Kazuhiro Sayama

List of Publications by Year
in descending order

189 papers	21,292 citations	9775 73 h-index	9090 144 g-index
190 all docs	190 docs citations	190 times ranked	15862 citing authors

#	Article	IF	Citations
1	Direct splitting of water under visible light irradiation with an oxide semiconductor photocatalyst. Nature, 2001, 414, 625-627.	13.7	2,995
2	Molecular Design of Coumarin Dyes for Efficient Dye-Sensitized Solar Cells. Journal of Physical Chemistry B, 2003, 107, 597-606.	1.2	1,015
3	Design of new coumarin dyes having thiophene moieties for highly efficient organic-dye-sensitized solar cells. New Journal of Chemistry, 2003, 27, 783-785.	1.4	621
4	A coumarin-derivative dye sensitized nanocrystalline TiO2 solar cell having a high solar-energy conversion efficiency up to 5.6%. Chemical Communications, 2001, , 569-570.	2.2	560
5	Highly efficient photon-to-electron conversion with mercurochrome-sensitized nanoporous oxide semiconductor solar cells. Solar Energy Materials and Solar Cells, 2000, 64, 115-134.	3.0	527
6	Photoelectrochemical Decomposition of Water into H2and O2on Porous BiVO4Thin-Film Electrodes under Visible Light and Significant Effect of Ag Ion Treatment. Journal of Physical Chemistry B, 2006, 110, 11352-11360.	1.2	515
7	Photocatalytic decomposition of water and photocatalytic reduction of carbon dioxide over zirconia catalyst. The Journal of Physical Chemistry, 1993, 97, 531-533.	2.9	494
8	Photoelectrochemical Properties of a Porous Nb2O5Electrode Sensitized by a Ruthenium Dye. Chemistry of Materials, 1998, 10, 3825-3832.	3.2	490
9	Stoichiometric water splitting into H2 and O2 using a mixture of two different photocatalysts and an IO3-/I- shuttle redox mediator under visible light irradiation. Chemical Communications, 2001, , 2416-2417.	2.2	435
10	Effect of Additives on the Photovoltaic Performance of Coumarin-Dye-Sensitized Nanocrystalline TiO2Solar Cells. Langmuir, 2004, 20, 4205-4210.	1.6	398
11	Photoelectrochemical Properties of J Aggregates of Benzothiazole Merocyanine Dyes on a Nanostructured TiO2 Film. Journal of Physical Chemistry B, 2002, 106, 1363-1371.	1.2	360
12	A new photocatalytic water splitting system under visible light irradiation mimicking a Z-scheme mechanism in photosynthesis. Journal of Photochemistry and Photobiology A: Chemistry, 2002, 148, 71-77.	2.0	353
13	Development of New Photocatalytic Water Splitting into H2and O2using Two Different Semiconductor Photocatalysts and a Shuttle Redox Mediator IO3-/I-. Journal of Physical Chemistry B, 2005, 109, 16052-16061.	1.2	324
14	A new type of water splitting system composed of two different TiO2 photocatalysts (anatase, rutile) and a IO3â^'/Iâ^' shuttle redox mediator. Chemical Physics Letters, 2001, 344, 339-344.	1.2	323
15	Efficient Complete Oxidation of Acetaldehyde into CO2over CuBi2O4/WO3Composite Photocatalyst under Visible and UV Light Irradiation. Journal of Physical Chemistry C, 2007, 111, 7574-7577.	1.5	313
16	Photosensitization of a porous TiO2 electrode with merocyanine dyes containing a carboxyl group and a long alkyl chain. Chemical Communications, 2000, , 1173-1174.	2.2	299
17	Efficient sensitization of nanocrystalline TiO2 films with cyanine and merocyanine organic dyes. Solar Energy Materials and Solar Cells, 2003, 80, 47-71.	3.0	292
18	Novel polyene dyes for highly efficient dye-sensitized solar cells. Chemical Communications, 2003, , 252-253.	2.2	283

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19	Nickel-loaded K4Nb6O17 photocatalyst in the decomposition of H2O into H2 and O2: Structure and reaction mechanism. Journal of Catalysis, 1989, 120, 337-352.	3.1	278
20	Photocatalytic Activity of R3MO7and R2Ti2O7(R = Y, Gd, La; M = Nb, Ta) for Water Splitting into H2and O2. Journal of Physical Chemistry B, 2006, 110, 2219-2226.	1.2	278
21	Photoelectrochemical decomposition of water on nanocrystalline BiVO4 film electrodes under visible light. Chemical Communications, 2003, , 2908.	2.2	261
22	Steady hydrogen evolution from water on Eosin Y-fixed TiO2 photocatalyst using a silane-coupling reagent under visible light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2000, 137, 63-69.	2.0	260
23	Effect of Na2CO3 addition on photocatalytic decomposition of liquid water over various semiconductor catalysis. Journal of Photochemistry and Photobiology A: Chemistry, 1994, 77, 243-247.	2.0	249
24	Dye-sensitized nanocrystalline TiO2 solar cells based on novel coumarin dyes. Solar Energy Materials and Solar Cells, 2003, 77, 89-103.	3.0	248
25	Effect of carbonate salt addition on the photocatalytic decomposition of liquid water over Ptâ€"TiO2 catalyst. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 1647-1654.	1.7	237
26	Highly efficient photoelectrochemical water splitting using a thin film photoanode of BiVO4/SnO2/WO3 multi-composite in a carbonate electrolyte. Chemical Communications, 2012, 48, 3833.	2.2	237
27	Quantitative Analysis of Light-Harvesting Efficiency and Electron-Transfer Yield in Ruthenium-Dye-Sensitized Nanocrystalline TiO2Solar Cells. Chemistry of Materials, 2002, 14, 2527-2535.	3.2	230
28	Electronic-Insulating Coating of CaCO3 on TiO2 Electrode in Dye-Sensitized Solar Cells:â€‰ Improvement of Electron Lifetime and Efficiency. Chemistry of Materials, 2006, 18, 2912-2916.	3.2	223
29	Efficient Eosin Y Dye-Sensitized Solar Cell Containing Br-/Br3-Electrolyte. Journal of Physical Chemistry B, 2005, 109, 22449-22455.	1.2	204
30	Efficient oxidative hydrogen peroxide production and accumulation in photoelectrochemical water splitting using a tungsten trioxide/bismuth vanadate photoanode. Chemical Communications, 2016, 52, 5406-5409.	2.2	197
31	Photocatalytic decomposition of water into H2 and O2 by a two-step photoexcitation reaction using a WO3 suspension catalyst and an Fe3+/Fe2+ redox system. Chemical Physics Letters, 1997, 277, 387-391.	1.2	183
32	Dye-Sensitized Nanocrystalline TiO2 Solar Cells Based on Ruthenium(II) Phenanthroline Complex Photosensitizers. Langmuir, 2001, 17, 5992-5999.	1.6	177
33	Significant effect of iodide addition on water splitting into H2 and O2 over Pt-loaded TiO2 photocatalyst: suppression of backward reaction. Chemical Physics Letters, 2003, 371, 360-364.	1.2	167
34	Preparation of S, C cation-codoped SrTiO3 and its photocatalytic activity under visible light. Applied Catalysis A: General, 2005, 288, 74-79.	2.2	166
35	Electrochemical and Photoelectrochemical Water Oxidation for Hydrogen Peroxide Production. Angewandte Chemie - International Edition, 2021, 60, 10469-10480.	7.2	152
36	Effect of carbonate addition on the photocatalytic decomposition of liquid water over a ZrO2 catalyst. Journal of Photochemistry and Photobiology A: Chemistry, 1996, 94, 67-76.	2.0	149

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37	The effect of selected reaction parameters on the photoproduction of oxygen and hydrogen from a WO3â€"Fe2+â€"Fe3+ aqueous suspension. Journal of Photochemistry and Photobiology A: Chemistry, 1999, 122, 175-183.	2.0	148
38	Influence of electrolytes on the photovoltaic performance of organic dye-sensitized nanocrystalline TiO2 solar cells. Solar Energy Materials and Solar Cells, 2001, 70, 151-161.	3.0	147
39	In-situ FT-IR study on CO2 hydrogenation over Cu catalysts supported on SiO2, Al2O3, and TiO2. Applied Catalysis A: General, 1997, 165, 391-409.	2.2	146
40	The photocatalytic oxidation of water to O2 over pure CeO2, WO3, and TiO2 using Fe3+ and Ce4+ as electron acceptors. Applied Catalysis A: General, 2001, 205, 117-128.	2.2	143
41	Photocatalytic decomposition of water over platinum-intercalated potassium niobate (K4Nb6O17). The Journal of Physical Chemistry, 1991, 95, 1345-1348.	2.9	141
42	Highly active WO3 semiconductor photocatalyst prepared from amorphous peroxo-tungstic acid for the degradation of various organic compounds. Applied Catalysis B: Environmental, 2010, 94, 150-157.	10.8	137
43	CO2 hydrogenation to ethanol over promoted Rh/SiO2 catalysts. Catalysis Today, 1996, 28, 261-266.	2.2	136
44	High-Throughput Screening Using Porous Photoelectrode for the Development of Visible-Light-Responsive Semiconductors. ACS Combinatorial Science, 2007, 9, 574-581.	3.3	136
45	Photocatalytic Water Splitting for Solar Hydrogen Production Using the Carbonate Effect and the Zâ€Scheme Reaction. Advanced Energy Materials, 2019, 9, 1801294.	10.2	136
46	Photocatalytic water splitting on nickel intercalated A4TaxNb6-xO17 (A = K, Rb). Catalysis Today, 1996, 28, 175-182.	2.2	135
47	Complete oxidation of acetaldehyde and toluene over a Pd/WO3 photocatalyst under fluorescent- or visible-light irradiation. Chemical Communications, 2008, , 5565.	2.2	135
48	Production of High-Value-Added Chemicals on Oxide Semiconductor Photoanodes under Visible Light for Solar Chemical-Conversion Processes. ACS Energy Letters, 2018, 3, 1093-1101.	8.8	134
49	Photoelectrochemical Hydrogen Peroxide Production from Water on a WO₃/BiVO₄ Photoanode and from O₂ on an Au Cathode Without External Bias. Chemistry - an Asian Journal, 2017, 12, 1111-1119.	1.7	128
50	Cs-Modified WO₃ Photocatalyst Showing Efficient Solar Energy Conversion for O₂ Production and Fe (III) Ion Reduction under Visible Light. Journal of Physical Chemistry Letters, 2010, 1, 1196-1200.	2.1	122
51	Reaction Mechanism and Activity of WO₃-Catalyzed Photodegradation of Organic Substances Promoted by a CuO Cocatalyst. Journal of Physical Chemistry C, 2009, 113, 6602-6609.	1.5	118
52	Photocatalytic water splitting under visible light utilizing I3â^'/Iâ^' and IO3â^'/Iâ^' redox mediators by Z-scheme system using surface treated PtOx/WO3 as O2 evolution photocatalyst. Catalysis Science and Technology, 2013, 3, 1750.	2.1	112
53	Enhanced Oxidative Hydrogen Peroxide Production on Conducting Glass Anodes Modified with Metal Oxides. ChemistrySelect, 2016, 1, 5721-5726.	0.7	110
54	Cyclometalated Ruthenium(II) Complexes as Nearâ€IR Sensitizers for High Efficiency Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2012, 51, 7528-7531.	7.2	109

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55	Semiconductor-sensitized solar cells based on nanocrystalline In 2 S 3 /In 2 O 3 thin film electrodes. Solar Energy Materials and Solar Cells, 2000, 62, 441-447.	3.0	108
56	Photocatalytic activity and reaction mechanism of Pt-intercalated K4Nb6O17 catalyst on the water splitting in carbonate salt aqueous solution. Journal of Photochemistry and Photobiology A: Chemistry, 1998, 114, 125-135.	2.0	107
57	Significant effect of carbonate addition on stoichiometric photodecomposition of liquid water into hydrogen and oxygen from platinumâ€"titanium(IV) oxide suspension. Journal of the Chemical Society Chemical Communications, 1992, , 150-152.	2.0	103
58	An Artificial Z-Scheme Constructed from Dye-Sensitized Metal Oxide Nanosheets for Visible Light-Driven Overall Water Splitting. Journal of the American Chemical Society, 2020, 142, 8412-8420.	6.6	103
59	Dye-sensitized photocatalysts for efficient hydrogen production from aqueous Iâˆ' solution under visible light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 166, 115-122.	2.0	101
60	Photocatalytic Water Splitting into H2 and O2 over R3TaO7 and R3NbO7 (R = Y, Yb, Gd, La):â€‰ Effect of Crystal Structure on Photocatalytic Activity. Journal of Physical Chemistry B, 2004, 108, 811-814.	1.2	101
61	Photoâ€Electrochemical Câˆ'H Bond Activation of Cyclohexane Using a WO₃ Photoanode and Visible Light. Angewandte Chemie - International Edition, 2018, 57, 11238-11241.	7.2	95
62	Efficient hydrogen evolution from aqueous mixture of Iâˆ' and acetonitrile using a merocyanine dye-sensitized Pt/TiO2 photocatalyst under visible light irradiation. Chemical Physics Letters, 2002, 362, 441-444.	1.2	94
63	Title is missing!. Catalysis Surveys From Asia, 2000, 4, 75-80.	1.2	88
64	Promotion effect of CuO co-catalyst on WO3-catalyzed photodegradation of organic substances. Catalysis Communications, 2008, 9, 1254-1258.	1.6	87
65	Photocatalytic decomposition of water over a Ni-Loaded Rb4Nb6O17 catalyst. Journal of Catalysis, 1990, 124, 541-547.	3.1	86
66	Ethanol synthesis by catalytic hydrogenation of CO2 over Rhî—¸FeSiO2 catalysts. Energy, 1997, 22, 343-348.	4.5	86
67	A new efficient photosensitizer for nanocrystalline solar cells: synthesis and characterization of cis-bis(4,7-dicarboxy-1,10-phenanthroline)dithiocyanato ruthenium(II). Dalton Transactions RSC, 2000, , 2817-2822.	2.3	86
68	WO3/BiVO4 composite photoelectrode prepared by improved auto-combustion method for highly efficient water splitting. International Journal of Hydrogen Energy, 2014, 39, 2454-2461.	3.8	86
69	Effect of the Ligand Structure on the Efficiency of Electron Injection from Excited Ruâˆ'Phenanthroline Complexes to Nanocrystalline TiO2Films. Journal of Physical Chemistry B, 2002, 106, 374-379.	1.2	83
70	Photosensitization of Porous TiO2Semiconductor Electrode with Xanthene Dyes. Chemistry Letters, 1998, 27, 753-754.	0.7	80
71	Photocatalytic and photophysical properties of a novel series of solid photocatalysts, BiTa1âˆ'Nb O4 (0â©½xâ©½1). Chemical Physics Letters, 2001, 343, 303-308.	1.2	80
72	Optimization of tandem-structured dye-sensitized solar cell. Solar Energy Materials and Solar Cells, 2010, 94, 297-302.	3.0	77

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73	Photocatalytic hydrogen and oxygen formation under visible light irradiation with M-doped InTaO4 (M=Mn, Fe, Co, Ni and Cu) photocatalysts. Journal of Photochemistry and Photobiology A: Chemistry, 2002, 148, 65-69.	2.0	75
74	CO2 Hydrogenation over Carbide Catalysts.. Chemistry Letters, 1992, , 5-8.	0.7	74
75	WO₃/BiVO₄ photoanode coated with mesoporous Al₂O₃ layer for oxidative production of hydrogen peroxide from water with high selectivity. RSC Advances, 2017, 7, 47619-47623.	1.7	72
76	Significant effects of the distance between the cyanine dye skeleton and the semiconductor surface on the photoelectrochemical properties of dye-sensitized porous semiconductor electrodes. New Journal of Chemistry, 2001, 25, 200-202.	1.4	71
77	Selective conversion of CO2 to methanol by catalytic hydrogenation over promoted copper catalyst. Energy Conversion and Management, 1992, 33, 521-528.	4.4	69
78	The enhancement of WO3-catalyzed photodegradation of organic substances utilizing the redox cycle of copper ions. Applied Catalysis B: Environmental, 2008, 84, 42-47.	10.8	67
79	Significant influence of solvent on hydrogen production from aqueous I3âˆ’/Iâˆ’ redox solution using dye-sensitized Pt/TiO2 photocatalyst under visible light irradiation. Chemical Physics Letters, 2003, 379, 230-235.	1.2	65
80	Photocatalytic Z-Scheme Water Splitting for Independent H₂/O₂ Production via a Stepwise Operation Employing a Vanadate Redox Mediator under Visible Light. Journal of Physical Chemistry C, 2017, 121, 9691-9697.	1.5	64
81	Photoelectrochemical dimethoxylation of furan via a bromide redox mediator using a BiVO₄/WO₃ photoanode. Chemical Communications, 2017, 53, 4378-4381.	2.2	63
82	Synthesis of a new class of cyclometallated ruthenium(II) complexes and their application in dye-sensitized solar cells. Inorganic Chemistry Communication, 2009, 12, 842-845.	1.8	60
83	Highly Efficient Photon-to-Electron Conversion of Mercurochrome-sensitized Nanoporous ZnO Solar Cells. Chemistry Letters, 2000, 29, 316-317.	0.7	59
84	Photocatalytic Water Splitting into H2and O2over R2Ti2O7(R = Y, Rare Earth) with Pyrochlore Structure. Chemistry Letters, 2004, 33, 954-955.	0.7	59
85	Near-IR dye-sensitized solar cells using a new type of ruthenium complexes having 2,6-bis(quinolin-2-yl)pyridine derivatives. Solar Energy Materials and Solar Cells, 2011, 95, 310-314.	3.0	55
86	Improvement of nickel-loaded K4Nb6O17 photocatalyst for the decomposition of H2O. Catalysis Letters, 1990, 4, 217-222.	1.4	54
87	Investigations on anodic photocurrent loss processes in dye sensitized solar cells: comparison between nanocrystalline SnO2 and TiO2 films. Chemical Physics Letters, 2002, 364, 297-302.	1.2	52
88	Effect of Carbonate Ions on the Photooxidation of Water over Porous BiVO4 Film Photoelectrode under Visible Light. Chemistry Letters, 2010, 39, 17-19.	0.7	52
89	Photoelectrochemical Reaction for the Efficient Production of Hydrogen and Highâ€Valueâ€Added Oxidation Reagents. ChemSusChem, 2015, 8, 1593-1600.	3.6	52
90	WO₃ nanosponge photoanodes with high applied bias photon-to-current efficiency for solar hydrogen and peroxydisulfate production. Journal of Materials Chemistry A, 2016, 4, 17809-17818.	5.2	49

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91	Efficient hypochlorous acid (HClO) production<i>via</i>photoelectrochemical solar energy conversion using a BiVO₄-based photoanode. Sustainable Energy and Fuels, 2018, 2, 155-162.	2.5	48
92	New Ru(II) phenanthroline complex photosensitizers having different number of carboxyl groups for dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2001, 145, 117-122.	2.0	45
93	Photoelectrochemical Oxidation of Benzylic Alcohol Derivatives on BiVO₄/WO₃ under Visible Light Irradiation. ChemElectroChem, 2017, 4, 3283-3287.	1.7	44
94	Modification of BiVO₄/WO₃ composite photoelectrodes with Al₂O₃ <i>via</i> chemical vapor deposition for highly efficient oxidative H₂O₂ production from H₂O. Sustainable Energy and Fuels, 2018, 2, 1621-1629.	2.5	44
95	UV photoinduced reduction of water to hydrogen in Na2S, Na2SO3, and Na2S2O4 aqueous solutions. Journal of Photochemistry and Photobiology A: Chemistry, 1999, 128, 27-31.	2.0	43
96	Decomposition of water into H2 and O2 by a two-step photoexcitation reaction over a Ptâ€"TiO2 photocatalyst in NaNO2 and Na2CO3 aqueous solution. Catalysis Communications, 2006, 7, 96-99.	1.6	43
97	Efficient Photosensitization of Nanocrystalline TiO2Films by a New Class of Sensitizer: cis-Dithiocyanato bis(4,7-dicarboxy-1,10-phenanthroline)ruthenium(II). Chemistry Letters, 1998, 27, 1005-1006.	0.7	42
98	Oxide semiconductor materials for solar light energy utilization. Research on Chemical Intermediates, 2000, 26, 145-152.	1.3	41
99	Photocatalytic hydrogen and oxygen formation over SiO2-supported RuS2 in the presence of sacrificial donor and acceptor. Applied Catalysis A: General, 1999, 189, 127-137.	2.2	40
100	Remarkable Effect of Na2CO3Addition on Photodecomposition of Liquid Water into H2and O2from Suspension of Semiconductor Powder Loaded with Various Metals. Chemistry Letters, 1992, 21, 253-256.	0.7	39
101	Near-IR sensitization of nanocrystalline TiO2 with a new ruthenium complex having a 2,6-bis(4-carboxyquinolin-2-yl)pyridine ligand. Inorganic Chemistry Communication, 2009, 12, 1212-1215.	1.8	39
102	Conversion of CO2to Dimethylether and Methanol over Hybrid Catalysts. Chemistry Letters, 1992, 21, 1115-1118.	0.7	38
103	Photoanode characteristics of multi-layer composite BiVO4 thin film in a concentrated carbonate electrolyte solution for water splitting. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 258, 51-60.	2.0	38
104	Improvement of Photocatalytic Activity of Titanate Pyrochlore Y2Ti2O7by Addition of Excess Y. Chemistry Letters, 2005, 34, 1122-1123.	0.7	36
105	Effect of Cations on the Interactions of Ru Dye and Iodides in Dye-Sensitized Solar Cells: A Density Functional Theory Study. Journal of Physical Chemistry C, 2011, 115, 2544-2552.	1.5	33
106	Utilization of Fe3+/Fe2+ Redox for the Photodegradation of Organic Substances over WO3 Photocatalyst and for H2 Production from the Electrolysis of Water. Electrochemistry, 2008, 76, 128-131.	0.6	32
107	Alcohol synthesis by catalytic hydrogenation of CO2 over Rh-Co/SiO2. Applied Organometallic Chemistry, 2000, 14, 836-840.	1.7	31
108	Theoretical Study on the Interactions between Black Dye and Iodide in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2011, 115, 9267-9275.	1.5	29

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109	High-efficiency water oxidation and energy storage utilizing various reversible redox mediators under visible light over surface-modified WO3. RSC Advances, 2014, 4, 8308-8316.	1.7	29
110	Nitrogen-Containing Heterocyclesâ€™ Interaction with Ru Dye in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2009, 113, 20764-20771.	1.5	26
111	Theoretical Study on the Intermolecular Interactions of Black Dye Dimers and Black Dyeâ€"Deoxycholic Acid Complexes in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 23906-23914.	1.5	24
112	Photoelectrochemical Oxidation of Glycerol to Dihydroxyacetone Over an Acid-Resistant Ta:BiVO₄ Photoanode. ACS Sustainable Chemistry and Engineering, 2022, 10, 7586-7594.	3.2	24
113	Significant Effects of Anion in Aqueous Reactant Solution on Photocatalytic O2 Evolution and Fe(III) Reduction. Chemistry Letters, 2010, 39, 846-847.	0.7	22
114	Combinatorial Search for Iron/Titanium-Based Ternary Oxides with a Visible-Light Response. ACS Combinatorial Science, 2010, 12, 356-362.	3.3	22
115	Photoâ€Electrochemical Câ^'H Bond Activation of Cyclohexane Using a WO₃ Photoanode and Visible Light. Angewandte Chemie, 2018, 130, 11408-11411.	1.6	22
116	Photocatalytic water splitting employing a [Fe(CN)₆]^{3â^'/4â^'} redox mediator under visible light. Catalysis Science and Technology, 2019, 9, 2019-2024.	2.1	22
117	Efficient H₂O₂ Production via H₂O Oxidation on an Anode Modified with Sbâ€Containing Mixed Metal Oxides. ChemElectroChem, 2020, 7, 2448-2455.	1.7	22
118	Viewing nanocrystalline TiO2 photoelectrodes as three-dimensional electrodes: Effect of the electrolyte upon the photocurrent efficiency. Electrochimica Acta, 2006, 52, 694-703.	2.6	21
119	Simultaneous Interactions of Ru Dye with Iodide Ions and Nitrogen-Containing Heterocycles in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 11335-11341.	1.5	21
120	Nearâ€IR Sensitization of Dyeâ€Sensitized Solar Cells Using Thiocyanateâ€Free Cyclometalated Ruthenium(II) Complexes Having a Pyridylquinoline Ligand. European Journal of Inorganic Chemistry, 2014, 2014, 1303-1311.	1.0	21
121	Highly efficient Fe(<scp>iii</scp>) reduction and solar-energy accumulation over a BiVO₄ photocatalyst. Chemical Communications, 2018, 54, 2670-2673.	2.2	21
122	Reverse Electron Transfer from TiO2to I2in Nanocrystalline TiO2Film Electrodes with Coadsorbed Bipyridine and Biquinoline Ruthenium Complexes. Journal of Physical Chemistry C, 2007, 111, 201-209.	1.5	20
123	Systematic evaluation of HOMO energy levels for efficient dye regeneration in dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 15945-15951.	5.2	20
124	PINO/NHPI-mediated selective oxidation of cycloalkenes to cycloalkenones <i>via</i> a photo-electrochemical method. Chemical Communications, 2019, 55, 9339-9342.	2.2	20
125	Solar-light-driven photocatalytic production of peroxydisulfate over noble-metal loaded WO₃. Chemical Communications, 2019, 55, 3813-3816.	2.2	20
126	Photocatalytic Production of Hypochlorous Acid over Pt/WO₃ under Simulated Solar Light. ACS Sustainable Chemistry and Engineering, 2020, 8, 8629-8637.	3.2	20

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127	Adsorption of merocyanine dye on rutile TiO2(1 1 0). Chemical Physics Letters, 2002, 360, 133-138.	1.2	19
128	Improved performance of Black-dye-sensitized solar cells with nanocrystalline anatase TiO2 photoelectrodes prepared from TiCl4 and ammonium carbonate. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 189, 100-104.	2.0	19
129	Photocatalytic Energy Storage over Surface-modified WO3 Using V5+/V4+ Redox Mediator. Chemistry Letters, 2012, 41, 1489-1491.	0.7	19
130	Electrochemical H₂O₂ Production and Accumulation from H₂O by Composite Effect of Al₂O₃ and BiVO₄. Journal of the Electrochemical Society, 2019, 166, H644-H649.	1.3	19
131	The Photoproduction of O2from a Suspension Containing CeO2and Ce4+Cations as an Electron Acceptor. Chemistry Letters, 1999, 28, 1047-1048.	0.7	18
132	Selective oxidation of aldehydes on TiO2 photocatalysts modified with functional groups. Journal of Molecular Catalysis A, 2006, 245, 47-54.	4.8	17
133	Reverse electron transfer at the interface of semiconductor film in dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 182, 288-295.	2.0	16
134	Selective Hydrogenation of Carbon Dioxide to Methanol on Cuâ€"ZnO/SiO2Catalysts Prepared by Alkoxide Method. Bulletin of the Chemical Society of Japan, 1992, 65, 2520-2525.	2.0	15
135	Effect of Catalyst Preparation on the Oxidative Coupling of Methane over SrOâ€"La2O3. Bulletin of the Chemical Society of Japan, 1994, 67, 2894-2897.	2.0	15
136	Effect of Side Groups for Ruthenium Bipyridyl Dye on the Interactions with Iodine in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 1493-1502.	1.5	14
137	A comparative computational study on the interactions of N719 and N749 dyes with iodine in dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2015, 17, 4379-4387.	1.3	14
138	Photocatalytic water oxidation over PbCrO₄ with 2.3 eV band gap in IO₃^{âˆ’}/I^{âˆ’} redox mediator under visible light. RSC Advances, 2015, 5, 1452-1455.	1.7	14
139	Sustainable chromic acid oxidation: solar-driven recycling of hexavalent chromium ions for quinone production by WO₃nanosponge photoanodes. Journal of Materials Chemistry A, 2018, 6, 110-117.	5.2	14
140	Attachment of an Organic Dye on a TiO2Substrate in Supercritical CO2: Application to a Solar Cell. Chemistry Letters, 1999, 28, 853-854.	0.7	13
141	A Na-containing Pt cocatalyst for efficient visible-light-induced hydrogen evolution on BaTaO₂N. Journal of Materials Chemistry A, 2021, 9, 13851-13854.	5.2	13
142	Improvement of photoelectrochemical HClO production under visible light irradiation by loading cobalt oxide onto a BiVO₄ photoanode. Catalysis Science and Technology, 2021, 11, 5467-5471.	2.1	13
143	Novel and Efficient Organic Liquid Electrolytes for Dye-sensitized Solar Cells Based on a Ru(II) Terpyridyl Complex Photosensitizer. Chemistry Letters, 2003, 32, 1014-1015.	0.7	12
144	Selective oxidation of benzaldehyde derivatives on TiO2 photocatalysts modified with fluorocarbon group. Catalysis Letters, 2005, 102, 207-210.	1.4	12

#	Article	IF	Citations
145	Dependence of electron transport in nanocrystalline TiO2 films sensitized with [NBu4]2[Ru(Htcterpy)(NCS)3] ([NBu4]+=tetrabutylammonium cation;) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 742 Td (H3tcterp Electrochimica Acta, 2006, 51, 3993-4002.	2.6	12
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147	Intermolecular interactions between a Ru complex and organic dyes in cosensitized solar cells: a computational study. Physical Chemistry Chemical Physics, 2014, 16, 16166.	1.3	12
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