Akira Yamakata

List of Publications by Year
in descending order

155 papers	8,177 citations	53660 45 h-index	53109 85 g-index
157 all docs	157 docs citations	157 times ranked	7167 citing authors

#	Article	IF	Citations
1	Atomically dispersed antimony on carbon nitride for the artificial photosynthesis of hydrogen peroxide. Nature Catalysis, 2021, 4, 374-384.	16.1	474
2	Nature-Inspired, Highly Durable CO₂ Reduction System Consisting of a Binuclear Ruthenium(II) Complex and an Organic Semiconductor Using Visible Light. Journal of the American Chemical Society, 2016, 138, 5159-5170.	6.6	403
3	Cobalt-Modified Porous Single-Crystalline LaTiO₂N for Highly Efficient Water Oxidation under Visible Light. Journal of the American Chemical Society, 2012, 134, 8348-8351.	6.6	382
4	Water- and Oxygen-Induced Decay Kinetics of Photogenerated Electrons in TiO2 and Pt/TiO2:â€‰ A Time-Resolved Infrared Absorption Study. Journal of Physical Chemistry B, 2001, 105, 7258-7262.	1.2	300
5	Heteroatom Dopants Promote Twoâ€Electron O₂ Reduction for Photocatalytic Production of H₂O₂ on Polymeric Carbon Nitride. Angewandte Chemie - International Edition, 2020, 59, 16209-16217.	7.2	270
6	Flux-mediated doping of SrTiO₃ photocatalysts for efficient overall water splitting. Journal of Materials Chemistry A, 2016, 4, 3027-3033.	5.2	224
7	Structure of Water at the Electrified Platinumâˆ'Water Interface:â€‰ A Study by Surface-Enhanced Infrared Absorption Spectroscopy. Journal of Physical Chemistry C, 2008, 112, 4248-4256.	1.5	220
8	Visible Light Responsive Pristine Metal Oxide Photocatalyst: Enhancement of Activity by Crystallization under Hydrothermal Treatment. Journal of the American Chemical Society, 2008, 130, 17650-17651.	6.6	214
9	Electron- and Hole-Capture Reactions on Pt/TiO2Photocatalyst Exposed to Methanol Vapor Studied with Time-Resolved Infrared Absorption Spectroscopy. Journal of Physical Chemistry B, 2002, 106, 9122-9125.	1.2	207
10	Time-resolved infrared absorption spectroscopy of photogenerated electrons in platinized TiO2 particles. Chemical Physics Letters, 2001, 333, 271-277.	1.2	194
11	Trapping-Induced Enhancement of Photocatalytic Activity on Brookite TiO₂ Powders: Comparison with Anatase and Rutile TiO₂ Powders. ACS Catalysis, 2017, 7, 2644-2651.	5.5	191
12	Effect of Particle Size on the Photocatalytic Activity of WO₃ Particles for Water Oxidation. Journal of Physical Chemistry C, 2013, 117, 22584-22590.	1.5	173
13	Potential Oscillations in Galvanostatic Electrooxidation of Formic Acid on Platinum:â€‰ A Time-Resolved Surface-Enhanced Infrared Study. Journal of Physical Chemistry B, 2005, 109, 23509-23516.	1.2	165
14	Distinctive Behavior of Photogenerated Electrons and Holes in Anatase and Rutile TiO₂ Powders. Journal of Physical Chemistry C, 2015, 119, 24538-24545.	1.5	156
15	Photodynamics of NaTaO3Catalysts for Efficient Water Splitting. Journal of Physical Chemistry B, 2003, 107, 14383-14387.	1.2	147
16	ATR-SEIRAS Investigation of the Fermi Level of Pt Cocatalyst on a GaN Photocatalyst for Hydrogen Evolution under Irradiation. Journal of the American Chemical Society, 2009, 131, 13218-13219.	6.6	145
17	Behavior and Energy States of Photogenerated Charge Carriers on Pt- or CoO_{<i>x</i>}-Loaded LaTiO₂N Photocatalysts: Time-Resolved Visible to Mid-Infrared Absorption Study. Journal of Physical Chemistry C, 2014, 118, 23897-23906.	1.5	132
18	Kinetics of the photocatalytic water-splitting reaction on TiO2 and Pt/TiO2 studied by time-resolved infrared absorption spectroscopy. Journal of Molecular Catalysis A, 2003, 199, 85-94.	4.8	129

#	Article	IF	Citations
19	Sequential cocatalyst decoration on BaTaO2N towards highly-active Z-scheme water splitting. Nature Communications, 2021, 12, 1005.	5.8	124
20	Curious behaviors of photogenerated electrons and holes at the defects on anatase, rutile, and brookite TiO2 powders: A review. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2019, 40, 234-243.	5.6	113
21	Plasmonic pâ€"n Junction for Infrared Light to Chemical Energy Conversion. Journal of the American Chemical Society, 2019, 141, 2446-2450.	6.6	110
22	Overall photosynthesis of H2O2 by an inorganic semiconductor. Nature Communications, 2022, 13, 1034.	5.8	105
23	Near infrared light induced plasmonic hot hole transfer at a nano-heterointerface. Nature Communications, 2018, 9, 2314.	5.8	103
24	Solar-driven Z-scheme water splitting using tantalum/nitrogen co-doped rutile titania nanorod as an oxygen evolution photocatalyst. Journal of Materials Chemistry A, 2017, 5, 11710-11719.	5.2	101
25	Carrier Dynamics in TiO2and Pt/TiO2Powders Observed by Femtosecond Time-Resolved Near-Infrared Spectroscopy at a Spectral Region of 0.9â^'1.5 Î¼m with the Direct Absorption Method. Journal of Physical Chemistry B, 2004, 108, 20233-20239.	1.2	99
26	NH₃-Assisted Flux Growth of Cube-like BaTaO₂N Submicron Crystals in a Completely Ionized Nonaqueous High-Temperature Solution and Their Water Splitting Activity. Crystal Growth and Design, 2015, 15, 4663-4671.	1.4	95
27	Surface Modifications of (ZnSe)_{0.5}(CuGa_{2.5}Se_{4.25})_{0.5} to Promote Photocatalytic Z-Scheme Overall Water Splitting. Journal of the American Chemical Society, 2021, 143, 10633-10641.	6.6	88
28	Behavior and Energy State of Photogenerated Charge Carriers in Single-Crystalline and Polycrystalline Powder SrTiO₃ Studied by Time-Resolved Absorption Spectroscopy in the Visible to Mid-Infrared Region. Journal of Physical Chemistry C, 2015, 119, 1880-1885.	1.5	86
29	Transient IR absorption study of charge carriers photogenerated in sulfur-doped TiO2. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 177, 269-275.	2.0	79
30	Effects of Water Addition on the Methanol Oxidation on Pt/TiO2Photocatalyst Studied by Time-Resolved Infrared Absorption Spectroscopy. Journal of Physical Chemistry B, 2003, 107, 9820-9823.	1.2	77
31	How g-C₃N₄ Works and Is Different from TiO₂ as an Environmental Photocatalyst: Mechanistic View. Environmental Science & Technology, 2020, 54, 497-506.	4.6	76
32	Interfacial Manipulation by Rutile TiO₂ Nanoparticles to Boost CO₂ Reduction into CO on a Metal-Complex/Semiconductor Hybrid Photocatalyst. ACS Applied Materials & Interfaces, 2017, 9, 23869-23877.	4.0	69
33	Undoped Layered Perovskite Oxynitride Li₂LaTa₂O₆N for Photocatalytic CO₂ Reduction with Visible Light. Angewandte Chemie - International Edition, 2018, 57, 8154-8158.	7.2	66
34	Morphology-sensitive trapping states of photogenerated charge carriers on SrTiO3 particles studied by time-resolved visible to Mid-IR absorption spectroscopy: The effects of molten salt flux treatments. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 313, 168-175.	2.0	64
35	Simultaneously Tuning the Defects and Surface Properties of Ta₃N₅ Nanoparticles by Mgâ€"Zr Codoping for Significantly Accelerated Photocatalytic H₂ Evolution. Journal of the American Chemical Society, 2021, 143, 10059-10064.	6.6	62
36	Photocatalytic property of metal ion added SrTiO3 to Overall H2O splitting. Applied Catalysis A: General, 2016, 521, 227-232.	2.2	61

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37	Effects of Interfacial Electron Transfer in Metal Complexâ€“Semiconductor Hybrid Photocatalysts on Z-Scheme CO₂ Reduction under Visible Light. ACS Catalysis, 2018, 8, 9744-9754.	5.5	60
38	Enhanced photocatalytic NO decomposition of visible-light responsive F-TiO2/(N,C)-TiO2 by charge transfer between F-TiO2 and (N,C)-TiO2 through their doping levels. Applied Catalysis B: Environmental, 2018, 238, 358-364.	10.8	60
39	Heteroatom Dopants Promote Twoâ€Electron O₂ Reduction for Photocatalytic Production of H₂O₂ on Polymeric Carbon Nitride. Angewandte Chemie, 2020, 132, 16343-16351.	1.6	59
40	NH₃-Assisted Flux-Mediated Direct Growth of LaTiO₂N Crystallites for Visible-Light-Induced Water Splitting. Journal of Physical Chemistry C, 2015, 119, 15896-15904.	1.5	55
41	Investigation on the highly active SrTiO3 photocatalyst toward overall H2O splitting by doping Na ion. Journal of Catalysis, 2020, 390, 81-89.	3.1	55
42	Laser-Induced Potential Jump at the Electrochemical Interface Probed by Picosecond Time-Resolved Surface-Enhanced Infrared Absorption Spectroscopy. Journal of Physical Chemistry B, 2006, 110, 6423-6427.	1.2	51
43	Construction of Spatial Charge Separation Facets on BaTaO₂N Crystals by Flux Growth Approach for Visible-Light-Driven H₂ Production. ACS Applied Materials & Interfaces, 2019, 11, 22264-22271.	4.0	51
44	Time-resolved infrared absorption study of nine TiO2 photocatalysts. Chemical Physics, 2007, 339, 133-137.	0.9	47
45	Potential-Dependent Recombination Kinetics of Photogenerated Electrons in n- and p-Type GaN Photoelectrodes Studied by Time-Resolved IR Absorption Spectroscopy. Journal of the American Chemical Society, 2011, 133, 11351-11357.	6.6	47
46	Destruction of the Water Layer on a Hydrophobic Surface Induced by the Forced Approach of Hydrophilic and Hydrophobic Cations. Journal of Physical Chemistry Letters, 2010, 1, 1487-1491.	2.1	45
47	Elucidating the impact of A-site cation change on photocatalytic H₂ and O₂ evolution activities of perovskite-type LnTaON₂ (Ln = La and Pr). Physical Chemistry Chemical Physics, 2017, 19, 22210-22220.	1.3	44
48	Real-Time Observation of the Destruction of Hydration Shells under Electrochemical Force. Journal of the American Chemical Society, 2013, 135, 15033-15039.	6.6	43
49	Synthesis of three-component C3N4/rGO/C-TiO2 photocatalyst with enhanced visible-light responsive photocatalytic deNO activity. Chemical Engineering Journal, 2020, 390, 124616.	6.6	42
50	In Situ Surface-Enhanced Infrared Study of Hydrogen Bond Pairing of Complementary Nucleic Acid Bases at the Electrochemical Interface. Analytical Chemistry, 2004, 76, 5564-5569.	3.2	40
51	Copolymerization Approach to Improving Ru(II)-Complex/C₃N₄ Hybrid Photocatalysts for Visible-Light CO₂ Reduction. ACS Sustainable Chemistry and Engineering, 2018, 6, 15333-15340.	3.2	40
52	Excited-State Dynamics of Graphitic Carbon Nitride Photocatalyst and Ultrafast Electron Injection to a Ru(II) Mononuclear Complex for Carbon Dioxide Reduction. Journal of Physical Chemistry C, 2018, 122, 16795-16802.	1.5	39
53	Photophysics and Electron Dynamics in Dye-Sensitized Semiconductor Film Studied by Time-Resolved Mid-IR Spectroscopy. Journal of Physical Chemistry B, 2003, 107, 4156-4161.	1.2	38
54	Surface-Enhanced Infrared Absorption Spectroscopic Studies of Adsorbed Nitrate, Nitric Oxide, and Related Compounds 2:â€‰ Nitrate Ion Adsorption at a Platinum Electrode. Langmuir, 2008, 24, 4358-4363.	1.6	38

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55	Binary flux-promoted formation of trigonal ZnIn₂S₄ layered crystals using ZnS-containing industrial waste and their photocatalytic performance for H₂ production. Green Chemistry, 2018, 20, 3845-3856.	4.6	38
56	Solar-Driven Photoelectrochemical Water Oxidation over an n-Type Leadâ€“Titanium Oxyfluoride Anode. Journal of the American Chemical Society, 2019, 141, 17158-17165.	6.6	38
57	Microsecond kinetics of photocatalytic oxidation on Pt/TiO2 traced by vibrational spectroscopy. Chemical Physics Letters, 2003, 376, 576-580.	1.2	37
58	Adsorbed Structures of 4,4â€˜-Bipyridine on Cu(111) in Acid Studied by STM and IR. Langmuir, 2006, 22, 3640-3646.	1.6	37
59	Destruction of the Hydration Shell around Tetraalkylammonium Ions at the Electrochemical Interface. Journal of the American Chemical Society, 2009, 131, 6892-6893.	6.6	36
60	Nitrogen/fluorine-codoped rutile titania as a stable oxygen-evolution photocatalyst for solar-driven Z-scheme water splitting. Sustainable Energy and Fuels, 2018, 2, 2025-2035.	2.5	36
61	Enhanced Overall Water Splitting by a Zirconiumâ€Doped TaONâ€Based Photocatalyst. Angewandte Chemie - International Edition, 2022, 61, e202116573.	7.2	36
62	Hydrogen Evolution Reaction Catalyzed by Proton-Coupled Redox Cycle of 4,4â€²-Bipyridine Monolayer Adsorbed on Silver Electrodes. Journal of the American Chemical Society, 2008, 130, 10862-10863.	6.6	34
63	Dynamics of Photogenerated Charge Carriers on Ni- and Ta-Doped SrTiO₃ Photocatalysts Studied by Time-Resolved Absorption and Emission Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 7997-8004.	1.5	34
64	Homogeneous Electron Doping into Nonstoichiometric Strontium Titanate Improves Its Photocatalytic Activity for Hydrogen and Oxygen Evolution. ACS Catalysis, 2018, 8, 7190-7200.	5.5	34
65	Clear and transparent nanocrystals for infrared-responsive carrier transfer. Nature Communications, 2019, 10, 406.	5.8	33
66	Cobalt Aluminate Spinel as a Cocatalyst for Photocatalytic Oxidation of Water: Significant Hole-Trapping Effect. ACS Catalysis, 2020, 10, 4960-4966.	5.5	33
67	Dynamics of Double-Layer Restructuring on a Platinum Electrode covered by CO: Laser-Induced Potential Transient Measurement. Journal of Physical Chemistry C, 2008, 112, 11427-11432.	1.5	31
68	Visible-light CO₂ reduction over a ruthenium(<scp>ii</scp>)-complex/C₃N₄ hybrid photocatalyst: the promotional effect of silver species. Journal of Materials Chemistry A, 2018, 6, 9708-9715.	5.2	31
69	Effect of Annealing Temperature on Back Electron Transfer and Distribution of Deep Trap Sites in Dye-Sensitized TiO2, Studied by Time-Resolved Infrared Spectroscopy. Journal of Physical Chemistry B, 2004, 108, 2963-2969.	1.2	30
70	Infrared Spectroscopic Study of the Potential Change at Cocatalyst Particles on Oxynitride Photocatalysts for Water Splitting by Visible Light Irradiation. Journal of Physical Chemistry C, 2011, 115, 23902-23907.	1.5	30
71	KCl flux-induced growth of isometric crystals of cadmium-containing early transition-metal (Ti 4+ ,) Tj ETQq1 1 0.784314 rgBT /Overlock atmosphere for water splitting application. Applied Catalysis B: Environmental, 2016, 182, 626-635.	10.8	30
72	Role of CoOx cocatalyst on Ta3N5 photocatalysts studied by transient visible to mid-infrared absorption spectroscopy. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 315-319.	2.0	29

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73	Effect of Photoexcited Electron Dynamics on Photocatalytic Efficiency of Bismuth Tungstate. Journal of Physical Chemistry C, 2011, 115, 16598-16605.	1.5	28
74	Oxygen induced enhancement of NIR emission in brookite TiO₂powders: comparison with rutile and anatase TiO₂powders. Physical Chemistry Chemical Physics, 2018, 20, 3241-3248.	1.3	28
75	Coreâ€“Shell Double Doping of Zn and Ca on Î²-Ga₂O₃ Photocatalysts for Remarkable Water Splitting. ACS Catalysis, 2021, 11, 1911-1919.	5.5	28
76	Titanium Dioxide/Polyvinyl Alcohol/Cork Nanocomposite: A Floating Photocatalyst for the Degradation of Methylene Blue under Irradiation of a Visible Light Source. ACS Omega, 2021, 6, 14493-14503.	1.6	28
77	Microscopic Identification of a Bimolecular Reaction Intermediate. Journal of Physical Chemistry B, 2002, 106, 11549-11552.	1.2	27
78	Improvement of photocatalytic activity under visible-light irradiation by heterojunction of Cu ion loaded WO3 and Cu ion loaded N-TiO2. Applied Catalysis B: Environmental, 2019, 248, 249-254.	10.8	27
79	Unfolding the Role of <i>B</i> Site-Selective Doping of Aliovalent Cations on Enhancing Sacrificial Visible Light-Induced Photocatalytic H₂ and O₂ Evolution over BaTaO₂N. ACS Catalysis, 2022, 12, 1403-1414.	5.5	27
80	Surface-Enhanced Infrared Absorption Spectroscopic Studies of Adsorbed Nitrate, Nitric Oxide, and Related Compounds 1:â€‰ Reduction of Adsorbed NO on a Platinum Electrode. Langmuir, 2008, 24, 4352-4357.	1.6	26
81	Pressure dependence of electron- and hole-consuming reactions in photocatalytic water splitting on Pt/TiO2studied by time-resolved IR absorption spectroscopy. International Journal of Photoenergy, 2003, 5, 7-9.	1.4	25
82	The contrasting effect of the Ta/Nb ratio in (111)-layered B-site deficient hexagonal perovskite Ba₅Nb_{4âˆ’x}Ta_xO₁₅ crystals on visible-light-induced photocatalytic water oxidation activity of their oxynitride derivatives. Dalton Transactions, 2016, 45, 12559-12568.	1.6	24
83	In Situ Observation of the Dehydration of Formate on Ni(110). Journal of Physical Chemistry B, 1997, 101, 5177-5181.	1.2	23
84	Effect of Naâ€Doping on Electron Decay Kinetics in SrTiO₃ Photocatalyst. ChemCatChem, 2019, 11, 6349-6354.	1.8	23
85	Nano <i>vs.</i> bulk rutile TiO₂:N,F in Z-scheme overall water splitting under visible light. Journal of Materials Chemistry A, 2020, 8, 11996-12002.	5.2	23
86	Effects of accumulated electrons on the decay kinetics of photogenerated electrons in Pt/TiO2 photocatalyst studied by time-resolved infrared absorption spectroscopy. Journal of Photochemistry and Photobiology A: Chemistry, 2003, 160, 33-36.	2.0	22
87	Identification of Individual Electron- and Hole-Transfer Kinetics at CoO_{<i>x</i>}/BiVO₄/SnO₂ Double Heterojunctions. ACS Applied Energy Materials, 2020, 3, 1207-1214.	2.5	22
88	Role of Oxygen Vacancy in the Photocarrier Dynamics of WO₃ Photocatalysts: The Case of Recombination Centers. Journal of Physical Chemistry C, 2022, 126, 9257-9263.	1.5	22
89	Photocatalytic activity of titania particles calcined at high temperature: Investigating deactivation. Chemical Physics Letters, 2013, 579, 111-113.	1.2	21
90	Crucial impact of reduction on the photocarrier dynamics of SrTiO₃ powders studied by transient absorption spectroscopy. Journal of Materials Chemistry A, 2019, 7, 26139-26146.	5.2	21

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91	Efficient photocatalytic hydrogen evolution on single-crystalline metal selenide particles with suitable cocatalysts. Chemical Science, 2020, 11, 6436-6441.	3.7	21
92	Enhanced Visible Light Response of TiO₂ Codoped with Cr and Ta Photocatalysts by Electron Doping. ACS Applied Energy Materials, 2019, 2, 3274-3282.	2.5	20
93	Synthesis of Three-Layer Perovskite Oxynitride K₂Ca₂Ta₃O₉NÂ·2H₂O and Photocatalytic Activity for H₂ Evolution under Visible Light. Inorganic Chemistry, 2020, 59, 11122-11128.	1.9	20
94	Defect-Induced Acceleration and Deceleration of Photocarrier Recombination in SrTiO₃ Powders. Journal of Physical Chemistry C, 2020, 124, 11057-11063.	1.5	19
95	Identification of a Self-Photosensitizing Hydrogen Atom Transfer Organocatalyst System. Journal of the American Chemical Society, 2022, 144, 6566-6574.	6.6	19
96	Enhancement of photoelectrochemical activity of SnS thin-film photoelectrodes using TiO2, Nb2O5, and Ta2O5metal oxide layers. Applied Physics Express, 2016, 9, 067101.	1.1	18
97	Cation-dependent restructure of the electric double layer on CO-covered Pt electrodes: Difference between hydrophilic and hydrophobic cations. Journal of Electroanalytical Chemistry, 2017, 800, 19-24.	1.9	18
98	Isotope Exchange Reaction of Formate with Molecular Hydrogen on Ni(110) by IRAS. The Journal of Physical Chemistry, 1996, 100, 18177-18182.	2.9	17
99	Fabrication of robust TiO2 thin films by atomized spray pyrolysis deposition for photoelectrochemical water oxidation. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 320-326.	2.0	17
100	Undoped Layered Perovskite Oxynitride Li₂LaTa₂O₆N for Photocatalytic CO₂ Reduction with Visible Light. Angewandte Chemie, 2018, 130, 8286-8290.	1.6	17
101	Manipulation of charge carrier flow in Bi₄NbO₈Cl nanoplate photocatalyst with metal loading. Chemical Science, 2022, 13, 3118-3128.	3.7	17
102	Time-Resolved Infrared Absorption Studies of Surface OH Groups on TiO2Particles Irradiated by UV Pulses. Bulletin of the Chemical Society of Japan, 2002, 75, 1019-1022.	2.0	16
103	Time-resolved Infrared Absorption Study of Photochemical Reactions Over Metal Oxides. Topics in Catalysis, 2005, 35, 211-216.	1.3	16
104	Heavy Metal Effects on the Photovoltaic Properties of Metallocorroles in Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2020, 3, 12460-12467.	2.5	16
105	Cocatalyst engineering of a narrow bandgap Ga-La₅Ti₂Cu_{0.9}Ag_{0.1}O₇S₅ photocatalyst towards effectively enhanced water splitting. Journal of Materials Chemistry A, 2021, 9, 27485-27492.	5.2	16
106	Enhancement of UV-responsive photocatalysts aided by visible-light responsive photocatalysts: Role of WO3 for H2 evolution on CuCl. Applied Catalysis B: Environmental, 2020, 263, 118333.	10.8	15
107	Utilization of Perovskite-Type Oxynitride La_{0.5}Sr_{0.5}Ta_{0.5}Ti_{0.5}O₂N as an O₂-Evolving Photocatalyst in Z-Scheme Water Splitting. ACS Applied Energy Materials, 2021, 4, 2056-2060.	2.5	15
108	Engaging the flux-grown La1â^’Sr Fe1â^’Ti O3 crystals in visible-light-driven photocatalytic hydrogen generation. International Journal of Hydrogen Energy, 2017, 42, 27024-27033.	3.8	14

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109	Enhanced water splitting through two-step photoexcitation by sunlight using tantalum/nitrogen-codoped rutile titania as a water oxidation photocatalyst. Sustainable Energy and Fuels, 2019, 3, 2337-2346.	2.5	14
110	SFG study of formic acid on a Pt(110)-(1 Ã— 2) surface. Surface Science, 1996, 357-358, 651-655.	0.8	13
111	Expansion of the photoresponse window of a BiVO₄ photocatalyst by doping with chromium(<scp>vi</scp>). RSC Advances, 2018, 8, 38140-38145.	1.7	13
112	Synthesis of Copolymerized Carbon Nitride Nanosheets from Urea and 2â€Aminobenzonitrile for Enhanced Visible Light CO₂ Reduction with a Ruthenium(II) Complex Catalyst. Solar Rrl, 2020, 4, 1900461.	3.1	13
113	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
114	Effect of CuFe2O4 ferrite on photocatalysis and carrier dynamics of electrospun Î±-Fe2O3 nanofibers by time-resolved transient absorption spectroscopy. Ceramics International, 2019, 45, 15676-15680.	2.3	12
115	Fe/Ru Oxide as a Versatile and Effective Cocatalyst for Boosting Z-Scheme Water-Splitting: Suppressing Undesirable Backward Electron Transfer. ACS Applied Materials & Interfaces, 2019, 11, 45606-45611.	4.0	11
116	Activation of a Pt-loaded Pb₂Ti₂O_{5.4}F_{1.2} photocatalyst by alkaline chloride treatment for improved H₂ evolution under visible light. Journal of Materials Chemistry A, 2020, 8, 9099-9108.	5.2	11
117	Time-Retrenched Synthesis of BaTaO₂N by Localizing an NH₃ Delivery System for Visible-Light-Driven Photoelectrochemical Water Oxidation at Neutral pH: Solid-State Reaction or Flux Method?. ACS Applied Energy Materials, 2021, 4, 9315-9327.	2.5	11
118	Surface-enhanced IR absorption spectroscopy of the KcsA potassium channel upon application of an electric field. Physical Chemistry Chemical Physics, 2015, 17, 21104-21111.	1.3	10
119	Oxygenâ€Doped Ta₃N₅ Nanoparticles for Enhanced Zâ€Scheme Carbon Dioxide Reduction with a Binuclear Ruthenium(II) Complex under Visible Light. ChemPhotoChem, 2019, 3, 1027-1033.	1.5	10
120	Optically Transparent Colloidal Dispersion of Titania Nanoparticles Storable for Longer than One Year Prepared by Sol/Gel Progressive Hydrolysis/Condensation. ACS Applied Materials & Interfaces, 2020, 12, 44743-44753.	4.0	9
121	Exchange Reaction of Adsorbed Formate with Gaseous Formic Acid on Ni(110) Studied by Time-Resolved Fourier Transform Infrared Reflection Absorption Spectroscopy. Journal of Physical Chemistry B, 1998, 102, 4401-4403.	1.2	8
122	Sodium titanium oxide bronze nanoparticles synthesized <i>via</i> concurrent reduction and Na⁺-doping into TiO₂(B). Nanoscale, 2019, 11, 1442-1450.	2.8	8
123	Control of the Photocatalytic Activity of Metastable Layered Oxynitride K₂LaTa₂O₆N through Topochemical Transformation of Tuned Oxide Precursors. Chemistry of Materials, 2021, 33, 6443-6452.	3.2	8
124	Earth-abundant iron(<scp>iii</scp>) species serves as a cocatalyst boosting the multielectron reduction of IO₃^{âˆ’}/I^{âˆ’}redox shuttle in Z-scheme photocatalytic water splitting. Journal of Materials Chemistry A, 2021, 9, 11718-11725.	5.2	8
125	Enhancement of photoelectrochemical activity of TiO2 electrode by particulate/dense double-layer formation. Journal of Chemical Physics, 2020, 152, 241101.	1.2	6
126	Exchange reaction of formate with gas-phase acetic acid on Ni(110). Surface Science, 1999, 433-435, 210-214.	0.8	5

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127	è¡¨é¢å¢—å¼·èµ·å–å¸åŽå ˆ†å…‰æ³•ã«ã‚ˆã‚‹é›»æ¥µç•Œé¢ã®è¶…é«˜é€Ÿãƒ€ã‚¤ãƒŠãƒŸã‚¯ã‚¹ã®è¿½è·¡. Electrochemistry, 2008, 76, 208-213.	0.2	5
128	Structural changes of the KcsA potassium channel upon application of the electrode potential studied by surface-enhanced IR absorption spectroscopy. Chemical Physics, 2013, 419, 224-228.	0.9	5
129	Achievement of High Photocatalytic Performance to BaTi 4 O 9 Toward Overall H 2 O Splitting. ChemCatChem, 2019, 11, 6213-6217.	1.8	5
130	Effect of Terminal-Group Halogenation of Naphthalene-Based Nonfullerene Acceptors on Their Film Structure and Photophysical and Photovoltaic Properties. ACS Applied Energy Materials, 2021, 4, 14022-14033.	2.5	5
131	Eliciting the contribution of TiN to photoelectrochemical performance enhancement of Imma-LaTiO2N at neutral pH. Materials Today Energy, 2022, 27, 101053.	2.5	5
132	Transport channels of X-ray beamlines at SPring-8. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 467-468, 813-815.	0.7	4
133	Forward and backward electron transfer on Pt loaded TiO2 photocatalysts under visible-light illumination. Applied Physics Letters, 2021, 119, .	1.5	4
134	In situ observation of the exchange reaction of formate with molecular formic acid on Ni(110). Journal of Molecular Catalysis A, 1999, 141, 73-82.	4.8	3
135	Electron- and Hole-transfer from TiO2 Particles to Adsorbates Studied by Time-Resolved Infrared Absorption Spectroscopy.. Hyomen Kagaku, 2003, 24, 46-52.	0.0	3
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137	Structural changes of water molecules during photoelectrochemical water oxidation on TiO₂ thin film electrodes. Physical Chemistry Chemical Physics, 2018, 20, 3388-3394.	1.3	3
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