Bo Xu

List of Publications by Year
in descending order

107 papers	6,478 citations	57758 44 h-index	64796 79 g-index
109 all docs	109 docs citations	109 times ranked	7475 citing authors

#	Article	IF	Citations
1	Carbazoleâ€Based Holeâ€Transport Materials for Efficient Solidâ€State Dyeâ€Sensitized Solar Cells and Perovskite Solar Cells. Advanced Materials, 2014, 26, 6629-6634.	21.0	369
2	A low-cost spiro[fluorene-9,9â€²-xanthene]-based hole transport material for highly efficient solid-state dye-sensitized solar cells and perovskite solar cells. Energy and Environmental Science, 2016, 9, 873-877.	30.8	362
3	Organic Dye-Sensitized Tandem Photoelectrochemical Cell for Light Driven Total Water Splitting. Journal of the American Chemical Society, 2015, 137, 9153-9159.	13.7	327
4	Over 12% Efficiency Nonfullerene Allâ€Smallâ€Molecule Organic Solar Cells with Sequentially Evolved Multilength Scale Morphologies. Advanced Materials, 2019, 31, e1807842.	21.0	272
5	Colorâ€Tunable Solidâ€State Emission of 2,2â€²â€Biindenylâ€Based Fluorophores. Angewandte Chemie - International Edition, 2011, 50, 11654-11657.	13.8	254
6	Facile synthesized organic hole transporting material for perovskite solar cell with efficiency of 19.8%. Nano Energy, 2016, 23, 138-144.	16.0	253
7	Tailor-Making Low-Cost Spiro[fluorene-9,9â€²-xanthene]-Based 3D Oligomers for Perovskite Solar Cells. CheM, 2017, 2, 676-687.	11.7	222
8	Highly Efficient Porphyrinâ€Based OPV/Perovskite Hybrid Solar Cells with Extended Photoresponse and High Fill Factor. Advanced Materials, 2017, 29, 1703980.	21.0	176
9	Modeling of Overflow Metabolism in Batch and Fed-Batch Cultures of Escherichia coli. Biotechnology Progress, 1999, 15, 81-90.	2.6	169
10	Low-temperature carbon-based electrodes in perovskite solar cells. Energy and Environmental Science, 2020, 13, 3880-3916.	30.8	149
11	Ternary non-fullerene polymer solar cells with 13.51% efficiency and a record-high fill factor of 78.13%. Energy and Environmental Science, 2018, 11, 3392-3399.	30.8	143
12	Initial Light Soaking Treatment Enables Hole Transport Material to Outperform Spiro-OMeTAD in Solid-State Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2013, 135, 7378-7385.	13.7	138
13	The Importance of Pendant Groups on Triphenylamineâ€Based Hole Transport Materials for Obtaining Perovskite Solar Cells with over 20% Efficiency. Advanced Energy Materials, 2018, 8, 1701209.	19.5	134
14	Strategy to Boost the Efficiency of Mixed-Ion Perovskite Solar Cells: Changing Geometry of the Hole Transporting Material. ACS Nano, 2016, 10, 6816-6825.	14.6	127
15	Monitoring of genes that respond to process-related stress in large-scale bioprocesses. Biotechnology and Bioengineering, 1999, 65, 151-159.	3.3	124
16	4â€<i>Tert</i>â€butylpyridine Free Organic Hole Transporting Materials for Stable and Efficient Planar Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1700683.	19.5	115
17	AgTFSI as pâ€Type Dopant for Efficient and Stable Solidâ€State Dyeâ€Sensitized and Perovskite Solar Cells. ChemSusChem, 2014, 7, 3252-3256.	6.8	114
18	Phenoxazineâ€Based Small Molecule Material for Efficient Perovskite Solar Cells and Bulk Heterojunction Organic Solar Cells. Advanced Energy Materials, 2015, 5, 1401720.	19.5	109

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19	A Universal Ternaryâ€Solventâ€Ink Strategy toward Efficient Inkjetâ€Printed Perovskite Quantum Dot Lightâ€Emitting Diodes. Advanced Materials, 2022, 34, e2107798.	21.0	109
20	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.	16.0	103
21	Dâ€"Aâ€"D-Typed Hole Transport Materials for Efficient Perovskite Solar Cells: Tuning Photovoltaic Properties via the Acceptor Group. ACS Applied Materials & Interfaces, 2018, 10, 19697-19703.	8.0	101
22	Novel Small Molecular Materials Based on Phenoxazine Core Unit for Efficient Bulk Heterojunction Organic Solar Cells and Perovskite Solar Cells. Chemistry of Materials, 2015, 27, 1808-1814.	6.7	100
23	New photochromic chemosensors for Hg2+ and Fâˆ'. Tetrahedron, 2011, 67, 915-921.	1.9	90
24	High conductivity Ag-based metal organic complexes as dopant-free hole-transport materials for perovskite solar cells with high fill factors. Chemical Science, 2016, 7, 2633-2638.	7.4	89
25	Optically Transparent Wood Substrate for Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 6061-6067.	6.7	89
26	The Role of 3D Molecular Structural Control in New Hole Transport Materials Outperforming <i>Spiro</i>â€OMeTAD in Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1601062.	19.5	87
27	Diâ€Spiroâ€Based Holeâ€Transporting Materials for Highly Efficient Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1800809.	19.5	79
28	Chemical Dopant Engineering in Hole Transport Layers for Efficient Perovskite Solar Cells: Insight into the Interfacial Recombination. ACS Nano, 2018, 12, 10452-10462.	14.6	78
29	Constructive Effects of Alkyl Chains: A Strategy to Design Simple and Nonâ€Spiro Hole Transporting Materials for Highâ€Efficiency Mixedâ€Ion Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1502536.	19.5	72
30	Incorporation of Counter Ions in Organic Molecules: New Strategy in Developing Dopantâ€Free Hole Transport Materials for Efficient Mixedâ€Ion Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1602736.	19.5	72
31	Direct selenylation of mixed Ni/Fe metal-organic frameworks to NiFe-Se/C nanorods for overall water splitting. Journal of Power Sources, 2017, 366, 193-199.	7.8	72
32	Solidâ€State Perovskiteâ€Sensitized pâ€Type Mesoporous Nickel Oxide Solar Cells. ChemSusChem, 2014, 7, 2150-2153.	6.8	69
33	Efficient solid state dye-sensitized solar cells based on an oligomer hole transport material and an organic dye. Journal of Materials Chemistry A, 2013, 1, 14467.	10.3	67
34	Pd@MIL-100(Fe) composite nanoparticles as efficient catalyst for reduction of 2/3/4-nitrophenol: Synergistic effect between Pd and MIL-100(Fe). Microporous and Mesoporous Materials, 2018, 255, 1-6.	4.4	66
35	Enhancement of p-Type Dye-Sensitized Solar Cell Performance by Supramolecular Assembly of Electron Donor and Acceptor. Scientific Reports, 2014, 4, 4282.	3.3	59
36	Integrated Design of Organic Hole Transport Materials for Efficient Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1401185.	19.5	59

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37	Structure and function relationships in alkylammonium lead(<scp>ii</scp>) iodide solar cells. Journal of Materials Chemistry A, 2015, 3, 9201-9207.	10.3	57
38	1,1,2,2â€Tetrachloroethane (TeCA) as a Solvent Additive for Organic Hole Transport Materials and Its Application in Highly Efficient Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1402340.	19.5	57
39	Rapid and Efficient Self-Assembly of Au@ZnO Coreâ€“Shell Nanoparticle Arrays with an Enhanced and Tunable Plasmonic Absorption for Photoelectrochemical Hydrogen Generation. ACS Applied Materials & Interfaces, 2017, 9, 31897-31906.	8.0	53
40	Preparation and photocatalytic property of spindle-like MIL-88B(Fe) nanoparticles. Inorganic Chemistry Communication, 2016, 67, 29-31.	3.9	51
41	Glycol assisted synthesis of MIL-100(Fe) nanospheres for photocatalytic oxidation of benzene to phenol. Catalysis Communications, 2017, 98, 112-115.	3.3	51
42	RF Compliance Study of Temperature Elevation in Human Head Model Around 28 GHz for 5G User Equipment Application: Simulation Analysis. IEEE Access, 2018, 6, 830-838.	4.2	51
43	Design, synthesis and application of a Ï€-conjugated, non-spiro molecular alternative as hole-transport material for highly efficient dye-sensitized solar cells and perovskite solar cells. Journal of Power Sources, 2017, 344, 11-14.	7.8	49
44	Design and synthesis of dopant-free organic hole-transport materials for perovskite solar cells. Chemical Communications, 2018, 54, 9571-9574.	4.1	49
45	Power Density Measurements at 15 GHz for RF EMF Compliance Assessments of 5G User Equipment. IEEE Transactions on Antennas and Propagation, 2017, 65, 6584-6595.	5.1	46
46	The combination of a new organic Dâ€“Ï€â€“A dye with different organic hole-transport materials for efficient solid-state dye-sensitized solar cells. Journal of Materials Chemistry A, 2015, 3, 4420-4427.	10.3	45
47	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.	10.3	41
48	Lattice distortion in hybrid NiTe2/Ni(OH)2 nanosheets as efficient synergistic electrocatalyst for water and urea oxidation. Journal of Power Sources, 2020, 449, 227585.	7.8	40
49	Covalently linking CuInS₂ quantum dots with a Re catalyst by click reaction for photocatalytic CO₂ reduction. Dalton Transactions, 2018, 47, 10775-10783.	3.3	37
50	Improved Performance of Colloidal CdSe Quantum Dot-Sensitized Solar Cells by Hybrid Passivation. ACS Applied Materials & Interfaces, 2014, 6, 18808-18815.	8.0	36
51	Solution-processed nanoporous NiO-dye-ZnO photocathodes: Toward efficient and stable solid-state p-type dye-sensitized solar cells and dye-sensitized photoelectrosynthesis cells. Nano Energy, 2019, 55, 59-64.	16.0	36
52	Design, Synthesis, and Photocatalytic Application of Moisture-Stable Hybrid Lead-Free Perovskite. ACS Applied Materials & Interfaces, 2020, 12, 54694-54702.	8.0	36
53	High performance solid-state dye-sensitized solar cells based on organic blue-colored dyes. Journal of Materials Chemistry A, 2017, 5, 1242-1247.	10.3	35
54	Developing Dâ€“Ï€â€“D hole-transport materials for perovskite solar cells: the effect of the Ï€-bridge on device performance. Materials Chemistry Frontiers, 2021, 5, 876-884.	5.9	33

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55	Triplex Glass Laminates with Silicon Quantum Dots for Luminescent Solar Concentrators. Solar Rrl, 2020, 4, 2000195.	5.8	31
56	A crosslinked polymer as dopant-free hole-transport material for efficient n-i-p type perovskite solar cells. Journal of Energy Chemistry, 2021, 55, 211-218.	12.9	29
57	Unsymmetrically amorphous 9,10-disubstituted anthracene derivatives for high-efficiency blue organic electroluminescence devices. Dyes and Pigments, 2011, 89, 155-161.	3.7	27
58	Spectrum-enhanced Au@ZnO plasmonic nanoparticles for boosting dye-sensitized solar cell performance. Journal of Power Sources, 2018, 380, 142-148.	7.8	27
59	Bimetallic metal-organic framework derived electrocatalyst for efficient overall water splitting. International Journal of Hydrogen Energy, 2019, 44, 5983-5989.	7.1	26
60	Exploring the Optical and Electrochemical Properties of Homoleptic versus Heteroleptic Diimine Copper(I) Complexes. Inorganic Chemistry, 2019, 58, 12167-12177.	4.0	25
61	Organic Salts as p-Type Dopants for Efficient LiTFSI-Free Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 33751-33758.	8.0	24
62	Single crystal structure and opto-electronic properties of oxidized Spiro-OMeTAD. Chemical Communications, 2020, 56, 1589-1592.	4.1	24
63	Facile and large-scale preparation of Co/Ni-MoO2 composite as high-performance electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2018, 43, 20721-20726.	7.1	23
64	A novel phenoxazine-based hole transport material for efficient perovskite solar cell. Journal of Energy Chemistry, 2015, 24, 698-706.	12.9	22
65	Novel Ni(S0.49Se0.51)2 porous flakes array on carbon fiber cloth for efficient hydrogen evolution reaction. International Journal of Hydrogen Energy, 2017, 42, 30119-30125.	7.1	22
66	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.	17.4	22
67	A study of oligothiopheneâ€“acceptor dyes in p-type dye-sensitized solar cells. RSC Advances, 2016, 6, 18165-18177.	3.6	21
68	A heavy metal-free CuInS₂ quantum dot sensitized NiO photocathode with a Re molecular catalyst for photoelectrochemical CO₂ reduction. Chemical Communications, 2019, 55, 7918-7921.	4.1	21
69	Photoinduced defect engineering: enhanced photocatalytic performance of 3D BiOCl nanoclusters with abundant oxygen vacancies. CrystEngComm, 2021, 23, 1305-1311.	2.6	20
70	Novel and Stable Dâ€“Aâˆ’Ï€â€“A Dyes for Efficient Solid-State Dye-Sensitized Solar Cells. ACS Omega, 2017, 2, 1812-1819.	3.5	19
71	Impact of Linking Topology on the Properties of Carbazoleâ€Based Holeâ€Transport Materials and their Application in Solidâ€State Mesoscopic Solar Cells. Solar Rrl, 2019, 3, 1900196.	5.8	17
72	A Near-Field Measurement and Calibration Technique: Radio-Frequency Electromagnetic Field Exposure Assessment of Millimeter-Wave 5G Devices. IEEE Antennas and Propagation Magazine, 2021, 63, 77-88.	1.4	17

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73	Isolation and Identification of Pseudo Seven-Coordinate Ru(III) Intermediate Completing the Catalytic Cycle of Ru-bda Type of Water Oxidation Catalysts. CCS Chemistry, 2022, 4, 2481-2490.	7.8	16
74	Hierarchical Z-scheme Fe₂O₃@ZnIn₂S₄ coreâ€“shell heterostructures with enhanced adsorption capacity enabling significantly improved photocatalytic CO₂ reduction. CrystEngComm, 2020, 22, 8221-8227.	2.6	15
75	Two novel Pb(II)-based heterometallic coordination polymers assembled from 1,3,5-benzenetricarboxylic acid: Syntheses, structures and luminescent properties. Journal of Molecular Structure, 2014, 1059, 320-324.	3.6	14
76	Sandwich-like MIL-100(Fe)@Pt@MIL-100(Fe) nanoparticles for catalytic hydrogenation of 4-nitrophenol. Catalysis Communications, 2017, 102, 17-20.	3.3	14
77	An Indacenodithieno[3,2â€b]thiopheneâ€Based Organic Dye for Solidâ€State pâ€Type Dyeâ€Sensitized Solar Cells. ChemSusChem, 2019, 12, 3243-3248.	6.8	13
78	Ground and excited states calculations of 7-phenylamino-substituted coumarins. Journal of Molecular Structure, 2009, 917, 15-20.	3.6	12
79	Aqueous controllable synthesis of spindle-like palladium nanoparticles and their application for catalytic reduction of 4-nitrophenol. Progress in Natural Science: Materials International, 2016, 26, 295-302.	4.4	12
80	Fast Power Density Assessment of 5G Mobile Handset Using Equivalent Currents Method. IEEE Transactions on Antennas and Propagation, 2021, 69, 6857-6869.	5.1	12
81	Constructing moisture-stable hybrid lead iodine semiconductors based on hydrogen-bond-free and dual-iodine strategies. Journal of Materials Chemistry C, 2019, 7, 7700-7707.	5.5	11
82	Bifunctional spiro-fluorene/heterocycle cored hole-transporting materials: Role of the heteroatom on the photovoltaic performance of perovskite solar cells. Chemical Engineering Journal, 2022, 431, 133371.	12.7	11
83	Effect of the Ancillary Ligand on the Performance of Heteroleptic Cu(I) Diimine Complexes as Dyes in Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2022, 5, 1460-1470.	5.1	10
84	Two novel Ni(II) complexes with polycatenated networks: Structures and magnetic properties. Inorganic Chemistry Communication, 2014, 47, 119-122.	3.9	9
85	Bistriphenylamine-substituted fluoranthene derivatives as electroluminescent emitters and dye-sensitized solar cells. Tetrahedron, 2012, 68, 10372-10377.	1.9	8
86	Structures and properties of four coordination polymers constructed from 1,3-bis-(4-pyridyl)-propane and aromatic dicarboxylic acids. RSC Advances, 2014, 4, 13919.	3.6	8
87	Molecular Engineering of Dâˆ'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.	8.0	8
88	EFFECT OF THE CHROMOPHORES STRUCTURES ON THE PERFORMANCE OF SOLID-STATE DYE SENSITIZED SOLAR CELLS. Nano, 2014, 09, 1440005.	1.0	7
89	Syntheses, crystal and band structures, and optical properties of a selenidoantimonate and an iron polyselenide. Journal of Solid State Chemistry, 2014, 218, 109-115.	2.9	7
90	Structural and functional studies on coordination polymers based on 5-tert-butylisophthalic acid and N,Nâ€²-bis-(4-pyridylmethyl) piperazine. RSC Advances, 2014, 4, 25588.	3.6	6

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91	Synthesis, Crystal Structures, and Luminescent Properties of Two Complexes based on 5â€<i>tert</i>â€Butylisophthalic Acid and 1, 2â€Bis(4â€pyridyl) Ethane. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2015, 641, 1311-1315.	1.2	6
92	Structures and Properties of Coordination Polymers based on 5â€Nitroisophthalic Acid and <i>N</i>,<i>N</i>â€²â€bis(4â€pyridylâ€methyl) Piperazine. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 2503-2507.	1.2	5
93	A novel 2D porous indium coordination polymer with tunable luminescent property. Journal of Molecular Structure, 2016, 1118, 105-109.	3.6	5
94	Hierarchical Ni-BDC coated FeOOH nanosheets: A coordination tuning synergistic electrocatalyst with enhanced activity for water oxidation. International Journal of Hydrogen Energy, 2020, 45, 9546-9554.	7.1	5
95	Continuous measurement of NOaq during denitrification by immobilized Pseudomonas stutzeri. Biotechnology Letters, 1995, 9, 659-664.	0.5	4
96	Structure and luminescent property of a zinc(II) complex assembled from 5-methylisophthalic acid and 1,2-bis-(4-pyridyl) ethane. Journal of Molecular Structure, 2014, 1056-1057, 52-55.	3.6	4
97	Structure and photocatalytic property of a new Cu(II) based framework with jsm topology. Inorganic Chemistry Communication, 2015, 52, 9-11.	3.9	4
98	Understandings of maximum spatially-averaged power density in 5G RF EMF exposure study. , 2017, , .		4
99	Morphology and electronic modulation of composite nanosheets for electrocatalytic oxygen evolution through partial and <i>in situ</i> transformation of NiFe-LDH. CrystEngComm, 2021, 23, 1572-1577.	2.6	3
100	Molecularly Engineered Low-Cost Organic Hole-Transporting Materials for Perovskite Solar Cells: The Substituent Effect on Non-fused Three-Dimensional Systems. ACS Applied Energy Materials, 2022, 5, 3156-3165.	5.1	2
101	Investigation of surface waves suppression on 5G handset devices at 15 GHz. , 2016, , .		1
102	RF EMF exposure of beam-steering slot array in 5g user equipment at 15 GHz. , 2017, , .		1
103	CHAPTER 3. Dye-sensitised Solar Cells. Inorganic Materials Series, 2019, , 89-152.	0.7	1
104	A Yb(III)â€"Zn(II) heterometallic coordination polymer with interesting three-fold 1D pseudo-nanotube architectures. Journal of Molecular Structure, 2014, 1068, 53-57.	3.6	0
105	Dye-Sensitized Solar Cells: 1,1,2,2-Tetrachloroethane (TeCA) as a Solvent Additive for Organic Hole Transport Materials and Its Application in Highly Efficient Solid-State Dye-Sensitized Solar Cells (Adv.) Tj ETQq1 1 0.784314 rg BT /Overlo	[illegible]	0
106	A-D-A Structured Small-Molecule Hole Transporting Materials for Dopant-Free Perovskite Solar Cells. General Chemistry, 2019, 5, 180026-180026.	0.6	0
107	Ocean wave energy generator based on graphene/TiO₂ nanoparticle composite films. Nanoscale Advances, 2022, 4, 1533-1537.	4.6	0