Yanfa Yan

List of Publications by Citations

471 papers	33,274 citations	94 h-index	171 g-index
522 ext. papers	38,696 ext. citations	10.3 avg, IF	7.72 L-index

#	Paper	IF	Citations
471	Unusual defect physics in CH3NH3PbI3 perovskite solar cell absorber. *Applied Physics Letters*, **2014**, 104, 063903	3.4	1720
470	Unique properties of halide perovskites as possible origins of the superior solar cell performance. *Advanced Materials*, **2014**, 26, 4653-8	24	1321
469	Halide perovskite materials for solar cells: a theoretical review. *Journal of Materials Chemistry A*, **2015**, 3, 8926-8942	13	882
468	Efficient and stable emission of warm-white light from lead-free halide double perovskites. *Nature*, **2018**, 563, 541-545	50.4	835
467	Low-temperature solution-processed tin oxide as an alternative electron transporting layer for efficient perovskite solar cells. *Journal of the American Chemical Society*, **2015**, 137, 6730-3	16.4	833
466	Understanding the physical properties of hybrid perovskites for photovoltaic applications. *Nature Reviews Materials*, **2017**, 2,	73.3	673
465	Band Edge Electronic Structure of BiVO4: Elucidating the Role of the Bi s and V d Orbitals. *Chemistry of Materials*, **2009**, 21, 547-551	9.6	542
464	Nanostructured Fe(3)O(4)/SWNT electrode: Binder-free and high-rate li-ion anode. *Advanced Materials*, **2010**, 22, E145-9	24	527
463	Low-bandgap mixed tin□lead iodide perovskite absorbers with long carrier lifetimes for all-perovskite tandem solar cells. *Nature Energy*, **2017**, 2,	62.3	515
462	An organic-inorganic perovskite ferroelectric with large piezoelectric response. *Science*, **2017**, 357, 306-309	33.3	506
461	Carrier lifetimes of >1 □s in Sn-Pb perovskites enable efficient all-perovskite tandem solar cells. *Science*, **2019**, 364, 475-479	33.3	496
460	Thin-Film Preparation and Characterization of Cs3Sb2I9: A Lead-Free Layered Perovskite Semiconductor. *Chemistry of Materials*, **2015**, 27, 5622-5632	9.6	489
459	Lead-Free Inverted Planar Formamidinium Tin Triiodide Perovskite Solar Cells Achieving Power Conversion Efficiencies up to 6.22. *Advanced Materials*, **2016**, 28, 9333-9340	24	480
458	Searching for promising new perovskite-based photovoltaic absorbers: the importance of electronic dimensionality. *Materials Horizons*, **2017**, 4, 206-216	14.4	406
457	Employing Lead Thiocyanate Additive to Reduce the Hysteresis and Boost the Fill Factor of Planar Perovskite Solar Cells. *Advanced Materials*, **2016**, 28, 5214-21	24	403
456	Perovskite ink with wide processing window for scalable high-efficiency solar cells. *Nature Energy*, **2017**, 2,	62.3	398
455	Microstructure and pseudocapacitive properties of electrodes constructed of oriented NiO-TiO2 nanotube arrays. *Nano Letters*, **2010**, 10, 4099-104	11.5	387

454	From Lead Halide Perovskites to Lead-Free Metal Halide Perovskites and Perovskite Derivatives. *Advanced Materials*, **2019**, 31, e1803792	24	346
453	Control of doping by impurity Cchemical potentials: predictions for p-type ZnO. *Physical Review Letters*, **2001**, 86, 5723-6	7.4	339
452	Ultrathin coatings on nano-LiCoO2 for Li-ion vehicular applications. *Nano Letters*, **2011**, 11, 414-8	11.5	322
451	Efficient hole-blocking layer-free planar halide perovskite thin-film solar cells. *Nature Communications*, **2015**, 6, 6700	17.4	314
450	Fabrication of Efficient Low-Bandgap Perovskite Solar Cells by Combining Formamidinium Tin Iodide with Methylammonium Lead Iodide. *Journal of the American Chemical Society*, **2016**, 138, 12360-3	16.4	298
449	Direct Growth of Highly Mismatched Type II ZnO/ZnSe Core/Shell Nanowire Arrays on Transparent Conducting Oxide Substrates for Solar Cell Applications. *Advanced Materials*, **2008**, 20, 3248-3253	24	286
448	Efficient two-terminal all-perovskite tandem solar cells enabled by high-quality low-bandgap absorber layers. *Nature Energy*, **2018**, 3, 1093-1100	62.3	284
447	Bandgap Engineering of Lead-Free Double Perovskite Cs AgBiBr through Trivalent Metal Alloying. *Angewandte Chemie - International Edition*, **2017**, 56, 8158-8162	16.4	282
446	Band structure engineering of semiconductors for enhanced photoelectrochemical water splitting: The case of TiO2. *Physical Review B*, **2010**, 82,	3.3	272
445	Parity-Forbidden Transitions and Their Impact on the Optical Absorption Properties of Lead-Free Metal Halide Perovskites and Double Perovskites. *Journal of Physical Chemistry Letters*, **2017**, 8, 2999-3007	6.4	267
444	Interface engineering in planar perovskite solar cells: energy level alignment, perovskite morphology control and high performance achievement. *Journal of Materials Chemistry A*, **2017**, 5, 1658-1666	13	266
443	Thin-Film Deposition and Characterization of a Sn-Deficient Perovskite Derivative Cs2SnI6. *Chemistry of Materials*, **2016**, 28, 2315-2322	9.6	252
442	Doping of ZnO by group-IB elements. *Applied Physics Letters*, **2006**, 89, 181912	3.4	251
441	Effective Carrier-Concentration Tuning of SnO Quantum Dot Electron-Selective Layers for High-Performance Planar Perovskite Solar Cells. *Advanced Materials*, **2018**, 30, e1706023	24	245
440	Oxide perovskites, double perovskites and derivatives for electrocatalysis, photocatalysis, and photovoltaics. *Energy and Environmental Science*, **2019**, 12, 442-462	35.4	229
439	Trifluoroacetate induced small-grained CsPbBr perovskite films result in efficient and stable light-emitting devices. *Nature Communications*, **2019**, 10, 665	17.4	227
438	Grain-boundary-enhanced carrier collection in CdTe solar cells. *Physical Review Letters*, **2014**, 112, 156103	7.4	210
437	Electrodeposited Aluminum-Doped □Fe2O3 Photoelectrodes: Experiment and Theory. *Chemistry of Materials*, **2010**, 22, 510-517	9.6	207

436	Progress in Theoretical Study of Metal Halide Perovskite Solar Cell Materials. *Advanced Energy Materials*, **2017**, 7, 1701136	21.8	197
435	Thermodynamic Stability and Defect Chemistry of Bismuth-Based Lead-Free Double Perovskites. *ChemSusChem*, **2016**, 9, 2628-2633	8.3	195
434	Anomalous Alloy Properties in Mixed Halide Perovskites. *Journal of Physical Chemistry Letters*, **2014** , 5, 3625-31	6.4	188
433	Intrinsic Instability of CsIn(I)M(III)X (M = Bi, Sb; X = Halogen) Double Perovskites: A Combined Density Functional Theory and Experimental Study. *Journal of the American Chemical Society*, **2017**, 139, 6054-6057	16.4	186
432	Superior Photovoltaic Properties of Lead Halide Perovskites: Insights from First-Principles Theory. *Journal of Physical Chemistry C*, **2015**, 119, 5253-5264	3.8	186
431	Possible approach to overcome the doping asymmetry in wideband gap semiconductors. *Physical Review Letters*, **2007**, 98, 135506	7.4	184
430	Cooperative tin oxide fullerene electron selective layers for high-performance planar perovskite solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 14276-14283	13	178
429	Electrochemical effects of ALD surface modification on combustion synthesized LiNi1/3Mn1/3Co1/3O2 as a layered-cathode material. *Journal of Power Sources*, **2011**, 196, 3317-3324	8.9	178
428	Comparative study of the luminescence and intrinsic point defects in the kesterite Cu2ZnSnS4 and chalcopyrite Cu(In,Ga)Se2 thin films used in photovoltaic applications. *Physical Review B*, **2011**, 84,	3.3	177
427	Electrically benign behavior of grain boundaries in polycrystalline CuInSe2 films. *Physical Review Letters*, **2007**, 99, 235504	7.4	176
426	Low-temperature plasma-enhanced atomic layer deposition of tin oxide electron selective layers for highly efficient planar perovskite solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 12080-12087	13	175
425	Evaluation of Nitrogen Doping of Tungsten Oxide for Photoelectrochemical Water Splitting. *Journal of Physical Chemistry C*, **2008**, 112, 5213-5220	3.8	174
424	Growth and characterization of radio frequency magnetron sputter-deposited zinc stannate, Zn2SnO4, thin films. *Journal of Applied Physics*, **2002**, 92, 310-319	2.5	174
423	TiO-ZnS Cascade Electron Transport Layer for Efficient Formamidinium Tin Iodide Perovskite Solar Cells. *Journal of the American Chemical Society*, **2016**, 138, 14998-15003	16.4	171
422	Four-Terminal All-Perovskite Tandem Solar Cells Achieving Power Conversion Efficiencies Exceeding 23%. *ACS Energy Letters*, **2018**, 3, 305-306	20.1	169
421	A layered Na1□NiyFe1□O2 double oxide oxygen evolution reaction electrocatalyst for highly efficient water-splitting. *Energy and Environmental Science*, **2017**, 10, 121-128	35.4	164
420	Efficient sky-blue perovskite light-emitting diodes via photoluminescence enhancement. *Nature Communications*, **2019**, 10, 5633	17.4	164
419	Understanding and Eliminating Hysteresis for Highly Efficient Planar Perovskite Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1700414	21.8	162

418	Reducing Saturation-Current Density to Realize High-Efficiency Low-Bandgap Mixed Tin–Lead Halide Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1803135	21.8	162
417	Effects of annealing temperature of tin oxide electron selective layers on the performance of perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 24163-24168	13	154
416	Effective band gap narrowing of anatase TiO2 by strain along a soft crystal direction. *Applied Physics Letters*, **2010**, 96, 221901	3.4	154
415	Doping asymmetry in wide-bandgap semiconductors: Origins and solutions. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 641-652	1.3	153
414	Origin of High Electronic Quality in Structurally Disordered CH3NH3PbI3 and the Passivation Effect of Cl and O at Grain Boundaries. *Advanced Electronic Materials*, **2015**, 1, 1500044	6.4	150
413	Unipolar self-doping behavior in perovskite CH3NH3PbBr3. *Applied Physics Letters*, **2015**, 106, 103902	3.4	145
412	Reducing Hysteresis and Enhancing Performance of Perovskite Solar Cells Using Low-Temperature Processed Y-Doped SnO Nanosheets as Electron Selective Layers. *Small*, **2017**, 13, 1601769	11	144
411	Improving the Performance of Formamidinium and Cesium Lead Triiodide Perovskite Solar Cells using Lead Thiocyanate Additives. *ChemSusChem*, **2016**, 9, 3288-3297	8.3	143
410	Synergistic Effects of Lead Thiocyanate Additive and Solvent Annealing on the Performance of Wide-Bandgap Perovskite Solar Cells. *ACS Energy Letters*, **2017**, 2, 1177-1182	20.1	142
409	Compositional and morphological engineering of mixed cation perovskite films for highly efficient planar and flexible solar cells with reduced hysteresis. *Nano Energy*, **2017**, 35, 223-232	17.1	138
408	Efficient fully-vacuum-processed perovskite solar cells using copper phthalocyanine as hole selective layers. *Journal of Materials Chemistry A*, **2015**, 3, 23888-23894	13	136
407	Effects of organic cations on the defect physics of tin halide perovskites. *Journal of Materials Chemistry A*, **2017**, 5, 15124-15129	13	135
406	Structural, magnetic, and electronic properties of the Co-Fe-Al oxide spinel system: Density-functional theory calculations. *Physical Review B*, **2007**, 76,	3.3	134
405	Enhanced photoelectrochemical responses of ZnO films through Ga and N codoping. *Applied Physics Letters*, **2007**, 91, 231909	3.4	133
404	Bimolecular Additives Improve Wide-Band-Gap Perovskites for Efficient Tandem Solar Cells with CIGS. *Joule*, **2019**, 3, 1734-1745	27.8	131
403	Water Vapor Treatment of Low-Temperature Deposited SnO2 Electron Selective Layers for Efficient Flexible Perovskite Solar Cells. *ACS Energy Letters*, **2017**, 2, 2118-2124	20.1	130
402	The 2020 photovoltaic technologies roadmap. *Journal Physics D: Applied Physics*, **2020**, 53, 493001	3	128
401	Double-hole-mediated coupling of dopants and its impact on band gap engineering in TiO2. *Physical Review Letters*, **2011**, 106, 066801	7.4	126

400	Engineering Grain Boundaries in Cu2ZnSnSe4 for Better Cell Performance: A First-Principle Study. *Advanced Energy Materials*, **2014**, 4, 1300712	21.8	118
399	Mechanisms of Electron-Beam-Induced Damage in Perovskite Thin Films Revealed by Cathodoluminescence Spectroscopy. *Journal of Physical Chemistry C*, **2015**, 119, 26904-26911	3.8	117
398	Roadmap on solar water splitting: current status and future prospects. *Nano Futures*, **2017**, 1, 022001	3.6	115
397	Conformal surface coatings to enable high volume expansion Li-ion anode materials. *ChemPhysChem*, **2010**, 11, 2124-30	3.2	115
396	A facile solvothermal growth of single crystal mixed halide perovskite CH3NH3Pb(Br(1-x)Cl(x))3. *Chemical Communications*, **2015**, 51, 7820-3	5.8	114
395	Life Cycle Assessment (LCA) of perovskite PV cells projected from lab to fab. *Solar Energy Materials and Solar Cells*, **2016**, 156, 157-169	6.4	114
394	Highly Sensitive Low-Bandgap Perovskite Photodetectors with Response from Ultraviolet to the Near-Infrared Region. *Advanced Functional Materials*, **2017**, 27, 1703953	15.6	113
393	Photovoltaic Properties of Two-Dimensional (CH3NH3)2Pb(SCN)2I2 Perovskite: A Combined Experimental and Density Functional Theory Study. *Journal of Physical Chemistry Letters*, **2016**, 7, 1213-8	6.4	112
392	Electronic, structural, and magnetic effects of 3d transition metals in hematite. *Journal of Applied Physics*, **2010**, 107, 123712	2.5	111
391	Quasicrystals as cluster aggregates. *Nature Materials*, **2004**, 3, 759-67	27	111
390	Annealing-free efficient vacuum-deposited planar perovskite solar cells with evaporated fullerenes as electron-selective layers. *Nano Energy*, **2016**, 19, 88-97	17.1	109
389	Metal□Organic Framework-Derived [email□protected] Composite Nanowire Electrocatalyst for Efficient Water Splitting. *ACS Energy Letters*, **2018**, 3, 1434-1442	20.1	109
388	Effects of Atomic Layer Deposition of Al2O3 on the Li[Li0.20Mn0.54Ni0.13Co0.13]O2 Cathode for Lithium-Ion Batteries. *Journal of the Electrochemical Society*, **2011**, 158, A1298	3.9	108
387	Enhancing the photo-currents of CdTe thin-film solar cells in both short and long wavelength regions. *Applied Physics Letters*, **2014**, 105, 183510	3.4	106
386	Alloying and Defect Control within Chalcogenide Perovskites for Optimized Photovoltaic Application. *Chemistry of Materials*, **2016**, 28, 821-829	9.6	105
385	Atomistic Mechanism of Broadband Emission in Metal Halide Perovskites. *Journal of Physical Chemistry Letters*, **2019**, 10, 501-506	6.4	105
384	Enhancement of photoelectrochemical response by aligned nanorods in ZnO thin films. *Journal of Power Sources*, **2008**, 176, 387-392	8.9	104
383	Synthesis of band-gap-reduced p-type ZnO films by Cu incorporation. *Journal of Applied Physics*, **2007**, 102, 023517	2.5	103

382	Band-Engineered Bismuth Titanate Pyrochlores for Visible Light Photocatalysis. *Journal of Physical Chemistry C*, **2010**, 114, 10598-10605	3.8	100
381	Self-Powered All-Inorganic Perovskite Microcrystal Photodetectors with High Detectivity. *Journal of Physical Chemistry Letters*, **2018**, 9, 2043-2048	6.4	99
380	Achieving a high open-circuit voltage in inverted wide-bandgap perovskite solar cells with a graded perovskite homojunction. *Nano Energy*, **2019**, 61, 141-147	17.1	97
379	Effect of copassivation of Cl and Cu on CdTe grain boundaries. *Physical Review Letters*, **2008**, 101, 155501	7.4	95
378	Excess charge-carrier induced instability of hybrid perovskites. *Nature Communications*, **2018**, 9, 4981	17.4	95
377	Efficient planar perovskite solar cells using room-temperature vacuum-processed C60 electron selective layers. *Journal of Materials Chemistry A*, **2015**, 3, 17971-17976	13	92
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375	Crystal and electronic structures of CuxS solar cell absorbers. *Applied Physics Letters*, **2012**, 100, 061906	3.4	91
374	Atomic structure of the quasicrystal Al72Ni20Co8. *Nature*, **2000**, 403, 266-7	50.4	91
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372	Stable and efficient CdS/Sb2Se3 solar cells prepared by scalable close space sublimation. *Nano Energy*, **2018**, 49, 346-353	17.1	87
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370	Electronic structure of ZnO:GaN compounds: Asymmetric bandgap engineering. *Physical Review B*, **2008**, 78,	3.3	85
369	Direct Imaging of Local Chemical Disorder and Columnar Vacancies in Ideal Decagonal Al-Ni-Co Quasicrystals. *Physical Review Letters*, **1998**, 81, 5145-5148	7.4	84
368	Oxygenated CdS Buffer Layers Enabling High Open-Circuit Voltages in Earth-Abundant Cu2BaSnS4 Thin-Film Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1601803	21.8	83
367	Electrochemical deposition of copper oxide nanowires for photoelectrochemical applications. *Journal of Materials Chemistry*, **2010**, 20, 6962		83
366	Structural and compositional dependence of the CdTexSe1-x alloy layer photoactivity in CdTe-based solar cells. *Nature Communications*, **2016**, 7, 12537	17.4	82
365	Low-Bandgap Mixed Tin-Lead Perovskites and Their Applications in All-Perovskite Tandem Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1808801	15.6	81

364	Dithieno[3,2-b:2?,3?-d]pyrrol-Cored Hole Transport Material Enabling Over 21% Efficiency Dopant-Free Perovskite Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1904300	15.6	80
363	Density-functional theory study of the effects of atomic impurity on the band edges of monoclinic WO3. *Physical Review B*, **2008**, 77,	3.3	80
362	Low-bandgap mixed tin□lead iodide perovskites with reduced methylammonium for simultaneous enhancement of solar cell efficiency and stability. *Nature Energy*, **2020**, 5, 768-776	62.3	80
361	One-step facile synthesis of a simple carbazole-cored hole transport material for high-performance perovskite solar cells. *Nano Energy*, **2017**, 40, 163-169	17.1	75
360	Photoelectrochemical Properties of N-Incorporated ZnO Films Deposited by Reactive RF Magnetron Sputtering. *Journal of the Electrochemical Society*, **2007**, 154, B956	3.9	75
359	Dithieno[3,2-b:2',3'-d]pyrrole Cored p-Type Semiconductors Enabling 20 % Efficiency Dopant-Free Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2019**, 58, 13717-13721	16.4	73
358	Origin of electronic and optical trends in ternary In2O3(ZnO)n transparent conducting oxides (n=1,3,5): Hybrid density functional theory calculations. *Physical Review B*, **2009**, 79,	3.3	73
357	Room-temperature fabrication of a delafossite CuCrO2 hole transport layer for perovskite solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 469-477	13	73
356	Manipulating Crystallization of Organolead Mixed-Halide Thin Films in Antisolvent Baths for Wide-Bandgap Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 2232-7	9.5	72
355	Trigonal Cu2-II-Sn-VI4 (II = Ba, Sr and VI = S, Se) quaternary compounds for earth-abundant photovoltaics. *Physical Chemistry Chemical Physics*, **2016**, 18, 4828-34	3.6	71
354	Environmental analysis of perovskites and other relevant solar cell technologies in a tandem configuration. *Energy and Environmental Science*, **2017**, 10, 1874-1884	35.4	71
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352	A Multi-functional Molecular Modifier Enabling Efficient Large-Area Perovskite Light-Emitting Diodes. *Joule*, **2020**, 4, 1977-1987	27.8	70
351	Stable Organic□norganic Perovskite Solar Cells without Hole-Conductor Layer Achieved via Cell Structure Design and Contact Engineering. *Advanced Functional Materials*, **2016**, 26, 4866-4873	15.6	70
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349	Reconfiguring the band-edge states of photovoltaic perovskites by conjugated organic cations. *Science*, **2021**, 371, 636-640	33.3	69
348	Simple descriptor derived from symbolic regression accelerating the discovery of new perovskite catalysts. *Nature Communications*, **2020**, 11, 3513	17.4	68
347	Chemical Origin of the Stability Difference between Copper(I)- and Silver(I)-Based Halide Double Perovskites. *Angewandte Chemie - International Edition*, **2017**, 56, 12107-12111	16.4	67

346	Extremely Durable High-Rate Capability of a LiNi0.4Mn0.4Co0.2O2 Cathode Enabled with Single-Walled Carbon Nanotubes. *Advanced Energy Materials*, **2011**, 1, 58-62	21.8	67
345	Electrical doping in halide perovskites. *Nature Reviews Materials*, **2021**, 6, 531-549	73.3	67
344	Electronic, Energetic, and Chemical Effects of Intrinsic Defects and Fe-Doping of CoAl2O4: A DFT+U Study. *Journal of Physical Chemistry C*, **2008**, 112, 12044-12050	3.8	66
343	Self-powered CsPbBr3 nanowire photodetector with a vertical structure. *Nano Energy*, **2018**, 53, 880-886	17.1	66
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339	Group-IIIA versus IIIB delafossites: Electronic structure study. *Physical Review B*, **2009**, 80,	3.3	60
338	Viability of Lead-Free Perovskites with Mixed Chalcogen and Halogen Anions for Photovoltaic Applications. *Journal of Physical Chemistry C*, **2016**, 120, 6435-6441	3.8	59
337	Predictions for p-Type CH3NH3PbI3 Perovskites. *Journal of Physical Chemistry C*, **2014**, 118, 25350-25354	3.8	59
336	Rules of structure formation for the homologous InMO3(ZnO)n compounds. *Physical Review Letters* , **2008**, 100, 255501	7.4	59
335	Efficient and Stable Nonfullerene-Graded Heterojunction Inverted Perovskite Solar Cells with Inorganic Ga2O3 Tunneling Protective Nanolayer. *Advanced Functional Materials*, **2018**, 28, 1804128	15.6	58
334	Direct Imaging of Cl- and Cu-Induced Short-Circuit Efficiency Changes in CdTe Solar Cells. *Advanced Energy Materials*, **2014**, 4, 1400454	21.8	58
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330	Chemical Origin of the Stability Difference between Copper(I)- and Silver(I)-Based Halide Double Perovskites. *Angewandte Chemie*, **2017**, 129, 12275-12279	3.6	57
329	Distant-Atom Mutation for Better Earth-Abundant Light Absorbers: A Case Study of Cu2BaSnSe4. *ACS Energy Letters*, **2017**, 2, 29-35	20.1	57

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324	Synthesis and Characterization of Boron-Doped Single-Wall Carbon Nanotubes Produced by the Laser Vaporization Technique. *Chemistry of Materials*, **2006**, 18, 2558-2566	9.6	56
323	Arylammonium-Assisted Reduction of the Open-Circuit Voltage Deficit in Wide-Bandgap Perovskite Solar Cells: The Role of Suppressed Ion Migration. *ACS Energy Letters*, **2020**, 5, 2560-2568	20.1	56
322	A Novel Codoping Approach for Enhancing the Performance of LiFePO4 Cathodes. *Advanced Energy Materials*, **2012**, 2, 1028-1032	21.8	55
321	Ternary cobalt spinel oxides for solar driven hydrogen production: Theory and experiment. *Energy and Environmental Science*, **2009**, 2, 774	35.4	55
320	Earth-Abundant Orthorhombic BaCu2Sn(SexS1□)4 (x □0.83) Thin Film for Solar Energy Conversion. *ACS Energy Letters*, **2016**, 1, 583-588	20.1	54
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318	Direct Imaging of Atomic Ordering in Undoped and La-Doped Pb(Mg1/3Nb2/3)O3. *Journal of the American Ceramic Society*, **2000**, 83, 181-88	3.8	54
317	Narrow-Bandgap Mixed Lead/Tin-Based 2D Dion-Jacobson Perovskites Boost the Performance of Solar Cells. *Journal of the American Chemical Society*, **2020**, 142, 15049-15057	16.4	53
316	Employing Overlayers To Improve the Performance of Cu2BaSnS4 Thin Film based Photoelectrochemical Water Reduction Devices. *Chemistry of Materials*, **2017**, 29, 916-920	9.6	52
315	Perovskite-a Perfect Top Cell for Tandem Devices to Break the S-Q Limit. *Advanced Science*, **2019**, 6, 1801704	15.1	52
314	Synthesis and characterization of band gap-reduced ZnO:N and ZnO:(Al,N) films for photoelectrochemical water splitting. *Journal of Materials Research*, **2010**, 25, 69-75	2.5	52
313	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. *Science*, **2022**, 375, 71-76	33.3	51
312	Bandgap Engineering of Barium Bismuth Niobate Double Perovskite for Photoelectrochemical Water Oxidation. *Advanced Energy Materials*, **2017**, 7, 1602260	21.8	49
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307	Crystal Structure of AgBiI Thin Films. *Journal of Physical Chemistry Letters*, **2016**, 7, 3903-3907	6.4	46
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