

# Kazuhiro Takanabe

## List of Publications by Year in descending order

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196  
papers

29,679  
citations

19608

61  
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4628

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213  
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213  
docs citations

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times ranked

25946  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design Predictions of n Heterojunction Based Photoanode for Efficient Unbiased Overall Solar Water Splitting. <i>Energy Technology</i> , 2022, 10, 2100570.	1.8	5
2	Gas Crossover Regulation by Porosity-Controlled Glass Sheet Achieves Pure Hydrogen Production by Buffered Water Electrolysis at Neutral pH. <i>ChemSusChem</i> , 2022, 15, e202102294.	3.6	13
3	High current density microkinetic and electronic structure analysis of CO <sub>2</sub> reduction using Co and Fe complexes on gas diffusion electrode. <i>Chem Catalysis</i> , 2022, 2, 1143-1162.	2.9	11
4	A Career in Catalysis: Jean-Marie M. Basset. <i>ACS Catalysis</i> , 2022, 12, 4961-4977.	5.5	3
5	Synthesis of size-controlled boehmite sols: application in high-performance hydrogen-selective ceramic membranes. <i>Journal of Materials Chemistry A</i> , 2022, 10, 12869-12881.	5.2	10
6	(Digital Presentation) Nickel-Iron Electrocatalysts Modified with Group 11 Metals Achieving 1 A cm <sup>-2</sup> of Oxygen Evolution in Buffered Near-Neutral pH Electrolyte. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 1557-1557.	0.0	0
7	(Invited, Digital Presentation) Neutral pH Water Electrolyzer: Can It Become a Disruptive Technology for Green Hydrogen Production?. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 1569-1569.	0.0	0
8	Oxidative coupling of methane over sodium zirconate catalyst. <i>Catalysis Science and Technology</i> , 2021, 11, 4803-4811.	2.1	4
9	Recent advances in understanding oxygen evolution reaction mechanisms over iridium oxide. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 2900-2917.	3.0	75
10	Determination and perturbation of the electronic potentials of solid catalysts for innovative catalysis. <i>Chemical Science</i> , 2021, 12, 540-545.	3.7	7
11	Delivering the Full Potential of Oxygen Evolving Electrocatalyst by Conditioning Electrolytes at Near-Neutral pH. <i>ChemSusChem</i> , 2021, 14, 1554-1564.	3.6	20
12	Maximizing Oxygen Evolution Performance on a Transparent NiFeO <sub>3</sub> /Ta <sub>3</sub> N <sub>5</sub> Photoelectrode Fabricated on an Insulator. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 16317-16325.	4.0	21
13	Surface-Modified Ta <sub>3</sub> N <sub>5</sub> Photoanodes for Sunlight-Driven Overall Water Splitting by Photoelectrochemical Cells. <i>Catalysts</i> , 2021, 11, 584.	1.6	18
14	Recent Developments in Visible-Light-Absorbing Semitransparent Photoanodes for Tandem Cells Driving Solar Water Splitting. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100023.	2.8	16
15	Operando Elucidation on the Working State of Immobilized Fluorinated Iron Porphyrin for Selective Aqueous Electroreduction of CO <sub>2</sub> to CO. <i>ACS Catalysis</i> , 2021, 11, 6499-6509.	5.5	27
16	Transient Potassium Peroxide Species in Highly Selective Oxidative Coupling of Methane over an Unmolten K <sub>2</sub> WO <sub>4</sub> /SiO <sub>2</sub> Catalyst Revealed by In Situ Characterization. <i>ACS Catalysis</i> , 2021, 11, 14237-14248.	5.5	14
17	Exploring the Structure and Performance of Cd-Chalcogenide Photocatalysts in Selective Trifluoromethylation. <i>ACS Catalysis</i> , 2021, 11, 14772-14780.	5.5	24
18	Noncatalytic Oxidative Coupling of Methane (OCM): Gas-Phase Reactions in a Jet Stirred Reactor (JSR). <i>ACS Omega</i> , 2021, 6, 33757-33768.	1.6	8

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19	Impact of OH Radical Generator Involvement in the Gas-Phase Radical Reaction Network on the Oxidative Coupling of Methane—A Simulation Study. <i>Energy Technology</i> , 2020, 8, 1900563.	1.8	10
20	Microkinetic assessment of electrocatalytic oxygen evolution reaction over iridium oxide in unbuffered conditions. <i>Journal of Catalysis</i> , 2020, 391, 435-445.	3.1	52
21	Methane dry reforming on supported cobalt nanoparticles promoted by boron. <i>Journal of Catalysis</i> , 2020, 392, 126-134.	3.1	32
22	Role of Oxidized Mo Species on the Active Surface of Ni-Mo Electrocatalysts for Hydrogen Evolution under Alkaline Conditions. <i>ACS Catalysis</i> , 2020, 10, 12858-12866.	5.5	75
23	Water Electrolysis in Saturated Phosphate Buffer at Neutral pH. <i>ChemSusChem</i> , 2020, 13, 5921-5933.	3.6	29
24	Structural and photoelectrochemical properties of SrTaO <sub>2</sub> N oxynitride thin films deposited by reactive magnetron sputtering. <i>Journal of the European Ceramic Society</i> , 2020, 40, 6301-6308.	2.8	2
25	Efficient Water Oxidation Using Ta <sub>3</sub> N <sub>5</sub> Thin Film Photoelectrodes Prepared on Insulating Transparent Substrates. <i>ChemSusChem</i> , 2020, 13, 1974-1978.	3.6	16
26	Maximizing Hydrogen Evolution Performance on Pt in Buffered Solutions: Mass Transfer Constrains of H <sub>2</sub> and Buffer Ions. <i>Journal of Physical Chemistry C</i> , 2019, 123, 21554-21563.	1.5	24
27	A Stand-Alone Module for Solar-Driven H <sub>2</sub> Production Coupled with Redox-Mediated Sulfide Remediation. <i>Energy Technology</i> , 2019, 7, 1900575.	1.8	5
28	Catalytic consequences of ultrafine Pt clusters supported on SrTiO <sub>3</sub> for photocatalytic overall water splitting. <i>Journal of Catalysis</i> , 2019, 376, 180-190.	3.1	67
29	Switching of Kinetically Relevant Reactants for the Aqueous Cathodic Process Determined by Mass-transport Coupled with Protolysis. <i>ChemCatChem</i> , 2019, 11, 5961-5968.	1.8	10
30	Combined theoretical and experimental characterizations of semiconductors for photoelectrocatalytic applications. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2019, 40, 212-233.	5.6	29
31	On the reconstruction of NiMo electrocatalysts by <i>operando</i> spectroscopy. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15031-15035.	5.2	24
32	Compositionally Screened Eutectic Catalytic Coatings on Halide Perovskite Photocathodes for Photoassisted Selective CO <sub>2</sub> Reduction. <i>ACS Energy Letters</i> , 2019, 4, 1279-1286.	8.8	56
33	Electrochemical Oxidation of a Highly Soluble Redox Mediator in Aqueous Solution for Energy Conversion. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7241-7251.	3.2	8
34	Optoelectronic Structure and Photocatalytic Applications of Na(Bi,La)S <sub>2</sub> Solid Solutions with Tunable Band Gaps. <i>Chemistry of Materials</i> , 2019, 31, 3211-3220.	3.2	13
35	Oxidative-Coupling-Assisted Methane Aromatization: A Simulation Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 22884-22892.	1.8	8
36	TiO <sub>2</sub> -supported Pt single atoms by surface organometallic chemistry for photocatalytic hydrogen evolution. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 24429-24440.	1.3	32

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37	Addressing fundamental experimental aspects of photocatalysis studies. <i>Journal of Catalysis</i> , 2019, 370, 480-484.	3.1	30
38	A new high temperature reactor for operando XAS: Application for the dry reforming of methane over Ni/ZrO <sub>2</sub> catalyst. <i>Review of Scientific Instruments</i> , 2018, 89, 035109.	0.6	13
39	A Permselective CeO <sub>x</sub> Coating To Improve the Stability of Oxygen Evolution Electrocatalysts. <i>Angewandte Chemie</i> , 2018, 130, 1632-1636.	1.6	28
40	A Permselective CeO <sub>x</sub> Coating To Improve the Stability of Oxygen Evolution Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1616-1620.	7.2	121
41	Solvent-Free Synthesis of Quaternary Metal Sulfide Nanoparticles Derived from Thiourea. <i>Particle and Particle Systems Characterization</i> , 2018, 35, 1700183.	1.2	7
42	Poly(3-hydroxybutyrate) production in an integrated electromicrobial setup: Investigation under stress-inducing conditions. <i>PLoS ONE</i> , 2018, 13, e0196079.	1.1	37
43	Theoretical insights into dehydrogenative chemisorption of alkylaromatics on Pt(110) and Ni(110). <i>Journal of Catalysis</i> , 2018, 363, 197-203.	3.1	3
44	Contribution of electrolyte in nanoscale electrolysis of pure and buffered water by particulate photocatalysis. <i>Sustainable Energy and Fuels</i> , 2018, 2, 2044-2052.	2.5	18
45	Kinetics on NiZn Bimetallic Catalysts for Hydrogen Evolution via Selective Dehydrogenation of Methylcyclohexane to Toluene. <i>ACS Catalysis</i> , 2017, 7, 1592-1600.	5.5	59
46	Catalytic routes to fuels from C <sub>1</sub> and oxygenate molecules. <i>Faraday Discussions</i> , 2017, 197, 9-39.	1.6	20
47	Photophysical Properties of SrTaO <sub>2</sub> N Thin Films and Influence of Anion Ordering: A Joint Theoretical and Experimental Investigation. <i>Chemistry of Materials</i> , 2017, 29, 3989-3998.	3.2	37
48	An Oxygen-Insensitive Hydrogen Evolution Catalyst Coated by a Molybdenum-Based Layer for Overall Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5780-5784.	7.2	106
49	An Oxygen-Insensitive Hydrogen Evolution Catalyst Coated by a Molybdenum-Based Layer for Overall Water Splitting. <i>Angewandte Chemie</i> , 2017, 129, 5874-5878.	1.6	13
50	In-operando elucidation of bimetallic CoNi nanoparticles during high-temperature CH <sub>4</sub> /CO <sub>2</sub> reaction. <i>Applied Catalysis B: Environmental</i> , 2017, 213, 177-189.	10.8	88
51	Boosting the Performance of the Nickel Anode in the Oxygen Evolution Reaction by Simple Electrochemical Activation. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5061-5065.	7.2	63
52	Boosting the Performance of the Nickel Anode in the Oxygen Evolution Reaction by Simple Electrochemical Activation. <i>Angewandte Chemie</i> , 2017, 129, 5143-5147.	1.6	19
53	Towards Versatile and Sustainable Hydrogen Production through Electrocatalytic Water Splitting: Electrolyte Engineering. <i>ChemSusChem</i> , 2017, 10, 1318-1336.	3.6	154
54	Photocatalytic Water Splitting: Quantitative Approaches toward Photocatalyst by Design. <i>ACS Catalysis</i> , 2017, 7, 8006-8022.	5.5	656

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55	Ultrathin Microporous SiO <sub>2</sub> Membranes Photodeposited on Hydrogen Evolving Catalysts Enabling Overall Water Splitting. ACS Catalysis, 2017, 7, 7931-7940.	5.5	40
56	Electrolyte Engineering towards Efficient Water Splitting at Mild pH. ChemSusChem, 2017, 10, 4155-4162.	3.6	51
57	Bismuth Silver Oxysulfide for Photoconversion Applications: Structural and Optoelectronic Properties. Chemistry of Materials, 2017, 29, 8679-8689.	3.2	28
58	Exclusive Hydrogen Generation by Electrocatalysts Coated with an Amorphous Chromium-Based Layer Achieving Efficient Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2017, 5, 8079-8088.	3.2	44
59	Electrolyte Engineering towards Efficient Water Splitting at Mild pH. ChemSusChem, 2017, 10, 4122-4122.	3.6	4
60	Integrated In-situ Characterization of a Molten Salt Catalyst Surface: Evidence of Sodium Peroxide and Hydroxyl Radical Formation. Angewandte Chemie, 2017, 129, 10539-10543.	1.6	17
61	Integrated In-situ Characterization of a Molten Salt Catalyst Surface: Evidence of Sodium Peroxide and Hydroxyl Radical Formation. Angewandte Chemie - International Edition, 2017, 56, 10403-10407.	7.2	57
62	Photophysics and electrochemistry relevant to photocatalytic water splitting involved at solid-electrolyte interfaces. Journal of Energy Chemistry, 2017, 26, 259-269.	7.1	20
63	Dehydrogenation of ethane to ethylene via radical pathways enhanced by alkali metal based catalyst in oxygen condition. AIChE Journal, 2017, 63, 105-110.	1.8	20
64	Insights on Measuring and Reporting Heterogeneous Photocatalysis: Efficiency Definitions and Setup Examples. Chemistry of Materials, 2017, 29, 158-167.	3.2	265
65	Critical difference between optoelectronic properties of In <sub>2</sub> S <sub>3</sub> and SnWO <sub>4</sub> semiconductors: A DFT/HSE06 and experimental investigation. Physica Status Solidi (B): Basic Research, 2016, 253, 1115-1119.	0.7	18
66	Electrocatalytic Reduction of Carbon Dioxide with a Well-Defined PN <sup>3</sup> -Ru Pincer Complex. ChemPlusChem, 2016, 81, 166-171.	1.3	21
67	Homo-tandem Polymer Solar Cells with $V_{OC} > 1.8$ V for Efficient PV-Driven Water Splitting. Advanced Materials, 2016, 28, 3366-3373.	11.1	57
68	Determination of the electronic, dielectric, and optical properties of sillenite Bi <sub>2</sub> TiO <sub>20</sub> and perovskite-like Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> materials from hybrid first-principle calculations. Journal of Chemical Physics, 2016, 144, 134702.	1.2	45
69	Enhanced Kinetics of Hole Transfer and Electrocatalysis during Photocatalytic Oxygen Evolution by Cocatalyst Tuning. ACS Catalysis, 2016, 6, 4117-4126.	5.5	48
70	Simultaneous Reduction of CO <sub>2</sub> and Splitting of H <sub>2</sub> O by a Single Immobilized Cobalt Phthalocyanine Electrocatalyst. ACS Catalysis, 2016, 6, 3092-3095.	5.5	237
71	New Insight into the Hydrogen Evolution Reaction under Buffered Near-Neutral pH Conditions: Enthalpy and Entropy of Activation. Journal of Physical Chemistry C, 2016, 120, 24187-24196.	1.5	41
72	Generation and Characteristics of IV-VI transition Metal Nitride and Carbide Nanoparticles using a Reactive Mesoporous Carbon Nitride. ChemistrySelect, 2016, 1, 290-296.	0.7	9

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73	Tantalum nitride for photocatalytic water splitting: concept and applications. <i>Materials for Renewable and Sustainable Energy</i> , 2016, 5, 1.	1.5	70
74	State-of-the-art Sn <sup>2+</sup> -based ternary oxides as photocatalysts for water splitting: electronic structures and optoelectronic properties. <i>Catalysis Science and Technology</i> , 2016, 6, 7656-7670.	2.1	45
75	A miniature solar device for overall water splitting consisting of series-connected spherical silicon solar cells. <i>Scientific Reports</i> , 2016, 6, 24633.	1.6	25
76	Generation of Transparent Oxygen Evolution Electrode Consisting of Regularly Ordered Nanoparticles from Self-Assembly Cobalt Phthalocyanine as a Template. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 32376-32384.	4.0	12
77	An Efficient and Stable Hydrophobic Molecular Cobalt Catalyst for Water Electro-oxidation at Neutral pH. <i>ACS Catalysis</i> , 2016, 6, 4647-4652.	5.5	50
78	Design of a core-shell Pt-SiO <sub>2</sub> catalyst in a reverse microemulsion system: Distinctive kinetics on CO oxidation at low temperature. <i>Journal of Catalysis</i> , 2016, 340, 368-375.	3.1	61
79	Solar Cells: Homo-Tandem Polymer Solar Cells with V <sub>OC</sub> > 1.8 V for Efficient PV-Driven Water Splitting ( <i>Adv. Mater.</i> 17/2016). <i>Advanced Materials</i> , 2016, 28, 3412-3412.	11.1	1
80	Temperature Dependence of Electrocatalytic and Photocatalytic Oxygen Evolution Reaction Rates Using NiFe Oxide. <i>ACS Catalysis</i> , 2016, 6, 1713-1722.	5.5	145
81	Cu-Sn Bimetallic Catalyst for Selective Aqueous Electroreduction of CO <sub>2</sub> to CO. <i>ACS Catalysis</i> , 2016, 6, 2842-2851.	5.5	380
82	Electrolyte Engineering toward Efficient Hydrogen Production Electrocatalysis with Oxygen-Crossover Regulation under Densely Buffered Near-Neutral pH Conditions. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1785-1794.	1.5	31
83	Solvent-induced deposition of Cu-Ga-In-S nanocrystals onto a titanium dioxide surface for visible-light-driven photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2016, 184, 264-269.	10.8	26
84	A simplified theoretical guideline for overall water splitting using photocatalyst particles. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2894-2908.	5.2	67
85	Insight on Tafel slopes from a microkinetic analysis of aqueous electrocatalysis for energy conversion. <i>Scientific Reports</i> , 2015, 5, 13801.	1.6	2,017
86	Ammonia Synthesis Using Ti and Nb Nitride Nanoparticles Prepared by Mesoporous Graphitic C <sub>3</sub> N <sub>4</sub> . <i>Bulletin of the Chemical Society of Japan</i> , 2015, 88, 584-590.	2.0	8
87	UV-Vis optoelectronic properties of g-C <sub>3</sub> N <sub>4</sub> : A comparative experimental and density functional theory based study. <i>APL Materials</i> , 2015, 3, 096101.	2.2	40
88	Surface Functionalization of g-C <sub>3</sub> N <sub>4</sub> : Molecular-Level Design of Noble-Metal-Free Hydrogen Evolution Photocatalysts. <i>Chemistry - A European Journal</i> , 2015, 21, 10290-10295.	1.7	42
89	Frontispiece: Surface Functionalization of g-C <sub>3</sub> N <sub>4</sub> : Molecular-Level Design of Noble-Metal-Free Hydrogen Evolution Photocatalysts. <i>Chemistry - A European Journal</i> , 2015, 21, n/a-n/a.	1.7	1
90	Identification of intrinsic catalytic activity for electrochemical reduction of water molecules to generate hydrogen. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 15111-15114.	1.3	30

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91	Combined experimental&theoretical study of the optoelectronic properties of non-stoichiometric pyrochlore bismuth titanate. <i>Journal of Materials Chemistry C</i> , 2015, 3, 12032-12039.	2.7	29
92	Photocatalytic Water-Splitting Reaction from Catalytic and Kinetic Perspectives. <i>Catalysis Letters</i> , 2015, 145, 95-108.	1.4	210
93	Impact of solute concentration on the electrocatalytic conversion of dissolved gases in buffered solutions. <i>Journal of Power Sources</i> , 2015, 287, 465-471.	4.0	26
94	Establishing Efficient Cobalt-Based Catalytic Sites for Oxygen Evolution on a Ta <sub>3</sub> N <sub>5</sub> Photocatalyst. <i>Chemistry of Materials</i> , 2015, 27, 5685-5694.	3.2	51
95	Solar Water Splitting Using Semiconductor Photocatalyst Powders. <i>Topics in Current Chemistry</i> , 2015, 371, 73-103.	4.0	52
96	Non-precious bimetallic catalysts for selective dehydrogenation of an organic chemical hydride system. <i>Chemical Communications</i> , 2015, 51, 12931-12934.	2.2	40
97	Immobilization of a molecular cobalt electrocatalyst by hydrophobic interaction with a hematite photoanode for highly stable oxygen evolution. <i>Chemical Communications</i> , 2015, 51, 13481-13484.	2.2	49
98	Electronic structure and photocatalytic activity of wurtzite Cu&Ga&S nanocrystals and their Zn substitution. <i>Journal of Materials Chemistry A</i> , 2015, 3, 8896-8904.	5.2	33
99	Combined experimental and theoretical assessments of the lattice dynamics and optoelectronics of TaON and Ta <sub>3</sub> N <sub>5</sub> . <i>Journal of Solid State Chemistry</i> , 2015, 229, 219-227.	1.4	88
100	Generation of Cu&In alloy surfaces from CuInO <sub>2</sub> as selective catalytic sites for CO <sub>2</sub> electroreduction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19085-19092.	5.2	99
101	Electrocatalytic Hydrogen Evolution under Densely Buffered Neutral pH Conditions. <i>Journal of Physical Chemistry C</i> , 2015, 119, 20453-20458.	1.5	66
102	Dendritic Tip-on Polytriazine-Based Carbon Nitride Photocatalyst with High Hydrogen Evolution Activity. <i>Chemistry of Materials</i> , 2015, 27, 8237-8247.	3.2	140
103	A Highly Selective Copper&Indium Bimetallic Electrocatalyst for the Electrochemical Reduction of Aqueous CO <sub>2</sub> to CO. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 2146-2150.	7.2	403
104	Perfluorinated Cobalt Phthalocyanine Effectively Catalyzes Water Electrooxidation. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 49-52.	1.0	37
105	Carrier dynamics of a visible-light-responsive Ta <sub>3</sub> N <sub>5</sub> photoanode for water oxidation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 2670-2677.	1.3	85
106	Nano-design of quantum dot-based photocatalysts for hydrogen generation using advanced surface molecular chemistry. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 1001-1009.	1.3	12
107	Electrocatalysts: Surface Generation of a Cobalt&Derived Water Oxidation Electrocatalyst Developed in a Neutral HCO <sub>3</sub> <sup>-</sup> /CO <sub>2</sub> System ( <i>Adv. Energy Mater.</i> 16/2014). <i>Advanced Energy Materials</i> , 2014, 4, .	10.2	5
108	Harvesting Solar Light with Crystalline Carbon Nitrides for Efficient Photocatalytic Hydrogen Evolution ( <i>Angew. Chem.</i> 41/2014). <i>Angewandte Chemie</i> , 2014, 126, 11278-11278.	1.6	0



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109	The effect of temperature in flux-assisted synthesis of SnNb <sub>2</sub> O <sub>6</sub> . Proceedings of SPIE, 2014, , .	0.8	2
110	Methane Coupling Reaction in an Oxy-steam Stream through an OH Radical Pathway by using Supported Alkali Metal Catalysts. ChemCatChem, 2014, 6, 1245-1251.	1.8	32
111	Nb-doped TiO <sub>2</sub> cathode catalysts for oxygen reduction reaction of polymer electrolyte fuel cells. Catalysis Today, 2014, 233, 181-186.	2.2	25
112	Generation of Multiple Excitons in Ag <sub>2</sub> S Quantum Dots: Single High-Energy versus Multiple-Photon Excitation. Journal of Physical Chemistry Letters, 2014, 5, 659-665.	2.1	81
113	Mechanistic Switching by Hydronium Ion Activity for Hydrogen Evolution and Oxidation over Polycrystalline Platinum Disk and Platinum/Carbon Electrodes. ChemElectroChem, 2014, 1, 1497-1507.	1.7	46
114	Nano-sized Quaternary CuGa <sub>2</sub> In <sub>3</sub> S <sub>8</sub> as an Efficient Photocatalyst for Solar Hydrogen Production. ChemSusChem, 2014, 7, 3112-3121.	3.6	17
115	Surface Generation of a Cobalt-derived Water Oxidation Electrocatalyst Developed in a Neutral HCO <sub>3</sub> <sup>-</sup> /CO <sub>2</sub> System. Advanced Energy Materials, 2014, 4, 1400252.	10.2	58
116	Electrodeposited Ultrafine TaO <sub>x</sub> /CB Catalysts for PEFC Cathode Application: Their Oxygen Reduction Reaction Kinetics. Electrochimica Acta, 2014, 149, 76-85.	2.6	17
117	Screened coulomb hybrid DFT investigation of band gap and optical absorption predictions of CuVO <sub>3</sub> , CuNbO <sub>3</sub> and Cu <sub>5</sub> Ta <sub>11</sub> O <sub>30</sub> materials. Physical Chemistry Chemical Physics, 2014, 16, 18198-18204.	1.3	40
118	Tuning the properties of visible-light-responsive tantalum (oxy)nitride photocatalysts by non-stoichiometric compositions: a first-principles viewpoint. Physical Chemistry Chemical Physics, 2014, 16, 20548-20560.	1.3	86
119	Photoelectrochemical and electrocatalytic properties of thermally oxidized copper oxide for efficient solar fuel production. Journal of Materials Chemistry A, 2014, 2, 7389-7401.	5.2	43
120	Particle size dependence on oxygen reduction reaction activity of electrodeposited TaO <sub>x</sub> catalysts in acidic media. Physical Chemistry Chemical Physics, 2014, 16, 895-898.	1.3	39
121	Critical Role of the Semiconductor-Electrolyte Interface in Photocatalytic Performance for Water-Splitting Reactions Using Ta <sub>3</sub> N <sub>5</sub> Particles. Chemistry of Materials, 2014, 26, 4812-4825.	3.2	98
122	Harvesting Solar Light with Crystalline Carbon Nitrides for Efficient Photocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2014, 53, 11001-11005.	7.2	295
123	Flux-assisted synthesis of SnNb <sub>2</sub> O <sub>6</sub> for tuning photocatalytic properties. Physical Chemistry Chemical Physics, 2014, 16, 10762-10769.	1.3	38
124	Molybdenum carbide-carbon nanocomposites synthesized from a reactive template for electrochemical hydrogen evolution. Journal of Materials Chemistry A, 2014, 2, 10548-10556.	5.2	135
125	Tethering Metal Ions to Photocatalyst Particulate Surfaces by Bifunctional Molecular Linkers for Efficient Hydrogen Evolution. ChemSusChem, 2014, 7, 2575-2583.	3.6	19
126	Photocatalytic hydrogen production using visible-light-responsive Ta <sub>3</sub> N <sub>5</sub> photocatalyst supported on monodisperse spherical SiO <sub>2</sub> particulates. Materials Research Bulletin, 2014, 49, 58-65.	2.7	47



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127	Electrodeposited Ultrafine NbO <sub>x</sub> , ZrO <sub>x</sub> , and TaO <sub>x</sub> Nanoparticles on Carbon Black Supports for Oxygen Reduction Electrocatalysts in Acidic Media. ACS Catalysis, 2013, 3, 2181-2189.	5.5	50
128	Cobalt phosphate-modified barium-doped tantalum nitride nanorod photoanode with 1.5% solar energy conversion efficiency. Nature Communications, 2013, 4, 2566.	5.8	306
129	Incident Photon-to-Current Efficiency and Photocurrent Spectroscopy. SpringerBriefs in Energy, 2013, , 87-97.	0.2	9
130	Synthesis of tantalum carbide and nitride nanoparticles using a reactive mesoporous template for electrochemical hydrogen evolution. Journal of Materials Chemistry A, 2013, 1, 12606.	5.2	72
131	Synthesis and Photocatalytic Activity of Poly(triazine imide). Chemistry - an Asian Journal, 2013, 8, 218-224.	1.7	131
132	Tungsten Carbide Nanoparticles as Efficient Cocatalysts for Photocatalytic Overall Water Splitting. ChemSusChem, 2013, 6, 168-181.	3.6	190
133	Determination of the Electronic Structure and UV-Vis Absorption Properties of (Na <sub>2</sub> -xCu <sub>x</sub> )Ta <sub>4</sub> O <sub>11</sub> from First-Principle Calculations. Journal of Physical Chemistry C, 2013, 117, 17477-17484.	1.5	32
134	Highly Dispersed TaO <sub>x</sub> Nanoparticles Prepared by Electrodeposition as Oxygen Reduction Electrocatalysts for Polymer Electrolyte Fuel Cells. Journal of Physical Chemistry C, 2013, 117, 11635-11646.	1.5	29
135	Titanium Nitride Nanoparticle Electrocatalysts for Oxygen Reduction Reaction in Alkaline Solution. Journal of the Electrochemical Society, 2013, 160, F501-F506.	1.3	35
136	Nano-nitride Cathode Catalysts of Ti, Ta, and Nb for Polymer Electrolyte Fuel Cells: Temperature-Programmed Desorption Investigation of Molecularly Adsorbed Oxygen at Low Temperature. Journal of Physical Chemistry C, 2013, 117, 496-502.	1.5	46
137	Vertically Aligned Ta <sub>3</sub> N <sub>5</sub> Nanorod Arrays for Solar-Driven Photoelectrochemical Water Splitting. Advanced Materials, 2013, 25, 125-131.	11.1	363
138	Photoelectrodes: Vertically Aligned Ta <sub>3</sub> N <sub>5</sub> Nanorod Arrays for Solar-Driven Photoelectrochemical Water Splitting (Adv. Mater. 1/2013). Advanced Materials, 2013, 25, 152-152.	11.1	4
139	UV-Vis Spectroscopy. SpringerBriefs in Energy, 2013, , 49-62.	0.2	22
140	PEC Characterization Flowchart. SpringerBriefs in Energy, 2013, , 45-47.	0.2	2
141	Flat-Band Potential Techniques. SpringerBriefs in Energy, 2013, , 63-85.	0.2	10
142	Experimental Considerations. SpringerBriefs in Energy, 2013, , 17-44.	0.2	2
143	Stability Testing. SpringerBriefs in Energy, 2013, , 115-118.	0.2	0
144	Hydrogen and Oxygen Detection from Photoelectrodes. SpringerBriefs in Energy, 2013, , 105-113.	0.2	2

#	ARTICLE	IF	CITATIONS
145	Catalytic Conversion of Methane: Carbon Dioxide Reforming and Oxidative Coupling. Journal of the Japan Petroleum Institute, 2012, 55, 1-12.	0.4	46
146	Effect of post-calcination thermal treatment on acid properties and pores structure of a mesoporous niobium-tungsten oxide. Catalysis Today, 2012, 192, 144-148.	2.2	8
147	Semiconductor monolayer assemblies with oriented crystal faces. CrystEngComm, 2012, 14, 59-62.	1.3	4
148	Highly-dispersed Ta-oxide catalysts prepared by electrodeposition in a non-aqueous plating bath for polymer electrolyte fuel cell cathodes. Chemical Communications, 2012, 48, 9074.	2.2	34
149	Photoelectrochemical Conversion of Toluene to Methylcyclohexane as an Organic Hydride by Cu <sub>2</sub> ZnSnS <sub>4</sub> -Based Photoelectrode Assemblies. Journal of the American Chemical Society, 2012, 134, 2469-2472.	6.6	53
150	Preparation of Inorganic Photocatalytic Materials for Overall Water Splitting. ChemCatChem, 2012, 4, 1485-1497.	1.8	92
151	Composite of TiN Nanoparticles and Few-Walled Carbon Nanotubes and Its Application to the Electrocatalytic Oxygen Reduction Reaction. Chemistry - an Asian Journal, 2012, 7, 286-289.	1.7	32
152	Electrocatalytic Activity and Stability of M-Fe Catalysts Synthesized by Polymer Complex Method for PEFC Cathode. Journal of the Electrochemical Society, 2011, 158, B1491.	1.3	3
153	Chemisorption of CO and Mechanism of CO Oxidation on Supported Platinum Nanoclusters. Journal of the American Chemical Society, 2011, 133, 4498-4517.	6.6	448
154	Enhanced Visible-Light Activity of Titania via Confinement inside Carbon Nanotubes. Journal of the American Chemical Society, 2011, 133, 14896-14899.	6.6	102
155	Mineralization of volatile organic compounds (VOCs) over the catalyst Cu-Co <sub>3</sub> O <sub>4</sub> -CeO <sub>2</sub> and its applications in industrial odor control. Applied Catalysis A: General, 2011, 409-410, 209-214.	2.2	23
156	Synthesis of Ordered Porous Graphitic-C <sub>3</sub> N <sub>4</sub> and Regularly Arranged Ta <sub>3</sub> N <sub>5</sub> Nanoparticles by Using Self-Assembled Silica Nanospheres as a Primary Template. Chemistry - an Asian Journal, 2011, 6, 103-109.	1.7	103
157	Synthesis and catalytic properties of porous Nb-Mo oxide solid acid. Catalysis Today, 2011, 164, 358-363.	2.2	15
158	Effects of La addition to Ni/Al <sub>2</sub> O <sub>3</sub> catalysts on rates and carbon deposition during steam reforming of n-dodecane. Fuel Processing Technology, 2011, 92, 21-25.	3.7	43
159	Toward Visible Light Response: Overall Water Splitting Using Heterogeneous Photocatalysts. Green, 2011, 1, .	0.4	63
160	Simple, Low-cost Preparation of High Surface Area Co <sub>3</sub> O <sub>4</sub> -CeO <sub>2</sub> Catalysts for Total Decomposition of Toluene. Chemistry Letters, 2010, 39, 26-27.	0.7	3
161	Layered and nanosheet tantalum molybdate as strong solid acid catalysts. Journal of Catalysis, 2010, 270, 206-212.	3.1	44
162	Synthesis of a Carbon Nitride Structure for Visible-Light Catalysis by Copolymerization. Angewandte Chemie - International Edition, 2010, 49, 441-444.	7.2	1,312

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163	Highly Active Mesoporous Nb <sup>5+</sup> W Oxide Solid Acid Catalyst. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 1128-1132.	7.2	124
164	Niobium-based catalysts prepared by reactive radio-frequency magnetron sputtering and arc plasma methods as non-noble metal cathode catalysts for polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2010, 55, 5393-5400.	2.6	44
165	Isotopic and kinetic assessment of photocatalytic water splitting on Zn-added Ga <sub>2</sub> O <sub>3</sub> photocatalyst loaded with Rh <sup>2+</sup> /Cr <sub>2</sub> O <sub>3</sub> cocatalyst. <i>Chemical Physics Letters</i> , 2010, 486, 144-146.	1.2	53
166	Improved catalytic performance of nitrated Co <sup>2+</sup> /Ti and Fe <sup>2+</sup> /Ti catalysts for oxygen reduction as non-noble metal cathodes in acidic media. <i>Electrochemistry Communications</i> , 2010, 12, 1177-1179.	2.3	16
167	Photocatalytic hydrogen evolution on dye-sensitized mesoporous carbon nitride photocatalyst with magnesium phthalocyanine. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 13020.	1.3	325
168	Synthesis and Characterization of Mesoporous Ta <sup>5+</sup> W Oxides as Strong Solid Acid Catalysts. <i>Chemistry of Materials</i> , 2010, 22, 3072-3078.	3.2	59
169	Nano-sized TiN on carbon black as an efficient electrocatalyst for the oxygen reduction reaction prepared using an mpg-C <sub>3</sub> N <sub>4</sub> template. <i>Chemical Communications</i> , 2010, 46, 7492.	2.2	125
170	Accelerating materials development for photoelectrochemical hydrogen production: Standards for methods, definitions, and reporting protocols. <i>Journal of Materials Research</i> , 2010, 25, 3-16.	1.2	1,032
171	Polymerized Complex Synthesis of Niobium- and Zirconium-Based Electrocatalysts for PEFC Cathodes. <i>Journal of the Electrochemical Society</i> , 2010, 157, B240.	1.3	20
172	CdS Nanoparticles Exhibiting Quantum Size Effect by Dispersion on TiO <sub>2</sub> : Photocatalytic H <sub>2</sub> Evolution and Photoelectrochemical Measurements. <i>Bulletin of the Chemical Society of Japan</i> , 2009, 82, 528-535.	2.0	27
173	A metal-free polymeric photocatalyst for hydrogen production from water under visible light. <i>Nature Materials</i> , 2009, 8, 76-80.	13.3	10,442
174	Hydrogen production by autothermal reforming of kerosene over MgAlO <sub>x</sub> -supported Rh catalysts. <i>Applied Catalysis A: General</i> , 2009, 371, 173-178.	2.2	24
175	Ordered Mesoporous SBA-15 Type Graphitic Carbon Nitride: A Semiconductor Host Structure for Photocatalytic Hydrogen Evolution with Visible Light. <i>Chemistry of Materials</i> , 2009, 21, 4093-4095.	3.2	392
176	Role and Function of Noble-Metal/Cr-Layer Core/Shell Structure Cocatalysts for Photocatalytic Overall Water Splitting Studied by Model Electrodes. <i>Journal of Physical Chemistry C</i> , 2009, 113, 10151-10157.	1.5	238
177	Effects of Transition-Metal Composition of Protonated, Layered Nonstoichiometric Oxides H <sub>1-x</sub> Nb <sub>1-x</sub> Mo <sub>1+x</sub> O <sub>6</sub> on Heterogeneous Acid Catalysis. <i>Journal of Physical Chemistry C</i> , 2009, 113, 17421-17427.	1.5	28
178	Mechanistic Aspects and Reaction Pathways for Oxidative Coupling of Methane on Mn/Na <sub>2</sub> WO <sub>4</sub> /SiO <sub>2</sub> Catalysts. <i>Journal of Physical Chemistry C</i> , 2009, 113, 10131-10145.	1.5	134
179	Aspects of the Water Splitting Mechanism on (Ga <sub>1-x</sub> Zn <sub>x</sub> )(N <sub>1-x</sub> O <sub>x</sub> ) Photocatalyst Modified with Rh <sub>2</sub> /Cr <sub>2</sub> O <sub>3</sub> Cocatalyst. <i>Journal of Physical Chemistry C</i> , 2009, 113, 21458-21466.	1.5	143
180	Highly Dispersed Niobium Catalyst on Carbon Black by Polymerized Complex Method as PEFC Cathode Catalyst. <i>Journal of the Electrochemical Society</i> , 2009, 156, B811.	1.3	33

#	ARTICLE	IF	CITATIONS
181	Enhancement of photocatalytic activity of zinc-germanium oxynitride solid solution for overall water splitting under visible irradiation. Dalton Transactions, 2009, , 10055.	1.6	44
182	Polymer Semiconductors for Artificial Photosynthesis: Hydrogen Evolution by Mesoporous Graphitic Carbon Nitride with Visible Light. Journal of the American Chemical Society, 2009, 131, 1680-1681.	6.6	1,618
183	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
184	Mechanistic Aspects of Catalytic Steam Reforming of Biomass-related Oxygenates. Topics in Catalysis, 2008, 49, 68-72.	1.3	19
185	Rate and Selectivity Enhancements Mediated by OH Radicals in the Oxidative Coupling of Methane Catalyzed by Mn/Na <sub>2</sub> WO <sub>4</sub> /SiO <sub>2</sub> . Angewandte Chemie - International Edition, 2008, 47, 7689-7693.	7.2	96
186	Steam reforming of acetic acid as a biomass derived oxygenate: Bifunctional pathway for hydrogen formation over Pt/ZrO <sub>2</sub> catalysts. Journal of Catalysis, 2006, 243, 263-269.	3.1	152
187	Catalyst deactivation during steam reforming of acetic acid over Pt/ZrO <sub>2</sub> . Chemical Engineering Journal, 2006, 120, 133-137.	6.6	148
188	Influence of reduction temperature on the catalytic behavior of Co/TiO <sub>2</sub> catalysts for CH <sub>4</sub> /CO <sub>2</sub> reforming and its relation with titania bulk crystal structure. Journal of Catalysis, 2005, 230, 75-85.	3.1	117
189	Titania-supported cobalt and nickel bimetallic catalysts for carbon dioxide reforming of methane. Journal of Catalysis, 2005, 232, 268-275.	3.1	396
190	Improvement of Pt/ZrO <sub>2</sub> by CeO <sub>2</sub> for high pressure CH <sub>4</sub> /CO <sub>2</sub> reforming. Catalysis Letters, 2005, 99, 97-100.	1.4	15
191	Improved resistance against coke deposition of titania supported cobalt and nickel bimetallic catalysts for carbon dioxide reforming of methane. Catalysis Letters, 2005, 102, 153-157.	1.4	56
192	Co/TiO <sub>2</sub> catalyst for high pressure dry reforming of methane and its modification by other metals. Studies in Surface Science and Catalysis, 2004, 147, 187-192.	1.5	8
193	Sustainable hydrogen from bio-oil—Steam reforming of acetic acid as a model oxygenate. Journal of Catalysis, 2004, 227, 101-108.	3.1	268
194	Modification of Co/TiO <sub>2</sub> for dry reforming of methane at 2MPa by Pt, Ru or Ni. Applied Catalysis A: General, 2004, 268, 151-158.	2.2	145
195	Influence of the reduction temperature on catalytic activity of Co/TiO <sub>2</sub> (anatase-type) for high pressure dry reforming of methane. Applied Catalysis A: General, 2003, 255, 13-21.	2.2	86
196	Influence of the phase composition of titania on catalytic behavior of Co/TiO <sub>2</sub> for the dry reforming of methane. Chemical Communications, 2002, , 1006-1007.	2.2	64