List of Publications by Year in descending order

113 papers	10,968 citations	36203 51 h-index	30010 103 g-index
114 all docs	114 docs citations	114 times ranked	12291 citing authors

#	Article	IF	Citations
1	Surface modification of TiO2 photocatalyst for environmental applications. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2013, 15, 1-20.	5.6	858
2	Effects of Single Metal-Ion Doping on the Visible-Light Photoreactivity of TiO₂. Journal of Physical Chemistry C, 2010, 114, 783-792.	1.5	685
3	Effects of TiO2 Surface Fluorination on Photocatalytic Reactions and Photoelectrochemical Behaviors. Journal of Physical Chemistry B, 2004, 108, 4086-4093.	1.2	591
4	Photoinduced charge transfer processes in solar photocatalysis based on modified TiO₂. Energy and Environmental Science, 2016, 9, 411-433.	15.6	494
5	Effects of the preparation method of the ternary CdS/TiO2/Pt hybrid photocatalysts on visible light-induced hydrogen production. Journal of Materials Chemistry, 2008, 18, 2379.	6.7	370
6	Carbon-doped TiO2 photocatalyst synthesized without using an external carbon precursor and the visible light activity. Applied Catalysis B: Environmental, 2009, 91, 355-361.	10.8	351
7	Treatment technologies for aqueous perfluorooctanesulfonate (PFOS) and perfluorooctanoate (PFOA). Frontiers of Environmental Science and Engineering in China, 2009, 3, 129-151.	0.8	344
8	Photocatalytic Comparison of TiO₂ Nanoparticles and Electrospun TiO₂ Nanofibers: Effects of Mesoporosity and Interparticle Charge Transfer. Journal of Physical Chemistry C, 2010, 114, 16475-16480.	1.5	330
9	Light-harvesting multi-walled carbon nanotubes and CdS hybrids: Application to photocatalytic hydrogen production from water. Energy and Environmental Science, 2011, 4, 685-694.	15.6	259
10	Reductive Defluorination of Aqueous Perfluorinated Alkyl Surfactants: Effects of Ionic Headgroup and Chain Length. Journal of Physical Chemistry A, 2009, 113, 690-696.	1.1	251
11	Sonochemical Degradation of Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoate (PFOA) in Landfill Groundwater: Environmental Matrix Effects. Environmental Science & Technology, 2008, 42, 8057-8063.	4.6	231
12	Investigation on TiO2-coated optical fibers for gas-phase photocatalytic oxidation of acetone. Applied Catalysis B: Environmental, 2001, 31, 209-220.	10.8	206
13	Photosynthesis of formate from CO₂ and water at 1% energy efficiency via copper iron oxide catalysis. Energy and Environmental Science, 2015, 8, 2638-2643.	15.6	204
14	Kinetics and Mechanism of the Sonolytic Conversion of the Aqueous Perfluorinated Surfactants, Perfluorooctanoate (PFOA), and Perfluorooctane Sulfonate (PFOS) into Inorganic Products. Journal of Physical Chemistry A, 2008, 112, 4261-4270.	1.1	203
15	Photoelectrochemical Investigation on Electron Transfer Mediating Behaviors of Polyoxometalate in UV-Illuminated Suspensions of TiO2and Pt/TiO2. Journal of Physical Chemistry B, 2003, 107, 3885-3890.	1.2	197
16	Strategic Modification of BiVO₄ for Improving Photoelectrochemical Water Oxidation Performance. Journal of Physical Chemistry C, 2013, 117, 9104-9112.	1.5	191
17	Effect of the Anchoring Group in Ruâ''Bipyridyl Sensitizers on the Photoelectrochemical Behavior of Dye-Sensitized TiO2Electrodes:Â Carboxylate versus Phosphonate Linkages. Journal of Physical Chemistry B, 2006, 110, 8740-8749.	1.2	188
18	Photocatalytic Reactivities of Nafion-Coated TiO2 for the Degradation of Charged Organic Compounds under UV or Visible Light. Journal of Physical Chemistry B, 2005, 109, 11667-11674.	1.2	187

#	Article	IF	Citations
19	Visible light and Fe(III)-mediated degradation of Acid Orange 7 in the absence of H2O2. Journal of Photochemistry and Photobiology A: Chemistry, 2003, 159, 241-247.	2.0	184
20	Solar Hydrogen Production Coupled with the Degradation of a Dye Pollutant Using TiO₂Modified with Platinum and Nafion. International Journal of Photoenergy, 2014, 2014, 1-9.	1.4	172
21	Ultra-efficient and durable photoelectrochemical water oxidation using elaborately designed hematite nanorod arrays. Nano Energy, 2017, 39, 211-218.	8.2	171
22	Selective Photocatalytic Oxidation of NH3to N2on Platinized TiO2in Water. Environmental Science & Technology, 2002, 36, 5462-5468.	4.6	168
23	Solar water oxidation using nickel-borate coupled BiVO4 photoelectrodes. Physical Chemistry Chemical Physics, 2013, 15, 6499.	1.3	156
24	Sonochemical Degradation of Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoate (PFOA) in Groundwater: Kinetic Effects of Matrix Inorganics. Environmental Science & Technology, 2010, 44, 445-450.	4.6	153
25	Photoelectrochemical Approach for Metal Corrosion Prevention Using a Semiconductor Photoanode. Journal of Physical Chemistry B, 2002, 106, 4775-4781.	1.2	152
26	Photocatalytic conversion of benzene to phenol using modified TiO2 and polyoxometalates. Catalysis Today, 2005, 101, 291-297.	2.2	152
27	Electrochemical Water Splitting Coupled with Organic Compound Oxidation: The Role of Active Chlorine Species. Journal of Physical Chemistry C, 2009, 113, 7935-7945.	1.5	148
28	Reversing CdS Preparation Order and Its Effects on Photocatalytic Hydrogen Production of CdS/Pt-TiO₂ Hybrids Under Visible Light. Journal of Physical Chemistry C, 2011, 115, 6141-6148.	1.5	126
29	Comparative Study of Homogeneous and Heterogeneous Photocatalytic Redox Reactions:Â PW12O403-vs TiO2. Journal of Physical Chemistry B, 2004, 108, 6402-6411.	1.2	120
30	Sonochemical Degradation of Perfluorooctanesulfonate in Aqueous Film-Forming Foams. Environmental Science & Technology, 2010, 44, 432-438.	4.6	114
31	Artificial Photosynthesis of C1â€“C3 Hydrocarbons from Water and CO₂ on Titanate Nanotubes Decorated with Nanoparticle Elemental Copper and CdS Quantum Dots. Journal of Physical Chemistry A, 2015, 119, 4658-4666.	1.1	105
32	Organic dye-sensitized TiO2 as a versatile photocatalyst for solar hydrogen and environmental remediation. Applied Catalysis B: Environmental, 2012, 121-122, 206-213.	10.8	104
33	Snâ€Coupled pâ€Si Nanowire Arrays for Solar Formate Production from CO₂. Advanced Energy Materials, 2014, 4, 1301614.	10.2	96
34	Solar-Powered Electrochemical Oxidation of Organic Compounds Coupled with the Cathodic Production of Molecular Hydrogen. Journal of Physical Chemistry A, 2008, 112, 7616-7626.	1.1	89
35	Solar conversion of seawater uranium (VI) using TiO2 electrodes. Applied Catalysis B: Environmental, 2015, 163, 584-590.	10.8	87
36	Visible-Light-Sensitized Production of Hydrogen Using Perfluorosulfonate Polymer-Coated TiO2Nanoparticles:Â An Alternative Approach to Sensitizer Anchoring. Langmuir, 2006, 22, 2906-2911.	1.6	82

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37	Electrolysis of urea and urine for solar hydrogen. Catalysis Today, 2013, 199, 2-7.	2.2	80
38	Effects of inorganic oxidants on kinetics and mechanisms of WO 3 -mediated photocatalytic degradation. Applied Catalysis B: Environmental, 2015, 162, 515-523.	10.8	79
39	Reductive degradation of perfluoroalkyl compounds with aquated electrons generated from iodide photolysis at 254 nm. Photochemical and Photobiological Sciences, 2011, 10, 1945-1953.	1.6	76
40	Shift of the Reactive Species in the Sbâ€“SnO₂-Electrocatalyzed Inactivation of E. coli and Degradation of Phenol: Effects of Nickel Doping and Electrolytes. Environmental Science & Technology, 2014, 48, 2877-2884.	4.6	74
41	A facile synthesis of CuFeO₂ and CuO composite photocatalyst films for the production of liquid formate from CO₂ and water over a month. Journal of Materials Chemistry A, 2017, 5, 2123-2131.	5.2	73
42	Photoelectrochemical performance of multi-layered BiOxâ€“TiO2/Ti electrodes for degradation of phenol and production of molecular hydrogen in water. Journal of Hazardous Materials, 2012, 211-212, 47-54.	6.5	72
43	Solar-Powered Production of Molecular Hydrogen from Water. Journal of Physical Chemistry C, 2008, 112, 885-889.	1.5	70
44	Combinatorial doping of TiO₂ with platinum (Pt), chromium (Cr), vanadium (V), and nickel (Ni) to achieve enhanced photocatalytic activity with visible light irradiation. Journal of Materials Research, 2010, 25, 149-158.	1.2	69
45	Photo-chargeable and dischargeable TiO2 and WO3 heterojunction electrodes. Applied Catalysis B: Environmental, 2012, 115-116, 74-80.	10.8	69
46	Visible light photocatalytic activities of nitrogen and platinum-doped TiO2: Synergistic effects of co-dopants. Applied Catalysis B: Environmental, 2014, 147, 642-650.	10.8	69
47	Photoelectrochemical and Photocatalytic Behaviors of Hematite-Decorated Titania Nanotube Arrays: Energy Level Mismatch versus Surface Specific Reactivity. Journal of Physical Chemistry C, 2011, 115, 7134-7142.	1.5	66
48	Ag(I) ions working as a hole-transfer mediator in photoelectrocatalytic water oxidation on WO3 film. Nature Communications, 2020, 11, 967.	5.8	66
49	TiO₂ Nanotube Array Photoelectrocatalyst and Niâ€“Sbâ€“SnO₂ Electrocatalyst Bifacial Electrodes: A New Type of Bifunctional Hybrid Platform for Water Treatment. ACS Applied Materials & Interfaces, 2015, 7, 1907-1914.	4.0	61
50	Stand-alone photoconversion of carbon dioxide on copper oxide wire arrays powered by tungsten trioxide/dye-sensitized solar cell dual absorbers. Nano Energy, 2016, 25, 51-59.	8.2	58
51	How and to what extent do carbon materials catalyze solar hydrogen production from water?. Applied Catalysis B: Environmental, 2012, 125, 530-537.	10.8	52
52	A novel photoelectrochemical method of metal corrosion prevention using a TiO2 solar panel. Chemical Communications, 2001, , 281-282.	2.2	51
53	Photocatalytic conversion of carbon dioxide to methane on TiO2/CdS in aqueous isopropanol solution. Catalysis Today, 2016, 266, 153-159.	2.2	48
54	Dual modification of hematite photoanode by Sn-doping and Nb2O5 layer for water oxidation. Applied Catalysis B: Environmental, 2017, 201, 591-599.	10.8	47

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55	Effects of TiO2 surface fluorination on photocatalytic degradation of methylene blue and humic acid. Research on Chemical Intermediates, 2010, 36, 127-140.	1.3	43
56	Shape-Dependent Charge Transfers in Crystalline ZnO Photocatalysts: Rods versus Plates. Journal of Physical Chemistry C, 2014, 118, 21331-21338.	1.5	43
57	A Composite Photocatalyst of CdS Nanoparticles Deposited on TiO2 Nanosheets. Journal of Nanoscience and Nanotechnology, 2006, 6, 3642-3646.	0.9	42
58	Optical resonance and charge transfer behavior of patterned WO₃ microdisc arrays. Energy and Environmental Science, 2016, 9, 3143-3150.	15.6	42
59	Template-engineered epitaxial BiVO₄ photoanodes for efficient solar water splitting. Journal of Materials Chemistry A, 2017, 5, 18831-18838.	5.2	42
60	Ionâ€Enhanced Conversion of CO₂ into Formate on Porous Dendritic Bismuth Electrodes with High Efficiency and Durability. ChemSusChem, 2020, 13, 698-706.	3.6	42
61	Lithium ion-inserted TiO2 nanotube array photoelectrocatalysts. Applied Catalysis B: Environmental, 2013, 140-141, 233-240.	10.8	41
62	Titania nanofibers as a photo-antenna for dye-sensitized solar hydrogen. Photochemical and Photobiological Sciences, 2012, 11, 1437-1444.	1.6	40
63	Facilitating hole transfer on electrochemically synthesized p-type CuAlO₂ films for efficient solar hydrogen production from water. Journal of Materials Chemistry A, 2017, 5, 10165-10172.	5.2	40
64	Electrocatalytic arsenite oxidation using iron oxyhydroxide polymorphs (Î±-, Î²-, and Î³-FeOOH) in aqueous bicarbonate solution. Applied Catalysis B: Environmental, 2021, 283, 119608.	10.8	40
65	Study of special cases where the enhanced photocatalytic activities of Pt/TiO2 vanish under low light intensity. Catalysis Today, 2006, 111, 259-265.	2.2	39
66	Carbon nanotubes as an auxiliary catalyst in heterojunction photocatalysis for solar hydrogen. Applied Catalysis B: Environmental, 2013, 142-143, 647-653.	10.8	35
67	Trilayer CdS/carbon nanofiber (CNF) mat/Pt-TiO2 composite structures for solar hydrogen production: Effects of CNF mat thickness. Applied Catalysis B: Environmental, 2016, 196, 216-222.	10.8	32
68	Enhancement of Hydrogen Evolution from Water Photocatalysis Using Liquid Phase Plasma on Metal Oxide-Loaded Photocatalysts. ACS Sustainable Chemistry and Engineering, 2017, 5, 3659-3666.	3.2	32
69	High-Efficiency Solar Desalination Accompanying Electrocatalytic Conversions of Desalted Chloride and Captured Carbon Dioxide. ACS Sustainable Chemistry and Engineering, 2019, 7, 15320-15328.	3.2	32
70	Electrocatalytic arsenite oxidation in bicarbonate solutions combined with CO2 reduction to formate. Applied Catalysis B: Environmental, 2020, 265, 118607.	10.8	31
71	Homogeneous photoconversion of seawater uranium using copper and iron mixed-oxide semiconductor electrodes. Applied Catalysis B: Environmental, 2017, 207, 35-41.	10.8	27
72	Sunlight-harnessing and storing heterojunction TiO2/Al2O3/WO3 electrodes for night-time applications. RSC Advances, 2013, 3, 17551.	1.7	26

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73	CdS-loaded flexible carbon nanofiber mats as a platform for solar hydrogen production. International Journal of Hydrogen Energy, 2015, 40, 136-145.	3.8	25
74	ZnO nanostructure electrodeposited on flexible conductive fabric: A flexible photo-sensor. Sensors and Actuators B: Chemical, 2017, 240, 1106-1113.	4.0	25
75	Photoelectrochemical hydrogen production on silicon microwire arrays overlaid with ultrathin titanium nitride. Journal of Materials Chemistry A, 2016, 4, 14008-14016.	5.2	24
76	Synthesis of Aliphatic Acids from CO₂ and Water at Efficiencies Close to the Photosynthesis Limit Using Mixed Copper and Iron Oxide Films. ACS Energy Letters, 2019, 4, 2075-2080.	8.8	24
77	Temperature-boosted photocatalytic H2 production and charge transfer kinetics on TiO2 under UV and visible light. Photochemical and Photobiological Sciences, 2016, 15, 1247-1253.	1.6	23
78	Mo-doped BiVO4 nanotextured pillars as efficient photoanodes for solar water splitting. Journal of Alloys and Compounds, 2017, 726, 1138-1146.	2.8	23
79	Reduced titania nanorods and Niâ€“Moâ€“S catalysts for photoelectrocatalytic water treatment and hydrogen production coupled with desalination. Applied Catalysis B: Environmental, 2021, 284, 119745.	10.8	23
80	Electrocatalytic water treatment using carbon nanotube filters modified with metal oxides. Environmental Science and Pollution Research, 2019, 26, 1036-1043.	2.7	22
81	Evaluating the Catalytic Effects of Carbon Materials on the Photocatalytic Reduction and Oxidation Reactions of TiO₂. Bulletin of the Korean Chemical Society, 2013, 34, 1137-1144.	1.0	22
82	Photoactive component-loaded Nafion film as a platform of hydrogen generation: Alternative utilization of a classical sensitizing system. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 203, 112-118.	2.0	21
83	High efficiency solar chemical conversion using electrochemically disordered titania nanotube arrays transplanted onto transparent conductive oxide electrodes. Applied Catalysis B: Environmental, 2018, 226, 194-201.	10.8	21
84	Computational density functional theory study on the selective conversion of CO2 to formate on homogeneously and heterogeneously mixed CuFeO2 and CuO surfaces. Catalysis Today, 2019, 335, 345-353.	2.2	20
85	Electrocatalytic activity of metal-doped SnO2 for the decomposition of aqueous contaminants: Ta-SnO vs. Sb-SnO. Chemical Engineering Journal, 2021, 409, 128175.	6.6	20
86	Solar hydrogen peroxide production on carbon nanotubes wired to titania nanorod arrays catalyzing As(III) oxidation. Applied Catalysis B: Environmental, 2019, 252, 55-61.	10.8	19
87	Theoretical insight into effect of cationâ€“anion pairs on CO2 reduction on bismuth electrocatalysts. Applied Surface Science, 2020, 532, 147459.	3.1	18
88	Highly efficient hydrogen production using p-Si wire arrays and NiMoZn heterojunction photocathodes. Applied Catalysis B: Environmental, 2017, 217, 615-621.	10.8	17
89	In Situ-Generated Reactive Oxygen Species in Precharged Titania and Tungsten Trioxide Composite Catalyst Membrane Filters: Application to As(III) Oxidation in the Absence of Irradiation. Environmental Science & Technology, 2020, 54, 9601-9608.	4.6	17
90	Synergistic conversion of CO2 into C1 and C2 gases using hybrid in-doped TiO2 and g-C3N4 photocatalysts. Chemical Engineering Journal, 2022, 437, 135388.	6.6	17

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91	Novel complexation between ferric ions and nonionic surfactants (Brij) and its visible light activity for CCl4 degradation in aqueous micellar solutions. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 165, 43-50.	2.0	14
92	Substitution effect of pentavalent bismuth ions on the electronic structure and physicochemical properties of perovskite-structured Ba(In0.5Ta0.5â^'xBix)O3 semiconductors. Materials Research Bulletin, 2007, 42, 1914-1920.	2.7	14
93	Facile Electrochemical Synthesis of Highly Efficient Copperâ€"Cobalt Oxide Nanostructures for Oxygen Evolution Reactions. Journal of the Electrochemical Society, 2020, 167, 026510.	1.3	14
94	Standalone photoconversion of CO2 using Ti and TiOx-sandwiched heterojunction photocatalyst of CuO and CuFeO2 films. Applied Catalysis B: Environmental, 2021, 288, 119985.	10.8	14
95	Carbon-catalyzed dye-sensitization for solar hydrogen production. Catalysis Today, 2014, 230, 15-19.	2.2	13
96	Harnessing and storing visible light using a heterojunction of WO3 and CdS for sunlight-free catalysis. Photochemical and Photobiological Sciences, 2016, 15, 1006-1011.	1.6	13
97	ZnO rods rooted on manifold carbon nanofiber paper as a scalable photocatalyst platform: the effects of ZnO morphology. RSC Advances, 2016, 6, 85521-85528.	1.7	12
98	Effect of liquid phase plasma on photocatalysis of water for hydrogen evolution. International Journal of Hydrogen Energy, 2017, 42, 17386-17393.	3.8	12
99	Photocatalytic H₂ production on trititanate nanotubes coupled with CdS and platinum nanoparticles under visible light: revisiting H₂ production and material durability. Faraday Discussions, 2017, 198, 419-431.	1.6	12
100	Effects of electrochemical synthetic conditions on surface property and photocatalytic performance of copper and iron-mixed p-type oxide electrodes. Journal of Materials Science and Technology, 2018, 34, 1503-1510.	5.6	12
101	Effect of ZnO Electrodeposited on Carbon Film and Decorated with Metal Nanoparticles for Solar Hydrogen Production. Journal of Materials Science and Technology, 2016, 32, 1059-1065.	5.6	11
102	Photoelectrochemical hydrogen production using CdS nanoparticles photodeposited onto Li-ion-inserted titania nanotube arrays. Catalysis Today, 2018, 303, 289-295.	2.2	11
103	High-Valent Iron Redox-Mediated Photoelectrochemical Water Oxidation. ACS Energy Letters, 2022, 7, 59-66.	8.8	10
104	The effect of nanostructure dimensionality on the photoelectrochemical properties of derived TiO2 films. Electrochimica Acta, 2021, 373, 137900.	2.6	9
105	Solar remediation of wastewater and saline water with concurrent production of value-added chemicals. Journal of Environmental Chemical Engineering, 2022, 10, 106919.	3.3	9
106	Effect of shape-driven intrinsic surface defects on photocatalytic activities of titanium dioxide in environmental application. Applied Surface Science, 2017, 423, 71-77.	3.1	7
107	Electrocatalytic activities of electrochemically reduced tubular titania arrays loaded with cobalt ions in flow-through processes. Chemical Engineering Journal, 2021, 404, 126410.	6.6	7
108	Sunlight-charged heterojunction TiO2 and WO3 particle-embedded inorganic membranes for night-time environmental applications. Photochemical and Photobiological Sciences, 2018, 17, 491-498.	1.6	6

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109	Catalytic activity of photocharged binary TiO2 and WO3 membrane filters: Effect of AlO interlayer on direct vs. mediated electron transfers. Chemical Engineering Journal, 2022, 437, 135319.	6.6	6
110	Platinum-decorated Cu(InGa)Se2/CdS photocathodes: Optimization of Pt electrodeposition time and pH level. Journal of Alloys and Compounds, 2017, 692, 294-300.	2.8	5
111	Effect of Fe/N-doped carbon nanotube (CNT) wall thickness on CO2 conversion: A DFT study. Sustainable Materials and Technologies, 2020, 26, e00224.	1.7	3
112	Strategic Design of Heterojunction CdS Photocatalysts for Solar Hydrogen. Nanostructure Science and Technology, 2014, , 1-22.	0.1	3
113	SWNTs-catalyzed solar hydrogen production. Rapid Communication in Photoscience, 2014, 3, 56-58.	0.1	2