

Anders Hagfeldt

List of Publications by Year in descending order

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647
papers

114,199
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659
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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Dye-Sensitized Solar Cells. <i>Chemical Reviews</i> , 2010, 110, 6595-6663.	47.7	8,072
2	Light-Induced Redox Reactions in Nanocrystalline Systems. <i>Chemical Reviews</i> , 1995, 95, 49-68.	47.7	5,161
3	Cesium-containing triple cation perovskite solar cells: improved stability, reproducibility and high efficiency. <i>Energy and Environmental Science</i> , 2016, 9, 1989-1997.	30.8	4,560
4	Incorporation of rubidium cations into perovskite solar cells improves photovoltaic performance. <i>Science</i> , 2016, 354, 206-209.	12.6	3,137
5	Molecular Photovoltaics. <i>Accounts of Chemical Research</i> , 2000, 33, 269-277.	15.6	2,625
6	Pseudo-halide anion engineering for FAPbI_3 perovskite solar cells. <i>Nature</i> , 2021, 592, 381-385.	27.8	2,095
7	Polymer-templated nucleation and crystal growth of perovskite films for solar cells with efficiency greater than 21%. <i>Nature Energy</i> , 2016, 1, .	39.5	1,719
8	Efficient luminescent solar cells based on tailored mixed-cation perovskites. <i>Science Advances</i> , 2016, 2, e1501170.	10.3	1,669
9	A vacuum flash-assisted solution process for high-efficiency large-area perovskite solar cells. <i>Science</i> , 2016, 353, 58-62.	12.6	1,636
10	Promises and challenges of perovskite solar cells. <i>Science</i> , 2017, 358, 739-744.	12.6	1,510
11	Characteristics of the Iodide/Triiodide Redox Mediator in Dye-Sensitized Solar Cells. <i>Accounts of Chemical Research</i> , 2009, 42, 1819-1826.	15.6	1,303
12	Li-Ion Insertion in TiO_2 (Anatase). 2. Voltammetry on Nanoporous Films. <i>Journal of Physical Chemistry B</i> , 1997, 101, 7717-7722.	2.6	1,283
13	Influence of electrolyte in transport and recombination in dye-sensitized solar cells studied by impedance spectroscopy. <i>Solar Energy Materials and Solar Cells</i> , 2005, 87, 117-131.	6.2	1,107
14	Highly efficient planar perovskite solar cells through band alignment engineering. <i>Energy and Environmental Science</i> , 2015, 8, 2928-2934.	30.8	1,097
15	Design of Organic Dyes and Cobalt Polypyridine Redox Mediators for High-Efficiency Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2010, 132, 16714-16724.	13.7	1,000
16	Not All That Glitters Is Gold: Metal-Migration-Induced Degradation in Perovskite Solar Cells. <i>ACS Nano</i> , 2016, 10, 6306-6314.	14.6	966
17	The rapid evolution of highly efficient perovskite solar cells. <i>Energy and Environmental Science</i> , 2017, 10, 710-727.	30.8	942
18	Purpose-Built Anisotropic Metal Oxide Material: A 3D Highly Oriented Microrod Array of ZnO . <i>Journal of Physical Chemistry B</i> , 2001, 105, 3350-3352.	2.6	903

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19	Three-Dimensional Array of Highly Oriented Crystalline ZnO Microtubes. <i>Chemistry of Materials</i> , 2001, 13, 4395-4398.	6.7	890
20	Conformal quantum dotâ€“SnO ₂ layers as electron transporters for efficient perovskite solar cells. <i>Science</i> , 2022, 375, 302-306.	12.6	872
21	Dye-sensitized solar cells for efficient power generation under ambient lighting. <i>Nature Photonics</i> , 2017, 11, 372-378.	31.4	871
22	A molecularly engineered hole-transporting material for efficient perovskite solar cells. <i>Nature Energy</i> , 2016, 1, .	39.5	816
23	Methylammonium-free, high-performance, and stable perovskite solar cells on a planar architecture. <i>Science</i> , 2018, 362, 449-453.	12.6	816
24	Economical Pt-Free Catalysts for Counter Electrodes of Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 3419-3428.	13.7	798
25	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , 2020, 5, 35-49.	39.5	797
26	Improving efficiency and stability of perovskite solar cells with photocurable fluoropolymers. <i>Science</i> , 2016, 354, 203-206.	12.6	748
27	Enhanced electronic properties in mesoporous TiO ₂ via lithium doping for high-efficiency perovskite solar cells. <i>Nature Communications</i> , 2016, 7, 10379.	12.8	744
28	Highly efficient and stable planar perovskite solar cells by solution-processed tin oxide. <i>Energy and Environmental Science</i> , 2016, 9, 3128-3134.	30.8	720
29	Unreacted PbI ₂ as a Double-Edged Sword for Enhancing the Performance of Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2016, 138, 10331-10343.	13.7	696
30	A novel organic chromophore for dye-sensitized nanostructured solar cells. <i>Chemical Communications</i> , 2006, , 2245.	4.1	651
31	Theoretical Models for the Action Spectrum and the Current-Voltage Characteristics of Microporous Semiconductor Films in Photoelectrochemical Cells. <i>The Journal of Physical Chemistry</i> , 1994, 98, 5552-5556.	2.9	638
32	Molecular Engineering of Organic Sensitizers for Dye-Sensitized Solar Cell Applications. <i>Journal of the American Chemical Society</i> , 2008, 130, 6259-6266.	13.7	625
33	Exploration of the compositional space for mixed lead halogen perovskites for high efficiency solar cells. <i>Energy and Environmental Science</i> , 2016, 9, 1706-1724.	30.8	622
34	Interpretation and evolution of open-circuit voltage, recombination, ideality factor and subgap defect states during reversible light-soaking and irreversible degradation of perovskite solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 151-165.	30.8	586
35	A 5% efficient photoelectrochemical solar cell based on nanostructured ZnO electrodes. <i>Solar Energy Materials and Solar Cells</i> , 2002, 73, 51-58.	6.2	577
36	Tuning the HOMO and LUMO Energy Levels of Organic Chromophores for Dye Sensitized Solar Cells. <i>Journal of Organic Chemistry</i> , 2007, 72, 9550-9556.	3.2	576

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37	Quantification of the Effect of 4-tert-Butylpyridine Addition to I-/I ³ -Redox Electrolytes in Dye-Sensitized Nanostructured TiO ₂ Solar Cells. <i>Journal of Physical Chemistry B</i> , 2006, 110, 13144-13150.	2.6	557
38	Low-Cost Molybdenum Carbide and Tungsten Carbide Counter Electrodes for Dye-Sensitized Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3520-3524.	13.8	552
39	Systematic investigation of the impact of operation conditions on the degradation behaviour of perovskite solar cells. <i>Nature Energy</i> , 2018, 3, 61-67.	39.5	544
40	Monolithic perovskite/silicon-heterojunction tandem solar cells processed at low temperature. <i>Energy and Environmental Science</i> , 2016, 9, 81-88.	30.8	536
41	High efficiency stable inverted perovskite solar cells without current hysteresis. <i>Energy and Environmental Science</i> , 2015, 8, 2725-2733.	30.8	533
42	Vapor-assisted deposition of highly efficient, stable black-phase FAPbI ₃ perovskite solar cells. <i>Science</i> , 2020, 370, .	12.6	530
43	Migration of cations induces reversible performance losses over day/night cycling in perovskite solar cells. <i>Energy and Environmental Science</i> , 2017, 10, 604-613.	30.8	525
44	Ultrahydrophobic 3D/2D fluoroarene bilayer-based water-resistant perovskite solar cells with efficiencies exceeding 22%. <i>Science Advances</i> , 2019, 5, eaaw2543.	10.3	524
45	Pt-Free Counter Electrode for Dye-Sensitized Solar Cells with High Efficiency. <i>Advanced Materials</i> , 2014, 26, 6210-6237.	21.0	521
46	Dye-Sensitized Nanostructured p-Type Nickel Oxide Film as a Photocathode for a Solar Cell. <i>Journal of Physical Chemistry B</i> , 1999, 103, 8940-8943.	2.6	504
47	Comparison of Dye-Sensitized ZnO and TiO ₂ Solar Cells: Studies of Charge Transport and Carrier Lifetime. <i>Journal of Physical Chemistry C</i> , 2007, 111, 1035-1041.	3.1	501
48	Boosting the performance of Cu ₂ O photocathodes for unassisted solar water splitting devices. <i>Nature Catalysis</i> , 2018, 1, 412-420.	34.4	489
49	Controlled Aqueous Chemical Growth of Oriented Three-Dimensional Crystalline Nanorod Arrays: Application to Iron(III) Oxides. <i>Chemistry of Materials</i> , 2001, 13, 233-235.	6.7	480
50	High Light-to-Energy Conversion Efficiencies for Solar Cells Based on Nanostructured ZnO Electrodes. <i>Journal of Physical Chemistry B</i> , 1997, 101, 2598-2601.	2.6	473
51	Effect of Different Hole Transport Materials on Recombination in CH ₃ NH ₃ PbI ₃ Perovskite-Sensitized Mesoscopic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 1532-1536.	4.6	472
52	Photoelectrochemical Studies of Oriented Nanorod Thin Films of Hematite. <i>Journal of the Electrochemical Society</i> , 2000, 147, 2456.	2.9	454
53	Phenothiazine derivatives for efficient organic dye-sensitized solar cells. <i>Chemical Communications</i> , 2007, , 3741.	4.1	446
54	Effect of Different Dye Baths and Dye-Structures on the Performance of Dye-Sensitized Solar Cells Based on Triphenylamine Dyes. <i>Journal of Physical Chemistry C</i> , 2008, 112, 11023-11033.	3.1	432

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55	Probing the Optical Property and Electronic Structure of TiO ₂ Nanomaterials for Renewable Energy Applications. <i>Chemical Reviews</i> , 2014, 114, 9662-9707.	47.7	422
56	Perovskite Solar Cells: From the Atomic Level to Film Quality and Device Performance. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2554-2569.	13.8	413
57	Fast Electron Transport in Metal Organic Vapor Deposition Grown Dye-sensitized ZnO Nanorod Solar Cells. <i>Journal of Physical Chemistry B</i> , 2006, 110, 16159-16161.	2.6	411
58	Properties of Contact and Bulk Impedances in Hybrid Lead Halide Perovskite Solar Cells Including Inductive Loop Elements. <i>Journal of Physical Chemistry C</i> , 2016, 120, 8023-8032.	3.1	407
59	Using a two-step deposition technique to prepare perovskite (CH ₃ NH ₃ PbI ₃) for thin film solar cells based on ZrO ₂ and TiO ₂ mesostructures. <i>RSC Advances</i> , 2013, 3, 18762.	3.6	405
60	Modified Phthalocyanines for Efficient Near-IR Sensitization of Nanostructured TiO ₂ Electrode. <i>Journal of the American Chemical Society</i> , 2002, 124, 4922-4932.	13.7	396
61	Europium-Doped CsPbI ₂ Br for Stable and Highly Efficient Inorganic Perovskite Solar Cells. <i>Joule</i> , 2019, 3, 205-214.	24.0	387
62	A Simple 3,4-Ethylenedioxythiophene Based Hole-Transporting Material for Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 4085-4088.	13.8	379
63	Studies of the Adsorption Process of Ru Complexes in Nanoporous ZnO Electrodes. <i>Langmuir</i> , 2000, 16, 4688-4694.	3.5	373
64	Design of an Organic Chromophore for P-Type Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2008, 130, 8570-8571.	13.7	371
65	Carbazole-Based Hole-Transport Materials for Efficient Solid-State Dye-Sensitized Solar Cells and Perovskite Solar Cells. <i>Advanced Materials</i> , 2014, 26, 6629-6634.	21.0	369
66	Tetrachelate Porphyrin Chromophores for Metal Oxide Semiconductor Sensitization: Effect of the Spacer Length and Anchoring Group Position. <i>Journal of the American Chemical Society</i> , 2007, 129, 4655-4665.	13.7	367
67	New-generation integrated devices based on dye-sensitized and perovskite solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 476-526.	30.8	364
68	A low-cost spiro[fluorene-9,9'-xanthene]-based hole transport material for highly efficient solid-state dye-sensitized solar cells and perovskite solar cells. <i>Energy and Environmental Science</i> , 2016, 9, 873-877.	30.8	362
69	How the Nature of Triphenylamine-Polyene Dyes in Dye-Sensitized Solar Cells Affects the Open-Circuit Voltage and Electron Lifetimes. <i>Langmuir</i> , 2010, 26, 2592-2598.	3.5	359
70	Investigation of influence of redox species on the interfacial energetics of a dye-sensitized nanoporous TiO ₂ solar cell. <i>Solar Energy Materials and Solar Cells</i> , 1998, 55, 267-281.	6.2	355
71	Spectroelectrochemistry of Nanostructured NiO. <i>Journal of Physical Chemistry B</i> , 2001, 105, 3039-3044.	2.6	354
72	A novel catalyst of WO ₂ nanorod for the counter electrode of dye-sensitized solar cells. <i>Chemical Communications</i> , 2011, 47, 4535.	4.1	346

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73	Nanostructured ZnO electrodes for dye-sensitized solar cell applications. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002, 148, 57-64.	3.9	337
74	Defects engineering for high-performance perovskite solar cells. <i>Npj Flexible Electronics</i> , 2018, 2, .	10.7	334
75	A New Method for Manufacturing Nanostructured Electrodes on Plastic Substrates. <i>Nano Letters</i> , 2001, 1, 97-100.	9.1	328
76	Stable New Sensitizer with Improved Light Harvesting for Nanocrystalline Dye-Sensitized Solar Cells. <i>Advanced Materials</i> , 2004, 16, 1806-1811.	21.0	324
77	Dye-sensitized nanostructured tandem cell-first demonstrated cell with a dye-sensitized photocathode. <i>Solar Energy Materials and Solar Cells</i> , 2000, 62, 265-273.	6.2	307
78	Economical and effective sulfide catalysts for dye-sensitized solar cells as counter electrodes. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 19298.	2.8	306
79	Electron Transport in the Nanostructured TiO ₂ Electrolyte System Studied with Time-Resolved Photocurrents. <i>Journal of Physical Chemistry B</i> , 1997, 101, 2514-2518.	2.6	303
80	Double-Layered NiO Photocathodes for μ -Type DSSCs with Record IPCE. <i>Advanced Materials</i> , 2010, 22, 1759-1762.	21.0	303
81	Tailored Amphiphilic Molecular Mitigators for Stable Perovskite Solar Cells with 23.5% Efficiency. <i>Advanced Materials</i> , 2020, 32, e1907757.	21.0	303
82	Effect of Tetrahydroquinoline Dyes Structure on the Performance of Organic Dye-Sensitized Solar Cells. <i>Chemistry of Materials</i> , 2007, 19, 4007-4015.	6.7	302
83	Direct Contact of Selective Charge Extraction Layers Enables High-Efficiency Molecular Photovoltaics. <i>Joule</i> , 2018, 2, 1108-1117.	24.0	291
84	How the formation of interfacial charge causes hysteresis in perovskite solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 2404-2413.	30.8	289
85	Identifying and suppressing interfacial recombination to achieve high open-circuit voltage in perovskite solar cells. <i>Energy and Environmental Science</i> , 2017, 10, 1207-1212.	30.8	288
86	13.6% Efficient Organic Dye-Sensitized Solar Cells by Minimizing Energy Losses of the Excited State. <i>ACS Energy Letters</i> , 2019, 4, 943-951.	17.4	284
87	Aqueous photoelectrochemistry of hematite nanorod array. <i>Solar Energy Materials and Solar Cells</i> , 2002, 71, 231-243.	6.2	281
88	Enhancing Efficiency of Perovskite Solar Cells via N-doped Graphene: Crystal Modification and Surface Passivation. <i>Advanced Materials</i> , 2016, 28, 8681-8686.	21.0	281
89	Electron Injection and Recombination in Ru(dcbpy) ₂ (NCS) ₂ Sensitized Nanostructured ZnO. <i>Journal of Physical Chemistry B</i> , 2001, 105, 5585-5588.	2.6	280
90	Efficient and stable CH ₃ NH ₃ PbI ₃ -sensitized ZnO nanorod array solid-state solar cells. <i>Nanoscale</i> , 2013, 5, 11686.	5.6	271

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91	Recent advances and future directions to optimize the performances of p-type dye-sensitized solar cells. <i>Coordination Chemistry Reviews</i> , 2012, 256, 2414-2423.	18.8	265
92	Effects of Driving Forces for Recombination and Regeneration on the Photovoltaic Performance of Dye-Sensitized Solar Cells using Cobalt Polypyridine Redox Couples. <i>Journal of Physical Chemistry C</i> , 2011, 115, 21500-21507.	3.1	264
93	High Performance Perovskite Solar Cells with Enhanced Environmental Stability Based on Amphiphile-Modified $\text{CH}_3\text{NH}_3\text{PbI}_3$. <i>Advanced Materials</i> , 2016, 28, 2910-2915.	21.0	258
94	Li-Ion Insertion in TiO_2 (Anatase). 1. Chronoamperometry on CVD Films and Nanoporous Films. <i>Journal of Physical Chemistry B</i> , 1997, 101, 7710-7716.	2.6	257
95	A p-type NiO -Based Dye-Sensitized Solar Cell with an Open-Circuit Voltage of 0.35 V. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4402-4405.	13.8	257
96	Highly Efficient CdS Quantum Dot-Sensitized Solar Cells Based on a Modified Polysulfide Electrolyte. <i>Journal of the American Chemical Society</i> , 2011, 133, 8458-8460.	13.7	257
97	Facile synthesized organic hole transporting material for perovskite solar cell with efficiency of 19.8%. <i>Nano Energy</i> , 2016, 23, 138-144.	16.0	253
98	Porous One-Dimensional Photonic Crystals Improve the Power Conversion Efficiency of Dye-Sensitized Solar Cells. <i>Advanced Materials</i> , 2009, 21, 764-770.	21.0	249
99	Enhanced charge carrier mobility and lifetime suppress hysteresis and improve efficiency in planar perovskite solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 78-86.	30.8	246
100	Unbroken Perovskite: Interplay of Morphology, Electro-optical Properties, and Ionic Movement. <i>Advanced Materials</i> , 2016, 28, 5031-5037.	21.0	242
101	Dye-sensitized solar cells strike back. <i>Chemical Society Reviews</i> , 2021, 50, 12450-12550.	38.1	240
102	Copper Bipyridyl Redox Mediators for Dye-Sensitized Solar Cells with High Photovoltage. <i>Journal of the American Chemical Society</i> , 2016, 138, 15087-15096.	13.7	239
103	Visible light driven hydrogen production from a photo-active cathode based on a molecular catalyst and organic dye-sensitized p-type nanostructured NiO . <i>Chemical Communications</i> , 2012, 48, 988-990.	4.1	237
104	Towards Oxide Electronics: a Roadmap. <i>Applied Surface Science</i> , 2019, 482, 1-93.	6.1	236
105	A photoelectrochemical device for visible light driven water splitting by a molecular ruthenium catalyst assembled on dye-sensitized nanostructured TiO_2 . <i>Chemical Communications</i> , 2010, 46, 7307.	4.1	232
106	Lithium Intercalation in Nanoporous Anatase TiO_2 Studied with XPS. <i>Journal of Physical Chemistry B</i> , 1997, 101, 3087-3090.	2.6	229
107	11% efficiency solid-state dye-sensitized solar cells with copper(II/I) hole transport materials. <i>Nature Communications</i> , 2017, 8, 15390.	12.8	229
108	Organic Redox Couples and Organic Counter Electrode for Efficient Organic Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2011, 133, 9413-9422.	13.7	227

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109	Intramolecular Charge-Transfer Tuning of Perylenes: Spectroscopic Features and Performance in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007, 111, 15137-15140.	3.1	225
110	Ionic Liquid Control Crystal Growth to Enhance Planar Perovskite Solar Cells Efficiency. <i>Advanced Energy Materials</i> , 2016, 6, 1600767.	19.5	224
111	A Light-Resistant Organic Sensitizer for Solar Cell Applications. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 1576-1580.	13.8	223
112	Tailor-Making Low-Cost Spiro[fluorene-9,9'-xanthene]-Based 3D Oligomers for Perovskite Solar Cells. <i>CheM</i> , 2017, 2, 676-687.	11.7	222
113	Li and Na Diffusion in TiO ₂ from Quantum Chemical Theory versus Electrochemical Experiment. <i>Journal of the American Chemical Society</i> , 1997, 119, 7374-7380.	13.7	220
114	Bifunctional Organic Spacers for Formamidinium-Based Hybrid Dion-Jacobson Two-Dimensional Perovskite Solar Cells. <i>Nano Letters</i> , 2019, 19, 150-157.	9.1	218
115	Molecular Design of Anthracene-Bridged Metal-Free Organic Dyes for Efficient Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 9101-9110.	3.1	216
116	Novel p-dopant toward highly efficient and stable perovskite solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 2985-2992.	30.8	216
117	Photoelectrochemical studies of colloidal TiO ₂ films: The effect of oxygen studied by photocurrent transients. <i>Journal of Electroanalytical Chemistry</i> , 1995, 381, 39-46.	3.8	215
118	Photoelectrochemistry of Nanostructured WO ₃ Thin Film Electrodes for Water Oxidation: Mechanism of Electron Transport. <i>Journal of Physical Chemistry B</i> , 2000, 104, 5686-5696.	2.6	213
119	Determination of Thermal Expansion Coefficients and Locating the Temperature-Induced Phase Transition in Methylammonium Lead Perovskites Using X-ray Diffraction. <i>Inorganic Chemistry</i> , 2015, 54, 10678-10685.	4.0	213
120	Goldschmidt's Rules and Strontium Replacement in Lead Halogen Perovskite Solar Cells: Theory and Preliminary Experiments on CH ₃ NH ₃ Sr ₃ . <i>Journal of Physical Chemistry C</i> , 2015, 119, 25673-25683.	3.1	211
121	Optimization of dye-sensitized solar cells prepared by compression method. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002, 148, 11-15.	3.9	209
122	High Temperature-Stable Perovskite Solar Cell Based on Low-Cost Carbon Nanotube Hole Contact. <i>Advanced Materials</i> , 2017, 29, 1606398.	21.0	209
123	Theoretical study of lithium intercalation in rutile and anatase. <i>Physical Review B</i> , 1996, 53, 159-170.	3.2	208
124	Fast Electrochromic Switching with Nanocrystalline Oxide Semiconductor Films. <i>Journal of the Electrochemical Society</i> , 1994, 141, L82-L84.	2.9	206
125	Advanced research trends in dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 10527-10545.	10.3	205
126	Functionalized Graphene Sheets as a Versatile Replacement for Platinum in Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 2794-2800.	8.0	204

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127	Mesoporous SnO ₂ electron selective contact enables UV-stable perovskite solar cells. Nano Energy, 2016, 30, 517-522.	16.0	204
128	Stabilization of Highly Efficient and Stable Phase-Pure FAPbI ₃ Perovskite Solar Cells by Molecularly Tailored 2D-Overlayers. Angewandte Chemie - International Edition, 2020, 59, 15688-15694.	13.8	201
129	The Influence of Local Electric Fields on Photoinduced Absorption in Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2010, 132, 9096-9101.	13.7	196
130	A molecular photosensitizer achieves a Voc of 1.24 eV enabling highly efficient and stable dye-sensitized solar cells with copper(II)-based electrolyte. Nature Communications, 2021, 12, 1777.	12.8	196
131	A new method to make dye-sensitized nanocrystalline solar cells at room temperature. Journal of Photochemistry and Photobiology A: Chemistry, 2001, 145, 107-112.	3.9	190
132	Synergistic Crystal and Interface Engineering for Efficient and Stable Perovskite Photovoltaics. Advanced Energy Materials, 2019, 9, 1802646.	19.5	189
133	Sensitized Hole Injection of Phosphorus Porphyrin into NiO: A Toward New Photovoltaic Devices. Journal of Physical Chemistry B, 2005, 109, 22928-22934.	2.6	188
134	Performance of perovskite solar cells under simulated temperature-illumination real-world operating conditions. Nature Energy, 2019, 4, 568-574.	39.5	186
135	Effect of Anchoring Group on Electron Injection and Recombination Dynamics in Organic Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2009, 113, 3881-3886.	3.1	185
136	Carbon nanotube-based hybrid hole-transporting material and selective contact for high efficiency perovskite solar cells. Energy and Environmental Science, 2016, 9, 461-466.	30.8	185
137	Interfacial Electron-Transfer Dynamics in Ru(tcterpy)(NCS) ₃ -Sensitized TiO ₂ Nanocrystalline Solar Cells. Journal of Physical Chemistry B, 2002, 106, 12693-12704.	2.6	181
138	Photoinduced Ultrafast Dynamics of Coumarin 343 Sensitized p-Type-Nanostructured NiO Films. Journal of Physical Chemistry B, 2005, 109, 19403-19410.	2.6	181
139	Rhodaninedyes for dye-sensitized solar cells: spectroscopy, energy levels and photovoltaic performance. Physical Chemistry Chemical Physics, 2009, 11, 133-141.	2.8	178
140	Highly Efficient Solid-State Dye-Sensitized Solar Cells Based on Triphenylamine Dyes. Advanced Functional Materials, 2011, 21, 2944-2952.	14.9	178
141	Electrochemical Investigation of Traps in a Nanostructured TiO ₂ Film. Journal of Physical Chemistry B, 2001, 105, 2529-2533.	2.6	177
142	Symmetric and unsymmetric donor functionalization. comparing structural and spectral benefits of chromophores for dye-sensitized solar cells. Journal of Materials Chemistry, 2009, 19, 7232.	6.7	177
143	Activation Energy of Electron Transport in Dye-Sensitized TiO ₂ Solar Cells. Journal of Physical Chemistry B, 2005, 109, 12093-12098.	2.6	175
144	Chemical Distribution of Multiple Cation (Rb ⁺ , Cs ⁺ , MA ⁺ , and Tj) ETQqO O rgBT /Overlock 10 T 29, 3589-3596.	6.7	175

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145	Synthesis and Mechanistic Studies of Organic Chromophores with Different Energy Levels for p-Type Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 4738-4748.	3.1	174
146	Improved Photon-to-Current Conversion Efficiency with a Nanoporous p-Type NiO Electrode by the Use of a Sensitizer-Acceptor Dyad. <i>Journal of Physical Chemistry C</i> , 2008, 112, 1721-1728.	3.1	173
147	High Incident Photon-to-Current Conversion Efficiency of p-Type Dye-Sensitized Solar Cells Based on NiO and Organic Chromophores. <i>Advanced Materials</i> , 2009, 21, 2993-2996.	21.0	173
148	Origin of apparent light-enhanced and negative capacitance in perovskite solar cells. <i>Nature Communications</i> , 2019, 10, 1574.	12.8	167
149	Two Novel Carbazole Dyes for Dye-Sensitized Solar Cells with Open-Circuit Voltages up to 1 V Based on Br ⁺ /Br ³⁺ Electrolytes. <i>Organic Letters</i> , 2009, 11, 5542-5545.	4.6	166
150	Spectral Characteristics of Light Harvesting, Electron Injection, and Steady-State Charge Collection in Pressed TiO ₂ Dye Solar Cells. <i>Journal of Physical Chemistry C</i> , 2008, 112, 5623-5637.	3.1	163
151	Silolothiophene-linked triphenylamines as stable hole transporting materials for high efficiency perovskite solar cells. <i>Energy and Environmental Science</i> , 2015, 8, 2946-2953.	30.8	163
152	Photoelectrochemical studies of colloidal TiO ₂ -films: the charge separation process studied by means of action spectra in the UV region. <i>Solar Energy Materials and Solar Cells</i> , 1992, 27, 293-304.	6.2	162
153	Resonance Raman Scattering of a Dye-Sensitized Solar Cell: A Mechanism of Thiocyanato Ligand Exchange. <i>Journal of Physical Chemistry B</i> , 2001, 105, 6314-6320.	2.6	161
154	Influence of π -Conjugation Units in Organic Dyes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007, 111, 1853-1860.	3.1	160
155	Two flexible counter electrodes based on molybdenum and tungsten nitrides for dye-sensitized solar cells. <i>Journal of Materials Chemistry</i> , 2011, 21, 10761.	6.7	160
156	Metal Oxide/Carbide/Carbon Nanocomposites: In Situ Synthesis, Characterization, Calculation, and their Application as an Efficient Counter Electrode Catalyst for Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2013, 3, 1407-1412.	19.5	157
157	Low-Temperature Nb-Doped SnO ₂ Electron-Selective Contact Yields over 20% Efficiency in Planar Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2018, 3, 773-778.	17.4	157
158	Tuning of phenoxazine chromophores for efficient organic dye-sensitized solar cells. <i>Chemical Communications</i> , 2009, , 6288.	4.1	156
159	Bipolar Membrane-Assisted Solar Water Splitting in Optimal pH. <i>Advanced Energy Materials</i> , 2016, 6, 1600100.	19.5	156
160	Verification of high efficiencies for the Grätzel-cell. A 7% efficient solar cell based on dye-sensitized colloidal TiO ₂ films. <i>Solar Energy Materials and Solar Cells</i> , 1994, 31, 481-488.	6.2	154
161	A metal-free "black dye" for panchromatic dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2009, 2, 674.	30.8	153
162	Regeneration and recombination kinetics in cobalt polypyridine based dye-sensitized solar cells, explained using Marcus theory. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 7087.	2.8	153

#	ARTICLE	IF	CITATIONS
163	Synergistic Effect of Fluorinated Passivator and Hole Transport Dopant Enables Stable Perovskite Solar Cells with an Efficiency Near 24%. <i>Journal of the American Chemical Society</i> , 2021, 143, 3231-3237.	13.7	152
164	Novel counter electrode catalysts of niobium oxides supersede Pt for dye-sensitized solar cells. <i>Chemical Communications</i> , 2011, 47, 11489.	4.1	151
165	Atomic Layer Deposition of ZnO on CuO Enables Selective and Efficient Electroreduction of Carbon Dioxide to Liquid Fuels. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15036-15040.	13.8	150
166	Transparent Cuprous Oxide Photocathode Enabling a Stacked Tandem Cell for Unbiased Water Splitting. <i>Advanced Energy Materials</i> , 2015, 5, 1501537.	19.5	149
167	High-efficiency dye-sensitized solar cells with molecular copper phenanthroline as solid hole conductor. <i>Energy and Environmental Science</i> , 2015, 8, 2634-2637.	30.8	149
168	Low-temperature carbon-based electrodes in perovskite solar cells. <i>Energy and Environmental Science</i> , 2020, 13, 3880-3916.	30.8	149
169	Nanostructured ZnO electrodes for photovoltaic applications. <i>Scripta Materialia</i> , 1999, 12, 487-490.	0.5	148
170	Degradation mechanisms in a dye-sensitized solar cell studied by UV-VIS and IR spectroscopy. <i>Solar Energy</i> , 2003, 75, 169-180.	6.1	148
171	Comprehensive control of voltage loss enables 11.7% efficient solid-state dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 1779-1787.	30.8	148
172	Effect of metal cation replacement on the electronic structure of metalorganic halide perovskites: Replacement of lead with alkaline-earth metals. <i>Physical Review B</i> , 2016, 93, .	3.2	145
173	Crown Ether Modulation Enables over 23% Efficient Formamidinium-Based Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2020, 142, 19980-19991.	13.7	145
174	Charge Transport Properties in Dye-Sensitized Nanostructured TiO ₂ Thin Film Electrodes Studied by Photoinduced Current Transients. <i>Journal of Physical Chemistry B</i> , 1999, 103, 1078-1083.	2.6	143
175	Nanostructured Zinc Stannate as Semiconductor Working Electrodes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007, 111, 5549-5556.	3.1	143
176	Recombination and Transport Processes in Dye-Sensitized Solar Cells Investigated under Working Conditions. <i>Journal of Physical Chemistry B</i> , 2006, 110, 17715-17718.	2.6	142
177	Synthesis, photophysical and photovoltaic investigations of acceptor-functionalized perylene monoimide dyes for nickel oxide p-type dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2011, 4, 2075.	30.8	142
178	Resonance Raman and Excitation Energy Dependent Charge Transfer Mechanism in Halide-Substituted Hybrid Perovskite Solar Cells. <i>ACS Nano</i> , 2015, 9, 2088-2101.	14.6	141
179	Copper Phenanthroline as a Fast and High-Performance Redox Mediator for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016, 120, 9595-9603.	3.1	140
180	Hole-Transporting Small Molecules Based on Thiophene Cores for High Efficiency Perovskite Solar Cells. <i>ChemSusChem</i> , 2014, 7, 3420-3425.	6.8	139

#	ARTICLE	IF	CITATIONS
181	Cu ₂ O photocathodes with band-tail states assisted hole transport for standalone solar water splitting. <i>Nature Communications</i> , 2020, 11, 318.	12.8	139
182	Initial Light Soaking Treatment Enables Hole Transport Material to Outperform Spiro-OMeTAD in Solid-State Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2013, 135, 7378-7385.	13.7	138
183	Molecular Engineering of Copper Phthalocyanines: A Strategy in Developing Dopant-Free Hole-Transporting Materials for Efficient and Ambient-Stable Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1803287.	19.5	138
184	Characterization techniques for dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2017, 10, 672-709.	30.8	136
185	Morphological and compositional progress in halide perovskite solar cells. <i>Chemical Communications</i> , 2019, 55, 1192-1200.	4.1	136
186	Ligand-Modulated Excess PbI ₂ Nanosheets for Highly Efficient and Stable Perovskite Solar Cells. <i>Advanced Materials</i> , 2020, 32, e2000865.	21.0	136
187	An open-access database and analysis tool for perovskite solar cells based on the FAIR data principles. <i>Nature Energy</i> , 2022, 7, 107-115.	39.5	136
188	Influence of Triple Bonds as π -Spacer Units in Metal-Free Organic Dyes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11305-11313.	3.1	134
189	The Importance of Pendant Groups on Triphenylamine-Based Hole Transport Materials for Obtaining Perovskite Solar Cells with over 20% Efficiency. <i>Advanced Energy Materials</i> , 2018, 8, 1701209.	19.5	134
190	Photoelectrochemistry of Mesoporous NiO Electrodes in Iodide/Triiodide Electrolytes. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17455-17458.	3.1	133
191	Dye sensitized photoelectrolysis cells. <i>Chemical Society Reviews</i> , 2019, 48, 3705-3722.	38.1	133
192	Pt-Like Behavior of High-Performance Counter Electrodes Prepared from Binary Tantalum Compounds Showing High Electrocatalytic Activity for Dye-Sensitized Solar Cells. <i>ChemSusChem</i> , 2013, 6, 411-416.	6.8	132
193	A Triphenylamine Dye Model for the Study of Intramolecular Energy Transfer and Charge Transfer in Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , 2008, 18, 3461-3468.	14.9	131
194	PEDOT counter electrodes for dye-sensitized solar cells prepared by aqueous micellar electrodeposition. <i>Electrochimica Acta</i> , 2013, 107, 45-51.	5.2	131
195	High-performance phosphide/carbon counter electrode for both iodide and organic redox couples in dye-sensitized solar cells. <i>Journal of Materials Chemistry</i> , 2012, 22, 11121.	6.7	129
196	Strategy to Boost the Efficiency of Mixed-Ion Perovskite Solar Cells: Changing Geometry of the Hole Transporting Material. <i>ACS Nano</i> , 2016, 10, 6816-6825.	14.6	127
197	Dual Passivation of CsPbI ₃ Perovskite Nanocrystals with Amino Acid Ligands for Efficient Quantum Dot Solar Cells. <i>Small</i> , 2020, 16, e2001772.	10.0	127
198	Photoelectrochemical Water-Splitting Using CuO-Based Electrodes for Hydrogen Production: A Review. <i>Advanced Materials</i> , 2021, 33, e2007285.	21.0	127

#	ARTICLE	IF	CITATIONS
199	DFT-INDO/S Modeling of New High Molar Extinction Coefficient Charge-Transfer Sensitizers for Solar Cell Applications. <i>Inorganic Chemistry</i> , 2006, 45, 787-797.	4.0	126
200	Coumarin 343 π NiO Films as Nanostructured Photocathodes in Dye-Sensitized Solar Cells: Ultrafast Electron Transfer, Effect of the I ₃ ⁻ /I ⁺ Redox Couple and Mechanism of Photocurrent Generation. <i>Journal of Physical Chemistry C</i> , 2008, 112, 9530-9537.	3.1	126
201	Low-cost high-efficiency system for solar-driven conversion of CO ₂ to hydrocarbons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 9735-9740.	7.1	126
202	Phthalocyanine-Sensitized Nanostructured TiO ₂ Electrodes Prepared by a Novel Anchoring Method. <i>Langmuir</i> , 2001, 17, 2743-2747.	3.5	124
203	Environmental aspects of electricity generation from a nanocrystalline dye sensitized solar cell system. <i>Renewable Energy</i> , 2001, 23, 27-39.	8.9	124
204	Ultrarapid Sonochemical Synthesis of ZnO Hierarchical Structures: From Fundamental Research to High Efficiencies up to 6.42% for Quasi-Solid Dye-Sensitized Solar Cells. <i>Chemistry of Materials</i> , 2013, 25, 1000-1012.	6.7	124
205	Spectral splitting photovoltaics using perovskite and wideband dye-sensitized solar cells. <i>Nature Communications</i> , 2015, 6, 8834.	12.8	122
206	Changes from Bulk to Surface Recombination Mechanisms between Pristine and Cycled Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2017, 2, 681-688.	17.4	122
207	A Scalable Methylamine Gas Healing Strategy for High-Efficiency Inorganic Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 5587-5591.	13.8	121
208	Polymeric room-temperature molten salt as a multifunctional additive toward highly efficient and stable inverted planar perovskite solar cells. <i>Energy and Environmental Science</i> , 2020, 13, 5068-5079.	30.8	121
209	Structural Modification of Organic Dyes for Efficient Coadsorbent-Free Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 2799-2805.	3.1	120
210	Comparing spiro-OMeTAD and P3HT hole conductors in efficient solid state dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 779-789.	2.8	118
211	Enhanced Crystallinity in Organic-Inorganic Lead Halide Perovskites on Mesoporous TiO ₂ via Disorder-Order Phase Transition. <i>Chemistry of Materials</i> , 2014, 26, 4466-4471.	6.7	118
212	Enhanced Performance of Supported HfO ₂ Counter Electrodes for Redox Couples Used in Dye-Sensitized Solar Cells. <i>ChemSusChem</i> , 2014, 7, 442-450.	6.8	117
213	Ultrafast relaxation dynamics of charge carriers relaxation in ZnO nanocrystalline thin films. <i>Chemical Physics Letters</i> , 2004, 387, 176-181.	2.6	115
214	Cobalt Polypyridyl-Based Electrolytes for p-Type Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011, 115, 9772-9779.	3.1	115
215	Boosting the Efficiency of Perovskite Solar Cells with CsBr-Modified Mesoporous TiO ₂ Beads as Electron-Selective Contact. <i>Advanced Functional Materials</i> , 2018, 28, 1705763.	14.9	115
216	Modulation of perovskite crystallization processes towards highly efficient and stable perovskite solar cells with MXene quantum dot-modified SnO ₂ . <i>Energy and Environmental Science</i> , 2021, 14, 3447-3454.	30.8	115

#	ARTICLE	IF	CITATIONS
217	Interfacial Passivation Engineering of Perovskite Solar Cells with Fill Factor over 82% and Outstanding Operational Stability on n-i-p Architecture. ACS Energy Letters, 2021, 6, 3916-3923.	17.4	115
218	AgTFSI as p-Type Dopant for Efficient and Stable Solid-State Dye-Sensitized and Perovskite Solar Cells. ChemSusChem, 2014, 7, 3252-3256.	6.8	114
219	Stable Layered 2D Perovskite Solar Cells with an Efficiency of over 19% via Multifunctional Interfacial Engineering. Journal of the American Chemical Society, 2021, 143, 3911-3917.	13.7	114
220	Efficient near infrared D ⁺ -Sensitizers with lateral anchoring group for dye-sensitized solar cells. Chemical Communications, 2009, , 4031.	4.1	112
221	Tuning the HOMO Energy Levels of Organic Dyes for Dye-Sensitized Solar Cells Based on Br ⁺ /Br ₃ ⁺ Electrolytes. Chemistry - A European Journal, 2010, 16, 13127-13138.	3.3	112
222	Efficient Organic Dye-Sensitized Solar Cells Based on an Iodine-Free Electrolyte. Angewandte Chemie - International Edition, 2010, 49, 7328-7331.	13.8	112
223	Facile route to freestanding CH ₃ NH ₃ PbI ₃ crystals using inverse solubility. Scientific Reports, 2015, 5, 11654.	3.3	112
224	Purpose-built metal oxide nanomaterials. The emergence of a new generation of smart materials. Pure and Applied Chemistry, 2000, 72, 47-52.	1.9	111
225	Conducting Polymers Containing In-Chain Metal Centers: Electropolymerization of Oligothieryl-Substituted {M(tpy) ₂ } Complexes and in Situ Conductivity Studies, M = Os(II), Ru(II). Inorganic Chemistry, 2005, 44, 1073-1081.	4.0	109
226	Photoinduced absorption spectroscopy of dye-sensitized nanostructured TiO ₂ . Chemical Physics Letters, 2003, 370, 381-386.	2.6	107
227	Phenoxazine Dyes for Dye-Sensitized Solar Cells: Relationship Between Molecular Structure and Electron Lifetime. Chemistry - A European Journal, 2011, 17, 6415-6424.	3.3	107
228	Highly Efficient and Stable Perovskite Solar Cells based on a Low-Cost Carbon Cloth. Advanced Energy Materials, 2016, 6, 1601116.	19.5	107
229	Theoretical Treatment of CH ₃ NH ₃ PbI ₃ Perovskite Solar Cells. Angewandte Chemie - International Edition, 2017, 56, 15806-15817.	13.8	107
230	Passivation Mechanism Exploiting Surface Dipoles Affords High-Performance Perovskite Solar Cells. Journal of the American Chemical Society, 2020, 142, 11428-11433.	13.7	107
231	PES Studies of Ru(dcbpyH ₂) ₂ (NCS) ₂ Adsorption on Nanostructured ZnO for Solar Cell Applications. Journal of Physical Chemistry B, 2002, 106, 10102-10107.	2.6	106
232	Adamantanes Enhance the Photovoltaic Performance and Operational Stability of Perovskite Solar Cells by Effective Mitigation of Interfacial Defect States. Advanced Energy Materials, 2018, 8, 1800275.	19.5	106
233	Greener, Nonhalogenated Solvent Systems for Highly Efficient Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1800177.	19.5	106
234	Proof-of-concept for facile perovskite solar cell recycling. Energy and Environmental Science, 2016, 9, 3172-3179.	30.8	105

#	ARTICLE	IF	CITATIONS
235	Ba-induced phase segregation and band gap reduction in mixed-halide inorganic perovskite solar cells. <i>Nature Communications</i> , 2019, 10, 4686.	12.8	105
236	Compositional and Interface Engineering of Organic-Inorganic Lead Halide Perovskite Solar Cells. <i>IScience</i> , 2020, 23, 101359.	4.1	105
237	Dye Regeneration by Spiro-MeOTAD in Solid State Dye-Sensitized Solar Cells Studied by Photoinduced Absorption Spectroscopy and Spectroelectrochemistry. <i>Journal of Physical Chemistry C</i> , 2009, 113, 6275-6281.	3.1	103
238	Convergent/Divergent Synthesis of a Linker-Free Series of Dyes for Dye-Sensitized Solar Cells Based on the D35 Donor. <i>Advanced Energy Materials</i> , 2013, 3, 1647-1656.	19.5	103
239	Particle Size and Crystallinity Dependent Electron Injection in Fluorescein 27-Sensitized TiO ₂ Films. <i>Journal of Physical Chemistry B</i> , 2003, 107, 1370-1375.	2.6	101
240	A Study of the Interactions between I ^{2-/I3-} Redox Mediators and Organometallic Sensitizing Dyes in Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009, 113, 783-790.	3.1	101
241	Optical analysis of CH ₃ NH ₃ Sn _x Pb _{1-x} I ₃ absorbers: a roadmap for perovskite-on-perovskite tandem solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11214-11221.	10.3	101
242	Importance of surface reactions in the photochemistry of zinc sulfide colloids. <i>The Journal of Physical Chemistry</i> , 1990, 94, 6797-6804.	2.9	98
243	Valence Level Character in a Mixed Perovskite Material and Determination of the Valence Band Maximum from Photoelectron Spectroscopy: Variation with Photon Energy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 26655-26666.	3.1	98
244	Unraveling the Effect of PbI ₂ Concentration on Charge Recombination Kinetics in Perovskite Solar Cells. <i>ACS Photonics</i> , 2015, 2, 589-594.	6.6	97
245	Photoelectrochemical Properties of Nano- to Microstructured ZnO Electrodes. <i>Journal of the Electrochemical Society</i> , 2001, 148, A149.	2.9	96
246	Photocapacitance of Nanocrystalline Oxide Semiconductor Films: A Band-Edge Movement in Mesoporous TiO ₂ Electrodes during UV Illumination. <i>The Journal of Physical Chemistry</i> , 1996, 100, 8045-8048.	2.9	95
247	Photomodulated Voltammetry of Iodide/Triiodide Redox Electrolytes and Its Relevance to Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 3016-3020.	4.6	95
248	Elucidating the role of chlorine in perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7423-7432.	10.3	95
249	Indeno[1,2-b]carbazole as Methoxy-Free Donor Group: Constructing Efficient and Stable Hole-Transporting Materials for Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15721-15725.	13.8	94
250	Emerging perovskite quantum dot solar cells: feasible approaches to boost performance. <i>Energy and Environmental Science</i> , 2021, 14, 224-261.	30.8	94
251	Role of the Triiodide/Iodide Redox Couple in Dye Regeneration in p-Type Dye-Sensitized Solar Cells. <i>Langmuir</i> , 2012, 28, 6485-6493.	3.5	92
252	Highly Efficient Organic Sensitizers for Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009, 113, 16816-16820.	3.1	91

#	ARTICLE	IF	CITATIONS
253	Decoupling the effects of defects on efficiency and stability through phosphonates in stable halide perovskite solar cells. <i>Joule</i> , 2021, 5, 1246-1266.	24.0	91
254	Are dye-sensitized nano-structured solar cells stable? An overview of device testing and component analyses. <i>International Journal of Photoenergy</i> , 2004, 6, 127-140.	2.5	89
255	Solution-Processed Cu ₂ S Photocathodes for Photoelectrochemical Water Splitting. <i>ACS Energy Letters</i> , 2018, 3, 760-766.	17.4	89
256	Efficient and stable planar all-inorganic perovskite solar cells based on high-quality CsPbBr ₃ films with controllable morphology. <i>Journal of Energy Chemistry</i> , 2020, 46, 8-15.	12.9	89
257	Charge carrier separation and charge transport in nanocrystalline junctions. <i>Solar Energy Materials and Solar Cells</i> , 1994, 32, 245-257.	6.2	88
258	Title is missing!. <i>Journal of Materials Science: Materials in Electronics</i> , 2000, 11, 355-362.	2.2	88
259	Dye-Sensitized Solar Cells Based on Nanocrystalline TiO ₂ Films Surface Treated with Al ³⁺ Ions: A Photovoltage and Electron Transport Studies. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18483-18490.	2.6	88
260	Intermediate Phase Enhances Inorganic Perovskite and Metal Oxide Interface for Efficient Photovoltaics. <i>Joule</i> , 2020, 4, 222-234.	24.0	88
261	The Role of 3D Molecular Structural Control in New Hole Transport Materials Outperforming Spiro-MeTAD in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1601062.	19.5	87
262	Photoinduced absorption spectroscopy as a tool in the study of dye-sensitized solar cells. <i>Inorganica Chimica Acta</i> , 2008, 361, 729-734.	2.4	86
263	Influence of nitrogen dopants on N-doped TiO ₂ electrodes and their applications in dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2011, 56, 4611-4617.	5.2	86
264	Synthesis of Highly Effective Vanadium Nitride (VN) Peas as a Counter Electrode Catalyst in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 12625-12631.	3.1	85
265	Perovskite-Templated Formation of a 1D@3D Perovskite Structure toward Highly Efficient and Stable Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2021, 11, 2101018.	19.5	85
266	Molten and Solid Trialkylsulfonium Iodides and Their Polyiodides as Electrolytes in Dye-Sensitized Nanocrystalline Solar Cells. <i>Journal of Physical Chemistry B</i> , 2003, 107, 13665-13670.	2.6	84
267	Characterization of Surface Passivation by Poly(methylsiloxane) for Dye-Sensitized Solar Cells Employing the Ferrocene Redox Couple. <i>Journal of Physical Chemistry C</i> , 2010, 114, 10551-10558.	3.1	84
268	The electronic structure of the cis-bis(4,4'-dicarboxy-2,2'-bipyridine)-bis(isothiocyanato)ruthenium(II) complex and its ligand 2,2'-bipyridyl-4,4'-dicarboxylic acid studied with electron spectroscopy. <i>Chemical Physics Letters</i> , 1997, 274, 51-57.	2.6	83
269	Integration of solid-state dye-sensitized solar cell with metal oxide charge storage material into photoelectrochemical capacitor. <i>Journal of Power Sources</i> , 2013, 234, 91-99.	7.8	83
270	Photovoltage study of charge injection from dye molecules into transparent hole and electron conductors. <i>Applied Physics Letters</i> , 2004, 84, 5455-5457.	3.3	82

#	ARTICLE	IF	CITATIONS
271	Towards optical optimization of planar monolithic perovskite/silicon-heterojunction tandem solar cells. <i>Journal of Optics (United Kingdom)</i> , 2016, 18, 064012.	2.2	82
272	The End-of-Life of Perovskite PV. <i>Joule</i> , 2017, 1, 29-46.	24.0	82
273	Crystal Orientation and Grain Size: Do They Determine Optoelectronic Properties of MAPbI ₃ Perovskite?. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 6010-6018.	4.6	82
274	A small electron donor in cobalt complex electrolyte significantly improves efficiency in dye-sensitized solar cells. <i>Nature Communications</i> , 2016, 7, 13934.	12.8	81
275	Globularity of Selected Large Molecules for a New Generation of Multication Perovskites. <i>Advanced Materials</i> , 2017, 29, 1702005.	21.0	81
276	A Broadly Absorbing Perylene Dye for Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009, 113, 14595-14597.	3.1	80
277	Modifying organic phenoxazine dyes for efficient dye-sensitized solar cells. <i>Journal of Materials Chemistry</i> , 2011, 21, 12462.	6.7	79
278	Linker Unit Modification of Triphenylamine-Based Organic Dyes for Efficient Cobalt Mediated Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2013, 117, 21029-21036.	3.1	79
279	Nanoscale mapping of chemical composition in organic-inorganic hybrid perovskite films. <i>Science Advances</i> , 2019, 5, eaaw6619.	10.3	79
280	Metal Coordination Complexes as Redox Mediators in Regenerative Dye-Sensitized Solar Cells. <i>Inorganics</i> , 2019, 7, 30.	2.7	79
281	Recent Progress of Critical Interface Engineering for Highly Efficient and Stable Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	78
282	A new method for manufacturing nanostructured electrodes on glass substrates. <i>Solar Energy Materials and Solar Cells</i> , 2002, 73, 91-101.	6.2	77
283	Conductivity Studies of Nanostructured TiO ₂ Films Permeated with Electrolyte. <i>Journal of Physical Chemistry B</i> , 2004, 108, 12388-12396.	2.6	77
284	Highly efficient, stable and hysteresis-free planar perovskite solar cell based on chemical bath treated Zn ₂ SnO ₄ electron transport layer. <i>Nano Energy</i> , 2020, 75, 105038.	16.0	77
285	Rapid hybrid perovskite film crystallization from solution. <i>Chemical Society Reviews</i> , 2021, 50, 7108-7131.	38.1	77
286	A universal co-solvent dilution strategy enables facile and cost-effective fabrication of perovskite photovoltaics. <i>Nature Communications</i> , 2022, 13, 89.	12.8	77
287	Notable catalytic activity of oxygen-vacancy-rich WO _{2.72} nanorod bundles as counter electrodes for dye-sensitized solar cells. <i>Chemical Communications</i> , 2013, 49, 7626.	4.1	76
288	Influence of the Annealing Atmosphere on the Performance of ZnO Nanowire Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2013, 117, 16349-16356.	3.1	74

#	ARTICLE	IF	CITATIONS
289	Carbon Nanoparticles in High-Performance Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2018, 8, 1702719.	19.5	74
290	A hybrid niobium-based oxide with bio-based porous carbon as an efficient electrocatalyst in photovoltaics: a general strategy for understanding the catalytic mechanism. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14864-14875.	10.3	74
291	Electrolytes for Dye-Sensitized Solar Cells Based on Interhalogen Ionic Salts and Liquids. <i>Inorganic Chemistry</i> , 2007, 46, 3566-3575.	4.0	73
292	Several highly efficient catalysts for Pt-free and FTO-free counter electrodes of dye-sensitized solar cells. <i>Journal of Materials Chemistry</i> , 2012, 22, 4009.	6.7	73
293	Direct light-induced polymerization of cobalt-based redox shuttles: an ultrafast way towards stable dye-sensitized solar cells. <i>Chemical Communications</i> , 2015, 51, 16308-16311.	4.1	73
294	Intrinsic Origin of Superior Catalytic Properties of Tungsten-based Catalysts in Dye-sensitized Solar Cells. <i>Electrochimica Acta</i> , 2017, 242, 390-399.	5.2	73
295	Solid-State Synthesis of ZnO Nanostructures for Quasi-Solid Dye-Sensitized Solar Cells with High Efficiencies up to 6.46%. <i>Advanced Materials</i> , 2013, 25, 4413-4419.	21.0	72
296	Constructive Effects of Alkyl Chains: A Strategy to Design Simple and Non-spiro Hole Transporting Materials for High-Efficiency Mixed-Ion Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1502536.	19.5	72
297	Incorporation of Counter Ions in Organic Molecules: New Strategy in Developing Dopant-Free Hole Transport Materials for Efficient Mixed-Ion Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1602736.	19.5	72
298	Resurgence of DSCs with copper electrolyte: a detailed investigation of interfacial charge dynamics with cobalt and iodine based electrolytes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22204-22214.	10.3	72
299	Multimodal host-guest complexation for efficient and stable perovskite photovoltaics. <i>Nature Communications</i> , 2021, 12, 3383.	12.8	72
300	Dye sensitised solar cells with nickel oxide photocathodes prepared via scalable microwave sintering. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 2411.	2.8	71
301	Tuning of Conductivity and Density of States of NiO Mesoporous Films Used in p-Type DSSCs. <i>Journal of Physical Chemistry C</i> , 2014, 118, 19556-19564.	3.1	71
302	A system approach to molecular solar cells. <i>Coordination Chemistry Reviews</i> , 2004, 248, 1501-1509.	18.8	69
303	Nanoscale interfacial engineering enables highly stable and efficient perovskite photovoltaics. <i>Energy and Environmental Science</i> , 2021, 14, 5552-5562.	30.8	69
304	Efficient solid state dye-sensitized solar cells based on an oligomer hole transport material and an organic dye. <i>Journal of Materials Chemistry A</i> , 2013, 1, 14467.	10.3	67
305	Novel Blue Organic Dye for Dye-Sensitized Solar Cells Achieving High Efficiency in Cobalt-Based Electrolytes and by Co-Sensitization. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 32797-32804.	8.0	67
306	Low-Cost Dopant Additive-Free Hole-Transporting Material for a Robust Perovskite Solar Cell with Efficiency Exceeding 21%. <i>ACS Energy Letters</i> , 2021, 6, 208-215.	17.4	67

#	ARTICLE	IF	CITATIONS
307	Additive-Free Transparent Triarylamine-Based Polymeric Hole-Transport Materials for Stable Perovskite Solar Cells. <i>ChemSusChem</i> , 2016, 9, 2567-2571.	6.8	65
308	Xanthan-Based Hydrogel for Stable and Efficient Quasi-Solid Truly Aqueous Dye-Sensitized Solar Cell with Cobalt Mediator. <i>Solar Rrl</i> , 2021, 5, 2000823.	5.8	65
309	High efficiency dye-sensitized nanocrystalline solar cells based on sputter deposited Ti oxide films. <i>Solar Energy Materials and Solar Cells</i> , 2000, 64, 385-392.	6.2	64
310	Ultrafast studies of electron injection in Ru dye sensitized SnO ₂ nanocrystalline thin film. <i>International Journal of Photoenergy</i> , 2002, 4, 17-20.	2.5	64
311	The influence of cations on charge accumulation in dye-sensitized solar cells. <i>Journal of Electroanalytical Chemistry</i> , 2007, 609, 55-60.	3.8	64
312	In Situ Synthesized Economical Tungsten Dioxide Imbedded in Mesoporous Carbon for Dye-Sensitized Solar Cells As Counter Electrode Catalyst. <i>Journal of Physical Chemistry C</i> , 2011, 115, 22598-22602.	3.1	64
313	Cobalt(II/III) Redox Electrolyte in ZnO Nanowire-Based Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 1902-1906.	8.0	64
314	One plus one greater than two: high-performance inverted planar perovskite solar cells based on a composite CuI/CuSCN hole-transporting layer. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21435-21444.	10.3	64
315	D35-TiO ₂ nano-crystalline film as a high performance visible-light photocatalyst towards the degradation of bis-phenol A. <i>Chemical Engineering Journal</i> , 2019, 355, 999-1010.	12.7	64
316	Distance and Driving Force Dependencies of Electron Injection and Recombination Dynamics in Organic Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2010, 114, 14358-14363.	2.6	63
317	Investigation of the photoinduced electron injection processes for p-type triphenylamine-sensitized solar cells. <i>Energy and Environmental Science</i> , 2011, 4, 4537.	30.8	63
318	Brief Overview of Dye-Sensitized Solar Cells. <i>Ambio</i> , 2012, 41, 151-155.	5.5	63
319	Electrochemical Properties of Cu(II/I)-Based Redox Mediators for Dye-Sensitized Solar Cells. <i>Electrochimica Acta</i> , 2017, 227, 194-202.	5.2	63
320	Improved Morphology Control Using a Modified Two-Step Method for Efficient Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 18751-18757.	8.0	62
321	Spontaneous crystal coalescence enables highly efficient perovskite solar cells. <i>Nano Energy</i> , 2017, 39, 24-29.	16.0	62
322	Electronic and Molecular Surface Structure of a Polyene-Diphenylaniline Dye Adsorbed from Solution onto Nanoporous TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2007, 111, 8580-8586.	3.1	61
323	Combination of Asymmetric Supercapacitor Utilizing Activated Carbon and Nickel Oxide with Cobalt Polypyridyl-Based Dye-Sensitized Solar Cell. <i>Electrochimica Acta</i> , 2014, 143, 390-397.	5.2	61
324	High-Efficiency Perovskite Solar Cells Employing a <i>S</i> , <i>N</i> -Heteropentacene-Based Hole-Transport Material. <i>ChemSusChem</i> , 2016, 9, 433-438.	6.8	61

#	ARTICLE	IF	CITATIONS
325	Guanine-Stabilized Formamidinium Lead Iodide Perovskites. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 4691-4697.	13.8	61
326	Formamidinium-Based Dion-Jacobson Layered Hybrid Perovskites: Structural Complexity and Optoelectronic Properties. <i>Advanced Functional Materials</i> , 2020, 30, 2003428.	14.9	61
327	Intermediate phase engineering of halide perovskites for photovoltaics. <i>Joule</i> , 2022, 6, 315-339.	24.0	60
328	Modification of Nanostructured TiO ₂ Electrodes by Electrochemical Al ³⁺ Insertion: Effects on Dye-Sensitized Solar Cell Performance. <i>Journal of Physical Chemistry C</i> , 2007, 111, 13267-13274.	3.1	59
329	The monolithic multicell: a tool for testing material components in dye-sensitized solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2007, 15, 113-121.	8.1	59
330	Surface Molecular Quantification and Photoelectrochemical Characterization of Mixed Organic Dye and Coadsorbent Layers on TiO ₂ for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11903-11910.	3.1	59
331	Enhancement of p-Type Dye-Sensitized Solar Cell Performance by Supramolecular Assembly of Electron Donor and Acceptor. <i>Scientific Reports</i> , 2014, 4, 4282.	3.3	59
332	Integrated Design of Organic Hole Transport Materials for Efficient Solid-State Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1401185.	19.5	59
333	Elucidation of Charge Recombination and Accumulation Mechanism in Mixed Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15149-15154.	3.1	59
334	Interpretation of Apparent Activation Energies for Electron Transport in Dye-sensitized Nanocrystalline Solar Cells. <i>Journal of Physical Chemistry B</i> , 2006, 110, 13694-13699.	2.6	58
335	Characterization of the Interface Properties and Processes in Solid State Dye-Sensitized Solar Cells Employing a Perylene Sensitizer. <i>Journal of Physical Chemistry C</i> , 2011, 115, 4345-4358.	3.1	58
336	Efficient dye regeneration at low driving force achieved in triphenylamine dye LEG4 and TEMPO redox mediator based dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 15868-15875.	2.8	58
337	Room Temperature as a Goldilocks Environment for CH ₃ NH ₃ PbI ₃ Perovskite Solar Cells: The Importance of Temperature on Device Performance. <i>Journal of Physical Chemistry C</i> , 2016, 120, 11382-11393.	3.1	58
338	A chain is as strong as its weakest link – Stability study of MAPbI ₃ under light and temperature. <i>Materials Today</i> , 2019, 29, 10-19.	14.2	58
339	Antraquinone dyes as photosensitizers for dye-sensitized solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2007, 91, 1863-1871.	6.2	57
340	Highly efficient dye-sensitized solar cells based on nitrogen-doped titania with excellent stability. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011, 219, 180-187.	3.9	57
341	Poly(ethylene glycol)-[60]Fullerene-Based Materials for Perovskite Solar Cells with Improved Moisture Resistance and Reduced Hysteresis. <i>ChemSusChem</i> , 2018, 11, 1032-1039.	6.8	57
342	Organic Ammonium Halide Modulators as Effective Strategy for Enhanced Perovskite Photovoltaic Performance. <i>Advanced Science</i> , 2021, 8, 2004593.	11.2	57

#	ARTICLE	IF	CITATIONS
343	Surface Reconstruction Engineering with Synergistic Effect of Mixed-Salt Passivation Treatment toward Efficient and Stable Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2102902.	14.9	57
344	Determination of the Light-Induced Degradation Rate of the Solar Cell Sensitizer N719 on TiO ₂ Nanocrystalline Particles. <i>Journal of Physical Chemistry B</i> , 2005, 109, 22413-22419.	2.6	56
345	Superior Catalytic Activity of Submicron-Thick Pt/SiC Films as Counter Electrodes for Dye-Sensitized Solar Cells. <i>ChemCatChem</i> , 2014, 6, 1584-1588.	3.7	56
346	Electron Affinity-Triggered Variations on the Optical and Electrical Properties of Dye Molecules Enabling Highly Efficient Dye-Sensitized Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14125-14128.	13.8	56
347	Determination of the electronic density of states at a nanostructured TiO ₂ /Ru-dye/electrolyte interface by means of photoelectron spectroscopy. <i>Chemical Physics</i> , 2002, 285, 157-165.	1.9	55
348	Electron transport and recombination in dye-sensitized solar cells with ionic liquid electrolytes. <i>Journal of Electroanalytical Chemistry</i> , 2006, 586, 56-61.	3.8	55
349	Development of an organic redox couple and organic dyes for aqueous dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2012, 5, 9752.	30.8	55
350	The effect of dye coverage on the performance of dye-sensitized solar cells with a cobalt-based electrolyte. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 8503.	2.8	55
351	Ambient air-processed mixed-ion perovskites for high-efficiency solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16536-16545.	10.3	55
352	Nanoscale Phase Segregation in Supramolecular β -Templating for Hybrid Perovskite Photovoltaics from NMR Crystallography. <i>Journal of the American Chemical Society</i> , 2021, 143, 1529-1538.	13.7	55
353	On the Influence of Anions in Binary Ionic Liquid Electrolytes for Monolithic Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007, 111, 13261-13266.	3.1	54
354	A thiolate/disulfide ionic liquid electrolyte for organic dye-sensitized solar cells based on Pt-free counter electrodes. <i>Chemical Communications</i> , 2011, 47, 10124.	4.1	54
355	Structure and stability of small titanium/oxygen clusters studied by ab initio quantum chemical calculations. <i>The Journal of Physical Chemistry</i> , 1993, 97, 12725-12730.	2.9	53
356	A rod-like polymer containing {Ru(terpy) ₂ } units prepared by electrochemical coupling of pendant thienyl moieties. <i>Chemical Communications</i> , 2002, , 284-285.	4.1	52
357	Neutral, Polaron, and Bipolaron States in PEDOT Prepared by Photoelectrochemical Polymerization and the Effect on Charge Generation Mechanism in the Solid-State Dye-Sensitized Solar Cell. <i>Journal of Physical Chemistry C</i> , 2013, 117, 22484-22491.	3.1	52
358	Efficient solid-state dye sensitized solar cells: The influence of dye molecular structures for the in-situ photoelectrochemically polymerized PEDOT as hole transporting material. <i>Nano Energy</i> , 2016, 19, 455-470.	16.0	52
359	Fabrication of Efficient NiO Photocathodes Prepared via RDS with Novel Routes of Substrate Processing for β -Type Dye-Sensitized Solar Cells. <i>ChemElectroChem</i> , 2014, 1, 384-391.	3.4	51
360	Copolymer-Templated Nickel Oxide for High-Efficiency Mesoscopic Perovskite Solar Cells in Inverted Architecture. <i>Advanced Functional Materials</i> , 2021, 31, 2102237.	14.9	51

#	ARTICLE	IF	CITATIONS
361	Critical Role of Removing Impurities in Nickel Oxide on High Efficiency and Long-Term Stability of Inverted Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	51
362	The application of transition metal complexes in hole-transporting layers for perovskite solar cells: Recent progress and future perspectives. <i>Coordination Chemistry Reviews</i> , 2020, 406, 213143.	18.8	50
363	Effect of Coordination Sphere Geometry of Copper Redox Mediators on Regeneration and Recombination Behavior in Dye-Sensitized Solar Cell Applications. <i>ACS Applied Energy Materials</i> , 2018, 1, 4950-4962.	5.1	49
364	Toward highly efficient and stable Sn ²⁺ and mixed Pb ²⁺ /Sn ²⁺ based halide perovskite solar cells through device engineering. <i>Energy and Environmental Science</i> , 2021, 14, 3256-3300.	30.8	49
365	A combined molecular dynamics and experimental study of two-step process enabling low-temperature formation of phase-pure I ₃ -FAPbI ₃ . <i>Science Advances</i> , 2021, 7, .	10.3	49
366	Poly(3,4-ethylenedioxythiophene) Hole-Transporting Material Generated by Photoelectrochemical Polymerization in Aqueous and Organic Medium for All-Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16591-16601.	3.1	48
367	Photocurrent Losses in Nanocrystalline/Nanoporous TiO ₂ Electrodes Due to Electrochemically Active Species in the Electrolyte. <i>Journal of the Electrochemical Society</i> , 1996, 143, 3173-3178.	2.9	47
368	Coordinative interactions in a dye-sensitized solar cell. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004, 164, 23-27.	3.9	47
369	Electrochemical aspects of display technology based on nanostructured titanium dioxide with attached viologen chromophores. <i>Electrochimica Acta</i> , 2008, 53, 4065-4071.	5.2	47
370	Photoinduced Stark Effects and Mechanism of Ion Displacement in Perovskite Solar Cell Materials. <i>ACS Nano</i> , 2017, 11, 2823-2834.	14.6	47
371	Outstanding Passivation Effect by a Mixed-Salt Interlayer with Internal Interactions in Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020, 5, 3159-3167.	17.4	47
372	Chemically tailored molecular surface modifiers for efficient and stable perovskite photovoltaics. <i>SmartMat</i> , 2021, 2, 33-37.	10.7	47
373	Morphology Engineering: A Route to Highly Reproducible and High Efficiency Perovskite Solar Cells. <i>ChemSusChem</i> , 2017, 10, 1624-1630.	6.8	46
374	Molten and solid metal-iodide-doped trialkylsulphonium iodides and polyiodides as electrolytes in dye-sensitized nanocrystalline solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2004, 82, 345-360.	6.2	45
375	Comparison of Trap-State Distribution and Carrier Transport in Nanotubular and Nanoparticulate TiO ₂ Electrodes for Dye-Sensitized Solar Cells. <i>ChemPhysChem</i> , 2010, 11, 2140-2145.	2.1	45
376	Molecular Design of Efficient Organic "A" Dye Featuring Triphenylamine as Donor Fragment for Application in Dye-Sensitized Solar Cells. <i>ChemSusChem</i> , 2018, 11, 494-502.	6.8	45
377	Understanding Interfacial Charge Transfer between Metallic PEDOT Counter Electrodes and a Cobalt Redox Shuttle in Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 2074-2079.	8.0	44
378	Charge transport properties in the nanostructured ZnO thin film electrode electrolyte system studied with time resolved photocurrents. <i>Solar Energy Materials and Solar Cells</i> , 2000, 60, 181-193.	6.2	43

#	ARTICLE	IF	CITATIONS
379	Nanocrystalline Ti-oxide-based solar cells made by sputter deposition and dye sensitization: Efficiency versus film thickness. <i>Solar Energy Materials and Solar Cells</i> , 2000, 62, 259-263.	6.2	43
380	An organic hydrophilic dye for water-based dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 19964-19971.	2.8	43
381	Novel highly active Pt/graphene catalyst for cathodes of Cu(II/I)-mediated dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2017, 251, 167-175.	5.2	43
382	Effect of Cs-Incorporated NiO on the Performance of Perovskite Solar Cells. <i>ACS Omega</i> , 2017, 2, 9074-9079.	3.5	43
383	Electronic structure of electrochemically Li-inserted TiO ₂ studied with synchrotron radiation electron spectroscopies. <i>Journal of Chemical Physics</i> , 2003, 118, 5607-5612.	3.0	42
384	Engineering of highly efficient tetrahydroquinoline sensitizers for dye-sensitized solar cells. <i>Tetrahedron</i> , 2012, 68, 552-558.	1.9	42
385	Photoinduced ultrafast dynamics of the triphenylamine-based organic sensitizer D35 on TiO ₂ , ZrO ₂ and in acetonitrile. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3906.	2.8	42
386	New donor-acceptor sensitizers containing 5H-[1,2,5]thiadiazolo [3,4-f]isoindole-5,7(6H)-dione and 6H-pyrrolo[3,4-g]quinoxaline-6,8(7H)-dione units. <i>Chemical Communications</i> , 2013, 49, 2409.	4.1	42
387	Influence of 4-tert-Butylpyridine in DSCs with CoII/III Redox Mediator. <i>Journal of Physical Chemistry C</i> , 2013, 117, 15515-15522.	3.1	42
388	Modification of electron transfer properties in photoelectrochemical solar cells by substituting {Ru(terpy) ₂ } ²⁺ dyes with thiophene. <i>Inorganic Chemistry Communication</i> , 2004, 7, 117-121.	3.9	41
389	A versatile photoelectron spectrometer for pressures up to 30 mbar. <i>Review of Scientific Instruments</i> , 2014, 85, 075119.	1.3	41
390	Conducting Polymers Containing In-Chain Metal Centers: Homogeneous Charge Transport through a Quaterthienyl-Bridged {Os(tpy) ₂ } Polymer. <i>Journal of Physical Chemistry B</i> , 2003, 107, 10431-10439.	2.6	40
391	Preventing Dye Aggregation on ZnO by Adding Water in the Dye-Sensitization Process. <i>Journal of Physical Chemistry C</i> , 2011, 115, 19274-19279.	3.1	40
392	Revealing the Perovskite Film Formation Using the Gas Quenching Method by In Situ GIWAXS: Morphology, Properties, and Device Performance. <i>Advanced Functional Materials</i> , 2021, 31, 2007473.	14.9	40
393	Optimized Protocol for On-Target Phosphopeptide Enrichment Prior to Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Using Mesoporous Titanium Dioxide. <i>Analytical Chemistry</i> , 2010, 82, 4577-4583.	6.5	39
394	Effect of Cation on Dye Regeneration Kinetics of N719-Sensitized TiO ₂ Films in Acetonitrile-Based and Ionic-Liquid-Based Electrolytes Investigated by Scanning Electrochemical Microscopy. <i>Journal of Physical Chemistry C</i> , 2012, 116, 4316-4323.	3.1	39
395	Interfacial Engineering of Metal Oxides for Highly Stable Halide Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800367.	3.7	39
396	Boosting the power conversion efficiency of perovskite solar cells to 17.7% with an indolo[3,2-b]carbazole dopant-free hole transporting material by improving its spatial configuration. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14835-14841.	10.3	39

#	ARTICLE	IF	CITATIONS
397	Regeneration of Oxidized Organic Photo-sensitizers in Grätzel Solar Cells: Quantum-Chemical Portrait of a General Mechanism. <i>ChemPhysChem</i> , 2010, 11, 1858-1862.	2.1	38
398	Electron and hole transfer dynamics of a triarylamine-based dye with peripheral hole acceptors on TiO ₂ in the absence and presence of solvent. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 8019.	2.8	38
399	Development of high efficiency 100% aqueous cobalt electrolyte dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 8419-8427.	2.8	38
400	Alternative bases to 4-tert-butylpyridine for dye-sensitized solar cells employing copper redox mediator. <i>Electrochimica Acta</i> , 2018, 265, 194-201.	5.2	38
401	Reducing Surface Recombination by a Poly(4-vinylpyridine) Interlayer in Perovskite Solar Cells with High Open-Circuit Voltage and Efficiency. <i>ACS Omega</i> , 2018, 3, 5038-5043.	3.5	38
402	Electrochemically polymerized poly(3, 4-phenylenedioxythiophene) as efficient and transparent counter electrode for dye sensitized solar cells. <i>Electrochimica Acta</i> , 2019, 300, 482-488.	5.2	38
403	A detailed analysis of ambipolar diffusion in nanostructured metal oxide films. <i>Solar Energy Materials and Solar Cells</i> , 2002, 73, 411-423.	6.2	37
404	Photoelectron Spectroscopy Studies of Ru(dcbpyH ₂) ₂ (NCS) ₂ /CuI and Ru(dcbpyH ₂) ₂ (NCS) ₂ /CuSCN Interfaces for Solar Cell Applications. <i>Journal of Physical Chemistry B</i> , 2004, 108, 11604-11610.	2.6	37
405	Efficient organic tandem cell combining a solid state dye-sensitized and a vacuum deposited bulk heterojunction solar cell. <i>Solar Energy Materials and Solar Cells</i> , 2009, 93, 1896-1899.	6.2	37
406	Perowskit-Solarzellen: atomare Ebene, Schichtqualität und Leistungs-fähigkeit der Zellen. <i>Angewandte Chemie</i> , 2018, 130, 2582-2598.	2.0	37
407	Semiempirical calculations of TiO ₂ (rutile) clusters. <i>International Journal of Quantum Chemistry</i> , 1992, 44, 477-495.	2.0	36
408	Combining a Small Hole-Conductor Molecule for Efficient Dye Regeneration and a Hole-Conducting Polymer in a Solid-State Dye-Sensitized Solar Cell. <i>Journal of Physical Chemistry C</i> , 2012, 116, 18070-18078.	3.1	36
409	Highly effective Co ₃ S ₄ /electrospun-carbon-nanofibers composite counter electrode synthesized with electrospun technique for cobalt redox electrolyte based on dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2016, 326, 6-13.	7.8	36
410	Physicochemical identity and charge storage properties of battery-type nickel oxide material and its composites with activated carbon. <i>Electrochimica Acta</i> , 2016, 194, 480-488.	5.2	36
411	Dye-Sensitized Nanocrystalline Titanium-Oxide-Based Solar Cells Prepared by Sputtering: Influence of the Substrate Temperature During Deposition. <i>Journal of Physical Chemistry B</i> , 2000, 104, 8712-8718.	2.6	35
412	Low-temperature TiO ₂ Films for Dye-sensitized Solar Cells: Factors Affecting Energy Conversion Efficiency. <i>Journal of Physical Chemistry C</i> , 2008, 112, 10021-10026.	3.1	35
413	Parallel-connected monolithic dye-sensitized solar modules. <i>Progress in Photovoltaics: Research and Applications</i> , 2010, 18, 340-345.	8.1	35
414	Influence of Dye Architecture of Triphenylamine Based Organic Dyes on the Kinetics in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21775-21783.	3.1	35

#	ARTICLE	IF	CITATIONS
415	PbZrTiO ₃ ferroelectric oxide as an electron extraction material for stable halide perovskite solar cells. Sustainable Energy and Fuels, 2019, 3, 382-389.	4.9	35
416	Power output stabilizing feature in perovskite solar cells at operating condition: Selective contact-dependent charge recombination dynamics. Nano Energy, 2019, 61, 126-131.	16.0	35
417	Highly efficient and rapid manufactured perovskite solar cells via Flash InfraRed Annealing. Materials Today, 2020, 35, 9-15.	14.2	35
418	Electropolymerisation dynamics of a highly conducting metallopolymer: poly-[Os(4-(5-(2,2-bithienyl))-2,6-terpyridine) ₂] ²⁺ . Electrochemistry Communications, 2004, 4, 193-200.	4.7	34
419	Crystal formation involving 1-methylbenzimidazole in iodide/triiodide electrolytes for dye-sensitized solar cells. Solar Energy Materials and Solar Cells, 2007, 91, 1062-1065.	6.2	34
420	Contribution from a hole-conducting dye to the photocurrent in solid-state dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2011, 13, 20172.	2.8	34
421	HIGH-EFFICIENT SOLID-STATE PEROVSKITE SOLAR CELL WITHOUT LITHIUM SALT IN THE HOLE TRANSPORT MATERIAL. Nano, 2014, 09, 1440001.	1.0	34
422	Synthesis of phthalocyanines with two carboxylic acid groups and their utilization in solar cells based on nano-structured TiO ₂ . Journal of Porphyrins and Phthalocyanines, 2004, 08, 1228-1235.	0.8	33
423	Interfacial properties of photovoltaic TiO ₂ /dye/PEDOT/PSS heterojunctions. Synthetic Metals, 2005, 149, 157-167.	3.9	33
424	A Double-Band Tandem Organic Dye-Sensitized Solar Cell with an Efficiency of 11.5%. ChemSusChem, 2011, 4, 609-612.	6.8	33
425	Synthesis of highly effective Pt/carbon fiber composite counter electrode catalyst for dye-sensitized solar cells. Electrochimica Acta, 2015, 176, 997-1000.	5.2	33
426	Atomic Layer Deposition of ZnO on CuO Enables Selective and Efficient Electroreduction of Carbon Dioxide to Liquid Fuels. Angewandte Chemie, 2019, 131, 15178-15182.	2.0	33
427	Auxiliary donors for phenothiazine sensitizers for dye-sensitized solar cells – how important are they really?. Journal of Materials Chemistry A, 2019, 7, 7581-7590.	10.3	33
428	Efficient organic dye sensitized solar cells based on modified sulfide/polysulfide electrolyte. Journal of Materials Chemistry, 2011, 21, 5573.	6.7	32
429	New approaches in component design for dye-sensitized solar cells. Sustainable Energy and Fuels, 2021, 5, 367-383.	4.9	32
430	Formation of High-Performance Multi-Cation Halide Perovskites Photovoltaics by CsPbI ₃ /RbPbI ₃ Seed-Assisted Heterogeneous Nucleation. Advanced Energy Materials, 2021, 11, 2003785.	19.5	32
431	Robust Self-Assembled Molecular Passivation for High-Performance Perovskite Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	13.8	32
432	Collective hydrogen-bond dynamics dictates the electronic structure of aqueous I ₃ ⁻ . Physical Chemistry Chemical Physics, 2013, 15, 20189.	2.8	31

#	ARTICLE	IF	CITATIONS
433	A New 1,3,4-Oxadiazole-Based Hole-Transport Material for Efficient CH ₃ NH ₃ PbBr ₃ Perovskite Solar Cells. <i>ChemSusChem</i> , 2016, 9, 657-661.	6.8	31
434	Efficient and Stable Dye-Sensitized Solar Cells Based on a Tetradentate Copper(II/I) Redox Mediator. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 30409-30416.	8.0	31
435	Molecular Engineering of Simple Metal-Free Organic Dyes Derived from Triphenylamine for Dye-Sensitized Solar Cell Applications. <i>ChemSusChem</i> , 2020, 13, 212-220.	6.8	31
436	Mesoporous TiO ₂ -Based Experimental Layout for On-Target Enrichment and Separation of Multi- and Monophosphorylated Peptides Prior to Analysis with Matrix-Assisted Laser Desorption-Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 761-766.	6.5	30
437	Molecular Design to Improve the Performance of Donor-Acceptor Near-IR Organic Dye-Sensitized Solar Cells. <i>ChemSusChem</i> , 2011, 4, 1601-1605.	6.8	30
438	Incompletely solvated ionic liquid mixtures as electrolyte solvents for highly stable dye-sensitized solar cells. <i>RSC Advances</i> , 2013, 3, 1896-1901.	3.6	30
439	Blue Photosensitizer with Copper(II/I) Redox Mediator for Efficient and Stable Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 2004804.	14.9	30
440	Inhibiting metal-inward diffusion-induced degradation through strong chemical coordination toward stable and efficient inverted perovskite solar cells. <i>Energy and Environmental Science</i> , 2022, 15, 2154-2163.	30.8	30
441	Direct-driven electrochromic displays based on nanocrystalline electrodes. <i>Displays</i> , 2004, 25, 223-230.	3.7	29
442	Investigation on the dynamics of electron transport and recombination in TiO ₂ nanotube/nanoparticle composite electrodes for dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 21487.	2.8	29
443	Optimization of the Performance of Dye-Sensitized Solar Cells Based on Pt-Like TiC Counter Electrodes. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 3557-3561.	2.0	29
444	New Approach for Preparation of Efficient Solid-State Dye-Sensitized Solar Cells by Photoelectrochemical Polymerization in Aqueous Micellar Solution. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 4026-4031.	4.6	29
445	Highly effective Pt/MoSi ₂ composite counter electrode catalyst for dye-sensitized solar cell. <i>Journal of Power Sources</i> , 2014, 263, 154-157.	7.8	29
446	Electronic Structures and Catalytic Activities of Niobium Oxides as Electrocatalysts in Liquid-Junction Photovoltaic Devices. <i>Solar Rrl</i> , 2020, 4, 1900430.	5.8	29
447	Revealing the Mechanism of Doping of <i>spiro</i> -MeOTAD via Zn Complexation in the Absence of Oxygen and Light. <i>ACS Energy Letters</i> , 2020, 5, 1271-1277.	17.4	29
448	Perovskite Solar Cells with Carbon-Based Electrodes – Quantification of Losses and Strategies to Overcome Them. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	29
449	Tuning the properties of ruthenium bipyridine dyes for solar cells by substitution on the ligands – characterisation of bis[4,4'-di(2-(3-methoxyphenyl)ethenyl)-2,2'-bipyridine][4,4'-dicarboxy-2,2'-bipyridine]ruthenium(ii) dihexafluorophosphate. <i>Dalton Transactions</i> . 2003, . 1280-1283.	3.3	28
450	Brownian dynamics simulations of electrons and ions in mesoporous films. <i>Solar Energy Materials and Solar Cells</i> , 2005, 86, 283-297.	6.2	28

#	ARTICLE	IF	CITATIONS
451	Tailoring mixed-valence CoIII/FelII complexes for their potential use as sensitizers in dye sensitized solar cells. <i>New Journal of Chemistry</i> , 2008, 32, 705.	2.8	28
452	Probing Photocurrent Generation, Charge Transport, and Recombination Mechanisms in Mesoporous Hybrid Perovskite through Photoconductivity Measurements. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4259-4264.	4.6	28
453	Geometrical and energetical structural changes in organic dyes for dye-sensitized solar cells probed using photoelectron spectroscopy and DFT. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 252-260.	2.8	28
454	Interfacial and bulk properties of hole transporting materials in perovskite solar cells: spiro-MeTAD versus spiro-OMeTAD. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8527-8539.	10.3	28
455	Formation and Stabilization of Inorganic Halide Perovskites for Photovoltaics. <i>Matter</i> , 2021, 4, 528-551.	10.0	28
456	Benzylammonium-Mediated Formamidinium Lead Iodide Perovskite Phase Stabilization for Photovoltaics. <i>Advanced Functional Materials</i> , 2021, 31, 2101163.	14.9	28
457	Methylammonium Triiodide for Defect Engineering of High-Efficiency Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2021, 6, 3650-3660.	17.4	28
458	Bilayer Hybrid Solar Cells Based on Triphenylamine-Thienylenevinylene Dye and TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2010, 114, 11659-11664.	3.1	27
459	Mesoporous TiO ₂ Microbead Electrodes for Cobalt-Mediator-Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16472-16478.	3.1	27
460	Monolithic CIGS-Perovskite Tandem Cell for Optimal Light Harvesting without Current Matching. <i>ACS Photonics</i> , 2017, 4, 861-867.	6.6	27
461	Fine-Tuning by Triple Bond of Carbazole Derivative Dyes to Obtain High Efficiency for Dye-Sensitized Solar Cells with Copper Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 46397-46405.	8.0	27
462	Trapping of electrons in nanostructured TiO ₂ studied by photocurrent transients. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002, 152, 213-218.	3.9	26
463	Organic chromophore-sensitized ZnO solar cells: Electrolyte-dependent dye desorption and band-edge shifts. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009, 202, 159-163.	3.9	26
464	Energy alignment and surface dipoles of rylene dyes adsorbed to TiO ₂ nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 14767.	2.8	26
465	Energy level alignment in TiO ₂ /dipole-molecule/P3HT interfaces. <i>Chemical Physics Letters</i> , 2011, 515, 146-150.	2.6	26
466	Trends in patent applications for dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2012, 5, 7376.	30.8	26
467	Dipicolinic acid: a strong anchoring group with tunable redox and spectral behavior for stable dye-sensitized solar cells. <i>Chemical Communications</i> , 2015, 51, 3858-3861.	4.1	26
468	Photon Energy-Dependent Hysteresis Effects in Lead Halide Perovskite Materials. <i>Journal of Physical Chemistry C</i> , 2017, 121, 26180-26187.	3.1	26

#	ARTICLE	IF	CITATIONS
469	Temperature dependent two-photon photoluminescence of $\text{CH}_3\text{NH}_3\text{PbBr}_3$: structural phase and exciton to free carrier transition. <i>Optical Materials Express</i> , 2018, 8, 511.	3.0	26
470	Electron Affinity Triggered Variations on the Optical and Electrical Properties of Dye Molecules Enabling Highly Efficient Dye-Sensitized Solar Cells. <i>Angewandte Chemie</i> , 2018, 130, 14321-14324.	2.0	26
471	SnS Quantum Dots as Hole Transporter of Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 3822-3829.	5.1	26
472	Photoinduced Lattice Symmetry Enhancement in Mixed Hybrid Perovskites and Its Beneficial Effect on the Recombination Behavior. <i>Advanced Optical Materials</i> , 2019, 7, 1801512.	7.3	26
473	Electric-paint displays™ with carbon counter electrodes. <i>Electrochimica Acta</i> , 2001, 46, 2187-2193.	5.2	25
474	Effect of the Preparation Procedure on the Morphology of Thin TiO_2 Films and Their Device Performance in Small-Molecule Bilayer Hybrid Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 5997-6004.	8.0	25
475	Electrochemical and photoelectrochemical investigation of new carboxylatobipyridine(bis-bipyridine)ruthenium(II) complexes for dye-sensitized TiO_2 electrodes. <i>Solar Energy Materials and Solar Cells</i> , 2000, 64, 97-114.	6.2	24
476	Free-base tetra-arylphthalocyanines for dye-sensitized nanostructured solar cell applications. <i>Journal of Porphyrins and Phthalocyanines</i> , 2001, 05, 609-616.	0.8	24
477	New dyes for solar cells based on nanostructured semiconducting metal oxides. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002, 148, 41-48.	3.9	24
478	Dye-sensitized sputtered titanium oxide films for photovoltaic applications: influence of the O_2/Ar gas flow ratio during the deposition. <i>Solar Energy Materials and Solar Cells</i> , 2003, 76, 37-56.	6.2	24
479	Enhanced Photovoltaic Performance of Nanowire Dye-Sensitized Solar Cells Based on Coaxial TiO_2/TiO Heterostructures with a Cobalt(II/III) Redox Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 9872-9877.	8.0	24
480	Solid-State Dye-Sensitized Solar Cells Based on Poly(3,4-ethylenedioxythiophene) and Metal-Free Organic Dyes. <i>ChemPhysChem</i> , 2014, 15, 1043-1047.	2.1	24
481	Nondestructive Probing of Perovskite Silicon Tandem Solar Cells Using Multiwavelength Photoluminescence Mapping. <i>IEEE Journal of Photovoltaics</i> , 2017, 7, 1081-1086.	2.5	24
482	An investigation of the roles furan versus thiophene π -bridges play in donor-acceptor porphyrin based DSSCs. <i>Dalton Transactions</i> , 2018, 47, 6549-6556.	3.3	24
483	Improving energy transfer efficiency of dye-sensitized solar cell by fine tuning of dye planarity. <i>Solar Energy</i> , 2019, 187, 274-280.	6.1	24
484	Reduced Graphene Oxide Improves Moisture and Thermal Stability of Perovskite Solar Cells. <i>Cell Reports Physical Science</i> , 2020, 1, 100053.	5.6	24
485	Liquid State and Zombie Dye Sensitized Solar Cells with Copper Bipyridine Complexes Functionalized with Alkoxy Groups. <i>Journal of Physical Chemistry C</i> , 2020, 124, 7071-7081.	3.1	24
486	A Blue Photosensitizer Realizing Efficient and Stable Green Solar Cells via Color Tuning by the Electrolyte. <i>Advanced Materials</i> , 2020, 32, 2000193.	21.0	24

#	ARTICLE	IF	CITATIONS
487	Redox properties of nanoporous TiO ₂ (anatase) surface modified with phosphotungstic acid. <i>Thin Solid Films</i> , 1998, 323, 141-145.	1.8	23
488	Interpretation of small-modulation photocurrent transients in dye-sensitized solar cells – A film thickness study. <i>Journal of Electroanalytical Chemistry</i> , 2010, 646, 91-99.	3.8	23
489	Solvent-Dependent Structure of the I ₃ ⁻ Ion Derived from Photoelectron Spectroscopy and Ab Initio Molecular Dynamics Simulations. <i>Chemistry - A European Journal</i> , 2015, 21, 4049-4055.	3.3	23
490	Phosphonic Acid Modification of the Electron Selective Contact: Interfacial Effects in Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 2402-2408.	5.1	23
491	Electropolymerisable bipyridine ruthenium(II) complexes. Synthesis and electrochemical characterisation of 4-(3-methoxystyryl)- and 4,4'-di(3-methoxystyryl)-2,2'-bipyridine ruthenium complexes. <i>Dalton Transactions RSC</i> , 2001, , 1319-1325.	2.3	22
492	Synthesis and characterization of an immobilizable photochemical molecular device for H ₂ -generation. <i>Dalton Transactions</i> , 2015, 44, 5577-5586.	3.3	22
493	Ultrafast charge separation dynamics in opaque, operational dye-sensitized solar cells revealed by femtosecond diffuse reflectance spectroscopy. <i>Scientific Reports</i> , 2016, 6, 24465.	3.3	22
494	Energy levels of small titanium oxide clusters obtained from SCF calculations. <i>International Journal of Quantum Chemistry</i> , 1994, 49, 97-104.	2.0	21
495	A semi-empirical model for the charging and discharging of electric-paint displays. <i>Electrochemistry Communications</i> , 2002, 4, 963-967.	4.7	21
496	Highly catalytic carbon nanotube counter electrode on plastic for dye solar cells utilizing cobalt-based redox mediator. <i>Electrochimica Acta</i> , 2013, 111, 206-209.	5.2	21
497	Efficient Blue-Colored Solid-State Dye-Sensitized Solar Cells: Enhanced Charge Collection by Using an In Situ Photoelectrochemically Generated Conducting Polymer Hole Conductor. <i>ChemPhysChem</i> , 2016, 17, 1441-1445.	2.1	21
498	A study of oligothiophene-acceptor dyes in p-type dye-sensitized solar cells. <i>RSC Advances</i> , 2016, 6, 18165-18177.	3.6	21
499	Unveiling the light soaking effects of the CsPbI ₃ perovskite solar cells. <i>Journal of Power Sources</i> , 2020, 472, 228506.	7.8	21
500	First Report of Chenodeoxycholic Acid-Substituted Dyes Improving the Dye Monolayer Quality in Dye-Sensitized Solar Cells. <i>Solar Rrl</i> , 2020, 4, 1900569.	5.8	21
501	Water Stable Haloplumbate Modulation for Efficient and Stable Hybrid Perovskite Photovoltaics. <i>Advanced Energy Materials</i> , 2021, 11, 2101082.	19.5	21
502	Photoelectrochemical effect in dye sensitized, sputter deposited Ti oxide films: The role of thickness-dependent roughness and porosity. <i>Solar Energy Materials and Solar Cells</i> , 1999, 59, 277-287.	6.2	20
503	Photovoltage enhancement from cyanobiphenyl liquid crystals and 4-tert-butylpyridine in Co(II/III) mediated dye-sensitized solar cells. <i>Chemical Communications</i> , 2013, 49, 9101.	4.1	20
504	Stark effects in D35-sensitized mesoporous TiO ₂ : influence of dye coverage and electrolyte composition. <i>Electrochimica Acta</i> , 2015, 179, 174-178.	5.2	20

#	ARTICLE	IF	CITATIONS
505	Diverging surface reactions at TiO ₂ - or ZnO-based photoanodes in dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 13047-13057.	2.8	20
506	Electron- Withdrawing Anchor Group of Sensitizer for Dye- Sensitized Solar Cells, Cyanoacrylic Acid, or Benzoic Acid?. <i>Solar Rrl</i> , 2020, 4, 1900436.	5.8	20
507	Electropolymerisable bipyridine ruthenium(II) complexes: synthesis, spectroscopic and electrochemical characterisation of 4-((2-thienyl) ethenyl)- and 4,4'-di((2-thienyl) ethenyl)-2,2'-bipyridine ruthenium complexes. <i>Polyhedron</i> , 2004, 23, 589-598.	2.2	19
508	Photoinduced electron transfer from a terrylene dye to TiO ₂ : Quantification of band edge shift effects. <i>Chemical Physics</i> , 2009, 357, 124-131.	1.9	19
509	Atomic and Electronic Structures of Interfaces in Dye- Sensitized , Nanostructured Solar Cells. <i>ChemPhysChem</i> , 2014, 15, 1006-1017.	2.1	19
510	Low-cost Cr doped Pt ₃ Ni alloy supported on carbon nanofibers composites counter electrode for efficient dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2016, 328, 543-550.	7.8	19
511	Triarylamine-based hydrido-carboxylate rhenium(i) complexes as photosensitizers for dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 7534-7543.	2.8	19
512	A Scalable Methylamine Gas Healing Strategy for High- Efficiency Inorganic Perovskite Solar Cells. <i>Angewandte Chemie</i> , 2019, 131, 5643-5647.	2.0	19
513	Zinc Phthalocyanine Conjugated Dimers as Efficient Dopant- Free Hole Transporting Materials in Perovskite Solar Cells. <i>ChemPhotoChem</i> , 2020, 4, 307-314.	3.0	19
514	Reevaluation of Photoluminescence Intensity as an Indicator of Efficiency in Perovskite Solar Cells. <i>Solar Rrl</i> , 2022, 6, .	5.8	19
515	Dye-Sensitized Nanostructured ZnO Electrodes for Solar Cell Applications. , 2006, , 227-254.		18
516	A comparative study of a polyene-diphenylaniline dye and Ru(dcbpy) ₂ (NCS) ₂ in electrolyte-based and solid-state dye-sensitized solar cells. <i>Thin Solid Films</i> , 2008, 516, 7214-7217.	1.8	18
517	Light-induced rearrangements of chemisorbed dyes on anatase(101). <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 10780.	2.8	18
518	Factors Affecting the Performance of Champion Silyl- Anchor Carbazole Dye Revealed in the Femtosecond to Second Studies of Complete ADEKA- Sensitized Solar Cells. <i>Chemistry - A European Journal</i> , 2016, 22, 15807-15818.	3.3	18
519	Perovskite solar cell - electrochemical double layer capacitor interplay. <i>Electrochimica Acta</i> , 2017, 258, 825-833.	5.2	18
520	The Rise of Dye- Sensitized Solar Cells: From Molecular Photovoltaics to Emerging Solid- State Photovoltaic Technologies. <i>Helvetica Chimica Acta</i> , 2021, 104, e2000230.	1.6	18
521	Structural and Compositional Investigations on the Stability of Cuprous Oxide Nanowire Photocathodes for Photoelectrochemical Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 55080-55091.	8.0	18
522	<title>Electrochromic switching with nanocrystalline TiO<formula><inf><roman>2</roman></inf></formula> semiconductor films</title>. , 1994, 2255, 297.		17

#	ARTICLE	IF	CITATIONS
523	Monitoring N719 Dye Configurations on (1 Å ⁿ)-Reconstructed Anatase (100) by Means of STM: Reversible Configurational Changes upon Illumination. <i>Langmuir</i> , 2010, 26, 13236-13244.	3.5	17
524	Determination of the Electron Diffusion Length in Dye-Sensitized Solar Cells by Substrate Contact Patterning. <i>Journal of Physical Chemistry C</i> , 2011, 115, 13932-13937.	3.1	17
525	Dye-sensitized Solar Cells Employing a SnO ₂ -TiO ₂ Core-shell Structure Made by Atomic Layer Deposition. <i>Chimia</i> , 2013, 67, 142.	0.6	17
526	Triphenylamine Groups Improve Blocking Behavior of Phenoxazine Dyes in Cobalt Electrolyte-Based Dye-Sensitized Solar Cells. <i>ChemPhysChem</i> , 2014, 15, 3476-3483.	2.1	17
527	Matrix-Assisted Laser Desorption/Ionization Mass Spectrometric Analysis of Poly(3,4-ethylenedioxythiophene) in Solid-State Dye-Sensitized Solar Cells: Comparison of <i>In Situ</i> Photoelectrochemical Polymerization in Aqueous Micellar and Organic Media. <i>Analytical Chemistry</i> , 2015, 87, 3942-3948.	6.5	17
528	Analysis of crystalline phases and integration modelling of charge quenching yields in hybrid lead halide perovskite solar cell materials. <i>Nano Energy</i> , 2017, 40, 596-606.	16.0	17
529	Planar Perovskite Solar Cells with High Open-Circuit Voltage Containing a Supramolecular Iron Complex as Hole Transport Material Dopant. <i>ChemPhysChem</i> , 2018, 19, 1363-1370.	2.1	17
530	Stabilization of Highly Efficient and Stable Phase-Pure FAPbI ₃ Perovskite Solar Cells by Molecularly Tailored 2D-Overlayers. <i>Angewandte Chemie</i> , 2020, 132, 15818-15824.	2.0	17
531	CVD-grown TiO ₂ particles as light scattering structures in dye-sensitized solar cells. <i>RSC Advances</i> , 2012, 2, 12278.	3.6	16
532	Development of Solid-State Photo-Supercapacitor by Coupling Dye-Sensitized Solar Cell Utilizing Conducting Polymer Charge Relay with Proton-Conducting Membrane Based Electrochemical Capacitor. <i>ECS Transactions</i> , 2013, 50, 235-244.	0.5	16
533	Solvent Dependence of the Electronic Structure of I ⁺ and I ³⁺ . <i>Journal of Physical Chemistry B</i> , 2014, 118, 3164-3174.	2.6	16
534	Photoelectrochemical Polymerization of EDOT for Solid State Dye Sensitized Solar Cells: Role of Dye and Solvent. <i>Electrochimica Acta</i> , 2015, 179, 220-227.	5.2	16
535	Investigation of cobalt redox mediators and effects of TiO ₂ film topology in dye-sensitized solar cells. <i>RSC Advances</i> , 2016, 6, 56580-56588.	3.6	16
536	Effect of furan π -spacer and triethylene oxide methyl ether substituents on performance of phenothiazine sensitizers in dye-sensitized solar cells. <i>New Journal of Chemistry</i> , 2019, 43, 9403-9410.	2.8	16
537	Xanthan-Based Hydrogel for Stable and Efficient Quasi-Solid Truly Aqueous Dye-Sensitized Solar Cell with Cobalt Mediator. <i>Solar Rrl</i> , 2021, 5, 2170074.	5.8	16
538	Pores in Nanostructured TiO ₂ Films. Size Distribution and Pore Permeability. <i>Journal of Physical Chemistry C</i> , 2007, 111, 7605-7611.	3.1	15
539	Photoelectrochemical studies of ionic liquid-containing solar cells sensitized with different polypyridyl-ruthenium complexes. <i>Polyhedron</i> , 2009, 28, 757-762.	2.2	15
540	Supramolecular Hemicage Cobalt Mediators for Dye-Sensitized Solar Cells. <i>ChemPhysChem</i> , 2016, 17, 3845-3852.	2.1	15

#	ARTICLE	IF	CITATIONS
541	Experimental and Theoretical Investigation of the Function of 4- <i>tert</i> -Butyl Pyridine for Interface Energy Level Adjustment in Efficient Solid-State Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 11572-11579.	8.0	15
542	Directly Photoexcited Oxides for Photoelectrochemical Water Splitting. ChemSusChem, 2019, 12, 4337-4352.	6.8	15
543	Indeno[1,2- <i>b</i>]carbazole as Methoxy-Free Donor Group: Constructing Efficient and Stable Hole-Transporting Materials for Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 15868-15872.	2.0	15
544	Triarylamine on Nanocrystalline TiO ₂ Studied in Its Reduced and Oxidized State by Photoelectron Spectroscopy. Journal of Physical Chemistry B, 2001, 105, 7182-7187.	2.6	14
545	Studies of coupled charge transport in dye-sensitized solar cells using a numerical simulation tool. Solar Energy Materials and Solar Cells, 2006, 90, 1915-1927.	6.2	14
546	Unravelling the structural complexity and photophysical properties of adamantyl-based layered hybrid perovskites. Journal of Materials Chemistry A, 2020, 8, 17732-17740.	10.3	14
547	Side-chain engineering of PEDOT derivatives as dopant-free hole-transporting materials for efficient and stable n-i-p structured perovskite solar cells. Journal of Materials Chemistry C, 2020, 8, 9236-9242.	5.5	14
548	Probing photovoltaic performance in copper electrolyte dye-sensitized solar cells of variable TiO ₂ particle size using comprehensive interfacial analysis. Journal of Materials Chemistry C, 2022, 10, 3929-3936.	5.5	14
549	Physicochemical Characterization of Phosphopeptide/Titanium Dioxide Interactions Employing the Quartz Crystal Microbalance Technique. Journal of Physical Chemistry B, 2013, 117, 2019-2025.	2.6	13
550	3,4-Ethylenedioxythiophene-based cobalt complex: an efficient co-mediator in dye-sensitized solar cells with poly(3,4-ethylenedioxythiophene) counter-electrode. Electrochimica Acta, 2015, 179, 237-240.	5.2	13
551	Dye-sensitized Solar Cells: New Approaches with Organic Solid-state Hole Conductors. Chimia, 2015, 69, 41.	0.6	13
552	Mesoporous carbon-embedded W ₂ C composites as flexible counter electrodes for dye-sensitized solar cells. Journal of Materials Chemistry C, 2016, 4, 6778-6783.	5.5	13
553	Highly efficient dye-sensitized solar cells achieved through using Pt-free Nb ₂ O ₅ /C composite counter electrode and iodide-free redox couples. Journal of Power Sources, 2016, 308, 37-43.	7.8	13
554	Toward an alternative approach for the preparation of low-temperature titanium dioxide blocking underlayers for perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 10729-10738.	10.3	13
555	Passivation Strategies through Surface Reconstruction toward Highly Efficient and Stable Perovskite Solar Cells on n-i-p Architecture. Energies, 2021, 14, 4836.	3.1	13
556	Interfacial engineering from material to solvent: A mechanistic understanding on stabilizing  -formamidinium lead triiodide perovskite photovoltaics. Nano Energy, 2022, 94, 106924.	16.0	13
557	Deconvolution of Light-Induced Ion Migration Phenomena by Statistical Analysis of Cathodoluminescence in Lead Halide-Based Perovskites. Advanced Science, 2022, 9, e2103729.	11.2	13
558	Comparison of charge accumulation and transport in nanostructured dye-sensitized solar cells with electrolyte or CuSCN as hole conductor. Solar Energy Materials and Solar Cells, 2005, 88, 351-362.	6.2	12

#	ARTICLE	IF	CITATIONS
559	Defect minimization and morphology optimization in TiO ₂ nanotube thin films, grown on transparent conducting substrate, for dye synthesized solar cell application. <i>Thin Solid Films</i> , 2012, 522, 71-78.	1.8	12
560	Peripheral Hole Acceptor Moieties on an Organic Dye Improve Dye-Sensitized Solar Cell Performance. <i>Advanced Science</i> , 2015, 2, 1500174.	11.2	12
561	Carbon nanotube film replacing silver in high-efficiency solid-state dye solar cells employing polymer hole conductor. <i>Journal of Solid State Electrochemistry</i> , 2015, 19, 3139-3144.	2.5	12
562	<i>p</i> -Phenylene-bridged zinc phthalocyanine-dimer as hole-transporting material in perovskite solar cells. <i>Journal of Porphyrins and Phthalocyanines</i> , 2019, 23, 546-553.	0.8	12
563	Perovskite Solar Cells Based on Oligotriarylamine Hexaarylbenzene as Hole-Transporting Materials. <i>Organic Letters</i> , 2019, 21, 3261-3264.	4.6	12
564	Fine-tuning the coordination atoms of copper redox mediators: an effective strategy for boosting the photovoltage of dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12808-12814.	10.3	12
565	Photoelectrochemical Cells Based on Dye Sensitization for Electricity and Fuel Production. <i>Chimia</i> , 2019, 73, 894.	0.6	12
566	An experimental and theoretical exploration of the role of tri-element metal-nonmetal nanohybrids in photovoltaics. <i>Chemical Engineering Journal</i> , 2021, 413, 127491.	12.7	12
567	Development of Hybrid Organic-Inorganic Materials for Efficient Charging/Discharging in Electrochemical and Photoelectrochemical Capacitors. <i>ECS Transactions</i> , 2011, 35, 93-102.	0.5	11
568	Postpassivation of Multication Perovskite with Rubidium Butyrate. <i>ACS Photonics</i> , 2020, 7, 2282-2291.	6.6	11
569	Efficient infiltration of low molecular weight polymer in nanoporous TiO ₂ . <i>Chemical Physics Letters</i> , 2011, 502, 225-230.	2.6	10
570	Phenoxazine dyes in solid-state dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2012, 239, 55-59.	3.9	10
571	Mesoporous TiO ₂ microbead electrodes for solid state dye-sensitized solar cells. <i>RSC Advances</i> , 2014, 4, 50295-50300.	3.6	10
572	Solid-State Dye-Sensitized Solar Cells. <i>Green Chemistry and Sustainable Technology</i> , 2018, , 151-185.	0.7	10
573	Design, synthesis and characterization of 1,8-naphthalimide based fullerene derivative as electron transport material for inverted perovskite solar cells. <i>Synthetic Metals</i> , 2019, 249, 25-30.	3.9	10
574	Blocking the Charge Recombination with Diiodide Radicals by TiO ₂ Compact Layer in Dye-Sensitized Solar Cells. <i>Journal of the Electrochemical Society</i> , 2019, 166, B3203-B3208.	2.9	10
575	Understanding Mass Transport in Copper Electrolyte-Based Dye-Sensitized Solar Cells. <i>ACS Applied Energy Materials</i> , 2022, 5, 2647-2654.	5.1	10
576	An Autocatalytic Factor in the Loss of Efficiency in Dye-Sensitized Solar Cells. <i>ChemCatChem</i> , 2012, 4, 1255-1258.	3.7	9

#	ARTICLE	IF	CITATIONS
577	Carbon counter electrodes efficient catalysts for the reduction of Co(III) in cobalt mediated dye-sensitized solar cells. <i>Polyhedron</i> , 2014, 82, 154-157.	2.2	9
578	Lateral Intermolecular Electronic Interactions of Diketopyrrolopyrrole Dye Sensitizers Adsorbed on Mesoporous Alumina. <i>Journal of Physical Chemistry C</i> , 2018, 122, 19348-19358.	3.1	9
579	A comprehensive experimental study of five fundamental phenothiazine geometries increasing the diversity of the phenothiazine dye class for dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2019, 169, 66-72.	3.7	9
580	Free-base tetra- <i>o</i> -carylphthalocyanines for dye-sensitized nanostructured solar cell applications. <i>Journal of Porphyrins and Phthalocyanines</i> , 2001, 5, 609-616.	0.8	9
581	Solid-state dye-sensitized solar cells using polymeric hole conductors. <i>RSC Advances</i> , 2021, 11, 39570-39581.	3.6	9
582	Hysteresis-Free Planar Perovskite Solar Module with 19.1% Efficiency by Interfacial Defects Passivation. <i>Solar Rrl</i> , 2022, 6, .	5.8	9
583	Critical Role of Removing Impurities in Nickel Oxide on High-Efficiency and Long-Term Stability of Inverted Perovskite Solar Cells. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	9
584	10.3: Screen-Printed Electrochromic Displays based on Nanocrystalline Electrodes. <i>Digest of Technical Papers SID International Symposium</i> , 2002, 33, 123.	0.3	8
585	Proton Insertion in Polycrystalline WO ₃ Studied with Electron Spectroscopy and Semi-empirical Calculations. <i>Advances in Quantum Chemistry</i> , 2004, 47, 23-36.	0.8	8
586	Photo-induced electron transfer study of D- π -A sensitizers with different type of anchoring groups for dye-sensitized solar cells. <i>RSC Advances</i> , 2012, 2, 6011.	3.6	8
587	The effect of mesoporous TiO ₂ pore size on the performance of solid-state dye sensitized solar cells based on photoelectrochemically polymerized Poly(3,4-ethylenedioxythiophene) hole conductor. <i>Electrochimica Acta</i> , 2016, 210, 23-31.	5.2	8
588	A tandem redox system with a cobalt complex and 2-azaadamantane- <i>N</i> -oxyl for fast dye regeneration and open circuit voltages exceeding 1 V. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10998-11006.	10.3	8
589	Understanding the Interfaces between Triple-Cation Perovskite and Electron or Hole Transporting Material. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 30399-30410.	8.0	8
590	When photoluminescence, electroluminescence, and open-circuit voltage diverge – light soaking and halide segregation in perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13967-13978.	10.3	8
591	Interfacial <i>versus</i> Bulk Properties of Hole-Transporting Materials for Perovskite Solar Cells: Isomeric Triphenylamine-Based Enamines <i>versus</i> Spiro-OMeTAD. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 21320-21330.	8.0	8
592	Hydrophobic Organic Ammonium Halide Modification toward Highly Efficient and Stable CsPbI ₃ Br _{0.75} Solar Cell. <i>Solar Rrl</i> , 2021, 5, 2100178.	5.8	8
593	Robust Self-Assembled Molecular Passivation for High-Performance Perovskite Solar Cells. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	8
594	Negative Ames-test of cis-di(thiocyanato)- <i>N,N'</i> -bis(4,4'-dicarboxy-2,2'-bipyridine)Ru(II), the sensitizer dye of the nanocrystalline TiO ₂ solar cell. <i>Solar Energy Materials and Solar Cells</i> , 2000, 60, 43-49.	6.2	7

#	ARTICLE	IF	CITATIONS
595	Chargeâ€“discharge kinetics of electric-paint displays. Journal of Electroanalytical Chemistry, 2004, 565, 175-184.	3.8	7
596	EFFECT OF THE CHROMOPHORES STRUCTURES ON THE PERFORMANCE OF SOLID-STATE DYE SENSITIZED SOLAR CELLS. Nano, 2014, 09, 1440005.	1.0	7
597	Comparative Studies on Rigid Ā Linkerâ€“Based Organic Dyes: Structureâ€“Property Relationships and Photovoltaic Performance. ChemSusChem, 2014, 7, 3396-3406.	6.8	7
598	A green route and rational design for ZnO-based high-efficiency photovoltaics. Nanoscale, 2014, 6, 5093.	5.6	7
599	In-Situ Probing of H2O Effects on a Ru-Complex Adsorbed on TiO2 Using Ambient Pressure Photoelectron Spectroscopy. Topics in Catalysis, 2016, 59, 583-590.	2.8	7
600	New covalently bonded dye/hole transporting material for better charge transfer in solid-state dye-sensitized solar cells. Electrochimica Acta, 2018, 269, 163-171.	5.2	7
601	Donor Effect on the Photoinduced Interfacial Charge Transfer Dynamics of Dâ”“A Diketopyrrolopyrrole Dye Sensitizers Adsorbed on Titanium Dioxide. Journal of Physical Chemistry C, 2018, 122, 19359-19369.	3.1	7
602	39.2: Nanostructured Electrochromic Displays: â€“Electric-Paint Displaysâ€“ Digest of Technical Papers SID International Symposium, 2001, 32, 1058.	0.3	6
603	Dye-Sensitized Solar Cells. , 2018, , 183-239.		6
604	Dye adsorption on TiO2 electrodes studied using modulated photocurrent measurements. Thin Solid Films, 2014, 560, 10-13.	1.8	5
605	Theoretische Abhandlung Åber CH₃NH₃PbI₃â€“Perowskitâ€“Solarzellen. Angewandte Chemie, 2017, 129, 16014-16026.	2.0	5
606	Supramolecular Co-adsorption on TiO₂ to enhance the efficiency of dye-sensitized solar cells. Journal of Materials Chemistry A, 2021, 9, 13697-13703.	10.3	5
607	Thiocyanate-Mediated Dimensionality Transformation of Low-Dimensional Perovskites for Photovoltaics. Chemistry of Materials, 2022, 34, 6331-6338.	6.7	5
608	A New Method for Manufacturing Dye-Sensitized Solar Cells on Plastic Substrates. ACS Symposium Series, 2003, , 123-132.	0.5	4
609	The Effect of UV-Irradiation (under Short-Circuit Condition) on Dye-Sensitized Solar Cells Sensitized with a Ru-Complex Dye Functionalized with a (diphenylamino)Styryl-Thiophen Group. International Journal of Photoenergy, 2009, 2009, 1-9.	2.5	4
610	Excitation Energy Dependent Charge Separation at Hole-Transporting Dye/TiO₂ Hetero Interface. Journal of Physical Chemistry C, 2012, 116, 21148-21156.	3.1	4
611	Laser desorption/ionization mass spectrometry of dyeâ€“sensitized solar cells: identification of the dyeâ€“electrolyte interaction. Journal of Mass Spectrometry, 2015, 50, 734-739.	1.6	4
612	Additives, Hole Transporting Materials and Spectroscopic Methods to Characterize the Properties of Perovskite Films. Chimia, 2017, 71, 754.	0.6	4

#	ARTICLE	IF	CITATIONS
613	Photobatteries and Photocapacitors. <i>Green Chemistry and Sustainable Technology</i> , 2018, , 281-325.	0.7	4
614	Phase stabilization of all-inorganic perovskite materials for photovoltaics. <i>Current Opinion in Electrochemistry</i> , 2018, 11, 141-145.	4.8	4
615	Quasi-Heteroface Perovskite Solar Cells. <i>Small</i> , 2020, 16, e2002887.	10.0	4
616	Flash Infrared Annealing for Perovskite Solar Cell Processing. <i>Journal of Visualized Experiments</i> , 2021, , .	0.3	4
617	In Operando, Photovoltaic, and Microscopic Evaluation of Recombination Centers in Halide Perovskite-Based Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 34171-34179.	8.0	4
618	Thermodynamic stability screening of IR-photon processed multication halide perovskite thin films. <i>Journal of Materials Chemistry A</i> , 2021, 9, 26885-26895.	10.3	4
619	Laser induced photocurrent transients and capacitance measurements on nanocrystalline TiO ₂ electrodes. <i>Solar Energy Materials and Solar Cells</i> , 1995, 38, 339-341.	6.2	3
620	P-92: Electrochromic Passive-Matrix Displays. <i>Digest of Technical Papers SID International Symposium</i> , 2003, 34, 570.	0.3	2
621	-Quantum-Dot Sensitized Metal Oxide Photoelectrodes: Photoelectrochemistry and Photoinduced Absorption Spectroscopy. <i>Advances in OptoElectronics</i> , 2011, 2011, 1-6.	0.6	2
622	Mesoporous Dye-Sensitized Solar Cells. , 2012, , 481-496.		2
623	Dye-Sensitized Photoelectrochemical Cells. , 2013, , 385-441.		2
624	Solar Cells: Ionic Liquid Control Crystal Growth to Enhance Planar Perovskite Solar Cells Efficiency (Adv. Energy Mater. 20/2016). <i>Advanced Energy Materials</i> , 2016, 6, .	19.5	2
625	Dopant-Free Hole-Transport Materials with Germanium Compounds Bearing Pseudohalide and Chalcogenide Moieties for Perovskite Solar Cells. <i>Inorganic Chemistry</i> , 2020, 59, 15154-15166.	4.0	2
626	Molecularly Engineered Low-Cost Organic Hole-Transporting Materials for Perovskite Solar Cells: The Substituent Effect on Non-fused Three-Dimensional Systems. <i>ACS Applied Energy Materials</i> , 2022, 5, 3156-3165.	5.1	2
627	<title>Colloidal films from TiO ₂ , an electrode material for dye-sensitized solar cells</title>. , 1993, 2017, 240.		1
628	Electric Characteristics of MgO-Doped TiO ₂ Nanocrystalline Film in Dye-Sensitized Solar Cells. <i>Advanced Materials Research</i> , 2011, 236-238, 2106-2109.	0.3	1
629	Infiltration of Spiro-MeOTAD hole transporting material into nanotubular TiO ₂ electrode for solid-state dye-sensitized solar cells. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2014, 187, 67-74.	3.5	1
630	Effect of TiO ₂ Photoanodes Morphology and Dye Structure on Dye-Regeneration Kinetics Investigated by Scanning Electrochemical Microscopy. <i>Electrochem</i> , 2020, 1, 329-343.	3.3	1

#	ARTICLE	IF	CITATIONS
631	Microbial bioelectrochemical cells for hydrogen generation based on irradiated semiconductor photoelectrodes. JPhys Energy, 2021, 3, 032012.	5.3	1
632	Interfacial Defects Passivation of High Efficiency Perovskite Solar Modules. , 0, , .		1
633	Interfacial Passivation Treatment towards High-efficiency and Operational Stable Perovskite Solar Cells. , 0, , .		1
634	2D White-Light Spectroscopy: Application to Lead-Halide Perovskites with Mixed Cations. ACS Symposium Series, 0, , 135-151.	0.5	1
635	Comment on photoelectrochemistry. Solar Energy Materials and Solar Cells, 1995, 38, 321-322.	6.2	0
636	Comparative Study between Dye-Sensitized and CdS Quantum-Dots-Sensitized TiO ₂ Solar Cells Using Photoinduced Absorption Spectroscopy. Advances in OptoElectronics, 2011, 2011, 1-5.	0.6	0
637	Science in the Age of Digital Networking. Journal of Physical Chemistry Letters, 2015, 6, 2900-2901.	4.6	0
638	Dye-sensitized and Perovskite Solar Cells with Record Level Efficiencies. , 0, , .		0
639	Nanoscale interfacial engineering enables highly stable and efficient perovskite photovoltaics. , 0, , .		0
640	(Keynote) The Versatility of Mesoscopic Solar Cells. ECS Meeting Abstracts, 2018, , .	0.0	0
641	Watching Ions Move: Scanning Probe Microscopy on Perovskite Solar Cells. , 0, , .		0
642	The Versatility of Mesoscopic Solar Cells. , 0, , .		0
643	Crystal Orientation and Grain Size: Do They Matter for Optoelectronic Properties of MAPbI ₃ Perovskite?. , 0, , .		0
644	Electron and hole transfer at TiO ₂ /perovskite and perovskite/spiro-OMeTAD interfaces in the triple cation perovskite solar cells prepared under room ambient conditions. , 0, , .		0
645	Crystal Orientation and Grain Size: Do They Matter for Optoelectronic Properties of MAPbI ₃ Perovskite?. , 0, , .		0
646	Chemistry and Light: The International Year of Light. Chimia, 2015, 69, 6.	0.6	0
647	Chemistry and Light: The International Year of Light. Chimia, 2015, 69, 6.	0.6	0