

Albert Polman

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2722976/publications.pdf>

Version: 2024-02-01

386
papers

43,110
citations

2311

98
h-index

2375

198
g-index

392
all docs

392
docs citations

392
times ranked

30132
citing authors

#	ARTICLE	IF	CITATIONS
1	Plasmonics for improved photovoltaic devices. <i>Nature Materials</i> , 2010, 9, 205-213.	13.3	7,449
2	Photovoltaic materials: Present efficiencies and future challenges. <i>Science</i> , 2016, 352, aad4424.	6.0	1,592
3	Plasmonic solar cells. <i>Optics Express</i> , 2008, 16, 21793.	1.7	1,411
4	Erbium implanted thin film photonic materials. <i>Journal of Applied Physics</i> , 1997, 82, 1-39.	1.1	1,082
5	Plasmon slot waveguides: Towards chip-scale propagation with subwavelength-scale localization. <i>Physical Review B</i> , 2006, 73, .	1.1	1,012
6	Photonic design principles for ultrahigh-efficiency photovoltaics. <i>Nature Materials</i> , 2012, 11, 174-177.	13.8	771
7	Design principles for particle plasmon enhanced solar cells. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	762
8	Broadband omnidirectional antireflection coating based on subwavelength surface Mie resonators. <i>Nature Communications</i> , 2012, 3, 692.	5.8	734
9	Light trapping in ultrathin plasmonic solar cells. <i>Optics Express</i> , 2010, 18, A237.	1.7	587
10	Transparent Conducting Silver Nanowire Networks. <i>Nano Letters</i> , 2012, 12, 3138-3144.	4.5	478
11	Tunable light trapping for solar cells using localized surface plasmons. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	476
12	Nanophotonics: Shrinking light-based technology. <i>Science</i> , 2015, 348, 516-521.	6.0	463
13	Experimental realization of an epsilon-near-zero metamaterial at visible wavelengths. <i>Nature Photonics</i> , 2013, 7, 907-912.	15.6	414
14	Planar metal plasmon waveguides: frequency-dependent dispersion, propagation, localization, and loss beyond the free electron model. <i>Physical Review B</i> , 2005, 72, .	1.1	397
15	Evolution of Light-Induced Vapor Generation at a Liquid-Immersed Metallic Nanoparticle. <i>Nano Letters</i> , 2013, 13, 1736-1742.	4.5	394
16	Defect-related versus excitonic visible light emission from ion beam synthesized Si nanocrystals in SiO ₂ . <i>Applied Physics Letters</i> , 1996, 69, 2033-2035.	1.5	377
17	Room-temperature electroluminescence from Er-doped crystalline Si. <i>Applied Physics Letters</i> , 1994, 64, 2235-2237.	1.5	350
18	Optimized Spatial Correlations for Broadband Light Trapping Nanopatterns in High Efficiency Ultrathin Film a-Si:H Solar Cells. <i>Nano Letters</i> , 2011, 11, 4239-4245.	4.5	350

#	ARTICLE	IF	CITATIONS
19	Rare-earth doped polymers for planar optical amplifiers. <i>Journal of Applied Physics</i> , 2002, 91, 3955-3980.	1.1	327
20	Designing dielectric resonators on substrates: Combining magnetic and electric resonances. <i>Optics Express</i> , 2013, 21, 26285.	1.7	313
21	Plasmonic light trapping in thin-film Si solar cells. <i>Journal of Optics (United Kingdom)</i> , 2012, 14, 024002.	1.0	307
22	Plasmon-enhanced luminescence near noble-metal nanospheres: Comparison of exact theory and an improved Gersten and Nitzan model. <i>Physical Review B</i> , 2007, 76, .	1.1	302
23	Plasmonics Applied. <i>Science</i> , 2008, 322, 868-869.	6.0	283
24	Strong exciton-erbium coupling in Si nanocrystal-doped SiO ₂ . <i>Applied Physics Letters</i> , 2000, 76, 2325-2327.	1.5	272
25	Temperature dependence and quenching processes of the intra-4f luminescence of Er in crystalline Si. <i>Physical Review B</i> , 1994, 49, 16313-16320.	1.1	263
26	Highly efficient GaAs solar cells by limiting light emission angle. <i>Light: Science and Applications</i> , 2013, 2, e45-e45.	7.7	260
27	Improved red-response in thin film a-Si:H solar cells with soft-imprinted plasmonic back reflectors. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	257
28	Direct Observation of Plasmonic Modes in Au Nanowires Using High-Resolution Cathodoluminescence Spectroscopy. <i>Nano Letters</i> , 2007, 7, 2843-2846.	4.5	255
29	Nonlocal Metasurfaces for Optical Signal Processing. <i>Physical Review Letters</i> , 2018, 121, 173004.	2.9	250
30	Highly confined electromagnetic fields in arrays of strongly coupled Ag nanoparticles. <i>Physical Review B</i> , 2005, 71, .	1.1	238
31	A single-layer wide-angle negative-index metamaterial at visible frequencies. <i>Nature Materials</i> , 2010, 9, 407-412.	13.3	238
32	Erbium-doped phosphate glass waveguide on silicon with 4.1 dB/cm gain at 1.535 μ m. <i>Applied Physics Letters</i> , 1997, 71, 2922-2924.	1.5	235
33	Broadband sensitizers for erbium-doped planar optical amplifiers: review. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2004, 21, 871.	0.9	235
34	Net optical gain at 1.53 μ m in Er ³⁺ -doped Al ₂ O ₃ waveguides on silicon. <i>Applied Physics Letters</i> , 1996, 68, 1886-1888.	1.5	228
35	Nanofocusing in laterally tapered plasmonic waveguides. <i>Optics Express</i> , 2008, 16, 45.	1.7	227
36	Tuning the emission wavelength of Si nanocrystals in SiO ₂ by oxidation. <i>Applied Physics Letters</i> , 1998, 72, 2577-2579.	1.5	220

#	ARTICLE	IF	CITATIONS
37	Nanowire Plasmon Excitation by Adiabatic Mode Transformation. Physical Review Letters, 2009, 102, 203904.	2.9	219
38	Measuring and Modifying the Spontaneous Emission Rate of Erbium near an Interface. Physical Review Letters, 1995, 74, 2459-2462.	2.9	214
39	Designing periodic arrays of metal nanoparticles for light-trapping applications in solar cells. Applied Physics Letters, 2009, 95, .	1.5	214
40	Optical Impedance Matching Using Coupled Plasmonic Nanoparticle Arrays. Nano Letters, 2011, 11, 1760-1765.	4.5	210
41	Plasmonic potentials in metal nanostructures. Science, 2014, 346, 828-831.	6.0	209
42	Experimental Verification of $\frac{1}{n^2}$ Structures for Visible Light. Physical Review Letters, 2013, 110, 013902.	2.9	208
43	The role of quantum-confined excitons vs defects in the visible luminescence of SiO ₂ films containing Ge nanocrystals. Applied Physics Letters, 1996, 68, 2511-2513.	1.5	205
44	Modeling Light Trapping in Nanostructured Solar Cells. ACS Nano, 2011, 5, 10055-10064.	7.3	205
45	Polarization-Selective Plasmon-Enhanced Silicon Quantum-Dot Luminescence. Nano Letters, 2006, 6, 2622-2625.	4.5	201
46	Size-dependent electron-hole exchange interaction in Si nanocrystals. Applied Physics Letters, 2000, 76, 351-353.	1.5	199
47	Demonstration of an erbium-doped microdisk laser on a silicon chip. Physical Review A, 2006, 74, .	1.0	198
48	A silicon-based electrical source of surface plasmon polaritons. Nature Materials, 2010, 9, 21-25.	13.3	198
49	Electron-beam spectroscopy for nanophotonics. Nature Materials, 2019, 18, 1158-1171.	13.3	193
50	Ultrasmall Mode Volume Plasmonic Nanodisk Resonators. Nano Letters, 2010, 10, 1537-1541.	4.5	190
51	The erbium-impurity interaction and its effects on the 1.54 μ m luminescence of Er ³⁺ in crystalline silicon. Journal of Applied Physics, 1995, 78, 3874-3882.	1.1	187
52	Complex response and polariton-like dispersion splitting in periodic metal nanoparticle chains. Physical Review B, 2006, 74, .	1.1	187
53	Spectral tuning of plasmon-enhanced silicon quantum dot luminescence. Applied Physics Letters, 2006, 88, 131109.	1.5	185
54	Silver as a sensitizer for erbium. Applied Physics Letters, 2002, 81, 1414-1416.	1.5	182

#	ARTICLE	IF	CITATIONS
55	Photoluminescence characterization of Er-implanted Al ₂ O ₃ films. Applied Physics Letters, 1993, 62, 3065-3067.	1.5	181
56	Directional Emission from Plasmonic Yagi-Uda Antennas Probed by Angle-Resolved Cathodoluminescence Spectroscopy. Nano Letters, 2011, 11, 3779-3784.	4.5	172
57	Optical doping of waveguide materials by MeV Er implantation. Journal of Applied Physics, 1991, 70, 3778-3784.	1.1	171
58	Concentration quenching in erbium implanted alkali silicate glasses. Optical Materials, 1996, 5, 159-167.	1.7	170
59	Optical properties of erbium-doped organic polydentate cage complexes. Journal of Applied Physics, 1998, 83, 497-503.	1.1	169
60	Upconversion in Er-implanted Al ₂ O ₃ waveguides. Journal of Applied Physics, 1996, 79, 1258-1266.	1.1	160
61	Ultralow-threshold erbium-implanted toroidal microlaser on silicon. Applied Physics Letters, 2004, 84, 1037-1039.	1.5	158
62	Microstructure of erbium-implanted Si. Applied Physics Letters, 1991, 58, 2797-2799.	1.5	156
63	Exciton-erbium interactions in Si nanocrystal-doped SiO ₂ . Journal of Applied Physics, 2000, 88, 1992-1998.	1.1	155
64	Directional emission from a single plasmonic scatterer. Nature Communications, 2014, 5, 3250.	5.8	154
65	Asymmetry in photocurrent enhancement by plasmonic nanoparticle arrays located on the front or on the rear of solar cells. Applied Physics Letters, 2010, 96, .	1.5	153
66	Absorption and emission spectroscopy in Er ³⁺ -Yb ³⁺ doped aluminum oxide waveguides. Optical Materials, 2003, 21, 705-712.	1.7	151
67	Photovoltaics Reaching for the Shockley-Queisser Limit. ACS Energy Letters, 2020, 5, 3029-3033.	8.8	149
68	High-Index Dielectric Metasurfaces Performing Mathematical Operations. Nano Letters, 2019, 19, 8418-8423.	4.5	143
69	Aligned Gold Nanorods in Silica Made by Ion Irradiation of Core-Shell Colloidal Particles. Advanced Materials, 2004, 16, 235-237.	11.1	140
70	Plasmon-enhanced erbium luminescence. Applied Physics Letters, 2006, 89, 211107.	1.5	140
71	Plasmon-Based Nanolenses Assembled on a Well-Defined DNA Template. Journal of the American Chemical Society, 2008, 130, 2750-2751.	6.6	139
72	Near-infrared electroluminescence of polymer light-emitting diodes doped with a lissamine-sensitized Nd ³⁺ complex. Applied Physics Letters, 2001, 78, 2122-2124.	1.5	136

#	ARTICLE	IF	CITATIONS
73	Sensitized near-infrared luminescence from polydentate triphenylene-functionalized Nd ³⁺ , Yb ³⁺ , and Er ³⁺ complexes. <i>Journal of Applied Physics</i> , 1999, 86, 1181-1185.	1.1	134
74	Gallium Plasmonics: Deep Subwavelength Spectroscopic Imaging of Single and Interacting Gallium Nanoparticles. <i>ACS Nano</i> , 2015, 9, 2049-2060.	7.3	133
75	Local density of states, spectrum, and far-field interference of surface plasmon polaritons probed by cathodoluminescence. <i>Physical Review B</i> , 2009, 79, .	1.1	132
76	Enhanced Nonlinear Optical Effects with a Tapered Plasmonic Waveguide. <i>Nano Letters</i> , 2007, 7, 334-337.	4.5	130
77	Colloidal Ellipsoids with Continuously Variable Shape. <i>Advanced Materials</i> , 2000, 12, 1511-1514.	11.1	129
78	Erbium in crystal silicon: Optical activation, excitation, and concentration limits. <i>Journal of Applied Physics</i> , 1995, 77, 1256-1262.	1.1	126
79	Relationship between gain and Yb ³⁺ concentration in Er ³⁺ -Yb ³⁺ doped waveguide amplifiers. <i>Journal of Applied Physics</i> , 2001, 90, 4314-4320.	1.1	125
80	Deep-subwavelength imaging of the modal dispersion of light. <i>Nature Materials</i> , 2012, 11, 781-787.	13.3	121
81	Tunable Nanoscale Localization of Energy on Plasmon Particle Arrays. <i>Nano Letters</i> , 2007, 7, 2004-2008.	4.5	120
82	MeV ion irradiation-induced creation and relaxation of mechanical stress in silica. <i>Journal of Applied Physics</i> , 1995, 78, 4723-4732.	1.1	116
83	Photoluminescence quantum efficiency of dense silicon nanocrystal ensembles in SiO ₂ . <i>Physical Review B</i> , 2006, 73, .	1.1	113
84	Photonic crystals of shape-anisotropic colloidal particles. <i>Applied Physics Letters</i> , 2002, 81, 838-840.	1.5	112
85	Optical and Topological Characterization of Gold Nanoparticle Dimers Linked by a Single DNA Double Strand. <i>Nano Letters</i> , 2011, 11, 5060-5065.	4.5	112
86	Room-temperature luminescence from Er-implanted semi-insulating polycrystalline silicon. <i>Applied Physics Letters</i> , 1993, 63, 1942-1944.	1.5	110
87	Excitation and deexcitation of Er ³⁺ in crystalline silicon. <i>Applied Physics Letters</i> , 1997, 70, 1721-1723.	1.5	109
88	Erbium as a probe of everything?. <i>Physica B: Condensed Matter</i> , 2001, 300, 78-90.	1.3	108
89	Prospects of near-field plasmonic absorption enhancement in semiconductor materials using embedded Ag nanoparticles. <i>Optics Express</i> , 2012, 20, A641.	1.7	107
90	Cooperative upconversion in erbium-implanted soda-lime silicate glass optical waveguides. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1995, 12, 1468.	0.9	103

#	ARTICLE	IF	CITATIONS
91	Self-assembled infrared-luminescent Er ³⁺ /SiO ₂ crystallites on silicon. Applied Physics Letters, 2004, 85, 4343.	1.5	103
92	Local structure around Er in silica and sodium silicate glasses. Journal of Non-Crystalline Solids, 1991, 136, 260-265.	1.5	102
93	Loss mechanisms of surface plasmon polaritons on gold probed by cathodoluminescence imaging spectroscopy. Applied Physics Letters, 2008, 93, .	1.5	102
94	Light Coupling and Trapping in Ultrathin Cu(In,Ga)Se ₂ Solar Cells Using Dielectric Scattering Patterns. ACS Nano, 2015, 9, 9603-9613.	7.3	102
95	Solution-Grown Silver Nanowire Ordered Arrays as Transparent Electrodes. Advanced Materials, 2016, 28, 905-909.	11.1	101
96	Densification, anisotropic deformation, and plastic flow of SiO ₂ during MeV heavy ion irradiation. Applied Physics Letters, 1994, 65, 2487-2489.	1.5	100
97	Förster transfer and the local optical density of states in erbium-doped silica. Physical Review B, 2005, 71, .	1.1	100
98	Erbium in oxygen-doped silicon: Optical excitation. Journal of Applied Physics, 1995, 78, 2642-2650.	1.1	99
99	Surface plasmon polariton modes in a single-crystal Au nanoresonator fabricated using focused-ion-beam milling. Applied Physics Letters, 2008, 92, .	1.5	99
100	Purcell-Factor-Enhanced Scattering from Si Nanocrystals in an Optical Microcavity. Physical Review Letters, 2009, 103, 027406.	2.9	99
101	Field enhancement in metallic subwavelength aperture arrays probed by erbium upconversion luminescence. Optics Express, 2009, 17, 14586.	1.7	98
102	Plasmon-Enhanced Photoluminescence of Silicon Quantum Dots: Simulation and Experiment. Journal of Physical Chemistry C, 2007, 111, 13372-13377.	1.5	97
103	Fabrication of two-dimensional photonic crystal waveguides for 1.5 μm in silicon by deep anisotropic dry etching. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 2734.	1.6	96
104	Direct imaging of propagation and damping of near-resonance surface plasmon polaritons using cathodoluminescence spectroscopy. Applied Physics Letters, 2006, 88, 221111.	1.5	96
105	Incorporation of high concentrations of erbium in crystal silicon. Applied Physics Letters, 1993, 62, 507-509.	1.5	95
106	Optical properties of lissamine functionalized Nd ³⁺ complexes in polymer waveguides and solution. Optical Materials, 2000, 14, 101-107.	1.7	95
107	Are negative index materials achievable with surface plasmon waveguides? A case study of three plasmonic geometries. Optics Express, 2008, 16, 19001.	1.7	95
108	Three-Dimensional Negative Index of Refraction at Optical Frequencies by Coupling Plasmonic Waveguides. Physical Review Letters, 2010, 105, 223901.	2.9	94

#	ARTICLE	IF	CITATIONS
109	Near-Field Visualization of Strongly Confined Surface Plasmon Polaritons in Metal-Insulator-Metal Waveguides. <i>Nano Letters</i> , 2008, 8, 2925-2929.	4.5	93
110	Plasmon Dispersion in Coaxial Waveguides from Single-Cavity Optical Transmission Measurements. <i>Nano Letters</i> , 2009, 9, 2832-2837.	4.5	93
111	Nanoscale optical tomography with cathodoluminescence spectroscopy. <i>Nature Nanotechnology</i> , 2015, 10, 429-436.	15.6	90
112	Infrared surface plasmons in two-dimensional silver nanoparticle arrays in silicon. <i>Applied Physics Letters</i> , 2004, 85, 1317-1319.	1.5	89
113	Size-dependent oxygen-related electronic states in silicon nanocrystals. <i>Applied Physics Letters</i> , 2004, 84, 5389-5391.	1.5	87
114	Probing the Band Structure of Topological Silicon Photonic Lattices in the Visible Spectrum. <i>Physical Review Letters</i> , 2019, 122, 117401.	2.9	87
115	Single-Step Soft-Imprinted Large-Area Nanopatterned Antireflection Coating. <i>Nano Letters</i> , 2015, 15, 4223-4228.	4.5	86
116	Erbium-implanted silica colloids with 80% luminescence quantum efficiency. <i>Applied Physics Letters</i> , 2000, 76, 3682-3684.	1.5	84
117	Ion beam-induced anisotropic plastic deformation at 300 keV. <i>Applied Physics Letters</i> , 2003, 83, 4315-4317.	1.5	84
118	Cooperative upconversion as the gain-limiting factor in Er doped miniature Al ₂ O ₃ optical waveguide amplifiers. <i>Journal of Applied Physics</i> , 2003, 93, 5008-5012.	1.1	83
119	Gain limiting processes in Er-doped Si nanocrystal waveguides in SiO ₂ . <i>Journal of Applied Physics</i> , 2002, 91, 534.	1.1	81
120	Origin of the 1.54 μ m luminescence of erbium-implanted porous silicon. <i>Applied Physics Letters</i> , 1995, 66, 2379-2381.	1.5	80
121	The New "p-n Junction": Plasmonics Enables Photonic Access to the Nanoworld. <i>MRS Bulletin</i> , 2005, 30, 385-389.	1.7	80
122	Modal Decomposition of Surface Plasmon Whispering Gallery Resonators. <i>Nano Letters</i> , 2009, 9, 3147-3150.	4.5	80
123	Resonant Modes of Single Silicon Nanocavities Excited by Electron Irradiation. <i>ACS Nano</i> , 2013, 7, 1689-1698.	7.3	80
124	Erbium in crystal silicon: Segregation and trapping during solid phase epitaxy of amorphous silicon. <i>Journal of Applied Physics</i> , 1994, 75, 2809-2817.	1.1	79
125	Erbium-implanted high-Q silica toroidal microcavity laser on a silicon chip. <i>Physical Review A</i> , 2004, 70, .	1.0	79
126	Plasmon Nanomechanical Coupling for Nanoscale Transduction. <i>Nano Letters</i> , 2013, 13, 3293-3297.	4.5	76

#	ARTICLE	IF	CITATIONS
127	Angle-Resolved Cathodoluminescence Imaging Polarimetry. ACS Photonics, 2016, 3, 147-154.	3.2	76
128	Origin of MeV ion irradiation-induced stress changes in SiO ₂ . Journal of Applied Physics, 2000, 88, 59-64.	1.1	75
129	Broadband Purcell enhancement in plasmonic ring cavities. Physical Review B, 2010, 82, .	1.1	74
130	Al ₂ O ₃ /TiO ₂ nano-pattern antireflection coating with ultralow surface recombination. Applied Physics Letters, 2013, 102, .	1.5	73
131	Solar Steam Nanobubbles. ACS Nano, 2013, 7, 15-18.	7.3	73
132	Energy-dependent anisotropic deformation of colloidal silica particles under MeV Au irradiation. Applied Physics Letters, 2001, 78, 910-912.	1.5	71
133	Anisotropic deformation of metallo-dielectric core-shell colloids under MeV ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 523-529.	0.6	71
134	Direct imaging of hybridized eigenmodes in coupled silicon nanoparticles. Optica, 2016, 3, 93.	4.8	70
135	Luminescence quenching in erbium-doped hydrogenated amorphous silicon. Applied Physics Letters, 1996, 68, 997-999.	1.5	69
136	Microphotonic parabolic light directors fabricated by two-photon lithography. Applied Physics Letters, 2011, 99, .	1.5	69
137	Erbium in oxygen-doped silicon: Electroluminescence. Journal of Applied Physics, 1995, 77, 6504-6510.	1.1	68
138	Temperature dependence of MeV heavy ion irradiation-induced viscous flow in SiO ₂ . Applied Physics Letters, 1997, 71, 1628-1630.	1.5	68
139	Efficient Generation of Propagating Plasmons by Electron Beams. Nano Letters, 2009, 9, 1176-1181.	4.5	68
140	Light Trapping in Thin Crystalline Si Solar Cells Using Surface Mie Scatterers. IEEE Journal of Photovoltaics, 2014, 4, 554-559.	1.5	68
141	Controlling magnetic and electric dipole modes in hollow silicon nanocylinders. Optics Express, 2016, 24, 2047.	1.7	68
142	Mega-electron-volt ion beam induced anisotropic plasmon resonance of silver nanocrystals in glass. Applied Physics Letters, 2003, 83, 4137-4139.	1.5	67
143	Plasmonic Modes of Annular Nanoresonators Imaged by Spectrally Resolved Cathodoluminescence. Nano Letters, 2007, 7, 3612-3617.	4.5	67
144	Angle-resolved cathodoluminescence spectroscopy. Applied Physics Letters, 2011, 99, .	1.5	67

#	ARTICLE	IF	CITATIONS
145	Visible Light, Wide-Angle Graded Metasurface for Back Reflection. ACS Photonics, 2017, 4, 228-235.	3.2	67
146	Materials Science Aspects of Photonic Crystals. MRS Bulletin, 2001, 26, 608-613.	1.7	65
147	Resonant SPP modes supported by discrete metal nanoparticles on high-index substrates. Optics Express, 2011, 19, A146.	1.7	65
148	Dielectric Scattering Patterns for Efficient Light Trapping in Thin-Film Solar Cells. Nano Letters, 2015, 15, 4846-4852.	4.5	64
149	Experimental test of kinetic theories for heterogeneous freezing in silicon. Physical Review B, 1993, 47, 5-13.	1.1	63
150	Optical and structural properties of MeV erbium-implanted LiNbO ₃ . Journal of Applied Physics, 1994, 75, 173-180.	1.1	63
151	Controlling Fano lineshapes in plasmon-mediated light coupling into a substrate. Optics Express, 2011, 19, A303.	1.7	63
152	Large area nanoimprint by substrate conformal imprint lithography (SCIL). Advanced Optical Technologies, 2017, 6, 243-264.	0.9	62
153	Teaching silicon new tricks. Nature Materials, 2002, 1, 10-12.	13.3	61
154	Resonant nano-antennas for light trapping in plasmonic solar cells. Journal Physics D: Applied Physics, 2011, 44, 185101.	1.3	61
155	Optimized Scattering Power Spectral Density of Photovoltaic Light-Trapping Patterns. ACS Photonics, 2015, 2, 822-831.	3.2	61
156	Mode coupling by plasmonic surface scatterers in thin-film silicon solar cells. Applied Physics Letters, 2012, 101, 221110.	1.5	60
157	Experimental evidence for large dynamic effects on the plasmon dispersion of subwavelength metal nanoparticle waveguides. Physical Review B, 2007, 76, .	1.1	59
158	On-chip green silica upconversion microlaser. Optics Letters, 2009, 34, 482.	1.7	59
159	Dual-Polarization Analog 2D Image Processing with Nonlocal Metasurfaces. ACS Photonics, 2020, 7, 1799-1805.	3.2	59
160	Local optical density of states in SiO ₂ spherical microcavities: Theory and experiment. Physical Review A, 2001, 64, .	1.0	58
161	Acid-Based Synthesis of Monodisperse Rare-Earth-Doped Colloidal SiO ₂ Spheres. Chemistry of Materials, 2002, 14, 2849-2853.	3.2	58
162	Amorphous silicon waveguides for microphotronics. Journal of Applied Physics, 2002, 92, 649-653.	1.1	58

#	ARTICLE	IF	CITATIONS
163	Coupling of Er ions to surface plasmons on Ag. Applied Physics Letters, 2005, 86, 041113.	1.5	57
164	Effects of heat treatment and concentration on the luminescence properties of erbium-doped silica sol-gel films. Journal of Non-Crystalline Solids, 2001, 296, 158-164.	1.5	56
165	Strong luminescence quantum-efficiency enhancement near prolate metal nanoparticles: Dipolar versus higher-order modes. Journal of Applied Physics, 2009, 105, .	1.1	56
166	Optimization of an Er-doped silica glass optical waveguide amplifier. IEEE Journal of Quantum Electronics, 1996, 32, 1680-1684.	1.0	55
167	Plasmonics: optics at the nanoscale. Materials Today, 2005, 8, 56.	8.3	55
168	Depth distribution of luminescent Si nanocrystals in Si implanted SiO ₂ films on Si. Journal of Applied Physics, 1999, 86, 759-763.	1.1	54
169	Energy backtransfer and infrared photoresponse in erbium-doped silicon p-n diodes. Journal of Applied Physics, 2000, 88, 5381-5387.	1.1	54
170	Anisotropic plastic deformation by viscous flow in ion tracks. Physical Review B, 2005, 71, .	1.1	54
171	How grooves reflect and confine surface plasmon polaritons. Optics Express, 2009, 17, 10385.	1.7	54
172	Large-area soft-imprinted nanowire networks as light trapping transparent conductors. Scientific Reports, 2015, 5, 11414.	1.6	53
173	Quantifying coherent and incoherent cathodoluminescence in semiconductors and metals. Journal of Applied Physics, 2014, 115, .	1.1	52
174	Photonics for Photovoltaics: Advances and Opportunities. ACS Photonics, 2021, 8, 61-70.	3.2	52
175	Combined Optical Tweezers/Ion Beam Technique to Tune Colloidal Masks for Nanolithography. Nano Letters, 2005, 5, 1175-1179.	4.5	51
176	Defect states of amorphous Si probed by the diffusion and solubility of Cu. Applied Physics Letters, 1990, 57, 1230-1232.	1.5	50
177	Optical doping of soda-lime-silicate glass with erbium by ion implantation. Journal of Applied Physics, 1993, 73, 8179-8183.	1.1	49
178	Quenching of Si nanocrystal photoluminescence by doping with gold or phosphorous. Journal of Luminescence, 2005, 114, 137-144.	1.5	49
179	Plasmonic Nanofocusing in a Dielectric Wedge. Nano Letters, 2010, 10, 3665-3669.	4.5	49
180	Imaging the Hidden Modes of Ultrathin Plasmonic Strip Antennas by Cathodoluminescence. Nano Letters, 2011, 11, 4265-4269.	4.5	49

#	ARTICLE	IF	CITATIONS
181	Efficient colored silicon solar modules using integrated resonant dielectric nanoscatterers. Applied Physics Letters, 2017, 111, .	1.5	49
182	Optical Properties of Single Plasmonic Holes Probed with Local Electron Beam Excitation. ACS Nano, 2014, 8, 7350-7358.	7.3	48
183	1.54 μ m room-temperature luminescence of MeV erbium-implanted silica glass. Applied Physics Letters, 1990, 57, 2859-2861.	1.5	47
184	Segregation and trapping of erbium during silicon molecular beam epitaxy. Applied Physics Letters, 1995, 66, 1385-1387.	1.5	47
185	Absorption and emission cross sections of Er ³⁺ in Al ₂ O ₃ waveguides. Applied Optics, 1997, 36, 3338.	2.1	47
186	Exciton-erbium energy transfer in Si nanocrystal-doped SiO ₂ . Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 81, 3-8.	1.7	47
187	A new method for the evaluation of solar cell parameters. Solar Cells, 1986, 17, 241-251.	0.6	46
188	Excitation of surface plasmons at aSiO ₂ /Ag interface by silicon quantum dots: Experiment and theory. Physical Review B, 2006, 73, .	1.1	46
189	Optical doping of silicon with erbium by ion implantation. Nuclear Instruments & Methods in Physics Research B, 1993, 80-81, 653-658.	0.6	45
190	Direct experimental evidence for trap-state mediated excitation of Er ³⁺ in silicon. Applied Physics Letters, 1995, 67, 377-379.	1.5	45
191	Anisotropic deformation of colloidal particles under MeV ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 350-356.	0.6	45
192	Shaping colloidal assemblies. Materials Today, 2004, 7, 40-46.	8.3	45
193	Deep Subwavelength Spatial Characterization of Angular Emission from Single-Crystal Au Plasmonic Ridge Nanoantennas. ACS Nano, 2012, 6, 1742-1750.	7.3	45
194	Plasmomechanical Resonators Based on Dimer Nanoantennas. Nano Letters, 2015, 15, 3971-3976.	4.5	45
195	Large Spectral Birefringence in Photoaddressable Polymer Films. Advanced Materials, 2004, 16, 1746-1750.	11.1	44
196	Optical cavity modes in gold shell colloids. Journal of Applied Physics, 2008, 103, .	1.1	44
197	Cathodoluminescence microscopy: Optical imaging and spectroscopy with deep-subwavelength resolution. MRS Bulletin, 2015, 40, 359-365.	1.7	44
198	Time-resolved reflectivity measurements during explosive crystallization of amorphous silicon. Applied Physics Letters, 1986, 49, 1160-1162.	1.5	43

#	ARTICLE	IF	CITATIONS
199	Ion beam-induced anisotropic plastic deformation of silicon microstructures. Applied Physics Letters, 2004, 84, 3591-3593.	1.5	43
200	Programmable Nanolithography with Plasmon Nanoparticle Arrays. Nano Letters, 2007, 7, 745-749.	4.5	43
201	Incorporation and optical activation of erbium in silicon using molecular beam epitaxy. Journal of Applied Physics, 1996, 79, 2658-2662.	1.1	42
202	Plasmonic excitation and manipulation with an electron beam. MRS Bulletin, 2012, 37, 752-760.	1.7	42
203	Erbium-implanted silica microsphere laser. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 182-185.	0.6	41
204	Plasmonics for improved photovoltaic devices. , 2010, , 1-11.		41
205	Spontaneous and stimulated electron-photon interactions in nanoscale plasmonic near fields. Light: Science and Applications, 2021, 10, 82.	7.7	40
206	Pulsed laser oxidation and nitridation of metal surfaces immersed in liquid media. Applied Physics Letters, 1987, 50, 138-140.	1.5	39
207	Optical Properties of Spherical and Oblate Spheroidal Gold Shell Colloids. Journal of Physical Chemistry C, 2008, 112, 4146-4150.	1.5	39
208	Dispersion of metal-insulator-metal plasmon polaritons probed by cathodoluminescence imaging spectroscopy. Physical Review B, 2009, 80, .	1.1	39
209	Optoelectronic Enhancement of Ultrathin $\text{CuIn}_{1-x}\text{Ga}_x\text{Se}_2$ Solar Cells by Nanophotonic Contacts. Advanced Optical Materials, 2017, 5, 1600637.	3.6	39
210	Complementary cathodoluminescence lifetime imaging configurations in a scanning electron microscope. Ultramicroscopy, 2019, 197, 28-38.	0.8	39
211	Formation mechanism of silver nanocrystals made by ion irradiation of ion-exchanged sodalime silicate glass. Nuclear Instruments & Methods in Physics Research B, 2000, 168, 237-244.	0.6	38
212	Angle-Dependent Extinction of Anisotropic Silica/Au Core/Shell Colloids Made via Ion Irradiation. Advanced Materials, 2005, 17, 1484-1488.	11.1	38
213	Improved performance of polarization-stable VCSELs by monolithic sub-wavelength gratings produced by soft nano-imprint lithography. Nanotechnology, 2011, 22, 505201.	1.3	38
214	Combined Metagratings for Efficient Broad-Angle Scattering Metasurface. ACS Photonics, 2019, 6, 1010-1017.	3.2	38
215	Impurity trapping and gettering in amorphous silicon. Applied Physics Letters, 1991, 58, 2916-2918.	1.5	37
216	Nanoscale Spatial Coherent Control over the Modal Excitation of a Coupled Plasmonic Resonator System. Nano Letters, 2015, 15, 7666-7670.	4.5	37

#	ARTICLE	IF	CITATIONS
217	Negative refractive index in coaxial plasmon waveguides. <i>Optics Express</i> , 2010, 18, 12770.	1.7	36
218	Single-Photon Generation by Electron Beams. <i>Nano Letters</i> , 2011, 11, 5099-5103.	4.5	36
219	Colloidal assemblies modified by ion irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2001, 178, 62-68.	0.6	35
220	Fine structure in the Er-related emission spectrum from Er ³⁺ /SiO ₂ matrices at room temperature under carrier mediated excitation. <i>Journal of Luminescence</i> , 2003, 102-103, 819-824.	1.5	35
221	Plasmonic Whispering Gallery Cavities As Optical Nanoantennas. <i>Nano Letters</i> , 2011, 11, 5524-5530.	4.5	35
222	Luminescence quenching in erbium-doped hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1996, 68, 46-48.	1.5	34
223	Energy transport in metal nanoparticle plasmon waveguides. <i>Materials Research Society Symposia Proceedings</i> , 2003, 777, 711.	0.1	34
224	Fabry-Pérot resonators for surface plasmon polaritons probed by cathodoluminescence. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	34
225	Design and optimization of 2D photonic crystal waveguides based on silicon. <i>Optical and Quantum Electronics</i> , 2002, 34, 145-159.	1.5	33
226	The Planar Parabolic Optical Antenna. <i>Nano Letters</i> , 2013, 13, 188-193.	4.5	33
227	Photon bunching reveals single-electron cathodoluminescence excitation efficiency in InGaN quantum wells. <i>Physical Review B</i> , 2017, 96, .	1.1	33
228	Modified spontaneous emission in erbium-doped SiO ₂ spherical colloids. <i>Applied Physics Letters</i> , 2001, 79, 3585-3587.	1.5	32
229	Nanoscale Relative Emission Efficiency Mapping Using Cathodoluminescence $g^{(2)}$ Imaging. <i>Nano Letters</i> , 2018, 18, 2288-2293.	4.5	32
230	Amorphous Si – the role of MeV implantation in elucidating defect and thermodynamic properties. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1991, 55, 533-543.	0.6	31
231	Enhancement of Er ³⁺ population in Y ₂ O ₃ by energy transfer to Ce ³⁺ . <i>Optical Materials</i> , 2001, 17, 445-451.	1.7	31
232	Erbium-thulium interaction in broadband infrared luminescent silicon-rich silicon oxide. <i>Applied Physics Letters</i> , 2003, 82, 3445-3447.	1.5	31
233	Merging transformation optics with electron-driven photon sources. <i>Nature Communications</i> , 2019, 10, 599.	5.8	31
234	Surface plasmon polariton modified emission of erbium in a metallodielectric grating. <i>Applied Physics Letters</i> , 2003, 83, 30-32.	1.5	30

#	ARTICLE	IF	CITATIONS
235	Nanoscale spatial limitations of large-area substrate conformal imprint lithography. <i>Nanotechnology</i> , 2019, 30, 345301.	1.3	30
236	Ion irradiation damage in Er-doped silica probed by the Er ³⁺ -luminescence lifetime at 1.535 μ m. <i>Journal of Applied Physics</i> , 1993, 73, 1669-1674.	1.1	29
237	Materials issues and device performances for light emitting Er-implanted Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1995, 106, 386-392.	0.6	29
238	Modified spontaneous emission from erbium-doped photonic layer-by-layer crystals. <i>Physical Review B</i> , 2003, 67, .	1.1	29
239	Electron-Induced State Conversion in Diamond NV Centers Measured with Pump-Probe Cathodoluminescence Spectroscopy. <i>ACS Photonics</i> , 2020, 7, 232-240.	3.2	29
240	Structural relaxation in amorphous silicon and the role of network defects. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1991, 59-60, 344-352.	0.6	28
241	1.5 μ m room-temperature luminescence from Er-implanted oxygen-doped silicon epitaxial films grown by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 1994, 75, 2644-2647.	1.1	28
242	Incorporation and stability of erbium in sapphire by ion implantation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1995, 106, 429-432.	0.6	28
243	Selective modification of the Er ^[sup 3+] [sup 4]I _[sub 11/2] branching ratio by energy transfer to Eu ^[sup 3+] . <i>Journal of Applied Physics</i> , 2000, 88, 4486.	1.1	28
244	Metal-Insulator-Semiconductor Nanowire Network Solar Cells. <i>Nano Letters</i> , 2016, 16, 3689-3695.	4.5	28
245	Thermodynamic theory of the plasmoelectric effect. <i>Scientific Reports</i> , 2016, 6, 23283.	1.6	28
246	Rapid thermal annealing of MeV erbium implanted LiNbO ₃ single crystals for optical doping. <i>Applied Physics Letters</i> , 1994, 65, 225-227.	1.5	27
247	All-optical octave-broad ultrafast switching of Si woodpile photonic band gap crystals. <i>Physical Review B</i> , 2008, 77, .	1.1	27
248	Dielectric back scattering patterns for light trapping in thin-film Si solar cells. <i>Optics Express</i> , 2013, 21, 20738.	1.7	27
249	Nanoscale Excitation Mapping of Plasmonic Patch Antennas. <i>ACS Photonics</i> , 2014, 1, 1134-1143.	3.2	27
250	Lattice site and photoluminescence of erbium implanted in Al ₂ O ₃ . <i>Journal of Materials Research</i> , 1997, 12, 1401-1404.	1.2	26
251	An MeV facility for materials research. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1989, 37-38, 935-940.	0.6	24
252	Selective excitation of erbium in silicon-infiltrated silica colloidal photonic crystals. <i>Journal of Applied Physics</i> , 2004, 95, 2297-2302.	1.1	24

#	ARTICLE	IF	CITATIONS
253	Fabrication and characterization of erbium-doped toroidal microcavity lasers. Journal of Applied Physics, 2006, 99, 083103.	1.1	24
254	Negative Refractive Index and Higher-Order Harmonics in Layered Metalodielectric Optical Metamaterials. ACS Photonics, 2014, 1, 670-676.	3.2	24
255	Plasmonic Scattering Back Reflector for Light Trapping in Flat Nano-Crystalline Silicon Solar Cells. ACS Photonics, 2016, 3, 685-691.	3.2	24
256	Enhanced spontaneous emission rate in annular plasmonic nanocavities. Applied Physics Letters, 2009, 95, .	1.5	23
257	Parallel Transduction of Nanomechanical Motion Using Plasmonic Resonators. ACS Photonics, 2014, 1, 1181-1188.	3.2	23
258	Limiting Light Escape Angle in Silicon Photovoltaics: Ideal and Realistic Cells. IEEE Journal of Photovoltaics, 2015, 5, 61-69.	1.5	23
259	Epitaxial explosive crystallization of amorphous silicon. Applied Physics Letters, 1989, 55, 1097-1099.	1.5	22
260	Size-dependent ion-beam-induced anisotropic plastic deformation at the nanoscale by nonhydrostatic capillary stresses. Physical Review B, 2006, 74, .	1.1	22
261	Combined electron energy-loss and cathodoluminescence spectroscopy on individual and composite plasmonic nanostructures. Physical Review B, 2016, 93, .	1.1	22
262	Spatial Resolution of Coherent Cathodoluminescence Super-Resolution Microscopy. ACS Photonics, 2019, 6, 1067-1072.	3.2	22
263	Tunable plasmonic HfN nanoparticles and arrays. Nanoscale, 2019, 11, 20252-20260.	2.8	21
264	Solid phase epitaxy of diamond cubic SnxGe1-x alloys. Journal of Applied Physics, 1996, 80, 4384-4388.	1.1	20
265	Nanoclustering of hydrogen in ion-implanted and plasma-grown amorphous silicon. Physical Review B, 1998, 58, 12853-12864.	1.1	20
266	Exciting erbium-doped planar optical amplifier materials. , 2000, 3942, 2.		20
267	Luminescence quantum efficiency and local optical density of states in thin film ruby made by ion implantation. Journal of Applied Physics, 2000, 88, 5142-5147.	1.1	20
268	Electron irradiation-activated low-temperature annealing of phosphorus-implanted silicon. Applied Physics Letters, 1986, 48, 1132-1134.	1.5	19
269	Explosive crystallization of amorphous silicon: triggering and propagation. Applied Surface Science, 1989, 43, 128-135.	3.1	19
270	Photoluminescence and structural characterization of MeV erbium-implanted silica glass. Nuclear Instruments & Methods in Physics Research B, 1991, 59-60, 1313-1316.	0.6	19

#	ARTICLE	IF	CITATIONS
271	Segregation and trapping of erbium at a moving crystal-amorphous Si interface. Journal of Applied Physics, 1997, 81, 150-153.	1.1	19
272	Erbium luminescence imaging of infrared surface plasmon polaritons. Applied Physics Letters, 2006, 88, 121121.	1.5	19
273	Polarization-sensitive cathodoluminescence Fourier microscopy. Optics Express, 2012, 20, 18679.	1.7	19
274	Absence of the enhanced intra-4f transition cross section at 1.5 μ m of Er ³⁺ in Si-rich SiO ₂ . Applied Physics Letters, 2005, 86, 241109.	1.5	18
275	Ultrafast optical switching of three-dimensional Si inverse opal photonic band gap crystals. Journal of Applied Physics, 2007, 102, 053111.	1.1	18
276	Near-Infrared Spectroscopic Cathodoluminescence Imaging Polarimetry on Silicon Photonic Crystal Waveguides. ACS Photonics, 2016, 3, 2112-2121.	3.2	18
277	Directional Emission from Leaky and Guided Modes in GaAs Nanowires Measured by Cathodoluminescence. ACS Photonics, 2016, 3, 677-684.	3.2	18
278	Electrons Generate Self-Complementary Broadband Vortex Light Beams Using Chiral Photon Sieves. Nano Letters, 2020, 20, 5975-5981.	4.5	18
279	Pulsed-laser crystallization of amorphous silicon layers buried in a crystalline matrix. Journal of Applied Physics, 1990, 67, 4024-4035.	1.1	17
280	Room temperature light emitting silicon diodes fabricated by erbium ion implantation. Nuclear Instruments & Methods in Physics Research B, 1995, 96, 374-377.	0.6	17
281	Application and validity of the effective medium approximation to the optical properties of nano-textured silicon coated with a dielectric layer. Optics Express, 2019, 27, 38645.	1.7	17
282	Fluorine mobility in La _{1-x} BaxF _{3-x} (0 < x < 0.1) studied by nuclear magnetic resonance. Solid State Ionics, 1983, 9-10, 539-542.	1.3	16
283	Optical Probes inside Photonic Crystals. MRS Bulletin, 2001, 26, 642-646.	1.7	16
284	Dispersive Ground Plane Core-Shell Type Optical Monopole Antennas Fabricated with Electron Beam Induced Deposition. ACS Nano, 2012, 6, 8226-8232.	7.3	16
285	Planar metal/dielectric single-periodic multilayer ultraviolet flat lens. Optica, 2016, 3, 592.	4.8	16
286	Monocrystalline Nanopatterns Made by Nanocube Assembly and Epitaxy. Advanced Materials, 2017, 29, 1701064.	11.1	16
287	Efficient Green Emission from Wurtzite Al _x In _{1-x} P Nanowires. Nano Letters, 2018, 18, 3543-3549.	4.5	16
288	The nature of keV and MeV ion damage in Al _x Ga _{1-x} As/GaAs and AlAs/GaAs heterostructures. Nuclear Instruments & Methods in Physics Research B, 1992, 62, 463-468.	0.6	15

#	ARTICLE	IF	CITATIONS
289	Optical and electrical doping of silicon with holmium. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 497-501.	0.6	15
290	Photoelectron imaging of modal interference in plasmonic whispering gallery cavities. Optics Express, 2015, 23, 31619.	1.7	15
291	Effect of EVA Encapsulation on Antireflection Properties of Mie Nanoscatterers for c-Si Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 559-564.	1.5	15
292	Soft imprinted Ag nanowire hybrid electrodes on silicon heterojunction solar cells. Nano Energy, 2016, 30, 398-406.	8.2	15
293	Phase-Resolved Surface Plasmon Scattering Probed by Cathodoluminescence Holography. ACS Photonics, 2020, 7, 1476-1482.	3.2	15
294	A copper negative index metamaterial in the visible/near-infrared. Applied Physics Letters, 2011, 99, 161108.	1.5	14
295	Experimental Realization of a Polarization-Independent Ultraviolet/Visible Coaxial Plasmonic Metamaterial. Nano Letters, 2014, 14, 6356-6360.	4.5	14
296	Femtosecond plasmon and photon wave packets excited by a high-energy electron on a metal or dielectric surface. Physical Review B, 2016, 94, .	1.1	14
297	Resonant Metagratings for Spectral and Angular Control of Light for Colored Rooftop Photovoltaics. ACS Applied Energy Materials, 2020, 3, 3150-3156.	2.5	14
298	Direct imaging of optical interference in erbium-doped Al ₂ O ₃ waveguides. Optics Letters, 1996, 21, 576.	1.7	13
299	Employing Cathodoluminescence for Nanothermometry and Thermal Transport Measurements in Semiconductor Nanowires. ACS Nano, 2021, 15, 11385-11395.	7.3	13
300	Transient diffusion of Ga in amorphous silicon. Journal of Applied Physics, 1994, 76, 5719-5723.	1.1	12
301	Ion beam synthesis of planar opto-electronic devices. Nuclear Instruments & Methods in Physics Research B, 1995, 106, 393-399.	0.6	12
302	Activation energy spectra for annealing of ion irradiation induced defects in silica glasses. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 221-226.	0.6	12
303	Plasmonic light-trapping in a-Si:H solar cells by front-side Ag nanoparticle arrays: A benchmarking study. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1571-1574.	0.8	12
304	Towards An Er-Doped Si Nanocrystal Sensitized Waveguide Laser "The Thin Line Between Gain And Loss. , 2003, , 383-400.		12
305	Cylindrical Metalens for Generation and Focusing of Free-Electron Radiation. Nano Letters, 2022, 22, 5641-5650.	4.5	12
306	Pumping planar waveguide amplifiers using a coupled waveguide system. Journal of Lightwave Technology, 2001, 19, 1740-1744.	2.7	11

#	ARTICLE	IF	CITATIONS
307	Er-doped AlGaAs native oxides: photoluminescence characterization and process optimization. IEEE Journal of Selected Topics in Quantum Electronics, 2002, 8, 880-890.	1.9	11
308	Controlled spontaneous emission in plasmonic whispering gallery antennas. Applied Physics Letters, 2011, 99, .	1.5	11
309	Water-Based Assembly and Purification of Plasmon-Coupled Gold Nanoparticle Dimers and Trimers. International Journal of Optics, 2012, 2012, 1-5.	0.6	11
310	Nanophotonic design principles for ultrahigh efficiency photovoltaics. AIP Conference Proceedings, 2013, , .	0.3	11
311	Triggering explosive crystallization of amorphous silicon. Journal of Crystal Growth, 1991, 108, 114-120.	0.7	10
312	Concentration effects in the photodegradation of lissamine-functionalized neodymium complexes in polymer waveguides. Journal of the Optical Society of America B: Optical Physics, 2001, 18, 1690.	0.9	10
313	Superstructure and finite-size effects in a Si photonic woodpile crystal. Physical Review B, 2003, 67, .	1.1	10
314	Stress map for ion irradiation: Depth-resolved dynamic competition between radiation-induced viscoelastic phenomena in SiO ₂ . Applied Physics Letters, 2004, 85, 389-391.	1.5	10
315	Efficient nanorod-based amorphous silicon solar cells with advanced light trapping. Journal of Applied Physics, 2015, 118, .	1.1	10
316	Photon Statistics of Incoherent Cathodoluminescence with Continuous and Pulsed Electron Beams. ACS Photonics, 2021, 8, 916-925.	3.2	10
317	Room-temperature luminescence in semi-insulating polycrystalline silicon implanted with Er. Nuclear Instruments & Methods in Physics Research B, 1995, 96, 378-381.	0.6	9
318	Highly Dispersive Micropatterns in Ion-Exchanged Glass Formed by Ion Irradiation Through a Mask of Colloidal Particles. Advanced Materials, 2002, 14, 1815-1818.	11.1	9
319	Energy-Momentum Cathodoluminescence Imaging of Anisotropic Directionality in Elliptical Aluminum Plasmonic Bullseye Antennas. ACS Photonics, 2019, 6, 573-580.	3.2	9
320	Structural defects and hydrogen clustering in amorphous silicon. Journal of Non-Crystalline Solids, 1998, 227-230, 128-132.	1.5	8
321	Unlocking Higher Power Efficiencies in Luminescent Solar Concentrators through Anisotropic Luminophore Emission. ACS Applied Materials & Interfaces, 2021, 13, 40742-40753.	4.0	8
322	Pulsed-laser induced transient phase transformations at the Si ²⁺ /O interface. Journal of Materials Research, 1989, 4, 843-856.	1.2	7
323	Optical doping of materials by erbium ion implantation. Nuclear Instruments & Methods in Physics Research B, 1996, 116, 77-84.	0.6	7
324	Controlled Passivation and Luminescence Blue Shifts of Isolated Silicon Nanocrystals. Materials Research Society Symposia Proceedings, 2003, 770, 621.	0.1	7

#	ARTICLE	IF	CITATIONS
325	Azimuthally polarized cathodoluminescence from InP nanowires. Applied Physics Letters, 2015, 107, .	1.5	7
326	Fabrication process of a coaxial plasmonic metamaterial. Optical Materials Express, 2016, 6, 884.	1.6	7
327	Fluorescence lifetime studies of MeV erbium implanted silica glass. Electronics Letters, 1991, 27, 993-995.	0.5	6
328	Incorporation, Excitation and De-Excitation of Erbium in Crystal Silicon. Materials Research Society Symposia Proceedings, 1996, 422, 219.	0.1	6
329	Ion implantation into amorphous solids. Materials Chemistry and Physics, 1996, 46, 140-146.	2.0	6
330	Exciting Erbium-Doped Planar Optical Amplifier Materials. Materials Research Society Symposia Proceedings, 1999, 597, 3.	0.1	6
331	Optical properties of high-quality nanohole arrays in gold made using soft-nanoimprint lithography. MRS Communications, 2015, 5, 547-553.	0.8	6
332	Light Trapping in Plasmonic Solar Cells. , 2011, , .		6
333	Depth-resolved nanostructure and refractive index of borosilicate glass doped with Ag nanocrystals. Optical Materials, 2006, 29, 326-331.	1.7	5
334	Reply to 'On the thermodynamics of light trapping in solar cells'. Nature Materials, 2014, 13, 104-105.	13.3	5
335	Generalized antireflection coatings for complex bulk metamaterials. Physical Review B, 2016, 93, .	1.1	5
336	Correlative electron energy loss spectroscopy and cathodoluminescence spectroscopy on three-dimensional plasmonic split ring resonators. Microscopy (Oxford, England), 2018, 67, i40-i51.	0.7	5
337	Manipulating Colloidal Crystallization for Photonic Applications: From Self-Organization to Do-it-Yourself Organization. , 2001, , 239-251.		5
338	Avoiding Shading Losses in Concentrator Photovoltaics Using a Soft-Imprinted Cloaking Geometry. IEEE Journal of Photovoltaics, 2022, 12, 1116-1127.	1.5	5
339	Epitaxial Explosive Crystallization of Amorphous Silicon Layers Buried in a Silicon (100) and (111) Matrix. Materials Research Society Symposia Proceedings, 1989, 147, 179.	0.1	4
340	Lattice Location and Photoluminescence of Er in GaAs and Al _{0.5} Ga _{0.5} As. Materials Research Society Symposia Proceedings, 1993, 301, 175.	0.1	4
341	Luminescence Quenching in Erbium-Doped Hydrogenated Amorphous Silicon. Materials Research Society Symposia Proceedings, 1996, 422, 239.	0.1	4
342	Ultrafast all-optical switching of 3D photonic band gap crystals. , 2007, , .		4

#	ARTICLE	IF	CITATIONS
343	Plasmonic light trapping for thin film A-Si:H solar cells. , 2010, , .		4
344	Surface plasmon polariton modes in coaxial metal-dielectric-metal waveguides. New Journal of Physics, 2016, 18, 043016.	1.2	4
345	Quench rate enhancement in pulsed laser melting of Si by processing under water. Applied Physics Letters, 1988, 52, 535-537.	1.5	3
346	High Concentrations of Erbium In Crystal Silicon by Thermal Or Ion-Beam-Induced Epitaxy of Erbium-Implanted Amorphous Silicon. Materials Research Society Symposia Proceedings, 1993, 301, 101.	0.1	3
347	Erbium doping of crystalline and amorphous silicon for optoelectronic applications. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1996, 18, 1131-1148.	0.4	3
348	Erbium-silicon-oxide Nano-complexes Prepared by Wet Chemical Synthesis. Materials Research Society Symposia Proceedings, 2003, 770, 361.	0.1	3
349	Excitation Mechanisms and Light Emitting Device Performances in Er-Doped Crystalline Si. Materials Research Society Symposia Proceedings, 1996, 422, 305.	0.1	2
350	Tailoring the Optical Properties of Si Nanocrystals In SiO ₂ : Materials Issues And Nanocrystal Laser Perspectives. Materials Research Society Symposia Proceedings, 1997, 486, 213.	0.1	2
351	Miniature erbium doped planar optical amplifiers. , 0, , .		2
352	Nanowires: Solution-Grown Silver Nanowire Ordered Arrays as Transparent Electrodes (Adv. Mater.) Tj ETQq0 0 0 rgrBT /Overlock 10 Tf 1.1 2		2
353	Solving integral equations with inverse-designed metagratings at optical wavelengths. , 2021, , .		2
354	Mark Stockman: Evangelist for Plasmonics. ACS Photonics, 2021, 8, 683-698.	3.2	2
355	Directional quantum dot emission by soft-stamping on silicon Mie resonators. Nanoscale Advances, 2022, 4, 1088-1097.	2.2	2
356	Very large plasmon band shift in strongly coupled metal nanoparticle chain arrays.. Materials Research Society Symposia Proceedings, 2003, 797, 87.	0.1	1
357	Luminescence properties of silicon nanocrystals in Al ₂ O ₃ fabricated at low temperature. , 2008, , .		1
358	Active plasmonic devices and optical metamaterials. , 2009, , .		1
359	Plasmonic anti-reflection coating for thin film solar cells. , 2010, , .		1
360	Highly conductive Ag nanowire hybrid electrodes improve silicon heterojunction solar cells. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
361	Subwavelength imaging of collective modes in silicon nanopillar honeycomb lattices. , 2018, , .		1
362	Smith-Purcell Metasurface Lens. , 2021, , .		1
363	Inverse designed metagratings for far-field integral equations solving. , 2020, , .		1
364	A Radiation Hardened Linear Macrocell Array. IEEE Transactions on Nuclear Science, 1986, 33, 1706-1709.	1.2	0
365	A comparison between excimer laser and thermal annealing for ion-implanted polycrystalline silicon solar cells. Solar Cells, 1987, 20, 51-57.	0.6	0
366	High Concentrations of Erbium in Crystal Silicon by Thermal or Ion-Beam-Induced Epitaxy of Erbium-Implanted Amorphous Silicon. Materials Research Society Symposia Proceedings, 1993, 298, 429.	0.1	0
367	On the Origin of Visible Luminescence from SiO ₂ Films Containing Ge Nanocrystals. Materials Research Society Symposia Proceedings, 1995, 405, 247.	0.1	0
368	Segregation and Trapping of Erbium in Silicon at a Crystal-Amorphous or Crystal-Vacuum Interface. Materials Research Society Symposia Proceedings, 1996, 422, 21.	0.1	0
369	Electroluminescence of Erbium in Oxygen Doped Silicon. Materials Research Society Symposia Proceedings, 1996, 422, 333.	0.1	0
370	Preview: 2003 MRS Spring Meeting. MRS Bulletin, 2003, 28, 204-204.	1.7	0
371	Photovoltaic effect in Si/SiO ₂ /Si heterostructures. , 2008, , .		0
372	An on-chip erbium doped three-photon upconversion silica microlaser emitting at green wavelengths. , 2008, , .		0
373	Plasmonics - from nanoscale integrated circuits to nano-photovoltaics. , 2009, , .		0
374	Plasmonic metamaterials. , 2009, , .		0
375	Conformal plasmonic a-Si:H solar cells with non-periodic light trapping patterns. , 2011, , .		0
376	Special issue on green photonics. Journal of Optics (United Kingdom), 2012, 14, 020201-020201.	1.0	0
377	3D-printed external light traps for solar cells. , 2015, , .		0
378	Topological photonic crystals in the visible: design and angle-resolved characterization of the bulk and edge states. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
379	Non-local computing metasurfaces performing mathematical operations. , 2018, , .		0
380	Near-Infrared Cathodoluminescence Polarimetry of a Plasmonic Vertical Split Ring Resonator. Microscopy and Microanalysis, 2021, 27, 706-708.	0.2	0
381	1, 2 and 3 Dimensional Photonic Materials Made Using Ion Beams: Fabrication and Optical Density-of-States. , 2001, , 555-566.		0
382	Ultrahigh-efficiency solar cells based on nanophotonic design. , 2012, , .		0
383	Full Energy-Momentum Cathodoluminescence Mapping on Circular and Elliptical Plasmonic Bullseye Antennas. , 2019, , .		0
384	Dielectric metasurfaces performing all-analog computing. , 2019, , .		0
385	Nanoscale inspection of GaN LED devices using $g(2)$ cathodoluminescence imaging. , 2019, , .		0
386	Plasma Focused Ion Beam Tomography for Accurate Characterization of Black Silicon Validated by Full Wave Optical Simulation. Advanced Materials Technologies, 0, , 2200068.	3.0	0