-342*	Journal

34	1993	"35 GHz F (Max) InP JFet Grown by Non-Hydride MOCVD", M. M. Hashemi, J. B. Shealy, S. P. DenBaars, U. K. Mishra	*Electronics Letters, V29, N4: 372-373*	Journal
35	1993	"High-Speed P+ GaInAs-N InP Heterojunction JFets (HJFETS) Grown by MOCVD", M. M. Hashemi, J. B. Shealy, S. P. DenBaars, U. K. Mishra	*IEEE Electron Device Letters, V14, N2: 60-62*	Journal
36	1993	"Epitaxial AlGaAs/AlAs Distributed Bragg Reflectors for Green (550 NM) Lightwaves", D. B. Young, D. I. Babic, S. P. DenBaars, L. A. Coldren	*Electronics Letters, V28, N20: 1873-1874*	Journal
37	1993	"Photoluminescence Studies of a Quantum Well Modulated by Facetting on GaAs(110) Surfaces", S. Tomiya, C.M. Reaves, M. Krishnamurthy, M. Wassermeier, D. Bimberg, P.M. Petroff, and S.P. DenBaars	Common Themes and Mechanisms of Epitaxial Growth, edited by P. Fuoss, J. Tsao, D.W. Kisker, A. Zangwill, and T. Kuech (Materials Research Society. Symposium Proceedings Vol. 312)	Conference Proceedings
38	1994	"Tertiarybutylarsine and Tertiarybutylphosphine for the MOCVD Growth of Low Threshold 1.5 5µm $\mathrm{In_XGa_{1-X}AsInP}$ Quantum Well Lasers", M. Heimbuch, A.L. Holmes, C.M. Reaves, S.P. DenBaars, and L.A. Coldren	*Journal of Electronic Materials, V23, N2:87-91, February*	Journal
39	1994	"High Performance InP JFET grown by Metalorganic Chemical Vapor Deposition using Tertiarybutylphosphine (TBP) as the Phosphorous Source", M.M. Hashemi, J.B. Shealy, S.P. DenBaars, U.K. Mishra	*Journal of Electronic Materials, V23, N2:233-237, February*	Journal
40	1994	"Formation of Coherently Strained Self-Assembled InP Quantum Islands on InGaP/GaAs", S. P. DenBaars, C. M. Reaves, V. Bresslerhill, S. Varma	*Journal of Crystal Growth, V145, N1-4: 721-727*	Journal
41	1994	"Flow Modulation Epitaxy of GaXIn(1-X)As/AlAs Heterostructures on InP for Resonant Tunneling Diodes", B.P. Keller, J.C. Yen, A.L.Homes, S.P.DenBaars, U.K.Mishra	*Applied Surface Science, V82-3, 126-131*	Journal
42	1994	"Luminescence Enhancement of InGaAs/InP Surface Quantum Wells by Room-Temperature Ion-Gun Hydrogenation", Y. L. Chang, I. H. Tan, C. Reaves, E. Hu, S. P. DenBaars	*Journal of Vacuum Science and Technology B, V12, N6: 3704-3707*	Journal
43	1994	"MBE and MOCVD Growth and Properties of Self-Assembling Quantum Dot Arrays in III-V Semiconductor Structures", P. M. Petroff, S. P. DenBaars	*Superlattices and Microstructures, V15, N1: 15-21*	Journal

44	1994	"GaXIn1-XAs/AlAs Resonant Tunneling Diodes Grown by Atmospheric Pressure Metalorganic Chemical Vapor Deposition", B. P. Keller, J. C. Yen, S. P. DenBaars, U. K. Mishra	*Applied Physics Letters, V65, N17: 2159-2161*	Journal
45	1994	"Widely Tunable Continuous-Wave InGaAsP/LnP Sampled Grating Lasers", V. Jayaraman, M. E. Heimbuch, L. A. Coldren, S. P. DenBaars	*Electronics Letters, V30, N18: 1492-1494.*	Journal
46	1994	"Field-Induced Guide Antiguide Modulators on InGaAsP/InP", S. L. Lee, M. E. Heimbuch, C. J. Mahon, N. Dagli	*Electronics Letters, V30, N12:954-956*	Journal
47	1994	"Passivation of InGaAs/InP Surface Quantum Wells by Ion-Gun Hydrogenation", Y. L. Chang, I. H. Tan, C. Reaves, J. Merz, S. P. DenBaars	*Applied Physics Letters, V64, N20: 2658-2660*	Journal
48	1994	"Continuous-Wave Operation of Sampled Grating Tunable Lasers with 10mwatt Output Power, >60nm Tuning, and Monotonic Tuning CVharacteristics", V.J. Jayaraman, M.E. Heimbuch, L.A. Coldren, and S.P. DenBaars	IEEE Proceedings of the 6th Intl. InP and Related Materials Conf	Conference Proceedings
49	1994	"Compressively Strained 1.55µm $In_xGa_{1-x}As_yP_{1-y}$/InP Quantum Well Laser Diodes Grown with TBA and TBP", S.P. DenBaars, A.L. Holmes, M.H. Heimbuch	SPIE Proceedings of the Optoelectronics/Laser Conf.	Conference Proceedings
50	1994	"Coupling of Terahertz Radiation with Wispering Gallery Mode Microdisk Lasers", K.B. Nordstrom, S.J. Allen, M.E. Heimbuch, S.P. DenBaars, A.F.J. Levi	Proceedings of the Conf on Laser and Electro-Optics	Conference Proceedings
51	1994	"GaInAs/GaInP Double Barrier Structures: Growth and Application in Tunneling Diodes", C.M. Reaves, J.C. Yen, N.A. Cevallos, U.K. Mishra, and S.P. DenBaars	Compound Semiconductor Epitaxy, edited by C.W. Tu, L.A. Kolodziejski, and V.R. McCrary (Materials Research Society Symposium Proceedings Vol. 320), 147-152	Conference Proceedings
52	1995	"Characterization of MOCVD-Grown InP on InGaP/GaAs", C. M. Reaves, V. Bresslerhill, S. Varma, W. H. Weinburg, S. P. DenBaars	*Surface Science, V326, N3: 209-217*	Journal
53	1995	"Indium Phosphide (INP) Based Heterostructure Materials and Devices Grown by MOCVD Using Tertiarybutylarsine (TBA) Tertiarybutylphosphine (TBP)", S. P. DenBaars, A. L. Holmes, M. E. Heimbuch, V. J. Jayaraman	*Journal of the Korean Physical Society, V28, S: S37-S42.*	Journal
54	1995	"Low-Temperature PD Bonding of III-V Semiconductors", I. H. Tan, C. Reaves, A. L. Holmes, E. L. Hu, S. P. DenBaars	*Electronics Letters, V31, N7: 588-589*	Journal

55	1995	"Effect of Atmospheric Pressure MOCVD Growth Conditions on UV Band-Edge Photoluminescence in GAn Thin Films", B. P. Keller, S. Keller, D. Kapolnek, M. Kato, S. P. DenBaars	*Electronic Letters, V31, N13: 1102-1103*	Journal
56	1995	"On the Interface Resistance of Regrwon GaInAs on InP", K. Hiziloglu, M.M. Hashemi, S.P. DenBaars, and U.K. Mishra	*Solid State Electronics, V38, N4: 905-908*	Journal
57	1995	"Structural Evolution in Epitaxial Metalorganic Chemical Vapor Deposition Grown GaN Films on Sapphire", D. Kapolnek, X. H. Wu, B. Heying, S. Keller, B. P. Keller, U. K. Mishra, S. P. DenBaars, J. S. Speck	*Applied Physics Letters, v67, N11: 1541-1543*	Journal
58	1995	"InP as Self Assembled Quantum Structures", C.M. Reaves, N.A. Cevallos, G.C. Hsueh, Y.M. Cheng, W.H. Weinberg, P.M. Petroff, and S.P. DenBaars	Proceeding of the Seventh International Conference on Indium Phosphide and Related Materials.	Conference Proceedings
59	1995	"Nanoscale characterization of InP islands on InGaP(001)", V. Bressler-Hill, C.M. Reaves, S. Varma, S.P. DenBaars, and W.H. Weinberg	*OSA Technical Digest Series (Optical Society of America, Washington DC, 1995), vol. 5, 36-38*	Journal
60	1993	“Luminescence Enhancement of InGaAs/InP Surface Quantum Wells by Room – Temperature Ion-Gun “, Y.L. Chang, I.H. Tan. C.M. Reaves, J. Merz, E. Hu, and S.P. DenBaars	*Phys. Rev. Letters.*	Journal
61	1994	“GaInAs/GaInP Double Barrier Structure: Growth and Application to Tunneling Devices”, C.M. Reaves, J. Yen, M.S. Leonard, A.L. Holmes, U.K. Mishra, S.P. DenBaars	*Materials Res. Soc., 1994, 147-152*	Conference Proceedings
62	1995	"MOCVD Growth of High Optical Quality and High Mobility GaN", B. P. Keller, S. Keller, D. Kapolnek, W.-N. Jiang, Y.-F. Wu, H. Masui, X. Wu, B. Heying, J. S. Speck, U. K. Mishra, S. P. DenBaars	*Journal Electronic Materials, Nov. 1995 V24 N11:1707-1709.*	Journal
63	1996	"The Role of Threading Dislocation Structure on the X-Ray Diffraction Peak Widths in Epitaxial GaN Films", B. Heying, X. H. Wu, S. Keller, Y. Li, D Kapolnek, B. Keller, S. P. DenBaars, J. S. Speck	*Applied Physics Letters, 29 Jan. 1996, V68 N5:643-645*	Journal

64	1995	"Growth and Characterization of InGaN/GaN Double Heterostructure LEDs Grown by MOCVD", S. Keller, B. P. Keller, Y.-F. Wu, D. Kapolnek, H. Masui, M. Kato, S. Imagi, U. K. Mishra, S. P. DenBaars	Special Issue on Proceedings of Topical Workshop on III-V Nitrides Pergamon.	Conference Proceedings
65	1995	"Effects of Deposition Rate on the Size of Self-Assembled InP Islands Formed on GaInP/GaAs(100)", C.M. Reaves, V. Bressler-Hill, W.H. Weinberg, and S.P. DenBaars	*Journal of Electronic Materials, Nov. 1995, V24, N11:1605-1609*	Journal
66	1995	"Characterization of InP Islands on InGaP/GaAs(001): Effect of Deposition Temperature", V. Bressler-Hill, C.M. Reaves, S. Varma, S.P. DenBaars, and W.H. Weinberg	*Surface Science, Nov 1, 1995, V341 N1-2: 29-39*	Journal
67	1996	"Influence of Sapphire Nitridation on Properties of Gallium Nitride Grown by Metal-Organic Chemical Vapor Deposition", S. Keller, B. P. Keller, Y.-F. Wu, B. Heying, X. H. Wu, D. Kapolnek, J. S. Speck, U. K. Mishra, and S. P. DenBaars	*Applied Physics Letters, 11 Mar. 1996, V68 N11: 1525-1527*	Journal
68	1996	"Effect of the Trimethylgallium Flow during Nucleation Layer Growth on the Properties of GaN Grown on Sapphire", S. Keller, D. Kapolnek, B. P. Keller, Y. Wu, B. Heying, J. S. Speck, U. K. Mishra, S. P. DenBaars.	*Japanese J. Appl. Physics, 1 March 1996, V35, N3A: L285-8.*	Journal
69	1996	"Nucleation Layer Evolution in Metal-Organic Chemical Vapor Deposition Grown GaN", X. H. Wu, D. Kapolnek, E. J. Tarsa, B. Heying, S. Keller, B. P. Keller, U. K. Mishra, S. P. DenBaars, J. S. Speck.	*Applied Physics Letters, 4 March1996, V68 N10: 1371-1373.*	Journal
70	1995	"High Performance AlAs/Ga/sub x/In/sub 1-x/As Resonant Tunneling Diodes by Metalorganic Chemical Vapor Deposition," J.C. Yen, B.P. Keller, S.P. DenBaars, U.K. Mishra.	*Journal of Electronic Materials, Oct. 1995. V24, N10:1387-1390.*	Journal
71	1995	"Analysis of InP Etched Surfaces Using Metalorganic Chemical Vapor Deposition Regrown Quantum Well Structures," Yu, DG; Keller, B.P.; Holmes, A.L., Jr.; Hu, E.L.; and others.	*Journal of Vacuum Science & Technology B, Nov-Dec. 1995, V13, N6:2381-2385.*	Journal
72	1995	"Lasing characteristics of InGaP/InGaAlP visible lasers grown by metalorganic chemical vapor deposition with tertiarybutylphosphine (TBP). Itaya, K.; Holmes, A.L., Jr.; Keller, S.; Hummel, S.G.; Coldren, L.A. and DenBaars, S.P.	*Japanese Journal of Applied Physics, Part 2 (Letters), 15 Nov. 1995, V34, N11B: L1540-1542.*	Journal
73	1995	"From research to manufacture-the evolution of MOCVD," Grodzinski, P.; DenBaars, S.P.; Lee, H.C.	*JOM, Dec. 1995, V47, N12:* *pp. 25-32.*	Journal

74	1996	“Field emission from selectively regrown GaN pyramids,” Underwood, R.D.; Kapolnek, D.; Keller, B.P.; Keller, S.; Mishra, U.K. and DenBaars, S.P.	*IEEE, 1996, pp.152-153.*	Conference Proceedings
75	1996	“GaN HFETs and MODFETs with very high breakdown voltage and large transconductance,” Wu, Y.-F.; Keller, B.P.; Keller, S.; Kapolnek, D.; Mishra, U.K. and DenBaars, S.P.	*IEEE, 1996, pp. 60-61.*	Conference Proceedings
76	1996	“Ion damage propagation in dry-etched InP-based structures,” Hu, E.L.; Yu, D.G.; Chen, C.-H.; Keller, B.; and DenBaars, S.P.	*IEEE, 1996, pages 107-110.*	Conference Proceedings
77	1996	“InP/InGaAsP photonic integrated broadly tunable receivers based on grating-assisted codirectional coupler optical filter,” Yu-Heng Jan; Heimbuch, M.E.; Coldren, L.A.; DenBaars, S.P.	*IEEE, 1996, pp. 157-158 Volume 2.*	Conference Proceedings
78	1996	“Cleaved facets in GaN by wafer fusion of GaN to InP,” Sink, R.K.; Keller, S.; Keller, B.P.; Babic, D.I.; Bowers, J.E.; Speck, J.S. and DenBaars, S.P.	*Materials Res. Soc, 1996,* *pp. 165-170.*	Conference Proceedings
79	1996	“Long-wavelength vertical-cavity surface-emitting laser diodes,” Babic, D.I.; Jayaraman, V.; Margalit, N.M.; Streubel, K.; and DenBaars, S.P.	*Materials Research. Society, 1996, pp. 63-74.*	Conference Proceedings
80	1996	“Absolute internal quantum efficiency of an InGaN/GaN quantum well,” Reese, C.; Yablonovitch, E.; Keller, S.; Keller, B.; Mishra, U.K. and DenBaars, S.P.	*Opt. Soc. America, 1996, p. 472.*	
81	1996	“InP-based devices and their applications for merged FET-HBT technologies,” Parikh, P.; Kiziloglu, K.; Mondry, M.; Chavarkar, P.; Mishra, U. and DenBaars, S.	*Microwave and Optical Technology Letters, 20 Feb. 1996, V11, N3: pp. 121-125.*	Journal
82	1996	“Wavelength-selective grating-assisted codirectional coupler tunable receiver on InP/InGaAsP.” Jan, Y.-H.; Heimbuch, M.E.; Coldren, L.A.; DenBaars, S.P.	*Electronics Letters, 14 March 1996, V32, N6: pp. 593-594.*	Journal
83	1996	“Low interface trap density for remote plasma deposited SiO/sub 2/ on n-type GaN,” Casey, H.C., Jr.; Fountain, G.G.; Alley, R.G.; Keller, B.P.; and DenBaars, S.	*Applied Physics Letters, 25 March 1996, V68, N13: pp. 1850-1852.*	Journal
84 (a)	1996	“Cleaved GaN facets by wafer fusion of GaN to InP,” Sink, R.K.; Keller, S.; Keller, B.P.; Babic, D.I.; Bowers, J.E. and DenBaars, S.P.	*Applied Physics Letters, 8 April 1996, V68, N15: pp. 2147-2149.*	Journal
84 (b)	1996	“Growth and Characterization of bulk InGaN films and quantum wells” S. Keller, B. P. Keller, D. Kapolnek, A. C. Abare, H. Masui, L. A. Coldren, U. K. Mishra, S. P. DenBaars	*Applied Physics Letters, 27 May 1996, V68, N22: pp. 3147-3149*	Journal

85	1996	“InP-based multiple quantum well structures grown with tertiarybutylarsine (TEA) and tertiarybutylphosphine (TBP): effects of growth interruptions on structural and optical properties. Holmes, A.L., Jr.; Heimbuch, M.E.; Fish, G.; Coldren, L.A.; and DenBaars, S.P.	*Journal of Electronic Materials, June 1996, V25, N6: pp. 965-971.*	Journal
86	1996	“A new FET-based integrated circuit technology: the SASSFET,” Parikh, P.A.; Jiang, W.N.; Chavarkar, P.M.; Kiziloglu, K.; Mishra,, U.K. and DenBaars, S.P.	*IEEE Electron Device Letters, July 1996, V17, N7: pp. 375-357.*	Journal
87	1996	“Photocurrent decay in n-type GaN thin films,” Qiu, C.H.; Melton, W.; Leksono, M.W.; Pankove, J.I.; Keller, B.P. and DenBaars, S.P.	*Applied Physics Letters, 26 August 1996, V69, N9: pp. 1282-1284.*	Journal
88	1996	“InP/InGaAsP grating-assisted codirectional coupler tunable receiver with a 30 nm wavelength tuning range,” Jan, Y.-H.; Heimbuch, M.E.; Coldren, L.A.; DenBaars, S.P.	*Electronics Letters, 29 Aug. 1996, V32, N18: pp. 1697-1699.*	Journal
89	1996	“Control of III-V epitaxy in a metalorganic chemical vapor deposition process: impact of source flow control on composition and thickness,” Gaffney, M.; Reaves, C.M.; Smith, R.S.; Holmes, A.L., Jr.; and DenBaars, S.P.	*Journal of Crystal Growth, Sept. 1996, V167, N1-2: pp. 8-16.*	Journal
90	1996	“Measured microwave power performance of AlGaN/GaN MODFET,” Wu, Y.-F.; Keller, B.P.; Keller, S.; Kapolnek, D.; and DenBaars, S.P.	*IEEE Electron Device Letters, Sept. 1996, V17, N9: pp. 455-457.*	Journal
91	1996	“Very high breakdown voltage and large transconductance realized on GaN heterojunction field effect transistors,” Wu, Y.-F.; Keller, B.P.; Keller, S.; Kapolnek, D.; and DenBaars, S.P.	*Applied Physics Letters, 2 Sept. 1996, V69, N10: pp. 1438-1440.*	Journal
92	1996	“Defect structure of metal-organic chemical vapor deposition-grown epitaxial (0001) GaN/Al/sub 2/O/sub 3/,” Wu, X.H.; Brown, L.M.; Kapolnek, D.; Keller, S.; Speck, J.S.: Mishra, U.K. and DenBaars, S.P.	*Journal of Applied Physics, 15 Sept. 1996, V80, N6: pp. 3228-3237.*	Journal
93	1996	“Radiative recombination lifetime measurements of InGaN single quantum well,” Sun, C.-K.; Keller, S.; Wang, G.; Minsky, M.; Bowers, J.E. & DenBaars, S.P.	*Applied Physics Letters, 23 Sept. 1996, V69, N13: pp. 1936-1938.*	Journal
94	1996	“Power spectral density analysis of strain-induced InP islands on GaInP/GaAs(100),” Hsueh, G.C.; Reaves, C.M.; DenBaars, S.P.; Weinberg, W.H.	*Surface Science, 10 Oct. 1996, V366, N1: pp. 129-139.*	Journal
95	1996	“High-performance submicrometer gatelength GaInAs/InP composite channel HEMT's with regrown ohmic contacts,” Shealy, J.B.;	*IEEE Electron Device Letters, Nov. 1996, V17, N11: pp. 540-542.*	Journal

		Matloubian, M.; Liu, T.Y.; Thompson, M.A.; Mishra, U.K. and DenBaars, S.P.		
96	1996	"Conduction band offsets in ordered-GaInP/GaAs heterostructures studied by ballistic-electron-emission microscopy," O'Shea, J.J.; Reaves, C.M.; DenBaars, S.P.; Chin, M.A.; and Narayanamurti, V.	*Applied Physics Letters, 11 Nov. 1996, V69, N20: pp. 3022-3024.*	Journal
97	1996	"45 nm wavelength tuning range of an InP/InGaAsP photonic integrated tunable receiver," Yu-Heng Jan; Heimbuch, M.E.; Coldren, L.A.; DenBaars, S.P.	*Applied Physics Letters, 18 Nov. 1996, V69, N21: pp. 3131-3133.*	Journal
98	1996	"Morphological and structural transitions in GaN films grown on sapphire by metal-organic chemical vapor deposition," Wu, X.H.; Fini, P.; Keller, S.; Tarsa, E.J.; Speck, J.S.: Mishra, U.K. and DenBaars, S.P.	*Japanese Journal of Applied Physics, Part 2 (Letters), 15 Dec. 1996, V35, N12B: L1648-1651*	Journal
99	1996	"Formation of self-assembled InP islands on a GaInP/GaAs(311)A surface," Reaves, C.M.; Pelzel, R.I.; Hsueh, G.C.; Weinberg, W.H.; and DenBaars, S.P.	*Applied Physics Letters, 16 Dec. 1996, V69, N25: pp. 3878-3880.*	Journal
100	1996	"Real-time composition and thickness control techniques in a metalorganic chemical vapor deposition process," Gaffney, M.S.; Reaves, C.M.; Holmes, A.L., Jr.; Smith, R.S.; and DenBaars, S.P.	*Materials Res. Soc, 1996. pp. 133-138.*	Conference Proceedings
101	1997	"Growth of bulk InGaN films and quantum wells by atmospheric pressure metalorganic chemical vapour deposition," Keller, S.; Keller, B.; Kapolnek, D.; Mishra, U.; & DenBaars, S.	*Journal of Crystal Growth, Jan. 1997, V170, N1-4: pp. 349-352.*	Journal
102	1997	"Selective area epitaxy of GaN for electron field emission devices," Kapolnek, D.; Underwood, R.D.; Keller, B.P.; Keller, S.; and Mishra, U.K. and DenBaars, S.P.	*Journal of Crystal Growth, Jan. 1997, V170, N.1-4: pp. 340-343.*	Journal
103	1997	"Ballistic electron emission microscopy study of transport in GaN thin films," Brazel, E.G.; Chin, M.A.; Narayanamurti, V.; Kapolnek, D.; and Mishra, U.K. and DenBaars, S.P.	*Applied Physics Letters, 20 Jan. 1997, V70, N3: pages 330-332.*	Journal
104	1997	"Selective-area regrowth of GaN field emission tips," Underwood, R.D.; Kapolnek, D.; Keller, B.P.; Keller, S.; Mishra, U.K. and DenBaars, S.P.	*Solid-State Electronics, Feb. 1997, V41, N2: pp. 243-245.*	Journal
105	1997	"Low resistance ohmic contact to n-GaN with a separate layer method," Wu, Y.-F.; Jiang, W.-N.; Keller, B.P.; Keller, S.; Mishra, U.K. and DenBaars, S.P.	*Solid-State Electronics, Feb. 1997, V41, N2: pp. 165-168.*	Journal
106	1997	"Comparing ion damage in GaAs and InP," Yu, D.G.; Chen, C.-H.; Holmes, A.L., Jr.; Hu, E.L.; and DenBaars, S.P.	*Microelectronic Engineering, Feb. 1997, V35, N1-4: pp. 95-98.*	Journal

107	1997	“GaN/AlGaN MODFET with 80 GHz f/sub max/ and >100 V gate-drain breakdown voltage,” Nguyen, N.X.; Keller, B.P.; Keller, S.; Wu, Y.-F.; Mishra, U.K. and DenBaars, S.P.	*Electronics Letters, 13 Feb. 1997, V33, N4: pp. 334-335.*	Journal
108	1997	“Observation of lasing from photopumped InGaN/GaN heterostructures in an edge emitting configuration,” Shmagin, I.K.; Muth, J.F.; Kolbas, R.M.; Krishnankutty, S.; Keller, S.; Abare, A.; Coldren, L.; Mishra, U. & DenBaars, S.	*Journal of Applied Physics, 15 Feb. 1997, V81, N4: pp. 2021-2023.*	Journal
109	1997	“Accurate mobility and carrier concentration analysis for GaN,” Look, D.C.; Sizelove, J.R.; Keller, S.; Wu, Y.F.; Mack, M.; Mishra, U.K. & DenBaars, S.P.	*Solid State Communications, April 1997, V102, N4: pp. 297-300.*	Journal
110	1997	“Femtosecond studies of carrier dynamics in InGaN,” Sun, C.-K.; Vallee, F.; Keller, S.; Bowers, J.E.; and DenBaars, S.P.	*Applied Physics Letters, 14 April 1997, V70, N15: pp. 2004-2006.*	Journal
111	1997	“Gain spectroscopy on InGaN/GaN quantum well diodes,” Kuball, M.; Jeon, E.S.; Song, Y.-K.; Nurmikko, A.V.; Keller, S.; Kozodoy, P.; Steigeruald, D,; Mishra, U.K. and DenBaars, S.P.	*Applied Physics Letters, 12 May 1997, V70, N19: pp. 2580-2582.*	Journal
112	1997	”Bias dependent microwave performance of AlGaN/GaN MODFET's up to 100 V,” Wu, Y.-F.; Keller, S.; Kozodoy, P.; Keller, B.P.; Keller, and DenBaars, S.P.	*IEEE Electron Device Letters, June 1997, V18, N6: pp. 290-292.*	Conference Proceedings
113	1997	“Demonstration of InP-InGaAsP vertical grating-assisted codirectional coupler filters and receivers with tapered coupling coefficient distributions,” Yu-Heng Jan; Fish, G.A.; Coldren, L.A.; DenBaars, S.P.	*IEEE Photonics Technology Letters, July 1997, V9, N7: pp. 994-996.*	Journal
114	1997	“Integration of semiconductor laser amplifiers with sampled grating tunable lasers for WDM applications,” San-Liang Lee; Heimbuch, M.E.; Cohen, D.A.; Coldren, L.A.; and DenBaars, S.P.	*IEEE Journal of Selected Topics in Quantum Electronics, April 1997, V3, N2: pp. 615-27.*	Journal
115	1997	“Substrate engineering of 1.55 mu m lasers,” Abraham, P.; Black, A.K.; Margalit, N.M.; Hawkins, A.R.; and DenBaars, S.P.	*IEEE, 1997. pp. 455-458.*	Conference Proceedings
116	1997	“Time-resolved photoluminescence studies of InGaN/GaN single-quantum-wells at room temperature,” Sun, C.-K.; Chiu, T.-L.; Keller, S.; Wang, G.; Minsky, M.; Bowrs, J.E.and DenBaars, S.P.	*Applied Physics Letters, 28 July 1997, V71, N4: pp. 425-427.*	Journal

117	1997	“Short channel AlGaN/GaN MODFET's with 50-GHz f/sub T/ and 1.7-W/mm output-power at 10 Ghz,” Wu, Y.-F.; Keller, B.P.; Keller, S.; Nguyen, N.X.; Mishra, U.K. and DenBaars, S.P.	*IEEE Electron Device Letters, Sept. 1997, V18, N9: pp. 438-440.*	Journal
118	1997	"MOCVD of Group III-Nitrides," S. DenBaars and S. Keller, Chapter 2, Gallium Nitride Materials and Devices, J. Pankove and T. Moustakas,	*Academic Press, 1197, V50, pp. 11-37.*	Journal
119	1997	"Reconfigurable Optical Properties in InGaN/GaN quantum wells,” I. Shmagi, J. Muth, R. Kolbas, M.P. Mack, A.C. Abare, S. Keller, L. A. Coldren, U.K. Mishra, and S. DenBaars.	*Appl. Physics Lett. V71 N1: pp. 1455.*	Journal
120	1997	"Characteristics of InGaN MQW Blue Laser Diodes Grown by MOCVD," M.P. Mack, A. C. Abare, M. Aizorcorbe, P. Kozodoy, S. Keller, U.K. Mishra, L.A. Coldren, and S.P. DenBaars.	*MRS Internet Journal of Nitride Research, 1997, Volume 2, Article 41.*	Journal
121	1997	"Electron Beam Pumped MQW InGaN/GaN Laser," V.I. Kozlovsky, A.B. Krysa, Y.K. Skyasyrsky, Y.M. Popov, A. Abare, M.P. Mack, S. Keller, U. K. Mishra, L. Coldren, S, DenBaars, M.D. Tiberi , T. George.	*MRS Internet Journal of Nitride Research, Volume 2, Article Number 38.*	Journal
122	1997	"Gallium-Nitride-Based Materials for Blue to Ultraviolet Optoelectronics Devices," S. DenBaars.	*IEEE Special Issue on Optoelectronics, 1997.*	Conference Proceedings
123.	1997	"MOCVD Growth and Properties of InGaN/Gan MQW," S. Keller, A. Abare, M. S. Minsky, D. H. Wu, M. P. Mack, J. S. Speck, E. Hu, L.A. Coldren, U.K. Mishra, and S. DenBaars.	Proceeding of the International Conference on SiC and Group III - Nitrides, 1997	Conference Proceedings
124.	1997	“Role of defect diffusion in the InP damage profile” D.G. Yu, C.H. Chen, A.L. Holmes Jr., S.P. DenBaars, E.L. Hu.	*J. Vac. Sci. Technol. B V15, N6*	Journal
125.	1997	“Gallium Nitride Based Semiconductors for Short Wavelength Optoelectronics” S.P. DenBaars	*Intl. J. of High Speen Electronics and Systems, V8, N2: pp. 265-282*	Journal
126.	1997	“Homoepitaxial growth of GaN under Ga-stable and N-stable conditions by plasma-assisted molecular beam epitaxy” E.J. Tarsa, B. Heying, X.H. Wu, P. Fini, S.P. DenBaars, J.S. Speck.	*J. Appl. Phys. , V82, N11: pp. 5472-5479*	Journal
127.	1997	“InP islands on InGaP/GaAs (001): island separation distributions” S. Varma, C.M. Reaves, V. Bressler-Hill, S.P. DenBaars, W.H. Weinberg	*Science Surface, V393, N1-3: pp. 24-33*	Journal

128.	1997	"Well-width dependent dtudies of InGaN-GaN single –quantum wells using time-resolved photoluminescence techniques" Chi-Kuang Sun, S. Keller, Tien-Lung Chiu, G. Wang, M.S. Minsky, J.E. Bowers, S.P. DenBaars	*IEEE Journal of Selected Topics in Quantum Electronics, V3, N3: pp. 731-738*	Journal
129.	1997	"Time-resolved photoluminescence studies of InGaN/GaN single-quantum-wells at room temperature" C.-K. Sun, T.-L. Chiu, S. Keller, G. Wang, M.S. Minsky, S.P. DenBaars, J.E. Bowers	*Applied Physics Letters, V71, N4: pp. 425-427*	Journal
130.	1997	"Magnetic field dependent Hall data analysis of electron transport in modulation-doped AlGaN/GaN heterostructures" Z. Dziuba, J. antoszewski, J.M. Dell, L. Faraone, P. Kozodoy, S. Keller, B. Keller, S.P. DenBaars, U.K. Mishra	*J. Appl. Phys. , V82, N6: pp. 2996-3002*	Journal
131.	1997	"Short-channel Al/sub 0.5/N-GaN MODFETs with power density >3 W/mm at 18 GHz." Y.-F. Wu, B.P. Keller, P. Fini, J. Pusl, M. Le, N.X. Nguyen, C. Nguyen, D. Widman, S. Keller, S.P. DenBaars, U.K. Mishra	*Electronics Letters, V33, N20: pp. 1742-1743*	Journal
132.	1997	"Compact InGaAsP/InP 1x2 optical switch based on carrier induced supression of modal interference" G.A. Fish, L.A. Coldren, S.P. DenBaars	*Electronics Letters, V33, N22: pp. 1898-1900*	Journal
133.	1997	"Absorption coefficient, energy gap, exciton binding energy, and recombination lifetime of GaN obtained from transmission measurements" J.F. Muth, A.J.H. Lee, I.K. Shmagin, R.M. Kolbas, H.C. Casey, Jr., B.P. Keller, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters, V71, N18: pp. 2572-2574*	Journal
134.	1997	"In/sub x/Ga/sub 1-x/N/Al/sub y/Ga/sub 1-y/N violet light emitting dioded with reflective p-contacts for high single sided light extraction" P.M. Menz, P. Kellawon, R. Van Roijen, P. Kozodoy, S. DenBaars	*Electronics Letters, V33, N24: pp. 2066-2068*	Journal
135.	1998	"High-temperature stimulated emission in optically pumped InGaN/GaN multiquantum wells" S. Bidnyk, T.J. Schmidt, Y.H. Cho, G.H. Gainer, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters V72, N13: pp. 1623-1625*	Journal
136.	1998	"Spiral Growth of InGaN Nanoscale Islands on GaN" S. Keller, U.K. Mishra, S.P. DenBaars, W. Seifert.	*Japanese J. Appl. Phys. V37 Part 2, No. 4B: pp. 431-434*	Journal

137.	1998	“Scanning capacitance microscopy imaging of threading dislocations in GaN films grown on (0001) sapphire by metalorganic chemical vapor deposition” P.J. Hansen, Y.E. Strausser, A.N. Erickson, E.J. Tarsa, P. Kozodoy, E.G. Brazel, J.P. Ibbetson, U. Mishra, V. Narayanamurti, S.P. DenBaars, J.S. Speck	*Applied Physics Letters V72, N 18: pp. 2247-2249*	Journal
138.	1998	“Growth and properties of InGaN nanoscale islands on GaN” S. Keller, B.P. Keller, M.S. Minsky, J.E. Bowers, U. K. Mishra, S.P. DenBaars, W. Seifert	*Journal of Crystal Growth V189, N190: pp. 29-32*	Journal
139.	1998	“Dislocation generation in GaN heteroepitaxy” X.H. Wu, P. Fini, E.J. Tarsa, B. Heying, S. Keller, U.K. Mishra, S.P. DenBaars, J.S. Speck	*Journal of Crystal Growth V189, N190: pp. 231-243*	Journal
140.	1998	“MOVPE growth and characterization of Mg-doped GaN” P.Kozodoy, S. Keller, S.P. DenBaars, U.K. Mishra	*Journal of Crystal Growth V195: pp. 265-269*	Journal
141.	1998	“Mechanisms of lateral epitaxial overgrowth of gallium nitride by metalorganic chemical vapor deposition” H. Marchand, J.P. Ibbetson, P.T. Fini, S. Keller, S.P. DenBaars, J.S. Speck, U.K. Mishra	*Journal of Crystal Growth V195: pp. 328-332*	Journal
142.	1998	“Cleaved and Etched Facet Nitride Laser Diodes” A.C. Abare, M.P. Mack, M. Hansen, R.K. Sink, P. Kozodoy, S. Keller, J.S. Speck, J.E. Bowers, U.K. Mishra, L.A. Coldren, S.P. DenBaars	*IEEE Journal of Selected Topics in Quantum Electronics V4, N3: pp. 505-509*	Journal
143.	1998	“Piezoelectric surface barrier lowering applied to InGaN/GaN field emitter arrays” R.D. Underwood, P. Kozodoy, S. Keller, S.P. DenBaars, U.K. Mishra	*Applied Physics Letters V73, N3: pp. 405-407*	Journal
144.	1998	“Effects of Si-doping in the barriers of InGaN multiquantum well purplish-blue laser diodes” S. Chichibu, D.A. Cohen, M.P. Mack, A.C. Abare, P. Kozodoy, M. Minsky, S. Fleischer, S. Keller, J.E. Bowers, U.K. Mishra, L.A. Coldren, D.R. Clarke, S.P. DenBaars	*Applied Physics Letters V73, N4: pp. 496-498*	Journal
145.	1998	“Energy selective optically pumped stimulated emission from InGaN/GaN multiple quantum wells” T.J. Schmidt, Y-H Cho, G.H. Gainer, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters V73, N5: pp. 560-562*	Journal

146.	1998	“Influence of Si doping on characteristics of InGaN/GaN multiple quantum wells” Y-H Cho, J.J. Song, S. Keller, M.S. Minsky, E. Hu, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters V73, N8: pp. 1128-1130*	Journal
147.	1998	“The effect of growth environment on the morphological and extended defect evolution in GaN grown by metalorganic chemical vapor depostion” P. Fini, X. Wu, E.J. Tarsa, Y. Golan, V. Srikant, S. Keller, S.P. DenBaars, J.S. Speck	*Japanese J. Appl. Phys. V37, N8: pp. 4460-4466*	Journal
148.	1998	“Microstructure of GaN laterally overgrown by metalorganic chemical vapor deposition” H. Marchand, X.H. Wu, J.P. Ibbetson, P.T. Fini, P. Kozodoy, S. Keller, J.S. Speck, S.P. DenBaars, U.K. Mishra	*Applied Physics Letters V73, N6: pp. 747-749*	Journal
149.	1998	“Electrical characterization of GaN p-n junctions with and without threading dislocations” P. Kozodoy, J.P. Ibbetson, H. Marchand, P.T. Fini, S. Keller, J.S. Speck, S.P. DenBaars, U.K. Mishra	*Applied Physics Letters V73, N7: pp. 975-977*	Journal
150.	1998	“Ridge Waveguide Sampled Grating DBR Lasers with 22-nm Quasi-Continuous Tuning Range” B. Mason, G.A. Fish, S.P. DenBaars, L.A. Coldren	*IEEE Photonics Technology Letters V10, N9: pp. 1211-1213*	Journal
151.	1998	“ ‘S-shaped’temperature-dependent emission shift and carrier dynamics in InGaN/GaN multiple quantum wells” Y-H Cho, G.H. Gainer, A.J. Fischer, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters V73, N10: pp. 1370-1372*	Journal
152.	1998	“Effective band gap inhomogeneity and piezoelectric field in InGaN/GaN multiquantum well structures” S.F. Chichibu, A.C. Abare, M.S. Minsky, S. Keller, S.B. Fleischer, J.E. Bowers, E. Hu, U.K. Mishra, L.A. Coldren, S.P. DenBaars	*Applied Physics Letters V73, N14: pp. 2006-2008*	Journal
153.	1998	“High-transconductance self-aligned AlGaN/GaN modulation-doped field-effect transistors with regrown ohmic contacts” C-H Chen, S. Keller, G. Parish, R. Vetury, P. Kozodoy, E.L. Hu, S.P. DenBaars, U.K. Mishra, Y. Wu	*Applied Physics Letters V73, N21: pp. 3147-3149*	Journal
154.	1998	“Excitation energy-dependent optical characteristics of InGaN multiple quantum wells” Y-H Cho, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters V73, N22: pp. 3181-3183*	Journal

155.	1998	“Measurement of gain current relations for InGaN multiple quantum wells” A.C. Abare, M.P. Mack, M. Hansen, J.S. Speck, L.A. Coldren, S.P. DenBaars, G.A. Meyer, S.L. Lehew, G.A. Cooper	*Applied Physics Letters V73, N26: pp.3887-3889*	Journal
156.	1998	“Improved compositional uniformity of InGaAsP grown by MOCVD through modification of the susceptor temperature profile” G.A. Fish, B. Mason, S.P. DenBaars, L.A. Coldren	*J. Crystal Growth, V186, N1-2: pp. 1-7*	Journal
157.	1998	“Optical properies of GaAs confined in the pores of MCM-41” V. I. Srdanov, I. Alxneit, G.D. Stucky, C.M. Reaves, S.P. DenBaars	*J. Physical Chemistry, V102, N18: pp. 3341-3344*	Journal
158.	1998	“Structural origin of V-defects and correlation with localized excitonic centers in InGaN/GaN multiple quantum wells” X.H. Wu, C.R. Elsass, A. Abare, M. Mack, S. Keller, P.M. Petroff, S.P. DenBaars, J.S. Speck	*Applied Physics Letters, V72, N6: pp. 692-694*	Journal
159.	1998	“High Al-content AlGaN/GaN MODFET’s for ultrahigh performance” Y.-F Wu, B.P. Keller, P. Fini, S. Keller, T.J. Jenkins, L.T. Kehias, S.P. DenBaars, U.K. Mishra	*IEEE Electron Device Letters, V19, N2: pp. 50-53*	Journal
160.	1998	“Suppressed modal interference switches with integrated curved amplifiers for scaleable photonic crossconnects” G.A. Fish, L.A. Coldren, S.P. DenBaars	*IEEE Photonics Technology Letters, V10, N2: pp. 230-232*	Journal
161.	1998	“Characterization of high-quality InGaN/GaN multiquantum wells with time-resolved photoluminescence” M.S. Minsky, S.B. Fleisher, A.C. Abare, J.E. Bowers, E.L. Hu, S.P. DenBaars	*Applied Physics Letters, V72, N9: pp. 1066-1068*	Journal
162.	1998	“Atomic force microscopy observation of threading dislocation density reduction in lateral epitaxial overgrowth of gallium nitride by MOCVD” H. Marchand, J.P. Ibbetson, P.T. Fini, P. Kozodoy, S. Keller, S.P. DenBaars, J.S. Speck, U.K. Mishra	*MRS Internet Journal of Nitride Semiconductor Research, V3*	Journal
163.	1998	“Determination of the cubic to hexagonal fraction in GaN nucleation layers using grazing incidence x-ray scattering” A. Munkholm, C. Thompson, C.M. Foster, J.A. Eastman, O. Auciello, G.B.Stephanson, P. Fini, S.P. DenBaars, J.S. Speck	*Applied Physics Letters, V72, N23: pp. 2972-2974*	Journal

164.	1998	“Catastrophic optical damage in GaInN multiple quantum wells” D.A. Cohen, T. Magalith, A.C. Abare, M.P. Mack, L.A. Coldren, S.P. DenBaars, D.R. Clarke	*Applied Physics Letters, V72, N25: pp. 3267-3269*	Journal
165.	1998	“Improvement of GaN-based laser diode facets by FIB polishing” M.P. Mack, G.D. Via, A.C. Abare, M. Hansen, P. Kozodoy, S. Keller, J.S. Speck, U.K. Mishra, L.A. Coldren, S.P. DenBaars	*Electronics Letters, V34, N13: pp. 1315-1316*	Journal
166.	1998	“Tunable sample-grating DBR lasers with integrated wavelength monitors” B. Mason, S.P. DenBaars, L.A. Coldren	*IEEE Photonics Technology Letters, V10, N8: pp. 1085-1087*	Journal
167	1998	“Compact, 4x4 InGaAsP-InP optical crossconnect with a scaleable architecture” G.A. Fish, B. Mason, L.A. Coldren, S.P. DenBaars	*IEEE Photonics Technology Letters, V10, N9: pages 1256-1258*	Journal
168.	1998	“Pump-probe spectoscopy of band tail states in metalorganic chemical vapor deposition-grown InGaN” T.J. Schmidt, Y.-H. Cho, G.H. Gainer, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters, V73, N13: pp. 1892-1894*	Journal
169.	1998	“Substrate reactivity and ‘controlled contamination’in metalorganic chemical vapor deposition of GaN on sapphire” Y. Golan, P. Fini, S.P. DenBaars, J.S. Speck	*Japanese Journal of Applied Physics, V37, Pt.1, N9A: pp. 57-65*	Journal
170.	1998	“A first look at AlGaN/GaN HBTs” L. McCarthy, P. Kozodoy, M. Rodwell, S.P. DenBaars, U.K. Mishra	*Compound Semiconductor Magazine, V4, N8*	Magazine
171.	1998	“Optical properties of InGaN/GaN quantum wells with Si-doped barriers” M. Minsky, S. Chichibu, S.B. Fleisher, A.C. Abare, J.E. Bowers, E.L. Hu, S. Keller, U.K. Mishra, S.P. DenBaars	*Japanese Journal of Applied Physics, V37, Pt. 2 ,N11B: pp. 1362-1364*	Journal
172.	1998	“Stimulated emission characteristics of InGaN/GaN multiple quantum wells:Excitation length and excitation density”	*Applied Physics Letters, V73, N25: pp. 3689-3691*	Journal
173.	1998	“Measurement of gain current relations for InGaN multiple quantum wells” A.C. Abare, M.P. Mack, M. Hansen, J.S. Speck, L.A. Coldren, S.P. DenBaars, G.A. Meyer, S.L. Lehew, G.A. Cooper	*Applied Physics Letters, V73, N26: pp. 3887-3889*	Journal

174.	1998	“Gallium nitride based materials and their application for light emitting devices” S. Keller, S.P. DenBaars	*Current Opinion in Solid State & Materials Science, V3, N1: pp. 45-50*	Journal
174a.	1998	Chapter 2 pp.11-35 “Metalorganic Chemical Vapor Deposition (MOCVD) of Group III Nitrides” S. P. DenBaars, S. Keller	*J. I. Pankove, T.D. Moustakas Semiconductors and Semimetals, V50: Gallium Nitride (GaN) I* *Academic Press: San Diego*	Book Chapter
175.	1999	“Real-Time X-Ray Scattering Studies of Surface Structure During Metalorganic Chemical Vapor Deposition of GaN” G.B. Stephenson, J.A. Eastman, O. Auciello, A. Munkholm, C. Thompson, P.H. Fuoss, P. Fini, S.P. DenBaars, J.S. Speck	*MRS Bulletin/Jan.: pp. 21-25*	Journal
176.	1999	“Emission mechanisms of bulk GaN and InGaN quantum wells prepared by lateral epitaxial overgrowth” S.F. Chichibu, H. Marchand, M.S. Minsky, S. Keller, P.T. Fini, J.P. Ibbetson, S.B. Fleischer, J.S. Speck, J.E. Bowers, E. Hu, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters V74, N10: pp. 1460-1462*	Journal
177.	1999	“Cathodoluminescence mapping of epitaxial lateral overgrowth in gallium nitride” S.J. Rosner, G. Girolami, H. Marchand, P.T. Fini, J.P. Ibbetson, L. Zhao, S. Keller, U.K. Mishra, S.P. DenBaars, J.S. Speck	*Applied Physics Letters V74, N14: pp. 2035-2037*	Journal
178.	1999	“Dislocation mediated surface morphology of GaN” B. Heying, E.J. Tarsa, C.R. Elsass, P. Fini, S.P. DenBaars, J.S. Speck	*Journal of Applied Physics V85, N9: pp. 6470-6476*	Journal
179.	1999	“Widely Tunable Sampled Grating DBR Laser with Integrated Electroabsorption Modulator” B. Mason, G.A. Fish, S.P. DenBaars, L.A. Coldren	*IEEE Photonics Technology Letters V11, N6: pp. 638-640*	Journal
180.	1999	“Picosecond carrier transport and capture for InGaN/GaN single and multiple quantum wells’ S.Fleisher, S. Keller, A. Abare, L. Coldren, U. Mishra, S. DenBaars, J. Bowers	*Ultrafast Electonics and Optoelectronics:* *Snow Mass, CO April 12-16*	Conference Proceedings
181.	1999	“Near-field scanning optical microscopy of indium gallium nitride multple-quantum-well laser diodes” D. Young, M. Mack, A. Abare, M. Hansen, L. Coldren, S. DenBaars, E. Hu , D. Awschalom	*Applied Physics Letters; V74, N16*	Journal

182.	1999	“Demonstration of electrically pumped nitride distributed feedback lasers employing dielectric gratings” A. Abare, M. hanson, J. Speck, L. coldren, s. DenBaars	*Device Research Conferecne, paper no. VII.B-6; Santa Barbara, CA*	Conferece Proceedings
183.	1999	“Indium tin oxide contacts to gallium nitride optoelectronic devices” T. Margalith, O. Buchinsky, D. Cohen, A. Abare, M. Hansen, S. DenBaars, L. Coldren	*Applied Phyics Letters; V7, N26*	Journal
184.	1999	“Improved characterstics of InGaN multi-quantum well laser diodes grown on laterally overgrown GaN on sapphire” M, Hanson, P. Fini, L. Zhao, A. Abare, J. Speck, L. coldren, S. DenBaars	*Elecronic Materials Conf.; Santa Barbara, CA – post deadline paper Session R, Electronic Materials Conf., June 30 – July 2, 1999*	Conference Proceeding
185.	1999	High-performance (Al,Ga)N-based solar-blind ultraviolet p-I-n detectors on laterally epitaxially overgrown GaN, G. Parish, S. Keller, P. Kozodoy, J.P. Ibbitson, H. Marchand, P.T. Fini, S.B. Fleischer, E.J. Tarsa , S.P. DenBaars, and U.K. Mishra.	*Applied Phyics Letters; V75, N2: pp. 247-249.*	Journal
186.	1999	High-quality coalescense of laterally overgrown GaN stripes on GaN/sapphire seed layers, P. Fini, L. Zhao, B. Moran, M. Hansen, H. Marchand, J.P. Ibbetson, S.P. DenBaars, U. K. Mishra and J.S. Speck.	*Applied Phyics Letters; V75, N12: pp. 1706-1708.*	Journal
187.	1999	Electrically pumped distributed feedback nitride lasers employing embedded dielectric gratings” A.C. Abare, M. Hansen, J. S. Speck, S. P. DenBaars and L. A. Coldren.	*Electronics Letters, Sept. 2, 1999, V35, N18: pp. 205-206.*	Journal
188.	1999	“Effect of AlGaN/GaN strained layer superlattice period of InGaN MQW laser diodes” M. Hansen, A. Abare, P. Kozodoy, T. Katona, M. Craven, J. Speck, U. Mishra, L. Coldren, S. DenBaars	*Phys. Stat. Sol., V176: pp. 59-62*	Journal
189.	1999	“Optical Spectroscopy of InGaN/GaN quantum wells” E. Berkowiz, D. Gershoni, G. Bahir, a. Abare, S DenBaars, L. Coldren	*Phys. Stat. Sol. 216,291*	Journal
190.	1999	“Embedded delelctric grating distributed feedback nitride laser diode” A. Abare, M. Hansen, J. speck, L. coldren, S. DenBaars	*International conference on nitride Semiconductros, Paper no. WePO61: Montpeliier, France*	Conference Proceeding
191.	1999	“Photoresponse and physical properties of photoconductor and photovoltaic GaN based UV detectors” V. Garber, G. Bahit, J. Salzman, A. Abare, S. DenBaars, L. coldren	*International conference on Niride Semiconductoes: montpellier, France- paper no. WePO35*	Conference Proceeding

192.	1999	"Monolithic integration of a widely tunable laser and an electro-absorptoin modulator" B. Mason, G. Fish, S. DenBaars, L. Coldren	*Integrated Photonic Research 99'; Santa Barbara, CA-paper no. RME2*	Conference Proceeding
193.	1999	"Compact, 1.55 µm spot-size converters for InP based photonic integrated circuits" G. Fish, B. mason, L. coldren, s. DenBaars	*Integrated Photonics Research Conference '99; santa Barbara, CA-paper no. RWD4*	Conference Proceedings
194.	1999	"Monolithic InP Optical Crossconnects: 4x4 and beyond" G. Fish, B. Mason, L. coldren, S. DenBaars	*Photonics in Switching; Santa Barbara, CA-paper no. JWB2*	Conference Proceedings
195.	1999	"Transparent contact to p-GaN: indium tin oxide/titanium nitride" O. Buchinsky, T. Margalith, D. Cohen, A. Abare, S. DenBaars, L. coldren	*LEOs Summer Topicals; San Diego, CA-paper no. FBI 3*	Conference Proceedings
196.	1999	"Large coherent acoustic-phonon oscillation observed in InGaN/GaN multiple-quantum wells" C. Sun, J. lLiang, C. Stanton, A. Abare, L. coldren, S. DenBaars	*Applied Physics Letters; V75:N9*	Journal
197.	1999	"Optical Crossbar Switches on InP" G. Fish, B. Mason, L. coldren, S. DenBaars	*LEOS '99; San Francisco, CA-paper no. WC1*	Conference Proceeding
198.	1999	"Improved Characteristics of InGaN multi-quantum-well laser diodes grown on laterally epitaxially overgrown GaN on sapphire" M. Hansen, P. Fini, L. Zhao, A. Abare, L. Coldren, J. Speck, S. DenBaars	*Materials Research Society Meeting; Boston, MA-paper no. W1 3*	Journal
199.	1999	"Optical properties of InGaN quantum wells" S.F. Chichibu, A.C. Abare, M.P. Mack,M.S. Minsky, T. Deguchi, D. Cohen, P. Kozodoy, S.B. Fleisher, S. Keller, J.S. Speck, J.E. Bowers, E. Hu, U.K. Mishra, L.A. Coldren, S.P. DenBaars, K. Wada, T. Soto, S. Nakamura	*Materials Science and Engineering B59, pp. 298-306*	Journal
200.	1999	"High resolution x-ray analysis of pseudomorphic InGaN/GaN multiple quantum wells: influence of Si-Doping concentration" Y.-H. Cho, F. Fedler, R.J. Hauenstein, G.H. Park, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*Journal of Applied Physics, V85, N5: pp. 3006-3008*	Journal
201.	1999	"Emission mechanisms of bulk GaN and InGaN quantum wells prepared by lateral epitaxial overgrowth" S.F. Chichibu, H. Marchand, M.S. Minsky, S. Keller, P.T. Fini, J.P. Ibbetson, S.B. Fleisher, J.S. Speck, S.P. DenBaars, T. Deguchi, T. Soto, S. Nakamura	*Applied Physics Letters, V74, N10: pp. 1460-1462*	Journal

202.	1999	“Low-temperature scanning tunneling microscope-induced luminescsence of an InGaN/GaN multiquantum well” S. Evoy, C.K. Harnett, H.G. Craighead, S. Keller, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters, V74, N10: pp. 1457-1459*	Journal
203.	1999	“Structural and optical properties of GaN laterally overgrown on Si(111) by metal organic vapor deposition using an AlNbuffer layer” H. Marchand, N. Zhang, L. Zhao, Y. Golan, S.J. Rosner, G. Girolami, P.T. Fini, J.P. Ibbetson, S. Keller, S.P. DenBaars, J.S. Speck, U.K. Mishra	*MRS Internet Journal, V4S1*	Journal
204.	1999	“Study of temperature effects on loss mechanisms in 1.55μm laser diodes with In/sub 0.81/Ga/sub 0.19/P electron stopper layer” P. Abraham, J. Piprek, S.P. DenBaars, J.E. Bowers	*Semiconductor Science and Technology, V14, N5: pp. 419-424*	Journal
205.	1999	“Observation of growth modes during metal-organic chemical vapor deposition of GaN” G.B. Stephenson, J.A. Eastman, C. Thompson, O. Auciello, L.J. Thompson, A, Munkholm, P. Fini, S.P. DenBaars, J.S. Speck	*Applied Physics Letters, V74, N22: pp. 3326-3328*	Journal
206.	1999	“Ultrafast electron dynamics study of GaN” C.-K. Sun, Y.-L. Huang, S. Keller, U.K. Mishra, S.P. DenBaars	*Physical Review B, V59, N21: pp. 13535-13538*	Journal
207.	1999	“High mobility two-dimensional electron gas in AlGaN/GaN heterostructures grown by plasma-assisted molecular beam epitaxy” C. R. Elsass, I.P. Smorchkova, B. Heying, E. Haus, P. Fini, K. Maranowski, J.P. Ibbetson, S. Keller, P.M. Petroff, S.P. DenBaars, U.K. Mishra, J.S, Speck	*Applied Physics Letters, V74 N23: pp. 3528-3530*	Journal
208.	1999	“Enhanced Mg doping efficiency in Al/sub 0.2/Ga/sub 0.8/N/GaN superlattices” P. Kozodoy, M. Hansen, S.P. DenBaars, U.K. Mishra	*Applied Physics Letters, V74, N24: pp. 3681-3683*	Journal
209.	1999	“AlGaN/GaN heterojunction bipolar transistor” L.S. McCarthy, P. Kozodoy, M.J. Rodwell, S.P. DenBaars, U.K. Mishra	*IEEE Electron Device Letters, V20, N6: pp. 277-279*	Journal
210.	1999	“AlGaN/GaN HBTs using regrown emitter” J.B. Limb, L. McCarthy, P. Kozodoy, H. Xing, J. Ibbetson, Y. Smorchkova, S.P. DenBaars, U.K. Mishra	*Electronics Letters, V35, N19: pp. 1671-1673*	Journal

211.	1999	“Surface structure of GaN(0001) in the chemical vapor deposition environment” A. Munkholm, G.B. Stephenson, J.A. Eastman, C. Thompson, P. Fini, J.S. Speck, O. Auciello., P.H. Fuoss, S.P. DenBaars	*Physical Review Letters, V83, N4: pp. 741-744*	Journal
212.	1999	“Photoluminescence and Photoluminescence Excitation Spectra of In/sub 0.2/Ga/sub 0.8/N-GaN quantum wells: comparison between experimental and theoretical studies” H. Jiang, M. Minsky, S. Keller, E. Hu, J. Singh, S.P. DenBaars	*IEEE Journal of Quantum Electronics, V35, N10: pp. 1483-1490*	Journal
213.	1999	“Coupling of InGaN quantum-well photoluminescence to silver surface plasmons” I. Gontijo, M. Boroditsky, E. Yablonovich, S. Keller, U.K. Mishra, S.P. DenBaars	*Physical Review B, V60, N16: pp. 11564-11567*	Journal
214.	1999	“Polarization-induced charge and electron mobility in AlGaN/GaN heterostructures grown by plasma-assisted molecular-beam epitaxy” I.P. Smorchkova, C.R. Elsass, J.P. Ibbetson, R. Ventury, B. Heying, P. Fini, E. Haus, S.P. DenBaars, J.S. Speck, U.K. Mishra	*Journal of Applied Physics, V86, N8: pp. 4520-4526*	Journal
215.	1999	“Polarization-enhanced Mg doping of AlGaN/GaN superlattices” P. Kozodoy, Y.P. Smorchkova, M. Hansen., H. Xing, S.P. DenBaars, U.K. Mishra, A.W. Saxler, R. Perrin, W.C. Mitchel	*Applied Physics Letters, V75, N16: pp. 2444-2446*	Journal
216.	1999	“Structural and optical characteristics of In/sub x/Ga/sub 1-x/N/GaN multiple quantum wells with different In compositions” Y.-H. Kwon, G.H. Gainer, S. Bidnyk, Y.H. Cho, J.J. Song, M. Hansen, S.P. DenBaars	*Applied Physics Letters, V75, N17: pp. 2545-2547*	Journal
217.	1999	“GaN-based FETs for Microwave Power Amplification” Y.F. Wu, B.P. Keller, S. Keller, J.J. Xu, B.J. Thibeault, S.P. DenBaars, U.K. Mishra	*IEICE Trans. Electron., VE82-C N11: pp. 1895-1905*	Journal
218.	1999	“Femtosecond Z-scan measurement of GaN” Y.-L. Huang, C.-K. Sun, J.-C Liang, S. Keller, M.P. Mack, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters, V75, N22: pp. 3524-3526*	Journal
219.	1999	“Large interband second-order susceptibilities in In/sub x/Ga/sub 1-x/N/GaN quantum wells” H.Schmidt, A.C, Abare, J.E.Bowers, S.P. DenBaars, A. Imamoglu,	*Applied Physics Letters, V75, N23: pp. 3611-3613*	Journal
220.	1999	“Thermal conductivity of lateral epitaxial overgrown GaN films” C.-Y Luo, H. Marchand, D.R. Clarke, S.P. DenBaars	*Applied Physics Letters, V75, N26: pp. 4151-4153*	Journal

221.	1999	“Thermal annealing of InGaN/GaN strained-layer quantum wells” M.C.-Y. Chan, K.-O. Tsang, E.H. Li, S.P. DenBaars	*MRS Internet Journal, V4S1, G6.25*	Journal
222.	1999	“Fast lateral epitaxial overgrowth of gallium nitride by metalorganic chemical vapor deposition using a two-step process” H. Marchand, J.P. Ibbetson, P.T. Fini, X.H. Wu, S. Keller, S.P. DenBaars, J.S. Speck, U.K. Mishra	*MRS Internet Journal, V4S1, G4.5*	Journal
223.	1999	“Spectroscopic studies in InGaN quantum wells” S.F. Chichibu, T. Sota, K. Wada., S.P. DenBaars, S. Nakamura	*MRS Internet Journal, V4S1, G2.7*	Journal
224.	1999	“Carrier dynamics of abnormal temperature-dependent emission shift in MOCVD-grown InGaN epilayers and InGaN/GaN quantum wells” Y.-H. Cho, B.D. Little, G.H. Gainer, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*MRS Internet Journal, V4S1, G2.4*	Journal
225.	1999	“Influence of Si-doping on carrier localization of MOCVD-grown InGaN/GaN multiple quantum wells” Y.-H. Cho, T.J. Schmidt, S. Bidnyk, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*MRS Internet Journal,V4S1, G6.44*	Journal
226.	1999	“Amplification path length dependence studies of stimulated emission from optically pumped InGaN/GaN multiple quantum wells” T.J. Schmidt, S. Bidnyk, Y.-H. Cho, A.J. Fischer, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*MRS Internet Journal, V4S1, G6.54*	Journal
227.	1999	“Scanning tunneling microscope-induced luminescence of GaN at threading dislocations” S. Evoy, H.G. Craighead, S. Keller, U.K. Mishra, S.P. DenBaars	*Journal of Vacuum Science & Technology B, V17, N1: pp. 29-32*	Journal
228.	2000	“Sims investigations into the effect of growth conditions on residual impurity and silicon incorporation in GaN and AlXGa 1-X N,” G. Parish, S. Keller, S.P. DenBaars and U.K. Mishra	*Journal of Electronic Materials, V29, N1, pp. 15-20.*	Journal
229.	2000	“Determination of tilt in the lateral epitaxial overgrowth of GaN using X-ray defraction” P. Fini, H. Marchand, J.P. Ibbetson, S.P. DenBaars, U.K. Mishra, J.S. Speck	*Journal of Crystal Growth, V209: pp. 581-590*	Journal
230.	2000	“Characterization of an AlGaN/GaN two-dimensional electron gas structure” A. Saxler, I.P. Smorchkova, B. Heying, E. Haus, P. Fini,	*Journal of Applied Physics, V87, N1: pp. 369-374*	Journal

		J.P. Ibbetson, S. Keller, P.M. Petroff, S.P. DenBaars, U.K. Mishra, J.S. Speck		
231.	2000	“Depletion region effects in Mg-doped GaN” P. Kozodoy, S.P. DenBaars, U.K. Mishra	*Journal of Applied Physics, V87, N2: pp. 770-775*	Journal
232.	2000	“Improved characteristics of InGaN multiple – quantum-well laser diodes grown on laterally epitaxially overgrown GaN on sapphire” M. Hansen, P. Fini, L. Zhao. A.C. Abare, L.A. Coldren, J.S. Speck, S.P. DenBaars	*Applied Physics Letters, V76, N5: pp. 529-531*	Journal
233.	2000	“Mg doping of GaN layers grown by plasma-assisted molecular-beam epitaxy” I.P. Smorchkova, E. Haus, B. Heying, P. Kozodoy, P. Fini, J.P. Ibbetson, S. Keller, S.P. DenBaars, J.S. Speck, U.K. Mishra	*Applied Physics Letters, V76, N6: pp. 718-720*	Journal
234.	2000	“Heavy doping effects in Mg-doped GaN” P. Kozodoy, H. Xing, S.P. DenBaars, U.K. Mishra, A. Saxler, R. Perrin, S. Elhamri, W.C. Mitchel	*Journal of Applied Physics, V87, N4: pp. 1832-1835*	Journal
235.	2000	“Epitaxially-grown GaN junction field effect transistors” L. Zhang, L.F. Lester, A.G. Baca, R.J. Shul, P.C. Chang, C.G. Willison, U.K. Mishra, S.P. DenBaars, J.C. Zolper	*IEEE Transactions on Electron Devices, V47, N3: pp. 507-511*	Journal
236.	2000	“Linear and nonlinear optical properties of In/sub x/Ga/sub 1-x/N/GaN heterostructures” Y.H. Cho, T.J. Schmidt, S. Bidnyk, G.H. Gainer, J.J. Song, S. Keller, U.K. Mishra, S.P. DenBaars	*Physical Review B, V61, N11: pp. 7571-7588*	Journal
237.	2000	“Distributed feedback laser diodes employing embedded dielectric gratings located above the active region” A.C. Abare, S.P. DenBaars, L.A. Coldren	*IEICE Trans. Electron, VE83-C, N4: pp. 560-563*	Journal
238.	2000	“Transient processes in AlGaN/GaN heterostructures field effect transistors” S.L. Rumyantsev, M.S. Shur, R. Gaska, X. Hu, A. Khan, G. Simin, J. Yang, N. Zhang, S.P. DenBaars, U.K. Mishra	*Electronics Letters, V36, N8: pp. 757-759*	Journal
239.	2000	“Measured and calculated radiative lifetime and optical absorption of In/sub x/Ga/sub 1-x/N/GaN quantum structures” E. Berkowitz, D. Gershoni, G. Bahir, E. Lakin, D. Shilo, E. Zolotoyabko, A.C, Abare, S.P. DenBaars, L.A. Coldren	*Physical Review B, V61, N16: pp. 10994-11008*	Journal

240.	2000	“High voltage operation (>80V) of GaN bipolar junction transistors with low leakage” J.B. Limb, H. Xing, B. Moran, L. McCarthy, S.P. DenBaars, U.K. Mishra	*Applied Physics Letters, V76, N17: pp. 2457-2459*	Journal
241.	2000	“Charge control and mobility in AlGaN/GaN transistors: experimental and theoretical studies” Y. Zhang, I.P. Smorchkova, C.R. Elsass, S. Keller, J.P. Ibbetson, S.P. DenBaars, U.K. Mishra, J. Singh	*Journal of Applied Physics, V87, N11: pp. 7981-7987*	Journal
242.	2000	“Channeling as a mechanism for dry etch damage in GaN” E.D. Haberer, C.-H. Chen, A. Abare, M. Hansen, S.P. DenBaars, L.A. Coldren, U.K. Mishra, E.L. Hu	*Applied Physics Letters, V76, N26: pp. 3941-3943*	Journal
243.	2000	“In Situ, real-time measurement of wing tilt during lateral epitaxial overgrowth of GaN” P. Fini, A. Munkholm, C. Thompson, G.B. Stephenson, J.A. Eastman, M.V. R. Murty, O. Auciello, L. Zhao, S.P. DenBaars, J.S. Speck	*Applied Physics Letters, V76, N26: pp. 3893-3895*	Journal
244.	2000	“Ultrafast optical characterization of carrier capture times in In/sub x/Ga/sub 1-x/ N multiple quantum wells” U. Ozgur, M.J. Bergmann, H.C. Casey, Jr., H.O. Everitt, A.C. Abare, S. Keller, S.P. DenBaars	*Applied Physics Letters, V77, N1: pp. 109-111*	Journal
245.	2000	“Effect of AlGaN/GaN strained layer superlattice period on InGaN MQW laser diodes” M. Hansen, A. Abare, P. Kozodoy, T. Katona, M. Craven, J. Speck, U. Mishra, L. Coldren, S. DenBaars	*Mat. Res. Soc. Symp., V595, W1.4.1-W1.4.6*	Journal
246.	2000	“Optically and thermally detected deep levels in n-type Schottky and p+-n GaN diodes” A. Hierro, D. Kwan, S.A. Ringel, M. Hansen, J.S. Speck, U.K. Mishra, S.P. DenBaars	*Applied Physics Letters, V76, N21: pp. 3064-3066*	Journal
247.	2000	“Transition between the 1x1 and (√3x2√3)R30 surface structures of GaN in the vapor-phase environment” A. Munkholm, C. Thompson, G. B. Stephenson, J.A. Eastman, O. Auciello, P. Fini, J.S. Speck, S.P. DenBaars	*Physica B, V283: pp. 217-222*	Journal
247a.	2000	Chapter 1 pp. 1-25 “Basic Physics & Materials Technology of GaN LEDs and LDs” Steven P. DenBaars	*S. Nakamura, S.F. Chicibu Introduction to Nitride SemiconductorBlue Lasers and Light Emitting Diodes.* *Taylor & Francis: London*	Book Chapter
248.	2000	“Polarization effects, surface states, and the source of electrons in AlGaN/GaN heterostructure field effect transistors” J.P. Ibbetson, P.T. Fini, K.D. Ness, S.P. DenBaars, J.S. Speck, U.K. Mishra	*Applied Physics Letters, V77, N2: pp. 250-252*	Journal

249.	2000	“In situ studies of the effect of silicon on GaN growth modes” A. Munkholm, G. B. Stephenson, J. A. Eastman, O. Auciello, M. V. Ramana Murty, C. Thompson, P. Fini, J. S. Speck, S. P. DenBaars	*Journal of Crystal Growth, V.221, pp. 98-105*	Journal
250.	2000	“Layer by layer growth of GaN induced by silicon” A. Munkholm, C. Thompson, M. V. Ramana Murty, J. A. Eastman, O. Auciello, G. B. Stephenson, P. Fini, S. P. DenBaars, J. S. Speck	*Applied Physics Letters, V77 N11, pp. 1626-1628*	Journal
251.	2000	“Optimization of the surface morphologies and electron mobilities in GaN grown by plasma-assisted molecular beam epitaxy” B. Heying, I. Smorchkova, C. Poblenz, C. Elsass, P. Fini, S. DenBaars, U. Mishra, J. S. Speck	*Applied Physics Letters, V77 N18, pp. 2885-2887*	Journal
252.	2000	“Electron transport in AlGaN/GaN heterostructures grown by plasma-assisted molecular beam epitaxy” C. R. Elsass, I. P. Smorchkova, B. Heying, E. Haus, C. Poblenz, P. Fini, K. Maranowski, P. M. Petroff, S. P. DenBaars, U. K. Mishra, James S. Speck, A. Saxler, S. Elhamri, W. C. Mitchel	*Japanese Journal of Applied Physics, V39 N10B (part 2), pp. L1023-L1025*	Journal
253.	2000	“Dislocation reduction in GaN films through selective island growth of InGaN” S. Keller, G. Parish, J. S. Speck, S. P. DenBaars, U. K. Mishra	*Applied Physics Letters, V77 N17, pp. 2665-2667*	Journal
254.	2000	“Growth and characterization of graded AlGaN conducting buffer layers on n+ SiC substrates” B. Moran, M. Hansen, M. D. Craven, J. S. Speck, S. P. DenBaars	*Journal of Crystal Growth, V221, pp. 301-304*	Journal
255.	2000	“Persistent photoconductivity study in a high mobility AlGaN/GaN heterostructure” S. Elhamri, A. Saxler, W. C. Mitchel, C. R. Elsass, I. P. Smorchkova, B. Heying, E. Haus, P. Fini, J. P. Ibbetson, S. Keller, P. M. Petroff, S. P. DenBaars, U. K. Mishra, J. S. Speck	*Journal of Applied Physics, V88, N11, pp. 6583-6588*	Journal
256.	2001	“Impact of internal electric field and localization effect on quantum well excitons in AlGaN/GaN/InGaN light emitting diodes” S. F. Chichibu, T. Sota, K. Wada, O. Brandt, K. H. Ploog, S. P. DenBaars, S. Nakamura	*Physica Status Solidi A, V183, pp. 91-98*	Journal
257.	2001	“Dominant role of the piezoelectric field in the pressure behavior of InGaN/GaN quantum wells” G. Vaschenko, D. Patel, C. S. Menoni, S. Keller, U. K. Mishra, S. P. DenBaars	*Applied Physics Letters, V78, N5, pp. 640-642*	Journal

258.	2001	“Piezoelectric-field-enhanced lateral ambipolar diffusion coefficient in InGaN/GaN multiple quantum wells” Y.-C. Huang, J.-C. Liang, C.-K. Sun, A. Abare, S. P. DenBaars	*Applied Physics Letters, V78, N7, pp. 928-930*	Journal
259.	2001	“Coherent optical control of acoustic phonon oscillations in InGaN/GaN multiple quantum wells” C.-K. Sun, Y.-K. Huang, J.-C. Liang, A. Abare, S. P. DenBaars	*Applied Physics Letters, V78, N9, pp. 1201-1203*	Journal
260.	2001	“Spin coherence and dephasing in GaN” B. Beschoten, E. Johnston-Halperin, D. K. Young, M. Poggio, J. E. Grimaldi, S. Keller, S. P. DenBaars, U. K. Mishra, E. L. Hu, D. D. Awschalom	*Physical Review B, V63, pp. 121201-1-121201-4*	Journal
261.	2001	“Development of selective lateral photoelectrochemical etching of InGaN/GaN for lift-off applications” A. R. Stonas, T. Margalith, S. P. DenBaars, L. A. Coldren, E. L. Hu	*Applied Physics Letters, V78, N13, pp. 1945-1947*	Journal
262.	2001	“GaN HBT: Toward an RF Device” L. S. McCarthy, I. P. Smorchkova, H. Xing, P. Kozodoy, P. Fini, J. D. L. Pulfrey, J. S. Speck, M. J. W. Rodwell, S. P. DenBaars, U. K. Mishra	*IEEE Transactions on Electron Devices, V48, N3, pp. 543-551*	Journal
263.	2001	“Gallium nitride based high power heterojunction field effect transistors: process development and present status at UCSB” S. Keller, Y.-F. Wu, G. Parish, B. Ziang, J. J. Xu, B. P. Keller, S. P. DenBaars, U. K. Mishra	*IEEE Transactions on Electron Devices, V48, N3, pp. 552-559*	Journal
264.	2001	“Effect of threading dislocations on AlGaN/GaN heterojunction bipolar transistors” L. McCarthy, I. Smorchkova, H. Xing, P. Fini, S. Keller, J. Speck, S. P. DenBaars, M. J. W. Rodwell, U. K. Mishra	*Applied Physics Letters, V78, N15, pp. 2235-2237*	Journal
265.	2001	“Metalorganic chemical vapor deposition of GaN on Si(111): Stress control and application to field-effect transistors”	*Journal of Applied Physics, V89 N12, pp. 7846-7851*	Journal
266.	2001	“Enhanced diffusion as a mechanism for ion-induced damage propagation in GaN” E. D. Haberer, C. H. Chen, M. Hansen, S. Keller, S. P. DenBaars, U. K. Mishra, E. L. Hu	*J. Vac. Sci. Technol. B, V19 N3, pp. 603-608*	Journal
267.	2001	“Channeling as a mechanism for dry etch damage in GaN” E. D. Haberer, C.-H. Chen, A. Abare, M. Hansen, S. DenBaars, L. Coldren, U. Mishra, E. L. Hu	*Appl. Phys. Lett., V76 N26, pp. 3941-3943*	Journal

268.	2001	“Mapping piezoelectric-field distribution in gallium nitride with scanning second-harmonic generation microscopy” C. K. Sun, S. W. Chu, S. P. Tai, S. Keller, A. Abare, U. K. Mishra, S. P. DenBaars	*Scanning, May-June 2001, V.23 N3, pp. 182-192*	Magazine
269.	2001	“Quantum corrections to the electrical conduction in an AlGaN/GaN heterostructure” Z. Dziuba, M. Gorska, J. Antoszewski, A. Babinski, P. Kozodoy, S. Keller, B. Keller, S. P. DenBaars, U. K. Mishra	*Applied Physics A- Materials Science & Processing , V72 N6, pp. 691-698*	Journal
270.	2001	“Femtosecond pump-probe spectroscopy and time-resolved photoluminescence of an InxGa 1-xN/GaN double heterostructures” C. K. Choi, B. D. Little, Y. H. Kwon, J. B. Lam, J. J. Song, Y. C. Chang, S. Keller, U. K. Mishra, S. P. DenBaars	*Physical Review B, V6319 N19, pp. U262-U267*	Journal
271.	2001	“Influence of composition and well-width fluctuations on optical gain in (In, Ga)N multiple quantum wells” M. Vehse, P. Michler, J. Gutowski, S. Figge, D. Hommel, H. Selke, S. Keller, S. P. DenBaars	*Semiconductor Science and Technology, V16 N5, pp. 406-412*	Journal
272.	2001	“Effect of growth termination conditions of the performance of AlGaN/GaN high electron mobility transistors” S. Keller, R. Ventury, G. Parish, S. P. DenBaars, U. K. Mishra	*Applied Physics Letters, V78 N20, pp. 3088-3090*	Journal
273.	2001	“Mass transport regrowth of GaN for ohmic contacts to AlGaN/GaN” S. Heikman, S. Keller, S. P. DenBaars, U. K. Mishra	*Applied Physics Letters, V78 N19, pp. 2876-2878*	Journal
274.	2001	“Selective area mass transport reqrowth of gallium nitride” S. Heikman, S. P. DenBaars, U. K. Mishra	*Japanese Journal of Applied Physics, part 1, V40 N2A, pp. 565-566*	Journal
275.	2001	“Investigations of chemical vapor deposition of GaN using synchotron radiation” C. Thompson, G. B. Stephenson, J. A. Eastman, A. Munkholm, O. Auciello, M. V. R. Murty, P. Fini, S. P. DenBaars, J. S. Speck	*Journal of the Electrochemical Society, V148 N5, pp. C390-C394*	Journal
276.	2001	“Studies of carrier dynamics in unintentionally doped gallium nitride bandtail states” C. K. Sun, J. C. Liang, X. Y. Yu, S. Keller, U. K. Mishra, S. P. DenBaars	*Applied Physics Letters, V78 N18, pp. 2724-2726*	Journal
277.	2001	“Gallium nitride based transistors” H. Xing, S. Keller, Y. F. McCarthy, I. P. Smorchkova, D. Buttari, R. Coffie, D. S. Green, G. Parish, S. Heikman, L. Shen, N. Zhang, J. J. Xu, B. P. Keller, S. P. DenBaars, U. K. Mishra	*Journal of Physics-Condensed Matter, V13 N32, pp. 7139-7157*	Journal

278.	2001	“Influence of pressure on the optical properties of InxGa1-xN epilayers and quantum structures” P. Perlin, I. Gorczyca, T. Suski, P. Wisniewski, S. Lepkowski, N. E. Christensen, A. Svane, M. Hansen, S. P. DenBaars, B. Damilano, N. Gandjean, J. Massies	*Physical Review B, V64 N11, pp. U459-U466*	Journal
279.	2001	“AlGaN/AlN/GaN high-power microwave HEMT” L. Shen, S. Heikman, B. Moran, R. Coffie, N. Q. Zhang, D. Buttari, I. P. Smorchkova, S. Ke.ller, S. P. DenBaars, U. K. Mishra	*IEEE Electron Device Letters, V22 N10, pp. 457-459*	Journal
280.	2001	“Infrared and Raman-scattering studies in a single-crystalline GaN nanowires” H. L. Liu, C. C. Chen, C. T. Chia, C. C. Yeh, C. H. Chen, M. Y. Yu, S. Keller, S. P. DenBaars	*Chemical Physical Letters, Vol. 345 No. 3-4, pp. 245-251*	Journal
281.	2001	“Influence of Ga flux on the growth and electron transport properties of AlGaN/GaN heterostructures grown by plasma-assisted molecular beam epitaxy” C. R. Elsass, C. Poblenz, B. Heying, P. Fini, P. M. Petroff, S. P. DenBaars, U. K. Mishra, J. S. Speck	*Journal of Crystal Growth, V233 N4, pp. 709-716*	Journal
282.	2001	“Influence of growth temperatures and thickness of AlGaN caps on electron transport in AlGaN/GaN heterostructures grown by plasma-assisted molecular beam epitaxy” C. R. Elsass, C. Poblenz, B. Heying, P. Fini, P. M. Petroff, S. P. DenBaars, U. K. Mishra, J. S. Speck, A. Saxler, S. Elhamrib, W. C. Mitchel	*Japanese Journal of Applied Physics, V40 N11, pp.6235-6238*	Journal
283.	2001	“Observation of crystallographic wing tilt in cantilever epitaxy of GaN on silicon carbide and silicon (111) substrates” T. M. Katona, M. D. Craven, P. T. Fini, J. S. Speck, S. P. DenBaars	*Journal of Applied Physics, V79 N18, pp. 2907-2909*	Journal
284.	2001	“Band gap bowing and exciton localization in strained cubic InxGa1-xN films grown on 3C-SiC (001) by rf molecular-beam epitaxy” S. F. Chichibu, M. Sugiyama, T. Kuroda, A. Tackeuchi, T. Kitamura, H. Nakanishi, T. Sota, S. P. DenBaars, S. Nakamura, Y. Ishida, H. Okumura	*Applied Physics Letters, V79 N22, pp. 3600-3602*	Journal
285.	2001	“Capture kinetics of electron traps in MBE-grown n-GaN”A. Hierro, A. R. Arehart, B. Heying, M. Hansen, J. S. Speck, U. K. Mishra, S. P. DenBaars, S. A. Ringel	*Physical Status Solidi B, V228, N1, pp. 309-313*	Journal
286.	2001	“Indium –surfactant-assisted growth of high-mobility AlN/GaN multilayer structures by metalorganic chemical vapor deposition” S. Keller, S. Heikman, I. Ben-Yaacov, L. Shen, S. P. DenBaars, U. K. Mishra	*Applied Physics Letters, V79 N21, pp. 3361-3363*	Journal

287.	2001	“Generation of coherent acoustic phonons in strained GaN thin films” Y. K. Huang, G. W. Chern, C. K. Sun, Y. Smorchkova, S. Keller, U. Mishra, S. P. DenBaars	*Applied Physics Letters, V79 N20, 3361-3363*	Journal
288.	2001	"AlN/GaN and (Al,Ga)N/AlN/GaN two-dimensional electron gas structures grown by plasma-assisted molecular-beam epitaxy" I. P. Smorchkova, L. Chen, T. Mates, L. Shen, S. Heikman, B. Moran, S. Keller, S. P. DenBaars, J. S. Speck, U. K. Mishra	*Journal of Applied Physics, Vol. 90 No. 10, pp. 5196-5201* *Correction/Addition Vol. 91 No. 7, p. 4780*	Journal
289.	2001	“Carrier trapping and recombination at point defects and dislocations in MOCVD n-GaN” A. Hierro, M. Hansen, J. J. Boeckl, L. Zhao, J. S. Speck, U. K. Mishra, S. P. DenBaars, S. A. Ringel	*Physica Status Solidi B, Vol. 228 No. 3, pp. 937-946*	Journal
290.	2001	“Mass transport regrowth of GaN for ohmic contacts to AlGaN/GaN” S. Heikman, S. Keller, B. Moran, R. Coffie, S. P. DenBaars, U. K. Mishra	*Physica Status Solidi A, Vol. 188 No. 1, pp. 355-358*	Journal
291.	2001	“Solar-blind p-GaN/i-AlGaN/n-AlGaN ultraviolet photodiodes on SiC substrate” G. Parish, M. Hansen, B. Moran, S. Keller, S. P. DenBaars, U. K. Mishra	*Physica Status Solidi A, Vol. 188 No. 1, pp. 297-300*	Journal
292.	2001	“Kilovolt AlGaN/GaN HEMTs as switching devices” N. Q. Zhang, B. Moran, S. P. DenBaars, U. K. Mishra, X. W. Wang, T. P. Ma	*Physica Status Solidi A, Vol. 188 No. 1, pp. 213-217*	Journal
293.	2001	“Indium surfactant assisted growth of AlN/GaN heterostructures by metal-organic chemical vapor deposition” S. Keller, S. Heikman, I. Ben-Yaacov, L. Shen, S. P. DenBaars, U. K. Mishra	*Physica Status Solidi A, Vol. 188 No. 2, pp. 775-778*	Journal
294.	2001	“Observation of Mg-rich precipitates in the p-type doping of GaN-based laser diodes” M. Hansen, L. F. Chen, J. S. Speck, S. P. DenBaars	*Physica Status Solidi B, Vol. 228 No. 2, pp. 353-356*	Journal
295.	2001	“Time-resolved photoluminescence of InxGa1-xN/GaN multiple quantum well structures: Effect of Si doping in the barriers” C. K. Choi, Y. H. Kwon, B. D. Little, G. H. Gainer, J. J. Song, Y. C. Chang, S. Keller, U. K. Mishra, S. P. DenBaars	*Physical Review B, Vol. 6424 No. 24, pp. 5339:U608-U613*	Journal
296.	2001	“Photoelectrochemical undercut etching for fabrication of GaN microelectrochemical systems” A. R. Stonas, N. C. MacDonald, K. L. Turner, S. P. DenBaars, E. L. Hu	*Journal of Vacuum Science & Technology B, Vol. 19 No. 6, pp. 2838-2841*	Journal

297.	2002	“Magnetic resonance studies of Mg-doped GaN epitaxial layers grown by organometallic chemical vapor deposition” E. R. Glaser, W. E. Carlos, G. C. B. Braga, J. A. Frietas, W. J. Moore, B. V. Shanabrook, R. L. Henry, A. E. Wickenden, D. D. Koleske, H. Obloh, P. Kozodoy, S. P. DenBaars, U. K. Mishra	*Physical Review B, Vol. 6508 No. 8, pp. U344-U353*	Journal
298.	2002	“Small signal RF performance of AlGaN/GaN heterojunction bipolar transistors” L. S. McCarthy, I. P. Smorchkova, P. Fini, M. J. W Rodwell, J. Speck, S. P. DenBaars, U. K. Mishra	*Electronics Letters, Vol. 38 No. 3, pp. 144-145*	Journal
299.	2002	“Systematic characterization of Cl-2 reactive ion etching for improved ohmics in AlGaN/GaN HEMTs” D. Buttari, A. Chini, G. Meneghesso, E. Zanoni, B. Moran, S. Heikman, N. Q. Zhang, L. Shen, R. Coffie, S. P. DenBaars, U. K. Mishra	*IEEE Electron Device Letters, Vol. 23 No. 2, pp. 76-78*	Journal
300.	2002	“Impact of Ga/N flux ratio on trap states in n-GaN grown by plasma-assisted molecular beam epitaxy” A. Hierro, A. R. Arehart, B. Heying, M. Hansen, U. K. Mishra, S. P. DenBaars, J. S. Speck, S. A. Ringel	*Applied Physics Letters, Vol. 80 No. 5, pp. 805-807*	Journal
301.	2002	“Morphological and optical properties of InGaN laser diodes on laterally overgrown GaN” M. Hansen, P. Fini, M. Craven, B. Heying, J. S. Speck , S. P. DenBaars	*Journal of Crystal Growth, Vol. 234, pp. 623-630*	Journal
302.	2002	“Mg-rich precipitates in the p-type doping of InGaN-based laser diodes” M. Hansen, L. F. Chen, S. H. Lim, S. P. DenBaars, J. S. Speck	*Applied Physics Letters, Vol. 80 No. 14, pp. 2469-2471*	Journal
303.	2002	“GaN-GaN junctions with ultrathin AlN interlayers: Expanding heterojunction design” S. Keller, S. Heikman, L. Shen, I. P. Smorchkova, S. P. DenBaars, U. K. Mishra	*Applied Physics Letters, Vol. 80 No. 23, pp. 4387-4389*	Journal
304.	2002	“Chemical mechanical polishing of gallium nitride” P. R. Tavernier, T. Margalith, L. A. Coldren, S. P. DenBaars, D. R. Clarke	*Electrochemical and Solid-State Letters, Vol. 5 No. 8, pp. 61-64*	Journal
305.	2002	“Characterization of nitrides by electron paramagnetic resonance (EPR) and optically detected magnetic resonance (ODMR)” E. R. Glaser, W. E. Carlos, G. C. B. Braga, J. A. Freitas, Jr., W. J. Moore, B. V. Shanabrook, A. E. Wickenden, D. D. Koleske, R. L. Henry, M. W. Bayerl, M. S. Brandt, H. Obloh, P. Kozodoy, S. P. DenBaars, U. K. Mishra, S. Nakamura, E. Haus, J. S. Speck, J. E. Van Nostrand, M. A. Sanchez, E. Calleja, A. J. Ptak, T. H. Meyers, R. J. Molnar	*Materials Science & Engineering B, Vol. 93, pp. 39-48*	Journal

306.	2002	“Investigation of the piezoelectric polarization in (In,Ga)N/GaN multiple quantum wells grown by plasma-assisted molecular beam epitaxy” P. Waltereit, M. D. Craven, S. P. DenBaars, J. S. Speck	*Journal of Applied Physics, Vol. 92 No. 1, pp. 456-460*	Journal
307.	2002	“Femtosecond dynamics of exciton bleaching in bulk GaN at room tempurature” Y. C. Huang, G. W. Chern, K. H. Lin, J. C. Liang, C. K. Sun, C. C. Hsu, S. Keller, S. P. DenBaars	*Applied Physics Letters, Vol. 81 No. 1, pp. 85-87*	Journal
308.	2002	“Structural characterization of nonpolar (11(2) over-bar0) a-plane GaN thin films grown on (1 (1) over-bar02) r-plane sapphire” M. D. Craven, S. H. Lim, F. Wu, J. S. Speck, S. P. DenBaars	*Applied Physics Letters, Vol. 81 No. 3, pp. 469-471*	Journal
309.	2002	“Growth of Fe doped semi-insulating GaN by metalorganic chemical vapor deposition”S. Heikman, S. Keller, S. P. Denbaars, U. K. Mishra	*Applied Physics Letters, Vol. 81 No. 3, pp. 439-441*	Journal
310.	2002	“Threading dislocation reduction via laterally overgrown nonpolar (11 (2) over-bar0) a-plane GaN” M. D. Craven, S. H. Lim, F. Wu, J. S. Speck, S. P. DenBaars	*Applied Physics Letters, Vol. 81, No. 7, pp. 1201-1203*	Journal
311.	2002	“Tunable sampled-grating DBR lasers using quantum-well intermixing” E. J. Skogen, J. S. Barton, S. P. Denbaars, L. A. Coldren	*IEEE Photonics Technology Letters, Vol. 14 No. 9, pp. 1243-1245*	Journal
312.	2002	“Impurity incorporation in InGaN grown by rf plasma-assisted molecular beam epitaxy” C. Poblenz, T. Mates, M. Craven, S. P. DenBaars, J. S. Speck	*Applied Physics Letters, Vol. 81 No. 15, pp. 2767-2769*	Journal
313.	2002	“A quantum-well-intermixing process for wavelength-agile photonic integrated circuits” E. J. Skogen, J. S. Barton, S. P. DenBaars, L. A. Coldren	*IEEE Journal of Selected Topics in Quantum Electronics, Vol. 8 No. 4, pp. 863-869*	Journal
314.	2002	“Control of crystallographic tilt in GaN grown on Si (111) by cantilever epitaxy” T. M. Katona, J. S. Speck, S. P. DenBaars	*Applied Physics Letters, Vol. 81 No. 19, pp. 3558-3560*	Journal
315.	2002	“Ultrashort hole capture time in Mg-doped GaN thin films” K.-H. Lin, G.-W. Chern, S.-W. Chu, C.-K. Sun, H. Xing, Y. Smorchkova, S. Keller, U. Mishra, S. P. DenBaars	*Applied Physics Letters, Vol. 81 No. 21, pp. 3975-3977*	Journal
316.	2002	“Higher efficiency InGaN laser diodes with an approved quantum well capping configuration” M. Hansen, J. Piprek, P. M. Pattison, J. S. Speck, S. Nakamura, S. P. DenBaars	*Applied Physics Letters, Vol. 81 No. 22, pp. 4275-4277*	Journal
317.	2002	“Realization of wide electron slabs by polarization bulk doping in graded III-V nitride semiconductor alloys” D. Jena, S. Heikman, D. Green, D. Buttari, R. Coffie, H. Xing, S.	*Applied Physics Letters, Vol. 81 No. 23, pp. 4395-4397*	Journal

		Keller, S. DenBaars, J. S. Speck, U. K. Mishra, I. Smorchkova		
317. (a)	2002	“Effect of the nucleation layer on stress during cantilever epitaxy of GaN on Si (111)” T. M. Katona, J. S. Speck, S. P. DenBaars	*Physica Status Solidi A, Vol. 194, pp. 550-553*	Journal
317. (b)	2002	“Nonpolar (11(2) over-bar0) a-plane GaN thin films grown on (1 (1) over-bar02) r-plane sapphire” M. D. Craven, S. H. Lim, F. Wu, J. S. Speck, S. P. DenBaars	*Physica Status Solidi A, Vol. 194, pp. 541-544*	Journal
318.	2003	“AlGaN/GaN current aperture vertical electron transistors fabricated by photoelectrochemical wet etching” Y. Gao, A. R. Stonas, I. Ben-Yaacov, U. Mishra, S. P. DenBaars, E. L. Hu	*Electronics Letters, Vol. 39 No. 1, pp. 148-149*	Journal
319.	2003	“Wafer-fused AlGaAs/GaAs/GaN heterojunction bipolar transistor” S. Estrada, H. Xing, A. Stonas, A. Huntington, U. Mishra, S. DenBaars, L. Coldren, E. Hu	*Applied Physics Letters, Vol. 82, No. 5, pp. 820-822*	Journal
320.	2003	“Influence of InN mole fraction on the recombination processes of localized excitons in strained cubic In$_x$Ga$_{1-x}$N/GaN multiple quantum wells” S. F. Chichibu, T. Onuma, T. Sota, S. P. DenBaars, S. Nakamura, T. Kitamura, Y. Ishida, H. Okumura	*Journal of Applied Physics, Vol. 93, No. 4, pp. 2051-2054*	Journal
321.	2003	“Memory effect and redistribution of Mg into sequencially regrown GaN layer by metalorganic chemical vapor deposition” H. Xing, D. S. Green, H. Yu, T. Mates, P. Kozodoy, S. Keller, S. P. DenBaars, U. K. Mishra	*Japanese Journal of Applied Physics, Vol. 42, No. 1, pp. 50-53*	Journal
322.	2003	“High linearity and high efficiency of class-B power amplifiers in GaN HEMT technology” V. Paidi, X. Shouxuan, R. Coffie, B. Moran, S. Heikman, S. Keller, A. Chini, S. P. DenBaars, U. K. Mishra, S. Long, M. J. W. Rodwell	*IEEE Transactions on Microwave Theory & Techniques, Vol. 51, No. 2, pp. 643-652*	Journal
323.	2003	“1.3 mu m wavelength vertical cavity surface emitting laser fabricated by orientation-mismatched wafer bonding: a prospect for polarization control” Y. L. Okuno, J. Geske, K.-G. Gan, Y. J. Chiu, S. P. DenBaars, J. E. Bowers	*Applied Physics Letters, Vol. 82, No. 15, pp. 2377-2379*	Journal
324.	2003	“Stimulated emission and ultrafast carrier relaxation in InGaN multiple quantum wells” U. Ozgur, H. O. Everitt, S. Keller, S. P. DenBaars	*Applied Physics Letters, Vol. 82, No. 9, pp. 1416-1418*	Journal
325.	2003	“Metalorganic chemical vapor deposition of highly conductive Al$_{0.65}$Ga$_{0.35}$N films” P. Cantu, S. Keller, U. K. Mishra, S. P. DenBaars	*Applied Physics Letters, Vol. 82, No. 21, pp. 3683-3685*	Journal

326.	2003	"Metalorganic chemical vapor deposition of group III nitrides – a discussion of critical issues" S. Keller, S.P. DenBaars	*Journal of Crystal Growth, Vol. 248, pp. 479-486*	Journal
327.	2003	"Growth and characteristics of Fe-doped GaN" S. Heikman, S. Keller, T.Mates, S. P. DenBaars, U. K. Mishra	*Journal of Crystal Growth, Vol. 248, pp. 513-517*	Journal
328.	2003	"Very high voltage operation (>330V) with high current gain of A1GaN/GaN HBTs" H.L. Xing, P.M. Chavarkar, S. Keller, S.P. DenBaars, U.K. Mishra	*IEEE Electron Device Letters, Vol. 24, No. 3, pp. 141-143*	Journal
329.	2003	"Polarization effects in AlGaN/GaN and GaN/AlGaN/GaN heterostructures" S. Heikman, S. Keller, Y. Wu, J. S. Speck, S. P. DenBaars, U. K. Mishra	*Journal of Applied Physics, Vol. 93, No. 12, pp. 10114-10118*	Journal
330.	2003	"Si doping effect on strain reduction in compressively strained A10.49Ga0.51N thin films" P. Cantu, F. Wu, P. Waltereit, S. Keller, A.E. Romanov, U.K. Mishra, S.P. DenBaars, J.S. Speck	*Applied Physics Letters, Vol.83, No. 4, pp. 674-676*	Journal
331.	2003	"Non-planar selective area growth and characterization of GaN and A1GaN" S. Heikman, S. Keller, S.P. DenBaars, U.K. Mishra, F. Bertram, J. Christen	*Japanese Journal of Applied Physics Part 1 – Regular Papers, Short Notes & Review Papers, Vol. 42, No.10, pp. 6276-6283*	Journal
332.	2003	"Variation of structural and optical properties across an A1GaN/GaN HEMT structure directly imaged by cathodoluminescence micrscopy" F. Bertram, J. Christen, S. Heikman, S. Keller, S.P. DenBaars, U.K. Mishra	*Physica Status Solidi A-Applied Research, Vol. 200, No.1, pp. 183-186*	Journal
333.	2003	"A widely tunable high-speed transmitter using an integrated SGDBR laser-semiconductor optical amplifier and Mach-Zehnder modulator" J.S. Barton, E.J. Skogen, M.L. Masanovic, S.P. DenBaars, L.A. Coldren	*IEEE Journal of Selected Topics in Quantum Electronics, Vol. 9, No. 5, pp. 1113-1117*	Journal
334.	2003	"Postgrowth control of the quantum-well band edge for the monolithic integration of widely tunable lasers and electroabsorption modulators" E.J. Skogen, J.W. Raring, S.P. DenBaars, L.A. Coldren	*IEEE Journal of Selected Topics in Quantum Electronics, Vol. 9, No. 5, pp. 1183-1190*	Journal
335.	2003	"n-AlGaAs/p-GaAs/n-GaN heterojunction bipolar transistor wafer-infused at 550-750 degrees C" S. Estrada, A. Huntington, A. Stonas, H. Xing, U. Mishra, S. DenBaars, L. Coldren, E. Hu	*Applied Physics Letters, Vol. 93, No. 12, pp. 560-562*	Journal

336.	2003	“High-linearity class B power amplifiers in GaN HEMT technology” X. Shouxuan, V. Paidi, R. Coffie, S. Keller, S. Heikman, B. Moran, A. Chini, S. P. DenBaars, U. Mishra, S. Long, M. J. W. Rodwell	*IEEE Microwave & Wireless Components Letters, Vol. 13, No. 7, pp. 284-286*	Journal
337.	2003	“Recombination dynamics of localized excitons in cubic $In_xGa_{1-x}N$/GaN multiple quantum wells grown by radio frequency molecular beam epitaxy on 3C-SiC substrate” S. F. Chichibu, T. Onuma, T. Aoyama, K. Nakajima, P. Ahmet, T. Chikyow, T. Sota, S. P. DenBaars, S. Nakamura, T. Kitamura, Y. Ishida, H. Okumura	*Journal of Vacuum Science & Technology B, Vol. 21, No. 4, pp. 1856-1862*	Journal
338.	2003	“Structural and morphological characteristics of planar(1120) *a*-plane gallium nitride grown by hydride vapor phase epitaxy” B. A. Haskell, F. Wu, S. Matsuda, M. D. Craven, P. T. Fini, S. P. DenBaars, J. S. Speck, S. Nakamura	*Applied Physics Letters, Vol. 83, No. 8, pp. 1554-1556*	Journal
339.	2003	“Refractive index study of $Al_xGa_{1-x}N$ films grown on sapphire substrates” N. A. Sanford, L. H. Robins, A. V. Davydov, A. Shapiro, D. V. Tsvetkov, A. V. Dmitriev, S. Keller, U. K. Mishra, S. P. DenBaars	*Journal of Applied Physics, Vol. 94, No. 5, pp. 2980-2991*	Journal
340.	2003	“Cathodoluminescence characterization of dislocations in gallium nitride using a transmission electron microscope” N. Yamamoto, H. Itoh, V. Grillo, S. F. Chichibu, S. Keller, J. S. Speck, S. P. DenBaars, U. K. Mishra, S. Nakamura, G. Salviati	*Journal of Applied Physics, Vol. 94, No. 7, pp. 4315-4319*	Journal
341.	2003	“Observation of huge nonlinear absorption enhancement near exciton resonance in GaN” K.-H. Lin, G.-W. Chern, Y.-C. Huang, S. Keller, S. P. DenBaars, C.-K. Sun	*Applied Physics Letters, Vol. 83, No. 15, pp. 3087-3089*	Journal
342.	2003	“High conductivity modulation doped AlGaN/GaN multiple channel heterostructures” S. Heikman, S. Keller, D. S. Green, S. P. DenBaars, U. K. Mishra	*Journal of Applied Physics, Vol. 94, No. 8, pp. 5321-5323*	Journal
343.	2003	“Characterization of *a*-plane GaN/(Al,Ga)N multiple quantum wells grown via metalorganic chemical vapor deposition” M. D. Craven, P. Waltereit, F. Wu, J. S. Speck, S. P. DenBaars	*Japanese Journal of Applied Physics, Vol. 42, pp. L235-L238*	Journal
344.	2003	“Crystallographic wing tilt in laterally overgrown GaN” C. Rodel, H. Heinke, D. Hommel, T. M. Katona, J. S. Speck, S. P. DenBaars	*Journal of Physics D: Applied Physics, Vol. 36, pp. A188-A191*	Journal

345.	2003	"Electrical and structural properties of AlGaN/AlGaN superlattice structures grown by metal-organic chemical vapor deposition" S. Keller, P. Waltereit, P. Cantu, U. K. Mishra, J. S. Speck	*Optical Materials, Vol. 28, pp. 187-195*	Journal
346.	2003	"Defect reduction in (1120) a-plane gallium nitride vial lateral epitaxial overgrowth by hydride vapor-phase epitaxy" B. A. Haskell, F. Wu, M. D. Craven, S. Matsuda, P. T. Fini, T. Fujii, K. Fujito, S. P. DenBaars, J. S. Speck, S. Nakamura	*Applied Physics Letters, Vol. 83, pp. 644-646*	Journal
347.	2004	"High-power polarization-engineered GaN/A1GaN HEMTs without surface passivation" L. Shen, R. Coffie, D. Buttari, S. Heikman, A. Chakraborty, A. Chini, S. Keller, S.P. DenBaars, U.K. Mishra	*IEEE Electron Device Letters, Vol. 25, No. 1, pp. 7-9*	Journal
348.	2004	"Power and linearity characteristics of GaN MISFETs on sapphire substrate" A. Chini, J. Wittich, S. Heikman, S. Keller, S.P. DenBaars, U.K. Mishra	*IEEE Electron Device Letters, Vol. 25, No. 2, pp. 55-57*	Journal
349.	2004	"AlGaN/GaN current aperture vertical electron transistors with regrown channels" I. Ben-Yaacov, Y.-K. Seck, U. K. Mishra, S. P. DenBaars	*Journal of Applied Physics, Vol. 95, No. 4, pp. 2073-2078*	Journal
350.	2004	"Well-width dependence of photoluminescence emission from a-plane GaN/AlGaN multiple quantum wells" M. D. Craven, P. Waltereit, J. S. Speck, S. P. DenBaars	*Applied Physics Letters, Vol. 84, No. 4, pp. 496-498*	Journal
351.	2004	"Impact of carbon on trap states in n-type GaN grown by metalorganic chemical vapor deposition" A. Armstrong, A. R. Arehart, B. Moran, S. P. DenBaars, U. K. Mishra, J. S. Speck, S. A. Ringel	*Applied Physics Letters, Vol. 84, No. 3, pp. 374-376*	Journal
352.	2004	"AlGaN/GaN polarization-doped field effect transistor for microwave power applications" S. Rajan, H. Xing, S. DenBaars, U. K. Mishra, D. Jena	*Applied Physics Letters, Vol. 84, No. 9, pp. 1591-1593*	Journal
353.	2004	"Radiative and nonradiative processes in strain-free Al_xGa_{1-x}/N films studied by time-resolved photoluminescence and positron annihilation techniques" T. Onuma, S. F. Chichibu, A. Uedona, T. Sota, P. Cantu, T. M. Katona, J. F. Kaeding, S. Keller, U. K. Mishra, S. Nakamura, S. P. DenBaars	*Journal of Applied Physics, Vol. 95, No. 5, pp. 2495-2504*	Journal
354.	2004	"Microstructural evolution of a-plane GaN grown on a-plane SiC by metalorganic chemical vapor deposition" M. D. Craven, F. Wu, A. Chakraborty, B. Imer, U. K. Mishra, S. P. DenBaars, J. S. Speck	*Applied Physics Letters, Vol. 84, No. 8, pp. 1281-1283*	Journal

355.	2004	“Increase in the extraction efficiency of GaN-based light-emitting diodes via surface roughening” T. Fujii, Y. Gao, R. Sharma, E. L. Hu, S. P. DenBaars, S. Nakamura	*Applied Physics Letters, Vol. 84, No. 6, pp. 855-857*	Journal
356.	2004	“Preparation of indium nitride micro-and nanostructures by ammonolysis of indium oxide” B. Schwenzer, L. Loeffler, R. Seshadri, S. Keller, F. F. Lange, S. P. DenBaars, U. K. Mishra	*Journal of Materials Chemistry, Vol. 14, No. 4, pp. 637-641*	Journal
357.	2004	“The growth of N-face GaN by MOCVD: effect of Mg, Si, and In” P. R. Tavernier, T. Margalith, J. Williams, D. S. Green, S. Keller, S. P. DenBaars, U. K. Mishra, S. Nakamura, D. R. Clarke	*Journal of Crystal Growth, Vol. 264, No. 1-3, pp. 150-158*	Journal
358.	2004	“Micro cavity effect in GaN-Based light-emitting diodes formed by laser lift-off and etch-back technique” T. Fujii, A. David, C. Schwach, P.M. Pattison, R. Sharma, K. Fujito, T. Margalith, S.P. DenBaars, C. Weisbuch, S. Nakamura	*Japanese Journal of Applied Physics Part 2 – Letters, Vol. 43, No.3B, pp. L411-L413*	Journal
359.	2004	“Blue GaN-based light-emitting diodes grown by molecular-beam epitaxy with external quantum efficiency greater than 1.5%” P. Waltereit, H. Sato, C. Poblenz, D. S. Green, J. S. Brown, M. McLaurin, T. Katona, S. P. DenBaars, J. S. Speck, J. H. Liang, M. Kato, H. Tamura, S. Omori, C. Funaoka	*Applied Physics Letters, Vol. 84, No. 15, pp. 2748-2750*	Journal
360.	2004	"Maskless lateral epitaxial overgrowth of high-aluminum-content AlxGa1-xN" T. M. Katona, P. Cantu, S. Keller, Y. Wu, J. S. Speck, S. P. DenBaars	*Applied Physics Letters, Vol. 84, No. 24, pp. 5025-5027*	Journal
361.	2004	"Ultrafast valence intersubband hole relaxation in InGaN multiple-quantum-well laser diodes" K.-G. Gan, C.-K. Sun, S. P. DenBaars, J. E. Bowers	*Applied Physics Letters, Vol. 84, No. 23, pp. 4675-4677*	Journal
362.	2004	"Improved quantum efficiency in nonpolar (1120) AlGaN/GaN quantum wells grown on GaN prepared by lateral epitaxial overgrowth" T. Koida, S. F. Chichibu, T. Sota, M. D. Craven, B. A. Haskell, J. S. Speck, S. P. DenBaars, S. Nakamura	*Applied Physics Letters, Vol. 84, No. 19, pp. 3768-3770*	Journal
363.	2004	"High doping incorporation on (311)B InP/InGaAs by metalorganic chemical vapor deposition and its application to tunnel junction fabrication" Y. L. Okuno, S. P. DenBaars, J. E Bowers	*Applied Physics Letters, Vol. 84, No. 18, pp. 3483-3485*	Journal
364.	2004	"Dislocation-and crystallographic-dependent photoelectrochemical wet etching of gallium nitride" Y. Gao, M. D. Craven, J. S. Speck, S. P. DenBaars, E. L. Hu	*Applied Physics Letters, Vol. 84, No. 17, pp. 3322-3324*	Journal

365	2004	“Unpassivated GaN/AlGaN/GaN power high electron mobility transistors with dispersion controlled by epitaxial layer design” L. Shen, R. Coffie, D. Buttari, S. Heikman, A. Chakraborty, A. Chini, S. Keller, S.P. Denbaars, U.K. Mishra	*J. of Elec. Mat. 33 (5): 422-425*	Journal
366	2004	“Roughening Hexagonal Surface Morphology on Laser Lift-Off (LLO) N-Face GaN with Simple Photo-Enhanced Chemical Wet Etching” Y. Gao, T. Fujii, R. Sharma, K. Fujito, S.P. Denbaars, S. Nakamura, E.L. Hu	*Jpn. J. of Appl. Phys., 43 (5A) pp. L637-L639*	Journal
367	2004	“Removal of thick (>100 nm) InGaN layers for optical devices using band-gap-selective photoelectrochemical etching” E.D. Haberer, R. Sharma, A.R. Stonas, S. Nakamura, S.P. DenBaars, E.L. Hu	*Appl. Phys. Lett., 85 (5), 762-764*	Journal
368	2004	“MOCVD growth of AlGaN films for solar blind photodetectors” P.C. Alejandro, S. Keller, T. Li, U.K. Mishra, J.S. Speck, S.P. Denbaars	*Phys. Stat. Sol. A 201 (9); 2185-2189*	Journal
369	2004	“Orientation-mismatched wafer bonding for polarization control of 1.3 µm-wavelength vertical cavity surface emitting lasers (VCSEL)” Y.L. Okuno, J. Geske, Y.J. Chiu, S.P. Denbaars, J.E. Bowers	*Institute of Physics Conference Series 174: 367-370*	Journal
370	2004	“Cathodoluminescence study of deep ultraviolet quantum wells grown on maskless laterally epitaxial overgrown AlGaN” T.M. Katona, M.D. Craven, J.S. Speck, S.P. DenBaars	*Appl. Phys. Lett., 85 (8),* 1350-1352	Journal
371	2004	“Integration of high-gain and high-saturation-power active regions using quantum-well intermixing and offset-quantum-well regrowth” E. Skogen, J. Raring, S. DenBaars, L. Coldren	*Elec. Lett. 40 (16),* 993-994	Journal
372	2004	“Wafer Bonding of GaN and ZnSSe for optoelectronic applications” A. Murai, L. McCarthy, U. Mishra, S.P. DenBaars, C. Kruse, S. Figge, D. Hommel	*Jpn. J. of Appl. Phys., 43 (10A),* L1275-1277	Journal
373	2004	“Nonpolar *a*-plane p-type GaN and *p-n* junction diodes” A. Chakraborty, H. Xing, M.D. Craven, S. Keller, T. Mates, J.S. Speck, S.P. DenBaars, U.K. Mishra	*J. of Appl. Phys.*, 96 (8), pp.4494-4499	Journal

374	2004	“AlGaN/GaN metal-oxide-semiconductor heterostructure field-effect transistors using barium strontium titanate” P.J. Hansen, L. Shen, Y. Wu, A. Stonas, Y. Terao, S. Heikman, D. Buttari, T.R. Taylor, S.P. DenBaars, U.K. Mishra, R.A. York, J.S. Speck	*J. Vac. Sci. Technol.* B 22(5), 2479-2485	Journal
375	2004	“Growth of thick (11$\underline{2}$0) GaN using a metal interlayer” P.R. Tavernier, B. Imer, S.P. DenBaars, D.R. Clarke	*Appl. Phys. Lett*., 85 (20), 4630-4632	Journal
376	2005	“Gallium Nitride Powders from Ammonolysis: Influence of Reaction Parameters on Structure and Properties” B. Schwenzer, J. Hu, R. Seshadri, S. Keller, S.P. DenBaars, U.K. Mishra	*Chem. Mater*., 16, (24): 5088-5095	Journal
377	2005	“Nonpolar InGaN/GaN emitters on reduced-defect lateral epitaxially overgrown *a*-plane GaN with drive-current-independent electroluminescence emission peak” A. Chakraborty, B.A. Haskell, S. Keller, J.S. Speck, S.P. DenBaars, S. Nakamura, U.K. Mishra	*Appl. Phys. Lett*., 85 (22), 5143-5145	Journal
378	2005	“Free-standing, optically pumped, GaN/InGaN microdisk lasers fabricated by photoelectrochemical etching” E.D. Haberer, R. Sharma, C. Meier, A.R. Stonas, S. Nakamura, S.P. DenBaars, E.L. Hu	*Appl. Phys. Lett*., 85 (22), 5179-5181	Journal
379	2005	“Dopant activation and ultralow resistance ohmic contacts to Si-ion-implanted GaN using pressurized rapid thermal annealing” H. Yu, L. McCarthy, H. Xing, P. Waltereit, L. Shen, S. Keller, S.P. Denbaars, J.S. Speck, U.K. Mishra	*Appl. Phys. Lett.*, 85 (22), 5254-5256	Journal
380	2005	“High contrast InP/InGaAsP grating MOCVD regrowth using TBA and TBP” E.J. Skogen, J.S. Barton, J.W. Raring, L.A. Coldren, S.P. DenBaars	*J. of Cryst. Growth* 272, 564-569	Journal
381	2005	“Demonstration of negative chirp characteristics over wide wavelength range using monolithically integrated SG-DBR laser/electroabsorption modulator” J.W. Raring, E.J. Skogen, S.P. DenBaars, L.A. Coldren	*Elec. Lett.*, 40 (25), 1599-1600	Journal
382	2005	“Structural and morphological evolution of GaN grown by metalorganic chemical vapor deposition on SiC substrates using an AlN initial layer” B. Moran, F. Wu, A.E. Romanov, U.K. Mishra, S.P. DenBaars, J.S. Speck	*J. of Cryst. Growth*, 273, 38-47	Journal

383	2005	“A study of regrowth interface and material quality for a novel InP-based architecture” J.W. Raring, E.J. Skogen, S.P. DenBaars, L.A. Coldren	*J. of Cryst. Growth*, 273, 26-37	Journal
384	2005	“Widely Tunable Negative-Chirp SG-DBR Laser/EA-Modulated Transmitter” J.W. Raring, E.J. Skogen, L.A. Johansson, M.N. Sysak, S.P. DenBaars, L.A. Coldren	*J. of Lightwave Tech.*, 23 (1), 80-86	Journal
385	2005	“Properties of nonpolar *a*-plane InGaN/GaN multiple quantum wells grown on laterally epitaxially overgrown *a*-plane GaN” A. Chakraborty, S. Keller, C. Meier, B. A. Haskell, S. Keller, P. Waltereit, S.P. DenBaars, S. Nakamura, J.S. Speck, U.K. Mishra	*Appl. Phys. Lett.,* 86 (3), 031901	Journal
386	2005	“Limiting factors of room-temperature nonradiative photoluminescence lifetime in polar and nonpolar GaN studied by time-resolved photoluminescence and slow positron annihilation techniques” S.F. Chichibu, A. Uedono, T. Onuma, T. Sota, B.A. Haskell, S.P. DenBaars, J.S. Speck, S. Nakamura	*Appl. Phys. Lett*., Vol. 86 (2), 021914	Journal
387	2005	“Demonstration of nonpolar *m*-plane InGaN/GaN light-emitting diodes on Free-standing *m*-plane GaN substrates” A. Chakraborty, B.A. Haskell, S. Keller, J.S. Speck, S.P. DenBaars, S. Nakamura, U.K. Mishra	*Jpn. J. of Appl. Phys.*, 44 (5), L173-L175	Journal
388	2005	“Measurement of second order susceptibilities of GaN and AlGaN” N.A. Sanford, A.V. Davydov, D.V. Tsvetkov, A.V. Dmitriev, S. Keller, U.K. Mishra, S.P. DenBaars, S.S. Park, J.Y. Han, R.J. Molnar	*J. of Appl. Phys.*, 97 (5), 053512	Journal
389	2005	“Defect reduction in $(1\underline{1}00)$ *m*-plane gallium nitride via lateral epitaxial overgrowth by hydride vapor phase epitaxy” B.A. Haskell, T.J. Baker, M.B. McLaurin, F. Wu, P.T. Fini, S.P. DenBaars, J.S. Speck, S. Nakamura	*Appl. Phys. Lett.*., 86 (11), 111917	Journal
390	2005	“Ion implanted AlGaN–GaN HEMTs with nonalloyed ohmic contacts” H. Yu, L. McCarthy, S. Rajan, S. Keller, S. DenBaars, J. Speck, U. Mishra	*IEEE Elec. Dev. Lett*., 26 (5), 283-285	Journal

391	2005	"Microstructure and enhanced morphology of planar nonpolar *m*-plane GaN grown by hydride vapor phase epitaxy" B.A Haskell, A. Chakraborty, F. Wu, H. Sasano, P.T. Fini, S.P. DenBaars, J.S. Speck, S. Nakamura	*J. of Elec. Mat.*, 34 (4), 357-360	Journal
392	2005	"Intensity dependent time-resolved photoluminescence studies of GaN/AlGaN multiple quantum wells of varying well width on laterally overgrown *a*-plane and planar *c*-plane GaN" G.A. Garrett, H. Shen, M. Wraback, B. Imer, B. Haskell, J.S. Speck. S. Keller, S. Nakamura, S.P. Denbaars	*Phys. Stat. Sol. A* 202 (5), 846-849	Journal
393	2005	"Demonstration of a GaN-spacer high electron mobility transistor with low alloy scattering" T. Palacios, L. Shen, S. Keller, A. Chakraborty, S. Heikman, D. Buttari, S.P. Denbaars, U.K. Mishra	*Phys. Stat. Sol A* 202 (5), 837-840	Journal
394	2005	"Localized exciton dynamics in nonpolar (11$\underline{2}$0) $In_xGa_{1-x}N$ multiple quantum wells grown on GaN templates prepared by lateral epitaxial overgrowth" T. Onuma, A. Chakraborty, B.A. Haskell, S. Keller, S.P. DenBaars, J.S. Speck, S. Nakamura, U.K. Mishra, T. Sota, S.F. Chichibu	*Appl. Phys. Lett.*, 86 (15), 151918	Journal
395	2005	"Milliwatt Power Deep Ultraviolet Light Emitting Diodes Grown on Silicon Carbide" C. Moe, H. Masui, M.C. Schmidt, L. Shen, B. Moran, S. Newman, K. Vampola, T. Mates, S. Keller, J.S. Speck, S.P. DenBaars, C. Hussel, D. Emerson	*Jpn. J. of Appl. Phys.*, 44 (17), L502-L504	Journal
396	2005	"Epitaxial Lateral Overgrowth of High Al Composition AlGaN Alloys on Deep Grooved SiC Substrates" S. Heikman, S. Keller, S. Newman, Y. Wu, C. Moe, B. Moran, M. Schmidt, U.K. Mishra, J.S. Speck, S.P. DenBaars	*Jpn. J. of Appl. Phys.*, 44 (13), L405-L407	Journal
397	2005	"Synthesis of luminescing (In,Ga)N nanoparticles from an inorganic ammonium fluoride precursor" B. Schwenzer, C. Meier, O. Masala, R. Seshadri, S.P. DenBaars, U.K. Mishra	*J. Mater. Chem.*, 15 (19), 1891-1895	Journal
398	2005	"Optical evidence for lack of polarization in (11$\underline{2}$0) oriented GaN/(AlGa)N quantum structures" N. Akopian, G. Bahir, D. Gershoni, M.D. Craven, J.S. Speck, S.P. DenBaars	*Appl. Phys. Lett.*, 86 (20), 202104	Journal

399	2005	“Multiple-band-edge quantum-well intermixing in the InGaAs/InGaAsP/InGaP material system” E.J. Skogen, L.A. Coldren, J.W. Raring, S.P. DenBaars	*Appl. Phys. Lett.*, 86 (24), 241117	Journal
400	2005	Characterization of AlGaN/GaN *p*-*n* diodes with selectively regrown *n*-AlGaN by metal-organic chemical-vapor deposition and its application to GaN-based bipolar transistors” H. Xing, S.P. DenBaars, U.K. Mishra	*J. of Appl. Phys.*, 97 (11), 113703	Journal
401	2005	“Role of inclined threading dislocations in stress relaxation in mismatched layers” P. Cantu, F. Wu, P. Waltereit, S. Keller, A.E. Romanov, S.P. DenBaars, J.S. Speck	*J. of Appl. Phys.*, 97 (10), 103534	Journal
402	2005	“Local wing tilt analysis of laterally overgrown GaN by x-ray rocking curve imaging” D. Lubbert, T. Baumbach, P. Mikulík, P. Pernot, L. Helfen, R. Köhler, T.M. Katona, S. Keller, S.P. DenBaars	*J. of Phys. D-Appl. Phys.*, 38 (10A), A50-A54	Journal
403	2005	“Polarized photoreflectance spectroscopy of strained *A*-plane GaN films on *R*-plane sapphire” Ghosh, S; Misra, P; Grahn, HT; Imer, B; Nakamura, S; DenBaars, SP; Speck, JS	*J. of Appl. Phys.* 98 (2): Art. 026105	Journal
404	2005	“Microstructural and optical evaluation of nitride light-emitting diodes and II-VI distributed Bragg reflectors combined by direct wafer bonding” Murai A, Kruse C, Samonji K, McCarthy L, Speck JS, Mishra UK, DenBaars SP, Hommel D	*Jpn. J. of Appl. Phys.* 44 (30): L958-L960	Journal
405	2005	“Milliwatt power blue InGaN/GaN light-emitting diodes on semipolar GaN templates” Chakraborty A, Baker TJ, Haskell” BA, Wu F, Speck JS, Denbaars SP, Nakamura S, Mishra UK	*Jpn. J. of Appl. Phys.* 44 (30): L945-L947	Journal
406	2005	“Photonic bands in two-dimensionally patterned multimode GaN waveguides for light extraction” David A, Meier C, Sharma R, Diana FS, DenBaars SP, Hu E, Nakamura S, Weisbuch C, Benisty H	*Appl. Phys. Lett.* 87 (10): 101107	Journal

407	2005	“Simultaneous four-photon luminescence, third-harmonic generation, and second-harmonic generation microscopy of GaN” Chu SW, Chan MC, Tai SP, Keller S, DenBaars SP, Sun CK	*Opt. Lett. 30 (18): 2463-2465*	Journal
408	2005	“Influence of the dynamic access resistance in the gm and fT linearity of AlGaN/GaN HEMTs” Palacios T, Rajan S, Chakraborty A, Heikman S, Keller S, DenBaars SP, Mishra UK	*IEEE Trans. on Elec. Dev. 52 (10): 2117-2123*	Journal
409	2005	“Quantum well intermixing and MOCVD regrowth for monolithic integration of 40 Gbit/s UTC type photodiodes with OW based components” Raring JW, Skogen EJ, Barton JS, Wang CS, DenBaars SP, Coldren LA	*Elec. Lett. 41 (18): 1033-1034 SEP 1 2005*	Journal
410	2005	“Metalorganic chemical vapor deposition conditions for efficient silicon doping in high Al-composition AlGaN films” Keller S, Cantu P, Moe C, Wu Y, Keller S, Mishra UK, Speck JS, DenBaars SP	*Jpn. J. of Appl. Phys. 44 (10): 7227-7233*	Journal
411	2005	“Polarized light emission from nonpolar InGaN light-emitting diodes grown on a bulk m-plane GaN substrate” Masui H, Chakraborty A, Haskell BA, Mishra UK, Speck JS, Nakamura S, DenBaars SP	*Jpn. J. of Appl. Phys. 44 (43): L1329-L1332*	Journal
412	2005	“GaN blue photonic crystal membrane nanocavities” Choi YS, Hennessy K, Sharma R, Haberer E, Gao Y, DenBaars SP, Nakamura S, Hu EL, Meier C	*Appl. Phys. Lett. 87 (24): 243101*	Journal
413	2005	“Demonstration of high saturation power/high gain SOAs using quantum well intermixing based integration platform” Raring JW, Skogen EJ, Masanovic ML, DenBaars SP, Coldren LA	*Elec. Lett. 41 (24): 1345-1346*	Journal
414	2005	“High-power AlGaN/GaN HEMTs for Ka-band applications” Palacios T, Chakraborty A, Rajan S, Poblenz C, Keller S, DenBaars SP, Speck JS, Mishra UK	*IEEE Elec. Dev. Lett. 26 (11): 781-783*	Journal
415	2006	“AlGaN/GaN high electron mobility transistors with InGaN back-barriers” Palacios T, Chakraborty A, Heikman S, Keller S, DenBaars SP, Mishra UK	*IEEE Elec. Dev. Lett. 27 (1): 13-15*	Journal

416	2006	“Visible resonant modes in GaN-based photonic crystal membrane cavities” Meier C, Hennessy K, Haberer ED, Sharma R, Choi YS, McGroddy K, Keller S, DenBaars SP, Nakamura S, Hu EL	*Appl Phys. Lett. 88 (3): 031111*	Journal
417	2006	“Electron mobility in graded AlGaN alloys” Rajan S, DenBaars SP, Mishra UK, Xing HL, Jena D	*Appl. Phys. Lett. 88 (4): Art. No. 042103*	Journal
418	2006	“Design and demonstration of novel QW intermixing scheme for the integration of UTC-type photodiodes with QW-based components” Raring JW, Skogen EJ, Wang CS, Barton JS, Morrison GB, Demiguel S, DenBaars SP, Coldren LA	*IEEE J. of Quant. Elect. 42 (2): 171-181*	Journal
419	2006	“GaN light-emitting diodes with Archimedean lattice photonic crystals” David A, Fujii T, Matioli E, Sharma R, Nakamura S, DenBaars SP, Weisbuch C, Benisty H	*Appl. Phys. Lett. 88 (7): 073510*	Journal
420	2006	“Use of double-channel heterostructures to improve the access resistance and linearity in GaN-based HEMTs” Palacios T, Chini A, Buttari D, Heikman S, Chakraborty A, Keller S, DenBaars SP, Mishra UK	*IEEE Trans. on Elect. Dev. 53 (3): 562-565*	Journal
421	2006	“Improved quality (1120) a-plane GaN with sidewall lateral epitaxial overgrowth” Imer BM, Wu F, DenBaars SP, Speck JS	*Appl. Phys. Lett. 88 (6): Art. No. 061908*	Journal
422	2006	“Photonic-crystal GaN light-emitting diodes with tailored guided modes distribution” David A, Fujii T, Sharma R, McGroddy K, Nakamura S, DenBaars SP, Hu EL, Weisbuch C, Benisty H	*Appl. Phys. Lett. 88 (6): 061124*	Journal
423	2006	“Nonpolar m-plane blue-light-emitting diode lamps with output power of 23.5 mW under pulsed operation” Chakraborty A, Haskell BA, Masui H, Keller S, Speck JS, DenBaars SP, Nakamura S, Mishra UK	*Jpn. J. of Appl. Phys. 45 (2A): 739-741*	Journal
424	2006	“Etching of Ga-face and N-face GaN by inductively coupled plasma” Waki I, Iza M, Speck JS, DenBaars SP, Nakamura S	*Jpn. J. of Appl. Phys. 45 (2A): 720-723*	Journal

425	2006	"Recombination dynamics of a 268 nm emission peak in Al0.53In0.11Ga0.36N/Al0.58In0.02Ga0.40N multiple quantum wells" Onuma T, Keller S, DenBaars SP, Speck JS, Nakamura S, Mishra UK, Sota T, Chichibu SF	*Appl. Phys. Lett. 88 (11): 111912*	Journal
426	2006	"Photonic crystal laser lift-off GaN light-emitting diodes" David A, Fujii T, Moran B, Nakamura S, DenBaars SP, Weisbuch C, Benisty H	*Appl. Phys. Lett. 88 (13): 133514*	Journal
427	2006	"Unpassivated high power deeply recessed GaN HEMTs with fluorine-plasma surface treatment" Shen L, Palacios T, Poblenz C, Corrion A, Chakraborty A, Fichtenbaum N, Keller S, Denbaars SP, Speck JS, Mishra UK	*IEEE Elec. Dev. Lett. 27 (4): 214-216*	Journal
428	2006	"Effect of the nucleation conditions on the polarity of AlN and GaN films grown on C-face 6H-SiC" Keller S, Fichrenbaum N, Wu F, Lee G, DenBaars SP, Speck JS, Mishra UK	*Jpn. J. of Appl. Phys. 45 (11): L322-L325*	Journal
429	2006	"Polarization anisotropy in GaN films for different nonpolar orientations studied by polarized photoreflectance spectroscopy" Misra P, Behn U, Brandt O, Grahn HT, Imer B, Nakamura S, DenBaars SP, Speck JS	*Appl. Phys. Lett. 88 (16): 161920*	Journal
430	2006	"Optimized doping and contact scheme for low-voltage 275-nm deep ultraviolet LEDs" Moe CG, Schmidt MC, Masui H, Chakraborty A, Vampola K, Newman S, Moran B, Shen L, Mates T, Keller S, Denbaars SP, Emerson D	*J. of Elect. Mat. 35 (4): 750-753*	Journal
431	2006	"Interdigitated multipixel arrays for the fabrication of high-power light-emitting diodes with very low series resistances" Chakraborty A, Shen L, Masui H, DenBaars SP, Mishra UK	*Appl. Phys. Lett. 88 (18): 181120*	Journal
432	2006	"High performance deeply-recessed GaN power HEMTs without surface passivation" Shen L, Chakraborty A, McCarthy L, Fichtenbaum N, Keller S, DenBaars SP, Mishra UK	*Elect. Lett. 42 (9): 555-556*	Journal
433	2006	"Optimization of AlGaN/GaN HEMTs for high frequency operation" Palacios T, Dora Y, Chakraborty A, Sanabria C, Keller S, DenBaars SP, Mishra UK	*Phys. Stat. Sol. A 203 (7): 1845-1850*	Journal

434	2006	“High-performance E-mode AlGaN/GaN HEMTs” Palacios T, Suh CS, Chakraborty A, Keller S, DenBaars SP, Mishra UK	*IEEE Elec. Dev. Lett. 27 (6): 428-430*	Journal
435	2006	“Novel devices based on the combination of nitride and II-VI materials” Murai A, Kruse C, McCarthy L, Mishra UK, DenBaars SP, Hommel D	*Phys. Stat. Sol. A 203 (7): 1771-1777*	Journal
436	2006	“Crystal quality and growth evolution of aluminum nitride on silicon carbide” Moe CG, Wu Y, Keller S, Speck JS, DenBaars SP, Emerson D	*Phys. Stat. Sol. A 203 (7): 1708-1711*	Journal
437	2006	“AlGaN/AlN distributed Bragg reflectors for deep ultraviolet wavelengths” Moe CG, Wu Y, Piprek J, Keller S, Speck JS, DenBaars SP, Emerson D	*Phys. Stat. Sol. A 203 (8): 1915-1919*	Journal
438	2006	“Mapping misorientation and crystallographic tilt in GaN layers via polychromatic microdiffraction” Barabash RI, Ice GE, Liu W, Roder C, Figge S, Einfeldt S, Hommel D, Katona TM, Speck JS, DenBaars SP, Davis RF	*Phys. Stat. Sol. B 243 (7): 1508-1513*	Journal
439	2006	“Optical polarization anisotropy in strained A-plane GaN films on R-plane sapphire” Ghosh S, Misra P, Grahn HT, Imer B, Nakamura S, DenBaars SP, Speck JS	*Phys. Stat. Sol. B 243 (7): 1441-1445*	Journal
440	2006	“Effect of ohmic contacts on buffer leakage of GaN transistors” Dora Y., Chakraborty A., Heikman S., McCarthy L., Keller S., DenBaars S.P., Mishra U.K.	*IEEE Electron Device Letters Vol 27 No 7 529-531*	Journal
441	2006	“Defect reduction in nonpolar a-plane GaN films using in situ SiNx nanomask” Chakraborty A., Kim K.C., Wu F., Speck J.S., DenBaars S.P., Mishra U.K.	*Applied Physics Letters 89 041903*	Journal
442	2006	“Effect of threading dislocation density on Ni/n-GaN Schottky diode I-V characteristics” Arehart A.R., Moran B., Speck J.S., Mishra U.K., DenBaars S.P., Ringel S.A.	*Journal of Applied Physics 100 023709*	Journal

443	2006	"Prospective emission efficiency and in-plane light polarization of nonpolar m-plane InxGa1-xN/GaN blue light emitting diodes fabricated on freestanding GaN substrates" T. Koyama, T. Onuma, H. Masui, A. Chakraborty, B. A. Haskell, S. Keller, U. K. Mishra, J. S. Speck, S. Nakamura, S. P. DenBaars, T. Sota, S. F. Chichibu	*Applied Physics Letters 89 091906*	Journal
444	2006	"Exciton dynamics in nonpolar $(11\bar{2}0)$ InGaN/GaN multiple quantum wells grown on GaN templates prepared by lateral epitaxial overgrowth" T. Onuma, A. Chakraborty, B. A. Haskell, S. Keller, et. al	*Phys. Stat. Sol.C 3 No 6 2082-2086*	Journal
445	2006	"X-Ray Microdiffraction Imaging Investigations of Wing Tilt In Epitazially Overgrown GaN" D. Lubbert, P. Mikulik, P. Pernot, S. Keller, et. al.	*Phys. Stat. Sol.A 203 No 7 1733-1738*	Journal
446	2006	"Improved Processing Technology for GaN-Capped deeply-Recessed GaN HEMTs Without Surface Passivation" L. Shen, L. McCarthy, T. Palacios, M.H. Wong, et. al.	*IEEE Electron Device Letters Device Research Conference, 2006 64th 101-102*	Conference Preceeding
447	2006	"Transient wavefunction analysis of a phononic bandgap nano-crystal" K.H. Lin, C.F. Chang, A.T. Tien, et al.	*Conference on Lasers & Electro-Optics/Quantum Electronics and Laser Science Conference (CLEO/QELS)*	Conference Preceeding
448	2006	"High Breakdown Voltage Achieved on AlGaN/GaN HEMTs With Integrated Slant Field Plates" Y. Dora, A. Chakraborty, L. McCarthy, S. Keller, S. DenBaars, U. Mishra	*IEEE Electron Device Letters Vol. 27 No.9 713-715*	Conference Preceeding and Journal
449	2006	"50 nm AlGaN/GaN HEMT Technology for mm-wave Applications" T. Palacios, N. Fichtenbaum, S. Keller, S. DenBaars, U. Mishra	*IEEE 64th Device Research Conference 99-100*	Conference Preceeding
450	2006	"40 Gbit/s photonic receivers integrating UTC photodiodes with high- and low-confinement SOAs using quantum well intermixing and MOCVD regrowth" J. Raring, L. Johansson, E. Skogen, M. Sysak, H. Poulsen, S. DenBaars, L. Coldren	*IEEE Electron Device Letters Vol. 42 No. 16 942-943*	Journal
451	2006	"Nitride-based High Electron Mobility Transistors with a GaN Spacer" T. Palacios, L. Shen, S. Keller, A. Chakraborty, S. Heikman, S. DenBaars, U. Mishra, et. al.	*Applied Physics Letters 89 073508*	Journal

452	2006	“Effects of Phosphor Application Geometry on White Light-Emitting Diodes” H. Masui, S. Nakamura and S. P. DenBaars	*Japanese Journal of Applied Physics Vol 45 No 34 L910-L912*	Journal
453	2006	“First-Moment Analysis of Polarized Light Emission from InGaN/GaN Light-Emitting Diodes Prepared on Semipolar Planes” H. Masui, T. Baker, R. Sharma, P. Pattison, M. Iza, H. Zhong, S. Nakamura and S. DenBaars	*Japanese Journal of Applied Physics Vol 45 No 34 L904-L906*	Journal
454	2006	“Prospective emission efficiency and in-plane light polarization of nonpolar m-plane InxGa1−xN/GaN blue light emitting diodes fabricated on freestanding GaN substrates” T. Koyama, T. Onuma, H. Masui, A. Chakraborty, B. A. Haskell, S. Keller, U. K. Mishra, J. S. Speck, S. Nakamura, S. P. DenBaars, T. Sota, and S. F. Chichibu	*Applied Physics Letters 89 091906*	Journal
455	2006	“Origin of defect-insensitive emission probability in In-containing (Al,In,Ga)N alloy semiconductors” S. Chichibu, A. Uedono, T. Onuma, B. Haskell, A. Chakrabort, T. Koyama, P. Fini, S. Keller, S. DenBaars, J. Speck, U. Mishra, S. Nakamura, et. al	*Nature Materials Vol. 5 810-816*	Journal
456	2006	“Optical and structural properties of GaN nanopillar and nanostripe arrays with embedded InGaN/GaN multi-quantum wells” S. Keller, C. Schaake, N. A. Fichtenbaum, C. J. Neufeld, Y. Wu, K. McGroddy, A. David, S. P. DenBaars, C. Weisbuch, J. S. Speck, and U. K. Mishra	*Journal of Applied Physics 100 054314*	Journal
457	2006	“Light-Emitting Diode Based on ZnO and GaN Direct Wafer Bonding” A. Murai, D. Thompson, C.Y. Chen, U. Mishra, S. Nakamura and S. DenBaars	*Japanese Journal of Applied Physics Vol 45 No 39 L1045-L1047*	Journal
458	2006	“Characterizing the nanoacoustic superlattice in a phonon cavity using a piezoelectric single quantum well” K.H. Lin, C.F. Chang, C.C. Pan, J.I. Chyi, S. Keller, U. Mishra, S. DenBaars, and C.K. Sun	*Applied Physics Letters 89 143103*	Journal
459	2006	“Direct heteroepitaxial growth of thick AlN layers on sapphire substrates by hydride vapor phase epitaxy” D. Kamber, Y. Wu, B. Haskell, S. Newman, S. DenBaars, J. Speck and S. Nakamura	*Journal of Crystal Growth 297 321-325*	Journal

460	2006	“Electroluminescent and Electrical Characteristics of Polar and Nonpolar InGaN/GaN Light-Emitting Diodes at Low Temperature” H. Masui, M. Schmidt, A. Chakraborty, S. Nakamura and S. DenBaars	*Japanese Journal of Applied Physics Vol 45 No 10A 7661-7666*	Journal
461	2006	“Single-Chip 40Gb/s Widely-Tunable Transceivers with Integrated SG-DBR Laser, QW EAM, UTC Photodiode, and Low Confinement SOA” J. Raring, L. Johansson, E. Skogen, M. Sysak, H. Poulsen, S. DenBaars, L. Coldren	*Semiconductor Laser Conference, 2006. Conference Digest. IEEE 20th International Conference*	Conference Preceeding
462	2006	“Cracking of III-nitride layers with strain gradients” A. E. Romanov, G. E. Beltz, P. Cantu, F. Wu, S. Keller, S. P. DenBaars, and J. S. Speck	*Applied Physics Letters 89 161922*	Journal
463	2006	“Hexagonal pyramid shaped light-emitting diodes based on ZnO and GaN direct wafer bonding” A. Murai, D. Thompson, H. Masui, N. Fellows, U. Mishra, S. Nakamura, and S. DenBaars	*Applied Physics Letters 89 171116*	Journal
464	2006	“Stability of (1100) m-Plane GaN Films Grown by Metalorganic Chemical Vapor Deposition” B. Imer, F. Wu, M. Craven, J. Speck and S. DenBaars	*Japanese J. of Appl. Phys Vol 45 No 1 8644-8647*	Journal
465	2006	“Structural and Electroluminescence Characteristics of Nonpolar Light-Emitting Diodes Fabricated on Lateral Epitaxially Overgrown a-Plane GaN” A. Chakraborty, K.C. Kim, F. Wu, B. Haskell, S. Keller, J. Speck, S. Nakamura, S. DenBaars and U. Mishra	*Japanese J. of Appl. Phys Vol 45 No 11 8659-8661*	Journal
466	2006	“Realization of high hole concentrations in Mg doped semipolar (10$\bar{1}\bar{1}$) GaN” J. F. Kaeding, H. Asamizu, H. Sato, M. Iza, T. E. Mates, S. P. DenBaars, J. S. Speck, and S. Nakamura	*Applied Physics Letters 89 202104*	Journal
467	2006	“Quantitative observation and discrimination of AlGaN- and GaN-related deep levels in AlGaN/GaN heterostructures using capacitance deep level optical spectroscopy” A. Armstrong, A. Chakraborty, J. S. Speck, S. P. DenBaars, U. K. Mishra, and S. A. Ringel	*Applied Physics Letters 89 262116*	Journal

468	2006	"Light-polarization characteristics of electroluminescence from InGaN/GaN light-emitting diodes prepared on $(11\bar{2}2)$-plane GaN" H. Masui, T. Baker, M. Iza, H. Zhong, S. Nakamura, and S. DenBaars	*Journal of Applied Physics 100 113109*	Journal
469	2006	"Increased Power from deep ultraviolet LEDs via precursoe selection" C. Moe, T. Onuma, K. Vampola, N. Fellows, H. Masui, S. Newman, S. Keller, et. al.	*Journal of Crystal Growth 298 710-713*	Journal
470	2007	"Effect of an (Al,In)N insertion layer on the radiative emission properties of (In,Ga)N/GaN multiple quantum well structures" B. Monemar, P. Paskov, J. Bergman, S. Keller, S. DenBaars, U. Mishra	*Phys. Stat. Sol. A 204 No. 1 304-308*	Journal
471	2007	"40-Gb/s Widely Tunable Low-Drive-Voltage Electroabsorption-Modulated Transmitters" J. Raring, L. Johansson, E. Skogen, M. Sysak, H. Poulsen, S. DenBaars, L. Coldren	*Journal of Lightwave Technology Vol 25 No 1 239-248*	Journal
472	2007	"Polarization anisotropy in nonpolar oriented GaN films studied by polarized photoreflectance spectroscopy" U. Behn, P. Misra , H. Grahn, B. Imer, S. Nakamura , S. DenBaars , J. Speck	*Phys Stat Sol A 204 No. 1 299-303*	Journal
473	2007	"Growth of Heteroepitaxial ZnO Thin Films on GaN-Buffered Al_2O_3 (0001) Substrates by Low-Temperature Hydrothermal Synthesis at 90 °C" J. H. Kim, E.-M. Kim, D. Andeen, D. Thomson, S. P. DenBaars, F. Lange	*Advanced Functional Materials Vol 17 No 3 463-471*	Journal
474	2007	"Time-resolved cathodoluminescence study of carrier relaxation, transfer, collection, and filling in coupled $In_xGa_{1-x}N/GaN$ multiple and single quantum wells" S. Keller, S. P. DenBaars, et. al.	*The American Physical Review B 75 035324*	Journal
475	2007	"Gallium nitride based microcavity light emitting diodes with 2λ effective cavity thickness" P. Pattison, A. David, R. Sharma, C. Weisbuch, S. DenBaars, and S. Nakamura	*Applied Physics Letters 90 031111*	Journal
476	2007	"Triangular pattern formation on silicon through self-organization of GaN nanoparticles" K. Prabhakaran, B. Schwenzer, S. DenBaars and U. Mishra	*Applied Surface Science 253 4773-4776*	Journal

477	2007	“High Output Saturation and High-Linearity Uni-Traveling-Carrier Waveguide Photodiodes” J. Klamkin, A. Ramaswamy, L. Johansson, S. DenBaars, J. Bowers, et. al.	*IEEE Photonics Technology Letters Vol. 19 No.3 149-151*	Journal
478	2007	“Structural and Optical Properties of Nonpolar InGaN/GaN Multiple Quantum Wells Grown on Planar and Lateral Epitaxially Overgrown m-Plane GaN Films” A. Chakraborty, B. Haskell, F. Wu, S. Keller, S. DenBaars, S. Nakamura, J. Speck, and U. Mishra	*Japanese Journal of Applied Physics Vol 46 No 2 542-546*	Journal
479	2007	“High Brightness Violet InGaN/GaN Light Emitting Diodes on Semipolar (1011) Bulk GaN Substrates” A. Tyagi, H. Zhong, N. Fellows, M. Iza, J. Speck, S. DenBaars, and S. Nakamura	*Japanese Journal of Applied Physics Vol 46 No 7 L129-L131*	Journal
480	2007	“High Power and High External Efficiency m-Plane InGaN Light Emitting Diodes” M. Schmidt, K.C. Kim, H. Sato, N. Fellows, H. Masui, S. Nakamura, S. DenBaars, and J. Speck	*Japanese Journal of Applied Physics Vol 46 No 7L126-L128*	Journal
481	2007	“Demonstration of Nonpolar m-Plane InGaN/GaN Laser Diodes” M. Schmidt, K.C Kim, R. Farrell, D. Feezell, D. Cohen, M. Saito, K. Fujito, J. Speck, S. DenBaars, and S. Nakamura	*Japanese Journal of Applied Physics Vol 46 No 9 L190-L191*	Journal
482	2007	“Metalorganic Chemical Vapor Deposition Regrowth of InGaN and GaN on N-polar Pillar and Stripe Nanostructures” N. Fichtenbaum, C. Neufeld, C. Schaake, Y. Wu, M.H. Wong, M. Grundmann, S. Keller, S. DenBaars, J. Speck, and U. Mishra	*Japanese Journal of Applied Physics Vol 46 No 10 L230-L233*	Journal
483	2007	“Electrical and structural characterization of Mg-doped p-type Al0.69Ga0.31N films on SiC substrate” A. Chakraborty, C. Moe, Y. Wu, T. Mates, S. Keller, J. Speck, S. DenBaars, and U. Mishra	*Journal of Applied Physics 101 053717*	Journal
484	2007	“Defect-mediated surface morphology of nonpolar m-plane GaN” A. Hiri, B. Haskell, M. McLaurin, F. Wu, M. Schmidt, K. Kim, T. Baker, S. DenBaars, S. Nakamura, J. Speck	*Applied Physics Letters 90 121119*	Journal

485	2007	“Lateral epitaxial overgrowth of aluminum nitride on patterned silicon carbide substrates by hydride vapor phase epitaxy” D. Kamber, Y. Wu, E. Letts, S. DenBaars, J. Speck, S. Nakamura, and S. Newman	*Applied Physics Letters 90 122116*	Journal
486	2007	“AlGaN-Cladding-Free Nonpolar InGaN/GaN Laser Diodes” D. Feezell, M. Schmidt, R. Farrell, K. Kim, M. Saito, K. Fujito, D. Cohen, J. Speck, S. DenBaars, and S. Nakamura	*Japanese Journal of Applied Physics Vol 46 No 13 L284-L286*	Journal
487	2007	“Improved electroluminescence on nonpolar m-plane InGaN/GaN quantum wells LEDs” K. Kim, M. Schmidt, H. Sato, F. Wu, N. Fellows, M. Saito, K. Fujito, J. Speck, S. Nakamura, S. DenBaars	*Phys. Stat. Sol (RRL) Vol 1 No 3 125-127*	Letter
488	2007	“Optical properties of GaN nanopillar and nanostripe arrays with embedded InGaN/GaN multi quantum wells” S. Keller, N. A. Fichtenbaum, C. Schaake, C. J. Neufeld, A. David, E. Matioli, Y. Wu, S. P. DenBaars , J. S. Speck, C. Weisbuch , U. K. Mishra	*Phys. Stat. Sol B 224 No 6 1797-1801*	Journal
489	2007	“MOCVD regrowth of InGaN on N-polar and Ga-polar pillar and stripe nanostructures” N. A. Fichtenbaum , C. J. Neufeld , C. Schaake , Y. Wu , M. H. Wong , M. Grundmann , S. Keller, S. P. DenBaars , J. S. Speck , U. K. Mishra	*Phys. Stat. Sol B 244 No. 6 1802-1805*	Journal
490	2007	“Origin of localized excitons in In-containing three-dimensional bulk (Al,In,Ga)N alloy films probed by time-resolved photoluminescence and monoenergetic positron annihilation techniques” S. F. Chichibu; A. Uedono; T. Onuma; B. A. Haskell; A. Chakraborty; T. Koyama; P. T. Fini, S. Keller; S. P. Denbaars; J. S. Speck; U. K. Mishra; S. Nakamura; S. Yamaguchi; S. Kamiyama; H. Amano; I. Akasaki; J. Han; T. Sota	*Philosophical Magazine Vol 87 No 13 2019-2039*	Journal
491	2007	“Thin metal intracavity contact and lateral current-distribution scheme for GaN-based vertical-cavity lasers” D. F. Feezell, R. M. Farrell, M. C. Schmidt, H. Yamada, M. Ishida, S. P. DenBaars, D. A. Cohen, and S. Nakamura	*Applied Physics Letters 90 181128*	Journal

492	2007	“Growth and characterization of N-polar InGaN/GaN multiquantum wells” S. Keller, N. A. Fichtenbaum, M. Furukawa, J. S. Speck, S. P. DenBaars, and U. K. Mishra	*Applied Physics Letters 90 191908*	Journal
493	2007	“Carrier relaxation dynamics and steady-state charge distributions in coupled InGaN/GaN multiple and single quantum wells” S. Khatsevich, D. H. Rich, S. Keller, and S. P. DenBaars	*Journal of Applied Physics 101 093515*	Journal
494	2007	“Semipolar (1011) InGaN/GaN Laser Diodes on Bulk GaN Substrates” A. Tyagi, H. Zhong, R. Chung, D. Feezell, M. Saito, K. Fujito, J. Speck, S. DenBaars, and S. Nakamura	*Japanese Journal of Applied Physics Vol 46 No 19 L444-L445*	Journal
495	2007	“Growth evolution in sidewall lateral epitaxial overgrowth (SLEO)” B. Imer, F.Wu, J. Speck, and S. DenBaars	*Journal of Crystal Growth 306 330-338*	Journal
496	2007	“Mega-cone blue LEDs based on ZnO/GaN direct wafer bonding” A. Murai, D. B. Thompson, H. Masui, N. Fellows, U. K. Mishra, S. Nakamura, S. P. DenBaars	*Phys Stat Sol C 4 No 7 2756-2759*	Journal
497	2007	“Deep-recessed GaN HEMTs using selective etch technology exhibiting high microwave performance without surface passivation” L. Shen, Y. Pei, L. McCarthy, C. Poblenz, et. al.	*IEEE Electron Device Letters Microwave Symposium, IEEE/MTT-S International 623-626*	Journal / Conference Proceeding
498	2007	“High power and high efficiency blue light emitting diode on freestanding semipolar (10$\bar{1}\bar{1}$) bulk GaN substrate” H. Zhong, A. Tyagi, N. Fellows, F. Wum R. Chung, M. Saito, K. Fujito, et. al.	*Applied Physics Letters 90 233504*	Journal
499	2007	“High power and high efficiency green light emitting diode on free-standing semipolar (11$\bar{2}$2) bulk GaN substrate” H. Sato, A. Tyagi, H. Zhong, N. Fellows, R. Chung, M. Saito, K. Fujito, et. al.	*Phys. Stat. Sol (RRL) 1 No. 4 162-164*	Journal
500	2007	“Progress in the growth of nonpolar gallium nitride” B. Haskell, S. Nakamura , S. DenBaars , J. Speck	*Phys. Stat. Sol B 244 No 8, 2847-2858*	Journal

501	2007	“Radiative Recombination Efficiency of InGaN-Based Light-Emitting Diodes Evaluated at Various Temperatures and Injection Currents” H. Masui, H. Sato, H. Asamizu, M. C. Schmidt, N.N. Fellows, S. Nakamura, and S.P. DenBaars	*Japanese Journal of Applied Physics Vol. 46 No. 25 L627-L629*	Journal
502	2007	“Recent Performance of Nonpolar and Semipolar GaN-Based Light Emitting Diodes and Laser Diodes” D. Feezell, S. DenBaars, J. Speck, S. Nakamura	*Compound Semiconductor Integrated Circuit Symposium (CISC) IEEE 1-4*	Conference Proceeding
503	2007	“Demonstration of high power blue-green light emitting diode on semipolar (1122) bulk GaN substrate” H. Zhong, A. Tyagi, N. Fellows, R. Chung, M. Saito, K. Fujito, J. Speck, S. DenBaars, S. Nakamura	*IEEE Electronics Letters Vol. 43 No. 15*	Journal
504	2007	“Radiative and nonradiative lifetimes in nonpolar m-plane InxGa1−xN/GaN multiple quantum wells grown on GaN templates prepared by lateral epitaxial overgrowth” A. Chakraborty, M. McLaurin, B. A. Haskell, P. T. Fini, S. Keller, S. P. DenBaars, J. S. Speck, S. Nakamura, U. K. Mishra, et. al.	*Journal of Vacuum Science Technology B Vol. 25, Issue 4 1524-1528*	Journal
505	2007	“Characterization and Discrimination of AlGaN- and GaN-related Deep Levels in AlGaN/GaN Heterostructures” A. Armstrong, A.Chakraborty, J. Speck, S. DenBaars, et al.	*Physics of Semiconductors 28th International Conference American Institute of Physics*	Conference Proceeding
506	2007	“Direct Evaluation of reflector effects on radiant flux from InGaN-based light-emitting diodes” H. Masui, N. Fellows, H. Sato, S. Nakamura, S. DenBaars	*Allied Optics Vol. 46 No. 23 5974-5978*	Journal
507	2007	“Continuous-wave Operation of AlGaN-cladding-free Nonpolar m-Plane InGaN/GaN Laser Diodes” R. Farrell, D. Feezell, M. Schmidt, D. Haeger, K. Kelchner, K. Iso, H. Yamada, M. Saito, K. Fujito, D. Cohen, J. Speck, S. DenBaars, and S. Nakamura	*Japanese Journal of Applied Physics Vol 46 No 32 L761-L763*	Journal
508	2007	“Direct water photoelectrolysis with patterned n-GaN” I. Waki, D. Cohen, R. Lal, U. Mishra, S. DenBaars, and S. Nakamura	*Applied Physics Letters 91 093519*	Journal

509	2007	“Monolithically Integrated Coherent Receiver for Highly Linear Microwave Photonic Links” J. Klamkin, L. Johansson, A. Ramaswamy, J. Bowers, S. DenBaars, L. Coldren	*The 20th Annual Meeting of the IEEE Lasers and Electro-Optics Society (LEOS)*	Conferen ce Proceedin g
510	2007	“Vertical defects in heavily Mg-doped Al0.69Ga0.31N” Y. Wu, C. G. Moe, S. Keller, S. P. DenBaars, J. S. Speck	*Phys Stat. Sol A 204 No 10 3423-3428*	Journal
511	2007	“Study of the n+ GaN Cap in AlGaN/GaN High Electron Mobility Transistors with Reduced Source–Drain Resistance” Y. Pei, L. Shen, T. Palacios, N. Fichtenbaum, L. McCarthy, S. Keller, S. DenBaars, U. Mishra	*Japanese Journal of Applied Physics Vol 46 No 35 L842-L844*	Journal
512	2007	“Nonpolar gallium nitride laser diodes are the next new blue” D. Feezell, S. Nakamura, S. DenBaars, J. Speck	*Laser Focus World 79-83*	Magazine
513	2007	“Photoelectrochemical Properties of Nonpolar and Semipolar GaN” K. Fujii, Y. Iwaki, H. Masui, T. Baker, M. Iza, H. Sato, J. Kaeding, T. Yao, J. Speck, S. DenBaars, S.Nakamura , and K. Ohkawa	*Japanese Journal of Applied Physics Vol.46 No. 10A 6573-6578*	Journal
514	2007	“High Brightness Blue InGaN/GaN Light Emitting Diode on Nonpolar m-plane Bulk GaN Substrate” K. Iso, H. Yamada, H. Hirasawa, N. Fellows, M. Saito, K. Fujito, S.P. DenBaars, J.S. Speck, and S. Nakamura	*Japanese Journal of Applied Physics Vol 46 No 40 L960-L962*	Journal
515	2007	“Electrical characterization of p-type N-polar and Ga-polar GaN grown by metalorganic chemical vapor deposition” N. Fichtenbaum, C. Schaake, T. Mates, C. Cobb, S. Keller, S. DenBaars, and U. Mishra	*Applied Physics Letters 91 172105*	Journa;
516	2007	“Influence of the substrate misorientation on the properties of N-polar GaN films grown by metal organic chemical vapor deposition” S. Keller, N. Fichtenbaum, F. Wu, D. Brown, A. Rosales, S. DenBaars, J. Speck, and U. Mishra	*Journal of Applied Physics 102 083546*	Journal

517	2007	“Study of nonpolar m-plane InGaN/GaN multiquantum well light emitting diodes grown by homoepitaxial metal-organic chemical vapor deposition” K. C. Kim, M. Schmidt, H. Sato, F. Wu, N. Fellows, Z. Jia, M. Saito, S. Nakamura, S. DenBaars, J. Speck and K Fujito	*Applied Physics Letters 91 181120*	Journal
518	2007	“Electrical Characteristics of Nonpolar InGaN-Based Light-Emitting Diodes Evaluated at Low Temperature” H. Masui, M. Schmidt, K.C. Kim, A. Chakraborty, S. Nakamura, and S. DenBaars	*Japanese Journal of Applied Physics Vol 46 No 11 7309-7310*	Journal
519	2007	“Formation and reduction of pyramidal hillocks on m-plane {1100} GaN” A. Hirai, Z. Jia, M. C. Schmidt, R. M. Farrell, S. P. DenBaars, S. Nakamura, J. S. Speck, and K. Fujito	*Applied Physics Letters 91 191906*	Journal
520	2007	“Electrical characterization of low defect density nonpolar (11¯20) a-plane GaN grown with sidewall lateral epitaxial overgrowth (SLEO)” B. Imer, B. Haskell, S. Rajan, S. Keller, U. Mishra, S. Nakamura, J. Speck, S. DenBaars	*Journal of Material Research Vol 23 No 2 551-555*	Journal
521	2007	“Recessed Slant Gate AlGaN/GaN High Electron Mobility Transistors with 20.9 W/mm at 10 GHz” Y. Pei, R/ Chu, N. Fichtenbaum, Z. Chen, D. Brown, L. Shen, S. Keller, S. DenBaars, U. Mishra	*Japanese Journal of Applied Physics Vol 46 No 45 L1087-L1089*	Journal
522	2007	“Impact of Substrate Miscut on the Characteristic of m-plane InGaN/GaN Light Emitting Diodes” H. Yamada, K. Iso, M. Saito, K. Fujito, S. DenBaars, J. Speck, and S. Nakamura	*Japanese Journal of Applied Physics Vol 46 No 46 L1117-L1119*	Journal
523	2007	“Low nonalloyed Ohmic contact resistance to nitride high electron mobility transistors using N-face growth” M.H Wong, Y. Pei, T. Palacios, L. Shen, A. Chakraborty, L. McCarthy, S. Keller, S. DenBaars, J. Speck, U. Mishra	*Applied Physics Letters 91 232103*	Journal
524	2007	“Deep submicron AlGaN/GaN HEMTs with ion implanted source/drain regions and non-alloyed ohmic contacts” Y. Pei, F. Recht, N. Fichtenbaum, S. Keller, S. DenBaars, U. Mishra	*IEEE Electronics Letters Vol 43 No 25*	Journal

525	2007	“Influence of Mg Doping on the Morphological, Optical, and Structural Properties of InGaN/GaN Multiple Quantum Wells” Z. Chen, N. Fichtenbaum, D. Brown, S. Keller, U.K. Mishra, S.P. Denbaars, and S. Nakamura	*Journal of Electronic Materials Vol 37 No 5 546-549*	Journal
526	2007	“Temperature-dependent high-frequency performance of deep submicron AlGaN/GaN HEMTs” R. Cuerdo, Y. Pei, F. Recht, N. Fichtenbaum, S. Keller, S. P. Denbaars, F. Calle, U. K. Mishra	*Physica Status Solidi C Vol 5 No 9 2994-2997*	Journal
527	2008	“Impact of strain on free-exciton resonance energies in wurtzite AlN” H. Ikeda, T. Okamura, K. Matsukawa, T. Sota, M. Sugawara, T. Hoshi, P. Cantu, R. Sharma, J. Kaeding, S. Keller, U. Mishra, K. Kosaka, K. Asai, S.Sumiya, T. Shibata, M. Tanaka, J. Speck, S. DenBaars, S. Nakamura, T. Koyama, T. Onuma, and S. Chichibu	*Journal of Applied Physics 102 123707*	Journal
528	2008	“Impurity incorporation in heteroepitaxial N-face and Ga-face GaN films grown by metalorganic chemical vapor deposition” N.A. Fichtenbaum, T.E. Mates, S. Keller, S.P. DenBaars and U.K. Mishra	*Journal of Crystal Growth 310 1124-1131*	Journal
529	2008	“Analytical light-ray tracing in two-dimensional objects for light-extraction problems in light-emitting diodes” H. Masui, S. Nakamura, S. DenBaars	*Applied Optics Vol 47 No 1*	Journal
530	2008	“Enhancement of external quantum efficiency in GaN-based light emitting diodes using a suspended geometry” N. Fellows, H. Masui, H. Sato, H. Asamizu, M. Iza, H. Zhong, S. Nakamura, S. DenBaars	*Phys Stat Sol C 5 No 6 2216-2218*	Journal
531	2008	“Non-polar-oriented InGaN light-emitting diodes for liquid-crystal display“ H. Masui, H. Yamada, K. Iso, J. Speck, S. Nakamura, S. DenBaars	*Journal of the Society for Information Display 16/4 1-8*	Journal
532	2008	“Characterization of nanoscale electronic structure in nonpolar GaN using scanning capacitance microscopy” S. Nakamura, J. S. Speck, and S. P. DenBaars et. al.	*Journal of Applied Physics 103 014305*	Journal

533	2008	“Comparison of InGaN/GaN light emitting diodes grown on m -plane and a -plane bulk GaN substrates” K. Fujito, J. Speck , S. DenBaars , S. Nakamura, et. al.	*Phys. Stat. Sol (RRL) 2 No. 2 89-91*	Journal
534	2008	“High Power and High Efficency Semipolar InGaN Light Emitting Diodes” H. Sato, H. Hirasawa, H. Asamizu, N. Fellows, A. Tyagi, M. Saito, K. Fujito, J. Speck, S. DenBaars, S. Nakamura	*Journal of Light and Vis. Env. Vol 32 No 2 107-110*	Journal
535	2008	“Electroluminescence efficiency of $(10\bar{1}0)$-oriented InGaN-based light-emitting diodes at low temperature” H. Masui , H. Kroemer, M. Schmidt , K.C. Kim, N. Fellows , S. Nakamura and S. DenBaars	*Journal of Physics D: Applied Physics 41 082001 1- 5*	Journal
536	2008	“Properties of N-polar AlGaN/GaN heterostructures and field effect transistors grown by metalorganic chemical vapor deposition” S. Keller, C. S. Suh, Z. Chen, R. Chu, S. Rajan, N. A. Fichtenbaum, M. Furukawa, S. P. DenBaars, J. S. Speck, and U. K. Mishra	*Journal of Applied Physics 103 033708*	Journal
537	2008	“Improved quality nonpolar a -plane GaN/AlGaN UV LEDs grown with sidewall lateral epitaxial overgrowth (SLEO)” B. Imer, M. Schmidt, B. Haskell, S. Rajan, B. Zhong, K.C. Kim, F. Wu, T. Mates, S. Keller, U. Mishra, S. Nakamura, J. Speck, S. DenBaars	*Phys Stat Sol A 205 No 7 1705-1712*	Journal
538	2008	“ZnO cone-shaped blue light emitting diodes” A. Murai, D. B. Thompson, U. K. Mishra, S. Nakamura, and S. P. DenBaars	*Proceedings of SPIE Synposium Vol 6895 6859N-1-6859N-9*	Conference Proceedings/ Invited Paper
539	2008	“Diffuse x-ray scattering from statistically inhomogeneous distributions of threading dislocations beyond the ergodic hypothesis” S. Keller, S. P. DenBaars, J. Speck, et. al.	*Physical Review B 77 094102*	Journal
540	2008	“Optical polarization characteristics of InGaN/GaN light-emitting diodes fabricated on GaN substrates oriented between (1010) and (1011) planes” H. Masui, H. Yamada, K. Iso, S. Nakamura, and S. DenBaars	*Applied Physics Letters 92 091105*	Journal

541	2008	“Optical polarization of m-plane In-GaN/GaN light-emitting diodes characterized via confocal microscope” H. Masui , H. Yamada, K. Iso, H. Hirasawa, N. Fellows, J. Speck, S. Nakamura, S. DenBaars	*Phys Stat Sol A 205 1203-1206*	Journal
542	2008	“Red-emitting SrIn2O4 : Eu3+ phosphor powders for applications in solid state white lamps” C.E. Rodríguez-García, N. Perea-López, G.A. Hirata, and S.P. DenBaars	*Journal of Physics D: Applied Physics 41 092005*	Journal
543	2008	“GaN/InGaN light emitting diodes with embedded photonic crystal obtained by lateral epitaxial overgrowth” A. David, B. Moran, K. McGroddy, E. Matioli, E. Hu, S. DenBaars, S. Nakamura, and C. Weisbuch	*Applied Physics Letters 92 113514*	Journal
544	2008	“InGaN/GaN laser diodes on semipolar $(10\bar{1}\bar{1})$ bulk GaN substrates” A. Tyagi, H. Zhong, R. Chung, D. Feezell, M. Saito, K. Fujito, J. Speck, S. DenBaars, S. Nakamura	*Phys Stat Sol C 5 No 6 2108-2110*	Journal
545	2008	“Correlation Between DC–RF Dispersion and Gate Leakage in Deeply Recessed GaN/AlGaN/GaN HEMTs” R. Chu, L. Shen, Zhen Chen, S. Keller, S. DenBaars, U. Mishra et. al	*IEEE Electron Device Letters Vol 29 No 4 303-305*	Journal
546	2008	“Effect of Al Composition and Gate Recess on Power Performance of AlGaN/GaN High-Electron Mobility Transistors” U. Mishra, S. Keller, S. DenBaars et. al.	*IEEE Electon Device Letters Vol 29 No 4 300-302*	Journal
547	2008	“Output Saturation and Linearity of Waveguide Unitraveling-Carrier Photodiodes” J. Klamkin, Y. Chang, A. Ramaswamy, L. Johansson, J. Bowers, S. DenBaars, L. Coldren	*IEEE Journal of Quantum Electronics Vol 44 No 4 354-359*	Journal
548	2008	“Properties of ZnO(0001) layers grown by metalorganic chemical vapor deposition on GaN(0001) templates” T. Ive , T. Ben-Yaacov , H. Asamizu , C. G. Van de Walle , U. Mishra , S. P. DenBaars J. S. Speck	*Phys Stat Sol C 5 No 6 1733-1735*	Journal
549	2008	“Step-flow growth of ZnO(0 0 0 1) on GaN(0 0 0 1) by metalorganic chemical vapor epitaxy” T. Ive, T. Ben-Yaacov, C.G. Van de Walle, U.K. Mishra, S.P. DenBaars and J.S. Speck	*Journal of Crystal Growth 310 3407-3412*	Journal

550	2008	“Equivalent-Circuit Analysis for the Electroluminescence-Efficiency Problem of InGaN/GaN Light-Emitting Diodes” H. Masui, T. Ive, M. Schmidt, N. Fellows, H. Sato, H. Asamizu, S. Nakamura, and S. DenBaars	*Japanese Journal of Applied Physics Vol 47 No 4 2112-2118*	Journal
551	2008	Erratum: “Impact of strain on free-exciton resonance energies in wurtzite AlN” [J. Appl. Phys. 102, 123707 (2007)] H. Ikeda, T. Okamura, K. Matsukawa, T. Sota, M. Sugawara, et al.	*Journal of Applied Physics 103 089901*	Journal
552	2008	“Comparison of deep level incorporation in ammonia and rf-plasma assisted molecular beam epitaxy n-GaN films” A. Arehart, A. Corrion, C. Poblenz, J. Speck, U. Mishra, S. DenBaars, S. Ringel	*Phys Stat Sol C 5 No 6 1750-1752*	Journal
553	2008	“Power performance of MBE-grown N-face high electron mobility transistors with AIN back barrier” M.H. Wong, Y. Pei, R. Chu, S. Rajan, B. L. Swenson, D. Brown, S. Keller, S. DenBaars, J. Speck, and U. Mishra	*IEEE Electron Device Letters* *Device Research Conference* *201-202*	Journal
554	2008	“Optical polarization characteristics of light emission from sidewalls of primary-color light-emitting diodes” H. Masui, N. Fellows, S. Nakamura, and S. DenBaars	*Semiconductor Science and Technology 23 072001*	Journal
555	2008	“Pointed Cone Shaped Light-Emitting Diodes Based on ZnO/GaN Wafer Bonding” A. Murai, D. Thompson, H. Hirasawa, N. Fellows, S. Brinkley, C.J. Won, M. Iza, U. Mishra, S. Nakamura, and S. DenBaars	*Japanese Journal of Applied Physics Vol 47 No 5 3522-3523*	Journal
556	2008	“Hexagonal Truncated Pyramidal Light Emitting Diodes through Wafer Bonding of ZnO to GaN, Laser Lift-off, and Photo Chemical Etching” D. Thompson, A. Murai, M. Iza, S. Brinkley, S. DenBaars, U. Mishra, and S. Nakamura	*Japanese Journal of Applied Physics Vol 47 No 5 3447-3449*	Journal
557	2008	“A novel hybrid pulsed laser deposition/metalorganic vapour deposition method to form rare-earth activated GaN” N. Perea-Lopez , J. Tao , J.B. Talbot , J. McKittrick , G.A. Hirata and S.P. DenBaars	*Journal of Physics D: Applied Physics 41 122001*	Journal

558	2008	“Microdiffraction imaging of dislocation densities in microstructured samples” D. Lübbert, T. Baumbach, V. Holý, P. Mikulík, L. Helfen, P. Pernot, M. Elyyan, S. Keller, T. M. Katona , S. P. DenBaars and J. S. Speck	*Exploring the Frontiers of Physics 82 56002*	Journal
559	2008	“Metalorganic chemical vapor deposition of ZnO(0001) thin films on GaN(0001) templates and ZnO(0001) substrates” T. Ive , T. Ben-Yaacov, A. Murai, H. Asamizu, C. G. Van de Walle, U. Mishra, S. P. DenBaars, J. S. Speck	*Phys Stat Sol C No 9 3091-3094*	Journal
560	2008	“Optical properties of yellow light-emitting diodes grown on semipolar (1122) bulk GaN substrates” H. Sato, R. Chung, H. Hirasawa, N. Fellows, H. Masui, F. Wu, M. Saito, K. Fujito, J. Speck, S. DenBaars, and S. Nakamura	*Applied Physics Letters 92 221110*	Journal
561	2008	“M -plane InGaN/GaN light emitting diodes fabricated by MOCVD regrowth on c -plane patterned templates” C. Schaake , N. Fichtenbaum , C. Neufeld, S. Keller , S. DenBaars , J. Speck , U. Mishra	*Phys Stat Sol C 5 No 9 2963-2965*	Journal
562	2008	“Study of interface barrier of SiNx/GaN interface for nitrogen-polar GaN based high electron mobility transistors” Nidhi, S. Rajan, S. Keller, F. Wu, S. DenBaars, J. Speck, and U. Mishra	*Journal of Applied Physics 103 124508*	Journal
563	2008	“Effects of off-axis GaN substrates on optical properties of m-plane InGaN/GaN light-emitting diodes” H. Yamada, K. Iso, H. Masui, M. Saito, K. Fujito, S. DenBaars, S. Nakamura	*Journal of Crystal Growth 310 4968-4971*	Journal
564	2008	“Experimental technique to correlate optical excitation intensities with electrical excitation intensities for semiconductor optoelectronic device characterization” H. Masui, S. Nakamura, and S. DenBaars	*Semiconductor Science and Technology 23 085018*	Journal
565	2008	“Highly Polarized Single-Chip ELED Sources Using Oppositely Strained MQW Emitters and Absorbers” S. Nicholes, J. Raring, E. Norberg, C. Wang, M. Dummer, S. DenBaars, L. Coldren	*IEEE Photonics Technology Letters Vol 20 No 14 1267-1269*	Journal

566	2008	“Growth and characterization of N-polar GaN films on SiC by metal organic chemical vapor deposition” D. Brown, S. Keller, F. Wu, J. Speck, S. DenBaars, and U. Mishra	*Journal of Applied Physics 104 024301*	Journal
567	2008	“Quantum-confined Stark effect on photoluminescence and electroluminescence characteristics of InGaN-based light-emitting diodes” H. Masui , J. Sonoda , N. Pfaff , I. Koslow , S. Nakamura, and S. DenBaars	*Journal of Physics D: Applied Physics 41 165105 1-6*	Journal
568	2008	“Electron mobility in N-polar GaN/AlGaN/GaN heterostructures” D Brown, S. Rajan, S. Keller, Y.H. Hsieh, S. DenBaars, and U. Mishra	*Applied Physics Letters 93 042104*	Journal
569	2008	“Demonstration of 426 nm InGaN/GaN Laser Diodes Fabricated on Free-Standing Semipolar (1122) Gallium Nitride Substrates” H. Asamizu, M. Saito, K. Fujito, J. Speck, S. DenBaars, and S. Nakamura	*The Japan Society of Applied Physics: Applied Physics Express 1 091102*	Journal
570	2008	“A yellow-emitting Ce3+ phosphor, La1−xCexSr2AlO5, for white light-emitting diodes” W.B. Im, Y.I Kim, N. Fellows, H. Masui, G. Hirata, S. DenBaars, and R. Seshadri	*Applied Physics Letters 93 091905*	Journal
571	2008	“Stimulated Emission at Blue-Green (480 nm) and Green (514 nm) Wavelengths from Nonpolar (m-plane) and Semipolar (1122) InGaN Multiple Quantum Well Laser Diode Structures” A. Tyagi, Y.D. Lin, D. Cohen, M. Saito, K. Fujito, J. Speck, S. DenBaars, and S. Nakamura	*The Japan Society of Applied Physics: Applied Physics Express 1 091103*	Journal
572	2008	“Directional emission control and increased light extraction in GaN photonic crystal light emitting diodes” K. McGroddy, A. David, E. Matioli, M. Iza, S. Nakamura, S. DenBaars, J. S. Speck, C. Weisbuch, and E. L. Hu	*Applied Physics Letters 93 103502*	Journal
573	2008	“Dichromatic color tuning with InGaN-based light-emitting diodes” N. Fellows, H. Sato, Y. D. Lin R. Chung, S. DenBaars, S. Nakamura	*Applied Physics Journal 93 121112*	Journal

574	2008	“N-Face Metal–Insulator–Semiconductor High-Electron-Mobility Transistors With AlN Back-Barrier” M.H. Wong, Y. Pei, R. Chu,S. Rajan, B. Swenson, D. Brown, S. Keller, S. DenBaars, J. Speck, U. Mishra	*IEEE Electron Device Letters Vol 29 No 10 1101-1104*	Journal
575	2008	“Time-Resolved Optical Studies of InGaN LED Structures Grown on Semipolar and Nonpolar Bulk GaN Substrates” A. Tyagi, M. Schmidt, Z. Jia, J. Speck, S. DenBaars, S. Nakamura, et. al.	*Conference on Quantum Electronics and Laser Science 1-2*	Conference Proceeding
576	2008	“High quantum efficiency InGaN/GaN solar cells with 2.95 eV band gap” C. Neufeld, N. Toledo, S. Cruz, M. Iza, S. DenBaars, and U. Mishra	*Applied Physics Letters 93 143502*	Journal
577	2008	“Low extended defect density nonpolar m-plane GaN by sidewall lateral epitaxial overgrowth” K.C. Kim, M. Schmidt, F. Wu, M. McLaurin, A. Hirai, S. Nakamura, S. DenBaars, and J. Speck	*Applied Physics Letters 93 142108*	Journal
578	2008	“Increased Polarization Ratio on Semipolar (1122) InGaN/GaN Light-Emitting Diodes with Increasing Indium Composition” N. Fellows, H. Sato, H. Masui, S. DenBaars, and S. Nakamura	*Japanese Journal of Applied Physics Vol 47 No 10 7854-7856*	7854-7856
579	2008	“V-Gate GaN HEMTs With Engineered Buffer for Normally Off Operation” R. Chu, Z. Chen, S. DenBaars, U. Mishra	*IEEE Electron Device Letters Vol 29 No 11 1184-1186*	Journal
580	2008	“Optical polarization characteristics of m-oriented InGaN/GaN light-emitting diodes with various indium compositions in single-quantum-well structure” H. Masui, H. Yamada, K. Iso, S. Nakamura and S. DenBaars	*Journal of Physics D: Applied Physics 41 225104*	Journal
581	2008	“Pressure-assisted combustion synthesis of red-emitting SrIn2O4: Eu3+ phosphor powders for applications in solid state white lamps” C.E. Rodriguez, Perea-Lopez, S. DenBaars	*Journal of Ceramic Processing Research Vol 9 No 5 463-465*	Journal
582	2008	“Smooth Top-Down Photoelectrochemical Etching of m-Plane GaN” A. Tamboli, M. Schmidt, S. Rajan, J. Speck, U. Mishra, S. DenBaars, E. Hu	*Journal of the Electrochemical Society 156 (1) H47-H51*	Journal

583	2008	“Influence of the substrate misorientation on the properties of N-polar InGaN/GaN and AlGaN/GaN heterostructures” S. Keller, C. S. Suh, N. A. Fichtenbaum, M. Furukawa, R. Chu, Z. Chen, K. Vijayraghavan, S. Rajan, S. P. DenBaars, J. S. Speck, and U. K. Mishra	*Journal of Applied Physics 104 093510*	Journal
584	2008	“Plane Dependent Growth of GaN in Supercritical Basic Ammonia” M. Saito, D. Kamber, T. Baker, K. Fujito, S. DenBaars, J. Speck, and S. Nakamura	*The Japan Society of Applied Physics: Applied Physics Express 1 121103*	Journal
585	2008	“Energy Efficent LEDs For Sustainable Solid-State Lighting” S. DenBaars	*Engineering Insights Conference UCSB 2008*	Journal
586	2009	“Homoepitaxial growth and characterization of ZnO(0001) thin films grown by metalorganic chemical vapor epitaxy” T. Ive , T. Ben-Yaacov, C. Van de Walle, U. Mishra, S. Denbaars, J. Speck	*Phys Status Solidi C 6, No 6 1460-1463*	Journal
587	2009	“Highly efficient broad-area blue and white light-emitting diodes on bulk GaN substrates” K. Vampola , N. Fellows , H. Masui , S. Brinkley, M. Furukawa, R. Chung, H. Sato, J. Sonoda, H. Hirasawa, M. Iza, S. DenBaars, S. Nakamura	*Phys Status Solidi A, 206 No 2 200-202*	Journal
588	2009	“Recent progress in nonpolar LEDs as polarized light emitters” H. Masui, M. Schmidt, N. Fellows, H. Yamada, K. Iso, J. Speck , S. Nakamura, S. DenBaars	*Phys Status Solidi A 206 No 2 203-205*	Conference Proceeding
589	2009	“Enhancement-Mode m-plane AlGaN/GaN Heterojunction Field-Effect Transistors” T. Fujiwara, S. Rajan, S. Keller, M. Higashiwaki, J. Speck, S. DenBaars, U. Mishra	*The Japan Society of Applied Physics: Applied Physics Express 2 011001*	Journal
590	2009	“Highly Linear Integrated Coherent Receivers for Microwave Photonic Links” J. Klamkin, L. Johansson, J. Bowers, S. DenBaars, et. al.	*Optical Society of America : Optical Fiber Communication 1-3*	Journal/ Conference Proceeding
591	2009	“Optical and thermal properties of In12Ga88N/GaN solar cells” C. Neufeld, S. Cruz, N. Toledo, M.Iza, S. DenBaars, U. Mishra	*IEEE Electron Device Letters 34th IEEE Photovaltaic Specialists Conference 001533-001535*	Journal/ Conference Proceeding

592	2009	“La1-x-0.025Ce0.025Sr2+xAl1-xSixO5 solid solutions as tunable yellow phosphors for solid state white lighting” W. B. Im, N. Fellows, S. DenBaars, R. Seshardi	*Journal of Materials Chemistry Vol 19 No 9 1325-1330*	Journal
593	2009	“Evaluation of GaN substrates grown in supercritical basic ammonia” M. Saito, H. Yamada, K. Iso, H. Sato, H. Hirasawa, D. Kamber, T. Hashimoto, S. DenBaars, J. Speck, and S. Nakamura	*Applied Physics Letters 94 052109*	Journal
594	2009	“Measurement of electron overflow in 450 nm InGaN light-emitting diode structures” K. Vampola, M. Iza, S. Keller, S. DenBaars, S. Nakamura	*Applied Physics Letters 94 061116*	Journal
595	2009	“Continuous-Wave Operation of InGaN/GaN Laser Diodes on Semipolar (1122) Plane Gallium Nitrides” H. Asamizu, M. Saito, K. Fujito, J. Speck, S. DenBaars, S. Nakamura	*The Japan Society of Applied Physics: Applied Physics Express 2 021002*	Journal
596	2009	“Comparison of time-resolved photoluminescence from InGaN single quantum wells grown on nonpolar and semipolar bulk GaN substrates” G. Garrett, H. Shen, M. Wraback, A. Tyagi, M. Schmidt, J. Speck, S. DenBaars, S. Nakamaura	*Phys Status Solidi C 6 No S2 S800-S803*	Journal
597	2009	“The Kink Effect at Cryogenic Temperatures in Deep Submicron AlGaN/GaN HEMTs” R. Cuerdo, Y. Pei, Z. Chen, S. Keller, S. P. DenBaars, F. Calle, U. K. Mishra	*IEEE Electron Device Letters Vol 30 No 3 209-212*	Journal
598	2009	“Prospects for LED lighting” S. Pimputkar, J. Speck, S. DenBaars, S. Nakamura	*Nature Photonics Vol 3 180-182*	Magazine
599	2009	“Deep-Submicrometer AlGaN/GaN HEMTs With Slant Field Plates” Y. Pei, Z. Chen, D. Brown, S. Keller, S. DenBaars, U. Mishra	*IEEE Electron Device Letters Vol 30 No 4 328-330*	Journal
600	2009	“Vacancy-oxygen complexes and their optical properties in AlN epitaxial films studied by positron annihilation” A. Uedono, S. Ishibashi, S. Keller, C. Moe P. Cantu, T. M. Katona, D. S. Kamber, et. al.	*Journal of Applied Physics 105 054501*	Journal
601	2009	“Enhancing the Light Extraction Efficiency of Blue Semipolar (1011) Nitride-Based Light Emitting Diodes through Surface Patterning” H. Zhong, A.Tyagi, N. Pfaff, M. Saito, K. Fujito, J. Speck, S. DenBaars, and S. Nakamura	*Japanese Journal of Applied Physics 48 030201*	Journal

602	2009	“Growth of AlGaN/GaN heterojunction field effect transistors on semi-insulating GaN using an AlGaN interlayer” Z. Chen, Y. Pei, S. Newman, R. Chu, D. Brown, R. Chung, S. Keller, S. P. Denbaars, S. Nakamura, U. Mishra	*Applied Physics Letters 94 112108*	Journal
603	2009	“Light Emitting Diodes with ZnO Current Spreading Layers Deposited from a Low Temperature Aqueous Solution” D. Thompson, J. Richardson, S. DenBaars, and F. Lange	*The Japan Society of Applied Physics: Applied Physics Express 2 042101*	Journal
604	2009	“Electron transport in nitrogen-polar high electron mobility transistors” D. Brown , S. Rajan, S. Keller, Y. Hsieh, S. DenBaars, U. Mishra	*Phys Status Solidi C 6 No S2 S960-S963*	Journal
605	2009	“Lateral epitaxial overgrowth of (0001) AlN on patterned sapphire using hydride vapor phase epitaxy” S. Newman, D. Kamber, T. Baker, Y. Wu, F. Wu, Z. Chen, S. DenBaars, S. Nakamura, J. Speck	*Applied Physics Letters 94 121906*	Journal
606	2009	“Geometrical Characteristics and Surface Polarity of Inclined Crystallographic Planes of the Wurtzite and Zincblende Structures” H. Masui, S. Cruz, S. Nakamura, S. DenBaars	*Journal of Electronic Materials Vol 38 No 6 756-760*	Journal
607	2009	“Electrical properties of N-polar AlGaN/GaN high electron mobility transistors grown on SiC by metalorganic chemical vapor deposition” D. Brown, R. Chu, S. Keller, S. DenBaars, and U. Mishra	*Applied Physics Letters 94 153506*	Journal
608	2009	“Photoelectrochemical etching of p-type GaN heterostructures” A. Tamboli, A. Hirai, S. Nakamura, S. DenBaars, E. Hu	*Applied Physics Letters 94 151113*	Journal
609	2009	“Growth of In-doped ZnO films by metalorganic chemical vapor deposition on GaN(0001) templates” T. Ben-Yaacov, T. Ivw, C. Van De Walle, U. Mishra, J. Speck, S. DenBaars	*Phys Status Solidi C 6 No 6 1464-1467*	Journal
610	2009	“LaSr2AlO5, a Versatile Host Compound for Ce3+-Based Yellow Phosphors: Structural Tuning of Optical Properties and Use in Solid-State White Lighting” W. Im, N. Fellows, S. DenBaars, R. Seshadri, Y. Kim	*Chemistry of Materials Vol 21 No 13 2957-2966*	Journal

611	2009	"RF Performance of N-Polar AlGaN/GaN MIS-HEMTs Grown by MOCVD on Sapphire Substrate" S. Kolluri, Y. Pei, S. Keller, S. DenBaars, U. Mishra	*IEEE Electron Device Letters Vol 30 No 6 584-586*	Journal
612	2009	"AlGaN/GaN HEMT With a Transparent Gate Electrode" Y. Pei, K. Vampola, Z. Chen, R. Chu, S. DenBaars, U. Mishra	*IEEE Electron Device Letters Vol 30 No 5 439-441*	Journal
613	2009	"Growth of AlGaN/GaN/AlGaN double heterojunction field-effect transistors and the observation of a compositional pulling effect" Z. Chen, Y. Pei, S. Newman, D. Brown, R. Chung, S. Keller, S. P. Denbaars, S. Nakamura, U. Mishra	*Applied Physics Letters 94 171117*	Journal
614	2009	"Development of Nonpolar and Semipolar InGaN/GaN Visible Light-Emitting Diodes" D. Feezell, M. Schmidt, S. DenBaars, S. Nakamura	*MRS Bulliten Vol 34 318-323*	Journal
615	2009	"Nonpolar and Semipolar Group III Nitride-Based Materials" J. Speck, S. Chichibu, et. al.	*MRS Bulliten Vol 34 304-312*	Journal
616	2009	"High responsivity A-plane GaN-based metal-semiconductor-metal photodetectors for polarization-sensitive applications" A. Navarro, C. Rivera, J. Pereiro, E. Munoz, B. Imer, S. P. DenBaars, J. S. Speck	*Applied Physics Letters 94 213512*	Journal
617	2009	"Crystallographic orientation dependence of dopant and impurity incorporation in GaN films grown by metalorganic chemical vapor deposition" S. Cruz, S. Keller, T. Mates, U. Mishra, S. DenBaars	*Journal of Crystal Growth 311 3817-3823*	Journal
618	2009	"Effects of piezoelectric fields on optoelectronic properties of InGaN/GaN quantum-well light-emitting diodes prepared on nonpolar (1 0 10) and semipolar (1122) orientations" H. Masui, H. Asamizu, T. Melo, H. Yamada, K. Iso, S. Cruz, S. Nakamura, S. DenBaars	*Journal of Physics D: Applied Physics 42 135106*	Journal
619	2009	"Si Delta-Doped m-plane AlGaN/GaN Heterojunction Field-Effect Transistors" T. Fujiwara, S. Keller, M. Higashiwaki, J. Speck, S. DenBaars, U. Mishra	*The Japan Society of Applied Physics: Applied Physics Express 2 061003*	Journal

620	2009	“Determination of polarization field in a semipolar (11$\bar{2}$2) InGa/GaN single quantum well using Franz–Keldysh oscillations in electroreflectance” H. Shen, M. Wraback, H. Zhong, A. Tyagi, S. P. DenBaars, S. Nakamura, and J. S. Speck	*Applied Physics Letters 94 241906*	Journal
621	2009	“Correlation between Optical Polarization and Luminescence Morphology of (1122)-Oriented InGaN/GaN Quantum-Well Structures” H. Masui, H. Asamizu, A.Tyagi, N. Fellows, S. Nakamura, S. DenBaars	*The Japan Society of Applied Physics: Applied Physics Express 2 071002*	Journal
622	2009	“Observation of whispering gallery modes in nonpolar m-plane GaN microdisks” A. Tamboli, M. Schmidt, A. Hirai, S. DenBaars, and E. Hu	*Applied Physics Letters 94 251116*	Journal
623	2009	“Nonpolar AlGaN-Cladding-Free Blue Laser Diodes with InGaN Waveguiding” K. Kelchner, M. Hardy, R. Ferrell, D. Haeger, F. Wu, et. al.	*The Japan Society of Applied Physics: Applied Physics Express 2 071003*	Journal
624	2009	“Characterization of blue-green m-plane InGaN light emitting diodes” Y.D.Lin, A. Chakraborty, S. Brinkley, H. C. Kuo, T. Melo, K. Fujito, J. Speck, S. DenBaars, S. Nakamura	*Applied Physics Letters 94 261108*	Journal
625	2009	“Luminescence Characteristics of N-Polar GaN and InGaN Films Grown by Metal Organic Chemical Vapor Deposition” H. Masui, S. Keller, N. Fellows, N. Fichtenbaum, M. Furukawa, S. Nakamura, U. Mishra, S. DenBaars	*Japanese Journal of Applied Physics 48 071003*	Journal
626	2009	“Unabmiguous evidence of the existence of polarization fiel crossover in a semipolar InGaN/GaN single quantum well” H. Shen, M. Wraback, H. Zhong, A. Tyagi, S. DenBaars, S. Nakamura, J. Speck	*Applied Physics Letters 95 033503*	Journal
627	2009	“Blue-Green InGaN/GaN Laser Diodes on Miscut m-Plane GaN Substrate” Y.D. Lin, M. Hardy, K. Kelchner, D. Haeger et. al.	*The Japan Society of Applied Physics: Applied Physics Express 2 082102*	Journal
628	2009	“Photoelectrochemical Undercut Etching of m-Plane GaN for Microdisk Applications” A. Tamboli, M. Schmidt, A. Hirai, S. DenBaars, E. Hu	*Journal of the Electrochemical SocietyVol 156 No 10 H767-H771*	Journal

629	2009	“MOCVD-Grown AlGaN Buffer GaN HEMTs With V-Gates for Microwave Power Applications” R. Chu, Z. Chen, Y. Pei, S. Newman, S. DenBaars, U. Mishra	*IEEE Electron Device Letters Vol 30 No 9 910-912*	Journal
630	2009	“m-plane pure blue laser diodes with p-GaN/n-AlGaN-based asymmetric cladding and InGaN-based wave-guiding layers” Y-D. Lin, M. Hardy, H. Ohta, J. Speck, S. DenBaars et. al.	*Applied Physics Letters 95 081110*	Journal
631	2009	“Customized Filter Cube in Fluorescence Microscope Measurements of InGaN/GaN Quantum-Well Characterization” H. Masui, J. Sonoda, A. Chakraborty, H. Yamada, K. Iso, N. Pfaff, I. Koslow, S. Nakamura, S. DenBaars	*Japanese Journal of Applied Physics 48 098003*	Journal
632	2009	“Uni-Traveling-Carrier Balanced Photodiode with Tunable MMI Couplet for Optimization of Source Laser RIN Suppression” J. Klamkin, A. Ramaswamy, L. Johansson, N. Nunoya, J. Bowers, S. DenBaars, L. Coldren	*International Topical Meeting on Microwave Photonics 1-4*	Invited Paper
633	2009	“Probing local structure in the yellow phosphor LaSr2AlO5 : Ce3+, by the maximum entropy method and pair distribution function analysis” W.B. Im, K. Page, S. DenBaars, R. Seshadri	*Journal of Materials Chemistry Vol 19 No 46 8761-8766*	Journal
634	2009	“Effects of Growth Temperature and Postgrowth Annealing on Inhomogeneous Luminescence Characteristics of Green-Emitting InGaN Films” H. Masui, T. Melo, J. Sonoda, C. Weisbuch, S. Nakamura, S. DenBaars	*Journal of Electronic Materials Vol 39 No 1 15-20*	Journal
635	2009	“GaN-Based Integrated Lateral Thermoelectric Device for Micro-Power Generation” A. Sztein, H. Ohta, J. Sonoda, A Ramu, J. Bowers, S. DenBaars, S. Nakamura	*The Japan Society of Applied Physics: Applied Physics Express 2 111003*	Journal
636	2009	“Nonpolar and Semipolar III-Nitride Light-Emitting Diodes: Achievements and Challenges” H. Masui, S. Nakamura, S. DenBaars, U. Mishra	*IEEE Transactions on Electron devices Vol 57 No 1 88-100*	Invited Paper
637	2009	“Substitution of oxygen by fluorine in the GdSr2AlO5:Ce3+ phosphors: Gd1−xSr2+xAlO5−xFx solid solutions for solid state white lighting” W.B. Im, Y. Fourre, S. Brinkley, J. Sonoda, S. Nakamura, S. DenBaars, R. Seshadri	*Optics Express Vol 17 No 25 22673-22679*	Journal

638	2009	“Spontaneous formation of $\{1\bar{1}01\}$ InGaN quantum wells on a $(11\bar{2}2)$ GaN template and their electroluminescence characteristics” H. Masui , D. Kamber, D. Kamber, S. Binkley, F. Wu, T. Baker, H. Zhong, M. Iza, J. Speck, S. Nakamura and S DenBaars	*Semiconductor Science and Technology Vol 25 015003 1-8*	Journal
639	2009	“m-Plane GaN-Based Blue Superluminescent Diodes Fabricated Using Selective Chemical Wet Etching” M. Hardy, K. Kelchner, Y.D. Lin, P.S. Hsu, H. Ohta, K. Fujito, J. Speck, S. Nakamura, S. DenBaars	*The Japan Society of Applied Physics: Applied Physics Express2 121004*	Journal
640	2009	“Properties of In-Doped ZnO Films Grown by Metalorganic Chemical Vapor Deposition on GaN(0001) Templates” T. Ben-Yaacov, T. Ive, C. Van De Walle, U. Mishra, J. Speck, S. DenBaars	*Journal of Electronic Materials Vol 39 No 5 608-611*	Journal
641	2009	“Partial strain relaxation via misfit dislocation generation at heterointerfaces in (Al,In)GaN epitaxial layers grown on semipolar $(11\bar{2}2)$ GaN free standing substrates” A. Tyagi, F. Wu, E. Young, A. Chakraborty, H. Ohta, R. Bhat, K. Fujito, S. DenBaars, S. Nakamura, J. Speck	*Applied Physics Letters 95 251905*	Journal
642	2009	“AlGaN-Cladding Free Green Semipolar GaN Based Laser Diode with a Lasing Wavelength of 506.4 nm” A. Tyagi, R. Ferrell, K. Kelchner, C. Y. Huang, P. S. Hsu, D. Haeger, M. Hardy, C. Holder, K. Fujito, D. Cohen, H. Ohta, J. Speck, S. DenBaars, S. Nakamura	*The Japan Society of Applied Physics: Applied Physics Express 3 011002*	Journal
643	2010	“Propagation of Spontaneous Emission in Birefringent m-Axis Oriented Semipolar (1122) (Al,In,Ga)N Waveguide Structures” C.Y. Huang, A. Tyagi, Y.D. Lin, M. Hardy, et. al.	*Japanese Journal of Applied Physics 49 010207*	Journal
644	2010	“Lattice Tilt and Misfit Dislocations in (1122) Semipolar GaN Heteroepitaxy” E. Young, F. Wu, A. Romanov, A. Tyagi, C. Gallinat, S. DenBaars, S. Nakamura, J. Speck	*The Japan Society of Applied Physics: Applied Physics Express 3 011004*	Journal
645	2010	“Low resistance Ti/Al/Au ohmic backside contacts to nonpolar m-plane n-GaN” Y.A. Chen, D. Cohen, S. DenBaars	*IEEE Electronics Letters Vol 46 No 2 173-174*	Journal

646	2010	“Optical waveguide simulations for the optimization of InGaN-based green laser diodes” C. Y. Huang, Y. D. Lin, A Tyagi, A. Chakraborty, H. Ohta, J. Speck, S. DenBaars, S. Nakamura	*Journal of Applied Physics 107 023101*	Journal
647	2010	“Growth and characterization of In-polar and N-polar InAlN by metal organic chemical vapor deposition” D. Brown, S. Keller, T. Mates, J. Speck, S. DenBaars, U. Mishra	*Journal of Applied Physics 107 033509*	Journal
648	2010	Technique to evaluate the diode ideality factor of light-emitting diodes H. Masui, S. Nakamura, S. DenBaars	*Applied Physics Letters 96 073509*	Journal
649	2010	“Photoluminescence and positron annihilation studies on Mg-doped nitrogen-polarity semipolar $(10\bar{1}\bar{1})$ GaN heteroepitaxial layers grown by metalorganic vapor phase epitaxy” T. Onuma, A. Uedono, H. Asamizu, H. Sato, J. Kaeding, M. Iza, S. DenBaars, S. Nakamura, F. Chichibu	*Applied Physics Letters 96 091913*	Journal
650	2010	“High-power high-efficiency continuous-wave InGaN laser diodes in the violet, blue, and green wavelength regimes” J. Raring, E. Hall, M. Schmidt, C. Poblenz, B. Li, N. Pfister, D. Feezell, R. Craig, J. Speck, S. DenBars, S. Nakamura	*Proceedings of SPIE Vol 7602 760218*	Conference Proceeding
651	2010	“Sr2.975−xBaxCe0.025AlO4F: a Highly Efficient Green-Emitting Oxyfluoride Phosphor for Solid State White Lighting” W.B. Im, S. Brinkley, J. Hu, A. Mikhailovsky, S. DenBaars, R. Seshadri	*Chemistry of Materials Vol 22 No 9 2842-2849*	Journal
652	2010	“State-of-the-art continuous-wave InGaN laser diodes in the violet, blue, and green wavelength regimes” J. Raring, E. Hall, M. Schmidt, C. Poblenz, B. Li, N. Pfister, D. Kebort, Y. C. Chang, D. Feezell, R. Craig, J. Speck, S. DenBaars, S. Nakamura	*Proceedings of SPIE Vol 7686 76860L*	Conference Proceeding
653	2010	“InGaN/GaN Blue Laser Diode Grown on Semipolar (3031) Free-Standing GaN Substrates” P.S. Hsu, K. Kelchner, A. Tyagi, R. Ferrell, D. Haeger, K. Fujito, H. Ohta, S. DenBaars, J. Speck, S. Nakamura	*The Japan Society of Applied Physics: Applied Physics Express 3 052702*	Journal

654	2010	“Origin of pyramidal hillocks on GaN thin films grown on free-standing m-plane GaN substrates” R. Farrell, D. Haeger, X. Chen, C. Gallinat, R. Davis, M. Cornish, K. Fujito, S. Keller, S. DenBaars, S. Nakamura, J. Speck	*Applied Physics Letters 96 231907*	Journal
655	2010	“Stacking fault formation in the long wavelength InGaN/GaN multiple quantum wells grown on m-plane GaN” F. Wu, Y.D. Lin, A. Chakraborty, H. Otha, S. DenBaars, S. Nakamura, J. Speck	*Applied Physics Letters 96 231912*	Journal
656	2010	“Low-threshold-current-density AlGaN-cladding-free m-plane InGaN/GaN laser diodes” R. Farrell, P. S. Hsu, D. Hager, K. Fujito, S. DenBaars, J. Speck, S. Nakamura	*Applied Physics Letters 96 231113*	Journal
657	2010	“Dynamics of polarized photoluminescence in m-plane InGaN/GaN quantum wells” V. Liuolia, S. Marcinkevicius, Y.D. Lin, H. Ohta, S. DenBaars, S. Nakamura	*Journal of Applied Physics 108 023101*	Journal
658	2010	“Vertical Stand Transparent Light-Emitting Diode Architecture for High-Efficiency and High-Power Light-Emitting Diodes” C.C. Pan, I. Koslow, J. Sonoda, H. Ohta, J.S. Ha, S. Nakamura, S. DenBaars	*Japanese Journal of Applies Physics 49 080210*	Journal
659	2010	“High Power and High Efficiency Blue InGaN Light Emitting Diodes on Free-Standing Semipolar (3031) Bulk GaN Substrate” I.L. Koslow, J. Sonoda, R.B. Chung, C. Pan, S. Brinkley, H. Ohta, S. Nakamura, S. DenBaars	*Japanese Journal of Applies Physics 49 080203*	Journal
660	2010	”N-Polar InAlN/AlN/GaN MIS-HEMTs” D.F. Brown, Nidihi, F. Wu, S. Keller, S. DenBaars, U.K. Mishra	*IEEE Electronic Device Letters Vol 31 No 8 800-802*	Journal
661	2010	“High Quality InGaN/AlGaN Multiple Quantum Wells for Semipolar InGaN Green Laser Diodes” Y.D. Lin, S. Yamamoto, C.Y. Huang, C. Hsiung, F. Wu, K. Fujito, H. Ohta, J. Speck, S. DenBaars, S. Nakamura	*Applied Physics Express 3 082001*	Journal

662 (B-1)*	2010	“Continuous-Wave Operation of Pure Blue AlGaN-Cladding-Free Nonpolar InGaN/GaN Laser Diodes” K. Kelchner, R. Farrell, Y. Lin, P. Hsu, M. Hardy, F. Wu, D. Cohen, H. Ohta, J. Speck, S. Nakamura, S. DenBaars	*Applied Physics Express 3 092103*	Journal
663	2010	“Influence of AlN interlayer on the anisotropic electron mobility and the device characteristics of N-polar AlGaN/GaN metal-insulator-semiconductor-high electron mobility transistors grown on vicinal substrates” S. Kolluri, S. Keller, D. Brown, G. Gupta, U.K.. Mishra, S. DenBaars, S. Rajan	*Journal of Applied Physics 108 074502*	Journal
664	2010	“Properties of N-polar GaN films and AlGaN/GaN heterostructures grown on (111) silicon by metal organic chemical vapor deposition” S. Keller, Y. Dora, F. Wu, X. Chen, S. Chowdury, S. DenBaars, J. Speck, U.K. Mishra	*Applied Physics Letters 97 142109*	Journal
665	2010	”Carrier localization in m-plane InGaN/GaN quantum wells probed by scanning near field optical spectroscopy” V. Liuolia, A. Pinos, S. Marcinkevicius, Y.D. Lin, H. Ohta, S. DenBaars, S. Nakamura	*Applied Physics Letters 97 151106*	Jounral
666	2010	“Lateral confinement of electrons in vicinal N-polar AlGaN/GaN heterostructure” D.N. Nath, S. Keller. E. Hsieh, S. DenBaars, U.K. Mishra, S. Rajan	*Applied Physics Letters 97 162106*	Journal
667	2010	“Future of group-III nitride semiconductor green laser diodes” H. Ohta, S. DenBaars, S. Nakamura	*Journal of the optical society of America B-Optical Physics* *Vol 27 No 11 B45-B49*	Journal
668	2010	“Influence of AlN interlayer on the anisotropic electron mobility and the device characteristics of N-polar AlGaN/GaN metal-insulator-semiconductor-high electron mobility transistors grown on vicinal substrates” S. Kolluri, S. Keller, D. Brown, G. Gupta, S. Rajan, S. DenBaars, U. Mishra	*Journal of Applied Physics 108 074502*	Journal
669	2010	“Effect of carrier gas and substrate misorientation on the structural and optical properties of m-plane InGaN/GaN light-emitting diodes” R.M. Farrell, D.A. Haegar, X. Chen, M. Iza, A. Hirai	*Journal of Crystal Growth* *Vol 313 No 1 1-7*	Journal

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* #662 previously B-1, Work In Press

670	2011	”A facile route to patterned epitaxial ZnO nanostructures by soft lithography” J.J. Richardson, D. Estrada, S. DenBaars, C.J. Hawker, L.M. Campos	*Journal of Materials Chemistry Vol 21 No 38 14417-14419*	Journal
671	2011	“Polarized spontaneous emission from blue-green m-plane GaN-based light emitting diodes” S.E. Brinkley, Y.D. Lin, A. Chakraborty, N. Pfaff, D. Cohen, J. Speck, S. Nakamura, S. DenBaars.	*Applied Physics Letters 98 011110*	Journal
672	2011	“High internal and external quantum efficiency InGaN/GaN solar cells” E. Matioli, C. Neufeld, M. Iza, S.C. Cruz, A.A. Al-Heji, X. Chen, R.M. Farrell, S. Keller, S. DenBaars, S. Nakamura, J. Speck, C. Weisbuch	*Applied Physics Letters 98 021102*	Journal
673	2011	“Misfit dislocation formation at heterointerfaces in (Al, In)GaN heteroepitaxial layers grown on semipolar free-standing GaN substrates” F. Wu, A. Tyagi, E.C. Young, A.E. Romanov, K. Fujito, S. DenBaars, S. Nakamura, J. Speck	*Journal of Applied Physics 109 033505*	Journal
674	2011	“RF Performance of Deep-Recessed N-Polar GaN MIS-HEMTs Using a Selective Etch Technology Without Ex Situ Surface Passivation” S. Kolluri, D.F. Brown, M.H. Wong, S. Dasgupta, S. Keller, S. DenBaars, U.K. Mishra	*IEEE Electron Device Letters Vol 32 No 2 134-136*	Journal
675	2011	“Ohmic Cathode Electrode on the Backside of m-Plane and (2021) Bulk GaN Substrates for Optical Device Applications” C.L. Hsiung, Y.D. Lin, H. Ohta, S. Denbaars, S. Nakamura	*Japanese Journal of Applied Physics 50 030208*	Journal
676	2011	“Droop improvement in high current range on PSS-LEDs” S. Tanaka, Y. Zhao, I. Koslow, C.C. Pan, H.T. Chen, J. Sonoda, S. DenBaars, S. Nakamura	*Electronic Letters Vol 47 No 5 335-U66*	Journal
677	2011	“Comparison of the spectral and temporal emission characteristics of homoepitaxial and heteroepitaxial ZnO nanowires” C. Pfuller, O. Brandt, T. Flissikowski, H.T. Grahn, T. Ive, J. Speck, S. DenBaars	*Applied Physics Letters 98 113113*	Journal

678	2011	“Electroluminescence enhancement of (1122) semipolar GaN light-emitting diodes grown on miscut m-plane sapphire substrates” S.Y. Bae, D.S. Lee, B.H. Kong, H.K. Cho, J.F. Kaeding, S. Nakamura, S. DenBaars, J. Speck	*Current Applied Physics Vol 11 No 3 954-958*	Journal
679	2011	“N-Polar GaN MIS-HEMTs With a 12.1-W/mm Continuous-Wave Output Power Density at 4 GHz on Sapphire Substrate” S. Kolluri, S. Keller, S. DenBaars, U.K. Mishra	*IEEE Electronic Device Letters Vol 32 No 5 635-637*	Journal
680	2011	“Atom probe analysis of interfacial abruptness and clustering within a single InxGa1-xN quantum well device on semipolar (1011) GaN substrate” T.J. Prosa, P.H. Clifton, H. Zhong, A. Tyagi, R. Shivaraman, S. DenBaars, S. Nakamura, J. Speck	*Applied Physics Letters 98 191903*	Journal
681	2011	“Basal plane misfit dislocations and stress relaxation in III-nitride semipolar heteroepitaxy” A.E. Romanov, E.C. Young, F. Wu, A. Tyagi, C.S. Gallinat, S. Nakamura, S. DenBaars, J. Speck	*Journal of Applied Physics 109 103522*	Journal
682	2011	“High quantum efficiency InGaN/GaN multiple quantum well solar cells with spectral response extending out to 520 nm” R.M. Farrell, C.J. Neufeld, S.C. Cruz, J.R. Lang, M. Iza, S. Keller, S. Nakamura, S. DenBaars, U.K. Mishra, J. Speck	*Applied Physics Letters 98 201107*	Journal
683	2011	“Efficient and Color-Tunable Oxyfluoride Solid Solution Phosphors for Solid-State White Lighting” W. Bin Im, N. George, J. Kurzman, S. Brinkley, A. Mikhailovsky, J. Hu, B.F. Chmelka, S. DenBaars, R. Seshadri	*Advamced Materials Vol 23 No 20 2300+*	Journal
684	2011	“Growth study and impurity characterization of AlxIn1-xN grown by metal organic chemical vapor deposition” R.B. Chung, F. Wu, R. Shivaraman, S. Keller, S. DenBaars, J. Speck, S. Nakamura	*Journal of Crustal Growth Vol 324 No 1 163-167*	Journal
685	2011	“Atom probe analysis of interfacial abruptness and clustering within a single InxGa1-xN quantum well device on semipolar, (10(11)(--)) GaN substrate (vol 98, 191903, 2011)” T.J. Prosa, P. H. Clifton, H. Zhong, A. Tyagi, R. Shivaraman, S.P. DenBaars, S. Nakamura, J. Speck	*Applied Physics Letters 98 239901*	Journal

686	2011	“Effect of doping and polarization on carrier collection in InGaN quantum well solar cells” C.J. Neufeld, S.C. Cruz, R.M. Farrell, M. Iza, J.R. Lang, S. Keller, S. Nakamura, S. DenBaars, J. Speck, U.K. Mishra	*Applied Physics Letters 98 24507*	Journal
687	2011	“Polarized light extraction in m-plane GaN light-emitting diodes by embedded photonic-crystals” E. Matioli, S. Brinkley, K.M. Kelchner, S. Nakamura, S. DenBaars, J. Speck, C. Weisbuch	*Applied Physics Letters 98 251112*	Journal
688	2011	“Thermally Induced Pore Formation in Epitaxial ZnO Films Grown from Low Temperature Aqueous Solution” J.J. Richardson, G. Goh, H.Q. Le, L.L. Liew, F.F. Lange, S. DenBaars	*Crystal Growth & Design*	Journal
689	2011	“High-Power Blue-Violet Semipolar (2021) InGaN/GaN Light-Emitting Diodes with Low Efficiency Droop at 200 A/cm(2)” Y.J. Zhao, S. Tanaka, C.C. Pan, K. Fujito, D. Feezell, J. Speck, S. DenBaars, S. Nakamura	*Applied Physics Express 4 082104*	Journal
690	2011	“High optical polarization ratio from semipolar (2021) blue-green InGaN/GaN light-emitting diodes” Y.J. Zhao, S. Tanaka, Q.M. Yan, C.Y. Huang, R.B. Chung, C.C. Pan, K. Fujito, D. Feezell, J. Speck, S. DenBaars, S. Nakamura	*Applied Physics Letters 99 051109*	Journal
691	2011	“Observation of positive thermal power coefficient in InGaN/GaN quantum well solar cells” C.J. Neufeld, S.C. Cruz, R.M. Farrell, M. Iza, S. Keller, S. Nakamura, S. DenBaars, J. Speck, U.K. Mishra	*Applied Physics Letters 99 071104*	Journal
692	2011	“Misfit dislocation formation via pre-existing threading dislocation glide in (1122) semipolar heteroepitaxy” P.S. Hsu, E.C. Young, A.E. Romanov, K. Fujito, S. DenBaars, S. Nakamura, J. Speck	*Applied Physics Letters 99 081912*	Journal
693	2011	“Enhancement-Mode m-plane AlGaN/GaN Heterojunction Field-Effect Transistors with+3V of Threshold Voltage Using Al2O3 Deposited by Atomic Layer Deposition” T. Fujiwara, R. Yeluri, D. Denninghoff, J. Lu, S. Keller, J. Speck, S. DenBaars, U. Mishra	*Applied Physics Express 4 096501*	Journal

694	2011	“Group III-nitride lasers: a materials perspective” M.T. Hardy, D.F. Feezell, S. DenBaars, S. Nakamura	*Materials Today Vol 14 No 9 408-415*	Journal
695	2011	“AlGaN-Cladding-Free m-Plane InGaN/GaN Laser Diodes with p-Type AlGaN Etch Stop Layers” RM Farrell, DA Haeger, PS Hsu, MT Hardy, KM Kelchner, K. Fujito, DF Feezell, UK Mishra, SP DenBaars, JS Speck, S. Nakamura	*Applied Physics Express 4 092105*	Journal
696	2011	“Temperature Dependent Capacitance-Voltage Analysis of Unintentionally Doped and Si Doped Al0.82In0.18N Grown on GaN” R.B. Chung, O. Bierwagen, F. Wu, S. Keller, S. DenBaars, J. Speck, S. Nakamura	*Japanese Journal of Applied Physics 50 101001*	Journal
697	2011	“Influence of Mg-doped barriers on semipolar (2021) multiple-quantum-well green light-emitting diodes” C.Y. Huang, Q.M. Yan, Y.J. Zhao, K. Fujito, D. Feezell, C.G. Van de Walle, J. Speck, S. DenBaars, S. Nakamura	*Applied Physics Letters 99 141114*	Journal
698		Determination of internal parameters for AlGaN-cladding-free m-plane InGaN/GaN laser diodes” R.M. Farrell, D.A. Haeger, P.S. Hsu, M.C. Schmidt, K. Fujito, D.F. Feezell, S. DenBaars, J. Speck, S. Nakamura	*Applied Physics Letters 99 171115*	Journal
699	2011	“High-power blue-violet AlGaN-cladding-free m-plane InGaN/GaN laser diodes” R.M. Farrell, D.A. Haeger, P.S. Hsu, M.C. Schmidt, K. Fujito, D.F. Feezell, S. DenBaars, J. Speck, S. Nakamura	*Applied Physics Letters 99 171113*	Journal
700	2011	“High optical polarization ratio from semipolar (2021) blue-green InGaN/GaN light-emitting diodes (vol 99, 051109, 2011)” Y. Zhao, S. Tanaka, Q. Yan, CY Huang, R. Chung, CC Pan, KFujito, D. Feezell, CG Van de Walle, J. Speck, S. DenBaars, S. Nakamura	*Appliedd Physics Letters 99 229902*	Journal
701	2011	“Semipolar Single-Crystal ZnO Films Deposited by Low-Temperature Aqueous Solution Phase Epitaxy on GaN Light-Emitting Diodes” J.J. Richardson, I. Koslow, C.C. Pan, Y. Zhao, J.S. Ha, S. DenBaars	*Applied Physics Express 4 126502*	Journal

702	2011	"Demonstration of 505 nm laser diodes using wavelength-stable semipolar (2021) InGaN/GaN quantum wells" C.Y. Huang, M.T Hardy, K. Fujito, D.F. Feezell, J.S. Speck, S.P. DenBaars, S. Nakamura	*Applied Physics Letters 99 241115*	Journal
703	2011	"Robust thermal performance of Sr2Si5N8:Eu2+: An efficient red emitting phosphor for light emitting diode based white lighting" S.E. Brinkley, N. Pfaff, K.A. Denault, Z.J. Zhang, H.T. Hintzen, R. Seshadri, S. Nakamura, S.P. DenBaars	*Applied Physics Letters 99 241106*	Journal
704	2011	"High temperature thermoelectric properties of optimized InGaN" A. Sztein, H. Ohta, J.E. Bowers, S. DenBaars, S. Nakamura	*Journal of Applied Physics 110 123709*	Journal
705	2011	"Observation of non-basal slip in semipolar InxGa1-xN/GaN heterostructures" F. Wu, E.C. Young, I. Koslow, M.T. Hardy, P.S. Hsu, A.E. Romanov, S. Nakamura, S. DenBaars, J. Speck	*Applied Physics Letters 99 251909*	Journal
706	2012	"Microwave Power Performance N-Polar GaN MISHEMTs Grown by MOCVD on SiC Substrates Using an Al2O3 Etch-Stop Technology" S. Kolluri, S. Keller, S. DenBaars, U.K. Mishra	*IEEE Electronic Device Letters Vol 33 No 1 44-46*	Journal
707	2012	"GaN Laser Diodes on Nonpolar and Semipolar Planes" K.M. Kelchner, S. Denbaars, J. Speck	*Advances in Semiconductor Lasers*	Book Chapter
708	2012	"A green-yellow emitting oxyfluoride solid solution phospor Sr2Ba(AlO4F)(1-x)(SiO5)(x):Ce3+for thermally stable, high color rendition solid state white lighting" K. Denault, N. George, S. Paden, S. Brinkley, A. Mikhailovsky, J. Neuefeind, S. DenBaars, R. Seshadri	*Journal of Materials Chemistry 22, 18204-18213*	Journal
709	2012	"High efficiency white LEDs with single-crystal ZnO current spreading layers deposited by aqueous solution epitaxy" A.H. Reading, J.J. Richardson, C.C. Pan, S. Nakamura, S. DenBaars	*Optics Express Vol 20 No 1 A13-A19*	Journal

710	2012	“444.9 nm semipolar (1122) laser diode grown on an intentionally stress relaxed InGaN waveguiding layer” P.S. Hsu, M.T. Hardy, F. Wu, I. koslow, E.C. Young, A.E. Romanov, K. Fujito, Feezell, J.S. Speck, S. Nakamura, S. DenBaars	*Applied Physics Letters 100 021104*	Journal
711	2012	“Materials and growth issues for high-performance nonpolar and semipolar light-emitting devices” R.M. Farrell, E.C. Young, F. Wu, S. DenBaars, J. Speck	*Semiconductor Science and Technology 27, 024001*	Journal
712	2012	“Assessment of deep level defects in m-plane GaN grown by metalorganic chemical vapor deposition” T.A. Henry, A. Armstrong, K.M. Kelchner, S. Nakamura, S. DenBaars, J. Speck	*Applied Physics Letters 100 082103*	Journal
713	2012	“The polarization field dependence of Ti/Al based Ohmic contacts on N-type semipolar GaN” R.B. Chung, H.T. Chen, C.C. Pan, J.S. Ha, S. DenBaars, S. Nakamura	*Applied Physics Letters 100 091104*	Journal
714	2012	“Carrier dynamics in active regions for ultraviolet optoelectronics grown on thick, relaxed AlGaN on semipolar bulk GaN” G.A. Garrett, P. Rotella, H.G. Shen, M. Wraback, D.A. Haeger, R.B. Chung, N. Pfaff, E.C. Young, S. DenBaars, J. Speck, D.A. Cohen	*Phsyics Status Solidi B-Basic Solid State Physics Vol 249 No 3 507-510*	Journal
715	2012	“Chip Shaping for Light Extraction Enhancement of Bulk c-Plane Light-Emitting Diodes” S.E. Brinkley, C.L. Keraly, J. Sonoda, C. Weisbuch, J. Speck, S. Nakamura, S. DenBaars	*Applied Physics Express 5 032104*	Journal
716	2012	“Effect of indium on the conductivity of poly-crystalline GaN grown on high purity fused silica” S. Keller, J. Lu, U.K. Mishra, S. DenBaars, J. Speck	*Physica Status Solidi A-Applications and Materials Science Vol 209 No 3 431-433*	Journal
717	2012	“Advances in the LED Materials and Architectures for Energy-Saving Solid-State Lighting Toward "Lighting Revolution"” S.T. Tan, X.W. Sun, H.V. Demir, S. DenBaars	*IEEE Photonics journal Vol 4 No 2 613-619*	Journal
718	2012	“Nanoindentation of Laterally Overgrown Epitaxial Gallium Nitride” M. Martyniuk, G. Parish, H. Marchand, P.T. Fini, S. DenBaars, L. Faraone	*Electronic Materials Letters Vol 8 No 2 111-115*	Journal

719	2012	“Effect of quantum well cap layer thickness on the microstructure and performance of InGaN/GaN solar cells” Y.L. Hu, R.M. Farrell, C.L. Neufeld, M. Iza, S.C. Cruz, M. Pfaff, D. Simenov, S. Keller, S. Nakamura, S. DenBaars, U.K. Mishra, J. Speck	*Applied Physics Letters 100 161101*	Journal
720	2012	“384 nm laser diode grown on a (2021) semipolar relaxed AlGaN buffer layer” D.A. Haeger, E.C. Young, R.B. Chung, F. Wu, N.A. Pfaff, M. Tsai, K. Fujito, Speck, S. Nakamura, S. DenBaars, D.A. Cohen	*Applied Physics Letters 100 161107*	Journal
721	2012	“Stress relaxation and critical thickness for misfit dislocation formation in (1010) and (3031) InGaN/GaN heteroepitaxy” P.S. Hsu, M.T. Hardy, E.C. Young, A.E. Romanov, S. DenBaars,S. Nakamura, U.K. Mishra, J. Speck	*Applied Physics Letters 100 171917*	Journal
722	2012	“Optical Characterization of Double Peak Behavior in {1011} Semipolar Light-Emitting Diodes on Miscut m-Plane Sapphire Substrates” S.B. Choi, S.Y. Bae, D.S. Lee, B.H. Kong, H.K. Cho, J.H. Song, B.J. Ahn, J.F. Keading, S. Nakamura, S. DenBaars, J. Speck	*Japanese Journal of Applied Physics 51 052101*	Journal
723	2012	“Access-Region Defect Spectroscopy of DC-Stressed N-Polar GaN MIS-HEMTs” A. Sasikumar, A. Arehart, S. Kolluri, M.H. Wong, S. Keller, S. DenBaars, J. Speck, U.K. Mishra, S. A. Ringel	*IEEE Electronic Device Letters Vol 33 No 5 658-660*	Journal
724	2012	“InGaAs-InGaN Wafer-Bonded Current Aperture Vertical Electron Transistors (BAVETs)” S. Lal, E. Snow, J. Lu, B. Swenson, S. Keller, S. DenBaars, U.K. Mishra	*Jounral of Electronic Materials Vol 41 No 5 857-864*	Journal
725	2012	“Coalescence of InP Epitaxial Lateral Overgrowth by MOVPE with V/III Ratio Variation” N. Julian, O. Mages, C. Zhang, J. Zhang, S. Kraemer, S. Stemmer, S. DenBaars, L. Coldren, P. Petroff, J. Bowers	*Journal of Electronic Materials Vol 41 No 5 845-852*	Journal

726	2012	“Indium incorporation and emission properties of nonpolar and semipolar InGaN quantum wells” Y.J. Zhao, Q.M. Yan, C.Y. Huang, S.C. Huang, P.S. Hsu, S. Tanaka, C.C. Pan, Y. Kawaguchi, K. Fujito, C.G. Van de Walle, J. Speck, S. DenBaars, S. Nakamura, D. Feezell	*Applied Physics Letters 100 201108*	Journal
727	2012	“Trace analysis of non-basal plane misfit stress relaxation in (2021) and (3031) semipolar InGaN/GaN heterostructures” M.T. Hardy, P.S. Hsu, F. Wu, I.L. Koslow, E.C. Young, S. Nakamura, A.E. Romanov, S. DenBaars, U.K. Mishra, J. Speck	*Applied Physics Letters 100 202103*	Journal
728	2012	“High-Power, Low-Efficiency-Droop Semipolar (2021) Single-Quantum-Well Blue Light-Emitting Diodes” C.C. Pan, S. Tanaka, F. Wu, Y.J. Zhao, J. Speck, S. Nakamura, S. DenBaars, D. Feezell	*Applied Physics Express 5 062103*	Journal
729	2012	“Influence of polarity on carrier transport in semipolar (2021) and (2021) multiple-quantum-well light-emitting diodes” Y. Kawaguchi, C.Y. Huang, Y.R. Wu, Q.M. Yan, C.C. Pan, Y.J. Zhao, S. Tanaka, K. Fujito, D, Feezell, C.G. Van de Walle, S. DenBaars, S. Nakamura	*Applied Physics Letters 100 231110*	Journal
730	2012	“High-brightness polarized light-emitting diodes” E. Matioli, S. Brinkley, K. Kelchner, Y. Hu, S. Nakamura, S. DenBaars, J. Speck, C. Weisbuch	*Light: Science & Applications Vol. 1, 8*	Journal
731	2012	“Demonstration of Nonpolar GaN-Based Vertical-Cavity Surface-Emitting Lasers” C. Holder, J. Speck, S. DenBaars, S. Nakamura, D. Feezell	*Applied Physics Express 5 092104*	Journal
732	2012	“Performance and polarization effects in (1122) long wavelength light emitting diodes grown on stress relaxed InGaN buffer layers” I.L. Koslow, M.T. Hardy, P.S. Hsu, P.Y. Dang, F. Wu, A. Romanov, Y.R. Wu, E.C. Young, S. Nakamura, J. Speck, S. DenBaars	*Applied Physics Letters 101 121106*	Journal
733	2012	“Suppression of m-plane and c-plane slip through Si and Mg doping in partially relaxed (2021) InGaN/GaN heterostructures” M.T. Hardy, E.C. Young, P.S. Hsu, D.A. Haeger, I.L. Koslow, S. Nakamura, S. DenBaars, J. Speck	*Applied Physics Letters 101 132102*	Journal

734	2012	“The reduction of efficiency droop by Al0.82In0.18N/GaN superlattice electron blocking layer in (0001) oriented GaN-based light emitting diodes” R.B. Chung, C. Han. C.C. Pan, N. Pfaff, J. Speck, S. DenBaars, S. Nakamura	*Applied Physics Letters 101 131113*	Journal
735	2012	“Compositionally graded relaxed AlGaN buffers on semipolar GaN for mid-ultraviolet emission” E.C. Young, F. Wu, A.E. Romanov, D.A. Haeger, S. Nakamura, S. DenBaars, D.A. Cohen, J. Speck	*Applied Physics Letters 101 142109*	Journal
736		“Reduction in Thermal Droop Using Thick Single-Quantum-Well Structure in Semipolar (20(2)over-bar(1)over-bar) Blue Light-Emitting Diodes” CC Pan, T. Gilbert, N. Pfaff, S. Tanaka, YJ Zhao, D. Feezell, JS Speck, S. Nakamura and SP DenBaars	*Applied Physics Express 5 102103*	Journal
737	2012	“Thermoelectric properties of lattice matched InAlN on semi-insulating GaN templates” A. Sztein, JE Bowers, SP DenBaars and S. Nakamura	*Journal of Applied Physics 112, Issue 8*	Journal
738	2012	“Polarization spectroscopy of N-polar AlGaN/GaN multi quantum wells grown on vicinal (000(1)over-bar)GaN” S. Keller, N. Pfaff, SP DenBaars and UK Mishra	*Applied Physics Letters, 101, Issue 18*	Journal
739	2012	“Charge and Mobility Enhancement in In-Polar InAl(Ga)N/Al(Ga)N/GaN Heterojunctions Grown by Metal Organic Chemical Vapor Deposition Using a Graded Growth Strategy” J Lu, YL Hu, DF Brown, F. Wu, S. Keller, JS Speck, SP DenBaars and UK Mishra	*Japanese Journal of Applied Physics, 51, Issue 11*	Journal
740	2012	“Suppression of relaxation in (20(2)over-bar)InGaN/GaN laser diodes using limited area epitaxy” MT Hardy, S. Nakamura, JS Speck and SP DenBaars	*Applied Physics Letters, 101, Issue 24*	Journal
741	2013	“Improving color rendition in solid state white lighting through the use of quantum dots” KA Denault, AA Mikhailovsky, S Brinkley, SP DenBaars and R. Seshadri	*Journal of Materials Chemistry, 1, Issue 7*	Journal

742	2013	“Demonstration of nonpolar GaN-based vertical-cavity surface-emitting lasers” C. Holder, D. Feezell, J. Speck, S. DenBaars, S. Nakamura	*SPIE Proceedings, Vol 8639*	Refereed Proceeding
743	2013	“Development of High-Performance Nonpolar III-Nitride Light-Emitting Devices” R. Farell, E. Young, F. Wu, S. Nakamura, SP DenBaars, J Speck	*SIECPC Proceedings*	Refereed Proceeding
744	2013	“Gallium nitride based light emitting diodes (LEDS) for energy efficient lighting and displays” S. DenBaars, S. Nakamura, S. Speck	*SIECPC Proceedings*	Refereed Proceeding
745	2013	“Structure-composition relationships and optical properties in cerium-substituted (Sr,Ba)3(Y,La)(BO3)3 borate phosphors” K. Denault, Z. Cheng, J. Brgoch, S. DenBaars, R. Seshadri	*Journal of Materials Chemistry C, 1, 7339*	Journal
746	2013	“Optical polarization characteristics of semipolar (30(3)over-bar1) and (30(3)over-bar(1)over-bar)” YJ Zhao, QM Yan, D. Feezell, K Fujito, CG Van de Walle, JS Speck, SP DenBaars, and S. Nakamura	*Optics Express, 21, Issue 1*	Journal
747	2013	“Microstructure of ZnO films synthesized on MgAL2O4 from low-temperature aqueouse solution: growth and post-annealing” B. Nijikovsky, JJ Richardson, M Garbercht, SP DenBaars, WD Kaplan	*Journal of Materials Science, 48, Issue 4*	Journal
748	2013	“Development of gallium-nitride-based light-emitting diodes (LEDs) and laser diodes for energy-efficient light and displays” SP DenBaars, D Feezell, K. Kelchner, S. Pimputkar, CC Pan, CC Yen, S. Tanaka, YJ Zhao, N Pfaff, R. Farrell, M. Iza, S. Keller, U. Mishra, JS Speck and S. Nakamura	*Acta Materialia 61, Issue 3*	Journal
749	2013	“Morphological evolution of InGaN/GaN light-emitting diodes grown on free-standing m-plane GaN substrates” RM Farrell, DA Haeger, K Fujito, SP DenBaars, S. Nakamura and JS Speck	*Journal of Applied Physics, 113, Issue 6*	Journal

750	2013	“Suppressing voide defects in long wavelength semipolar (20(21)over-bar InGaN quantum wells by growth rate optimization” YJ Zhao, F. Wu, CY Huang, Y. Kawaguchi, S. Tanaka, K. Fujito, JS Speck, SP DenBaars and S. Nakamura	*Applied Physics Letters 102, Issue 9*	Journal
751	2013	“Optical Properties of extended and localized states in m-plane InGaN quantum wells” S. Marcinkevicius, KM Kelchner, S. Nakamura, SP DenBaars and JS Speck	*Applied Physics Letters 102, Issue 10*	Journal
752	2013	“Semipolar (20(2)over-bar(1)over-bar InGaN/GaN Light-Emitting Diodes for High-Efficiency Solid-State Lighting” DF Feezell, JS Speck, SP DenBaars and S. Nakamura	*Journal of Display Technology 9, Issue 4*	Journal
753	2013	“Tuning luminescent properties through solid-solution in (Ba1-xSrx)(9)Sc2Si6O24:Ce3+,Li+” J. Brgoch, CKH Borg, KA Denault, SP DenBaars and R. Seshadri	*Solid State Sciences 18, 149-154*	Journal
754	2013	“Dependence of Electron Overflow on Emission Wavelength and Crystallographic Orientation in Single-Quantum-Well III-Nitride Light-Emitting Diodes” Y. Kawaguchi, SC Huang, RM Farrell, YJ Zhao, JS Speck, SP DenBaars and S. Nakamura	*Applied Physics Express 6, Issue 5*	Journal
755	2013	“Calculated thermoelectric properties of InxGa1-xN, InAl1-xN and AlxGa1-xN” A. Sztein, J. Haberstroh, JE Bowers, SP DenBaars and S. Nakamura	*Journal of Applied Physics 113, Issue 18*	Journal
756	2013	“Green Semipolar (20(2)over-bar(1)over-bar) InGaN Light-Emitting Diodes with Small Wavelength Shift and Narrow Spectral Linewidth” YJ Zhao, SH Oh, F. Wu, Y. Kawaguchi, S. Tanaka, K. Fujito, JS Speck, SP DenBaars and S. Nakamura	*Applied Physics Express 6, Issue 6*	Journal
757	2013	“Very high channel conductivity in ultra-thin channel N-polar GaN/(AIN, InAIN, AlGaN) high electron mobility hetero-junctions grown by metalorganic chemical vapor deposition” J. Ling, D. Denninghoff, R. Yeluri, S. Lal, G. Gupta, M. Laurent, S. Keller, SP DenBaars and UK Mishra	*Applied Physics Letters 102, Issue 23*	Journal

758	2013	“Comparative analysis of 20(2)iver-bar1 and 20(2)over-bar(1)over-bar semipolar GaN light emitting diodes using atom probe tomography” R. Shivaraman, Y. Kawaguchi, S. Tanaka, SP DenBaars, S. Nakamura and JS Speck	*Applied Physics Letters 102, Issue 25*	Journal
759	2013	“N-polar GaN epitaxy and high electron mobility transistors” MH Wong, S. Keller, SD Nidhi, DJ Denninghoff, S Kolluri, DF Brown, J Lu, NA Fichtenbaum, E. Ahmadi, U. Singisetti, A. Chini, S. Rajan, SP DenBaars, JS Speck and UK Mishra	*Semiconductor Science and Technology 28, Issue 7*	Journal
760	2013	“Efficient and stable laser-driven white lighting” KA Denault, M. Cantore, S. Nakamura, SP DenBaars and R. Seshadri	*AIP Advances 3, Issue 7*	Journal
761	2013	“Direct comparison of traps in InAIN/GaN and AlGaN/GaN high electron mobility transistors using constant drain current deep level transient spectroscopy” A. Sasikumar, AR Arehart, S. Martin-Horcajo, MF Romero, Y Pei, D Brown, F. Recht, MA di Forte-Poisson, F. Calle, MJ Tadler, S Keller, SP DenBaars, UK Mishra and SA Ringel	*Applied Physics Letters 103, Issue 3*	Journal
762	2013	“An Efficient, Thermally Stable Cerium-Based Silicate Phosphor for Solid State White Lighting” J Brgoch, CKH Borg, KA Denault, A. Mikhailovsky, SP DenBaars, R. Seshadri	*Inorganice Chemistry 52, Issue 14*	Journal
763	2013	“Influence of the Structure Parameters on the Relaxation of Semipolar InGaN/GaN Multi Quantum Wells” S. Keller, RM Farrell, M. Iza, Y. Terao, N. Young, UK Mishra, S. Nakamura, SP DenBaars and JS Speck	*Japanese Journal of Applied Physics 52, Issue 8*	Journal
764	2013	“Semipolar (20(2)over-bar1) Single-Quantum-Well Red Light-Emitting Diodes with a Low Forward Voltage” Y. Kawaguchi, CY Huang, YR Wu, YJ Zhao, SP DenBaars and S. Nakamura	*Japanese Journal of Applied Physics 52, Issue 8*	Journal
765	2013	“Indium-tin-oxide clad blue and true green semipolar InGaN/GaN laser diodes” MT Hardy, CO Holder, DF Feezell, S. Nakamura, JS Speck, DA Cohen and SP DenBaars	*Appliedd Physics Letters 103, Issue 8*	Journal

766	2013	“Thermal Performance of Violet and Blue Single-Quantum-Well Nonpolar m-Plane InGaN Light-Emitting Diodes” N. Pfaff, KM Kelchner, DF Feezell, S. Nakamura, SP DenBaars and JS Speck	*Applied Physics Express 6, 092104*	Journal
767	2013	“Proxies from Ab Initio Calculations for Screening Efficient Ce3+ Phosphor Hosts” J. Brgoch, S. DenBaars, R. Seshadri	*The Journal of Physical Chemistry 117, 35*	Journal
768	2013	“An Efficient, Thermally Stable Cerium-Based Silicate Phosphor for Solid State White Lighting” J. Brgoch, CKH Borg, KA Denault, SP DenBaars, R. Seshadri	*Inorganic Chemistry, 52, 14, pp 8010-8016*	Journal
769	2013	“Photoexcited carrier recombination in wide m-plane InGaN/GaN quantum wells” S. Marcinkevicius, KM Kelchner, LY Kuritzky, S. Nakamura, SP DenBaars, JS Speck	*Applied Physics Letters 103 111107*	Journal
770	2013	“Near-field investigation of spatial variations of (20(2)over-bar(1)over-bar) InGaN quantum well emission spectra” S. Marcinkevicius, Y. Zhao, KM Kelchner, S. Nakamura, SP DenBaars and JS Speck	*Applied Physics Letters, 103,131116*	Journal
771	2013	“Pulsed high-power AlGaN-cladding-free blue laser diodes on semipolar (20(2)over-bar(1)over-bar) GaN substrates” A. Pourhashemi, RM Farrell, MT Hardy, PS Hsu, KM Kelchner, JS Speck, SP DenBaars and S. Nakamura	*Applied Physics Letters, 103,151112*	Journal
772	2013	“Blue and aquamarine stress-relaxed semipolar (11(2)over-bar) laser diodes” PS Hsu, F. Wu, EC Young, AE Romanov, K. Fujito, SP DenBaars, JS Speck and S. Nakamura	*Applied Physics Letters, 103,161117*	Journal
773	2013	“High performance thin quantum barrier InGaN/GaN solar cells on sapphire and bulk (0001) GaN substrates” N.G. Young, R.M. Farrell, L. Hu, Y. Terao, M. Iza, S. Keller, S.P. DenBaars, S. Nakamura, J. S. Speck	*Applied Physics Letters, 103, 173903*	Journal
774	2013	“Emission characteristics of single InGaN quantum wells on misoriented nonpolar m-plane bulk GaN substrates” KM Kelchner, LY Kuritzky, K. Fujito, S. Nakamura, SP DenBaars, JS Speck	*Journal of Crystal Growth 382 80-86*	Journal

775	2013	“Comparison of Polished and Dry Etched Semipolar (11(2)over-bar2) III-Nitride Laser Facets” PS Hsu, RM Farrell, JJ Weaver, K. Fujito, SP DenBaars, JS Speck and S. Nakamura	*IEEE Photonics Technology Letters 25, 2105-2107*	Journal
776	2013	“True green semipolar InGaN-based laser diodes beyond critical thickness limits using limited area epitaxy” MT Hardy, F Wu, PS Hsu, DA Haeger, S. Nakamura, JS Speck, and SP DenBaars	*Journal of Applied Physics 114, 183101*	Journal
777	2013	“Optimization of Annealing Process for Improved InGaN Solar Cell Performance” NC Das, ML Reed, AV Sampath, H Shen, M. Wraback, RM Farrell, M Iza, SC Cruz, JR Lang, NG Young, Y Terao, CJ Neufeld, S Keller, S Nakamura, SP DenBaars, UK Mishra, and JS Speck	*Journal of Electronic Material 42, 12, pp 3467-3470*	Journal
778	2013	“Impact of Gate-Aperture Overlap on the Channel-Pinch Off in InGaAs/InGaN-Based Bonded Aperture Vertical Electron Transistor” S. lal, J Lu, G Gupta, BJ Thibeault, SP DenBaars, and UK Mishra	*IEEE Electron Device Letters 34, 12, pp1500-1502*	Journal
779	2013	“Rapid microwave preparation of cerium-substituted sodium yttrium silicate phosphors for solid state white lighting” J Brgoch, CKH Borg, KA Denault, JR Douglas, TA Strom, SP DenBaars, and R Seshadri	*Solid State Sceinces 26, pp 115-120*	Journal
780	2013	“Influence of growth temperature and temperature ramps on deep level defect incorporation in m-plane Gan” AM Armstrong, K. Kalchner, S. Nakamura, SP DenBaars, and JS Speck	*Applied Physics Letters 103, 23*	Journal
781	2014	“Polarization field engineering GaN/AIN/AIGaN superlattices for enhanced thermoelectric properties” A. Sztein, JE Bowers, SP DenBaars, and S. Nakamura	*Applied Physics Letters 104, 4*	Journal
782	2014	“Onset of Plastic relaxation in semipolar (11(2)over-bar2) InxGa1-xN/GaN heterstructures” IL Koslow, MT Hardy, PS Hsu, F. Wu, AE Romanov, EC Young, S. Nakamura, SP DenBaars, and JS Speck	*Journal of Crystal Growth 388, pp 45-53*	Journal

783	2014	“Improved performance of (2021) long-wavelength light-emitting diodes grown with wide quantum wells on stress-relaxed InxGa1-xN buffer layers” I. Koslow, C. McTaggart, F. Wu, S. Nakamura, J. Speck, S. DenBaars	*Applied Physics Express 7, 031003*	Journal
784	2014	“Engineering the (In, Al, Ga)N back-barriers to achieve high channel-conductivity for extremely scaled channel-thicknesses in N-Polar GaN high-electron-mobility-transistors” J. Lu, X. Zheng, M. Guidry, D. Denninghoff, E. Ahmadi, S. Lal, S. Keller, SP DenBaars, and UK Mishra	*Applied Physics Letters 104, 9*	Journal
785	2014	“Highly polarized photoluminescence and its dynamics in semipolar (20 2 ¯ 1 ¯) InGaN/GaN quantum well” S. Marcinkeviius, R. Ivanov, Y. Zhao, S. Nakamura, S. P. DenBaars, J.S. Speck	*Applied Physics Letters 104, 111113*	Journal
786	2014	“Comparative study of field-dependent carrier dynamics and emission kinetics of InGaN/GaN light-emitting diodes grown on (112¯2) semipolar versus (0001) polar planes” Y. Ji, W. Lui, R. Chen, S. T. Tan, Z. H. Zhang, Z. Ju, X. Zhang, H. Sun, X. W. Sun, Y. Zhao, S. DenBaars, S. Nakamura, H. Demir	*Applied Physics Letters 104, 143506*	Journal
787	2014	“Consequences of Optimal Bond Valence on Structural Rigidity and Improved Luminescence Properties in SrxBa2-xSiO4:Eu2+ Orthosilicate Phosphors” K. Denault, J. Brgoch, M. Gaultois, A. Mikhailovsky, R. Petry, H. Winkler, S. P. DenBaars, R. Seshadri	*Chemisty of Materials 26, 7*	Journal
788	2014	“Stacking faults and interface roughening in semiploar (20 2¯1¯) single InGaN quantum wells for long wavelength emission” F. Wu, Y. Zhao, A. Romanov, S. P DenBaars, S. Nakamura, J. S. Speck	*Applied Physics Letters 104, 151901*	Journal
789	2014	“High-performance broadband optical coatings on InGaN/GaN solar cells for multijunction device intergration” N.G. Young, E. E. Perl, R. M. Farrell, M. Iza, S. Keller, J. E. Bowers, S. Nakamura, S. P. DenBaars, J.S. Speck	*Applied Physics Letters 104, 163902*	Journal

790	2014	“Formation of InGaAs fins by atomic layer epitaxy on InP sidewalls” D. C. Elias, A. Sivananthan, C. Zhang, S. Keller, H.W. Chiang, J. Law, B. Thibeault, W. Mitchell, S. Lee, A. Carter, C. Y. Huang, V. Chobpattana, S. Stemmer, S. P. DenBaars, L. Coldren, M. Rodwell	*Japanese Journal of Applied Physics 53, 065503*	Journal

Since Last Review

791	2014	“Determination of the first satellite valley energy in the conduction band of wurtzite GaN by near-band-gap photoemission spectroscopy” M. Piccardo, L. Martinelli, J. Iveland, N. Young, S. P. DenBaars, S. Nakamura, J. S. Speck, C. Weisbuch, and J. Peretti	*Physical Review B **89**, 235124*	Journal
792	2014	“Nonpolar III-nitride vertical-cavity surface emitting lasers with a polarization ratio of 100% fabricated using photoelectrochemical etching” C. Holder, J. Leonard, R. M. Farrell, D. Cohen, B. Yonkee, J. S. Speck, S. P. DenBaars, S. Nakamura, and D. Feezell	*Applied Physics Letters **105**, 031111*	Journal
793	2014	“Improved properties of high-Al-composition AlGaN/GaN high electron mobility transistor structures with thin GaN cap layers” H. Li, S. Keller, S. DenBaars and U. Mishra	*Japanese Journal of Applied Physics **53**, 095504*	Journal
794	2014	“Carrier redistribution between different potential sites in semipolar (2021) InGaN quantum wells studied by near-field photoluminescence” S. Marcinkevičius, K. Gelžinytė, Y. Zhao, S. Nakamura, S. P. DenBaars and J. S. Speck	*Applied Physics Letters **105**, 111108*	Journal
795	2014	“Surface Structured Optical Coatings with Near-Perfect Broadband and Wide-Angle Antireflective Properties” E. Perl, W. McMahon, R. Farrell, S. P. DenBaars, J. S. Speck, and J. Bowers	*Nano Letters **14**, 5960-5964*	Journal
796	2014	“High-power low-droop violet semipolar (3031) InGaN/GaN light-emitting diodes with thick active layer design” D. Becerra, Y. Zhao, S. Oh, C. Pynn, K. Fujito, S. P. DenBaars, and S. Nakamura	*Applied Physics Letters **105**, 171106*	Journal

797	2014	"Recent progress in metal-organic chemical vapor deposition of (0001) N-polar group-III nitrides" S. Keller, H. Li, M. Laurent, Y. Hu, N. Pfaff, J. Lu, D. F. Brown, N. A. Fichtenbaum, J. S. Speck, S. P. DenBaars and U. K. Mishra	*Semiconductor Science And Technology **29**, 113001*	Journal
798	2014	"Extraction of net interfacial polarization charge from Al0.54In0.12Ga0.34N/GaN high electron mobility transistors grown by metalorganic chemical vapor deposition" M. A. Laurent, G. Gupta, S. Wienecke, A. A. Muqtadir, S. Keller, S. P. DenBaars, and U. K. Mishra	*Journal of Applied Physics **116**, 183704*	Journal
799	2015	"Spatial variations of optical properties of semipolar InGaN quantum wells" S. Marcinkevičiusm, K.Gelžinytė, R. Ivanov, Y. Zhao, S. Nakamura, S. P. DenBaars, J. S. Speck	*Gallium Nitride Materials And Devices X **9363,** 93631U*	Book Proceeding
800	2015	"Ammonia molecular beam epitaxy technology for UV light emitters" E.C. Young, B.P. Yonkee, J. Leonard, F. Wu, S.P. Denbaars, S. Nakamura, J.S. Speck	*2015 IEEE Photonics Society Summer Topical Meeting Series (SUM) pp137-138*	Conference Paper
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803	2015	"High spatial uniformity of photoluminescence spectra in semipolar (2021) plane InGaN/GaN quantum wells" K. Gelžinytė, R. Ivanov, S. Marcinkevičius, Y. Zhao, D. L. Becerra, S. Nakamura, S. P. DenBaars, and J. S. Speck	*Journal of Applied Physics 117, 023111*	Journal

804	2015	"Temperature dependence of exciton-surface plasmon polariton coupling in Ag, Au, and Al films on InxGa1-xN/GaN quantum wells studied with time-resolved cathodoluminescence" Y. Estrin, D. H. Rich, S. Keller and S. P. DenBaars	*Journal of Applied Physics 117, 043105*	Journal
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806	2015	"High-power blue laser diodes with indium tin oxide cladding on semipolar (2021) GaN substrates" A. Pourhashemi, R. M. Farrell, D. A. Cohen, J. S. Speck, S. P. DenBaars, and S. Nakamura	*Applied Physics Letters 106, 111105*	Journal
807	2015	"Continuous-wave operation of a (2021) InGaN laser diode with a photoelectrochemically etched current aperture" L. Megalini, D. L. Becerra, R. M. Farrell, A. Pourhashemi, J. S. Speck, S. Nakamura, S. P. DenBaars and D.A. Cohen	*Appied Physics Express 8, 042701*	Journal
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809	2015	"Selective and controllable lateral photoelectrochemical etching of nonpolar and semipolar InGaN/GaN multiple quantum well active regions" L. Megalini1, L. Y. Kuritzky, J. T. Leonard, R. Shenoy, K. Rose, S. Nakamura, J. S. Speck, D. A. Cohen and S. P. DenBaars	*Applied Physics Express 8, 066502*	Journal
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811	2015	“4 Gbps direct modulation of 450 nm GaN laser for high-speed visible light communication” C. Lee, C. Zhang, M. Cantore, R. M. Farrell, S. Ho Oh, T. Margalith, J.S. Speck, S.Nakamura, J. E. Bowers, and S. P. DenBaars	*Optics Express 23, pp16232-16237*	Journal
812	2015	“Demonstration of low resistance ohmic contacts to p-type (2021) GaN” B. P. Yonkee, R. M. Farrell, J. T. Leonard, S. P. DenBaars, J. S. Speck and S. Nakamura	*Semiconductor Science Technology 30, 075007*	Journal
813	2015	“Nonpolar III-nitride vertical-cavity surface-emitting lasers incorporating an ion implanted aperture” J. T. Leonard, D. A. Cohen, B. P. Yonkee, R. M. Farrell, T. Margalith, S. Lee, S. P. DenBaars, J. S. Speck, and S. Nakamura	*Applied Physics Letters 107, 011102*	Journal
814	2015	“Observations of exciton-surface plasmon polariton coupling and exciton-phonon coupling in InGaN/GaN quantum wells covered with Au, Ag, and Al films” Y. Estrin, D. H. Rich, S. Keller and S. P. DenBaars	*Journal of Physics: Condensed Matter, 27, 265802*	Journal
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816	2015	“Low damage dry etch for III-nitride light emitters” J. G. Nedy, N. G. Young, K. M. Kelchner, Y. Hu, R. M. Farrell, S. Nakamura, S. P. DenBaars, C.Weisbuch and J. S Speck	*Semiconductor Science And Technology 30, 085019*	Journal
817	2015	“Demonstration of a III-nitride vertical-cavity surface-emitting laser with a III-nitride tunnel junction intracavity contact” J. T. Leonard, E. C. Young, B. P. Yonkee, D. A. Cohen, T. Margalith, S. P. DenBaars, J. S. Speck and S. Nakamura	*Applied Physics Letters 107, 091105*	Journal
818	2015	“Ultraviolet light emitting diodes by ammonia molecular beam epitaxy on metamorphic (2021) AlGaN/GaN buffer layers” E. C. Young, , B. P. Yonkee, F. Wu, B. K. Saifaddin, D. A. Cohen, S. P. DenBaars, S. Nakamura, J. S. Speck	*Journal Of Crystal Growth 425 pp389-392*	Journal

819	2015	“Demonstration of phosphor-free polarized white light emission from monolithically integrated semipolar InGaN quantum wells” S. J. Kowsz, C. D. Pynn, S. H. Oh, R. M. Farrell, J. S. Speck, S. P. DenBaars, and S. Nakamura	*Applied Physics Letters 107, , 101104*	Journal
820	2015	“Thermally enhanced blue light-emitting diode” J. Xue, Y. Zhao, S. Ho Oh, W. F. Herrington, J. S. Speck, S. P. DenBaars, S. Nakamura, and R. J. Ram	*Applied Physics Letters 107, 121109*	Journal
821	2015	“InGaN lattice constant engineering via growth on (In,Ga)N/GaN nanostripe arrays” S. Keller, C. Lund, T. Whyland, Y. Hu, C. Neufeld, S. Chan, S. Wienecke, F. Wu, S. Nakamura, J. S. Speck, S. P. DenBaars and U. K. Mishra	*Semiconductor Science Technology 30, 105020*	Journal
822	2015	“Smooth e-beam-deposited tin-doped indium oxide for III-nitride vertical-cavity surface-emitting laser intracavity contacts” J. T. Leonard, D. A. Cohen, B. P. Yonkee, R. M. Farrell, S. P. DenBaars, J. S. Speck, and S. Nakamura	*Journal of Applied Physics 118, 145304*	Journal
823	2015	“2 Gbit/s data transmission from an unfiltered laser-based phosphor-converted white lighting communication system” C. Lee, C. Shen, H. M. Oubei, M. Cantore,B. Janjua,T. K. Ng, R. M. Farrell, M. M. El-Desouki, J. S. Speck, S.Nakamura, B. S. Ooi, and S. P. DenBaars	*Optics Express 23, pp29779-29787*	Journal
824	2015	“Impact of carrier localization on radiative recombination times in semipolar (202¯1)(202¯1) plane InGaN/GaN quantum wells” R. Ivanov, S. Marcinkevičius, Y. Zhao, D. L. Becerra, S. Nakamura, S. P. DenBaars, and J. S. Speck	*Applied Physics Letters 107, 211109*	Journal
825	2015	“Phosphorous Diffuser Diverged Blue Laser Diode for Indoor Lighting and Communication” Y. ChiehChi, D. Hsieh, C. Lin, H. Chen, C. Huang, J. He, B. Ooi, S. P. DenBaars, S. Nakamura, H. Kuo & G. Lin	*Scientific Reports 5, 18690*	Journal

826	2016	“Properties of near-field photoluminescence in green emitting single and multiple semipolar (2021) plane InGaN/GaN quantum wells” M. D. Mensi, D. L. Becerra, R. Ivanov, S. Marcinkevičius, S. Nakamura, S. P. DenBaars, and J. S. Speck	*Optical Materials Express 6, pp 39-45*	Journal
827	2016	“Nonpolar III-nitride vertical-cavity surface-emitting laser with a photoelectrochemically etched air-gap aperture” J. T. Leonard, B. P. Yonkee, D. A. Cohen, L. Megalini, S. Lee, J. S. Speck, S. P. DenBaars, and S. Nakamura	*Applied Physics Letters 108, 031111*	Journal
828	2016	“High luminous flux from single crystal phosphor-converted laser-based white lighting system” M. Cantore, N. Pfaff, R. M. Farrell, J. S. Speck, S. Nakamura, and S. P. DenBaars	*Optics Express 24,. A215-A221*	Journal
829	2016	“Metalorganic chemical vapor deposition and characterization of (Al,Si)O dielectrics for GaN-based devices” S. H. Chan, M. Tahhan, X. Liu, D. Bisi, C. Gupta, O. Koksaldi, H. Li, T. Mates, S. P. DenBaars, S. Keller	*Japanese Journal Of Applied Physics 55, 021501*	Journal
830	2016	“High-Modulation-Efficiency, Integrated Waveguide Modulator-Laser Diode at 448 nm” C. Shen, T. Khee Ng, J. T. Leonard, A.Pourhashemi, H. M. Oubei, M. S. Alias, S. Nakamura, S. P. DenBaars J. S. Speck, A. Y. Alyamani, M.M. Eldesouki,and B. S. Ooi	*ACS Photonics* ***3****, 262–268*	Journal
831	2016	“Hybrid tunnel junction contacts to III–nitride light-emitting diodes” E. C. Young, B. P. Yonkee, F. Wu, S. Ho Oh, S. P. DenBaars, S. Nakamura, and J. S. Speck	*Applied Physics. Express* ***9,*** *022102*	Journal
832	2016	“Polarization field screening in thick (0001) InGaN/GaN single quantum well light-emitting diodes” N. G. Young, R. M. Farrell, S. Oh, M. Cantore, F. Wu, S. Nakamura, S. P. DenBaars, C. Weisbuch, and J. S. Speck	*Applied Physics Letters* ***108****, 061105*	Journal
833	2016	“Barrier height inhomogeneity and its impact on (Al, In, Ga)N Schottky diodes” M. A. Laurent, G. Gupta, D. J. Suntrup III, S. P. DenBaars, and U. K. Mishra	*Journal of Applied Physics* ***119****, 064501*	Journal

834	2016	“High-power LEDs using Ga-doped ZnO current-spreading layers” A.J. Mughal, S. Oh, A. Myzaferi, S. Nakamura, J.S. Speck and S.P. DenBaars	*Electronics Letters* ***52****, pp 304-305*	Journal
835	2016	‘”Measurement and analysis of internal loss and injection efficiency for continuous-wave blue semipolar (2021) III-nitride laser diodes with chemically assisted ion beam etched facets” D. L. Becerra, L.Y. Kuritzky, J. Nedy, A. S. Abbas, A. Pourhashemi, R. M. Farrell, D. A. Cohen, S. P. DenBaars, J. S. Speck, and S. Nakamura	*Applied Physics Letters* ***108****, 091106*	Journal
836	2016	“Demonstration of a III-nitride edge-emitting laser diode utilizing a GaN tunnel junction contact” B. P. Yonkee, E. C. Young, C. Lee, J. T. Leonard, S. P. DenBaars, J. S. Speck, and S. Nakamura	*Optics Express* ***24****, pp. 7816-7822*	
837	2016	“Acidic ammonothermal growth of gallium nitride in a liner-freemolybdenum alloy autoclave” Thomas F. Malkowskia, Siddha Pimputkar, S. P. DenBaars, J. S. Speck, and S. Nakamura	*Journal of Crystal Growth Vol.* ***456,*** *21-26*	Journal
838	2016	“Chemically assisted ion beam etching of laserdiode facets on nonpolar and semipolarorientations of GaN’, L Y Kuritzky, D L Becerra, A Saud Abbas, J Nedy, S Nakamura,S P DenBaars and D A Cohen	*Semiconductor Science and Technology,* ***31,*** *075008*	Book chapter
839	2016	“Comparison of nonpolar III-nitridevertical-cavity surface-emitting laserswith tunnel junction and ITOintracavity contacts”, J. T. Leonard, E. C. Young, B. P. Yonkee, D. A. Cohen, C. Shen,T. Margalith, T. K. Ng, S. P. DenBaars, B. S. Ooi, J. S. Speck, and S. Nakamura	*GALLIUM NITRIDE MATERIALS AND DEVICES XI Book Series Proc. of SPIE* ***9748****, UNSP 97481B*	Journal
840	2016	“CW operation of high-power blue laser diodes with polished facets on semi-polar (2021) GaN substrates”, A. Pourhashemi, R.M. Farrell, D.A. Cohen, D.L. Becerra,S.P. DenBaars and S. Nakamura	*ELECTRONICS LETTERS.* ***52****, 2003-2004*	Journal

841	2016	“Dynamic characteristics of 410nm semipolar III-nitride laser diodes with amodulation bandwidth of over 5 GHz” ChangminLee, ChongZhang, Daniel L.Becerra, SeunggeunLee, Charles A.Forman, Sang HoOh, Robert M.Farrell, James S.Speck, ShujiNakamura, John E.Bowers, and Steven P.DenBaars	*Applied Physics Letters **109**, 101104*	Journal
842	2016	“Effects of active region design on gain and carrierinjection and transport of CW semipolar InGaNlaser diodes” Daniel L. Becerra, Daniel A. Cohen, Robert M. Farrell, Steven P. DenBaars, and Shuji Nakamura	*Appl. Phys. Express **9** 092104*	Journal
843	2016	“Estimation of roughness-induced scattering losses in III-nitride laserdiodes with a photoelectrochemically etched current aperture” Ludovico Megalini, Renuka Shenoy, Kenneth Rose, James P. Speck, John E. Bowers,Shuji Nakamura, Daniel A. Cohen, and Steven P. DenBaars	*Phys. Status Solidi A**213**,No. 4, 953–957*	Journal
844	2016	“Flip-chip blue LEDs grown on bulk GaNsubstrates utilizing photoelectrochemical etching for substrate removal” Benjamin P. Yonkee, Burhan SaifAddin, John T. Leonard, Steven P. DenBaars, and Shuji Nakamura	*Appl. Phys. Express **9** 056502*	Journal
845	2016	“Germanium doping of GaN by metalorganic chemical vapor deposition for polarization screening applications” N.G. Young, R.M. Farrell, M. Iza, S. Nakamura, S.P. DenBaars, C. Weisbuch, J.S. Speck	*Journal of Crystal Growth **455** 105–110*	Journal
846	2016	“Green semipolar III-nitride light-emitting diodes grown by limited area epitaxy” C. D. Pynn, S. J. Kowsz, S. H. Oh, H. Gardner, R. M. Farrell, S. Nakamura, J. S. Speck, and S. P. DenBaars	*Appl. Phys. Lett.**109**, 041107*	Journal
847	2016	“High electron mobility recovery in AlGaN/GaN2DEG channels regrown on etched surfaces” Silvia H Chan, Stacia Keller, Maher Tahhan, Haoran Li,Brian Romanczyk, Steven P DenBaars and Umesh K Mishra	*Semicond. Sci. Technol.**31** 065008*	Journal

848	2016	“High-brightness semipolar (2021) blue InGaN/GaN superluminescent diodes for droop-free solid-state lighting and visible-light communications” Chaoshen,Tienkheeng,Johnt. Leonard,Arashpourhashemi,Shujinakamura, Stevenp. Denbaars,Jamess. Speck,Ahmedy. Alyamani,Munirm. El-Desouki,Andboons. Ooi	*OPTICS LETTERS* ***41*** *2608-2611*	Journal
849	2016	“Improving source efficiency for aluminum nitride grown by metal organic chemical vapor deposition” Humberto M Foronda, Matthew A Laurent, Benjanim Yonkee,Stacia Keller, Steven P DenBaars and James S Speck	*Semicond. Sci. Technol.****31*** *085003*	Journal
850		“Role of graphene interlayers in mitigating degradation of Ni/Au ohmic contact morphology on p-type GaN” Wayne K. Morrowa, Changmin Leeb, Steven P. DenBaarsb, Fan Renc,Stephen J. Pearton	*Vacuum* ***128*** *34-38*	Journal
851		“Semipolar III–nitride light-emitting diodes with negligible efficiency droop up to ∼1 W” Sang Ho Oh, Benjamin P. Yonkee, Michael Cantore, Robert M. Farrell,James S. Speck, Shuji Nakamura, and Steven P. DenBaars	*Appl. Phys. Express* ***9*** *102102*	Journal
852		“Silver free III-nitride flip chip light-emitting-diode with wall plug efficiency over 70%utilizing a GaN tunnel junction” B. P. Yonkee, E. C. Young, S. P. DenBaars, S. Nakamura, and J. S. Speck	*Appl. Phys. Lett.****109****, 191104*	Journal
853		“Study of Low-Efficiency Droop in Semipolar (2021)InGaN Light-Emitting Diodes by Time-Resolved Photoluminescence” Houqiang Fu, Zhijian Lu, Xin-Hao Zhao, Yong-Hang Zhang, Fellow, IEEE, Steven P. DenBaars, Fellow, IEEE,Shuji Nakamura, and Yuji Zhao	*JOURNAL OF DISPLAY TECHNOLOGY,* ***12*** *736-741*	Journal
854		“Transparent conducting oxide clad limited area epitaxy semipolar III-nitride laserdiodes” A. Myzaferi, A. H. Reading, D. A. Cohen, R. M. Farrell, S. Nakamura, J. S. Speck, and S. P. DenBaars	*Appl. Phys. Lett.****109****, 061109*	Journal

855		“Using band engineering to tailor the emission spectra of trichromatic semipolar InGaN light-emitting diodes for phosphor-free polarized white light emission” S. J.Kowsz,C. D.Pynn,S. H.Oh,R. M.Farrell,S. P.DenBaars,and S.Nakamura	*Journal of Applied Physics***120***, 033102*	Journal
856	2016	“Monolithic translucent BaMgAl10O17:Eu2+ phosphors for laser-driven solid state lighting” Clayton Cozzan, Michael J. Brady, Nicholas O’Dea, Emily E. Levin, Shuji Nakamura, Steven P. DenBaars, and Ram Seshadri	*AIP ADVANCES* ***6*** *105005*	Journal
857	2016	“High-speed 405-nm superluminescent diode (SLD) with 807-MHz modulation bandwidth” Chao Shen, Changmin Lee, Tien Khee Ng, Shuji Nakamura, James S. Speck, Steven P. DenBaars, Ahmed Y. Alyamani, Munir M. El-Desouki, and Boon S. Ooi	*OPTICS EXPRESS* ***24*** *20281-20286*	Journal
858	2016	“High luminous efficacy green light-emitting diodes with AlGaN cap layer” Abdullah I. Alhassan, Robert M. Farrell, Burhan Saifaddin, Asad Mughal, Feng Wu, Steven P. DenBaars, Shuji Nakamura, and James S. Speck	*OPTICS EXPRESS* ***24*** *17868-17873*	Journal
859	2016	“GHz Modulation Enabled Using Large Extinction Ratio Waveguide-Modulator Integrated with 404 nm GaN Laser Diode” Shen, Chao; Lee, Changmin; Ng, Tien Khee; Speck, James S.; Nakamura, Shuji; DenBaars, Steven P.; Alyamani, Ahmed Y.; Eldesouki, Munir M.; Ooi, Boon S.	*2016 IEEE PHOTONICS CONFERENCE (IPC) Book Series: IEEE Photonics Conference Pages: 813-814*	Conference Paper
860	2016	“Properties of near-field photoluminescence in green emitting single and multiple semipolar (2021) plane InGaN/GaN quantum wells” Mounir D. Mensi, Daniel L. Becerra, Ruslan Ivanov, Saulius Marcinkevičius, Shuji Nakamura, Steven P. DenBaars, and James S. Speck	*OPTICAL MATERIALS EXPRESS* ***6*** *39-45*	Journal
861	2017	“444 nm InGaN light emitting diodes on low-defect-density (1122) GaN templates on patterned sapphire” Michel Khoury, Hongjian Li, Leah Y. Kuritzky, Asad J. Mughal, Philippe DeMierry,Shuji Nakamura, James S. Speck, and Steven P. DenBaars	*Appl. Phys. Express* ***10*** *106501*	Journal

862	2017	“Analysis of Vegard’s law for lattice matching InxAl1xN to GaN bymetalorganic chemical vapor deposition” Humberto M. Forondaa, Baishakhi Mazumdera, Erin C. Young, Matthew A. Laurent, Youli Li,Steven P. DenBaars, James S. Speck	*Journal of Crystal Growth* ***475*** *127–135*	Journal
863	2017	“Characterization of N-polar AlN inGaN/AlN/(Al,Ga)N heterostructures grown by metal-organic chemical vapor deposition” Haoran Li, Baishakhi Mazumder, Bastien Bonef, Stacia Keller,Steven Wienecke, James S Speck, Steven P Denbaars and Umesh K Mishra	*Semicond. Sci. Technol.****32*** *115004*	Journal
864	2017	“Digital growth of thick N-polar InGaN films onrelaxed InGaN pseudosubstrates” Cory Lund, Karine Hestroffer, Nirupam Hatui, Shuji Nakamura,Steven P. DenBaars, Umesh K. Mishra, and Stacia Keller	*Appl. Phys. Express* ***10*** *111001*	Journal
865	2017	“Efficient Semipolar (11−22) 550 nm Yellow/Green InGaN Light-Emitting Diodes on Low Defect Density (11−22) GaN/SapphireTemplates” Hongjian Li,⊥Michel Khoury, Bastien Bonef, Abdullah I. Alhassan, Asad J. Mughal, Ezzah Azimah, Muhammad E.A. Samsudin, Philippe De Mierry, Shuji Nakamura, James S. Speck, and Steven P. DenBaars	*Applied Materials & Interfaces* ***9,*** *36417-36422*	Journal
866	2017	“Exploring metalorganic chemical vapor deposition of Si-alloyed Al2O3 dielectrics using disilane” Silvia H. Chan, Stacia Keller, Onur S. Koksaldi, Chirag Gupta, Steven P. DenBaars,Umesh K. Mishr	*Journal of Crystal Growth* ***464****, 54-58*	Journal
867	2017	“Growth of high purity N-polar (In,Ga)N films” Cory Lund,Shuji Nakamura, Steven P. DenBaars, Umesh K. Mishra, Stacia Keller	*Journal of Crystal Growth* ***464****, 127-131*	Journal
868	2017	“Impact of oxygen precursor flow on the forward bias behavior of MOCVD-Al2O3 dielectrics grown on GaN” Silvia H.Chan,DavideBisi,XiangLiu,RamyaYeluri, MaherTahhan,StaciaKeller,Steven P.DenBaars,MatteoMeneghini,and Umesh K.Mishra	*JOURNAL OF APPLIED PHYSICS* ***122****, 174101*	Journal
869	2017	“Indium segregation in N-polar InGaN quantum wells evidenced by energy dispersive X-ray spectroscopy and atom probe tomography”	*APPLIED PHYSICS LETTERS* ***110****, 143101*	Journal

		BastienBonef,MassimoCatalano,CoryLund,Steven P.Denbaars,ShujiNakamura,Umesh K.Mishra,Moon J.Kim,and StaciaKeller		
870	2017	“Metal-organic chemical vapor deposition of high quality, high indium composition N-polar InGaN layers for tunnel devices” Cory Lund, Brian Romanczyk, Massimo Catalano, Qingxiao Wang, Wenjun Li, Domenic DiGiovanni, Moon J. Kim, Patrick Fay, Shuji Nakamura, Steven P. DenBaars, Umesh K. Mishra, and Stacia Keller	*Journal of Applied Physics* ***121****, 185707*	Journal
871	2017	“Optoelectronic properties of doped hydrothermal ZnO thinfilms” Asad J. Mughal, Benjamin Carberry, Sang Ho Oh, Anisa Myzaferi, James S. Speck, Shuji Nakamura,and Steven P. DenBaars	*Phys. Status Solidi A****214****, 1600941*	Journal
872	2017	“Semipolar $(20\overline{21})$ III-Nitride P-Down LEDs within situanneal to reduce the Mg memory effect” C.Forman, J.Leonard, B.Yonkee, C.Pynn, T.Mates, D.Cohen, R.Farrell, T.Margalith, S.DenBaars, J.Speck, S.Nakamura	*Journal of Crystal Growth* ***464****, 197-200*	Journal
873	2017	“Semipolar III–nitride quantum well waveguide photodetector integrated with laser diode for on-chip photonic system” Chao Shen, Changmin Lee, Edgars Stegenburgs, Jorge Holguin Lerma, Tien Khee Ng, Shuji Nakamura,Steven P. DenBaars, Ahmed Y. Alyamani, Munir M. El-Desouki, and Boon S. Ooi	*Appl. Phys. Express* ***10*** *042201*	Journal
874	017	“Semipolar InGaN-based superluminescent diodes for solid-state lighting and visible light communications” Chao Shen, Tien Khee Ng, Changmin Lee, John T. Leonard, ShujiNakamura, James S. Speck, Steven P. Denbaars, Ahmed Y. Alyamani, MunirM. El-Desouki, Boon S. Ooi	*ALLIUM NITRIDE MATERIALS AND DEVICES XII Book Series: Proceedings of SPIE****, 10104****, 101041U*	Book Proceeding
875	2017	“Smooth and selective photo-electrochemicaletching of heavily doped GaN:Si using a mode-locked 355 nm microchip laser” SeungGeun Lee, Saadat Mishkat-Ul-Masabih, John T. Leonard, Daniel F. Feezell, Daniel A. Cohen,James S. Speck, Shuji Nakamura, and Steven P. DenBaars	*Appl. Phys. Express* ***10*** *011001*	Journal
876	2017	“Structural and Optical Properties of Group III Doped Hydrothermal ZnO Thin Films”	*Journal of ELECTRONIC MATERIALS,* ***46****, 1821-1825*	Journal

		Asad J. Mughal,Benjamin Carberry,James S. Speck,Shuji Nakamura,And Steven P. Denbaars		
877	2017	“Polarization-enhanced InGaN/GaN-based hybrid tunnel junction contacts to GaN p-n diodes and InGaN LEDs” Asad J. Mughal, Erin C. Young, Abdullah I. Alhassan, Joonho Back, Shuji Nakamura, James S. Speck, and Steven P. DenBaars	*APPLIED PHYSICS EXPRESS* ***10*** *121006*	Journal
878	2017	“High wall-plug efficiency blue III-nitride LEDs designed for low current density operation” Leah Y. Kuritzky,Andrew C. Espenlaub, Benjamin P. Yonkee, Christopher D. Pynn, Steven P. Denbaars, Shuji Nakamura, Claude Weisbuch, And James S. Speck	*OPTICS EXPRESS* ***25*** *30696-30707*	Journal
879	2017	“Influence of well width fluctuations on recombination properties in semipolar InGaN quantum wells studied by time-and spatially-resolved near-field photoluminescence” Tomas K. Uždavinys, Daniel L. Becerra, Ruslan Ivanov, Steven P. Denbaars, Shuji Nakamura, James S. Speck, And Saulius Marcinkeviˇcius	*OPTICAL MATERIALS EXPRESS* ***7*** *3116-3123*	Journal
880	2017	“Explanation of low efficiency droop in semipolar (2021) InGaN/GaN LEDs through evaluation of carrier recombination coefficients” Morteza Monavarian,Arman Rashidi, Andrew Aragon,Sang H. Oh, Mohsen Nami, Steve P. Denbaars, And Daniel Feezell	*OPTICS EXPRESS* ***25*** *19343-19353*	Journal
881	2017	“Semipolar III-nitride laser diodes with zinc oxide cladding” Anisa Myzaferi, Arthur H. Reading, Robert M. Farrell, Daniel A. Cohen, Shuji Nakamura, And Steven P. Denbaars	*OPTICS EXPRESS* ***25*** *16922-16930*	Journal
882	2017	“Gigabit-per-second white light-based visible light communication using near-ultraviolet laser diode and red-,green-,and blue-emitting phosphors” Changmin Lee,Chao Shen,Clayton Cozzan,Robert M. Farrell, James S. Speck,Shuji Nakamura,Boon S. Ooi, Andsteven P. Denbaars	*OPTICS EXPRESS* ***25*** *17480-17487*	Journal
883	2017	“Enhanced light extraction from free-standing InGaN/GaN light emitters using	*OPTICS EXPRESS* ***25*** *15778-15785*	Journal

		bio-inspired backside surface structuring” Christopher D. Pynn, Lesley Chan, Federico Lora Gonzalez, Alex Berry, David Hwang,Haoyang Wu, Tal Margalith, Daniel E. Morse, Steven P. Denbaars, And Michael J. Gordon		
884	2017	“Nonpolar and semipolar InGaN/GaN multiple-quantum-well solar cells with improved carrier collection efficiency” Xuanqi Huang, Houqiang Fu, Hong Chen, Xiaodong Zhang, Zhijian Lu, Jossue Montes, Michael Iza, Steven P. DenBaars, Shuji Nakamura, and Yuji Zhao	*APPLIED PHYSICS LETTERS* ***110*** *161105*	Journal
885	2017	“Semipolar III-nitride quantum well waveguide photodetector integrated with laser diode for on-chip photonic system” Chao Shen, Changmin Lee, Edgars Stegenburgs, Jorge Holguin Lerma, Tien Khee Ng, Shuji Nakamura, Steven P. DenBaars, Ahmed Y. Alyamani, Munir M. El-Desouki, and Boon S. Ooi	*APPLIED PHYSICS EXPRESS* ***10*** *042201*	Journal
886	2017	“Sustained high external quantum efficiency in ultrasmall blue III-nitride micro-LEDs” David Hwang, Asad Mughal, Christopher D. Pynn, Shuji Nakamura, and Steven P. DenBaars	*APPLIED PHYSICS EXPRESS* ***10*** *032101*	Journal
887	2017	“Using tunnel junctions to grow monolithically integrated optically pumped semipolar III-nitride yellow quantum wells on top of electrically injected blue quantum wells” Stacy J. Kowsz, Erin C. Young,Benjamin P. Yonkee, Christopher D. Pynn, Robert M. Farrell, James S. Speck, Steven P. Denbaars, and Shuji Nakamura	*OPTICS EXPRESS* ***25*** *3841-3849*	Journal
888	2017	“Internal quantum efficiency and carrier dynamics in semipolar (2021) InGaN/GaN light-emitting diodes” Serdal Okur, Mohsen Nami, Ashwin K. Rishinaramangalam, Sang H. Oh, Steve P. Denbaars, Sheng Liu, Igal Brener, and Daniel F. Feezell	*OPTICS EXPRESS* ***25*** *2178-2186*	Journal
889	2017	“Nonpolar GaN-Based Vertical-Cavity Surface-Emitting Lasers” Charles A. Forman, John T. Leonard, Erin C. Young, Seunggeun Lee, Daniel A. Cohen, Benjamin P. Yonkee, Robert M. Farrell, Tal Margalith, Steven P. DenBaars, James S. Speck, and Shuji Nakamura	*30TH ANNUAL CONFERENCE OF THE IEEE PHOTONICS SOCIETY (IPC) Book Series: IEEE Photonics Conference 233-234*	Conference Paper

890	2017	“Integrated photonic platform based on semipolar InGaN/GaN multiple section laser diodes” Chao Shen, Changmin Lee, Tien Khee Ng, James S. Speck, Shuji Nakamura, Steven P. DenBaars, and Boon S.Ooi	*2017 CONFERENCE ON LASERS AND ELECTRO-OPTICS PACIFIC RIM (CLEO-PR)*	Conference Paper
891	2018	“Carrier dynamics of two distinct localized centers in 530 nm InGaN green light-emitting diodes” Panpan Lia, Bastien Bonef, Michel Khoury, Guillaume Lheureux,Hongjian Li,Junjie Kang, Shuji Nakamura, Steven P. DenBaars	*Superlattices and Microstructures* ***113****, 684-689*	Journal
892	2018	“Comparing electrical characteristics of in situ and ex situ Al2O3/GaN interfaces formed by metalorganic chemical vapor deposition” Silvia H. Chan, Davide Bisi, Maher Tahhan, Chirag Gupta, Steven P. DenBaars,Stacia Keller, Enrico Zanoni, and Umesh K. Mishra	*Appl. Phys. Express* ***11*** *041002*	Journal
893	2018	“Continuous-wave operation of m-plane GaN-based vertical-cavity surface-emitting lasers with a tunnel junction intracavity contact” Charles A. Forman, SeungGeun Lee, Erin C. Young, Jared A. Kearns, Daniel A. Cohen, John T. Leonard, TalMargalith, Steven P. DenBaars, and Shuji Nakamura	*Appl. Phys. Lett.****112****, 111106*	Journal
894	2018	“Impact of crystal orientation on the modulation bandwidth of InGaN/GaN light-emittingdiodes” M. Monavarian, A. Rashidi, A. A. Aragon, S. H. Oh, A. K. Rishinaramangalam, S. P. DenBaars, and D. Feezell	*Appl. Phys. Lett.****112****, 041104*	Journal
895	2018	“Metal-organic chemical vapor deposition of N-polar InN quantum dots and thin films on vicinal GaN” Cory Lund, Massimo Catalano, Luhua Wang, Christian Wurm, Thomas Mates, Moon Kim, Shuji Nakamura,Steven P. DenBaars, Umesh K. Mishra, and Stacia Keller	*Journal of Applied Physics****123****, 055702*	Journal
896	2018	“Micro-light-emitting diodes with III–nitride tunnel junction contacts grown by metalorganic chemical vapor deposition” David Hwang, Asad J. Mughal, Matthew S. Wong, Abdullah I. Alhassan,Shuji Nakamura, and Steven P. DenBaars	*Appl. Phys. Express* ***11*** *012102*	Journal
897	2018	“On the optical polarization properties of semipolar and InGaN/GaN quantum wells”	*Journal of Applied Physics****123****, 085705*	Journal

		Christian Mounir, Ingrid L. Koslow, Tim Wernicke, Michael Kneissl, Leah Y. Kuritzky, Nicholas L. Adamski, Sang Ho Oh, Christopher D. Pynn, Steven P. DenBaars, Shuji Nakamura, James S. Speck, and Ulrich T. Schwarz		
898	2018	“Spin injection in epitaxial MnGa(111)/GaN(0001) heterostructures” Christian Zube, Joerg Malindretos, Lars Watschke, Reza R. Zamani, David Disterheft, Rainer G. Ulbrich, Angela Rizzi, Michael Iza, Stacia Keller, and Steven P. DenBaars	*Journal of Applied Physics**123**, 033906*	Journal
899	2018	“Stable, Heat-Conducting Phosphor Composites for High-Power Laser Lighting” Clayton Cozzan,Guillaume Lheureux,Nicholas O’Dea,Emily E. Levin,Jake Graser,Taylor D. Sparks,Shuji Nakamura,Steven P. DenBaars,Claude Weisbuch,and Ram Seshadri	*ACS Appl. Mater. Interfaces 10 5673-5681*	Journal
900	2018	“Suppression of Anomalously Large Threshold Voltage in Wafer-Bonded Vertical Transistors by Enhancing Critical Field to Impact Ionization” Shalini Lal, Jing Lu, Brian J. Thibeault, Man Hoi Wong, Steven P. DenBaars, and Umesh K. Mishra	*EEE TRANSACTIONS ON ELECTRON DEVICES, **65**, 1079-1086*	Journal
901	2018	“Trade-off between bandwidth and efficiency in semipolar (2021) InGaN/GaN single- andmultiple-quantum-well light-emitting diodes” M. Monavarian, A. Rashidi, A. A. Aragon, M. Nami, S. H. Oh, S. P. DenBaars, and D. Feezell	*Appl. Phys. Lett.**112**, 191102*	Journal
902	2018	“GaN-based vertical-cavity surface-emitting lasers with tunnel junction contacts grown by metal-organic chemical vapor deposition” SeungGeun Lee, Charles A. Forman, Changmin Lee, Jared Kearns, Erin C. Young, John T. Leonard, Daniel A. Cohen, James S. Speck, Shuji Nakamura and Steven P. DenBaars	*APPLIED PHYSICS EXPRESS **11** 062703*	Journal
903	2018	“Zinc oxide clad limited area epitaxy semipolar III-nitride laser diodes” Myzaferi, A , Mughal, AJ, DA, Farrell, RM , Nakamura, S, Speck, JS, DenBaars, SP	*OPTICS EXPRESS **26** 12490-12498*	Journal
904	2018	“Reduced-droop green III-nitride light-emitting diodes utilizing GaN tunnel junction” Abdullah I. Alhassan, Erin C. Young, Ahmed Y. Alyamani, Abdulrahman	*APPLIED PHYSICS EXPRESS **11** 042101*	Journal

		Albadri, Shuji Nakamura, Steven P. DenBaars and James S. Speck		
905	2018	"Semipolar InGaN quantum-well laser diode with integrated amplifier for visible light communications" Chao Shen, Tien Khee Ng, Changmin Lee, Shuji Nakamura, James S. Speck, Steven P. DenBaars, Ahmed Y. Alyamani, Munir M. El-Desouki, and Boon S. Ooi	*OPTICS EXPRESS* ***26*** *A219-A226*	Journal
906	2018	"Development of high performance green c-plane III-nitride light-emitting diodes" Abdullah. I. Alhassan, Nathan. G. Young, Robert. M. Farrell, Christopher. Pynn, Feng. Wu, Ahmed. Y. Alyamani, Shuji Nakamura, Steven. P. DenBaars, and James. S. Speck	*Optics Express* ***26****, 5591-5601*	Journal
907	2018	"Semipolar (2021) GaN templates on sapphire: 432nm InGaN light-emitting diodes and light extraction simulations" Michel Khoury, Hongjian Li, Bastien Bonef, Leah Y. Kuritzky, Asad J. Mughal, Shuji Nakamura, James S. Speck and Steven P. DenBaars	*APPLIED PHYSICS EXPRESS* ***11*** *036501*	Journal
908	2018	"Direct Measurement of Nanoscale Lateral Carrier Diffusion: Toward Scanning Diffusion Microscopy" Mounir Mensi, Ruslan Ivanov, Tomas K. Uždavinys, Kathryn M. Kelchner, Shuji Nakamura, Steven P. DenBaars, James S. Speck, and Saulius Marcinkevičius	*ACS PHOTONICS* ***5*** *528-534*	Journal
909	2018	"Low threading dislocation density aluminum nitride on silicon carbide through the use of reduced temperature interlayers" Humberto M.Foronda, FengWu,ChristianZollner, Muhammad EsmedAlif, BurhanSaifaddin, AbdullahAlmogbel,MichaelIza,ShujiNakamura,Steven P.DenBaars, James S.Speck	*JOURNAL OF CRYSTAL GROWTH* ***483*** *134-139*	Journal
910	2018	"Demonstration of enhanced continuous-wave operation of blue laser diodes on a semipolar 2021 GaN substrate using indium-tin-oxide/thin-p-GaN cladding layers" Mehari S, Cohen DA, Becerra DL, Nakamura S, DenBaars SP.	*OPTICS EXPRESS* ***26*** *1564-1572*	Journal
911	2018	"High reflectivity Ohmic contacts to n-GaN utilizing vacuum annealed aluminum" Benjamin P Yonkee, Erin C Young, Steven P	*SEMICONDUCTOR SCIENCE AND TECHNOLOGY* ***33*** *015015*	Journal

		DenBaars, James S Speck and Shuji Nakamura		
912	2018	“Carrier dynamics of two distinct localized centers in 530 nm InGaN green light-emitting diodes” Panpan Li, Bastien Bonef, Michel Khoury, Guillaume Lheureux, Hongjian Li, Junjie Kang, Shuji Nakamura, Steven P. DenBaars	*Superlattices and Microstructures,* Vol: 113, pp: 684-689	Journal
913	2018	“Micro-light-emitting diodes with III-nitride tunnel junction contacts grown by metalorganic chemical vapor deposition” David Hwang, Asad J. Mughal, Matthew S. Wong, Abdullah. Alhassan, Shuji Nakamura, and Steven P. DenBaars	*Applied Physics Express*, Vol: 11, Issue: 1, Article Number: 012102	Journal
914	2018	“Spin injection in epitaxial MnGa(111)/GaN(0001) heterostructures” Christian Zube, Joerg Malindretos, Lars Watschke, Reza R. Zamani, David Disterheft, Rainer G. Ulbrich,Angela Rizzi, Michael Iza, Stacia Keller, and Steven P. DenBaars	*Journal of Applied Physics,* Vol: 123, Issue: 3, Article Number: 033906	Journal
915	2018	“Demonstration of enhanced continuous-wave operation of blue laser diodes on a semipolar 20(21)over-bar GaN substrate using indium-tin-oxide/thin-p-GaN cladding layers” Shlomo Mehari, Daniel A. Cohen, Daniel L. Becerra, Shuji Nakamura, and Steven P. DenBaars	*Optics Express*, Vol: 26, Issue: 2, pp: 1564-1572	Journal
916	2018	“Impact of crystal orientation on the modulation bandwidth of InGaN/GaN light-emitting diodes” M. Monavarian, A. Rashidi, A. A. Aragon,S. H. Oh, A. K. Rishinaramangalam, S. P. DenBaars, and D. Feezell	*Applied Physics Letters,* Vol: 112, Issue: 4, Article Number: 041104	Journal
917	2018	“Low threading dislocation density aluminum nitride on silicon carbide through the use of reduced temperature interlayers” Humberto M. Foronda, Feng Wua, Christian Zollner, Muhammad Esmed Alif, Burhan Saifaddin, Abdullah Almogbel, Michael Iza, Shuji Nakamura, Steven P. DenBaars, James S. Speck	*Journal of Crustal Growth,* Vol: 483, pp: 134-139	Journal
918	2018	“Direct Measurement of Nanoscale Lateral Carrier Diffusion: Toward Scanning Diffusion Microscopy” Mounir Mensi, Ruslan Ivanov, Tomas K. Uzdavinys, Kathryn M. Kelchner, Shuji Nakamura, Steven P. DenBaars, James S. Speck, and Saulius Marcinkevicius	*ACS Phototonics*, Vol: 5, Issue: 2, pp: 528-534	Journal

919	2018	“Metal-organic chemical vapor deposition of N-polar InN quantum dots and thin films on vicinal GaN” Cory Lund, Massimo Catalano, Luhua Wang, Christian Wurm, Thomas Mates, Moon Kim, Shuji Nakamura, Steven P. DenBaars, Umesh K. Mishra, and Stacia Keller	*Journal of Applied Physics,* Vol: 123, Issue: 5, Article Number: 055702	Journal
920	2018	“Stable, Heat-Conducting Phosphor Composites for High-Power Laser Lighting” Clayton Cozzan, Guillaume Lheureux, Nicholas O’Dea, Emily E. Levin, Jake Graser, Taylor D. Sparks, Shuji Nakamura, Steven P. DenBaars, Claude Weisbuch, and Ram Seshadri	*ACS Applied Materials & Interfaces,* Vol: 10, Issue: 6, Pages: 5673-5681	Journal
921	2018	“On the optical polarization properties of semipolar 2020 and 2020 InGaN/GaN quantum wells” Christian Mounir, Ingrid L. Koslow, Tim Wernicke, Michael Kneissl, Leah Y. Kuritzky, Nicholas L. Adamski, Sang Ho Oh, Christopher D. Pynn, Steven P. DenBaars, Shuji Nakamura, James S. Speck, and Ulrich T. Schwarz	*Journal of Applied Physics* Vol: 123, Issue: 8, Article Number: 08570	Journal
922	2018	“Semipolar 2020 GaN templates on sapphire: 432nm InGaN light-emitting diodes and light extraction simulations” Michel Khoury, Hongjian Li, Bastien Bonef, Leah Y. Kuritzky, Asad J. Mughal, Shuji Nakamura, James S. Speck, and Steven P. DenBaars	*Applied Physics Express,* Volume: 11, Issue: 3, Article Number: 036501	Journal
923	2018	“Suppression of Anomalously Large Threshold Voltage in Wafer-Bonded Vertical Transistors by Enhancing Critical Field to Impact Ionization” Shalini Lal, Jing Lu, Brian J. Thibeault, Man Hoi Wong, Steven P. DenBaars, and Umesh K. Mishra	*IEEE Transactions on Electronic Devices,* Vol: 65, Issue: 3, Pages: 1079-1086	Journal
924	2018	“Development of high performance green c-plane III-nitride light-emitting diodes” Abdullah I. Alhassan, Nathan G. Young, Robert M. Farrel, Christopher Pynn, Feng Wu, Ahmed Y. Alyamani, Shuji Nakamura, Dteven P. Denbaars, and James S. Speck	*Optics Express,* Vol: 26, Issue: 5, Pages: 5591-5601	Journal
925	2018	“Continuous-wave operation of m-plane GaN-based vertical-cavity surface-emitting lasers with a tunnel junction intracavity contact” Charles A. Forman, SeungGeun Lee , Erin C. Young , Jared A. Kearns, Daniel A. Cohen, John T. Leonard, Tal Margalith, Steven P. DenBaars, and Shuji Nakamura	*Applied Physics Letters,* Vol: 112, Issue: 11, Article Number: 111106	Journal

926	2018	“Semipolar InGaN quantum-well laser diode with integrated amplifier for visible light communications” Chao Shen, Tien Khee Ng, Changmin Lee, Shuji Nakamura, James S. Speck, Steven P. DenBaars, Ahmed Y. Alyamani, Munir M. El-Desouki, and Boon S. Ooi	*Optics Express,* Vol: 26, Issue: 6, Pages: A219-A226	Journal
927	2018	“Comparing electrical characteristics of in situ and ex situ Al2O3/GaN interfaces formed by metalorganic chemical vapor deposition” Silvia H. Chan, Davide Bisi, Maher Tahhan, Chirag Gupta, Steven P. DenBaars, Stacia Keller, Enrico Zanoni, and Umesh K. Mishra	*Applied Physics Express*, Vol: 11, Issue: 4, Article Number: 041002	Journal
928	2018	“Reduced-droop green III-nitride light-emitting diodes utilizing GaN tunnel junction” Abdullah I. Alhassan, Erin C. Young, Ahmed Y. Alyamani, Abdulrahman Albadri, Shuji Nakamura, Steven P. DenBaars, and James S. Speck	*Applied Physics Express*, Vol: 11, Issue: 4, Article Number: 042101	Journal
929	2018	“Trade-off between bandwidth and efficiency in semipolar (20(2)over-bar(1)over-bar) InGaN/GaN single- and multiple-quantum-well light-emitting diodes” M. Monavarian, A. Rashidi, A. A. Aragon, M. Nami, S. H. Oh, S. P. DenBaars, and D. Feezell	*Applied Physics Letters,* Volume: 112, Issue: 19, Article Number: 191102	Journal
930	2018	“Zinc oxide clad limited area epitaxy semipolar III-nitride laser diodes” Anisa Myzaferi, Asad J. Mughal, Daniel A. Cohen, Robert M. Farrell, Shuji Nakamura, James S. Speck, and Steven P. DenBaars	*Optics Express,* Volume: 26, Issue: 10, Pages: 12490-12498	Journal
931	2018	“GaN-based vertical-cavity surface-emitting lasers with tunnel junction contacts grown by metal-organic chemical vapor deposition” SeungGeun Lee, Charles A. Forman, Changmin Lee, Jared Kearns, Erin C. Young, John T. Leonard, Daniel A. Cohen, James S. Speck, Shuji Nakamura, and Steven P. DenBaars	*Applied Physics Express*, Volume: 11, Issue: 6, Article Number: 062703	Journal
932	2018	“High efficiency of III-nitride micro-light-emitting diodes by sidewall passivation using atomic layer deposition” Matthew S. Wong, David Hwang, Abdullah I. Alhassan, Changmin Lee, Ryan Ley, Shuji Nakamura, Steven P. DenBaars	OPTICS EXPRESS, Volume: 26, Pages: 21324-21331	Journal
933	2018	“Investigation of Mg delta-doping for low resistance N-polar p-GaN films grown at reduced temperatures by	SEMICONDUCTOR SCIENCE AND TECHNOLOGY, Volume:	Journal

		MOCVD” Cory Lund, Anchal Agarwal, Brian Romanczyk, Thomas Mates, Shuji Nakamura, Steven P DenBaars, Umesh K Mishra and Stacia Keller	33, Article Number: 095014	
934	2018	“An exploratory study of acidic ammonothermal growth in a TZM autoclave at high temperatures” Thomas F. Malkowski, James S. Speck, Steven P. DenBaars, Shuji Nakamura	JOURNAL OF CRYSTAL GROWTH, Volume: 499, Pages: 85-89	Journal
935	2019	“Semipolar III-Nitride laser diodes for solid-state lighting” Shlomo Mehari, Daniel A. Cohen, Daniel L. Becerra, Haojun Zhang, Claude Weisbuch, James S. Speck, Shuji Nakamura, Steven P. DenBaars	NOVEL IN-PLANE SEMICONDUCTOR LASERS XVIII, Book Series: Proceedings of SPIE, Volume: 10939 Article Number: UNSP 109390G	Proceedings
936	2019	“Compensation effects of high oxygen levels in semipolar AlGaN electron blocking layers and their mitigation via growth optimization” Daniel L. Becerra, Daniel A. Cohen, Shlomo Mehari, Steven P. DenBaars, and Shuji Nakamura	JOURNAL OF CRYSTAL GROWTH, Volume: 507, Pages: 118-12	Journal
937	2019	“Semipolar InGaN blue laser diodes with a low optical loss and a high material gain obtained by suppression of carrier accumulation in the p-waveguide region” Shlomo Mehari , Daniel A. Cohen, Daniel L. Becerra, Shuji Nakamura, and Steven P. DenBaars	JAPANESE JOURNAL OF APPLIED PHYSICS, Volume: 58, Article Number: 02090	Journal
938	2019	“Investigation of oxygen and other impurities and their effect on the transparency of a Na flux grown GaN crystal” Mohammed Abo Alreesh, Paul Von Dollen, Thomas F. Malkowski, Tom Mates, Hamad Albrithen, Steven DenBaars, Shuji Nakamura, James S. Speck	JOURNAL OF CRYSTAL GROWTH, Volume: 508, Pages: 50-57	Journal
939	2019	“Fabrication technology for high light-extraction ultraviolet thin-film flip-chip (UV TFFC) LEDs grown on SiC” Burhan K. SaifAddin , Abdullah Almogbel, Christian J. Zollner, Humberto Foronda, Ahmed Alyamani, Abdulrahman Albadri, Michael Iza, Shuji Nakamura, Steven P. DenBaars and James S. Speck	SEMICONDUCTOR SCIENCE AND TECHNOLOGY, Volume: 34, Article Number: 035007	Journal

940	2019	“Efficient tunnel junction contacts for high-power semipolar III-nitride edge-emitting laser diodes” Kareem W. Hamdy, Erin C. Young, Abdullah I. Alhassan, Daniel L. Becerra, Steven P. DenBaars, James S. Speck, Shuji Nakamura	OPTICS EXPRESS, Volume: 27, Pages: 8327-8334	Journal
941	2019	“Interwell carrier transport in InGaN/(In)GaN multiple quantum wells” Saulius Marcinkevicius, Rinat Yappparov, Leah Y. Kuritzky, Yuh-Renn Wu, Shuji Nakamura, Steven P. DenBaars, James S. Speck	APPLIED PHYSICS LETTERS, Volume: 114, Article Number: 151103	Journal
942	2019	“Continuous-wave operation of a semipolar InGaN distributed-feedback blue laser diode with a first-order indium tin oxide surface grating” Haojun Zhang, Daniel A. Cohen, Philip Chan, Matthew S. Wong, Shlomo Mehari, Daniel L. Becerra, Shuji Nakamua, Steven P. DenBaars	OPTICS LETTERS, Volume: 44, Pages: 3106-3109	Journal
943	2019	“Infrared luminescence from N-polar InN quantum dots and thin films grown by metal organic chemical vapor deposition” Caroline E. Reilly, Cory Lund, Shuji Nakamura, Umesh K. Mishra, Steven P. DenBaars, and Stacia Keller	APPLIED PHYSICS LETTERS, Volume: 114, Article Number: 241103	Journal
944	2019	“Properties of N-polar InGaN/GaN quantum wells grown with triethyl gallium and triethyl indium as precursors” Cory Lund, Shuji Nakamura, Steven P DenBaars, Umesh K Mishra and Stacia Keller	SEMICONDUCTOR SCIENCE AND TECHNOLOGY, Volume: 34, Article Number: 075017	Journal
945	2019	“High-Temperature Polarization-Free III-Nitride Solar Cells with Self-Cooling Effects” Xuanqi Huang, Wei Li, Houqiang Fu, Dongying Li, Chaomin Zhang, Hong Chen, Yi Fang, Kai Fu, Steven P. DenBaars, Shuji Nakamura, Stephen M. Goodnick, Cun-Zheng Ning, Shanhui Fan, and Yuji Zhao	ACS PHOTONICS, Volume: 6, Pages: 2096-2103	Journal
946	2019	“Impact of roughening density on the light extraction efficiency of thin-film flip-chip ultraviolet LEDs grown on SiC” Burhan K. SaifAddin, Michael Iza, Humberto Foronda, Abdullah Almogbel, Chrisian J. Zollner, Feng Wu, Ahmed Alyamani, AbdulRahman Albadri, Shuji	OPTICS EXPRESS, Volume: 27, Pages: A1074-A1083	Journal

		Nakamura, Steven P. DenBaars, James S. Speck		
947	2019	“Electrical injection of a 440nm InGaN laser with lateral confinement by nanoporous-GaN” Ryan Anderson, Daniel Cohen, Shlomo Mehari, Shuji Nakamura, Steven P. DenBaars	OPTICS EXPRESS, Volume: 27, Pages: 22764-22769	Journal
948	2019	“Realization of thin-film m-plane InGaN laser diode fabricated by epitaxial lateral overgrowth and mechanical separation from a reusable growth substrate” Takeshi Kamikawa, Srinivas Gandrothula, Masahiro Araki, Hongjian Li, Valeria Bonito Oliva, Deng Wu, Daniel Cohen, James S. Sepck, Steven P. DenBaars, Shuji Nakamura	OPTICS EXPRESS, Volume: 27, Pages: 24717-24723	Journal
949	2019	“Study of efficient semipolar (11-22) InGaN green micro-light-emitting diodes on high-quality (11-22) GaN/sapphire template” Jomgjian Li, Matthew S. Wong, Michel Khoury, Bastien Bonef, Haojun Zhang, YiChao Chow, PanPan Li, Jared Kearns, Aidan A. Taylor, Philippe De Mierry, Zainuriah Hassan, Shuji Nakamura, Steven P. DenBaars	OPTICS EXPRESS, Volume: 27, Pages: 24154-24160	Journal
950	2019	“Demonstration of blue semipolar (20(2)over-bar(1)over-bar) GaN-based vertical-cavity surface-emitting lasers” Jared A. Kearns, Joonho Back, Daniel A. Cohen, Steven P. DenBaars, Shuji Nakamura	OPTICS EXPRESS, Volume: 27, Pages: 23707-23713	Journal
951	2019	“Size-independent peak efficiency of III-nitride micro-light-emitting-diodes using chemical treatment and sidewall passivation” Matthew S. Wong, Changmin Lee, Daniel J. Myers, David Hwang, Jared A. Kearns, Thomas Li, James S. Speck, Shuji Nakamura, and Steven P. DenBaars	APPLIED PHYSICS EXPRESS, Volume: 12, Article Number: 097004	Journal
952	2019	“MOCVD Growth and Characterization of InN Quantum Dots” Caroline E. Reilly, Shuji Nakamura, Steven P. DenBaars, and Stacia Keller	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, Article Number: 1900508	Journal
953	2019	“Strain relaxation of InGaN/GaN multi-quantum well light emitters via nanopatterning” Ryan Ley, Lesley Chan, Pavel Shapturenka, Matthew Wong, Steven DenBaars, Michael Gordon	OPTICS EXPRESS, Volume: 27, Pages: 30081-30089	Journal

954	2019	“Demonstration of GaN-based vertical-cavity surface-emitting lasers with buried tunnel junction contacts” SeungGeun Lee, Charles A. Forman, Jared Kearns, Jonh T. Leonard, Daniel A. Cohen, Shuji Nakamura, Steven P. DenBaars	OPTICS EXPRESS, Volume: 27, Pages: 31621-31628	Journal