Yun Hang Hu

List of Publications by Year in descending order

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243 papers 15,981 citations

70 h-index

11651

117 g-index

247 all docs

247 docs citations

times ranked

247

16019 citing authors

#	Article	IF	CITATIONS
1	A Highly Efficient Photocatalyst—Hydrogenated Black TiO ₂ for the Photocatalytic Splitting of Water. Angewandte Chemie - International Edition, 2012, 51, 12410-12412.	13.8	382
2	Graphene as a counter electrode material for dye-sensitized solar cells. Energy and Environmental Science, 2012, 5, 8182.	30.8	380
3	Visible light photocatalytic degradation of tetracycline over TiO2. Chemical Engineering Journal, 2020, 382, 122842.	12.7	367
4	5.1% Apparent quantum efficiency for stable hydrogen generation over eosin-sensitized CuO/TiO2 photocatalyst under visible light irradiation. Catalysis Communications, 2007, 8, 1267-1273.	3.3	361
5	Hydrogen Storage in Metal–Organic Frameworks. Advanced Materials, 2010, 22, E117-30.	21.0	349
6	3D Honeycombâ€Like Structured Graphene and Its High Efficiency as a Counterâ€Electrode Catalyst for Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2013, 52, 9210-9214.	13.8	340
7	Eosin Y-sensitized graphitic carbon nitride fabricated by heating urea for visible light photocatalytic hydrogen evolution: the effect of the pyrolysis temperature of urea. Physical Chemistry Chemical Physics, 2013, 15, 7657.	2.8	332
8	3D Graphene Materials: From Understanding to Design and Synthesis Control. Chemical Reviews, 2020, 120, 10336-10453.	47.7	319
9	Memristive Behavior and Ideal Memristor of 1T Phase MoS ₂ Nanosheets. Nano Letters, 2016, 16, 572-576.	9.1	317
10	Carbon dioxide reforming of methane over nickel/alkaline earth metal oxide catalysts. Applied Catalysis A: General, 1995, 133, 149-161.	4.3	316
11	BINARY MgO-BASED SOLID SOLUTION CATALYSTS FOR METHANE CONVERSION TO SYNGAS. Catalysis Reviews - Science and Engineering, 2002, 44, 423-453.	12.9	304
12	Synthesis of CdS Nanorods by an Ethylenediamine Assisted Hydrothermal Method for Photocatalytic Hydrogen Evolution. Journal of Physical Chemistry C, 2009, 113, 9352-9358.	3.1	296
13	Catalytic Conversion of Methane to Synthesis Gas by Partial Oxidation and CO2 Reforming. Advances in Catalysis, 2004, 48, 297-345.	0.2	272
14	One-step transformation of highly hydrophobic membranes into superhydrophilic and underwater superoleophobic ones for high-efficiency separation of oil-in-water emulsions. Journal of Materials Chemistry A, 2018, 6, 3391-3396.	10.3	257
15	Synthesis, stabilization and applications of 2-dimensional 1T metallic MoS ₂ . Journal of Materials Chemistry A, 2018, 6, 23932-23977.	10.3	250
16	Efficient Visible Light Photocatalytic CO ₂ Reforming of CH ₄ . ACS Catalysis, 2016, 6, 494-497.	11.2	238
17	The nonmetal modulation of composition and morphology of g-C3N4-based photocatalysts. Applied Catalysis B: Environmental, 2020, 269, 118828.	20.2	237
18	Thinnest Twoâ€Dimensional Nanomaterialâ€"Graphene for Solar Energy. ChemSusChem, 2010, 3, 782-796.	6.8	205

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19	MoS ₂ as a coâ€catalyst for photocatalytic hydrogen production from water. Energy Science and Engineering, 2016, 4, 285-304.	4.0	205
20	Tunable Photodeposition of MoS ₂ onto a Composite of Reduced Graphene Oxide and CdS for Synergic Photocatalytic Hydrogen Generation. Journal of Physical Chemistry C, 2014, 118, 19842-19848.	3.1	199
21	Recent progress in visible light photocatalytic conversion of carbon dioxide. Journal of Materials Chemistry A, 2019, 7, 865-887.	10.3	193
22	Excellent photocatalytic degradation of tetracycline over black anatase-TiO2 under visible light. Chemical Engineering Journal, 2021, 406, 126747.	12.7	184
23	Highly selective photocatalytic production of H2O2 on sulfur and nitrogen co-doped graphene quantum dots tuned TiO2. Applied Catalysis B: Environmental, 2018, 239, 475-484.	20.2	178
24	Photocatalytic hydrogen generation in the presence of glucose over ZnS-coated ZnIn2S4 under visible light irradiation. International Journal of Hydrogen Energy, 2010, 35, 7116-7126.	7.1	175
25	Catalytic behavior of graphene oxide for cement hydration process. Journal of Physics and Chemistry of Solids, 2016, 89, 128-133.	4.0	173
26	Solid-solution catalysts for CO2 reforming of methane. Catalysis Today, 2009, 148, 206-211.	4.4	171
27	Pore-Edge Tailoring of Single-Atom Iron–Nitrogen Sites on Graphene for Enhanced CO ₂ Reduction. ACS Catalysis, 2020, 10, 10803-10811.	11.2	140
28	Photocatalytic hydrogen generation in the presence of chloroacetic acids over Pt/TiO2. Chemosphere, 2006, 63, 1312-1318.	8.2	139
29	Role of Support in CO2Reforming of CH4to Syngas over Ni Catalysts. Journal of Catalysis, 1996, 162, 230-238.	6.2	138
30	A review on PEDOT-based counter electrodes for dye-sensitized solar cells. International Journal of Energy Research, 2014, 38, 1099-1111.	4.5	135
31	Confinement Capillarity of Thin Coating for Boosting Solarâ€Driven Water Evaporation. Advanced Functional Materials, 2021, 31, 2011114.	14.9	131
32	An efficient counter electrode material for dye-sensitized solar cellsâ€"flower-structured 1T metallic phase MoS ₂ . Journal of Materials Chemistry A, 2016, 4, 12398-12401.	10.3	127
33	Atomically Dispersed Iron–Nitrogen Sites on Hierarchically Mesoporous Carbon Nanotube and Graphene Nanoribbon Networks for CO ₂ Reduction. ACS Nano, 2020, 14, 5506-5516.	14.6	125
34	Steam reforming of methane: Current states of catalyst design and process upgrading. Renewable and Sustainable Energy Reviews, 2021, 149, 111330.	16.4	120
35	Effect of Oxygen Content on Structures of Graphite Oxides. Industrial & Engineering Chemistry Research, 2011, 50, 6132-6137.	3.7	119
36	Fe-B alloy coupled with Fe clusters as an efficient cocatalyst for photocatalytic hydrogen evolution. Chemical Engineering Journal, 2018, 344, 506-513.	12.7	119

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37	A comprehensive review on catalysts for electrocatalytic and photoelectrocatalytic degradation of antibiotics. Chemical Engineering Journal, 2021, 409, 127739.	12.7	119
38	In situ loading of Ni2P on Cd0.5Zn0.5S with red phosphorus for enhanced visible light photocatalytic H2 evolution. Applied Surface Science, 2018, 447, 822-828.	6.1	118
39	Photocatalytic hydrogen evolution over Erythrosin B-sensitized graphitic carbon nitride with in situ grown molybdenum sulfide cocatalyst. International Journal of Hydrogen Energy, 2015, 40, 353-362.	7.1	113
40	Formation of multilayer-Eosin Y-sensitized TiO2 via Fe3+ coupling for efficient visible-light photocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2009, 34, 5629-5636.	7.1	111
41	g-C ₃ N ₄ -based photoelectrodes for photoelectrochemical water splitting: a review. Journal of Materials Chemistry A, 2020, 8, 21474-21502.	10.3	111
42	Advances in catalytic conversion of methane and carbon dioxide to highly valuable products. Energy Science and Engineering, 2019, 7, 4-29.	4.0	110
43	Clathrate Hydrogen Hydrate—A Promising Material for Hydrogen Storage. Angewandte Chemie - International Edition, 2006, 45, 2011-2013.	13.8	108
44	Highly Efficient Temperature-Induced Visible Light Photocatalytic Hydrogen Production from Water. Journal of Physical Chemistry C, 2015, 119, 18927-18934.	3.1	107
45	Tannic acid encountering ovalbumin: a green and mild strategy for superhydrophilic and underwater superoleophobic modification of various hydrophobic membranes for oil/water separation. Journal of Materials Chemistry A, 2018, 6, 13959-13967.	10.3	107
46	Progress in low-temperature solid oxide fuel cells with hydrocarbon fuels. Chemical Engineering Journal, 2020, 402, 126235.	12.7	105
47	A new concept: Volume photocatalysis for efficient H2 generation Using low polymeric carbon nitride as an example. Applied Catalysis B: Environmental, 2020, 279, 119379.	20.2	104
48	H2Storage in Li3N. Temperature-Programmed Hydrogenation and Dehydrogenation. Industrial & Engineering Chemistry Research, 2003, 42, 5135-5139.	3.7	100
49	Effect of doping TiO2 with alkaline-earth metal ions on its photocatalytic activity. Journal of the Serbian Chemical Society, 2007, 72, 393-402.	0.8	98
50	Combination of CO2Reforming and Partial Oxidation of Methane over NiO/MgO Solid Solution Catalysts. Industrial & Engineering Chemistry Research, 1998, 37, 1744-1747.	3.7	97
51	Promoting Effect of Graphene on Dye-Sensitized Solar Cells. Industrial & Engineering Chemistry Research, 2012, 51, 10613-10620.	3.7	97
52	Thermo-photo catalysis: a whole greater than the sum of its parts. Chemical Society Reviews, 2022, 51, 3609-3647.	38.1	95
53	Insights into the Thermo-Photo Catalytic Production of Hydrogen from Water on a Low-Cost NiO _{<i>x</i>, 2019, 9, 5047-5056.}	11.2	94
54	Recent advances in grapheneâ€based materials for fuel cell applications. Energy Science and Engineering, 2021, 9, 958-983.	4.0	93

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55	Progress in protonâ€conducting oxides as electrolytes for lowâ€temperature solid oxide fuel cells: From materials to devices. Energy Science and Engineering, 2021, 9, 984-1011.	4.0	93
56	Catalysts for CO ₂ reforming of CH ₄ : a review. Journal of Materials Chemistry A, 2021, 9, 12495-12520.	10.3	93
57	Facile Synthesis of Graphene Sponge from Graphene Oxide for Efficient Dye-Sensitized H ₂ Evolution. ACS Applied Materials & Samp; Interfaces, 2016, 8, 15187-15195.	8.0	91
58	The effect of precursor and preparation conditions of MgO on the CO2 reforming of CH4 over NiO/MgO catalysts. Applied Catalysis A: General, 1997, 154, 185-205.	4.3	90
59	Efficient ZnO-based counter electrodes for dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 6622.	10.3	90
60	Endohedral Chemistry of C60-Based Fullerene Cages. Journal of the American Chemical Society, 2005, 127, 11277-11282.	13.7	88
61	3D flower-structured graphene from CO ₂ for supercapacitors with ultrahigh areal capacitance at high current density. Journal of Materials Chemistry A, 2015, 3, 10183-10187.	10.3	88
62	Nitrogen-doped TiO2 modified with NH4F for efficient photocatalytic degradation of formaldehyde under blue light-emitting diodes. Journal of Hazardous Materials, 2010, 182, 90-96.	12.4	87
63	Phosphate-assisted hydrothermal synthesis of hexagonal CdS for efficient photocatalytic hydrogen evolution. CrystEngComm, 2012, 14, 6974.	2.6	84
64	An Ideal Electrode Material, 3D Surface-Microporous Graphene for Supercapacitors with Ultrahigh Areal Capacitance. ACS Applied Materials & Samp; Interfaces, 2017, 9, 24655-24661.	8.0	83
65	Synthesis of 3D cauliflower-fungus-like graphene from CO ₂ as a highly efficient counter electrode material for dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 16842-16846.	10.3	80
66	Co-effects of graphene oxide sheets and single wall carbon nanotubes on mechanical properties of cement. Journal of Physics and Chemistry of Solids, 2015, 85, 39-43.	4.0	80
67	Breakthroughs in Designing Commercial-Level Mass-Loading Graphene Electrodes for Electrochemical Double-Layer Capacitors. Matter, 2019, 1, 596-620.	10.0	79
68	Study of NiOâ^'CoO and Co ₃ O ₄ â^'Ni ₃ O ₄ Solid Solutions in Multiphase Niâ^'Coâ^'O Systems. Industrial & Displayed in Engineering Chemistry Research, 2011, 50, 2015-2020.	3.7	78
69	Ni-B coupled with borate-intercalated Ni(OH)2 for efficient and stable electrocatalytic and photocatalytic hydrogen evolution under low alkalinity. Chemical Engineering Journal, 2020, 394, 124928.	12.7	77
70	Synergetic effect of metal nickel and graphene as a cocatalyst for enhanced photocatalytic hydrogen evolution via dye sensitization. Scientific Reports, 2015, 5, 10589.	3.3	75
71	Photocatalytic hydrogen production over Rh-loaded TiO2: What is the origin of hydrogen and how to achieve hydrogen production from water?. Applied Catalysis B: Environmental, 2020, 278, 119316.	20.2	7 3
72	Recent progress in photocatalysts for overall water splitting. International Journal of Energy Research, 2019, 43, 1082-1098.	4.5	72

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73	Strategies of tuning catalysts for efficient photodegradation of antibiotics in water environments: a review. Journal of Materials Chemistry A, 2021, 9, 2592-2611.	10.3	72
74	Unusual particle-size-induced promoter-to-poison transition of ZrN in counter electrodes for dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 14350.	10.3	70
75	A thermo-photo hybrid process for steam reforming of methane: highly efficient visible light photocatalysis. Chemical Communications, 2019, 55, 7816-7819.	4.1	70
76	Surface defection reduces cytotoxicity of Zn(2-methylimidazole) < sub>2 < /sub> (ZIF-8) without compromising its drug delivery capacity. RSC Advances, 2016, 6, 4128-4135.	3.6	68
77	Design, synthesis, and performance of adsorbents for heavy metal removal from wastewater: a review. Journal of Materials Chemistry A, 2022, 10, 1047-1085.	10.3	68
78	Potassium-chemical synthesis of 3D graphene from CO ₂ and its excellent performance in HTM-free perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 7749-7752.	10.3	66
79	NiO as an Efficient Counter Electrode Catalyst for Dye-Sensitized Solar Cells. Topics in Catalysis, 2014, 57, 607-611.	2.8	65
80	Thermo-photo catalytic CO ₂ hydrogenation over Ru/TiO ₂ . Journal of Materials Chemistry A, 2020, 8, 7390-7394.	10.3	65
81	1T Phase Transition Metal Dichalcogenides for Hydrogen Evolution Reaction. Electrochemical Energy Reviews, 2021, 4, 194-218.	25.5	65
82	Synthesis, structures and applications of single component core-shell structured TiO2: A review. Chemical Engineering Journal, 2019, 375, 122029.	12.7	64
83	Mechanically-induced reverse phase transformation of MoS ₂ from stable 2H to metastable 1T and its memristive behavior. RSC Advances, 2016, 6, 65691-65697.	3.6	63
84	H ₂ O-Functionalized Zeolitic Zn(2-methylimidazole) ₂ Framework (ZIF-8) for H ₂ Storage. Journal of Physical Chemistry C, 2014, 118, 21866-21872.	3.1	62
85	Template-free synthesis of hollow Ni/reduced graphene oxide composite for efficient H ₂ evolution. Journal of Materials Chemistry A, 2017, 5, 13072-13078.	10.3	61
86	High-Resolution Transmission Electron Microscopy Study of Carbon Deposited on the NiO/MgO Solid Solution Catalysts. Journal of Catalysis, 1999, 184, 298-302.	6.2	56
87	Direct conversion of CO ₂ to 3D graphene and its excellent performance for dye-sensitized solar cells with 10% efficiency. Journal of Materials Chemistry A, 2016, 4, 12054-12057.	10.3	55
88	Ab initio quantum chemical calculations for fullerene cages with large holes. Journal of Chemical Physics, 2003, 119, 10073-10080.	3.0	54
89	Highly efficient light-driven methane coupling under ambient conditions based on an integrated design of a photocatalytic system. Green Chemistry, 2020, 22, 4669-4675.	9.0	54
90	Electrolyte-induced precipitation of graphene oxide in its aqueous solution. Journal of Colloid and Interface Science, 2013, 391, 21-27.	9.4	53

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91	3D Channel-structured graphene as efficient electrodes for capacitive deionization. Journal of Colloid and Interface Science, 2019, 538, 420-425.	9.4	53
92	Bimetallic cocatalysts for photocatalytic hydrogen production from water. Chemical Engineering Journal, 2021, 409, 128250.	12.7	52
93	Photocatalytic hydrogen generation using glycerol wastewater over Pt/TiO2. Frontiers of Chemistry in China: Selected Publications From Chinese Universities, 2009, 4, 32-38.	0.4	51
94	Bending Effect of sp-Hybridized Carbon (Carbyne) Chains on Their Structures and Properties. Journal of Physical Chemistry C, 2011, 115, 1843-1850.	3.1	51
95	Core-shell structured TiO2 as highly efficient visible light photocatalyst for dye degradation. Catalysis Today, 2020, 341, 90-95.	4.4	51
96	The Bright Future for Electrode Materials of Energy Devices: Highly Conductive Porous Na-Embedded Carbon. Nano Letters, 2016, 16, 8029-8033.	9.1	50
97	Photo-assisted methanol steam reforming on solid solution of Cu-Zn-Ti oxide. Chemical Engineering Journal, 2019, 375, 121909.	12.7	50
98	Photocatalytic hydrogen evolution under visible light irradiation by the polyoxometalate α-[AlSiW11(H2O)O39]5Ⱐ-Eosin Y system. International Journal of Hydrogen Energy, 2012, 37, 12150-12157.	7.1	49
99	Enhanced Photocatalytic Production of H ₂ O ₂ by Nafion Coatings on S,N-Codoped Graphene-Quantum-Dots-Modified TiO ₂ . Journal of Physical Chemistry C, 2019, 123, 13693-13701.	3.1	48
100	Comment on "Dry reforming of methane by stable Ni–Mo nanocatalysts on single-crystalline MgO― Science, 2020, 368, .	12.6	48
101	Structurally and chemically engineered graphene for capacitive deionization. Journal of Materials Chemistry A, 2021, 9, 1429-1455.	10.3	45
102	The special route toward conversion of methane to methanol on a fluffy metalâ€free carbon nitride photocatalyst in the presence of H ⟨sub⟩2⟨/sub⟩ O ⟨sub⟩2⟨/sub⟩. International Journal of Energy Research, 2020, 44, 2740-2753.	4.5	44
103	The stability of a graphene oxide (GO) nanofiltration (NF) membrane in an aqueous environment: progress and challenges. Materials Advances, 2020, 1, 554-568.	5.4	43
104	Modification of TiO2 with sulfate and phosphate for enhanced eosin Y-sensitized hydrogen evolution under visible light illumination. Photochemical and Photobiological Sciences, 2013, 12, 1903-1910.	2.9	42
105	Novel Binder-Free Three-Dimensional MoS ₂ -Based Electrode for Efficient and Stable Electrocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2019, 2, 1102-1110.	5.1	42
106	Surface-microporous graphene for CO2 adsorption. Catalysis Today, 2020, 356, 514-518.	4.4	42
107	Role of lattice oxygen during CO2 reforming of methane over NiO/MgO solid solutions. Catalysis Letters, 1998, 51, 183-185.	2.6	41
108	Transformation of Fe-B@Fe into Fe-B@Ni for efficient photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2020, 578, 273-280.	9.4	41

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109	Cyclo[18]carbon as an ultra-elastic molecular O-ring with unique mechanical properties. Carbon, 2021, 171, 96-103.	10.3	40
110	NaCl-assisted low temperature synthesis of layered Zn-In-S photocatalyst with high visible-light activity for hydrogen evolution. RSC Advances, 2012, 2, 3458.	3.6	38
111	Unprecedentedly high efficiency for photocatalytic conversion of methane to methanol over Au–Pd/TiO ₂ – what is the role of each component in the system?. Journal of Materials Chemistry A, 2021, 9, 10796-10802.	10.3	37
112	Enhancement of photocatalytic H ₂ evolution of eosin Y-sensitized reduced graphene oxide through a simple photoreaction. Beilstein Journal of Nanotechnology, 2014, 5, 801-811.	2.8	36
113	CH4TPR-MS of NiO/MgO Solid Solution Catalysts. Langmuir, 1997, 13, 2055-2058.	3.5	35
114	Pore Size Distribution of Single-Walled Carbon Nanotubes. Industrial & Engineering Chemistry Research, 2004, 43, 708-711.	3.7	35
115	Reduction of CO ₂ with H ₂ S in a simulated deep-sea hydrothermal vent system. Chemical Communications, 2019, 55, 1056-1059.	4.1	35
116	Recent advances in single-atom catalysts for CO oxidation. Catalysis Reviews - Science and Engineering, 2022, 64, 491-532.	12.9	35
117	The First Magneticâ€Nanoparticleâ€Free Carbonâ€Based Contrast Agent of Magneticâ€Resonance Imagingâ€Fluorinated Graphene Oxide. Small, 2014, 10, 1451-1452.	10.0	34
118	Catalytic role of H ₂ O in degradation of inorganic-organic perovskite (CH ₃) Tj ETQq0 (0 0 ₄ gBT /0	Oveglock 10 T
119	Porous graphene doped with Fe/N/S and incorporating Fe ₃ O ₄ nanoparticles for efficient oxygen reduction. Catalysis Science and Technology, 2018, 8, 5325-5333.	4.1	33
120	Synthesis, properties and potential applications of hydrogenated graphene. Chemical Engineering Journal, 2020, 397, 125408.	12.7	33
121	Ultrafast, Lowâ€Cost, and Mass Production of Highâ€Quality Graphene. Angewandte Chemie - International Edition, 2020, 59, 9232-9234.	13.8	33
122	Highly selective photocatalytic conversion of methane to liquid oxygenates over silicomolybdic-acid/TiO ₂ under mild conditions. Journal of Materials Chemistry A, 2021, 9, 1713-1719.	10.3	33
123	High Reversible Hydrogen Capacity of LiNH2/Li3N Mixtures. Industrial & Engineering Chemistry Research, 2005, 44, 1510-1513.	3.7	32
124	Composition, morphology and photocatalytic activity of Zn-In-S composite synthesized by a NaCl-assisted hydrothermal method. CrystEngComm, 2011, 13, 4770.	2.6	32
125	New Chemistry for New Material: Highly Dense Mesoporous Carbon Electrode for Supercapacitors with High Areal Capacitance. ACS Applied Materials & Samp; Interfaces, 2018, 10, 33162-33169.	8.0	32
126	One-Step Chemical Vapor Deposition Synthesis of Hierarchical Ni and N Co-Doped Carbon Nanosheet/Nanotube Hybrids for Efficient Electrochemical CO ₂ Reduction at Commercially Viable Current Densities. ACS Catalysis, 2021, 11, 10333-10344.	11.2	32

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127	Novel Mesoâ€Superstructured Solar Cells with a High Efficiency Exceeding 12%. Advanced Materials, 2014, 26, 2102-2104.	21.0	31
128	Surface modification of LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ cathode materials with Li ₂ Oâ€B ₂ O ₃ â€LiBr for lithiumâ€ion batteries. International Journal of Energy Research, 2019, 43, 4644-4651.	4.5	31
129	Recent progress in design and fabrication of SOFC cathodes for efficient catalytic oxygen reduction. Catalysis Today, 2023, 409, 71-86.	4.4	30
130	Transient Response Analysis via a Broadened Pulse Combined with a Step Change or an Isotopic Pulse. Application to CO2Reforming of Methane over NiO/SiO2. Journal of Physical Chemistry B, 1997, 101, 7563-7565.	2.6	29
131	Making ultrafine and highly-dispersive multimetallic nanoparticles in three-dimensional graphene with supercritical fluid as excellent electrocatalyst for oxygen reduction reaction. Journal of Materials Chemistry A, 2016, 4, 18628-18638.	10.3	29
132	Recent Advances in Green, Safe, and Fast Production of Graphene Oxide via Electrochemical Approaches. ACS Sustainable Chemistry and Engineering, 2019, 7, 12671-12681.	6.7	29
133	Near Infrared Light-Driven Photoelectrocatalytic Water Splitting over P-Doped g-C ₃ N ₄ . ACS Applied Energy Materials, 2020, 3, 11223-11230.	5.1	29
134	Strategies for improving photoelectrochemical water splitting performance of Siâ€based electrodes. Energy Science and Engineering, 2022, 10, 1526-1543.	4.0	29
135	Metalâ€Catalystâ€Free Carbohydrazide Fuel Cells with Threeâ€Dimensional Graphene Anodes. ChemSusChem, 2015, 8, 1147-1150.	6.8	27
136	Direct conversion of CO ₂ to meso/macro-porous frameworks of surface-microporous graphene for efficient asymmetrical supercapacitors. Journal of Materials Chemistry A, 2017, 5, 23252-23258.	10.3	27
137	KOH-assisted microwave post-treatment of activated carbon for efficient symmetrical double-layer capacitors. International Journal of Energy Research, 2017, 41, 728-735.	4.5	27
138	Thermo–Photo Catalysis for Methanol Synthesis from Syngas. ACS Sustainable Chemistry and Engineering, 2019, 7, 19277-19285.	6.7	27
139	3D Graphene Materials from the Reduction of CO2. Accounts of Materials Research, 2021, 2, 48-58.	11.7	27
140	Hierarchically Porous Polymeric Carbon Nitride as a Volume Photocatalyst for Efficient H ₂ Generation under Strong Irradiation. Solar Rrl, 2022, 6, 2100823.	5.8	27
141	Highly Efficient Nickel, Iron, and Nitrogen Codoped Carbon Catalysts Derived from Industrial Waste Petroleum Coke for Electrochemical CO ₂ Reduction. ACS Sustainable Chemistry and Engineering, 2020, 8, 8840-8847.	6.7	26
142	Electronic structure modulating for supported Rh catalysts toward CO2 methanation. Catalysis Today, 2020, 356, 570-578.	4.4	26
143	Pre-intercalation of phosphate into Ni(OH)2/NiOOH for efficient and stable electrocatalytic oxygen evolution reaction. Journal of Catalysis, 2022, 410, 22-30.	6.2	26
144	Highly conductive porous Na-embedded carbon nanowalls for high-performance capacitive deionization. Journal of Physics and Chemistry of Solids, 2018, 116, 347-352.	4.0	25

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145	Highly conductive Na-embedded carbon nanowalls for hole-transport-material-free perovskite solar cells without metal electrodes. Journal of Materials Chemistry A, 2017, 5, 24126-24130.	10.3	24
146	One-step synthesis of nickel oxide/nickel carbide/graphene composite for efficient dye-sensitized photocatalytic H2 evolution. Catalysis Today, 2019, 335, 326-332.	4.4	24
147	Thermo-photo coupled catalytic CO2 reforming of methane: A review. Chemical Engineering Journal, 2022, 428, 131222.	12.7	24
148	Fast and Exothermic Reaction of CO2and Li3N into C–N-Containing Solid Materials. Journal of Physical Chemistry A, 2011, 115, 11678-11681.	2.5	23
149	Disordered 3 D Multiâ€layer Graphene Anode Material from CO ₂ for Sodiumâ€lon Batteries. ChemSusChem, 2016, 9, 1397-1402.	6.8	23
150	Ultra-fast and ultra-long-life Li ion batteries with 3D surface-porous graphene anodes synthesized from CO ₂ . Journal of Materials Chemistry A, 2020, 8, 13385-13392.	10.3	23
151	Degradation issues and stabilization strategies of protonic ceramic electrolysis cells for steam electrolysis. Energy Science and Engineering, 2022, 10, 1706-1725.	4.0	23
152	Synthesis of Mesochannel Carbon Nanowall Material from CO ₂ and Its Excellent Performance for Perovskite Solar Cells. Industrial & Engineering Chemistry Research, 2017, 56, 1803-1809.	3.7	22
153	Excellent performance of highly conductive porous Na-embedded carbon nanowalls for electric double-layer capacitors with a wide operating temperature range. Journal of Materials Chemistry A, 2017, 5, 9090-9096.	10.3	22
154	Surface-microporous graphene for high-performance capacitive deionization under ultralow saline concentration. Journal of Physics and Chemistry of Solids, 2019, 125, 135-140.	4.0	22
155	Facile synthesis of Co ₂ (OH) ₃ Cl/cobalt carbide/reduced graphene oxide composites for enhanced dye-sensitized photocatalytic H ₂ evolution. Sustainable Energy and Fuels, 2020, 4, 6181-6187.	4.9	22
156	Photocatalytic conversion of carbon monoxide: from pollutant removal to fuel production. Applied Catalysis B: Environmental, 2021, 295, 120312.	20.2	22
157	How Magical Is Magic-Angle Graphene?. Matter, 2020, 2, 1106-1114.	10.0	21
158	Low Temperature and Controllable Formation of Oxygen Vacancy SrTiO _{3â€x} by Loading Pt for Enhanced Photocatalytic Hydrogen Evolution. Energy Technology, 2018, 6, 2166-2171.	3.8	20
159	Distinct Pathways in Visible-Light Driven Thermo-Photo Catalytic Methane Conversion. Journal of Physical Chemistry Letters, 2021, 12, 7459-7465.	4.6	20
160	Catalytic Conversion of Methane to Synthesis Gas by Partial Oxidation and CO2 Reforming. ChemInform, 2004, 35, no.	0.0	19
161	Novel hydrogen storage systems and materials. International Journal of Energy Research, 2013, 37, 683-685.	4.5	19
162	Synthesis of carbon nanomaterials for dye-sensitized solar cells. International Journal of Energy Research, 2015, 39, 842-850.	4.5	19

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163	Photocatalytic hydrogen evolution and decomposition of glycerol over <scp>C</scp> d _{0.5} <scp>S</scp> solid solution under visible light irradiation. Environmental Progress and Sustainable Energy, 2016, 35, 141-148.	2.3	19
164	Phosphorus-based metal-free Z-scheme 2D van der Waals heterostructures for visible-light photocatalytic water splitting: a first-principles study. Physical Chemistry Chemical Physics, 2020, 22, 9250-9256.	2.8	19
165	Boron-Doped and Carbon-Controlled Porous Si/C Anode for High-Performance Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 8488-8495.	5.1	19
166	Design and Synthesis of 3D Potassium-Ion Pre-Intercalated Graphene for Supercapacitors. Industrial & Lamp; Engineering Chemistry Research, 2018, 57, 3610-3616.	3.7	18
167	S-Vacancy induced indirect-to-direct band gap transition in multilayer MoS ₂ . Physical Chemistry Chemical Physics, 2020, 22, 26005-26014.	2.8	18
168	Enhanced photocatalytic CO2 hydrogenation with wide-spectrum utilization over black TiO2 supported catalyst. Chinese Chemical Letters, 2022, 33, 812-816.	9.0	18
169	Isotopic study of the reaction of methane with the lattice oxygen of a NiO/MgO solid solution. Catalysis Letters, 1999, 57, 167-169.	2.6	17
170	Quantum chemical density-functional theory calculations of the structures of defect C60 with four vacancies. Journal of Chemical Physics, 2004, 120, 7971-7975.	3.0	17
171	Immobilization of PDMS-SiO2-TiO2 composite for the photocatalytic degradation of dye AO-7. Water Science and Technology, 2016, 74, 1680-1688.	2.5	16
172	Multiple Transient Response Methods To Identify Mechanisms of Heterogeneous Catalytic Reactions. Accounts of Chemical Research, 2003, 36, 791-797.	15.6	15
173	Novel WS ₂ -Based 3D Electrode with Protecting Scaffold for Efficient and Stable Hydrogen Evolution. Journal of Physical Chemistry C, 2019, 123, 12142-12148.	3.1	15
174	Density functional theory calculations for endohedral complexes of non-Ï€C60H60 cage with small guest molecules. Journal of Chemical Physics, 2005, 123, 144303.	3.0	14
175	Enhanced photocatalytic hydrogen evolution under visible light over Cd x Zn1â^'x S solid solution by ruthenium doping. Reaction Kinetics, Mechanisms and Catalysis, 2012, 107, 105-113.	1.7	14
176	Photocatalytic conversion of CO2 over C3N4-based catalysts. Catalysis Today, 2018, 316, 149-154.	4.4	14
177	Phase role of white TiO2 precursor in its reduction to black TiO2. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2978-2982.	2.1	14
178	One-step synthesis of high surface-area honeycomb graphene clusters for highly efficient capacitive deionization. Journal of Physics and Chemistry of Solids, 2019, 134, 64-68.	4.0	14
179	Tuning metal-support interaction of NiCu/graphene cocatalysts for enhanced dye-sensitized photocatalytic H2 evolution. Applied Surface Science, 2022, 593, 153459.	6.1	14
180	Preparation of SiO2-Pt-CdS composite photocatalyst and its photocatalytic activity for hydrogen evolution under visible light. Reaction Kinetics and Catalysis Letters, 2008, 95, 185-192.	0.6	13

#	Article	IF	Citations
181	Kinetic analysis and thermodynamic simulation of alkaliâ€silica reaction in cementitious materials. Journal of the American Ceramic Society, 2019, 102, 1463-1478.	3.8	13
182	Mo6S8-based single-metal-atom catalysts for direct methane to methanol conversion. Journal of Chemical Physics, 2019, 151, 024304.	3.0	13
183	Efficient Ni(OH) ₂ /WO ₃ Photoanode for Photoelectrocatalytic Water Splitting at Low Bias. Journal of Physical Chemistry C, 2020, 124, 19447-19456.	3.1	13
184	Highly Efficient Dye-Sensitized Solar Cells with Composited Food Dyes. Industrial & Engineering Chemistry Research, 2020, 59, 10457-10463.	3.7	13
185	Applications of 3D Potassium-Ion Pre-Intercalated Graphene for Perovskite and Dye-Sensitized Solar Cells. Industrial & Engineering Chemistry Research, 2019, 58, 8743-8749.	3.7	12
186	In-situ FTIR-DRS investigation on shallow trap state of Cu-doped TiO2 photocatalyst. Catalysis Today, 2020, 341, 21-25.	4.4	12
187	Highly efficient visible-light photocatalytic ethane oxidation into ethyl hydroperoxide as a radical reservoir. Chemical Science, 2021, 12, 5825-5833.	7.4	12
188	Multiple roles of graphene in electrocatalysts for metal-air batteries. Catalysis Today, 2023, 409, 2-22.	4.4	12
189	Rebuttal to Comments on "Catalyst Temperature Oscillations during Partial Oxidation of Methane― Industrial & Engineering Chemistry Research, 1999, 38, 1742-1742.	3.7	11
190	Acetylene adsorption on defected MIL-53. International Journal of Energy Research, 2016, 40, 846-852.	4.5	11
191	3D graphene from CO2 and K as an excellent counter electrode for dye-sensitized solar cells. International Journal of Energy Research, 2017, 41, 2502-2508.	4.5	11
192	Highly Efficient Thin Zinc Air Batteries. Journal of the Electrochemical Society, 2019, 166, A2879-A2886.	2.9	11
193	Lithium-Chemical Synthesis of Highly Conductive 3D Mesoporous Graphene for Highly Efficient New Generation Solar Cells. ACS Applied Energy Materials, 2019, 2, 1445-1451.	5.1	11
194	Controlling the Release of Hydrogen Peroxide from Catechol-Based Adhesives Using Silica Nanoparticles. ACS Biomaterials Science and Engineering, 2020, 6, 4502-4511.	5.2	11
195	Open the door to the atomic world by single-molecule atomic force microscopy. Matter, 2021, 4, 1189-1223.	10.0	11
196	Bifunctional electrocatalysts for oxygen reduction and oxygen evolution: a theoretical study on 2D metallic WO ₂ -supported single atom (Fe, Co, or Ni) catalysts. Physical Chemistry Chemical Physics, 2021, 23, 13687-13695.	2.8	11
197	Bond order bond polarizability model for fullerene cages and nanotubes. Journal of Chemical Physics, 2005, 123, 214708.	3.0	10
198	Advances in Catalysts for CO ₂ Reforming of Methane. ACS Symposium Series, 2010, , 155-174.	0.5	10

#	Article	IF	CITATIONS
199	Oxygen-deficiency-induced 6H-polymorph of hexagonal perovskite Ba4YMn3O11.5â^Î: synthesis, structure and properties. Journal of Materials Chemistry, 2012, 22, 8103.	6.7	10
200	Excellent capacitive deionization performance of meso-carbon microbeads. RSC Advances, 2016, 6, 47285-47291.	3.6	10
201	Ultrahigh-rate lithium-ion batteries with 3D fungus-structured carbon/CuC ₂ O ₄ Â <i>x</i> H ₂ O electrodes. Journal of Materials Chemistry A, 2020, 8, 3397-3404.	10.3	10
202	Metal-free surface-microporous graphene electrocatalysts from CO ₂ for rechargeable all-solid-state zinc–air batteries. Journal of Materials Chemistry A, 2021, 9, 10081-10087.	10.3	10
203	3D MoS2/Graphene hybrid layer materials as counter electrodes for dye-sensitized solar cells. Catalysis, 0, , 268-280.	1.0	10
204	Highly efficient polyoxometalate-based catalysts for clean-gasoline synthesis. Journal of Materials Chemistry A, 2015, 3, 21424-21427.	10.3	9
205	Highly selective production of C5-C12 hydrocarbons over efficient Ru/heteropoly-acid catalysts. Fuel, 2019, 244, 395-402.	6.4	9
206	Confined synthesis of condensed π-conjugation C-PAN/MS-CN nanotubes for efficient photocatalytic H ₂ evolution. Chemical Communications, 2022, 58, 4352-4355.	4.1	9
207	Tuning shape of three dimensional graphene sheets. Catalysis Today, 2016, 274, 99-102.	4.4	8
208	2.21 Supercapacitors. , 2018, , 663-695.		8
209	Steam-Reforming Product (H ₂ /CO ₂ Mixture) Used as a Hydrogen Source for Hydrogen Storage in Li ₃ N. Industrial & Engineering Chemistry Research, 2007, 46, 5940-5942.	3.7	7
210	In Situ Photoreduction Synthesis of Fe(0)/Melamine Coreâ€"Shell Submicrocubes for Efficient Photocatalytic H ₂ Evolution. ACS Applied Energy Materials, 2018, 1, 2483-2489.	5.1	7
211	Direct conversion of methane to oxygenates catalyzed by iron(<scp>III < /scp>) chloride in water at near ambient temperature. International Journal of Energy Research, 2021, 45, 2581-2592.</scp>	4.5	7
212	1T/1T′-dominated WSe ₂ with stabilized oxygen dopants for efficient and durable hydrogen evolution. Journal of Materials Chemistry A, 2021, 9, 13490-13495.	10.3	7
213	A simple approach making acetylene black electrocatalytically active for flexible rechargeable zinc–air batteries. Journal of Materials Chemistry A, 2021, 9, 11145-11150.	10.3	7
214	Ultraâ€stable Molecular Interface SiW ₁₂ O _x /TiO ₂ Catalyst Derived from Kegginâ€type Polyoxometalates for Photocatalytic Conversion of Methane to Oxygenates. ChemCatChem, 2022, 14, .	3.7	7
215	Temperature-Induced Irreversible Change of ZnO Optical Energy Gap. Industrial & Description (2012, 51, 1083-1085).	3.7	6
216	Enhanced photocatalytic hydrogen evolution under visible light irradiation over Cd0.5Zn0.5S solid solution by magnesium-doping. Reaction Kinetics, Mechanisms and Catalysis, 2013, 110, 259-270.	1.7	6

#	Article	IF	Citations
217	Novel design for the odd-symmetric memristor from asymmetric switches. Journal of Materials Chemistry C, 2015, 3, 2768-2772.	5 . 5	6
218	Synthesis of Semimetallic Tungsten Trioxide for Infrared Light Photoelectrocatalytic Water Splitting. Journal of Physical Chemistry C, 2019, 123, 25833-25843.	3.1	6
219	Self-stabilization of Ni/Al2O3 Catalyst with a NiAl2O4 Isolation Layer in Dry Reforming of Methane. Catalysis Letters, 2022, 152, 2852-2859.	2.6	6
220	Optimal preparation of molybdenum phosphide cocatalyst for efficient dye-sensitized photocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2022, 47, 3814-3823.	7.1	6
221	Electro-catalytic role of insulator/conductor interface in MgO/PEDOT composite electrodes for dye-sensitized solar cells. Science China Chemistry, 2015, 58, 101-106.	8.2	5
222	Thin-water-film-enhanced TiO ₂ -based catalyst for CO ₂ hydrogenation to formic acid. Chemical Communications, 2022, 58, 787-790.	4.1	5
223	Visible-light-driven hydrogen evolution with polyoxometalate as electron relay. Journal of Photonics for Energy, 2016, 6, 046501.	1.3	4
224	Efficient and stable photocatalytic hydrogen evolution from alkaline formaldehyde solution over Cd _{0.5} Zn _{0.5} S solid solution under visible light irradiation. Journal of Photonics for Energy, 2017, 7, 016503.	1.3	4
225	Microfactories for Intracellular Locally Generated Hydrogen Therapy: Advanced Materials, Challenges, and Opportunities. ChemPlusChem, 2020, 85, 57-67.	2.8	4
226	Photocatalytic conversion of ethane: status and perspective. International Journal of Energy Research, 2020, 44, 708-717.	4.5	4
227	Trash to treasure: Fallen leaves as separators for supercapacitors. International Journal of Energy Research, 2022, 46, 14517-14525.	4.5	4
228	<scp> CePMo ₁₂ O ₄₀ </scp> / <scp> TiO ₂ </scp> catalysts for photocatalytic oxidation of methane to valueâ€added organic oxygenates. International Journal of Energy Research, 2021, 45, 12996-13006.	4. 5	3
229	Surface-copper-doped WO3 photoanode for photoelectrochemical water splitting. Applied Physics Letters, 2021, 118, 223903.	3.3	3
230	A unique black TiO2 created from CO-induced oxidation of defect-rich TiO2. Journal of Physics and Chemistry of Solids, 2021, 154, 110053.	4.0	3
231	Hierarchically Porous Polymeric Carbon Nitride as a Volume Photocatalyst for Efficient H ₂ Generation under Strong Irradiation. Solar Rrl, 2022, 6, .	5.8	3
232	Higher Chemical Stability of α-Li3N than β-Li3N in Atmosphere. Topics in Catalysis, 2015, 58, 386-390.	2.8	2
233	Investigation on H-containing shallow trap of hydrogenated TiO ₂ with <i>in situ</i> Fourier transform infrared diffuse reflection spectroscopy. Nanotechnology, 2017, 28, 304001.	2.6	2
234	Special column: solar energy conversion. Frontiers in Energy, 2019, 13, 205-206.	2.3	2

#	Article	IF	CITATIONS
235	Facile Hydrothermal Synthesis of EABâ€Type Zeolite under Static Synthesis Conditions. Crystal Research and Technology, 2021, 56, 2000163.	1.3	2
236	Synthesis of Ni2P/Ni12P5 composite for a highly efficient hydrogen production from formaldehyde solution. Reaction Kinetics, Mechanisms and Catalysis, 2021, 133, 229-243.	1.7	2
237	New chemistry for one-step synthesis of tunable 3D hydrogenated graphene. Journal of Physics and Chemistry of Solids, 2022, 167, 110772.	4.0	2
238	Theoretical and Experimental Studies of Gallate Melilite Electrides from Topotactic Reduction of Interstitial Oxide Ion Conductors. Inorganic Chemistry, 2022, 61, 10915-10924.	4.0	2
239	Ultraschnelle und kosteng $ ilde{A}^{1}\!\!4$ nstige Produktion von hochwertigem Graphen. Angewandte Chemie, 2020, 132, 9316-9318.	2.0	1
240	Eli Ruckenstein – A Rare Researcher, Teacher, and Mentor par Excellence. Advances in Colloid and Interface Science, 2017, 244, 1-5.	14.7	0
241	140 years of excellence from the society of chemical industry (SCI) promoting innovation in chemical industries. Energy Science and Engineering, 2021, 9, 920-920.	4.0	0
242	Fund industrial fellowships for faculty to benefit graduates. Nature, 2022, 601, 508-508.	27.8	0
243	<i>Energy Science & Engineering (i): 10 Years of excellence. Energy Science and Engineering, 2022, 10, 1570-1571.</i>	4.0	0