

Hiroshi Irie

List of Publications by Year in descending order

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49
papers

3,841
citations

361045

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214527

47
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docs citations

51
times ranked

4835
citing authors

#	ARTICLE	IF	CITATIONS
1	Anomalous photo-thermoelectric effects of platinum-photodeposited tungsten trioxide after gaschromic reaction. <i>Journal of Applied Physics</i> , 2022, 131, 185102.	1.1	1
2	Silver cocatalyst-concentration dependence of overall water splitting performance over silver-inserted solid-state heterojunction photocatalyst composed of zinc rhodium oxide and bismuth vanadium oxide. <i>Applied Catalysis B: Environmental</i> , 2021, 284, 119744.	10.8	14
3	Selective loading of platinum cocatalyst onto zinc rhodium oxide in a silver-inserted heterojunction overall water-splitting photocatalyst consisting of zinc rhodium oxide and bismuth vanadium oxide. <i>Journal of the Ceramic Society of Japan</i> , 2021, 129, 453-457.	0.5	1
4	Noble Metal Modification of CdS-Covered CuInS ₂ Electrodes for Improved Photoelectrochemical Activity and Stability. <i>Catalysts</i> , 2020, 10, 949.	1.6	13
5	Red light-inducible overall water-splitting photocatalyst, gold-inserted zinc rhodium oxide and bismuth vanadium oxide heterojunction, connected using gold prepared by sputtering in ionic liquid. <i>Journal of Chemical Physics</i> , 2020, 153, 014701.	1.2	9
6	Facet-dependent activity of hematite nanocrystals toward the oxygen evolution reaction. <i>Catalysis Science and Technology</i> , 2020, 10, 3748-3754.	2.1	16
7	Selective Loading of Platinum or Silver Cocatalyst on a Hydrogen-Evolution Photocatalyst in an Overall Water-Splitting System, Silver-Inserted Zinc Rhodium Oxide and Bismuth Vanadium Oxide. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 3067-3067.	0.0	0
8	Cocatalyst modification of niobium-substituted silver tantalate photocatalyst for enhanced solar water-splitting activity. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 23600-23609.	3.8	8
9	Controllable Anomalous n- and p-Type Photothermoelectric Effects of Platinum Oxide and Tungsten Trioxide Layers with and without Chromic Reaction. <i>Chemistry of Materials</i> , 2019, 31, 6202-6209.	3.2	4
10	Induction of Concerted Proton-Coupled Electron Transfer during Oxygen Evolution on Hematite Using Lanthanum Oxide as a Solid Proton Acceptor. <i>ACS Catalysis</i> , 2019, 9, 9212-9215.	5.5	27
11	Electrochemical Reduction of Carbon Dioxide to Formate on Palladium-Copper Alloy Nanoparticulate Electrode. <i>Electrochemistry</i> , 2019, 87, 134-138.	0.6	15
12	Visible-light-induced water splitting on a hierarchically constructed Z-scheme photocatalyst composed of zinc rhodium oxide and bismuth vanadate. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10372-10378.	5.2	13
13	Selective loading of platinum or silver cocatalyst onto a hydrogen-evolution photocatalyst in a silver-mediated all solid-state Z-scheme system for enhanced overall water splitting. <i>RSC Advances</i> , 2019, 9, 41913-41917.	1.7	11
14	Zinc rhodium oxide and its possibility as a constituent photocatalyst for carbon dioxide reduction using water as an electron source. <i>Catalysis Today</i> , 2019, 335, 402-408.	2.2	3
15	Facile synthesis of a red light-inducible overall water-splitting photocatalyst using gold as a solid-state electron mediator. <i>Chemical Communications</i> , 2018, 54, 7999-8002.	2.2	18
16	Synthesis and Photocatalytic Properties of Iron Disilicide/SiC Composite Powder. <i>MRS Advances</i> , 2017, 2, 471-476.	0.5	2
17	Silver-inserted heterojunction photocatalyst consisting of zinc rhodium oxide and silver antimony oxide for overall pure-water splitting under visible light. <i>Applied Catalysis B: Environmental</i> , 2017, 209, 663-668.	10.8	18
18	Enhanced Visible-Light-Sensitive Two-Step Overall Water-Splitting Based on Band Structure Controls of Titanium Dioxide and Strontium Titanate. <i>Journal of Materials Science and Chemical Engineering</i> , 2017, 05, 129-141.	0.2	3

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19	A heterojunction photocatalyst composed of zinc rhodium oxide, single crystal-derived bismuth vanadium oxide, and silver for overall pure-water splitting under visible light up to 740 nm. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 27754-27760.	1.3	41
20	Improvement of the Photocatalytic Water Splitting Activity of Silver Tantalate by Photodeposited Platinum and Cobalt-Oxide Nanoclusters. <i>Electrochemistry</i> , 2016, 84, 784-788.	0.6	8
21	Acceleration of electrocatalytic CO ₂ reduction by adding proton-coupled electron transfer inducing compounds. <i>Journal of Photonics for Energy</i> , 2016, 7, 012005.	0.8	5
22	Efficient oxygen evolution on hematite at neutral pH enabled by proton-coupled electron transfer. <i>Chemical Communications</i> , 2016, 52, 14015-14018.	2.2	21
23	Detection of Intermediate Species in Oxygen Evolution on Hematite Electrodes Using Spectroelectrochemical Measurements. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24827-24834.	1.5	48
24	Photo- and gas-tuned, reversible thermoelectric properties and anomalous photo-thermoelectric effects of platinum-loaded tungsten trioxide. <i>Journal of Applied Physics</i> , 2016, 119, 245109.	1.1	4
25	A silver-inserted zinc rhodium oxide and bismuth vanadium oxide heterojunction photocatalyst for overall pure-water splitting under red light. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3061-3067.	5.2	33
26	Visible-Light-Sensitive Photocatalysts: Nanocluster-Grafted Titanium Dioxide for Indoor Environmental Remediation. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 75-84.	2.1	138
27	Visible-light-sensitive two-step overall water-splitting based on band structure control of titanium dioxide. <i>Applied Catalysis B: Environmental</i> , 2016, 180, 1-5.	10.8	32
28	Photocatalytic hydrogen evolution over \hat{I}^2 -iron silicide under infrared-light irradiation. <i>Chemical Communications</i> , 2015, 51, 2818-2820.	2.2	23
29	Development of optically transparent water oxidation catalysts using manganese pyrophosphate compounds. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2015, 152, 139-145.	1.7	2
30	Niobium(V) oxide with added silver as a thermoelectric material prepared by spark plasma sintering. <i>Materials Letters</i> , 2015, 156, 94-97.	1.3	6
31	Photo-controllable thermoelectric properties with reversibility and photo-thermoelectric effects of tungsten trioxide accompanied by its photochromic phenomenon. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	10
32	Silver-Inserted Heterojunction Photocatalysts for Z-Scheme Overall Pure-Water Splitting under Visible-Light Irradiation. <i>Journal of Physical Chemistry C</i> , 2014, 118, 22450-22456.	1.5	63
33	In situ UV-vis Absorption Spectra of Intermediate Species for Oxygen-Evolution Reaction on the Surface of MnO ₂ in Neutral and Alkaline Media. <i>Electrochemistry</i> , 2014, 82, 325-327.	0.6	25
34	A visible-light-induced overall water-splitting photocatalyst: conduction-band-controlled silver tantalate. <i>Chemical Communications</i> , 2013, 49, 10094.	2.2	56
35	Magnetic and photocatalytic properties of n- and p-type ZnFe ₂ O ₄ particles synthesized using ultrasonic spray pyrolysis. <i>Journal of the Ceramic Society of Japan</i> , 2013, 121, 26-30.	0.5	13
36	Hydrothermal synthesis of visible light-sensitive conduction band-controlled tungsten-doped titanium dioxide photocatalysts with copper ion-grafts. <i>Journal of the Ceramic Society of Japan</i> , 2013, 121, 563-567.	0.5	3

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37	Structural and Thermoelectric Properties of Rare-Earth-Substituted $\text{Sr}_{3-x}\text{Fe}_2\text{O}_7$. Materials Transactions, 2013, 54, 1986-1992.	0.4	4
38	Hydrogen and Oxygen Evolution Photocatalysts Synthesized from Strontium Titanate by Controlled Doping and Their Performance in Two-Step Overall Water Splitting under Visible Light. Journal of Physical Chemistry C, 2012, 116, 17458-17463.	1.5	81
39	Synthesis and thermoelectric properties of the novel A-site deficient $\text{Zn}_{0.5}\text{Rh}_2\text{O}_4$ compound. Journal of Solid State Chemistry, 2012, 192, 23-27.	1.4	9
40	Visible-light sensitive hydrogen evolution photocatalyst ZnRh_2O_4 . International Journal of Hydrogen Energy, 2012, 37, 134-138.	3.8	24
41	Band structure controls of SrTiO_3 towards two-step overall water splitting. Applied Catalysis B: Environmental, 2012, 115-116, 330-335.	10.8	29
42	Photocatalytic and Electrochemical Characterizations of Cu(II) -Grafted TiO_2 . Electrochemistry, 2011, 79, 793-796.	0.6	11
43	An Efficient Visible-Light-Sensitive Fe(III) -Grafted TiO_2 Photocatalyst. Journal of Physical Chemistry C, 2010, 114, 16481-16487.	1.5	344
44	Visible Light-Sensitive Cu(II) -Grafted TiO_2 Photocatalysts: Activities and X-ray Absorption Fine Structure Analyses. Journal of Physical Chemistry C, 2009, 113, 10761-10766.	1.5	393
45	Ag^{+} - and Pb^{2+} -Doped SrTiO_3 Photocatalysts. A Correlation Between Band Structure and Photocatalytic Activity. Journal of Physical Chemistry C, 2007, 111, 1847-1852.	1.5	126
46	Visible Light Sensitive Photocatalyst, Delafossite Structured AgGaO_2 . Journal of Physical Chemistry B, 2006, 110, 23274-23278.	1.2	152
47	Visible Light-Sensitive InTaO_4 -Based Photocatalysts for Organic Decomposition. Journal of the American Ceramic Society, 2005, 88, 3137-3142.	1.9	22
48	Nitrogen-Concentration Dependence on Photocatalytic Activity of $\text{TiO}_2\text{-xN}_x$ Powders. Journal of Physical Chemistry B, 2003, 107, 5483-5486.	1.2	1,939
49	Acceleration of electrocatalytic CO_2 reduction by adding proton-coupled electron transfer inducing compounds. Journal of Photonics for Energy, 0, , 012001.	0.8	0