James H Edgar

List of Publications by Citations

262 papers	5,774 citations	37 h-index	68 g-index
281 ext. papers	6,922 ext. citations	6.5 avg, IF	5.9 L-index

#	Paper	IF	Citations
262	Substrates for gallium nitride epitaxy. *Materials Science and Engineering Reports*, **2002**, 37, 61-127	30.9	612
261	Wet etching of GaN, AlN, and SiC: a review. *Materials Science and Engineering Reports*, **2005**, 48, 1-46	30.9	547
260	Photonics with hexagonal boron nitride. *Nature Reviews Materials*, **2019**, 4, 552-567	73.3	253
259	Infrared hyperbolic metasurface based on nanostructured van der Waals materials. *Science*, **2018**, 359, 892-896	33.3	215
258	Prospects for device implementation of wide band gap semiconductors. *Journal of Materials Research*, **1992**, 7, 235-252	2.5	201
257	Ultralow-loss polaritons in isotopically pure boron nitride. *Nature Materials*, **2018**, 17, 134-139	27	191
256	Controlled growth of 3C-SiC and 6H-SiC films on low-tilt-angle vicinal (0001) 6H-SiC wafers. *Applied Physics Letters*, **1991**, 59, 333-335	3.4	119
255	Raman scattering studies on single-crystalline bulk AlN under high pressures. *Applied Physics Letters*, **2001**, 78, 724-726	3.4	112
254	Reconfigurable infrared hyperbolic metasurfaces using phase change materials. *Nature Communications*, **2018**, 9, 4371	17.4	92
253	Phonon lifetimes in bulk AlN and their temperature dependence. *Applied Physics Letters*, **2000**, 77, 1958-1960	3.4	78
252	Bulk AlN crystal growth: self-seeding and seeding on 6H-SiC substrates. *Journal of Crystal Growth*, **2002**, 246, 187-193	1.6	69
251	Modulating the thermal conductivity in hexagonal boron nitride via controlled boron isotope concentration. *Communications Physics*, **2019**, 2,	5.4	67
250	Isotope engineering of van der Waals interactions in hexagonal boron nitride. *Nature Materials*, **2018**, 17, 152-158	27	66
249	Single photon emission from plasma treated 2D hexagonal boron nitride. *Nanoscale*, **2018**, 10, 7957-7965	7.7	64
248	Two-dimensional excitons in three-dimensional hexagonal boron nitride. *Applied Physics Letters*, **2013**, 103, 191106	3.4	63
247	Single Crystal Growth of Millimeter-Sized Monoisotopic Hexagonal Boron Nitride. *Chemistry of Materials*, **2018**, 30, 6222-6225	9.6	63
246	Self-assembled monolayers of alkylphosphonic acid on GaN substrates. *Langmuir*, **2008**, 24, 6630-5	4	62

245	Distinctive in-Plane Cleavage Behaviors of Two-Dimensional Layered Materials. *ACS Nano*, **2016**, 10, 8980-8	14.7	60
244	Defect-selective etching of bulk AlN single crystals in molten KOH/NaOH eutectic alloy. *Journal of Crystal Growth*, **2004**, 262, 89-94	1.6	60
243	Temperature Dependence of the Phonons of Bulk AlN. *Japanese Journal of Applied Physics*, **2000**, 39, L710-L712	1.4	56
242	Polariton nanophotonics using phase-change materials. *Nature Communications*, **2019**, 10, 4487	17.4	53
241	Application of oxidation to the structural characterization of SiC epitaxial films. *Applied Physics Letters*, **1991**, 59, 183-185	3.4	52
240	Transport effects in the sublimation growth of aluminum nitride. *Journal of Crystal Growth*, **2000**, 220, 243-253	1.6	46
239	Micromagnetometry of two-dimensional ferromagnets. *Nature Electronics*, **2019**, 2, 457-463	28.4	46
238	Epitaxy of Boron Phosphide on Aluminum Nitride(0001)/Sapphire Substrate. *Crystal Growth and Design*, **2016**, 16, 981-987	3.5	45
237	Fourier transform infrared spectroscopic study of predeposition reactions in metalloorganic chemical vapor deposition of gallium nitride. *Chemistry of Materials*, **1991**, 3, 737-742	9.6	45
236	Optimization of Ni□r flux growth for hexagonal boron nitride single crystals. *Journal of Crystal Growth*, **2014**, 393, 114-118	1.6	42
235	Raman characterization and stress analysis of AlN grown on SiC by sublimation. *Journal of Applied Physics*, **2002**, 92, 5183-5188	2.5	41
234	X-ray double crystal characterization of single crystal epitaxial aluminum nitride thin films on sapphire, silicon carbide and silicon substrates. *Journal of Applied Physics*, **1995**, 77, 6263-6266	2.5	40
233	Effect of beam voltage on the properties of aluminium nitride prepared by ion beam assisted deposition. *Journal of Materials Science: Materials in Electronics*, **1996**, 7, 247-253	2.1	40
232	Refractive Index-Based Control of Hyperbolic Phonon-Polariton Propagation. *Nano Letters*, **2019**, 19, 7725-7734	11.5	39
231	Effects of High-Energy Electron Irradiation on Quantum Emitters in Hexagonal Boron Nitride. *ACS Applied Materials & Interfaces*, **2018**, 10, 24886-24891	9.5	38
230	The origin of 2.78 eV emission and yellow coloration in bulk AlN substrates. *Applied Physics Letters*, **2009**, 95, 262104	3.4	38
229	Gaseous etching of 6H□SiC at relatively low temperatures. *Journal of Crystal Growth*, **2000**, 217, 115-124	1.6	38
228	Atomistic Insights into Nucleation and Formation of Hexagonal Boron Nitride on Nickel from First-Principles-Based Reactive Molecular Dynamics Simulations. *ACS Nano*, **2017**, 11, 3585-3596	16.7	37

227	Seeded growth of AlN on SiC substrates and defect characterization. *Journal of Crystal Growth*, **2008**, 310, 2464-2470	1.6	37
226	Crystal growth and properties of scandium nitride. *Journal of Materials Science: Materials in Electronics*, **2004**, 15, 555-559	2.1	37
225	Raman scattering studies on single-crystalline bulk AlN: temperature and pressure dependence of the AlN phonon modes. *Journal of Crystal Growth*, **2001**, 231, 391-396	1.6	37
224	Wet Chemical Etching of AlN Single Crystals. *MRS Internet Journal of Nitride Semiconductor Research* , **2002**, 7, 1		37
223	Giant oscillations in a triangular network of one-dimensional states in marginally twisted graphene. *Nature Communications*, **2019**, 10, 4008	17.4	36
222	Collective near-field coupling and nonlocal phenomena in infrared-phononic metasurfaces for nano-light canalization. *Nature Communications*, **2020**, 11, 3663	17.4	35
221	Isotopic effects on phonon anharmonicity in layered van der Waals crystals: Isotopically pure hexagonal boron nitride. *Physical Review B*, **2018**, 97,	3.3	34
220	Influence of Atomic Layer Deposition Temperatures on TiO2/n-Si MOS Capacitor. *ECS Journal of Solid State Science and Technology*, **2013**, 2, N110-N114	2	34
219	Perfect interferenceless absorption at infrared frequencies by a van der Waals crystal. *Physical Review B*, **2015**, 92,	3.3	32
218	Photonic crystal for graphene plasmons. *Nature Communications*, **2019**, 10, 4780	17.4	30
217	Thermal oxidation of single crystalline aluminum nitride. *Materials Characterization*, **2007**, 58, 672-679	3.9	30
216	Influence of buffer layer and 6H-SiC substrate polarity on the nucleation of AlN grown by the sublimation sandwich technique. *Journal of Crystal Growth*, **2001**, 233, 177-186	1.6	30
215	Large-Scale Growth of High-Quality Hexagonal Boron Nitride Crystals at Atmospheric Pressure from an Fe□r Flux. *Crystal Growth and Design*, **2017**, 17, 4932-4935	3.5	29
214	Van der Waals engineering of ferroelectric heterostructures for long-retention memory. *Nature Communications*, **2021**, 12, 1109	17.4	29
213	Photoluminescence properties of AlN homoepilayers with different orientations. *Applied Physics Letters*, **2008**, 93, 041905	3.4	28
212	High-speed homoepitaxy of SiC from methyltrichlorosilane by chemical vapor deposition. *Journal of Crystal Growth*, **2005**, 285, 506-513	1.6	28
211	DPBs-free and polytype controlled growth of SiC via surface etching on on-axis 6H-SiC(0001). *Journal of Crystal Growth*, **2001**, 224, 235-243	1.6	28
210	Metalorganic Surface Chemical Adsorption Deposition of AlN Films by Ammonia and Trimethylaluminum. *Journal of the Electrochemical Society*, **1991**, 138, 196-199	3.9	27

209	Real-space observation of vibrational strong coupling between propagating phonon polaritons and organic molecules. *Nature Photonics*, **2021**, 15, 197-202	33.9	26
208	Characterization of bulk hexagonal boron nitride single crystals grown by the metal flux technique. *Journal of Crystal Growth*, **2014**, 403, 110-113	1.6	24
207	HVPE of scandium nitride on 6H□SiC(0 0 0 1). *Journal of Crystal Growth*, **2008**, 310, 1075-1080	1.6	24
206	MOCVD growth of cubic GaN on 3C-SiC deposited on Si (100) substrates. *Journal of Electronic Materials*, **2000**, 29, 317-321	1.9	24
205	Exciton-phonon interaction in the strong-coupling regime in hexagonal boron nitride. *Physical Review B*, **2017**, 95,	3.3	23
204	MOCVD growth of GaBN on 6H-SiC (0001) substrates. *Journal of Electronic Materials*, **2000**, 29, 452-456	1.9	23
203	Effect of GaN surface treatment on Al2O3/n-GaN MOS capacitors. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2015**, 33, 061201	1.3	22
202	Shallow and deep levels in carbon-doped hexagonal boron nitride crystals. *Physical Review Materials*, **2019**, 3,	3.2	22
201	Image polaritons in boron nitride for extreme polariton confinement with low losses. *Nature Communications*, **2020**, 11, 3649	17.4	21
200	Outstanding Thermal Conductivity of Single Atomic Layer Isotope-Modified Boron Nitride. *Physical Review Letters*, **2020**, 125, 085902	7.4	21
199	c-Boron□luminum nitride alloys prepared by ion-beam assisted deposition. *Thin Solid Films*, **1997**, 298, 33-38	2.2	20
198	Crystal growth of B12As2 on SiC substrate by CVD method. *Journal of Crystal Growth*, **2005**, 273, 431-438	1.6	20
197	Fizeau drag in graphene plasmonics. *Nature*, **2021**, 594, 513-516	50.4	20
196	Energy band structure and optical response function of icosahedral B12As2: A spectroscopic ellipsometry and first-principles calculational study. *Physical Review B*, **2010**, 81,	3.3	19
195	Native oxide and hydroxides and their implications for bulk AlN crystal growth. *Journal of Crystal Growth*, **2008**, 310, 4002-4006	1.6	19
194	Unstable composition region in the wurtzite B1□□GaxAlyN system. *Journal of Crystal Growth*, **2000**, 208, 179-182	1.6	19
193	Selective epitaxial growth of silicon carbide on SiO2 masked Si(100): The effects of temperature. *Journal of Applied Physics*, **1998**, 84, 201-204	2.5	19
192	Sublimation growth of aluminum nitride crystals. *Journal of Crystal Growth*, **2006**, 297, 105-110	1.6	18

191	A Global Growth Rate Model for Aluminum Nitride Sublimation. *Journal of the Electrochemical Society*, **2002**, 149, G12	3.9	18
190	A comparison of NF3 and NH3 as the nitrogen sources for AlN crystal growth by metalorganic chemical vapor deposition. *Thin Solid Films*, **1991**, 204, 115-121	2.2	18
189	Nanoscale Guiding of Infrared Light with Hyperbolic Volume and Surface Polaritons in van der Waals Material Ribbons. *Advanced Materials*, **2020**, 32, e1906530	24	17
188	Preparation, properties, and characterization of boron phosphide films on 4H- and 6H-silicon carbide. *Solid State Sciences*, **2015**, 47, 55-60	3.4	17
187	Photopolymerization of self-assembled monolayers of diacetylenic alkylphosphonic acids on group-III nitride substrates. *Langmuir*, **2010**, 26, 10725-30	4	17
186	Low-temperature chemical-vapor deposition of 3C SiC films on Si(1 0 0) using SiH4 C2H4 HCl H2. *Journal of Crystal Growth*, **1998**, 191, 439-445	1.6	17
185	Thermal oxidation of polycrystalline and single crystalline aluminum nitride wafers. *Journal of Electronic Materials*, **2005**, 34, 1271-1279	1.9	17
184	Growth Mode and Defects in Aluminum Nitride Sublimed on (0001) 6H-SiC Substrates. *MRS Internet Journal of Nitride Semiconductor Research*, **2001**, 6, 1		17
183	Raman spectroscopy of B12As2 under high pressure. *Journal of Applied Physics*, **2004**, 96, 910-912	2.5	16
182	New Technique for Sublimation Growth of AlN Single Crystals. *MRS Internet Journal of Nitride Semiconductor Research*, **2001**, 6, 1		16
181	The growth and characterization of GaN on sapphire and silicon. *Journal of Electronic Materials*, **1992**, 21, 383-387	1.9	15
180	Strong magnetophonon oscillations in extra-large graphene. *Nature Communications*, **2019**, 10, 3334	17.4	14
179	Temperature dependence of the energy bandgap of two-dimensional hexagonal boron nitride probed by excitonic photoluminescence. *Journal of Applied Physics*, **2014**, 115, 053503	2.5	14
178	High pressure X-ray diffraction study on icosahedral boron arsenide (B12As2). *Journal of Physics and Chemistry of Solids*, **2011**, 72, 144-146	3.9	14
177	Hardness, elastic modulus and structure of indium nitride thin films on AlN-nucleated sapphire substrates. *Journal of Materials Science: Materials in Electronics*, **1997**, 8, 307-312	2.1	14
176	Double-positioning twinning in icosahedral B12As2 thin films grown by chemical vapor deposition. *Materials Letters*, **2004**, 58, 1331-1335	3.3	14
175	Effects of the Addition of Silane during Carbonization on the Epitaxy of 3C-SiC on Si. *Journal of the Electrochemical Society*, **2002**, 149, G550	3.9	14
174	X-ray double crystal and X-ray topographic characterization of silicon carbide thin films on silicon, titanium carbide, 6H-silicon carbide, and aluminum nitride/sapphire substrates. *Thin Solid Films*, **1996**, 274, 23-30	2.2	14

173	The Electrical and Compositional Properties of AlN - Si Interfaces. *Journal of the Electrochemical Society*, **1992**, 139, 1146-1151	3.9	14
172	Nature of exciton transitions in hexagonal boron nitride. *Applied Physics Letters*, **2016**, 108, 122101	3.4	14
171	Demonstration of boron arsenide heterojunctions: A radiation hard wide band gap semiconductor device. *Applied Physics Letters*, **2010**, 96, 223506	3.4	13
170	ScAlN nanowires: A cathodoluminescence study. *Journal of Crystal Growth*, **2009**, 311, 3147-3151	1.6	13
169	Sublimation crystal growth of yttrium nitride. *Journal of Crystal Growth*, **2010**, 312, 2896-2903	1.6	13
168	The Durability of Various Crucible Materials for Aluminum Nitride Crystal Growth by Sublimation. *MRS Internet Journal of Nitride Semiconductor Research*, **2004**, 9, 1		13
167	Low-temperature epitaxial growth and photoluminescence characterization of GaN. *Applied Physics Letters*, **1994**, 65, 2317-2319	3.4	13
166	Low temperature metal-organic chemical vapor deposition of aluminum nitride with nitrogen trifluoride as the nitrogen source. *Thin Solid Films*, **1990**, 189, L11-L14	2.2	13
165	Predicting the preferred morphology of hexagonal boron nitride domain structure on nickel from ReaxFF-based molecular dynamics simulations. *Nanoscale*, **2019**, 11, 5607-5616	7.7	12
164	Photoluminescence investigation of the indirect band gap and shallow impurities in icosahedral B12As2. *Journal of Applied Physics*, **2012**, 112, 013508	2.5	12
163	A Comparison of Aluminum Nitride Freely Nucleated and Seeded on 6H-Silicon Carbide. *Materials Science Forum*, **2000**, 338-342, 1599-1602	0.4	12
162	Epitaxial Growth of SiC on Sapphire Substrates with an AlN Buffer Layer. *Journal of the Electrochemical Society*, **1994**, 141, 510-513	3.9	12
161	Planar refraction and lensing of highly confined polaritons in anisotropic media. *Nature Communications*, **2021**, 12, 4325	17.4	12
160	Probing hyperbolic polaritons using infrared attenuated total reflectance micro-spectroscopy. *MRS Communications*, **2018**, 8, 1418-1425	2.7	12
159	Insulating gallium oxide layer produced by thermal oxidation of gallium-polar GaN. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 565-568		11
158	A Comparison of N-Polar () GaN Surface Preparations for the Atomic Layer Deposition of Al2O3. *ECS Journal of Solid State Science and Technology*, **2014**, 3, N127-N131	2	11
157	Semiconducting icosahedral boron arsenide crystal growth for neutron detection. *Journal of Crystal Growth*, **2011**, 318, 553-557	1.6	11
156	Initial Nucleation Study and New Technique for Sublimation Growth of AlN on SiC Substrate. *Physica Status Solidi A*, **2001**, 188, 757-762		11

155	Thermodynamic analysis of GaxB1−xN grown by MOVPE. *Journal of Crystal Growth*, **2000**, 217, 109-114	1.6	11
154	Hexagonal Boron Nitride Crystal Growth from Iron, a Single Component Flux. *ACS Nano*, **2021**, 15, 7032-7039	16.3	11
153	Long-Lived Phonon Polaritons in Hyperbolic Materials. *Nano Letters*, **2021**, 21, 5767-5773	11.5	11
152	Excellent electronic transport in heterostructures of graphene and monoisotopic boron-nitride grown at atmospheric pressure. *2D Materials*, **2020**, 7, 031009	5.9	11
151	Enhanced Light−Matter Interaction in 10B Monoisotopic Boron Nitride Infrared Nanoresonators. *Advanced Optical Materials*, **2021**, 9, 2001958	8.1	11
150	Probing Mid-Infrared Phonon Polaritons in the Aqueous Phase. *Nano Letters*, **2020**, 20, 3986-3991	11.5	10
149	Thermal conductivity and Seebeck coefficients of icosahedral boron arsenide films on silicon carbide. *Journal of Applied Physics*, **2010**, 108, 084906	2.5	10
148	Single-crystalline B12As2 on m-plane (11−00) 15R-SiC. *Applied Physics Letters*, **2008**, 92, 231917	3.4	10
147	Defect structures in B12As2 epitaxial layers grown on (0001) 6H-SiC. *Journal of Applied Physics*, **2008**, 103, 123508	2.5	10
146	Heteroepitaxial B12As2 on silicon substrates. *Journal of Crystal Growth*, **2006**, 293, 162-168	1.6	10
145	Bulk AlN crystal growth by direct heating of the source using microwaves. *Journal of Crystal Growth* , **2004**, 262, 168-174	1.6	10
144	Fourier transform infrared spectroscopic study of predeposition reactions in metalloorganic chemical vapor deposition of gallium nitride. 2. *Chemistry of Materials*, **1991**, 3, 1093-1097	9.6	10
143	Deep ultraviolet hyperspectral cryomicroscopy in boron nitride: Photoluminescence in crystals with an ultra-low defect density. *AIP Advances*, **2020**, 10, 075025	1.5	10
142	MoS2/h-BN heterostructures: controlling MoS2 crystal morphology by chemical vapor deposition. *Journal of Materials Science*, **2017**, 52, 7028-7038	4.3	9
141	Influence of isotopic substitution on the anharmonicity of the interlayer shear mode of h-BN. *Physical Review B*, **2019**, 99,	3.3	9
140	Isotopic Disorder: The Prevailing Mechanism in Limiting the Phonon Lifetime in Hexagonal BN. *Physical Review Letters*, **2020**, 124, 167402	7.4	9
139	Sublimation Growth and Characterization of Erbium Nitride Crystals. *Crystal Growth and Design*, **2018**, 18, 3762-3766	3.5	9
138	The high-pressure compressibility of B12P2. *Journal of Physics and Chemistry of Solids*, **2017**, 102, 21-26	3.9	9

137	Sublimation growth of titanium nitride crystals. *Journal of Materials Science: Materials in Electronics*, **2010**, 21, 78	2.1	9
136	Selective Epitaxial Growth of SiC: Thermodynamic Analysis of the Si-C-Cl-H and Si-C-Cl-H-O Systems. *Journal of the Electrochemical Society*, **1997**, 144, 1875-1880	3.9	9
135	Nucleation of AlN on SiC substrates by seeded sublimation growth. *Journal of Crystal Growth*, **2007**, 300, 336-342	1.6	9
134	Revealing Phonon Polaritons in Hexagonal Boron Nitride by Multipulse Peak Force Infrared Microscopy. *Advanced Optical Materials*, **2020**, 8, 1901084	8.1	9
133	Hexagonal Boron Nitride Single Crystal Growth from Solution with a Temperature Gradient. *Chemistry of Materials*, **2020**, 32, 5066-5072	9.6	8
132	CVD growth and properties of boron phosphide on 3C-SiC. *Journal of Crystal Growth*, **2016**, 449, 15-21	1.6	8
131	Equation of state of single-crystal cubic boron phosphide. *Journal of Superhard Materials*, **2014**, 36, 61-64	0.9	8
130	Defect sensitive etching of hexagonal boron nitride single crystals. *Journal of Applied Physics*, **2017**, 122, 225110	2.5	8
129	Seebeck Coefficient and Electrical Resistivity of Single Crystal B12As2at High Temperatures. *Journal of the Physical Society of Japan*, **2013**, 82, 095001	1.5	8
128	Low temperature chemical vapor deposition of 3C-SiC on 6H-SiC □high resolution X-ray diffractometry and synchrotron X-ray topography study. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 76, 217-224	3.1	8
127	Spatiotemporal imaging of 2D polariton wave packet dynamics using free electrons. *Science*, **2021**, 372, 1181-1186	33.3	8
126	Exploiting the P L_2,3 absorption edge for optics: spectroscopic and structural characterization of cubic boron phosphide thin films. *Optical Materials Express*, **2016**, 6, 3946	2.6	8
125	Ultrahigh-Resolution, Label-Free Hyperlens Imaging in the Mid-IR. *Nano Letters*, **2021**, 21, 7921-7928	11.5	8
124	Determining crystal phase purity in c-BP through X-ray absorption spectroscopy. *Physical Chemistry Chemical Physics*, **2017**, 19, 8174-8187	3.6	7
123	Self-healing in B12P2 through Mediated Defect Recombination. *Chemistry of Materials*, **2016**, 28, 8415-8428	9.6	7
122	X-ray diffraction and high resolution transmission electron microscopy of 3C-SiC/AlN/6H-SiC(0001). *Journal of Electronic Materials*, **1997**, 26, 1389-1393	1.9	7
121	Interface properties of an AlN/(AlN)x (SiC)1□ /4H-SiC heterostructure. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 3720-3725	1.6	7
120	Defect-selective etching of scandium nitride crystals. *Journal of Crystal Growth*, **2006**, 293, 242-246	1.6	7

119	Free nucleation of aluminum nitride single crystals in HPBN crucible by sublimation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2005**, 117, 99-104	3.1	7
118	Guided Mid-IR and Near-IR Light within a Hybrid Hyperbolic-Material/Silicon Waveguide Heterostructure. *Advanced Materials*, **2021**, 33, e2004305	24	7
117	Cubic boron phosphide epitaxy on zirconium diboride. *Journal of Crystal Growth*, **2018**, 483, 115-120	1.6	7
116	Bulk (100) scandium nitride crystal growth by sublimation on tungsten single crystal seeds. *Applied Physics Letters*, **2018**, 113, 122106	3.4	7
115	Detection of defect populations in superhard semiconductor boron subphosphide B12P2 through X-ray absorption spectroscopy. *Journal of Materials Chemistry A*, **2017**, 5, 5737-5749	13	6
114	Single crystal growth of monoisotopic hexagonal boron nitride from a Fe□r flux. *Journal of Materials Chemistry C*, **2020**, 8, 9931-9935	7.1	6
113	Properties of bulk scandium nitride crystals grown by physical vapor transport. *Applied Physics Letters*, **2020**, 116, 132103	3.4	6
112	The coefficients of thermal expansion of boron arsenide (B12As2) between 25□C and 850□C. *Journal of Physics and Chemistry of Solids*, **2013**, 74, 673-676	3.9	6
111	The effects of the simultaneous addition of diborane and ammonia on the hot-filament assisted chemical vapor deposition of diamond. *Diamond and Related Materials*, **1998**, 7, 35-42	3.5	6
110	The effect of Si doping on the electrical properties of B12As2 thin films on (0001) 6H-SiC substrates. *Journal of Applied Physics*, **2007**, 101, 053710	2.5	6
109	Aluminum Nitride-Silicon Carbide Alloy Crystals Grown on SiC Substrates by Sublimation. *MRS Internet Journal of Nitride Semiconductor Research*, **2005**, 10, 1		6
108	Cr□t Ohmic contacts to B12As2. *Applied Physics Letters*, **2005**, 87, 042103	3.4	6
107	The role of trimethylgallium flow during nucleation layer deposition in the optimization of epitaxial GaN films. *Thin Solid Films*, **2000**, 360, 34-38	2.2	6
106	Surface etching of 6H-SiC (0001) and surface morphology of the subsequently grown GaN via MOCVD. *Journal of Electronic Materials*, **2000**, 29, 411-417	1.9	6
105	Cathodoluminescence and x-ray photoelectron spectroscopy of ScN: Dopant, defects, and band structure. *APL Materials*, **2020**, 8, 081103	5.7	6
104	Direct Laser Patterning of a 2D WSe2 Logic Circuit. *Advanced Functional Materials*, **2021**, 31, 2009549	15.6	6
103	Determination of the optical bandgap of the Bernal and rhombohedral boron nitride polymorphs. *Physical Review Materials*, **2021**, 5,	3.2	6
102	Revealing Nanoscale Confinement Effects on Hyperbolic Phonon Polaritons with an Electron Beam. *Small*, **2021**, 17, e2103404	11	6

101	Growth mechanisms and defect structures of B12As2 epilayers grown on 4 H-SiC substrates. *Journal of Crystal Growth*, **2012**, 352, 3-8	1.6	5
100	Effect of Impurities on Raman and Photoluminescence Spectra of AlN Bulk Crystals. *Materials Research Society Symposia Proceedings*, **2003**, 798, 454		5
99	Characterization of Aluminum Nitride Crystals Grown by Sublimation. *Physica Status Solidi A*, **2001**, 188, 769-774		5
98	Investigation of the Growth of 3C-SiC and 6H-SiC Films on Low-Tilt-Angle Vicinal (0001) 6H-SiC Wafers. *Springer Proceedings in Physics*, **1992**, 23-30	0.2	5
97	Three-dimensional near-field analysis through peak force scattering-type near-field optical microscopy. *Nanoscale*, **2020**, 12, 1817-1825	7.7	5
96	Pressure dependence of the interlayer and intralayer E2g Raman-active modes of hexagonal BN up to the wurtzite phase transition. *Physical Review B*, **2020**, 102,	3.3	5
95	Ellipsometry Study of Hexagonal Boron Nitride Using Synchrotron Radiation: Transparency Window in the Far-UVC. *Advanced Photonics Research*, **2021**, 2, 2000101	1.9	5
94	Flat Bands and Giant Light-Matter Interaction in Hexagonal Boron Nitride. *Physical Review Letters*, **2021**, 127, 137401	7.4	5
93	Hydride CVD Hetero-epitaxy of B12P2 on 4H-SiC. *Journal of Crystal Growth*, **2017**, 459, 112-117	1.6	4
92	Phonon states of B 12 P 2 crystals: Ab initio calculation and experiment. *Journal of Physics and Chemistry of Solids*, **2017**, 110, 248-253	3.9	4
91	Band structure and infrared optical transitions in ErN. *Applied Physics Letters*, **2020**, 116, 171104	3.4	4
90	Comparison of the physical, chemical and electrical properties of ALD Al2O3 on c- and m- plane GaN. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 898-901		4
89	Mechanism for Improved Quality B12As2 Epitaxial Films on (0001) 4H-SiC Substrates Offcut towards [1$\bar{1}$00]. *Materials Research Society Symposia Proceedings*, **2010**, 1246, 1		4
88	Growth of scandium aluminum nitride nanowires on ScN(111) films on 6H-SiC substrates by HVPE. *Physica Status Solidi (A) Applications and Materials Science*, **2009**, 206, 2809-2815	1.6	4
87	Transmission electron microscopy study of defects in AlN crystals with rough and smooth surface grains. *Journal of Crystal Growth*, **2010**, 312, 3479-3484	1.6	4
86	The effects of the simultaneous addition of diborane and ammonia on the hot-filament-assisted chemical vapor deposition of diamond II. Characterization of diamond and BCN film. *Diamond and Related Materials*, **1998**, 7, 1357-1363	3.5	4
85	Investigation of Thin Film Growth of B12As2 by Chemical Vapor Deposition. *Materials Research Society Symposia Proceedings*, **2003**, 764, 1		4
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