Highly-efficient dye-sensitized solar cells with collabor
and carboxy-anchor dyes

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Citation Report

#	Article	IF	Citations
2	Emerging Thinâ€Film Photovoltaics: Stabilize or Perish. Advanced Energy Materials, 2015, 5, .	10.2	3
3	Discovery of Black Dye Crystal Structure Polymorphs: Implications for Dye Conformational Variation in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 27646-27653.	4.0	15
4	New efficient tert-butyldiphenyl-4H-pyranylidene sensitizers for DSSCs. RSC Advances, 2015, 5, 106706-106709.	1.7	13
5	Application-oriented computational studies on a series of Dâ€“Ï€â€“A structured porphyrin sensitizers with different electron-donor groups. Physical Chemistry Chemical Physics, 2015, 17, 30624-30631.	1.3	8
6	Aluminum-Doped SnO2Hollow Microspheres as Photoanode Materials for Dye-Sensitized Solar Cells. International Journal of Photoenergy, 2016, 2016, 1-5.	1.4	1
7	Dicyanovinyl and Cyano-Ester Benzoindolenine Squaraine Dyes: The Effect of the Central Functionalization on Dye-Sensitized Solar Cell Performance. Energies, 2016, 9, 486.	1.6	25
8	Towards Renewable Iodide Sources for Electrolytes in Dye-Sensitized Solar Cells. Energies, 2016, 9, 241.	1.6	3
9	Nanostructured p-Type Semiconductor Electrodes and Photoelectrochemistry of Their Reduction Processes. Energies, 2016, 9, 373.	1.6	46
10	Cobalt-Based Electrolytes for Dye-Sensitized Solar Cells: Recent Advances towards Stable Devices. Energies, 2016, 9, 384.	1.6	97
11	Zinc Porphyrins Possessing Three p-Carboxyphenyl Groups: Effect of the Donor Strength of Push-Groups on the Efficiency of Dye Sensitized Solar Cells. Energies, 2016, 9, 513.	1.6	6
12	Porphyrin Dye-Sensitized Zinc Oxide Aggregated Anodes for Use in Solar Cells. Molecules, 2016, 21, 1025.	1.7	11
13	Beneficial Effect of Electron-Withdrawing Groups on the Sensitizing Action of Squaraines for <i>p</i>-Type Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2016, 120, 16340-16353.	1.5	48
14	Sprayâ€deposited carbonâ€nanotube counterâ€electrodes for dyeâ€sensitized solar cells. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1157-1164.	0.8	10
15	Quasi-solid-state dye-sensitized solar cell based on gel electrolyte with high gel to solution transition temperature using low molecular mass organogelator. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 329, 139-145.	2.0	8
16	Effects of structural optimization on the performance of dye-sensitized solar cells: spirobifluorene as a promising building block to enhance V_{oc}. Journal of Materials Chemistry A, 2016, 4, 11782-11788.	5.2	35
17	Metal-Free Sensitizers for Dye-Sensitized Solar Cells. Chemical Record, 2016, 16, 1311-1336.	2.9	60
18	Ferrocenyl Dithiocarbamate Based d¹⁰ Transitionâ€Metal Complexes as Potential Coâ€Sensitizers in Dyeâ€Sensitized Solar Cells. European Journal of Inorganic Chemistry, 2016, 2016, 1013-1021.	1.0	39
19	Tin Oxide Lightâ€Scattering Layer for Titania Photoanodes in Dyeâ€Sensitized Solar Cells. Energy Technology, 2016, 4, 959-966.	1.8	11

#	Article	IF	Citations
20	The Effect of Pyridyl Nitrogen Atom Position in Pyrido[3,4â€<i>b</i>]pyrazines in Donorâ€Acceptorâ€Ï€â€Acceptor Dyes on Absorption, Energy Levels, and Photovoltaic Performances of Dyeâ€Sensitized Solar Cells. Asian Journal of Organic Chemistry, 2016, 5, 293-300.	1.3	6
21	High Absorption Coefficient Cyclopentadithiophene Donor-Free Dyes for Liquid and Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2016, 120, 15027-15034.	1.5	28
23	Developments in and prospects for photocathodic and tandem dye-sensitized solar cells. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2016, 28, 44-71.	5.6	42
24	Titanium dioxide nanowires modified tin oxide hollow spheres for dye-sensitized solar cells. MRS Communications, 2016, 6, 226-233.	0.8	6
25	Impact of the molecular structure and adsorption mode of Dâ€“Ï€â€“A dye sensitizers with a pyridyl group in dye-sensitized solar cells on the adsorption equilibrium constant for dye-adsorption on TiO₂ surface. Physical Chemistry Chemical Physics, 2016, 18, 32992-32998.	1.3	10
26	A small electron donor in cobalt complex electrolyte significantly improves efficiency in dye-sensitized solar cells. Nature Communications, 2016, 7, 13934.	5.8	81
27	Spatially Resolved Analysis of Screen Printed Photoanodes of Dye-Sensitized Solar Cells by Scanning Electrochemical Microscopy. Electrochimica Acta, 2016, 222, 735-746.	2.6	6
28	Dye-sensitized solar cell scale-up: Influence of substrate resistance. Journal of Renewable and Sustainable Energy, 2016, 8, 023704.	0.8	14
29	Improved performance of nanoporous TiO2 film in dye-sensitized solar cells via ZrCl4 and TiCl4 surface co-modifications. Materials Science in Semiconductor Processing, 2016, 49, 48-53.	1.9	8
30	A Systematic Study on the Influence of Electron-Acceptors in Phenanthrocarbazole Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 9839-9848.	4.0	32
31	Photovoltaics literature survey (No. 124). Progress in Photovoltaics: Research and Applications, 2016, 24, 269-272.	4.4	0
32	Organic sensitizers with a rigid dithienobenzotriazole-based spacer for high-performance dye-sensitized solar cells. Journal of Materials Chemistry A, 2016, 4, 6553-6560.	5.2	44
33	Microemulsion-assisted Zinc Oxide Synthesis: Morphology Control and Its Applications in Photoanodes of Dye-Sensitized Solar Cells. Electrochimica Acta, 2016, 210, 483-491.	2.6	20
34	Versatile copper complexes as a convenient springboard for both dyes and redox mediators in dye sensitized solar cells. Coordination Chemistry Reviews, 2016, 322, 69-93.	9.5	76
35	Three-dimensional nanocomposite formed by hydrophobic multiwalled carbon nanotubes threading titanium dioxide as the counter electrode of enhanced performance dye-sensitized solar cells. RSC Advances, 2016, 6, 55071-55078.	1.7	9
36	Co-sensitization of Dithiafulvenyl-Phenothiazine Based Organic Dyes with N719 for Efficient Dye-Sensitized Solar Cells. Electrochimica Acta, 2016, 211, 364-374.	2.6	60
37	Mesoporous TiO2 microspheres synthesized via a facile hydrothermal method for dye sensitized solar cell applications. Journal of Porous Materials, 2016, 23, 1483-1487.	1.3	11
38	In-situ growth of antimony sulfide in carbon nanoparticle matrix: Enhanced electrocatalytic activity as counter electrode in dye-sensitized solar cells. Journal of Power Sources, 2016, 319, 219-226.	4.0	23

#	Article	IF	Citations
39	Toward tightly bound carboxylic acid-based organic dyes for DSCs: relative TiO2 binding strengths of benzoic acid, cyanoacrylic acid, and conjugated double carboxylic acid anchoring dyes. Synthetic Metals, 2016, 222, 66-75.	2.1	13
40	Tetracoordinated Bis-phenanthroline Copper-Complex Couple as Efficient Redox Mediators for Dye Solar Cells. Inorganic Chemistry, 2016, 55, 5245-5253.	1.9	60
41	Dye-Sensitized Solar Cells Based on TiO2 Nanotube and Shelled Arrayed Structures. Electrochimica Acta, 2016, 201, 125-133.	2.6	12
42	Quasi-monodispersed anatase TiO2 submicrospheres as current-contributed scattering particles for dye-sensitized solar cells. Electrochimica Acta, 2016, 204, 227-234.	2.6	7
43	Molecular engineering of cyanine dyes to design a panchromatic response in co-sensitized dye-sensitized solar cells. Molecular Systems Design and Engineering, 2016, 1, 86-98.	1.7	24
44	Graphene and transition metal dichalcogenide nanosheets as charge transport layers for solution processed solar cells. Materials Today, 2016, 19, 580-594.	8.3	79
45	P-Type dye-sensitized solar cells: Enhanced performance with a NiO compact blocking layer. Synthetic Metals, 2016, 217, 314-321.	2.1	34
46	Improving performance of copper(I)-based dye sensitized solar cells through I3â^'/Iâ^' electrolyte manipulation. Dyes and Pigments, 2016, 132, 72-78.	2.0	22
47	The effect of mesoporous TiO2 pore size on the performance of solid-state dye sensitized solar cells based on photoelectrochemically polymerized Poly(3,4-ethylenedioxythiophene) hole conductor. Electrochimica Acta, 2016, 210, 23-31.	2.6	8
48	Synthesis of new dithieno[3,2-b:2â€²,3â€²-d]pyrrole (DTP) dyes for dye-sensitized solar cells: effect of substituent on photovoltaic properties. Tetrahedron, 2016, 72, 3204-3212.	1.0	14
49	Facile synthesis of fluorene-based hole transport materials for highly efficient perovskite solar cells and solid-state dye-sensitized solar cells. Nano Energy, 2016, 26, 108-113.	8.2	103
50	Direct simulation of electron transfer in the cobalt hexammine(<scp>ii</scp>/<scp>iii</scp>) self-exchange reaction. Physical Chemistry Chemical Physics, 2016, 18, 26117-26124.	1.3	13
51	Ligand-free nano-grain Cu₂SnS₃ as a potential cathode alternative for both cobalt and iodine redox electrolyte dye-sensitized solar cells. Journal of Materials Chemistry A, 2016, 4, 14865-14876.	5.2	21
52	Fumed SiO₂ modified electrolytes for quantum dot sensitized solar cells with efficiency exceeding 11% and better stability. Journal of Materials Chemistry A, 2016, 4, 14194-14203.	5.2	68
53	Influence of ethynyl position on benzothiadiazole based Dâ€"Aâ€"Ï€â€"A dye-sensitized solar cells: spectral response and photovoltage performance. Journal of Materials Chemistry C, 2016, 4, 9203-9211.	2.7	34
54	Progress, challenges and perspectives in flexible perovskite solar cells. Energy and Environmental Science, 2016, 9, 3007-3035.	15.6	345
55	Studies on the Interfacial Electric Field and Stark Effect at the TiO₂/Dye/Electrolyte Interface. Journal of Physical Chemistry C, 2016, 120, 22215-22224.	1.5	9
56	Unraveling the Dual Character of Sulfur Atoms on Sensitizers in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 26827-26833.	4.0	16

#	Article	IF	Citations
57	Ferrocenyl chalcones with phenolic and pyridyl anchors as potential sensitizers in dye-sensitized solar cells. RSC Advances, 2016, 6, 97664-97675.	1.7	28
58	Platinum Alloy Tailored Allâ€Weather Solar Cells for Energy Harvesting from Sun and Rain. Angewandte Chemie - International Edition, 2016, 55, 14412-14416.	7.2	49
59	Understanding the Role of Reduced Graphene Oxide in the Electrolyte of Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2016, 120, 23368-23376.	1.5	35
60	Nanostructured hybrid materials based on reduced graphene oxide for solar energy conversion. , 2016, , .		3
61	4Dâ€“Ï€â€“1A type Î²-substituted Zn^{II}-porphyrins: ideal green sensitizers for building-integrated photovoltaics. Chemical Communications, 2016, 52, 12642-12645.	2.2	27
62	Influence of oligothiophene-functionalized co-sensitizer on the electron injection efficiency for multiple dye-TiO2 interface. Organic Electronics, 2016, 38, 384-395.	1.4	6
63	Energy and Electron Transfer Cascade in Self-Assembled Bilayer Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 28633-28640.	4.0	47
64	The Effect of Additives on a Molecular Organic Conductor Based Electrolyte System for Solid State Dye Sensitized Solar Cells. ChemistrySelect, 2016, 1, 2244-2248.	0.7	0
65	The introduction of conjugated isolation groups into the common acceptor cyanoacrylic acid: an efficient strategy to suppress the charge recombination in dye sensitized solar cells and the dramatically improved efficiency from 5.89% to 9.44%. Journal of Materials Chemistry A, 2016, 4, 16403-16409.	5.2	33
66	Molecular engineering of fluorescein dyes as complementary absorbers in dye co-sensitized solar cells. Molecular Systems Design and Engineering, 2016, 1, 402-415.	1.7	17
67	Convenient synthesis of EDOT-based dyes by CH-activation and their application as dyes in dye-sensitized solar cells. Journal of Materials Chemistry A, 2016, 4, 15655-15661.	5.2	15
68	Supramolecular Hemicage Cobalt Mediators for Dyeâ€Sensitized Solar Cells. ChemPhysChem, 2016, 17, 3845-3852.	1.0	15
69	Twisted Fused-Ring Thiophene Organic Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2016, 120, 22822-22830.	1.5	30
71	Theoretical design and experimental synthesis of counter electrode for dye-sensitized solar cells: Amino-functionalized graphene. Journal of Energy Chemistry, 2016, 25, 861-867.	7.1	9
72	Understanding why replacing I₃^{âˆ’}/I^{âˆ’} by cobalt(<scp>ii</scp>)/(<scp>iii</scp>) electrolytes in bis(diimine)copper(<scp>i</scp>)-based dye-sensitized solar cells improves performance. Journal of Materials Chemistry A, 2016, 4, 12995-13004.	5.2	24
73	Dye-sensitized solar cells based on N719 and cobalt gel electrolyte obtained through a room temperature process. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 330, 8-14.	2.0	8
74	Laser assisted glass frit sealing for production large area DSCs panels. Solar Energy, 2016, 135, 674-681.	2.9	20
75	Photoâ€enhanced catalytic activity of sprayâ€coated Cu₂SnSe₃ nanoparticle counter electrode for dyeâ€sensitised solar cells. Physica Status Solidi - Rapid Research Letters, 2016, 10, 739-744.	1.2	5

#	Article	IF	Citations
76	Photoelectrochromic devices based on cobalt complex electrolytes. RSC Advances, 2016, 6, 81680-81684.	1.7	8
77	Bis(1,1-bis(2-pyridyl)ethane)copper(<scp>i</scp>/<scp>ii</scp>) as an efficient redox couple for liquid dye-sensitized solar cells. Journal of Materials Chemistry A, 2016, 4, 14550-14554.	5.2	63
78	Thermal Stability Study of Dye-Sensitized Solar Cells with Cobalt Bipyridylâ€“based Electrolytes. Electrochimica Acta, 2016, 213, 879-886.	2.6	21
79	A co-sensitized approach to efficiently fill the absorption valley, avoid dye aggregation and reduce the charge recombination. Electrochimica Acta, 2016, 215, 506-514.	2.6	40
80	CuFeS₂ colloidal nanocrystals as an efficient electrocatalyst for dye sensitized solar cells. Chemical Communications, 2016, 52, 11488-11491.	2.2	45
81	Pt-free spray coated reduced graphene oxide counter electrodes for dye sensitized solar cells. Solar Energy, 2016, 137, 143-147.	2.9	35
82	Dyeâ€Sensitized Solar Hydrogen Production: The Emerging Role of Metalâ€Free Organic Sensitizers. European Journal of Organic Chemistry, 2016, 2016, 5194-5215.	1.2	77
83	Organic Photosensitizers Incorporating Rigidified Dithieno[3,2-<i>f</i>:2â€²,3â€²-<i>h</i>]quinoxaline Segment Tethered with Thiophene Substitutes for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 23066-23073.	4.0	25
84	Achievement of over 1.4â€‰V photovoltage in a dye-sensitized solar cell by the application of a silyl-anchor coumarin dye. Scientific Reports, 2016, 6, 35888.	1.6	42
85	Anchoring groups for dyes in p-DSSC application: insights from DFT. Journal of Molecular Modeling, 2016, 22, 289.	0.8	18
86	Factors Affecting the Performance of Champion Silylâ€Anchor Carbazole Dye Revealed in the Femtosecond to Second Studies of Complete ADEKAâ€1 Sensitized Solar Cells. Chemistry - A European Journal, 2016, 22, 15807-15818.	1.7	18
87	Interfacial charge separation and photovoltaic efficiency in Fe(<scp>ii</scp>)â€“carbene sensitized solar cells. Physical Chemistry Chemical Physics, 2016, 18, 28069-28081.	1.3	48
88	Solutionâ€Based inâ€“situ Synthesis of Transition Metal Sulfides as Efficient Counter Electrodes for Dyeâ€Sensitized Solar Cells. ChemistrySelect, 2016, 1, 4613-4619.	0.7	10
89	Nickel silicotungstate-decorated Pt photocathode as an efficient catalyst for triiodide reduction in dye-sensitized solar cells. Dalton Transactions, 2016, 45, 16859-16868.	1.6	13
90	Effect of the self-assembled gel network formed from a low molecular mass organogelator on the electron kinetics in quasi-solid-state dye-sensitized solar cells. Science China Materials, 2016, 59, 787-796.	3.5	4
91	Characterization and charge transfer properties of organic BODIPY dyes integrated in TiO₂nanotube based dye-sensitized solar cells. RSC Advances, 2016, 6, 91529-91540.	1.7	17
92	Recent advances in counter electrodes of quantum dot-sensitized solar cells. RSC Advances, 2016, 6, 90082-90099.	1.7	41
93	A Pushâ€“Pull Porphyrin Dimer with Multiple Electron-donating Groups for Dye-sensitized Solar Cells: Excellent Light-harvesting in Near-infrared Region. Chemistry Letters, 2016, 45, 1126-1128.	0.7	10

#	Article	IF	Citations
94	Molecular Design Principles for Nearâ€Infrared Absorbing and Emitting Indolizine Dyes. Chemistry - A European Journal, 2016, 22, 15536-15542.	1.7	39
95	Quantum chemical study of the effect of Ï€-bridge on the optical and electronic properties of sensitizers for DSSCs incorporating dioxythiophene and thiophene units. Theoretical Chemistry Accounts, 2016, 135, 1.	0.5	19
96	Consequences of Solid Electrolyte Interphase (SEI) Formation upon Aging on Charge-Transfer Processes in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2016, 120, 18991-18998.	1.5	6
97	Phosphorene and Phosphoreneâ€Based Materials â€“ Prospects for Future Applications. Advanced Materials, 2016, 28, 8586-8617.	11.1	378
98	Enhanced Photocurrent Density by Spin-Coated NiO Photocathodes for N-Annulated Perylene-Based p-Type Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 19393-19401.	4.0	24
99	A strategy to minimize the energy offset in carrier injection from excited dyes to inorganic semiconductors for efficient dye-sensitized solar energy conversion. Physical Chemistry Chemical Physics, 2016, 18, 22244-22253.	1.3	13
100	Effect of Ï€-spacers and anchoring groups on the photovoltaic performances of ullazine-based dyes. RSC Advances, 2016, 6, 70046-70055.	1.7	16
101	Enhanced Light Harvesting in Mesoscopic Solar Cells by Multilevel Multiscale Patterned Photoelectrodes with Superpositioned Optical Properties. Advanced Functional Materials, 2016, 26, 6584-6592.	7.8	17
102	Platinum Alloy Tailored Allâ€Weather Solar Cells for Energy Harvesting from Sun and Rain. Angewandte Chemie, 2016, 128, 14624-14628.	1.6	10
103	A Quasi-Solid State DSSC with 10.1% Efficiency through Molecular Design of the Charge-Separation and -Transport. Scientific Reports, 2016, 6, 28022.	1.6	73
104	Triarylamine: Versatile Platform for Organic, Dye-Sensitized, and Perovskite Solar Cells. Chemical Reviews, 2016, 116, 14675-14725.	23.0	418
105	Wrinkled silica/titania nanoparticles with tunable interwrinkle distances for efficient utilization of photons in dye-sensitized solar cells. Scientific Reports, 2016, 6, 30829.	1.6	33
106	Adsorption Behavior of I₃^{â€“} and I^{â€“} Ions at a Nanoporous NiO/Acetonitrile Interface Studied by X-ray Photoelectron Spectroscopy. Langmuir, 2016, 32, 11540-11550.	1.6	34
107	Phase transformations of novel Cu_xS nanostructures as highly efficient counter electrodes for stable and reproducible quantum dot-sensitized solar cells. RSC Advances, 2016, 6, 101185-101197.	1.7	12
108	Reduced interfacial recombination in dye-sensitized solar cells assisted with NiO:Eu3+,Tb3+ coated TiO2 film. Scientific Reports, 2016, 6, 31123.	1.6	49
109	Performance enhancers for gel polymer electrolytes based on LiI and RbI for quasi-solid-state dye sensitized solar cells. RSC Advances, 2016, 6, 103683-103691.	1.7	19
110	Synthesis of zinc oxide/titanium dioxide (ZnO/TiO2) nanocomposites by wet incipient wetness impregnation method and preparation of ZnO/TiO2 paste using poly(vinylpyrrolidone) for efficient dye-sensitized solar cells. Electrochimica Acta, 2016, 222, 473-480.	2.6	38
111	Novel Blue Organic Dye for Dye-Sensitized Solar Cells Achieving High Efficiency in Cobalt-Based Electrolytes and by Co-Sensitization. ACS Applied Materials & Interfaces, 2016, 8, 32797-32804.	4.0	67

#	Article	IF	Citations
112	Improving the efficiency of dye-sensitized solar cells by photoanode surface modifications. Science China Materials, 2016, 59, 867-883.	3.5	13
113	Copper Bipyridyl Redox Mediators for Dye-Sensitized Solar Cells with High Photovoltage. Journal of the American Chemical Society, 2016, 138, 15087-15096.	6.6	239
114	Metal-free organic dyes for TiO2 and ZnO dye-sensitized solar cells. Scientific Reports, 2016, 6, 18756.	1.6	68
115	Magnetic field effects in dye-sensitized solar cells controlled by different cell architecture. Scientific Reports, 2016, 6, 30077.	1.6	24
116	Rationalizing the suitability of rhodamines as chromophores in dye-sensitized solar cells: a systematic molecular design study. Molecular Systems Design and Engineering, 2016, 1, 416-435.	1.7	15
117	Development of type-I/type-II hybrid dye sensitizer with both pyridyl group and catechol unit as anchoring group for type-I/type-II dye-sensitized solar cell. Physical Chemistry Chemical Physics, 2016, 18, 30662-30676.	1.3	24
118	A Strategy for Enhancing the Performance of Borondipyrromethene Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2016, 120, 25657-25667.	1.5	19
119	Understanding structure-property correlation of metal free organic dyes using interfacial electron transfer measurements. Solar Energy, 2016, 139, 547-556.	2.9	10
120	Tandem Dye-Sensitized Solar Cells Based on TCO-less Back Contact Bottom Electrodes. Journal of Physics: Conference Series, 2016, 704, 012003.	0.3	4
121	Effects of Bulky Substituents of Pushâ€"Pull Porphyrins on Photovoltaic Properties of Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 15379-15390.	4.0	61
122	Carbon nanotubes hybrid carbon counter electrode for high efficiency dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2016, 27, 4736-4743.	1.1	15
123	A low recombination rate indolizine sensitizer for dye-sensitized solar cells. Chemical Communications, 2016, 52, 8424-8427.	2.2	45
124	Efficiency and stability of spectral sensitization of boron-doped-diamond electrodes through covalent anchoring of a donorâ€"acceptor organic chromophore (P1). Physical Chemistry Chemical Physics, 2016, 18, 16444-16450.	1.3	21
125	Efficient dye-sensitized solar cells with broad absorption and enhanced photo-current generation. RSC Advances, 2016, 6, 56747-56755.	1.7	7
126	ZnO double layer film with a novel organic sensitizer as an efficient photoelectrode for dyeâ€"sensitized solar cells. Journal of Power Sources, 2016, 325, 209-219.	4.0	15
127	Hierarchical growth of TiO2 nanosheets on anodic ZnO nanowires for high efficiency dye-sensitized solar cells. Journal of Power Sources, 2016, 325, 365-374.	4.0	19
128	Ligand Engineering for the Efficient Dye-Sensitized Solar Cells with Ruthenium Sensitizers and Cobalt Electrolytes. Inorganic Chemistry, 2016, 55, 6653-6659.	1.9	80
129	Optimization of the PtFe alloy structure for application as an efficient counter electrode for dye-sensitized solar cells. Electrochimica Acta, 2016, 211, 842-850.	2.6	32

#	Article	IF	Citations
130	Panchromatic engineering for efficient zinc oxide flexible dye-sensitized solar cells using porphyrin and indoline dyes. RSC Advances, 2016, 6, 59273-59279.	1.7	9
131	Insertion of a naphthalenediimide unit in a metal-free donorâ€“acceptor organic sensitizer for efficiency enhancement of a dye-sensitized solar cell. Dyes and Pigments, 2016, 134, 83-90.	2.0	21
132	Influence of zirconium dioxide and titanium dioxide binders on the photovoltaic performance of dye sensitized solar cell tungsten carbide nanorods based counter electrode. Electrochimica Acta, 2016, 211, 375-384.	2.6	19
133	TiO2/graphene nanocomposite layers for improving the performances of dye-sensitized solar cells using a cobalt redox shuttle. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 329, 54-60.	2.0	15
134	Copper-based dye-sensitized solar cells with quasi-solid nano cellulose composite electrolytes. RSC Advances, 2016, 6, 56571-56579.	1.7	16
135	Synthesis and integration of poly(1-vinylimidazole) polymer electrolyte in dye sensitized solar cells by initiated chemical vapor deposition. Chemical Engineering Science, 2016, 154, 136-142.	1.9	22
137	Cosensitization process effect of D-A-Ï€-A featured dyes on photovoltaic performances. Green Energy and Environment, 2016, 1, 84-90.	4.7	15
138	Coadsorption of Dye Molecules at TiO2 Surfaces: A Photoelectron Spectroscopy Study. Journal of Physical Chemistry C, 2016, 120, 12484-12494.	1.5	8
139	Single Walled Carbon Nanohorns as Catalytic Counter Electrodes for Co(III)/(II) Electron Mediators in Dye Sensitized Cells. ACS Applied Materials & Interfaces, 2016, 8, 14604-14612.	4.0	26
140	Effects of Ethyl Cellulose on Performance of Titania Photoanode for Dye-sensitized Solar Cells. Journal of Electronic Materials, 2016, 45, 6192-6199.	1.0	11
141	Analysis and assessment of dye-sensitized solar cell at different materials parameters and environmental conditions. International Journal of Energy Research, 2016, 40, 1093-1104.	2.2	8
142	Metalâ€Free Indeno[2,1â€<i>b</i>]thiopheneâ€Based Sensitizers for Dyeâ€Sensitized Solar Cells. Asian Journal of Organic Chemistry, 2016, 5, 801-811.	1.3	2
143	Atypical organic dyes used as sensitizers for efficient dye-sensitized solar cells. Frontiers of Optoelectronics, 2016, 9, 38-43.	1.9	9
144	Improving the performance of dye-sensitized solar cells with electron-donor and electron-acceptor characteristic of planar electronic skeletons. Energy and Environmental Science, 2016, 9, 1390-1399.	15.6	71
145	Synthesis and characterization of simple cost-effective trans-A₂BC porphyrins with various donor groups for dye-sensitized solar cells. New Journal of Chemistry, 2016, 40, 5704-5713.	1.4	14
146	Selenorhodamine Dye-Sensitized Solar Cells: Influence of Structure and Surface-Anchoring Mode on Aggregation, Persistence, and Photoelectrochemical Performance. Langmuir, 2016, 32, 1521-1532.	1.6	37
147	Electron-Transfer Kinetics through Interfaces between Electron-Transport and Ion-Transport Layers in Solid-State Dye-Sensitized Solar Cells Utilizing Solid Polymer Electrolyte. Journal of Physical Chemistry C, 2016, 120, 2494-2500.	1.5	13
148	Ultrafast and fast charge separation processes in real dye-sensitized solar cells. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2016, 26, 1-30.	5.6	92

#	Article	IF	Citations
149	Effect of the alkaline cation size on the conductivity in gel polymer electrolytes and their influence on photo electrochemical solar cells. Physical Chemistry Chemical Physics, 2016, 18, 10873-10881.	1.3	32
150	Identification of different pathways of electron injection in dye-sensitised solar cells of electrodeposited ZnO using an indoline sensitiser. Physical Chemistry Chemical Physics, 2016, 18, 8938-8944.	1.3	7
151	Structural and electronic properties of dye-sensitized TiO₂ for solar cell applications: from single molecules to self-assembled monolayers. Journal of Materials Chemistry C, 2016, 4, 4346-4373.	2.7	46
152	Development of high efficiency 100% aqueous cobalt electrolyte dye-sensitised solar cells. Physical Chemistry Chemical Physics, 2016, 18, 8419-8427.	1.3	38
153	Pyridyl vs. bipyridyl anchoring groups of porphyrin sensitizers for dye sensitized solar cells. RSC Advances, 2016, 6, 22187-22203.	1.7	18
154	Thieno[3,4-<i>b</i>]pyrazine as an Electron Deficient Ï€-Bridge in Dâ€“Aâ^'Ï€â€“<i>A</i> DSCs. ACS Applied Materials & Interfaces, 2016, 8, 5376-5384.	4.0	57
155	Naphtho[2,3-<i>c</i>][1,2,5]thiadiazole and 2<i>H</i>-Naphtho[2,3-<i>d</i>][1,2,3]triazole-Containing Dâ€“Aâ^'Ï€â€“A Conjugated Organic Dyes for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 6117-6126.	4.0	38
156	Rare earth ion doped phosphors for dye-sensitized solar cells applications. RSC Advances, 2016, 6, 17546-17559.	1.7	58
157	Donor design and modification strategies of metal-free sensitizers for highly-efficient n-type dye-sensitized solar cells. Frontiers of Optoelectronics, 2016, 9, 3-37.	1.9	29
158	Graphene-based large area dye-sensitized solar cell modules. Nanoscale, 2016, 8, 5368-5378.	2.8	132
159	Recent advances in the photovoltaic applications of coordination polymers and metal organic frameworks. Journal of Materials Chemistry A, 2016, 4, 3991-4002.	5.2	121
160	Perfluoro anion based binary and ternary ionic liquids as electrolytes for dye-sensitized solar cells. Journal of Power Sources, 2016, 311, 167-174.	4.0	22
161	Low-temperature Fabrication of Highly-Efficient, Optically-Transparent (FTO-free) Graphene Cathode for Co-Mediated Dye-Sensitized Solar Cells with Acetonitrile-free Electrolyte Solution. Electrochimica Acta, 2016, 195, 34-42.	2.6	46
162	Computational study of the influence of the Ï€-bridge conjugation order of novel molecular derivatives of coumarins for dye-sensitized solar cells using DFT. Theoretical Chemistry Accounts, 2016, 135, 1.	0.5	5
163	Nanoclimbing-wall-like CoSe 2 /carbon composite film for the counter electrode of a highly efficient dye-sensitized solar cell: A study on the morphology control. Nano Energy, 2016, 22, 594-606.	8.2	78
164	Indium- and Platinum-Free Counter Electrode for Green Mesoscopic Photovoltaics through Graphene Electrode and Graphene Composite Catalysts: Interfacial Compatibility. ACS Applied Materials & Interfaces, 2016, 8, 5314-5319.	4.0	33
165	Molecular degradation of D35 and K77 sensitizers when exposed to temperatures exceeding 100 Â°C investigated by photoelectron spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 8598-8607.	1.3	3
166	Enhanced efficiency in flexible dye-sensitized solar cells by a novel bilayer photoanode made of carbon nanotubes incorporated TiO 2 nanorods and branched TiO 2 nanotubes. Solar Energy Materials and Solar Cells, 2016, 147, 134-143.	3.0	36

#	Article	IF	Citations
167	Large-scale synthesis of few-layer graphene from magnesium and different carbon sources and its application in dye-sensitized solar cells. Materials and Design, 2016, 92, 462-470.	3.3	27
168	PVP-assisted synthesis of nanostructured transparent WO3 thin films for photoelectrochemical water splitting. Materials and Design, 2016, 90, 1005-1009.	3.3	28
169	Highly efficient and durable dye-sensitized solar cells based on a wet-laid PET membrane electrolyte. Journal of Materials Chemistry A, 2016, 4, 458-465.	5.2	45
170	Unlocking the effects of ancillary electron-donors on light absorption and charge recombination in phenanthrocarbazole dye-sensitized solar cells. Journal of Materials Chemistry A, 2016, 4, 519-528.	5.2	31
171	Use of organic materials in dye-sensitized solar cells. Materials Today, 2017, 20, 267-283.	8.3	231
172	Effect of spacers and anchoring groups of extended Ï€-conjugated tetrathiafulvalene based sensitizers on the performance of dye sensitized solar cells. Sustainable Energy and Fuels, 2017, 1, 345-353.	2.5	20
173	Experimental and theoretical investigation of dye sensitized solar cells integrated with crosslinked poly(vinylpyrrolidone) polymer electrolyte using initiated chemical vapor deposition. Thin Solid Films, 2017, 635, 9-16.	0.8	11
174	Molecular engineering of Dâ€"Aâ€"Ï€â€"A sensitizers for highly efficient solid-state dye-sensitized solar cells. Journal of Materials Chemistry A, 2017, 5, 3157-3166.	5.2	41
175	A transparent nickel selenide counter electrode for high efficient dye-sensitized solar cells. Applied Surface Science, 2017, 401, 1-6.	3.1	31
176	Electrochemical Properties of Cu(II/I)-Based Redox Mediators for Dye-Sensitized Solar Cells. Electrochimica Acta, 2017, 227, 194-202.	2.6	63
177	Fence Constructed at a Semiconductor/Electrolyte Interface Improving the Electron Collection Efficiency of the Photoelectrode for a Dye-Sensitized Solar Cell. ACS Applied Materials & Interfaces, 2017, 9, 2396-2402.	4.0	4
178	Amazing long-lived lifetime. Green Energy and Environment, 2017, 2, 67-69.	4.7	3
179	Pyrene based Dâ€"Ï€â€"A architectures: synthesis, density functional theory, photophysics and electron transfer dynamics. Physical Chemistry Chemical Physics, 2017, 19, 3125-3135.	1.3	27
180	Synthesis and optical and electrochemical properties of julolidine-structured pyrido[3,4-b]indole dye. Physical Chemistry Chemical Physics, 2017, 19, 3565-3574.	1.3	16
181	Sensitizers for Aqueousâ€Based Solar Cells. Chemistry - an Asian Journal, 2017, 12, 486-496.	1.7	27
182	The effect of furan linkers on the properties of cyclic thiourea functionalized triphenylamine dye sensitizers. Dyes and Pigments, 2017, 139, 772-778.	2.0	13
183	Engineering Processes at the Interface of pâ€Semiconductor for Enhancing the Open Circuit Voltage in pâ€Type Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2017, 7, 1601776.	10.2	36
184	A D-Ï€-A organic dye â€" Reduced graphene oxide covalent dyad as a new concept photosensitizer for light harvesting applications. Carbon, 2017, 115, 746-753.	5.4	25

#	Article	IF	Citations
185	Reversed Y-shape di-anchoring sensitizers for dye sensitized solar cells based on benzimidazole core. Dyes and Pigments, 2017, 140, 441-451.	2.0	24
186	Semi-transparent solar cells. Journal Physics D: Applied Physics, 2017, 50, 093001.	1.3	70
187	40% enhanced photocurrent of dye sensitized solar cells using lotus-shaped H 2 -treated anatase TiO 2 with {0 0 1} dominated facets. Chemical Engineering Journal, 2017, 316, 534-543.	6.6	12
188	A General Strategy to Enhance the Performance of Dyeâ€Sensitized Solar Cells by Incorporating a Lightâ€Harvesting Dye with a Hydrophobic Polydiacetylene Electrolyteâ€Blocking Layer. Chemistry - an Asian Journal, 2017, 12, 690-697.	1.7	12
189	Nitrogen-Doped Mesoporous Carbons as Counter Electrodes in Quantum Dot Sensitized Solar Cells with a Conversion Efficiency Exceeding 12%. Journal of Physical Chemistry Letters, 2017, 8, 559-564.	2.1	193
190	Cocktail co-sensitization of porphyrin dyes with additional donors and acceptors for developing efficient dye-sensitized solar cells. Dyes and Pigments, 2017, 140, 36-46.	2.0	41
191	Digital imaging to simultaneously study device lifetimes of multiple dye-sensitized solar cells. Sustainable Energy and Fuels, 2017, 1, 362-370.	2.5	7
192	Comparative spectroscopic approach for the dye loading optimization of sheet-like ZnO photoanodes for dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 337, 192-197.	2.0	5
193	Effects of release agents on the film morphology of TiO2 photoanodes for FDSSCs by the roll-to-roll method. Journal of Alloys and Compounds, 2017, 702, 366-371.	2.8	2
194	Electrospun FeS nanorods with enhanced stability as counter electrodes for dye-sensitized solar cells. Electrochimica Acta, 2017, 229, 229-238.	2.6	46
195	Advances in hole transport materials engineering for stable and efficient perovskite solar cells. Nano Energy, 2017, 34, 271-305.	8.2	362
196	Structural Effects on the Incident Photon-to-Current Conversion Efficiency of Zn Porphyrin Dyes on the Low-Index Planes of TiO₂. ACS Omega, 2017, 2, 128-135.	1.6	7
197	Cost-effective CoPd alloy/reduced graphene oxide counter electrodes as a new avenue for high-efficiency liquid junction photovoltaic devices. Journal of Alloys and Compounds, 2017, 705, 610-617.	2.8	22
198	Dye-sensitized solar cells using cobalt electrolytes: the influence of porosity and pore size to achieve high-efficiency. Journal of Materials Chemistry C, 2017, 5, 2833-2843.	2.7	52
199	Transparent Conductive Oxide Films for High-Performance Dye-Sensitized Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 518-524.	1.5	9
200	High-Voltage Dye-Sensitized Solar Cells Mediated by [Co(2,2â€²-bipyrimidine)₃]^{<i>z</i>}. Inorganic Chemistry, 2017, 56, 2383-2386.	1.9	12
201	Long persistence phosphor assisted all-weather solar cells. Electricity generation beyond sunny days. Chemical Communications, 2017, 53, 3209-3212.	2.2	19
202	Graphene tailored polymer gel electrolytes for 9.1%-efficiency quasi-solid-state dye-sensitized solar cells. Journal of Power Sources, 2017, 348, 239-245.	4.0	28

#	Article	IF	Citations
203	Nickel selenide/reduced graphene oxide nanocomposite as counter electrode for high efficient dye-sensitized solar cells. Journal of Colloid and Interface Science, 2017, 498, 217-222.	5.0	41
204	Synthesis, optical and electrochemical properties, and photovoltaic performance of a panchromatic and near-infrared (D)₂â€“Ï€â€“A type BODIPY dye with pyridyl group or cyanoacrylic acid. RSC Advances, 2017, 7, 13072-13081.	1.7	23
205	(Dâ€“Ï€â€“A)₂â€“Ï€â€“Dâ€“A type ferrocenyl bisthiazole linked triphenylamine based molecular systems for DSSC: synthesis, experimental and theoretical performance studies. Physical Chemistry Chemical Physics, 2017, 19, 8925-8933.	1.3	45
206	Dye-sensitized solar cells based on cobalt-containing room temperature ionic liquid redox shuttles. RSC Advances, 2017, 7, 13689-13695.	1.7	14
207	Allâ€Weather Solar Cells: A Rising Photovoltaic Revolution. Chemistry - A European Journal, 2017, 23, 8118-8127.	1.7	16
208	Integrated solar capacitors for energy conversion and storage. Nano Research, 2017, 10, 1545-1559.	5.8	61
209	Flexible dye-sensitized solar cells based on Ti/TiO2 nanotubes photoanode and Pt-free and TCO-free counter electrode system. Solid State Ionics, 2017, 302, 192-196.	1.3	10
210	High performance of TiO₂/CdS quantum dot sensitized solar cells with a Cuâ€“ZnS passivation layer. New Journal of Chemistry, 2017, 41, 1914-1917.	1.4	43
211	Crystallography as Forensic Tool for Understanding Electrolyte Degradation in Dyeâ€“sensitized Solar Cells. ChemistrySelect, 2017, 2, 1675-1680.	0.7	2
212	PtZn nanoalloy counter electrodes as a new avenue for highly efficient dye-sensitized solar cells. Journal of Alloys and Compounds, 2017, 702, 449-457.	2.8	29
213	Utility of Pt in PtNi alloy counter electrodes as a new avenue for cost effective and highly efficient liquid junction photovoltaic devices. Journal of Colloid and Interface Science, 2017, 495, 78-83.	5.0	12
214	Enhanced Internal Quantum Efficiency in Dye-Sensitized Solar Cells: Effect of Long-Lived Charge-Separated State of Sensitizers. ACS Applied Materials & Interfaces, 2017, 9, 9880-9891.	4.0	27
215	Enhanced light harvesting of dye-sensitized solar cells with TiO2 microspheres as light scattering layer. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	8
216	Mesoporous NiCo₂O₄ networks with enhanced performance as counter electrodes for dye-sensitized solar cells. Dalton Transactions, 2017, 46, 4403-4411.	1.6	26
217	Highly efficient solid-state dye-sensitized solar cells based on hexylimidazolium iodide ionic polymer electrolyte prepared by in situ low-temperature polymerization. Journal of Power Sources, 2017, 345, 131-136.	4.0	21
218	Exploring simple ancillary ligands in copper-based dye-sensitized solar cells: effects of a heteroatom switch and of co-sensitization. Journal of Materials Chemistry A, 2017, 5, 4671-4685.	5.2	27
219	Recent developments in tetrathiafulvalene and dithiafulvalene based metal-free organic sensitizers for dye-sensitized solar cells: a mini-review. Sustainable Energy and Fuels, 2017, 1, 678-688.	2.5	38
220	Carbon nanotube/metal-sulfide composite flexible electrodes for high-performance quantum dot-sensitized solar cells and supercapacitors. Scientific Reports, 2017, 7, 46519.	1.6	134

#	Article	IF	Citations
221	Molecular design of porphyrin dyes for dye sensitized solar cells: A quantitative structure property relationship study. International Journal of Quantum Chemistry, 2017, 117, e25385.	1.0	9
222	Novel ethynyl-pyrene substituted phenothiazine based metal free organic dyes in DSSC with 12% conversion efficiency. Journal of Materials Chemistry A, 2017, 5, 10289-10300.	5.2	103
223	Microwave assisted synthesis of high surface area TiO 2 aerogels: A competent photoanode material for quasi-solid dye-sensitized solar cells. Materials Chemistry and Physics, 2017, 196, 37-44.	2.0	50
224	Conducting polymers revisited: applications in energy, electrochromism and molecular recognition. Journal of Solid State Electrochemistry, 2017, 21, 2489-2515.	1.2	68
225	Bismuth-based ternary nanowires as efficient electrocatalysts for dye sensitized solar cells. Chemical Communications, 2017, 53, 5445-5448.	2.2	20
226	New Acetyleneâ€Bridged 9,10â€Conjugated Anthracene Sensitizers: Application in Outdoor and Indoor Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2017, 7, 1700032.	10.2	137
227	Novel and Stable Dâ€“Aâ^'Ï€â€“A Dyes for Efficient Solid-State Dye-Sensitized Solar Cells. ACS Omega, 2017, 2, 1812-1819.	1.6	19
228	Effect of Alkyl Chain Length on the Sensitizing Action of Substituted Nonâ€Symmetric Squaraines for pâ€Type Dyeâ€Sensitized Solar Cells. ChemElectroChem, 2017, 4, 2385-2397.	1.7	17
229	2-(4-Butoxyphenyl)-<i>N</i>-hydroxyacetamide: An Efficient Preadsorber for Dye-Sensitized Solar Cells. ACS Omega, 2017, 2, 1820-1825.	1.6	14
230	X-ray photoelectron spectroscopy investigation of nanoporous NiO electrodes sensitized with Erythrosine B. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 532, 464-471.	2.3	14
231	Effects of Post-Assembly Molecular and Atomic Passivation of Sensitized Titania Surface: Dynamics of Electron Transfer Measured from Femtoseconds to Seconds. ACS Applied Materials & Interfaces, 2017, 9, 17102-17114.	4.0	16
232	Electrochemical interfacial charge transfer dynamics and photovoltaic performances of nanofibrous vanadium derivatives based platinum free counter electrodes in dye sensitized solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 222, 7-17.	1.7	22
233	Recent progress and utilization of natural pigments in dye sensitized solar cells: A review. Renewable and Sustainable Energy Reviews, 2017, 78, 301-317.	8.2	156
234	Intrinsic Origin of Superior Catalytic Properties of Tungsten-based Catalysts in Dye-sensitized Solar Cells. Electrochimica Acta, 2017, 242, 390-399.	2.6	73
235	Limits on the use of cobalt sulfide as anode of p-type dye-sensitized solar cells. Journal Physics D: Applied Physics, 2017, 50, 215501.	1.3	8
236	Multi-layered hierarchical nanostructures for transparent monolithic dye-sensitized solar cell architectures. Nanotechnology, 2017, 28, 245603.	1.3	8
237	Efficient electron transfer and reduced recombination with Nd:YAG laser scribing for high-efficiency quantum dot-sensitized solar cells. Optics and Laser Technology, 2017, 94, 290-295.	2.2	7
238	Iodine-Pseudohalogen Ionic Liquid-Based Electrolytes for Quasi-Solid-State Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 33437-33445.	4.0	19

#	Article	IF	Citations
239	Comparative study on N,N-di-p-tolylaniline-based D-Ï€-A1-Ï€-A2 sensitizers by tuning the auxiliary acceptor for dye-sensitized solar cells. Dyes and Pigments, 2017, 145, 427-435.	2.0	15
240	Design of CoNi alloy/graphene as an efficient Pt-free counter electrode in liquid junction photovoltaic devices. Synthetic Metals, 2017, 230, 97-104.	2.1	24
241	High Efficiency Quantum Dot Sensitized Solar Cells Based on Direct Adsorption of Quantum Dots on Photoanodes. ACS Applied Materials & Interfaces, 2017, 9, 22549-22559.	4.0	39
242	Solution Processed NixSy Films: Composition, Morphology and Crystallinity Tuning via Ni/S-Ratio-Control and Application in Dye-Sensitized Solar Cells. Electrochimica Acta, 2017, 246, 285-293.	2.6	14
243	The way to panchromatic copper(<scp>i</scp>)-based dye-sensitized solar cells: co-sensitization with the organic dye SQ2. Journal of Materials Chemistry A, 2017, 5, 13717-13729.	5.2	28
244	A study on the degradation of dye-sensitized solar cells irradiated by two different dose rates of Î³-rays. Journal of Radioanalytical and Nuclear Chemistry, 2017, 312, 609-614.	0.7	3
245	Photoinduced excitation and charge transfer processes of organic dyes with siloxane anchoring groups: a combined spectroscopic and computational study. Physical Chemistry Chemical Physics, 2017, 19, 15310-15323.	1.3	11
246	A Peryleneâ€Based Polycyclic Aromatic Hydrocarbon Electron Donor for a Highly Efficient Solar Cell Dye. ChemSusChem, 2017, 10, 2962-2967.	3.6	28
247	Ferrocenyl benzimidazole with carboxylic and nitro anchors as potential sensitizers in dye-sensitized solar cells. New Journal of Chemistry, 2017, 41, 7312-7321.	1.4	21
248	New series of soft materials based on ionic liquidâ€“metal complexes for high-efficient electrolytes of dye-sensitized solar cells. Journal of Materials Chemistry A, 2017, 5, 14630-14638.	5.2	7
249	Synthesis and characterization of push-pull bithiophene and thieno[3,2-b]thiophene derivatives bearing an ethyne linker as sensitizers for dye-sensitized solar cells. Organic Electronics, 2017, 49, 194-205.	1.4	24
250	Understanding the photo-electrochemistry of metal-free di and tri substituted thiophene-based organic dyes in dye-sensitized solar cells using DFT/TD-DFT studies. Ionics, 2017, 23, 3545-3554.	1.2	20
251	High efficient dye sensitized solar cells using phthaloylchitosan based gel polymer electrolytes. Electrochimica Acta, 2017, 245, 846-853.	2.6	68
252	Quantum dot sensitized solar cells with efficiency over 12% based on tetraethyl orthosilicate additive in polysulfide electrolyte. Journal of Materials Chemistry A, 2017, 5, 14124-14133.	5.2	86
253	Rational design of a tripartite-layered TiO₂photoelectrode: a candidate for enhanced power conversion efficiency in dye sensitized solar cells. Nanoscale, 2017, 9, 9913-9920.	2.8	24
254	11% efficiency solid-state dye-sensitized solar cells with copper(II/I) hole transport materials. Nature Communications, 2017, 8, 15390.	5.8	229
255	Influence of deposition voltage of cobalt diselenide preparation on the film quality and the performance of dye-sensitized solar cells. Solar Energy, 2017, 151, 61-67.	2.9	25
256	Consequences of changes in the ZnO trap distribution on the performance of dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2017, 19, 16159-16168.	1.3	12

#	Article	IF	Citations
257	Towards a high open-circuit voltage by co-additives in electrolyte for high-efficiency dye-sensitized solar cells. Journal of Power Sources, 2017, 359, 142-146.	4.0	13
258	EXAFS, ab Initio Molecular Dynamics, and NICIS Spectroscopy Studies on an Organic Dye Model at the Dye-Sensitized Solar Cell Photoelectrode Interface. ACS Applied Materials & Interfaces, 2017, 9, 19773-19779.	4.0	8
259	Recent advances in hierarchical three-dimensional titanium dioxide nanotree arrays for high-performance solar cells. Journal of Materials Chemistry A, 2017, 5, 12699-12717.	5.2	52
260	A flexible and portable powerpack by solid-state supercapacitor and dye-sensitized solar cell integration. Journal of Power Sources, 2017, 359, 311-321.	4.0	134
261	A supramolecular gel electrolyte formed from amide based co-gelator for quasi-solid-state dye-sensitized solar cell with boosted electron kinetic processes. Journal of Power Sources, 2017, 359, 80-87.	4.0	15
262	Hollow platinum alloy tailored counter electrodes for photovoltaic applications. Journal of Power Sources, 2017, 360, 232-242.	4.0	7
263	Effects of a TiO 2 :CaO barrier layer on the back electron transfer in TiO 2 -based solar cells. Journal of Industrial and Engineering Chemistry, 2017, 50, 96-101.	2.9	10
264	A Stable Panchromatic Green Dual Acceptor, Dual Donor Organic Dye for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2017, 121, 8770-8780.	1.5	35
265	Enhance photovoltaic performance of tris(2,2â€²-bipyridine) cobalt(II)/(III) based dye-sensitized solar cells via modifying TiO 2 surface with metal-organic frameworks. Solar Energy, 2017, 147, 126-132.	2.9	24
266	The revival of dye-sensitized solar cells. Current Opinion in Electrochemistry, 2017, 2, 111-119.	2.5	35
267	Efficient Method for Adsorbing Dye on TiO2 Electrodes in DSC Production. ChemistrySelect, 2017, 2, 3060-3064.	0.7	1
268	Advancements in the development of TiO 2 photoanodes and its fabrication methods for dye sensitized solar cell (DSSC) applications. A review. Renewable and Sustainable Energy Reviews, 2017, 77, 89-108.	8.2	352
269	A facile one-step synthesis and fabrication of hexagonal palladium-carbon nanocubes (H-Pd/C NCs) and their application as an efficient counter electrode for dye-sensitized solar cell (DSSC). Ceramics International, 2017, 43, 8466-8474.	2.3	11
270	Effective suppression of interfacial charge recombination by a 12-crown-4 substituent on a double-anchored organic sensitizer and rotating disk electrochemical evidence. Journal of Materials Chemistry A, 2017, 5, 7586-7594.	5.2	36
271	NiCo2S4 nanosheets in situ grown on carbon fibers as an efficient counter electrode for fiber-shaped dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2017, 28, 10640-10644.	1.1	8
272	Dependence of solar cell performance on the nature of alkaline counterion in gel polymer electrolytes containing binary iodides. Journal of Solid State Electrochemistry, 2017, 21, 1571-1578.	1.2	19
273	meso-Diphenylbacteriochlorins: Macrocyclic Dyes with Rare Colors for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2017, 121, 7081-7087.	1.5	32
274	Facile synthesis of morphology dependent CuS nanoparticle thin film as a highly efficient counter electrode for quantum dot-sensitized solar cells. Journal of Electroanalytical Chemistry, 2017, 791, 95-102.	1.9	25

#	Article	IF	Citations
275	Benzimidazole/Pyridoimidazoleâ€Based Organic Sensitizers for Highâ€Performance Dyeâ€Sensitized Solar Cells. Chemistry - an Asian Journal, 2017, 12, 996-1004.	1.7	14
276	Electrochemical synthesis of nanoporous tungsten carbide and its application as electrocatalysts for photoelectrochemical cells. Nanoscale, 2017, 9, 5413-5424.	2.8	26
277	Hydrothermal growth of MoS2/Co3S4 composites as efficient Pt-free counter electrodes for dye-sensitized solar cells. Science China Materials, 2017, 60, 295-303.	3.5	35
278	Electrochemistry and dye-sensitized solar cells. Current Opinion in Electrochemistry, 2017, 2, 88-96.	2.5	91
279	Solution-processed relatively pure MoS2 nanoparticles in-situ grown on graphite paper as an efficient FTO-free counter electrode for dye-sensitized solar cells. Electrochimica Acta, 2017, 235, 182-190.	2.6	33
280	Organic sensitizers featuring thiophene derivative based donors with improved stability and photovoltaic performance. Physical Chemistry Chemical Physics, 2017, 19, 1927-1936.	1.3	19
281	Correlating excited state and charge carrier dynamics with photovoltaic parameters of perylene dye sensitized solar cells: influences of an alkylated carbazole ancillary electron-donor. Physical Chemistry Chemical Physics, 2017, 19, 2549-2556.	1.3	8
282	Pyrrolo[3,2,1-kl]phenothiazine-based D-Ï€-A type organic dyes for efficient dye-sensitized solar cells. Dyes and Pigments, 2017, 139, 292-299.	2.0	15
283	Characterization techniques for dye-sensitized solar cells. Energy and Environmental Science, 2017, 10, 672-709.	15.6	136
284	Surface Engineering of Nanostructured ZnO Surfaces. Advanced Materials Interfaces, 2017, 4, 1600758.	1.9	50
285	Efficient and economical dye-sensitized solar cells based on graphene/TiO2 nanocomposite as a photoanode and graphene as a Pt-free catalyst for counter electrode. Organic Electronics, 2017, 42, 187-193.	1.4	22
286	Effects of different electron donating groups on dye regeneration and aggregation in phenothiazine-based dye-sensitized solar cells. Organic Electronics, 2017, 42, 234-243.	1.4	25
287	Harnessing Photovoltage: Effects of Film Thickness, TiO₂ Nanoparticle Size, MgO and Surface Capping with DSCs. ACS Applied Materials & Interfaces, 2017, 9, 3050-3059.	4.0	15
288	Excited-State and Charge Carrier Dynamics in a High-Photovoltage and Thermostable Dye-Sensitized Solar Cell. ACS Photonics, 2017, 4, 165-173.	3.2	17
289	Enhanced visible-light-driven photocatalytic activity of Au@Ag coreâ€"shell bimetallic nanoparticles immobilized on electrospun TiO₂ nanofibers for degradation of organic compounds. Catalysis Science and Technology, 2017, 7, 570-580.	2.1	134
290	Judicious engineering of a metal-free perylene dye for high-efficiency dye sensitized solar cells: the control of excited state and charge carrier dynamics. Journal of Materials Chemistry A, 2017, 5, 3514-3522.	5.2	18
291	Fine tuning of compact ZnO blocking layers for enhanced photovoltaic performance in ZnO based DSSCs: a detailed insight using Î² recombination, EIS, OCVD and IMVS techniques. New Journal of Chemistry, 2017, 41, 1007-1016.	1.4	28
292	Significant light absorption enhancement by a single heterocyclic unit change in the Ï€-bridge moiety from thieno[3,2-b]benzothiophene to thieno[3,2-b]indole for high performance dye-sensitized and tandem solar cells. Journal of Materials Chemistry A, 2017, 5, 2297-2308.	5.2	200

#	Article	IF	Citations
293	Characterization of dye-sensitized solar cells using five pure anthocyanidin 3-O-glucosides possessing different chromophores. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 335, 230-238.	2.0	11
294	BODIPYs for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 39873-39889.	4.0	149
295	New triarylamine organic dyes containing the 9-hexyl-2-(hexyloxy)-9H-carbazole for dye-sensitized solar cells. Electrochimica Acta, 2017, 254, 191-200.	2.6	14
296	A novel monodisperse metal nanoparticles anchored graphene oxide as Counter Electrode for Dye-Sensitized Solar Cells. Nano Structures Nano Objects, 2017, 12, 41-45.	1.9	46
297	Highly flexible TiO2/C nanofibrous film for flexible dye-sensitized solar cells as a platinum- and transparent conducting oxide-free flexible counter electrode. Electrochimica Acta, 2017, 255, 256-265.	2.6	26
298	Luminescent Spectral Conversion to Improve the Performance of Dyeâ€Sensitized Solar Cells. ChemPhysChem, 2017, 18, 3292-3308.	1.0	15
299	Preparation of hierarchical rutile TiO2 microspheres as scattering centers for efficient dye-sensitized solar cells. Electrochimica Acta, 2017, 255, 187-194.	2.6	24
300	Effect of fluorine substitution and position on phenylene spacer in carbazole based organic sensitizers for dye sensitized solar cells. Physical Chemistry Chemical Physics, 2017, 19, 28579-28587.	1.3	16
301	Polymer-Doped Molten Salt Mixtures as a New Concept for Electrolyte Systems in Dye-Sensitized Solar Cells. ACS Omega, 2017, 2, 6570-6575.	1.6	2
302	Highly electrocatalytic carbon black/copper sulfide composite counter electrodes fabricated by a facile method for quantum-dot-sensitized solar cells. Journal of Materials Chemistry A, 2017, 5, 23146-23157.	5.2	43
303	New Dâ€"Ï€â€"A dyes incorporating dithieno[3,2-b:2â€²,3â€²-d]pyrrole (DTP)-based Ï€-spacers for efficient dye-sensitized solar cells. RSC Advances, 2017, 7, 45807-45817.	1.7	15
304	Hydrothermally derived nanoporous titanium dioxide nanorods/nanoparticles and their influence in dye-sensitized solar cell as a photoanode. Chemical Physics Letters, 2017, 689, 19-25.	1.2	20
305	Effect of Donor Groups on the Performance of Cyclometalated Ruthenium Sensitizers in Dye-Sensitized Solar Cells. Inorganic Chemistry, 2017, 56, 13437-13445.	1.9	14
306	Molecular Engineering of Near Infrared Absorbing Thienopyrazine Double Donor Double Acceptor Organic Dyes for Dye-Sensitized Solar Cells. Journal of Organic Chemistry, 2017, 82, 12038-12049.	1.7	22
307	A supramolecular assembly of metal-free organic dye with zinc porphyrin chromophore for dye-sensitized solar cells. Dalton Transactions, 2017, 46, 15124-15129.	1.6	14
308	Surface NH 2 -rich nanoparticles: Solidifying ionic-liquid electrolytes and improving the performance of dye-sensitized solar cells. Journal of Power Sources, 2017, 370, 20-26.	4.0	6
309	Photovoltaic Properties and Long-Term Durability of Porphyrin-Sensitized Solar Cells with Silicon-Based Anchoring Groups. ACS Omega, 2017, 2, 6958-6967.	1.6	22
310	Counter electrodes in dye-sensitized solar cells. Chemical Society Reviews, 2017, 46, 5975-6023.	18.7	609

#	Article	IF	Citations
311	Novel highly active Pt/graphene catalyst for cathodes of Cu(II/I)-mediated dye-sensitized solar cells. Electrochimica Acta, 2017, 251, 167-175.	2.6	43
312	Ultra-long hierarchical bud-like branched TiO 2 nanowire arrays for dye-sensitized solar cells. Thin Solid Films, 2017, 640, 14-19.	0.8	8
313	New Insights into Organic Dye Regeneration Mechanism in Dye-Sensitized Solar Cells: A Theoretical Study. ACS Sustainable Chemistry and Engineering, 2017, 5, 8619-8629.	3.2	13
314	Recent advances and insights in dye-sensitized NiO photocathodes for photovoltaic devices. Journal of Materials Chemistry A, 2017, 5, 21077-21113.	5.2	90
315	TiO2 nanoparticle/nanofiberâ€“ZnO photoanode for the enhancement of the efficiency of dye-sensitized solar cells. RSC Advances, 2017, 7, 41738-41744.	1.7	22
316	Investigation of the dye-sensitized solar cell designed by a series of mixed metal oxides based on ZnAl-layered double hydroxide. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	21
317	Determination of unique power conversion efficiency of solar cell showing hysteresis in the I-V curve under various light intensities. Scientific Reports, 2017, 7, 11790.	1.6	38
318	Electrolyte containing lithium cation in squaraine-sensitized solar cells: interactions and consequences for performance and charge transfer dynamics. Physical Chemistry Chemical Physics, 2017, 19, 27670-27681.	1.3	11
319	Energy Band Transition and Voltage Compensation via Surface Stoichiometry Alteration in pâ€Type Dyeâ€Sensitized Solar Cells. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700258.	1.2	4
320	Highly uniform hierarchical Zn₂SnO₄ microspheres for the construction of high performance dye-sensitized solar cells. RSC Advances, 2017, 7, 43403-43409.	1.7	12
321	Probing photoinduced electron-transfer in grapheneâ€“dye hybrid materials for DSSC. Physical Chemistry Chemical Physics, 2017, 19, 27716-27724.	1.3	19
322	Increasing the Open-Circuit Voltage of Dye-Sensitized Solar Cells via Metal-Ion Coordination. Inorganic Chemistry, 2017, 56, 11168-11175.	1.9	36
323	Aggregated mesoporous nanoparticles for high surface area light scattering layer TiO2 photoanodes in Dye-sensitized Solar Cells. Scientific Reports, 2017, 7, 10341.	1.6	35
324	Self-oriented TiO₂ nanosheets in films for enhancement of electron transport in nanoporous semiconductor networks. Materials Chemistry Frontiers, 2017, 1, 2094-2102.	3.2	6
325	A Hydroxamic Acid Anchoring Group for Durable Dyeâ€Sensitized Solar Cells Incorporating a Cobalt Redox Shuttle. ChemSusChem, 2017, 10, 3347-3351.	3.6	35
326	Multidimensional Anodized Titanium Foam Photoelectrode for Efficient Utilization of Photons in Mesoscopic Solar Cells. Small, 2017, 13, 1701458.	5.2	12
327	Branched open-ended TiO2 nanotubes for improved efficiency of flexible dye-sensitized solar cells. Journal of Alloys and Compounds, 2017, 724, 1124-1133.	2.8	7
328	Organic dianchor dyes for dye-sensitized solar cells. Materials Today Energy, 2017, 5, 243-279.	2.5	31

#	Article	IF	Citations
329	Sequential series multijunction dye-sensitized solar cells (SSM-DSCs): 4.7 volts from a single illuminated area. Energy and Environmental Science, 2017, 10, 1764-1769.	15.6	19
330	Effect of structural optimization on the photovoltaic performance of dithieno[3,2-b:2â€²,3â€²-d]pyrrole-based dye-sensitized solar cells. RSC Advances, 2017, 7, 35598-35607.	1.7	8
331	Electron transport properties in dye-sensitized solar cells with {001} facet-dominant TiO₂ nanoparticles. Physical Chemistry Chemical Physics, 2017, 19, 22129-22140.	1.3	12
332	Facile synthesis of Î²-functionalized â€œpush-pullâ€• Zn(II) porphyrins for DSSC applications. Dyes and Pigments, 2017, 147, 56-66.	2.0	16
333	Insights into the limitations of solar cells sensitized with ruthenium dyes revealed in time-resolved spectroscopy studies. Physical Chemistry Chemical Physics, 2017, 19, 20463-20473.	1.3	15
334	Dyeâ‹¯TiO₂ interfacial structure of dye-sensitised solar cell working electrodes buried under a solution of I^{â^’}/I₃^{â^’} redox electrolyte. Nanoscale, 2017, 9, 11793-11805.	2.8	15
335	Alloyed PtNi counter electrodes for high-performance dye-sensitized solar cell applications. Journal of Alloys and Compounds, 2017, 725, 1272-1281.	2.8	19
336	Long-Term Stability of Dye-Sensitized Solar Cells Assembled with Cobalt Polymer Gel Electrolyte. Journal of Physical Chemistry C, 2017, 121, 17577-17585.	1.5	28
337	Boosting Efficiencies of Gel Polymer Electrolyte Based Dye Sensitized Solar Cells Using Mixed Cations. Materials Today: Proceedings, 2017, 4, 5092-5099.	0.9	14
338	Effect of 1-Butyl-3-Methylimidazolium Iodide on the Performance of Dye-Sensitized Solar Cell Having PEO-PVA Based Gel Polymer Electrolyte. Materials Today: Proceedings, 2017, 4, 5161-5168.	0.9	10
339	Lowâ€Recombination Thieno[3,4â€b]thiopheneâ€Based Photosensitizers for Dyeâ€Sensitized Solar Cells with Panchromatic Photoresponses. ChemSusChem, 2017, 10, 3624-3631.	3.6	10
340	Synthesis of a dibenzo-BODIPY-incorporating phenothiazine dye as a panchromatic sensitizer for dye-sensitized solar cells. New Journal of Chemistry, 2017, 41, 10367-10375.	1.4	26
341	Combined effect of alkaline cations and organic additives for iodide ion conducting gel polymer electrolytes to enhance efficiency in dye sensitized solar cells. Electrochimica Acta, 2017, 252, 208-214.	2.6	8
342	Strategic Design of Bacteriochlorins as Possible Dyes for Photovoltaic Applications. Journal of Physical Chemistry A, 2017, 121, 6660-6669.	1.1	11
343	A dual-functional NaLuF₄:Yb³⁺/Er³⁺ material for enhancing photon harvesting in dye-sensitized solar cells. RSC Advances, 2017, 7, 38506-38511.	1.7	7
344	Optimum Design of Dye-Sensitized Solar Module for Building-Integrated Photovoltaic Systems. ETRI Journal, 2017, 39, 859-865.	1.2	6
345	Influence of the Conditions of Sensitization on the Characteristics ofp-DSCs Sensitized with Asymmetric Squaraines. Journal of the Electrochemical Society, 2017, 164, H1099-H1111.	1.3	6
346	Organic Photosensitizers Incorporating Rigid Benzo[1,2-<i>b</i>:6,5-<i>b</i>â€²]dithiophene Segment for High-Performance Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 43739-43746.	4.0	24

#	Article	IF	Citations
347	Dye-sensitized solar cells with electrodeposited ZnO and Co(bpy)3 redox electrolyte: Investigation of mass transport in the electrolyte and interfacial charge recombination. Electrochimica Acta, 2017, 258, 591-598.	2.6	13
348	Improving the mass transport of copper-complex redox mediators in dye-sensitized solar cells by reducing the inter-electrode distance. Physical Chemistry Chemical Physics, 2017, 19, 32132-32142.	1.3	24
349	ZnO-based dye-sensitized solar cells: Effects of redox couple and dye aggregation. Electrochimica Acta, 2017, 258, 396-404.	2.6	24
350	Nanofillers in the electrolytes of dye-sensitized solar cells â€" A short review. Coordination Chemistry Reviews, 2017, 353, 58-112.	9.5	50
351	Synthesis and investigation of triphenylamine-based double branched organic dyes for p-type dye-sensitized solar cells. Molecular Crystals and Liquid Crystals, 2017, 653, 109-117.	0.4	4
352	Development of stable current collectors for large area dye-sensitized solar cells. Applied Surface Science, 2017, 423, 549-556.	3.1	8
353	First-Principles and Molecular Dynamics on Aâ€"D(Î)â€"A Type Sensitizers for Dye-Sensitized Solar Cells: Effects of Various Anchoring Groups on Electronic Coupling and Dye Aggregation. Journal of Physical Chemistry C, 2017, 121, 14019-14026.	1.5	18
354	Photovoltaic performances of type-II dye-sensitized solar cells based on catechol dye sensitizers: retardation of back-electron transfer by PET (photo-induced electron transfer). Materials Chemistry Frontiers, 2017, 1, 2243-2255.	3.2	20
355	Discovery of SÂ·Â·Â·Câ‰¡N Intramolecular Bonding in a Thiophenylcyanoacrylate-Based Dye: Realizing Charge Transfer Pathways and DyeÂ·Â·Â·TiO₂ Anchoring Characteristics for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 25952-25961.	4.0	20
356	Revealing the influence of Cyano in Anchoring Groups of Organic Dyes on Adsorption Stability and Photovoltaic Properties for Dye-Sensitized Solar Cells. Scientific Reports, 2017, 7, 4979.	1.6	30
357	Fe-quercetin coupled different shaped ZnO rods based dye sensitized solar cell applications. Solar Energy, 2017, 155, 233-245.	2.9	18
358	Influence of a Dâ€"Ï€â€"A system through a linked unit of double and triple bonds in a triarylene bridge for dye-sensitised solar cells. New Journal of Chemistry, 2017, 41, 8016-8025.	1.4	11
359	A novel porous Ti/TiN/Ti thin film as a working electrode for back-contact, monolithic and non-TCO dye-sensitized solar cells. Sustainable Energy and Fuels, 2017, 1, 851-858.	2.5	4
360	Asymmetric 8H-Thieno[2â€²,3â€²:4,5]thieno[3,2-<i>b</i>]thieno[2,3-<i>d</i>]pyrrole-Based Sensitizers: Synthesis and Application in Dye-Sensitized Solar Cells. Organic Letters, 2017, 19, 3711-3714.	2.4	29
361	The impact of adjusting auxiliary donors on the performance of dye-sensitized solar cells based on phenothiazine D-D-Ï€-A sensitizers. Dyes and Pigments, 2017, 146, 127-135.	2.0	26
362	Template-free TiO2 photoanodes for dye-sensitized solar cell via modified chemical route. Journal of Colloid and Interface Science, 2017, 488, 269-276.	5.0	17
363	Branched and linear alkoxy chains-wrapped push-pull porphyrins for developing efficient dye-sensitized solar cells. Dyes and Pigments, 2017, 137, 421-429.	2.0	34
364	An Unsymmetrical, Pushâ€"Pull Porphyrazine for Dyeâ€Sensitized Solar Cells. ChemPhotoChem, 2017, 1, 164-166.	1.5	17

#	Article	IF	Citations
365	Restrain recombination by spraying pyrolysis TiO2 on NiO film for quinoxaline-based p-type dye-sensitized solar cells. Journal of Colloid and Interface Science, 2017, 490, 380-390.	5.0	13
366	Synthesis of nanocrystalline TiO2 nanorods via hydrothermal method: An efficient photoanode material for dye sensitized solar cells. Journal of Crystal Growth, 2017, 468, 125-128.	0.7	25
367	Molecular engineering and sequential cosensitization for preventing the â€œtrade-offâ€• effect with photovoltaic enhancement. Chemical Science, 2017, 8, 2115-2124.	3.7	41
368	Highly electrocatalytic counter electrodes based on carbon black for cobalt(<scp>iii</scp>)/(<scp>ii</scp>)-mediated dye-sensitized solar cells. Journal of Materials Chemistry A, 2017, 5, 240-249.	5.2	57
369	A multifunctional photoanode made of titania submicrospheres and titania nanoparticles modified titania nanotube arrays on FTO glass for dye-sensitized solar cells. Materials Science in Semiconductor Processing, 2017, 57, 99-104.	1.9	10
370	Use of Carbon Nanotubes in Third-Generation Solar Cells. , 2017, , 201-249.		4
371	Cyclopentadithiophene bridged organic sensitizers with different auxiliary acceptor for high performance dye-sensitized solar cells. Dyes and Pigments, 2017, 137, 165-173.	2.0	19
372	Understanding the Role of Electron Donor in Truxene Dye Sensitized Solar Cells with Cobalt Electrolytes. ACS Sustainable Chemistry and Engineering, 2017, 5, 97-104.	3.2	29
373	Synthesis and characterization of novel thieno[3,2- b]thiophene based metal-free organic dyes with different heteroaromatic donor moieties as sensitizers for dye-sensitized solar cells. Dyes and Pigments, 2017, 136, 46-53.	2.0	38
374	Influence of Ionic Liquid Electrolytes on the Photovoltaic Performance of Dyeâ€Sensitized Solar Cells. Energy Technology, 2017, 5, 321-326.	1.8	24
375	Exploring the effect of vibronic contributions on light harvesting efficiency of NKX-2587 derivatives through vibrationally resolved electronic spectra. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 171, 406-414.	2.0	5
376	Photoanode/Electrolyte Interface Stability in Aqueous Dyeâ€Sensitized Solar Cells. Energy Technology, 2017, 5, 300-311.	1.8	68
377	Titanium dioxide nanorod diameter and layer porosity optimization by estimating electrical performance of dye and perovskite sensitized solar cell. Journal of Porous Materials, 2017, 24, 217-231.	1.3	6
378	Organic sensitizers with different thiophene units as conjugated bridges: molecular engineering and photovoltaics. Science China Chemistry, 2017, 60, 231-236.	4.2	13
379	Preparation and improvement in photovoltaic performance of dye-sensitized solar cells using carbon dioxide. Ionics, 2017, 23, 337-342.	1.2	0
380	Studies on solution processed Graphene-Nb2O5 nanocomposite based photoanode for dye-sensitized solar cells. Journal of Alloys and Compounds, 2017, 694, 401-407.	2.8	34
381	A review on triphenylamine (TPA) based organic hole transport materials (HTMs) for dye sensitized solar cells (DSSCs) and perovskite solar cells (PSCs): evolution and molecular engineering. Journal of Materials Chemistry A, 2017, 5, 1348-1373.	5.2	298
382	Synthesis and characterization of TiO2 photoanode treated by tetrabutyl titanate sol for DSSC application. Journal of Materials Science: Materials in Electronics, 2017, 28, 394-398.	1.1	2

#	Article	IF	Citations
383	Electrochemical growth of NiS nanoparticle thin film as counter electrode for quantum dot-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 332, 200-207.	2.0	21
384	Significance of Ï€-bridge contribution in pyrido[3,4-b]pyrazine featured Dâ€“Aâ€“Ï€â€“A organic dyes for dye-sensitized solar cells. Materials Chemistry Frontiers, 2017, 1, 181-189.	3.2	28
385	Optical and Photovoltaic Properties of Thieno[3,2-<i>b</i>]thiophene-Based Pushâ€“Pull Organic Dyes with Different Anchoring Groups for Dye-Sensitized Solar Cells. ACS Omega, 2017, 2, 9268-9279.	1.6	32
386	Influence of natural dye adsorption on the structural, morphological and optical properties of TiO₂based photoanode of dye-sensitized solar cell. Materials Science-Poland, 2017, 36, 93-101.	0.4	25
387	In-situ evaluation of dye adsorption on TiO2using QCM. EPJ Photovoltaics, 2017, 8, 80401.	0.8	0
388	First-Principles View on Photoelectrochemistry: Water-Splitting as Case Study. Inorganics, 2017, 5, 37.	1.2	22
389	Organic Dyes Containing Coplanar Dihexyl-Substituted Dithienosilole Groups for Efficient Dye-Sensitised Solar Cells. International Journal of Photoenergy, 2017, 2017, 1-14.	1.4	8
390	Nanostructured Semiconductor Materials for Dye-Sensitized Solar Cells. Journal of Nanomaterials, 2017, 2017, 1-31.	1.5	93
392	Chlorophyll as Photosensitizer in Dye-Sensitized Solar Cells. , 0, , .		12
393	Photoinduced Charge Transfer: From Photography to Solar Energy. Science Progress, 2017, 100, 212-230.	1.0	2
394	Hydrothermal Synthesis of NiS2 Cubes with High Performance as Counter Electrodes in Dye-Sensitized Solar Cells. International Journal of Electrochemical Science, 2017, 12, 4610-4618.	0.5	18
395	High energy and high voltage integrated photo-electrochemical double layer capacitor. Sustainable Energy and Fuels, 2018, 2, 968-977.	2.5	23
396	Solid-State Thin-Film Dye-Sensitized Solar Cell Co-Sensitized with Methylammonium Lead Bromide Perovskite. Bulletin of the Chemical Society of Japan, 2018, 91, 754-760.	2.0	14
397	Poly(3,4-ethylenedioxythiophene)/reduced graphene oxide composites as counter electrodes for high efficiency dye-sensitized solar cells. Applied Surface Science, 2018, 440, 8-15.	3.1	18
398	Graphene Oxide for DSSC, OPV and Perovskite Stability. , 2018, , 503-531.		3
399	Structural and Optical Properties of Nanocrystalline TiO₂ with Multiwalled Carbon Nanotubes and Its Photovoltaic Studies Using Ru(II) Sensitizers. ACS Omega, 2018, 3, 2743-2756.	1.6	74
400	Highly Efficient Bifacial Dye-Sensitized Solar Cells Employing Polymeric Counter Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 8611-8620.	4.0	35
401	Dual functional hetero-anthracene based single component organic ionic conductors as redox mediator cum light harvester for solid state photoelectrochemical cells. Journal of Materials Chemistry A, 2018, 6, 4868-4877.	5.2	37

#	Article	IF	Citations
402	Optimization of 3D ZnO brush-like nanorods for dye-sensitized solar cells. RSC Advances, 2018, 8, 9775-9782.	1.7	16
403	Ullazine Donorâ€"Ï€ bridgeâ€Acceptor Organic Dyes for Dyeâ€Sensitized Solar Cells. Chemistry - A European Journal, 2018, 24, 5939-5949.	1.7	18
404	Alkali-corrosion synthesis and excellent DSSC performance of novel jujube-like hierarchical TiO2 microspheres. Nanotechnology, 2018, 29, 175603.	1.3	8
405	Thermal and electrochemical characterization of a new poly (ethylene oxide) copolymerâ€"gel electrolyte containing polyvalent ion pair of cobalt (CoII/III) or iron (FeII/III). Journal of Solid State Electrochemistry, 2018, 22, 1591-1605.	1.2	5
406	Enhanced photoelectric conversion performance by morphology-controlled growth of Fe 3 O 4 in dye-sensitized solar cells. Materials Letters, 2018, 220, 16-19.	1.3	6
407	Influence of redox electrolyte on the device performance of phenothiazine based dye sensitized solar cells. New Journal of Chemistry, 2018, 42, 9045-9050.	1.4	32
408	Cuprophilia: Dye-sensitized solar cells with copper(I) dyes and copper(I)/(II) redox shuttles. Dyes and Pigments, 2018, 156, 410-416.	2.0	40
409	Balance between the charge transfer resistance and diffusion impedance in a CNT/Pt counter electrode for highly efficient liquid-junction photovoltaic devices. Organic Electronics, 2018, 58, 159-166.	1.4	17
410	1,1â€²-Bis(diphenylphosphino)ferrocene-appended nickel(<scp>ii</scp>) dithiolates as sensitizers in dye-sensitized solar cells. New Journal of Chemistry, 2018, 42, 9306-9316.	1.4	18
411	Effect of nanoporous In2O3 film fabricated on TiO2-In2O3 photoanode for photovoltaic performance via a sparking method. Journal of Solid State Electrochemistry, 2018, 22, 2531-2543.	1.2	5
412	Highly efficient quasi-solid-state dye-sensitized solar cells using polyethylene oxide (PEO) and poly(methyl methacrylate) (PMMA)-based printable electrolytes. Journal of Materials Chemistry A, 2018, 6, 10085-10094.	5.2	64
413	Material challenges for solar cells in the twenty-first century: directions in emerging technologies. Science and Technology of Advanced Materials, 2018, 19, 336-369.	2.8	162
414	Molecular Engineering of Zincâ€Porphyrin Sensitisers for pâ€Type Dyeâ€Sensitised Solar Cells. ChemPlusChem, 2018, 83, 711-720.	1.3	16
415	Mobilities of iodide anions in aqueous solutions for applications in natural dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2018, 20, 13038-13046.	1.3	22
416	Comprehensive control of voltage loss enables 11.7% efficient solid-state dye-sensitized solar cells. Energy and Environmental Science, 2018, 11, 1779-1787.	15.6	148
417	Enhanced Donorâ€"Ï€â€"Acceptor Character of a Porphyrin Dye Incorporating Naphthobisthiadiazole for Efficient Nearâ€Infrared Light Absorption. European Journal of Organic Chemistry, 2018, 2018, 2537-2547.	1.2	16
418	Enhancing the efficiency of dye-sensitized solar cells by hydrothermal post-treatment in acidic environment. Journal of Physics: Conference Series, 2018, 985, 012055.	0.3	0
419	Towards Longâ€Term Thermal Stability of Dyeâ€Sensitized Solar Cells Using Multiwalled Carbon Nanotubes. ChemPlusChem, 2018, 83, 682-690.	1.3	18

#	Article	IF	Citations
420	A Highâ€Voltage Molecularâ€Engineered Organic Sensitizerâ€"Iron Redox Shuttle Pair: 1.4â€…V DSSC and 3.3â€…V SSMâ€DSSC Devices. Angewandte Chemie - International Edition, 2018, 57, 5472-5476.	7.2	39
421	A Lowâ€Energyâ€Gap Thienochrysenocarbazole Dye for Highly Efficient Mesoscopic Titania Solar Cells: Understanding the Excited State and Charge Carrier Dynamics. ChemSusChem, 2018, 11, 1460-1466.	3.6	12
422	High-Performance Dye-Sensitized Solar Cells Based on Colloidâ€"Solution Deposition Planarized Fluorine-Doped Tin Oxide Substrates. ACS Applied Materials & Interfaces, 2018, 10, 15697-15703.	4.0	13
423	Enhanced photovoltaic performance of dye-sensitized solar cells based on a promising hybrid counter electrode of CoSe2/MWCNTs. Solar Energy, 2018, 167, 137-146.	2.9	32
424	Magnetic and optical effects in TiO2 based dye sensitized solar cells. AIP Conference Proceedings, 2018, , .	0.3	0
425	Preparation of titanium dioxide nanorods/nanoparticles via one-step hydrothermal method and their influence as a photoanode material in nanocrystalline dye-sensitized solar cell. Applied Surface Science, 2018, 449, 166-173.	3.1	15
426	Photoexcited Phenyl Ring Twisting in Quinodimethane Dyes Enhances Photovoltaic Performance in Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2018, 1, 1127-1139.	2.5	7
427	Performance enhancement effects of dispersed graphene oxide sponge nanofillers on the liquid electrolytes of dye-sensitized solar cells. Carbon, 2018, 132, 71-77.	5.4	6
428	NH2-rich silica nanoparticle as a universal additive in electrolytes for high-efficiency quasi-solid-state dye-sensitized solar cells and quantum dot sensitized solar cells. Electrochimica Acta, 2018, 262, 197-205.	2.6	20
429	Enhancement of quantum efficiency by co-adsorbing small julolidine dye and bulky triphenylamine dye in dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 356, 403-410.	2.0	7
430	Increasing the Efficiency of Organic Dyeâ€Sensitized Solar Cells over 10.3% Using Locally Ordered Inverse Opal Nanostructures in the Photoelectrode. Advanced Functional Materials, 2018, 28, 1706291.	7.8	36
431	Effects of ethynyl unit and electron acceptors on the performance of triazatruxene-based dye-sensitized solar cells. New Journal of Chemistry, 2018, 42, 4133-4141.	1.4	11
432	Interconnected molybdenum disulfide@tin disulfide heterojunctions with different morphologies: a type of enhanced counter electrode for dye-sensitized solar cells. CrystEngComm, 2018, 20, 1252-1263.	1.3	18
433	Pt-free counter electrode based on FeNi alloy/reduced graphene oxide in liquid junction photovoltaic devices. Journal of Alloys and Compounds, 2018, 742, 334-341.	2.8	25
434	Design of butterfly type organic dye sensitizers with double electron donors: The first principle study. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 196, 385-391.	2.0	9
435	Carbon-coated three-dimensional WS2 film consisting of WO3@WS2 core-shell blocks and layered WS2 nanostructures as counter electrodes for efficient dye-sensitized solar cells. Electrochimica Acta, 2018, 266, 130-138.	2.6	21
436	Gold leaf counter electrodes for dye-sensitized solar cells. Japanese Journal of Applied Physics, 2018, 57, 03EJ04.	0.8	8
437	Metal Complexes as Redox Shuttles in Dye-Sensitized Solar Cells Based on Electrodeposited ZnO: Tuning Recombination Kinetics and Conduction Band Energy. Journal of the Electrochemical Society, 2018, 165, H3115-H3121.	1.3	6

#	Article	IF	Citations
438	Effect of Sodium Hydroxide Pretreatment of NiO_x Cathodes on the Performance of Squaraineâ€Sensitized <i>p</i>â€Type Dyeâ€Sensitized Solar Cells. ChemistrySelect, 2018, 3, 1066-1075.	0.7	10
439	A combined experimental and computational investigation on pyrene based Dâ€“Ï€â€“A dyes. Physical Chemistry Chemical Physics, 2018, 20, 6264-6273.	1.3	11
440	Single-Layer TiO₂ Film Composed of Mesoporous Spheres for High-Efficiency and Stable Dye-Sensitized Solar Cells. ACS Sustainable Chemistry and Engineering, 2018, 6, 3411-3418.	3.2	27
441	Coupling of a Copper Dye with a Copper Electrolyte: A Fascinating Springboard for Sustainable Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2018, 1, 751-756.	2.5	50
442	Zn-Porphyrin propped with hydantoin anchor: synthesis, photophysics and electron injection/recombination dynamics. Physical Chemistry Chemical Physics, 2018, 20, 5117-5127.	1.3	16
443	Enhanced performance of flexible dye-sensitized solar cells using flexible Ag@ZrO2/C nanofiber film as low-cost counter electrode. Applied Surface Science, 2018, 440, 992-1000.	3.1	20
444	Metalâ€Free Sensitizers with a Perfluorohexyl Side Chain for Dyeâ€Sensitized Solar Cells: Properties Alien to Alkyl Chains. Asian Journal of Organic Chemistry, 2018, 7, 819-828.	1.3	1
445	Design and Synthesis of Novel Indole and Carbazole Based Organic Dyes for Dye Sensitized Solar Cells: Theoretical Studies by DFT/TDDFT. ChemistrySelect, 2018, 3, 1623-1628.	0.7	5
446	Nanoarchitectures in dye-sensitized solar cells: metal oxides, oxide perovskites and carbon-based materials. Nanoscale, 2018, 10, 4987-5034.	2.8	108
447	Porphyrin-sensitized solar cells: systematic molecular optimization, coadsorption and cosensitization. Chemical Communications, 2018, 54, 1811-1824.	2.2	138
448	Exploring the role of the spacers and acceptors on the triphenylamine-based dyes for dye-sensitized solar cells. International Journal of Hydrogen Energy, 2018, 43, 4691-4705.	3.8	24
449	New iodide-based amino acid molecules for more sustainable electrolytes in dye-sensitized solar cells. Green Chemistry, 2018, 20, 1059-1064.	4.6	5
450	Roomâ€Temperature Vapor Deposition of Cobalt Nitride Nanofilms for Mesoscopic and Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1703114.	10.2	29
451	Transition metal oxide nanostructures: premeditated fabrication and applications in electronic and photonic devices. Journal of Materials Science, 2018, 53, 4334-4359.	1.7	38
452	Efficiency improvement of dye-sensitized BaSnO3 solar cell based surface treatments. Electrochimica Acta, 2018, 261, 23-28.	2.6	29
453	DDQ as an effective p-type dopant for the hole-transport material X1 and its application in stable solid-state dye-sensitized solar cells. Journal of Energy Chemistry, 2018, 27, 413-418.	7.1	9
454	Cobalt-doped molybdenum disulfide in-situ grown on graphite paper with excellent electrocatalytic activity for triiodide evolution. Electrochimica Acta, 2018, 263, 328-337.	2.6	33
455	Cosensitization of Structurally Simple Porphyrin and Anthracene-Based Dye for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 2391-2399.	4.0	56

#	Article	IF	Citations
456	Hydrothermal preparation of hierarchical SnO2 microsphere for efficient dye-sensitized solar cells. Materials Chemistry and Physics, 2018, 207, 141-146.	2.0	9
457	A Stable Blue Photosensitizer for Color Palette of Dye-Sensitized Solar Cells Reaching 12.6% Efficiency. Journal of the American Chemical Society, 2018, 140, 2405-2408.	6.6	270
458	Dâ€"Ï€â€"A Dyes that Contain New Hydantoin Anchoring Groups for Dyeâ€Sensitized Solar Cells. Asian Journal of Organic Chemistry, 2018, 7, 458-464.	1.3	12
459	Near infrared harvesting dye-sensitized solar cells enabled by rare-earth upconversion materials. Dalton Transactions, 2018, 47, 8526-8537.	1.6	48
460	Nonâ€classical Design of Highâ€Efficiency Sensitizers for Dyeâ€Sensitized Solar Cells. Journal of the Chinese Chemical Society, 2018, 65, 511-522.	0.8	2
461	TiO2 nanotubes sensitized with CdSe quantum dots. Theoretical Chemistry Accounts, 2018, 137, 1.	0.5	2
462	Panchromatic cross-conjugated Ï€-bridge NIR dyes for DSCs. Physical Chemistry Chemical Physics, 2018, 20, 2438-2443.	1.3	3
463	Graphene aerogels for efficient energy storage and conversion. Energy and Environmental Science, 2018, 11, 772-799.	15.6	435
464	Effect of Ï€-linkers on phenothiazine sensitizers for dye-sensitized solar cells. Dyes and Pigments, 2018, 151, 263-271.	2.0	34
465	Î²-Substituted ZnII porphyrins as dyes for DSSC: A possible approach to photovoltaic windows. Coordination Chemistry Reviews, 2018, 358, 153-177.	9.5	85
466	Ground state geometries, UV/vis absorption spectra and charge transfer properties of triphenylamine-thiophenes based dyes for DSSCs: A TD-DFT benchmark study. Computational and Theoretical Chemistry, 2018, 1125, 39-48.	1.1	56
467	New-generation integrated devices based on dye-sensitized and perovskite solar cells. Energy and Environmental Science, 2018, 11, 476-526.	15.6	364
468	A 3D architecture composite of porous vanadium nitride nanoribbons and reduced graphene oxide as a high-efficiency counter electrode for dye-sensitized solar cells. RSC Advances, 2018, 8, 1083-1088.	1.7	14
469	Ellipsoidal TiO2 mesocrystals as bi-functional photoanode materials for dye-sensitized solar cells. Electrochimica Acta, 2018, 261, 365-374.	2.6	11
470	Aqueous Solution-Processed Multifunctional SnO2 Aggregates for Highly Efficient Dye-Sensitized Solar Cells. Industrial & Engineering Chemistry Research, 2018, 57, 7136-7145.	1.8	11
471	FeSn alloy/graphene as an electrocatalyst for the counter electrode of highly efficient liquid-junction photovoltaic devices. Journal of Alloys and Compounds, 2018, 754, 139-146.	2.8	10
472	Rational design of cost-effective dyes for high performance dye-sensitized cells in indoor light environments. Organic Electronics, 2018, 59, 69-76.	1.4	19
473	Direct Contact of Selective Charge Extraction Layers Enables High-Efficiency Molecular Photovoltaics. Joule, 2018, 2, 1108-1117.	11.7	291

#	Article	IF	Citations
474	Few layers graphene based conductive composite inks for Pt free stainless steel counter electrodes for DSSC. Solar Energy, 2018, 169, 67-74.	2.9	28
475	A Highâ€Voltage Molecularâ€Engineered Organic Sensitizerâ€“Iron Redox Shuttle Pair: 1.4â€…V DSSC and 3.3â€…V SSMâ€DSSC Devices. Angewandte Chemie, 2018, 130, 5570-5574.	1.6	28
476	Effects of Aqueous Electrolyte, Active Layer Thickness and Bias Irradiation on Charge Transfer Rates in Solar Cells Sensitized with Top Efficient Carbazole Dyes. Journal of Physical Chemistry C, 2018, 122, 8147-8158.	1.5	14
477	Graphene-Based Transparent Electrodes for Dye Sensitized Solar Cells. IOP Conference Series: Materials Science and Engineering, 2018, 305, 012019.	0.3	12
478	Bay Annulated Indigo as a New Chromophore for pâ€type Dyeâ€Sensitized Solar Cells. ChemPhotoChem, 2018, 2, 498-506.	1.5	12
479	Synthesis and characterization of carbon based counter electrode for dye sensitized solar cells (DSSCs) using organic precursor 2-2â€²Bipyridine (Bpy) as a carbon material. Journal of Alloys and Compounds, 2018, 748, 905-910.	2.8	32
480	Stable Radical Materials for Energy Applications. Annual Review of Chemical and Biomolecular Engineering, 2018, 9, 83-103.	3.3	70
481	Electric field effect on multi-anchoring molecular architectures: Electron transfer process and opto-electronic property. Journal of Molecular Liquids, 2018, 261, 123-136.	2.3	11
482	Charge transfer mechanics in transparent dye-sensitised solar cells under low concentration. Materials Letters, 2018, 222, 78-81.	1.3	9
483	D-A-Ï€-A dye-sensitizers with Cd (â…¡) or Cu (â…¡) complex as auxiliary electron acceptor. Optical Materials, 2018, 77, 140-147.	1.7	5
484	Bis(1,10-phenanthroline) copper complexes with tailored molecular architecture: from electrochemical features to application as redox mediators in dye-sensitized solar cells. Electrochimica Acta, 2018, 271, 180-189.	2.6	18
485	A Polymer Electrolyte for Dye-Sensitized Solar Cells Based on a Poly(Polyvinylidenefluoride-Co-Hexafluoropropylene)/Hydroxypropyl Methyl Cellulose Blend. Electronic Materials Letters, 2018, 14, 342-347.	1.0	8
486	Improved electron transfer of TiO2 based dye sensitized solar cells using Ge as sintering aid. Optik, 2018, 157, 134-140.	1.4	22
487	Graphene Oxide Sponge as Nanofillers in Printable Electrolytes in High-Performance Quasi-Solid-State Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 10955-10964.	4.0	30
488	Controlled Assembly of Porphyrinâ€MoS₂ Composite Nanosheets for Enhanced Photoelectrochemical Performance. Chemistry - an Asian Journal, 2018, 13, 1293-1296.	1.7	18
489	The preparation of hierarchical rutile TiO2 microspheres constructed with branched nanorods for efficient dye-sensitized solar cells. Journal of Alloys and Compounds, 2018, 747, 729-737.	2.8	14
490	Influence of TiO₂ Particle Size on Dye-Sensitized Solar Cells Employing an Organic Sensitizer and a Cobalt(III/II) Redox Electrolyte. Journal of Physical Chemistry C, 2018, 122, 7051-7060.	1.5	35
491	Bifunctional polyaniline electrode tailored hybridized solar cells for energy harvesting from sun and rain. Journal of Energy Chemistry, 2018, 27, 742-747.	7.1	11

#	Article	IF	Citations
492	Organic dyes containing fused acenes as building blocks: Optical, electrochemical and photovoltaic properties. Chinese Chemical Letters, 2018, 29, 289-292.	4.8	18
493	Incorporating transition metals (Ta/Co) into nitrogen-doped carbon as counter electrode catalysts for dye-sensitized solar cells. Carbon, 2018, 126, 145-155.	5.4	80
494	Organic dyes containing indolodithienopyrrole unit for dye-sensitized solar cells. Dyes and Pigments, 2018, 149, 16-24.	2.0	27
495	Synthesis and properties of new benzothiadiazole-based push-pull dyes for p-type dye sensitized solar cells. Dyes and Pigments, 2018, 148, 154-166.	2.0	27
496	Porphyrins as Multifunctional Interconnects in Networks of ZnO Nanoparticles and their Application in Dyeâ€Sensitized Solar Cells. ChemPhotoChem, 2018, 2, 213-222.	1.5	8
497	Insight into the effects of modifying chromophores on the performance of quinoline-based dye-sensitized solar cells. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 190, 23-32.	2.0	20
498	Multimolecular assemblies on high surface area metal oxides and their role in interfacial energy and electron transfer. Chemical Society Reviews, 2018, 47, 104-148.	18.7	78
499	Time-Resolved Laser Spectroscopy in Molecular Devices for Solar Energy Conversion. Green Chemistry and Sustainable Technology, 2018, , 385-432.	0.4	2
500	Liquid Dye-Sensitized Solar Cells. Green Chemistry and Sustainable Technology, 2018, , 109-149.	0.4	5
501	Hybrid Organic/Inorganic and Perovskite Solar Cells. Green Chemistry and Sustainable Technology, 2018, , 187-227.	0.4	2
502	Recent developments of graphene-TiO2 composite nanomaterials as efficient photoelectrodes in dye-sensitized solar cells: A review. Renewable and Sustainable Energy Reviews, 2018, 82, 103-125.	8.2	124
503	Enhancing the Energyâ€Conversion Efficiency of Solidâ€State Dyeâ€Sensitized Solar Cells with a Chargeâ€Transfer Complex based on 2,3â€Dichloroâ€5,6â€dicyanoâ€1,4â€benzoquinone. Energy Technology, 2018, 6, 752-758.	1.8	5
504	Nearâ€Infraredâ€Absorbing Metalâ€Free Organic, Porphyrin, and Phthalocyanine Sensitizers for Panchromatic Dyeâ€Sensitized Solar Cells. ChemSusChem, 2018, 11, 86-103.	3.6	135
505	Single and double branched organic dyes based on carbazole and red-absorbing cationic indolium for p-type dye-sensitized solar cells: A combined experimental and theoretical investigation. Dyes and Pigments, 2018, 149, 25-36.	2.0	18
506	Perovskite solar cells: Materials, configurations and stability. Renewable and Sustainable Energy Reviews, 2018, 82, 2471-2489.	8.2	109
507	A novel bilayer photoanode made of carbon nanotubes incorporated TiO2 nanorods and Mg2+ doped TiO2 nanorods for flexible dye-sensitized solar cells. Thin Solid Films, 2018, 646, 44-52.	0.8	14
508	Investigation of suitable binder combination and electrochemical charge transfer dynamics of vanadium carbide nanoparticles-based counter electrode in Pt-free dye-sensitized solar cell. Journal of Materials Science, 2018, 53, 4444-4455.	1.7	17
509	A large, ultra-black, efficient and cost-effective dye-sensitized solar module approaching 12% overall efficiency under 1000 lux indoor light. Journal of Materials Chemistry A, 2018, 6, 1995-2003.	5.2	71

#	Article	IF	Citations
510	A fiber-shaped solar cell showing a record power conversion efficiency of 10%. Journal of Materials Chemistry A, 2018, 6, 45-51.	5.2	93
511	Pt-coated cylindrical micropatterned honeycomb Petri dishes as an efficient TCO-free counter electrode in liquid junction photovoltaic devices. Journal of Power Sources, 2018, 376, 41-45.	4.0	13
512	Immobilization of Molecular Catalysts for Enhanced Redox Catalysis. ChemCatChem, 2018, 10, 1686-1702.	1.8	35
513	Rapid Microwave-Assisted Self-Assembly of a Carboxylic-Acid-Terminated Dye on a TiO₂ Photoanode. ACS Applied Energy Materials, 2018, 1, 202-210.	2.5	3
514	Improved conversion efficiency in dye-sensitized solar cells based on porphyrin dyes with dithieno[3,2-b:2â€²,3â€²- d]pyrrole donor. Dyes and Pigments, 2018, 150, 223-230.	2.0	20
515	Fabrication of stable dye-sensitized solar cell with hydrothermally synthesized titanium dioxide nanorods as a photoanode material. Journal of Materials Science: Materials in Electronics, 2018, 29, 3736-3743.	1.1	13
516	First principles study on interface between dual-channel anchorable organic dyes and TiO2 for dye-sensitized solar cells. Dyes and Pigments, 2018, 149, 908-914.	2.0	22
517	The bridged effect on the geometric, optoelectronic and charge transfer properties of the triphenylamineâ€“bithiophene-based dyes: a DFT study. Research on Chemical Intermediates, 2018, 44, 2009-2023.	1.3	32
518	Light Harvesting and Direct Electron Injection by Interfacial Charge-Transfer Transitions between TiO₂ and Carboxy-Anchor Dye LEG4 in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2018, 122, 8-15.	1.5	41
519	Effects of the bridge unit in Dâ€Ï€â€A architecture to improve light harvesting efficiency at DSSCs: A first principle theoretical study. Environmental Progress and Sustainable Energy, 2018, 37, 1403-1410.	1.3	6
520	Enhancing the efficiency of transparent dye-sensitized solar cells using concentrated light. Solar Energy Materials and Solar Cells, 2018, 175, 29-34.	3.0	91
521	A detailed evaluation of charge recombination dynamics in dye solar cells based on starburst triphenylamine dyes. Sustainable Energy and Fuels, 2018, 2, 303-314.	2.5	21
522	Carbon nanotubes: A potential material for energy conversion and storage. Progress in Energy and Combustion Science, 2018, 64, 219-253.	15.8	184
523	High efficiency ZnO-based dye-sensitized solar cells with a 1H,1H,2H,2H-perfluorodecyltriethoxysilane chain barrier for cutting on interfacial recombination. Applied Surface Science, 2018, 434, 1144-1152.	3.1	32
524	Additional donor bridge as a design approach for multi-anchoring dyes for highly efficient dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 352, 86-97.	2.0	19
525	Polyaniline-grafted silica nanocomposites-based gel electrolytes for quasi-solid-state dye-sensitized solar cells. Applied Surface Science, 2018, 427, 458-464.	3.1	21
527	Electrolyte tuning in dye-sensitized solar cells with <i>N</i>-heterocyclic carbene (NHC) iron(II) sensitizers. Beilstein Journal of Nanotechnology, 2018, 9, 3069-3078.	1.5	13
528	Effect of Surface Modification to Photoanodes in Alkoxysilyl Dye-Sensitized Solar Cells on the Photovoltaic Performance. Key Engineering Materials, 0, 790, 65-68.	0.4	0

#	Article	IF	Citations
529	Highly efficient stereoscopic phenothiazine dyes with different anchors for dye-sensitized solar cells. New Journal of Chemistry, 2018, 42, 18702-18707.	1.4	20
530	Tailoring the porosity of MOF-derived N-doped carbon electrocatalysts for highly efficient solar energy conversion. Journal of Materials Chemistry A, 2018, 6, 20170-20183.	5.2	25
531	Improved conversion efficiency of 10% for solid-state dye-sensitized solar cells utilizing P-type semiconducting CuI and multi-dye consisting of novel porphyrin dimer and organic dyes. Journal of Materials Chemistry A, 2018, 6, 22508-22512.	5.2	20
532	Benzothiadiazoleâ€"ethynylthiophenezoic acid as an acceptor of photosensitizer for efficient organic dye-sensitized solar cells. Journal of Materials Chemistry A, 2018, 6, 21493-21500.	5.2	17
534	Significant Influence of a Single Atom Change in Auxiliary Acceptor on Photovoltaic Properties of Porphyrin-Based Dye-Sensitized Solar Cells. Nanomaterials, 2018, 8, 1030.	1.9	9
535	Push-Pull Zinc Porphyrins as Light-Harvesters for Efficient Dye-Sensitized Solar Cells. Frontiers in Chemistry, 2018, 6, 541.	1.8	59
536	Electron Transfer and Dye Regeneration in Dye-Sensitized Solar Cells. , 2018, , .		0
537	Vapor-Deposited Tungsten Carbide Nano-Dendrites as Sulfur-Tolerant Electrocatalysts for Quantum Dot-Sensitized Solar Cells. Journal of the Electrochemical Society, 2018, 165, H954-H961.	1.3	0
539	Interfacial Modification of Photoanode|Electrolyte Interface Using Oleic Acid Enhancing the Efficiency of Dye-Sensitized Solar Cells. ACS Omega, 2018, 3, 18285-18294.	1.6	11
540	Effect of Germanium on the TiO₂ Photoanode for Dye Sensitized Solar Cell Applications. A Potential Sintering Aid. IOP Conference Series: Materials Science and Engineering, 2018, 358, 012015.	0.3	3
541	A Review on the Advancement of Ternary Alloy Counter Electrodes for Use in Dye-Sensitised Solar Cells. Metals, 2018, 8, 1080.	1.0	16
542	Electrochemical and Photoelectrochemical Properties of Nickel Oxide (NiO) With Nanostructured Morphology for Photoconversion Applications. Frontiers in Chemistry, 2018, 6, 601.	1.8	47
543	A theoretical study of fused thiophene modified anthracene-based organic dyes for dye-sensitized solar cell applications. New Journal of Chemistry, 2018, 42, 20163-20170.	1.4	21
544	Embedded Chromium Current Collectors for Efficient and Stable Large Area Dye Sensitized Solar Cells. Journal of the Electrochemical Society, 2018, 165, H1040-H1046.	1.3	6
546	Computational Prediction of Electronic and Photovoltaic Properties of Anthracene-Based Organic Dyes for Dye-Sensitized Solar Cells. International Journal of Photoenergy, 2018, 2018, 1-17.	1.4	2
547	Indium Zinc Oxide Electron Transport Layer for High-Performance Planar Perovskite Solar Cells. Journal of Physical Chemistry C, 2018, 122, 28491-28496.	1.5	10
548	Dye-Sensitized Solar Cells: Fundamentals and Current Status. Nanoscale Research Letters, 2018, 13, 381.	3.1	639
549	Effect of lithium iodide on the performance of dye sensitized solar cells (DSSC) using poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overl 531-537.	1.7	41

#	Article	IF	Citations
550	Molecular Engineering of Dâ^'Ï€â€"A Type of Blue-Colored Dyes for Highly Efficient Solid-State Dye-Sensitized Solar Cells through Co-Sensitization. ACS Applied Materials & Interfaces, 2018, 10, 35946-35952.	4.0	8
551	Titanium Dioxide Modifications for Energy Conversion: Learnings from Dye-Sensitized Solar Cells. , 2018, , .		3
552	Morphology-controlled growth of Co3S4 as highly efficient counter electrode catalysts for dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2018, 29, 19867-19872.	1.1	2
553	Modifying the Semiconductor/Electrolyte Interface in CuO p-Type Dye-Sensitized Solar Cells: Optimization of Iodide/Triiodide-Based Electrolytes. ACS Applied Energy Materials, 2018, 1, 6388-6400.	2.5	13
554	Effect of Flexible, Rigid Planar and Non-Planar Donors on the Performance of Dye-Sensitized Solar Cells. Journal of the Electrochemical Society, 2018, 165, H845-H860.	1.3	19
555	Tuning optical and electronic properties in novel carbazole photosensitizers for p-type dye-sensitized solar cells. Electrochimica Acta, 2018, 292, 805-816.	2.6	67
556	Recent Studies of Semitransparent Solar Cells. Coatings, 2018, 8, 329.	1.2	39
559	The researcher's guide to solid-state dye-sensitized solar cells. Journal of Materials Chemistry C, 2018, 6, 11903-11942.	2.7	87
560	Functionalization of boron-doped diamond with a pushâ€"pull chromophore <i>via</i> Sonogashira and CuAAC chemistry. RSC Advances, 2018, 8, 33276-33290.	1.7	13
561	Aggregation induced light harvesting of molecularly engineered D-A-Ï€-A carbazole dyes for dye-sensitized solar cells. Solar Energy, 2018, 174, 1085-1096.	2.9	31
562	Organic Dyes based on Tetraarylâ€1,4â€dihydropyrroloâ€[3,2â€<i>b</i>]pyrroles for Photovoltaic and Photocatalysis Applications with the Suppressed Electron Recombination. Chemistry - A European Journal, 2018, 24, 18032-18042.	1.7	28
563	Testing New Concepts in Solar Cells Sensitized with Indoline Dyesâ€"Alkoxysilyl Anchoring Group, Molecular Capping, and Cobalt-Based Electrolyte. Journal of Physical Chemistry C, 2018, 122, 25764-25775.	1.5	6
564	Effect on photovoltaic performance of Dâ€"Aâ€"Ï€â€"A motif polymer dye sensitizers by adopting the complex of metal with diamine as auxiliary electron acceptor. Journal of Materials Science: Materials in Electronics, 2018, 29, 21170-21179.	1.1	1
565	TiCl4-free 100.6â€¯cm2 active area dye-sensitized solar cells with â^¼8% power conversion efficiency. Solar Energy, 2018, 176, 320-324.	2.9	1
566	An Important Step toward More Efficient and Stable Dye-Sensitized Solar Cells. CheM, 2018, 4, 2267-2268.	5.8	4
567	Research Progress on Photosensitizers for DSSC. Frontiers in Chemistry, 2018, 6, 481.	1.8	202
568	Solar Module Using Dye-Sensitized Solar Cells. , 2018, , .		1
569	Dendrimer-based Nanoparticle for Dye Sensitized Solar Cells with Improved Efficiency. Journal of Nanomedicine & Nanotechnology, 2018, 09, .	1.1	9

#	Article	IF	Citations
570	Self-Assembled Cauliflower-Like CuS/ZnS@rGO Electrocatalyst with Cuprous Oxide as a Sacrificial Template for Dye-Sensitized Solar Cells with Excellent Photoelectric Properties and Electrochemical Stability. Journal of the Electrochemical Society, 2018, 165, H916-H926.	1.3	9
571	Photoactuated Properties of Acetylene-Congeners Non-Metallic Dyes and Molecular Design for Solar Cells. Materials, 2018, 11, 2027.	1.3	0
572	Rational Design of High-Efficiency Organic Dyes in Dye-Sensitized Solar Cells by Multiscale Simulations. Journal of Physical Chemistry C, 2018, 122, 25219-25228.	1.5	32
573	Importance of Compact Blocking Layers to the Performance of Dye-Sensitized Solar Cells under Ambient Light Conditions. ACS Applied Materials & Interfaces, 2018, 10, 38900-38905.	4.0	52
574	Study of the Influence of the I-Based Electrolyte Composition on the Photoconversion Properties of p-Type Dye-Sensitized Solar Cells. Journal of the Electrochemical Society, 2018, 165, H889-H896.	1.3	15
579	Effects of various heteroatom donor species on the photophysical, electrochemical and photovoltaic performance of dye-sensitized solar cells. Electrochimica Acta, 2018, 290, 303-311.	2.6	13
581	Poly(ionic liquid)s for dye-sensitized solar cells: A mini-review. European Polymer Journal, 2018, 108, 420-428.	2.6	46
582	Investigation on the Thickness Effect of TiO₂Photo- Anode on Dye-Sensitized Solar Cell Performance. Solid State Phenomena, 2018, 280, 76-80.	0.3	4
583	Dye-Sensitized Solar Cells with Electrospun Nanofiber Mat-Based Counter Electrodes. Materials, 2018, 11, 1604.	1.3	28
585	New Dâ€"Dâ€²â€"A Configured Dye for Efficient Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2018, 122, 22241-22251.	1.5	19
586	Designing Ecoâ€Sustainable Dyeâ€Sensitized Solar Cells by the Use of a Mentholâ€Based Hydrophobic Eutectic Solvent as an Effective Electrolyte Medium. Chemistry - A European Journal, 2018, 24, 17656-17659.	1.7	47
587	Molecular Photon Upconversion Solar Cells Using Multilayer Assemblies: Progress and Prospects. Journal of Physical Chemistry Letters, 2018, 9, 5810-5821.	2.1	76
588	Noble metal-free Co@N-doped carbon nanotubes as efficient counter electrode in dye-sensitized solar cells. Solar Energy, 2018, 174, 225-230.	2.9	20
589	Significantly improved performance of dye-sensitized solar cells by optimizing organic dyes with pyrrole as the isolation spacer and utilizing alkyl chain engineering. Journal of Materials Chemistry A, 2018, 6, 22256-22265.	5.2	20
590	Porous Carbon Materials as Supreme Metal-Free Counter Electrode for Dye-Sensitized Solar Cells. , 0, , .		1
592	Quinoxaline-Based Dual Donor, Dual Acceptor Organic Dyes for Dye-Sensitized Solar Cells. Applied Sciences (Switzerland), 2018, 8, 1421.	1.3	10
593	Resurgence of DSCs with copper electrolyte: a detailed investigation of interfacial charge dynamics with cobalt and iodine based electrolytes. Journal of Materials Chemistry A, 2018, 6, 22204-22214.	5.2	72
594	A perspective on using experiment and theory to identify design principles in dye-sensitized solar cells. Science and Technology of Advanced Materials, 2018, 19, 599-612.	2.8	3

#	Article	IF	Citations
595	Effects of the terminal donor unit in dyes with Dâ€“Dâ€“Ï€â€“A architecture on the regeneration mechanism in DSSCs: a computational study. Physical Chemistry Chemical Physics, 2018, 20, 23564-23577.	1.3	15
596	Performance of dye-sensitized solar cells employing polymer gel as an electrolyte and the influence of nano-porous materials as fillers. Materials Research Express, 2018, 5, 115305.	0.8	8
597	A Co-Sensitization Process for Dye-Sensitized Solar Cell: Enhanced Light-Harvesting Efficiency and Reduced Charge Recombination. IOP Conference Series: Materials Science and Engineering, 2018, 394, 042018.	0.3	5
598	Molecular engineering of ruthenium-diacetylide organometallic complexes towards efficient green dye for DSSC. Dyes and Pigments, 2018, 158, 326-333.	2.0	11
599	Remarkable Enhancement in the Photoelectric Performance of Uniform Flower-like Mesoporous Fe₃O₄ Wrapped in Nitrogen-Doped Graphene Networks. ACS Applied Materials & Interfaces, 2018, 10, 19564-19572.	4.0	48
600	Comparative study of edge-functionalized graphene nanoplatelets as metal-free counter electrodes for highly efficient dye-sensitized solar cells. Materials Today Energy, 2018, 9, 67-73.	2.5	34
601	Large Enhancement of Dye Sensitized Solar Cell Efficiency by Co-sensitizing Pyridyl- and Carboxylic Acid-Based Dyes. ACS Applied Energy Materials, 2018, 1, 2776-2783.	2.5	23
602	Tailoring the benzotriazole (BTZ) auxiliary acceptor in a D-Aâ€²-Ï€-A type sensitizer for high performance dye-sensitized solar cells (DSSCs). Dyes and Pigments, 2018, 158, 195-203.	2.0	15
603	Electrospinning synthesis of high performance carbon nanofiber coated flower-like MoS2 nanosheets for dye-sensitized solar cells counter electrode. Electrochimica Acta, 2018, 280, 94-100.	2.6	44
604	Effects of meta or para connected organic dyes for dye-sensitized solar cell. Dyes and Pigments, 2018, 158, 165-174.	2.0	40
605	Femtosecond Fluorescence Upconversion Study of a Naphthalimideâ€“Bithiopheneâ€“Triphenylamine Pushâ€“Pull Dye in Solution. Journal of Physical Chemistry A, 2018, 122, 5533-5544.	1.1	13
606	Rational Design of Metal Oxideâ€“Based Cathodes for Efficient Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2018, 8, 1800172.	10.2	30
607	D-Ï€-A-Ï€-D type thiazolo[5,4-d]thiazole-core organic chromophore and graphene modified PEDOT:PSS buffer layer for efficient bulk heterojunction organic solar cells. Solar Energy, 2018, 171, 366-373.	2.9	29
608	Rational design criteria for Dâ€“Ï€â€“A structured organic and porphyrin sensitizers for highly efficient dye-sensitized solar cells. Journal of Materials Chemistry A, 2018, 6, 14518-14545.	5.2	256
609	Dye-Sensitized Solar Cells. , 2018, , 270-281.		20
610	Improving the power conversion efficiency of solid state dye sensitized solar cells with a N-oxoammonium salt: 2,2,6,6-Tetramethyl-1-oxopiperidinebromide. Solar Energy, 2018, 170, 1001-1008.	2.9	4
611	Transparent ternary alloy counter electrodes for high-efficiency bifacial dye-sensitized solar cells. Solar Energy, 2018, 170, 762-768.	2.9	22
612	First Evidence of Electrode Reconstruction in Mesoporous NiO After Operation as Photocathode of Dyeâ€Sensitized Solar Cells. ChemistrySelect, 2018, 3, 6729-6736.	0.7	8

#	Article	IF	Citations
613	Evolution of the Excitedâ€State Dynamics of 2<i>H</i>â€Dinaphthopentacene Based Dyes in Dyeâ€Sensitized Solar Cells: From Chromophoric Core to Ultimate Dye. Solar Rrl, 2018, 2, 1800119.	3.1	3
614	Recent advances in copper complexes for electrical/light energy conversion. Coordination Chemistry Reviews, 2018, 375, 514-557.	9.5	159
615	Hybrid TiO2-Graphene nanoribbon photoanodes to improve the photoconversion efficiency of dye sensitized solar cells. Journal of Power Sources, 2018, 396, 566-573.	4.0	38
616	Pyrazine-incorporating panchromatic sensitizers for dye sensitized solar cells under one sun and dimÂlight. Journal of Materials Chemistry A, 2018, 6, 13778-13789.	5.2	73
617	Dyeâ€Sensitized Solar Cell Based on Novel Starâ€Shaped Ruthenium Polypyridyl Sensitizer: New Insight into the Relationship between Molecular Designing and Its Outstanding Charge Carrier Dynamics. ChemistrySelect, 2018, 3, 6821-6829.	0.7	10
618	TiO2 nanofiber photoelectrochemical cells loaded with sub-12Ânm AuNPs: Size dependent performance evaluation. Materials Today Energy, 2018, 9, 254-263.	2.5	23
619	Performance enhancement of dye-sensitized solar cells via cosensitization of ruthenizer Z907 and organic sensitizer SQ2. International Journal of Energy Research, 2018, 42, 3957-3965.	2.2	34
620	Physical Insight on Mechanism of Photoinduced Charge Transfer in Multipolar Photoactive Molecules. Scientific Reports, 2018, 8, 10089.	1.6	14
621	Study on bridging moiety effect on asymmetric double Dâ€"Ïâ€"A dyes. Organic Electronics, 2018, 62, 598-609.	1.4	13
622	Electrochemically Synthesized Mesoscopic Nickel Oxide Films as Photocathodes for Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2018, 1, 4178-4185.	2.5	10
623	A review on applications of Cu2ZnSnS4 as alternative counter electrodes in dye-sensitized solar cells. AIP Advances, 2018, 8, .	0.6	16
624	Promising pyridinium ylide based anchors towards high-efficiency dyes for dye-sensitized solar cells applications: Insights from theoretical investigations. Electrochimica Acta, 2018, 283, 1798-1805.	2.6	33
625	Efficient Dye-Sensitized Solar Cells with Voltages Exceeding 1 V through Exploring Tris(4-alkoxyphenyl)amine Mediators in Combination with the Tris(bipyridine) Cobalt Redox System. ACS Energy Letters, 2018, 3, 1929-1937.	8.8	22
626	A comparative study of Be and Mg ions adsorbed on TiO2 photoelectrodes on interfacial charge recombination in solar cells. Journal of Industrial and Engineering Chemistry, 2018, 65, 188-194.	2.9	5
627	Anisotropic One-Dimensional Aqueous Polymer Gel Electrolyte for Photoelectrochemical Devices: Improvement in Hydrophobic TiO₂â€"Dye/Electrolyte Interface. ACS Applied Energy Materials, 2018, 1, 3665-3673.	2.5	34
628	Charge-separated sensitizers with enhanced intramolecular charge transfer for dye-sensitized solar cells: Insight from structure-performance relationship. Organic Electronics, 2018, 61, 35-45.	1.4	21
629	Effects of Introducing Methoxy Groups into the Ancillary Ligands in Bis(diimine) Copper(I) Dyes for Dye-Sensitized Solar Cells. Inorganics, 2018, 6, 40.	1.2	14
630	The Versatile SALSAC Approach to Heteroleptic Copper(I) Dye Assembly in Dye-Sensitized Solar Cells. Inorganics, 2018, 6, 57.	1.2	20

#	Article	IF	Citations
631	The Effect of Illumination Direction and Temperature on Dye-Sensitized Solar Cells with Viscous Cobalt Complex-Based Electrolytes. Inorganics, 2018, 6, 60.	1.2	6
632	Ruthenium Complexes as Sensitizers in Dye-Sensitized Solar Cells. Inorganics, 2018, 6, 52.	1.2	98
633	Fused Fluorenylindolenine-Donor-Based Unsymmetrical Squaraine Dyes for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 26335-26347.	4.0	24
634	Theoretical Insights into D-D-Ï€-A Sensitizers Employing <i>N</i>-Annulated Perylene for Dye-Sensitized Solar Cells. Journal of Physical Chemistry A, 2018, 122, 6328-6342.	1.1	21
635	Hot Charge Carrier Extraction from Semiconductor Quantum Dots. Journal of Physical Chemistry C, 2018, 122, 17586-17600.	1.5	33
636	Ionic-Liquid-like Polysiloxane Electrolytes for Highly Stable Solid-State Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2018, 1, 4106-4114.	2.5	12
637	Copper Complexes with Tetradentate Ligands for Enhanced Charge Transport in Dye-Sensitized Solar Cells. Inorganics, 2018, 6, 53.	1.2	36
638	Correlating cobalt redox couples to photovoltage in the dye-sensitized solar cell. Dalton Transactions, 2018, 47, 11942-11952.	1.6	21
639	Synthesis of new di-anchoring organic sensitizer based on quinoxaline acceptor for dye-sensitized solar cells. Tetrahedron Letters, 2018, 59, 3322-3325.	0.7	8
640	The role of ethanol-water solvent mixtures in N719 sensitization of electrodeposited ZnO nanorods. Journal of Solid State Electrochemistry, 2018, 22, 2779-2787.	1.2	1
641	New pyran-based dyes as efficient sensitizers of p-type dye-sensitized solar cells. Solar Energy, 2018, 169, 237-241.	2.9	18
642	The impact of non-uniform photogeneration on mass transport in dye-sensitised solar cells. Journal of Materials Chemistry A, 2018, 6, 10264-10276.	5.2	11
643	The Influence of Materials of Electrodes of Sensitized Solar Cells on Their Capacitive and Electrical Characteristics. Russian Physics Journal, 2018, 61, 196-202.	0.2	3
644	Influence of graphite-coating methods on the DSSC performance. Optik, 2018, 174, 40-45.	1.4	14
645	Single Crystalline-like and Nanostructured TiO2Photoanodes for Dye Sensitized Solar Cells Synthesized by Reactive Magnetron Sputtering at Glancing Angle. Journal of Physical Chemistry C, 2018, 122, 20661-20668.	1.5	10
646	Electronâ€Affinityâ€Triggered Variations on the Optical and Electrical Properties of Dye Molecules Enabling Highly Efficient Dyeâ€Sensitized Solar Cells. Angewandte Chemie, 2018, 130, 14321-14324.	1.6	26
647	Indenoquinaldineâ€Based Unsymmetrical Squaraine Dyes for Nearâ€Infrared Absorption: Investigating the Steric and Electronic Effects in Dyeâ€Sensitized Solar Cells. Chemistry - A European Journal, 2018, 24, 16368-16378.	1.7	7
648	Efficient and Stable Dye-Sensitized Solar Cells Based on a Tetradentate Copper(II/I) Redox Mediator. ACS Applied Materials & Interfaces, 2018, 10, 30409-30416.	4.0	31

#	Article	IF	Citations
649	Electronâ€Affinityâ€Triggered Variations on the Optical and Electrical Properties of Dye Molecules Enabling Highly Efficient Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2018, 57, 14125-14128.	7.2	56
650	Synthesis of carboxylated chlorophyll derivatives and their activities in dye-sensitized solar cells. Tetrahedron, 2018, 74, 4078-4085.	1.0	23
651	Template- and surfactant-free synthesis of mesoporous TiO2 spheres with hollow core-shell structure for dye-sensitized solar cells. Advanced Powder Technology, 2018, 29, 2161-2167.	2.0	7
652	Iodine binding with thiophene and furan based dyes for DSCs. Physical Chemistry Chemical Physics, 2018, 20, 17859-17870.	1.3	15
653	Ag@TiO₂Nanowires-Loaded Dye-Sensitized Solar Cells and Their Effect on the Various Performance Parameters of DSSCs. Journal of the Electrochemical Society, 2018, 165, H500-H509.	1.3	7
654	Application of Graphene and Graphene Derivatives/Oxide Nanomaterials for Solar Cells. , 2018, , 395-437.		4
655	Carrier Dynamics of Dye Sensitized-TiO₂ in Contact with Different Cobalt Complexes in the Presence of Tri(p-anisyl)amine Intermediates. Journal of Physical Chemistry C, 2018, 122, 14345-14354.	1.5	3
656	Electrochemically synthesized nanostructured iron carbide/carbon composite as a low-cost counter electrode for dye-sensitized solar cells. Journal of Power Sources, 2018, 396, 213-219.	4.0	22
657	Solar Redox Flow Batteries: Mechanism, Design, and Measurement. Advanced Sustainable Systems, 2018, 2, 1800031.	2.7	29
658	Systematic optimization of the substituents on the phenothiazine donor of doubly strapped porphyrin sensitizers: an efficiency over 11% unassisted by any cosensitizer or coadsorbent. Journal of Materials Chemistry A, 2019, 7, 20854-20860.	5.2	68
659	Printed single-walled carbon-nanotubes-based counter electrodes for dye-sensitized solar cells with copper-based redox mediators. Semiconductor Science and Technology, 2019, 34, 105001.	1.0	17
660	Role of Electronic Relaxation in the Injection Process of Organic Pushâ€“Pull Dyes in Complete Dye-Sensitized Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 5076-5081.	2.1	10
661	SnO₂ Transparent Printing Pastes from Powders for Photon Conversion in SnO₂â€Based Dyeâ€Sensitized Solar Cells. Chemistry - A European Journal, 2019, 25, 14205-14213.	1.7	9
662	A facile method to produce TiO2 nanorods for high-efficiency dye solar cells. Journal of Power Sources, 2019, 438, 227012.	4.0	23
663	Developing photocathode materials for p-type dye-sensitized solar cells. Journal of Materials Chemistry C, 2019, 7, 10409-10445.	2.7	47
664	Carbon nanotubes in hybrid photovoltaics: dye sensitized and perovskites solar cells. , 2019, , 201-248.		1
665	Automated energy storage using carbon nanostructured materials. , 2019, , 395-409.		0
666	Synthesis of Poly[N-(2-ethylhexyl)-3,6-carbazole-<i>alt</i>-aniline] Copolymer and Its Potential as Hole-Transporting Material to Solid-State Dye-Sensitized Solar Cells. Molecular Crystals and Liquid Crystals, 2019, 678, 53-61.	0.4	0

#	Article	IF	Citations
667	Pt-free counter electrode based on orange fiber-derived carbon embedded cobalt sulfide nanoflakes for dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 383, 111977.	2.0	16
668	Effect of long alkyl chains of aniline donor on the photovoltaic performance of Dâ€Ï€â€A zinc porphyrin for dyeâ€sensitized solar cells. Journal of the Chinese Chemical Society, 2019, 66, 1134-1140.	0.8	1
669	Stability improvement by incorporating poly(Îµ-caprolactone) in dimethylformamide-potassium iodide liquid electrolyte for dye-sensitized solar cell. Journal of Solid State Electrochemistry, 2019, 23, 2411-2421.	1.2	5
670	Non-aqueous preparation of anatase TiO2 hollow microspheres for efficient dye-sensitized solar cells. Advanced Powder Technology, 2019, 30, 2408-2415.	2.0	12
671	The sensitization effect and microscopic essence of different additives on the electronic structure of nanocrystalline TiO2 in dye-sensitized solar cell. Solar Energy, 2019, 189, 372-384.	2.9	2
672	Review on simulation of currentâ€"voltage characteristics of dye-sensitized solar cells. Journal of Industrial and Engineering Chemistry, 2019, 80, 516-526.	2.9	16
673	Electronic structure of surface complexes between CeO2 and benzene derivatives: A comparative experimental and DFT study. Materials Chemistry and Physics, 2019, 236, 121816.	2.0	4
674	Modulation of Acceptor Position in Organic Sensitizers: The Optimization of Intramolecular and Interfacial Charge Transfer Processes. ACS Applied Materials & Interfaces, 2019, 11, 27648-27657.	4.0	20
675	Switching on optical properties of D-Ï€-A DSSC sensitizers from Ï€-spacers towards machine learning. Solar Energy, 2019, 188, 1189-1200.	2.9	21
676	1,10 phenanthroline 5,6 diol metal complex (Cu, Fe) sensitized solar cells: A cocktail dye effect. Journal of Power Sources, 2019, 435, 226825.	4.0	21
677	Dye-Sensitized Solar Cells for Efficient Solar and Artificial Light Conversion. ACS Sustainable Chemistry and Engineering, 2019, 7, 13464-13470.	3.2	33
678	High stability arc-evaporated carbon counter electrodes in a dye sensitized solar cell based on inorganic and organic redox mediators. Diamond and Related Materials, 2019, 97, 107451.	1.8	10
679	Three-component one-pot reaction for molecular engineering of novel cost-effective highly rigid quinoxaline-based photosensitizers for highly efficient DSSCs application: Remarkable photovoltage. Dyes and Pigments, 2019, 171, 107683.	2.0	17
680	Extraction method dependent performance of bio-based dye-sensitized solar cells (DSSCs). Materials Research Express, 2019, 6, 095512.	0.8	16
681	Theoretical design and characterization of NIR porphyrin-based sensitizers for applications in dye-sensitized solar cells. Solar Energy, 2019, 188, 1031-1040.	2.9	15
682	Ru(II) porphyrins as sensitizers for DSSCs: Axial vs. peripheral carboxylate anchoring group. Journal of Porphyrins and Phthalocyanines, 2019, 23, 870-880.	0.4	1
683	A near-infrared thienyl-BODIPY co-sensitizer for high-efficiency dye-sensitized solar cells. Sustainable Energy and Fuels, 2019, 3, 2983-2989.	2.5	12
684	Quantum Dot Based Solar Cells: Role of Nanoarchitectures, Perovskite Quantum Dots, and Chargeâ€Transporting Layers. ChemSusChem, 2019, 12, 4724-4753.	3.6	29

#	Article	IF	Citations
685	Transparent 3 nm-thick MoS2 counter electrodes for bifacial dye-sensitized solar cells. Journal of Industrial and Engineering Chemistry, 2019, 80, 106-111.	2.9	15
686	Effect of structural engineering of Ï€-spacers on anti-aggregation of Dâ€"Aâ€"Ï€â€"A dyes. Journal of Materials Chemistry C, 2019, 7, 10379-10388.	2.7	25
687	Investigations into structure-property relationships of novel Ru(II) dyes with N,Nâ€²-Diethyl group in ancillary ligand for dye-sensitized solar cells. Dyes and Pigments, 2019, 171, 107754.	2.0	8
688	DFT Study of the CNS Ligand Effect on the Geometry, Spin-State, and Absorption Spectrum in Ruthenium, Iron, and Cobalt Quaterpyridine Complexes. ACS Omega, 2019, 4, 10991-11003.	1.6	13
689	Synthesis, characterization, and dye-sensitized solar cell fabrication using potato starchâ€" and potato starch nanocrystalâ€"based gel electrolytes. Ionics, 2019, 25, 6035-6042.	1.2	15
690	Metal Sulphides and Their Carbon Supported Composites as Platinum-Free Counter Electrodes in Dye-Sensitized Solar Cells: A Review. Materials, 2019, 12, 1980.	1.3	17
691	Bi-layer photoanodes with superior charge collection ability and diffusion length of sub-layer nanostructures for the fabrication of high efficiency dye-sensitized solar cells. Electrochimica Acta, 2019, 319, 339-348.	2.6	18
692	Design of WSe₂/MoS₂ Heterostructures as the Counter Electrode to Replace Pt for Dye-Sensitized Solar Cell. ACS Sustainable Chemistry and Engineering, 2019, 7, 13195-13205.	3.2	57
693	Electric-field assisted spray technique for controlled pore filling of nanostructured films: device applications. Journal of Materials Science: Materials in Electronics, 2019, 30, 13567-13575.	1.1	4
694	Exploring Overall Photoelectric Applications by Organic Materials Containing Symmetric Donor Isomers. Chemistry of Materials, 2019, 31, 8810-8819.	3.2	12
695	High-Efficiency Bifacial Dye-Sensitized Solar Cells for Application under Indoor Light Conditions. ACS Applied Materials & Interfaces, 2019, 11, 42780-42789.	4.0	58
696	Boosting the Performance of Environmentally Friendly Quantum Dotâ€Sensitized Solar Cells over 13% Efficiency by Dual Sensitizers with Cascade Energy Structure. Advanced Materials, 2019, 31, e1903696.	11.1	51
697	Synthesis of Lowâ€Viscosity Ionic Liquids for Application in Dyeâ€Sensitized Solar Cells. Chemistry - an Asian Journal, 2019, 14, 4201-4206.	1.7	21
698	Surface Silylation of Hybrid Benzidinium Lead Perovskite and its Influence on the Photocatalytic Activity. ChemCatChem, 2019, 11, 6384-6390.	1.8	6
699	Structural, Morphological and Electrochemical Characterization of Hydrothermally Fabricated PdNiCo and PdNiCo-rGO Alloys for Use as Counter Electrode Catalysts in DSSC. Materials, 2019, 12, 3256.	1.3	3
700	Molecular Engineering of Quinodimethane-based Dyes with Different Anchor Groups for Dye Sensitized Solar Cells (DSSCs). Journal of Physics: Conference Series, 2019, 1298, 012025.	0.3	1
701	Polyethylene glycolâ€based ultrasonicâ€assisted enzymatic extraction, characterization, and antioxidant activity in vitro and in vivo of polysaccharides from <i>Lonicerae japonica</i> leaves. Food Science and Nutrition, 2019, 7, 3452-3462.	1.5	9
704	Interfacial Charge Transfer Transitions in Colloidal TiO₂ Nanoparticles Functionalized with Salicylic acid and 5-Aminosalicylic acid: A Comparative Photoelectron Spectroscopy and DFT Study. Journal of Physical Chemistry C, 2019, 123, 29057-29066.	1.5	17

#	Article	IF	Citations
705	Thermally Stable Inorganic CsPbI₂Br Mesoscopic Metal Halide Perovskite Solar Submodules. ACS Applied Materials & Interfaces, 2019, 11, 43066-43074.	4.0	21
706	Synthesis, Characterization and Optimization of Hydrothermally Fabricated Binary Palladium Alloys PdNix for Use as Counter Electrode Catalysts in Dye Sensitized Solar Cells. Materials, 2019, 12, 3116.	1.3	5
707	Aligned carbon nanotube/carbon (CNT/C) composites with exceptionally high electrical conductivity at elevated temperature to 400 Â°C. Materials Research Express, 2019, 6, 116302.	0.8	10
708	Functional panchromatic BODIPY dyes with near-infrared absorption: design, synthesis, characterization and use in dye-sensitized solar cells. Beilstein Journal of Organic Chemistry, 2019, 15, 1758-1768.	1.3	8
709	Semi-Transparent and Stable Solar Cells for Building Integrated Photovoltaics: The Confinement Effects of the Polymer Gel Electrolyte inside Mesoporous Films. ACS Omega, 2019, 4, 15097-15100.	1.6	3
710	Ultrasonic spray pyrolysis-assisted preparation of CoS for stable, uniform and efficient counter electrode in dye-sensitized solar cells. Solar Energy, 2019, 189, 398-403.	2.9	6
711	Improved long-term stability of dye-sensitized solar cell employing PMA/PVAc based gel polymer electrolyte. Optical Materials, 2019, 96, 109349.	1.7	19
712	TiO2 Coated ZnO Nanorods by Mist Chemical Vapor Deposition for Application as Photoanodes for Dye-Sensitized Solar Cells. Nanomaterials, 2019, 9, 1339.	1.9	29
713	A New Series of EDOT Based Co-Sensitizers for Enhanced Efficiency of Cocktail DSSC: A Comparative Study of Two Different Anchoring Groups. Molecules, 2019, 24, 3554.	1.7	27
714	Screen printed tin selenide films used as the counter electrodes in dye sensitized solar cells. Solar Energy, 2019, 190, 28-33.	2.9	24
715	Physical properties of quasi-solid-state polymer electrolytes for dye-sensitised solar cells: A characterisation review. Solar Energy, 2019, 190, 434-452.	2.9	31
716	Improving of the Photovoltaic Characteristics of Dye-Sensitized Solar Cells Using a Photoelectrode with Electrospun Porous TiO2 Nanofibers. Nanomaterials, 2019, 9, 95.	1.9	18
717	Lindqvist polyoxometalates as electrolytes in p-type dye sensitized solar cells. Sustainable Energy and Fuels, 2019, 3, 96-100.	2.5	13
718	Regulation of dithiafulvene-based molecular shape and aggregation on TiO₂ for high efficiency dye-sensitized solar cells. Journal of Materials Chemistry C, 2019, 7, 1974-1981.	2.7	15
719	Improving the light harvesting and colour range of methyl ammonium lead tri-bromide (MAPbBr₃) perovskite solar cells through co-sensitisation with organic dyes. Chemical Communications, 2019, 55, 35-38.	2.2	16
720	Theoretical study on the influence of electric field direction on the photovoltaic performance of aryl amine organic dyes for dye-sensitized solar cells. New Journal of Chemistry, 2019, 43, 651-661.	1.4	7
721	Ab Initio Modeling of Solar Cell Dye Sensitizers: The Hunt for Red Photons Continues. European Journal of Inorganic Chemistry, 2019, 2019, 743-750.	1.0	7
722	Synthesis of dipyrrolopyrazine-based sensitizers with a new Ï€-bridge end-capped donorâ€“acceptor framework for DSSCs: a combined experimental and theoretical investigation. New Journal of Chemistry, 2019, 43, 3017-3025.	1.4	13

#	Article	IF	Citations
723	Boosting the efficiency of aqueous solar cells: A photoelectrochemical estimation on the effectiveness of TiCl4 treatment. Electrochimica Acta, 2019, 302, 31-37.	2.6	81
724	Hierarchical TiO₂ microspheres composed with nanoparticle-decorated nanorods for the enhanced photovoltaic performance in dye-sensitized solar cells. RSC Advances, 2019, 9, 3056-3062.	1.7	5
725	Emerging Design Principles for Enhanced Solar Energy Utilization with Singlet Fission. Journal of Physical Chemistry C, 2019, 123, 3923-3934.	1.5	59
726	Role of co-sensitization in dye-sensitized and quantum dot-sensitized solar cells. SN Applied Sciences, 2019, 1, 1.	1.5	25
727	Solution-Processed Anatase Titania Nanowires: From Hyperbranched Design to Optoelectronic Applications. Accounts of Chemical Research, 2019, 52, 633-644.	7.6	16
728	p-Type dye-sensitized solar cells based on pseudorotaxane mediated charge-transfer. Faraday Discussions, 2019, 215, 393-406.	1.6	8
729	The Applications of Polymers in Solar Cells: A Review. Polymers, 2019, 11, 143.	2.0	146
730	Indolo[3,2-<i>b</i>]indole donor-based Dâ€“Ï€â€“A dyes for DSCs: investigating the role of Ï€-spacers towards recombination. New Journal of Chemistry, 2019, 43, 862-873.	1.4	30
731	Synthesis of near-infrared absorbing and fluorescing thiophene-fused BODIPY dyes with strong electron-donating groups and their application in dye-sensitised solar cells. New Journal of Chemistry, 2019, 43, 1156-1165.	1.4	28
732	Blocking the Charge Recombination with Diiodide Radicals by TiO₂ Compact Layer in Dye-Sensitized Solar Cells. Journal of the Electrochemical Society, 2019, 166, B3203-B3208.	1.3	10
733	New pyridyl-based dyes for co-sensitization in dye sensitized solar cells. Solar Energy, 2019, 187, 108-114.	2.9	24
734	A promising heat-induced supramolecular metallogel electrolyte for quasi-solid-state dye-sensitized solar cells. Journal of Solid State Electrochemistry, 2019, 23, 1563-1570.	1.2	9
735	Investigation of the p-type dye-sensitized solar cell based on full Cu2O electrodes. Journal of Alloys and Compounds, 2019, 802, 86-92.	2.8	32
736	Interface effect of grapheneâ€“TiO2 photoanode with CuO nanorod counter electrode on solar conversion efficiency and enhanced external quantum efficiency. Optical and Quantum Electronics, 2019, 51, 1.	1.5	1
737	Molybdenum disulfide/reduced graphene oxide hybrids with enhanced electrocatalytic activity: An efficient counter electrode for dye-sensitized solar cells. Journal of Electroanalytical Chemistry, 2019, 847, 113236.	1.9	20
738	Progress on Electrolytes Development in Dye-Sensitized Solar Cells. Materials, 2019, 12, 1998.	1.3	152
739	Application of TiO2 hollow microspheres incorporated with up-conversion NaYF4:Yb3+, Er3+ nanoparticles and commercial available carbon counter electrodes in dye-sensitized solar cells. Solar Energy, 2019, 188, 441-449.	2.9	13
740	A comprehensive review on the reasons behind low power conversion efficiency of dibenzo derivatives based donors in bulk heterojunction organic solar cells. Organic Electronics, 2019, 73, 182-204.	1.4	24

#	Article	IF	Citations
741	Organicâ€"Inorganic Hybrid Nanomaterials: Synthesis, Characterization, and Application. , 2019, , 419-449.		5
742	Highâ€Performance Organic Dyes with Electronâ€Deficient Quinoxalinoid Heterocycles for Dyeâ€Sensitized Solar Cells under One Sun and Indoor Light. ChemSusChem, 2019, 12, 3654-3665.	3.6	51
743	Energyâ€Loss Reduction as a Strategy to Improve the Efficiency of Dyeâ€Sensitized Solar Cells. Solar Rrl, 2019, 3, 1900253.	3.1	14
744	Electrospun and hydrothermal techniques to synthesize the carbon-coated nickel sulfide microspheres/carbon nanofibers nanocomposite for high performance liquid-state solar cells. Composites Part B: Engineering, 2019, 173, 107026.	5.9	13
745	Thiazolocatechol: Electronâ€Withdrawing Catechol Anchoring Group for Dyeâ€Sensitized Solar Cells. ChemPhysChem, 2019, 20, 2689-2695.	1.0	5
746	Branched dibenzofulvene-based organic dyes for dye-sensitized solar cells under one sun and dim light. Journal of Materials Science: Materials in Electronics, 2019, 30, 12981-12991.	1.1	6
747	Diverging surface reactions at TiO₂- or ZnO-based photoanodes in dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2019, 21, 13047-13057.	1.3	20
748	Effect of morphology and surface treatment on the performance of ZnO nanorod-based dye-sensitized solar cells. Journal of Alloys and Compounds, 2019, 798, 249-256.	2.8	16
749	Photon Converters for Photovoltaics. , 2019, , 121-151.		3
750	Preparation by electrophoretic deposition of molybdenum iodide cluster-based functional nanostructured photoelectrodes for solar cells. Electrochimica Acta, 2019, 317, 737-745.	2.6	21
751	Branched titania nanostructures for efficient energy conversion and storage: A review on design strategies, structural merits and multifunctionalities. Nano Energy, 2019, 62, 791-809.	8.2	41
752	A new mechanism for interpreting the effect of TiO2 nanofillers in quasi-solid-state dye-sensitized solar cells. Journal of Power Sources, 2019, 433, 226693.	4.0	5
753	Reduced graphene oxide modified titania photoanodes for fabrication of the efficient dye-sensitized solar cell. Journal of Materials Science: Materials in Electronics, 2019, 30, 12966-12980.	1.1	5
754	Renaissance of Fused Porphyrins: Substituted Methylene-Bridged Thiophene-Fused Strategy for High-Performance Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2019, 141, 9910-9919.	6.6	176
755	Inhibiting formation of Zn2+/N179 molecules insulation layer and degradation of ZnO-based dye-sensitized solar cells via quasi-solid-state electrolytes. Applied Surface Science, 2019, 488, 455-461.	3.1	6
756	Perovskite Grains Embraced in a Soft Fullerene Network Make Highly Efficient Flexible Solar Cells with Superior Mechanical Stability. Advanced Materials, 2019, 31, e1901519.	11.1	123
757	Combined photoanodes of TiO₂ nanoparticles and {001}-faceted TiO₂ nanosheets for quantum dot-sensitized solar cells. New Journal of Chemistry, 2019, 43, 8551-8556.	1.4	5
758	A comprehensive experimental study of five fundamental phenothiazine geometries increasing the diversity of the phenothiazine dye class for dye-sensitized solar cells. Dyes and Pigments, 2019, 169, 66-72.	2.0	9

#	Article	IF	Citations
759	Recent Advances in Applications of Sorted Singleâ€Walled Carbon Nanotubes. Advanced Functional Materials, 2019, 29, 1902273.	7.8	67
760	Rhodanine-based light-harvesting sensitizers: a rational comparison between 2-(1,1-dicyanomethylene)rhodanine and rhodanine-3-acetic acid. New Journal of Chemistry, 2019, 43, 8781-8787.	1.4	6
761	Fabrication of Dye-Sensitized Solar Cells Using Zinc Oxide Nanorod-Modified Titanium Dioxide Photoanode. IEEE Nanotechnology Magazine, 2019, 18, 553-561.	1.1	8
762	Novel 4,4â€²-bis(alkylphenyl/alkyloxyphenyl)-2,2â€²-bithiophene bridged cyclic thiourea functionalized triphenylamine sensitizers for efficient dye-sensitized solar cells. Solar Energy, 2019, 186, 1-8.	2.9	21
763	Activated coconut shell charcoal based counter electrode for dye-sensitized solar cells. Organic Electronics, 2019, 71, 93-97.	1.4	46
764	Homoleptic and Heteroleptic Copper Complexes as Redox Couples in Dyeâ€Sensitized Solar Cells. ChemPhotoChem, 2019, 3, 636-644.	1.5	12
765	One-step hydrothermal fabrication of three dimensional anatase hierarchical hyacinth-like TiO2 arrays for dye-sensitized solar cells. Thin Solid Films, 2019, 683, 42-48.	0.8	10
766	Electrospun Nanocomposite Agâ€“ZnO Nanofibrous Photoanode for Better Performance of Dye-Sensitized Solar Cells. Journal of Electronic Materials, 2019, 48, 4389-4399.	1.0	11
767	Insight into the positional effect of bulky rigid substituents in organic sensitizers on the performance of dye-sensitized solar cells. Dyes and Pigments, 2019, 168, 1-11.	2.0	13
768	Fabrication, device performance, and MPPT for flexible dye-sensitized solar panel based on gel-polymer phthaloylchitosan based electrolyte and nanocluster CoS2 counter electrode. Materials Science for Energy Technologies, 2019, 2, 319-328.	1.0	9
769	Nanostructured photoanode and counter electrode materials for efficient Dye-Sensitized Solar Cells (DSSCs). Solar Energy, 2019, 185, 165-188.	2.9	128
770	Cosensitization in Dye-Sensitized Solar Cells. Chemical Reviews, 2019, 119, 7279-7327.	23.0	190
771	The versatility of copper tin sulfide. Journal of Materials Chemistry A, 2019, 7, 17118-17182.	5.2	42
772	Functional Ï€-conjugated tetrathiafulvalene decorated with benzothiadiazole organic sensitizers for dye sensitized solar cells. New Journal of Chemistry, 2019, 43, 8919-8929.	1.4	10
773	Energy Harvesting Under Dim-Light Condition With Dye-Sensitized and Perovskite Solar Cells. Frontiers in Chemistry, 2019, 7, 209.	1.8	44
774	Theoretical analysis of the electronic properties in Zinc-porphyrins derivatives. Journal of Molecular Structure, 2019, 1191, 259-270.	1.8	9
775	A structurally simple donor with a low recombination rate for high-performance dye-sensitized solar cells. Solar Energy, 2019, 185, 124-130.	2.9	6
776	Rigidified and expanded N-annulated perylenes as efficient donors in organic sensitizers for application in solar cells. Physical Chemistry Chemical Physics, 2019, 21, 10488-10496.	1.3	11

#	Article	IF	Citations
777	Titanium dioxide/agglomerated-free reduced graphene oxide hybrid photoanode film for dye-sensitized solar cells photovoltaic performance improvement. Nano Structures Nano Objects, 2019, 18, 100314.	1.9	8
778	New Blue Donorâ€"Acceptor Pechmann Dyes: Synthesis, Spectroscopic, Electrochemical, and Computational Studies. ACS Omega, 2019, 4, 7614-7627.	1.6	8
779	Aging effect in dye-sensitized solar cells sealed with thermoplastic films. Microelectronics International, 2019, 36, 68-72.	0.4	7
780	CVD-graphene/graphene flakes dual-films as advanced DSSC counter electrodes. 2D Materials, 2019, 6, 035007.	2.0	23
782	New 2Dâ€"Ï€â€"2A organic dyes with bipyridine anchoring groups for DSSCs. New Journal of Chemistry, 2019, 43, 5820-5825.	1.4	16
783	Exploring the Effect of Electron Withdrawing Groups on Optoelectronic Properties of Pyrazole Derivatives as Efficient Donor and Acceptor Materials for Photovoltaic Devices. Zeitschrift Fur Physikalische Chemie, 2019, 233, 1625-1644.	1.4	16
784	Molecular engineering of anchoring groups for designing efficient triazatruxene-based organic dye-sensitized solar cells. New Journal of Chemistry, 2019, 43, 6480-6491.	1.4	15
785	Efficient monolithic dye sensitized solar cells with eco-friendly silica-titania spacer layers. Solar Energy, 2019, 183, 419-424.	2.9	9
786	Sodium Hydroxide Pretreatment as an Effective Approach to Reduce the Dye/Holes Recombination Reaction in P-Type DSCs. Frontiers in Chemistry, 2019, 7, 99.	1.8	5
787	Spin-coated cobalt telluride counter electrodes for highly efficient dye-sensitized solar cells. Materials Research Bulletin, 2019, 115, 65-69.	2.7	10
788	Improving the Performance of Dye-Sensitized Solar Cells. Frontiers in Chemistry, 2019, 7, 77.	1.8	100
789	Metal Coordination Complexes as Redox Mediators in Regenerative Dye-Sensitized Solar Cells. Inorganics, 2019, 7, 30.	1.2	79
790	Solar Cells Sensitized with Porphyrin Dyes Containing Oligo(Ethylene Glycol) Units: A High Efficiency Beyond 12â€‰%. ChemSusChem, 2019, 12, 2802-2809.	3.6	36
791	13.6% Efficient Organic Dye-Sensitized Solar Cells by Minimizing Energy Losses of the Excited State. ACS Energy Letters, 2019, 4, 943-951.	8.8	284
792	Recent progress in quantum dot sensitized solar cells: an inclusive review of photoanode, sensitizer, electrolyte, and the counter electrode. Journal of Materials Chemistry C, 2019, 7, 4911-4933.	2.7	93
793	Efficient power generating devices utilizing low intensity indoor lights via non-radiative energy transfer mechanism from organic ionic redox couples. Nano Energy, 2019, 60, 457-466.	8.2	44
794	A Comparative Study of TiO2 Paste Preparation Methods Using Solvothermally Synthesised Anatase Nanoparticles in Dye-Sensitised Solar Cells. Applied Sciences (Switzerland), 2019, 9, 979.	1.3	3
795	Tunable Lifetimes of Intramolecular Charge-Separated States in Molecular Donorâ€"Acceptor Dyads. Journal of Physical Chemistry C, 2019, 123, 8500-8511.	1.5	9

#	Article	IF	Citations
796	Quasi-Solid-State Dye-Sensitized Solar Cells for Efficient and Stable Power Generation under Room Light Conditions. ACS Sustainable Chemistry and Engineering, 2019, 7, 7403-7411.	3.2	35
797	Beyond the Limitations of Dye-Sensitized Solar Cells. , 2019, , 285-323.		6
798	Overview of Dye-Sensitized Solar Cells. , 2019, , 1-49.		10
799	Photovoltaic Performance of Natural Dyes for Dye-Sensitized Solar Cells. , 2019, , 203-229.		12
800	Upconversion-Enhanced Dye-Sensitized Solar Cells. , 2019, , 325-340.		2
801	Self-Assembly by Coordination with Organic Antenna Chromophores for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 15845-15852.	4.0	8
802	Design, synthesis of organic sensitizers containing carbazole and triphenylamine Ï€-bridged moiety for dye-sensitized solar cells. Journal of the Iranian Chemical Society, 2019, 16, 1923-1937.	1.2	10
803	Hydrothermally synthesized self-assembled multi-dimensional TiO2/Graphene oxide composites with efficient charge transfer kinetics fabricated as novel photoanode for dye sensitized solar cell. Journal of Alloys and Compounds, 2019, 793, 400-409.	2.8	30
804	Realization of ultra-long columnar single crystals in TiO₂ nanotube arrays as fast electron transport channels for high efficiency dye-sensitized solar cells. Journal of Materials Chemistry A, 2019, 7, 11520-11529.	5.2	19
805	Scalable screen-printing manufacturing process for graphene oxide platinum free alternative counter electrodes in efficient dye sensitized solar cells. FlatChem, 2019, 15, 100105.	2.8	19
806	Efficient Sunlight Harvesting by A4 Î²-Pyrrolic Substituted ZnII Porphyrins: A Mini-Review. Frontiers in Chemistry, 2019, 7, 177.	1.8	26
807	Phenalenothiophene-Based Organic Dye for Stable and Efficient Solar Cells with a Cobalt Redox Electrolyte. ACS Photonics, 2019, 6, 1216-1225.	3.2	13
808	Thienochrysenocarbazole based organic dyes for transparent solar cells with over 10% efficiency. Journal of Materials Chemistry A, 2019, 7, 11338-11346.	5.2	28
809	Amphiphilic POSS-based ionic liquid electrolyte additives as a boost for dye-sensitized solar cell performance. Solar Energy, 2019, 183, 619-631.	2.9	21
810	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. Journal of Materials Chemistry A, 2019, 7, 10998-11006.	5.2	8
811	The progression of silicon technology acting as substratum for the betterment of future photovoltaics. International Journal of Energy Research, 2019, 43, 3959-3980.	2.2	11
812	D-A-Ï€-A based organic dyes for efficient DSSCs: A theoretical study on the role of Ï€-spacer. Computational Materials Science, 2019, 161, 163-176.	1.4	65
813	Enhancement of solar cell performance through the formation of a surface dipole on polyacrylonitrile-treated TiO2 photoelectrodes. Journal of Industrial and Engineering Chemistry, 2019, 73, 260-267.	2.9	13

#	Article	IF	Citations
814	Third-Generation Solar Cells: Concept, Materials and Performance - An Overview. Environmental Chemistry for A Sustainable World, 2019, , 305-339.	0.3	22
815	Optimizing room temperature binder free TiO ₂ paste for high efficiency flexible polymer dye sensitized solar cells. Flexible and Printed Electronics, 2019, 4, 015007.	1.5	9
816	Fabrication of Zn2SnO4 microspheres with controllable shell numbers for highly efficient dye-sensitized solar cells. Solar Energy, 2019, 181, 424-429.	2.9	25
817	Highly efficient quasi-solid-state dye-sensitized solar cells prepared by printable electrolytes for room light applications. Chemical Engineering Journal, 2019, 367, 17-24.	6.6	67
818	Metal-free organic dyes with di(1-benzothieno)[3,2-b:2â€²,3â€²-d]pyrrole as a donor for efficient dye-sensitized solar cells: Effect of mono- and bi-anchors on photovoltaic performance. Dyes and Pigments, 2019, 165, 103-111.	2.0	26
819	Preparation of CdS quantum dot sensitized solar cell based on ZnTi-layered double hydroxide photoanode to enhance photovoltaic properties. Solar Energy, 2019, 181, 325-332.	2.9	26
820	Nanostructured photovoltaics. Nano Futures, 2019, 3, 012002.	1.0	9
821	New semi-rigid triphenylamine donor moiety for D-Ï€-A sensitizer: Theoretical and experimental investigations for DSSCs. Dyes and Pigments, 2019, 165, 1-10.	2.0	22
822	Stabilization of a Cyclometalated Ruthenium Sensitizer on Nanocrystalline TiO₂ by an Electrodeposited Covalent Layer. Inorganic Chemistry, 2019, 58, 3509-3517.	1.9	13
823	Ferrocenylethenyl-substituted oxadiazoles with phenolic and nitro anchors as sensitizers in dye sensitized solar cells. New Journal of Chemistry, 2019, 43, 4745-4756.	1.4	13
824	Fabrication of Titanium Dioxide-reduced Graphene Oxide (TiO₂/rGO) nanocomposites as the Photoanode in Dye Sensitized Solar Cells. Journal of Physics: Conference Series, 2019, 1402, 055101.	0.3	6
825	Theoretical Study of the Effect of Different Ï€ Bridges Including an Azomethine Group in Triphenylamine-Based Dye for Dye-Sensitized Solar Cells. Molecules, 2019, 24, 3897.	1.7	17
826	High efficiency dye-sensitized solar cells with <i>V</i>_{OC}â€"<i>J</i>_{SC} trade off eradication by interfacial engineering of the photoanode|electrolyte interface. RSC Advances, 2019, 9, 40292-40300.	1.7	11
827	Effect of Auxiliary Donors on 3,8-Phenothiazine Dyes for Dye-Sensitized Solar Cells. Molecules, 2019, 24, 4485.	1.7	8
828	Tetraphenylethylene tethered phenothiazine-based double-anchored sensitizers for high performance dye-sensitized solar cells. Journal of Materials Chemistry A, 2019, 7, 23225-23233.	5.2	56
829	Solid-State Solar Energy Conversion from WO3 Nano and Microstructures with Charge Transportation and Light-Scattering Characteristics. Nanomaterials, 2019, 9, 1797.	1.9	13
831	Pyranylidene/thienothiophene-based organic sensitizers for dye-sensitized solar cells. Dyes and Pigments, 2019, 161, 205-213.	2.0	21
832	Sulfur-doped cobalt oxide nanowires as efficient electrocatalysts for iodine reduction reaction. Journal of Alloys and Compounds, 2019, 772, 80-91.	2.8	11

#	Article	IF	Citations
833	Effect of regioisomeric substitution patterns on the performance of quinoxaline-based dye-sensitized solar cells. Electrochimica Acta, 2019, 298, 650-662.	2.6	14
834	Self-templated synthesis of large-scale hierarchical anatase titania nanotube arrays on transparent conductive substrate for dye-sensitized solar cells. Advanced Powder Technology, 2019, 30, 572-580.	2.0	7
835	New 2,3-diphenylquinoxaline containing organic D-A-Ï€-A dyes with nickel oxide photocathode prepared by surfactant-mediated synthesis for high performance p-type dye-sensitized solar cells. Dyes and Pigments, 2019, 163, 761-774.	2.0	15
836	Steuerung des GrenzflÃchenâ€Ladungstransfers und des Fillâ€Factors in CuOâ€basierten GrÃtzelâ€Tandemzellen. Angewandte Chemie, 2019, 131, 4097-4102.	1.6	8
837	Controlling Interfacial Charge Transfer and Fill Factors in CuOâ€based Tandem Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 4056-4060.	7.2	32
838	Cubic aggregates of Zn2SnO4 nanoparticles and their application in dye-sensitized solar cells. Nano Energy, 2019, 57, 202-213.	8.2	42
839	Enhancing Loading Amount and Performance of Quantum-Dot-Sensitized Solar Cells Based on Direct Adsorption of Quantum Dots from Bicomponent Solvents. Journal of Physical Chemistry Letters, 2019, 10, 229-237.	2.1	21
840	Influence of Different Light Sources, Light Intensities, and Water Flow Lens (WFL) System on Dye-Sensitized Solar Cell Performances. IEEE Journal of Photovoltaics, 2019, 9, 492-498.	1.5	11
841	Natural Dye-Sensitized Solar Cells: Fabrication, Characterization, and Challenges. Energy, Environment, and Sustainability, 2019, , 129-155.	0.6	4
842	Dye-Sensitized Solar Cells as Potential Candidate for Indoor/Diffused Light Harvesting Applications: From BIPV to Self-powered IoTs. Energy, Environment, and Sustainability, 2019, , 281-316.	0.6	20
843	Effect of microwave power irradiation on TiO2 nano-structures and binder free paste screen printed dye sensitized solar cells. Ceramics International, 2019, 45, 4667-4673.	2.3	20
844	Impact of Ï€-spacers of dithieno[3,2-f:2â€²,3â€²-h]quinoxaline-based organic dyes with three Ï€-spacers on the solar cell performance. Journal of Materials Science: Materials in Electronics, 2019, 30, 647-657.	1.1	5
845	Metalâ€"Organic Frameworks in Dye-Sensitized Solar Cells. Energy, Environment, and Sustainability, 2019, , 175-219.	0.6	8
846	How to screen a promising anchoring group from heterocyclic components in dye sensitized solar cell:A theoretical investigation. Electrochimica Acta, 2019, 296, 545-554.	2.6	10
847	Effects of introducing functional groups on the performance of phenoxazine-based dye-sensitized solar cells. Dyes and Pigments, 2019, 162, 905-915.	2.0	11
848	The comparative study of new carboxylated 1,3-indanedione sensitizers with standard cyanoacetic acid dyes using co-adsorbents in dye-sensitized solar cells. Chemical Physics Letters, 2019, 715, 84-90.	1.2	10
849	One-step synthesis of hierarchical SnO2/TiO2 composite hollow microspheres as an efficient scattering layer for dye-sensitized solar cells. Electrochimica Acta, 2019, 296, 142-148.	2.6	23
850	Engineering flexible dye-sensitized solar cells for portable electronics. Solar Energy, 2019, 177, 80-98.	2.9	72

#	Article	IF	Citations
851	Firstâ€principles modeling for optimal design, operation, and integration of energy conversion and storage systems. AIChE Journal, 2019, 65, e16482.	1.8	13
852	High conducting nanocomposite electrospun PVDF-HFP/ $$hbox {TiO}_{2}$$ TiO 2 quasi-solid electrolyte for dye-sensitized solar cell. Journal of Materials Science: Materials in Electronics, 2019, 30, 1199-1213.	1.1	23
853	Highly improved photocurrent and stability of dye-sensitized solar cell through quasi-solid-state electrolyte formed by two low molecular mass organogelators. Organic Electronics, 2019, 65, 179-184.	1.4	13
854	Development of Nextâ€Generation Organicâ€Based Solar Cells: Studies on Dyeâ€Sensitized and Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1802967.	10.2	36
855	Tailoring the Optical Properties of Organic D-Ï€-A Photosensitizers: Effect of Sulfur Introduction in the Acceptor Group. European Journal of Organic Chemistry, 2019, 2019, 812-825.	1.2	3
856	Multiply Wrapped Porphyrin Dyes with a Phenothiazine Donor: A High Efficiency of 11.7% Achieved through a Synergetic Coadsorption and Cosensitization Approach. ACS Applied Materials & Interfaces, 2019, 11, 5046-5054.	4.0	83
857	Photovoltaic Performances of Yb Doped CdTe QDs Sensitized TiO2 Photoanodes for Solar cell Applications. Journal of Inorganic and Organometallic Polymers and Materials, 2019, 29, 859-868.	1.9	22
858	Unclogging electron-transporting channels via self-assembly for improving light harvesting and stability of dye-sensitized solar cells. Electrochimica Acta, 2019, 299, 518-530.	2.6	10
859	Facile fabrication of open-ended TiO2 nanotube arrays with large area for efficient dye-sensitized solar cells. Electrochimica Acta, 2019, 299, 339-345.	2.6	16
860	Cosensitization of porphyrin dyes with new X type organic dyes for efficient dye-sensitized solar cells. Dyes and Pigments, 2019, 163, 589-593.	2.0	29
861	High efficiency dye-sensitized solar cell based on a novel gel polymer electrolyte containing RbI and tetrahexylammonium iodide (Hex4NI) salts and multi-layered photoelectrodes of TiO2 nanoparticles. Renewable and Sustainable Energy Reviews, 2019, 103, 282-290.	8.2	39
862	Dye Sensitized Solar Cells Based on Diphenylpyranylidene Sensitizers with Mono and Dual Cyanoacrylic Acid Anchoring Groups. Chemistry Letters, 2019, 48, 204-207.	0.7	5
863	Excitedâ€State Dynamics of [Ru(bpy)₃]²⁺ Thin Films on Sensitized TiO₂ and ZrO₂. ChemPhysChem, 2019, 20, 618-626.	1.0	6
864	Modulation in band gap and efficient charge separation in Cd substituted ZnO quantum dots with enhanced photocatalytic and antibacterial activity. Materials Research Express, 2019, 6, 045058.	0.8	8
865	Low temperature sintering of aqueous TiO2 colloids for flexible, co-sensitized dye-sensitized solar cells. Materials Letters, 2019, 236, 289-291.	1.3	11
866	Molecular engineering of triphenylamine functionalized phenoxazine sensitizers for highly efficient solid-state dye sensitized solar cells. Dyes and Pigments, 2019, 162, 606-610.	2.0	14
867	Au nanoparticle-decorated urchin-like TiO2 hierarchical microspheres for high performance dye-sensitized solar cells. Electrochimica Acta, 2019, 293, 230-239.	2.6	16
868	Organic sensitizers featuring 9H-thieno[2â€²,3':4,5]thieno[3,2-b]thieno[2â€²,3':4,5]thieno[2,3-d]pyrrole core for high performance dye-sensitized solar cells. Dyes and Pigments, 2019, 162, 126-135.	2.0	19

#	Article	IF	Citations
869	Incident Angle and Light Intensity Variation: a Comparative Impact Study on Perovskite, Dye-sensitized and Silicon Heterojunction Solar Cells Towards Building-Integrated Applications. Solar Energy Materials and Solar Cells, 2019, 191, 451-458.	3.0	13
870	Designâ€toâ€Device Approach Affords Panchromatic Coâ€Sensitized Solar Cells. Advanced Energy Materials, 2019, 9, 1802820.	10.2	40
871	Phthalocyanines for dye-sensitized solar cells. Coordination Chemistry Reviews, 2019, 381, 1-64.	9.5	269
872	Electrospinning preparation of cobalt-based carbon nanofibers with incorporated nitrogen as cost-effective counter electrodes for dye-sensitized solar cells. Materials Today Communications, 2019, 18, 1-6.	0.9	9
873	Novel photo-voltaic device based on Bi1â^'xLaxFeO3 perovskite films with higher efficiency. Journal of Materials Science: Materials in Electronics, 2019, 30, 1654-1662.	1.1	4
874	The influences of different bi-component supramolecular gel electrolytes on the photovoltaic performances of quasi-solid-state dye-sensitized solar cell. Materials Chemistry and Physics, 2019, 221, 430-435.	2.0	9
875	Theoretical insights into co-sensitization mechanism in Zn-porphyrin and Y123 co-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 369, 25-33.	2.0	16
876	Emerging Organic and Organic/Inorganic Hybrid Photovoltaic Devices for Specialty Applications: Lowâ€Levelâ€Lighting Energy Conversion and Biomedical Treatment. Advanced Optical Materials, 2019, 7, 1800662.	3.6	69
877	Tuning photophysical properties via alkoxyl groups in charge-separated triphenylamine sensitizers for dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 368, 233-241.	2.0	12
878	Synthesis of novel sensitizers with a linear conjugated di(1-benzothieno)[3,2-b:2â€²,3â€²-d]pyrrole unit for dye-sensitized solar cells. Dyes and Pigments, 2019, 162, 89-96.	2.0	21
879	Recent Progress and Emerging Applications of Rare Earth Doped Phosphor Materials for Dyeâ€Sensitized and Perovskite Solar Cells: A Review. Chemical Record, 2020, 20, 65-88.	2.9	52
880	Effects of a dianion compound as a surface modifier on the back reaction of photogenerated electrons in TiO2-based solar cells. Arabian Journal of Chemistry, 2020, 13, 2340-2348.	2.3	6
881	Hierarchical NiO@NiS@graphene nanocomposite as a sustainable counter electrode for Pt free dye-sensitized solar cell. Applied Surface Science, 2020, 501, 144010.	3.1	44
882	Exploring the effect of mono- and di-fluorinated triphenylamine-based molecules as electron donors for dye-sensitised solar cells. Molecular Simulation, 2020, 46, 41-53.	0.9	9
883	Theoretical study of the effect of Ï€-linkers on triarylamine-based <i>p</i>-type D-Ï€-A sensitiser. Molecular Simulation, 2020, 46, 128-135.	0.9	8
884	Device characteristics and material developments of indoor photovoltaic devices. Materials Science and Engineering Reports, 2020, 139, 100517.	14.8	108
886	Recent progress of thin-film photovoltaics for indoor application. Chinese Chemical Letters, 2020, 31, 643-653.	4.8	106
887	Characterization of TiO2 photoanodes and natural dyes (Allamanda Blanchetti and Allamanda) Tj ETQq1 1 0.784314 rgBT /Overlock 10 and Technology, 2020, 93, 202-213.	1.1	18

#	Article	IF	Citations
888	Dye-sensitized solar cells: from synthetic dyes to natural pigments. , 2020, , 107-161.		11
889	Electronâ€Withdrawing Anchor Group of Sensitizer for Dyeâ€Sensitized Solar Cells, Cyanoacrylic Acid, or Benzoic Acid?. Solar Rrl, 2020, 4, 1900436.	3.1	20
890	Axial-symmetric conjugated group promoting intramolecular charge transfer performances of triphenylamine sensitizers for dye-sensitized solar cells. Dyes and Pigments, 2020, 174, 108029.	2.0	19
891	Effect of electron donor and acceptor in dithienopyrrolobenzothiadiazole-based organic dyes for efficient quasi-solid-state dye-sensitized solar cells. Dyes and Pigments, 2020, 173, 107999.	2.0	7
892	Novel cobalt redox materials admitted in natrosol polymer with a thiophene based additive as a gel polymer electrolyte to tune up the efficiency of dye sensitized solar cells. Electrochimica Acta, 2020, 329, 135169.	2.6	36
893	Performance enhancement of dye-sensitized solar cells by plasma treatment of BaSnO3 photoanode. Journal of Alloys and Compounds, 2020, 818, 152856.	2.8	17
894	Effect of mono- and di-anchoring dyes based on o,m-difluoro substituted phenylene spacer in liquid and solid state dye sensitized solar cells. Dyes and Pigments, 2020, 174, 108021.	2.0	20
895	Development of solid polymer electrolytes based on sodium-carboxymethylcellulose (NaCMC)-polysulphide for quantum dot-sensitized solar cells (QDSSCs). Ionics, 2020, 26, 1365-1378.	1.2	8
896	Robust, Scalable Synthesis of the Bulky Hagfeldt Donor for Dyeâ€Sensitized Solar Cells. ChemSusChem, 2020, 13, 283-286.	3.6	9
897	Tuning optoelectronic properties of triphenylamine based dyes through variation of pi-conjugated units and anchoring groups: A DFT/TD-DFT investigation. Journal of Molecular Graphics and Modelling, 2020, 94, 107480.	1.3	31
898	One-step fabrication of ultrathin layered 1T@2H phase MoS2 with high catalytic activity based counter electrode for photovoltaic devices. Journal of Materials Science and Technology, 2020, 51, 94-101.	5.6	30
899	Interface Modification and Exceptionally Fast Regeneration in Copper Mediated Solar Cells Sensitized with Indoline Dyes. Journal of Physical Chemistry C, 2020, 124, 2895-2906.	1.5	15
900	Prospective life cycle assessment of third-generation photovoltaics at the pre-industrial scale: A long-term scenario approach. Renewable and Sustainable Energy Reviews, 2020, 121, 109703.	8.2	63
901	Acceptor tuning effect on TPA-based organic efficient sensitizers for optoelectronic applicationsâ€"quantum chemical investigation. Structural Chemistry, 2020, 31, 1029-1042.	1.0	15
902	Diatom frustules enhancing the efficiency of gel polymer electrolyte based dye-sensitized solar cells with multilayer photoelectrodes. Nanoscale Advances, 2020, 2, 199-209.	2.2	16
903	Synergy of co-sensitizers in a copper bipyridyl redox system for efficient and cost-effective dye-sensitized solar cells in solar and ambient light. Journal of Materials Chemistry A, 2020, 8, 1279-1287.	5.2	62
904	Co-sensitization of the HD-2 complex with low-cost cyanoacetanilides for highly efficient DSSCs. Photochemical and Photobiological Sciences, 2020, 19, 281-288.	1.6	17
905	Revolution of Perovskite. Materials Horizons, 2020, , .	0.3	10

#	Article	IF	Citations
906	Theoretical insights into the effect of pristine, doped and hole graphene on the overall performance of dye-sensitized solar cells. Inorganic Chemistry Frontiers, 2020, 7, 157-168.	3.0	9
907	Efficient cosensitization of new organic dyes containing bipyridine anchors with porphyrins for dye-sensitized solar cells. Sustainable Energy and Fuels, 2020, 4, 347-353.	2.5	47
908	Accurate estimation of the photoelectric conversion efficiency of a series of anthracene-based organic dyes for dye-sensitized solar cells. Journal of Materials Chemistry C, 2020, 8, 2388-2399.	2.7	47
909	Photocatalysts for H 2 Generation from Starburst Triphenylamine/Carbazole Donorâ€Based Metalâ€Free Dyes and Porous Anatase TiO 2 Cube. ChemSusChem, 2020, 13, 1037-1043.	3.6	14
910	Conjugated Polymers as Hole Transporting Materials for Solar Cells. Chinese Journal of Polymer Science (English Edition), 2020, 38, 449-458.	2.0	9
911	Full SnO2 double-layer dye-sensitized solar cells: Slowly increasing phenomenon of power conversion efficiency. Solar Energy, 2020, 196, 99-106.	2.9	12
912	Impact of tetrabutylammonium, iodide and triiodide ions conductivity in polyacrylonitrile based electrolyte on DSSC performance. Solar Energy, 2020, 196, 379-388.	2.9	55
913	Performance Enhancement of Dye-Sensitized Solar Cells by Utilizing Carbon Nanotubes as an Electrolyte-Treating Agent. ACS Sustainable Chemistry and Engineering, 2020, 8, 1102-1111.	3.2	11
914	A theoretical investigation on promising acceptor groups for POM-based dyes: from electronic structure to photovoltaic conversion efficiency. Journal of Materials Chemistry C, 2020, 8, 219-227.	2.7	11
916	Novel inorganic electron transport layers for planar perovskite solar cells: Progress and prospective. Nano Energy, 2020, 68, 104289.	8.2	83
917	Insights into the role of Dâ€Aâ€Ï€â€A type proâ€aromatic organic dyes with thieno[3,4â€b]pyrazine as A acceptor group into dyeâ€sensitized solarâ€cells. A TDâ€DFT/periodic DFT study. International Journal of Quantum Chemistry, 2020, 120, e26108.	1.0	6
918	Interfacial self-assembly engineering for constructing a 2D flexible superlattice polyoxometalate/rGO heterojunction for high-performance photovoltaic devices. Dalton Transactions, 2020, 49, 3766-3774.	1.6	11
919	Copper-based redox shuttles supported by preorganized tetradentate ligands for dye-sensitized solar cells. Dalton Transactions, 2020, 49, 343-355.	1.6	19
920	Holey graphene: an emerging versatile material. Journal of Materials Chemistry A, 2020, 8, 918-977.	5.2	81
921	Facile synthesis of hollow urchin-like Nb2O5 nanostructures and their performance in dye-sensitized solar cells. Journal of Solid State Electrochemistry, 2020, 24, 273-281.	1.2	3
922	Highly transparent Pt-TiO2 as an efficient catalyst for triiodide reduction of bifacial liquid-junction photovoltaic devices. Journal of Electroanalytical Chemistry, 2020, 857, 113769.	1.9	4
923	Anionic and cationic polymer-based quasi-solid-state dye-sensitized solar cell with poly(aniline) counter electrode. Solar Energy, 2020, 195, 565-572.	2.9	17
924	Synthesis of pâ€type Nâ€doped TiO₂ thin films by coâ€reactive magnetron sputtering. Plasma Processes and Polymers, 2020, 17, 1900203.	1.6	10

#	Article	IF	Citations
925	Effect of Ligand Structures of Copper Redox Shuttles on Photovoltaic Performance of Dye-Sensitized Solar Cells. Inorganic Chemistry, 2020, 59, 452-459.	1.9	43
926	A review on spectral converting nanomaterials as a photoanode layer in dyeâ€sensitized solar cells with implementation in energy storage devices. Energy Storage, 2020, 2, e120.	2.3	14
927	Highly Crystallized C-Doped Nickel Oxide Nanoparticles for p-Type Dye-Sensitized Solar Cells with Record Open-Circuit Voltage Breaking 0.5 V. Industrial & Engineering Chemistry Research, 2020, 59, 175-182.	1.8	3
928	Synthesis of Anatase (Core)/Rutile (Shell) Nanostructured TiO₂ Thin Films by Magnetron Sputtering Methods for Dye-Sensitized Solar Cell Applications. ACS Applied Energy Materials, 2020, 3, 759-767.	2.5	19
929	Integrated probing the influence of dye acceptor with several electron withdrawing groups for dye-sensitized solar cells. Solar Energy, 2020, 195, 491-498.	2.9	7
930	Carbon Counter Electrodes in Dyeâ€Sensitized and Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 1906451.	7.8	74
931	Efficiency enhancement of pyridinium ylide dye-sensitized solar cells by introduction of benzothiadiazolyl chromophore: A computational study. Materials Today Communications, 2020, 22, 100839.	0.9	2
932	A platinum-free nanostructured gold counter electrode for DSSCs prepared by pulsed laser ablation. Applied Surface Science, 2020, 506, 144690.	3.1	20
933	Metal ion linked multilayers on mesoporous substrates: Energy/electron transfer, photon upconversion, and more. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 390, 112291.	2.0	13
934	Power conversion efficiency (PCE) performance of back-illuminated DSSCs with different Pt catalyst contents at the optimized TiO2 thickness. Optik, 2020, 203, 163567.	1.4	7
936	Developments of Diketopyrrolopyrroleâ€Dyeâ€Based Organic Semiconductors for a Wide Range of Applications in Electronics. Advanced Materials, 2020, 32, e1903882.	11.1	212
937	In situ topological transformation of hierarchical TiO2 hollow nanobricks as efficient scattering layer for dye-sensitized solar cells. Chemical Physics Letters, 2020, 739, 136996.	1.2	7
938	Structural Refinement and Optoelectronic Properties of (Mo x Ti 1â€x O 2â€Î´) 1â€y (RGO) y Nanocomposites and Their Photovoltaic Studies with Natural Pigments as Sensitizers. ChemistrySelect, 2020, 5, 218-230.	0.7	5
939	Double Linker Triphenylamine Dyes for Dye-Sensitized Solar Cells. Energies, 2020, 13, 4637.	1.6	8
940	Cause, Regulation and Utilization of Dye Aggregation in Dye-Sensitized Solar Cells. Molecules, 2020, 25, 4478.	1.7	30
941	Current Progress in Solid-State Electrolytes for Dye-Sensitized Solar Cells: A Mini-Review. Journal of Electronic Materials, 2020, 49, 7085-7097.	1.0	15
942	Development of Rapid Curing SiO2 Aerogel Composite-Based Quasi-Solid-State Dye-Sensitized Solar Cells through Screen-Printing Technology. ACS Applied Materials & Interfaces, 2020, 12, 48794-48803.	4.0	23
943	Theoretical study on the interaction of iodide electrolyte/organic dye with the TiO₂ surface in dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2020, 22, 26410-26418.	1.3	7

#	Article	IF	Citations
944	Quasi-solid-state dye-sensitized indoor photovoltaics with efficiencies exceeding 25%. Journal of Materials Chemistry A, 2020, 8, 22423-22433.	5.2	24
945	Natural Dye Sensitized Solar Cell Conversion Efficiency Enhancement: A Review. , 2020, , .		3
946	Effects of heteroatoms in Ï€-conjugated linkers on the optical and electronic properties of modified triphenylamine based dyes: towards DSSCsâ€™ applications. Journal of Molecular Modeling, 2020, 26, 288.	0.8	23
947	A theoretical approach of star-shaped molecules with triphenylamine core as sensitizer for their potential application in dye sensitized solar cells. Journal of Molecular Graphics and Modelling, 2020, 101, 107704.	1.3	4
948	Dithienopyrrolobenzothiadiazole-based metal-free organic dyes with double anchors and thiophene spacers for efficient dye-sensitized solar cells. Solar Energy, 2020, 208, 1103-1113.	2.9	15
949	Enhanced efficiency with CDCA co-adsorption for dye-sensitized solar cells based on metallosalophen complexes. Solar Energy, 2020, 209, 316-324.	2.9	75
950	Ionic Liquids Roles and Perspectives in Electrolyte for Dye-Sensitized Solar Cells. Sustainability, 2020, 12, 7598.	1.6	40
951	Probing synergistic outcome of graphene derivatives in solid-state polymer electrolyte and Pt-free counter electrode on photovoltaic performances. Solar Energy, 2020, 208, 949-956.	2.9	8
952	Halide Perovskite Solar Cells with Biocompatibility. Advanced Energy and Sustainability Research, 2020, 1, 2000028.	2.8	10
953	Enhanced photoelectrochemical cell performance of Co doped ZnO nanoparticles sensitized by affordable mixed dyes as sensitizer. Inorganic and Nano-Metal Chemistry, 2020, , 1-14.	0.9	1
954	Novel benzothiazole half-squaraines: model chromophores to study dyeâ€“TiO₂interactions in dye-sensitized solar cells. Journal of Materials Chemistry A, 2020, 8, 22191-22205.	5.2	4
955	Photoanodes for Aqueous Solar Cells: Exploring Additives and Formulations Starting from a Commercial TiO₂ Paste. ChemSusChem, 2020, 13, 6562-6573.	3.6	71
956	Textile dyes as photo-sensitizer in the dye sensitized solar cells. Optical Materials, 2020, 109, 110306.	1.7	15
957	Comprehensive performance analysis of dye-sensitized solar cells using single layer TiO2 photoanode deposited using screen printing technique. Optik, 2020, 223, 165595.	1.4	10
958	Effect of UV-ozone exposure on the dye-sensitized solar cells performance. Solar Energy, 2020, 208, 212-219.	2.9	4
959	Flexible energy generation and storage devices: focus on key role of heterocyclic solid-state organic ionic conductors. Chemical Society Reviews, 2020, 49, 7819-7844.	18.7	27
960	Influence of internal acceptor and thiophene based Ï€-spacer in D-A-Ï€-A system on photophysical and charge transport properties for efficient DSSCs: A DFT insight. Solar Energy, 2020, 209, 194-205.	2.9	46
961	Fine-Tuning by Triple Bond of Carbazole Derivative Dyes to Obtain High Efficiency for Dye-Sensitized Solar Cells with Copper Electrolyte. ACS Applied Materials & Interfaces, 2020, 12, 46397-46405.	4.0	27

#	Article	IF	Citations
962	Hexyl dithiafulvalene (HDT)-substituted carbazole (CBZ) Dâ€"Ï€â€"A based sensitizers for dye-sensitized solar cells. New Journal of Chemistry, 2020, 44, 18481-18488.	1.4	11
963	Effect of charge transport channel and interaction of IDT type dyes on photoelectric characteristics. Journal of Molecular Liquids, 2020, 303, 112594.	2.3	12
964	Design and fabrication of carbon dots decorated WO3 nanosheets hybrid photoanodes for sunlight-driven dye-sensitized solar cell applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 14553-14562.	1.1	4
965	Drastic improvement in dye-sensitized solar cell efficiency by electrosorption based dye staining of titania semiconductor photoanode. Electrochimica Acta, 2020, 349, 136344.	2.6	3
966	Effect of triphenylethylene analogues on the performance of carbazole-based dye-sensitized solar cells. Solar Energy, 2020, 207, 428-435.	2.9	16
967	Dye-sensitized solar cells (DSSCs) as a potential photovoltaic technology for the self-powered internet of things (IoTs) applications. Solar Energy, 2020, 207, 874-892.	2.9	113
968	Probing the dyeâ€"semiconductor interface in dye-sensitized NiO solar cells. Journal of Chemical Physics, 2020, 153, 184704.	1.2	16
969	Phenothiazine (or phenoxazine) based (Dâ€"Ï€â€"A)-L2-(Aâ€"Ï€â€"Dâ€"Ï€â€"A)2-type organic dyes with five anchors for efficient dye-sensitized solar cells. Solar Energy, 2020, 212, 220-230.	2.9	17
970	Theoretical study of organic sensitizers based on 2, 6-diphenyl-4H-pyranylidene/1, 3, 4-oxadiazole for dye-sensitized solar cells. Journal of Molecular Modeling, 2020, 26, 346.	0.8	10
971	Perovskite Tandem Solar Cells: From Fundamentals to Commercial Deployment. Chemical Reviews, 2020, 120, 9835-9950.	23.0	248
972	Origin of the electrocatalytic activity in carbon nanotube fiber counter-electrodes for solar-energy conversion. Nanoscale Advances, 2020, 2, 4400-4409.	2.2	9
973	Recent progress on nanostructured carbon-based counter/back electrodes for high-performance dye-sensitized and perovskite solar cells. Nanoscale, 2020, 12, 17590-17648.	2.8	48
974	Highly effective SnS composite counter electrode sandwiched bi-function CeO2:Er3+/Yb3+ assisted surface modified photoelectroded dye sensitized solar cell exceeds 9.5% efficiency. Solar Energy, 2020, 207, 1158-1164.	2.9	17
975	Effect of using betalain, anthocyanin and chlorophyll dyes together as a sensitizer on enhancing the efficiency of dyeâ€sensitized solar cell. International Journal of Energy Research, 2020, 44, 10846-10859.	2.2	29
976	Investigation of optoelectronic properties of triphenylamine-based dyes featuring heterocyclic anchoring groups for DSSCsâ€™ applications: a theoretical study. Structural Chemistry, 2020, 31, 2451-2461.	1.0	13
977	Optimization of titanium dioxide decorated by graphene quantum dot as a light scatterer for enhanced dye-sensitized solar cell performance. Journal of Electroanalytical Chemistry, 2020, 876, 114516.	1.9	17
978	Fine tuning of the photovoltaic properties of triarylethylene-bridged dyes by altering the position and proportion of phenyl/thienyl groups. Dyes and Pigments, 2020, 183, 108630.	2.0	4
979	Metal-free efficient dye-sensitized solar cells based on thioalkylated bithiophenyl organic dyes. Journal of Materials Chemistry C, 2020, 8, 15322-15330.	2.7	20

#	Article	IF	Citations
980	Recent Advances in the Development of Nano-Sculpted Films by Magnetron Sputtering for Energy-Related Applications. Nanomaterials, 2020, 10, 2039.	1.9	14
981	A poly(styrene-<i>co</i>-acrylonitrile) gel electrolyte for dye-sensitized solar cells with improved photoelectrochemical performance. New Journal of Chemistry, 2020, 44, 20212-20221.	1.4	2
982	High stability photosensitizers for dye-sensitized solar cells: Synthesis, characterization and optical performance. Optical Materials, 2020, 109, 110198.	1.7	17
983	Replacing aromatic Ï€-system with cycloalkyl in triphenylamine dyes to impact intramolecular charge transfer in dyes pertaining to dye-sensitized solar cells application. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 403, 112862.	2.0	18
984	Effect of Ultraviolet Radiation on the Long-Term Stability of Dye-Sensitized Solar Cells. Electronic Materials Letters, 2020, 16, 556-563.	1.0	1
985	Computational Study of Anthracene-Based Organic Dyes for Dye-Sensitized Solar Cells: Effects of Auxiliary Electron Donors. Journal of Electronic Materials, 2020, 49, 6317-6324.	1.0	0
986	Toward Seeâ€Through Optoelectronics: Transparent Lightâ€Emitting Diodes and Solar Cells. Advanced Optical Materials, 2020, 8, 2001122.	3.6	35
987	Blue Photosensitizer with Copper(II/I) Redox Mediator for Efficient and Stable Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2020, 30, 2004804.	7.8	30
988	Titanium Dioxide-Coated Zinc Oxide Nanorods as an Efficient Photoelectrode in Dye-Sensitized Solar Cells. Nanomaterials, 2020, 10, 1598.	1.9	24
989	Ferrocene Derivatives Functionalized with Donor/Acceptor (Hetero)Aromatic Substituents: Tuning of Redox Properties. Energies, 2020, 13, 3937.	1.6	10
990	Polymer Gel Electrolytes Based on PEG-Functionalized ABA Triblock Copolymers for Quasi-Solid-State Dye-Sensitized Solar Cells: Molecular Engineering and Key Factors. ACS Applied Materials & Interfaces, 2020, 12, 42067-42080.	4.0	28
991	Open-shell donorâ€“Ï€â€“acceptor conjugated metal-free dyes for dye-sensitized solar cells. Molecular Systems Design and Engineering, 2020, 5, 1477-1490.	1.7	9
992	Impact of improvements in mesoporous titania layers on ultrafast electron transfer dynamics in perovskite and dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2020, 22, 21947-21960.	1.3	5
993	Ionic moieties in organic and hybrid semiconducting devices: influence on energy band structures and functions. Journal of Materials Chemistry C, 2020, 8, 13953-13971.	2.7	7
994	Theoretical study of the surface structure of anatase nanoparticles: effect on dye adsorption and photovoltaic properties. New Journal of Chemistry, 2020, 44, 17267-17276.	1.4	6
995	Highly Efficient Dye-sensitized Solar Cells Based on Poly(vinylidene fluoride-co-hexafluoropropylene) and Montmorillonite Nanofiller-based Composite Electrolytes. Journal of Oleo Science, 2020, 69, 539-547.	0.6	3
996	Indenofluoreneâ€Extended Tetrathiafulvalene Scaffolds for Dyeâ€Sensitized Solar Cells. European Journal of Organic Chemistry, 2020, 2020, 6127-6134.	1.2	13
997	Molecular engineering of pyrene carbazole dyes with a single bond and double bond as the mode of linkage. New Journal of Chemistry, 2020, 44, 16511-16525.	1.4	11

#	Article	IF	Citations
998	Effect of Sb doping and polyvinylpyrrolidone on the mesoporous TiO2 photoanodes for Sb2Se3 sensitized solar cells. MRS Advances, 2020, 5, 2477-2486.	0.5	1
999	Theoretical Study of the Effect of Ï€-Bridge on Optical and Electronic Properties of Carbazole-Based Sensitizers for DSSCs. Molecules, 2020, 25, 3670.	1.7	27
1000	Computational modelling and characterisation of phosphole adopted in triphenyl amine photosensitisers for solar cell applications. Results in Chemistry, 2020, 2, 100069.	0.9	8
1001	The influence of three diphenylpyran isomer co-sensitizers with different sterical structures on N719-based dye sensitized solar cells. RSC Advances, 2020, 10, 43290-43298.	1.7	3
1002	Interconnection of smectic domains by polyethylene oxide networks for long-range conducting channels towards efficient and thermally stable dye-sensitized solar cells. Nanoscale, 2020, 12, 22202-22209.	2.8	6
1003	Ligands and Coordination Compounds Used as New Photosensitized Materials for the Construction of Solar Cells. , 2020, , .		2
1004	IoT-enabled dye-sensitized solar cells: an effective embedded tool for monitoring the outdoor device performance. RSC Advances, 2020, 10, 35787-35791.	1.7	14
1005	Full Visible Spectrum Panchromatic Triple Donor Dye for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2020, 124, 25211-25220.	1.5	12
1006	Triazatruxene-based sensitizers for highly efficient solid-state dye-sensitized solar cells. Solar Energy, 2020, 212, 1-5.	2.9	9
1007	TiO₂ nanotubes for dyeâ€sensitized solar cellsâ€"A review. Energy Science and Engineering, 2021, 9, 921-937.	1.9	51
1008	Computational Study of Cresyl Violet Covalently Attached to the Silane Coupling Agents: Application to TiO2-Based Photocatalysts and Dye-Sensitized Solar Cells. Nanomaterials, 2020, 10, 1958.	1.9	5
1009	N-methylferrocenyl-N-ethylhydroxy ammonium nitrate: synthesis, characterization, and sensitizer in dye-sensitized solar cells. Transition Metal Chemistry, 2020, 45, 457-465.	0.7	3
1010	Investigations of New Phenothiazine-Based Compounds for Dye-Sensitized Solar Cells with Theoretical Insight. Materials, 2020, 13, 2292.	1.3	36
1011	Theoretical study of Dâ€"Aâ€²â€"Ï€â€"A/Dâ€"Ï€â€"Aâ€²â€"Ï€â€"A triphenylamine and quinoline derivatives as sensitizers for dye-sensitized solar cells. RSC Advances, 2020, 10, 17255-17265.	1.7	14
1012	POM-based dyes featuring rigidified bithiophene Ï€ linkers: potential high-efficiency dyes for dye-sensitized solar cells. New Journal of Chemistry, 2020, 44, 8996-9003.	1.4	0
1013	Zn based 3D-Coordination polymer as the photoanode material in dye-sensitized solar cells. Materials Chemistry and Physics, 2020, 251, 123109.	2.0	6
1014	n-type polyaniline hole-blocking layer for high-efficiency QDSC by one-pot electropolymerization and selective aprotic cation ([EMIM]+) doping. Nanotechnology, 2020, 31, 315702.	1.3	0
1015	Position engineering of cyanoacrylic-acid anchoring group in a dye for DSSC applications. Dyes and Pigments, 2020, 180, 108470.	2.0	18

#	Article	IF	Citations
1016	Visible-light-responsive Al2O3 powder: Photocatalytic study. Optical Materials, 2020, 106, 110013.	1.7	8
1017	Anthracene Organic Sensitizer with Dual Anchors for Efficient and Robust Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2020, 3, 5479-5486.	2.5	14
1018	A multifunctional Ni-doped iron pyrite/reduced graphene oxide composite as an efficient counter electrode for DSSCs and as a non-enzymatic hydrogen peroxide electrochemical sensor. Dalton Transactions, 2020, 49, 8516-8527.	1.6	16
1019	Preparation of YbF₃-Ho@TiO₂ coreâ€"shell sub-microcrystal spheres and their application to the electrode of dye-sensitized solar cells. New Journal of Chemistry, 2020, 44, 10545-10553.	1.4	6
1020	Enhanced catalytic property of transparent PEDOT counter electrodes for bifacial dye sensitized solar cells. Materials Today Communications, 2020, 25, 101313.	0.9	8
1021	Efficiency enhancement in dye-sensitized solar cells using hierarchical TiO2 submicron size spheres as a light scattering layer. Journal of Solid State Electrochemistry, 2020, 24, 2261-2269.	1.2	11
1022	Bulky Phenanthroimidazoleâ€"Phenothiazine Dâˆ'Ï€â€"A Based Organic Sensitizers for Application in Efficient Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2020, 3, 6758-6767.	2.5	51
1023	Salen Zn complexes along with ZnO nanowires for dye sensitized solar cells. Nano Express, 2020, 1, 010040.	1.2	5
1024	Towards sustainable and efficient p-type metal oxide semiconductor materials in dye-sensitised photocathodes for solar energy conversion. Physical Chemistry Chemical Physics, 2020, 22, 13850-13861.	1.3	28
1025	Photochromic dye-sensitized solar cells with light-driven adjustable optical transmission and power conversion efficiency. Nature Energy, 2020, 5, 468-477.	19.8	120
1026	Indoor Thinâ€Film Photovoltaics: Progress and Challenges. Advanced Energy Materials, 2020, 10, 2000641.	10.2	89
1027	Low lying valence band edge materials based on copper oxide for tandem dye-sensitized solar cells. Materials Letters, 2020, 275, 128151.	1.3	15
1028	Thioalkyl-Functionalized Bithiophene (SBT)-Based Organic Sensitizers for High-Performance Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 15071-15079.	4.0	27
1029	Effective Upconverter and Light Scattering Dual Function LiYF₄:Er³⁺/Yb³⁺ Assisted Photoelectrode for High Performance Cosensitized Dye Sensitized Solar Cells. ACS Applied Electronic Materials, 2020, 2, 962-970.	2.0	28
1030	Grafted PEO polymeric ionic liquid nanocomposite electrospun membrane for efficient and stable dye sensitized solar cell. Electrochimica Acta, 2020, 341, 136040.	2.6	32
1031	Advances in stable and flexible perovskite solar cells. Current Applied Physics, 2020, 20, 720-737.	1.1	20
1032	Schiff Base Ancillary Ligands in Bis(diimine) Copper(I) Dye-Sensitized Solar Cells. International Journal of Molecular Sciences, 2020, 21, 1735.	1.8	10
1033	Computational analysis on Dâ€"Ï€â€"A based perylene organic efficient sensitizer in dye-sensitized solar cells. Optical and Quantum Electronics, 2020, 52, 1.	1.5	19

#	Article	IF	Citations
1034	Molecular engineering strategies for fabricating efficient porphyrin-based dye-sensitized solar cells. Energy and Environmental Science, 2020, 13, 1617-1657.	15.6	178
1035	Porous membrane of polyindole and polymeric ionic liquid incorporated PMMA for efficient quasi-solid state dye sensitized solar cell. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 394, 112464.	2.0	19
1036	Low-spin cobalt(<scp>ii</scp>) redox shuttle by isocyanide coordination. Sustainable Energy and Fuels, 2020, 4, 2497-2507.	2.5	2
1037	Functionalized metal oxide nanoparticles for efficient dye-sensitized solar cells (DSSCs): A review. Materials Science for Energy Technologies, 2020, 3, 472-481.	1.0	62
1038	Highly efficient bio-based porous carbon hybridized with tungsten carbide as counter electrode for dye-sensitized solar cell. Ceramics International, 2020, 46, 15812-15821.	2.3	47
1039	Are Alkynyl Spacers in Ancillary Ligands in Heteroleptic Bis(diimine)copper(I) Dyes Beneficial for Dye Performance in Dye-Sensitized Solar Cells?. Molecules, 2020, 25, 1528.	1.7	15
1040	Interfacial and bulk properties of hole transporting materials in perovskite solar cells: spiro-MeTAD<i>versus</i>spiro-OMeTAD. Journal of Materials Chemistry A, 2020, 8, 8527-8539.	5.2	28
1041	Density functional theory study on the donating strength of donor systems in dye-sensitized solar cells. New Journal of Chemistry, 2020, 44, 7200-7209.	1.4	28
1042	Synergistics of Cr(III) doping in TiO2/MWCNTs nanocomposites: Their enhanced physicochemical properties in relation to photovoltaic studies. Solar Energy, 2020, 201, 398-408.	2.9	12
1043	A new electrochemically prepared composite counter electrode for dye-sensitized solar cells. Thin Solid Films, 2020, 701, 137926.	0.8	23
1044	Near-IR oxime-based solvatochromic perylene diimide probe as a chemosensor for Pd species and Cu2+ ions in water and live cells. Photochemical and Photobiological Sciences, 2020, 19, 504-514.	1.6	17
1045	Effect of fluorine substituents on benzothiadiazole-based Dâ€"Ï€â€"Aâ€²â€"Ï€â€"A photosensitizers for dye-sensitized solar cells. RSC Advances, 2020, 10, 9203-9209.	1.7	12
1046	Highly conductive double perovskite oxides A2LuTaO6 (AÂ=ÂBa, Sr, Ca) as promising photoanode material for dye sensitized solar cells. Materials Letters, 2020, 276, 128220.	1.3	15
1047	Modification of Physical and Chemical Properties of Titanium Dioxide (TiO2) by Ion Implantation for Dye Sensitized Solar Cells. , 2020, , .		5
1048	Review on mixed cation effect in gel polymer electrolytes for quasi solid-state dye-sensitized solar cells. Ionics, 2020, 26, 3685-3704.	1.2	22
1049	Bis(4â€²-tert-butylbiphenyl-4-yl)aniline (BBA)-substituted A3B zinc porphyrin as light harvesting material for conversion of light energy to electricity. Journal of Porphyrins and Phthalocyanines, 2020, 24, 1189-1197.	0.4	3
1050	Influence of Different Molecular Design Strategies on Photovoltaic Properties of a Series of Triphenylamine-Based Organic Dyes for Dye-Sensitized Solar Cells: Insights from Theoretical Investigations. Journal of Physical Chemistry C, 2020, 124, 15036-15044.	1.5	17
1051	Modulating the molecular configuration by varying linking bridge for double-anchored dye-sensitized solar cells. Journal of Chemical Physics, 2020, 152, 244708.	1.2	5

#	Article	IF	Citations
1052	Ruthenium complexes based dye sensitized solar cells: Fundamentals and research trends. Solar Energy, 2020, 207, 59-76.	2.9	90
1053	Polyacrylonitrile-based gel polymer electrolytes for dye-sensitized solar cells: a review. Ionics, 2020, 26, 4215-4238.	1.2	34
1054	Nanoporous NiO nanosheets-based nanohybrid catalyst for efficient reduction of triiodide ions. Solar Energy, 2020, 197, 546-552.	2.9	17
1055	Highly dispersed redox-active polyoxometalatesâ€™ periodic deposition on multi-walled carbon nanotubes for boosting electrocatalytic triiodide reduction in dye-sensitized solar cells. Inorganic Chemistry Frontiers, 2020, 7, 1676-1684.	3.0	17
1056	Highly Effective 2D Layer Structured Titanium Carbide Electrode for Dyeâ€Sensitized and Perovskite Solar Cells. ChemElectroChem, 2020, 7, 1149-1154.	1.7	22
1057	The Hagfeldt Donor and Use of Nextâ€Generation Bulky Donor Designs in Dyeâ€Sensitized Solar Cells. ChemSusChem, 2020, 13, 2503-2512.	3.6	27
1058	A computational study on boron dipyromethene ancillary acceptor-based dyes for dye-sensitized solar cells. New Journal of Chemistry, 2020, 44, 4877-4886.	1.4	17
1059	14.2% Efficiency Dyeâ€Sensitized Solar Cells by Coâ€sensitizing Novel Thieno[3,2â€<i>b</i>]indoleâ€Based Organic Dyes with a Promising Porphyrin Sensitizer. Advanced Energy Materials, 2020, 10, 2000124.	10.2	216
1060	Rational Design of Photo-Electrochemical Hybrid Devices Based on Graphene and Chlamydomonas reinhardtii Light-Harvesting Proteins. Scientific Reports, 2020, 10, 3376.	1.6	9
1061	Digital printing of efficient dye-sensitized solar cells (DSSCs). Solar Energy, 2020, 199, 92-99.	2.9	24
1062	A novel PEDOT:PSS/SWCNH bilayer thin film counter electrode for efficient dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2020, 31, 4752-4760.	1.1	13
1063	Ionic conductivity enhancement of â€œsoggy sandâ€• electrolytes with AlOOH nanofibers for dye-sensitized solar cells. Electrochimica Acta, 2020, 337, 135849.	2.6	4
1064	Real-Time Observation of the Diffusion Mechanism Progression from Liquid to Solid State of Transition Metal Complexes. ACS Energy Letters, 2020, 5, 583-588.	8.8	3
1065	First Report of Chenodeoxycholic Acidâ€"Substituted Dyes Improving the Dye Monolayer Quality in Dyeâ€Sensitized Solar Cells. Solar Rrl, 2020, 4, 1900569.	3.1	21
1066	Synthesis, properties and photovoltaic performance in dye-sensitized solar cells of three meso-diphenylbacteriochlorins bearing a dual-function electron-donor. RSC Advances, 2020, 10, 6172-6178.	1.7	5
1067	Increasing the efficiency of TiO2-based DSSC by means of a double layer RF-sputtered thin film blocking layer. Optik, 2020, 207, 164419.	1.4	24
1068	Understanding the effects of the co-sensitizing ratio on the surface potential, electron injection efficiency, and FÃ¶rster resonance energy transfer. Physical Chemistry Chemical Physics, 2020, 22, 5568-5576.	1.3	5
1069	Characteristics of dye-sensitized solar cells (DSSCs) using liquid and gel polymer electrolytes with tetrapropylammonium salt. Optical and Quantum Electronics, 2020, 52, 1.	1.5	8

#	Article	IF	Citations
1070	Aromaticityâ€"Photovoltaic Property Relationship of Triphenylamine-Based D-Ï€-A Dyes: Leads from DFT Calculations. Journal of Physical Chemistry A, 2020, 124, 3374-3385.	1.1	23
1071	Efficient Anthryl Dye Enhanced by an Additional Ethynyl Bridge for Dye-Sensitized Module with Large Active Area to Drive Indoor Appliances. ACS Applied Energy Materials, 2020, 3, 2744-2754.	2.5	9
1072	Sol-Gel Processed TiO2 Nanotube Photoelectrodes for Dye-Sensitized Solar Cells with Enhanced Photovoltaic Performance. Nanomaterials, 2020, 10, 296.	1.9	27
1073	Dye-sensitized solar cells based on natural photosensitizers: A green view from Iran. Journal of Alloys and Compounds, 2020, 828, 154329.	2.8	40
1074	Silole and selenophene-based D-Ï€-A dyes in dye-sensitized solar cells: Insights from optoelectronic and regeneration properties. Dyes and Pigments, 2020, 176, 108243.	2.0	6
1075	Bimetallic PtSe nanoparticles incorporating with reduced graphene oxide as efficient and durable electrode materials for liquid-junction photovoltaic devices. Materials Today Energy, 2020, 16, 100384.	2.5	14
1076	Improved ionic conductivity and efficiency of dye-sensitized solar cells with the incorporation of 1-methyl-3-propylimidazolium iodide. Ionics, 2020, 26, 3173-3183.	1.2	13
1078	Influence of 2,4-Diamino-6-Phenyl-1-3-5-triazine on bio synthesized TiO₂ dye-sensitized solar cell fabricated using poly (ethylene glycol) polymer electrolyte. Materials Research Express, 2020, 7, 025507.	0.8	17
1079	I-V performance analysis of flexible back Illuminated Dye Sensitized Solar cells (DSSCS) with various platinum catalyst contents. Journal of Physics: Conference Series, 2020, 1432, 012043.	0.3	3
1080	Computational Protocol for Precise Prediction of Dye-Sensitized Solar Cell Performance. Journal of Physical Chemistry C, 2020, 124, 3980-3987.	1.5	28
1081	Stability of cobalt complex based dye solar cells with PEDOT and Pt catalysts and different electrolyte concentrations. Electrochimica Acta, 2020, 335, 135652.	2.6	16
1082	In Depth Analysis of Photovoltaic Performance of Chlorophyll Derivative-Based â€œAll Solid-Stateâ€• Dye-Sensitized Solar Cells. Molecules, 2020, 25, 198.	1.7	10
1083	A novel cheap, one-step and facile synthesis of hierarchical TiO2 nanotubes as fast electron transport channels for highly efficient dye-sensitized solar cells. Advanced Powder Technology, 2020, 31, 1556-1563.	2.0	14
1084	Optimization of platinum precursor concentration for new, fast and simple fabrication method of counter electrode for DSSC application. Optik, 2020, 206, 164314.	1.4	10
1085	Enhancing DSSC Photoanode Performance by Using Ni-Doped TiO2 to Fabricate Scattering Layers. Journal of Electronic Materials, 2020, 49, 2578-2583.	1.0	17
1086	Enhanced DSSC performance by the introduction of hydroxamic acid group into the cyanoacetic acid dyes. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 398, 112512.	2.0	5
1087	Novel synergistic combination of Cu/S co-doped TiO2 nanoparticles incorporated as photoanode in dye sensitized solar cell. Solar Energy, 2020, 203, 296-303.	2.9	48
1088	Responsive Nanomaterials for Sustainable Applications. Springer Series in Materials Science, 2020, , .	0.4	2

#	Article	IF	Citations
1089	New cyanoacetanilides based dyes as effective co-sensitizers for DSSCs sensitized with ruthenium (II) complex (HD-2). Journal of Materials Science: Materials in Electronics, 2020, 31, 7981-7990.	1.1	16
1090	Computational design of new organic (Dâ€"Ï€â€"A) dyes based on benzothiadiazole for photovoltaic applications, especially dye-sensitized solar cells. Research on Chemical Intermediates, 2020, 46, 3247-3262.	1.3	23
1091	Highly efficient indoor light quasi-solid-state dye sensitized solar cells using cobalt polyethylene oxide-based printable electrolytes. Chemical Engineering Journal, 2020, 394, 124954.	6.6	50
1092	An all-solid-state lamellar-nanostructured polymer electrolyte in-situ-prepared from smectic liquid crystal for thermally stable dye-sensitized solar cells. Chemical Engineering Science, 2020, 221, 115710.	1.9	10
1093	Ionic relaxation of electrospun nanocomposite polymer-blend quasi-solid electrolyte for high photovoltaic performance of Dye-sensitized solar cells. Materials Chemistry and Physics, 2020, 250, 122945.	2.0	17
1094	Investigating Various Permutations of Copper Iodide/FeCu Tandem Materials as Electrodes for Dye-Sensitized Solar Cells with a Natural Dye. Nanomaterials, 2020, 10, 784.	1.9	23
1095	Performance enhancement of dye-sensitized solar cells via co-sensitization of ruthenium (II) based N749 dye and organic sensitizer RK1. Solar Energy, 2020, 203, 260-266.	2.9	57
1096	The Synchronization of Electron Enricher and Electron Extractor as Ternary Composite Photoanode for Enhancement of DSSC Performance. Journal of Nanomaterials, 2020, 2020, 1-11.	1.5	4
1097	Efficient phenothiazine-ruthenium sensitizers with high open-circuit voltage (Voc) for high performance dye-sensitized solar cells. Dyes and Pigments, 2020, 180, 108454.	2.0	8
1098	Investigation of the photovoltaic performance of dye-sensitized solar cells utilizing 9,9'-bianthracene-based dyes as a co-sensitizer. Synthetic Metals, 2020, 264, 116385.	2.1	7
1099	Photovoltaic Performance of Porphyrinâ€Based Dyeâ€Sensitized Solar Cells with Binary Ionic Liquid Electrolytes. Energy Technology, 2020, 8, 2000092.	1.8	5
1100	Accelerated Discovery of Potential Organic Dyes for Dyeâ€Sensitized Solar Cells by Interpretable Machine Learning Models and Virtual Screening. Solar Rrl, 2020, 4, 2000110.	3.1	35
1101	Semisynthetic Chlorophyll Derivatives Toward Solar Energy Applications. Solar Rrl, 2020, 4, 2000162.	3.1	43
1102	Composite electrode of TiO2 particles with three kinds of crystal phases for significantly improved performance of dye-sensitized solar cells. Chemical Physics, 2020, 533, 110744.	0.9	2
1103	Plasma-processed CoSn/RGO nanocomposite: A low-cost and sustainable counter electrode for dye-sensitized solar cells. Solar Energy, 2020, 201, 819-826.	2.9	19
1104	Tuning the Color Palette of Semi-Transparent Solar Cells via Lateral Ï€-Extension of Polycyclic Heteroaromatics of Donorâ€"Acceptor Dyes. ACS Applied Energy Materials, 2020, 3, 4549-4558.	2.5	15
1105	Above 800 mV Open-Circuit Voltage in Solid-State Photovoltaic Devices Using Phosphonium Cation-Based Solid Ionic Conductors. ACS Applied Materials & Interfaces, 2020, 12, 22939-22947.	4.0	5
1106	A DFT study to probe homo-conjugated norbornylogous bridged spacers in dye-sensitized solar cells: an approach to suppressing agglomeration of dye molecules. RSC Advances, 2020, 10, 15307-15319.	1.7	16

#	Article	IF	Citations
1107	Design of high performance p-type sensitizers with pyridinium derivatives as the acceptor by theoretical calculations. RSC Advances, 2020, 10, 10569-10576.	1.7	7
1108	Spiro[fluorene-9,9â€²-phenanthren]-10â€²-one as auxiliary acceptor of D-A-Ï€-A dyes for dye-sensitized solar cells under one sun and indoor light. Journal of Power Sources, 2020, 458, 228063.	4.0	37
1109	Understanding the physical properties of thin TiO2 films treated in different thermal atmospheric conditions. Vacuum, 2020, 177, 109347.	1.6	16
1110	Rational Design of Phenothiazine-Based Organic Dyes for Dye-Sensitized Solar Cells: The Influence of Ï€-Spacers and Intermolecular Aggregation on Their Photovoltaic Performances. Journal of Physical Chemistry C, 2020, 124, 9233-9242.	1.5	50
1111	Bridgehead nitrogen tripodal organic dyes having multiple donor-Ï€-acceptor branches for solar cell applications. Dyes and Pigments, 2021, 186, 108985.	2.0	3
1112	Y-shaped organic dyes with D2â€“Ï€â€“A configuration as efficient co-sensitizers for ruthenium-based dye sensitized solar cells. Journal of Power Sources, 2021, 481, 228952.	4.0	29
1113	Facile fabrication of reduced graphene oxide counter electrodes by laser engraver for dye-sensitized solar cell applications. Fullerenes Nanotubes and Carbon Nanostructures, 2021, 29, 100-106.	1.0	9
1114	A study on the microstructural development of gel polymer electrolytes and different imidazolium-based ionic liquids for dye-sensitized solar cells. Journal of Power Sources, 2021, 481, 228622.	4.0	27
1115	Solid-state solar cells co-sensitized with PbS/CdS quantum dots and N719 dye and based on solid polymer electrolyte with binary cations and nanofillers. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 405, 112915.	2.0	11
1116	New carbazole-based organic dyes with different acceptors for dye-sensitized solar cells: Synthesis, characterization, dssc fabrications and density functional theory studies. Journal of Molecular Structure, 2021, 1225, 129297.	1.8	52
1117	Orientation-dependent effects of indeno[1,2-b]indole-spirofluorene donor on photovoltaic performance of Dâˆ'Ï€âˆ'A and Dâˆ'Dâˆ'Ï€âˆ'A sensitizers. Journal of Power Sources, 2021, 481, 228901.	4.0	8
1118	The influence of Ï€-linkers configuration on properties of 10-hexylphenoxazine donor-based sensitizer for dye-sensitized solar cell application â€" Theoretical approach. Journal of Molecular Graphics and Modelling, 2021, 102, 107779.	1.3	9
1119	Hybrid structure of ionic liquid and ZnO nano clusters for potential application in dye-sensitized solar cells. Journal of Molecular Liquids, 2021, 322, 114538.	2.3	22
1120	Photoelectrochemical properties of dyads composed of porphyrin/ruthenium catalyst grafted on metal oxide semiconductors. Dyes and Pigments, 2021, 185, 108908.	2.0	9
1121	Double-layered printable electrolytes for highly efficient dye-sensitized solar cells. Journal of Power Sources, 2021, 482, 228962.	4.0	27
1122	Carbazole-substituted dialkoxybenzodithiophene dyes for efficient light harvesting and the effect of alkoxy tail length. Dyes and Pigments, 2021, 186, 109002.	2.0	9
1123	Supramolecular strategies in artificial photosynthesis. Chemical Science, 2021, 12, 50-70.	3.7	65
1124	Investigation of the TiO2 nanoparticles aggregation with high light harvesting for high-efficiency dye-sensitized solar cells. Materials Research Bulletin, 2021, 135, 111148.	2.7	22

#	Article	IF	Citations
1125	Template-free synthesis of Vanadium Nitride Nanopetals (VNNP) as a high performance counter electrode for dye sensitized solar cells. Solar Energy, 2021, 213, 145-153.	2.9	16
1126	Tunable synthesis of mesoporous titania with different morphologies for dye-sensitized solar cells. Advanced Powder Technology, 2021, 32, 99-105.	2.0	4
1127	Vacuumâ€Deposited Transparent Organic Photovoltaics for Efficiently Harvesting Selective Ultraviolet and Nearâ€Infrared Solar Energy. Solar Rrl, 2021, 5, 2000564.	3.1	11
1128	New approaches in component design for dye-sensitized solar cells. Sustainable Energy and Fuels, 2021, 5, 367-383.	2.5	32
1129	Experimental and theoretical study of the synthesis of N-doped TiO2 by N ion implantation of TiO2 thin films. Applied Surface Science, 2021, 541, 148493.	3.1	21
1130	Benzothiadiazole-based photosensitizers for efficient and stable dye-sensitized solar cells and 8.7% efficiency semi-transparent mini-modules. Sustainable Energy and Fuels, 2021, 5, 144-153.	2.5	48
1131	Copper redox mediators with alkoxy groups suppressing recombination for dye-sensitized solar cells. Electrochimica Acta, 2021, 368, 137564.	2.6	10
1132	Porphyrin sensitizers with acceptor structural engineering for dye-sensitized solar cells. Dyes and Pigments, 2021, 187, 109082.	2.0	14
1133	Cube-like mixed-phases TiO2 mesocrystalline hollow boxes from in situ topotactic transformation for highly efficient dye-sensitized solar cells. Advanced Powder Technology, 2021, 32, 186-193.	2.0	6
1134	Investigation on the properties of La-doped and Dy-doped ZnO nanorods and their enhanced photovoltaic performance of Dye-Sensitized Solar Cells. Optical Materials, 2021, 112, 110735.	1.7	21
1135	Synthesis and characterization of a conjugated porphyrin dyad entangled with carboxyl functionalized benzimidazolium: an efficient metal free sensitizer for DSSCs. New Journal of Chemistry, 2021, 45, 1430-1445.	1.4	9
1136	Gold nanoparticle decorated carbon nanotube nanocomposite for dye-sensitized solar cell performance and stability enhancement. Chemical Engineering Journal, 2021, 421, 127756.	6.6	20
1137	Preparation of Cu-doped ZnO nanoparticles via layered double hydroxide and application for dye-sensitized solar cells. Journal of Physics and Chemistry of Solids, 2021, 150, 109833.	1.9	37
1138	Unravelling the miniscule size effect of auxiliary donor in D-D-Ï€-A type dipolar photosensitizers on quasi-solid state DSSC performance. Dyes and Pigments, 2021, 185, 108959.	2.0	14
1139	Experimental investigation of hydrogen insertion in copper oxide on photovoltaic performance of <i>p</i> â€type dyeâ€sensitized solar cell. International Journal of Energy Research, 2021, 45, 5309-5317.	2.2	14
1140	Multi-layers of TiO2 nanoparticles in the photoelectrode and binary iodides in the gel polymer electrolyte based on poly(ethylene oxide) to improve quasi solid-state dye-sensitized solar cells. Journal of Solid State Electrochemistry, 2021, 25, 707-720.	1.2	12
1141	Zn2SnO4 as electron transport material for semi-transparent dye sensitized solar cells. Materials Letters, 2021, 283, 128848.	1.3	8
1142	Photovoltaic and spectroscopic properties of bacteriochlorin-based photosensitizer: molecular approach. Research on Chemical Intermediates, 2021, 47, 1071-1085.	1.3	5

#	Article	IF	Citations
1143	Effect of thiophene-based Ï€-spacers on N-arylphenothiazine dyes for dye-sensitized solar cells. Dyes and Pigments, 2021, 185, 108951.	2.0	27
1144	Redoxâ€Mediated Alcohol Oxidation Coupled to Hydrogen Gas Formation in a Dyeâ€Sensitized Photosynthesis Cell. Chemistry - A European Journal, 2021, 27, 218-221.	1.7	22
1145	Efficient charge collection of photoanodes and light absorption of photosensitizers: A review. International Journal of Energy Research, 2021, 45, 1425-1448.	2.2	23
1146	The Role of Electrospun Nanomaterials in the Future of Energy and Environment. Materials, 2021, 14, 558.	1.3	21
1147	Optimizing Deposition Parameters of DSSCs Composed of Blue TiO₂. IEEE Journal of Photovoltaics, 2021, 11, 118-123.	1.5	9
1148	In-depth understanding of the energy loss and efficiency limit of dye-sensitized solar cells under outdoor and indoor conditions. Journal of Materials Chemistry A, 2021, 9, 24830-24848.	5.2	28
1149	Solution-processed two-dimensional materials for next-generation photovoltaics. Chemical Society Reviews, 2021, 50, 11870-11965.	18.7	96
1150	NiO/ZrO₂ nanocomposites as photocathodes of tandem DSCs with higher photoconversion efficiency with respect to parent single-photoelectrode p-DSCs. Sustainable Energy and Fuels, 2021, 5, 4736-4748.	2.5	6
1151	Redox-induced electricity for energy scavenging and self-powered sensors. Journal of Materials Chemistry A, 2021, 9, 19116-19148.	5.2	18
1152	Challenges and prospects of ambient hybrid solar cell applications. Chemical Science, 2021, 12, 5002-5015.	3.7	43
1153	Sustainable biomaterials for solar energy technologies. , 2021, , 557-592.		1
1154	An investigation into the origin of variations in photovoltaic performance using Dâ€"Dâ€"Ï€â€"A and Dâ€"Aâ€"Ï€â€"A triphenylimidazole dyes with a copper electrolyte. Molecular Systems Design and Engineering, 2021, 6, 779-789.	1.7	11
1155	Effect of auxiliary acceptor on D-Ï€-A based porphyrin sensitizers for dye sensitized solar cells. Journal of Porphyrins and Phthalocyanines, 2021, 25, 407-417.	0.4	9
1156	An electron rich indaceno [2,1-<i>b</i>:6,5-<i>b</i>â€²] dithiophene derivative as a high intramolecular charge transfer material in dye sensitized solar cells. New Journal of Chemistry, 2021, 45, 2734-2741.	1.4	4
1157	Dye-sensitized solar cells. , 2021, , 179-211.		3
1158	The influence of the shape and configuration of sensitizer molecules on the efficiency of DSSCs: a theoretical insight. RSC Advances, 2021, 11, 5556-5567.	1.7	7
1159	Data-driven materials discovery for solar photovoltaics. , 2021, , 129-164.		0
1160	Boosting the photoelectric conversion efficiency of DSSCs through graphene quantum dots: insights from theoretical study. Materials Chemistry Frontiers, 2021, 5, 5814-5825.	3.2	10

#	Article	IF	Citations
1161	Computational study of 4,4â€²-dimethoxy triphenylamine donor linked with low band gap Ï€-spacers by single and double bonds for DSSC applications. New Journal of Chemistry, 2021, 45, 16989-17001.	1.4	5
1162	Phenothiazine and phenoxazine sensitizers for dye-sensitized solar cells â€" an investigative review of two complete dye classes. Journal of Materials Chemistry C, 2021, 9, 11974-11994.	2.7	35
1163	The dynamics of light-induced interfacial charge transfer of different dyes in dye-sensitized solar cells studied by <i>ab initio</i> molecular dynamics. Physical Chemistry Chemical Physics, 2021, 23, 27171-27184.	1.3	9
1164	ImprovedÂphotovoltaic performance of dyeâ€sensitized solar cells using dual post treatment based on TiCl ₄ and urea solution. Micro and Nano Letters, 2021, 16, 232-238.	0.6	2
1165	Lanthanide-doped nanoparticles in photovoltaics â€" more than just upconversion. Journal of Materials Chemistry C, 2021, 9, 16110-16131.	2.7	19
1166	Porous rGO/ZnSe/CoSe₂dispersed in PEDOT:PSS as an efficient counter electrode for dye-sensitized solar cells. Materials Chemistry Frontiers, 2021, 5, 2702-2714.	3.2	27
1167	Nanomaterials for Energy Harvesting and Storage. Advances in Chemical and Materials Engineering Book Series, 2021, , 188-203.	0.2	3
1168	Advanced research trends in dye-sensitized solar cells. Journal of Materials Chemistry A, 2021, 9, 10527-10545.	5.2	205
1169	The impact of ZnO nanoparticle size on the performance of photoanodes in DSSC and QDSSC: a comparative study. Journal of Materials Science: Materials in Electronics, 2021, 32, 3167-3179.	1.1	13
1170	Earth-abundant non-toxic perovskite nanocrystals for solution processed solar cells. Materials Advances, 2021, 2, 4140-4151.	2.6	14
1171	Design and DFT study of nitrogen-rich donor systems for improved photovoltaic performance in dye-sensitized solar cells. New Journal of Chemistry, 2021, 45, 11585-11595.	1.4	16
1172	Introducing chenodeoxycholic acid coadsorbent and strong electron-withdrawing group in indoline dyes to design high-performance solar cells: a remarkable theoretical improvement. Journal of Materials Chemistry C, 2021, 9, 5800-5807.	2.7	22
1173	Highly efficient and stable ionic liquid-based gel electrolytes. Nanoscale, 2021, 13, 7140-7151.	2.8	11
1174	Effect of luminescent material NaYbF4: Ho3+ on the photovoltaic performance of dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2021, 32, 1445-1456.	1.1	4
1175	Biomass-derived carbon electrodes for supercapacitors and hybrid solar cells: towards sustainable photo-supercapacitors. Sustainable Energy and Fuels, 2021, 5, 4784-4806.	2.5	17
1176	Computational Screening of Organic Dye-Sensitizers for Dye-Sensitized Solar Cells: DFT/TDDFT Approach. Challenges and Advances in Computational Chemistry and Physics, 2021, , 187-205.	0.6	0
1177	The Effect of Different Solvents in Natural Dyes from Roselle (Hibiscus Sabdariffa) and Green Tea Leaves (Camellia Sinensis) for Dye-Sensitized Solar Cell. Journal of Physics: Conference Series, 2021, 1755, 012024.	0.3	1
1178	Emerging Technologies for Green Energy Conversion and Storage. Advanced Sustainable Systems, 2021, 5, 2000152.	2.7	17

#	Article	IF	Citations
1179	Improving the Efficiency of Dye-Sensitized Solar Cells via the Impact of Triphenylamine-Based Inventive Organic Additives on Biodegradable Cellulose Polymer Gel Electrolytes. Energy & Fuels, 2021, 35, 4273-4282.	2.5	17
1180	Effects of TiO2 phase and nanostructures as photoanode on the performance of dye-sensitized solar cells. Bulletin of Materials Science, 2021, 44, 1.	0.8	3
1181	Environmental performance of dye-sensitized solar cells based on natural dyes. Solar Energy, 2021, 215, 346-355.	2.9	16
1182	Vacuumâ€Deposited Transparent Organic Photovoltaics for Efficiently Harvesting Selective Ultraviolet and Nearâ€Infrared Solar Energy. Solar Rrl, 2021, 5, 2170032.	3.1	8
1183	The Rise of Dyeâ€Sensitized Solar Cells: From Molecular Photovoltaics to Emerging Solidâ€State Photovoltaic Technologies. Helvetica Chimica Acta, 2021, 104, e2000230.	1.0	18
1184	Solvothermally synthesized anatase TiO2 nanoparticles for photoanodes in dye-sensitized solar cells. Science and Technology of Advanced Materials, 2021, 22, 100-112.	2.8	16
1185	A Review on Semitransparent Solar Cells for Real-Life Applications Based on Dye-Sensitized Technology. IEEE Journal of Photovoltaics, 2021, 11, 354-361.	1.5	22
1186	Comparative Studies on the Structureâ€“Performance Relationships of Phenothiazine-Based Organic Dyes for Dye-Sensitized Solar Cells. ACS Omega, 2021, 6, 6817-6823.	1.6	16
1187	Judicious design of L(D-Ï€-A)2 type di-anchoring organic sensitizers for highly efficient dye-sensitized solar cells: Effect of the donor-linking bridges on functional properties. Dyes and Pigments, 2021, 187, 109134.	2.0	9
1188	Donor group influence on dye-sensitized solar cell device performances: Balancing dye loading and donor size. Dyes and Pigments, 2021, 187, 109074.	2.0	7
1189	Self-Assembled Multinuclear Complexes for Cobalt(II/III) Mediated Sensitized Solar Cells. Applied Sciences (Switzerland), 2021, 11, 2769.	1.3	2
1190	Transparent and Colorless Dye-Sensitized Solar Cells Exceeding 75% Average Visible Transmittance. Jacs Au, 2021, 1, 409-426.	3.6	66
1191	Influence of different concentrations of 4-tert-butyl-pyridine in a gel polymer electrolyte towards improved performance of Dye-Sensitized Solar Cells (DSSC). Solar Energy, 2021, 216, 111-119.	2.9	34
1192	Xanthanâ€Based Hydrogel for Stable and Efficient Quasiâ€Solid Truly Aqueous Dyeâ€Sensitized Solar Cell with Cobalt Mediator. Solar Rrl, 2021, 5, 2000823.	3.1	65
1193	Design of dye-sensitized TiO₂ materials for photocatalytic hydrogen production: light and shadow. JPhys Energy, 2021, 3, 031001.	2.3	28
1194	The effect of benzoxazole unit on the properties of cyclic thiourea functionalized triphenylamine dye sensitizers. Dyes and Pigments, 2021, 187, 109093.	2.0	6
1195	A molecular photosensitizer achieves a Voc of 1.24â€‰V enabling highly efficient and stable dye-sensitized solar cells with copper(II/I)-based electrolyte. Nature Communications, 2021, 12, 1777.	5.8	196
1196	Eco-Friendly Dye-Sensitized Solar Cells Based on Water-Electrolytes and Chlorophyll. Materials, 2021, 14, 2150.	1.3	8

#	Article	IF	Citations
1197	Influence of various dithienoheterocycles as conjugated linker in Naphtho[2,3-d] [1,2,3]triazole-based organic dyes for dye-sensitized solar cells. Dyes and Pigments, 2021, 188, 109220.	2.0	11
1198	Dendritic-based co-adsorbents for dye-sensitized solar cells: Effect of the generations and alkyl chain lengths. Synthetic Metals, 2021, 274, 116711.	2.1	1
1199	Effects of side substituents in bithiophene spacer on the performance of dye-sensitized solar cells with cobalt electrolyte. Solar Energy, 2021, 218, 503-511.	2.9	9
1200	Optical-electronic performance and mechanism investigation of dihydroindolocarbazole-based organic dyes for DSSCs. Results in Physics, 2021, 23, 103939.	2.0	8
1201	Fabrication of Functional Materials for Dye-sensitized Solar Cells. Frontiers in Energy Research, 2021, 9, .	1.2	12
1202	Natural rubber (Hevea Brasiliensis)-based quasi-solid electrolyte as a potential candidate for arresting recombination and improving performance in aqueous dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2021, 32, 14207-14216.	1.1	7
1203	Impact of the selectivity of titanium dioxide on photovoltaic performance of anthocyanin-sensitized solar cells. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-15.	1.2	1
1204	Enhancement of dye-sensitized solar cell efficiency through co-sensitization of thiophene-based organic compounds and metal-based N-719. Arabian Journal of Chemistry, 2021, 14, 103080.	2.3	20
1205	Incorporation of organic additives with electron rich donors (N, O, S) in gelatin gel polymer electrolyte for dye sensitized solar cells. Solar Energy, 2021, 218, 552-562.	2.9	20
1206	Structural Engineering of Organic Dâ€"Aâ^'Ï€â€"A Dyes Incorporated with a Dibutyl-Fluorene Moiety for High-Performance Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 23513-23522.	4.0	30
1207	Dopant-Free All-Organic Small-Molecule HTMs for Perovskite Solar Cells: Concepts and Structureâ€"Property Relationships. Energies, 2021, 14, 2279.	1.6	18
1208	Augmentation of dye-sensitized solar cell photovoltaic conversion efficiency via incorporation of terpolymer Poly(vinyl butyral-co-vinyl alcohol-co-vinyl acetate) based gel polymer electrolytes. Polymer, 2021, 223, 123713.	1.8	13
1209	Effect of Different Site Trifluoromethylbenzoic Acid Organic Photosensitizer for Dyeâ€sensitized Solar Cells. ChemistrySelect, 2021, 6, 4645-4650.	0.7	3
1210	Thiophene-fused carbazole derivative dyes for high-performance dye-sensitized solar cells. Tetrahedron, 2021, 88, 132124.	1.0	5
1211	A Review of Integrated Systems Based on Perovskite Solar Cells and Energy Storage Units: Fundamental, Progresses, Challenges, and Perspectives. Advanced Science, 2021, 8, 2100552.	5.6	19
1212	Coâ€sensitization of 4â€(thiopheneâ€2â€ylmethylene)thiazolidinâ€5â€one dyes with Ru(II) complex Nâ€719. Applied Organometallic Chemistry, 2021, 35, e6313.	1.7	3
1213	Dye Anchoring on CuCrO₂ Surfaces for p-Type Dye-Sensitized Solar Cell Applications: An Ab Initio Study. ACS Applied Energy Materials, 2021, 4, 6180-6190.	2.5	7
1214	Alternative sources of natural pigments for dye-sensitized solar cells: Algae, cyanobacteria, bacteria, archaea and fungi. Journal of Biotechnology, 2021, 332, 29-53.	1.9	28

#	Article	IF	Citations
1215	New 3-Ethynylaryl Coumarin-Based Dyes for DSSC Applications: Synthesis, Spectroscopic Properties, and Theoretical Calculations. Molecules, 2021, 26, 2934.	1.7	12
1216	Highly efficient MoS2/rGO electrocatalysts for triiodide reduction as Pt-free counter electrode for dye-sensitized solar cells. Solar Energy, 2021, 220, 788-795.	2.9	16
1217	Simulation and electrochemical impedance spectroscopy of dye-sensitized solar cells. Journal of Industrial and Engineering Chemistry, 2021, 97, 574-583.	2.9	13
1218	Metal Chalcogenides (M_{<i>x</i>}E_{<i>y</i>}; Eâ€‰=â€‰S, Se, and Te) as Counter Electrodes for Dyeâ€"Sensitized Solar Cells: An Overview and Guidelines. Advanced Energy and Sustainability Research, 2021, 2, 2100056.	2.8	18
1219	Recent progress in dye sensitized solar cell materials and photo-supercapacitors: A review. Journal of Power Sources, 2021, 493, 229698.	4.0	96
1220	An approach to emerging optical and optoelectronic applications based on NiO micro- and nanostructures. Nanophotonics, 2021, 10, 1785-1799.	2.9	24
1221	Quasi-solid-state composite electrolytes with Al2O3 and ZnO nanofillers for dye-sensitized solar cells. Electrochimica Acta, 2021, 380, 137588.	2.6	12
1222	Solution processed Cu2ZnSnSe4 nanoink for inexpensive Pt-free counter electrode in dye-sensitized solar cells. Solid State Sciences, 2021, 116, 106612.	1.5	5
1223	Review of State of the Art Recycling Methods in the Context of Dye Sensitized Solar Cells. Energies, 2021, 14, 3741.	1.6	24
1224	Indoor Organic Photovoltaics for Selfâ€Sustaining IoT Devices: Progress, Challenges and Practicalization. ChemSusChem, 2021, 14, 3449-3474.	3.6	41
1225	Bifacial DSSC fabricated using low-temperature processed 3D flower like MoS2 - high conducting carbon composite counter electrodes. Materials Today Communications, 2021, 27, 102208.	0.9	4
1226	Organic sensitizers featuring tetrathienosilole core for efficient and robust dye-sensitized solar cells. Solar Energy, 2021, 221, 402-411.	2.9	4
1227	Improving photovoltaic properties of ZTO-based DSSCs using surface modification of Zn2SnO4 nanoparticles prepared by co-precipitation method. Materials Science in Semiconductor Processing, 2021, 127, 105664.	1.9	5
1228	POLY ORGANIC POLYMER (3-HEXYLTHIOPHENE) P3HT as LIGHT SENSITIVITY in PROTOTYPE DYE-SENSITIZED SOLAR CELLS (DSSC). Indonesian Physical Review, 2021, 4, 104.	0.1	0
1229	Economically synthesized NiCo2S4/TiO2 with high reflectance ability as the counter electrode to replace Pt for dye-sensitized solar cells. Advanced Powder Technology, 2021, , .	2.0	1
1230	Grossly warped nanographeneâ€"phenothiazine nanocomposite as photoactive layer for solar cells: Insights from theoretical study. Chemical Physics Letters, 2021, 773, 138607.	1.2	1
1231	DFT and TDâ€DFT Study on Azobenzeneâ€Based Dye Covalently Attached to Silane Coupling Agents: Toward Dyeâ€Sensitized TiO 2 Catalyst and Dyeâ€Sensitized Solar Cell Applications. ChemistrySelect, 2021, 6, 6011-6018.	0.7	1
1232	Optimization of photoelectrode by structural engineering for efficiency improvement of dye-sensitized solar cells at different light intensity. Journal of Alloys and Compounds, 2021, 870, 159478.	2.8	2

#	Article	IF	Citations
1233	Evaluating the efficacy of binary palladium alloy PdO-Pd for use as an electrocatalyst in DSSC counter electrodes. South African Journal of Chemical Engineering, 2021, 37, 92-97.	1.2	2
1234	Recent advances and challenges in solar photovoltaic and energy storage materials: future directions in Indian perspective. JPhys Energy, 2021, 3, 034018.	2.3	10
1235	Performance Analysis of Several ZnO-Based Dye-Sensitized Solar Cells With Identical Photoelectrodes, Electrolyte, and Sensitizer. IEEE Journal of Photovoltaics, 2021, 11, 991-996.	1.5	1
1236	Green carbon dots based ultraviolet photovoltaic window with high transparence to visible light. International Journal of Energy Research, 2021, 45, 17709-17720.	2.2	6
1237	Catalytic Effect of 1,4-Dioxane on the Kinetics of the Oxidation of Iodide by Dicyanobis(bipyridine)iron(III) in Water. Catalysts, 2021, 11, 840.	1.6	4
1238	Structure and Energetics of Dye-Sensitized NiO Interfaces in Water from Ab Initio MD and Large-Scale GW Calculations. Journal of Chemical Theory and Computation, 2021, 17, 5225-5238.	2.3	9
1239	Towards achieving improved efficiency using newly designed dye-sensitized solar cell devices engineered with dye-anchored counter electrodes. Journal of Industrial and Engineering Chemistry, 2021, 99, 117-125.	2.9	8
1240	Enhanced Power Conversion Efficiency Using a Ce³⁺:SrF₂ Down-Shifting Nanophosphor-Based Photoelectrode for Dye-Sensitized Solar Cell Applications. ACS Applied Energy Materials, 2021, 4, 7112-7121.	2.5	7
1241	High-efficiency quasi-solid state dye-sensitized solar cells using a polymer blend electrolyte with â€œpolymer-in-saltâ€• conduction characteristics. Solar Energy, 2021, 222, 35-47.	2.9	22
1242	Effect of the Spatial Configuration of Donors on the Photovoltaic Performance of Double Dâˆ'Ï€â€"A Organic Dyes. ACS Applied Materials & Interfaces, 2021, 13, 40648-40655.	4.0	13
1243	A Molecular Engineering Strategy of Phenylamine-Based Zinc-Porphyrin Dyes for Dye-Sensitized Solar Cells: Synthesis, Characteristics, and Structureâ€"Performance Relationships. ACS Applied Energy Materials, 2021, 4, 9267-9275.	2.5	17
1244	Effect of different aromatic groups on photovoltaic performance of 1,1â€²â€‹i>bis</i> (diphenylphosphino)ferrocene functionalized Ni (II) dithiolates as sensitizers in dye sensitized solar cells. Applied Organometallic Chemistry, 2021, 35, e6402.	1.7	9
1245	Co-sensitization of natural and low-cost dyes for efficient panchromatic light-harvesting using dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 417, 113345.	2.0	24
1246	Exploring the charge injection aptitude in pyrazol and oxazole derivatives by the first-principles approach. Zeitschrift Fur Physikalische Chemie, 2021, .	1.4	0
1247	Toward Sustainable, Colorless, and Transparent Photovoltaics: State of the Art and Perspectives for the Development of Selective Nearâ€Infrared Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2021, 11, 2101598.	10.2	73
1248	Nickel foam supported Pt as highly flexible counter electrode of dye-sensitized solar cells. Solar Energy, 2021, 224, 82-87.	2.9	10
1250	Ultrathin layered MoS2 and N-doped graphene quantum dots (N-GQDs) anchored reduced graphene oxide (rGO) nanocomposite-based counter electrode for dye-sensitized solar cells. Carbon, 2021, 181, 107-117.	5.4	52
1251	Controlled Photoanode Properties for Large-Area Efficient and Stable Dye-Sensitized Photovoltaic Modules. Nanomaterials, 2021, 11, 2125.	1.9	5

#	Article	IF	Citations
1252	Inâ€Situ Growth Mirrorâ€Like Cobalt Sulfide Nanosheets on ITO for High Efficiency Counter Electrode of Dyeâ€Sensitized Solar Cells**. ChemistrySelect, 2021, 6, 7537-7541.	0.7	2
1253	Organic Dyes in Dye-Sensitized Solar Cells Featuring Back Reflector. Energies, 2021, 14, 5529.	1.6	8
1254	Evaluation of the excited state dynamics, photophysical properties, and the influence of donor substitution in a donor-$$pi$$-acceptor system. Journal of Molecular Modeling, 2021, 27, 284.	0.8	34
1255	Advances in upconversion enhanced solar cell performance. Solar Energy Materials and Solar Cells, 2021, 230, 111234.	3.0	45
1256	Inorganic Pb(II)â€"P and Pb(II)â€"S Complexes as Photosensitizers from Primary and Secondary Amines in Dyes-Sensitized Solar Cells. ACS Omega, 2021, 6, 23700-23709.	1.6	4
1257	Improvement of Efficiency of Dye Sensitized Solar Cells by Incorporating Carbon Nanotubes. , 0, , .		1
1258	Novel indole-based photosensitizers coupled with PEG-HEC quasi-solid-state electrolyte to improve energy conversion and stability of organic dyes based-dye sensitized solar cells. Electrochimica Acta, 2021, 389, 138771.	2.6	20
1259	Recent progress in organic hole transport materials for energy applications. Dyes and Pigments, 2021, 193, 109465.	2.0	27
1260	Low dye content efficient dye-sensitized solar cells using carbon doped-titania paste from convenient green synthetic process. Inorganica Chimica Acta, 2021, 525, 120487.	1.2	0
1261	Cu₂ZnSnS₄ thin film as a counter electrode in zinc stannate-based dye-sensitized solar cells. Semiconductor Science and Technology, 2021, 36, 105008.	1.0	15
1262	Correlation Study on Biopolymer-Blended Cobalt and Iodine Gel Electrolytes to Enhance the Efficiency of Natural Dye-Based DSSCs. Energy & Fuels, 2021, 35, 15033-15044.	2.5	5
1263	Plasticized I2-free polysiloxane ionic conductors as electrolytes for stable and flexible solid-state dye-sensitized solar cells. Applied Surface Science Advances, 2021, 5, 100120.	2.9	6
1264	Visible Range Activated Metal Oxide Photocatalysts in New and Emerging Energy Applications. Green Chemistry and Sustainable Technology, 2022, , 787-815.	0.4	1
1265	Novel Architecture of Indoor Bifacial Dyeâ€Sensitized Solar Cells with Efficiencies Surpassing 25% and Efficiency Ratios Exceeding 95%. Advanced Optical Materials, 2021, 9, 2100936.	3.6	12
1266	Performance analysis of TiO2 based dye sensitized solar cell prepared by screen printing and doctor blade deposition techniques. Solar Energy, 2021, 226, 9-19.	2.9	26
1267	Effect of Combination of Natural Dyes and the Blocking Layer on the Performance of DSSC. , 0, , .		0
1268	Optimizing the Cosensitization Effect of SQ02 Dye on BP-2 Dye-Sensitized Solar Cells: A Computational Quantum Chemical Study. Journal of Chemical Information and Modeling, 2021, 61, 5098-5116.	2.5	16
1269	Application of Natural Betalain Dye from Beetroot for Improved Efficiency in Dye Sensitized Solar Cell. IOP Conference Series: Materials Science and Engineering, 2021, 1187, 012005.	0.3	2

#	Article	IF	Citations
1270	Dimeric dithiafulvene sensitizers involving a 1,3,4-oxadiazole as auxiliary acceptor and pyridine as electron-withdrawing anchoring group for efficient dye sensitized solar cells. Dyes and Pigments, 2021, 193, 109483.	2.0	5
1271	ZnO hierarchical structures as sacrificial inclusions for enhanced performance under full sun and indoor light in bifacial dye sensitized solar cells. Solar Energy, 2021, 226, 214-224.	2.9	12
1272	Transition divalent metal substitution in chalcopyrite CuInSe2 (In= Co, Ni, and Mn) counter electrode for dye-sensitized solar cell applications. Materials Letters, 2021, , 130887.	1.3	4
1273	First principles design novel D5 derivative dyes with excellent acceptors for highly efficient dye-sensitized solar cells. Computational and Theoretical Chemistry, 2021, 1203, 113374.	1.1	1
1274	Ultrasonically synthesized TiO2/ZnS nanocomposites to improve the efficiency of dye sensitized solar cells. Materials Science in Semiconductor Processing, 2021, 132, 105917.	1.9	6
1275	Highly efficient gel electrolytes by end group modified PEG-based ABA triblock copolymers for quasi-solid-state dye-sensitized solar cells. Chemical Engineering Journal, 2021, 420, 129899.	6.6	18
1276	Introducing thiophene and benzothiadiazole groups in triphenylamine-based organic dyes with rigidly fused Ï€-bridge to design high-efficiency solar cells: A theoretical investigation. Solar Energy, 2021, 225, 323-332.	2.9	10
1277	Comprehensive study on dye sensitized solar cell in subsystem level to excel performance potential: A review. Solar Energy, 2021, 226, 192-213.	2.9	24
1278	Nanostructured perovskite oxides for dye-sensitized solar cells. Journal Physics D: Applied Physics, 2021, 54, 493001.	1.3	6
1279	Dual-channel D-(Ï€-A)2 phenoxazine/phenothiazine dyes with an auxiliary N-alkoxy benzoic acid anchor for fabrication of dye-sensitized solar cells. Solar Energy, 2021, 225, 173-183.	2.9	9
1280	Understanding the optical behaviours and the power conversion efficiency of novel organic dye and nanostructured TiO2 based integrated DSSCs. Solar Energy, 2021, 225, 129-147.	2.9	16
1281	Theoretical and photovoltaic investigations of 1,3,5-triazine-based photosensitizers achieving highly efficient DSSCs. Synthetic Metals, 2021, 280, 116882.	2.1	7
1282	New phenothiazine dyes containing benzothiadiazole-acceptor for dye-sensitized solar cells. Dyes and Pigments, 2021, 194, 109664.	2.0	8
1283	Application of new natural dyes extracted from Nasturtium flowers (Tropaeolum majus) as photosensitizer in dye-sensitized solar cells. Optik, 2021, 243, 167331.	1.4	20
1284	Switching the electrical characteristics of TiO2 from n-type to p-type by ion implantation. Applied Surface Science, 2021, 563, 150274.	3.1	6
1285	A novel idea of using dyes extracted from the leaves of Prosopis juliflora in dye â€“ Sensitized solar cells. Optical Materials, 2021, 120, 111429.	1.7	17
1286	Highly effective 2D layered carbides counter electrode for iodide redox couple regeneration in dye-sensitized solar cells. Electrochimica Acta, 2021, 392, 138983.	2.6	11
1287	Effects of concentrated light on the performance and stability of a quasi-solid electrolyte in dye-sensitized solar cells. Chemical Physics Letters, 2021, 781, 138986.	1.2	5

#	Article	IF	Citations
1288	Advances in phenothiazine and phenoxazine-based electron donors for organic dye-sensitized solar cells. Dyes and Pigments, 2021, 194, 109638.	2.0	41
1289	D-Ï€-A-structured organic sensitizers with Ï€-extended auxiliary acceptor units for high-performance dye-sensitized solar cells. Dyes and Pigments, 2021, 195, 109681.	2.0	24
1290	Plasmon-enhanced dye-sensitized solar cells through porphyrin-silver nanoparticle hybrid structures: Experimental and computational studies. Journal of Power Sources, 2021, 511, 230407.	4.0	6
1291	Carbon dots as nano-modules for energy conversion and storage. Materials Today Communications, 2021, 29, 102732.	0.9	13
1292	Experimental and theoretical study on optimizing CaxBa1âˆ'xSnO3 perovskite materials as photoanode of dye-sensitized solar cells. Journal of Alloys and Compounds, 2021, 888, 161439.	2.8	7
1293	The influences of Ni, Ag-doped TiO2 and SnO2, Ag-doped SnO2/TiO2 nanocomposites on recombination reduction in dye synthesized solar cells. Journal of Alloys and Compounds, 2022, 890, 161709.	2.8	33
1294	Performance of photovoltaic-driven electrochemical cell systems for CO2 reduction. Chemical Engineering Journal, 2022, 428, 130259.	6.6	17
1295	Improving energy harvesting efficiency of dye sensitized solar cell by using cobalt-rGO co-doped TiO2 photoanode. Journal of Alloys and Compounds, 2022, 891, 162040.	2.8	22
1296	Dye-sensitized solar cells strike back. Chemical Society Reviews, 2021, 50, 12450-12550.	18.7	240
1297	Complexity of Electron Injection Dynamics and Light Soaking Effects in Efficient Dyes for Modern DSSC. Energies, 2021, 14, 407.	1.6	1
1298	Supramolecular Co-adsorption on TiO₂ to enhance the efficiency of dye-sensitized solar cells. Journal of Materials Chemistry A, 2021, 9, 13697-13703.	5.2	5
1299	Structural modulation of phenothiazine and coumarin based derivatives for high performance dye sensitized solar cells: a theoretical study. Physical Chemistry Chemical Physics, 2021, 23, 13190-13203.	1.3	15
1300	Polyoxometalate modified transparent metal selenide counter electrodes for high-efficiency bifacial dye-sensitized solar cells. Inorganic Chemistry Frontiers, 2021, 8, 3230-3237.	3.0	9
1301	Introduction to solar energy and its conversion into electrical energy by using dye-sensitized solar cells. , 2021, , 139-178.		3
1302	Indole fused heterocycles as sensitizers in dye-sensitized solar cells: an overview. Materials Advances, 2021, 2, 6136-6168.	2.6	35
1303	Preparation and Property Studies of Polyaniline Film for Flexible Counter Electrode of Dyeâ€Sensitized Solar Cells by Cyclic Voltammetry. ChemistrySelect, 2021, 6, 230-233.	0.7	11
1304	On the nature of plasmon-induced photocurrent enhancement in Bacteriochlorophyll c sensitized solar cells: Towards red light harvesting. Materials Chemistry and Physics, 2021, 258, 123932.	2.0	2
1305	Effect of 1-Substituted 2-(Pyridin-2-yl)-1<i>H</i>-Benzo[<i>d</i>]imidazole Ligand-Coordinated Copper and Cobalt Complex Redox Electrolytes on Performance of Ru(II) Dye-Based Dye-Sensitized Solar Cells. Inorganic Chemistry, 2021, 60, 1937-1947.	1.9	29

#	Article	IF	Citations
1306	Comparison of homogeneous and heterogeneous catalysts in dye-sensitised photoelectrochemical cells for alcohol oxidation coupled to dihydrogen formation. Sustainable Energy and Fuels, 2021, 5, 5707-5716.	2.5	10
1307	Recent improvements in dye-sensitized solar cells. , 2021, , 509-544.		2
1308	Cu(<scp>ii</scp>/<scp>i</scp>) redox couples: potential alternatives to traditional electrolytes for dye-sensitized solar cells. Materials Advances, 2021, 2, 1229-1247.	2.6	48
1309	Well-dispersed Te-doped mesoporous carbons as Pt-free counter electrodes for high-performance dye-sensitized solar cells. Dalton Transactions, 2021, 50, 9399-9409.	1.6	15
1310	Materials for Solar Cell Applications: An Overview of TiO2, ZnO, Upconverting Organic and Polymer-Based Solar Cells. , 2020, , 55-78.		6
1311	Conducting Polymers as Cost Effective Counter Electrode Material in Dye-Sensitized Solar Cells. Energy, Environment, and Sustainability, 2020, , 345-371.	0.6	8
1312	In situ ligand-free growth of TiO2-escapsulated Au nanocomposites on photoanode for efficient dye sensitized solar cells. Chemical Engineering Journal, 2020, 396, 125302.	6.6	18
1313	Hybrid graphene/metal oxide anodes for efficient and stable dye sensitized solar cell. Electrochimica Acta, 2020, 349, 136409.	2.6	32
1314	Low-energy-gap organic photosensitizers with phenalenothiophene and benzoindenothiophene as primary electron-donors for durable dye-sensitized solar cells. Journal of Power Sources, 2020, 451, 227748.	4.0	12
1315	New organic dyes with varied arylamine donors as effective co-sensitizers for ruthenium complex N719 in dye sensitized solar cells. Journal of Power Sources, 2020, 451, 227776.	4.0	47
1316	PAN-Based Triblock Copolymers Tailor-Made by Reversible Additionâ€“Fragmentation Chain Transfer Polymerization for High-Performance Quasi-Solid State Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2021, 4, 1302-1312.	2.5	12
1317	Dye-sensitized solar cells under ambient light powering machine learning: towards autonomous smart sensors for the internet of things. Chemical Science, 2020, 11, 2895-2906.	3.7	200
1318	Effect of cyclodextrin cavity size on the photovoltaic performance of unanchored ruthenium(II) polypyridine complex-containing dye-sensitized solar cells. Journal of Photonics for Energy, 2020, 10, .	0.8	1
1319	Graphene-based copper oxide thin film nanostructures as high-efficiency photocathode for p-type dye-sensitized solar cells. Journal of Photonics for Energy, 2017, 7, 1.	0.8	4
1320	Effects of {001} Facet of Anatase TiO₂ Single-crystalline Nanosheets on Photoexcited Electron Transfer from Near-infrared Dye-sensitizer. Chemistry Letters, 2017, 46, 1624-1627.	0.7	2
1321	Transformed Double-Capped Gold Nanorods in Dye Co-Sensitized Solar Cells for Semitransparent Windows. Current Nanoscience, 2019, 15, 309-318.	0.7	2
1322	Printing photovoltaics by electrospray. Opto-Electronic Advances, 2020, 3, 190038-190038.	6.4	20
1323	An Overview of the Operational Principles, Light Harvesting and Trapping Technologies, and Recent Advances of the Dye Sensitized Solar Cells (Review). Applied Solar Energy (English Translation of) Tj ETQq1 1 0.784314 rgBT /Overlock 1	0.3	10

#	Article	IF	Citations
1324	Interfacial Charge-Transfer Transitions for Direct Charge-Separation Photovoltaics. Energies, 2020, 13, 2521.	1.6	17
1325	DYE PHOTOSENSITIZERS AND THEIR INFLUENCE ON DSSC EFFICIENCY: A REVIEW. Informatyka Automatyka Pomiary W Gospodarce I Ochronie Åšrodowiska, 2019, 9, 86-90.	0.2	5
1326	N719 and N3 dyes for quasi-solid state dye sensitized solar cells - A comparative study using polyacrylonitrile and CsI based electrolytes. Ceylon Journal of Science, 2016, 45, 61.	0.1	9
1327	Review of the Development of Dyes for Dye-Sensitized Solar Cells. Applied Science and Convergence Technology, 2019, 28, 194-206.	0.3	20
1328	Emerging Photovoltaic Technologies and Eco-Designâ€"Criticisms and Potential Improvements. , 0, , .		5
1329	Rationalization of excited state energy transfer in Dâ€"Ï€â€"A porphyrin sensitizers enhancing efficiency in dye-sensitized solar cells. Materials Advances, 0, , .	2.6	2
1330	Indoor light-harvesting dye-sensitized solar cells surpassing 30% efficiency without co-sensitizers. Materials Advances, 2021, 2, 7773-7787.	2.6	33
1332	Zinc phthalocyanine absorbance in the near-infrared with application for transparent and colorless dye-sensitized solar cells. Comptes Rendus Chimie, 2021, 24, 157-170.	0.2	2
1333	Electronically Coupled TTA-UC Solar Cells. , 2022, , 209-237.		0
1334	Efficient improvement of W05â€based dyes by inserting auxiliary electron acceptors for dyeâ€sensitized solar cells: A theoretical investigation. Journal of Physical Organic Chemistry, 0, , e4290.	0.9	1
1335	Photoelectrochemical properties of WO3-modified anatase TiO2 photoanodes and application for dye-sensitized solar cells. Surfaces and Interfaces, 2021, 27, 101543.	1.5	4
1336	Enhancing spectral response towards high-performance dye-sensitised solar cells by multiple dye approach: A comprehensive review. Applied Materials Today, 2021, 25, 101204.	2.3	11
1337	Terminal Ï€-group engineering of organic co-sensitizers for thiourea dye based dye-sensitized solar cells. Solar Energy, 2021, 230, 312-320.	2.9	8
1338	Effect of ZnO nanostructures on the performance of dye sensitized solar cells. Solar Energy, 2021, 230, 492-500.	2.9	25
1339	Cost effective synthesis Co9S8/Ni9S8 loaded on nitrogen doped porous carbons high efficiency counter electrode materials for liquid thin film solar cells. Electrochimica Acta, 2021, 399, 139441.	2.6	9
1340	Ionic Liquid-based Polymers and Crystals for Dye-sensitized Solar Cells. RSC Smart Materials, 2017, , 515-530.	0.1	0
1341	2ï¼Žæœ‰æ©Ÿã,±ã,ç´è‰²ç´ ã,'ç"¨ã,ãŸé«˜åŠ¹çŽ‡è‰²ç´ å¢—æ„Ÿå¤ªé™½é›»æ±ã®é–‹ç™º. Electrochemistry, 2017, 85, 415-420.	0.6	0
1342	Stability of perovskite solar cells on flexible substrates. , 2018, , .		0

#	Article	IF	Citations
1343	CHAPTER 3. Dye-sensitised Solar Cells. Inorganic Materials Series, 2019, , 89-152.	0.5	1
1344	Graphene: Preparation and Applications. RSC Smart Materials, 2020, , 100-130.	0.1	0
1345	Perovskite Materials in Photovoltaics. Materials Horizons, 2020, , 175-207.	0.3	1
1346	Effect of Extending the Conjugation of Dye Molecules on the Efficiency and Stability of Dye-Sensitized Solar Cells. ACS Omega, 2021, 6, 30069-30077.	1.6	8
1347	Low-Cost and Efficient Nickel Nitroprusside/Graphene Nanohybrid Electrocatalysts as Counter Electrodes for Dye-Sensitized Solar Cells. Materials, 2021, 14, 6563.	1.3	10
1348	Basic Concepts, Engineering, and Advances in Dye-Sensitized Solar Cells. , 2020, , 185-233.		2
1349	Photon-Responsive Nanomaterials for Solar Cells. Springer Series in Materials Science, 2020, , 1-63.	0.4	0
1350	Fabrication techniques and working principle of neoteric dye-sensitized solar cells. , 2022, , 159-179.		0
1351	p-Type Dye Sensitized Solar Cells: An Overview of Factors Limiting Efficiency. Energy, Environment, and Sustainability, 2020, , 315-344.	0.6	2
1352	Effect of LEG4 concentration as a sensitizer on increasing efficiency in DSSC-based solar cells. AIP Conference Proceedings, 2020, , .	0.3	0
1353	Role of Ultrathin Electron Transport Layers in Performance of Dye-Sensitized and Perovskite Solar Cells. Materials Horizons, 2020, , 479-505.	0.3	0
1354	Polydopamine-Modified Electrospun Polyvinylidene Fluoride Nanofiber Based Flexible Polymer Gel Electrolyte for Highly Stable Dye-Sensitized Solar Cells. ACS Omega, 2021, 6, 28663-28670.	1.6	10
1355	Spiroâ€sulfoneâ€based Auxiliary Acceptor in Dâ€Aâ€Ï€â€A Dyeâ€sensitized Solar Cells Application under Indoor/Outdoor Light. Asian Journal of Organic Chemistry, 2021, 10, 3396-3405.	1.3	2
1356	Efficiency and stability improvements for room light dye-sensitized solar cells in the presence of electrochemically fabricated composite counter electrodes. Journal of Power Sources, 2022, 518, 230781.	4.0	12
1357	Role of Ï€-spacer in regulating the photovoltaic performance of copper electrolyte dye-sensitized solar cells using triphenylimidazole dyes. Materials Advances, 2022, 3, 1231-1239.	2.6	15
1358	Electrospun membrane of PVA and functionalized agarose with polymeric ionic liquid and conductive carbon for efficient dye sensitized solar cell. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 425, 113666.	2.0	11
1359	Natural resources for dye-sensitized solar cells. Heliyon, 2021, 7, e08436.	1.4	12
1360	Effect of Mg Doping on SnO₂ Energy Band and Power Conversion Efficiency of Dye-Sensitized Solar Cells. Journal of Physics: Conference Series, 2021, 2101, 012066.	0.3	1

#	Article	IF	Citations
1361	Fabrication and Characterization of a Dye-Sensitized Solar Cell using Natural Dye Extract of Rosella (Hibiscus sabdariffa L.) as Photosensitizer. Journal of the Nigerian Society of Physical Sciences, 0, , 287-291.	0.0	2
1362	Preferential Direction of Electron Transfers at a Dyeâ€"Metal Oxide Interface with an Insulating Fluorinated Self-Assembled Monolayer and MgO. Journal of Physical Chemistry C, 2021, 125, 25410-25421.	1.5	4
1363	Organic Devices: Fabrication, Applications, and Challenges. Journal of Electronic Materials, 2022, 51, 447-485.	1.0	20
1364	Effect of thickness on charge transfer properties of conductive polymer based PEDOT counter electrodes in DSSC. Results in Surfaces and Interfaces, 2021, 5, 100030.	1.0	7
1365	Fabrication of eco-friendly, low-cost dye sensitized solar cells using harda fruit-based natural dye. Optical Materials, 2021, 122, 111800.	1.7	9
1366	The effect of secondary dopants on screenâ€printed <scp>PEDOT</scp>:<scp>PSS</scp> counterâ€electrodes for dyeâ€sensitized solar cells. Journal of Applied Polymer Science, 2022, 139, 51929.	1.3	7
1367	Aminosilicate modified zinc oxide Nanorod-GO nanocomposite for DSSC photoanodes. Ceramics International, 2022, 48, 6037-6045.	2.3	6
1368	Unveiling the influence of SmFeO3-TiO2 nanocomposites as high performance photoanodes of dye-sensitized solar cells. Journal of Molecular Liquids, 2022, 348, 118070.	2.3	26
1369	Dynamic dimer copper coordination redox shuttles. CheM, 2022, 8, 439-449.	5.8	4
1370	Review on the Revolution of Polymer Electrolytes for Dye-Sensitized Solar Cells. Energy & Fuels, 2021, 35, 19320-19350.	2.5	13
1371	Dynamics of photoconversion processes: the energetic cost of lifetime gain in photosynthetic and photovoltaic systems. Chemical Society Reviews, 2021, 50, 13372-13409.	18.7	10
1372	Through Structural Isomerism: Positional Effect of Alkyne Functionality on Molecular Optical Properties. Physical Chemistry Chemical Physics, 2022, , .	1.3	2
1373	Solid-state dye-sensitized solar cells using polymeric hole conductors. RSC Advances, 2021, 11, 39570-39581.	1.7	9
1374	Solar energy conversion using first row d-block metal coordination compound sensitizers and redox mediators. Chemical Science, 2022, 13, 1225-1262.	3.7	35
1375	Effects of methoxy group(s) on D-Ï€-A porphyrin based DSSCs: efficiency enhanced by co-sensitization. Materials Chemistry Frontiers, 2022, 6, 580-592.	3.2	19
1376	The improved photocurrent density of D35-cpdt and DN-F10 via co-sensitization process in dye-sensitized solar cells. Ionics, 2022, 28, 1461-1471.	1.2	2
1377	New organic photosensitizers based on triphenylamine and hydantoin as anchoring group onto TiO2 Surface. Journal of Molecular Structure, 2022, 1251, 132072.	1.8	2
1378	Impact of internal (donor/acceptor) moieties and Ï€-spacer in triphenylamine-based dyes for DSSCs. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 426, 113738.	2.0	19

#	Article	IF	Citations
1379	Low cost carbazole-based organic dyes bearing the acrylamide and 2-pyridone moieties for efficient dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 426, 113760.	2.0	19
1380	Starburst configured imidazole-arylamine organic sensitizers for DSSC applications. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 426, 113735.	2.0	5
1381	Dye sensitized solar cells go beyond using perovskite and spinel inorganic materials: A review. Renewable and Sustainable Energy Reviews, 2022, 157, 112047.	8.2	54
1382	Li+ doped anodic TiO2 nanotubes for enhanced efficiency of Dye-sensitized solar cells. Surface Science, 2022, 718, 122012.	0.8	7
1383	Titanium Dioxide Nanorods as An Effective Blocking Layer in Solar Cells. International Journal on Advanced Science, Engineering and Information Technology, 2020, 10, 1992-1997.	0.2	0
1384	Effect of Macropores in Titanium Dioxide Layer on the Enhancement of Photovoltaic Conversion Efficiency of Long-Persistence-Phosphor Enhanced Dye-Sensitized Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0
1385	Dye-sensitized solar cells based on Fe N-heterocyclic carbene photosensitizers with improved rod-like push-pull functionality. Chemical Science, 2021, 12, 16035-16053.	3.7	17
1386	Ferrocenylâ€2â€pyridylimine derived d¹⁰â€configuration complexes as prospective coâ€sensitizers in dye sensitized solar cells. Applied Organometallic Chemistry, 2022, 36, .	1.7	7
1387	Efficient dye-sensitized solar cells based on concerted companion dyes: Systematic optimization of thiophene units in the organic dye components. Chinese Chemical Letters, 2022, 33, 4313-4316.	4.8	38
1388	Nitrogen-doped porous carbon with parallel macropore channels derived from Luffa sponge as counter electrode of high-performance dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2022, 33, 5224.	1.1	1
1389	Novel Dispersion of 1D Nanofiber Fillers for Fast Ion-Conducting Nanocomposite Polymer Blend Quasi-Solid Electrolytes for Dye-Sensitized Solar Cells. ACS Omega, 2022, 7, 1658-1670.	1.6	19
1390	Controlled Synthesis of Highly Active Nonstoichiometric Tin Phosphide/Carbon Composites for Electrocatalysis and Electrochemical Energy Storage Applications. ACS Sustainable Chemistry and Engineering, 2022, 10, 1482-1498.	3.2	15
1391	Real-time photovoltaic parameters assessment of carbon quantum dots showing strong blue emission. RSC Advances, 2022, 12, 1352-1360.	1.7	10
1392	Simple strategies deployed for developing efficient and stable solution processed quantum dot solar cells. Materials Advances, 2022, 3, 2249-2267.	2.6	3
1393	Enhancement in Photovoltaic Performance of Solar Cells by Electrostatic Adsorption of Dyes on ZnO Nanorods. Nanomaterials, 2022, 12, 372.	1.9	4
1394	Preparation of CoNi@CN composites based on metal-organic framework materials as high efficiency counter electrode materials for dye-sensitized solar cells. Solar Energy, 2022, 231, 767-774.	2.9	10
1395	Novel pyridoquinazolinone dyes for dye sensitized solar cells. Tetrahedron, 2022, 108, 132658.	1.0	2
1396	Sensitizers designed toward efficient intramolecular charge separation for p-type dye-sensitized solar cells. Dyes and Pigments, 2022, 200, 110127.	2.0	7

#	Article	IF	Citations
1397	Metal nitrides and carbides as advanced counter electrodes for dye-sensitized solar cells. , 2022, , 219-257.		2
1398	Characterizing Interfacial Structures of Dye-Sensitized Solar Cell Working Electrodes. Langmuir, 2022, 38, 871-890.	1.6	3
1399	Data-driven approach towards identifying dyesensitizer molecules for higher power conversion efficiency in solar cells. New Journal of Chemistry, 2022, 46, 4395-4405.	1.4	6
1400	Eco-Friendly Aqueous Dye-Sensitized Solar Cell with a Copper(I/II) Electrolyte System: Efficient Performance under Ambient Light Conditions. ACS Applied Energy Materials, 2022, 5, 257-265.	2.5	10
1401	Deep Eutectic Solvents in Solar Energy Technologies. Molecules, 2022, 27, 709.	1.7	23
1402	Photoelectrochemical Polymerization for Solidâ€State Dyeâ€Sensitized Solar Cells. Macromolecular Rapid Communications, 2021, , 2100762.	2.0	1
1403	Advancements, frontiers and analysis of metal oxide semiconductor, dye, electrolyte and counter electrode of dye sensitized solar cell. Solar Energy, 2022, 233, 378-407.	2.9	52
1404	An Ab Initio Molecular Dynamics Study of the Mechanism and Rate of Dye Regeneration by Iodide Ions in Dye-Sensitized Solar Cells. ACS Sustainable Chemistry and Engineering, 0, , .	3.2	0
1405	Diverse applications of ionic liquids: A comprehensive review. Journal of Molecular Liquids, 2022, 351, 118556.	2.3	197
1406	Enhanced adsorption on TiO2 photoelectrodes of dye-sensitized solar cells by electrochemical methods dye. Journal of Alloys and Compounds, 2022, 903, 163959.	2.8	8
1407	Investigation of silver nanowires in Zn2SnO4 spheres for enhanced dye-sensitized solar cells performance. Journal of Alloys and Compounds, 2022, 902, 163890.	2.8	14
1408	Probing photovoltaic performance in copper electrolyte dye-sensitized solar cells of variable TiO₂ particle size using comprehensive interfacial analysis. Journal of Materials Chemistry C, 2022, 10, 3929-3936.	2.7	14
1409	Synthesis and solar cell power conversion efficiency improvement of Ï€-extended triphenylamine dyes for indoor light-based applications. Applied Nanoscience (Switzerland), 2023, 13, 2271-2276.	1.6	0
1410	Morphology Control of Monomerâ€"Polymer Hybrid Electron Acceptor for Bulk-Heterojunction Solar Cell Based on P3HT and Ti-Alkoxide with Ladder Polymer. Materials, 2022, 15, 1195.	1.3	0
1411	An analysis of the dye-sensitized solar cells fabricated with the dyes extracted from the leaves and flowers of Amaranthus cruentus. Environmental Science and Pollution Research, 2022, 29, 44271-44281.	2.7	5
1412	Assessment of TiO₂ Blocking Layers for Cu^{II/I}-Electrolyte Dye-Sensitized Solar Cells by Electrochemical Impedance Spectroscopy. ACS Applied Energy Materials, 2022, 5, 1933-1941.	2.5	9
1413	Synthesis and photocurrent densityâ€"photovoltage (Jâ€"V) characterization of a novel alizarin derivative dye for dye-sensitized solar cell technology. International Journal of Energy and Environmental Engineering, 2022, 13, 769-783.	1.3	1
1414	Indoor Dye-Sensitized Solar Cells with Efficiencies Surpassing 26% Using Polymeric Counter Electrodes. ACS Sustainable Chemistry and Engineering, 2022, 10, 2473-2483.	3.2	34

#	Article	IF	Citations
1415	Structural effect of Low-dimensional carbon nanostructures on Long-term stability of dye sensitized solar cells. Chemical Engineering Journal, 2022, 435, 135037.	6.6	11
1416	Bio and nonâ€bio materialsâ€based quasiâ€solid state electrolytes in <scp>DSSC</scp> : A review. International Journal of Energy Research, 2022, 46, 5399-5422.	2.2	16
1417	Toward Eco-Friendly Dye-Sensitized Solar Cells (DSSCs): Natural Dyes and Aqueous Electrolytes. Energies, 2022, 15, 219.	1.6	31
1418	Long-term investigation of unsealed DSSCs with glycerol-based electrolytes of different compositions. AIMS Materials Science, 2022, 9, 283-296.	0.7	2
1419	Recent Development and Future Prospects of Rigid and Flexible Dye-Sensitized Solar Cell: A Review. Lecture Notes in Electrical Engineering, 2022, , 85-109.	0.3	4
1420	2D MXene: A Potential Candidate for Photovoltaic Cells? A Critical Review. Advanced Science, 2022, 9, e2104743.	5.6	41
1421	A Photoelectrochemical Study of Hybrid Organic and Donorâ€"Acceptor Dyes as Sensitizers for Dye-Sensitized Solar Cells. Applied Sciences (Switzerland), 2022, 12, 3159.	1.3	4
1422	Composite electrolyte pastes for preparing sub-module dye sensitized solar cells. Journal of Industrial and Engineering Chemistry, 2022, 107, 383-390.	2.9	2
1423	Aqueous Biphasic Dyeâ€Sensitized Photosynthesis Cells for TEMPOâ€Based Oxidation of Glycerol. Angewandte Chemie - International Edition, 2022, 61, .	7.2	17
1424	Trifluoromethyl Substituted Derivatives of Pyrazoles as Materials for Photovoltaic and Electroluminescent Applications. Crystals, 2022, 12, 434.	1.0	7
1425	Anthraceneâ€Bridged Sensitizers for Dyeâ€Sensitized Solar Cells with 37% Efficiency under Dim Light. Advanced Energy Materials, 2022, 12, .	10.2	21
1426	Investigating the effect of Ï€-configurations and methoxy substitution on donor and Ï€- spacers based dyes for dye-sensitized solar cell applicationsâ€"computational approach. Research on Chemical Intermediates, 2022, 48, 1877-1906.	1.3	5
1427	The Anodization of Thin Titania Layers as a Facile Process towards Semitransparent and Ordered Electrode Material. Nanomaterials, 2022, 12, 1131.	1.9	5
1428	Enhanced Performance of Carbonâ€"Selenide Composite with La0.9Ce0.1NiO3 Perovskite Oxide for Outstanding Counter Electrodes in Platinum-Free Dye-Sensitized Solar Cells. Nanomaterials, 2022, 12, 961.	1.9	4
1429	Effect of poly (ethylene glycol) gel polymer electrolyte consist of novel heteroleptic cobalt redox shuttle and pyridine based organic additive on performance of dye sensitized solar cells. Optical Materials, 2022, 125, 112082.	1.7	12
1430	Intrinsic and Extrinsic Incorporation of Indium and Singleâ€Walled Carbon Nanotubes for Improved ZnOâ€Based DSSCs. Advanced Energy Materials, 2022, 12, .	10.2	8
1431	Ti₃C₂ MXene-Reduced Graphene Oxide Composite Polymer-Based Printable Electrolyte for Quasi-Solid-State Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2022, 5, 3329-3338.	2.5	22
1432	Aqueous Biphasic Dyeâ€Sensitized Photosynthesis Cells for TEMPOâ€Based Oxidation of Glycerol. Angewandte Chemie, 0, , .	1.6	0

#	Article	IF	Citations
1433	Spatial separation strategies to control charge recombination and dye regeneration in p-type dye sensitized solar cells. Solar Energy, 2022, 236, 107-152.	2.9	14
1434	PEDOT-graphene counter-electrode for solar and improved artificial light conversion in regular, bifacial and FTO-less cobalt mediated DSSCs. Electrochimica Acta, 2022, 412, 140140.	2.6	7
1435	Recent developments on green synthesised nanomaterials and their application in dye-sensitised solar cells. International Journal of Ambient Energy, 2022, 43, 7133-7149.	1.4	4
1436	Effect of an aqueous copper gel electrolyte with cobalt metal organic framework based additive on performance of aqueous-dye-sensitized solar cells. Solar Energy, 2022, 236, 586-598.	2.9	12
1437	The TiO₂ films with sandwich-type polyoxometalates in dye sensitized solar cells with electron recombination decreasing and dye adsorption increasing. Journal of Coordination Chemistry, 0, , 1-15.	0.8	0
1438	Encapsulation of commercial and emerging solar cells with focus on perovskite solar cells. Solar Energy, 2022, 237, 264-283.	2.9	35
1439	Counter electrode materials based on carbon nanotubes for dye-sensitized solar cells. Renewable and Sustainable Energy Reviews, 2022, 159, 112196.	8.2	39
1440	Scanning prevalent technologies to promote scalable devising of DSSCs: An emphasis on dye component precisely with a shift to ambient algal dyes. Inorganic Chemistry Communication, 2022, 139, 109368.	1.8	8
1441	Effect of macropores in titanium dioxide layer on the enhancement of photovoltaic conversion efficiency of long-persistence-phosphor enhanced dye-sensitized solar cells. Journal of Alloys and Compounds, 2022, 905, 164295.	2.8	4
1442	Pyridyl anchored indolium dyes for the p-type dye sensitized solar cell. Dyes and Pigments, 2022, 202, 110244.	2.0	7
1443	Experimental and theoretical study of organic sensitizers for solid-state dye-sensitized solar cells (s-DSSCs). Journal of Photochemistry and Photobiology A: Chemistry, 2022, 428, 113890.	2.0	6
1444	Aza-dipyrrinato ruthenium sensitizers for enhancement of Light-Harvesting ability of Dye-Sensitized solar cells. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 275, 121131.	2.0	2
1445	Account of Structural, Theoretical, and Photovoltaic Properties of ABO₃ Oxide Perovskites Photoanodeâ€Based Dyeâ€Sensitized Solar Cells. Solar Rrl, 2022, 6, .	3.1	10
1446	Outdoor Performance and Stability Assessment of Dye-Sensitized Solar Cells (DSSCs). , 0, , .		1
1447	Terpyridyl Ruthenium Complexes Functionalized with Conjugated Heterocycles for Panchromatic Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2021, 4, 13461-13470.	2.5	3
1448	Push-Pull Heterocyclic Dyes Based on Pyrrole and Thiophene: Synthesis and Evaluation of Their Optical, Redox and Photovoltaic Properties. Coatings, 2022, 12, 34.	1.2	6
1449	Construction of In₂S₃/Ag-Ag₂S-AgInS₂/TNR Nanoarrays with Excellent Photoelectrochemical and Photocatalytic Properties. Journal of the Electrochemical Society, 2021, 168, 126517.	1.3	5
1450	Copper Piperazine Complex with a High Diffusion Coefficient for Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2021, 4, 14004-14013.	2.5	2

#	Article	IF	Citations
1451	Tandem Dye-Sensitized Solar Cells with Efficiencies Surpassing 33% Under Dim-Light Conditions. SSRN Electronic Journal, 0, , .	0.4	0
1452	UV-selective organic absorbers for the cosensitization of greenhouse-integrated dye-sensitized solar cells: synthesis and computational study. RSC Advances, 2022, 12, 11420-11435.	1.7	8
1453	Photovoltaic Performance of Dye-Sensitized Solar Cells with a Solid-State Redox Mediator Based on an Ionic Liquid and Hole-Transporting Triphenylamine Compound. Energies, 2022, 15, 2765.	1.6	3
1454	Photoexcited Intramolecular Charge Transfer in Dye Sensitizers: Predictive In Silico Screening for Dye-Sensitized Solar Cell Devices. ACS Omega, 2022, 7, 13465-13474.	1.6	7
1455	Synthesis of polymer-gel electrolytes for quasi solid-state dye-sensitized solar cells and Modules: A potential photovoltaic technology for powering internet of things (IoTs) applications. Materials Letters, 2022, 319, 132270.	1.3	2
1456	Instability of dye-sensitized solar cells using natural dyes and approaches to improving stability â€“ An overview. Sustainable Energy Technologies and Assessments, 2022, 52, 102196.	1.7	10
1457	CHAPTER 8. Dye-sensitised Solar Cells. RSC Nanoscience and Nanotechnology, 0, , 268-297.	0.2	0
1462	Novel 2D-AuSe nanostructures as effective platinum replacement counter electrodes in dye-sensitized solar cells. RSC Advances, 2022, 12, 12882-12890.	1.7	4
1463	Scalable Method for Horizontal-Dipping Electrodeposition of Platinum Nanoparticles in Application to Dye-Sensitized Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0
1464	Role of artificial neural networks in predicting design and efficiency of dye sensitized solar cells. International Journal of Energy Research, 2022, 46, 11556-11573.	2.2	8
1465	Donor-Ï€-Acceptor Type Porphyrin-Fullerene Dyad with Acetylene Bridge for p-Type Dye-sensitized Solar Cell. Chemistry Letters, 2022, 51, 260-263.	0.7	1
1466	DFT exploration to tune the silyl group as anchoring unit on the performance of dye-sensitized solar cells: an approach to suppress dye leaching from semiconductor surface. Journal of Molecular Modeling, 2022, 28, 131.	0.8	6
1467	ELECTRICAL ANALYSIS OF SEMI-FLEXIBLE AND FLEXIBLE DSSCS: COMPARISON STUDY. Surface Review and Letters, 0, , .	0.5	0
1468	MWCNT Aided Cobalt Antimony Sulfide Electrocatalyst for Dye-Sensitized Solar Cells and Supercapacitors: Designing Integrated Photo-Powered Energy System. Journal of the Electrochemical Society, 2022, 169, 056518.	1.3	11
1469	One-dimensional silver-titania nanocomposites as modification of photoanode for enhanced dye-sensitized solar cells â€“ A review. Materials Today: Proceedings, 2022, 62, 3301-3305.	0.9	2
1470	Emergence of Copper(I/II) Complexes as Third-Generation Redox Shuttles for Dye-Sensitized Solar Cells. ACS Energy Letters, 2022, 7, 1926-1938.	8.8	25
1471	Electrical Transport, Structural, Optical and Thermal Properties of [(1â^'x)Succinonitrile: xPEO]-LiTFSI-Co(bpy)3(TFSI)2-Co(bpy)3(TFSI)3 Solid Redox Mediators. Polymers, 2022, 14, 1870.	2.0	3
1472	Ionic liquid dispersed highly conducting polymer electrolyte for supercapacitor application: Current scenario and prospects â€œICSEM 2021â€. High Performance Polymers, 2022, 34, 652-672.	0.8	6

#	Article	IF	Citations
1473	Remarkable 8.3% efficiency and extended electron lifetime towards highly stable semi-transparent iodine-free DSSCs by mitigating the in-situ triiodide generation. Chemical Engineering Journal, 2022, 446, 136777.	6.6	17
1474	Polymers in High-Efficiency Solar Cells: The Latest Reports. Polymers, 2022, 14, 1946.	2.0	23
1475	An Efficient Copper-Based Redox Shuttle Bearing a Hexadentate Polypyridyl Ligand for DSCs under Low-Light Conditions. ACS Applied Energy Materials, 2022, 5, 5964-5973.	2.5	2
1476	The improved performance of dyeâ€sensitized solar cells using coâ€sensitization and polymer gel electrolyte. International Journal of Energy Research, 2022, 46, 12974-12987.	2.2	7
1477	Seawater-based electrolytes facilitate charge transfer mechanisms improving the efficiency of dye-sensitized solar cells. Journal of Electroanalytical Chemistry, 2022, 915, 116352.	1.9	2
1478	Effect of the TiO2 surface modification with 3-glycidyloxypropyltrimethoxysilane on the aggregation of cresyl violet: Application to a dye-sensitized solar cell. Materials Chemistry and Physics, 2022, 286, 126196.	2.0	1
1479	Mini review on the molecular engineering of photosensitizer: Current status and prospects of metal-free/porphyrin frameworks at the interface of dye-sensitized solar cells. Dyes and Pigments, 2022, 203, 110380.	2.0	17
1480	A synergistic effect of NaYF4:Yb,Er@NaGdF4:Nd@SiO2 upconversion nanoparticles and TiO2 hollow spheres to enhance photovoltaic performance of dye-sensitized solar cells. Electrochimica Acta, 2022, 421, 140435.	2.6	21
1481	A Brief on Emerging Materials and Its Photovoltaic Application. , 2022, , 361-406.		3
1482	High Open-Circuit Voltage in Double Perovskite Oxide A2NdSbO6 (A = Ba, Sr) Photoanode-Based Dye-Sensitized Solar Cells. Journal of Electronic Materials, 2022, 51, 4281-4287.	1.0	3
1483	Review about Main Requirements for Porphyrin Derivatives as Components of Dye Sensitized Solar Cells. Journal of Solar Energy Research Updates, 0, 6, .	0.0	1
1484	Zinc Oxide: A Fascinating Material for Photovoltaic Applications. Materials Horizons, 2022, , 173-241.	0.3	2
1485	Stable Cobalt-Mediated Monolithic Dye-Sensitized Solar Cells by Full Glass Encapsulation. ACS Applied Energy Materials, 2022, 5, 7220-7229.	2.5	11
1486	New Dâ^'Ï€â€"Dâ^'Ï€â€"A Systems Based on Phenothiazine Derivatives with Imidazole Structures for Photovoltaics. Journal of Physical Chemistry C, 2022, 126, 8986-8999.	1.5	10
1487	Ant-like small molecule metal-free dimeric porphyrin sensitizer for true energy-generating DSSC with 9.3% efficiency. Journal of Materials Science: Materials in Electronics, 2022, 33, 14305-14322.	1.1	3
1488	Direct and soxhlet extraction of dyes from the peels of Allium cepa and its effective application in dye â€" Sensitized solar cells as sensitizer. Optical Materials, 2022, 129, 112487.	1.7	13
1489	<P Class="Batitle"><Span Lang="En-Us">Pyrrole - Best Additional Spacers for Azo Based Dye Sensitized Solar Cells: A Computational Study<O:P></O:P></Span></P>. SSRN Electronic Journal, 0, , .	0.4	0
1490	High Performance Photoelectrodes Prepared Using Au@P3ht Composite Nanoparticles for Dye-Sensitized Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	Citations
1491	Reviewâ€"Recent Advancements in Dye-Sensitized Solar Cells; From Photoelectrode to Counter Electrode. Journal of the Electrochemical Society, 2022, 169, 066507.	1.3	28
1492	Upconversion photoluminescence enhancement by Gd-doped NaYF4:Yb,Er@SiO2 nanoparticles and their application in dye-sensitized solar cells. Journal of Luminescence, 2022, 249, 119052.	1.5	5
1493	Effect of a locust bean gum based gel electrolyte with nanocomposite additives on the performance of a dye-sensitized solar cell. New Journal of Chemistry, 0, , .	1.4	3
1494	Synthetic Efforts to Investigate the Effect of Planarizing the Triarylamine Geometry in Dyes for Dye-Sensitized Solar Cells. ACS Omega, 2022, 7, 22046-22057.	1.6	7
1495	Open-Circuit Voltage Degradation by Dye Mulliken Electronegativity in Multi-Anchor Organic Dye-Based Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2022, 5, 7600-7616.	2.5	7
1496	Performance improvement of nanocrystalline Cu2O-based counter electrons for dye-sensitized solar cells by Sn alloying. Journal of Materials Science: Materials in Electronics, 0, , .	1.1	0
1497	Rutheniumâ€based complex dyes for dyeâ€sensitized solar cells. Journal of the Chinese Chemical Society, 2022, 69, 1242-1252.	0.8	4
1498	Review of technology specific degradation in crystalline silicon, cadmium telluride, copper indium gallium selenide, dye sensitised, organic and perovskite solar cells in photovoltaic modules: Understanding how reliability improvements in mature technologies can enhance emerging technologies. Progress in Photovoltaics: Research and Applications, 2022, 30, 1365-1392.	4.4	26
1499	Designing Self-Assembled Dyeâ€"Redox Shuttle Systems via Interfacial Ï€-Stacking in Dye-Sensitized Solar Cells for Enhanced Low Light Power Conversion. Energy & Fuels, 0, , .	2.5	0
1500	Mapping the Progress in Natural Dyeâ€Sensitized Solar Cells: Materials, Parameters and Durability. ChemistrySelect, 2022, 7, .	0.7	5
1501	A Review And Comparative Analysis Of Different Types Of Dyes For Applications In Dye-Sensitized Solar Cells. Brazilian Journal of Physics, 2022, 52, .	0.7	9
1502	Experimental and Theoretical Exploration of In-Situ Grown Fe3s4/Co3s4 Heterostructure as Efficient Counter Electrode Substituding Pt in Dsscs. SSRN Electronic Journal, 0, , .	0.4	0
1503	Titanium dioxide/graphene composites for dye-sensitized solar cell applications. , 2022, , 313-339.		0
1504	Experimentation of dyes extracted from the peels of red banana and aloe vera as sensitizers for TiO2-based dye-sensitized solar cells. Environmental Science and Pollution Research, 2022, 29, 83897-83906.	2.7	5
1505	A fast combinative chemical precipitation/microwave-activated approach for the synthesis of alloyed CdSexTe1-x nanocrystals for application in quantum dot-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2022, 33, 16713-16727.	1.1	1
1506	Semitransparent Dye-Sensitized Solar Cell with 11% Efficiency and Photothermal Stability. Journal of Physical Chemistry C, 2022, 126, 11007-11015.	1.5	5
1507	Structural and morphological effect of multidimensional TiO2 nanostructures on the dye-sensitized solar cells performance. Sadhana - Academy Proceedings in Engineering Sciences, 2022, 47, .	0.8	0
1508	Microwave-assisted hydrothermal synthesis and characterization of TiO2 microspheres for efficient dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 0, , .	1.1	0

#	Article	IF	Citations
1509	Investigation on Dye Regeneration Kinetics at P-Type Sensitized Nanoparticle Nickel Oxide Film by Scanning Electrochemical Microscopy. Journal of Nanomaterials, 2022, 2022, 1-11.	1.5	1
1510	Benzophenanthrothiophene based donorâˆ’acceptor organic dyes for efficient solar cells with long-term stability. Dyes and Pigments, 2022, 205, 110575.	2.0	0
1511	Synthesis and Luminescence Characterization of Downconversion and Downshifting Phosphor for Efficiency Enhancement of Solar Cells: Perspectives and Challenges. ACS Applied Electronic Materials, 2022, 4, 3354-3391.	2.0	9
1512	High performance PANI-PSSNa doped counter electrode for dye-sensitized solar cells. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	2
1513	Syntheses and photovoltaic properties of polythiopheneâ€based copolymers as polymer matrix of quasiâ€solidâ€state electrolytes. Bulletin of the Korean Chemical Society, 2022, 43, 1141-1147.	1.0	2
1514	The renaissance of monolithic dye-sensitized solar cells. Materials Today Communications, 2022, 32, 104030.	0.9	8
1515	Pyrrole â€“ Best additional spacers for azo based dye sensitized solar cells: A computational study. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 433, 114146.	2.0	7
1516	Pyranylidene/trifluoromethylbenzoic acid-based chromophores for dye-sensitized solar cells. Dyes and Pigments, 2022, 206, 110566.	2.0	1
1517	A locust bean and pectin polymer blend integrated with thio-bridged pyridinyl additive as a novel cobalt and copper gel electrolyte system for dye-sensitized solar cells. Optical Materials, 2022, 131, 112657.	1.7	3
1518	A dye-sensitized solar cells with enhanced efficiency based on a â€œpillared effectâ€•of CoMoP2 @Mxene@CNTs composite counter electrode. Journal of Alloys and Compounds, 2022, 922, 166279.	2.8	13
1519	N719 dye as a sensitizer for dyeâ€sensitized solar cells (DSSCs): A review of its functions and certain rudimentary principles. Environmental Progress and Sustainable Energy, 2023, 42, .	1.3	13
1520	Investigation of Boron-Based Ionic Liquids for Energy Applications. , 0, , .		1
1521	Bulky 3D Structures of Dithienopyrrol Dye with Copper(II/I) Redox Mediator Enabling Efficient Solar Cells with an Open-Circuit Voltage of 1.13 V. ACS Applied Energy Materials, 2022, 5, 9962-9969.	2.5	3
1522	New metal free organic dyes incorporating heterocyclic Benzofuran core as conjugated spacer: Synthesis, Optoâ€electrochemical, <scp>DFT</scp> and <scp>DSSC</scp> studies. Journal of Heterocyclic Chemistry, 2023, 60, 63-73.	1.4	4
1523	New designed push-pull organic dyes based on the conjugated Ï€-spacers forÂ application in dye-sensitized solar cells: a computational chemistry study. Bulletin of Materials Science, 2022, 45, .	0.8	5
1524	Fabrication of copper oxide-based dye-sensitized solar cell with high short-circuit current density (JSC) using flexible and binder-free porous photoelectrode. Journal of Materials Science: Materials in Electronics, 2022, 33, 20790-20801.	1.1	5
1525	Low-Temperature Chemical Sintered TiO2 Photoanodes Based on a Binary Liquid Mixture for Flexible Dye-Sensitized Solar Cells. Journal of Electrochemical Science and Technology, 2022, 13, 453-461.	0.9	2
1526	Triphenylimidazole Based Dye-Sensitized Solar Cells for Efficient Solar and Artificial Light Conversion using Iodide/Triiodide Redox Electrolyte. Journal of Chemical Sciences, 2022, 134, .	0.7	4

#	Article	IF	Citations
1527	Novel heterologous binary redox mediator based on an ionic liquid and cobalt complex for efficient organic-solvent-free dye-sensitized solar cells. Journal of Industrial and Engineering Chemistry, 2022, 115, 263-271.	2.9	3
1528	Electrodeposited PEDOT/Nafion as Catalytic Counter Electrodes for Cobalt and Copper Bipyridyl Redox Mediators in Dye-Sensitized Solar Cells. ACS Omega, 2022, 7, 29181-29194.	1.6	5
1529	Synthesis of Novel Triphenylamine-Based Organic Dyes with Dual Anchors for Efficient Dye-Sensitized Solar Cells. Nanoscale Research Letters, 2022, 17, .	3.1	6
1530	Peptide Materials in Dye Sensitized Solar Cells. Energies, 2022, 15, 5632.	1.6	2
1531	Organic sensitizer with azine Ï€-conjugated architecture as co-sensitizer and polymer-based electrolyte for efficient dye-sensitized solar cell. Surfaces and Interfaces, 2022, 33, 102236.	1.5	9
1532	Developing efficient dye-sensitized solar cells by inclusion of ferrocene and benzene Ï€-bridges into molecular structures of triphenylamine dyes. Materials Science in Semiconductor Processing, 2022, 151, 107018.	1.9	2
1533	Synthesis, photophysical, electrochemical and computational investigation of dimethine and trimethine cyanine-based dyes. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 433, 114189.	2.0	6
1534	High performance photoelectrodes prepared using Au@P3HT composite nanoparticles for dye-sensitized solar cells. Journal of Alloys and Compounds, 2022, 926, 166822.	2.8	1
1535	Development of multi-walled carbon nanotube/polythiophene (MWCNT/PTh) nanocomposites for platinum-free dye-sensitized solar cells (DSSCs). Solar Energy, 2022, 245, 153-157.	2.9	5
1536	PdNP@Cyclodextrin on Cu/Al LDH-containing nanocomposites: Cage effect, crystallite size tuning and composite topology towards cross-couplings. Applied Clay Science, 2022, 230, 106702.	2.6	0
1537	UV Ozone based rapid low temperature fabrication of flexible dye sensitized solar cells. Synthetic Metals, 2022, 291, 117172.	2.1	2
1538	Thin Films of Solid-State Polymer Electrolytes for Dye-Sensitized Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0
1539	Recent progress in one dimensional TiO₂nanomaterials as photoanodes in dye-sensitized solar cells. Nanoscale Advances, 2022, 4, 5202-5232.	2.2	3
1540	Industrial applications of quantum dots. , 2022, , 771-803.		0
1541	A double co-sensitization strategy using heteroleptic transition metal ferrocenyl dithiocarbamate phenanthrolene-dione for enhancing the performance of N719-based DSSCs. RSC Advances, 2022, 12, 28088-28097.	1.7	2
1542	Dye Sensitized and Quantum Dot Sensitized Solar Cell. Advances in Sustainability Science and Technology, 2022, , 131-149.	0.4	0
1543	An optimal molecule-matching co-sensitization system for the improvement of photovoltaic performances of DSSCs. Physical Chemistry Chemical Physics, 2022, 24, 22580-22588.	1.3	4
1544	Sterically demanding pyridine-quinoline anchoring ligands as building blocks for copper(<scp>i</scp>)-based dye-sensitized solar cell (DSSC) complexes. Dalton Transactions, 2022, 51, 15049-15066.	1.6	5

#	Article	IF	Citations
1545	Multifunctional conjugated molecules combined with electrospun CuCoP/carbon nanofibers as a modifier of the Pt counter electrode for dye-sensitized solar cells. Journal of Materials Chemistry C, 2022, 10, 12232-12248.	2.7	5
1546	Solar Cell Technologies: An Overview. Engergy Systems in Electrical Engineering, 2022, , 1-59.	0.5	0
1547	Effect of Iodide-Based Organic Salts and Ionic Liquid Additives in Dye-Sensitized Solar Cell Performance. Nanomaterials, 2022, 12, 2988.	1.9	2
1549	Rapid and Facile Fabrication of Polyiodide Solid-State Dye-Sensitized Solar Cells Using Ambient Air Drying. ACS Applied Materials & Interfaces, 2022, 14, 43456-43462.	4.0	8
1550	Structural, Thermal, and Electrical Properties of Poly(Ethylene Oxide)â€"Tetramethyl Succinonitrile Blend for Redox Mediators. Polymers, 2022, 14, 3728.	2.0	0
1551	Titania Nanorods Embedded with 2-Bromo-3-(methylamino)naphthalene-1,4-dione for Dye-Sensitized Solar Cells. ACS Omega, 0, , .	1.6	1
1552	Highly Efficient Rigidified Quinoxalineâ€based Coâ€Sensitizers Carrying Long Alkyl Chains for Rutheniumâ€Complexâ€Sensitized DSSCs**. ChemistrySelect, 2022, 7, .	0.7	1
1553	Holistically Optimizing Charge Carrier Dynamics Enables High-Performance Dye-Sensitized Solar Cells and Photodetectors. ACS Applied Materials & Interfaces, 2022, 14, 43576-43585.	4.0	19
1554	The photovoltaic performance of green quantum dots and dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 0, , .	1.1	0
1555	A Facile Route for the Synthesis of Pure & Ag-Doped ZnO for Dye-Sensitized Solar Cell Application. Lecture Notes in Electrical Engineering, 2023, , 465-473.	0.3	0
1556	Bi-layered photoelectrodes of TiO2/activated carbon modified with SrTiO3 films boosted sunlight harvesting of dye-sensitized solar cells. Inorganic Chemistry Communication, 2022, 145, 110045.	1.8	21
1557	Exploration of the interesting photovoltaic behavior of the fused benzothiophene dioxide moiety as a core donor with modification in acceptors for high-efficacy organic solar cells. RSC Advances, 2022, 12, 29010-29021.	1.7	6
1558	Influence of the Ï€-Bridge-Fused Ring and Acceptor Unit Extension in Dâ^'Ï€â€"A-Structured Organic Dyes for Highly Efficient Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 52745-52757.	4.0	22
1559	Top sensitizers for highly efficient dye-sensitized solar cells. Radiation Effects and Defects in Solids, 0, , 1-11.	0.4	0
1560	Modified Hagfeldt Donor for Organic Dyes That Are Compatible with Copper Electrolytes in Efficient Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2022, 5, 13544-13553.	2.5	2
1561	Tin Sulfide (SnS) Films Deposited by an Electric Field-Assisted Continuous Spray Pyrolysis Technique with Application as Counter Electrodes in Dye-Sensitized Solar Cells. ACS Omega, 2022, 7, 39690-39696.	1.6	3
1562	Effects of additional Ï€-spacers on the photovoltaic properties of organic dyes for efficient dye-sensitized solar cells: a theoretical study. Research on Chemical Intermediates, 2022, 48, 5243-5264.	1.3	1
1563	Ternary NiCuS electrocatalyst for iodide/triiodide reduction in dye-sensitized solar cells. Materials Today: Proceedings, 2022, , .	0.9	1

#	Article	IF	Citations
1564	Hydroxamic acid pre-adsorption raises the efficiency of cosensitized solar cells. Nature, 2023, 613, 60-65.	13.7	127
1565	Using supramolecular machinery to engineer directional charge propagation in photoelectrochemical devices. Nature Chemistry, 2023, 15, 213-221.	6.6	10
1566	CoP@Ni2P microcrystals in situ grown on carbon fiber as counter electrode catalysts for high-efficiency dye-sensitized solar cells. Materials Today Sustainability, 2022, 20, 100262.	1.9	3
1567	Co-Sensitization Effects of Indoline and Carbazole Dyes in Solar Cells and Their Neutralâ€“Anion Equilibrium in Solution. Materials, 2022, 15, 7725.	1.3	0
1568	Photo-performance characteristics of Baphia nitida and rosella dye sensitized solar cell. Results in Optics, 2022, 9, 100311.	0.9	2
1569	Carbazole based D-Ï€i-Ï€-A dyes for DSSC applications: DFT/TDDFT study of the influence of Ï€i-spacers on the photovoltaic performance. Chemical Physics, 2023, 565, 111738.	0.9	5
1570	One-step solvothermal method synthesizes petal-like Cu2WSx supported on carbon paper used in dye-sensitized solar cells. Journal of Alloys and Compounds, 2023, 931, 167480.	2.8	0
1571	Investigation and design of efficient intramolecular charge transfer dyes with DBTP-based dual-electron-donor structure. Materials Science in Semiconductor Processing, 2023, 154, 107203.	1.9	0
1572	Influence of Redox Couple on the Performance of ZnO Dye Solar Cells and Minimodules with Benzothiadiazole-Based Photosensitizers. ACS Applied Energy Materials, 0, , .	2.5	3
1573	4,4-Bis(2-ethylhexyl)-6-(9-(2-ethylhexyl)-2,3,4,4a,9,9a-hexahydro-1H-carbazol-6-yl)-4H-cyclopenta[2,1-b:3,4-bâ€²]dithiophene-2-carbald MolBank, 2022, 2022, M1486.	0.2	1
1574	Experimental and Theoretical Exploration of In Situ Grown Fe₃S₄/Co₃S₄ Heterostructure as Efficient Catalyst for I₃ ^{â^'} Reduction Reaction. Journal of the Electrochemical Society, 2022, 169, 116511.	1.3	0
1575	A Molecularly Tailored Photosensitizer with an Efficiency of 13.2% for Dyeâ€Sensitized Solar Cells. Advanced Materials, 2023, 35, .	11.1	18
1576	Effect of Copper and Cobalt Metal Complex Redox Mediator Based Xanthan Gum Gel Electrolyte Materials on Performance of Dye Sensitized Solar Cells. ChemistrySelect, 2022, 7, .	0.7	4
1577	Effect of end groups on fluorene based dyes without carboxyl anchors as efficient co-sensitizer for retarding charge recombination in DSSC applications. Optical Materials, 2022, 134, 113159.	1.7	4
1578	Strategies for successful Suzuki-Miyaura cross-couplings with thienylboronic acids: From model studies to dye structures. Dyes and Pigments, 2023, 209, 110899.	2.0	0
1579	Effect of Ti_{1â^'<i>x</i>}Fe_{<i>x</i>}O₂ photoanodes on the performance of dye-sensitized solar cells utilizing natural <i>betalain pigments</i> extracted from <i>Beta vulgaris</i> (<i>BV</i>). Energy Advances, 2023, 2, 148-160.	1.4	9
1580	Harnessing multiple generated excitons from intermolecular singlet fission of peryleneâ€“monoimides in a p-type dye-sensitized solar cell. Solar Energy, 2023, 250, 1-9.	2.9	3
1581	Quantum chemical and photovoltaic modeling of D-Ï€-A organic dyes based on substituted arylamine electron donors in dye sensitized solar cells. Australian Journal of Chemistry, 2022, 75, 966-973.	0.5	1

#	Article	IF	Citations
1582	Energy level tuning of push-pull porphyrin sensitizer by trifluoromethyl group for dye-sensitized solar cells. Journal of Porphyrins and Phthalocyanines, 2023, 27, 145-156.	0.4	1
1583	Improving the Photovoltaic Performance of Dye-Sensitized Solar Cells Using a W and S Co-doped ZnO Photoanode. Journal of Electronic Materials, 2023, 52, 939-950.	1.0	1
1584	Optimal processing methodology for futuristic natural dye-sensitized solar cells and novel applications. Dyes and Pigments, 2023, 210, 110997.	2.0	18
1585	Tungsten Phosphide Microsheets Inâ€Situ Grown on Carbon Fiber as Counter Electrode Catalyst for Efficient Dyeâ€Sensitized Solar Cells. Advanced Materials Interfaces, 2023, 10, .	1.9	4
1586	Efficient Ti₃C₂T_{<i>x</i>} MXene/TiO₂ Hybrid Photoanodes for Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2022, 5, 15928-15938.	2.5	11
1587	Insights into the Explicit Mechanism and Dynamic Rate of Regeneration of Sensitizing Organic Dyes by Transition-Metal Redox Mediators in Solar Cells Using Ab Initio Molecular Dynamics. ACS Applied Energy Materials, 2022, 5, 14638-14645.	2.5	1
1588	Novel synergistic Combination of W and Co Coâ€doped ZnO Nanoparticles Incorporated as a Photoanode in a Dye Sensitized Solar Cell. ChemistrySelect, 2022, 7, .	0.7	0
1589	Effect of Anchoring Groups Number on the Photovoltaic Parameters in Dye-Sensitized Solar Cells. Oxford Open Materials Science, 0, , .	0.5	1
1590	TCO-free dye solar cells based on Ti back contact electrode by facile printing method. Journal of Saudi Chemical Society, 2023, 27, 101593.	2.4	2
1591	Sunlight harvesting. Computers and Chemical Engineering, 2023, 170, 108103.	2.0	1
1592	What is necessary to fill the technological gap to design sustainable dye-sensitized solar cells?. Sustainable Energy and Fuels, 2023, 7, 916-927.	2.5	11
1593	Strategies to Improve the Photochromic Properties and Photovoltaic Performances of Naphthopyran Dyes in Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2023, 13, .	10.2	10
1594	Graphene Quantum Dots as a Co-Sensitizer With Improving Light Absorption for Dye-Sensitized Solar Cells. IEEE Nanotechnology Magazine, 2023, 22, 20-27.	1.1	3
1595	Molecular Switch Cobalt Redox Shuttle with a Tunable Hexadentate Ligand. Journal of the American Chemical Society, 2023, 145, 1367-1377.	6.6	7
1596	Insight on the choice of sensitizers/dyes for dye sensitized solar cells: A review. Dyes and Pigments, 2023, 213, 111087.	2.0	34
1597	A dye-sensitized solar cells with an efficiency of 10.01% based on the MoP/MoNiP2@Ti3C2 composite counter electrode. Materials Today Sustainability, 2023, 22, 100329.	1.9	3
1598	Inâ€Silico Device Performance Prediction of Cosensitizer Dye Pairs for Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2023, 13, .	10.2	1
1599	Photoelectric properties of the layered raspberry sandwich amorphous ZnCo₂S₄@MnCo₂S₄/CP composite counter electrode in semiconductor-sensitized solar cells. Dalton Transactions, 2023, 52, 2363-2372.	1.6	1

#	Article	IF	Citations
1600	Recent advances in the development of flexible dye-sensitized solar cells: fabrication, challenges and applications-a review. Flexible and Printed Electronics, 2023, 8, 013001.	1.5	7
1601	First Planar Binuclear Phthalocyanines Sharing a Common Carbazole Linkage: Synthesis, Optical and Photochemical Properties. Bulletin of the Chemical Society of Japan, 2023, 96, 226-240.	2.0	0
1602	Progress in optoelectronic applications of ionic liquids. , 2023, , 391-413.		2
1603	Simulation of the iodide/triiodide electrolyte concentrationâ€™s effects on Jsc and Voc for dye-sensitized solar cells (DSSC). AIP Conference Proceedings, 2023, , .	0.3	0
1604	Photovoltaic properties and impedance spectroscopy of dye sensitized solar cells co-sensitized by natural dyes. Physica B: Condensed Matter, 2023, 654, 414716.	1.3	8
1605	Effect of D-limonene additive in copper redox-based quasi-solid-state electrolytes on the performance of dye-sensitized solar cells. Materials Today Communications, 2023, 35, 105505.	0.9	0
1606	Review on recycling of solar modules/panels. Solar Energy Materials and Solar Cells, 2023, 253, 112151.	3.0	11
1607	Copper(<scp>ii</scp>) and cobalt(<scp>iii</scp>) Schiff base complexes with hydroxy anchors as sensitizers in dye-sensitized solar cells (DSSCs). RSC Advances, 2023, 13, 9046-9054.	1.7	7
1608	Biomass-derived carbon for dye-sensitized solar cells: a review. Journal of Materials Science, 2023, 58, 6057-6075.	1.7	3
1609	P1 Pushâ€Pull Dye as a Case Study in QM/MM Theoretical Characterization for Dyeâ€sensitized Solar Cell Organic Chromophores**. ChemistrySelect, 2023, 8, .	0.7	0
1610	The effect of sintering temperature on the properties of the BiOCl films for potential application in DSSC. Ceramics International, 2023, 49, 16305-16313.	2.3	4
1611	Metal and nitrogen coâ€doped carbon dots in the sensitized solar cells. Applied Organometallic Chemistry, 2023, 37, .	1.7	0
1612	Redox Shuttle-Based Electrolytes for Dye-Sensitized Solar Cells: Comprehensive Guidance, Recent Progress, and Future Perspective. ACS Omega, 2023, 8, 6139-6163.	1.6	28
1613	Carbon Electrodes: The Rising Star for PSC Commercialization. Electronics (Switzerland), 2023, 12, 992.	1.8	2
1614	Thin films of solid-state polymer electrolytes for dye-sensitized solar cells. Journal of Power Sources, 2023, 564, 232896.	4.0	4
1616	Optical and electronic properties enhancement via chalcogenides: promising materials for DSSC applications. Journal of Molecular Modeling, 2023, 29, .	0.8	6
1617	Recent Progress of Carbonaceous Materials in Third Generation Solar Cells: DSSCs. Materials Horizons, 2023, , 165-188.	0.3	2
1618	Firstâ€Principles Modeling of the Adsorption Mechanism of Carboxylic and Phosphonic Acids onto Pristine and Defective Delafossite CuAlO₂ Surfaces. Physica Status Solidi (B): Basic Research, 2023, 260, .	0.7	0

#	Article	IF	Citations
1619	Steric Effect of <i>N</i>-Substituted Triphenylamine on Double-Anchored Phenothiazine Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2023, 6, 3778-3788.	2.5	6
1620	Calcium-doped TiO2 microspheres and near-infrared carbazole-based sensitizer for efficient co-sensitized dye-sensitized solar cell. Journal of Materials Science, 2023, 58, 5718-5734.	1.7	2
1621	Application of Covalent Organic Frameworks (COFs) as Dyes and Additives for Dye-Sensitized Solar Cells (DSSCs). Nanomaterials, 2023, 13, 1204.	1.9	4
1622	Enhancement of photovoltaic performance of solvent-free dye-sensitized solar cells with doped poly(3-hexylthiophene). Journal of Industrial and Engineering Chemistry, 2023, 123, 428-435.	2.9	1
1623	Densely Packed Dâ˘Ï€â€"A Photosensitizers on TiO₂ Enable Efficient Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2023, 6, 4229-4237.	2.5	5
1624	Boosting the Efficiency of Dyeâ€Sensitized Solar Cells by a Multifunctional Composite Photoanode to 14.13â€‰%. Angewandte Chemie - International Edition, 2023, 62, .	7.2	8
1625	Boosting the Efficiency of Dyeâ€Sensitized Solar Cells by a Multifunctional Composite Photoanode to 14.13â€‰%. Angewandte Chemie, 2023, 135, .	1.6	2
1626	Effective redox shuttles for polymer gel electrolytes-based quasi-solid-state dye-sensitized solar cells in outdoor and indoor applications: Comprehensive comparison and guidelines. Materials Today Energy, 2023, 34, 101299.	2.5	14
1627	Enhanced efficiency of DSSCs by co-sensitizing dyes with complementary absorption spectra. Journal of Photochemistry and Photobiology A: Chemistry, 2023, 442, 114758.	2.0	3
1628	The evolution of organic materials for efficient dye-sensitized solar cells. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2023, 55, 100586.	5.6	18
1629	Emerging indoor photovoltaics for self-powered and self-aware IoT towards sustainable energy management. Chemical Science, 2023, 14, 5350-5360.	3.7	16
1630	Quantum Chemical Elucidation on the Optoelectronic Properties of N2-(4-Aminophenyl)Pyridine-2,5-Diamine Based Dyes for Solar Cells Utilization. Chemistry Africa, 0, , .	1.2	0
1631	Control and regulation of the performance of fullerene-based dye-sensitized solar cells with D-D-A structure by external electric fields. Nanoscale Advances, 0, , .	2.2	1
1639	Dye sensitized semi-transparent solar cell: Building application, transparency and colour characterization. AIP Conference Proceedings, 2023, , .	0.3	0
1647	First-principles modeling of dye-sensitized solar cells: From the optical properties of standalone dyes to the charge separation at dye/TiO2 interfaces. , 2023, , 215-245.		1
1653	Ionic Liquid-Based Electrolyte for Application in Photoelectrochemical cells: A Future Insight. , 2023, , 326-353.		0
1656	State-of-the-Art of Dye-Sensitized Solar Cells. Materials Horizons, 2023, , 91-120.	0.3	1
1657	Chemistry of ionic liquid with its classification and applications. , 2023, , 27-48.		0

#	Article	IF	Citations
1662	Effect of Polyacriontrile (PAN) Concentration on Characteristics and Performance of TiO2/N719/PAN-rGO for Dye-Sensitized Solar Cells. , 2023, , 74-85.		0
1672	Metal Oxide Nanostructures as an Electron Transport Layer for Dye-Sensitized Solar Cells. Progress in Optical Science and Photonics, 2023, , 223-262.	0.3	0
1680	DSSC to Perovskites â€“ Overview. , 2023, , .		0
1686	Hybrid Photocatalyst Nanomaterials in Solar Cell Applications. Advances in Material Research and Technology, 2023, , 221-238.	0.3	0
1693	An overview of bi-layered niobium pentoxide (Nb2O5)-based photoanodes for dye-sensitized solar cells. Advanced Composites and Hybrid Materials, 2023, 6, .	9.9	1
1694	Panchromatic porphyrin-based dye-sensitized solar cells: from cosensitization to concerted companion dye approaches. Materials Chemistry Frontiers, 0, , .	3.2	0
1698	Recent Progress on Phenothiazine Tethered Sensitizers for Dye-Sensitized Solar Cells. , 2023, , .		0
1705	Towards Environmentally Friendly Solution-Processed Hybrid Photovoltaics. , 2023, , .		0
1714	An Overview of Solar Cell Technologies Toward the Next-Generation Agrivoltaics. Green Energy and Technology, 2024, , 69-129.	0.4	0
1716	An Overview of Dye-Sensitized Solar Cells. , 2024, , .		0
1717	Metal oxides for dye-sensitized solar cells. , 2024, , 543-576.		0
1720	Developments in Dye-Sensitized Solar Cells - An Overview. , 2024, , .		0