

Kazuhiro Sayama

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8065742/kazuhiro-sayama-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

184
papers

18,847
citations

69
h-index

136
g-index

190
ext. papers

19,978
ext. citations

5.3
avg, IF

6.76
L-index

#	Paper	IF	Citations
184	Solar-to-Pharmaceutical Raw Material Production: Photoelectrochemical Naphthoquinone Formation Using Stabilized BiVO Photoanodes in Acid Media. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 57132-57141	9.5	0
183	Acid-Resistant BiVO Photoanodes: Insolubility Control by Solvents and Weak W Diffusion in the Lattice. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 12079-12090	9.5	3
182	NaBr-Assisted Photoelectrochemical and Photochemical Integrated Process for Isomerization of Maleate Esters to Fumarate Esters. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 6886-6893	8.3	1
181	Electrochemical and Photoelectrochemical Water Oxidation for Hydrogen Peroxide Production. <i>Angewandte Chemie</i> , 2021 , 133, 10561-10572	3.6	1
180	Electrochemical and Photoelectrochemical Water Oxidation for Hydrogen Peroxide Production. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 10469-10480	16.4	51
179	Effective solar-light-driven photocatalytic production of hypobromous acid on film-like photocatalyst sheets. <i>Sustainable Energy and Fuels</i> , 2021 , 5, 3648-3655	5.8	0
178	A Na-containing Pt cocatalyst for efficient visible-light-induced hydrogen evolution on BaTaO ₂ N. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 13851-13854	13	3
177	A Z-scheme system constructed from WO ₃ modified TiO ₂ doped with Cr and Sb for visible light-driven overall water splitting. <i>Applied Physics Letters</i> , 2021 , 119, 113901	3.4	1
176	An Improved Z-Scheme for Overall Water Splitting Using Dye-Sensitized Calcium Niobate Nanosheets Synthesized by a Flux Method. <i>ACS Applied Energy Materials</i> , 2021 , 4, 10145-10152	6.1	3
175	Improvement of photoelectrochemical HClO production under visible light irradiation by loading cobalt oxide onto a BiVO ₄ photoanode. <i>Catalysis Science and Technology</i> , 2021 , 11, 5467-5471	5.5	2
174	HO production on a carbon cathode loaded with a nickel carbonate catalyst and on an oxide photoanode without an external bias.. <i>RSC Advances</i> , 2021 , 11, 11224-11232	3.7	1
173	An Artificial Z-Scheme Constructed from Dye-Sensitized Metal Oxide Nanosheets for Visible Light-Driven Overall Water Splitting. <i>Journal of the American Chemical Society</i> , 2020 , 142, 8412-8420	16.4	60
172	Photocatalytic Production of Hypochlorous Acid over Pt/WO ₃ under Simulated Solar Light. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 8629-8637	8.3	7
171	InBe mixed oxide as an oxygen-evolution photocatalyst for visible-light-driven Z-scheme water splitting. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 2686-2690	5.8	4
170	Efficient H ₂ O ₂ Production via H ₂ O Oxidation on an Anode Modified with Sb-Containing Mixed Metal Oxides. <i>ChemElectroChem</i> , 2020 , 7, 2448-2455	4.3	9
169	Electrochemical H ₂ O ₂ Production and Accumulation from H ₂ O by Composite Effect of Al ₂ O ₃ and BiVO ₄ . <i>Journal of the Electrochemical Society</i> , 2019 , 166, H644-H649	3.9	14
168	Photocatalytic water splitting employing a [Fe(CN) ₆] ^{3/4-} redox mediator under visible light. <i>Catalysis Science and Technology</i> , 2019 , 9, 2019-2024	5.5	11

167	Solar-light-driven photocatalytic production of peroxydisulfate over noble-metal loaded WO ₃ . <i>Chemical Communications</i> , 2019 , 55, 3813-3816	5.8	17
166	Photocatalytic Water Splitting for Solar Hydrogen Production Using the Carbonate Effect and the Z-Scheme Reaction. <i>Advanced Energy Materials</i> , 2019 , 9, 1801294	21.8	89
165	Diffusion controlled porous WO ₃ thin film photoanodes for efficient solar-driven photoelectrochemical permanganic acid production. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 2380-2390	5.8	5
164	PINO/NHPI-mediated selective oxidation of cycloalkenes to cycloalkenones via a photo-electrochemical method. <i>Chemical Communications</i> , 2019 , 55, 9339-9342	5.8	11
163	Solar-light-driven non-bias photoelectrolysis for bleach production from sea water and atmospheric oxygen. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 3441-3447	5.8	6
162	Production of High-Value-Added Chemicals on Oxide Semiconductor Photoanodes under Visible Light for Solar Chemical-Conversion Processes. <i>ACS Energy Letters</i> , 2018 , 3, 1093-1101	20.1	88
161	Highly efficient Fe(III) reduction and solar-energy accumulation over a BiVO ₄ photocatalyst. <i>Chemical Communications</i> , 2018 , 54, 2670-2673	5.8	17
160	Photo-Electrochemical C-H Bond Activation of Cyclohexane Using a WO ₃ Photoanode and Visible Light. <i>Angewandte Chemie</i> , 2018 , 130, 11408-11411	3.6	16
159	Photo-Electrochemical C-H Bond Activation of Cyclohexane Using a WO ₃ Photoanode and Visible Light. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 11238-11241	16.4	55
158	Modification of BiVO ₄ /WO ₃ composite photoelectrodes with Al ₂ O ₃ via chemical vapor deposition for highly efficient oxidative H ₂ O ₂ production from H ₂ O. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 1621-1629	5.8	29
157	Sustainable chromic acid oxidation: solar-driven recycling of hexavalent chromium ions for quinone production by WO ₃ nanosponge photoanodes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 110-117	13	11
156	Efficient hypochlorous acid (HClO) production via photoelectrochemical solar energy conversion using a BiVO ₄ -based photoanode. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 155-162	5.8	30
155	Photocatalytic Z-Scheme Water Splitting for Independent H ₂ /O ₂ Production via a Stepwise Operation Employing a Vanadate Redox Mediator under Visible Light. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 9691-9697	3.8	51
154	Photoelectrochemical Hydrogen Peroxide Production from Water on a WO ₃ /BiVO ₄ Photoanode and from O ₂ on an Au Cathode Without External Bias. <i>Chemistry - an Asian Journal</i> , 2017 , 12, 1111-1119	4.5	94
153	Photoelectrochemical dimethoxylation of furan via a bromide redox mediator using a BiVO ₄ /WO ₃ photoanode. <i>Chemical Communications</i> , 2017 , 53, 4378-4381	5.8	41
152	WO ₃ /BiVO ₄ photoanode coated with mesoporous Al ₂ O ₃ layer for oxidative production of hydrogen peroxide from water with high selectivity. <i>RSC Advances</i> , 2017 , 7, 47619-47623	3.7	42
151	Photoelectrochemical Oxidation of Benzylic Alcohol Derivatives on BiVO ₄ /WO ₃ under Visible Light Irradiation. <i>ChemElectroChem</i> , 2017 , 4, 3283-3287	4.3	28
150	Novel Cobalt Complexes as a Dopant for Hole-transporting Material in Perovskite Solar Cells. <i>Electrochemistry</i> , 2017 , 85, 226-230	1.2	10

149	A computational study on Ru complexes with bidentate carboxylate ligands: Insights into the photocurrents of dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2016 , 314, 171-177	4.7	5
148	Comparative study on the interactions of TEMPO and iodine with organic dyes in dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2016 , 330, 95-101	4.7	3
147	Enhanced Oxidative Hydrogen Peroxide Production on Conducting Glass Anodes Modified with Metal Oxides. <i>ChemistrySelect</i> , 2016 , 1, 5721-5726	1.8	71
146	WO ₃ nanosponge photoanodes with high applied bias photon-to-current efficiency for solar hydrogen and peroxydisulfate production. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 17809-17818	13	35
145	Efficient oxidative hydrogen peroxide production and accumulation in photoelectrochemical water splitting using a tungsten trioxide/bismuth vanadate photoanode. <i>Chemical Communications</i> , 2016 , 52, 5406-9	5.8	134
144	Solar Hydrogen Production on Photocatalysis-Electrolysis Hybrid System Using Redox Mediator and Porous Oxide Photoelectrodes. <i>Lecture Notes in Energy</i> , 2016 , 345-365	0.4	
143	Visible-Light-Responsive Photocatalysts and Photoelectrodes Using WO ₃ Semiconductors for Degradation of Organics and Water Splitting. <i>Nanostructure Science and Technology</i> , 2016 , 429-442	0.9	
142	Photocatalytic water oxidation over PbCrO ₄ with 2.3 eV band gap in IO ₃ ⁻ /I ⁻ redox mediator under visible light. <i>RSC Advances</i> , 2015 , 5, 1452-1455	3.7	10
141	Photoelectrochemical reaction for the efficient production of hydrogen and high-value-added oxidation reagents. <i>ChemSusChem</i> , 2015 , 8, 1593-600	8.3	42
140	Discovery of Overcoating Metal Oxides on Photoelectrode for Water Splitting by Automated Screening. <i>ACS Combinatorial Science</i> , 2015 , 17, 592-9	3.9	10
139	A comparative computational study on the interactions of N719 and N749 dyes with iodine in dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 4379-87	3.6	12
138	Near-IR Sensitization of Dye-Sensitized Solar Cells Using Thiocyanate-Free Cyclometalated Ruthenium(II) Complexes Having a Pyridylquinoline Ligand. <i>European Journal of Inorganic Chemistry</i> , 2014 , 2014, 1303-1311	2.3	18
137	Systematic evaluation of HOMO energy levels for efficient dye regeneration in dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 15945-15951	13	17
136	High-efficiency water oxidation and energy storage utilizing various reversible redox mediators under visible light over surface-modified WO ₃ . <i>RSC Advances</i> , 2014 , 4, 8308-8316	3.7	25
135	Intermolecular interactions between a Ru complex and organic dyes in cosensitized solar cells: a computational study. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 16166-75	3.6	8
134	New class of NCS-free cyclometalated ruthenium(II) complexes with 6-phenylpyridine-2-carboxylate for use as near-infrared sensitizers in dye-sensitized solar cells. <i>Inorganic Chemistry Communication</i> , 2014 , 46, 137-139	3.1	8
133	Codoping Effect of Sr and Ti for Fe ₂ O ₃ Photocatalyst on Water Oxidation Utilizing IO ₃ ⁻ as a Reversible Redox Ion under Visible Light. <i>Chemistry Letters</i> , 2014 , 43, 1560-1562	1.7	3
132	WO ₃ /BiVO ₄ composite photoelectrode prepared by improved auto-combustion method for highly efficient water splitting. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 2454-2461	6.7	74

131	Photocatalytic water splitting under visible light utilizing I^3/I^- and IO_3^-/I^- redox mediators by Z-scheme system using surface treated PtOx/WO_3 as O_2 evolution photocatalyst. <i>Catalysis Science and Technology</i> , 2013 , 3, 1750	5.5	88
130	New class of thiocyanate-free cyclometalated ruthenium(II) complexes having a pyridylquinoline derivative for near-infrared sensitization of dye-sensitized solar cells. <i>Inorganic Chemistry Communication</i> , 2013 , 35, 281-283	3.1	12
129	Theoretical study of cyclometalated Ru(II) dyes: Implications on the open-circuit voltage of dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2013 , 272, 80-89	4.7	4
128	Photoanode characteristics of multi-layer composite BiVO_4 thin film in a concentrated carbonate electrolyte solution for water splitting. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2013 , 258, 51-60	4.7	37
127	Angulated $\text{Bi}^{3+}/\text{WO}_3$ with Significant Alkali Resistance and Efficient Photocatalytic Activity. <i>Chemistry Letters</i> , 2013 , 42, 395-397	1.7	2
126	Cosensitization of Cyclometalated Ruthenium Complex and Organic Dyes for High-efficiency Dye-sensitized Solar Cells. <i>Chemistry Letters</i> , 2013 , 42, 1371-1373	1.7	9
125	New Class of Thiocyanate-free Ruthenium(II) Complex as a Near-IR Sensitizer for Dye-sensitized Solar Cells. <i>Chemistry Letters</i> , 2012 , 41, 647-649	1.7	8
124	Photocatalytic Energy Storage over Surface-modified WO_3 Using $\text{V}^{5+}/\text{V}^{4+}$ Redox Mediator. <i>Chemistry Letters</i> , 2012 , 41, 1489-1491	1.7	14
123	Effect of Side Groups for Ruthenium Bipyridyl Dye on the Interactions with Iodine in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 1493-1502	3.8	13
122	Theoretical Study on the Intermolecular Interactions of Black Dye Dimers and Black Dye/Deoxycholic Acid Complexes in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 23906-23914	3.8	24
121	Highly efficient photoelectrochemical water splitting using a thin film photoanode of $\text{BiVO}_4/\text{SnO}_2/\text{WO}_3$ multi-composite in a carbonate electrolyte. <i>Chemical Communications</i> , 2012 , 48, 3833-3835	5.8	215
120	Cyclometalated ruthenium(II) complexes as near-IR sensitizers for high efficiency dye-sensitized solar cells. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 7528-31	16.4	102
119	Synthesis and Electrochemical Properties of 2,6-Bis(quinoline-2-yl)pyridyl Ruthenium Complexes as Near-Infrared Sensitizers for Dye-Sensitized Solar Cells. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NE11	1.4	5
118	Effect of Cations on the Interactions of Ru Dye and Iodides in Dye-Sensitized Solar Cells: A Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 2544-2552	3.8	32
117	Theoretical Study on the Interactions between Black Dye and Iodide in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 9267-9275	3.8	28
116	Flexible Dye-Sensitized Solar Cells with High Thermal Resistance Clay Films as Substrates. <i>Electrochemistry</i> , 2011 , 79, 801-803	1.2	4
115	Near-IR dye-sensitized solar cells using a new type of ruthenium complexes having 2,6-bis(quinolin-2-yl)pyridine derivatives. <i>Solar Energy Materials and Solar Cells</i> , 2011 , 95, 310-314	6.4	51
114	Cs-Modified WO_3 Photocatalyst Showing Efficient Solar Energy Conversion for O_2 Production and Fe (III) Ion Reduction under Visible Light. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 1196-1200	6.4	109

113	Combinatorial search for iron/titanium-based ternary oxides with a visible-light response. <i>ACS Combinatorial Science</i> , 2010 , 12, 356-62		22
112	Simultaneous Interactions of Ru Dye with Iodide Ions and Nitrogen-Containing Heterocycles in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 11335-11341	3.8	20
111	Effect of Carbonate Ions on the Photooxidation of Water over Porous BiVO ₄ Film Photoelectrode under Visible Light. <i>Chemistry Letters</i> , 2010 , 39, 17-19	1.7	49
110	Significant Effects of Anion in Aqueous Reactant Solution on Photocatalytic O ₂ Evolution and Fe(III) Reduction. <i>Chemistry Letters</i> , 2010 , 39, 846-847	1.7	20
109	Photocatalytic and Antibacterial Activities over WO ₃ on Glass Filters. <i>Chemistry Letters</i> , 2010 , 39, 884-885.	7	6
108	Optimization of tandem-structured dye-sensitized solar cell. <i>Solar Energy Materials and Solar Cells</i> , 2010 , 94, 297-302	6.4	72
107	Highly active WO ₃ semiconductor photocatalyst prepared from amorphous peroxy-tungstic acid for the degradation of various organic compounds. <i>Applied Catalysis B: Environmental</i> , 2010 , 94, 150-157	21.8	126
106	Synthesis of a new class of cyclometallated ruthenium(II) complexes and their application in dye-sensitized solar cells. <i>Inorganic Chemistry Communication</i> , 2009 , 12, 842-845	3.1	59
105	Near-IR sensitization of nanocrystalline TiO ₂ with a new ruthenium complex having a 2,6-bis(4-carboxyquinolin-2-yl)pyridine ligand. <i>Inorganic Chemistry Communication</i> , 2009 , 12, 1212-1215	3.1	38
104	Nitrogen-Containing Heterocycles Interaction with Ru Dye in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 20764-20771	3.8	24
103	Reaction Mechanism and Activity of WO ₃ -Catalyzed Photodegradation of Organic Substances Promoted by a CuO Cocatalyst. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 6602-6609	3.8	108
102	Promotion effect of CuO co-catalyst on WO ₃ -catalyzed photodegradation of organic substances. <i>Catalysis Communications</i> , 2008 , 9, 1254-1258	3.2	77
101	Complete oxidation of acetaldehyde and toluene over a Pd/WO ₃ photocatalyst under fluorescent- or visible-light irradiation. <i>Chemical Communications</i> , 2008 , 5565-7	5.8	124
100	Preparation of a Visible Light-responding Photocatalyst via Nitrogen Doping to Titanium(IV) Oxide Modified with a Silane Coupling Reagent. <i>Electrochemistry</i> , 2008 , 76, 118-120	1.2	1
99	Utilization of Fe ³⁺ /Fe ²⁺ Redox for the Photodegradation of Organic Substances over WO ₃ Photocatalyst and for H ₂ Production from the Electrolysis of Water. <i>Electrochemistry</i> , 2008 , 76, 128-131	1.2	31
98	The enhancement of WO ₃ -catalyzed photodegradation of organic substances utilizing the redox cycle of copper ions. <i>Applied Catalysis B: Environmental</i> , 2008 , 84, 42-47	21.8	63
97	High-throughput screening using porous photoelectrode for the development of visible-light-responsive semiconductors. <i>ACS Combinatorial Science</i> , 2007 , 9, 574-81		123
96	Reverse Electron Transfer from TiO ₂ to I ₂ in Nanocrystalline TiO ₂ Film Electrodes with Coadsorbed Bipyridine and Biquinoline Ruthenium Complexes. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 201-209	3.8	20

95	Improved performance of Black-dye-sensitized solar cells with nanocrystalline anatase TiO ₂ photoelectrodes prepared from TiCl ₄ and ammonium carbonate. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2007 , 189, 100-104	4.7	17
94	Efficient Complete Oxidation of Acetaldehyde into CO ₂ over CuBi ₂ O ₄ /WO ₃ Composite Photocatalyst under Visible and UV Light Irradiation. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 7574-7577	3.8	283
93	Photocatalytic activity of R ₃ MO ₇ and R ₂ Ti ₂ O ₇ (R=Y, Gd, La; M=Nb, Ta) for water splitting into H ₂ and O ₂ . <i>Journal of Physical Chemistry B</i> , 2006 , 110, 2219-26	3.4	248
92	Photoelectrochemical decomposition of water into H ₂ and O ₂ on porous BiVO ₄ thin-film electrodes under visible light and significant effect of Ag ion treatment. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 11352-60	3.4	471
91	Decomposition of water into H ₂ and O ₂ by a two-step photoexcitation reaction over a Pt/TiO ₂ photocatalyst in NaNO ₂ and Na ₂ CO ₃ aqueous solution. <i>Catalysis Communications</i> , 2006 , 7, 96-99	3.2	38
90	Electronic-Insulating Coating of CaCO ₃ on TiO ₂ Electrode in Dye-Sensitized Solar Cells: Improvement of Electron Lifetime and Efficiency. <i>Chemistry of Materials</i> , 2006 , 18, 2912-2916	9.6	213
89	Electron Transport in Nanocrystalline TiO ₂ Films Sensitized with [NBu ₄] ⁺ [cis-Ru(Hdcbpy) ₂ (NCS) ₂] (N719; [NBu ₄] ⁺ = Tetrabutyl Ammonium Cation; Hdcbpy = 4,4'-Dicarboxy-2,2'-bipyridine) and [NBu ₄] ⁺ [Ru(Htcterpy)(NCS) ₃] (B-dye; H3tcterpy = 4,4',4'-Tricarboxy-2,2':6',2'-terpyridine). <i>Chemistry of Materials</i> , 2006 , 18, 2316-2327	1.7	6
88	Dependence of electron transport in nanocrystalline TiO ₂ films sensitized with [NBu ₄] ⁺ [Ru(Htcterpy)(NCS) ₃] ([NBu ₄] ⁺ = tetrabutylammonium cation; H3tcterpy = 4,4',4'-tricarboxy-2,4':2',4':2'-terpyridine) on the properties of TiO ₂ nanoparticles. <i>Electrochimica Acta</i> , 2006 , 51, 3993-4002	6.7	12
87	Viewing nanocrystalline TiO ₂ photoelectrodes as three-dimensional electrodes: Effect of the electrolyte upon the photocurrent efficiency. <i>Electrochimica Acta</i> , 2006 , 52, 694-703	6.7	19
86	Reverse electron transfer at the interface of semiconductor film in dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006 , 182, 288-295	4.7	12
85	Selective oxidation of aldehydes on TiO ₂ photocatalysts modified with functional groups. <i>Journal of Molecular Catalysis A</i> , 2006 , 245, 47-54		16
84	Photo-electrochemical properties of oxide semiconductors on porous titanium metal electrodes. <i>Solar Energy Materials and Solar Cells</i> , 2006 , 90, 2429-2437	6.4	7
83	Development of new photocatalytic water splitting into H ₂ and O ₂ using two different semiconductor photocatalysts and a shuttle redox mediator IO ₃ ⁻ /I ⁻ . <i>Journal of Physical Chemistry B</i> , 2005 , 109, 16052-61	3.4	285
82	Efficient eosin y dye-sensitized solar cell containing Br ⁻ /Br ₃ ⁻ electrolyte. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 22449-55	3.4	184
81	Improvement of Photocatalytic Activity of Titanate Pyrochlore Y ₂ Ti ₂ O ₇ by Addition of Excess Y. <i>Chemistry Letters</i> , 2005 , 34, 1122-1123	1.7	33
80	Preparation of S, C cation-codoped SrTiO ₃ and its photocatalytic activity under visible light. <i>Applied Catalysis A: General</i> , 2005 , 288, 74-79	5.1	146
79	Selective oxidation of benzaldehyde derivatives on TiO ₂ photocatalysts modified with fluorocarbon group. <i>Catalysis Letters</i> , 2005 , 102, 207-210	2.8	11
78	Influence of electrolyte on the photovoltaic performance of a dye-sensitized TiO ₂ solar cell based on a Ru(II) terpyridyl complex photosensitizer. <i>Solar Energy Materials and Solar Cells</i> , 2004 , 85, 21-21	6.4	4

77	Dye-sensitized photocatalysts for efficient hydrogen production from aqueous I ₃ ⁻ /I ⁻ solution under visible light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 166, 115-122	4.7	90
76	Photocatalytic Water Splitting into H ₂ and O ₂ over R ₃ TaO ₇ and R ₃ NbO ₇ (R = Y, Yb, Gd, La): Effect of Crystal Structure on Photocatalytic Activity. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 811-814	3.4	97
75	Effect of additives on the photovoltaic performance of coumarin-dye-sensitized nanocrystalline TiO ₂ solar cells. <i>Langmuir</i> , 2004 , 20, 4205-10	4	386
74	Photocatalytic Water Splitting into H ₂ and O ₂ over R ₂ Ti ₂ O ₇ (R = Y, Rare Earth) with Pyrochlore Structure. <i>Chemistry Letters</i> , 2004 , 33, 954-955	1.7	56
73	Oxidation of Aldehydes on TiO ₂ Photocatalysts Modified with Alkylsilyl Group. <i>Chemistry Letters</i> , 2004 , 33, 1610-1611	1.7	9
72	Novel and Efficient Organic Liquid Electrolytes for Dye-sensitized Solar Cells Based on a Ru(II) Terpyridyl Complex Photosensitizer. <i>Chemistry Letters</i> , 2003 , 32, 1014-1015	1.7	11
71	Design of new coumarin dyes having thiophene moieties for highly efficient organic-dye-sensitized solar cells. <i>New Journal of Chemistry</i> , 2003 , 27, 783-785	3.6	596
70	Molecular Design of Coumarin Dyes for Efficient Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 597-606	3.4	936
69	Significant influence of solvent on hydrogen production from aqueous I ₃ ⁻ /I ⁻ redox solution using dye-sensitized Pt/TiO ₂ photocatalyst under visible light irradiation. <i>Chemical Physics Letters</i> , 2003 , 379, 230-235	2.5	58
68	Significant effect of iodide addition on water splitting into H ₂ and O ₂ over Pt-loaded TiO ₂ photocatalyst: suppression of backward reaction. <i>Chemical Physics Letters</i> , 2003 , 371, 360-364	2.5	145
67	Dye-sensitized nanocrystalline TiO ₂ solar cells based on novel coumarin dyes. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 77, 89-103	6.4	227
66	Efficient sensitization of nanocrystalline TiO ₂ films with cyanine and merocyanine organic dyes. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 80, 47-71	6.4	271
65	Novel polyene dyes for highly efficient dye-sensitized solar cells. <i>Chemical Communications</i> , 2003 , 252-3	5.8	261
64	Photoelectrochemical decomposition of water on nanocrystalline BiVO ₄ film electrodes under visible light. <i>Chemical Communications</i> , 2003 , 2908-9	5.8	235
63	29 Effect of 3d transition-metal (M) doping in In _{1-x} M _x TaO ₄ photocatalysts on water splitting under visible light irradiation. <i>Studies in Surface Science and Catalysis</i> , 2003 , 145, 165-168	1.8	2
62	Photocatalytic hydrogen and oxygen formation under visible light irradiation with M-doped InTaO ₄ (M=Mn, Fe, Co, Ni and Cu) photocatalysts. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002 , 148, 65-69	4.7	68
61	A new photocatalytic water splitting system under visible light irradiation mimicking a Z-scheme mechanism in photosynthesis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002 , 148, 71-74	4.7	310
60	Adsorption of merocyanine dye on rutile TiO ₂ (1 1 0). <i>Chemical Physics Letters</i> , 2002 , 360, 133-138	2.5	19

59	Efficient hydrogen evolution from aqueous mixture of I ₂ and acetonitrile using a merocyanine dye-sensitized Pt/TiO ₂ photocatalyst under visible light irradiation. <i>Chemical Physics Letters</i> , 2002 , 362, 441-444	2.5	87
58	Investigations on anodic photocurrent loss processes in dye sensitized solar cells: comparison between nanocrystalline SnO ₂ and TiO ₂ films. <i>Chemical Physics Letters</i> , 2002 , 364, 297-302	2.5	49
57	Significant Effect of Carbonate Ions on the Photooxidation of Water on Mesoporous TiO ₂ Film Electrodes. <i>Chemistry Letters</i> , 2002 , 31, 994-995	1.7	8
56	Effect of the Ligand Structure on the Efficiency of Electron Injection from Excited Ru(II)phenanthroline Complexes to Nanocrystalline TiO ₂ Films. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 374-379	3.4	72
55	Quantitative Analysis of Light-Harvesting Efficiency and Electron-Transfer Yield in Ruthenium-Dye-Sensitized Nanocrystalline TiO ₂ Solar Cells. <i>Chemistry of Materials</i> , 2002 , 14, 2527-2535	9.6	211
54	Photoelectrochemical Properties of J Aggregates of Benzothiazole Merocyanine Dyes on a Nanostructured TiO ₂ Film. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 1363-1371	3.4	334
53	New Ru(II) phenanthroline complex photosensitizers having different number of carboxyl groups for dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2001 , 145, 117-122	4.7	44
52	The photocatalytic oxidation of water to O ₂ over pure CeO ₂ , WO ₃ , and TiO ₂ using Fe ³⁺ and Ce ⁴⁺ as electron acceptors. <i>Applied Catalysis A: General</i> , 2001 , 205, 117-128	5.1	131
51	Influence of electrolytes on the photovoltaic performance of organic dye-sensitized nanocrystalline TiO ₂ solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2001 , 70, 151-161	6.4	138
50	Photocatalytic and photophysical properties of a novel series of solid photocatalysts, BiTa _{1-x} Nb _x O ₄ (0 ≤ x ≤ 1). <i>Chemical Physics Letters</i> , 2001 , 343, 303-308	2.5	75
49	A new type of water splitting system composed of two different TiO ₂ photocatalysts (anatase, rutile) and a IO ₃ ⁻ /I ⁻ shuttle redox mediator. <i>Chemical Physics Letters</i> , 2001 , 344, 339-344	2.5	287
48	Direct splitting of water under visible light irradiation with an oxide semiconductor photocatalyst. <i>Nature</i> , 2001 , 414, 625-7	50.4	2760
47	A coumarin-derivative dye sensitized nanocrystalline TiO ₂ solar cell having a high solar-energy conversion efficiency up to 5.6%. <i>Chemical Communications</i> , 2001 , 569-570	5.8	523
46	Dye-Sensitized Nanocrystalline TiO ₂ Solar Cells Based on Ruthenium(II) Phenanthroline Complex Photosensitizers. <i>Langmuir</i> , 2001 , 17, 5992-5999	4	162
45	Stoichiometric water splitting into H ₂ and O ₂ using a mixture of two different photocatalysts and an IO ₃ ⁻ /I ⁻ shuttle redox mediator under visible light irradiation. <i>Chemical Communications</i> , 2001 , 2416-7	5.8	397
44	Significant effects of the distance between the cyanine dye skeleton and the semiconductor surface on the photoelectrochemical properties of dye-sensitized porous semiconductor electrodes. <i>New Journal of Chemistry</i> , 2001 , 25, 200-202	3.6	69
43	Electrochemical Preparation of Poly(3-thiopheneacetic acid) and Its n-Type Semiconductor Property. <i>Bulletin of the Chemical Society of Japan</i> , 2000 , 73, 583-587	5.1	6
42	Highly Efficient Photon-to-Electron Conversion of Mercurochrome-sensitized Nanoporous ZnO Solar Cells. <i>Chemistry Letters</i> , 2000 , 29, 316-317	1.7	58

41	Alcohol synthesis by catalytic hydrogenation of CO ₂ over Rh ₁₀ /SiO ₂ . <i>Applied Organometallic Chemistry</i> , 2000 , 14, 836-840	3.1	27
40	Semiconductor-sensitized solar cells based on nanocrystalline In ₂ S ₃ /In ₂ O ₃ thin film electrodes. <i>Solar Energy Materials and Solar Cells</i> , 2000 , 62, 441-447	6.4	99
39	Highly efficient photon-to-electron conversion with mercurochrome-sensitized nanoporous oxide semiconductor solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2000 , 64, 115-134	6.4	482
38	Steady hydrogen evolution from water on Eosin Y-fixed TiO ₂ photocatalyst using a silane-coupling reagent under visible light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2000 , 137, 63-69	4.7	230
37	Solar hydrogen production. Significant effect of Na ₂ CO ₃ addition on water splitting using simple oxide semiconductor photocatalysts. <i>Catalysis Surveys From Asia</i> , 2000 , 4, 75-80		80
36	Oxide semiconductor materials for solar light energy utilization. <i>Research on Chemical Intermediates</i> , 2000 , 26, 145-152	2.8	34
35	A new efficient photosensitizer for nanocrystalline solar cells: synthesis and characterization of cis-bis(4,7-dicarboxy-1,10-phenanthroline)dithiocyanato ruthenium(II). <i>Dalton Transactions RSC</i> , 2000 , 2817-2822		82
34	Photosensitization of a porous TiO ₂ electrode with merocyanine dyes containing a carboxyl group and a long alkyl chain. <i>Chemical Communications</i> , 2000 , 1173-1174	5.8	290
33	Photocatalytic hydrogen and oxygen formation over SiO ₂ -supported RuS ₂ in the presence of sacrificial donor and acceptor. <i>Applied Catalysis A: General</i> , 1999 , 189, 127-137	5.1	36
32	The effect of selected reaction parameters on the photoproduction of oxygen and hydrogen from a WO ₃ /Fe ²⁺ /Fe ³⁺ aqueous suspension. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1999 , 122, 175-183	4.7	134
31	UV photoinduced reduction of water to hydrogen in Na ₂ S, Na ₂ SO ₃ , and Na ₂ S ₂ O ₄ aqueous solutions. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1999 , 128, 27-31	4.7	39
30	Attachment of an Organic Dye on a TiO ₂ Substrate in Supercritical CO ₂ : Application to a Solar Cell. <i>Chemistry Letters</i> , 1999 , 28, 853-854	1.7	13
29	The Photoproduction of O ₂ from a Suspension Containing CeO ₂ and Ce ⁴⁺ Cations as an Electron Acceptor. <i>Chemistry Letters</i> , 1999 , 28, 1047-1048	1.7	16
28	Photocatalytic activity and reaction mechanism of Pt-intercalated K ₄ Nb ₆ O ₁₇ catalyst on the water splitting in carbonate salt aqueous solution. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1998 , 114, 125-135	4.7	94
27	Photoelectrochemical Properties of a Porous Nb ₂ O ₅ Electrode Sensitized by a Ruthenium Dye. <i>Chemistry of Materials</i> , 1998 , 10, 3825-3832	9.6	442
26	Photosensitization of Porous TiO ₂ Semiconductor Electrode with Xanthene Dyes. <i>Chemistry Letters</i> , 1998 , 27, 753-754	1.7	77
25	Photocatalytic Activity of RuS ₂ /SiO ₂ for Water Decomposition. <i>Chemistry Letters</i> , 1998 , 27, 387-388	1.7	5
24	Efficient Photosensitization of Nanocrystalline TiO ₂ Films by a New Class of Sensitizer: cis-Dithiocyanato bis(4,7-dicarboxy-1,10-phenanthroline)ruthenium(II). <i>Chemistry Letters</i> , 1998 , 27, 1005-1006	1.7	39

23	Photo-Oxidative Coupling of Methane over TiO ₂ -based Catalysts. <i>Chemistry Letters</i> , 1997 , 26, 457-458	1.7	5
22	Effect of carbonate salt addition on the photocatalytic decomposition of liquid water over Pt/TiO ₂ catalyst. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1997 , 93, 1647-1654		217
21	In-situ FT-IR study on CO ₂ hydrogenation over Cu catalysts supported on SiO ₂ , Al ₂ O ₃ , and TiO ₂ . <i>Applied Catalysis A: General</i> , 1997 , 165, 391-409	5.1	112
20	Ethanol synthesis by catalytic hydrogenation of CO ₂ over Rh ₂ FeSiO ₂ catalysts. <i>Energy</i> , 1997 , 22, 343-348	7.9	64
19	Photocatalytic decomposition of water into H ₂ and O ₂ by a two-step photoexcitation reaction using a WO ₃ suspension catalyst and an Fe ³⁺ /Fe ²⁺ redox system. <i>Chemical Physics Letters</i> , 1997 , 277, 387-391	2.5	163
18	Effect of carbonate addition on the photocatalytic decomposition of liquid water over a ZrO ₂ catalyst. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1996 , 94, 67-76	4.7	128
17	Photocatalytic water splitting on nickel intercalated A ₄ TaxNb _{6-x} O ₁₇ (A = K, Rb). <i>Catalysis Today</i> , 1996 , 28, 175-182	5.3	128
16	CO ₂ hydrogenation to ethanol over promoted Rh/SiO ₂ catalysts. <i>Catalysis Today</i> , 1996 , 28, 261-266	5.3	102
15	Ethanol Synthesis by Catalytic Hydrogenation of Carbon Dioxide over Promoted Rhodium Catalysts. I. The Effect of Additives on Ethanol Synthesis by Catalytic Hydrogenation of Carbon Dioxide over Silica Supported Rhodium Catalysts.. <i>Nippon Kagaku Kaishi / Chemical Society of Japan - Chemistry and Industrial Chemistry Journal</i> , 1995 , 1995, 875-880		7
14	Effect of Na ₂ CO ₃ addition on photocatalytic decomposition of liquid water over various semiconductor catalysis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1994 , 77, 243-247	4.7	224
13	Effect of Catalyst Preparation on the Oxidative Coupling of Methane over SrO ₂ La ₂ O ₃ . <i>Bulletin of the Chemical Society of Japan</i> , 1994 , 67, 2894-2897	5.1	12
12	Photocatalytic decomposition of water and photocatalytic reduction of carbon dioxide over zirconia catalyst. <i>The Journal of Physical Chemistry</i> , 1993 , 97, 531-533		435
11	CO ₂ Hydrogenation over Carbide Catalysts.. <i>Chemistry Letters</i> , 1992 , 5-8	1.7	68
10	Selective Hydrogenation of Carbon Dioxide to Methanol on CuZnO/SiO ₂ Catalysts Prepared by Alkoxide Method. <i>Bulletin of the Chemical Society of Japan</i> , 1992 , 65, 2520-2525	5.1	11
9	Conversion of CO ₂ to Dimethylether and Methanol over Hybrid Catalysts. <i>Chemistry Letters</i> , 1992 , 21, 1115-1118	1.7	29
8	Remarkable Effect of Na ₂ CO ₃ Addition on Photodecomposition of Liquid Water into H ₂ and O ₂ from Suspension of Semiconductor Powder Loaded with Various Metals. <i>Chemistry Letters</i> , 1992 , 21, 253-256	1.7	36
7	Significant effect of carbonate addition on stoichiometric photodecomposition of liquid water into hydrogen and oxygen from platinum-titanium(IV) oxide suspension. <i>Journal of the Chemical Society Chemical Communications</i> , 1992 , 150-152		93
6	Selective conversion of CO ₂ to methanol by catalytic hydrogenation over promoted copper catalyst. <i>Energy Conversion and Management</i> , 1992 , 33, 521-528	10.6	67

5	EXAFS Investigation of Pentasil-Structured Gallium-Containing Metallosilicates. <i>Bulletin of the Chemical Society of Japan</i> , 1991 , 64, 2602-2604	5.1	5
4	Photocatalytic decomposition of water over platinum-intercalated potassium niobate (K4Nb6O17). <i>The Journal of Physical Chemistry</i> , 1991 , 95, 1345-1348		127
3	Improvement of nickel-loaded K4Nb6O17 photocatalyst for the decomposition of H2O. <i>Catalysis Letters</i> , 1990 , 4, 217-222	2.8	52
2	Photocatalytic decomposition of water over a Ni-Loaded Rb4Nb6O17 catalyst. <i>Journal of Catalysis</i> , 1990 , 124, 541-547	7.3	80
1	Nickel-loaded K4Nb6O17 photocatalyst in the decomposition of H2O into H2 and O2: Structure and reaction mechanism. <i>Journal of Catalysis</i> , 1989 , 120, 337-352	7.3	238