

Akira Yamakata

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ext. citations

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#	Paper	IF	Citations
147	Cobalt-modified porous single-crystalline LaTiO ₂ N for highly efficient water oxidation under visible light. <i>Journal of the American Chemical Society</i> , 2012 , 134, 8348-51	16.4	329
146	Nature-Inspired, Highly Durable CO ₂ Reduction System Consisting of a Binuclear Ruthenium(II) Complex and an Organic Semiconductor Using Visible Light. <i>Journal of the American Chemical Society</i> , 2016 , 138, 5159-70	16.4	329
145	Water- and Oxygen-Induced Decay Kinetics of Photogenerated Electrons in TiO ₂ and Pt/TiO ₂ : A Time-Resolved Infrared Absorption Study. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 7258-7262	3.4	269
144	Visible light responsive pristine metal oxide photocatalyst: enhancement of activity by crystallization under hydrothermal treatment. <i>Journal of the American Chemical Society</i> , 2008 , 130, 17650-17654	16.4	202
143	Electron- and Hole-Capture Reactions on Pt/TiO ₂ Photocatalyst Exposed to Methanol Vapor Studied with Time-Resolved Infrared Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 9122-9125	3.4	194
142	Structure of Water at the Electrified Platinum/Water Interface: A Study by Surface-Enhanced Infrared Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 4248-4256	3.8	187
141	Time-resolved infrared absorption spectroscopy of photogenerated electrons in platinumized TiO ₂ particles. <i>Chemical Physics Letters</i> , 2001 , 333, 271-277	2.5	169
140	Flux-mediated doping of SrTiO ₃ photocatalysts for efficient overall water splitting. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 3027-3033	13	152
139	Potential oscillations in galvanostatic electrooxidation of formic acid on platinum: a time-resolved surface-enhanced infrared study. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 23509-16	3.4	152
138	Effect of Particle Size on the Photocatalytic Activity of WO ₃ Particles for Water Oxidation. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 22584-22590	3.8	146
137	Photodynamics of NaTaO ₃ Catalysts for Efficient Water Splitting. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 14383-14387	3.4	139
136	Trapping-Induced Enhancement of Photocatalytic Activity on Brookite TiO ₂ Powders: Comparison with Anatase and Rutile TiO ₂ Powders. <i>ACS Catalysis</i> , 2017 , 7, 2644-2651	13.1	134
135	Distinctive Behavior of Photogenerated Electrons and Holes in Anatase and Rutile TiO ₂ Powders. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 24538-24545	3.8	131
134	ATR-SEIRAS investigation of the Fermi level of Pt cocatalyst on a GaN photocatalyst for hydrogen evolution under irradiation. <i>Journal of the American Chemical Society</i> , 2009 , 131, 13218-9	16.4	126
133	Kinetics of the photocatalytic water-splitting reaction on TiO ₂ and Pt/TiO ₂ studied by time-resolved infrared absorption spectroscopy. <i>Journal of Molecular Catalysis A</i> , 2003 , 199, 85-94		121
132	Behavior and Energy States of Photogenerated Charge Carriers on Pt- or CoOx-Loaded LaTiO ₂ N Photocatalysts: Time-Resolved Visible to Mid-Infrared Absorption Study. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 23897-23906	3.8	102
131	Heteroatom Dopants Promote Two-Electron O Reduction for Photocatalytic Production of H ₂ O on Polymeric Carbon Nitride. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 16209-16217	16.4	98

130	Atomically dispersed antimony on carbon nitride for the artificial photosynthesis of hydrogen peroxide. <i>Nature Catalysis</i> , 2021 , 4, 374-384	36.5	96
129	Carrier Dynamics in TiO ₂ and Pt/TiO ₂ Powders Observed by Femtosecond Time-Resolved Near-Infrared Spectroscopy at a Spectral Region of 0.9–1.5 μm with the Direct Absorption Method. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 20233-20239	3.4	91
128	Solar-driven Z-scheme water splitting using tantalum/nitrogen co-doped rutile titania nanorod as an oxygen evolution photocatalyst. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 11710-11719	13	76
127	Behavior and Energy State of Photogenerated Charge Carriers in Single-Crystalline and Polycrystalline Powder SrTiO ₃ Studied by Time-Resolved Absorption Spectroscopy in the Visible to Mid-Infrared Region. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 1880-1885	3.8	74
126	NH ₃ -Assisted Flux Growth of Cube-like BaTaO ₂ N Submicron Crystals in a Completely Ionized Nonaqueous High-Temperature Solution and Their Water Splitting Activity. <i>Crystal Growth and Design</i> , 2015 , 15, 4663-4671	3.5	73
125	Transient IR absorption study of charge carriers photogenerated in sulfur-doped TiO ₂ . <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006 , 177, 269-275	4.7	72
124	Effects of Water Addition on the Methanol Oxidation on Pt/TiO ₂ Photocatalyst Studied by Time-Resolved Infrared Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 9820-9823	3.4	71
123	Curious behaviors of photogenerated electrons and holes at the defects on anatase, rutile, and brookite TiO ₂ powders: A review. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2019 , 40, 234-243	16.4	71
122	Plasmonic p-n Junction for Infrared Light to Chemical Energy Conversion. <i>Journal of the American Chemical Society</i> , 2019 , 141, 2446-2450	16.4	70
121	Near infrared light induced plasmonic hot hole transfer at a nano-heterointerface. <i>Nature Communications</i> , 2018 , 9, 2314	17.4	58
120	Interfacial Manipulation by Rutile TiO Nanoparticles to Boost CO Reduction into CO on a Metal-Complex/Semiconductor Hybrid Photocatalyst. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 23869-23877	9.5	56
119	Undoped Layered Perovskite Oxynitride Li LaTa O N for Photocatalytic CO Reduction with Visible Light. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 8154-8158	16.4	51
118	Morphology-sensitive trapping states of photogenerated charge carriers on SrTiO ₃ particles studied by time-resolved visible to Mid-IR absorption spectroscopy: The effects of molten salt flux treatments. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2015 , 313, 168-175	4.7	51
117	Laser-induced potential jump at the electrochemical interface probed by picosecond time-resolved surface-enhanced infrared absorption spectroscopy. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 6423-7	3.4	49
116	Sequential cocatalyst decoration on BaTaON towards highly-active Z-scheme water splitting. <i>Nature Communications</i> , 2021 , 12, 1005	17.4	46
115	NH ₃ -Assisted Flux-Mediated Direct Growth of LaTiO ₂ N Crystallites for Visible-Light-Induced Water Splitting. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 15896-15904	3.8	44
114	Effects of Interfacial Electron Transfer in Metal Complex/Semiconductor Hybrid Photocatalysts on Z-Scheme CO ₂ Reduction under Visible Light. <i>ACS Catalysis</i> , 2018 , 8, 9744-9754	13.1	44
113	Photocatalytic property of metal ion added SrTiO ₃ to Overall H ₂ O splitting. <i>Applied Catalysis A: General</i> , 2016 , 521, 227-232	5.1	43

112	Enhanced photocatalytic NO _x decomposition of visible-light responsive F-TiO ₂ /(N,C)-TiO ₂ by charge transfer between F-TiO ₂ and (N,C)-TiO ₂ through their doping levels. <i>Applied Catalysis B: Environmental</i> , 2018 , 238, 358-364	21.8	43
111	Potential-dependent recombination kinetics of photogenerated electrons in n- and p-type GaN photoelectrodes studied by time-resolved IR absorption spectroscopy. <i>Journal of the American Chemical Society</i> , 2011 , 133, 11351-7	16.4	42
110	Time-resolved infrared absorption study of nine TiO ₂ photocatalysts. <i>Chemical Physics</i> , 2007 , 339, 133-137	13.7	41
109	Photophysics and Electron Dynamics in Dye-Sensitized Semiconductor Film Studied by Time-Resolved Mid-IR Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 4156-4161	3.4	37
108	Real-time observation of the destruction of hydration shells under electrochemical force. <i>Journal of the American Chemical Society</i> , 2013 , 135, 15033-9	16.4	36
107	In situ surface-enhanced infrared study of hydrogen bond pairing of complementary nucleic acid bases at the electrochemical interface. <i>Analytical Chemistry</i> , 2004 , 76, 5564-9	7.8	36
106	Elucidating the impact of A-site cation change on photocatalytic H and O evolution activities of perovskite-type LnTaON (Ln = La and Pr). <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 22210-22220	3.6	34
105	Destruction of the Water Layer on a Hydrophobic Surface Induced by the Forced Approach of Hydrophilic and Hydrophobic Cations. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 1487-1491	6.4	34
104	Adsorbed structures of 4,4'-bipyridine on Cu(111) in acid studied by STM and IR. <i>Langmuir</i> , 2006 , 22, 3640-6	11.6	33
103	Microsecond kinetics of photocatalytic oxidation on Pt/TiO ₂ traced by vibrational spectroscopy. <i>Chemical Physics Letters</i> , 2003 , 376, 576-580	2.5	33
102	How g-CN Works and Is Different from TiO ₂ as an Environmental Photocatalyst: Mechanistic View. <i>Environmental Science & Technology</i> , 2020 , 54, 497-506	10.3	33
101	Excited-State Dynamics of Graphitic Carbon Nitride Photocatalyst and Ultrafast Electron Injection to a Ru(II) Mononuclear Complex for Carbon Dioxide Reduction. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 16795-16802	3.8	33
100	Construction of Spatial Charge Separation Facets on BaTaON Crystals by Flux Growth Approach for Visible-Light-Driven H ₂ Production. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 22264-22271	9.5	31
99	Destruction of the hydration shell around tetraalkylammonium ions at the electrochemical interface. <i>Journal of the American Chemical Society</i> , 2009 , 131, 6892-3	16.4	31
98	Surface-enhanced infrared absorption spectroscopic studies of adsorbed nitrate, nitric oxide, and related compounds 2: Nitrate ion adsorption at a platinum electrode. <i>Langmuir</i> , 2008 , 24, 4358-63	4	31
97	Effect of Annealing Temperature on Back Electron Transfer and Distribution of Deep Trap Sites in Dye-Sensitized TiO ₂ , Studied by Time-Resolved Infrared Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 2963-2969	3.4	30
96	Hydrogen evolution reaction catalyzed by proton-coupled redox cycle of 4,4'-bipyridine monolayer adsorbed on silver electrodes. <i>Journal of the American Chemical Society</i> , 2008 , 130, 10862-3	16.4	29
95	Surface Modifications of (ZnSe)(CuGaSe) to Promote Photocatalytic Z-Scheme Overall Water Splitting. <i>Journal of the American Chemical Society</i> , 2021 , 143, 10633-10641	16.4	29

94	Dynamics of Photogenerated Charge Carriers on Ni- and Ta-Doped SrTiO ₃ Photocatalysts Studied by Time-Resolved Absorption and Emission Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 7997-8004	3.8	29
93	KCl flux-induced growth of isometric crystals of cadmium-containing early transition-metal (Ti 4+ , Nb 5+ , and Ta 5+) oxides and nitridability to form their (oxy)nitride derivatives under an NH ₃ atmosphere for water splitting application. <i>Applied Catalysis B: Environmental</i> , 2016 , 182, 626-635	21.8	28
92	Solar-Driven Photoelectrochemical Water Oxidation over an n-Type Lead-Titanium Oxyfluoride Anode. <i>Journal of the American Chemical Society</i> , 2019 , 141, 17158-17165	16.4	28
91	Homogeneous Electron Doping into Nonstoichiometric Strontium Titanate Improves Its Photocatalytic Activity for Hydrogen and Oxygen Evolution. <i>ACS Catalysis</i> , 2018 , 8, 7190-7200	13.1	28
90	Nitrogen/fluorine-codoped rutile titania as a stable oxygen-evolution photocatalyst for solar-driven Z-scheme water splitting. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 2025-2035	5.8	28
89	Synthesis of three-component C ₃ N ₄ /rGO/C-TiO ₂ photocatalyst with enhanced visible-light responsive photocatalytic deNO activity. <i>Chemical Engineering Journal</i> , 2020 , 390, 124616	14.7	27
88	Dynamics of Double-Layer Restructuring on a Platinum Electrode covered by CO: Laser-Induced Potential Transient Measurement. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 11427-11432	3.8	27
87	Effect of Photoexcited Electron Dynamics on Photocatalytic Efficiency of Bismuth Tungstate. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 16598-16605	3.8	26
86	Copolymerization Approach to Improving Ru(II)-Complex/C ₃ N ₄ Hybrid Photocatalysts for Visible-Light CO ₂ Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 15333-15340	8.3	26
85	Clear and transparent nanocrystals for infrared-responsive carrier transfer. <i>Nature Communications</i> , 2019 , 10, 406	17.4	25
84	Pressure dependence of electron- and hole-consuming reactions in photocatalytic water splitting on Pt/TiO ₂ studied by time-resolved IR absorption spectroscopy. <i>International Journal of Photoenergy</i> , 2003 , 5, 7-9	2.1	25
83	Microscopic Identification of a Bimolecular Reaction Intermediate. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 11549-11552	3.4	25
82	Visible-light CO ₂ reduction over a ruthenium(II)-complex/C ₃ N ₄ hybrid photocatalyst: the promotional effect of silver species. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 9708-9715	13	24
81	Binary flux-promoted formation of trigonal ZnIn ₂ S ₄ layered crystals using ZnS-containing industrial waste and their photocatalytic performance for H ₂ production. <i>Green Chemistry</i> , 2018 , 20, 3845-3856	10	24
80	Infrared Spectroscopic Study of the Potential Change at Cocatalyst Particles on Oxynitride Photocatalysts for Water Splitting by Visible Light Irradiation. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 23902-23907	3.8	24
79	Oxygen induced enhancement of NIR emission in brookite TiO powders: comparison with rutile and anatase TiO powders. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 3241-3248	3.6	23
78	Surface-enhanced infrared absorption spectroscopic studies of adsorbed nitrate, nitric oxide, and related compounds 1: Reduction of adsorbed NO on a platinum electrode. <i>Langmuir</i> , 2008 , 24, 4352-7	4	22
77	Role of CoO _x cocatalyst on Ta ₃ N ₅ photocatalysts studied by transient visible to mid-infrared absorption spectroscopy. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018 , 358, 315-319	4.7	21

76	The contrasting effect of the Ta/Nb ratio in (111)-layered B-site deficient hexagonal perovskite Ba ₅ Nb _{4-x} Ta _x O ₁₅ crystals on visible-light-induced photocatalytic water oxidation activity of their oxynitride derivatives. <i>Dalton Transactions</i> , 2016 , 45, 12559-68	4.3	21
75	Effects of accumulated electrons on the decay kinetics of photogenerated electrons in Pt/TiO ₂ photocatalyst studied by time-resolved infrared absorption spectroscopy. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003 , 160, 33-36	4.7	21
74	In Situ Observation of the Dehydration of Formate on Ni(110). <i>Journal of Physical Chemistry B</i> , 1997 , 101, 5177-5181	3.4	20
73	Cobalt Aluminate Spinel as a Cocatalyst for Photocatalytic Oxidation of Water: Significant Hole-Trapping Effect. <i>ACS Catalysis</i> , 2020 , 10, 4960-4966	13.1	19
72	Photocatalytic activity of titania particles calcined at high temperature: Investigating deactivation. <i>Chemical Physics Letters</i> , 2013 , 579, 111-113	2.5	19
71	Simultaneously Tuning the Defects and Surface Properties of TaN Nanoparticles by Mg-Zr Codoping for Significantly Accelerated Photocatalytic H Evolution. <i>Journal of the American Chemical Society</i> , 2021 , 143, 10059-10064	16.4	17
70	Cation-dependent restructure of the electric double layer on CO-covered Pt electrodes: Difference between hydrophilic and hydrophobic cations. <i>Journal of Electroanalytical Chemistry</i> , 2017 , 800, 19-24	4.1	16
69	Undoped Layered Perovskite Oxynitride Li ₂ LaTa ₂ O ₆ N for Photocatalytic CO ₂ Reduction with Visible Light. <i>Angewandte Chemie</i> , 2018 , 130, 8286-8290	3.6	16
68	Isotope Exchange Reaction of Formate with Molecular Hydrogen on Ni(110) by IRAS. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 18177-18182		16
67	Improvement of photocatalytic activity under visible-light irradiation by heterojunction of Cu ion loaded WO ₃ and Cu ion loaded N-TiO ₂ . <i>Applied Catalysis B: Environmental</i> , 2019 , 248, 249-254	21.8	16
66	Time-Resolved Infrared Absorption Studies of Surface OH Groups on TiO ₂ Particles Irradiated by UV Pulses. <i>Bulletin of the Chemical Society of Japan</i> , 2002 , 75, 1019-1022	5.1	15
65	Enhancement of photoelectrochemical activity of SnS thin-film photoelectrodes using TiO ₂ , Nb ₂ O ₅ , and Ta ₂ O ₅ metal oxide layers. <i>Applied Physics Express</i> , 2016 , 9, 067101	2.4	15
64	Nano vs. bulk rutile TiO ₂ :N,F in Z-scheme overall water splitting under visible light. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 11996-12002	13	14
63	Fabrication of robust TiO ₂ thin films by atomized spray pyrolysis deposition for photoelectrochemical water oxidation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018 , 358, 320-326	4.7	14
62	Time-resolved Infrared Absorption Study of Photochemical Reactions Over Metal Oxides. <i>Topics in Catalysis</i> , 2005 , 35, 211-216	2.3	14
61	Effect of Na-Doping on Electron Decay Kinetics in SrTiO ₃ Photocatalyst. <i>ChemCatChem</i> , 2019 , 11, 6349-6354	5.54	13
60	Investigation on the highly active SrTiO ₃ photocatalyst toward overall H ₂ O splitting by doping Na ion. <i>Journal of Catalysis</i> , 2020 , 390, 81-89	7.3	13
59	Efficient photocatalytic hydrogen evolution on single-crystalline metal selenide particles with suitable cocatalysts. <i>Chemical Science</i> , 2020 , 11, 6436-6441	9.4	13

58	Engaging the flux-grown La _{1-x} Bi _x Fe _{1-y} Ti _y O ₃ crystals in visible-light-driven photocatalytic hydrogen generation. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 27024-27033	6.7	12
57	SFG study of formic acid on a Pt(110)-(1 × 1) surface. <i>Surface Science</i> , 1996 , 357-358, 651-655	1.8	12
56	Crucial impact of reduction on the photocarrier dynamics of SrTiO ₃ powders studied by transient absorption spectroscopy. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 26139-26146	13	12
55	Enhanced water splitting through two-step photoexcitation by sunlight using tantalum/nitrogen-codoped rutile titania as a water oxidation photocatalyst. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 2337-2346	5.8	11
54	Overall photosynthesis of H ₂ by an inorganic semiconductor.. <i>Nature Communications</i> , 2022 , 13, 1034	17.4	11
53	Identification of Individual Electron- and Hole-Transfer Kinetics at CoO _x /BiVO ₄ /SnO ₂ Double Heterojunctions. <i>ACS Applied Energy Materials</i> , 2020 , 3, 1207-1214	6.1	10
52	Core-Shell Double Doping of Zn and Ca on BiGa ₂ O ₃ Photocatalysts for Remarkable Water Splitting. <i>ACS Catalysis</i> , 2021 , 11, 1911-1919	13.1	10
51	Expansion of the photoresponse window of a BiVO photocatalyst by doping with chromium(vi).. <i>RSC Advances</i> , 2018 , 8, 38140-38145	3.7	10
50	Surface-enhanced IR absorption spectroscopy of the KcsA potassium channel upon application of an electric field. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 21104-11	3.6	9
49	Defect-Induced Acceleration and Deceleration of Photocarrier Recombination in SrTiO ₃ Powders. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 11057-11063	3.8	9
48	Enhancement of UV-responsive photocatalysts aided by visible-light responsive photocatalysts: Role of WO ₃ for H ₂ evolution on CuCl. <i>Applied Catalysis B: Environmental</i> , 2020 , 263, 118333	21.8	9
47	Synthesis of Three-Layer Perovskite Oxynitride KCaTaON ₂ H ₂ O and Photocatalytic Activity for H ₂ Evolution under Visible Light. <i>Inorganic Chemistry</i> , 2020 , 59, 11122-11128	5.1	9
46	Heavy Metal Effects on the Photovoltaic Properties of Metalloporphyrins in Dye-Sensitized Solar Cells. <i>ACS Applied Energy Materials</i> , 2020 , 3, 12460-12467	6.1	9
45	Oxygen-Doped Ta ₃ N ₅ Nanoparticles for Enhanced Z-Scheme Carbon Dioxide Reduction with a Binuclear Ruthenium(II) Complex under Visible Light. <i>ChemPhotoChem</i> , 2019 , 3, 1027-1033	3.3	7
44	Enhanced Visible Light Response of TiO ₂ Codoped with Cr and Ta Photocatalysts by Electron Doping. <i>ACS Applied Energy Materials</i> , 2019 , 2, 3274-3282	6.1	7
43	Heteroatom Dopants Promote Two-Electron O ₂ Reduction for Photocatalytic Production of H ₂ O ₂ on Polymeric Carbon Nitride. <i>Angewandte Chemie</i> , 2020 , 132, 16343-16351	3.6	7
42	Activation of a Pt-loaded Pb ₂ Ti ₂ O ₅ .4F _{1.2} photocatalyst by alkaline chloride treatment for improved H ₂ evolution under visible light. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 9099-9108	13	7
41	Fe/Ru Oxide as a Versatile and Effective Cocatalyst for Boosting Z-Scheme Water-Splitting: Suppressing Undesirable Backward Electron Transfer. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 45606-45611	9.5	7

40	Synthesis of Copolymerized Carbon Nitride Nanosheets from Urea and 2-Aminobenzonitrile for Enhanced Visible Light CO ₂ Reduction with a Ruthenium(II) Complex Catalyst. <i>Solar Rrl</i> , 2020 , 4, 1900467	7.1	7
39	Titanium Dioxide/Polyvinyl Alcohol/Cork Nanocomposite: A Floating Photocatalyst for the Degradation of Methylene Blue under Irradiation of a Visible Light Source. <i>ACS Omega</i> , 2021 , 6, 14493-14503	3.9	7
38	Sodium titanium oxide bronze nanoparticles synthesized via concurrent reduction and Na-doping into TiO(B). <i>Nanoscale</i> , 2019 , 11, 1442-1450	7.7	6
37	Effect of CuFe ₂ O ₄ ferrite on photocatalysis and carrier dynamics of electrospun Fe ₂ O ₃ nanofibers by time-resolved transient absorption spectroscopy. <i>Ceramics International</i> , 2019 , 45, 15676-15680	5.1	6
36	Exchange Reaction of Adsorbed Formate with Gaseous Formic Acid on Ni(110) Studied by Time-Resolved Fourier Transform Infrared Reflection Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 4401-4403	3.4	6
35	Utilization of Perovskite-Type Oxynitride La _{0.5} Sr _{0.5} Ta _{0.5} Ti _{0.5} O ₂ N as an O ₂ -Evolving Photocatalyst in Z-Scheme Water Splitting. <i>ACS Applied Energy Materials</i> , 2021 , 4, 2056-2060	6.1	6
34	Exchange reaction of formate with gas-phase acetic acid on Ni(110). <i>Surface Science</i> , 1999 , 433-435, 210-284	2.84	5
33	Optically Transparent Colloidal Dispersion of Titania Nanoparticles Storable for Longer than One Year Prepared by Sol/Gel Progressive Hydrolysis/Condensation. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 44743-44753	9.5	5
32	Achievement of High Photocatalytic Performance to BaTi ₄ O ₉ Toward Overall H ₂ O Splitting. <i>ChemCatChem</i> , 2019 , 11, 6213-6217	5.2	4
31	Structural changes of the KcsA potassium channel upon application of the electrode potential studied by surface-enhanced IR absorption spectroscopy. <i>Chemical Physics</i> , 2013 , 419, 224-228	2.3	4
30	?????????????????????????????????????. <i>Electrochemistry</i> , 2008 , 76, 208-213	1.2	4
29	Transport channels of X-ray beamlines at SPring-8. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2001 , 467-468, 813-815	1.2	4
28	Manipulation of charge carrier flow in BiNbOCl nanoplate photocatalyst with metal loading.. <i>Chemical Science</i> , 2022 , 13, 3118-3128	9.4	4
27	Unfolding the Role of B Site-Selective Doping of Aliovalent Cations on Enhancing Sacrificial Visible Light-Induced Photocatalytic H ₂ and O ₂ Evolution over BaTaO ₂ N. <i>ACS Catalysis</i> , 1403-1414	13.1	4
26	Enhancement of photoelectrochemical activity of TiO electrode by particulate/dense double-layer formation. <i>Journal of Chemical Physics</i> , 2020 , 152, 241101	3.9	3
25	Electron- and Hole-transfer from TiO ₂ Particles to Adsorbates Studied by Time-Resolved Infrared Absorption Spectroscopy.. <i>Hyomen Kagaku</i> , 2003 , 24, 46-52		3
24	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
23	Structural changes of water molecules during photoelectrochemical water oxidation on TiO thin film electrodes. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 3388-3394	3.6	3

22	Earth-abundant iron(III) species serves as a cocatalyst boosting the multielectron reduction of IO ₃ ⁻ /I ⁻ redox shuttle in Z-scheme photocatalytic water splitting. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 11718-11725	13	3
21	Enhanced Overall Water Splitting by a Zirconium-Doped TaON-Based Photocatalyst.. <i>Angewandte Chemie - International Edition</i> , 2022 , e202116573	16.4	3
20	Identification of a Self-Photosensitizing Hydrogen Atom Transfer Organocatalyst System.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	3
19	Inorganic assembly catalysts for artificial photosynthesis: general discussion. <i>Faraday Discussions</i> , 2017 , 198, 481-507	3.6	2
18	Structure and Behavior of Water at the Electrochemical Interface Studied by Surface-Enhanced Infrared Absorption Spectroscopy. <i>Bunseki Kagaku</i> , 2011 , 60, 1-9	0.2	2
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