Harry A Atwater

List of Publications by Citations

558 papers	49,994 citations	99 h-index	216 g-index
769 ext. papers	56,552 ext. citations	9.1 avg, IF	8.16 L-index

#	Paper	IF	Citations
558	Plasmonics for improved photovoltaic devices. *Nature Materials*, **2010**, 9, 205-13	27	6453
557	Local detection of electromagnetic energy transport below the diffraction limit in metal nanoparticle plasmon waveguides. *Nature Materials*, **2003**, 2, 229-32	27	1960
556	Plasmonics: Localization and guiding of electromagnetic energy in metal/dielectric structures. *Journal of Applied Physics*, **2005**, 98, 011101	2.5	1418
555	Broadband polarization-independent resonant light absorption using ultrathin plasmonic super absorbers. *Nature Communications*, **2011**, 2, 517	17.4	1237
554	Comparison of the device physics principles of planar and radial p-n junction nanorod solar cells. *Journal of Applied Physics*, **2005**, 97, 114302	2.5	1133
553	Materials science. Low-loss plasmonic metamaterials. *Science*, **2011**, 331, 290-1	33.3	1035
552	Enhanced absorption and carrier collection in Si wire arrays for photovoltaic applications. *Nature Materials*, **2010**, 9, 239-44	27	910
551	Photonic design principles for ultrahigh-efficiency photovoltaics. *Nature Materials*, **2012**, 11, 174-7	27	632
550	Electromagnetic energy transfer and switching in nanoparticle chain arrays below the diffraction limit. *Physical Review B*, **2000**, 62, R16356-R16359	3.3	632
549	Plasmonic nanostructure design for efficient light coupling into solar cells. *Nano Letters*, **2008**, 8, 4391-7	11.5	623
548	Plasmonic nanoparticle enhanced light absorption in GaAs solar cells. *Applied Physics Letters*, **2008**, 93, 121904	3.4	616
547	The Promise of Plasmonics. *Scientific American*, **2007**, 296, 56-62	0.5	557
546	Design considerations for plasmonic photovoltaics. *Advanced Materials*, **2010**, 22, 4794-808	24	542
545	Photoelectrochemical hydrogen evolution using Si microwire arrays. *Journal of the American Chemical Society*, **2011**, 133, 1216-9	16.4	515
544	Photovoltaic measurements in single-nanowire silicon solar cells. *Nano Letters*, **2008**, 8, 710-4	11.5	513
543	Field-effect electroluminescence in silicon nanocrystals. *Nature Materials*, **2005**, 4, 143-6	27	500
542	Light trapping in ultrathin plasmonic solar cells. *Optics Express*, **2010**, 18 Suppl 2, A237-45	3.3	494

541	Theoretical predictions for hot-carrier generation from surface plasmon decay. *Nature Communications*, **2014**, 5, 5788	17.4	475
540	A comparative technoeconomic analysis of renewable hydrogen production using solar energy. *Energy and Environmental Science*, **2016**, 9, 2354-2371	35.4	475
539	Energy-conversion properties of vapor-liquid-solid-grown silicon wire-array photocathodes. *Science*, **2010**, 327, 185-7	33.3	460
538	Negative refraction at visible frequencies. *Science*, **2007**, 316, 430-2	33.3	447
537	All-optical modulation by plasmonic excitation of CdSe quantum dots. *Nature Photonics*, **2007**, 1, 402-406	33.9	442
536	Plasmonic color filters for CMOS image sensor applications. *Nano Letters*, **2012**, 12, 4349-54	11.5	438
535	PlasMOStor: a metal-oxide-Si field effect plasmonic modulator. *Nano Letters*, **2009**, 9, 897-902	11.5	427
534	Highly confined tunable mid-infrared plasmonics in graphene nanoresonators. *Nano Letters*, **2013**, 13, 2541-7	11.5	415
533	Observation of coupled plasmon-polariton modes in Au nanoparticle chain waveguides of different lengths: Estimation of waveguide loss. *Applied Physics Letters*, **2002**, 81, 1714-1716	3.4	415
532	Frequency tunable near-infrared metamaterials based on VO2 phase transition. *Optics Express*, **2009**, 17, 18330-9	3.3	398
531	Gate-Tunable Conducting Oxide Metasurfaces. *Nano Letters*, **2016**, 16, 5319-25	11.5	381
530	Nonradiative Plasmon Decay and Hot Carrier Dynamics: Effects of Phonons, Surfaces, and Geometry. *ACS Nano*, **2016**, 10, 957-66	16.7	380
529	Defect-related versus excitonic visible light emission from ion beam synthesized Si nanocrystals in SiO2. *Applied Physics Letters*, **1996**, 69, 2033-2035	3.4	354
528	Optical pulse propagation in metal nanoparticle chain waveguides. *Physical Review B*, **2003**, 67,	3.3	339
527	Unity-order index change in transparent conducting oxides at visible frequencies. *Nano Letters*, **2010**, 10, 2111-6	11.5	333
526	Subwavelength integrated photonics. *Nature*, **2018**, 560, 565-572	50.4	324
525	Highly strained compliant optical metamaterials with large frequency tunability. *Nano Letters*, **2010**, 10, 4222-7	11.5	323
524	Observation of near-field coupling in metal nanoparticle chains using far-field polarization spectroscopy. *Physical Review B*, **2002**, 65,	3.3	322

523	Optimized spatial correlations for broadband light trapping nanopatterns in high efficiency ultrathin film a-Si:H solar cells. *Nano Letters*, **2011**, 11, 4239-45	11.5	306
522	Large integrated absorption enhancement in plasmonic solar cells by combining metallic gratings and antireflection coatings. *Nano Letters*, **2011**, 11, 2195-201	11.5	297
521	Rapid self-assembly of brush block copolymers to photonic crystals. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 14332-6	11.5	288
520	Light absorption enhancement in thin-film solar cells using whispering gallery modes in dielectric nanospheres. *Advanced Materials*, **2011**, 23, 1272-6	24	281
519	Interband Transitions in SnxGe1 Alloys. *Physical Review Letters*, **1997**, 79, 1937-1940	7.4	262
518	Solar Cell light trapping beyond the ray optic limit. *Nano Letters*, **2012**, 12, 214-8	11.5	251
517	Hybrid surface-phonon-plasmon polariton modes in graphene/monolayer h-BN heterostructures. *Nano Letters*, **2014**, 14, 3876-80	11.5	238
516	Growth of vertically aligned Si wire arrays over large areas (>1cm2) with Au and Cu catalysts. *Applied Physics Letters*, **2007**, 91, 103110	3.4	234
515	High aspect ratio silicon wire array photoelectrochemical cells. *Journal of the American Chemical Society*, **2007**, 129, 12346-7	16.4	226
514	Improved red-response in thin film a-Si:H solar cells with soft-imprinted plasmonic back reflectors. *Applied Physics Letters*, **2009**, 95, 183503	3.4	225
513	A monolithically integrated, intrinsically safe, 10% efficient, solar-driven water-splitting system based on active, stable earth-abundant electrocatalysts in conjunction with tandem III V light absorbers protected by amorphous TiO2 films. *Energy and Environmental Science*, **2015**, 8, 3166-3172	35.4	222
512	Highly efficient GaAs solar cells by limiting light emission angle. *Light: Science and Applications*, **2013**, 2, e45-e45	16.7	219
511	Highly confined photon transport in subwavelength metallic slot waveguides. *Nano Letters*, **2006**, 6, 1928-32	11.5	217
510	Hot Hole Collection and Photoelectrochemical CO Reduction with Plasmonic Au/p-GaN Photocathodes. *Nano Letters*, **2018**, 18, 2545-2550	11.5	215
509	Nanoscale conducting oxide PlasMOStor. *Nano Letters*, **2014**, 14, 6463-8	11.5	215
508	Enhanced radiative emission rate and quantum efficiency in coupled silicon nanocrystal-nanostructured gold emitters. *Nano Letters*, **2005**, 5, 1768-73	11.5	206
507	Monolithic Photoelectrochemical Device for Direct Water Splitting with 19% Efficiency. *ACS Energy Letters*, **2018**, 3, 1795-1800	20.1	206
506	Experimental Demonstration of >230 Phase Modulation in Gate-Tunable Graphene-Gold Reconfigurable Mid-Infrared Metasurfaces. *Nano Letters*, **2017**, 17, 3027-3034	11.5	200

505	Si microwire-array solar cells. *Energy and Environmental Science*, **2010**, 3, 1037	35.4	199
504	A single-layer wide-angle negative-index metamaterial at visible frequencies. *Nature Materials*, **2010**, 9, 407-12	27	198
503	Tuning the emission wavelength of Si nanocrystals in SiO2 by oxidation. *Applied Physics Letters*, **1998**, 72, 2577-2579	3.4	196
502	The role of quantum-confined excitons vs defects in the visible luminescence of SiO2 films containing Ge nanocrystals. *Applied Physics Letters*, **1996**, 68, 2511-2513	3.4	192
501	Plasmonic hot carrier dynamics in solid-state and chemical systems for energy conversion. *Nanophotonics*, **2016**, 5, 96-111	6.3	190
500	Design of nanostructured solar cells using coupled optical and electrical modeling. *Nano Letters*, **2012**, 12, 2894-900	11.5	189
499	Polarization-selective plasmon-enhanced silicon quantum-dot luminescence. *Nano Letters*, **2006**, 6, 2622-5	11.5	187
498	Photovoltaic performance of ultrasmall PbSe quantum dots. *ACS Nano*, **2011**, 5, 8140-7	16.7	185
497	Size-dependent electron-hole exchange interaction in Si nanocrystals. *Applied Physics Letters*, **2000**, 76, 351-353	3.4	185
496	Modeling light trapping in nanostructured solar cells. *ACS Nano*, **2011**, 5, 10055-64	16.7	183
495	High-performance Si microwire photovoltaics. *Energy and Environmental Science*, **2011**, 4, 866	35.4	182
494	Electrooptic modulation in thin film barium titanate plasmonic interferometers. *Nano Letters*, **2008**, 8, 4048-52	11.5	179
493	Terawatt-scale photovoltaics: Transform global energy. *Science*, **2019**, 364, 836-838	33.3	178
492	Hydrogen-evolution characteristics of Ni-Mo-coated, radial junction, n+p-silicon microwire array photocathodes. *Energy and Environmental Science*, **2012**, 5, 9653	35.4	178
491	Van der Waals Materials for Atomically-Thin Photovoltaics: Promise and Outlook. *ACS Photonics*, **2017**, 4, 2962-2970	6.3	175
490	Nanophotonics. Plasmoelectric potentials in metal nanostructures. *Science*, **2014**, 346, 828-31	33.3	173
489	Spectral tuning of plasmon-enhanced silicon quantum dot luminescence. *Applied Physics Letters*, **2006**, 88, 131109	3.4	170
488	Compliant metamaterials for resonantly enhanced infrared absorption spectroscopy and refractive index sensing. *ACS Nano*, **2011**, 5, 8167-74	16.7	164

487	Electronic modulation of infrared radiation in graphene plasmonic resonators. *Nature Communications*, **2015**, 6, 7032	17.4	161
486	Compact silicon photonic waveguide modulator based on the vanadium dioxide metal-insulator phase transition. *Optics Express*, **2010**, 18, 11192-201	3.3	157
485	Efficiency limits for photoelectrochemical water-splitting. *Nature Communications*, **2016**, 7, 13706	17.4	155
484	Synthesis and characterization of aerosol silicon nanocrystal nonvolatile floating-gate memory devices. *Applied Physics Letters*, **2001**, 79, 433-435	3.4	148
483	Efficient coupling between dielectric-loaded plasmonic and silicon photonic waveguides. *Nano Letters*, **2010**, 10, 4851-7	11.5	141
482	High Photovoltaic Quantum Efficiency in Ultrathin van der Waals Heterostructures. *ACS Nano*, **2017**, 11, 7230-7240	16.7	140
481	Flexible Polymer-Embedded Si Wire Arrays. *Advanced Materials*, **2009**, 21, 325-328	24	136
480	Photoelectrochemistry of core□shell tandem junction n□p+-Si/n-WO3 microwire array photoelectrodes. *Energy and Environmental Science*, **2014**, 7, 779-790	35.4	135
479	Electronically Tunable Perfect Absorption in Graphene. *Nano Letters*, **2018**, 18, 971-979	11.5	134
478	Symmetry breaking and strong coupling in planar optical metamaterials. *Optics Express*, **2010**, 18, 13407-17	3.3	133
477	Two-plasmon quantum interference. *Nature Photonics*, **2014**, 8, 317-320	33.9	132
476	Tunable color filters based on metal-insulator-metal resonators. *Nano Letters*, **2009**, 9, 2579-83	11.5	132
475	Tunable large resonant absorption in a midinfrared graphene Salisbury screen. *Physical Review B*, **2014**, 90,	3.3	129
474	Structural and optoelectronic characterization of RF sputtered ZnSnN(2). *Advanced Materials*, **2013**, 25, 2562-6	24	129
473	Color imaging via nearest neighbor hole coupling in plasmonic color filters integrated onto a complementary metal-oxide semiconductor image sensor. *ACS Nano*, **2013**, 7, 10038-47	16.7	127
472	Dual-Gated Active Metasurface at 1550 nm with Wide (>300□) Phase Tunability. *Nano Letters*, **2018**, 18, 2957-2963	11.5	125
471	Universal optical transmission features in periodic and quasiperiodic hole arrays. *Optics Express*, **2008**, 16, 9222-38	3.3	119
470	Near-Unity Absorption in van der Waals Semiconductors for Ultrathin Optoelectronics. *Nano Letters*, **2016**, 16, 5482-7	11.5	116

469	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 295-306	3.8	113
468	A Comparison Between the Behavior of Nanorod Array and Planar Cd(Se, Te) Photoelectrodes. *Journal of Physical Chemistry C*, **2008**, 112, 6186-6193	3.8	111
467	Ion-bombardment-enhanced grain growth in germanium, silicon, and gold thin films. *Journal of Applied Physics*, **1988**, 64, 2337-2353	2.5	109
466	Phase Modulation with Electrically Tunable Vanadium Dioxide Phase-Change Metasurfaces. *Nano Letters*, **2019**, 19, 3961-3968	11.5	105
465	Improving brush polymer infrared one-dimensional photonic crystals via linear polymer additives. *Journal of the American Chemical Society*, **2014**, 136, 17374-7	16.4	103
464	How much can guided modes enhance absorption in thin solar cells?. *Optics Express*, **2009**, 17, 20975-90	3.3	101
463	Solar cell efficiency enhancement via light trapping in printable resonant dielectric nanosphere arrays. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 255-260	1.6	99
462	Solar energy conversion via hot electron internal photoemission in metallic nanostructures: Efficiency estimates. *Journal of Applied Physics*, **2014**, 115, 134301	2.5	98
461	Ultraclean Two-Stage Aerosol Reactor for Production of Oxide-Passivated Silicon Nanoparticles for Novel Memory Devices. *Journal of the Electrochemical Society*, **2001**, 148, G265	3.9	97
460	Electro-optically Tunable Multifunctional Metasurfaces. *ACS Nano*, **2020**, 14, 6912-6920	16.7	96
459	Electromagnetic energy transport along arrays of closely spaced metal rods as an analogue to plasmonic devices. *Applied Physics Letters*, **2001**, 78, 16-18	3.4	91
458	Empirical interatomic potential for Si-H interactions. *Physical Review B*, **1995**, 51, 4889-4893	3.3	90
457	Ab initio phonon coupling and optical response of hot electrons in plasmonic metals. *Physical Review B*, **2016**, 94,	3.3	89
456	Optical, electrical, and solar energy-conversion properties of gallium arsenide nanowire-array photoanodes. *Energy and Environmental Science*, **2013**, 6, 1879	35.4	89
455	Plasmon-Enhanced Photoluminescence of Silicon Quantum Dots: Simulation and Experiment. *Journal of Physical Chemistry C*, **2007**, 111, 13372-13377	3.8	89
454	Plasmonic rainbow trapping structures for light localization and spectrum splitting. *Physical Review Letters*, **2011**, 107, 207401	7.4	88
453	Quantifying the role of surface plasmon excitation and hot carrier transport in plasmonic devices. *Nature Communications*, **2018**, 9, 3394	17.4	87
452	Plasmonic nanoparticle enhanced photocurrent in GaN/InGaN/GaN quantum well solar cells. *Applied Physics Letters*, **2010**, 96, 153501	3.4	85

451	Quantitative determination of optical transmission through subwavelength slit arrays in Ag films: Role of surface wave interference and local coupling between adjacent slits. *Physical Review B*, **2008**, 77,	3.3	85
450	Resonant absorption in semiconductor nanowires and nanowire arrays: Relating leaky waveguide modes to Bloch photonic crystal modes. *Journal of Applied Physics*, **2014**, 116, 153106	2.5	84
449	Near-field visualization of strongly confined surface plasmon polaritons in metal-insulator-metal waveguides. *Nano Letters*, **2008**, 8, 2925-9	11.5	84
448	Experimental and Ab□Initio Ultrafast Carrier Dynamics in Plasmonic Nanoparticles. *Physical Review Letters*, **2017**, 118, 087401	7.4	83
447	Ultraefficient thermophotovoltaic power conversion by band-edge spectral filtering. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 15356-15361	11.5	83
446	Near-unity broadband absorption designs for semiconducting nanowire arrays via localized radial mode excitation. *Optics Express*, **2014**, 22 Suppl 3, A930-40	3.3	83
445	Direct-bonded GaAs□hGaAs tandem solar cell. *Applied Physics Letters*, **2006**, 89, 102106	3.4	83
444	Interface stoichiometry control to improve device voltage and modify band alignment in ZnO/Cu2O heterojunction solar cells. *Energy and Environmental Science*, **2014**, 7, 3606-3610	35.4	82
443	820 mV open-circuit voltages from Cu2O/CH3CN junctions. *Energy and Environmental Science*, **2011**, 4, 1311	35.4	82
442	Plasmon dispersion in coaxial waveguides from single-cavity optical transmission measurements. *Nano Letters*, **2009**, 9, 2832-7	11.5	81
441	Dynamic beam steering with all-dielectric electro-optic III-V multiple-quantum-well metasurfaces. *Nature Communications*, **2019**, 10, 3654	17.4	80
440	Are negative index materials achievable with surface plasmon waveguides? A case study of three plasmonic geometries. *Optics Express*, **2008**, 16, 19001-17	3.3	80
439	10 □h minority-carrier diffusion lengths in Si wires synthesized by Cu-catalyzed vapor-liquid-solid growth. *Applied Physics Letters*, **2009**, 95, 163116	3.4	78
438	Flexible, polymer-supported, Si wire array photoelectrodes. *Advanced Materials*, **2010**, 22, 3277-81	24	78
437	Secondary ion mass spectrometry of vapor-liquid-solid grown, Au-catalyzed, Si wires. *Nano Letters*, **2008**, 8, 3109-13	11.5	78
436	Silicon Microwire Arrays for Solar Energy-Conversion Applications. *Journal of Physical Chemistry C*, **2014**, 118, 747-759	3.8	76
435	Synthesis of epitaxial SnxGe1□ alloy films by ion-assisted molecular beam epitaxy. *Applied Physics Letters*, **1996**, 68, 664-666	3.4	75
434	The New □□ Junction□Plasmonics Enables Photonic Access to the Nanoworld. *MRS Bulletin*, **2005**, 30, 385-389	3.2	74

433	Field Effect Optoelectronic Modulation of Quantum-Confined Carriers in Black Phosphorus. *Nano Letters*, **2017**, 17, 78-84	11.5	72
432	Towards an optimized all lattice-matched InAlAs/InGaAsP/InGaAs multijunction solar cell with efficiency >50%. *Applied Physics Letters*, **2013**, 102, 033901	3.4	72
431	Electrically pumped hybrid evanescent Si/InGaAsP lasers. *Optics Letters*, **2009**, 34, 1345-7	3	72
430	Electronically tunable extraordinary optical transmission in graphene plasmonic ribbons coupled to subwavelength metallic slit arrays. *Nature Communications*, **2016**, 7, 12323	17.4	71
429	Ultralow threshold on-chip microcavity nanocrystal quantum dot lasers. *Applied Physics Letters*, **2006**, 89, 191124	3.4	70
428	Gallium Arsenide Solar Cell Absorption Enhancement Using Whispering Gallery Modes of Dielectric Nanospheres. *IEEE Journal of Photovoltaics*, **2012**, 2, 123-128	3.7	69
427	Materials issues for layered tunnel barrier structures. *Journal of Applied Physics*, **2002**, 92, 261-267	2.5	69
426	Tunable visible and near-IR emission from sub-10 nm etched single-crystal Si nanopillars. *Nano Letters*, **2010**, 10, 4423-8	11.5	67
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422	CO2 Reduction to CO with 19% Efficiency in a Solar-Driven Gas Diffusion Electrode Flow Cell under Outdoor Solar Illumination. *ACS Energy Letters*, **2020**, 5, 470-476	20.1	65
421	Materials challenges for the Starshot lightsail. *Nature Materials*, **2018**, 17, 861-867	27	63
420	Functional plasmonic nanocircuits with low insertion and propagation losses. *Nano Letters*, **2013**, 13, 4539-45	11.5	63
419	Repeated epitaxial growth and transfer of arrays of patterned, vertically aligned, crystalline Si wires from a single Si(111) substrate. *Applied Physics Letters*, **2008**, 93, 032112	3.4	63
418	Electrochemical Tuning of the Dielectric Function of Au Nanoparticles. *ACS Photonics*, **2015**, 2, 459-464	6.3	62
417	Bandgap tunability in Zn(Sn,Ge)N(2) semiconductor alloys. *Advanced Materials*, **2014**, 26, 1235-41	24	62
416	Conjugated polymer/metal nanowire heterostructure plasmonic antennas. *Advanced Materials*, **2010**, 22, 1223-7	24	62

415	Resonant thermoelectric nanophotonics. *Nature Nanotechnology*, **2017**, 12, 770-775	28.7	61
414	Macroporous Silicon as a Model for Silicon Wire Array Solar Cells. *Journal of Physical Chemistry C*, **2008**, 112, 6194-6201	3.8	61
413	Mega-electron-volt ion beam induced anisotropic plasmon resonance of silver nanocrystals in glass. *Applied Physics Letters*, **2003**, 83, 4137-4139	3.4	60
412	Rapid biaxial texture development during nucleation of MgO thin films during ion beam-assisted deposition. *Applied Physics Letters*, **2002**, 80, 3388-3390	3.4	60
411	Near-Unity Unselective Absorption in Sparse InP Nanowire Arrays. *ACS Photonics*, **2016**, 3, 1826-1832	6.3	60
410	Localized charge injection in SiO2 films containing silicon nanocrystals. *Applied Physics Letters*, **2001**, 79, 791-793	3.4	59
409	Plasmonics: Metal-worthy methods and materials in nanophotonics. *MRS Bulletin*, **2012**, 37, 717-724	3.2	58
408	Photoluminescence-based measurements of the energy gap and diffusion length of Zn3P2. *Applied Physics Letters*, **2009**, 95, 112103	3.4	58
407	InGaAs/InP double heterostructures on InP/Si templates fabricated by wafer bonding and hydrogen-induced exfoliation. *Applied Physics Letters*, **2003**, 83, 5413-5415	3.4	57
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405	Experimental demonstration of enhanced photon recycling in angle-restricted GaAs solar cells. *Energy and Environmental Science*, **2014**, 7, 1907-1912	35.4	56
404	Plasmonic modes of annular nanoresonators imaged by spectrally resolved cathodoluminescence. *Nano Letters*, **2007**, 7, 3612-7	11.5	56
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402	High efficiency InGaAs solar cells on Si by InP layer transfer. *Applied Physics Letters*, **2007**, 91, 012108	3.4	54
401	The Influence of Spectral Albedo on Bifacial Solar Cells: A Theoretical and Experimental Study. *IEEE Journal of Photovoltaics*, **2017**, 7, 1611-1618	3.7	53
400	Graphene field effect transistor without an energy gap. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 8786-9	11.5	53
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395	Resonant guided wave networks. *Physical Review Letters*, **2010**, 104, 147402	7.4	51
394	GaInP□GaAs dual junction solar cells on Ge□Si epitaxial templates. *Applied Physics Letters*, **2008**, 92, 103503	3.4	51
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392	Active Radiative Thermal Switching with Graphene Plasmon Resonators. *ACS Nano*, **2018**, 12, 2474-2481	16.7	50
391	Defect generation and morphology of (001) Si surfaces during low-energy Ar-ion bombardment. *Physical Review B*, **1992**, 45, 1507-1510	3.3	50
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388	Measurement of minority-carrier diffusion lengths using wedge-shaped semiconductor photoelectrodes. *Energy and Environmental Science*, **2014**, 7, 3424-3430	35.4	48
387	Plasmonics: optics at the nanoscale. *Materials Today*, **2005**, 8, 56	21.8	48
386	Millivolt Modulation of Plasmonic Metasurface Optical Response via Ionic Conductance. *Advanced Materials*, **2017**, 29, 1701044	24	47
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384	Ray optical light trapping in silicon microwires: exceeding the 2n(2) intensity limit. *Optics Express*, **2011**, 19, 3316-31	3.3	46
383	Interface-limited grain-boundary motion during ion bombardment. *Physical Review Letters*, **1988**, 60, 112-115	7.4	46
382	Self-stabilizing photonic levitation and propulsion of nanostructured macroscopic objects. *Nature Photonics*, **2019**, 13, 289-295	33.9	44
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380	Quenching of Si nanocrystal photoluminescence by doping with gold or phosphorous. *Journal of Luminescence*, **2005**, 114, 137-144	3.8	44

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378	Dynamically controlled Purcell enhancement of visible spontaneous emission in a gated plasmonic heterostructure. *Nature Communications*, **2017**, 8, 1631	17.4	43
377	Hyper-selective plasmonic color filters. *Optics Express*, **2017**, 25, 27386-27395	3.3	43
376	Quantum optical properties of a dipole emitter coupled to an e-near-zero nanoscale waveguide. *Optics Express*, **2013**, 21, 32279-90	3.3	43
375	Giant Enhancement of Photoluminescence Emission in WS-Two-Dimensional Perovskite Heterostructures. *Nano Letters*, **2019**, 19, 4852-4860	11.5	41
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370	Photoluminescence from GaAs nanocrystals fabricated by Ga+ and As+ co-implantation into SiO2 matrices. *Applied Physics Letters*, **1998**, 73, 1829-1831	3.4	40
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