

# Harry A Atwater

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Probing the Catalytically Active Region in a Nanoporous Gold Gas Diffusion Electrode for Highly Selective Carbon Dioxide Reduction. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 871-879	20.1	5
557	Role of Atomic Structure on Exciton Dynamics and Photoluminescence in NIR Emissive InAs/InP/ZnSe Quantum Dots. <i>Journal of Physical Chemistry C</i> , <b>2022</b> , 126, 7576-7587	3.8	1
556	Nonreciprocal infrared absorption via resonant magneto-optical coupling to InAs.. <i>Science Advances</i> , <b>2022</b> , 8, eabm4308	14.3	9
555	Coupling electrochemical CO2 conversion with CO2 capture. <i>Nature Catalysis</i> , <b>2021</b> , 4, 952-958	36.5	32
554	Dispersion Mapping in 3-Dimensional Core-Shell Photonic Crystal Lattices Capable of Negative Refraction in the Mid-Infrared. <i>Nano Letters</i> , <b>2021</b> , 21, 9102-9107	11.5	2
553	Broadband electro-optic polarization conversion with atomically thin black phosphorus. <i>Science</i> , <b>2021</b> , 374, 448-453	33.3	11
552	A hybrid coupler for directing quantum light emission with high radiative Purcell enhancement to a dielectric metasurface lens. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 163103	2.5	1
551	Electrically Tunable and Dramatically Enhanced Valley-Polarized Emission of Monolayer WS at Room Temperature with Plasmonic Archimedes Spiral Nanostructures. <i>Advanced Materials</i> , <b>2021</b> , e2104863	24.3	7
550	Upconversion Plasmonic Lasing from an Organolead Trihalide Perovskite Nanocrystal with Low Threshold. <i>ACS Photonics</i> , <b>2021</b> , 8, 335-342	6.3	10
549	Highly Strain-Tunable Interlayer Excitons in MoS/WSe Heterobilayers. <i>Nano Letters</i> , <b>2021</b> , 21, 3956-3964	11.5	16
548	AlSb as a material for high index contrast nanophotonics. <i>Optical Materials Express</i> , <b>2021</b> , 11, 1334	2.6	0
547	Mid-infrared radiative emission from bright hot plasmons in graphene. <i>Nature Materials</i> , <b>2021</b> , 20, 805-811	11.5	4
546	Unassisted Highly Selective Gas-Phase CO2 Reduction with a Plasmonic Au/p-GaN Photocatalyst Using H2O as an Electron Donor. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 1849-1856	20.1	14
545	All-day fresh water harvesting by microstructured hydrogel membranes. <i>Nature Communications</i> , <b>2021</b> , 12, 2797	17.4	34
544	Outdoor performance of a tandem InGaP/Si photovoltaic luminescent solar concentrator. <i>Solar Energy Materials and Solar Cells</i> , <b>2021</b> , 223, 110945	6.4	5
543	Near-Infrared Active Metasurface for Dynamic Polarization Conversion. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2100230	8.1	9
542	Spatiotemporal Imaging of Thickness-Induced Band-Bending Junctions. <i>Nano Letters</i> , <b>2021</b> , 21, 5745-5753	11.5	3

541	Impact of Semiconductor Band Tails and Band Filling on Photovoltaic Efficiency Limits. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 52-57	20.1	20
540	Solar power windows: Connecting scientific advances to market signals. <i>Energy</i> , <b>2021</b> , 219, 119567	7.9	12
539	Temperature-dependent Spectral Emission of Hexagonal Boron Nitride Quantum Emitters on Conductive and Dielectric Substrates. <i>Physical Review Applied</i> , <b>2021</b> , 15,	4.3	5
538	Tunable intraband optical conductivity and polarization-dependent epsilon-near-zero behavior in black phosphorus. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	16
537	Absolute and arbitrary orientation of single-molecule shapes. <i>Science</i> , <b>2021</b> , 371,	33.3	21
536	X-ray Photoelectron Spectroscopy and Resonant X-ray Spectroscopy Investigations of Interactions between Thin Metal Catalyst Films and Amorphous Titanium Dioxide Photoelectrode Protection Layers. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 1265-1275	9.6	8
535	Hydrogen from Sunlight and Water: A Side-by-Side Comparison between Photoelectrochemical and Solar Thermochemical Water-Splitting. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 3096-3113	20.1	4
534	Unlocking Higher Power Efficiencies in Luminescent Solar Concentrators through Anisotropic Luminophore Emission. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 40742-40753	9.5	3
533	Refractive Index Modulation in Monolayer Molybdenum Diselenide. <i>Nano Letters</i> , <b>2021</b> , 21, 7602-7608	11.5	2
532	Nanoscale axial position and orientation measurement of hexagonal boron nitride quantum emitters using a tunable nanophotonic environment. <i>Nanotechnology</i> , <b>2021</b> , 33,	3.4	2
531	Silicon Heterojunction Microcells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 45600-45608	9.5	1
530	Operando Local pH Measurement within Gas Diffusion Electrodes Performing Electrochemical Carbon Dioxide Reduction. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 20896-20904	3.8	5
529	Light-Matter Interactions in Films of Randomly Distributed Unidirectionally Scattering Dielectric Nanoparticles. <i>ACS Photonics</i> , <b>2020</b> , 7, 2105-2114	6.3	3
528	Optically tunable mesoscale CdSe morphologies via inorganic phototropic growth. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 12412-12417	7.1	7
527	Confronting Racism in Chemistry Journals. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 6131-6133	5.6	
526	Confronting Racism in Chemistry Journals. <i>ACS Applied Polymer Materials</i> , <b>2020</b> , 2, 2496-2498	4.3	
525	Photonic Crystal Waveguides for >90% Light Trapping Efficiency in Luminescent Solar Concentrators. <i>ACS Photonics</i> , <b>2020</b> , 7, 2122-2131	6.3	13
524	Confronting Racism in Chemistry Journals. <i>Organometallics</i> , <b>2020</b> , 39, 2331-2333	3.8	

523	Optical Excitation of a Nanoparticle Cu/p-NiO Photocathode Improves Reaction Selectivity for CO Reduction in Aqueous Electrolytes. <i>Nano Letters</i> , <b>2020</b> , 20, 2348-2358	11.5	50
522	Bicarbonate or Carbonate Processes for Coupling Carbon Dioxide Capture and Electrochemical Conversion. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 940-945	20.1	29
521	Update to Our Reader, Reviewer, and Author Communities April 2020. <i>Energy &amp; Fuels</i> , <b>2020</b> , 34, 5107-5108	4.1	
520	An ultralight concentrator photovoltaic system for space solar power harvesting. <i>Acta Astronautica</i> , <b>2020</b> , 170, 443-451	2.9	8
519	Nanowire Solar Cells: A New Radiation Hard PV Technology for Space Applications. <i>IEEE Journal of Photovoltaics</i> , <b>2020</b> , 10, 502-507	3.7	10
518	Electro-optically Tunable Multifunctional Metasurfaces. <i>ACS Nano</i> , <b>2020</b> , 14, 6912-6920	16.7	96
517	Conformal SnOx heterojunction coatings for stabilized photoelectrochemical water oxidation using arrays of silicon microcones. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 9292-9301	13	10
516	Update to Our Reader, Reviewer, and Author Communities April 2020. <i>Organometallics</i> , <b>2020</b> , 39, 1665-1666	16.6	
515	Design of efficient radiative emission and daytime cooling structures with SiN and SiO nanoparticle laminate films. <i>Optics Express</i> , <b>2020</b> , 28, 35784-35794	3.3	1
514	Self-Stabilizing Silicon Nitride Lightsails <b>2020</b> ,		3
513	Controlling the dopant profile for SRH suppression at low current densities in $\lambda$ 330 nm GaInAsP light-emitting diodes. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 203503	3.4	1
512	Confronting Racism in Chemistry Journals. <i>Journal of Chemical Health and Safety</i> , <b>2020</b> , 27, 198-200	1.7	
511	Seeing the light in energy use. <i>Nanophotonics</i> , <b>2020</b> , 10, 115-116	6.3	1
510	Development of Lattice-Mismatched GaInAsP for Radiation Hardness. <i>IEEE Journal of Photovoltaics</i> , <b>2020</b> , 10, 103-108	3.7	2
509	CO2 Reduction to CO with 19% Efficiency in a Solar-Driven Gas Diffusion Electrode Flow Cell under Outdoor Solar Illumination. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 470-476	20.1	65
508	High Broadband Light Transmission for Solar Fuels Production Using Dielectric Optical Waveguides in TiO Nanocone Arrays. <i>Nano Letters</i> , <b>2020</b> , 20, 502-508	11.5	9
507	Photovoltaic operation in the lower atmosphere and at the surface of Venus. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2020</b> , 28, 545-553	6.8	2
506	Band Edge Tailoring in Few-Layer Two-Dimensional Molybdenum Sulfide/Selenide Alloys. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 22893-22902	3.8	4

505	Autonomous Light Management in Flexible Photoelectrochromic Films Integrating High Performance Silicon Solar Microcells. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 1540-1551	6.1	9
504	Ultrafast hot-hole injection modifies hot-electron dynamics in Au/p-GaN heterostructures. <i>Nature Materials</i> , <b>2020</b> , 19, 1312-1318	27	52
503	Perimeter-Control Architecture for Optical Phased Arrays and Metasurfaces. <i>Physical Review Applied</i> , <b>2020</b> , 14,	4.3	5
502	Array-Level Inverse Design of Beam Steering Active Metasurfaces. <i>ACS Nano</i> , <b>2020</b> , 14, 15042-15055	16.7	21
501	A direct coupled electrochemical system for capture and conversion of CO from oceanwater. <i>Nature Communications</i> , <b>2020</b> , 11, 4412	17.4	23
500	Aluminum Oxide Nanoparticle Films Deposited from a Nonthermal Plasma: Synthesis, Characterization, and Crystallization. <i>ACS Omega</i> , <b>2020</b> , 5, 24754-24761	3.9	5
499	A Computationally Efficient Multidiode Model for Optimizing the Front Grid of Multijunction Solar Cells under Concentration. <i>Journal of Renewable Energy</i> , <b>2020</b> , 2020, 1-10	1.4	0
498	Nearly 90% Circularly Polarized Emission in Monolayer WS Single Crystals by Chemical Vapor Deposition. <i>ACS Nano</i> , <b>2020</b> , 14, 1350-1359	16.7	23
497	Hot-Hole Hot-Electron Transport at Cu/GaN Heterojunction Interfaces. <i>ACS Nano</i> , <b>2020</b> , 14, 5788-5797	16.7	26
496	Predicting Geographic Energy Production for Tandem PV Designs Using a Compact Set of Spectra Correlated by Irradiance. <i>IEEE Journal of Photovoltaics</i> , <b>2019</b> , 9, 1596-1601	3.7	1
495	Tunable all-dielectric metasurface for phase modulation of the reflected and transmitted light via permittivity tuning of indium tin oxide. <i>Nanophotonics</i> , <b>2019</b> , 8, 415-427	6.3	49
494	Spectrally Matched Quantum Dot Photoluminescence in GaAs-Si Tandem Luminescent Solar Concentrators. <i>IEEE Journal of Photovoltaics</i> , <b>2019</b> , 9, 397-401	3.7	9
493	Giant Enhancement of Photoluminescence Emission in WS-Two-Dimensional Perovskite Heterostructures. <i>Nano Letters</i> , <b>2019</b> , 19, 4852-4860	11.5	41
492	Life Cycle Assessment of tandem LSC-Si devices. <i>Energy</i> , <b>2019</b> , 181, 1-10	7.9	5
491	Phase Modulation with Electrically Tunable Vanadium Dioxide Phase-Change Metasurfaces. <i>Nano Letters</i> , <b>2019</b> , 19, 3961-3968	11.5	105
490	Electronic Modulation of Near-Field Radiative Transfer in Graphene Field Effect Heterostructures. <i>Nano Letters</i> , <b>2019</b> , 19, 3898-3904	11.5	21
489	Terawatt-scale photovoltaics: Transform global energy. <i>Science</i> , <b>2019</b> , 364, 836-838	33.3	178
488	Integration of electrocatalysts with silicon microcone arrays for minimization of optical and overpotential losses during sunlight-driven hydrogen evolution. <i>Sustainable Energy and Fuels</i> , <b>2019</b> , 3, 2227-2236	5.8	5

487	Femtosecond time-resolved two-photon photoemission studies of ultrafast carrier relaxation in CuO photoelectrodes. <i>Nature Communications</i> , <b>2019</b> , 10, 2106	17.4	14
486	A flexible phased array system with low areal mass density. <i>Nature Electronics</i> , <b>2019</b> , 2, 195-205	28.4	23
485	Probing the Band Structure of Topological Silicon Photonic Lattices in the Visible Spectrum. <i>Physical Review Letters</i> , <b>2019</b> , 122, 117401	7.4	56
484	Self-stabilizing photonic levitation and propulsion of nanostructured macroscopic objects. <i>Nature Photonics</i> , <b>2019</b> , 13, 289-295	33.9	44
483	Dynamic beam steering with all-dielectric electro-optic III-V multiple-quantum-well metasurfaces. <i>Nature Communications</i> , <b>2019</b> , 10, 3654	17.4	80
482	Ultraefficient thermophotovoltaic power conversion by band-edge spectral filtering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 15356-15361	11.5	83
481	Enhanced Stability and Efficiency for Photoelectrochemical Iodide Oxidation by Methyl Termination and Electrochemical Pt Deposition on n-Type Si Microwire Arrays. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2308-2314 <sup>20.1</sup>	20.1	4
480	Simulation and partial prototyping of an eight-junction holographic spectrum-splitting photovoltaic module. <i>Energy Science and Engineering</i> , <b>2019</b> , 7, 2572-2584	3.4	5
479	Quantum Coherence Preservation in Extremely Dispersive Plasmonic Media. <i>Physical Review Applied</i> , <b>2019</b> , 12,	4.3	3
478	Inorganic Phototropism in Electrodeposition of Se-Te. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 18658-18661	16.4	5
477	Radiation Tolerant Nanowire Array Solar Cells. <i>ACS Nano</i> , <b>2019</b> , 13, 12860-12869	16.7	17
476	Mimicking surface polaritons for unpolarized light with high-permittivity materials. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	11
475	Transport of hot carriers in plasmonic nanostructures. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	17
474	Visual appearance of microcontacts for solar windows. <i>Journal of Photonics for Energy</i> , <b>2019</b> , 9, 1	1.2	1
473	Ultralight Luminescent Solar Concentrators for Space Solar Power Systems <b>2019</b> ,		1
472	A new metal transfer process for van der Waals contacts to vertical Schottky-junction transition metal dichalcogenide photovoltaics. <i>Science Advances</i> , <b>2019</b> , 5, eaax6061	14.3	40
471	Nanoporous Gold as a Highly Selective and Active Carbon Dioxide Reduction Catalyst. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 164-170	6.1	39
470	High Spectral Resolution Plasmonic Color Filters with Subwavelength Dimensions. <i>ACS Photonics</i> , <b>2019</b> , 6, 332-338	6.3	34

469	Probing Surface Chemistry at an Atomic Level: Decomposition of 1-Propanethiol on GaP(001) (2 × 4) Investigated by STM, XPS, and DFT. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 2964-2972	3.8	
468	The Polyhedral Specular Reflector: A Spectrum-Splitting Multijunction Design to Achieve Ultrahigh (>50%) Solar Module Efficiencies. <i>IEEE Journal of Photovoltaics</i> , <b>2019</b> , 9, 174-182	3.7	7
467	Anisotropic Quantum Well Electro-Optics in Few-Layer Black Phosphorus. <i>Nano Letters</i> , <b>2019</b> , 19, 269-276	11.5	30
466	Hot Hole Collection and Photoelectrochemical CO Reduction with Plasmonic Au/p-GaN Photocathodes. <i>Nano Letters</i> , <b>2018</b> , 18, 2545-2550	11.5	215
465	Optical magnetism in planar metamaterial heterostructures. <i>Nature Communications</i> , <b>2018</b> , 9, 296	17.4	44
464	Electronically Tunable Perfect Absorption in Graphene. <i>Nano Letters</i> , <b>2018</b> , 18, 971-979	11.5	134
463	Nanoscale doping heterogeneity in few-layer WSe <sub>2</sub> exfoliated onto noble metals revealed by correlated SPM and TERS imaging. <i>2D Materials</i> , <b>2018</b> , 5, 035003	5.9	14
462	Dual-Gated Active Metasurface at 1550 nm with Wide (>300°) Phase Tunability. <i>Nano Letters</i> , <b>2018</b> , 18, 2957-2963	11.5	125
461	Active Radiative Thermal Switching with Graphene Plasmon Resonators. <i>ACS Nano</i> , <b>2018</b> , 12, 2474-2481	16.7	50
460	Nanophotonic Heterostructures for Efficient Propulsion and Radiative Cooling of Relativistic Light Sails. <i>Nano Letters</i> , <b>2018</b> , 18, 5583-5589	11.5	22
459	Extremely broadband ultralight thermally-emissive optical coatings. <i>Optics Express</i> , <b>2018</b> , 26, 18545-18562	6.2	9
458	Quantum nonlinear light emission in metamaterials: broadband Purcell enhancement of parametric downconversion. <i>Optica</i> , <b>2018</b> , 5, 608	8.6	18
457	Mesoscale trumps nanoscale: metallic mesoscale contact morphology for improved light trapping, optical absorption and grid conductance in silicon solar cells. <i>Optics Express</i> , <b>2018</b> , 26, A275-A282	3.3	24
456	Materials challenges for the Starshot lightsail. <i>Nature Materials</i> , <b>2018</b> , 17, 861-867	27	63
455	Template-Free Synthesis of Periodic Three-Dimensional PbSe Nanostructures via Photoelectrodeposition. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 6536-6539	16.4	9
454	Design Criteria for Micro-Optical Tandem Luminescent Solar Concentrators. <i>IEEE Journal of Photovoltaics</i> , <b>2018</b> , 8, 1560-1567	3.7	23
453	Quantifying the role of surface plasmon excitation and hot carrier transport in plasmonic devices. <i>Nature Communications</i> , <b>2018</b> , 9, 3394	17.4	87
452	Study of the Interface in a GaP/Si Heterojunction Solar Cell. <i>IEEE Journal of Photovoltaics</i> , <b>2018</b> , 8, 1568-1576	15.7	12

451	Solar Cell Analysis Under Venus Atmosphere Conditions <b>2018</b> ,		1
450	Light Trapping in Bifacial Solar Modules Using Effectively Transparent Contacts (ETCs) <b>2018</b> ,		2
449	Modulated Resonant Transmission of Graphene Plasmons Across a $\sqrt{50}$ Plasmonic Waveguide Gap. <i>Physical Review Applied</i> , <b>2018</b> , 10,	4-3	9
448	<b>2018</b> ,		1
447	Low-Intensity High-Temperature (LIHT) Solar Cells for Venus Atmosphere. <i>IEEE Journal of Photovoltaics</i> , <b>2018</b> , 8, 1621-1626	3-7	5
446	Subwavelength integrated photonics. <i>Nature</i> , <b>2018</b> , 560, 565-572	50-4	324
445	Enhancing the Power Output of Bifacial Solar Modules by Applying Effectively Transparent Contacts (ETCs) With Light Trapping. <i>IEEE Journal of Photovoltaics</i> , <b>2018</b> , 8, 1183-1189	3-7	6
444	Monolithic Photoelectrochemical Device for Direct Water Splitting with 19% Efficiency. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 1795-1800	20-1	206
443	Excitonic Effects in Emerging Photovoltaic Materials: A Case Study in Cu <sub>2</sub> O. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 431-437	20-1	22
442	Experimental and Ab Initio Ultrafast Carrier Dynamics in Plasmonic Nanoparticles. <i>Physical Review Letters</i> , <b>2017</b> , 118, 087401	7-4	83
441	Silicon heterojunction solar cells with effectively transparent front contacts. <i>Sustainable Energy and Fuels</i> , <b>2017</b> , 1, 593-598	5-8	25
440	Design of photovoltaics for modules with 50% efficiency. <i>Energy Science and Engineering</i> , <b>2017</b> , 5, 69-80	3-4	5
439	Experimental Demonstration of $>230^\circ$ Phase Modulation in Gate-Tunable Graphene-Gold Reconfigurable Mid-Infrared Metasurfaces. <i>Nano Letters</i> , <b>2017</b> , 17, 3027-3034	11-5	200
438	Epitaxy: Programmable Atom Equivalents Versus Atoms. <i>ACS Nano</i> , <b>2017</b> , 11, 180-185	16-7	30
437	High Photovoltaic Quantum Efficiency in Ultrathin van der Waals Heterostructures. <i>ACS Nano</i> , <b>2017</b> , 11, 7230-7240	16-7	140
436	Resonant thermoelectric nanophotonics. <i>Nature Nanotechnology</i> , <b>2017</b> , 12, 770-775	28-7	61
435	Atomic-Scale Structural and Chemical Characterization of Hexagonal Boron Nitride Layers Synthesized at the Wafer-Scale with Monolayer Thickness Control. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 4700-4707	9-6	29
434	Millivolt Modulation of Plasmonic Metasurface Optical Response via Ionic Conductance. <i>Advanced Materials</i> , <b>2017</b> , 29, 1701044	24	47



433	Porous Nanomaterials: Porous Nanomaterials for Ultrabroadband Omnidirectional Anti-Reflection Surfaces with Applications in High Concentration Photovoltaics (Adv. Energy Mater. 7/2017). <i>Advanced Energy Materials</i> , <b>2017</b> , 7,	21.8	2
432	Porous Nanomaterials for Ultrabroadband Omnidirectional Anti-Reflection Surfaces with Applications in High Concentration Photovoltaics. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601992	21.8	19
431	Field Effect Optoelectronic Modulation of Quantum-Confined Carriers in Black Phosphorus. <i>Nano Letters</i> , <b>2017</b> , 17, 78-84	11.5	72
430	Photon and carrier management design for nonplanar thin-film copper indium gallium selenide photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , <b>2017</b> , 161, 149-156	6.4	6
429	Gate-Variable Mid-Infrared Optical Transitions in a (BiSb)Te Topological Insulator. <i>Nano Letters</i> , <b>2017</b> , 17, 255-260	11.5	23
428	Van der Waals Materials for Atomically-Thin Photovoltaics: Promise and Outlook. <i>ACS Photonics</i> , <b>2017</b> , 4, 2962-2970	6.3	175
427	Thermodynamic Efficiency Limit of Bifacial Solar Cells for Various Spectral Albedos <b>2017</b> ,		2
426	Micro-optical Tandem Luminescent Solar Concentrator <b>2017</b> ,		3
425	Effects of Electron and Proton Radiation on Perovskite Solar Cells for Space Solar Power Application <b>2017</b> ,		7
424	Growth of Epitaxial ZnSnGeN Alloys by MBE. <i>Scientific Reports</i> , <b>2017</b> , 7, 11990	4.9	7
423	Limits to the Optical Response of Graphene and Two-Dimensional Materials. <i>Nano Letters</i> , <b>2017</b> , 17, 5408-5415	8.5	27
422	Dynamically controlled Purcell enhancement of visible spontaneous emission in a gated plasmonic heterostructure. <i>Nature Communications</i> , <b>2017</b> , 8, 1631	17.4	43
421	Effects of surface condition on the work function and valence-band position of ZnSnN <sub>2</sub> . <i>Applied Physics A: Materials Science and Processing</i> , <b>2017</b> , 123, 1	2.6	11
420	Fabrication of Single Crystal Gallium Phosphide Thin Films on Glass. <i>Scientific Reports</i> , <b>2017</b> , 7, 4643	4.9	13
419	Polycrystalline Cu <sub>2</sub> O photovoltaic devices incorporating Zn(O,S) window layers. <i>Solar Energy Materials and Solar Cells</i> , <b>2017</b> , 160, 340-345	6.4	25
418	The Influence of Spectral Albedo on Bifacial Solar Cells: A Theoretical and Experimental Study. <i>IEEE Journal of Photovoltaics</i> , <b>2017</b> , 7, 1611-1618	3.7	53
417	Enhanced Light Trapping in Thin Silicon Solar Cells using Effectively Transparent Contacts (ETCs) <b>2017</b> ,		2
416	Hyper-selective plasmonic color filters. <i>Optics Express</i> , <b>2017</b> , 25, 27386-27395	3.3	43

415	Gate-Tunable Conducting Oxide Metasurfaces. <i>Nano Letters</i> , <b>2016</b> , 16, 5319-25	11.5	381
414	Near-Unity Absorption in van der Waals Semiconductors for Ultrathin Optoelectronics. <i>Nano Letters</i> , <b>2016</b> , 16, 5482-7	11.5	116
413	Ab initio phonon coupling and optical response of hot electrons in plasmonic metals. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	89
412	Electronically tunable extraordinary optical transmission in graphene plasmonic ribbons coupled to subwavelength metallic slit arrays. <i>Nature Communications</i> , <b>2016</b> , 7, 12323	17.4	71
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401	Effectively Transparent Front Contacts for Optoelectronic Devices. <i>Advanced Optical Materials</i> , <b>2016</b> , 4, 1470-1474	8.1	39
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399	Excitonic effects in photovoltaic materials with large exciton binding energies <b>2016</b> ,		1
398	Highly absorbing and high lifetime tapered silicon microwire arrays as an alternative for thin film crystalline silicon solar cells <b>2016</b> ,		1

397	Effectively transparent contacts (ETCs) for solar cells <b>2016</b> ,		9
396	Heteroepitaxial growth of Pt and Au thin films on MgO single crystals by bias-assisted sputtering. <i>Scientific Reports</i> , <b>2016</b> , 6, 23232	4.9	17
395	Predicting energy production for multijunction photovoltaics: Effects of spectral variation and cumulative irradiance <b>2016</b> ,		1
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373	Resonant dielectric high-contrast gratings as spectrum splitting optical elements for ultrahigh efficiency (>50%) photovoltaics <b>2015</b> ,		2
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