## Liyuan Han

## List of Publications by Year in descending order

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6613 6300 28,061 334 79 158 citations h-index g-index papers 340 340 340 19444 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Chargeâ€Carrier Transport in Quasiâ€2D Ruddlesden–Popper Perovskite Solar Cells. Advanced Materials, 2022, 34, e2106822.	21.0	74
2	Crystallization kinetics modulation and defect suppression of all-inorganic CsPbX <sub>3</sub> perovskite films. Energy and Environmental Science, 2022, 15, 413-438.	30.8	53
3	Robust heterojunction to strengthen the performances of FAPbI3 perovskite solar cells. Chemical Engineering Journal, 2022, 432, 134311.	12.7	7
4	Crystal-array-assisted growth of a perovskite absorption layer for efficient and stable solar cells. Energy and Environmental Science, 2022, 15, 1078-1085.	30.8	62
5	Droplet Manipulation and Crystallization Regulation in Inkjet-Printed Perovskite Film Formation. CCS Chemistry, 2022, 4, 1465-1485.	7.8	14
6	Two-dimensional perovskites: Impacts of species, components, and properties of organic spacers on solar cells. Nano Today, 2022, 43, 101394.	11.9	58
7	Self-assembled interlayer aiming at the stability of NiO based perovskite solar cells. Journal of Energy Chemistry, 2022, 69, 211-220.	12.9	20
8	Heterogeneous FASnI3 Absorber with Enhanced Electric Field for High-Performance Lead-Free Perovskite Solar Cells. Nano-Micro Letters, 2022, 14, 99.	27.0	43
9	Dual Functions of Performance Improvement and Lead Leakage Mitigation of Perovskite Solar Cells Enabled by Phenylbenzimidazole Sulfonic Acid. Small Methods, 2022, 6, e2101257.	8.6	22
10	Modification of SnO <sub>2</sub> with Phosphorusâ€Containing Lewis Acid for Highâ€Performance Planar Perovskite Solar Cells with Negligible Hysteresis. Solar Rrl, 2022, 6, .	5.8	17
11	Lead-Free Perovskite Solar Cells with Over 10% Efficiency and Size 1 cm <sup>2</sup> Enabled by Solvent–Crystallization Regulation in a Two-Step Deposition Method. ACS Energy Letters, 2022, 7, 425-431.	17.4	36
12	Effective Passivation with Selfâ€Organized Molecules for Perovskite Photovoltaics. Advanced Materials, 2022, 34, e2202100.	21.0	67
13	Stable perovskite solar cells with 23.12% efficiency and area over 1 cm2 by an all-in-one strategy. Science China Chemistry, 2022, 65, 1321-1329.	8.2	25
14	Robust hole transport material with interface anchors enhances the efficiency and stability of inverted formamidinium–cesium perovskite solar cells with a certified efficiency of 22.3%. Energy and Environmental Science, 2022, 15, 2567-2580.	30.8	46
15	Restricting the Formation of Pb–Pb Dimer via Surface Pb Site Passivation for Enhancing the Light Stability of Perovskite. Small, 2022, 18, e2201831.	10.0	15
16	In situ growth of graphene on both sides of a Cu–Ni alloy electrode for perovskite solar cells with improved stability. Nature Energy, 2022, 7, 520-527.	39.5	68
17	Sustainable Pb Management in Perovskite Solar Cells toward Ecoâ€Friendly Development. Advanced Energy Materials, 2022, 12, .	19.5	38
18	Progress of all-perovskite tandem solar cells: the role of narrow-bandgap absorbers. Science China Chemistry, 2021, 64, 218-227.	8.2	37

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19	Effects of A site doping on the crystallization of perovskite films. Journal of Materials Chemistry A, 2021, 9, 1372-1394.	10.3	43
20	A Scalable Integrated Dopantâ€Free Heterostructure to Stabilize Perovskite Solar Cell Modules. Advanced Energy Materials, 2021, 11, 2003301.	19.5	43
21	Stable tin perovskite solar cells enabled by widening the time window for crystallization. Science China Materials, 2021, 64, 1849-1857.	6.3	10
22	Additive Engineering toward Highâ€Performance Tin Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100034.	5.8	34
23	2Dâ€MA <sub>3</sub> Sb <sub>2</sub> I <sub>9</sub> Back Surface Field for Efficient and Stable Perovskite Solar Cells. Small Methods, 2021, 5, e2001090.	8.6	8
24	Making Room for Growing Oriented FASnl <sub>3</sub> with Large Grains via Cold Precursor Solution. Advanced Functional Materials, 2021, 31, 2100931.	14.9	57
25	Slot-die coating large-area formamidinium-cesium perovskite film for efficient and stable parallel solar module. Science Advances, 2021, 7, .	10.3	165
26	Lead-free tin perovskite solar cells. Joule, 2021, 5, 863-886.	24.0	134
27	Stable tin perovskite solar cells developed via additive engineering. Science China Materials, 2021, 64, 2645-2654.	6.3	15
28	Design of Low Bandgap CsPb <sub>1â^'</sub> <i><sub>x</sub></i> Sn <i><sub>x</sub></i> l>sub>l>sub>2Br Perovskite Solar Cells with Excellent Phase Stability. Small, 2021, 17, e2101380.	10.0	42
29	The Main Progress of Perovskite Solar Cells in 2020–2021. Nano-Micro Letters, 2021, 13, 152.	27.0	250
30	Reduction of Nonradiative Loss in Inverted Perovskite Solar Cells by Donorâ^π–Acceptor Dipoles. ACS Applied Materials & Donorân Interfaces, 2021, 13, 44321-44328.	8.0	30
31	Defect Passivation for Perovskite Solar Cells: from Molecule Design to Device Performance. ChemSusChem, 2021, 14, 4354-4376.	6.8	43
32	Interface Energyâ€Level Management toward Efficient Tin Perovskite Solar Cells with Holeâ€Transportâ€Layerâ€Free Structure. Advanced Functional Materials, 2021, 31, 2106560.	14.9	30
33	Review on Practical Interface Engineering of Perovskite Solar Cells: From Efficiency to Stability. Solar Rrl, 2020, 4, 1900257.	5.8	119
34	Synergistic Coassembly of Highly Wettable and Uniform Holeâ€Extraction Monolayers for Scalingâ€up Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 1909509.	14.9	41
35	Highly efficient tin perovskite solar cells achieved in a wide oxygen concentration range. Journal of Materials Chemistry A, 2020, 8, 2760-2768.	10.3	85
36	Efficient and stable tin-based perovskite solar cells by introducing π-conjugated Lewis base. Science China Chemistry, 2020, 63, 107-115.	8.2	160

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37	Templated growth of FASnI <sub>3</sub> crystals for efficient tin perovskite solar cells. Energy and Environmental Science, 2020, 13, 2896-2902.	30.8	165
38	Barrier Designs in Perovskite Solar Cells for Longâ€Term Stability. Advanced Energy Materials, 2020, 10, 2001610.	19.5	84
39	Ink Engineering of Inkjet Printing Perovskite. ACS Applied Materials & Interfaces, 2020, 12, 39082-39091.	8.0	85
40	The Application of Graphene Derivatives in Perovskite Solar Cells. Small Methods, 2020, 4, 2000507.	8.6	35
41	Efficiency progress of inverted perovskite solar cells. Energy and Environmental Science, 2020, 13, 3823-3847.	30.8	210
42	Perovskite Solar Cells: Barrier Designs in Perovskite Solar Cells for Longâ€Term Stability (Adv. Energy) Tj ETQq0 (	0 1gBT /C	)veglock 10 T
43	Efficient and stable tin perovskite solar cells enabled by amorphous-polycrystalline structure. Nature Communications, 2020, 11, 2678.	12.8	143
44	Surface-Controlled Oriented Growth of FASnI3 Crystals for Efficient Lead-free Perovskite Solar Cells. Joule, 2020, 4, 902-912.	24.0	208
45	Efficient and Stable Tin Perovskite Solar Cells Enabled by Graded Heterostructure of Lightâ€Absorbing Layer. Solar Rrl, 2020, 4, 2000240.	5.8	53
46	Highly Reproducible and Efficient FASnl <sub>3</sub> Perovskite Solar Cells Fabricated with Volatilizable Reducing Solvent. Journal of Physical Chemistry Letters, 2020, 11, 2965-2971.	4.6	115
47	Stabilizing Formamidinium Lead Iodide Perovskite by Sulfonylâ€Functionalized Phenethylammonium Salt via Crystallization Control and Surface Passivation. Solar Rrl, 2020, 4, 2000069.	5.8	33
48	High Electron Affinity Enables Fast Hole Extraction for Efficient Flexible Inverted Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903487.	19.5	210
49	China's progress of perovskite solar cells in 2019. Science Bulletin, 2020, 65, 1306-1315.	9.0	12
50	CsPb(I Br1â^')3 solar cells. Science Bulletin, 2019, 64, 1532-1539.	9.0	114
51	Stabilizing heterostructures of soft perovskite semiconductors. Science, 2019, 365, 687-691.	12.6	447
52	A general strategy to prepare high-quality inorganic charge-transporting layers for efficient and stable all-layer-inorganic perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 18603-18611.	10.3	31
53	Highly Stable and Efficient FASnI <sub>3</sub> â€Based Perovskite Solar Cells by Introducing Hydrogen Bonding. Advanced Materials, 2019, 31, e1903721.	21.0	266
54	Efficient Perovskite Solar Cell Modules with High Stability Enabled by Iodide Diffusion Barriers. Joule, 2019, 3, 2748-2760.	24.0	167

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55	Hybrid Inorganic Electron-Transporting Layer Coupled with a Halogen-Resistant Electrode in CsPbl <sub>2</sub> Br-Based Perovskite Solar Cells to Achieve Robust Long-Term Stability. ACS Applied Materials & Ditempted Materials & Ditempted Robust Long-Term Stability. ACS Applied Materials & Ditempted Robust Long-Term Stability. ACS Applied Materials & Ditempted Robust Long-Term Stability. ACS Applied Robust	8.0	25
56	Solar cells boosted by an improved charge-carrying material. Nature, 2019, 567, 465-467.	27.8	16
57	Reliable Measurement of Perovskite Solar Cells. Advanced Materials, 2019, 31, e1803231.	21.0	62
58	Pbâ€Reduced CsPb <sub>0.9</sub> Zn <sub>0.1</sub> I <sub>2</sub> Br Thin Films for Efficient Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1900896.	19.5	150
59	Efficient and Stable CsPbI <sub>3</sub> Solar Cells via Regulating Lattice Distortion with Surface Organic Terminal Groups. Advanced Materials, 2019, 31, e1900605.	21.0	209
60	Efficient Defect Passivation for Perovskite Solar Cells by Controlling the Electron Density Distribution of Donorâ€i€â€Acceptor Molecules. Advanced Energy Materials, 2019, 9, 1803766.	19.5	280
61	A chemically inert bismuth interlayer enhances long-term stability of inverted perovskite solar cells. Nature Communications, 2019, 10, 1161.	12.8	225
62	Research activities on perovskite solar cells in China. Science China Chemistry, 2019, 62, 822-828.	8.2	22
63	Efficient and Stable Chemical Passivation on Perovskite Surface via Bidentate Anchoring. Advanced Energy Materials, 2019, 9, 1803573.	19.5	232
64	Study on Carrier Separation in Perovskite Solar Cells by Operando Profiling of Electrical Potential Distribution. Vacuum and Surface Science, 2019, 62, 9-14.	0.1	0
65	Recent advances in perovskite solar cells: Space potential and optoelectronic conversion mechanism. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 158401.	0.5	3
66	[6,6]-Phenyl-C <sub>61</sub> -Butyric Acid Methyl Ester/Cerium Oxide Bilayer Structure as Efficient and Stable Electron Transport Layer for Inverted Perovskite Solar Cells. ACS Nano, 2018, 12, 2403-2414.	14.6	114
67	Efficient Passivation of Hybrid Perovskite Solar Cells Using Organic Dyes with COOH Functional Group. Advanced Energy Materials, 2018, 8, 1800715.	19.5	187
68	Improving the Performance of Inverted Formamidinium Tin Iodide Perovskite Solar Cells by Reducing the Energy-Level Mismatch. ACS Energy Letters, 2018, 3, 1116-1121.	17.4	105
69	Ligandâ€Free, Highly Dispersed NiO <sub>x</sub> Nanocrystal for Efficient, Stable, Lowâ€Temperature Processable Perovskite Solar Cells. Solar Rrl, 2018, 2, 1800004.	5.8	58
70	Control of Electrical Potential Distribution for High-Performance Perovskite Solar Cells. Joule, 2018, 2, 296-306.	24.0	138
71	Low-Temperature Soft-Cover-Assisted Hydrolysis Deposition of Large-Scale TiO2 Layer for Efficient Perovskite Solar Modules. Nano-Micro Letters, 2018, 10, 49.	27.0	14
72	Solvent engineering for efficient inverted perovskite solar cells based on inorganic CsPbI2Br light absorber. Materials Today Energy, 2018, 8, 125-133.	4.7	121

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73	Zinc ion as effective film morphology controller in perovskite solar cells. Sustainable Energy and Fuels, 2018, 2, 1093-1100.	4.9	55
74	Extrinsic Movable Ions in MAPbl <sub>3</sub> Modulate Energy Band Alignment in Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1701981.	19.5	62
75	Panchromatic absorption of dye sensitized solar cells by co-Sensitization of triple organic dyes. Sustainable Energy and Fuels, 2018, 2, 209-214.	4.9	31
76	Toward Longâ€Term Stable and Highly Efficient Perovskite Solar Cells via Effective Charge Transporting Materials. Advanced Energy Materials, 2018, 8, 1800249.	19.5	85
77	In Situ Grain Boundary Functionalization for Stable and Efficient Inorganic CsPbl <sub>2</sub> Br Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1801050.	19.5	195
78	Inorganic and Lead-Free AgBil <sub>4</sub> Rudorffite for Stable Solar Cell Applications. ACS Applied Energy Materials, 2018, 1, 4485-4492.	5.1	58
79	Surfactants for smoother films. Nature Energy, 2018, 3, 545-546.	39.5	4
80	Effect of spacers and anchoring groups of extended π-conjugated tetrathiafulvalene based sensitizers on the performance of dye sensitized solar cells. Sustainable Energy and Fuels, 2017, 1, 345-353.	4.9	20
81	Effect of different auxiliary ligands and anchoring ligands on neutral thiocyanate-free ruthenium(II) dyes bearing tetrazole chromophores for dye-sensitized solar cells. Dyes and Pigments, 2017, 140, 354-362.	3.7	13
82	Donor-π–Acceptor Based Stable Porphyrin Sensitizers for Dye-Sensitized Solar Cells: Effect of π-Conjugated Spacers. Journal of Physical Chemistry C, 2017, 121, 6464-6477.	3.1	101
83	Cyclometalated ruthenium complexes with 6-(ortho-methoxyphenyl)-2,2′-bipyridine as panchromatic dyes for dye-sensitized solar cells. Journal of Organometallic Chemistry, 2017, 833, 61-70.	1.8	9
84	A comparative study of o,p-dimethoxyphenyl-based hole transport materials by altering π-linker units for highly efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 10480-10485.	10.3	60
85	Thermally Stable MAPbl <sub>3</sub> Perovskite Solar Cells with Efficiency of 19.19% and Area over 1 cm <sup>2</sup> achieved by Additive Engineering. Advanced Materials, 2017, 29, 1701073.	21.0	541
86	Effect of thermal-convection-induced defects on the performance of perovskite solar cells. Applied Physics Express, 2017, 10, 075502.	2.4	7
87	Accurate and fast evaluation of perovskite solar cells with least hysteresis. Applied Physics Express, 2017, 10, 076601.	2.4	12
88	Diffusion engineering of ions and charge carriers for stable efficient perovskite solar cells. Nature Communications, 2017, 8, 15330.	12.8	356
89	Heteroleptic Ru( <scp>ii</scp> ) cyclometalated complexes derived from benzimidazole-phenyl carbene ligands for dye-sensitized solar cells: an experimental and theoretical approach. Materials Chemistry Frontiers, 2017, 1, 947-957.	5.9	12
90	Stable Inverted Planar Perovskite Solar Cells with Lowâ€Temperatureâ€Processed Holeâ€Transport Bilayer. Advanced Energy Materials, 2017, 7, 1700763.	19.5	115

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91	A solvent- and vacuum-free route to large-area perovskite films for efficient solar modules. Nature, 2017, 550, 92-95.	27.8	618
92	Vertical recrystallization for highly efficient and stable formamidinium-based inverted-structure perovskite solar cells. Energy and Environmental Science, 2017, 10, 1942-1949.	30.8	402
93	Lowâ€Temperature Softâ€Cover Deposition of Uniform Largeâ€Scale Perovskite Films for Highâ€Performance Solar Cells. Advanced Materials, 2017, 29, 1701440.	21.0	74
94	First-Principles Study of Electron Injection and Defects at the TiO <sub>2</sub> /CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Interface of Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2017, 8, 5840-5847.	4.6	31
95	Stable and charge recombination minimized ï€-extended thioalkyl substituted tetrathiafulvalene dye-sensitized solar cells. Materials Chemistry Frontiers, 2017, 1, 460-467.	5.9	30
96	Organic-inorganic halide perovskite solar cell with CH3NH3PbI2Br as hole conductor. Journal of Power Sources, 2017, 339, 61-67.	7.8	33
97	Costâ€Performance Analysis of Perovskite Solar Modules. Advanced Science, 2017, 4, 1600269.	11.2	345
98	Photovoltaic Properties of Bithiazole-Based Polymers Synthesized by Direct C-H Arylation. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2016, 29, 347-352.	0.3	4
99	Bias voltage dependence of two-step photocurrent in GaAs/AlGaAs quantum well solar cells. Journal of Applied Physics, 2016, 119, .	2.5	3
100	Near-infrared squaraine co-sensitizer for high-efficiency dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2016, 18, 14279-14285.	2.8	41
101	Annealing-free perovskite films by instant crystallization for efficient solar cells. Journal of Materials Chemistry A, 2016, 4, 8548-8553.	10.3	103
102	Enhanced Stability of Perovskite Solar Cells through Corrosionâ€Free Pyridine Derivatives in Holeâ€Transporting Materials. Advanced Materials, 2016, 28, 10738-10743.	21.0	147
103	n-Type Doping and Energy States Tuning in CH <sub>3</sub> NH <sub>3</sub> Pb <sub>1â€"<i>x</i></sub> Sb <sub>2<i>x</i>/3</sub> I <sub>3</sub> Perovskite Solar Cells. ACS Energy Letters, 2016, 1, 535-541.	17.4	160
104	Thiocyanate-free asymmetric ruthenium(II) dye sensitizers containing azole chromophores with near-IR light-harvesting capacity. Journal of Power Sources, 2016, 331, 100-111.	7.8	16
105	Perovskite solar cells with 18.21% efficiency andÂarea over 1 cm2 fabricated by heterojunctionÂengineering. Nature Energy, 2016, 1, .	39.5	555
106	Soft-cover deposition of scaling-up uniform perovskite thin films for high cost-performance solar cells. Energy and Environmental Science, 2016, 9, 2295-2301.	30.8	173
107	Study of Donor–Acceptor–π–Acceptor Architecture Sensitizers with Benzothiazole Acceptor for Dyeâ€Sensitized Solar Cells. Energy Technology, 2016, 4, 458-468.	3.8	8
108	Neutral and anionic tetrazole-based ligands in designing novel ruthenium dyes for dye-sensitized solar cells. Journal of Power Sources, 2016, 307, 416-425.	7.8	27

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109	First-principles study on the cosensitization effects of Ru and squaraine dyes on a TiO2 surface. Surface Science, 2016, 649, 66-71.	1.9	5
110	Surface Properties of CH <sub>3</sub> NH <sub>3</sub> Pbl <sub>3</sub> for Perovskite Solar Cells. Accounts of Chemical Research, 2016, 49, 554-561.	15.6	145
111	Enhanced Photovoltaic Performances of Dye-Sensitized Solar Cells by Co-Sensitization of Benzothiadiazole and Squaraine-Based Dyes. ACS Applied Materials & Samp; Interfaces, 2016, 8, 4616-4623.	8.0	61
112	Dye-sensitized solar cells: Sensitized with triple dyes in ultraviolet to near infrared. , 2016, , .		0
113	4.ペãƒãƒ—ã,¹ã,«ã,ੴfå蛭™½é›»æ±ã®é«~効率北技è;". Electrochemistry, 2016, 84, 454-459.	1.4	0
114	Fullerene-Structured MoSe2 Hollow Spheres Anchored on Highly Nitrogen-Doped Graphene as a Conductive Catalyst for Photovoltaic Applications. Scientific Reports, 2015, 5, 13214.	3.3	46
115	Synthesis of Thin Titania Photoanodes with Large Mesopores for Electricity-generating Windows. Chemistry Letters, 2015, 44, 656-658.	1.3	6
116	Bulk Heterojunction Photovoltaic Cells with Triphenylamine-Based Amorphous Polymer and Non-Halogenated Solvent Processing Provide Reproducible Performance. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 373-376.	0.3	2
117	Manganese powder promoted highly efficient and selective synthesis of fullerene mono- and biscycloadducts at room temperature. Scientific Reports, 2015, 5, 13920.	3.3	7
118	Synthesis and optical properties of photovoltaic materials based on the indenofluorines and ambipolar dithienonaphthothiadiazol. , 2015, , .		0
119	Efficient Synthesis and Photosensitizer Performance of Nonplanar Organic Donor–Acceptor Molecules. Journal of Nanoscience and Nanotechnology, 2015, 15, 5856-5866.	0.9	9
120	Highâ€Quality Mixedâ€Organicâ€Cation Perovskites from a Phaseâ€Pure Nonâ€stoichiometric Intermediate (FAI) <sub>1â^'</sub> <i><sub>x</sub></i> 27, 4918-4923.	21.0	140
121	Selective Deposition of Insulating Metal Oxide in Perovskite Solar Cells with Enhanced Device Performance. ChemSusChem, 2015, 8, 2625-2629.	6.8	10
122	Film Morphology Control For High Efficiency Perovskite Solar Cells. , 2015, , .		0
123	Simple Fluorene Based Triarylamine Metal-Free Organic Sensitizers. Electrochimica Acta, 2015, 174, 581-587.	5.2	25
124	Emission from Charge-Transfer States in Bulk Heterojunction Organic Photovoltaic Cells Based on Ethylenedioxythiophene-Fluorene Polymers. Molecular Crystals and Liquid Crystals, 2015, 620, 107-111.	0.9	4
125	Microwave-assisted polycondensation of 4-octylaniline with dibromoarylene. Journal of Polymer Science Part A, 2015, 53, 536-542.	2.3	3
126	A hybrid catalyst composed of reduced graphene oxide/Cu <sub>2</sub> S quantum dots as a transparent counter electrode for dye sensitized solar cells. RSC Advances, 2015, 5, 9075-9078.	3.6	16

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127	Triflic Acid Mediated Cascade Cyclization of Aryldiynes for the Synthesis of Indeno[1,2â€ <i></i> )chromenes: Application to Dyeâ€Sensitized Solar Cells. Chemistry - A European Journal, 2015, 21, 4065-4070.	3.3	26
128	Thieno[2,3,a]carbazole donor-based organic dyes for high efficiency dye-sensitized solar cells. Organic Chemistry Frontiers, 2015, 2, 253-258.	4.5	13
129	Synthesis and optical properties of photovoltaic materials based on the ambipolar dithienonaphthothiadiazole unit. Journal of Materials Chemistry A, 2015, 3, 4229-4238.	10.3	14
130	Synthesis and photovoltaic properties of naphthobisthiadiazole-triphenylamine-based donor–acceptor π-conjugated polymer. Polymer, 2015, 58, 139-145.	3.8	16
131	Bifunctional alkyl chain barriers for efficient perovskite solar cells. Chemical Communications, 2015, 51, 7047-7050.	4.1	135
132	New ruthenium complexes (Ru[3+2+1]) bearing π-extended 4-methylstyryl terpyridine and unsymmetrical bipyridine ligands for DSSC applications. Inorganica Chimica Acta, 2015, 435, 46-52.	2.4	7
133	Tuning the Photovoltaic Performance of Benzocarbazole-Based Sensitizers for Dye-Sensitized Solar Cells: A Joint Experimental and Theoretical Study of the Influence of Ĭ∈-Spacers. Journal of Physical Chemistry C, 2015, 119, 17053-17064.	3.1	60
134	Improved power conversion efficiency of bulk-heterojunction organic photovoltaic cells using neat C70 as an effective acceptor for an amorphous π-conjugated polymer. Organic Electronics, 2015, 25, 99-104.	2.6	12
135	Monodentate pyrazole as a replacement of labile NCS for Ru (II) photosensitizers: Minimum electron injection free energy for dye-sensitized solar cells. Dyes and Pigments, 2015, 120, 93-98.	3.7	19
136	Efficient thieno[3,2-a]carbazole-based organic dyes for dye-sensitized solar cells. Tetrahedron, 2015, 71, 6534-6540.	1.9	9
137	Hysteresis-free and highly stable perovskite solar cells produced via a chlorine-mediated interdiffusion method. Journal of Materials Chemistry A, 2015, 3, 12081-12088.	10.3	123
138	Efficient and stable large-area perovskite solar cells with inorganic charge extraction layers. Science, 2015, 350, 944-948.	12.6	2,007
139	First-Principles Study of Ion Diffusion in Perovskite Solar Cell Sensitizers. Journal of the American Chemical Society, 2015, 137, 10048-10051.	13.7	582
140	Consecutive Morphology Controlling Operations for Highly Reproducible Mesostructured Perovskite Solar Cells. ACS Applied Materials & Solar Cells. ACS Applied Materials & Solar Cells. ACS Applied Materials & Solar Cells.	8.0	43
141	Possibility of NCS Group Anchor for Ru Dye Adsorption to Anatase TiO2(101) Surface: A Density Functional Theory Investigation. Journal of Physical Chemistry C, 2015, 119, 234-241.	3.1	4
142	Effects of various π-conjugated spacers in thiadiazole[3,4-c]pyridine-cored panchromatic organic dyes for dye-sensitized solar cells. Journal of Materials Chemistry A, 2015, 3, 3103-3112.	10.3	41
143	Tuning of spectral response by co-sensitization in black-dye based dye-sensitized solar cell. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 651-656.	1.8	14
144	Voltage dependence of two-step photocurrent generation in quantum dot intermediate band solar cells. Solar Energy Materials and Solar Cells, 2015, 134, 108-113.	6.2	23

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145	Hybrid interfacial layer leads to solid performance improvement of inverted perovskite solar cells. Energy and Environmental Science, 2015, 8, 629-640.	30.8	285
146	New heteroleptic benzimidazole functionalized Ru-sensitizer showing the highest efficiency for dye-sensitized solar cells. Inorganic Chemistry Communication, 2015, 51, 61-65.	3.9	12
147	Effect of the anchoring group in the performance of carbazole-phenothiazine dyads for dye-sensitized solar cells. Dyes and Pigments, 2015, 113, 536-545.	3.7	30
148	Key issues in highly efficient perovskite solar cells. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 038404.	0.5	12
149	Labeling Co-Sensitizer Dye for XPS Quantification in Coadsorption Dye-Sensitized Solar Cells. E-Journal of Surface Science and Nanotechnology, 2014, 12, 63-67.	0.4	2
150	Dramatic enhancement of fullerene anion formation in polymer solar cells by thermal annealing: Direct observation by electron spin resonance. Applied Physics Letters, 2014, 104, .	3.3	28
151	Investigation of the influence of coadsorbent dye upon the interfacial structure of dye-sensitized solar cells. Journal of Chemical Physics, 2014, 141, 174709.	3.0	5
152	Tin Oxide Microspheres with Exposed {101} Facets for Dyeâ€sensitized Solar Cells: Enhanced Photocurrent and Photovoltage. ChemSusChem, 2014, 7, 172-178.	6.8	14
153	Metal-free organic dyes containing thiadiazole unit for dye-sensitized solar cells: a combined experimental and theoretical study. RSC Advances, 2014, 4, 13172.	3.6	20
154	Direct Arylation Polycondensation: A Promising Method for the Synthesis of Highly Pure, Highâ€Molecularâ€Weight Conjugated Polymers Needed for Improving the Performance of Organic Photovoltaics. Advanced Functional Materials, 2014, 24, 3226-3233.	14.9	126
155	Highâ€Performance, Transparent, Dyeâ€Sensitized Solar Cells for Seeâ€Through Photovoltaic Windows. Advanced Energy Materials, 2014, 4, 1301966.	19.5	88
156	Twoâ€Step direct arylation for synthesis of naphthalenediimideâ€based conjugated polymer. Journal of Polymer Science Part A, 2014, 52, 1401-1407.	2.3	40
157	Tripleâ€Yolked ZnO/CdS Hollow Spheres for Semiconductorâ€Sensitized Solar Cells. Particle and Particle Systems Characterization, 2014, 31, 757-762.	2.3	9
158	Novel Nearâ€Infrared Squaraine Sensitizers for Stable and Efficient Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2014, 24, 3059-3066.	14.9	77
159	Novel design of organic donor–acceptor dyes without carboxylic acid anchoring groups for dye-sensitized solar cells. Journal of Materials Chemistry C, 2014, 2, 3367.	5.5	56
160	Effect of different trap states on the electron transport of photoanodes in dye sensitized solar cells. Journal of Power Sources, 2014, 257, 264-271.	7.8	18
161	GaAs/AlGaAs quantum wells with indirect-gap AlGaAs barriers for solar cell applications. Applied Physics Letters, 2014, 104, .	3.3	3
162	Molecular Engineering of New Thienylâ∈Bodipy Dyes for Highly Efficient Panchromatic Sensitized Solar Cells. Advanced Energy Materials, 2014, 4, 1400085.	19.5	47

#	Article	IF	Citations
163	Structure–property relationship of heteroâ€aromaticâ€electronâ€donor antennas of polypyridyl Ru (II) complexes for high efficiency dyeâ€sensitized solar cells. Progress in Photovoltaics: Research and Applications, 2014, 22, 958-969.	8.1	25
164	Carbazole based A-Ï€-D-Ï€-A dyes with double electron acceptor for dye-sensitized solar cell. Organic Electronics, 2014, 15, 266-275.	2.6	65
165	Interfacial engineering for dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 5167.	10.3	59
166	Novel core–shell TiO <sub>2</sub> microsphere scattering layer for dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 1502-1508.	10.3	43
167	More stable and more efficient alternatives of Z-907: carbazole-based amphiphilic Ru( <scp>ii</scp> ) sensitizers for dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2014, 16, 27078-27087.	2.8	41
168	Shielding effects of additives in a cobalt(ii/iii) redox electrolyte: toward higher open-circuit photovoltages in dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 10532.	10.3	21
169	Band alignment by ternary crystalline potential-tuning interlayer for efficient electron injection in quantum dot-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 7004-7014.	10.3	26
170	Ethanol adsorption on rutile TiO2(110). RSC Advances, 2014, 4, 8550.	3.6	19
171	Influence of mono versus bis-electron-donor ancillary ligands in heteroleptic Ru( <scp>ii</scp> ) bipyridyl complexes on electron injection from the first excited singlet and triplet states in dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 14228-14235.	10.3	30
172	Thiocyanate-free cyclometalated ruthenium(ii) sensitizers for DSSC: A combined experimental and theoretical investigation. Physical Chemistry Chemical Physics, 2014, 16, 2630.	2.8	48
173	Acetonitrile Solution Effect on Ru N749 Dye Adsorption and Excitation at TiO <sub>2</sub> Anatase Interface. Journal of Physical Chemistry C, 2014, 118, 16863-16871.	3.1	14
174	A comparative study of Ru( <scp>ii</scp> ) cyclometallated complexes versus thiocyanated heteroleptic complexes: thermodynamic force for efficient dye regeneration in dye-sensitized solar cells and how low could it be?. Physical Chemistry Chemical Physics, 2014, 16, 14874-14881.	2.8	31
175	Termination Dependence of Tetragonal CH <sub>3</sub> NH <sub>3</sub> Pbl <sub>3</sub> Surfaces for Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 2903-2909.	4.6	320
176	Retarding the crystallization of PbI <sub>2</sub> for highly reproducible planar-structured perovskite solar cells via sequential deposition. Energy and Environmental Science, 2014, 7, 2934-2938.	30.8	807
177	A dopant-free hole-transporting material for efficient and stable perovskite solar cells. Energy and Environmental Science, 2014, 7, 2963-2967.	30.8	668
178	Space–Charge Layer Effect at Interface between Oxide Cathode and Sulfide Electrolyte in All-Solid-State Lithium-Ion Battery. Chemistry of Materials, 2014, 26, 4248-4255.	6.7	426
179	Highly conjugated electron rich thiophene antennas on phenothiazine and phenoxazine-based sensitizers for dye sensitized solar cells. Synthetic Metals, 2014, 195, 208-216.	3.9	36
180	A quasi core–shell nitrogen-doped graphene/cobalt sulfide conductive catalyst for highly efficient dye-sensitized solar cells. Energy and Environmental Science, 2014, 7, 2637-2641.	30.8	185

#	Article	IF	CITATIONS
181	Panchromatic Donor–Acceptor–Donor Conjugated Oligomers for Dye-Sensitized Solar Cell Applications. ACS Applied Materials & Interfaces, 2014, 6, 8715-8722.	8.0	59
182	Influence of Number of Benzodioxan-Stilbazole-based Ancillary Ligands on Dye Packing, Photovoltage and Photocurrent in Dye-Sensitized Solar Cells. ACS Applied Materials & Samp; Interfaces, 2014, 6, 11617-11624.	8.0	49
183	Dye-Sensitized Solar Cells Based on Quinoxaline Dyes: Effect of Ï∈-Linker on Absorption, Energy Levels, and Photovoltaic Performances. Journal of Physical Chemistry C, 2014, 118, 16552-16561.	3.1	72
184	Hierarchically Structured ZnO Nanorods as an Efficient Photoanode for Dyeâ€Sensitized Solar Cells. Chemistry - A European Journal, 2014, 20, 8483-8487.	3.3	22
185	New simple panchromatic dyes based on thiadiazolo[3,4-c]pyridine unit for dye-sensitized solar cells. Dyes and Pigments, 2014, 102, 196-203.	3.7	29
186	Highly compact TiO <sub>2</sub> layer for efficient hole-blocking in perovskite solar cells. Applied Physics Express, 2014, 7, 052301.	2.4	199
187	Thieno[2,3-a]carbazole-based donor–π–acceptor organic dyes for efficient dye-sensitized solar cells. Tetrahedron, 2014, 70, 6211-6216.	1.9	18
188	One-step fabrication of large-scaled indium tin oxide/poly(3,4-ethylenedioxythiophene):poly(styrenesulfonate)/poly(3-hexylthiophene-2,5-diyl):[6,6]-phenyl-C61-bacid methyl ester multi-layered structure. Thin Solid Films, 2014, 554, 46-50.	ou <b>ity</b> sric	2
189	Substitution effects of Ru–terpyridyl complexes on photovoltaic and carrier transport properties in dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 11033.	10.3	12
190	Efficient metal-free sensitizers bearing circle chain embracing π-spacers for dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 10889.	10.3	31
191	Functionalized phenyl bipyridine ancillary ligand as double recombination inhibitor in ruthenium complex for dye solar cells. Dyes and Pigments, 2013, 99, 850-856.	3.7	14
192	Novel ruthenium sensitizer with multiple butadiene equivalent thienyls as conjugation on ancillary ligand for dye-sensitized solar cells. Organic Electronics, 2013, 14, 2243-2248.	2.6	18
193	Simple indoline based donor–acceptor dye for high efficiency dye-sensitized solar cells. Materials Chemistry and Physics, 2013, 142, 82-86.	4.0	10
194	Coordinated shifts of interfacial energy levels: insight into electron injection in highly efficient dye-sensitized solar cells. Energy and Environmental Science, 2013, 6, 3637.	30.8	31
195	Influence of cyclic versus acyclic oxygen-containing electron donor ancillary ligands on the photocurrent, photovoltage and photostability for high efficiency dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 13679.	10.3	30
196	Co-sensitization of amphiphilic ruthenium (II) sensitizer with a metal free organic dye: Improved photovoltaic performance of dye sensitized solar cells. Organic Electronics, 2013, 14, 1237-1241.	2.6	43
197	Novel Carbazole-Phenothiazine Dyads for Dye-Sensitized Solar Cells: A Combined Experimental and Theoretical Study. ACS Applied Materials & Company: Interfaces, 2013, 5, 9635-9647.	8.0	102
198	2,6-Bis(1-methylbenzimidazol-2-yl)pyridine: A New Ancillary Ligand for Efficient Thiocyanate-Free Ruthenium Sensitizer in Dye-Sensitized Solar Cell Applications. ACS Applied Materials & Samp; Interfaces, 2013, 5, 11623-11630.	8.0	21

#	Article	IF	Citations
199	X-ray Characterization of Dye Adsorption in Coadsorbed Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2013, 117, 17033-17038.	3.1	15
200	Deuterium Isotope Effect on Bulk Heterojunction Solar Cells. Enhancement of Organic Photovoltaic Performances Using Monobenzyl Substituted Deuteriofullerene Acceptors. Organic Letters, 2013, 15, 5674-5677.	4.6	12
201	Exciton-to-Carrier Conversion Processes in a Low-Band-Gap Organic Photovoltaic. Japanese Journal of Applied Physics, 2013, 52, 062405.	1.5	22
202	4,4′-Unsymmetrically substituted-2,2′-bipyridines: novel bidentate ligands on ruthenium(ii) [3 + 2 + 1] mixed ligand complexes for efficient sensitization of nanocrystalline TiO2 in dye solar cells. RSC Advances, 2013, 3, 26035.	3.6	9
203	Energy band tunable TixSn1â^xO2 photoanode for efficient non-TiO2 type dye sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 8453.	10.3	15
204	Functional 2-benzyl-1,2-dihydro [60] fullerenes as acceptors for organic photovoltaics: facile synthesis and high photovoltaic performances. Tetrahedron, 2013, 69, 1302-1306.	1.9	12
205	Rigid triarylamine-based efficient DSSC sensitizers with high molar extinction coefficients. Journal of Materials Chemistry A, 2013, 1, 4763.	10.3	76
206	Structure of electron collection electrode in dye-sensitized nanocrystalline TiO2. Electrochimica Acta, 2013, 87, 309-316.	5.2	12
207	Structure–property relationship of different electron donors: novel organic sensitizers based on fused dithienothiophene π-conjugated linker for high efficiency dye-sensitized solar cells. Tetrahedron, 2013, 69, 3444-3450.	1.9	27
208	Highly efficient dye-sensitized solar cells: progress and future challenges. Energy and Environmental Science, 2013, 6, 1443.	30.8	596
209	Improvement of spectral response by co-sensitizers for high efficiency dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 4812.	10.3	76
210	New fluorenone-containing organic photosensitizers for dye-sensitized solar cells. Dyes and Pigments, 2013, 98, 428-436.	3.7	30
211	Reliable evaluation of dye-sensitized solar cells. Energy and Environmental Science, 2013, 6, 54-66.	30.8	114
212	Enhanced Lightâ∈Harvesting Capability of a Panchromatic Ru(II) Sensitizer Based on Ï€â€Extended Terpyridine with a 4â€Methylstylryl Group for Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2013, 23, 1817-1823.	14.9	82
213	Squaraine Dyes for Dyeâ€Sensitized Solar Cells: Recent Advances and Future Challenges. Chemistry - an Asian Journal, 2013, 8, 1706-1719.	3.3	113
214	A Nearâ€Infrared <i>cis</i> àâ€Configured Squaraine Coâ€Sensitizer for Highâ€Efficiency Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2013, 23, 3782-3789.	14.9	59
215	Electronic structure of acetonitrile adsorbed on the anatase TiO2 (101) surface. Chemical Physics Letters, 2013, 556, 225-229.	2.6	11
216	Circle chain embracing donor–acceptor organic dye: simultaneous improvement of photocurrent and photovoltage for dye-sensitized solar cells. Chemical Communications, 2013, 49, 7587.	4.1	38

#	Article	IF	CITATIONS
217	Constructing High-Efficiency D–Aâ^'π–A-Featured Solar Cell Sensitizers: a Promising Building Block of 2,3-Diphenylquinoxaline for Antiaggregation and Photostability. ACS Applied Materials & Discrete Representation of the Interfaces, 2013, 5, 4986-4995.	8.0	187
218	Structure–property relationship of extended π-conjugation of ancillary ligands with and without an electron donor of heteroleptic Ru(ii) bipyridyl complexes for high efficiency dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2013, 15, 8401.	2.8	44
219	Synthesis and photovoltaic properties of amorphous polymers based on dithienylbenzothiadiazoleâ€triphenylamine with hexyl side chains on different positions of thienyl groups. Journal of Polymer Science Part A, 2013, 51, 2536-2544.	2.3	16
220	Multiwall Carbon Nanotube Coated with Conducting Polyaniline Nanocomposites for Quasi-Solid-State Dye-Sensitized Solar Cells. Journal of Chemistry, 2013, 2013, 1-5.	1.9	4
221	Improving the Spectral Response of Black Dye by Cosensitization with a Simple Indoline Based Dye in Dye-Sensitized Solar Cell. Journal of Chemistry, 2013, 2013, 1-5.	1.9	10
222	Effect of co-adsorption dye on the electrode interface (Ru complex/ $TiO2$ ) of dye-sensitized solar cells. AIP Advances, 2013, 3, .	1.3	8
223	Carrier formation dynamics of a small-molecular organic photovoltaic. Applied Physics Letters, 2013, 102, .	3.3	11
224	Impacts of ambipolar carrier escape on current-voltage characteristics in a type-I quantum-well solar cell. Applied Physics Letters, 2013, 103, 061118.	3.3	7
225	Robust carrier formation process in low-band gap organic photovoltaics. Applied Physics Letters, 2013, 103, 173901.	3.3	9
226	Prominent Charge-Transfer State at $\hat{l}$ ±-Sexithiophene/C <sub>60</sub> Interface. Journal of the Physical Society of Japan, 2013, 82, 063709.	1.6	3
227	Effective charge collection in dye-sensitized nanocrystalline TiO 2. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2013, 4, 015006.	1.5	4
228	Substituent Effects for Perylenedicarboxylic Anhydrides on the Performance of Dye-sensitized Solar Cells: The Simpler, the Better. Chemistry Letters, 2013, 42, 450-452.	1.3	2
229	Cosensitization of Ruthenium–Polypyridyl Dyes with Organic Dyes in Dye-sensitized Solar Cells. Chemistry Letters, 2013, 42, 1328-1335.	1.3	30
230	Unexpected effect of dye's molar extinction coefficient on performance of back contact dye-sensitized solar cells. Applied Physics Letters, 2012, 101, 233905.	3.3	2
231	A New Factor Affecting the Performance of Dye-Sensitized Solar Cells in the Presence of 4-tert-Butylpyridine. Applied Physics Express, 2012, 5, 042303.	2.4	10
232	Current–Voltage Characteristics of GaAs/AlGaAs Coupled Multiple Quantum Well Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10ND08.	1.5	3
233	Surface Treatment for Effective Dye Adsorption on Nanocrystalline TiO\$_{2}\$. Japanese Journal of Applied Physics, 2012, 51, 10NE16.	1.5	5
234	Influences of Electron-Withdrawing Groups of Organic Dyes on Spectral Property and Photovoltaic Performance in Dye-sensitized Solar Cells Application. Japanese Journal of Applied Physics, 2012, 51, 10NE13.	1.5	5

#	Article	IF	Citations
235	Simple Metal-Free Organic D-ï∈-A Dyes with Alkoxy- or Fluorine Substitutions: Application in Dye Sensitized Solar Cells. Journal of Nanoscience and Nanotechnology, 2012, 12, 4489-4494.	0.9	16
236	Photovoltaic Properties and Charge Dynamics in Nanophase-Separated F8T2/PCBM Blend Films. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2012, 25, 271-276.	0.3	15
237	MODELS OF ELECTRON INJECTION, DIFFUSION AND RECOMBINATION IN DYE-SENSITIZED SOLAR CELLS. International Journal of Modern Physics B, 2012, 26, 1230009.	2.0	1
238	Functionalized styryl bipyridine as a superior chelate for a ruthenium sensitizer in dye sensitized solar cells. Dalton Transactions, 2012, 41, 8770.	3.3	29
239	Fast Carrier Formation from Acceptor Exciton in Low-Gap Organic Photovotalic. Applied Physics Express, 2012, 5, 042302.	2.4	32
240	Directly Determine an Additive-Induced Shift in Quasi-Fermi Level of TiO <sub>2</sub> Films in Dye-Sensitized Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NE15.	1.5	1
241	Chemical input and l–V output: stepwise chemical information processing in dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2012, 14, 16014.	2.8	11
242	Hexagonal TiO2 microplates with superior light scattering for dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 20773.	6.7	40
243	Incorporating a stable fluorenone unit into D–A–π–A organic dyes for dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 19236.	6.7	64
244	Improved power conversion efficiency of bulk-heterojunction organic solar cells using a benzothiadiazole–triphenylamine polymer. Journal of Materials Chemistry, 2012, 22, 2539-2544.	6.7	30
245	Use of benzothiadiazole–triphenylamine amorphous polymer for reproducible performance of polymer–fullerene bulk-heterojunction solar cells. Organic Electronics, 2012, 13, 1802-1808.	2.6	18
246	High-efficiency dye-sensitized solar cell with a novel co-adsorbent. Energy and Environmental Science, 2012, 5, 6057.	30.8	655
247	Aggregation-free branch-type organic dye with a twisted molecular architecture for dye-sensitized solar cells. Energy and Environmental Science, 2012, 5, 8548.	30.8	76
248	Structureâ€"property relationship of naphthalene based donorâ€"Ï€â€"acceptor organic dyes for dye-sensitized solar cells: remarkable improvement of open-circuit photovoltage. Journal of Materials Chemistry, 2012, 22, 22550.	6.7	39
249	A Novel Organic Sensitizer Combined with a Cobalt Complex Redox Shuttle for Dye-Sensitized Solar Cells. Organic Letters, 2012, 14, 2532-2535.	4.6	26
250	Tuning the Electrical and Optical Properties of Diketopyrrolopyrrole Complexes for Panchromatic Dyeâ€Sensitized Solar Cells. Chemistry - an Asian Journal, 2012, 7, 2895-2903.	3.3	37
251	Effect of branched alkyl chains attached at sp3 silicon of donor–acceptor copolymers on their morphology and photovoltaic properties. Journal of Polymer Science Part A, 2012, 50, 4829-4839.	2.3	11
252	Template method for fabricating interdigitate p-n heterojunction for organic solar cell. Nanoscale Research Letters, 2012, 7, 469.	5.7	17

#	Article	IF	Citations
253	One bipyridine and triple advantages: tailoring ancillary ligands in ruthenium complexes for efficient sensitization in dye solar cells. Journal of Materials Chemistry, 2012, 22, 18757.	6.7	21
254	Donor–acceptor dyes incorporating a stable dibenzosilole π-conjugated spacer for dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 10771.	6.7	45
255	Efficient thiocyanate-free sensitizer: a viable alternative to N719 dye for dye-sensitized solar cells. Dalton Transactions, 2012, 41, 7604.	3.3	27
256	Protonated Carboxyl Anchor for Stable Adsorption of Ru N749 Dye (Black Dye) on a TiO2 Anatase (101) Surface. Journal of Physical Chemistry Letters, 2012, 3, 472-477.	4.6	48
257	Surface ion transfer growth of ternary CdS1â^'xSex quantum dots and their electron transport modulation. Nanoscale, 2012, 4, 7690.	5.6	36
258	A novel carbazole-based dye outperformed the benchmark dye N719 for high efficiency dye-sensitized solar cells (DSSCs). Journal of Materials Chemistry, 2012, 22, 24048.	6.7	74
259	Highly efficient nanoporous graphitic carbon with tunable textural properties for dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 20866.	6.7	29
260	Effect of Cerium Doping in the TiO <sub>2</sub> Photoanode on the Electron Transport of Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 19182-19190.	3.1	137
261	Carrier Formation Dynamics of Organic Photovoltaics as Investigated by Time-Resolved Spectroscopy. Advances in Optical Technologies, 2012, 2012, 1-10.	0.8	10
262	A novel D–A-π-A organic sensitizer containing a diketopyrrolopyrrole unit with a branched alkyl chain for highly efficient and stable dye-sensitized solar cells. Chemical Communications, 2012, 48, 6972.	4.1	229
263	Ellipsoidal TiO <sub>2</sub> Hierarchitectures with Enhanced Photovoltaic Performance. Chemistry - A European Journal, 2012, 18, 5269-5274.	3.3	14
264	Metalâ€Free and Fluorescent Diketopyrrolopyrrole Fluorophores for Dyeâ€Sensitized Solar Cells. ChemPlusChem, 2012, 77, 462-469.	2.8	5
265	Panchromatic donor–acceptor–acceptor sensitizers based on 4H-cyclopenta[2,1-b:3,4-b′]dithiophen-4-one as a strong acceptor for dye-sensitized solar cells. Dyes and Pigments, 2012, 94, 553-560.	3.7	32
266	Evaluation of carrier transport and recombinations in cadmium selenide quantum-dot-sensitized solar cells. Solar Energy Materials and Solar Cells, 2012, 101, 5-10.	6.2	25
267	Cascade cyclization of aryldiynes using iodine: synthesis of iodo-substituted benzo[b]naphtho[2,1-d]thiophene derivatives for dye-sensitized solar cells. Tetrahedron Letters, 2012, 53, 1946-1950.	1.4	36
268	Influences of Electron-Withdrawing Groups of Organic Dyes on Spectral Property and Photovoltaic Performance in Dye-sensitized Solar Cells Application. Japanese Journal of Applied Physics, 2012, 51, 10NE13.	1.5	4
269	Directly Determine an Additive-Induced Shift in Quasi-Fermi Level of TiO2Films in Dye-Sensitized Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NE15.	1.5	4
270	Surface Treatment for Effective Dye Adsorption on Nanocrystalline TiO2. Japanese Journal of Applied Physics, 2012, 51, 10NE16.	1.5	0

#	Article	IF	Citations
271	Injection Efficiency in Dye-Sensitized Solar Cells within a Two-Band Model. Journal of Physical Chemistry C, 2011, 115, 6033-6039.	3.1	18
272	Preparation of donor–acceptor type organic dyes bearing various electron-withdrawing groups for dye-sensitized solar cell application. Chemical Communications, 2011, 47, 6159.	4.1	56
273	Water Contamination Effect on Liquid Acetonitrile/TiO <sub>2</sub> Anatase (101) Interface for Durable Dye-Sensitized Solar Cell. Journal of Physical Chemistry C, 2011, 115, 19849-19855.	3.1	31
274	Controlled fabrication of TiO2rutile nanorod/anatase nanoparticle composite photoanodes for dye-sensitized solar cell application. Nanotechnology, 2011, 22, 275709.	2.6	18
275	Effects of 4-tert-butylpyridine on the quasi-Fermi levels of TiO2 films in the presence of different cations in dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2011, 13, 19310.	2.8	33
276	A novel metal-free panchromatic TiO2 sensitizer based on a phenylenevinylene-conjugated unit and an indoline derivative for highly efficient dye-sensitized solar cells. Chemical Communications, 2011, 47, 12400.	4.1	64
277	Long-Wavelength Sensitization of TiO2by Ruthenium Diimine Compounds with Low-Lying π* Orbitals. Langmuir, 2011, 27, 14522-14531.	3.5	35
278	Theoretical Investigation on Interfacial-Potential-Limited Diffusion and Recombination in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2011, 115, 17154-17162.	3.1	10
279	Charge-Transfer State and Charge Dynamics in Poly(9,9\$'\$-dioctylfluorene- <i>co</i> -bithiophene) and [6,6]-Phenyl C\$_{70}\$-butyric Acid Methyl Ester Blend Film. Applied Physics Express, 2011, 4, 122601.	2.4	13
280	Novel Approach for the Synthesis of Nanocrystalline Anatase Titania and Their Photovoltaic Application. Advances in OptoElectronics, 2011, 2011, 1-5.	0.6	18
281	Quasi Solid-State Dye-Sensitized Solar Cell Incorporating Highly Conducting Polythiophene-Coated Carbon Nanotube Composites in Ionic Liquid. Advances in OptoElectronics, 2011, 2011, 1-7.	0.6	3
282	Piperidine-Substituted Perylene Sensitizer for Dye-Sensitized Solar Cells. Advances in OptoElectronics, 2011, 2011, 1-7.	0.6	8
283	Dye-Sensitized Solar Cells Based on High Surface Area Nanocrystalline Zinc Oxide Spheres. Advances in OptoElectronics, 2011, 2011, 1-5.	0.6	2
284	Solar Energy Conversion by Dye-Sensitized Photovoltaic Cells Using High Surface Area Mesoporous Carbon Counter Electrode. Advances in OptoElectronics, 2011, 2011, 1-4.	0.6	2
285	Preparation, Spectral Properties, and Electron Affinity of Bis(thiadiazolo)quinoxaline and Bis(thiadiazolo)phenanthroquinoxaline as n-Type Semiconductors. Chemistry Letters, 2011, 40, 1252-1253.	1.3	5
286	Air-stable triarylamine-based amorphous polymer as donor material for bulk-heterojunction organic solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 3509-3515.	6.2	14
287	Colloidal quantum dot solar cells. Solar Energy, 2011, 85, 1264-1282.	6.1	246
288	Highly Efficient Dye-sensitized Solar Cells. Materials Research Society Symposia Proceedings, 2011, 1327, 70501.	0.1	1

#	Article	IF	CITATIONS
289	Effect of 4- <i>tert</i> -Butylpyridine on the Quasi-Fermi Level of Dye-Sensitized TiO <sub>2</sub> Films. Applied Physics Express, 2011, 4, 042301.	2.4	28
290	THIOCYANATE-FREE, PANCHROMATIC RUTHENIUM (II) TERPYRIDINE SENSITIZER HAVING A TRIDENTATE DIETHYLENETRIAMINE LIGAND FOR NEAR-IR SENSITIZATION OF NANOCRYSTALINE <pre><font>TiO<sub>2</sub></font></pre> sub>font>. Functional Materials Letters, 2011, 04, 21-24.	1.2	22
291	Development of a New Class of Thiocyanate-Free Cyclometalated Ruthenium(II) Complex for Sensitizing Nanocrystalline TiO2Solar Cells. International Journal of Photoenergy, 2011, 2011, 1-5.	2.5	18
292	Amphiphilic Ruthenium(II) Terpyridine Sensitizers with Long Alkyl Chain Substituted $\hat{l}^2$ -Diketonato Ligands: An Efficient Coadsorbent-Free Dye-Sensitized Solar Cells. International Journal of Photoenergy, 2011, 2011, 1-7.	2.5	6
293	Synthesis and Application of New Ruthenium Complexes Containing $\hat{I}^2$ -Diketonato Ligands as Sensitizers for Nanocrystalline TiO2Solar Cells. International Journal of Photoenergy, 2011, 2011, 1-8.	2.5	7
294	Metal-Free Counter Electrode for Efficient Dye-Sensitized Solar Cells through High Surface Area and Large Porous Carbon. International Journal of Photoenergy, 2011, 2011, 1-4.	2.5	12
295	Benzothiadiazole-Triphenylamine Derivatives as Donor Materials for Bulk-Heterojunction Organic Solar Cells. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2010, 23, 307-312.	0.3	4
296	STM imaging of a model surface of Ru(4,4′-dicarboxy-2,2′-bipyridine)2(NCS)2 dye-sensitized TiO2 photoelectrodes. Surface Science, 2010, 604, 106-110.	1.9	22
297	SUCCESSIVE LARGE PERTURBATION METHOD FOR THE EXTRACTION OF MORE ACCURATE EQUIVALENT-CIRCUIT-PARAMETERS IN SOLAR CELLS. Journal of Nonlinear Optical Physics and Materials, 2010, 19, 637-643.	1.8	2
298	RUTILE-ANATASE <font>TiO<sub>2</sub></font> PHOTOANODES FOR DYE-SENSITIZED SOLAR CELLS. Journal of Nonlinear Optical Physics and Materials, 2010, 19, 673-679.	1.8	10
299	A $\hat{l}^2$ -Diketonato Ruthenium(II) Complex with High Molar Extinction Coefficient for Panchromatic Sensitization of Nanocrystalline TiO <sub>2</sub> Film. Applied Physics Express, 2010, 3, 062301.	2.4	26
300	Singlet Annihilation in Films of Regioregular Poly(3-hexylthiophene): Estimates for Singlet Diffusion Lengths and the Correlation between Singlet Annihilation Rates and Spectral Relaxation. Journal of Physical Chemistry C, 2010, 114, 10962-10968.	3.1	87
301	Quantitative study of solvent effects on electron injection efficiency for black-dye-sensitized nanocrystalline TiO2 films. Solar Energy Materials and Solar Cells, 2009, 93, 698-703.	6.2	36
302	Influence of TiO2/electrode interface on electron transport properties in back contact dye-sensitized solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 720-724.	6.2	57
303	Lateral distribution of N3 dye molecules on TiO2(1 1 0) surface. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 202, 185-190.	3.9	10
304	Recombination rate between dye cations and electrons in N719-sensitized nanocrystalline TiO2 films under substantially weak excitation conditions. Chemical Physics Letters, 2009, 471, 280-282.	2.6	20
305	Estimate of singlet diffusion lengths in PCBM films by time-resolved emission studies. Chemical Physics Letters, 2009, 478, 33-36.	2.6	76
306	Influence of TiCl4 treatment on back contact dye-sensitized solar cells sensitized with black dye. Energy and Environmental Science, 2009, 2, 1205.	30.8	83

#	Article	IF	CITATIONS
307	Dye-Sensitized Photovoltaic Module with Conversion Efficiency of 8.4%. Applied Physics Express, 2009, 2, 082202.	2.4	35
308	Successive large perturbation method for the elimination of initial value dependence in I-V curve fitting. Review of Scientific Instruments, 2009, 80, 115111.	1.3	8
309	Integrated dye-sensitized solar cell module with conversion efficiency of 8.2%. Applied Physics Letters, 2009, 94, 013305.	3.3	101
310	Fabrication of Stretch-Oriented Regioregular Poly(3-Hexylthiophene) film and Its Application to Organic Field-Effect Transistors. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2009, 22, 713-717.	0.3	17
311	Highly efficient dye-sensitized solar cells. Proceedings of SPIE, 2009, , .	0.8	1
312	New Approach to Low-Cost Dye-Sensitized Solar Cells With Back Contact Electrodes. Chemistry of Materials, 2008, 20, 4974-4979.	6.7	67
313	Work Function on Dye-Adsorbed TiO <sub>2</sub> Surfaces Measured by Using a Kelvin Probe Force Microscope. Journal of Physical Chemistry C, 2008, 112, 6961-6967.	3.1	22
314	Scanning Tunneling Microscopy Study of Black Dye and Deoxycholic Acid Adsorbed on a Rutile TiO <sub>2</sub> (110). Langmuir, 2008, 24, 8056-8060.	3.5	45
315	Electron transport in back contact dye-sensitized solar cells. Journal of Applied Physics, 2008, 104, 064307.	2.5	21
316	Back Contact Dye-Sensitized Solar Cells. Japanese Journal of Applied Physics, 2007, 46, L420-L422.	1.5	49
317	Photoinduced electron injection in black dye sensitized nanocrystalline TiO2 films. Journal of Materials Chemistry, 2007, 17, 3190.	6.7	75
318	Dye-Sensitized Solar Cells with Conversion Efficiency of 11.1%. Japanese Journal of Applied Physics, 2006, 45, L638-L640.	1.5	1,761
319	High Efficiency of Dye-Sensitized Solar Cell and Module. , 2006, , .		17
320	Synthesis and Characterization of New Efficient Tricarboxyterpyridyl ( $\hat{l}^2$ -diketonato) Ruthenium(II) Sensitizers and Their Applications in Dye-Sensitized Solar Cells. Chemistry of Materials, 2006, 18, 5178-5185.	6.7	93
321	Modeling of an equivalent circuit for dye-sensitized solar cells: improvement of efficiency of dye-sensitized solar cells by reducing internal resistance. Comptes Rendus Chimie, 2006, 9, 645-651.	0.5	206
322	Improvement of efficiency of dye-sensitized solar cells based on analysis of equivalent circuit. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 182, 296-305.	3.9	386
323	Effect of a redox electrolyte in mixed solvents on the photovoltaic performance of a dye-sensitized solar cell. Solar Energy Materials and Solar Cells, 2006, 90, 649-658.	6.2	103
324	Conversion efficiency of 10.8% by a dye-sensitized solar cell using a TiO2 electrode with high haze. Applied Physics Letters, 2006, 88, 223505.	3.3	163

#	Article	IF	CITATIONS
325	Improvement of Efficiency of Polymer Solar Cells with Soluble Fullerene Derivatives., 2006,,.		1
326	Ruthenium(II) Tricarboxyterpyridyl Complex with a Fluorine-substituted $\hat{l}^2$ -Diketonato Ligand for Highly Efficient Dye-sensitized Solar Cells. Chemistry Letters, 2005, 34, 344-345.	1.3	36
327	Methods of Measuring Energy Conversion Efficiency in Dye-sensitized Solar Cells. Japanese Journal of Applied Physics, 2005, 44, 4176-4181.	1.5	35
328	Improvement of efficiency of dye-sensitized solar cells by reduction of internal resistance. Applied Physics Letters, 2005, 86, 213501.	3.3	318
329	Highly efficient quasi-solid state dye-sensitized solar cell with ion conducting polymer electrolyte. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 164, 123-127.	3.9	110
330	Modeling of an equivalent circuit for dye-sensitized solar cells. Applied Physics Letters, 2004, 84, 2433-2435.	3.3	583
331	Measuring methods of cell performance of dye-sensitized solar cells. Review of Scientific Instruments, 2004, 75, 2828-2831.	1.3	123
332	Syntheses and absorption spectra of intermolecular charge-transfer complex dyes. Dyes and Pigments, 1988, 9, 343-350.	3.7	19
333	Charge-transfer complexes of N-ethylcarbazole and poly-N-vinylcarbazole with dicyanonaphthoquino derivatives: thermodynamic parameters and photofading behaviour. Dyes and Pigments, 1988, 9, 419-426.	3.7	1
334	Improvement of efficiency of dye-sensitized solar cells by reduction of internal resistance. , 0, , .		4