Fan-Tai Kong

List of Publications by Year
in descending order

97 papers	3,841 citations	101543 36 h-index	133252 59 g-index
98 all docs	98 docs citations	98 times ranked	5396 citing authors

#	Article	IF	Citations
1	Microstructure Design of Nanoporous TiO2Photoelectrodes for Dye-Sensitized Solar Cell Modules. Journal of Physical Chemistry B, 2007, 111, 358-362.	2.6	171
2	Kinetic Stability of Bulk LiNiO₂ and Surface Degradation by Oxygen Evolution in LiNiO₂â€Based Cathode Materials. Advanced Energy Materials, 2019, 9, 1802586.	19.5	160
3	Unraveling the Origin of Instability in Ni-Rich LiNi_{1â€“2<i>x</i>}Co_{<i>x</i>}Mn_{<i>x</i>}O₂ (NCM) Cathode Materials. Journal of Physical Chemistry C, 2016, 120, 6383-6393.	3.1	154
4	Anatase and rutile in evonik aeroxide P25: Heterojunctioned or individual nanoparticles?. Catalysis Today, 2018, 300, 12-17.	4.4	147
5	Charge Mediated Reversible Metalâ€“Insulator Transition in Monolayer MoTe₂ and W_{<i>x</i>}Mo_{1â€“<i>x</i>}Te₂ Alloy. ACS Nano, 2016, 10, 7370-7375.	14.6	133
6	Nanocomposite gel electrolyte with large enhanced charge transport properties of an I3âˆ’/Iâˆ’ redox couple for quasi-solid-state dye-sensitized solar cells. Solar Energy Materials and Solar Cells, 2007, 91, 1959-1965.	6.2	132
7	Design of DSC panel with efficiency more than 6%. Solar Energy Materials and Solar Cells, 2005, 85, 447-455.	6.2	129
8	Review of Recent Progress in Dye-Sensitized Solar Cells. Advances in OptoElectronics, 2007, 2007, 1-13.	0.6	124
9	Site-dependent multicomponent doping strategy for Ni-rich LiNi_{1âˆ’2y}Co_yMn_yO₂ (<i>y</i> = 1/12) cathode materials for Li-ion batteries. Journal of Materials Chemistry A, 2017, 5, 25303-25313.	10.3	119
10	Conflicting Roles of Anion Doping on the Electrochemical Performance of Li-Ion Battery Cathode Materials. Chemistry of Materials, 2016, 28, 6942-6952.	6.7	118
11	Rational design of common transition metal-nitrogen-carbon catalysts for oxygen reduction reaction in fuel cells. Nano Energy, 2016, 30, 443-449.	16.0	114
12	Ab initio study of doping effects on LiMnO₂ and Li₂MnO₃ cathode materials for Li-ion batteries. Journal of Materials Chemistry A, 2015, 3, 8489-8500.	10.3	102
13	Designing function-oriented artificial nanomaterials and membranes via electrospinning and electrospraying techniques. Materials Science and Engineering C, 2018, 92, 1075-1091.	7.3	83
14	Dye-sensitized solar cells, from cell to module. Solar Energy Materials and Solar Cells, 2004, 84, 125-133.	6.2	80
15	Charge Recombination and Band-Edge Shift in the Dye-Sensitized Mg²⁺-Doped TiO₂Solar Cells. Journal of Physical Chemistry C, 2011, 115, 16418-16424.	3.1	79
16	The adsorption of 4-tert-butylpyridine on the nanocrystalline TiO2 and Raman spectra of dye-sensitized solar cells in situ. Vibrational Spectroscopy, 2005, 39, 99-105.	2.2	73
17	Low Molecular Mass Organogelator Based Gel Electrolyte with Effective Charge Transport Property for Long-Term Stable Quasi-Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry B, 2008, 112, 12927-12933.	2.6	70
18	Multiple-Anchoring Triphenylamine Dyes for Dye-Sensitized Solar Cell Application. Journal of Physical Chemistry C, 2014, 118, 8756-8765.	3.1	70

#	ARTICLE	IF	CITATIONS
19	Influence of Ï€-linker on triphenylamine-based hole transporting materials in perovskite solar cells. Dyes and Pigments, 2017, 139, 129-135.	3.7	69
20	Stable and Active Oxidation Catalysis by Cooperative Lattice Oxygen Redox on SmMn₂O₅ Mullite Surface. Journal of the American Chemical Society, 2019, 141, 10722-10728.	13.7	64
21	Influence of 1-methylbenzimidazole interactions with Li+ and TiO2 on the performance of dye-sensitized solar cells. Electrochimica Acta, 2008, 53, 5503-5508.	5.2	58
22	The design and outdoor application of dye-sensitized solar cells. Inorganica Chimica Acta, 2008, 361, 786-791.	2.4	58
23	Obstacles toward unity efficiency of LiNi 1-2x Co x Mn x O 2 (xÂ=Â0Ââˆ¼Â1/3) (NCM) cathode materials: Insights from ab initio calculations. Journal of Power Sources, 2017, 340, 217-228.	7.8	57
24	Superior Light-Harvesting Heteroleptic Ruthenium(II) Complexes with Electron-Donating Antennas for High Performance Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 19410-19417.	8.0	55
25	Facile Synthesis of Flowerlike Bi₂MoO₆ Hollow Microspheres for High-Performance Supercapacitors. ACS Sustainable Chemistry and Engineering, 2018, 6, 7355-7361.	6.7	55
26	Metalâ€Free Sensitizers Containing Hydantoin Acceptor as High Performance Anchoring Group for Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2016, 26, 5733-5740.	14.9	54
27	Ab Initio Study on Surface Segregation and Anisotropy of Ni-Rich LiNi_{1â€“2<i>y</i>}Co_{<i>y</i>}Mn_{<i>y</i>}O₂ (NCM) (<i>y</i> â‰ 0.1) Cathodes. ACS Applied Materials & Interfaces, 2018, 10, 6673-6680.	8.0	50
28	Influence of Different Electrolytes on the Reaction Mechanism of a Triiodide/Iodide Redox Couple on the Platinized FTO Glass Electrode in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 4160-4167.	3.1	48
29	Triphenylamine-based organic dyes with julolidine as the secondary electron donor for dye-sensitized solar cells. Journal of Power Sources, 2013, 243, 131-137.	7.8	48
30	Tetraphenylmethaneâ€Arylamine Holeâ€Transporting Materials for Perovskite Solar Cells. ChemSusChem, 2017, 10, 968-975.	6.8	45
31	Anthraceneâ€“arylamine hole transporting materials for perovskite solar cells. Chemical Communications, 2017, 53, 9558-9561.	4.1	45
32	Influence of different acceptor groups in julolidine-based organic dye-sensitized solar cells. Dyes and Pigments, 2013, 99, 653-660.	3.7	44
33	Thiopheneâ€“Arylamine Holeâ€Transporting Materials in Perovskite Solar Cells: Substitution Position Effect. Energy Technology, 2017, 5, 1788-1794.	3.8	44
34	Molecular Engineering of Simple Benzeneâ€“Arylamine Hole-Transporting Materials for Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 27657-27663.	8.0	42
35	Porosity Effects on Electron Transport in TiO2Films and Its Application to Dye-Sensitized Solar Cells. Journal of Physical Chemistry B, 2006, 110, 12404-12409.	2.6	40
36	Sc-doped NiO nanoflowers sensor with rich oxygen vacancy defects for enhancing VOCs sensing performances. Journal of Alloys and Compounds, 2021, 851, 155760.	5.5	39

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37	Influence of various cations on redox behavior of Iâˆ’ and I3âˆ’ and comparison between KI complex with 18-crown-6 and 1,2-dimethyl-3-propylimidazolium iodide in dye-sensitized solar cells. Electrochimica Acta, 2005, 50, 2597-2602.	5.2	35
38	A Simple Carbazole-Triphenylamine Hole Transport Material for Perovskite Solar Cells. Journal of Physical Chemistry C, 2018, 122, 26337-26343.	3.1	34
39	Multivalent Li-Site Doping of Mn Oxides for Li-Ion Batteries. Journal of Physical Chemistry C, 2015, 119, 21904-21912.	3.1	33
40	Julolidine dyes with different acceptors and thiophene-conjugation bridge: Design, synthesis and their application in dye-sensitized solar cells. Synthetic Metals, 2013, 180, 9-15.	3.9	31
41	Coreâ€“Shell Nanocomposites for Improving the Structural Stability of Li-Rich Layered Oxide Cathode Materials for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 19226-19234.	8.0	30
42	Diketopyrrolopyrrole or benzodithiophene-arylamine small-molecule hole transporting materials for stable perovskite solar cells. RSC Advances, 2016, 6, 87454-87460.	3.6	26
43	Unravelling the structural-electronic impact of arylamine electron-donating antennas on the performances of efficient ruthenium sensitizers for dye-sensitized solar cells. Journal of Power Sources, 2017, 346, 71-79.	7.8	26
44	Facile synthesis of simple arylamine-substituted naphthalene derivatives as hole-transporting materials for efficient and stable perovskite solar cells. Journal of Power Sources, 2019, 425, 87-93.	7.8	26
45	Transition Metal Ordering Optimization for High-Reversible Capacity Positive Electrode Materials in the Liâ€“Niâ€“Coâ€“Mn Pseudoquaternary System. Journal of Physical Chemistry C, 2016, 120, 8540-8549.	3.1	24
46	Phthalocyanine-silver nanoparticle structures for plasmon-enhanced dye-sensitized solar cells. Solar Energy, 2020, 198, 283-294.	6.1	24
47	Highly efficient ruthenium complexes with acetyl electron-acceptor unit for dye sensitized solar cells. Journal of Power Sources, 2018, 396, 559-565.	7.8	23
48	Ruthenium complexes as sensitizers with phenyl-based bipyridine anchoring ligands for efficient dye-sensitized solar cells. Journal of Materials Chemistry C, 2018, 6, 9445-9452.	5.5	23
49	Benzothiadiazole-based hole transport materials for high-efficiency dopant-free perovskite solar cells: Molecular planarity effect. Journal of Energy Chemistry, 2020, 44, 115-120.	12.9	23
50	Effect of different acceptors in di-anchoring triphenylamine dyes on the performance of dye-sensitized solar cells. Dyes and Pigments, 2014, 105, 1-6.	3.7	21
51	Planar Vacancies in Sn_{1â€“<i>x</i>}Bi_{<i>x</i>}Te Nanoribbons. ACS Nano, 2016, 10, 5507-5515.	14.6	21
52	Broad spectral-response organic Dâ€“Aâ€“Ï€â€“A sensitizer with pyridine-diketopyrrolopyrrole unit for dye-sensitized solar cells. RSC Advances, 2016, 6, 13433-13441.	3.6	21
53	Atomic-scale understanding of non-stoichiometry effects on the electrochemical performance of Ni-rich cathode materials. Journal of Power Sources, 2018, 378, 750-758.	7.8	20
54	Improved performance of solid-state dye-sensitized solar cells with p/p-type nanocomposite electrolyte. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 189, 329-333.	3.9	19

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55	Dopant-free benzothiadiazole bridged hole transport materials for highly stable and efficient perovskite solar cells. Dyes and Pigments, 2020, 173, 107954.	3.7	19
56	Boosting Photovoltaic Performance and Stability of Super-Halogen-Substituted Perovskite Solar Cells by Simultaneous Methylammonium Immobilization and Vacancy Compensation. ACS Applied Materials & Interfaces, 2020, 12, 8249-8259.	8.0	19
57	Enhanced phthalocyanine-sensitized solar cell efficiency via cooperation of nitrogen-doped carbon dots. Journal of Cleaner Production, 2020, 268, 122236.	9.3	19
58	New Amphiphilic Polypyridyl Ruthenium(II) Sensitizer and Its Application in Dye-Sensitized Solar Cells. Chinese Journal of Chemistry, 2007, 25, 168-171.	4.9	18
59	Effects of TiO2 Film on the Performance of Dye-sensitized Solar Cells Based on Ionic Liquid Electrolyte. Chinese Journal of Chemistry, 2005, 23, 1579-1583.	4.9	17
60	Atomic disorders in layer structured topological insulator SnBi2Te4 nanoplates. Nano Research, 2018, 11, 696-706.	10.4	16
61	Surface-energy engineered Bi-doped SnTe nanoribbons with weak antilocalization effect and linear magnetoresistance. Nanoscale, 2016, 8, 19383-19389.	5.6	15
62	CT-MEAM interatomic potential of the Li-Ni-O ternary system for Li-ion battery cathode materials. Computational Materials Science, 2017, 127, 128-135.	3.0	15
63	Photoelectrochemical Analysis of the Dyed TiO₂/Electrolyte Interface in Long-Term Stability of Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 19807-19813.	3.1	14
64	Synthesis and spectroscopic properties of ring-fused thiophene bridged pushâ€“pull dyes and their application in dye-sensitized solar cells. Tetrahedron Letters, 2012, 53, 3264-3267.	1.4	14
65	Purification of Bipyridyl Ruthenium Dye and Its Application in Dye-Sensitized Solar Cells. Plasma Science and Technology, 2006, 8, 531-534.	1.5	13
66	Numerical model analysis of the shaded dye-sensitized solar cell module. Journal Physics D: Applied Physics, 2010, 43, 305102.	2.8	13
67	Novel 4â€²-functionalized 4,4â€²â€²-dicarboxyterpyridine ligands for ruthenium complexes: near-IR sensitization in dye sensitized solar cells. Dalton Transactions, 2014, 43, 14992-15003.	3.3	13
68	Charge-transfer modified embedded-atom method for manganese oxides: Nanostructuring effects on MnO2 nanorods. Computational Materials Science, 2016, 121, 191-203.	3.0	13
69	Zinc dopant inspired enhancement of electron injection for CuInS₂quantum dot-sensitized solar cells. RSC Advances, 2017, 7, 39443-39451.	3.6	13
70	Atomic Insights into Phase Evolution in Ternary Transitionâ€Metal Dichalcogenides Nanostructures. Small, 2018, 14, e1800780.	10.0	13
71	Improving the performance of arylamine-based hole transporting materials in perovskite solar cells: Extending Ï€-conjugation length or increasing the number of side groups?. Journal of Energy Chemistry, 2018, 27, 1409-1414.	12.9	13
72	A large-scale simulation method on complex ternary Liâ€“Mnâ€“O compounds for Li-ion battery cathode materials. Computational Materials Science, 2016, 112, 193-204.	3.0	12

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73	Studies of interfacial recombination in the dyed TiO2 electrode using Raman spectra and electrochemical techniques. Journal of Electroanalytical Chemistry, 2009, 632, 133-138.	3.8	11
74	Experimental Investigation of Back Electron Transfer and Band Edge Shift in Dyed TiO₂ Electrodes. Journal of Physical Chemistry C, 2011, 115, 8653-8657.	3.1	11
75	Effect of electron-donor ancillary ligands on the heteroleptic ruthenium complexes: synthesis, characterization, and application in high-performance dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2016, 18, 11213-11219.	2.8	11
76	Energetics of metal ion adsorption on and diffusion through crown ethers: First principles study on two-dimensional electrolyte. Solid State Ionics, 2017, 301, 176-181.	2.7	9
77	Insight into Electron-Donating Ancillary Ligands in Ruthenium Terpyridyl Complexes Configuration on Performances of Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2017, 121, 8752-8759.	3.1	9
78	Application of Organic Hole-Transporting Materials in Perovskite Solar Cells. Wuli Huaxue Xuebao/Acta Physico - Chimica Sinica, 2016, 32, 1347-1370.	4.9	9
79	Visible light boosting hydrophobic ZnO/(Sr0.6Bi0.305)2Bi2O7 chemiresistor toward ambient trimethylamine. Sensors and Actuators B: Chemical, 2022, 352, 131076.	7.8	8
80	Di-n-alkylphosphinic acids as coadsorbents for metal-free organic dye-sensitized solar cells. Synthetic Metals, 2014, 197, 188-193.	3.9	7
81	Boosting Photovoltaic Properties and Intrinsic Stability for MA-Based Perovskite Solar Cells by Incorporating 1,1,1-Trimethylhydrazinium Cation. ACS Applied Materials & Interfaces, 2019, 11, 38779-38788.	8.0	6
82	A novel strategy to design a multilayer functionalized Cu₂S thin film counter electrode with enhanced catalytic activity and stability for quantum dot sensitized solar cells. Nanoscale Advances, 2020, 2, 833-843.	4.6	6
83	Plasmon-enhanced dye-sensitized solar cells through porphyrin-silver nanoparticle hybrid structures: Experimental and computational studies. Journal of Power Sources, 2021, 511, 230407.	7.8	6
84	The strategy for high-efficiency hole conductors by engineering short-range intramolecular interactions. Dyes and Pigments, 2022, 197, 109889.	3.7	6
85	First principles study of the Mn-doping effect on the physical and chemical properties of mullite-family Al₂SiO₅. Physical Chemistry Chemical Physics, 2017, 19, 24991-25001.	2.8	5
86	Flash Surface Treatment of CH₃NH₃PbI₃ Films Using 248â€‰nm KrF Excimer Laser Enhances the Performance of Perovskite Solar Cells. Solar Rrl, 2019, 3, 1900020.	5.8	5
87	Influence of Structure and Morphology of Perovskite Films on the Performance of Perovskite Solar Cells. Acta Chimica Sinica, 2015, 73, 267.	1.4	5
88	Effects of 1,3-dialkylimidazolium cations with different lengths of alkyl chains on the Pt electrode/electrolyte interface in dye-sensitized solar cells. Electrochimica Acta, 2011, 56, 3395-3400.	5.2	4
89	In Situ Evaluation of Kinetics and Interaction Mechanism between Chenodeoxycholic Acid and N719 on Dye-Sensitized Nanofilm Surface. ACS Applied Energy Materials, 2020, 3, 3310-3317.	5.1	4
90	Air-stable synthesis of near-infrared AgInSe2 quantum dots for sensitized solar cells. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 626, 127071.	4.7	4

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91	Multifunctional organic semiconductor for dopant-free perovskite solar cells. Synthetic Metals, 2022, 285, 117027.	3.9	4
92	TiO₂/Dye/Electrolyte Interface Modification for Dye-Sensitized Solar Cells. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2013, 29, 1851-1864.	4.9	3
93	Spectroelectrochemical analysis of conduction band edge shift in nanoporous TiO2 electrodes. Journal of Electroanalytical Chemistry, 2015, 736, 107-111.	3.8	3
94	Charge-transfer modified embedded atom method dynamic charge potential for Liâ€“Coâ€“O system. Journal of Physics Condensed Matter, 2017, 29, 475903.	1.8	3
95	The Way towards Commercialization of Dye Sensitized Solar Cells. , 2013, , .		0
96	Effects of Different Acceptors in Triphenylamine-based Organic Dye-sensitized Solar Cells. , 2013, , .		0
97	Di-n-alkylphosphinic Acid with a Long Alkyl Chain as a Coadsorbent for Modifying TiO₂ Photoanodes. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2014, 30, 662-668.	4.9	0