

Akihide Iwase

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5456699/akihide-iwase-publications-by-citations.pdf>

Version: 2024-04-25

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.

99
papers

7,305
citations

40
h-index

85
g-index

108
ext. papers

8,057
ext. citations

7.7
avg, IF

6.16
L-index

#	Paper	IF	Citations
99	Reduced graphene oxide as a solid-state electron mediator in Z-scheme photocatalytic water splitting under visible light. <i>Journal of the American Chemical Society</i> , 2011 , 133, 11054-7	16.4	844
98	Reducing Graphene Oxide on a Visible-Light BiVO ₄ Photocatalyst for an Enhanced Photoelectrochemical Water Splitting. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 2607-2612	6.4	768
97	Surface Modification of CoO(x) Loaded BiVO ₄ Photoanodes with Ultrathin p-Type NiO Layers for Improved Solar Water Oxidation. <i>Journal of the American Chemical Society</i> , 2015 , 137, 5053-60	16.4	436
96	Z-schematic water splitting into H ₂ and O ₂ using metal sulfide as a hydrogen-evolving photocatalyst and reduced graphene oxide as a solid-state electron mediator. <i>Journal of the American Chemical Society</i> , 2015 , 137, 604-7	16.4	394
95	Water Splitting and CO ₂ Reduction under Visible Light Irradiation Using Z-Scheme Systems Consisting of Metal Sulfides, CoO _x -Loaded BiVO ₄ , and a Reduced Graphene Oxide Electron Mediator. <i>Journal of the American Chemical Society</i> , 2016 , 138, 10260-4	16.4	365
94	The effect of co-catalyst for Z-scheme photocatalysis systems with an Fe ³⁺ /Fe ²⁺ electron mediator on overall water splitting under visible light irradiation. <i>Journal of Catalysis</i> , 2008 , 259, 133-137	7.3	329
93	Photocatalytic H ₂ Evolution over TiO ₂ Nanoparticles. The Synergistic Effect of Anatase and Rutile. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 2821-2829	3.8	307
92	BiVO ₄ /Ru/SrTiO ₃ :Rh composite Z-scheme photocatalyst for solar water splitting. <i>Chemical Science</i> , 2014 , 5, 1513	9.4	195
91	Effects of doping of metal cations on morphology, activity, and visible light response of photocatalysts. <i>Chemical Physics</i> , 2007 , 339, 104-110	2.3	178
90	Photoelectrochemical water splitting using visible-light-responsive BiVO ₄ fine particles prepared in an aqueous acetic acid solution. <i>Journal of Materials Chemistry</i> , 2010 , 20, 7536		176
89	A visible light responsive rhodium and antimony-codoped SrTiO ₃ powdered photocatalyst loaded with an IrO ₂ cocatalyst for solar water splitting. <i>Chemical Communications</i> , 2014 , 50, 2543-6	5.8	163
88	Semiconductor/reduced graphene oxide nanocomposites derived from photocatalytic reactions. <i>Catalysis Today</i> , 2011 , 164, 353-357	5.3	155
87	Sustained solar hydrogen generation using a dye-sensitized NiO photocathode/BiVO ₄ tandem photo-electrochemical device. <i>Energy and Environmental Science</i> , 2012 , 5, 9472	35.4	153
86	Nanosized Au Particles as an Efficient Cocatalyst for Photocatalytic Overall Water Splitting. <i>Catalysis Letters</i> , 2006 , 108, 7-10	2.8	122
85	Flame preparation of visible-light-responsive BiVO ₄ oxygen evolution photocatalysts with subsequent activation via aqueous route. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 1997-2004	9.5	117
84	Role of Iron Ion Electron Mediator on Photocatalytic Overall Water Splitting under Visible Light Irradiation Using Z-Scheme Systems. <i>Bulletin of the Chemical Society of Japan</i> , 2007 , 80, 2457-2464	5.1	115
83	Utilization of Metal Sulfide Material of (CuGa) _(1-x) Zn _(2x) S ₂ Solid Solution with Visible Light Response in Photocatalytic and Photoelectrochemical Solar Water Splitting Systems. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 1042-7	6.4	110

82	Highly Active NaTaO ₃ -Based Photocatalysts for CO Reduction to Form CO Using Water as the Electron Donor. <i>ChemSusChem</i> , 2017 , 10, 112-118	8.3	97
81	The effect of alkaline earth metal ion dopants on photocatalytic water splitting by NaTaO ₃ powder. <i>ChemSusChem</i> , 2009 , 2, 873-7	8.3	84
80	Enhanced photocatalytic water splitting by BaLa ₄ Ti ₄ O ₁₅ loaded with ~1 nm gold nanoclusters using glutathione-protected Au ₂₅ clusters. <i>Nanoscale</i> , 2013 , 5, 7188-92	7.7	83
79	Transforming Anodized WO ₃ Films into Visible-Light-Active Bi ₂ WO ₆ Photoelectrodes by Hydrothermal Treatment. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 913-8	6.4	82
78	The effect of Au cocatalyst loaded on La-doped NaTaO ₃ on photocatalytic water splitting and O ₂ photoreduction. <i>Applied Catalysis B: Environmental</i> , 2013 , 136-137, 89-93	21.8	76
77	Formation of Surface Nano-step Structures and Improvement of Photocatalytic Activities of NaTaO ₃ by Doping of Alkaline Earth Metal Ions. <i>Chemistry Letters</i> , 2004 , 33, 1260-1261	1.7	73
76	A Novel Photodeposition Method in the Presence of Nitrate Ions for Loading of an Iridium Oxide Cocatalyst for Water Splitting. <i>Chemistry Letters</i> , 2005 , 34, 946-947	1.7	72
75	Influence of annealing temperature of WO ₃ in photoelectrochemical conversion and energy storage for water splitting. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 5269-75	9.5	70
74	Controlled Loading of Small Au Clusters (n= 10 ⁸) onto BaLa ₄ Ti ₄ O ₁₅ Photocatalysts: Toward an Understanding of Size Effect of Cocatalyst on Water-Splitting Photocatalytic Activity. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 11224-11232	3.8	68
73	Photoelectrochemical water oxidation using a Bi ₂ MoO ₆ /MoO ₃ heterojunction photoanode synthesised by hydrothermal treatment of an anodised MoO ₃ thin film. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 6964-6971	13	62
72	The KCaSrTa ₅ O ₁₅ photocatalyst with tungsten bronze structure for water splitting and CO ₂ reduction. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 24417-22	3.6	62
71	Loading effects of silver oxides upon generation of reactive oxygen species in semiconductor photocatalysis. <i>Physical Chemistry Chemical Physics</i> , 2008 , 10, 2986-92	3.6	61
70	Photocatalytic CO reduction using water as an electron donor by a powdered Z-scheme system consisting of metal sulfide and an RGO-TiO ₂ composite. <i>Faraday Discussions</i> , 2017 , 198, 397-407	3.6	58
69	Interfacing BiVO ₄ with Reduced Graphene Oxide for Enhanced Photoactivity: A Tale of Facet Dependence of Electron Shuttling. <i>Small</i> , 2016 , 12, 5295-5302	11	56
68	Z-scheme water splitting under visible light irradiation over powdered metal-complex/semiconductor hybrid photocatalysts mediated by reduced graphene oxide. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 13283-13290	13	54
67	Sensitization of NaMO ₃ (M: Nb and Ta) Photocatalysts with Wide Band Gaps to Visible Light by Ir Doping. <i>Bulletin of the Chemical Society of Japan</i> , 2009 , 82, 514-518	5.1	54
66	An effect of Ag(I)-substitution at Cu sites in CuGaS ₂ on photocatalytic and photoelectrochemical properties for solar hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 21815-21823	13	52
65	Time-Resolved Infrared Absorption Study of NaTaO ₃ Photocatalysts Doped with Alkali Earth Metals. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 13918-13923	3.8	50

64	A Simple Preparation Method of Visible-Light-Driven BiVO ₄ Photocatalysts From Oxide Starting Materials (Bi ₂ O ₃ and V ₂ O ₅) and Their Photocatalytic Activities. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2010 , 132,	2.3	48
63	Photoreduced Graphene Oxide as a Conductive Binder to Improve the Water Splitting Activity of Photocatalyst Sheets. <i>Advanced Functional Materials</i> , 2016 , 26, 7011-7019	15.6	47
62	Visible light-induced charge storage, on-demand release and self-photorechargeability of WO ₃ film. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 13421-6	3.6	47
61	Au ₂₅ -Loaded BaLa ₄ Ti ₄ O ₁₅ Water-Splitting Photocatalyst with Enhanced Activity and Durability Produced Using New Chromium Oxide Shell Formation Method. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 13669-13681	3.8	45
60	The role of surface states during photocurrent switching: Intensity modulated photocurrent spectroscopy analysis of BiVO ₄ photoelectrodes. <i>Applied Catalysis B: Environmental</i> , 2018 , 237, 401-408	21.8	45
59	Enhancement of CO ₂ reduction activity under visible light irradiation over Zn-based metal sulfides by combination with Ru-complex catalysts. <i>Applied Catalysis B: Environmental</i> , 2018 , 224, 572-578	21.8	40
58	Atomic-Level Understanding of the Effect of Heteroatom Doping of the Cocatalyst on Water-Splitting Activity in AuPd or AuPt Alloy Cluster-Loaded BaLa ₄ Ti ₄ O ₁₅ . <i>ACS Applied Energy Materials</i> , 2019 , 2, 4175-4187	6.1	37
57	Solar hydrogen evolution using a CuGaS ₂ photocathode improved by incorporating reduced graphene oxide. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 8566-8570	13	37
56	Z-Schematic and visible-light-driven CO reduction using HO as an electron donor by a particulate mixture of a Ru-complex/(CuGa)ZnS hybrid catalyst, BiVO and an electron mediator. <i>Chemical Communications</i> , 2018 , 54, 10199-10202	5.8	33
55	A CoO-modified SnNbO photoelectrode for highly efficient oxygen evolution from water. <i>Chemical Communications</i> , 2017 , 53, 629-632	5.8	32
54	Photocatalytic Water Splitting and CO ₂ Reduction over KCaSrTa ₅ O ₁₅ Nanorod Prepared by a Polymerized Complex Method. <i>Bulletin of the Chemical Society of Japan</i> , 2015 , 88, 538-543	5.1	32
53	Development of Ir and La-codoped BaTaO photocatalysts using visible light up to 640 nm as an H ₂ -evolving photocatalyst for Z-schematic water splitting. <i>Chemical Communications</i> , 2017 , 53, 6156-6159	5.8	28
52	The Importance of the Interfacial Contact: Is Reduced Graphene Oxide Always an Enhancer in Photo(Electro)Catalytic Water Oxidation?. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 23125-23134	9.5	28
51	Sensitization of wide band gap photocatalysts to visible light by molten CuCl treatment. <i>Chemical Science</i> , 2015 , 6, 687-692	9.4	28
50	Photocatalysis of heat treated sodium- and hydrogen-titanate nanoribbons for water splitting, H ₂ /O ₂ generation and oxalic acid oxidation. <i>Chemical Engineering Science</i> , 2013 , 93, 341-349	4.4	28
49	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
48	Activation of Water-Splitting Photocatalysts by Loading with Ultrafine Rh-Cr Mixed-Oxide Cocatalyst Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 7076-7082	16.4	27
47	Understanding self-photorechargeability of WO ₃ for H ₂ generation without light illumination. <i>ChemSusChem</i> , 2013 , 6, 291-8	8.3	27

46	Preparation of Mo- and W-doped BiVO ₄ fine particles prepared by an aqueous route for photocatalytic and photoelectrochemical O ₂ evolution. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018 , 353, 284-291	4.7	27
45	Enhanced H ₂ evolution over an Ir-doped SrTiO ₃ photocatalyst by loading of an Ir cocatalyst using visible light up to 800 nm. <i>Chemical Communications</i> , 2018 , 54, 10606-10609	5.8	24
44	Development of Various Metal Sulfide Photocatalysts Consisting of d0, d5, and d10 Metal Ions for Sacrificial H ₂ Evolution under Visible Light Irradiation. <i>Chemistry Letters</i> , 2017 , 46, 616-619	1.7	22
43	Photoexcited Electrons Driven by Doping Concentration Gradient: Flux-Prepared NaTaO ₃ Photocatalysts Doped with Strontium Cations. <i>ACS Catalysis</i> , 2018 , 8, 9334-9341	13.1	22
42	Z-scheme photocatalyst systems employing Rh- and Ir-doped metal oxide materials for water splitting under visible light irradiation. <i>Faraday Discussions</i> , 2019 , 215, 313-328	3.6	21
41	Powder-based (CuGa _{1-x} In _x) _{1-x} Zn _{2x} S ₂ solid solution photocathodes with a largely positive onset potential for solar water splitting. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 2016-2024	5.8	21
40	Solar Water Splitting Utilizing a SiC Photocathode, a BiVO ₄ Photoanode, and a Perovskite Solar Cell. <i>ChemSusChem</i> , 2017 , 10, 4420-4423	8.3	20
39	Photocathode Characteristics of a Spray-Deposited Cu ₂ ZnGeS ₄ Thin Film for CO ₂ Reduction in a CO ₂ -Saturated Aqueous Solution. <i>ACS Applied Energy Materials</i> , 2019 , 2, 6911-6918	6.1	19
38	Z-scheme water splitting by microspherical Rh-doped SrTiO ₃ photocatalysts prepared by a spray drying method. <i>Applied Catalysis B: Environmental</i> , 2019 , 252, 222-229	21.8	19
37	Solar-driven BiVO ₄ Photoanodes Prepared by a Facile Screen Printing Method. <i>Chemistry Letters</i> , 2016 , 45, 152-154	1.7	18
36	Enhanced Activity of BiVO ₄ Powdered Photocatalyst Under Visible Light Irradiation by Preparing Microwave-Assisted Aqueous Solution Methods. <i>Catalysis Letters</i> , 2014 , 144, 1962-1967	2.8	18
35	Capturing local structure modulations of photoexcited BiVO ₄ by ultrafast transient XAFS. <i>Chemical Communications</i> , 2017 , 53, 7314-7317	5.8	17
34	Solar water splitting over RhCrO ₂ -loaded AgTaO ₃ of a valence-band-controlled metal oxide photocatalyst. <i>Chemical Science</i> , 2020 , 11, 2330-2334	9.4	17
33	Characterization of Rh:SrTiO ₃ photoelectrodes surface-modified with a cobalt clathrochelate and their application to the hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2017 , 258, 255-265	6.7	16
32	Visible-Light-Responsive CuLi _{1/3} Ti _{2/3} O ₂ Powders Prepared by a Molten CuCl Treatment of Li ₂ TiO ₃ for Photocatalytic H ₂ Evolution and Z-Schematic Water Splitting. <i>Chemistry of Materials</i> , 2016 , 28, 4677-4685	9.6	16
31	Water Splitting on Aluminum Porphyrins To Form Hydrogen and Hydrogen Peroxide by One Photon of Visible Light. <i>ACS Applied Energy Materials</i> , 2019 , 2, 8045-8051	6.1	16
30	Cu MS (M=V, Nb, Ta) and its Solid Solutions with Sulvanite Structure for Photocatalytic and Photoelectrochemical H ₂ Evolution under Visible-Light Irradiation. <i>ChemSusChem</i> , 2019 , 12, 1977-1983	8.3	15
29	Photocatalytic Properties of Layered Metal Oxides Substituted with Silver by a Molten AgNO ₃ Treatment. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 14638-43	9.5	15

28	Photocatalytic CO ₂ reduction using water as an electron donor over Ag-loaded metal oxide photocatalysts consisting of several polyhedra of Ti ⁴⁺ , Zr ⁴⁺ , and Ta ⁵⁺ . <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018 , 358, 416-421	4.7	15
27	Photocatalysis using a Wide Range of the Visible Light Spectrum: Hydrogen Evolution from Doped AgGaS ₂ . <i>ChemSusChem</i> , 2015 , 8, 2902-6	8.3	14
26	Efficient Solar Water Oxidation to Oxygen over Mo-doped BiVO ₄ Thin Film Photoanode Prepared by a Facile Aqueous Solution Route. <i>Chemistry Letters</i> , 2017 , 46, 651-654	1.7	11
25	In situ metal doping during modified anodization synthesis of Nb ₂ O ₅ with enhanced photoelectrochemical water splitting. <i>AIChE Journal</i> , 2016 , 62, 352-358	3.6	11
24	Improvement of hydrogen evolution under visible light over Zn _{1-x} (CuGa) _x Ga ₂ S ₄ photocatalysts by synthesis utilizing a polymerizable complex method. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 14239-14244	13.244	10
23	Z-Schematic Solar Water Splitting Using Fine Particles of H ₂ -Evolving (CuGa) _{0.5} ZnS ₂ Photocatalyst Prepared by a Flux Method with Chloride Salts. <i>ACS Applied Energy Materials</i> , 2020 , 3, 5684-5692	6.1	10
22	Decomposition of an aqueous ammonia solution as a photon energy conversion reaction using a Ru-loaded ZnS photocatalyst. <i>Chemical Communications</i> , 2018 , 54, 6117-6119	5.8	10
21	Photoelectrochemical Reduction of CO ₂ to CO Using a CuGaS ₂ Thin-film Photocathode Prepared by a Spray Pyrolysis Method. <i>Chemistry Letters</i> , 2018 , 47, 1424-1427	1.7	10
20	Photochemical hydrogen evolution on metal ion surface-grafted TiO ₂ -particles prepared by sol/gel method without calcination. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018 , 358, 386-394	4.7	9
19	Water reduction into hydrogen using Rh-doped SrTiO ₃ photoelectrodes surface-modified by minute amounts of Pt: Insights from heterogeneous kinetic analysis. <i>Electrochimica Acta</i> , 2019 , 297, 696-704	6.7	9
18	Solar Water Splitting under Neutral Conditions Using Z-Scheme Systems with Mo-Doped BiVO ₄ as an O ₂ -Evolving Photocatalyst. <i>Energy Technology</i> , 2019 , 7, 1900358	3.5	8
17	Effects of Coapplication of Rh-Doping and Ag-Substitution on the Band Structure of Li ₂ TiO ₃ and the Photocatalytic Property. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 9881-9887	8.3	7
16	Z-Schematic CO ₂ Reduction to CO through Interparticle Electron Transfer between SrTiO ₃ :Rh of a Reducing Photocatalyst and BiVO ₄ of a Water Oxidation Photocatalyst under Visible Light. <i>ACS Applied Energy Materials</i> , 2020 , 3, 10001-10007	6.1	7
15	Long wavelength visible light-responsive SrTiO ₃ photocatalysts doped with valence-controlled Ru for sacrificial H ₂ and O ₂ evolution. <i>Catalysis Science and Technology</i> , 2020 , 10, 4912-4916	5.5	6
14	Water Splitting over CaTa ₄ O ₁₁ and LaZrTa ₃ O ₁₁ Photocatalysts with Laminated Structure Consisting of Layers of TaO ₆ Octahedra and TaO ₇ Decahedra. <i>Chemistry Letters</i> , 2014 , 43, 396-398	1.7	6
13	Photocatalytic Overall Water Splitting over Al ₂ Ti ₆ O ₁₄ (A: 2Na and Sr) with Tunneling Structure. <i>Chemistry Letters</i> , 2011 , 40, 108-110	1.7	6
12	Photocatalytic Water Splitting over Rod-shaped K ₃ Ta ₃ Si ₂ O ₁₃ and Block-shaped Ba ₃ Ta ₆ Si ₄ O ₂₆ Prepared by Flux Method. <i>Chemistry Letters</i> , 2015 , 44, 306-308	1.7	5
11	New Visible-Light-Driven H ₂ - and O ₂ -Evolving Photocatalysts Developed by Ag(I) and Cu(I) Ion Exchange of Various Layered and Tunneling Metal Oxides Using Molten Salts Treatments. <i>Chemistry of Materials</i> , 2020 , 32, 10524-10537	9.6	3

10	Inorganic assembly catalysts for artificial photosynthesis: general discussion. <i>Faraday Discussions</i> , 2017 , 198, 481-507	3.6	2
9	Activation of Water-Splitting Photocatalysts by Loading with Ultrafine Rh ₄ Ir Mixed-Oxide Cocatalyst Nanoparticles. <i>Angewandte Chemie</i> , 2020 , 132, 7142-7148	3.6	2
8	Water Splitting over Ba ₂ In ₂ O ₅ Photocatalysts with a Brownmillerite Structure and the Effect of La-substitution on Its Band Structure and Photocatalytic Activities. <i>Chemistry Letters</i> , 2018 , 47, 1526-1529	1.7	2
7	Phase relations in the pseudo ternary system In ₂ O ₃ -TiO ₂ -BO (B: Zn, Co and Ni) at 1200 °C in air. <i>Journal of Solid State Chemistry</i> , 2018 , 258, 865-875	3.3	1
6	Control of Surface Structure and Effect of Cocatalyst Aiming at Water Splitting over Photocatalyst. <i>Hyomen Kagaku</i> , 2006 , 27, 386-391		1
5	Development of visible-light-responsive Ir and La-codoped KTaO photocatalysts for water splitting. <i>Chemical Communications</i> , 2021 , 57, 10331-10334	5.8	1
4	3.????????????????????~????????????????~. <i>Electrochemistry</i> , 2014 , 82, 492-496	1.2	
3	Fundamentals of Development of Photocatalyst Materials and Evaluation of Photocatalytic Abilities. <i>Journal of the Institute of Electrical Engineers of Japan</i> , 2018 , 138, 594-597	0	
2	Photocatalysis: Interfacing BiVO ₄ with Reduced Graphene Oxide for Enhanced Photoactivity: A Tale of Facet Dependence of Electron Shuttling (Small 38/2016). <i>Small</i> , 2016 , 12, 5232-5232	11	
1	Band Engineering of Semiconductors Toward Visible-Light-Responsive Photocatalysts 2021 , 203-213		