Kazuhiro Takanabe

List of Publications by Year
in descending order

196 papers	29,679 citations	19608 61 h-index	4628 170 g-index
213 all docs	213 docs citations	213 times ranked	25946 citing authors

#	Article	IF	Citations
1	A metal-free polymeric photocatalyst for hydrogen production from water under visibleÂlight. Nature Materials, 2009, 8, 76-80.	13.3	10,442
2	Insight on Tafel slopes from a microkinetic analysis of aqueous electrocatalysis for energy conversion. Scientific Reports, 2015, 5, 13801.	1.6	2,017
3	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
4	Synthesis of a Carbon Nitride Structure for Visibleâ€Light Catalysis by Copolymerization. Angewandte Chemie - International Edition, 2010, 49, 441-444.	7.2	1,312
5	Accelerating materials development for photoelectrochemical hydrogen production: Standards for methods, definitions, and reporting protocols. Journal of Materials Research, 2010, 25, 3-16.	1.2	1,032
6	Photocatalytic Water Splitting: Quantitative Approaches toward Photocatalyst by Design. ACS Catalysis, 2017, 7, 8006-8022.	5.5	656
7	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
8	A Highly Selective Copperâ€“Indium Bimetallic Electrocatalyst for the Electrochemical Reduction of Aqueous CO₂ to CO. Angewandte Chemie - International Edition, 2015, 54, 2146-2150.	7.2	403
9	Titania-supported cobalt and nickel bimetallic catalysts for carbon dioxide reforming of methane. Journal of Catalysis, 2005, 232, 268-275.	3.1	396
10	Ordered Mesoporous SBA-15 Type Graphitic Carbon Nitride: A Semiconductor Host Structure for Photocatalytic Hydrogen Evolution with Visible Light. Chemistry of Materials, 2009, 21, 4093-4095.	3.2	392
11	Cuâ€“Sn Bimetallic Catalyst for Selective Aqueous Electroreduction of CO₂ to CO. ACS Catalysis, 2016, 6, 2842-2851.	5.5	380
12	Vertically Aligned Ta₃N₅ Nanorod Arrays for Solarâ€Driven Photoelectrochemical Water Splitting. Advanced Materials, 2013, 25, 125-131.	11.1	363
13	Photocatalytic hydrogen evolution on dye-sensitized mesoporous carbon nitride photocatalyst with magnesium phthalocyanine. Physical Chemistry Chemical Physics, 2010, 12, 13020.	1.3	325
14	Cobalt phosphate-modified barium-doped tantalum nitride nanorod photoanode with 1.5% solar energy conversion efficiency. Nature Communications, 2013, 4, 2566.	5.8	306
15	Harvesting Solar Light with Crystalline Carbon Nitrides for Efficient Photocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2014, 53, 11001-11005.	7.2	295
16	Sustainable hydrogen from bio-oilâ€"Steam reforming of acetic acid as a model oxygenate. Journal of Catalysis, 2004, 227, 101-108.	3.1	268
17	Insights on Measuring and Reporting Heterogeneous Photocatalysis: Efficiency Definitions and Setup Examples. Chemistry of Materials, 2017, 29, 158-167.	3.2	265
18	Role and Function of Noble-Metal/Cr-Layer Core/Shell Structure Cocatalysts for Photocatalytic Overall Water Splitting Studied by Model Electrodes. Journal of Physical Chemistry C, 2009, 113, 10151-10157.	1.5	238

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19	Simultaneous Reduction of CO₂ and Splitting of H₂O by a Single Immobilized Cobalt Phthalocyanine Electrocatalyst. ACS Catalysis, 2016, 6, 3092-3095.	5.5	237
20	Photocatalytic Water-Splitting Reaction from Catalytic and Kinetic Perspectives. Catalysis Letters, 2015, 145, 95-108.	1.4	210
21	Tungsten Carbide Nanoparticles as Efficient Cocatalysts for Photocatalytic Overall Water Splitting. ChemSusChem, 2013, 6, 168-181.	3.6	190
22	Towards Versatile and Sustainable Hydrogen Production through Electrocatalytic Water Splitting: Electrolyte Engineering. ChemSusChem, 2017, 10, 1318-1336.	3.6	154
23	Steam reforming of acetic acid as a biomass derived oxygenate: Bifunctional pathway for hydrogen formation over Pt/ZrO2 catalysts. Journal of Catalysis, 2006, 243, 263-269.	3.1	152
24	Catalyst deactivation during steam reforming of acetic acid over Pt/ZrO2. Chemical Engineering Journal, 2006, 120, 133-137.	6.6	148
25	Modification of Co/TiO2 for dry reforming of methane at 2MPa by Pt, Ru or Ni. Applied Catalysis A: General, 2004, 268, 151-158.	2.2	145
26	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
27	Temperature Dependence of Electrocatalytic and Photocatalytic Oxygen Evolution Reaction Rates Using NiFe Oxide. ACS Catalysis, 2016, 6, 1713-1722.	5.5	145
28	Aspects of the Water Splitting Mechanism on (Ga_{1âˆ’<i>x</i>}Zn_{<i>x</i>})(N_{1âˆ’<i>x</i>}O_{<i>x</i>}) Photocatalyst Modified with Rh_{2âˆ’<i>y</i>}Cr_{<i>y</i>}O₃ Cocatalyst. Journal of Physical Chemistry C, 2009, 113, 21458-21466.	1.5	143
29	Dendritic Tip-on Polytriazine-Based Carbon Nitride Photocatalyst with High Hydrogen Evolution Activity. Chemistry of Materials, 2015, 27, 8237-8247.	3.2	140
30	Molybdenum carbideâ€“carbon nanocomposites synthesized from a reactive template for electrochemical hydrogen evolution. Journal of Materials Chemistry A, 2014, 2, 10548-10556.	5.2	135
31	Mechanistic Aspects and Reaction Pathways for Oxidative Coupling of Methane on Mn/Na₂WO₄/SiO₂ Catalysts. Journal of Physical Chemistry C, 2009, 113, 10131-10145.	1.5	134
32	Synthesis and Photocatalytic Activity of Poly(triazine imide). Chemistry - an Asian Journal, 2013, 8, 218-224.	1.7	131
33	Nano-sized TiN on carbon black as an efficient electrocatalyst for the oxygen reduction reaction prepared using an mpg-C3N4 template. Chemical Communications, 2010, 46, 7492.	2.2	125
34	Highly Active Mesoporous Nbâ€“W Oxide Solidâ€Acid Catalyst. Angewandte Chemie - International Edition, 2010, 49, 1128-1132.	7.2	124
35	A Permselective CeO_{<i>x</i>} Coating To Improve the Stability of Oxygen Evolution Electrocatalysts. Angewandte Chemie - International Edition, 2018, 57, 1616-1620.	7.2	121
36	Influence of reduction temperature on the catalytic behavior of Co/TiO2 catalysts for CH4/CO2 reforming and its relation with titania bulk crystal structure. Journal of Catalysis, 2005, 230, 75-85.	3.1	117

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37	An Oxygenâ€Insensitive Hydrogen Evolution Catalyst Coated by a Molybdenumâ€Based Layer for Overall Water Splitting. Angewandte Chemie - International Edition, 2017, 56, 5780-5784.	7.2	106
38	Synthesis of Ordered Porous Graphiticâ€C₃N₄ and Regularly Arranged Ta₃N₅ Nanoparticles by Using Selfâ€Assembled Silica Nanospheres as a Primary Template. Chemistry - an Asian Journal, 2011, 6, 103-109.	1.7	103
39	Enhanced Visible-Light Activity of Titania via Confinement inside Carbon Nanotubes. Journal of the American Chemical Society, 2011, 133, 14896-14899.	6.6	102
40	Generation of Cuâ€“In alloy surfaces from CuInO₂as selective catalytic sites for CO₂electroreduction. Journal of Materials Chemistry A, 2015, 3, 19085-19092.	5.2	99
41	Critical Role of the Semiconductorâ€“Electrolyte Interface in Photocatalytic Performance for Water-Splitting Reactions Using Ta₃N₅ Particles. Chemistry of Materials, 2014, 26, 4812-4825.	3.2	98
42	Rate and Selectivity Enhancements Mediated by OH Radicals in the Oxidative Coupling of Methane Catalyzed by Mn/Na₂WO₄/SiO₂. Angewandte Chemie - International Edition, 2008, 47, 7689-7693.	7.2	96
43	Preparation of Inorganic Photocatalytic Materials for Overall Water Splitting. ChemCatChem, 2012, 4, 1485-1497.	1.8	92
44	Combined experimental and theoretical assessments of the lattice dynamics and optoelectronics of TaON and Ta3N5. Journal of Solid State Chemistry, 2015, 229, 219-227.	1.4	88
45	In-operando elucidation of bimetallic CoNi nanoparticles during high-temperature CH4/CO2 reaction. Applied Catalysis B: Environmental, 2017, 213, 177-189.	10.8	88
46	Influence of the reduction temperature on catalytic activity of Co/TiO2 (anatase-type) for high pressure dry reforming of methane. Applied Catalysis A: General, 2003, 255, 13-21.	2.2	86
47	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
48	Carrier dynamics of a visible-light-responsive Ta₃N₅photoanode for water oxidation. Physical Chemistry Chemical Physics, 2015, 17, 2670-2677.	1.3	85
49	Generation of Multiple Excitons in Ag₂S Quantum Dots: Single High-Energy versus Multiple-Photon Excitation. Journal of Physical Chemistry Letters, 2014, 5, 659-665.	2.1	81
50	Role of Oxidized Mo Species on the Active Surface of Niâ€“Mo Electrocatalysts for Hydrogen Evolution under Alkaline Conditions. ACS Catalysis, 2020, 10, 12858-12866.	5.5	75
51	Recent advances in understanding oxygen evolution reaction mechanisms over iridium oxide. Inorganic Chemistry Frontiers, 2021, 8, 2900-2917.	3.0	75
52	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
53	Tantalum nitride for photocatalytic water splitting: concept and applications. Materials for Renewable and Sustainable Energy, 2016, 5, 1.	1.5	70
54	A simplified theoretical guideline for overall water splitting using photocatalyst particles. Journal of Materials Chemistry A, 2016, 4, 2894-2908.	5.2	67

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55	Catalytic consequences of ultrafine Pt clusters supported on SrTiO3 for photocatalytic overall water splitting. Journal of Catalysis, 2019, 376, 180-190.	3.1	67
56	Electrocatalytic Hydrogen Evolution under Densely Buffered Neutral pH Conditions. Journal of Physical Chemistry C, 2015, 119, 20453-20458.	1.5	66
57	Influence of the phase composition of titania on catalytic behavior of Co/TiO2 for the dry reforming of methane. Chemical Communications, 2002, , 1006-1007.	2.2	64
58	Toward Visible Light Response: Overall Water Splitting Using Heterogeneous Photocatalysts. Green, 2011, 1, .	0.4	63
59	Boosting the Performance of the Nickel Anode in the Oxygen Evolution Reaction by Simple Electrochemical Activation. Angewandte Chemie - International Edition, 2017, 56, 5061-5065.	7.2	63
60	Design of a coreâ€“shell Ptâ€“SiO2 catalyst in a reverse microemulsion system: Distinctive kinetics on CO oxidation at low temperature. Journal of Catalysis, 2016, 340, 368-375.	3.1	61
61	Synthesis and Characterization of Mesoporous Taâˆ’W Oxides as Strong Solid Acid Catalysts. Chemistry of Materials, 2010, 22, 3072-3078.	3.2	59
62	Kinetics on NiZn Bimetallic Catalysts for Hydrogen Evolution via Selective Dehydrogenation of Methylcyclohexane to Toluene. ACS Catalysis, 2017, 7, 1592-1600.	5.5	59
63	Surface Generation of a Cobaltâ€Derived Water Oxidation Electrocatalyst Developed in a Neutral HCO₃^{âˆ’}/CO₂ System. Advanced Energy Materials, 2014, 4, 1400252.	10.2	58
64	Homoâ€Tandem Polymer Solar Cells with <i>V</i>_{OC} >1.8 V for Efficient PVâ€Driven Water Splitting. Advanced Materials, 2016, 28, 3366-3373.	11.1	57
65	Integrated Inâ€…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
66	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
67	Compositionally Screened Eutectic Catalytic Coatings on Halide Perovskite Photocathodes for Photoassisted Selective CO₂ Reduction. ACS Energy Letters, 2019, 4, 1279-1286.	8.8	56
68	Isotopic and kinetic assessment of photocatalytic water splitting on Zn-added Ga2O3 photocatalyst loaded with Rh2âˆ’yCryO3 cocatalyst. Chemical Physics Letters, 2010, 486, 144-146.	1.2	53
69	Photoelectrochemical Conversion of Toluene to Methylcyclohexane as an Organic Hydride by Cu₂ZnSnS₄-Based Photoelectrode Assemblies. Journal of the American Chemical Society, 2012, 134, 2469-2472.	6.6	53
70	Solar Water Splitting Using Semiconductor Photocatalyst Powders. Topics in Current Chemistry, 2015, 371, 73-103.	4.0	52
71	Microkinetic assessment of electrocatalytic oxygen evolution reaction over iridium oxide in unbuffered conditions. Journal of Catalysis, 2020, 391, 435-445.	3.1	52
72	Establishing Efficient Cobalt-Based Catalytic Sites for Oxygen Evolution on a Ta₃N₅ Photocatalyst. Chemistry of Materials, 2015, 27, 5685-5694.	3.2	51

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73	Electrolyte Engineering towards Efficient Water Splitting at Mild pH. ChemSusChem, 2017, 10, 4155-4162.	3.6	51
74	Electrodeposited Ultrafine NbO_{<i>x</i>}, ZrO_{<i>x</i>}, and TaO_{<i>x</i>} Nanoparticles on Carbon Black Supports for Oxygen Reduction Electrocatalysts in Acidic Media. ACS Catalysis, 2013, 3, 2181-2189.	5.5	50
75	An Efficient and Stable Hydrophobic Molecular Cobalt Catalyst for Water Electro-oxidation at Neutral pH. ACS Catalysis, 2016, 6, 4647-4652.	5.5	50
76	Immobilization of a molecular cobalt electrocatalyst by hydrophobic interaction with a hematite photoanode for highly stable oxygen evolution. Chemical Communications, 2015, 51, 13481-13484.	2.2	49
77	Enhanced Kinetics of Hole Transfer and Electrocatalysis during Photocatalytic Oxygen Evolution by Cocatalyst Tuning. ACS Catalysis, 2016, 6, 4117-4126.	5.5	48
78	Photocatalytic hydrogen production using visible-light-responsive Ta3N5 photocatalyst supported on monodisperse spherical SiO2 particulates. Materials Research Bulletin, 2014, 49, 58-65.	2.7	47
79	Catalytic Conversion of Methane: Carbon Dioxide Reforming and Oxidative Coupling. Journal of the Japan Petroleum Institute, 2012, 55, 1-12.	0.4	46
80	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
81	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
82	Determination of the electronic, dielectric, and optical properties of sillenite Bi12TiO20 and perovskite-like Bi4Ti3O12 materials from hybrid first-principle calculations. Journal of Chemical Physics, 2016, 144, 134702.	1.2	45
83	State-of-the-art Sn²⁺-based ternary oxides as photocatalysts for water splitting: electronic structures and optoelectronic properties. Catalysis Science and Technology, 2016, 6, 7656-7670.	2.1	45
84	Enhancement of photocatalytic activity of zinc-germanium oxynitride solid solution for overall water splitting under visible irradiation. Dalton Transactions, 2009, , 10055.	1.6	44
85	Layered and nanosheet tantalum molybdate as strong solid acid catalysts. Journal of Catalysis, 2010, 270, 206-212.	3.1	44
86	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. Electrochimica Acta, 2010, 55, 5393-5400.	2.6	44
87	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
88	Effects of La addition to Ni/Al2O3 catalysts on rates and carbon deposition during steam reforming of n-dodecane. Fuel Processing Technology, 2011, 92, 21-25.	3.7	43
89	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
90	Surface Functionalization of gâ€C₃N₄: Molecularâ€Level Design of Nobleâ€Metalâ€Free Hydrogen Evolution Photocatalysts. Chemistry - A European Journal, 2015, 21, 10290-10295.	1.7	42

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91	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
92	Screened coulomb hybrid DFT investigation of band gap and optical absorption predictions of CuVO₃, CuNbO₃ and Cu₅Ta₁₁O₃₀ materials. Physical Chemistry Chemical Physics, 2014, 16, 18198-18204.	1.3	40
93	UV-Vis optoelectronic properties of Î±-SnWO4: A comparative experimental and density functional theory based study. APL Materials, 2015, 3, 096101.	2.2	40
94	Non-precious bimetallic catalysts for selective dehydrogenation of an organic chemical hydride system. Chemical Communications, 2015, 51, 12931-12934.	2.2	40
95	Ultrathin Microporous SiO₂ Membranes Photodeposited on Hydrogen Evolving Catalysts Enabling Overall Water Splitting. ACS Catalysis, 2017, 7, 7931-7940.	5.5	40
96	Particle size dependence on oxygen reduction reaction activity of electrodeposited TaO_xcatalysts in acidic media. Physical Chemistry Chemical Physics, 2014, 16, 895-898.	1.3	39
97	Flux-assisted synthesis of SnNb₂O₆ for tuning photocatalytic properties. Physical Chemistry Chemical Physics, 2014, 16, 10762-10769.	1.3	38
98	Perfluorinated Cobalt Phthalocyanine Effectively Catalyzes Water Electrooxidation. European Journal of Inorganic Chemistry, 2015, 2015, 49-52.	1.0	37
99	Photophysical Properties of SrTaO₂N Thin Films and Influence of Anion Ordering: A Joint Theoretical and Experimental Investigation. Chemistry of Materials, 2017, 29, 3989-3998.	3.2	37
100	Poly(3-hydroxybutyrate) production in an integrated electromicrobial setup: Investigation under stress-inducing conditions. PLoS ONE, 2018, 13, e0196079.	1.1	37
101	Titanium Nitride Nanoparticle Electrocatalysts for Oxygen Reduction Reaction in Alkaline Solution. Journal of the Electrochemical Society, 2013, 160, F501-F506.	1.3	35
102	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
103	Highly Dispersed Niobium Catalyst on Carbon Black by Polymerized Complex Method as PEFC Cathode Catalyst. Journal of the Electrochemical Society, 2009, 156, B811.	1.3	33
104	Electronic structure and photocatalytic activity of wurtzite Cuâ€"Gaâ€"S nanocrystals and their Zn substitution. Journal of Materials Chemistry A, 2015, 3, 8896-8904.	5.2	33
105	Composite of TiN Nanoparticles and Fewâ€Walled Carbon Nanotubes and Its Application to the Electrocatalytic Oxygen Reduction Reaction. Chemistry - an Asian Journal, 2012, 7, 286-289.	1.7	32
106	Determination of the Electronic Structure and UVâ€"Vis Absorption Properties of (Na2â€"xCux)Ta4O11 from First-Principle Calculations. Journal of Physical Chemistry C, 2013, 117, 17477-17484.	1.5	32
107	Methane Coupling Reaction in an Oxyâ€Steam Stream through an OH Radical Pathway by using Supported Alkali Metal Catalysts. ChemCatChem, 2014, 6, 1245-1251.	1.8	32
108	TiO₂-supported Pt single atoms by surface organometallic chemistry for photocatalytic hydrogen evolution. Physical Chemistry Chemical Physics, 2019, 21, 24429-24440.	1.3	32

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109	Methane dry reforming on supported cobalt nanoparticles promoted by boron. Journal of Catalysis, 2020, 392, 126-134.	3.1	32
110	Electrolyte Engineering toward Efficient Hydrogen Production Electrocatalysis with Oxygen-Crossover Regulation under Densely Buffered Near-Neutral pH Conditions. Journal of Physical Chemistry C, 2016, 120, 1785-1794.	1.5	31
111	Identification of intrinsic catalytic activity for electrochemical reduction of water molecules to generate hydrogen. Physical Chemistry Chemical Physics, 2015, 17, 15111-15114.	1.3	30
112	Addressing fundamental experimental aspects of photocatalysis studies. Journal of Catalysis, 2019, 370, 480-484.	3.1	30
113	Highly Dispersed TaO_{<i>x</i>} 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
114	Combined experimentalâ€“theoretical study of the optoelectronic properties of non-stoichiometric pyrochlore bismuth titanate. Journal of Materials Chemistry C, 2015, 3, 12032-12039.	2.7	29
115	Combined theoretical and experimental characterizations of semiconductors for photoelectrocatalytic applications. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2019, 40, 212-233.	5.6	29
116	Water Electrolysis in Saturated Phosphate Buffer at Neutral pH. ChemSusChem, 2020, 13, 5921-5933.	3.6	29
117	Effects of Transition-Metal Composition of Protonated, Layered Nonstoichiometric Oxides H1âˆ'xNb1âˆ'xMo1+xO6 on Heterogeneous Acid Catalysis. Journal of Physical Chemistry C, 2009, 113, 17421-17427.	1.5	28
118	Bismuth Silver Oxysulfide for Photoconversion Applications: Structural and Optoelectronic Properties. Chemistry of Materials, 2017, 29, 8679-8689.	3.2	28
119	A Permselective CeO_{<i>x</i>} Coating To Improve the Stability of Oxygen Evolution Electrocatalysts. Angewandte Chemie, 2018, 130, 1632-1636.	1.6	28
120	CdS Nanoparticles Exhibiting Quantum Size Effect by Dispersion on TiO2: Photocatalytic H2 Evolution and Photoelectrochemical Measurements. Bulletin of the Chemical Society of Japan, 2009, 82, 528-535.	2.0	27
121	Operando Elucidation on the Working State of Immobilized Fluorinated Iron Porphyrin for Selective Aqueous Electroreduction of CO₂ to CO. ACS Catalysis, 2021, 11, 6499-6509.	5.5	27
122	Impact of solute concentration on the electrocatalytic conversion of dissolved gases in buffered solutions. Journal of Power Sources, 2015, 287, 465-471.	4.0	26
123	Solvent-induced deposition of Cuâ€“Gaâ€“Inâ€“S nanocrystals onto a titanium dioxide surface for visible-light-driven photocatalytic hydrogen production. Applied Catalysis B: Environmental, 2016, 184, 264-269.	10.8	26
124	Nb-doped TiO2 cathode catalysts for oxygen reduction reaction of polymer electrolyte fuel cells. Catalysis Today, 2014, 233, 181-186.	2.2	25
125	A miniature solar device for overall water splitting consisting of series-connected spherical silicon solar cells. Scientific Reports, 2016, 6, 24633.	1.6	25
126	Hydrogen production by autothermal reforming of kerosene over MgAlOx-supported Rh catalysts. Applied Catalysis A: General, 2009, 371, 173-178.	2.2	24

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127	Maximizing Hydrogen Evolution Performance on Pt in Buffered Solutions: Mass Transfer Constrains of H₂ and Buffer Ions. Journal of Physical Chemistry C, 2019, 123, 21554-21563.	1.5	24
128	On the reconstruction of NiMo electrocatalysts by <i>operando</i> spectroscopy. Journal of Materials Chemistry A, 2019, 7, 15031-15035.	5.2	24
129	Exploring the Structure and Performance of Cdâ€“Chalcogenide Photocatalysts in Selective Trifluoromethylation. ACS Catalysis, 2021, 11, 14772-14780.	5.5	24
130	Mineralization of volatile organic compounds (VOCs) over the catalyst CuOâ€“Co3O4â€“CeO2 and its applications in industrial odor control. Applied Catalysis A: General, 2011, 409-410, 209-214.	2.2	23
131	UV-Vis Spectroscopy. SpringerBriefs in Energy, 2013, , 49-62.	0.2	22
132	Electrocatalytic Reduction of Carbon Dioxide with a Wellâ€Defined PN³âˆ'Ru Pincer Complex. ChemPlusChem, 2016, 81, 166-171.	1.3	21
133	Maximizing Oxygen Evolution Performance on a Transparent NiFeO_{<i>x</i>}/Ta₃N₅ Photoelectrode Fabricated on an Insulator. ACS Applied Materials & Interfaces, 2021, 13, 16317-16325.	4.0	21
134	Polymerized Complex Synthesis of Niobium- and Zirconium-Based Electrocatalysts for PEFC Cathodes. Journal of the Electrochemical Society, 2010, 157, B240.	1.3	20
135	Catalytic routes to fuels from C₁ and oxygenate molecules. Faraday Discussions, 2017, 197, 9-39.	1.6	20
136	Photophysics and electrochemistry relevant to photocatalytic water splitting involved at solidâ€“electrolyte interfaces. Journal of Energy Chemistry, 2017, 26, 259-269.	7.1	20
137	Dehydrogenation of ethane to ethylene via radical pathways enhanced by alkali metal based catalyst in oxysteam condition. AICHE Journal, 2017, 63, 105-110.	1.8	20
138	Delivering the Full Potential of Oxygen Evolving Electrocatalyst by Conditioning Electrolytes at Nearâ€Neutral pH. ChemSusChem, 2021, 14, 1554-1564.	3.6	20
139	Mechanistic Aspects of Catalytic Steam Reforming of Biomass-related Oxygenates. Topics in Catalysis, 2008, 49, 68-72.	1.3	19
140	Tethering Metal Ions to Photocatalyst Particulate Surfaces by Bifunctional Molecular Linkers for Efficient Hydrogen Evolution. ChemSusChem, 2014, 7, 2575-2583.	3.6	19
141	Boosting the Performance of the Nickel Anode in the Oxygen Evolution Reaction by Simple Electrochemical Activation. Angewandte Chemie, 2017, 129, 5143-5147.	1.6	19
142	Critical difference between optoelectronic properties of Î±â€•and Î²â€SnWO₄ semiconductors: A DFT/HSE06 and experimental investigation. Physica Status Solidi (B): Basic Research, 2016, 253, 1115-1119.	0.7	18
143	Contribution of electrolyte in nanoscale electrolysis of pure and buffered water by particulate photocatalysis. Sustainable Energy and Fuels, 2018, 2, 2044-2052.	2.5	18
144	Surface-Modified Ta3N5 Photoanodes for Sunlight-Driven Overall Water Splitting by Photoelectrochemical Cells. Catalysts, 2021, 11, 584.	1.6	18

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145	Nanoâ€Sized Quaternary CuGa₂In₃S₈ as an Efficient Photocatalyst for Solar Hydrogen Production. ChemSusChem, 2014, 7, 3112-3121.	3.6	17
146	Electrodeposited Ultrafine TaOx/CB Catalysts for PEFC Cathode Application: Their Oxygen Reduction Reaction Kinetics. Electrochimica Acta, 2014, 149, 76-85.	2.6	17
147	Integrated Inâ€...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
148	Improved catalytic performance of nitrided Coâ€“Ti and Feâ€“Ti catalysts for oxygen reduction as non-noble metal cathodes in acidic media. Electrochemistry Communications, 2010, 12, 1177-1179.	2.3	16
149	Efficient Water Oxidation Using Ta 3 N 5 Thin Film Photoelectrodes Prepared on Insulating Transparent Substrates. ChemSusChem, 2020, 13, 1974-1978.	3.6	16
150	Recent Developments in Visibleâ€Lightâ€Absorbing Semitransparent Photoanodes for Tandem Cells Driving Solar Water Splitting. Advanced Energy and Sustainability Research, 2021, 2, 2100023.	2.8	16
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