Xue-Dan Song

List of Publications by Year
in descending order

74 papers	2,136 citations	218381 26 h-index	243296 44 g-index
74 all docs	74 docs citations	74 times ranked	2773 citing authors

#	Article	IF	Citations
1	Scrutinizing Defects and Defect Density of Seleniumâ€Doped Graphene for Highâ€Efficiency Triiodide Reduction in Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2018, 57, 4682-4686.	7.2	155
2	Cobalt-embedded nitrogen-doped hollow carbon nanorods for synergistically immobilizing the discharge products in lithiumâ€“sulfur battery. Energy Storage Materials, 2016, 5, 223-229.	9.5	149
3	Nitrogenâ€Doped Graphene Nanoribbons with Surface Enriched Active Sites and Enhanced Performance for Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1500180.	10.2	147
4	Facile Synthesis of Heterostructured MoS₂â€“MoO₃ Nanosheets with Active Electrocatalytic Sites for High-Performance Lithiumâ€“Sulfur Batteries. ACS Nano, 2021, 15, 20478-20488.	7.3	115
5	Graphene-mediated highly-dispersed MoS2 nanosheets with enhanced triiodide reduction activity for dye-sensitized solar cells. Carbon, 2016, 100, 474-483.	5.4	100
6	ZIF-67 Derived Nanostructures of Co/CoO and Co@N-doped Graphitic Carbon as Counter Electrode for Highly Efficient Dye-sensitized Solar Cells. Electrochimica Acta, 2016, 213, 252-259.	2.6	95
7	A Universal Converse Voltage Process for Triggering Transition Metal Hybrids In Situ Phase Restruction toward Ultrahighâ€Rate Supercapacitors. Advanced Materials, 2019, 31, e1901241.	11.1	81
8	Rational design and fabrication of sulfur-doped porous graphene with enhanced performance as a counter electrode in dye-sensitized solar cells. Journal of Materials Chemistry A, 2017, 5, 2280-2287.	5.2	72
9	Bromine Doping as an Efficient Strategy to Reduce the Interfacial Defects in Hybrid Two-Dimensional/Three-Dimensional Stacking Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 31755-31764.	4.0	65
10	Acid-base bifunctional catalyst: Carboxyl ionic liquid immobilized on MIL-101-NH2 for rapid synthesis of propylene carbonate from CO2 and propylene oxide under facile solvent-free conditions. Microporous and Mesoporous Materials, 2018, 267, 84-92.	2.2	59
11	Recognition of Water-Induced Effects toward Enhanced Interaction between Catalyst and Reactant in Alcohol Oxidation. Journal of the American Chemical Society, 2021, 143, 6071-6078.	6.6	55
12	Electrochemically Driven Coordination Tuning of FeOOH Integrated on Carbon Fiber Paper for Enhanced Oxygen Evolution. Small, 2019, 15, e1901015.	5.2	46
13	Mismatching integration-enabled strains and defects engineering in LDH microstructure for high-rate and long-life charge storage. Nature Communications, 2022, 13, 1409.	5.8	42
14	A Câ€Sâ€C Linkageâ€Triggered Ultrahigh Nitrogenâ€Doped Carbon and the Identification of Active Site in Triiodide Reduction. Angewandte Chemie - International Edition, 2021, 60, 3587-3595.	7.2	41
15	Biomass-Derived Carbon Nanospheres with Turbostratic Structure as Metal-Free Catalysts for Selective Hydrogenation of o-Chloronitrobenzene. ACS Sustainable Chemistry and Engineering, 2017, 5, 7481-7485.	3.2	38
16	Discrimination of Various Amine Vapors by a Triemissive Metal-Organic Framework Composite via the Combination of a Three-Dimensional Ratiometric Approach and a Confinement-Induced Enhancement Effect. ACS Applied Materials & Interfaces, 2020, 12, 12043-12053.	4.0	38
17	Insights into the Anchoring of Polysulfides and Catalytic Performance by Metal Phthalocyanine Covalent Organic Frameworks as the Cathode in Lithiumâ€“Sulfur Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 10185-10192.	3.2	37
18	Interaction between Formaldehyde and Luminescent MOF [Zn(NH₂bdc)(bix)]_n in the Electronic Excited State. Journal of Physical Chemistry A, 2014, 118, 6191-6196.	1.1	36

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19	Hexylammonium Iodide Derived Two-Dimensional Perovskite as Interfacial Passivation Layer in Efficient Two-Dimensional/Three-Dimensional Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 698-705.	4.0	36
20	Toward an Understanding of the Enhanced CO₂ Electroreduction in NaCl Electrolyte over CoPc Moleculeâ€Implanted Graphitic Carbon Nitride Catalyst. Advanced Energy Materials, 2021, 11, 2100075.	10.2	36
21	New Insights into the Anchoring Mechanism of Polysulfides inside Nanoporous Covalent Organic Frameworks for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2018, 10, 43896-43903.	4.0	35
22	Improved OER performance of Co3O4/N-CNTs derived from newly designed ZIF-67/PPy NTs composite. Journal of Electroanalytical Chemistry, 2020, 858, 113768.	1.9	33
23	Biomass-Derived Multilayer-Graphene-Encapsulated Cobalt Nanoparticles as Efficient Electrocatalyst for Versatile Renewable Energy Applications. ACS Sustainable Chemistry and Engineering, 2019, 7, 1137-1145.	3.2	31
24	A Novel Singleâ€Atom Electrocatalyst Ti₁/rGO for Efficient Cathodic Reduction in Hybrid Photovoltaics. Advanced Materials, 2020, 32, e2000478.	11.1	31
25	Phosphate Species up to 70% Mass Ratio for Enhanced Pseudocapacitive Properties. Small, 2018, 14, e1803811.	5.2	29
26	Scrutinizing Defects and Defect Density of Seleniumâ€Doped Graphene for Highâ€Efficiency Triiodide Reduction in Dyeâ€Sensitized Solar Cells. Angewandte Chemie, 2018, 130, 4772-4776.	1.6	28
27	Onion-like graphitic carbon covering metallic nanocrystals derived from brown coal as a stable and efficient counter electrode for dye-sensitized solar cells. Journal of Power Sources, 2019, 414, 495-501.	4.0	28
28	Experimental investigation and theoretical exploration of single-atom electrocatalysis in hybrid photovoltaics: The powerful role of Pt atoms in triiodide reduction. Nano Energy, 2017, 39, 1-8.	8.2	25
29	Recyclable and Magnetically Functionalized Metalâ€“Organic Framework Catalyst: IL/Fe₃O₄@HKUST-1 for the Cycloaddition Reaction of CO₂ with Epoxides. ACS Applied Materials & Interfaces, 2021, 13, 22836-22844.	4.0	25
30	An insight into the reaction mechanism of CO₂ photoreduction catalyzed by atomically dispersed Fe atoms supported on graphitic carbon nitride. Physical Chemistry Chemical Physics, 2021, 23, 4690-4699.	1.3	22
31	A sensor for formaldehyde detection: luminescent metalâ€“organic framework [Zn₂(H₂L)(2,2â€²-bpy)₂(H₂O)]_n. RSC Advances, 2015, 5, 49752-49758.	1.7	21
32	Elucidating triplet-sensitized photolysis mechanisms of sulfadiazine and metal ions effects by quantum chemical calculations. Chemosphere, 2015, 122, 62-69.	4.2	21
33	Two (5,5)-connected isomeric frameworks as highly selective and sensitive photoluminescent probes of nitroaromatics. CrystEngComm, 2017, 19, 2786-2794.	1.3	19
34	Solvothermal Syntheses and Characterizations of Four Quaternary Copper Sulfides BaCu₃MS₄ (M = In, Ga) and BaCu₂MS₄ (M = Sn, Ge). Inorganic Chemistry, 2019, 58, 15101-15109.	1.9	19
35	Gravity field-mediated synthesis of carbon-conjugated quantum dots with tunable defective density for enhanced triiodide reduction. Nano Energy, 2020, 69, 104377.	8.2	19
36	Understanding the Inhibition of the Shuttle Effect of Sulfides (S â‰¥ 3) in Lithiumâ€“Sulfur Batteries by Heteroatom-Doped Graphene: First-Principles Study. Journal of Physical Chemistry C, 2020, 124, 3644-3649.	1.5	19

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37	A tuned Lewis acidic catalyst guided by hardâ€“soft acidâ€“base theory to promote N₂ electroreduction. Journal of Materials Chemistry A, 2021, 9, 13036-13043.	5.2	19
38	Design Principles for Covalent Organic Frameworks to Achieve Strong Heteroatom-Synergistic Effect on Anchoring Polysulfides for Lithiumâ€“Sulfur Batteries. Journal of Physical Chemistry Letters, 2019, 10, 7445-7451.	2.1	18
39	A Phase Transformationâ€Resistant Electrode Enabled by a MnO₂â€Confined Effect for Enhanced Energy Storage. Advanced Functional Materials, 2019, 29, 1901342.	7.8	18
40	Syntheses, structures, and photocatalytic properties of open-framework Agâ€“Snâ€“S compounds. Dalton Transactions, 2020, 49, 11708-11714.	1.6	17
41	Pseudohalogen-Based 2D Perovskite: A More Complex Thermal Degradation Mechanism Than 3D Perovskite. Inorganic Chemistry, 2018, 57, 2045-2050.	1.9	15
42	One-Step Activation Synthesized Hierarchical Porous Carbon Spheres from Resorcinolâ€“Thioureaâ€“Formaldehyde for Electrochemical Capacitors. Industrial & Engineering Chemistry Research, 2020, 59, 226-235.	1.8	15
43	Hydrogenâ€Bonding Triggered Assembly to Configure Hollow Carbon Nanosheets for Highly Efficient Triâ€Iodide Reduction. Advanced Functional Materials, 2020, 30, 2006270.	7.8	15
44	Photophysical and photochemical insights of the photodegradation of norfloxacin: The rate-limiting step and the influence of Ca2+ ion. Chemosphere, 2019, 219, 236-242.	4.2	13
45	Synergistic effect of heat treatments and KOH activation enhances the electrochemistry performance of polypyrrole nanochains (PPy-NCs). Electrochimica Acta, 2018, 266, 151-160.	2.6	12
46	Temperature controlling valance changes of crystalline thioarsenates and thioantimonates. Journal of Alloys and Compounds, 2021, 872, 159591.	2.8	11
47	Role of the electronic excited-state hydrogen bonding in the nitro-explosives detection by [Zn2(oba)2(bpy)]. Chemical Physics Letters, 2016, 661, 257-262.	1.2	10
48	A recognition mechanism study: Luminescent metal-organic framework for the detection of nitro-explosives. Journal of Molecular Graphics and Modelling, 2018, 80, 132-137.	1.3	10
49	Insight into the Activity and Stability of Transition-Metal Atoms Embedded in MnO for Triiodide Reduction Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 19303-19310.	3.2	10
50	Theoretical and Experimental Insights into the Effects of Oxygen-Containing Species within CNTs toward Triiodide Reduction. ACS Sustainable Chemistry and Engineering, 2019, 7, 7527-7534.	3.2	10
51	Mild solvothermal syntheses and characterizations of two layered sulfides Ba2Cu2Cd2S5 and Ba3Cu4Hg4S9. Journal of Alloys and Compounds, 2020, 829, 154586.	2.8	9
52	Atomic-level structure engineering of Ni-substituted Ni Co3â^'S4 for enhancing performance of supercapacitors. Journal of Electroanalytical Chemistry, 2019, 851, 113474.	1.9	8
53	LCOFs: Role of the excited state hydrogen bonding in the detection for nitro-explosives. Journal of Luminescence, 2019, 215, 116733.	1.5	7
54	Impact of electronically excited state hydrogen bonding on luminescent covalent organic framework: a TD-DFT investigation. Molecular Physics, 2019, 117, 823-830.	0.8	7

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55	TD-DFT insights into the sensing potential of the luminescent covalent organic framework for indoor pollutant formaldehyde. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 224, 117432.	2.0	7
56	Synergistic Size Effect of MOF Cavity/Encapsulated Luminescent Modules Significantly Boosts Nitro-Aromatic Vapors Distinction via a Three-Dimensional Ratiometric Sensing. Sensors and Actuators B: Chemical, 2021, 328, 129025.	4.0	7
57	A Câ€Sâ€C Linkageâ€Triggered Ultrahigh Nitrogenâ€Doped Carbon and the Identification of Active Site in Triiodide Reduction. Angewandte Chemie, 2021, 133, 3631-3639.	1.6	7
58	Insight into the Inhibition of Shuttle by Metal-Modified Covalent Triazine Frameworks and Graphene Composites with the Solvent Interaction in Lithium Sulfur Batteries. ACS Applied Energy Materials, 2022, 5, 825-831.	2.5	6
59	Excited-state hydrogen bonding: Detecting ammonia using an HHTP-DPB covalent organic framework. Chemical Physics, 2020, 536, 110822.	0.9	5
60	Graphene Nanoribbons: Nitrogenâ€Doped Graphene Nanoribbons with Surface Enriched Active Sites and Enhanced Performance for Dyeâ€Sensitized Solar Cells (Adv. Energy Mater. 11/2015). Advanced Energy Materials, 2015, 5, .	10.2	4
61	Effect of CH3OH on the luminescent properties of the [Zn(sfdb)(bpy)(H2O)] Â· 0.5nCH3OH metalâ€“organic framework. Chemical Physics, 2015, 446, 65-69.	0.9	4
62	Computational insights into the mechanism of formaldehyde detection by luminescent covalent organic framework. Journal of Molecular Modeling, 2019, 25, 248.	0.8	4
63	Dual Sites of CoO Nanoparticles and Coâ€“N_x Embedded within Coal-Based Support toward Advanced Triiodide Reduction. ACS Sustainable Chemistry and Engineering, 2019, 7, 10484-10492.	3.2	4
64	Coaxial heterojunction carbon nanofibers with charge transport and electrocatalytic reduction phases for high performance dye-sensitized solar cells. RSC Advances, 2018, 8, 7040-7043.	1.7	3
65	The oxygen sensing mechanism of a trifluoromethyl-substituted cyclometalated platinum(II) complex. Computational and Theoretical Chemistry, 2018, 1145, 1-5.	1.1	2
66	Exploration of the basic reactant in CO2 photoreduction: New insights from photophysics and photochemistry. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 382, 111959.	2.0	2
67	Role of water oxidation in the photoreduction of graphene oxide. Chemical Communications, 2019, 55, 1837-1840.	2.2	2
68	Study of the mechanisms of dialkyl carbonates directly formed from carbon dioxide and alcohols: New insights from kinetic and thermodynamic processes. Molecular Catalysis, 2020, 482, 110699.	1.0	2
69	Insights into the existing form of glycolaldehyde in methanol solution: an experimental and theoretical investigation. New Journal of Chemistry, 2021, 45, 8149-8154.	1.4	2
70	The Structural Design of Dualâ€Elementâ€Doped Graphene for Iodine Reduction Reaction: Density Functional Theory Study. ChemistrySelect, 2022, 7, .	0.7	2
71	The Role of Thermodynamically Stable Configuration in Enhancing Crystallographic Diffraction Quality of Flexible MOFs. IScience, 2021, 24, 103398.	1.9	1
72	Excited state intermolecular hydrogen bondâ€™s effect on the luminescent behaviour of the 2D covalent organic framework (PPy-COF): A TDDFT insight. Molecular Simulation, 2019, 45, 942-950.	0.9	0

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73	Frontispiece: A Câ€Sâ€C Linkageâ€Triggered Ultrahigh Nitrogenâ€Doped Carbon and the Identification of Active Site in Triiodide Reduction. Angewandte Chemie - International Edition, 2021, 60, .	7.2	0
74	Frontispiz: A Câ€Sâ€C Linkageâ€Triggered Ultrahigh Nitrogenâ€Doped Carbon and the Identification of Active Site in Triiodide Reduction. Angewandte Chemie, 2021, 133, .	1.6	0