Xu-Bing Li

List of Publications by Year
in descending order

74 papers	5,047 citations	81743 39 h-index	88477 70 g-index
77 all docs	77 docs citations	77 times ranked	5467 citing authors

#	Article	IF	Citations
1	Graphdiyne: A Metal-Free Material as Hole Transfer Layer To Fabricate Quantum Dot-Sensitized Photocathodes for Hydrogen Production. Journal of the American Chemical Society, 2016, 138, 3954-3957.	6.6	335
2	Semiconducting quantum dots forÂartificial photosynthesis. Nature Reviews Chemistry, 2018, 2, 160-173.	13.8	334
3	Semiconductor Quantum Dots: An Emerging Candidate for CO₂ Photoreduction. Advanced Materials, 2019, 31, e1900709.	11.1	316
4	Rational design of isostructural 2D porphyrin-based covalent organic frameworks for tunable photocatalytic hydrogen evolution. Nature Communications, 2021, 12, 1354.	5.8	286
5	Mechanistic Insights into the Interfaceâ€Directed Transformation of Thiols into Disulfides and Molecular Hydrogen by Visibleâ€Light Irradiation of Quantum Dots. Angewandte Chemie - International Edition, 2014, 53, 2085-2089.	7.2	205
6	Efficient and Selective CO2 Reduction Integrated with Organic Synthesis by Solar Energy. CheM, 2019, 5, 2605-2616.	5.8	179
7	Chitosan confinement enhances hydrogen photogeneration from a mimic of the diiron subsite of [FeFe]-hydrogenase. Nature Communications, 2013, 4, 2695.	5.8	159
8	Photocatalysis with Quantum Dots and Visible Light: Selective and Efficient Oxidation of Alcohols to Carbonyl Compounds through a Radical Relay Process in Water. Angewandte Chemie - International Edition, 2017, 56, 3020-3024.	7.2	151
9	Graphdiyne: A Promising Catalystâ€"Support To Stabilize Cobalt Nanoparticles for Oxygen Evolution. ACS Catalysis, 2017, 7, 5209-5213.	5.5	150
10	Visible Light Catalysis Assisted Site-Specific Functionalization of Amino Acid Derivatives by Câ€"H Bond Activation without Oxidant: Cross-Coupling Hydrogen Evolution Reaction. ACS Catalysis, 2015, 5, 2391-2396.	5.5	148
11	Self-Assembled Framework Enhances Electronic Communication of Ultrasmall-Sized Nanoparticles for Exceptional Solar Hydrogen Evolution. Journal of the American Chemical Society, 2017, 139, 4789-4796.	6.6	146
12	An Exceptional Artificial Photocatalyst, Ni_hâ€CdSe/CdS Core/Shell Hybrid, Made In Situ from CdSe Quantum Dots and Nickel Salts for Efficient Hydrogen Evolution. Advanced Materials, 2013, 25, 6613-6618.	11.1	140
13	Semiconductor nanocrystals for small molecule activation<i>via</i>artificial photosynthesis. Chemical Society Reviews, 2020, 49, 9028-9056.	18.7	127
14	A robust â€œartificial catalystâ€• in situ formed from CdTe QDs and inorganic cobalt salts for photocatalytic hydrogen evolution. Energy and Environmental Science, 2013, 6, 465-469.	15.6	120
15	Threeâ€Dimensional Graphene Networks with Abundant Sharp Edge Sites for Efficient Electrocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2018, 57, 192-197.	7.2	106
16	Superhydrophilic Graphdiyne Accelerates Interfacial Mass/Electron Transportation to Boost Electrocatalytic and Photoelectrocatalytic Water Oxidation Activity. Advanced Functional Materials, 2019, 29, 1808079.	7.8	95
17	Metallic Co₂C: A Promising Co-catalyst To Boost Photocatalytic Hydrogen Evolution of Colloidal Quantum Dots. ACS Catalysis, 2018, 8, 5890-5895.	5.5	92
18	Photocatalytic Hydrogen Evolution from Glycerol and Water over Nickelâ€Hybrid Cadmium Sulfide Quantum Dots under Visibleâ€Light Irradiation. ChemSusChem, 2014, 7, 1468-1475.	3.6	91

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19	Quantum Dot Assembly for Lightâ€Driven Multielectron Redox Reactions, such as Hydrogen Evolution and CO₂ Reduction. Angewandte Chemie - International Edition, 2019, 58, 10804-10811.	7.2	91
20	A solution-processed, mercaptoacetic acid-engineered CdSe quantum dot photocathode for efficient hydrogen production under visible light irradiation. Energy and Environmental Science, 2015, 8, 1443-1449.	15.6	90
21	Direct synthesis of all-inorganic heterostructured CdSe/CdS QDs in aqueous solution for improved photocatalytic hydrogen generation. Journal of Materials Chemistry A, 2017, 5, 10365-10373.	5.2	89
22	Visible Light Catalysis-Assisted Assembly of Ni_h-QD Hollow Nanospheres in Situ via Hydrogen Bubbles. Journal of the American Chemical Society, 2014, 136, 8261-8268.	6.6	74
23	Photocatalysis with Quantum Dots and Visible Light for Effective Organic Synthesis. Chemistry - A European Journal, 2018, 24, 11530-11534.	1.7	71
24	Comparison of H₂ photogeneration by [FeFe]-hydrogenase mimics with CdSe QDs and Ru(bpy)₃Cl₂ in aqueous solution. Energy and Environmental Science, 2016, 9, 2083-2089.	15.6	65
25	Recent Advances in Sensitized Photocathodes: From Molecular Dyes to Semiconducting Quantum Dots. Advanced Science, 2018, 5, 1700684.	5.6	65
26	Holeâ€Acceptingâ€Ligandâ€Modified CdSe QDs for Dramatic Enhancement of Photocatalytic and Photoelectrochemical Hydrogen Evolution by Solar Energy. Advanced Science, 2016, 3, 1500282.	5.6	60
27	Surface stoichiometry manipulation enhances solar hydrogen evolution of CdSe quantum dots. Journal of Materials Chemistry A, 2018, 6, 6015-6021.	5.2	57
28	Susceptible Surface Sulfide Regulates Catalytic Activity of CdSe Quantum Dots for Hydrogen Photogeneration. Advanced Materials, 2019, 31, e1804872.	11.1	55
29	Exceptional Catalytic Nature of Quantum Dots for Photocatalytic Hydrogen Evolution without External Cocatalysts. Advanced Functional Materials, 2018, 28, 1801769.	7.8	54
30	Unveiling Catalytic Sites in a Typical Hydrogen Photogeneration System Consisting of Semiconductor Quantum Dots and 3d-Metal Ions. Journal of the American Chemical Society, 2020, 142, 4680-4689.	6.6	51
31	A Redox Shuttle Accelerates O₂ Evolution of Photocatalysts Formed In Situ under Visible Light. Advanced Materials, 2017, 29, 1606009.	11.1	48
32	Photoelectrochemical cell for Pâ€"H/Câ€"H cross-coupling with hydrogen evolution. Chemical Communications, 2019, 55, 10376-10379.	2.2	47
33	Nonstoichiometric Cu_{<i>x</i>}In_{<i>y</i>}S Quantum Dots for Efficient Photocatalytic Hydrogen Evolution. ChemSusChem, 2017, 10, 4833-4838.	3.6	45
34	Tracking Co(I) Intermediate in Operando in Photocatalytic Hydrogen Evolution by X-ray Transient Absorption Spectroscopy and DFT Calculation. Journal of Physical Chemistry Letters, 2016, 7, 5253-5258.	2.1	44
35	Protonated Graphitic Carbon Nitride with Surface Attached Molecule as Hole Relay for Efficient Photocatalytic O₂ Evolution. ACS Catalysis, 2016, 6, 8336-8341.	5.5	44
36	Nitrogenase inspired artificial photosynthetic nitrogen fixation. CheM, 2021, 7, 1431-1450.	5.8	43

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37	Rational Design of Dotâ€onâ€Rod Nanoâ€Heterostructure for Photocatalytic CO₂ Reduction: Pivotal Role of Hole Transfer and Utilization. Advanced Materials, 2022, 34, e2106662.	11.1	42
38	Threeâ€Dimensional Graphene Networks with Abundant Sharp Edge Sites for Efficient Electrocatalytic Hydrogen Evolution. Angewandte Chemie, 2018, 130, 198-203.	1.6	41
39	Vectorial Electron Transfer for Improved Hydrogen Evolution by Mercaptopropionicâ€Acidâ€Regulated CdSe Quantumâ€Dotsâ€"TiO₂â€"Ni(OH)₂ Assembly. ChemSusChem, 2015, 8, 642-649.	3.6	39
40	Assembling metallic 1T-MoS₂nanosheets with inorganic-ligand stabilized quantum dots for exceptional solar hydrogen evolution. Chemical Communications, 2017, 53, 5606-5609.	2.2	39
41	Regioselective <i>Ortho</i> Amination of an Aromatic Câ€"H Bond by Trifluoroacetic Acid via Electrochemistry. Organic Letters, 2019, 21, 5581-5585.	2.4	36
42	Site- and Spatial-Selective Integration of Non-noble Metal Ions into Quantum Dots for Robust Hydrogen Photogeneration. Matter, 2020, 3, 571-585.	5.0	36
43	Reductive Carbonâ€"Carbon Coupling on Metal Sites Regulates Photocatalytic CO₂ Reduction in Water Using ZnSe Quantum Dots. Angewandte Chemie - International Edition, 2022, 61, .	7.2	36
44	Enhanced Charge Separation Efficiency Accelerates Hydrogen Evolution from Water of Carbon Nitride and 3,4,9,10-Perylene-tetracarboxylic Dianhydride Composite Photocatalyst. ACS Applied Materials & Interfaces, 2018, 10, 3515-3521.	4.0	35
45	Secondary coordination sphere accelerates hole transfer for enhanced hydrogen photogeneration from [FeFe]-hydrogenase mimic and CdSe QDs in water. Scientific Reports, 2016, 6, 29851.	1.6	33
46	Photocatalysis with Quantum Dots and Visible Light: Selective and Efficient Oxidation of Alcohols to Carbonyl Compounds through a Radical Relay Process in Water. Angewandte Chemie, 2017, 129, 3066-3070.	1.6	32
47	Flower-like cobalt carbide for efficient carbon dioxide conversion. Chemical Communications, 2020, 56, 7849-7852.	2.2	30
48	Direct synthesis of sulfide capped CdS and CdS/ZnS colloidal nanocrystals for efficient hydrogen evolution under visible light irradiation. Journal of Materials Chemistry A, 2018, 6, 16328-16332.	5.2	29
49	Thiol Activation toward Selective Thiolation of Aromatic Câ€"H Bond. Organic Letters, 2020, 22, 3804-3809.	2.4	26
50	Mechanistic Insights Into Iron(II) Bis(pyridyl)amineâ€Bipyridine Skeleton for Selective CO₂ Photoreduction. Angewandte Chemie - International Edition, 2021, 60, 26072-26079.	7.2	25
51	Tandem photoelectrochemical and photoredox catalysis for efficient and selective aryl halides functionalization by solar energy. Matter, 2021, 4, 2354-2366.	5.0	24
52	Site-selective D₂O-mediated deuteration of diaryl alcohols <i>via</i> quantum dots photocatalysis. Chemical Communications, 2021, 57, 6768-6771.	2.2	23
53	Bioinspired metal complexes for energy-related photocatalytic small molecule transformation. Chemical Communications, 2020, 56, 15496-15512.	2.2	22
54	Quantum Dot Assembly for Lightâ€Driven Multielectron Redox Reactions, such as Hydrogen Evolution and CO 2 Reduction. Angewandte Chemie, 2019, 131, 10918-10925.	1.6	20

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55	Optimal d-band-induced Cu₃N as a cocatalyst on metal sulfides for boosting photocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2020, 8, 22601-22606.	5.2	20
56	Cobalt carbide nanosheets as effective catalysts toward photothermal degradation of mustard-gas simulants under solar light. Applied Catalysis B: Environmental, 2021, 284, 119703.	10.8	19
57	Visible light-induced photochemical oxygen evolution from water by 3,4,9,10-perylenetetracarboxylic dianhydride nanorods as an n-type organic semiconductor. Catalysis Science and Technology, 2016, 6, 672-676.	2.1	16
58	Integrating CdSe Quantum Dots with a [FeFe]â€Hydrogenase Mimic into a Photocathode for Hydrogen Evolution at a Low Bias Voltage. ChemPhotoChem, 2017, 1, 260-264.	1.5	16
59	Self-assembled inorganic clusters of semiconducting quantum dots for effective solar hydrogen evolution. Chemical Communications, 2018, 54, 4858-4861.	2.2	14
60	Visible-Light-Induced Nanoparticle Assembly for Effective Hydrogen Photogeneration. ACS Sustainable Chemistry and Engineering, 2019, 7, 7286-7293.	3.2	12
61	Identifying a Real Catalyst of [NiFe]â€Hydrogenase Mimic for Exceptional H 2 Photogeneration. Angewandte Chemie - International Edition, 2020, 59, 18400-18404.	7.2	11
62	Hand-in-hand quantum dot assembly sensitized photocathodes for enhanced photoelectrochemical hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 26098-26104.	5.2	10
63	Perâ€6â€Thiolâ€Cyclodextrin Engineered [FeFe]â€Hydrogenase Mimic/CdSe Quantum Dot Assembly for Photocatalytic Hydrogen Production. Solar Rrl, 2021, 5, 2000474.	3.1	9
64	Probe Binding Mode and Structure of the Photocatalytic Center: Hydrogen Generation by Quantum Dots and Nickel Ions. Energy & Fuels, 2021, 35, 19185-19190.	2.5	7
65	Catalytic Hydrogen Production Using A Cobalt Catalyst Bearing a Phosphinoamine Ligand. ChemPhotoChem, 2019, 3, 220-224.	1.5	5
66	Reductive Carbonâ€Carbon Coupling on Metal Sites Regulates Photocatalytic CO2 Reduction in Water Using ZnSe Quantum Dots. Angewandte Chemie, 0, , .	1.6	4
67	Sensitized Photocathodes: Recent Advances in Sensitized Photocathodes: From Molecular Dyes to Semiconducting Quantum Dots (Adv. Sci. 4/2018). Advanced Science, 2018, 5, 1870023.	5.6	3
68	Holeâ€Transferâ€Layer Modification of Quantum Dotâ€Sensitized Photocathodes for Dramatically Enhanced Hydrogen Evolution. Particle and Particle Systems Characterization, 2018, 35, 1700278.	1.2	3
69	Identifying a Real Catalyst of [NiFe]â€Hydrogenase Mimic for Exceptional H₂ Photogeneration. Angewandte Chemie, 2020, 132, 18558-18562.	1.6	2
70	Photocatalysis: An Exceptional Artificial Photocatalyst, Ni_hâ€CdSe/CdS Core/Shell Hybrid, Made In Situ from CdSe Quantum Dots and Nickel Salts for Efficient Hydrogen Evolution (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 T	11	1
71	Solar Energy Conversion: Holeâ€Acceptingâ€Ligandâ€Modified CdSe QDs for Dramatic Enhancement of Photocatalytic and Photoelectrochemical Hydrogen Evolution by Solar Energy (Adv. Sci. 4/2016). Advanced Science, 2016, 3, .	5.6	1
72	Superhydrophilic Graphdiyne: Superhydrophilic Graphdiyne Accelerates Interfacial Mass/Electron Transportation to Boost Electrocatalytic and Photoelectrocatalytic Water Oxidation Activity (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	7.8	1

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73	Photocatalytic Hydrogen Evolution: Susceptible Surface Sulfide Regulates Catalytic Activity of CdSe Quantum Dots for Hydrogen Photogeneration (Adv. Mater. 7/2019). Advanced Materials, 2019, 31, 1970048.	11.1	1
74	Frontispiece: Photocatalysis with Quantum Dots and Visible Light for Effective Organic Synthesis. Chemistry - A European Journal, 2018, 24, .	1.7	0