

# Josh D Caldwell

## List of Publications by Year in descending order

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209  
papers

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61984

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213  
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213  
docs citations

213  
times ranked

9004  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polaritons in layered two-dimensional materials. <i>Nature Materials</i> , 2017, 16, 182-194.	27.5	963
2	Sub-diffractive volume-confined polaritons in the natural hyperbolic material hexagonal boron nitride. <i>Nature Communications</i> , 2014, 5, 5221.	12.8	686
3	Two-dimensional gallium nitride realized via graphene encapsulation. <i>Nature Materials</i> , 2016, 15, 1166-1171.	27.5	626
4	Low-loss, infrared and terahertz nanophotonics using surface phonon polaritons. <i>Nanophotonics</i> , 2015, 4, 44-68.	6.0	547
5	Photonics with hexagonal boron nitride. <i>Nature Reviews Materials</i> , 2019, 4, 552-567.	48.7	504
6	Hyperbolic phonon-polaritons in boron nitride for near-field optical imaging and focusing. <i>Nature Communications</i> , 2015, 6, 7507.	12.8	399
7	Ultralow-loss polaritons in isotopically pure boron nitride. <i>Nature Materials</i> , 2018, 17, 134-139.	27.5	291
8	Low-Loss, Extreme Subdiffraction Photon Confinement via Silicon Carbide Localized Surface Phonon Polariton Resonators. <i>Nano Letters</i> , 2013, 13, 3690-3697.	9.1	259
9	Plasmonic Nanopillar Arrays for Large-Area, High-Enhancement Surface-Enhanced Raman Scattering Sensors. <i>ACS Nano</i> , 2011, 5, 4046-4055.	14.6	197
10	Technique for the Dry Transfer of Epitaxial Graphene onto Arbitrary Substrates. <i>ACS Nano</i> , 2010, 4, 1108-1114.	14.6	190
11	Role of epsilon-near-zero substrates in the optical response of plasmonic antennas. <i>Optica</i> , 2016, 3, 339.	9.3	162
12	Reconfigurable infrared hyperbolic metasurfaces using phase change materials. <i>Nature Communications</i> , 2018, 9, 4371.	12.8	148
13	Chemical Gradients on Graphene To Drive Droplet Motion. <i>ACS Nano</i> , 2013, 7, 4746-4755.	14.6	142
14	Atomic-scale photonic hybrids for mid-infrared and terahertz nanophotonics. <i>Nature Nanotechnology</i> , 2016, 11, 9-15.	31.5	136
15	Spectral Tuning of Localized Surface Phonon Polariton Resonators for Low-Loss Mid-IR Applications. <i>ACS Photonics</i> , 2014, 1, 718-724.	6.6	134
16	Quantifying pulsed laser induced damage to graphene. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	133
17	Mie resonance-enhanced light absorption in periodic silicon nanopillar arrays. <i>Optics Express</i> , 2013, 21, 27587.	3.4	117
18	Phonon-Polaritonic Bowtie Nanoantennas: Controlling Infrared Thermal Radiation at the Nanoscale. <i>ACS Photonics</i> , 2017, 4, 1753-1760.	6.6	114

#	ARTICLE	IF	CITATIONS
19	Imaging of Anomalous Internal Reflections of Hyperbolic Phonon-Polaritons in Hexagonal Boron Nitride. Nano Letters, 2016, 16, 3858-3865.	9.1	106
20	Active tuning of surface phonon polariton resonances via carrier photoinjection. Nature Photonics, 2018, 12, 50-56.	31.4	102
21	Reduced Self-Heating in AlGaIn/GaN HEMTs Using Nanocrystalline Diamond Heat-Spreading Films. IEEE Electron Device Letters, 2012, 33, 23-25.	3.9	100
22	Infrared Permittivity of the Biaxial van der Waals Semiconductor $\text{In}_2\text{Se}_3$ from Near-Field and Far-Field Correlative Studies. Advanced Materials, 2020, 32, e1908176.	21.0	99
23	High-Contrast Infrared Absorption Spectroscopy via Mass-Produced Coaxial Zero-Mode Resonators with Sub-10 nm Gaps. Nano Letters, 2018, 18, 1930-1936.	9.1	88
24	On the driving force for recombination-induced stacking fault motion in 4H-SiC. Journal of Applied Physics, 2010, 108, .	2.5	80
25	Ultrastrong plasmon-phonon coupling via epsilon-near-zero nanocavities. Nature Photonics, 2021, 15, 125-130.	31.4	78
26	Hyperbolic shear polaritons in low-symmetry crystals. Nature, 2022, 602, 595-600.	27.8	78
27	Strong Coupling of Epsilon-Near-Zero Phonon Polaritons in Polar Dielectric Heterostructures. Nano Letters, 2018, 18, 4285-4292.	9.1	71
28	Refractive Index-Based Control of Hyperbolic Phonon-Polariton Propagation. Nano Letters, 2019, 19, 7725-7734.	9.1	69
29	Non-lithographic SERS Substrates: Tailoring Surface Chemistry for Au Nanoparticle Cluster Assembly. Small, 2012, 8, 2239-2249.	10.0	68
30	Reduced self-heating in AlGaIn/GaN HEMTs using nanocrystalline diamond heat spreading films. , 2010, , .		64
31	Polaritonic Hybrid-Epsilon-near-Zero Modes: Beating the Plasmonic Confinement vs Propagation-Length Trade-Off with Doped Cadmium Oxide Bilayers. Nano Letters, 2019, 19, 948-957.	9.1	61
32	Mid-infrared nanophotonics. Nature Materials, 2015, 14, 364-366.	27.5	57
33	Image polaritons in boron nitride for extreme polariton confinement with low losses. Nature Communications, 2020, 11, 3649.	12.8	56
34	Nanoscale Mapping and Spectroscopy of Nonradiative Hyperbolic Modes in Hexagonal Boron Nitride Nanostructures. Nano Letters, 2018, 18, 1628-1636.	9.1	55
35	Lithography-free IR polarization converters via orthogonal in-plane phonons in $\text{In}_2\text{Se}_3$ flakes. Nature Communications, 2020, 11, 5771.	12.8	54
36	Resonant Enhancement of Second-Harmonic Generation in the Mid-Infrared Using Localized Surface Phonon Polaritons in Subdiffractional Nanostructures. Nano Letters, 2016, 16, 6954-6959.	9.1	53

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37	Sub-nanometer Thin Oxide Film Sensing with Localized Surface Phonon Polaritons. ACS Photonics, 2018, 5, 2807-2815.	6.6	52
38	Large-area plasmonic hot-spot arrays: sub-2 nm interparticle separations with plasma-enhanced atomic layer deposition of Ag on periodic arrays of Si nanopillars. Optics Express, 2011, 19, 26056.	3.4	51
39	Perfect interferenceless absorption at infrared frequencies by a van der Waals crystal. Physical Review B, 2015, 92, .	3.2	51
40	Manipulating polaritons at the extreme scale in van der Waals materials. Nature Reviews Physics, 2022, 4, 578-594.	26.6	51
41	Bilayer Graphene Grown on 4H-SiC (0001) Step-Free Mesas. Nano Letters, 2012, 12, 1749-1756.	9.1	50
42	Nondestructive analysis of threading dislocations in GaN by electron channeling contrast imaging. Applied Physics Letters, 2007, 91, .	3.3	49
43	Recombination-induced stacking fault degradation of 4H-SiC merged-PiN-Schottky diodes. Journal of Applied Physics, 2009, 106, .	2.5	49
44	Plasmon drag effect in metal nanostructures. New Journal of Physics, 2013, 15, 113061.	2.9	49
45	Probing polaritons in the mid- to far-infrared. Journal of Applied Physics, 2019, 125, .	2.5	48
46	Reversal of forward voltage drift in 4H-SiC p-i-n diodes via low temperature annealing. Applied Physics Letters, 2007, 90, 143519.	3.3	46
47	Hybrid longitudinal-transverse phonon polaritons. Nature Communications, 2019, 10, 1682.	12.8	46
48	Deterministic inverse design of Tamm plasmon thermal emitters with multi-resonant control. Nature Materials, 2021, 20, 1663-1669.	27.5	46
49	Engineering the Spectral and Spatial Dispersion of Thermal Emission via Polariton-Phonon Strong Coupling. Nano Letters, 2021, 21, 1831-1838.	9.1	44
50	Electron channeling contrast imaging of atomic steps and threading dislocations in 4H-SiC. Applied Physics Letters, 2007, 90, 234101.	3.3	43
51	High growth rate 4H-SiC epitaxial growth using dichlorosilane in a hot-wall CVD reactor. Journal of Crystal Growth, 2011, 316, 60-66.	1.5	43
52	Second Harmonic Generation from Phononic Epsilon-Near-Zero Berreman Modes in Ultrathin Polar Crystal Films. ACS Photonics, 2019, 6, 1365-1371.	6.6	42
53	Long-lived modulation of plasmonic absorption by ballistic thermal injection. Nature Nanotechnology, 2021, 16, 47-51.	31.5	40
54	Emergent interface vibrational structure of oxide superlattices. Nature, 2022, 601, 556-561.	27.8	40

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55	Large surface-enhanced Raman scattering from self-assembled gold nanosphere monolayers. Applied Physics Letters, 2013, 102, .	3.3	38
56	Long-Lived Phonon Polaritons in Hyperbolic Materials. Nano Letters, 2021, 21, 5767-5773.	9.1	38
57	Photoinduced tunability of the reststrahlen band in $\text{HfO}_2/\text{SiO}_2$ heterostructures. Physical Review B, 2016, 93, .	3.1	37
58	Near-Unity and Narrowband Thermal Emissivity in Balanced Dielectric Metasurfaces. Advanced Optical Materials, 2020, 8, 1901470.	7.3	37
59	Graphene Plasmon Cavities Made with Silicon Carbide. ACS Omega, 2017, 2, 3640-3646.	3.5	35
60	Vibrational Coupling to Epsilon-Near-Zero Waveguide Modes. ACS Photonics, 2020, 7, 614-621.	6.6	35
61	Pitch-dependent resonances and near-field coupling in infrared nanoantenna arrays. Optics Express, 2012, 20, 27725.	3.4	34
62	Narrowband Polaritonic Thermal Emitters Driven by Waste Heat. ACS Omega, 2020, 5, 10900-10908.	3.5	34
63	Controlling the Infrared Dielectric Function through Atomic-Scale Heterostructures. ACS Nano, 2019, 13, 6730-6741.	14.6	33
64	Controlling the local chemical reactivity of graphene through spatial functionalization. Carbon, 2013, 60, 84-93.	10.3	32
65	Growth and photoluminescence properties of vertically aligned $\text{SnO}_2$ nanowires. Journal of Crystal Growth, 2009, 311, 3158-3162.	1.5	31
66	Design of Gallium Nitride Resonant Cavity Light-Emitting Diodes on Si Substrates. Advanced Materials, 2008, 20, 115-118.	21.0	28
67	Electrical and Optical Characterization of AlGaIn/GaN HEMTs with In-Situ and Ex-Situ Deposited SiN <sub>x</sub> Layers. Journal of Electronic Materials, 2010, 39, 2452-2458.	2.2	27
68	Thermal Annealing and Propagation of Shockley Stacking Faults in 4H-SiC PiN Diodes. Journal of Electronic Materials, 2007, 36, 318-323.	2.2	26
69	The Role of Propagating and Localized Surface Plasmons for SERS Enhancement in Periodic Nanostructures. Plasmonics, 2012, 7, 143-150.	3.4	26
70	Experimental demonstration of the optical lattice resonance in arrays of Si nanoresonators. Applied Physics Letters, 2016, 108, .	3.3	26
71	Study of triangular defects and inverted pyramids in 4H-SiC 4° off-cut (0001) Si face epilayers. Journal of Crystal Growth, 2008, 310, 4443-4450.	1.5	25
72	Structure and Morphology of Inclusions in 4° Offcut 4H-SiC Epitaxial Layers. Journal of Electronic Materials, 2011, 40, 413-418.	2.2	25

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73	Aspect-ratio driven evolution of high-order resonant modes and near-field distributions in localized surface phonon polariton nanostructures. Scientific Reports, 2016, 6, 32959.	3.3	25
74	Differences in emission spectra of Si- and C-core partial dislocations. Applied Physics Letters, 2007, 90, 153503.	3.3	24
75	Precise control of infrared polarization using crystal vibrations. Nature, 2018, 562, 499-501.	27.8	24
76	9 kV, 1 cm <sup>2</sup> SiC Gate Turn-Off Thyristors. Materials Science Forum, 0, 645-648, 1017-1020.	0.3	23
77	Spoof-like plasmonic behavior of plasma enhanced atomic layer deposition grown Ag thin films. Applied Physics Letters, 2012, 100, 053106.	3.3	23
78	Influence of Temperature on Shockley Stacking Fault Expansion and Contraction in SiC PiN Diodes. Journal of Electronic Materials, 2008, 37, 699-705.	2.2	22
79	Differences in Emission Spectra of Dislocations in 4H-SiC Epitaxial Layers. Materials Science Forum, 0, 600-603, 345-348.	0.3	21
80	Microwave-induced transformation of rice husks to SiC. Journal of Applied Physics, 2012, 111, .	2.5	21
81	Nanotubes, nanobelts, nanowires, and nanorods of silicon carbide from the wheat husks. Journal of Applied Physics, 2015, 118, 104904.	2.5	21
82	Nanoparticles and nanorods of silicon carbide from the residues of corn. Journal of Applied Physics, 2015, 117, .	2.5	21
83	Temperature dependence and mechanism of electrically detected ESR at the $\frac{1}{2}$ -filling factor of a two-dimensional electron system. Physical Review B, 2003, 67, .	3.2	20
84	Nanocrystalline diamond films as UV-semitransparent Schottky contacts to 4H-SiC. Applied Physics Letters, 2007, 91, .	3.3	20
85	Degradation and Full Recovery in High-Voltage Implanted-Gate SiC JFETs Subjected to Bipolar Current Stress. IEEE Electron Device Letters, 2012, 33, 952-954.	3.9	20
86	Filterless Nondispersive Infrared Sensing using Narrowband Infrared Emitting Metamaterials. ACS Photonics, 2021, 8, 472-480.	6.6	20
87	Guided Mid-IR and Near-IR Light within a Hybrid Hyperbolic-Material/Silicon Waveguide Heterostructure. Advanced Materials, 2021, 33, e2004305.	21.0	20
88	Van der Waals Phonon Polariton Microstructures for Configurable Infrared Electromagnetic Field Localizations. Advanced Science, 2021, 8, 2004872.	11.2	20
89	Improved ultraviolet emission from reduced defect gallium nitride homojunctions grown on step-free 4H-SiC mesas. Applied Physics Letters, 2006, 88, 263509.	3.3	19
90	Photoluminescence and Electroluminescence Imaging of Carrot Defect in 4H-SiC Epitaxy. Journal of Electronic Materials, 2007, 36, 297-306.	2.2	19

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91	Observation of a multilayer planar in-grown stacking fault in 4H-SiC p-i-n diodes. Applied Physics Letters, 2006, 89, 103519.	3.3	18
92	Free carrier distribution profiling of 4H-SiC substrates using a commercial optical scanner. Journal of Applied Physics, 2007, 101, 093506.	2.5	18
93	Formation of Nanodimensional 3C-SiC Structures from Rice Husks. Journal of Electronic Materials, 2013, 42, 799-804.	2.2	18
94	Production of nanoscale particles and nanorods of SiC from sorghum leaves. Industrial Crops and Products, 2013, 51, 158-162.	5.2	18
95	Anisotropy and Modal Hybridization in Infrared Nanophotonics Using Low-Symmetry Materials. ACS Photonics, 2022, 9, 1078-1095.	6.6	18
96	Probing hyperbolic polaritons using infrared attenuated total reflectance micro-spectroscopy. MRS Communications, 2018, 8, 1418-1425.	1.8	17
97	Strong confinement of optical fields using localized surface phonon polaritons in cubic boron nitride. Optics Letters, 2018, 43, 2177.	3.3	17
98	Ultra-high-Resolution, Label-Free Hyperlens Imaging in the Mid-IR. Nano Letters, 2021, 21, 7921-7928.	9.1	17
99	Fabrication of GaN suspended photonic crystal membranes and resonant nanocavities on Si(111). Journal of Vacuum Science & Technology B, 2007, 25, 721.	1.3	16
100	Nanoscale Spectroscopy of Dielectric Properties of Mica. ACS Photonics, 2021, 8, 175-181.	6.6	16
101	Experimental confirmation of long hyperbolic polariton lifetimes in monoisotopic ( <sup>10</sup> B) hexagonal boron nitride at room temperature. APL Materials, 2021, 9, .	5.1	16
102	Ultraviolet to far-infrared dielectric function of $\text{In}_{0.9}\text{Ga}_{0.1}\text{N}$ -doped cadmium oxide thin films. Physical Review Materials, 2020, 4, .	2.4	16
103	Towards low-loss on-chip nanophotonics with coupled graphene and silicon carbide: a review. JPhys Materials, 2020, 3, 032005.	4.2	15
104	Temperature-mediated saturation and current-induced recovery of the $V_f$ drift in 4H-SiC p-i-n diodes. Applied Physics Letters, 2007, 91, .	3.3	14
105	Surface Phonon Polariton Resonance Imaging Using Long-Wave Infrared-Visible Sum-Frequency Generation Microscopy. ACS Photonics, 2019, 6, 3017-3023.	6.6	14
106	Ultrafast Active Tuning of the Berreman Mode. ACS Photonics, 2020, 7, 279-287.	6.6	14
107	Plasmonically enhanced emission from a group-III nitride nanowire emitter. Nanotechnology, 2007, 18, 265401.	2.6	13
108	High-Q dark hyperbolic phonon-polaritons in hexagonal boron nitride nanostructures. Nanophotonics, 2020, 9, 1457-1467.	6.0	13

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109	Investigation of the Epitaxial Graphene/p-SiC Heterojunction. IEEE Electron Device Letters, 2012, 33, 1610-1612.	3.9	12
110	Theoretical analysis of graphene plasmon cavities. Applied Materials Today, 2018, 12, 283-293.	4.3	12
111	Exploiting Phonon-Resonant Near-Field Interaction for the Nanoscale Investigation of Extended Defects. Advanced Functional Materials, 2020, 30, 1907357.	14.9	12
112	Mid-wave to near-IR optoelectronic properties and epsilon-near-zero behavior in indium-doped cadmium oxide. Physical Review Materials, 2021, 5, .	2.4	12
113	Epitaxial SiC Growth Morphology and Extended Defects Investigated by Electron Backscatter Diffraction and Electron Channeling Contrast Imaging. Journal of Electronic Materials, 2008, 37, 691-698.	2.2	11
114	Mitigating Defects within Silicon Carbide Epitaxy. Journal of the Electrochemical Society, 2012, 159, R46-R51.	2.9	11
115	Probing hyperbolic polaritons. Nature Photonics, 2015, 9, 638-640.	31.4	11
116	Characterization of defects in the drift region of 4H-SiC pin diodes via optical beam induced current. Journal of Vacuum Science & Technology B, 2006, 24, 2178.	1.3	10
117	Bilayer graphene by bonding CVD graphene to epitaxial graphene. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, 03D110.	1.2	10
118	Experimental evidence for mobile luminescence center mobility on partial dislocations in 4H-SiC using hyperspectral electroluminescence imaging. Applied Physics Letters, 2013, 102, .	3.3	10
119	Etch free graphene transfer to polymers. Surface and Coatings Technology, 2014, 241, 118-122.	4.8	10
120	Fabrication of phonon-based metamaterial structures using focused ion beam patterning. Applied Physics Letters, 2018, 112, .	3.3	10
121	Observation of Free Carrier Redistribution Resulting from Stacking Fault Formation in Annealed 4H-SiC. Materials Science Forum, 2006, 527-529, 347-350.	0.3	9
122	Ultraviolet Photoluminescence Imaging of Stacking Fault Contraction in 4H-SiC Epitaxial Layers. Materials Science Forum, 0, 717-720, 391-394.	0.3	9
123	Electron spin resonance in a wide parabolic quantum well. Physical Review B, 2005, 72, .	3.2	8
124	Effect of Bipolar Gate-to-Drain Current on the Electrical Properties of Vertical Junction Field Effect Transistors. Materials Science Forum, 0, 615-617, 719-722.	0.3	8
125	On the high curvature coefficient rectifying behavior of nanocrystalline diamond heterojunctions to 4H-SiC. Applied Physics Letters, 2010, 97, .	3.3	8
126	Electrically defined topological interface states of graphene surface plasmons based on a gate-tunable quantum Bragg grating. Nanophotonics, 2019, 8, 1417-1431.	6.0	8



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127	Phonon engineering of boron nitride via isotopic enrichment. Journal of Materials Research, 2021, 36, 4394-4403.	2.6	8
128	Long Carrier Lifetime in 4H-SiC Epilayers Using Chlorinated Precursors. Materials Science Forum, 0, 615-617, 291-294.	0.3	7
129	Multi-frequency coherent emission from superstructure thermal emitters. Applied Physics Letters, 2021, 118, .	3.3	7
130	Enhanced Absorption with Graphene-Coated Silicon Carbide Nanowires for Mid-Infrared Nanophotonics. Nanomaterials, 2021, 11, 2339.	4.1	7
131	Measurement of Local Temperatures Using $\hat{\mu}$ -Raman of SiC and AlGaIn-GaN/SiC Power and RF Devices. Materials Science Forum, 2008, 600-603, 1111-1114.	0.3	6
132	Impact of 4H-SiC Substrate Defectivity on Epilayer Injected Carrier Lifetimes. Materials Science Forum, 0, 600-603, 481-484.	0.3	6
133	Investigation of deep levels in nitrogen doped 4H-SiC epitaxial layers grown on 4 $\hat{\text{A}}^\circ$ and 8 $\hat{\text{A}}^\circ$ off-axis substrates. Journal of Applied Physics, 2010, 108, 054906.	2.5	6
134	Growth of Vertically Aligned ZnO Nanowire Arrays Using Bilayered Metal Catalysts. Journal of Nanomaterials, 2012, 2012, 1-7.	2.7	6
135	Collective Phonon-Polaritonic Modes in Silicon Carbide Subarrays. ACS Nano, 2022, 16, 963-973.	14.6	6
136	Dynamic nuclear polarization and nuclear magnetic resonance in the vicinity of edge states of a 2DES in GaAs quantum wells. Solid State Nuclear Magnetic Resonance, 2006, 29, 52-65.	2.3	5
137	Diffraction Contrast of Threading Dislocations in GaN and 4H-SiC Epitaxial Layers Using Electron Channeling Contrast Imaging. Journal of Electronic Materials, 2010, 39, 743-746.	2.2	5
138	Influence of spatial dispersion on spectral tuning of phonon-polaritons. Physical Review B, 2019, 100, .	3.2	5
139	Van der Waals Semiconductors: Infrared Permittivity of the Biaxial van der Waals Semiconductor $\text{In}_2\text{Te}_3$ from Near- and Far-Field Correlative Studies (Adv. Mater. 29/2020). Advanced Materials, 2020, 32, 2070220.	21.0	5
140	On the Driving Force of Shockley Stacking Fault Motion in 4H-SiC. ECS Transactions, 2009, 25, 93-104.	0.5	4
141	On the Luminescence and Driving Force of Stacking Faults in 4H-SiC. Materials Science Forum, 0, 645-648, 277-282.	0.3	4
142	Correlation of Extended Defects on Carrier Lifetime in Thick SiC Epilayers. Materials Science Forum, 2012, 717-720, 297-300.	0.3	4
143	Implementation of plasmonic band structure to understand polariton hybridization within metamaterials. Optics Express, 2018, 26, 29363.	3.4	4
144	Interface quality in GaSb/AlSb short period superlattices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	4

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145	Influence of Shockley stacking fault propagation and contraction on electrical behavior of 4H-SiC pin diodes and DMOSFETs. , 2007, , .		3
146	Resonance spectra of diabolo optical antenna arrays. AIP Advances, 2015, 5, 107149.	1.3	3
147	Long-wave infrared super-resolution wide-field microscopy using sum-frequency generation. Applied Physics Letters, 2022, 120, 131102.	3.3	3
148	SiC Substrate Doping Profiles Using Commercial Optical Scanners. Materials Science Forum, 2006, 527-529, 725-728.	0.3	2
149	Determination of the Core-structure of Shockley Partial Dislocations in 4H-SiC. Materials Research Society Symposia Proceedings, 2008, 1069, 1069-D03-03-01.	0.1	2
150	Synchrotron X-Ray Topographic Studies of Recombination Activated Shockley Partial Dislocations in 4H-Silicon Carbide Epitaxial Layers. Materials Science Forum, 0, 600-603, 357-360.	0.3	2
151	Techniques for the Dry Transfer of Epitaxial Graphene onto Arbitrary Substrates. Materials Science Forum, 2010, 645-648, 633-636.	0.3	2
152	Plasmo-photonic nanowire arrays for large-area surface-enhanced Raman scattering sensors. Proceedings of SPIE, 2010, , .	0.8	2
153	Luminescence Imaging of Extended Defects in SiC via Hyperspectral Imaging. Materials Science Forum, 0, 717-720, 403-406.	0.3	2
154	Focused Ion Beam Direct Write Nanofabrication of Surface Phonon Polariton Metamaterial Nanostructures. Microscopy and Microanalysis, 2014, 20, 358-359.	0.4	2
155	Rapid Bimolecular and Defect-Assisted Carrier Recombination in Hexagonal Boron Nitride. Journal of Physical Chemistry C, 2019, 123, 14689-14695.	3.1	2
156	Non-Destructive Electro- and Photo-Luminescence Imaging of Dislocations in SiC Epitaxy. Materials Research Society Symposia Proceedings, 2006, 911, 3.	0.1	1
157	The influence of substrate atomic step morphology on threading dislocation distributions in iii-nitride films. , 2007, , .		1
158	Infrared PL Signatures of n-Type Bulk SiC Substrates with Nitrogen Impurity Concentration between $10^{16}$ and $10^{17}$ cm <sup>-3</sup> . Materials Science Forum, 2008, 600-603, 449-452.	0.3	1
159	Temperature Dependence of Shockley Stacking Fault Expansion and Contraction in 4H-SiC p-i-n Diodes. Materials Science Forum, 2008, 600-603, 273-278.	0.3	1
160	Influence of Shockley Stacking Fault Expansion and Contraction on the Electrical Behavior of 4H-SiC DMOSFETs and MPS diodes. Materials Research Society Symposia Proceedings, 2008, 1069, 1.	0.1	1
161	Integrated Optics Utilizing GaN-Based Layers on Silicon Substrates. Materials Research Society Symposia Proceedings, 2008, 1068, 1.	0.1	1
162	(Invited) Techniques for the Dry Transfer of Epitaxial Graphene onto Arbitrary Substrates. ECS Transactions, 2010, 33, 177-186.	0.5	1

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163	Recent Developments in SiC Homoepitaxy Using Dichlorosilane for High Power Devices. Materials Research Society Symposia Proceedings, 2010, 1246, 1.	0.1	1
164	Temperature profiling in AlGaIn/GaN HEMTs with nanocrystalline diamond heat spreading layers by Raman spectroscopy. , 2011, , .		1
165	Growth of 4H- and 3C-SiC Epitaxial Layers on 4H-SiC Step-Free Mesas. Materials Science Forum, 0, 679-680, 119-122.	0.3	1
166	Surface Enhanced Raman Scattering Enhancements from Silver Atomic Layer Deposition Coated Nanowire. , 2011, , .		1
167	Influence of Intercalated Silicon on the Transport Properties of Graphene. Materials Science Forum, 2011, 679-680, 793-796.	0.3	1
168	(Invited) Mitigating Defects within Silicon Carbide Epitaxy. ECS Transactions, 2011, 41, 261-271.	0.5	1
169	Chapter 12 Semiconductor Nanophotonics Using Surface Polaritons. NATO Science for Peace and Security Series B: Physics and Biophysics, 2018, , 235-254.	0.3	1
170	Polaritonic hybrid-epsilon-near-zero modes: engineering strong optoelectronic coupling and dispersion in doped cadmium oxide bilayers (Conference Presentation). , 2019, , .		1
171	Below Bandgap Excitation of SnO2 Nanowires: The Relaxation of Trap States. , 2011, , .		1
172	Temperature dependence of electrically detected ESR at filling factor $\nu_{\frac{1}{2}}=1$ in a 2DEG. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 320-321.	2.7	0
173	MD-ENDOR Spectroscopy in a Two-Dimensional Electron System in the Regime of the Quantum Hall Effect. AIP Conference Proceedings, 2005, , .	0.4	0
174	Optical, Electrical and Lifetime Characterization of In-Grown Stacking Faults in 4H-SiC. Materials Research Society Symposia Proceedings, 2006, 911, 5.	0.1	0
175	Investigation of nanocrystalline diamond films as UV transparent Ohmic contacts to GaN. , 2007, , .		0
176	Investigation of Electron-Hole Recombination-Activated Partial Dislocations and Their Behavior in 4H-SiC Epitaxial Layers. Journal of Electronic Materials, 2008, 37, 706-712.	2.2	0
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