

Robert F Davis

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4519869/robert-f-davis-publications-by-year.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

442
papers

17,890
citations

72
h-index

116
g-index

454
ext. papers

18,729
ext. citations

3.1
avg, IF

6.23
L-index

#	Paper	IF	Citations
442	Layered phase composition and microstructure of Ga_2O_3 -dominant heteroepitaxial films grown via MOCVD. <i>Journal of Applied Physics</i> , 2022 , 131, 055305	2.5	2
441	Flow-modulated deposition of sp^2 -boron nitride using diborane and ammonia on chemomechanically polished (0001) 4H-SiC substrates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2022 , 40, 023409	2.9	
440	On the discrepancies between the experimental realization and the thermodynamic predictions of stability of rhombohedral boron nitride. <i>MRS Communications</i> , 2021 , 11, 451-456	2.7	
439	Progression of central nervous system disease from pediatric to young adulthood in sickle cell anemia. <i>Experimental Biology and Medicine</i> , 2021 , 246, 2473-2479	3.7	3
438	Thermodynamic calculations for the chemical vapor deposition of hexagonal boron nitride using triethylboron, ammonia, and hydrogen. <i>Journal of Crystal Growth</i> , 2021 , 572, 126283	1.6	1
437	Characterization of Epitaxial $\text{AlGaIn}_2\text{O}_3$ -Based Films and Applications as UV Photodetectors. <i>Journal of Electronic Materials</i> , 2020 , 49, 3490-3498	1.9	8
436	Metal Organic Chemical Vapor Deposition 2. <i>Springer Series in Materials Science</i> , 2020 , 171-184	0.9	
435	Progression of Central Nervous System Vasculopathy in Young Adults with Sickle Cell Anemia. <i>Blood</i> , 2019 , 134, 2290-2290	2.2	
434	Nondiffusive electron transport in metals: A two-temperature Boltzmann transport equation analysis of thermoreflectance experiments. <i>Physical Review B</i> , 2019 , 99,	3.3	1
433	Growth and characterization of β and γ -phases of Ga_2O_3 using MOCVD and HVPE techniques. <i>Materials Research Letters</i> , 2018 , 6, 268-275	7.4	104
432	Electrical behavior of Ga_2O_3 Schottky diodes with different Schottky metals. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017 , 35, 03D113	1.3	76
431	Investigation of Different Metals as Ohmic Contacts to Ga_2O_3 : Comparison and Analysis of Electrical Behavior, Morphology, and Other Physical Properties. <i>Journal of Electronic Materials</i> , 2017 , 46, 2053-2060	1.9	68
430	(Invited) Growth and Characterization of β and γ - Ga_2O_3 Epitaxial Layers on Sapphire. <i>ECS Transactions</i> , 2017 , 80, 191-196	1	21
429	Thermal interface conductance across metal alloy/dielectric interfaces. <i>Physical Review B</i> , 2016 , 93,	3.3	19
428	Analysis of compositional uniformity in $\text{Al}_x\text{Ga}_{1-x}\text{N}$ thin films using atom probe tomography and electron microscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016 , 34, 041510	2.9	4
427	Polymer ligand-induced autonomous sorting and reversible phase separation in binary particle blends. <i>Science Advances</i> , 2016 , 2, e1601484	14.3	25
426	Hydrogen desorption from hydrogen fluoride and remote hydrogen plasma cleaned silicon carbide (0001) surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015 , 33, 05E105	1.9	7

425	Cleaning of pyrolytic hexagonal boron nitride surfaces. <i>Surface and Interface Analysis</i> , 2015 , 47, 798-803	1.5	9
424	Band alignment at AlN/Si (111) and (001) interfaces. <i>Journal of Applied Physics</i> , 2015 , 118, 045304	2.5	6
423	Hydrogen desorption kinetics for aqueous hydrogen fluoride and remote hydrogen plasma processed silicon (001) surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015 , 33, 05E115	2.9	6
422	Substrates and epitaxial deposition processes for Group III-nitride thin films and power device heterostructures. <i>MRS Bulletin</i> , 2015 , 40, 406-411	3.2	0
421	Photoemission investigation of the Schottky barrier at the Sc/3C-SiC (111) interface. <i>Physica Status Solidi (B): Basic Research</i> , 2015 , 252, 391-396	1.3	9
420	Site-specific comparisons of V-defects and threading dislocations in InGaN/GaN multi-quantum-wells grown on SiC and GaN substrates. <i>Journal of Crystal Growth</i> , 2014 , 387, 16-22	1.6	10
419	Gas source molecular beam epitaxy of scandium nitride on silicon carbide and gallium nitride surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014 , 32, 061504	2.9	34
418	Composition and interface analysis of InGaN/GaN multi-quantum-wells on GaN substrates using atom probe tomography. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2014 , 32, 051209	1.3	9
417	. <i>Proceedings of the IEEE</i> , 2014 , 102, 35-52	14.3	14
416	Valence and conduction band alignment at ScN interfaces with 3C-SiC (111) and 2H-GaN (0001). <i>Applied Physics Letters</i> , 2014 , 105, 081606	3.4	13
415	Desorption and sublimation kinetics for fluorinated aluminum nitride surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014 , 32, 051402	2.9	8
414	Universal phonon mean free path spectra in crystalline semiconductors at high temperature. <i>Scientific Reports</i> , 2013 , 3, 2963	4.9	96
413	Modeling the Electrical Response of Hydrogen Sensors Based on AlGaN/GaN High-Electron-Mobility Transistors. <i>ECS Journal of Solid State Science and Technology</i> , 2013 , 2, Q214-Q219	2	2
412	The impact of film thickness and substrate surface roughness on the thermal resistance of aluminum nitride nucleation layers. <i>Journal of Applied Physics</i> , 2013 , 113, 213502	2.5	24
411	Current Status and Emerging Trends in Wide Bandgap (WBG) Semiconductor Power Switching Devices. <i>ECS Journal of Solid State Science and Technology</i> , 2013 , 2, N3055-N3063	2	42
410	Dislocations as quantum wires: Buffer leakage in AlGaN/GaN heterostructures. <i>Journal of Materials Research</i> , 2013 , 28, 1687-1691	2.5	7
409	Microstructure of epitaxial GaN films grown on chemomechanically polished GaN(0001) substrates. <i>Journal of Crystal Growth</i> , 2012 , 347, 88-94	1.6	15
408	Material Defects and Rugged Electrical Power Switching in Semiconductors. <i>Materials Science Forum</i> , 2012 , 717-720, 1077-1080	0.4	2

407	Layer-by-layer thermal conductivities of the Group III nitride films in blue/green light emitting diodes. <i>Applied Physics Letters</i> , 2012 , 100, 201106	3.4	37
406	Impact of Solid State Lighting on Energy Utilization and Environmental Conditions. <i>Transactions of the Materials Research Society of Japan</i> , 2012 , 20thAnniv, 41-45	0.2	
405	Identifying threading dislocations in GaN films and substrates by electron channelling. <i>Journal of Microscopy</i> , 2011 , 244, 311-9	1.9	14
404	Green Emission of Silicon Quantum Dot Light-emitting Diodes caused by Enhanced Carrier Injection. <i>Journal of the Korean Physical Society</i> , 2011 , 59, 2183-2186	0.6	2
403	Optical property of silicon quantum dots embedded in silicon nitride by thermal annealing. <i>Thin Solid Films</i> , 2010 , 518, 1744-1746	2.2	9
402	Surface and defect microstructure of GaN and AlN layers grown on hydrogen-etched 6H-SiC(0001) substrates. <i>Acta Materialia</i> , 2010 , 58, 2165-2175	8.4	21
401	Impact of Solid State Lighting on Energy Utilization and Environmental Conditions. <i>Transactions of the Materials Research Society of Japan</i> , 2010 , 35, 467-471	0.2	
400	Enhancement of Electrical and Optical Properties of Silicon Quantum Dot Light-Emitting Diodes with ZnO Doping Layer. <i>Japanese Journal of Applied Physics</i> , 2009 , 48, 105004	1.4	
399	Enhanced performance of silicon quantum dot light-emitting diodes grown on nanoroughened silicon substrate. <i>Applied Physics Letters</i> , 2009 , 95, 073113	3.4	12
398	Hydrogen desorption kinetics and band bending for 6H-SiC(0 0 0 1) surfaces. <i>Surface Science</i> , 2009 , 603, 3104-3118	1.8	26
397	On the origin of aluminum-related cathodoluminescence emissions from sublimation grown 4H-SiC(1120). <i>Applied Surface Science</i> , 2009 , 255, 6535-6539	6.7	3
396	Sequential growths of AlN and GaN layers on as-polished 6H-SiC(0001) substrates. <i>Acta Materialia</i> , 2009 , 57, 4001-4008	8.4	16
395	Effect of injection current density on electroluminescence in silicon quantum dot light-emitting diodes. <i>Applied Physics Letters</i> , 2009 , 95, 153103	3.4	5
394	Sublimation growth of an in-situ-deposited layer in SiC chemical vapor deposition on 4H-SiC(1 1 20). <i>Journal of Crystal Growth</i> , 2008 , 311, 72-78	1.6	3
393	Kinetics of Ga and In desorption from (700) Si(111) and (300) 6H-SiC(0001) surfaces. <i>Surface Science</i> , 2008 , 602, 405-415	1.8	13
392	Growth evolution and pendeo-epitaxy of non-polar AlN and GaN thin films on 4H-SiC (1 1 200). <i>Journal of Crystal Growth</i> , 2007 , 300, 83-89	1.6	7
391	Characterization of growth defects in thin GaN layers with X-ray microbeam. <i>Physica Status Solidi (B): Basic Research</i> , 2007 , 244, 1735-1742	1.3	6
390	Polytype Stability and Microstructural Characterization of Silicon Carbide Epitaxial Films Grown on $[\overline{1}1\overline{2}0]$ - and $[0001]$ -Oriented Silicon Carbide Substrates. <i>Journal of Electronic Materials</i> , 2007 , 36, 285-296	1.9	6

389	Phonon-assisted stimulated emission from pendeoepitaxy GaN stripes grown on 6H-SiC substrates. <i>Applied Physics Letters</i> , 2007 , 91, 051119	3.4	2
388	Electrical and optical properties of ZnO (0001) wafers implanted with argon. <i>Journal of Applied Physics</i> , 2007 , 101, 024902	2.5	5
387	Growth and fabrication of AlGaIn-based ultraviolet light emitting diodes on 6H-SiC(0001) substrates and the effect of carrier-blocking layers on their emission characteristics. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2006 , 127, 169-179	3.1	2
386	Origins of Parasitic Emissions from 353 nm AlGaIn-based Ultraviolet Light Emitting Diodes over SiC Substrates. <i>Japanese Journal of Applied Physics</i> , 2006 , 45, 4083-4086	1.4	16
385	Effect of thermal annealing on the metastable optical properties of GaN thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2006 , 24, 1051-1054	2.9	1
384	Ohmic Contacts to GaN 2006 , 489-527		
383	Mapping misorientation and crystallographic tilt in GaN layers via polychromatic microdiffraction. <i>Physica Status Solidi (B): Basic Research</i> , 2006 , 243, 1508-1513	1.3	1
382	Optimization of a Nanoparticle Suspension for Freeze Casting. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 2459-2465	3.8	59
381	Growth and characterization of pendeo-epitaxial GaN on 4H-SiC substrates. <i>Journal of Crystal Growth</i> , 2006 , 290, 504-512	1.6	13
380	Growth and structural investigations of epitaxial hexagonal YMnO ₃ thin films deposited on wurtzite GaN(001) substrates. <i>Thin Solid Films</i> , 2006 , 515, 1807-1813	2.2	14
379	Structural TEM study of nonpolar a-plane gallium nitride grown on (112)4H-SiC by organometallic vapor phase epitaxy. <i>Physical Review B</i> , 2005 , 71,	3.3	174
378	Step-controlled strain relaxation in the vicinal surface epitaxy of nitrides. <i>Physical Review Letters</i> , 2005 , 95, 086101	7.4	49
377	Intersecting basal plane and prismatic stacking fault structures and their formation mechanisms in GaN. <i>Journal of Applied Physics</i> , 2005 , 98, 063510	2.5	18
376	Structural, microstructural, and electrical properties of gold films and Schottky contacts on remote plasma-cleaned, n-type ZnO{0001} surfaces. <i>Journal of Applied Physics</i> , 2005 , 97, 103517	2.5	119
375	Photo-electron emission and atomic force microscopies of the hydrogen etched 6H-SiC(0 0 0 1) surface and the initial growth of GaN and AlN. <i>Applied Surface Science</i> , 2005 , 242, 428-436	6.7	6
374	Growth of dense ZnO films via MOVPE on GaN(0 0 0 1) epilayers using a low/high-temperature sequence. <i>Journal of Crystal Growth</i> , 2005 , 277, 345-351	1.6	11
373	Homoepitaxial growth of dense ZnO(0 0 0 1) and ZnO (112) films via MOVPE on selected ZnO substrates. <i>Journal of Crystal Growth</i> , 2005 , 283, 147-155	1.6	21
372	P-type doping utilizing nitrogen and Mn doping of ZnO using MOCVD for ultraviolet lasers and spintronic applications. <i>Journal of Electronic Materials</i> , 2005 , 34, 949-952	1.9	12

371	The formation of epitaxial hexagonal boron nitride on nickel substrates. <i>Journal of Electronic Materials</i> , 2005 , 34, 1558-1564	1.9	16
370	The effects of oxygen, nitrogen, and hydrogen annealing on Mg acceptors in GaN as monitored by electron paramagnetic resonance spectroscopy. <i>Journal of Electronic Materials</i> , 2005 , 34, 34-39	1.9	10
369	Comparison of the microstructure and chemistry of GaN(0001) films grown using trimethylgallium and triethylgallium on AlN/SiC substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005 , 2, 2166-2169		1
368	White X-ray microbeam analysis of strain and crystallographic tilt in GaN layers grown by maskless pendeoepitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2005 , 202, 732-738	1.6	8
367	A printable form of single-crystalline gallium nitride for flexible optoelectronic systems. <i>Small</i> , 2005 , 1, 1164-8	11	98
366	On the microstructure of Al _x Ga _{1-x} N layers grown on 6H-SiC(0001) substrates. <i>Journal of Applied Physics</i> , 2005 , 97, 083501	2.5	7
365	Preparation and characterization of atomically clean, stoichiometric surfaces of AlN(0001). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005 , 23, 72-77	2.9	8
364	Local strain, defects, and crystallographic tilt in GaN(0001) layers grown by maskless pendeo-epitaxy from x-ray microdiffraction. <i>Journal of Applied Physics</i> , 2005 , 97, 013504	2.5	8
363	Origins of Parasitic Emissions from 353 nm AlGaIn-based UV LEDs over SiC Substrates. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 892, 154		
362	Effect of Carrier Blocking Layers on the Emission Characteristics of AlGaIn-based Ultraviolet Light Emitting Diodes. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 7254-7259	1.4	15
361	In situ cleaning of GaN(0001) surfaces in a metalorganic vapor phase epitaxy environment. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2004 , 22, 2077-2082	2.9	7
360	In situ cleaning and characterization of oxygen- and zinc-terminated, n-type, ZnO{0001} surfaces. <i>Journal of Applied Physics</i> , 2004 , 95, 5856-5864	2.5	77
359	Surface-roughness correlations in homoepitaxial growth of GaN(0001) films by NH ₃ supersonic jet epitaxy. <i>Journal of Applied Physics</i> , 2004 , 96, 4556-4562	2.5	2
358	Selective Etching of GaN from AlGaIn/GaN and AlN/GaN Structures. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 2004 , 9, 1		8
357	Homoepitaxial growth of (0 0 0 1)- and (0001)-oriented ZnO thin films via metalorganic vapor-phase epitaxy and their characterization. <i>Journal of Crystal Growth</i> , 2004 , 265, 390-398	1.6	32
356	Growth and characterization of ZnO thin films on GaN epilayers. <i>Journal of Electronic Materials</i> , 2004 , 33, 826-832	1.9	7
355	HVPE-GaN: comparison of emission properties and microstructure of films grown on different laterally overgrown templates. <i>Diamond and Related Materials</i> , 2004 , 13, 1125-1129	3.5	6
354	Growth of Homoepitaxial Films on 4H-SiC(11-20) and 8° Off-Axis 4H-SiC(0001) Substrates and their Characterization. <i>Materials Science Forum</i> , 2004 , 457-460, 221-224	0.4	2

353	Response to Comment on Ed growth and subsequent Schottky barrier formation on chemical vapor cleaned p-type GaN surfaces[J. Appl. Phys. 91, 732 (2002)]. <i>Journal of Applied Physics</i> , 2003 , 93, 3679-3679	2.5	
352	Gallium nitride and related materials: challenges in materials processing. <i>Acta Materialia</i> , 2003 , 51, 5961-5979	5.2	
351	Helical-type surface defects in GaN thin films epitaxially grown on GaN templates at reduced temperatures. <i>Journal of Crystal Growth</i> , 2003 , 253, 16-25	1.6	12
350	Surface morphology and strain of GaN layers grown using 6H-SiC(0001) substrates with different buffer layers. <i>Journal of Crystal Growth</i> , 2003 , 253, 129-141	1.6	37
349	Helical-type surface defects in InGaN thin films epitaxially grown on GaN templates at reduced temperatures. <i>Thin Solid Films</i> , 2003 , 437, 140-149	2.2	6
348	Evolution and growth of ZnO thin films on GaN(0001) epilayers via metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2003 , 257, 255-262	1.6	22
347	Domain structures in 6H-SiC wafers and their effect on the microstructures of GaN films grown on AlN and Al _{0.2} Ga _{0.8} N buffer layers. <i>Journal of Crystal Growth</i> , 2003 , 258, 75-83	1.6	2
346	Electron energy distribution during high-field transport in AlN. <i>Journal of Applied Physics</i> , 2003 , 93, 2765-2771	2.5	5
345	High performance 0.14 μ m gate-length AlGaIn/GaN power HEMTs on SiC. <i>IEEE Electron Device Letters</i> , 2003 , 24, 677-679	4.4	12
344	Gold Schottky contacts on oxygen plasma-treated, n-type ZnO(0001). <i>Applied Physics Letters</i> , 2003 , 82, 400-402	3.4	348
343	Growth and Characterization of AlN and GaN Thin Films Deposited on Si(111) Substrates Containing a Very Thin Al Layer. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 798, 140		
342	Measurement of the band offsets of SiO ₂ on clean n- and p-type GaN(0001). <i>Journal of Applied Physics</i> , 2003 , 93, 3995-4004	2.5	75
341	Electrical and chemical characterization of the Schottky barrier formed between clean n-GaN(0001) surfaces and Pt, Au, and Ag. <i>Journal of Applied Physics</i> , 2003 , 94, 3939-3948	2.5	88
340	Supersonic jet epitaxy of gallium nitride using triethylgallium and ammonia. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003 , 21, 294-301	2.9	2
339	Microscopic mapping of strain relaxation in uncoalesced pendeoepitaxial GaN on SiC. <i>Physical Review B</i> , 2003 , 67,	3.3	15
338	Band offset measurements of the GaN (0001)/HfO ₂ interface. <i>Journal of Applied Physics</i> , 2003 , 94, 7155-7158	2.5	64
337	Characterization of hydrogen etched 6H-SiC(0001) substrates and subsequently grown AlN films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003 , 21, 394-400	2.9	11
336	Preparation and characterization of atomically clean, stoichiometric surfaces of n- and p-type GaN(0001). <i>Journal of Applied Physics</i> , 2003 , 94, 3163-3172	2.5	104

- 335 Band offset measurements of the Si₃N₄/GaN (0001) interface. *Journal of Applied Physics*, **2003**, 94, 3949-3954 76
- 334 Effect Of Implantation Temperature On Damage Accumulation In Ar - Implanted GaN. *MRS Internet Journal of Nitride Semiconductor Research*, **2002**, 7, 1 3
- 333 Maskless pendeo-epitaxial growth of GaN films. *Journal of Electronic Materials*, **2002**, 31, 421-428 1.9 9
- 332 Application of Nomarski interference contrast microscopy as a thickness monitor in the preparation of transparent, SiC-based, cross-sectional TEM samples. *Ultramicroscopy*, **2002**, 92, 265-71 3.1 8
- 331 The influence of band offsets on the IV characteristics for GaN/SiC heterojunctions. *Solid-State Electronics*, **2002**, 46, 827-835 1.7 15
- 330 Growth and decomposition of bulk GaN: role of the ammonia/nitrogen ratio. *Journal of Crystal Growth*, **2002**, 236, 529-537 1.6 13
- 329 Surface instability and associated roughness during conventional and pendeo-epitaxial growth of GaN(0001) films via MOVPE. *Journal of Crystal Growth*, **2002**, 241, 141-150 1.6 34
- 328 High temperature nucleation and growth of GaN crystals from the vapor phase. *Journal of Crystal Growth*, **2002**, 241, 404-415 1.6 20
- 327 Electron-beam-induced optical memory effects in GaN. *Applied Physics Letters*, **2002**, 80, 2675-2677 3.4 13
- 326 Cross-sectional imaging of pendeo-epitaxial GaN using continuous-wave two-photon microphotoluminescence. *Applied Physics Letters*, **2002**, 81, 1984-1986 3.4 9
- 325 Chemical, electrical, and structural properties of Ni/Au contacts on chemical vapor cleaned p-type GaN. *Journal of Applied Physics*, **2002**, 91, 9151-9160 2.5 19
- 324 Pd growth and subsequent Schottky barrier formation on chemical vapor cleaned p-type GaN surfaces. *Journal of Applied Physics*, **2002**, 91, 732-738 2.5 35
- 323 Electrical, structural and microstructural characteristics of as-deposited and annealed Pt and Au contacts on chemical-vapor-cleaned GaN thin films. *Journal of Applied Physics*, **2002**, 91, 2133-2137 2.5 10
- 322 Probing the Al_xGa_{1-x}N spatial alloy fluctuation via UV-photoluminescence and Raman at submicron scale. *Applied Physics Letters*, **2002**, 81, 4186-4188 3.4 9
- 321 Strain and crystallographic tilt in uncoalesced GaN layers grown by maskless pendeoepitaxy. *Applied Physics Letters*, **2002**, 80, 953-955 3.4 34
- 320 Observations of electron velocity overshoot during high-field transport in AlN. *Materials Research Society Symposia Proceedings*, **2002**, 743, L10.2.1
- 319 Probing the Al_xGa_{1-x}N Atomic Distribution via UV-Photoluminescence and Raman at Sub- μ m Scale. *Materials Research Society Symposia Proceedings*, **2002**, 719, 8231
- 318 Investigations regarding the maskless pendeo-epitaxial growth of GaN films prior to coalescence. *IEEE Journal of Quantum Electronics*, **2002**, 38, 1006-1016 2 14

317	TiC nanoisland formation on 6H-SiC(0001)Si. <i>Journal of Applied Physics</i> , 2002 , 91, 6081-6084	2.5	
316	Strain in cracked AlGaIn layers. <i>Journal of Applied Physics</i> , 2002 , 92, 118-123	2.5	26
315	Gallium nitride materials - progress, status, and potential roadblocks. <i>Proceedings of the IEEE</i> , 2002 , 90, 993-1005	14.3	30
314	Review of Pendeo-Epitaxial Growth and Characterization of Thin Films of GaN and AlGaIn Alloys on 6H-SiC(0001) and Si(111) Substrates. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 2001 , 6, 1		25
313	Ion implantation into gallium nitride. <i>Physics Reports</i> , 2001 , 351, 349-385	27.7	115
312	Time-Resolved Photoluminescence in Strained GaN Layers. <i>Physica Status Solidi A</i> , 2001 , 183, 151-155		5
311	Strain and Dislocation Reduction in Maskless Pendeo-Epitaxy GaN Thin Films. <i>Physica Status Solidi A</i> , 2001 , 188, 729-732		9
310	Lateral epitaxy and dislocation density reduction in selectively grown GaN structures. <i>Journal of Crystal Growth</i> , 2001 , 222, 706-718	1.6	58
309	In situ cleaning of GaN/6H-SiC substrates in NH ₃ . <i>Journal of Crystal Growth</i> , 2001 , 222, 452-458	1.6	13
308	Pendeo-epitaxial growth of thin films of gallium nitride and related materials and their characterization. <i>Journal of Crystal Growth</i> , 2001 , 225, 134-140	1.6	56
307	Conventional and pendeo-epitaxial growth of GaN(0001) thin films on Si(111) substrates. <i>Journal of Crystal Growth</i> , 2001 , 231, 335-341	1.6	32
306	Time-resolved spectroscopy of strained GaN/AlN/6H-SiC heterostructures grown by metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , 2001 , 78, 1062-1064	3.4	14
305	Optical metastability of subband gap (2.2 eV) yellow luminescence in GaN. <i>Applied Physics Letters</i> , 2001 , 79, 281-283	3.4	20
304	Growth of epitaxial CoSi ₂ on 6H-SiC(0001)Si. <i>Journal of Applied Physics</i> , 2001 , 90, 5924-5927	2.5	4
303	Photoluminescence and electrical characteristics of the two-dimensional electron gas in Si delta-doped GaN layers. <i>Applied Physics Letters</i> , 2001 , 78, 1688-1690	3.4	2
302	Kinetics and gas-surface dynamics of GaN homoepitaxial growth using NH ₃ -seeded supersonic molecular beams. <i>Surface Science</i> , 2001 , 494, 28-42	1.8	10
301	Polarization charges and polarization-induced barriers in Al _x Ga _{1-x} N/GaN and In _y Ga _{1-y} N/GaN heterostructures. <i>Applied Physics Letters</i> , 2001 , 79, 2916-2918	3.4	8
300	Reverse-annealing phenomenon during the high-temperature implantation of Ar ⁺ into GaN. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 693, 120		1

299	Surface Instability and Associated Roughness of Pendeo-epitaxy GaN (0001) Films Grown via Metalorganic Vapor Phase Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 693, 359		
298	Removal of 6H-SiC substrate influence when evaluating GaN thin film properties via x-ray. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 693, 519		
297	Electron transport in AlN under high electric fields. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 693, 666		
296	Helical-Type Surface Defects in GaN and InGaN Thin Films Epitaxially Grown on GaN Templates at Reduced Temperatures. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 693, 69		
295	Hot Electron Transport in AlN. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 639, 11331		
294	Effect of Interface Manipulation for MBE Growth of AlN on 6H-SiC. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 622, 561		2
293	Growth and characterization of GaN single crystals. <i>Journal of Crystal Growth</i> , 2000 , 208, 100-106	1.6	27
292	Crystallinity and microstructures of aluminum nitride films deposited on Si(111) substrates. <i>Solid-State Electronics</i> , 2000 , 44, 747-755	1.7	14
291	Optical characterization of wide bandgap semiconductors. <i>Thin Solid Films</i> , 2000 , 364, 98-106	2.2	9
290	Growth and microstructure of In _x Ga _{1-x} N films grown on SiC substrates via low pressure metalorganic vapor phase epitaxy. <i>Materials Science in Semiconductor Processing</i> , 2000 , 3, 163-171	4.3	7
289	Pendeo-epitaxial growth of gallium nitride on silicon substrates. <i>Journal of Electronic Materials</i> , 2000 , 29, 306-310	1.9	19
288	Pendeo-Epitaxy TM Process for Aluminum Gallium Nitride Thin Films on Silicon Carbide Substrates via Metalorganic Chemical Vapor Deposition. <i>Materials Science Forum</i> , 2000 , 338-342, 1491-1494	0.4	
287	Schottky barrier height and electron affinity of titanium on AlN. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000 , 18, 2082		10
286	Selective etching of GaN over AlN using an inductively coupled plasma and an O ₂ /Cl ₂ /Ar chemistry. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000 , 18, 879-881	2.9	13
285	Ion implanted dopants in GaN and AlN: Lattice sites, annealing behavior, and defect recovery. <i>Journal of Applied Physics</i> , 2000 , 87, 2149-2157	2.5	48
284	Hot electron transport in AlN. <i>Journal of Applied Physics</i> , 2000 , 88, 5865-5869	2.5	12
283	Dry Etching and Metallization Schemes in a GaN/SiC Heterojunction Device Process. <i>Materials Science Forum</i> , 2000 , 338-342, 1049-1052	0.4	5
282	Lateral- and Pendeo-Epitaxial Growth and Defect Reduction in GaN Thin Films. <i>Materials Science Forum</i> , 2000 , 338-342, 1471-1476	0.4	5

281	Photo-Emission Electron Microscopy (PEEM) of Cleaned and Etched 6H-SiC(0001). <i>Materials Science Forum</i> , 2000 , 338-342, 353-356	0.4	1
280	Influence of Annealing Conditions on Dopant Activation of Si ⁺ and Mg ⁺ Implanted GaN. <i>Materials Science Forum</i> , 2000 , 338-342, 1615-1618	0.4	
279	SiC MISFETs with MBE-grown AlN Gate Dielectric. <i>Materials Science Forum</i> , 2000 , 338-342, 1315-1318	0.4	14
278	Pendeo-epitaxial Growth and Characterization of GaN and related Materials on 6H-SiC(0001) and Si(111) Substrates. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 2000 , 5, 49-61		1
277	Pendeo-Epitaxy - A New Approach for Lateral Growth of Gallium Nitride Structures. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 1999 , 4, 275-280		7
276	Microstructure, electrical properties, and thermal stability of Ti-based ohmic contacts to n-GaN. <i>Journal of Materials Research</i> , 1999 , 14, 1032-1038	2.5	24
275	Dry Ex Situ Cleaning Processes for (0001) Si 6H-SiC Surfaces. <i>Journal of the Electrochemical Society</i> , 1999 , 146, 2648-2651	3.9	14
274	Stimulated emission in GaN thin films in the temperature range of 300-700 K. <i>Journal of Applied Physics</i> , 1999 , 85, 1792-1795	2.5	8
273	Evidence for localized Si-donor state and its metastable properties in AlGa _{0.15} N. <i>Applied Physics Letters</i> , 1999 , 74, 3833-3835	3.4	50
272	Thermal mismatch stress relaxation via lateral epitaxy in selectively grown GaN structures. <i>Applied Physics Letters</i> , 1999 , 74, 2492-2494	3.4	44
271	Electronic structure of the 0.88-eV luminescence center in electron-irradiated gallium nitride. <i>Physical Review B</i> , 1999 , 60, 1746-1751	3.3	2
270	Observation of highly dispersive surface states on GaN(0001)111. <i>Physical Review B</i> , 1999 , 59, R15586-R15589	3.3	36
269	Pendeoepitaxy of gallium nitride thin films. <i>Applied Physics Letters</i> , 1999 , 75, 196-198	3.4	163
268	Simulation and electrical characterization of GaN/SiC and AlGa _{0.15} N/SiC heterodiodes. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1999 , 61-62, 320-324	3.1	7
267	The potential performance of wide bandgap microwave power MESFETs. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1999 , 61-62, 419-423	3.1	2
266	Adhesion measurement of zirconium nitride and amorphous silicon carbide coatings to nickel and titanium alloys. <i>Surface and Coatings Technology</i> , 1999 , 114, 156-168	4.4	26
265	Imaging electron emission from diamond and III-V nitride surfaces with photo-electron emission microscopy. <i>Applied Surface Science</i> , 1999 , 146, 287-294	6.7	11
264	Electrochemical evaluation of molybdenum nitride electrodes in H ₂ SO ₄ electrolyte. <i>Journal of Applied Electrochemistry</i> , 1999 , 29, 75-80	2.6	22

263	Valence band discontinuity of the (0001) 2H-GaN / (111) 3C-SiC interface. <i>Journal of Electronic Materials</i> , 1999 , 28, L34-L37	1.9	25
262	Pendeo-epitaxy: A new approach for lateral growth of gallium nitride films. <i>Journal of Electronic Materials</i> , 1999 , 28, L5-L8	1.9	135
261	Reflectance Difference Spectroscopy Characterization of Al _x Ga _{1-x} N-Compound Layers. <i>Physica Status Solidi (B): Basic Research</i> , 1999 , 216, 215-220	1.3	3
260	Homoepitaxial GaN Layers Studied by Low-Energy Electron Microscopy, Atomic Force Microscopy and Transmission Electron Microscopy. <i>Physica Status Solidi A</i> , 1999 , 176, 469-473		3
259	Charge Redistribution at GaN/Ga ₂ O ₃ Interfaces: A Microscopic Mechanism for Low Defect Density Interfaces in Remote Plasma Processed MOS Devices Prepared on Polar GaN Faces. <i>Physica Status Solidi A</i> , 1999 , 176, 793-796		23
258	Valence band discontinuity, surface reconstruction, and chemistry of (0001), (0001), and (11 00) 2H-AlN/6H-SiC interfaces. <i>Journal of Applied Physics</i> , 1999 , 86, 4483-4490	2.5	33
257	Raman analysis of phonon lifetimes in AlN and GaN of wurtzite structure. <i>Physical Review B</i> , 1999 , 59, 12977-12982	3.3	138
256	Wet Chemical Processing of (0001)Si 6H-SiC Hydrophobic and Hydrophilic Surfaces. <i>Journal of the Electrochemical Society</i> , 1999 , 146, 1910-1917	3.9	48
255	Low-energy electron microscopy observations of GaN homoepitaxy using a supersonic jet source. <i>Applied Physics Letters</i> , 1999 , 75, 989-991	3.4	16
254	Growth, doping and characterization of epitaxial thin films and patterned structures of AlN, GaN, and Al _x Ga _{1-x} N. <i>Diamond and Related Materials</i> , 1999 , 8, 288-294	3.5	6
253	Raman analysis of the E1 and A1 quasi-longitudinal optical and quasi-transverse optical modes in wurtzite AlN. <i>Journal of Applied Physics</i> , 1999 , 85, 3535-3539	2.5	72
252	X-ray photoelectron spectroscopy analysis of GaN/(0001)AlN and AlN/(0001)GaN growth mechanisms. <i>Journal of Applied Physics</i> , 1999 , 86, 5584-5593	2.5	34
251	Chemical Vapor Cleaning of 6H-SiC Surfaces. <i>Journal of the Electrochemical Society</i> , 1999 , 146, 3448-3454	3.9	20
250	Pendeo-Epitaxial Growth and Characterization of GaN and Related Materials on 6H-SiC(0001) and Si(111) Substrates. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 595, 1		
249	Phonon Dynamics and Lifetimes of Aln and Gan Crystallites. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 1999 , 4, 787-792		
248	Reaction kinetics of silicon carbide deposition by gas-source molecular-beam epitaxy. <i>Journal of Crystal Growth</i> , 1998 , 183, 581-593	1.6	5
247	Surface melting in the heteroepitaxial nucleation of diamond on Ni. <i>Journal of Crystal Growth</i> , 1998 , 187, 81-88	1.6	14
246	The formation of crystalline defects and crystal growth mechanism in In _x Ga _{1-x} N/GaN heterostructure grown by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 1998 , 189-190, 24-28	1.6	55

245	Phase control of MoxN films via chemical vapor deposition. <i>Thin Solid Films</i> , 1998 , 324, 30-36	2.2	18
244	Optical and structural properties of lateral epitaxial overgrown GaN layers. <i>Journal of Crystal Growth</i> , 1998 , 189-190, 92-96	1.6	9
243	Spectroscopic ellipsometry and low-temperature reflectance: complementary analysis of GaN thin films. <i>Thin Solid Films</i> , 1998 , 313-314, 187-192	2.2	6
242	Acceptor and donor doping of AlxGa1-xN thin film alloys grown on 6H-SiC(0001) substrates via metalorganic vapor phase epitaxy. <i>Journal of Electronic Materials</i> , 1998 , 27, 229-232	1.9	12
241	Lateral epitaxial overgrowth of GaN films on SiO2 areas via metalorganic vapor phase epitaxy. <i>Journal of Electronic Materials</i> , 1998 , 27, 233-237	1.9	87
240	Analysis of reactor geometry and diluent gas flow effects on the metalorganic vapor phase epitaxy of AlN and GaN thin films on (6H)-SiC substrates. <i>Journal of Electronic Materials</i> , 1998 , 27, 238-245	1.9	12
239	Growth of highly (0001)-oriented aluminum nitride thin films with smooth surfaces on silicon carbide by gas-source molecular beam epitaxy. <i>Vacuum</i> , 1998 , 49, 189-191	3.7	4
238	Biaxial strain in AlxGa1-xN/GaN layers deposited on 6H-SiC. <i>Thin Solid Films</i> , 1998 , 324, 107-114	2.2	15
237	Synthesis of low oxygen concentration molybdenum nitride films. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998 , 248, 198-205	5.3	8
236	Growth of MoxN films via chemical vapor deposition of MoCl5 and NH3. <i>Surface and Coatings Technology</i> , 1998 , 102, 256-259	4.4	17
235	Electron emission properties of crystalline diamond and III-nitride surfaces. <i>Applied Surface Science</i> , 1998 , 130-132, 694-703	6.7	29
234	Diffraction-based cell detection using a microcontact printed antibody grating. <i>Analytical Chemistry</i> , 1998 , 70, 1108-11	7.8	126
233	Photoelectrochemical Capacitance-Voltage Measurements in GaN. <i>Journal of Electronic Materials</i> , 1998 , 27, L26-L28	1.9	7
232	Flat-flame diamond CVD: The effect of pressure and operating conditions for specific applications. <i>Diamond and Related Materials</i> , 1998 , 7, 133-138	3.5	4
231	Intrinsic exciton transitions in GaN. <i>Journal of Applied Physics</i> , 1998 , 83, 455-461	2.5	40
230	Transmission electron microscopy analysis of the oriented diamond growth on nickel substrates. <i>Journal of Applied Physics</i> , 1998 , 83, 7658-7663	2.5	3
229	Structural and electronic properties of boron nitride thin films containing silicon. <i>Journal of Applied Physics</i> , 1998 , 84, 5046-5051	2.5	47
228	Cleaning of AlN and GaN surfaces. <i>Journal of Applied Physics</i> , 1998 , 84, 5248-5260	2.5	249

227	Phonon density of states of bulk gallium nitride. <i>Applied Physics Letters</i> , 1998 , 73, 34-36	3.4	98
226	Chapter 1 Materials Properties and Characterization of SiC. <i>Semiconductors and Semimetals</i> , 1998 , 1-20	0.6	24
225	Growth and Characterization of Thin Films and Patterned Substrates of III-V Nitrides on SiC (0001) Substrates. <i>Materials Science Forum</i> , 1998 , 264-268, 1111-1114	0.4	
224	Electron emission characteristics of GaN pyramid arrays grown via organometallic vapor phase epitaxy. <i>Journal of Applied Physics</i> , 1998 , 84, 5238-5242	2.5	67
223	Cathodoluminescence studies of the deep level emission bands of Al _x Ga _{1-x} N films deposited on 6H-SiC(0001). <i>Journal of Applied Physics</i> , 1998 , 83, 469-475	2.5	24
222	Optical activation of Be implanted into GaN. <i>Applied Physics Letters</i> , 1998 , 73, 1622-1624	3.4	57
221	Optical characterization of lateral epitaxial overgrown GaN layers. <i>Applied Physics Letters</i> , 1998 , 72, 2990-2992	3.4	48
220	Investigation of optically active E1 transversal optic phonon modes in Al _x Ga _{1-x} N layers deposited on 6H-SiC substrates using infrared reflectance. <i>Applied Physics Letters</i> , 1998 , 73, 1760-1762	3.4	39
219	X-ray photoelectron diffraction from (3 $\bar{3}$) and (3 $\bar{3}$)R 30°(0001)Si 6H-SiC surfaces. <i>Journal of Applied Physics</i> , 1998 , 84, 6042-6048	2.5	24
218	Dependence of (0001) GaN/AlN valence band discontinuity on growth temperature and surface reconstruction. <i>Journal of Applied Physics</i> , 1998 , 84, 2086-2090	2.5	75
217	Lattice site location studies of ion implanted ⁸ Li in GaN. <i>Journal of Applied Physics</i> , 1998 , 84, 3085-3089	2.5	15
216	Fine structure of near-band-edge photoluminescence in He ⁺ -irradiated GaN grown on SiC. <i>Applied Physics Letters</i> , 1998 , 72, 2838-2840	3.4	19
215	Trends in residual stress for GaN/AlN/6H-SiC heterostructures. <i>Applied Physics Letters</i> , 1998 , 73, 2808-2810	3.4	40
214	A Free Electron Laser-Photoemission Electron Microscope System (FELPEEM). <i>Surface Review and Letters</i> , 1998 , 05, 1257-1268	1.1	52
213	Aluminum nitride-silicon carbide solid solutions grown by plasma-assisted, gas-source molecular beam epitaxy. <i>Journal of Materials Research</i> , 1998 , 13, 1816-1822	2.5	11
212	Microstructural factors influencing the properties of high surface area molybdenum nitride films converted from molybdenum trioxide films deposited via solution spray pyrolysis. <i>Journal of Materials Research</i> , 1998 , 13, 2237-2244	2.5	1
211	Pinholes, Dislocations and Strain Relaxation in InGaN. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 1998 , 3, 1		67
210	Growth and Characterization of GaN and Al _x Ga _{1-x} N Thin Films Achieved Via Lateral- and/or Pendeo-Epitaxial Overgrowth on 6H-SiC(0001) Substrates. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 535, 91		

209	Pendeo-Epitaxy A New Approach for Lateral Growth of Gallium Nitride Structures. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 537, 1		9
208	Phonon Dynamics and Lifetimes of AlN and GaN Crystallites. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 537, 1		
207	Coalesced oriented diamond films on nickel. <i>Journal of Materials Research</i> , 1998 , 13, 1120-1123	2.5	5
206	Microstructure and Properties of SiC/SiC and SiC/III-V Nitride Thin Film Heterostructural Assemblies 1998 , 629-636		
205	High rate and selective etching of GaN, AlGa _N , and AlN using an inductively coupled plasma. <i>Applied Physics Letters</i> , 1997 , 71, 3631-3633	3-4	137
204	Raman analysis of the configurational disorder in Al _x Ga _{1-x} N films. <i>Applied Physics Letters</i> , 1997 , 71, 2157-2159	3-4	63
203	Dislocation density reduction via lateral epitaxy in selectively grown GaN structures. <i>Applied Physics Letters</i> , 1997 , 71, 2472-2474	3-4	433
202	Deposition and doping of silicon carbide by gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , 1997 , 71, 1356-1358	3-4	18
201	Thin films of aluminum nitride and aluminum gallium nitride for cold cathode applications. <i>Applied Physics Letters</i> , 1997 , 71, 2289-2291	3-4	60
200	Control of diamond heteroepitaxy on nickel by optical reflectance. <i>Applied Physics Letters</i> , 1997 , 70, 2960-2962	3-4	21
199	Optical metastability in bulk GaN single crystals. <i>Applied Physics Letters</i> , 1997 , 71, 455-457	3-4	22
198	Microstructure, electrical properties, and thermal stability of Au-based ohmic contacts to p-GaN. <i>Journal of Materials Research</i> , 1997 , 12, 2249-2254	2.5	36
197	In situ mass spectrometry during diamond chemical vapor deposition using a low pressure flat flame. <i>Journal of Materials Research</i> , 1997 , 12, 2733-2742	2.5	16
196	The Composition Pulling Effect in MOVPE Grown InGa _N on GaN and AlGa _N and its TEM Characterization. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 1997 , 2, 1		132
195	Growth of GaN and Al _{0.2} Ga _{0.8} N on Patterened Substrates via Organometallic Vapor Phase Epitaxy. <i>Japanese Journal of Applied Physics</i> , 1997 , 36, L532-L535	1.4	115
194	Diluent Gas Effects on Properties of Al _N and GaN Thin Films Grown by Metalorganic Vapor Phase Epitaxy on (6H)-SiC Substrates. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 482, 241		1
193	Lateral Epitaxy Formation Mechanism and Microstructure of Selectively Grown GaN Structures. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 482, 452		11
192	Raman Analysis of Al _x Ga _{1-x} N Films. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 482, 587		1

191	Lateral epitaxy of low defect density GaN layers via organometallic vapor phase epitaxy. <i>Applied Physics Letters</i> , 1997 , 71, 2638-2640	3.4	597
190	Growth and doping via gas-source molecular beam epitaxy of SiC and heterostructures and their microstructural and electrical characterization. <i>Diamond and Related Materials</i> , 1997 , 6, 1282-1288	3.5	2
189	Growth, doping and characterization of Al _x Ga _{1-x} N thin film alloys on 6H-SiC(0001) substrates. <i>Diamond and Related Materials</i> , 1997 , 6, 196-201	3.5	5
188	Variation of GaN valence bands with biaxial stress and quantification of residual stress. <i>Applied Physics Letters</i> , 1997 , 70, 2001-2003	3.4	45
187	Low-temperature deposition of optically transparent diamond using a low-pressure flat flame. <i>Diamond and Related Materials</i> , 1997 , 6, 1862-1867	3.5	8
186	Chemical Considerations Regarding the Vapor-Phase Epitaxy of Binary and Ternary III-Nitride Thin Films. <i>ACS Symposium Series</i> , 1997 , 12-25	0.4	
185	Sublimation growth and characterization of bulk aluminum nitride single crystals. <i>Journal of Crystal Growth</i> , 1997 , 179, 363-370	1.6	67
184	Correlation of biaxial strains, bound exciton energies, and defect microstructures in gan films grown on AlN/6H-SiC(0001) substrates. <i>Journal of Electronic Materials</i> , 1997 , 26, 224-231	1.9	65
183	Highly anisotropic, ultra-smooth patterning of GaN/SiC by low energy electron enhanced etching in DC plasma. <i>Journal of Electronic Materials</i> , 1997 , 26, 301-305	1.9	27
182	Growth of AlN, GaN and Al _x Ga _{1-x} N thin films on vicinal and on-axis 6H-SiC(0001) substrates. <i>Journal of the European Ceramic Society</i> , 1997 , 17, 1775-1779	6	7
181	Silicon carbide for high-temperature microelectronics: recent advances in material growth via gas source MBE and device research. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997 , 46, 240-247	3.1	5
180	Spectral analysis of above-, below-, and near-bandedge phenomena in GaN thin films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997 , 50, 134-141	3.1	6
179	Indentation and microcutting fracture damage in a silicon carbide coating on an Incoloy substrate. <i>Surface and Coatings Technology</i> , 1997 , 88, 119-126	4.4	3
178	Growth of AlN and GaN thin films via OMVPE and gas source MBE and their characterization. <i>Solid-State Electronics</i> , 1997 , 41, 129-134	1.7	4
177	Hydrogen incorporation and its temperature stability in SiC crystals. <i>Solid-State Electronics</i> , 1997 , 41, 677-679	1.7	7
176	Homoepitaxial SiC Growth by Molecular Beam Epitaxy. <i>Physica Status Solidi (B): Basic Research</i> , 1997 , 202, 379-404	1.3	14
175	Gas-source molecular beam epitaxy of III-V nitrides. <i>Journal of Crystal Growth</i> , 1997 , 178, 87-101	1.6	18
174	Ohmic Contacts To GaN by Solid-Phase Regrowth. <i>Acta Physica Polonica A</i> , 1997 , 92, 819-823	0.6	2

173	Defect Formation during Hetero-Epitaxial Growth of Aluminum Nitride Thin Films on 6H-Silicon Carbide by Gas-Source Molecular Beam Epitaxy. <i>Japanese Journal of Applied Physics</i> , 1996 , 35, 1641-1647	1.4	36
172	Negative electron affinity surfaces of aluminum nitride and diamond. <i>Diamond and Related Materials</i> , 1996 , 5, 790-796	3.5	74
171	Vicinal and on-axis surfaces of 6H-SiC(0001) thin films observed by scanning tunneling microscopy. <i>Surface Science</i> , 1996 , 350, 247-253	1.8	24
170	Scanning tunneling microscopy studies of niobium carbide (100) and (110) surfaces. <i>Surface Science</i> , 1996 , 366, 85-92	1.8	16
169	Strain effects on excitonic transitions in GaN: Deformation potentials. <i>Physical Review B</i> , 1996 , 54, 13460-13463	3.3	146
168	Real-time assessment of overlayer removal on GaN, AlN, and AlGa _N surfaces using spectroscopic ellipsometry. <i>Applied Physics Letters</i> , 1996 , 69, 2065-2067	3.4	55
167	Ex Situ and In Situ Methods for Complete Oxygen and Non-Carbide Carbon Removal from (0001)Si 6H-SiC Surfaces. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 423, 563		
166	Nitride-Based Thin-Film Cold Cathode Emitters. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 449, 1121		2
165	Growth, Doping and Characterization of Al _x Ga _{1-x} N Thin Film Alloys on 6H-SiC(0001) Substrates. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 1996 , 1, 1		94
164	Electrical characterisation of epitaxial 6H-SiC by admittance spectroscopy. <i>Materials Science and Technology</i> , 1996 , 12, 94-97	1.5	3
163	Strain-related phenomena in GaN thin films. <i>Physical Review B</i> , 1996 , 54, 17745-17753	3.3	719
162	Cleaning of GaN surfaces. <i>Journal of Electronic Materials</i> , 1996 , 25, 805-810	1.9	118
161	Growth of SiC and III-V nitride thin films via gas-source molecular beam epitaxy and their characterization. <i>Journal of Crystal Growth</i> , 1996 , 164, 132-142	1.6	15
160	Microstructural evolution and defect formation during the initial stages of the growth of silicon carbide and aluminum nitride on 6H-SiC(0001) substrates. <i>Journal of Crystal Growth</i> , 1996 , 163, 93-99	1.6	9
159	UV photoemission study of heteroepitaxial AlGa _N films grown on 6H-SiC. <i>Applied Surface Science</i> , 1996 , 104-105, 455-460	6.7	59
158	Synthesis Routes and Characterization of High-Purity, Single-Phase Gallium Nitride Powders. <i>Journal of the American Ceramic Society</i> , 1996 , 79, 2309-2312	3.8	148
157	Optical studies of GaN and GaN/AlGa _N heterostructures on SiC substrates. <i>Applied Physics Letters</i> , 1996 , 69, 740-742	3.4	49
156	Electrical characteristics of metal/AlN/n-type 6H-SiC(0001) heterostructures. <i>Applied Physics Letters</i> , 1996 , 69, 2873-2875	3.4	39

155	Growth defects in GaN films on 6H-BiC substrates. <i>Applied Physics Letters</i> , 1996 , 68, 2678-2680	3.4	65
154	Textured diamond growth by low pressure flat flame chemical vapor deposition. <i>Applied Physics Letters</i> , 1996 , 69, 2258-2260	3.4	20
153	Binding energy for the intrinsic excitons in wurtzite GaN. <i>Physical Review B</i> , 1996 , 54, 16369-16372	3.3	74
152	Film/Substrate Orientation Relationship in the AlN/6H-SiC Epitaxial System. <i>Physical Review Letters</i> , 1996 , 77, 1797-1800	7.4	63
151	A donorlike deep level defect in Al _{0.12} Ga _{0.88} N characterized by capacitance transient spectroscopies. <i>Applied Physics Letters</i> , 1996 , 69, 2379-2381	3.4	35
150	Microstructure, electrical properties, and thermal stability of Al ohmic contacts to n-GaN. <i>Journal of Materials Research</i> , 1996 , 11, 2257-2262	2.5	30
149	Undoped and doped GaN thin films deposited on high-temperature monocrystalline AlN buffer layers on vicinal and on-axis (6H)-SiC(0001) substrates via organometallic vapor phase epitaxy. <i>Journal of Materials Research</i> , 1996 , 11, 1011-1018	2.5	52
148	Recent advances in the growth, doping and characterization of III-V nitride thin films 1996 , 1-24		
147	Alteration of oxidation behaviour of silicon carbide by aluminium implantation. <i>Journal of Materials Science Letters</i> , 1995 , 14, 460-463		2
146	Matrix characterization of fibre-reinforced SiC matrix composites fabricated by chemical vapour infiltration. <i>Journal of Materials Science</i> , 1995 , 30, 4279-4285	4.3	15
145	Determination of donor and acceptor level energies by admittance spectroscopy in 6H SiC. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1995 , 29, 122-125	3.1	10
144	A critical review of ohmic and rectifying contacts for silicon carbide. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1995 , 34, 83-105	3.1	351
143	GaN thin films deposited via organometallic vapor phase epitaxy on (6H)-BiC(0001) using high-temperature monocrystalline AlN buffer layers. <i>Applied Physics Letters</i> , 1995 , 67, 401-403	3.4	236
142	Observation of a negative electron affinity for boron nitride. <i>Applied Physics Letters</i> , 1995 , 67, 3912-3914	3.4	149
141	Initial stage of aluminum nitride film growth on 6H-silicon carbide by plasma-assisted, gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , 1995 , 66, 37-39	3.4	125
140	Synthesis and characterization of high purity, single phase GaN powder. <i>Powder Diffraction</i> , 1995 , 10, 266-268	1.8	54
139	Chemistry, microstructure, and electrical properties at interfaces between thin films of platinum and alpha (6H) silicon carbide (0001). <i>Journal of Materials Research</i> , 1995 , 10, 2336-2342	2.5	20
138	Chemistry, microstructure, and electrical properties at interfaces between thin films of titanium and alpha (6H) silicon carbide (0001). <i>Journal of Materials Research</i> , 1995 , 10, 668-679	2.5	82

137	Chemistry, microstructure, and electrical properties at interfaces between thin films of cobalt and alpha (6H) silicon carbide (0001). <i>Journal of Materials Research</i> , 1995 , 10, 26-33	2.5	36
136	Deposition of GaN Films Using Seeded Supersonic Jets. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 388, 265		7
135	Issues and Examples Regarding Growth of AlN, GaN and Al _x Ga _{1-x} N Thin Films via OMVPE and Gas Source MBE. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 395, 3		20
134	XPS Measurement of the SiC/AlN Band-Offset at the (0001) Interface. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 395, 375		17
133	Ex Situ and in Situ Methods for Oxide and Carbon Removal from AlN and GaN Surfaces. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 395, 739		20
132	Growth via MOCVD and Characterization of GaN and Al _x Ga _{1-x} N(0001) Alloys For Optoelectronic and Microelectronic Device Applications. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 415, 3		1
131	Silicon Carbide: The Premier Paradigm for Structural and Microelectronic Device Applications in Severe Environments. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 410, 365		
130	Kinetics and Mechanisms of Constant Stress Creep in the Non-Oxide Ceramics of SiC, SiC Whisker-Reinforced Si ₃ N ₄ Composites and AlN 1995 , 425-444		
129	Growth and characterization of cubic boron nitride thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1994 , 12, 3074-3081	2.9	129
128	Effects of gas flow ratio on silicon carbide thin film growth mode and polytype formation during gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , 1994 , 65, 2851-2853	3.4	53
127	Determination of ionization energies of the nitrogen donors in 6H-SiC by admittance spectroscopy. <i>Journal of Applied Physics</i> , 1994 , 76, 1956-1958	2.5	16
126	Interface chemistry and surface morphology in the initial stages of growth of GaN and AlN on 6SiC and sapphire. <i>Journal of Crystal Growth</i> , 1994 , 141, 11-21	1.6	79
125	Deposition and characterization of diamond, silicon carbide and gallium nitride thin films. <i>Journal of Crystal Growth</i> , 1994 , 137, 161-169	1.6	44
124	Deposition of III-N thin films by molecular beam epitaxy. <i>Microelectronics Journal</i> , 1994 , 25, 661-674	1.8	11
123	Observation of a negative electron affinity for heteroepitaxial AlN on 6H-SiC(0001). <i>Applied Physics Letters</i> , 1994 , 64, 3288-3290	3.4	199
122	Epitaxial Cu contacts on semiconducting diamond. <i>Diamond and Related Materials</i> , 1994 , 3, 883-886	3.5	14
121	Deposition and characterization of boron nitride thin films. <i>Diamond and Related Materials</i> , 1994 , 3, 332-336	3.5	70
120	Initial Stages of Growth of Thin Films of III-V Nitrides and Silicon Carbide Polytypes by Molecular Beam Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 339, 351		2

119	Molecular Beam Epitaxy of Boron Nitride Thin Films and Their Analytical Characterization. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 363, 139		
118	Epitaxial nucleation of diamond on SiC via bias-enhanced microwave plasma chemical vapor deposition. <i>Diamond and Related Materials</i> , 1993 , 2, 142-146	3.5	95
117	Deposition of highly resistive, undoped, and p-type, magnesium-doped gallium nitride films by modified gas source molecular beam epitaxy. <i>Applied Physics Letters</i> , 1993 , 63, 990-992	3.4	90
116	Phase evolution in boron nitride thin films. <i>Journal of Materials Research</i> , 1993 , 8, 1213-1216	2.5	183
115	Gas-source molecular beam epitaxy of monocrystalline SiC on vicinal (6H)SiC. <i>Journal of Materials Research</i> , 1993 , 8, 2753-2756	2.5	22
114	Aluminum nitride/silicon carbide multilayer heterostructure produced by plasma-assisted, gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , 1993 , 62, 3333-3335	3.4	31
113	Effect of self-implantation on structure and oxidation behavior of single crystal SiC. <i>Applied Physics Letters</i> , 1993 , 62, 423-425	3.4	12
112	Photoassisted growth of gallium nitride by gas source molecular beam epitaxy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993 , 11, 18-24	2.9	4
111	Deposition, characterization, and device development in diamond, silicon carbide, and gallium nitride thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993 , 11, 829-837	2.9	49
110	Kinetics and mechanisms of high-temperature creep in polycrystalline aluminum nitride. <i>Journal of Materials Research</i> , 1993 , 8, 1101-1108	2.5	6
109	Solid solutions of AlN and SiC grown by plasma-assisted, gas-source molecular beam epitaxy. <i>Journal of Materials Research</i> , 1993 , 8, 1477-1480	2.5	21
108	Epitaxial growth of AlN by plasma-assisted, gas-source molecular beam epitaxy. <i>Journal of Materials Research</i> , 1993 , 8, 2310-2314	2.5	48
107	Thin films and devices of diamond, silicon carbide and gallium nitride 1993 , 1-15		
106	Thin film Ti/6H-SiC interfacial reaction: high spatial resolution electron microscopy study. <i>Ultramicroscopy</i> , 1993 , 52, 289-296	3.1	11
105	Layer-by-layer growth of SiC at low temperatures. <i>Thin Solid Films</i> , 1993 , 225, 219-224	2.2	22
104	Layer-by-layer epitaxial growth of GaN at low temperatures. <i>Thin Solid Films</i> , 1993 , 225, 244-249	2.2	29
103	Molecular beam epitaxy of nitride thin films. <i>Journal of Crystal Growth</i> , 1993 , 127, 136-142	1.6	37
102	Photo-induced phase inhibition during growth of boron nitride thin films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1993 , 18, 275-280	3.1	1

101	Thin films and devices of diamond, silicon carbide and gallium nitride. <i>Physica B: Condensed Matter</i> , 1993 , 185, 1-15	2.8	122
100	Aromatization of 2+2 cycloadducts of butadienes and fluoroolefins other than tetrafluoroethylene. <i>Journal of Fluorine Chemistry</i> , 1993 , 63, 59-68	2.1	7
99	Novel phases in shock-compacted mixtures of diamond and boron nitride. <i>Journal of Materials Science Letters</i> , 1993 , 12, 1768-1770		8
98	Chemistry and Structure of Beta Silicon Carbide Implanted with High-Dose Aluminum. <i>Journal of the American Ceramic Society</i> , 1993 , 76, 330-335	3.8	14
97	Boron nitride thin films by microwave ECR plasma chemical vapor deposition. <i>Thin Solid Films</i> , 1993 , 235, 30-34	2.2	8
96	Metal Schottky barrier contacts to alpha 6H-SiC. <i>Journal of Applied Physics</i> , 1992 , 72, 4757-4760	2.5	160
95	Epitaxial thin film growth, characterization and device development in monocrystalline 6H silicon carbide. <i>Diamond and Related Materials</i> , 1992 , 1, 109-120	3.5	22
94	Luminescence and lattice parameter of cubic gallium nitride. <i>Journal of Materials Science Letters</i> , 1992 , 11, 261-262		47
93	Diffusion-Accommodated Grain Boundary Sliding and Dislocation Glide in the Creep of Sintered Alpha Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 1786-1795	3.8	31
92	Theory of native defects, doping and diffusion in diamond and silicon carbide. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1992 , 11, 265-272	3.1	46
91	Chemical and structural analyses of the titanium nitride/alpha (6H)-silicon carbide interface. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1992 , 10, 1625-1630	2.9	49
90	Heteroepitaxial Growth and Characterization of Titanium Films on Alpha (6H) Silicon Carbide. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 221, 99		6
89	AlN/GaN superlattices grown by gas source molecular beam epitaxy. <i>Thin Solid Films</i> , 1991 , 200, 311-320	2.2	47
88	Microstructural characterization of a creep-deformed SiC whisker-reinforced Si ₃ N ₄ . <i>Ultramicroscopy</i> , 1991 , 37, 263-278	3.1	6
87	In situ incorporation of Al and N and p-n junction diode fabrication in alpha(6H)-SiC thin films. <i>Journal of Electronic Materials</i> , 1991 , 20, 289-294	1.9	16
86	Growth rate and surface microstructure in 6H-SiC thin films grown by chemical vapor deposition. <i>Journal of Electronic Materials</i> , 1991 , 20, 869-874	1.9	20
85	Low energy ion-assisted deposition of titanium nitride ohmic contacts on alpha (6H)-silicon carbide. <i>Applied Physics Letters</i> , 1991 , 59, 2868-2870	3.4	29
84	Atmospheric Effects on Compressive Creep of SiC-Whisker-Reinforced Alumina. <i>Journal of the American Ceramic Society</i> , 1991 , 74, 1240-1247	3.8	38

83	Deformation and microstructural changes in SiC whisker-reinforced Si ₃ N ₄ composites. <i>Journal of Materials Research</i> , 1991 , 6, 2735-2746	2.5	8
82	The role of geometric considerations in the diamond-cubic boron nitride heteroepitaxial system. <i>Journal of Applied Physics</i> , 1991 , 69, 2679-2681	2.5	11
81	Studies of SiC (001) and (111) surfaces by scanning tunneling microscopy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1991 , 9, 681		17
80	Advanced electron cyclotron resonance chemical vapor deposition SiC coatings and x-ray mask membranes. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1991 , 9, 3258		26
79	Scanning tunneling microscopy and spectroscopy of cubic SiC(111) surfaces. <i>Surface Science</i> , 1991 , 256, 354-360	1.8	82
78	. <i>Proceedings of the IEEE</i> , 1991 , 79, 677-701	14.3	333
77	. <i>Proceedings of the IEEE</i> , 1991 , 79, 702-712	14.3	331
76	Electron Microscopy of Defects in Epitaxial SiC Thin Films Grown on Silicon and Carbon {0001} Faces of SiC Substrates. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 1283-1288	3.8	7
75	Effect of Substrate Orientation on Interfacial and Bulk Character of Chemically Vapor Deposited Monocrystalline Silicon Carbide Thin Films. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 1289-1296	3.8	6
74	Scanning Tunneling Microscopy of Cubic Silicon Carbide Surfaces. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 3264-3268	3.8	18
73	Steady-state creep of hot-pressed SiC whisker-reinforced silicon nitride. <i>Composites Science and Technology</i> , 1990 , 37, 313-328	8.6	28
72	The analysis of defect structures and substrate/film interfaces of diamond thin films. <i>Journal of Crystal Growth</i> , 1990 , 99, 1168-1176	1.6	35
71	Deposition of oxide films by metal-organic molecular-beam epitaxy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1990 , 8, 327		18
70	Growth of AlN/GaN layered structures by gas source molecular-beam epitaxy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1990 , 8, 316		97
69	Growth of boron nitride films by gas molecular-beam epitaxy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1990 , 8, 323		11
68	Hall measurements as a function of temperature on monocrystalline SiC thin films. <i>Journal of Applied Physics</i> , 1990 , 67, 6375-6381	2.5	59
67	Design and performance of an electron cyclotron resonance plasma source for standard molecular beam epitaxy equipment. <i>Review of Scientific Instruments</i> , 1990 , 61, 2407-2411	1.7	48
66	Deep-Level Dominated Electrical Characteristics of Au Contacts on SiC. <i>Journal of the Electrochemical Society</i> , 1990 , 137, 1598-1603	3.9	14

65	Defects in Cubic SiC on Si. <i>Radiation Effects and Defects in Solids</i> , 1990 , 112, 77-84	0.9	20
64	Dopant Redistribution during Thermal Oxidation of Monocrystalline Beta - SiC Thin Films. <i>Journal of the Electrochemical Society</i> , 1989 , 136, 502-507	3.9	34
63	Growth rate, surface morphology, and defect microstructures of SiC films chemically vapor deposited on 6H-SiC substrates. <i>Journal of Materials Research</i> , 1989 , 4, 204-214	2.5	84
62	Growth of cubic phase gallium nitride by modified molecular-beam epitaxy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1989 , 7, 701-705	2.9	335
61	Crystallographic Etching Phenomenon during Plasma Etching of SiC (100) Thin Films in SF ₆ . <i>Journal of the Electrochemical Society</i> , 1989 , 136, 491-495	3.9	7
60	The effects of thermal annealing on the microstructural, optical and electrical properties of beta silicon carbide films implanted with boron or nitrogen. <i>Journal of Electronic Materials</i> , 1989 , 18, 157-165 ^{1.9}	1.9	12
59	Dislocation mechanisms, diffusional processes and creep behavior in NbC _x . <i>Acta Metallurgica</i> , 1989 , 37, 417-427		7
58	Epitaxial growth and doping of and device development in monocrystalline SiC semiconductor thin films. <i>Thin Solid Films</i> , 1989 , 181, 1-15	2.2	42
57	Correlation Among Process Routes, Microstructures and Properties of Chemically Vapor Deposited Silicon Carbide. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 168, 145		5
56	Epitaxial Thin Film Growth and Device Development in Monocrystalline Alpha and Beta Silicon Carbide. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 162, 463		6
55	Plasma-Assisted Chemical Vapor Deposition of Ceramic Films and Coatings. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 155, 213		1
54	Kinetics and Mechanisms of High-Temperature Creep in Silicon Carbide: III, Sintered Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 1988 , 71, 281-295	3.8	86
53	Self-diffusion of silicon-30 and nitrogen-15 in β -phase silicon nitride. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1988 , 105-106, 47-54	5.3	24
52	Critical evaluation of the status of the areas for future research regarding the wide band gap semiconductors diamond, gallium nitride and silicon carbide. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1988 , 1, 77-104	3.1	212
51	Formation energies, abundances, and the electronic structure of native defects in cubic SiC. <i>Physical Review B</i> , 1988 , 38, 12752-12755	3.3	137
50	Chemical vapor deposition and characterization of 6H-SiC thin films on off-axis 6H-SiC substrates. <i>Journal of Applied Physics</i> , 1988 , 64, 2672-2679	2.5	192
49	Summary Abstract: Structural and chemical characterization of diamond films and diamond-substrate interfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1988 , 6, 1819-1820	2.9	7
48	Scanning tunneling microscopy of cubic silicon carbide surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1988 , 6, 696-698	2.9	8

47	Electrical properties of ion-implanted p-n junction diodes in β -SiC. <i>Journal of Applied Physics</i> , 1988 , 63, 922-929	2.5	83
46	Characterization of device parameters in high-temperature metal-oxide-semiconductor field-effect transistors in β -SiC thin films. <i>Journal of Applied Physics</i> , 1988 , 64, 2168-2177	2.5	103
45	Summary Abstract: Epitaxial growth, doping, and analytical characterization of monocrystalline beta-SiC semiconductor thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1988 , 6, 1954-1956	2.9	
44	Electrical Contacts to Beta Silicon Carbide Thin Films. <i>Journal of the Electrochemical Society</i> , 1988 , 135, 359-362	3.9	61
43	Ion implantation in β -SiC: Effect of channeling direction and critical energy for amorphization. <i>Journal of Materials Research</i> , 1988 , 3, 321-328	2.5	51
42	Correlation of steady-state creep and changing microstructure in polycrystalline SiC sintered with powder derived via gaseous reactants in an arc plasma. <i>Journal of Materials Research</i> , 1988 , 3, 1021-1030	2.5	4
41	The effect of off-axis Si (100) substrates on the defect structure and electrical properties of β -SiC thin films. <i>Journal of Materials Research</i> , 1988 , 3, 521-530	2.5	43
40	Interface structures in beta-silicon carbide thin films. <i>Applied Physics Letters</i> , 1987 , 50, 203-205	3.4	80
39	High-temperature depletion-mode metal-oxide-semiconductor field-effect transistors in beta-SiC thin films. <i>Applied Physics Letters</i> , 1987 , 51, 2028-2030	3.4	103
38	Temperature dependence of the current-voltage characteristics of metal-semiconductor field-effect transistors in n-type β -SiC grown via chemical vapor deposition. <i>Applied Physics Letters</i> , 1987 , 51, 442-444	3.4	47
37	Defects in neutron irradiated SiC. <i>Applied Physics Letters</i> , 1987 , 50, 1138-1140	3.4	68
36	Photoluminescence spectroscopy of ion-implanted 3C-SiC grown by chemical vapor deposition. <i>Journal of Applied Physics</i> , 1987 , 61, 2011-2016	2.5	64
35	Steady-state creep behavior of hot isostatically pressed niobium carbide. <i>Materials Research Bulletin</i> , 1987 , 22, 1233-1240	5.1	5
34	Occurrence and Distribution of Boron-Containing Phases in Sintered Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 1986 , 69, 695-698	3.8	27
33	Chemical Etching of Ion Implanted Amorphous Silicon Carbide. <i>Journal of the Electrochemical Society</i> , 1986 , 133, 650-652	3.9	9
32	Theoretically predicted and experimentally determined effects of the Si/(Si+C) gas phase ratio on the growth and character of monocrystalline beta silicon carbide films. <i>Journal of Applied Physics</i> , 1986 , 60, 2897-2903	2.5	33
31	Epitaxial growth of β -SiC thin films on 6H β -SiC substrates via chemical vapor deposition. <i>Applied Physics Letters</i> , 1986 , 49, 1074-1076	3.4	73
30	Dry etching of β -SiC in CF ₄ and CF ₄ +O ₂ mixtures. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1986 , 4, 590-593	2.9	60

29	Theoretical and Empirical Studies of Impurity Incorporation into β SiC Thin Films during Epitaxial Growth. <i>Journal of the Electrochemical Society</i> , 1986 , 133, 2350-2357	3.9	57
28	Kinetics and Mechanisms of Creep in Hot Isostatically Pressed Niobium Carbide. <i>Materials Research Society Symposia Proceedings</i> , 1985 , 60, 153		1
27	Electron cyclotron resonance in cubic SiC. <i>Solid State Communications</i> , 1985 , 55, 67-69	1.6	99
26	Extrinsic gettering via the controlled introduction of misfit dislocations. <i>Applied Physics Letters</i> , 1985 , 46, 419-421	3.4	33
25	Microstructural, chemical, and electrical characterization of the beta silicon carbide thin-film silicon substrate interface. <i>Applied Physics Letters</i> , 1985 , 47, 850-852	3.4	9
24	Epitaxial Growth and Characterization of β SiC Thin Films. <i>Journal of the Electrochemical Society</i> , 1985 , 132, 642-648	3.9	235
23	Kinetics and Mechanisms of High-Temperature Creep in Silicon Carbide: II, Chemically Vapor Deposited. <i>Journal of the American Ceramic Society</i> , 1984 , 67, 732-740	3.8	105
22	Kinetics and Mechanisms of High-Temperature Creep in Silicon Carbide: I, Reaction-Bonded. <i>Journal of the American Ceramic Society</i> , 1984 , 67, 409-417	3.8	90
21	Thermal Stresses in Heteroepitaxial Beta Silicon Carbide Thin Films Grown on Silicon Substrates. <i>Journal of the Electrochemical Society</i> , 1984 , 131, 3014-3018	3.9	59
20	Ion-beam and laser mixing of nickel overlayers on silicon carbide. <i>Journal of Applied Physics</i> , 1984 , 56, 1577-1582	2.5	31
19	Structural and microstructural transitions during phase separation and crystallization of Al ₂ O ₃ -SiO ₂ -P ₂ O ₅ -Y ₂ O ₃ glass. <i>Journal of Materials Science</i> , 1983 , 18, 2108-2116	4.3	2
18	Thermodynamic Calculations for the Chemical Vapor Deposition of Silicon Nitride. <i>Journal of the American Ceramic Society</i> , 1983 , 66, 551-558	3.8	45
17	Thermodynamic Calculations for the Chemical Vapor Deposition of Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 1983 , 66, 558-566	3.8	81
16	Hot isostatic pressing of niobium carbide. <i>Materials Science and Engineering</i> , 1982 , 55, 289-292		4
15	Self-diffusion of silicon-30 in β SiC single crystals. <i>Journal of Materials Science</i> , 1981 , 16, 2485-2494	4.3	127
14	Self-diffusion of ⁹⁵ Nb in single crystals of NbC _x . <i>Journal of Physics and Chemistry of Solids</i> , 1981 , 42, 83-87	3.9	23
13	Self-diffusion of ³⁰ Si in polycrystalline β SiC. <i>Journal of Materials Science</i> , 1980 , 15, 2073-2080	4.3	119
12	Self-Diffusion of Carbon-14 in High-Purity and N-Doped β SiC Single Crystals. <i>Journal of the American Ceramic Society</i> , 1980 , 63, 546-552	3.8	109

11	High-temperature, multi-atmosphere, constant stress compression creep apparatus. <i>Review of Scientific Instruments</i> , 1980 , 51, 1352-1357	1.7	22
10	Self-diffusion of ¹⁴ C in single crystals of NbC _x . <i>Journal of Physics and Chemistry of Solids</i> , 1979 , 40, 997-1006		28
9	Self-diffusion of ¹⁴ C in polycrystalline SiC. <i>Journal of Materials Science</i> , 1979 , 14, 2411-2421	4.3	134
8	Near-surface effect in self-diffusion in NbC _x . <i>Physica Status Solidi A</i> , 1979 , 51, 261-267		7
7	Densities of SiO ₂ -Al ₂ O ₃ Melts. <i>Journal of the American Ceramic Society</i> , 1979 , 62, 332-336	3.8	70
6	Electronic Conductivity and Related Properties of Amorphous and Crystallized V ₂ O ₅ -Based Glasses. <i>Journal of the American Ceramic Society</i> , 1979 , 62, 403-410	3.8	33
5	Thermomechanical behavior of unannealed NbC _x single crystals. <i>Materials Science and Engineering</i> , 1979 , 39, 275-277		2
4	Deposition of diffusion tracers on SiC using a travelling solvent zone. <i>Materials Science and Engineering</i> , 1978 , 33, 145-147		3
3	Precision grinding device for radioactive tracer diffusion studies in very hard ceramic materials. <i>Review of Scientific Instruments</i> , 1978 , 49, 83	1.7	7
2	Decomposition of Mullite. <i>Journal of the American Ceramic Society</i> , 1972 , 55, 98-101	3.8	34
1	Diffusion and Reaction Studies in the System Al ₂ O ₃ -SiO ₂ . <i>Journal of the American Ceramic Society</i> , 1972 , 55, 525-531	3.8	164