Mohamad K Nazeeruddin

List of Publications by Citations

736 papers	120,593 citations	153 h-index	334 g-index
790 ext. papers	129,911 ext. citations	11.5 avg, IF	8.54 L-index

#	Paper	IF	Citations
736	Sequential deposition as a route to high-performance perovskite-sensitized solar cells. *Nature*, **2013**, 499, 316-9	50.4	7488
735	Conversion of light to electricity by cis-X2bis(2,2'-bipyridyl-4,4'-dicarboxylate)ruthenium(II) charge-transfer sensitizers (X = Cl-, Br-, I-, CN-, and SCN-) on nanocrystalline titanium dioxide electrodes. *Journal of the American Chemical Society*, **1993**, 115, 6382-6390	16.4	5364
734	Porphyrin-sensitized solar cells with cobalt (II/III)-based redox electrolyte exceed 12 percent efficiency. *Science*, **2011**, 334, 629-34	33.3	5284
733	Cesium-containing triple cation perovskite solar cells: improved stability, reproducibility and high efficiency. *Energy and Environmental Science*, **2016**, 9, 1989-1997	35.4	3740
732	Dye-sensitized solar cells with 13% efficiency achieved through the molecular engineering of porphyrin sensitizers. *Nature Chemistry*, **2014**, 6, 242-7	17.6	3560
731	Combined experimental and DFT-TDDFT computational study of photoelectrochemical cell ruthenium sensitizers. *Journal of the American Chemical Society*, **2005**, 127, 16835-47	16.4	2503
730	Engineering of efficient panchromatic sensitizers for nanocrystalline TiO(2)-based solar cells. *Journal of the American Chemical Society*, **2001**, 123, 1613-24	16.4	2308
729	Efficient inorganic□organic hybrid heterojunction solar cells containing perovskite compound and polymeric hole conductors. *Nature Photonics*, **2013**, 7, 486-491	33.9	2185
728	Water photolysis at 12.3% efficiency via perovskite photovoltaics and Earth-abundant catalysts. *Science*, **2014**, 345, 1593-6	33.3	1920
727	Mesoscopic CH3NH3PbI3/TiO2 heterojunction solar cells. *Journal of the American Chemical Society*, **2012**, 134, 17396-9	16.4	1623
726	Fabrication of thin film dye sensitized solar cells with solar to electric power conversion efficiency over 10%. *Thin Solid Films*, **2008**, 516, 4613-4619	2.2	1564
725	Efficient luminescent solar cells based on tailored mixed-cation perovskites. *Science Advances*, **2016** , 2, e1501170	14.3	1498
724	A stable quasi-solid-state dye-sensitized solar cell with an amphiphilic ruthenium sensitizer and polymer gel electrolyte. *Nature Materials*, **2003**, 2, 402-7	27	1387
723	One-Year stable perovskite solar cells by 2D/3D interface engineering. *Nature Communications*, **2017**, 8, 15684	17.4	1253
722	Enhance the optical absorptivity of nanocrystalline TiO2 film with high molar extinction coefficient ruthenium sensitizers for high performance dye-sensitized solar cells. *Journal of the American Chemical Society*, **2008**, 130, 10720-8	16.4	1229
721	Perovskite solar cells employing organic charge-transport layers. *Nature Photonics*, **2014**, 8, 128-132	33.9	1196
720	Organohalide lead perovskites for photovoltaic applications. *Energy and Environmental Science*, **2014**, 7, 2448-2463	35.4	1049

719	Understanding the rate-dependent J–V hysteresis, slow time component, and aging in CH3NH3PbI3 perovskite solar cells: the role of a compensated electric field. *Energy and Environmental Science*, **2015**, 8, 995-1004	35.4	998
718	Mixed-organic-cation perovskite photovoltaics for enhanced solar-light harvesting. *Angewandte Chemie - International Edition*, **2014**, 53, 3151-7	16.4	960
717	Acid-Base Equilibria of (2,2′-Bipyridyl-4,4′-dicarboxylic acid)ruthenium(II) Complexes and the Effect of Protonation on Charge-Transfer Sensitization of Nanocrystalline Titania. *Inorganic Chemistry*, **1999**, 38, 6298-6305	5.1	955
716	Highly efficient planar perovskite solar cells through band alignment engineering. *Energy and Environmental Science*, **2015**, 8, 2928-2934	35.4	949
715	High-Efficiency Organic-Dye- Sensitized Solar Cells Controlled by Nanocrystalline-TiO2 Electrode Thickness. *Advanced Materials*, **2006**, 18, 1202-1205	24	934
714	Improved performance and stability of perovskite solar cells by crystal crosslinking with alkylphosphonic acid ω-ammonium chlorides. *Nature Chemistry*, **2015**, 7, 703-11	17.6	898
713	Fabrication of screen-printing pastes from TiO2 powders for dye-sensitised solar cells. *Progress in Photovoltaics: Research and Applications*, **2007**, 15, 603-612	6.8	870
712	Cation-induced band-gap tuning in organohalide perovskites: interplay of spin-orbit coupling and octahedra tilting. *Nano Letters*, **2014**, 14, 3608-16	11.5	837
711	Perovskite as light harvester: a game changer in photovoltaics. *Angewandte Chemie - International Edition*, **2014**, 53, 2812-24	16.4	783
710	Highly Efficient Dye-Sensitized Solar Cells Based on Carbon Black Counter Electrodes. *Journal of the Electrochemical Society*, **2006**, 153, A2255	3.9	782
709	Effect of Annealing Temperature on Film Morphology of Organic–Inorganic Hybrid Pervoskite Solid-State Solar Cells. *Advanced Functional Materials*, **2014**, 24, 3250-3258	15.6	773
708	First-Principles Modeling of Mixed Halide Organometal Perovskites for Photovoltaic Applications. *Journal of Physical Chemistry C*, **2013**, 117, 13902-13913	3.8	767
707	Not All That Glitters Is Gold: Metal-Migration-Induced Degradation in Perovskite Solar Cells. *ACS Nano*, **2016**, 10, 6306-14	16.7	759
706	Molecular engineering of organic sensitizers for solar cell applications. *Journal of the American Chemical Society*, **2006**, 128, 16701-7	16.4	728
705	Meso-substituted porphyrins for dye-sensitized solar cells. *Chemical Reviews*, **2014**, 114, 12330-96	68.1	716
704	Depleted-heterojunction colloidal quantum dot solar cells. *ACS Nano*, **2010**, 4, 3374-80	16.7	707
703	A molecularly engineered hole-transporting material for efficient perovskite solar cells. *Nature Energy*, **2016**, 1,	62.3	693
702	Investigation of Sensitizer Adsorption and the Influence of Protons on Current and Voltage of a Dye-Sensitized Nanocrystalline TiO2 Solar Cell. *Journal of Physical Chemistry B*, **2003**, 107, 8981-8987	3.4	671

701	Inorganic hole conductor-based lead halide perovskite solar cells with 12.4% conversion efficiency. *Nature Communications*, **2014**, 5, 3834	17.4	670
700	Highly Efficient Porphyrin Sensitizers for Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2007**, 111, 11760-11762	3.8	651
699	Tris(2-(1H-pyrazol-1-yl)pyridine)cobalt(III) as p-type dopant for organic semiconductors and its application in highly efficient solid-state dye-sensitized solar cells. *Journal of the American Chemical Society*, **2011**, 133, 18042-5	16.4	630
698	Enhanced electronic properties in mesoporous TiO2 via lithium doping for high-efficiency perovskite solar cells. *Nature Communications*, **2016**, 7, 10379	17.4	626
697	Impedance spectroscopic analysis of lead iodide perovskite-sensitized solid-state solar cells. *ACS Nano*, **2014**, 8, 362-73	16.7	617
696	Dye-sensitized solar cells: A brief overview. *Solar Energy*, **2011**, 85, 1172-1178	6.8	615
695	Molecular engineering of organic sensitizers for dye-sensitized solar cell applications. *Journal of the American Chemical Society*, **2008**, 130, 6259-66	16.4	595
694	Efficient CdSe quantum dot-sensitized solar cells prepared by an improved successive ionic layer adsorption and reaction process. *Nano Letters*, **2009**, 9, 4221-7	11.5	587
693	Control of dark current in photoelectrochemical (TiO2/I--I3-)) and dye-sensitized solar cells. *Chemical Communications*, **2005**, 4351-3	5.8	538
692	Ionic polarization-induced current-voltage hysteresis in CH3NH3PbX3 perovskite solar cells. *Nature Communications*, **2016**, 7, 10334	17.4	500
691	Organized mesoporous TiO2 films exhibiting greatly enhanced performance in dye-sensitized solar cells. *Nano Letters*, **2005**, 5, 1789-92	11.5	497
690	Hybrid polymer/zinc oxide photovoltaic devices with vertically oriented ZnO nanorods and an amphiphilic molecular interface layer. *Journal of Physical Chemistry B*, **2006**, 110, 7635-9	3.4	492
689	High-performance nanostructured inorganic-organic heterojunction solar cells. *Nano Letters*, **2010**, 10, 2609-12	11.5	480
688	High efficiency stable inverted perovskite solar cells without current hysteresis. *Energy and Environmental Science*, **2015**, 8, 2725-2733	35.4	479
687	Monolithic perovskite/silicon-heterojunction tandem solar cells processed at low temperature. *Energy and Environmental Science*, **2016**, 9, 81-88	35.4	469
686	Efficient far red sensitization of nanocrystalline TiO2 films by an unsymmetrical squaraine dye. *Journal of the American Chemical Society*, **2007**, 129, 10320-1	16.4	466
685	Molecular cosensitization for efficient panchromatic dye-sensitized solar cells. *Angewandte Chemie - International Edition*, **2007**, 46, 8358-62	16.4	461
684	Highly phosphorescence iridium complexes and their application in organic light-emitting devices. *Journal of the American Chemical Society*, **2003**, 125, 8790-7	16.4	461

683	Efficient inorganic-organic hybrid perovskite solar cells based on pyrene arylamine derivatives as hole-transporting materials. *Journal of the American Chemical Society*, **2013**, 135, 19087-90	16.4	456
682	Dimensional tailoring of hybrid perovskites for photovoltaics. *Nature Reviews Materials*, **2019**, 4, 4-22	73.3	440
681	Thermal Behavior of Methylammonium Lead-Trihalide Perovskite Photovoltaic Light Harvesters. *Chemistry of Materials*, **2014**, 26, 6160-6164	9.6	433
680	PbS and CdS Quantum Dot-Sensitized Solid-State Solar Cells: "Old Concepts, New Results" *Advanced Functional Materials*, **2009**, 19, 2735-2742	15.6	433
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678	Increased light harvesting in dye-sensitized solar cells with energy relay dyes. *Nature Photonics*, **2009**, 3, 406-411	33.9	398
677	Migration of cations induces reversible performance losses over day/night cycling in perovskite solar cells. *Energy and Environmental Science*, **2017**, 10, 604-613	35.4	387
676	Influence of the donor size in D-π-A organic dyes for dye-sensitized solar cells. *Journal of the American Chemical Society*, **2014**, 136, 5722-30	16.4	381
675	High-efficiency (7.2%) flexible dye-sensitized solar cells with Ti-metal substrate for nanocrystalline-TiO2 photoanode. *Chemical Communications*, **2006**, 4004-6	5.8	377
674	CoII(dbbip)22+ Complex Rivals Tri-iodide/Iodide Redox Mediator in Dye-Sensitized Photovoltaic Cells. *Journal of Physical Chemistry B*, **2001**, 105, 10461-10464	3.4	376
673	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. *Nature Energy*, **2020**, 5, 35-49	62.3	369
672	Using a two-step deposition technique to prepare perovskite (CH3NH3PbI3) for thin film solar cells based on ZrO2 and TiO2 mesostructures. *RSC Advances*, **2013**, 3, 18762	3.7	369
671	New paradigm in molecular engineering of sensitizers for solar cell applications. *Journal of the American Chemical Society*, **2009**, 131, 5930-4	16.4	365
670	Highly efficient and thermally stable organic sensitizers for solvent-free dye-sensitized solar cells. *Angewandte Chemie - International Edition*, **2008**, 47, 327-30	16.4	359
669	Predicting the Open-Circuit Voltage of CH3NH3PbI3 Perovskite Solar Cells Using Electroluminescence and Photovoltaic Quantum Efficiency Spectra: the Role of Radiative and Non-Radiative Recombination. *Advanced Energy Materials*, **2015**, 5, 1400812	21.8	358
668	Flexible high efficiency perovskite solar cells. *Energy and Environmental Science*, **2014**, 7, 994	35.4	357
667	Nanocrystalline rutile electron extraction layer enables low-temperature solution processed perovskite photovoltaics with 13.7% efficiency. *Nano Letters*, **2014**, 14, 2591-6	11.5	352
666	Highly efficient perovskite solar cells with a compositionally engineered perovskite/hole transporting material interface. *Energy and Environmental Science*, **2017**, 10, 621-627	35.4	350

665	Large guanidinium cation mixed with methylammonium in lead iodide perovskites for 19% efficient solar cells. *Nature Energy*, **2017**, 2, 972-979	62.3	339
664	High efficiency methylammonium lead triiodide perovskite solar cells: the relevance of non-stoichiometric precursors. *Energy and Environmental Science*, **2015**, 8, 3550-3556	35.4	335
663	CdSe Quantum Dot-Sensitized Solar Cells Exceeding Efficiency 1% at Full-Sun Intensity. *Journal of Physical Chemistry C*, **2008**, 112, 11600-11608	3.8	328
662	Metal free sensitizer and catalyst for dye sensitized solar cells. *Energy and Environmental Science*, **2013**, 6, 3439	35.4	326
661	Efficient sensitization of nanocrystalline TiO2 films by a near-IR-absorbing unsymmetrical zinc phthalocyanine. *Angewandte Chemie - International Edition*, **2007**, 46, 373-6	16.4	318
660	The synergistic effect of H2O and DMF towards stable and 20% efficiency inverted perovskite solar cells. *Energy and Environmental Science*, **2017**, 10, 808-817	35.4	315
659	An organic D-A dye for record efficiency solid-state sensitized heterojunction solar cells. *Nano Letters*, **2011**, 11, 1452-6	11.5	308
658	Stable New Sensitizer with Improved Light Harvesting for Nanocrystalline Dye-Sensitized Solar Cells. *Advanced Materials*, **2004**, 16, 1806-1811	24	308
657	Molecular control of recombination dynamics in dye-sensitized nanocrystalline TiO2 films: free energy vs distance dependence. *Journal of the American Chemical Society*, **2004**, 126, 5225-33	16.4	305
656	Outdoor Performance and Stability under Elevated Temperatures and Long-Term Light Soaking of Triple-Layer Mesoporous Perovskite Photovoltaics. *Energy Technology*, **2015**, 3, 551-555	3.5	300
655	Reversible colorimetric probes for mercury sensing. *Journal of the American Chemical Society*, **2005**, 127, 12351-6	16.4	298
654	Panchromatic engineering for dye-sensitized solar cells. *Energy and Environmental Science*, **2011**, 4, 842-857	35.4	294
653	Analysis of electron transfer properties of ZnO and TiO2 photoanodes for dye-sensitized solar cells. *ACS Nano*, **2014**, 8, 2261-8	16.7	284
652	Nanowire perovskite solar cell. *Nano Letters*, **2015**, 15, 2120-6	11.5	282
651	Surface Modification of Titanium with Phosphonic Acid To Improve Bone Bonding: Characterization by XPS and ToF-SIMS. *Langmuir*, **2002**, 18, 2582-2589	4	280
650	Photovoltaic characterization of dye-sensitized solar cells: effect of device masking on conversion efficiency. *Progress in Photovoltaics: Research and Applications*, **2006**, 14, 589-601	6.8	276
649	Application of metalloporphyrins in nanocrystalline dye-sensitized solar cells for conversion of sunlight into electricity. *Langmuir*, **2004**, 20, 6514-7	4	272
648	Triazatruxene-Based Hole Transporting Materials for Highly Efficient Perovskite Solar Cells. *Journal of the American Chemical Society*, **2015**, 137, 16172-8	16.4	268

647	Recent developments in solid-state dye-sensitized solar cells. *ChemSusChem*, **2008**, 1, 699-707	8.3	268
646	Anthocyanins and betalains as light-harvesting pigments for dye-sensitized solar cells. *Solar Energy*, **2012**, 86, 1563-1575	6.8	266
645	Real-space observation of unbalanced charge distribution inside a perovskite-sensitized solar cell. *Nature Communications*, **2014**, 5, 5001	17.4	262
644	Regenerative PbS and CdS quantum dot sensitized solar cells with a cobalt complex as hole mediator. *Langmuir*, **2009**, 25, 7602-8	4	262
643	Phase Segregation in Cs-, Rb- and K-Doped Mixed-Cation (MA)(FA)PbI Hybrid Perovskites from Solid-State NMR. *Journal of the American Chemical Society*, **2017**, 139, 14173-14180	16.4	260
642	Graphene nanoplatelet cathode for Co(III)/(II) mediated dye-sensitized solar cells. *ACS Nano*, **2011**, 5, 9171-8	16.7	254
641	Nanostructured TiO2/CH3NH3PbI3 heterojunction solar cells employing spiro-OMeTAD/Co-complex as hole-transporting material. *Journal of Materials Chemistry A*, **2013**, 1, 11842	12	253
640	Synthesis of novel ruthenium sensitizers and their application in dye-sensitized solar cells. *Coordination Chemistry Reviews*, **2005**, 249, 1460-1467	23.2	248
639	Alkyl chain barriers for kinetic optimization in dye-sensitized solar cells. *Journal of the American Chemical Society*, **2006**, 128, 16376-83	16.4	243
638	Dye Dependent Regeneration Dynamics in Dye Sensitized Nanocrystalline Solar Cells: Evidence for the Formation of a Ruthenium Bipyridyl Cation/Iodide Intermediate. *Journal of Physical Chemistry C*, **2007**, 111, 6561-6567	3.8	241
637	Perovskite Solar Cells: Influence of Hole Transporting Materials on Power Conversion Efficiency. *ChemSusChem*, **2016**, 9, 10-27	8.3	237
636	Selective growth of layered perovskites for stable and efficient photovoltaics. *Energy and Environmental Science*, **2018**, 11, 952-959	35.4	233
635	Optimization of distyryl-Bodipy chromophores for efficient panchromatic sensitization in dye sensitized solar cells. *Chemical Science*, **2011**, 2, 949	9.4	233
634	Stepwise assembly of amphiphilic ruthenium sensitizers and their applications in dye-sensitized solar cell. *Coordination Chemistry Reviews*, **2004**, 248, 1317-1328	23.2	229
633	Preparation of phosphonated polypyridyl ligands to anchor transition-metal complexes on oxide surfaces: application for the conversion of light to electricity with nanocrystalline TiO2 films. *Journal of the Chemical Society Chemical Communications*, **1995**, 65-66		229
632	Perovskite solar cells with 12.8% efficiency by using conjugated quinolizino acridine based hole transporting material. *Journal of the American Chemical Society*, **2014**, 136, 8516-9	16.4	228
631	Design, Synthesis, and Application of Amphiphilic Ruthenium Polypyridyl Photosensitizers in Solar Cells Based on Nanocrystalline TiO2 Films. *Langmuir*, **2002**, 18, 952-954	4	226
630	Toward interaction of sensitizer and functional moieties in hole-transporting materials for efficient semiconductor-sensitized solar cells. *Nano Letters*, **2011**, 11, 4789-93	11.5	220

629	High open-circuit voltage solid-state dye-sensitized solar cells with organic dye. *Nano Letters*, **2009**, 9, 2487-92	11.5	220
628	Time-dependent density functional theory investigations on the excited states of Ru(II)-dye-sensitized TiO2 nanoparticles: the role of sensitizer protonation. *Journal of the American Chemical Society*, **2007**, 129, 14156-7	16.4	220
627	Structure of Nanocrystalline TiO2 Powders and Precursor to Their Highly Efficient Photosensitizer. *Chemistry of Materials*, **1997**, 9, 430-439	9.6	216
626	Synthesis, characterization, and DFT/TD-DFT calculations of highly phosphorescent blue light-emitting anionic iridium complexes. *Inorganic Chemistry*, **2008**, 47, 980-9	5.1	212
625	Supramolecular control of charge-transfer dynamics on dye-sensitized nanocrystalline TiO2 films. *Chemistry - A European Journal*, **2004**, 10, 595-602	4.8	210
624	High-Performance Perovskite Solar Cells with Enhanced Environmental Stability Based on Amphiphile-Modified CH3 NH3 PbI3. *Advanced Materials*, **2016**, 28, 2910-5	24	207
623	A Methoxydiphenylamine-Substituted Carbazole Twin Derivative: An Efficient Hole-Transporting Material for Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2015**, 54, 11409-13	16.4	207
622	Frontiers, opportunities, and challenges in perovskite solar cells: A critical review. *Journal of Photochemistry and Photobiology C: Photochemistry Reviews*, **2018**, 35, 1-24	16.4	205
621	Molecular Engineering of Photosensitizers for Nanocrystalline Solar Cells: Synthesis and Characterization of Ru Dyes Based on Phosphonated Terpyridines. *Inorganic Chemistry*, **1997**, 36, 5937-5946	5.1	204
620	A light-resistant organic sensitizer for solar-cell applications. *Angewandte Chemie - International Edition*, **2009**, 48, 1576-80	16.4	203
619	Absorption Spectra and Excited State Energy Levels of the N719 Dye on TiO2 in Dye-Sensitized Solar Cell Models. *Journal of Physical Chemistry C*, **2011**, 115, 8825-8831	3.8	200
618	Dye-sensitized solar cells based on poly (3,4-ethylenedioxythiophene) counter electrode derived from ionic liquids. *Journal of Materials Chemistry*, **2010**, 20, 1654		197
617	From Nano- to Micrometer Scale: The Role of Antisolvent Treatment on High Performance Perovskite Solar Cells. *Chemistry of Materials*, **2017**, 29, 3490-3498	9.6	194
616	First-Principles Modeling of the Adsorption Geometry and Electronic Structure of Ru(II) Dyes on Extended TiO2 Substrates for Dye-Sensitized Solar Cell Applications. *Journal of Physical Chemistry C* , **2010**, 114, 6054-6061	3.8	192
615	Efficient co-sensitization of nanocrystalline TiO(2) films by organic sensitizers. *Chemical Communications*, **2007**, 4680-2	5.8	191
614	Effect of coadsorbent on the photovoltaic performance of zinc pthalocyanine-sensitized solar cells. *Langmuir*, **2008**, 24, 5636-40	4	190
613	Co-sensitization of organic dyes for efficient ionic liquid electrolyte-based dye-sensitized solar cells. *Langmuir*, **2007**, 23, 10906-9	4	189
612	Influence of Ancillary Ligands in Dye-Sensitized Solar Cells. *Chemical Reviews*, **2016**, 116, 9485-564	68.1	189

611	Cobalt electrolyte/dye interactions in dye-sensitized solar cells: a combined computational and experimental study. *Journal of the American Chemical Society*, **2012**, 134, 19438-53	16.4	185
610	Molecular Design of Unsymmetrical Squaraine Dyes for High Efficiency Conversion of Low Energy Photons into Electrons Using TiO2 Nanocrystalline Films. *Advanced Functional Materials*, **2009**, 19, 2720-2727	15.6	185
609	An improved perylene sensitizer for solar cell applications. *ChemSusChem*, **2008**, 1, 615-8	8.3	185
608	A simple spiro-type hole transporting material for efficient perovskite solar cells. *Energy and Environmental Science*, **2015**, 8, 1986-1991	35.4	184
607	Cyclometallated iridium complexes for conversion of light into electricity and electricity into light. *Journal of Organometallic Chemistry*, **2009**, 694, 2661-2670	2.3	183
606	Efficient green-blue-light-emitting cationic iridium complex for light-emitting electrochemical cells. *Inorganic Chemistry*, **2006**, 45, 9245-50	5.1	183
605	A dopant free linear acene derivative as a hole transport material for perovskite pigmented solar cells. *Energy and Environmental Science*, **2015**, 8, 1816-1823	35.4	179
604	Influence of the interfacial charge-transfer resistance at the counter electrode in dye-sensitized solar cells employing cobalt redox shuttles. *Energy and Environmental Science*, **2011**, 4, 4921	35.4	178
603	Engineering of a novel ruthenium sensitizer and its application in dye-sensitized solar cells for conversion of sunlight into electricity. *Inorganic Chemistry*, **2005**, 44, 178-80	5.1	178
602	Mixed Dimensional 2D/3D Hybrid Perovskite Absorbers: The Future of Perovskite Solar Cells?. *Advanced Functional Materials*, **2019**, 29, 1806482	15.6	178
601	Stable single-layer light-emitting electrochemical cell using 4,7-diphenyl-1,10-phenanthroline-bis(2-phenylpyridine)iridium(III) hexafluorophosphate. *Journal of the American Chemical Society*, **2006**, 128, 14786-7	16.4	177
600	Investigation regarding the role of chloride in organic-inorganic halide perovskites obtained from chloride containing precursors. *Nano Letters*, **2014**, 14, 6991-6	11.5	176
599	Subnanometer Ga2O3 tunnelling layer by atomic layer deposition to achieve 1.1 V open-circuit potential in dye-sensitized solar cells. *Nano Letters*, **2012**, 12, 3941-7	11.5	175
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595	Phthalocyanines for dye-sensitized solar cells. *Coordination Chemistry Reviews*, **2019**, 381, 1-64	23.2	173
594	Molecular engineering of face-on oriented dopant-free hole transporting material for perovskite solar cells with 19% PCE. *Journal of Materials Chemistry A*, **2017**, 5, 7811-7815	13	171

593	Impact of Monovalent Cation Halide Additives on the Structural and Optoelectronic Properties of CH3NH3PbI3 Perovskite. *Advanced Energy Materials*, **2016**, 6, 1502472	21.8	171
592	Conversion of Light into Electricity with Trinuclear Ruthenium Complexes Adsorbed on Textured TiO2 Films. *Helvetica Chimica Acta*, **1990**, 73, 1788-1803	2	169
591	Light Harvesting and Charge Recombination in CH3NH3PbI3 Perovskite Solar Cells Studied by Hole Transport Layer Thickness Variation. *ACS Nano*, **2015**, 9, 4200-9	16.7	167
590	Benzotrithiophene-Based Hole-Transporting Materials for 18.2 % Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2016**, 55, 6270-4	16.4	165
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588	Cation Dynamics in Mixed-Cation (MA)(FA)PbI Hybrid Perovskites from Solid-State NMR. *Journal of the American Chemical Society*, **2017**, 139, 10055-10061	16.4	160
587	Novel ruthenium sensitizers containing functionalized hybrid tetradentate ligands: synthesis, characterization, and INDO/S analysis. *Inorganic Chemistry*, **2002**, 41, 367-78	5.1	157
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585	Multistep electron transfer processes on dye co-sensitized nanocrystalline TiO2 films. *Journal of the American Chemical Society*, **2004**, 126, 5670-1	16.4	155
584	Highly Selective and Reversible Optical, Colorimetric, and Electrochemical Detection of Mercury(II) by Amphiphilic Ruthenium Complexes Anchored onto Mesoporous Oxide Films. *Advanced Functional Materials*, **2006**, 16, 189-194	15.6	153
583	Yttrium-substituted nanocrystalline TiO□photoanodes for perovskite based heterojunction solar cells. *Nanoscale*, **2014**, 6, 1508-14	7.7	151
582	Dopant-Free Hole-Transporting Materials for Stable and Efficient Perovskite Solar Cells. *Advanced Materials*, **2017**, 29, 1606555	24	151
581	Deep level trapped defect analysis in CH3NH3PbI3 perovskite solar cells by deep level transient spectroscopy. *Energy and Environmental Science*, **2017**, 10, 1128-1133	35.4	150
580	Structure-function relationships in unsymmetrical zinc phthalocyanines for dye-sensitized solar cells. *Chemistry - A European Journal*, **2009**, 15, 5130-7	4.8	150
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