

Albert Polman

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367
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36,616
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h-index

183
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391
ext. papers

40,348
ext. citations

6.5
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L-index

#	Paper	IF	Citations
367	Plasmonics for improved photovoltaic devices. <i>Nature Materials</i> , 2010 , 9, 205-13	27	6453
366	Plasmonic solar cells. <i>Optics Express</i> , 2008 , 16, 21793-800	3.3	1198
365	Photovoltaic materials: Present efficiencies and future challenges. <i>Science</i> , 2016 , 352, aad4424	33.3	1192
364	Erbium implanted thin film photonic materials. <i>Journal of Applied Physics</i> , 1997 , 82, 1-39	2.5	965
363	Plasmon slot waveguides: Towards chip-scale propagation with subwavelength-scale localization. <i>Physical Review B</i> , 2006 , 73,	3.3	863
362	Design principles for particle plasmon enhanced solar cells. <i>Applied Physics Letters</i> , 2008 , 93, 191113	3.4	655
361	Photonic design principles for ultrahigh-efficiency photovoltaics. <i>Nature Materials</i> , 2012 , 11, 174-7	27	632
360	Broadband omnidirectional antireflection coating based on subwavelength surface Mie resonators. <i>Nature Communications</i> , 2012 , 3, 692	17.4	601
359	Light trapping in ultrathin plasmonic solar cells. <i>Optics Express</i> , 2010 , 18 Suppl 2, A237-45	3.3	494
358	Transparent conducting silver nanowire networks. <i>Nano Letters</i> , 2012 , 12, 3138-44	11.5	437
357	Tunable light trapping for solar cells using localized surface plasmons. <i>Journal of Applied Physics</i> , 2009 , 105, 114310	2.5	403
356	Nanophotonics: shrinking light-based technology. <i>Science</i> , 2015 , 348, 516-21	33.3	356
355	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	3.4	354
354	Evolution of light-induced vapor generation at a liquid-immersed metallic nanoparticle. <i>Nano Letters</i> , 2013 , 13, 1736-42	11.5	346
353	Planar metal plasmon waveguides: frequency-dependent dispersion, propagation, localization, and loss beyond the free electron model. <i>Physical Review B</i> , 2005 , 72,	3.3	340
352	Experimental realization of an epsilon-near-zero metamaterial at visible wavelengths. <i>Nature Photonics</i> , 2013 , 7, 907-912	33.9	315
351	Optimized spatial correlations for broadband light trapping nanopatterns in high efficiency ultrathin film a-Si:H solar cells. <i>Nano Letters</i> , 2011 , 11, 4239-45	11.5	306

350	Room-temperature electroluminescence from Er-doped crystalline Si. <i>Applied Physics Letters</i> , 1994 , 64, 2235-2237	3.4	304
349	Rare-earth doped polymers for planar optical amplifiers. <i>Journal of Applied Physics</i> , 2002 , 91, 3955-3980	2.5	289
348	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,	3.3	273
347	Applied physics. Plasmonics applied. <i>Science</i> , 2008 , 322, 868-9	33.3	255
346	Plasmonic light trapping in thin-film Si solar cells. <i>Journal of Optics (United Kingdom)</i> , 2012 , 14, 024002	1.7	250
345	Strong exciton-erbium coupling in Si nanocrystal-doped SiO ₂ . <i>Applied Physics Letters</i> , 2000 , 76, 2325-2327	3.4	243
344	Temperature dependence and quenching processes of the intra-4f luminescence of Er in crystalline Si. <i>Physical Review B</i> , 1994 , 49, 16313-16320	3.3	241
343	Designing dielectric resonators on substrates: combining magnetic and electric resonances. <i>Optics Express</i> , 2013 , 21, 26285-302	3.3	239
342	Direct observation of plasmonic modes in au nanowires using high-resolution cathodoluminescence spectroscopy. <i>Nano Letters</i> , 2007 , 7, 2843-6	11.5	238
341	Improved red-response in thin film a-Si:H solar cells with soft-imprinted plasmonic back reflectors. <i>Applied Physics Letters</i> , 2009 , 95, 183503	3.4	225
340	Highly efficient GaAs solar cells by limiting light emission angle. <i>Light: Science and Applications</i> , 2013 , 2, e45-e45	16.7	219
339	Broadband sensitizers for erbium-doped planar optical amplifiers: review. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2004 , 21, 871	1.7	216
338	Highly confined electromagnetic fields in arrays of strongly coupled Ag nanoparticles. <i>Physical Review B</i> , 2005 , 71,	3.3	209
337	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	3.4	202
336	A single-layer wide-angle negative-index metamaterial at visible frequencies. <i>Nature Materials</i> , 2010 , 9, 407-12	27	198
335	Tuning the emission wavelength of Si nanocrystals in SiO ₂ by oxidation. <i>Applied Physics Letters</i> , 1998 , 72, 2577-2579	3.4	196
334	Measuring and modifying the spontaneous emission rate of erbium near an interface. <i>Physical Review Letters</i> , 1995 , 74, 2459-2462	7.4	196
333	Nanowire plasmon excitation by adiabatic mode transformation. <i>Physical Review Letters</i> , 2009 , 102, 203904	7.04	193

332	The role of quantum-confined excitons vs defects in the visible luminescence of SiO ₂ films containing Ge nanocrystals. <i>Applied Physics Letters</i> , 1996 , 68, 2511-2513	3.4	192
331	Net optical gain at 1.53 μm in Er-doped Al ₂ O ₃ waveguides on silicon. <i>Applied Physics Letters</i> , 1996 , 68, 1886-1888	3.4	192
330	Nanofocusing in laterally tapered plasmonic waveguides. <i>Optics Express</i> , 2008 , 16, 45-57	3.3	188
329	Polarization-selective plasmon-enhanced silicon quantum-dot luminescence. <i>Nano Letters</i> , 2006 , 6, 2622-2625	3.5	187
328	Designing periodic arrays of metal nanoparticles for light-trapping applications in solar cells. <i>Applied Physics Letters</i> , 2009 , 95, 053115	3.4	185
327	Size-dependent electron-hole exchange interaction in Si nanocrystals. <i>Applied Physics Letters</i> , 2000 , 76, 351-353	3.4	185
326	Modeling light trapping in nanostructured solar cells. <i>ACS Nano</i> , 2011 , 5, 10055-64	16.7	183
325	Optical impedance matching using coupled plasmonic nanoparticle arrays. <i>Nano Letters</i> , 2011 , 11, 1760-1765	3.5	179
324	A silicon-based electrical source of surface plasmon polaritons. <i>Nature Materials</i> , 2010 , 9, 21-5	27	174
323	Nanophotonics. Plasmoelectric potentials in metal nanostructures. <i>Science</i> , 2014 , 346, 828-31	33.3	173
322	The erbium-impurity interaction and its effects on the 1.54 μm luminescence of Er ³⁺ in crystalline silicon. <i>Journal of Applied Physics</i> , 1995 , 78, 3874-3882	2.5	171
321	Spectral tuning of plasmon-enhanced silicon quantum dot luminescence. <i>Applied Physics Letters</i> , 2006 , 88, 131109	3.4	170
320	Silver as a sensitizer for erbium. <i>Applied Physics Letters</i> , 2002 , 81, 1414-1416	3.4	168
319	Complex response and polariton-like dispersion splitting in periodic metal nanoparticle chains. <i>Physical Review B</i> , 2006 , 74,	3.3	167
318	Experimental verification of n = 0 structures for visible light. <i>Physical Review Letters</i> , 2013 , 110, 013902	7.4	165
317	Ultrasmall mode volume plasmonic nanodisk resonators. <i>Nano Letters</i> , 2010 , 10, 1537-41	11.5	159
316	Photoluminescence characterization of Er-implanted Al ₂ O ₃ films. <i>Applied Physics Letters</i> , 1993 , 62, 3065-3067	3.4	159
315	Concentration quenching in erbium implanted alkali silicate glasses. <i>Optical Materials</i> , 1996 , 5, 159-167	3.3	157

314	Optical doping of waveguide materials by MeV Er implantation. <i>Journal of Applied Physics</i> , 1991 , 70, 3778-3784	11.5	156
313	Directional emission from plasmonic Yagi-Uda antennas probed by angle-resolved cathodoluminescence spectroscopy. <i>Nano Letters</i> , 2011 , 11, 3779-84	11.5	155
312	Optical properties of erbium-doped organic polydentate cage complexes. <i>Journal of Applied Physics</i> , 1998 , 83, 497-503	2.5	152
311	Upconversion in Er-implanted Al ₂ O ₃ waveguides. <i>Journal of Applied Physics</i> , 1996 , 79, 1258-1266	2.5	145
310	Microstructure of erbium-implanted Si. <i>Applied Physics Letters</i> , 1991 , 58, 2797-2799	3.4	142
309	Exciton-erbium interactions in Si nanocrystal-doped SiO ₂ . <i>Journal of Applied Physics</i> , 2000 , 88, 1992-1998	2.5	141
308	Demonstration of an erbium-doped microdisk laser on a silicon chip. <i>Physical Review A</i> , 2006 , 74,	2.6	140
307	Directional emission from a single plasmonic scatterer. <i>Nature Communications</i> , 2014 , 5, 3250	17.4	136
306	Nonlocal Metasurfaces for Optical Signal Processing. <i>Physical Review Letters</i> , 2018 , 121, 173004	7.4	136
305	Absorption and emission spectroscopy in Er ³⁺ /Yb ³⁺ doped aluminum oxide waveguides. <i>Optical Materials</i> , 2003 , 21, 705-712	3.3	133
304	Plasmon-based nanolenses assembled on a well-defined DNA template. <i>Journal of the American Chemical Society</i> , 2008 , 130, 2750-1	16.4	132
303	Plasmon-enhanced erbium luminescence. <i>Applied Physics Letters</i> , 2006 , 89, 211107	3.4	131
302	Asymmetry in photocurrent enhancement by plasmonic nanoparticle arrays located on the front or on the rear of solar cells. <i>Applied Physics Letters</i> , 2010 , 96, 033113	3.4	129
301	Near-infrared electroluminescence of polymer light-emitting diodes doped with a lissamine-sensitized Nd ³⁺ complex. <i>Applied Physics Letters</i> , 2001 , 78, 2122-2124	3.4	126
300	Aligned Gold Nanorods in Silica Made by Ion Irradiation of Core-Shell Colloidal Particles. <i>Advanced Materials</i> , 2004 , 16, 235-237	24	125
299	Ultralow-threshold erbium-implanted toroidal microlaser on silicon. <i>Applied Physics Letters</i> , 2004 , 84, 1037-1039	3.4	121
298	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	2.5	121
297	Enhanced nonlinear optical effects with a tapered plasmonic waveguide. <i>Nano Letters</i> , 2007 , 7, 334-7	11.5	120

296	Local density of states, spectrum, and far-field interference of surface plasmon polaritons probed by cathodoluminescence. <i>Physical Review B</i> , 2009 , 79,	3.3	118
295	Colloidal Ellipsoids with Continuously Variable Shape. <i>Advanced Materials</i> , 2000 , 12, 1511-1514	24	114
294	Erbium in crystal silicon: Optical activation, excitation, and concentration limits. <i>Journal of Applied Physics</i> , 1995 , 77, 1256-1262	2.5	111
293	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	2.5	108
292	Deep-subwavelength imaging of the modal dispersion of light. <i>Nature Materials</i> , 2012 , 11, 781-7	27	107
291	MeV ion irradiation-induced creation and relaxation of mechanical stress in silica. <i>Journal of Applied Physics</i> , 1995 , 78, 4723-4732	2.5	104
290	Tunable Nanoscale Localization of Energy on Plasmon Particle Arrays. <i>Nano Letters</i> , 2007 , 7, 2004-2008	11.5	103
289	Photonic crystals of shape-anisotropic colloidal particles. <i>Applied Physics Letters</i> , 2002 , 81, 838-840	3.4	103
288	Excitation and deexcitation of Er ³⁺ in crystalline silicon. <i>Applied Physics Letters</i> , 1997 , 70, 1721-1723	3.4	102
287	Photoluminescence quantum efficiency of dense silicon nanocrystal ensembles in SiO ₂ . <i>Physical Review B</i> , 2006 , 73,	3.3	101
286	Optical and topological characterization of gold nanoparticle dimers linked by a single DNA double strand. <i>Nano Letters</i> , 2011 , 11, 5060-5	11.5	99
285	Local structure around Er in silica and sodium silicate glasses. <i>Journal of Non-Crystalline Solids</i> , 1991 , 136, 260-265	3.9	98
284	Prospects of near-field plasmonic absorption enhancement in semiconductor materials using embedded Ag nanoparticles. <i>Optics Express</i> , 2012 , 20 Suppl 5, A641-54	3.3	97
283	Erbium as a probe of everything?. <i>Physica B: Condensed Matter</i> , 2001 , 300, 78-90	2.8	97
282	Electron-beam spectroscopy for nanophotonics. <i>Nature Materials</i> , 2019 , 18, 1158-1171	27	96
281	Room-temperature luminescence from Er-implanted semi-insulating polycrystalline silicon. <i>Applied Physics Letters</i> , 1993 , 63, 1942-1944	3.4	96
280	Loss mechanisms of surface plasmon polaritons on gold probed by cathodoluminescence imaging spectroscopy.. <i>Applied Physics Letters</i> , 2008 , 93, 113110	3.4	94
279	Gallium plasmonics: deep subwavelength spectroscopic imaging of single and interacting gallium nanoparticles. <i>ACS Nano</i> , 2015 , 9, 2049-60	16.7	93

278	Densification, anisotropic deformation, and plastic flow of SiO ₂ during MeV heavy ion irradiation. <i>Applied Physics Letters</i> , 1994 , 65, 2487-2489	3.4	93
277	Surface plasmon polariton modes in a single-crystal Au nanoresonator fabricated using focused-ion-beam milling. <i>Applied Physics Letters</i> , 2008 , 92, 083110	3.4	91
276	Solution-Grown Silver Nanowire Ordered Arrays as Transparent Electrodes. <i>Advanced Materials</i> , 2016 , 28, 905-9	24	89
275	Plasmon-Enhanced Photoluminescence of Silicon Quantum Dots: Simulation and Experiment. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 13372-13377	3.8	89
274	Optical properties of lissamine functionalized Nd ³⁺ complexes in polymer waveguides and solution. <i>Optical Materials</i> , 2000 , 14, 101-107	3.3	89
273	Incorporation of high concentrations of erbium in crystal silicon. <i>Applied Physics Letters</i> , 1993 , 62, 507-509	3.4	89
272	Purcell-factor-enhanced scattering from Si nanocrystals in an optical microcavity. <i>Physical Review Letters</i> , 2009 , 103, 027406	7.4	88
271	Erbium in oxygen-doped silicon: Optical excitation. <i>Journal of Applied Physics</i> , 1995 , 78, 2642-2650	2.5	88
270	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	1.7	86
269	Direct imaging of propagation and damping of near-resonance surface plasmon polaritons using cathodoluminescence spectroscopy. <i>Applied Physics Letters</i> , 2006 , 88, 221111	3.4	85
268	Near-field visualization of strongly confined surface plasmon polaritons in metal-insulator-metal waveguides. <i>Nano Letters</i> , 2008 , 8, 2925-9	11.5	84
267	Light Coupling and Trapping in Ultrathin Cu(In,Ga)Se ₂ Solar Cells Using Dielectric Scattering Patterns. <i>ACS Nano</i> , 2015 , 9, 9603-13	16.7	83
266	Field enhancement in metallic subwavelength aperture arrays probed by erbium upconversion luminescence. <i>Optics Express</i> , 2009 , 17, 14586-98	3.3	83
265	Plasmon dispersion in coaxial waveguides from single-cavity optical transmission measurements. <i>Nano Letters</i> , 2009 , 9, 2832-7	11.5	81
264	Size-dependent oxygen-related electronic states in silicon nanocrystals. <i>Applied Physics Letters</i> , 2004 , 84, 5389-5391	3.4	81
263	Are negative index materials achievable with surface plasmon waveguides? A case study of three plasmonic geometries. <i>Optics Express</i> , 2008 , 16, 19001-17	3.3	80
262	Infrared surface plasmons in two-dimensional silver nanoparticle arrays in silicon. <i>Applied Physics Letters</i> , 2004 , 85, 1317-1319	3.4	80
261	Erbium-implanted silica colloids with 80% luminescence quantum efficiency. <i>Applied Physics Letters</i> , 2000 , 76, 3682-3684	3.4	80

260	Three-dimensional negative index of refraction at optical frequencies by coupling plasmonic waveguides. <i>Physical Review Letters</i> , 2010 , 105, 223901	7.4	79
259	Ion beam-induced anisotropic plastic deformation at 300 keV. <i>Applied Physics Letters</i> , 2003 , 83, 4315-4317	3.4	79
258	Faster transfer and the local optical density of states in erbium-doped silica. <i>Physical Review B</i> , 2005 , 71,	3.3	79
257	Self-assembled infrared-luminescent ErBiO ₃ crystallites on silicon. <i>Applied Physics Letters</i> , 2004 , 85, 4343	3.4	78
256	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	2.5	76
255	Fabrication of two-dimensional photonic crystal waveguides for 1.5 μ m in silicon by deep anisotropic dry etching. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1999 , 17, 2734		76
254	Nanoscale optical tomography with cathodoluminescence spectroscopy. <i>Nature Nanotechnology</i> , 2015 , 10, 429-36	28.7	74
253	The New μ m Junction—Plasmonics Enables Photonic Access to the Nanoworld. <i>MRS Bulletin</i> , 2005 , 30, 385-389	3.2	74
252	Single-Step Soft-Imprinted Large-Area Nanopatterned Antireflection Coating. <i>Nano Letters</i> , 2015 , 15, 4223-8	11.5	72
251	High-Index Dielectric Metasurfaces Performing Mathematical Operations. <i>Nano Letters</i> , 2019 , 19, 8418-8423	11.5	71
250	Origin of the 1.54 μ m luminescence of erbium-implanted porous silicon. <i>Applied Physics Letters</i> , 1995 , 66, 2379-2381	3.4	71
249	Gain limiting processes in Er-doped Si nanocrystal waveguides in SiO ₂ . <i>Journal of Applied Physics</i> , 2002 , 91, 534	2.5	70
248	Modal decomposition of surface--plasmon whispering gallery resonators. <i>Nano Letters</i> , 2009 , 9, 3147-50	11.5	69
247	Resonant modes of single silicon nanocavities excited by electron irradiation. <i>ACS Nano</i> , 2013 , 7, 1689-98	6.7	68
246	Erbium-implanted high-Q silica toroidal microcavity laser on a silicon chip. <i>Physical Review A</i> , 2004 , 70,	2.6	68
245	Luminescence quenching in erbium-doped hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1996 , 68, 997-999	3.4	67
244	Erbium in crystal silicon: Segregation and trapping during solid phase epitaxy of amorphous silicon. <i>Journal of Applied Physics</i> , 1994 , 75, 2809-2817	2.5	66
243	Origin of MeV ion irradiation-induced stress changes in SiO ₂ . <i>Journal of Applied Physics</i> , 2000 , 88, 59-64	2.5	65

242	Anisotropic deformation of metallo-dielectric core-shell colloids under MeV ion irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006 , 242, 523-529	1.2	64
241	Energy-dependent anisotropic deformation of colloidal silica particles under MeV Au irradiation. <i>Applied Physics Letters</i> , 2001 , 78, 910-912	3.4	64
240	Solar steam nanobubbles. <i>ACS Nano</i> , 2013 , 7, 15-8	16.7	63
239	Efficient generation of propagating plasmons by electron beams. <i>Nano Letters</i> , 2009 , 9, 1176-81	11.5	63
238	Temperature dependence of MeV heavy ion irradiation-induced viscous flow in SiO ₂ . <i>Applied Physics Letters</i> , 1997 , 71, 1628-1630	3.4	63
237	Angle-resolved cathodoluminescence spectroscopy. <i>Applied Physics Letters</i> , 2011 , 99, 143103	3.4	62
236	Al ₂ O ₃ /TiO ₂ nano-pattern antireflection coating with ultralow surface recombination. <i>Applied Physics Letters</i> , 2013 , 102, 233902	3.4	61
235	Broadband Purcell enhancement in plasmonic ring cavities. <i>Physical Review B</i> , 2010 , 82,	3.3	60
234	Mega-electron-volt ion beam induced anisotropic plasmon resonance of silver nanocrystals in glass. <i>Applied Physics Letters</i> , 2003 , 83, 4137-4139	3.4	60
233	Plasmon nanomechanical coupling for nanoscale transduction. <i>Nano Letters</i> , 2013 , 13, 3293-7	11.5	59
232	Direct imaging of hybridized eigenmodes in coupled silicon nanoparticles. <i>Optica</i> , 2016 , 3, 93	8.6	58
231	Experimental test of kinetic theories for heterogeneous freezing in silicon. <i>Physical Review B</i> , 1993 , 47, 5-13	3.3	58
230	Light Trapping in Thin Crystalline Si Solar Cells Using Surface Mie Scatterers. <i>IEEE Journal of Photovoltaics</i> , 2014 , 4, 554-559	3.7	57
229	Probing the Band Structure of Topological Silicon Photonic Lattices in the Visible Spectrum. <i>Physical Review Letters</i> , 2019 , 122, 117401	7.4	56
228	Resonant SPP modes supported by discrete metal nanoparticles on high-index substrates. <i>Optics Express</i> , 2011 , 19 Suppl 2, A146-56	3.3	56
227	Controlling Fano lineshapes in plasmon-mediated light coupling into a substrate. <i>Optics Express</i> , 2011 , 19 Suppl 3, A303-11	3.3	56
226	Plasmonic modes of annular nanoresonators imaged by spectrally resolved cathodoluminescence. <i>Nano Letters</i> , 2007 , 7, 3612-7	11.5	56
225	Coupling of Er ions to surface plasmons on Ag. <i>Applied Physics Letters</i> , 2005 , 86, 041113	3.4	56

224	Erbium in oxygen-doped silicon: Electroluminescence. <i>Journal of Applied Physics</i> , 1995 , 77, 6504-6510	2.5	56
223	Optical and structural properties of MeV erbium-implanted LiNbO ₃ . <i>Journal of Applied Physics</i> , 1994 , 75, 173-180	2.5	56
222	Angle-Resolved Cathodoluminescence Imaging Polarimetry. <i>ACS Photonics</i> , 2016 , 3, 147-154	6.3	55
221	Experimental evidence for large dynamic effects on the plasmon dispersion of subwavelength metal nanoparticle waveguides. <i>Physical Review B</i> , 2007 , 76,	3.3	55
220	Local optical density of states in SiO ₂ spherical microcavities: Theory and experiment. <i>Physical Review A</i> , 2001 , 64,	2.6	55
219	Visible Light, Wide-Angle Graded Metasurface for Back Reflection. <i>ACS Photonics</i> , 2017 , 4, 228-235	6.3	54
218	Dielectric Scattering Patterns for Efficient Light Trapping in Thin-Film Solar Cells. <i>Nano Letters</i> , 2015 , 15, 4846-52	11.5	54
217	Materials Science Aspects of Photonic Crystals. <i>MRS Bulletin</i> , 2001 , 26, 608-613	3.2	53
216	Controlling magnetic and electric dipole modes in hollow silicon nanocylinders. <i>Optics Express</i> , 2016 , 24, 2047-64	3.3	53
215	Microphotonic parabolic light directors fabricated by two-photon lithography. <i>Applied Physics Letters</i> , 2011 , 99, 151113	3.4	52
214	Mode coupling by plasmonic surface scatterers in thin-film silicon solar cells. <i>Applied Physics Letters</i> , 2012 , 101, 221110	3.4	52
213	Effects of heat treatment and concentration on the luminescence properties of erbium-doped silica sol-gel films. <i>Journal of Non-Crystalline Solids</i> , 2001 , 296, 158-164	3.9	52
212	Depth distribution of luminescent Si nanocrystals in Si implanted SiO ₂ films on Si. <i>Journal of Applied Physics</i> , 1999 , 86, 759-763	2.5	52
211	Acid-Based Synthesis of Monodisperse Rare-Earth-Doped Colloidal SiO ₂ Spheres. <i>Chemistry of Materials</i> , 2002 , 14, 2849-2853	9.6	51
210	Strong luminescence quantum-efficiency enhancement near prolate metal nanoparticles: Dipolar versus higher-order modes. <i>Journal of Applied Physics</i> , 2009 , 105, 044302	2.5	50
209	Optimized Scattering Power Spectral Density of Photovoltaic Light-Trapping Patterns. <i>ACS Photonics</i> , 2015 , 2, 822-831	6.3	49
208	Energy backtransfer and infrared photoresponse in erbium-doped silicon p-n diodes. <i>Journal of Applied Physics</i> , 2000 , 88, 5381-5387	2.5	49
207	Defect states of amorphous Si probed by the diffusion and solubility of Cu. <i>Applied Physics Letters</i> , 1990 , 57, 1230-1232	3.4	49

206	How grooves reflect and confine surfaceplasmon polaritons. <i>Optics Express</i> , 2009 , 17, 10385-92	3.3	48
205	Plasmonics: optics at the nanoscale. <i>Materials Today</i> , 2005 , 8, 56	21.8	48
204	Resonant nano-antennas for light trapping in plasmonic solar cells. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 185101	3	46
203	Anisotropic plastic deformation by viscous flow in ion tracks. <i>Physical Review B</i> , 2005 , 71,	3.3	46
202	Amorphous silicon waveguides for microphotronics. <i>Journal of Applied Physics</i> , 2002 , 92, 649-653	2.5	46
201	Optimization of an Er-doped silica glass optical waveguide amplifier. <i>IEEE Journal of Quantum Electronics</i> , 1996 , 32, 1680-1684	2	46
200	Optical doping of soda-lime-silicate glass with erbium by ion implantation. <i>Journal of Applied Physics</i> , 1993 , 73, 8179-8183	2.5	46
199	1.54 eV room-temperature luminescence of MeV erbium-implanted silica glass. <i>Applied Physics Letters</i> , 1990 , 57, 2859-2861	3.4	46
198	Photovoltaics Reaching for the Shockley-Queisser Limit. <i>ACS Energy Letters</i> , 2020 , 5, 3029-3033	20.1	46
197	Combined optical tweezers/ion beam technique to tune colloidal masks for nanolithography. <i>Nano Letters</i> , 2005 , 5, 1175-9	11.5	45
196	Anisotropic deformation of colloidal particles under MeV ion irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2001 , 175-177, 350-356	1.2	45
195	Large-area soft-imprinted nanowire networks as light trapping transparent conductors. <i>Scientific Reports</i> , 2015 , 5, 11414	4.9	44
194	Imaging the hidden modes of ultrathin plasmonic strip antennas by cathodoluminescence. <i>Nano Letters</i> , 2011 , 11, 4265-9	11.5	44
193	Plasmonic nanofocusing in a dielectric wedge. <i>Nano Letters</i> , 2010 , 10, 3665-9	11.5	44
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