

Michael Dudley

List of Publications by Citations

Source: <https://exaly.com/author-pdf/10599772/michael-dudley-publications-by-citations.pdf>
Version: 2024-04-10

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.

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	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
164	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
163	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
162	Epitaxy of Boron Phosphide on Aluminum Nitride(0001)/Sapphire Substrate. <i>Crystal Growth and Design</i> , 2016 , 16, 981-987	3.5	45
161	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
160	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
159	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
158	Bulk Growth of Large Area SiC Crystals. <i>Materials Science Forum</i> , 2016 , 858, 5-10	0.4	41
157	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
156	Epitaxial growth and characterization of silicon carbide films. <i>Journal of Crystal Growth</i> , 2006 , 287, 344-348	3.8	40
155	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
154	Hexagonal voids and the formation of micropipes during SiC sublimation growth. <i>Journal of Applied Physics</i> , 2001 , 89, 4625-4630	2.5	36
153	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
152	Growth kinetics and thermal stress in AlN bulk crystal growth. <i>Journal of Crystal Growth</i> , 2003 , 253, 326-339	3.9	35
151	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
150	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
149	Defect analysis in crystals using X-ray topography. <i>Microscopy Research and Technique</i> , 2006 , 69, 343-58	2.8	34

148	Memory and Perfection in Ferroelastic Inclusion Compounds. <i>Crystal Growth and Design</i> , 2005 , 5, 2100-2116	3.6	29
147	Characterization of SiC using Synchrotron White Beam X-ray Topography. <i>Materials Science Forum</i> , 2000 , 338-342, 431-436	0.4	29
146	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
145	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
144	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
143	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
142	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
141	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
140	Vertical bridgman growth and characterization of large-diameter single-crystal CdTe. <i>Journal of Crystal Growth</i> , 1993 , 128, 576-581	1.6	23
139	Template effects, asymmetry, and twinning in helical inclusion compounds. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 965-9	16.4	21
138	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
137	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
136	Material defects in 4H-silicon carbide diodes. <i>Journal of Applied Physics</i> , 2003 , 93, 611-618	2.5	20
135	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
134	X-Ray Topography Techniques for Defect Characterization of Crystals 2010 , 1425-1451		19
133	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
132	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
131	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

130	Characterization of bulk grown GaN and AlN single crystal materials. <i>Journal of Crystal Growth</i> , 2006 , 287, 349-353	1.6	18
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	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
127	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
126	X-ray topography characterization of gallium nitride substrates for power device development. <i>Journal of Crystal Growth</i> , 2020 , 544, 125709	1.6	14
125	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
124	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
123	Defect Generation Mechanisms in PVT-Grown AlN Single Crystal Boules. <i>Materials Science Forum</i> , 2013 , 740-742, 91-94	0.4	11
122	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
121	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
120	Growth and Characterization of Silicon Carbide Crystals 2010 , 797-820		11
119	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
118	Understanding the microstructures of triangular defects in 4H-SiC homoepitaxial. <i>Journal of Crystal Growth</i> , 2017 , 480, 119-125	1.6	10
117	High Quality AlN Single Crystal Substrates for AlGaN-Based Devices. <i>Materials Science Forum</i> , 2018 , 924, 923-926	0.4	10
116	Single-crystalline B12As2 on m-plane (11 $\bar{2}$ 00) 15R-SiC. <i>Applied Physics Letters</i> , 2008 , 92, 231917	3.4	10
115	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
114	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
113	Synchrotron white-beam X-ray topography of ferroelectric domains in a BaTiO3 single crystal. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1997 , 75, 611-620		9

112	The character of micropipes in silicon carbide crystals. <i>Philosophical Magazine</i> , 2006 , 86, 1209-1225	1.6	9
111	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
110	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
109	X-ray Topography. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 307, 213		9
108	Prismatic Slip in PVT-Grown 4H-SiC Crystals. <i>Journal of Electronic Materials</i> , 2017 , 46, 2040-2044	1.9	8
107	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
106	Crystal Growth Techniques and Characterization: An Overview 2010 , 3-16		7
105	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
104	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
103	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
102	High-resolution x-ray topography of dislocations in 4H-SiC epilayers. <i>Journal of Materials Research</i> , 2007 , 22, 845-849	2.5	6
101	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
100	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
99	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
98	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
97	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
96	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
95	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

94	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	0.4	5
93	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	0.4	5
92	Effect of Doping Concentration Variations in PVT-Grown 4H-SiC Wafers. <i>Journal of Electronic Materials</i> , 2016 , 45, 2066-2070	1.9	4
91	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
90	Mechanism for Improved Quality B12As2 Epitaxial Films on (0001) 4H-SiC Substrates Offcut towards [1100]. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1246, 1		4
89	Electronic Impact of Inclusions in Diamond. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1203, 1		4
88	Lateral Growth Expansion of 4H/6H-SiC Plane Pseudo Fiber Crystals by Hot Wall CVD Epitaxy. <i>Materials Science Forum</i> , 2012 , 717-720, 33-36	0.4	4
87	Crucible Selection in AlN Bulk Crystal Growth. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 798, 361		4
86	PVT Growth of 6H SiC Crystals and Defect Characterization. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 815, 187		4
85	Synchrotron Topographic Studies of the Influence of Rapid Thermal Processing on Defect Structures in Single Crystal Silicon.. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 209, 511		4
84	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
83	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
82	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
81	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
80	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
79	Nucleation Mechanism of 6H-SiC Polytype Inclusions Inside 15R-SiC Crystals. <i>Journal of Electronic Materials</i> , 2010 , 39, 799-804	1.9	3
78	Process-Induced Deformations and Stacking Faults in 4H-SiC. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 2		3
77	Growth Mechanism and Dislocation Characterization of Silicon Carbide Epitaxial Films. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 27		3

76	The Formation Mechanism of Carrot Defects in SiC Epifilms. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 24		3
75	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
74	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
73	Dislocation Line Direction Determination in Pyrene Single Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 1992 , 211, 51-58		3
72	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
71	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
70	Characterization of Defects in P-Terphenyl Single Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 1992 , 211, 35-42		3
69	White Beam Synchrotron Topographic Studies of the Effects of Localized Stress Fields on the Kinetics of Single Crystal Solid State Reactions.. <i>Materials Research Society Symposia Proceedings</i> , 1988 , 143, 253		3
68	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
67	Optimization of 150 mm 4H SiC Substrate Crystal Quality. <i>Materials Science Forum</i> , 2018 , 924, 11-14	0.4	3
66	Characterization of V-shaped Defects in 4H-SiC Homoepitaxial Layers. <i>Journal of Electronic Materials</i> , 2015 , 44, 1293-1299	1.9	2
65	Growth and Surface Morphologies of 6H SiC Bulk and Epitaxial Crystals. <i>Materials Science Forum</i> , 2006 , 527-529, 67-70	0.4	2
64	Preparation and Electrical Properties of the MWNT/Polymer Nanocomposite Fibers. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 963, 1		2
63	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
62	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
61	Progress in Bulk 4H SiC Crystal Growth for 150 mm Wafer Production. <i>Materials Science Forum</i> , 2020 , 1004, 37-43	0.4	2
60	Dislocation contrast on X-ray topographs under weak diffraction conditions. <i>Journal of Applied Crystallography</i> , 2021 , 54, 1225-1233	3.8	2
59	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

58	Studies on Doping Concentration Variations in 4H-SiC Substrates Using X-ray Contour Mapping. <i>ECS Transactions</i> , 2017 , 80, 275-283	1	1
57	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
56	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
55	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
54	Characterization of 4H Silicon Carbide Films Grown by Solvent-Laser Heated Floating Zone. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1433, 113		1
53	Novel Method for High Speed SiC Vapor Growth. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 911, 9		1
52	Chemical Vapor Deposition and Defect Characterization of Silicon Carbide Epitaxial Films. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 891, 1		1
51	Fabrication and Characterization of Molybdenum Oxide Nanofibers by Electrospinning. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 900, 1		1
50	Characterization of Porous SiC Substrates and of the Epilayer Structures Grown on Them. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 742, 2111		1
49	Dislocation motion around loaded notches in ice single-crystals. <i>Cold Regions Science and Technology</i> , 2000 , 31, 103-117	3.8	1
48	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
47	Synchrotron X-Ray Topographic Study of the Behavior of Defects in High Carbon-Content Si Wafers during RTP. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 225, 301		1
46	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
45	Influence of Surface Relaxation on X-Ray Topographic Imaging of Interfacial Dislocations in Heterosystems. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 209, 707		1
44	Crystal Growth and Defect Characterization of AlN Single Crystals. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 892, 702		1
43	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
42	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
41	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

40	Automated Mapping of Micropipes in SiC Wafers Using Polarized-Light Microscope. <i>Materials Science Forum</i> , 2018 , 924, 527-530	0.4	1
39	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
38	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
37	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
36	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
35	Influence of Dopant Concentration on Dislocation Distributions in 150mm 4H SiC Wafers. <i>Materials Science Forum</i> , 2019 , 963, 60-63	0.4	0
34	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	
33	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	
32	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		
31	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		
30	Growth of Boron Carbide Crystals from a Copper Flux. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1164, 1		
29	Stress Mapping of SiC Wafers by Synchrotron White Beam X-ray Reticulography. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1069, 1		
28	Synthesis of GaN Nanostructures at Low Temperatures by Chemical Vapor Deposition. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1080, 1		
27	Studies of c-Axis Threading Screw Dislocations in Hexagonal SiC. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1069, 1		
26	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		
25	Characterization and Growth Mechanism of B12As2 Epitaxial Layers Grown on (1-100) 15R-SiC. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1069, 1		
24	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		
23	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	

- 22 High-Resolution X-ray Topography of Dislocations in 4H-SiC Epilayers. *Materials Research Society Symposia Proceedings*, **2006**, 911, 11
- 21 Electrospun Tungsten Oxide Nanofibers: Fabrication and Characterization. *Materials Research Society Symposia Proceedings*, **2006**, 915, 1
- 20 Investigation of Low Angle Grain Boundaries in Hexagonal Silicon Carbide. *Materials Research Society Symposia Proceedings*, **2006**, 955, 1
- 19 Sublimation Growth and Defect Characterization of AlN Single Crystals. *Materials Research Society Symposia Proceedings*, **2007**, 1040, 1
- 18 Defect Structures of B12As2 Epilayers Grown on c-plane and a-plane 6H-SiC Substrates. *Materials Research Society Symposia Proceedings*, **2007**, 994, 1
- 17 Thermodynamic Studies of Carbon in Liquid Silicon Using the Central Atoms Model. *Journal of the American Ceramic Society*, **2006**, 89, 060628061644005-??? 3.8
- 16 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. *Materials Research Society Symposia Proceedings*, **2004**, 831, 55
- 15 Growth Kinetics and Thermal Stress in AlN Bulk Crystal Growth **2002**, 53
- 14 Synchrotron white beam x-ray topography (SWBXT) and high resolution triple axis diffraction studies on AlN layers grown on 4H- and 6H-SiC seeds. *Materials Research Society Symposia Proceedings*, **2004**, 831, 631
- 13 Accurate Lattice Constant and Mismatch Measurements of SiC Heterostructures by X-Ray Multiple-Order Reflections. *Materials Research Society Symposia Proceedings*, **2002**, 742, 381
- 12 Characterization of Defects in p-Quaterphenyl Single Crystals. *Molecular Crystals and Liquid Crystals*, **1998**, 313, 293-301
- 11 Growth Defect Studies in SiC Single Crystals. *Molecular Crystals and Liquid Crystals*, **1996**, 278, 37-46
- 10 A New Method to Characterize Dislocation Loops. *Materials Research Society Symposia Proceedings*, **1994**, 375, 319
- 9 Synchrotron X-Ray Topography as a Non-Destructive Monitor of Damage Accompanying IC Processing. *Materials Research Society Symposia Proceedings*, **1991**, 224, 61
- 8 Combined Tem and X-Ray Topographic Characterization of In_xGa_{1-x}As/GaAs Strained Layer Systems.. *Materials Research Society Symposia Proceedings*, **1990**, 209, 655
- 7 Synchrotron White Radiation Topographic Studies of the X-Ray Induced Solid State Polymerization of Bis(Propio1ato)Tetra-aquozinc(II) Single Crystals. *Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics*, **1990**, 187, 207-213
- 6 Structural characterization of GaN single crystal layers grown by vapor transport from a gallium oxide (Ga₂O₃) powder source. *Materials Research Society Symposia Proceedings*, **2005**, 892, 708
- 5 Dislocations in 4 H - SiC Substrates and Epilayers **2021**, 169-197

4	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
3	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
2	Investigation of Lattice Strain in High Energy Implanted 4H-SiC Wafers by Al or N Atoms. <i>Materials Science Forum</i> , 1062, 361-365	0.4
1	Synchrotron X-Ray Topography Characterization of Power Electronic GaN Materials. <i>Materials Science Forum</i> , 1062, 351-355	0.4