Jing Bai

List of Publications by Year
in descending order

109	6,093	61857	74018
papers	citations	43 h-index	75 g-index

109	109	109	6846
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Titanium Dioxide Nanomaterials for Sensor Applications. Chemical Reviews, 2014, 114, 10131-10176.	23.0	702
2	Selective Degradation of Organic Pollutants Using an Efficient Metal-Free Catalyst Derived from Carbonized Polypyrrole via Peroxymonosulfate Activation. Environmental Science & Technology, 2017, 51, 11288-11296.	4.6	514
3	Spin-State-Dependent Peroxymonosulfate Activation of Single-Atom Mâ€“N Moieties via a Radical-Free Pathway. ACS Catalysis, 2021, 11, 9569-9577.	5.5	192
4	Highly selective photocatalytic production of H2O2 on sulfur and nitrogen co-doped graphene quantum dots tuned TiO2. Applied Catalysis B: Environmental, 2018, 239, 475-484.	10.8	178
5	A highly efficient BiVO 4 /WO 3 /W heterojunction photoanode for visible-light responsive dual photoelectrode photocatalytic fuel cell. Applied Catalysis B: Environmental, 2016, 183, 224-230.	10.8	151
6	Photoelectrocatalytic degradation of tetracycline by highly effective TiO2 nanopore arrays electrode. Journal of Hazardous Materials, 2009, 171, 678-683.	6.5	143
7	Synthesis of WO3/BiVO4 photoanode using a reaction of bismuth nitrate with peroxovanadate on WO3 film for efficient photoelectrocatalytic water splitting and organic pollutant degradation. Applied Catalysis B: Environmental, 2017, 217, 21-29.	10.8	134
8	High-performance BiVO4 photoanodes cocatalyzed with an ultrathin Î±-Fe2O3 layer for photoelectrochemical application. Applied Catalysis B: Environmental, 2017, 204, 127-133.	10.8	133
9	Carbon quantum dots modified anatase/rutile TiO2 photoanode with dramatically enhanced photoelectrochemical performance. Applied Catalysis B: Environmental, 2020, 269, 118776.	10.8	132
10	Highly selective transformation of ammonia nitrogen to N2 based on a novel solar-driven photoelectrocatalytic-chlorine radical reactions system. Water Research, 2017, 125, 512-519.	5.3	127
11	A new glass substrate photoelectrocatalytic electrode for efficient visible-light hydrogen production: CdS sensitized TiO2 nanotube arrays. Applied Catalysis B: Environmental, 2010, 95, 408-413.	10.8	120
12	Highly stable CdS-modified short TiO2 nanotube array electrode for efficient visible-light hydrogen generation. International Journal of Hydrogen Energy, 2011, 36, 167-174.	3.8	115
13	Preparation of vertically aligned WO3 nanoplate array films based on peroxotungstate reduction reaction and their excellent photoelectrocatalytic performance. Applied Catalysis B: Environmental, 2017, 202, 388-396.	10.8	114
14	RhB Adsorption Performance of Magnetic Adsorbent Fe3O4/RGO Composite and Its Regeneration through A Fenton-like Reaction. Nano-Micro Letters, 2014, 6, 125-135.	14.4	109
15	A solar light driven dual photoelectrode photocatalytic fuel cell (PFC) for simultaneous wastewater treatment and electricity generation. Journal of Hazardous Materials, 2016, 311, 51-62.	6.5	103
16	Monolithic cobalt-doped carbon aerogel for efficient catalytic activation of peroxymonosulfate in water. Journal of Hazardous Materials, 2017, 332, 195-204.	6.5	103
17	Selfâ€Assembled, Nanowire Network Electrodes for Depleted Bulk Heterojunction Solar Cells. Advanced Materials, 2013, 25, 1769-1773.	11.1	102
18	Efficient photochemical water splitting and organic pollutant degradation by highly ordered TiO2 nanopore arrays. Applied Catalysis B: Environmental, 2009, 89, 142-148.	10.8	96

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19	Converting hazardous organics into clean energy using a solar responsive dual photoelectrode photocatalytic fuel cell. Journal of Hazardous Materials, 2013, 262, 304-310.	6.5	92
20	Exhaustive Conversion of Inorganic Nitrogen to Nitrogen Gas Based on a Photoelectro-Chlorine Cycle Reaction and a Highly Selective Nitrogen Gas Generation Cathode. Environmental Science & Technology, 2018, 52, 1413-1420.	4.6	87
21	Highly-stable and efficient photocatalytic fuel cell based on an epitaxial TiO2/WO3/W nanothorn photoanode and enhanced radical reactions for simultaneous electricity production and wastewater treatment. Applied Energy, 2018, 220, 127-137.	5.1	87
22	Enhanced organic pollutants degradation and electricity production simultaneously via strengthening the radicals reaction in a novel Fenton-photocatalytic fuel cell system. Water Research, 2017, 108, 293-300.	5.3	84
23	Extremely Efficient Decomposition of Ammonia N to N₂ Using ClO^{â€¢} from Reactions of HO^{â€¢} and HOCl Generated in Situ on a Novel Bifacial Photoelectroanode. Environmental Science & Technology, 2019, 53, 6945-6953.	4.6	84
24	Photoelectrocatalytic COD determination method using highly ordered TiO2 nanotube array. Water Research, 2009, 43, 1986-1992.	5.3	81
25	A novel in situ preparation method for nanostructured Î±-Fe₂O₃ films from electrodeposited Fe films for efficient photoelectrocatalytic water splitting and the degradation of organic pollutants. Journal of Materials Chemistry A, 2015, 3, 4345-4353.	5.2	79
26	The formation mechanism of titania nanotube arrays in hydrofluoric acid electrolyte. Journal of Materials Science, 2008, 43, 1880-1884.	1.7	76
27	Preparation of short, robust and highly ordered TiO2 nanotube arrays and their applications as electrode. Applied Catalysis B: Environmental, 2009, 92, 326-332.	10.8	69
28	BiVO4/TiO2(N2) Nanotubes Heterojunction Photoanode for Highly Efficient Photoelectrocatalytic Applications. Nano-Micro Letters, 2017, 9, 14.	14.4	66
29	A low-cost photoelectrochemical tandem cell for highly-stable and efficient solar water splitting. Nano Energy, 2017, 41, 225-232.	8.2	62
30	Combined nanostructured Bi2S3/TNA photoanode and Pt/SiPVC photocathode for efficient self-biasing photoelectrochemical hydrogen and electricity generation. Nano Energy, 2014, 9, 152-160.	8.2	59
31	Preparation of photocatalytic anatase nanowire films byin situoxidation of titanium plate. Nanotechnology, 2009, 20, 185703.	1.3	58
32	Aerated visible-light responsive photocatalytic fuel cell for wastewater treatment with producing sustainable electricity in neutral solution. Chemical Engineering Journal, 2014, 252, 89-94.	6.6	58
33	BiVO4 Photoanode with Exposed (040) Facets for Enhanced Photoelectrochemical Performance. Nano-Micro Letters, 2018, 10, 11.	14.4	58
34	Total organic carbon and total nitrogen removal and simultaneous electricity generation for nitrogen-containing wastewater based on the catalytic reactions of hydroxyl and chlorine radicals. Applied Catalysis B: Environmental, 2018, 238, 168-176.	10.8	58
35	A novel thin-layer photoelectrocatalytic (PEC) reactor with double-faced titania nanotube arrays electrode for effective degradation of tetracycline. Applied Catalysis B: Environmental, 2010, 98, 154-160.	10.8	57
36	Enhanced Photoelectrochemical Properties of Cu2O-loaded Short TiO2 Nanotube Array Electrode Prepared by Sonoelectrochemical Deposition. Nano-Micro Letters, 2010, 2, 277-284.	14.4	55

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37	Dramatic enhancement of organics degradation and electricity generation via strengthening superoxide radical by using a novel 3D AQS/PPy-GF cathode. Water Research, 2017, 125, 259-269.	5.3	53
38	Preparation of well-aligned WO3 nanoflake arrays vertically grown on tungsten substrate as photoanode for photoelectrochemical water splitting. Electrochemistry Communications, 2012, 20, 153-156.	2.3	52
39	Photoeletrocatalytic activity of an n-ZnO/p-Cu2O/n-TNA ternary heterojunction electrode for tetracycline degradation. Journal of Hazardous Materials, 2013, 262, 482-488.	6.5	52
40	Comparison of photoelectrochemical properties of TiO2-nanotube-array photoanode prepared by anodization in different electrolyte. Environmental Chemistry Letters, 2009, 7, 363-368.	8.3	48
41	Removal of trivalent chromium in the complex state of trivalent chromium passivation wastewater. Chemical Engineering Journal, 2014, 236, 59-65.	6.6	46
42	A novel 3D ZnO/Cu₂O nanowire photocathode material with highly efficient photoelectrocatalytic performance. Journal of Materials Chemistry A, 2015, 3, 22996-23002.	5.2	46
43	Enhanced Oxidation of Organic Contaminants by Mn(VII)/CaSO3 Under Environmentally Relevant Conditions: Performance and Mechanisms. Water Research, 2021, 188, 116481.	5.3	45
44	Serial hole transfer layers for a BiVO₄photoanode with enhanced photoelectrochemical water splitting. Nanoscale, 2018, 10, 18378-18386.	2.8	44
45	Exhaustive denitrification via chlorine oxide radical reactions for urea based on a novel photoelectrochemical cell. Water Research, 2020, 170, 115357.	5.3	44
46	Selfâ€Biasing Photoelectrochemical Cell for Spontaneous Overall Water Splitting under Visibleâ€Light Illumination. ChemSusChem, 2013, 6, 1276-1281.	3.6	41
47	Novel 3D Pd-Cu(OH)2/CF cathode for rapid reduction of nitrate-N and simultaneous total nitrogen removal from wastewater. Journal of Hazardous Materials, 2021, 401, 123232.	6.5	40
48	Efficient ammonia removal and toxic chlorate control by using BiVO4/WO3 heterojunction photoanode in a self-driven PEC-chlorine system. Journal of Hazardous Materials, 2021, 402, 123725.	6.5	40
49	The Inhibition Effect of Tert-Butyl Alcohol on the TiO2 Nano Assays Photoelectrocatalytic Degradation of Different Organics and Its Mechanism. Nano-Micro Letters, 2016, 8, 221-231.	14.4	39
50	Coupled Effect of Sulfidation and Ferrous Dosing on Selenate Removal by Zerovalent Iron Under Aerobic Conditions. Environmental Science & Technology, 2019, 53, 14577-14585.	4.6	38
51	Efficient degradation of refractory organics for carbonate-containing wastewater via generation carbonate radical based on a photoelectrocatalytic TNA-MCF system. Applied Catalysis B: Environmental, 2019, 259, 118071.	10.8	36
52	Efficient wastewater treatment and simultaneously electricity production using a photocatalytic fuel cell based on the radical chain reactions initiated by dual photoelectrodes. Journal of Hazardous Materials, 2017, 337, 47-54.	6.5	36
53	Self-Driven Photoelectrochemical Splitting of H₂S for S and H₂ Recovery and Simultaneous Electricity Generation. Environmental Science & Technology, 2017, 51, 12965-12971.	4.6	35
54	Efficient degradation of N-containing organic wastewater via chlorine oxide radical generated by a photoelectrochemical system. Chemical Engineering Journal, 2020, 392, 123695.	6.6	35

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55	Magnetically separable maghemite/montmorillonite composite as an efficient heterogeneous Fenton-like catalyst for phenol degradation. Environmental Science and Pollution Research, 2017, 24, 1926-1937.	2.7	33
56	The effect and mechanism of organic pollutants oxidation and chemical energy conversion for neutral wastewater via strengthening reactive oxygen species. Science of the Total Environment, 2019, 651, 1226-1235.	3.9	32
57	Highly efficient removal of total nitrogen and dissolved organic compound in waste reverse osmosis concentrate mediated by chlorine radical on 3D Co3O4 nanowires anode. Journal of Hazardous Materials, 2022, 424, 127662.	6.5	30
58	Preparation of a BiVO₄ nanoporous photoanode based on peroxovanadate reduction and conversion for efficient photoelectrochemical performance. Nanoscale, 2018, 10, 2848-2855.	2.8	28
59	Highly efficient total nitrogen and simultaneous total organic carbon removal for urine based on the photoelectrochemical cycle reaction of chlorine and hydroxyl radicals. Electrochimica Acta, 2019, 297, 1-9.	2.6	27
60	The design of high performance photoanode of CQDs/TiO2/WO3 based on DFT alignment of lattice parameter and energy band, and charge distribution. Journal of Colloid and Interface Science, 2021, 600, 828-837.	5.0	27
61	Dramatic enhancement of photocurrent for BiVO4/TiO2 heterojunction photoanode with suitable band-match via in-situ band regulation using Ta. International Journal of Hydrogen Energy, 2018, 43, 18202-18210.	3.8	26
62	Efficient SO₂ Removal and Highly Synergistic H₂O₂ Production Based on a Novel Dual-Function Photoelectrocatalytic System. Environmental Science & Technology, 2020, 54, 11515-11525.	4.6	25
63	High-efficient energy recovery from organics degradation for neutral wastewater treatment based on radicals catalytic reaction of Fe2+/Fe3+-EDTA complexes. Chemosphere, 2018, 201, 59-65.	4.2	24
64	High yield of H2O2 and efficient S recovery from toxic H2S splitting through a self-driven photoelectrocatalytic system with a microporous GDE cathode. Applied Catalysis B: Environmental, 2018, 238, 491-497.	10.8	24
65	Electron blocking and hole extraction by a dual-function layer for hematite with enhanced photoelectrocatalytic performance. Applied Catalysis B: Environmental, 2018, 237, 175-184.	10.8	23
66	Novel Denitrification Fuel Cell for Energy Recovery of Nitrate-N and TN Removal Based on NH₄⁺ Generation on a CNW@CF Cathode. Environmental Science & Technology, 2022, 56, 2562-2571.	4.6	23
67	Enhanced photoelectrocatalytic performance of nanoporous WO3 photoanode by modification of cobaltâ€“phosphate (Coâ€“Pi) catalyst. Journal of Solid State Electrochemistry, 2014, 18, 157-161.	1.2	22
68	Preparation of hematite with an ultrathin iron titanate layer via an in situ reaction and its stable, long-lived, and excellent photoelectrochemical performance. Applied Catalysis B: Environmental, 2017, 218, 690-699.	10.8	21
69	Impact of wastewater treatment plant effluent on an urban river. Journal of Freshwater Ecology, 2017, 32, 697-710.	0.5	21
70	Photocatalytic fuel cell based on sulfate radicals converted from sulfates in situ for wastewater treatment and chemical energy utilization. Catalysis Today, 2019, 335, 485-491.	2.2	21
71	Efficient purification and chemical energy recovery from urine by using a denitrifying fuel cell. Water Research, 2019, 152, 117-125.	5.3	21
72	WO3/W Nanopores Sensor for Chemical Oxygen Demand (COD) Determination under Visible Light. Sensors, 2014, 14, 10680-10690.	2.1	19

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73	Efficient denitrification and removal of natural organic matter, emerging pollutants simultaneously for RO concentrate based on photoelectrocatalytic radical reaction. Separation and Purification Technology, 2020, 234, 116032.	3.9	19
74	TiO2 nanotube arrays and TiO2-nanotube-array based dye-sensitized solar cell. Science Bulletin, 2007, 52, 1585-1589.	1.7	18
75	Trace organic contaminants abatement by permanganate/bisulfite pretreatment coupled with conventional water treatment processes: Lab- and pilot-scale tests. Journal of Hazardous Materials, 2021, 401, 123380.	6.5	18
76	Treatment of hazardous organic amine wastewater and simultaneous electricity generation using photocatalytic fuel cell based on TiO2/WO3 photoanode and Cu nanowires cathode. Chemosphere, 2022, 289, 133119.	4.2	17
77	The Promotion Effect of Low-Molecular Hydroxyl Compounds on the Nano-Photoelectrocatalytic Degradation of Fulvic Acid and Mechanism. Nano-Micro Letters, 2016, 8, 320-327.	14.4	16
78	Efficient Degradation of Refractory Organics Using Sulfate Radicals Generated Directly from WO3 Photoelectrode and the Catalytic Reaction of Sulfate. Catalysts, 2017, 7, 346.	1.6	16
79	Rapid Conversion of Co²⁺ to Co³⁺ by Introducing Oxygen Vacancies in Co₃O₄ Nanowire Anodes for Nitrogen Removal with Highly Efficient H₂ Recovery in Urine Treatment. Environmental Science & Technology, 2022, 56, 9693-9701.	4.6	16
80	Scalable one-step synthesis of TiO₂/WO₃ films on titanium plates with an efficient electron storage ability. Journal of Materials Chemistry A, 2015, 3, 10195-10198.	5.2	14
81	Efficient TN removal and simultaneous TOC conversion for highly toxic organic amines based on a photoelectrochemical-chlorine radicals process. Catalysis Today, 2019, 335, 452-459.	2.2	14
82	Efficient urine removal, simultaneous elimination of emerging contaminants, and control of toxic chlorate in a photoelectrocatalytic-chlorine system. Environmental Pollution, 2020, 267, 115605.	3.7	14
83	Efficient organic pollutants conversion and electricity generation for carbonate-containing wastewater based on carbonate radical reactions initiated by BiVO4-Au/PVC system. Journal of Hazardous Materials, 2020, 389, 122140.	6.5	14
84	Effect of Oxygenâ€“Iron Composition on Charge Transport and Interface Reaction in Hematite. ACS Catalysis, 2020, 10, 2413-2418.	5.5	14
85	High Yield of CO and Synchronous S Recovery from the Conversion of CO₂ and H₂S in Natural Gas Based on a Novel Electrochemical Reactor. Environmental Science & Technology, 2021, 55, 14854-14862.	4.6	14
86	Assessment of a COD analytical method based on the photoelectrocatalysis of a TiO2 nanotube array sensor. Analytical Methods, 2012, 4, 1790.	1.3	13
87	TiO₂ Nanotube Sensor for Online Chemical Oxygen Demand Determination in Conjunction with Flow Injection Technique. Water Environment Research, 2014, 86, 532-539.	1.3	12
88	The synergic generation of CO3â˙ and O2â˙ radicals in a novel photocatalytic fuel cell for efficient oxidation of carbonate-containing wastewater and simultaneous electricity production. Applied Catalysis B: Environmental, 2020, 277, 119227.	10.8	11
89	Efficient WO3â˙x nanoplates photoanode based on bidentate hydrogen bonds and thermal reduction of ethylene glycol. Chemical Engineering Journal, 2021, 404, 127089.	6.6	11
90	Kinetics and Mechanisms for Photoelectrochemical Degradation of Glucose on Highly Effective Self-Organized TiO2 Nanotube Arrays. Chinese Journal of Catalysis, 2010, 31, 163-170.	6.9	10

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91	Highly-ordered dye-sensitized TiO2 nanotube arrays film used for improving photoelectrochemical electrodes. Science China Chemistry, 2013, 56, 101-105.	4.2	8
92	Simulation and engineering demonstration of the advanced treatment of rainy overflow wastewater using a combined system of storage tankâ€wastewater treatment plantâ€wetland. Water Environment Research, 2020, 92, 1057-1069.	1.3	8
93	Charge recombination in dye-sensitized nanoporous TiO2 solar cell. Science Bulletin, 2005, 50, 2408-2412.	1.7	7
94	Tungsten sulfide co-catalytic radical chain-reaction for efficient organics degradation and electricity generation. Applied Catalysis B: Environmental, 2020, 268, 118471.	10.8	7
95	Photoelectrocatalytic Performance of Benzoic Acid onTiO2Nanotube Array Electrodes. International Journal of Photoenergy, 2013, 2013, 1-7.	1.4	6
96	Photoelectrocatalytic generation of H2 and S from toxic H2S by using a novel BiOI/WO3 nanoflake array photoanode. Frontiers in Energy, 2021, 15, 744.	1.2	6
97	Multistep Surface Trap State Finishing Based on in Situ One-Step MOF Modification over Hematite for Dramatically Enhanced Solar Water Oxidation. ACS Applied Materials & Interfaces, 2020, 12, 33638-33646.	4.0	5
98	Surface metal valence state regulating on hematite to weaken dependence of charge transport to catalyst loading. Nano Energy, 2020, 78, 105396.	8.2	5
99	Effect of oxygen concentration and distribution on holes transfer and photoelectrocatalytic properties in hematite. International Journal of Hydrogen Energy, 2021, 46, 7309-7319.	3.8	5
100	Adsorption and photoelectrocatalytic characteristics of organics on TiO2 nanotube arrays. Journal of Solid State Electrochemistry, 2012, 16, 3907-3914.	1.2	4
101	Enhanced Photoelectrochemical Properties of Cu2O-loaded Short TiO2 Nanotube Array Electrode Prepared by Sonoelectrochemical Deposition. , 2010, 2, 277.		4
102	Efficient Hydrogen Generation and Total Nitrogen Removal for Urine Treatment in a Neutral Solution Based on a Self-Driving Nano Photoelectrocatalytic System. Nanomaterials, 2021, 11, 2777.	1.9	3
103	Effect of Structural Parameters of TiO₂ Nanotube Arrays upon Their Photocatalytic/Photoelectrocatalytic Performance. Chinese Journal of Chemistry, 2011, 29, 2236-2242.	2.6	2
104	Simple method to quantify extraneous water and organic matter degradation in sewer networks. Environmental Science: Water Research and Technology, 2021, 7, 172-183.	1.2	2
105	RhB Adsorption Performance of Magnetic Adsorbent Fe₃O₄/RGO Composite and Its Regeneration through A Fenton-like Reaction. Nano-Micro Letters, 2014, 6, 125.	14.4	2
106	Photoelectrochemical degradation of methyl orange by TiO2 nanopore arrays electrode and its comparison with TiO2 nanotube arrays electrode. Water Science and Technology, 2010, 62, 2783-2789.	1.2	1
107	Enhanced Photoelectrocatalytic Degradation of Azo-Dye Pollutants Using Transparent Titania Nanotube Arrays Glass Electrode. Advanced Materials Research, 2011, 311-313, 2089-2092.	0.3	1
108	Solubility of 2,2â€²,6,6â€²-Tetrabromo-4,4â€²-isopropylidene Phenol in Aqueous Pollutant Solutions. Journal of Chemical & Engineering Data, 2013, 58, 3150-3154.	1.0	1

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109	The Promotion Effect and Mechanism of Methanoic Acid on the Photoelectrocatalytic Degradation of Fulvic Acid. Journal of Chemistry, 2016, 2016, 1-7.	0.9	0