

Michael Dudley

List of Publications by Year in Descending Order

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

165 papers	1,617 citations	24 h-index	34 g-index
169 ext. papers	1,909 ext. citations	2 avg, IF	4.26 L-index

#	Paper	IF	Citations
165	Strain mapping of GaN substrates and epitaxial layers used for power electronic devices by synchrotron X-ray rocking curve topography. <i>Journal of Crystal Growth</i> , 2022 , 583, 126559	1.6	0
164	Dislocations in 4 H - SiC Substrates and Epilayers 2021 , 169-197		
163	Synchrotron X-ray Topography Studies of Dislocation Behavior During Early Stages of PVT Growth of 4H-SiC Crystals. <i>Journal of Electronic Materials</i> , 2021 , 50, 3258-3265	1.9	0
162	Characterization of Hazy Morphology on AlInP/GaAs Epitaxial Wafers Grown by Organometallic Vapor-Phase Epitaxy. <i>Journal of Electronic Materials</i> , 2021 , 50, 3006-3012	1.9	1
161	Synchrotron X-ray topographic image contrast variation of screw-type basal plane dislocations located at different depths below the crystal surface in 4H-SiC. <i>Acta Materialia</i> , 2021 , 208, 116746	8.4	4
160	Characterization of Dislocations in 6H-SiC Wafer Through X-Ray Topography and Ray-Tracing Simulations. <i>Journal of Electronic Materials</i> , 2021 , 50, 4104-4117	1.9	
159	Dislocation contrast on X-ray topographs under weak diffraction conditions. <i>Journal of Applied Crystallography</i> , 2021 , 54, 1225-1233	3.8	2
158	Application of synchrotron X-ray topography to characterization of ion implanted GaN epitaxial layers for the development of vertical power devices. <i>MRS Advances</i> , 2021 , 6, 450-455	0.7	0
157	X-ray Topography Characterization of GaN Substrates Used for Power Electronic Devices. <i>Journal of Electronic Materials</i> , 2021 , 50, 2981-2989	1.9	2
156	Influence of surface relaxation on the contrast of threading edge dislocations in synchrotron X-ray topographs under the condition of $g \cdot b = 0$ and $g \cdot b \cdot l = 0$. <i>Journal of Applied Crystallography</i> , 2021 , 54, 439-443	3.8	3
155	Surface relaxation and photoelectric absorption effects on synchrotron X-ray topographic images of dislocations lying on the basal plane in off-axis 4H-SiC crystals. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021 , 271, 115281	3.1	1
154	Ray Tracing Simulation of Images of Dislocations and Inclusions on X-Ray Topographs of GaAs Epitaxial Wafers. <i>Journal of Electronic Materials</i> , 2020 , 49, 3472-3480	1.9	3
153	Relationship Between Basal Plane Dislocation Distribution and Local Basal Plane Bending in PVT-Grown 4H-SiC Crystals. <i>Journal of Electronic Materials</i> , 2020 , 49, 3455-3464	1.9	5
152	X-ray topography characterization of gallium nitride substrates for power device development. <i>Journal of Crystal Growth</i> , 2020 , 544, 125709	1.6	14
151	Characterization of defects and strain in the $(\text{Al}_x\text{Ga}_{1-x})_{0.5}\text{In}_{0.5}\text{P}/\text{GaAs}$ system by synchrotron X-ray topography. <i>Journal of Crystal Growth</i> , 2020 , 533, 125458	1.6	1
150	Synchrotron X-ray topography characterization of high quality ammonothermal-grown gallium nitride substrates. <i>Journal of Crystal Growth</i> , 2020 , 551, 125903	1.6	11
149	Progress in Bulk 4H SiC Crystal Growth for 150 mm Wafer Production. <i>Materials Science Forum</i> , 2020 , 1004, 37-43	0.4	2

148	Study of Nitrogen Doping Effect on Lattice Strain Variation in 4H-SiC Substrates by Synchrotron X-Ray Contour Mapping Method. <i>Materials Science Forum</i> , 2019 , 963, 336-340	0.4	
147	Studies on Lattice Strain Variation due to Nitrogen Doping by Synchrotron X-ray Contour Mapping Technique in PVT-Grown 4H-SiC Crystals. <i>Journal of Electronic Materials</i> , 2019 , 48, 3363-3369	1.9	1
146	Influence of Dopant Concentration on Dislocation Distributions in 150mm 4H SiC Wafers. <i>Materials Science Forum</i> , 2019 , 963, 60-63	0.4	0
145	Characterization of Strain Due to Nitrogen Doping Concentration Variations in Heavy Doped 4H-SiC. <i>Journal of Electronic Materials</i> , 2018 , 47, 938-943	1.9	6
144	High Quality AlN Single Crystal Substrates for AlGaN-Based Devices. <i>Materials Science Forum</i> , 2018 , 924, 923-926	0.4	10
143	Penetration Depth and Defect Image Contrast Formation in Grazing-Incidence X-ray Topography of 4H-SiC Wafers. <i>Journal of Electronic Materials</i> , 2018 , 47, 1218-1222	1.9	3
142	Mapping of Lattice Strain in 4H-SiC Crystals by Synchrotron Double-Crystal X-ray Topography. <i>Journal of Electronic Materials</i> , 2018 , 47, 903-909	1.9	17
141	Evaluation of Model for Determining Nitrogen Doping Concentration from Resultant Strain in Heavily Doped 4H-SiC Crystals. <i>ECS Transactions</i> , 2018 , 86, 53-61	1	
140	Optimization of 150 mm 4H SiC Substrate Crystal Quality. <i>Materials Science Forum</i> , 2018 , 924, 11-14	0.4	3
139	Automated Mapping of Micropipes in SiC Wafers Using Polarized-Light Microscope. <i>Materials Science Forum</i> , 2018 , 924, 527-530	0.4	1
138	Prismatic Slip in PVT-Grown 4H-SiC Crystals. <i>Journal of Electronic Materials</i> , 2017 , 46, 2040-2044	1.9	8
137	Understanding the microstructures of triangular defects in 4H-SiC homoepitaxial. <i>Journal of Crystal Growth</i> , 2017 , 480, 119-125	1.6	10
136	Studies on Doping Concentration Variations in 4H-SiC Substrates Using X-ray Contour Mapping. <i>ECS Transactions</i> , 2017 , 80, 275-283	1	1
135	Direct Determination of Burgers Vectors of Threading Mixed Dislocations in 4H-SiC Grown by PVT Method. <i>Journal of Electronic Materials</i> , 2016 , 45, 2045-2050	1.9	9
134	Effect of Doping Concentration Variations in PVT-Grown 4H-SiC Wafers. <i>Journal of Electronic Materials</i> , 2016 , 45, 2066-2070	1.9	4
133	Study of Defect Structures in 6H-SiC a/m-Plane Pseudofiber Crystals Grown by Hot-Wall CVD Epitaxy. <i>Journal of Electronic Materials</i> , 2016 , 45, 2078-2086	1.9	
132	Epitaxy of Boron Phosphide on Aluminum Nitride(0001)/Sapphire Substrate. <i>Crystal Growth and Design</i> , 2016 , 16, 981-987	3.5	45
131	Bulk Growth of Large Area SiC Crystals. <i>Materials Science Forum</i> , 2016 , 858, 5-10	0.4	41

130	Characterization of V-shaped Defects in 4H-SiC Homoepitaxial Layers. <i>Journal of Electronic Materials</i> , 2015 , 44, 1293-1299	1.9	2
129	Preparation, properties, and characterization of boron phosphide films on 4H- and 6H-silicon carbide. <i>Solid State Sciences</i> , 2015 , 47, 55-60	3.4	17
128	Direct Observation of Stacking Fault Nucleation from Deflected Threading Dislocations with Burgers Vector $c+a$ in PVT Grown 4H-SiC. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1693, 49		1
127	Structural Characterization of Lateral-grown 6H-SiC a/m -plane Seed Crystals by Hot Wall CVD Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1693, 43		
126	Effect of doping on crystalline quality of rubidium titanyl phosphate (RTP) crystals grown by the TSSG method. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1698, 71		1
125	Characterization of Threading Dislocations in PVT-Grown AlN Substrates via x-Ray Topography and Ray Tracing Simulation. <i>Journal of Electronic Materials</i> , 2014 , 43, 838-842	1.9	24
124	Characterization and Formation Mechanism of Six Pointed Star-Type Stacking Faults in 4H-SiC. <i>Journal of Electronic Materials</i> , 2013 , 42, 787-793	1.9	3
123	Quantitative Comparison Between Dislocation Densities in Offcut 4H-SiC Wafers Measured Using Synchrotron X-ray Topography and Molten KOH Etching. <i>Journal of Electronic Materials</i> , 2013 , 42, 794-798	1.9	4
122	Defect Generation Mechanisms in PVT-Grown AlN Single Crystal Boules. <i>Materials Science Forum</i> , 2013 , 740-742, 91-94	0.4	11
121	Grazing Incidence X-ray Topographic Studies of Threading Dislocations in Hydrothermal Grown ZnO Single Crystal Substrates. <i>Materials Research Society Symposia Proceedings</i> , 2013 , 1494, 121-126		6
120	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
119	Growth mechanisms and defect structures of B12As2 epilayers grown on 4 H-SiC substrates. <i>Journal of Crystal Growth</i> , 2012 , 352, 3-8	1.6	5
118	Lateral Growth Expansion of 4H/6H-SiC M -Plane Pseudo Fiber Crystals by Hot Wall CVD Epitaxy. <i>Materials Science Forum</i> , 2012 , 717-720, 33-36	0.4	4
117	Simulation of Grazing-Incidence Synchrotron X-ray Topographic Images of Threading $c+a$ Dislocations in 4H-SiC. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1433, 53		18
116	Characterization of 4H Silicon Carbide Films Grown by Solvent-Laser Heated Floating Zone. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1433, 113		1
115	Elimination of Degenerate Epitaxy in the Growth of High Quality B12As2 Single Crystalline Epitaxial Films. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1307, 1		3
114	Mechanism for Improved Quality B12As2 Epitaxial Films on (0001) 4H-SiC Substrates Offcut towards $[1\bar{1}00]$. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1246, 1		4
113	Characterization of 100 mm Diameter 4H-Silicon Carbide Crystals with Extremely Low Basal Plane Dislocation Density. <i>Materials Science Forum</i> , 2010 , 645-648, 291-294	0.4	15

112	Analysis of Dislocation Behavior in Low Dislocation Density, PVT-Grown, Four-Inch Silicon Carbide Single Crystals. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1246, 1		18
111	Crystal Growth Techniques and Characterization: An Overview 2010 , 3-16		7
110	X-Ray Topography Techniques for Defect Characterization of Crystals 2010 , 1425-1451		19
109	Nucleation Mechanism of 6H-SiC Polytype Inclusions Inside 15R-SiC Crystals. <i>Journal of Electronic Materials</i> , 2010 , 39, 799-804	1.9	3
108	Growth and Characterization of Silicon Carbide Crystals 2010 , 797-820		11
107	Electronic Impact of Inclusions in Diamond. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1203, 1		4
106	A Novel X-ray Diffraction Based Technique for Complete Stress State Mapping of Packaged Silicon Dies. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1158, 1		1
105	Origins of Twinned Microstructures in B12As2 Epilayers Grown on (0001) 6H-SiC and Their Influence on Physical Properties. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1164, 1		
104	Growth of Boron Carbide Crystals from a Copper Flux. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1164, 1		
103	Reduction of Chemical Reaction Mechanism for Halide-Assisted Silicon Carbide Epitaxial Film Deposition. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 3860-3866	3.9	9
102	Stress Mapping of SiC Wafers by Synchrotron White Beam X-ray Reticulography. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1069, 1		
101	Synthesis of GaN Nanostructures at Low Temperatures by Chemical Vapor Deposition. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1080, 1		
100	Studies of c-Axis Threading Screw Dislocations in Hexagonal SiC. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1069, 1		
99	Determination of the Core-structure of Shockley Partial Dislocations in 4H-SiC. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1069, 1069-D03-03-01		
98	Characterization and Growth Mechanism of B12As2 Epitaxial Layers Grown on (1-100) 15R-SiC. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1069, 1		
97	Single-crystalline B12As2 on m-plane (11 $\bar{2}$ 0) 15R-SiC. <i>Applied Physics Letters</i> , 2008 , 92, 231917	3.4	10
96	Simulation of Grazing-Incidence Synchrotron White Beam X-ray Topographic Images of Micropipes in 4H-SiC and Determination of Their Dislocation Senses. <i>Journal of Electronic Materials</i> , 2008 , 37, 713-720	1.9	11
95	Investigation of Electron-Hole Recombination-Activated Partial Dislocations and Their Behavior in 4H-SiC Epitaxial Layers. <i>Journal of Electronic Materials</i> , 2008 , 37, 706-712	1.9	

94	Synthesis of Molybdenum Oxide Nanoplatelets during Crystallization of the Precursor Gel from Its Hybrid Nanocomposites. <i>Chemistry of Materials</i> , 2007 , 19, 979-981	9.6	34
93	Interaction Between Recombination Enhanced Dislocation Glide Process Activated Basal Stacking Faults and Threading Dislocations in 4H-Silicon Carbide Epitaxial Layers. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 994, 1		
92	Chemical Vapor Deposition of Silicon Carbide Epitaxial Films and Their Defect Characterization. <i>Journal of Electronic Materials</i> , 2007 , 36, 332-339	1.9	7
91	Sublimation Growth and Defect Characterization of AlN Single Crystals. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1040, 1		
90	Direct determination of dislocation sense of closed-core threading screw dislocations using synchrotron white beam x-ray topography in 4H silicon carbide. <i>Applied Physics Letters</i> , 2007 , 91, 141918 ³⁻⁴		26
89	High-resolution x-ray topography of dislocations in 4H-SiC epilayers. <i>Journal of Materials Research</i> , 2007 , 22, 845-849	2.5	6
88	Behavior of Basal Plane Dislocations and Low Angle Grain Boundary Formation in Hexagonal Silicon Carbide. <i>Materials Science Forum</i> , 2007 , 556-557, 231-234	0.4	8
87	Defect Structures of B12As2 Epilayers Grown on c-plane and a-plane 6H-SiC Substrates. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 994, 1		
86	Defect analysis in crystals using X-ray topography. <i>Microscopy Research and Technique</i> , 2006 , 69, 343-58	2.8	34
85	The character of micropipes in silicon carbide crystals. <i>Philosophical Magazine</i> , 2006 , 86, 1209-1225	1.6	9
84	Novel Method for High Speed SiC Vapor Growth. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 9		1
83	Growth and Surface Morphologies of 6H SiC Bulk and Epitaxial Crystals. <i>Materials Science Forum</i> , 2006 , 527-529, 67-70	0.4	2
82	High-Resolution X-ray Topography of Dislocations in 4H-SiC Epilayers. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 11		
81	Preparation and Electrical Properties of the MWNT/Polymer Nanocomposite Fibers. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 963, 1		2
80	Electrospun Tungsten Oxide Nanofibers: Fabrication and Characterization. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 915, 1		
79	Process-Induced Deformations and Stacking Faults in 4H-SiC. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 2		3
78	Investigation of Low Angle Grain Boundaries in Hexagonal Silicon Carbide. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 955, 1		
77	Growth Mechanism and Dislocation Characterization of Silicon Carbide Epitaxial Films. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 27		3

76	Structural Characterization of Bulk AlN Single Crystals Grown from Self-Seeding and Seeding by SiC Substrates. <i>Materials Science Forum</i> , 2006 , 527-529, 1521-1524	0.4	2
75	Epitaxial growth and characterization of silicon carbide films. <i>Journal of Crystal Growth</i> , 2006 , 287, 344-348	4.0	
74	Multiplication of Basal Plane Dislocations via Interaction with c-Axis Threading Dislocations in 4H-SiC. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 4		2
73	Thermodynamic Studies of Carbon in Liquid Silicon Using the Central Atoms Model. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 060628061644005-???	3.8	
72	Characterization of bulk grown GaN and AlN single crystal materials. <i>Journal of Crystal Growth</i> , 2006 , 287, 349-353	1.6	18
71	Effects of Different Defect Types on the Performance of Devices Fabricated on a 4H-SiC Homoepitaxial Layer. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 3		6
70	The Formation Mechanism of Carrot Defects in SiC Epifilms. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 24		3
69	Memory and Perfection in Ferroelastic Inclusion Compounds. <i>Crystal Growth and Design</i> , 2005 , 5, 2100-2115	3.56	29
68	Chemical Vapor Deposition and Defect Characterization of Silicon Carbide Epitaxial Films. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 891, 1		1
67	Fabrication and Characterization of Molybdenum Oxide Nanofibers by Electrospinning. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 900, 1		1
66	Crystal Growth and Defect Characterization of AlN Single Crystals. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 892, 702		1
65	Structural characterization of GaN single crystal layers grown by vapor transport from a gallium oxide (Ga ₂ O ₃) powder source. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 892, 708		
64	Micropipes and the closure of axial screw dislocation cores in silicon carbide crystals. <i>Journal of Applied Physics</i> , 2004 , 96, 348-353	2.5	20
63	Characterization of SiC Epitaxial Structures using High-Resolution X-Ray Diffraction Techniques. <i>Materials Science Forum</i> , 2004 , 457-460, 157-162	0.4	6
62	PVT Growth of 6H SiC Crystals and Defect Characterization. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 815, 187		4
61	Characterization of SiC epilayers using high-resolution X-ray diffraction and synchrotron topography imaging. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 815, 258		5
60	Nondestructive Defect Characterization of SiC Epilayers and its Significance for SiC Device Research. <i>Materials Science Forum</i> , 2004 , 457-460, 601-604	0.4	3
59	X-ray characterization of GaN single crystal layers grown by the ammonothermal technique on HVPE GaN seeds and by the sublimation technique on sapphire seeds. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 831, 55		

58	Synchrotron white beam x-ray topography (SWBXT) and high resolution triple axis diffraction studies on AlN layers grown on 4H- and 6H-SiC seeds. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 831, 631		
57	Crucible Selection in AlN Bulk Crystal Growth. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 798, 361		4
56	Chemical mechanical polishing for decoration and measurement of dislocations on freestanding GaN wafers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003 , 2460-2463		11
55	Growth kinetics and thermal stress in AlN bulk crystal growth. <i>Journal of Crystal Growth</i> , 2003 , 253, 326-339		35
54	Contribution of x-ray topography and high-resolution diffraction to the study of defects in SiC. <i>Journal Physics D: Applied Physics</i> , 2003 , 36, A30-A36	3	52
53	Synchrotron White Beam X-Ray Topography and High Resolution Triple Axis X-Ray Diffraction Studies of Defects in SiC Substrates, Epilayers and Devices. <i>Materials Science Forum</i> , 2003 , 433-436, 247-252	9.4	5
52	Material defects in 4H-silicon carbide diodes. <i>Journal of Applied Physics</i> , 2003 , 93, 611-618	2.5	20
51	X-ray diffraction measurement of doping induced lattice mismatch in n-type 4H-SiC epilayers grown on p-type substrates. <i>Applied Physics Letters</i> , 2003 , 83, 1971-1973	3.4	27
50	Growth Kinetics and Thermal Stress in AlN Bulk Crystal Growth 2002 , 53		
49	Template effects, asymmetry, and twinning in helical inclusion compounds. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 965-9	16.4	21
48	Synchrotron white beam topography characterization of physical vapor transport grown AlN and ammonothermal GaN. <i>Journal of Crystal Growth</i> , 2002 , 246, 271-280	1.6	21
47	Enlargement of step-free SiC surfaces by homoepitaxial web growth of thin SiC cantilevers. <i>Journal of Applied Physics</i> , 2002 , 92, 2391-2400	2.5	35
46	Polytype Identification and Mapping in Heteroepitaxial Growth of 3C on Atomically Flat 4H-SiC Mesas Using Synchrotron White-Beam X-Ray Topography. <i>Materials Science Forum</i> , 2002 , 389-393, 391-394	8.4	5
45	Growth of Defect-Free 3C-SiC on 4H- and 6H-SiC Mesas Using Step-Free Surface Heteroepitaxy. <i>Materials Science Forum</i> , 2002 , 389-393, 311-314	0.4	23
44	Characterization of Porous SiC Substrates and of the Epilayer Structures Grown on Them. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 742, 2111		1
43	Accurate Lattice Constant and Mismatch Measurements of SiC Heterostructures by X-Ray Multiple-Order Reflections. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 742, 381		
42	Growth Kinetics and Thermal Stress in the Sublimation Growth of Silicon Carbide. <i>Crystal Growth and Design</i> , 2002 , 2, 213-220	3.5	42
41	Basal plane slip and formation of mixed-tilt boundaries in sublimation-grown hexagonal polytype silicon carbide single crystals. <i>Journal of Applied Physics</i> , 2002 , 92, 778-785	2.5	36

40	Partial dislocations in the X-ray topography of as-grown hexagonal silicon carbide crystals. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2001 , 87, 173-177	3.1	13
39	Report on the growth of bulk aluminum nitride and subsequent substrate preparation. <i>Journal of Crystal Growth</i> , 2001 , 231, 317-321	1.6	92
38	Hexagonal voids and the formation of micropipes during SiC sublimation growth. <i>Journal of Applied Physics</i> , 2001 , 89, 4625-4630	2.5	36
37	Micropipes in silicon carbide crystals: Do all screw dislocations have open cores?. <i>Journal of Materials Research</i> , 2000 , 15, 1649-1652	2.5	9
36	Correlation of EBIC and SWBXT Imaged Defects and Epilayer Growth Pits in 6H-SiC Schottky Diodes. <i>Materials Science Forum</i> , 2000 , 338-342, 489-492	0.4	20
35	X-ray Characterization of 3 inch Diameter 4H and 6H-SiC Experimental Wafers. <i>Materials Science Forum</i> , 2000 , 338-342, 473-476	0.4	6
34	Characterization of SiC using Synchrotron White Beam X-ray Topography. <i>Materials Science Forum</i> , 2000 , 338-342, 431-436	0.4	29
33	Dislocation motion around loaded notches in ice single-crystals. <i>Cold Regions Science and Technology</i> , 2000 , 31, 103-117	3.8	1
32	Investigation of the cross-hatch pattern and localized defects in epitaxial HgCdTe. <i>Journal of Electronic Materials</i> , 1998 , 27, 615-623	1.9	19
31	Experimental Studies of Hollow-Core Screw Dislocations in 6H-SiC and 4H-SiC Single Crystals. <i>Materials Science Forum</i> , 1998 , 264-268, 429-432	0.4	39
30	Characterization of Defects in p-Quaterphenyl Single Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 1998 , 313, 293-301		
29	Synchrotron white-beam X-ray topography of ferroelectric domains in a BaTiO ₃ single crystal. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1997 , 75, 611-620		9
28	Hollow-core screw dislocations in 6H-SiC single crystals: A test of Frank's theory. <i>Journal of Electronic Materials</i> , 1997 , 26, 128-133	1.9	41
27	Investigations of 3C-SiC inclusions in 4H-SiC epilayers on 4H-SiC single crystal substrates. <i>Journal of Electronic Materials</i> , 1997 , 26, 151-159	1.9	40
26	Lattice mismatch induced morphological features and strain in HgCdTe epilayers on CdZnTe substrates. <i>Journal of Electronic Materials</i> , 1997 , 26, 515-523	1.9	13
25	Synchrotron White Beam X-Ray Topography Characterization of Defect Structures in 2,10-Undecanedione/Urea Inclusion Compounds. <i>Molecular Crystals and Liquid Crystals</i> , 1996 , 276, 203-212		3
24	Growth Defect Studies in SiC Single Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 1996 , 278, 37-46		
23	Dislocation-grain boundary interactions in ice crystals. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1995 , 71, 15-42		46

22	Thermally induced dislocation loops in polycrystalline ice. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1995 , 71, 1-14		9
21	The growth and comparison of large-diameter vertical Bridgman CdZnTe and CdTe. <i>Journal of Crystal Growth</i> , 1994 , 137, 195-200	1.6	6
20	Studies of Defect Behavior in Large-Grain, Polycrystalline Ice Using Synchrotron X-ray Topography. <i>Molecular Crystals and Liquid Crystals</i> , 1994 , 240, 73-80		1
19	A New Method to Characterize Dislocation Loops. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 375, 319		
18	Dynamic observations of dislocation generation at grain boundaries in ice. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1993 , 67, 1261-1276		26
17	X-ray Topography. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 307, 213		9
16	Vertical bridgman growth and characterization of large-diameter single-crystal CdTe. <i>Journal of Crystal Growth</i> , 1993 , 128, 576-581	1.6	23
15	Synchrotron Topography Observations of a Low Temperature Phase Transition in An Organic Crystal. <i>Molecular Crystals and Liquid Crystals</i> , 1992 , 211, 43-49		1
14	Dislocation Line Direction Determination in Pyrene Single Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 1992 , 211, 51-58		3
13	Synchrotron x-ray topography studies of twin structures in lanthanum aluminate single crystals. <i>Journal of Materials Research</i> , 1992 , 7, 1847-1855	2.5	28
12	Rapid Structural Defect Mapping of Bulk III-V Semiconductors Using White-Beam Synchrotron Topography and X-Ray. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 262, 215		3
11	Influence of Surface Relaxation and Multi-Dislocation Strain Field Interactions on X-Ray Topographic Images of Dislocations in Semiconductor Materials. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 262, 265		3
10	Characterization of Defects in P-Terphenyl Single Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 1992 , 211, 35-42		3
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