The properties of hydrogen as fuel tomorrow in sustain planet

International Journal of Hydrogen Energy

30, 795-802

DOI: 10.1016/j.ijhydene.2004.10.011

Citation Report

#	Article	IF	Citations
1	Green energy strategies for sustainable development. Energy Policy, 2006, 34, 3623-3633.	4.2	263
2	Insight into steam reforming of ethanol to produce hydrogen for fuel cells. Chemical Engineering Journal, 2006, 117, 39-49.	6.6	589
3	Hydrogen Energy. , 0, , 165-206.		5
4	The Role and Future Benefits of Green Energy. International Journal of Green Energy, 2007, 4, 65-87.	2.1	35
6	Key strategies of hydrogen energy systems for sustainability. International Journal of Hydrogen Energy, 2007, 32, 511-524.	3.8	126
7	Autothermal reforming of gasoline on Rh-based monolithic catalysts. International Journal of Hydrogen Energy, 2007, 32, 981-991.	3.8	92
8	Potential of hydrogen from oil palm biomass as a source of renewable energy worldwide. Energy Policy, 2007, 35, 5692-5701.	4.2	243
9	Metabolic flux analysis of biological hydrogen production by Escherichia coli. International Journal of Hydrogen Energy, 2007, 32, 3820-3830.	3.8	51
10	Comparison of biohydrogen production processes. International Journal of Hydrogen Energy, 2008, 33, 279-286.	3.8	457
11	Perovskite membrane reactor for continuous and isothermal redox hydrogen production from the dissociation of water. Journal of Membrane Science, 2008, 325, 704-711.	4.1	50
12	Ethanol steam reforming on Ni/Al2O3 catalysts: Effect of Mg addition. International Journal of Hydrogen Energy, 2008, 33, 3489-3492.	3.8	114
13	Photocatalytic reforming of biomass: A systematic study of hydrogen evolution from glucose solution. International Journal of Hydrogen Energy, 2008, 33, 6484-6491.	3.8	301
14	GC-MS determination of low hydrocarbon species (C1â€“C6) from a diesel partial oxidation reformer. International Journal of Hydrogen Energy, 2008, 33, 7074-7083.	3.8	8
15	Electrolysis of Water. , 2008, , 41-63.		9
16	Hydrogen Technology. Green Energy and Technology, 2008, , .	0.4	45
17	Storage of hydrogen in zeolites. , 2008, , 223-260.		5
19	The problem of solid state hydrogen storage. Energy, 2009, 34, 2087-2091.	4.5	197
20	What energy levels can the Earth sustain?. Energy Policy, 2009, 37, 2469-2474.	4.2	76

#	Article	IF	Citations
21	Hydrogen energy demonstration plant in Patagonia: Description and safety issues. International Journal of Hydrogen Energy, 2009, 34, 4684-4691.	3.8	33
22	Design of a PEM fuel cell system for residential application. International Journal of Hydrogen Energy, 2009, 34, 5242-5248.	3.8	161
23	Hydrogen's role in an uncertain energy future. International Journal of Hydrogen Energy, 2009, 34, 31-39.	3.8	206
24	MedHySol: Future federator project of massive production of solar hydrogen. International Journal of Hydrogen Energy, 2009, 34, 4922-4933.	3.8	28
25	The stability of hydrogen evolution activity and corrosion behavior of NiCu coatings with long-term electrolysis in alkaline solution. International Journal of Hydrogen Energy, 2009, 34, 2089-2094.	3.8	119
26	Hydrogen evolution reaction on glassy carbon electrode modified with titanyl phthalocyanines. International Journal of Hydrogen Energy, 2009, 34, 2107-2112.	3.8	51
27	Development of some exergetic parameters for PEM fuel cells for measuring environmental impact and sustainability. International Journal of Hydrogen Energy, 2009, 34, 3858-3872.	3.8	148
28	Life cycle cost analysis to examine the economical feasibility of hydrogen as an alternative fuel. International Journal of Hydrogen Energy, 2009, 34, 4243-4255.	3.8	76
29	Kinetic model of homogeneous thermal decomposition of methane and ethane. International Journal of Hydrogen Energy, 2009, 34, 3710-3716.	3.8	55
30	La1â^'xSrxMO3 (M = Mn, Fe) perovskites as materials for thermochemical hydrogen production in conventional and membrane reactors. International Journal of Hydrogen Energy, 2009, 34, 7162-7172.	3.8	73
31	An evaluation of the potential of the use of wasted hydroelectric capacity to produce hydrogen to be used in fuel cells in order to decrease CO2 emissions in Brazil. International Journal of Hydrogen Energy, 2009, 34, 7898-7902.	3.8	22
32	The stability of NiCoZn electrocatalyst for hydrogen evolution activity in alkaline solution during long-term electrolysis. International Journal of Hydrogen Energy, 2009, 34, 7910-7918.	3.8	74
33	Study of sensitivity and response kinetics changes for SnO2 thin-film hydrogen sensors. International Journal of Hydrogen Energy, 2009, 34, 8438-8443.	3.8	56
34	Metabolic flux analysis of the hydrogen production potential in Synechocystis sp. PCC6803. International Journal of Hydrogen Energy, 2009, 34, 8828-8838.	3.8	31
35	Ethanol steam reforming on Mg- and Ca-modified Cuâ€"Ni/SBA-15 catalysts. Catalysis Today, 2009, 146, 63-70.	2.2	97
36	Valorisation of wastepaper using the fibrolytic/hydrogen producing bacterium Ruminococcus albus. Bioresource Technology, 2009, 100, 5928-5933.	4.8	30
37	Protein Engineering of the Transcriptional Activator FhlA To Enhance Hydrogen Production in Escherichia coli. Applied and Environmental Microbiology, 2009, 75, 5639-5646.	1.4	39
39	Properties and applications of perovskite proton conductors. Materials Research, 2010, 13, 385-394.	0.6	137

#	Article	IF	Citations
40	Biohydrogen Production from Biomass and Wastes via Dark Fermentation: A Review. Waste and Biomass Valorization, 2010, 1, 21-39.	1.8	286
42	Promoting effect of small amount of Fe addition onto Co catalyst supported on Î±-Al2O3 for steam reforming of ethanol. Applied Catalysis A: General, 2010, 383, 96-101.	2.2	43
43	Effect of H2/O2 addition in increasing the thermal efficiency of a diesel engine. Fuel, 2010, 89, 378-383.	3.4	152
44	La1â^'xSrxFeO3â^'Î´ perovskites as redox materials for application in a membrane reactor for simultaneous production of pure hydrogen and synthesis gas. Fuel, 2010, 89, 1265-1273.	3.4	112
45	Hydrogen production from ethanol steam reforming over cerium and nickel based oxyhydrides. International Journal of Hydrogen Energy, 2010, 35, 12741-12750.	3.8	37
46	Influence of solids retention time on continuous H2 production using membrane bioreactor. International Journal of Hydrogen Energy, 2010, 35, 52-60.	3.8	40
47	Combustion characteristics of natural gasâ€"hydrogen hybrid fuel turbulent diffusion flame. International Journal of Hydrogen Energy, 2010, 35, 2556-2565.	3.8	68
48	Influence of Sr-doping on the photocatalytic activities of CdSâ€"ZnS solid solution photocatalysts. International Journal of Hydrogen Energy, 2010, 35, 2048-2057.	3.8	123
49	Application of a modified Anaerobic Digestion Model 1 version for fermentative hydrogen production from sweet sorghum extract by Ruminococcus albus. International Journal of Hydrogen Energy, 2010, 35, 3423-3432.	3.8	35
50	Structured reactors as alternative to pellets catalyst for propane oxidative steam reforming. International Journal of Hydrogen Energy, 2010, 35, 9810-9817.	3.8	24
51	Sequential simulation of dense oxygen permeation membrane reactor for hydrogen production from oxidative steam reforming of ethanol with ASPEN PLUS. International Journal of Hydrogen Energy, 2010, 35, 6691-6698.	3.8	29
52	Hydrogen production via water splitting process in a molten-salt fusion breeder. International Journal of Hydrogen Energy, 2010, 35, 7357-7368.	3.8	18
53	Biological hydrogen production: Simultaneous saccharification and fermentation with nitrogen and phosphorus removal from wastewater effluent. International Journal of Hydrogen Energy, 2010, 35, 9611-9617.	3.8	6
54	Effect of hydroxy (HHO) gas addition on performance and exhaust emissions in compression ignition engines. International Journal of Hydrogen Energy, 2010, 35, 11366-11372.	3.8	144
55	Hydrogen production potential of APEX fusion transmuter fueled minor actinide fluoride. International Journal of Hydrogen Energy, 2010, 35, 10190-10201.	3.8	13
56	Preparation, characterization and application of alkaline leached CuNiZn ternary coatings for long-term electrolysis in alkaline solution. International Journal of Hydrogen Energy, 2010, 35, 10045-10049.	3.8	57
57	Hydrogen production from ethanol in presence of water over cerium and nickel mixed oxides. Catalysis Today, 2010, 157, 456-461.	2.2	23
58	Multi-Walled Carbon Nanotube-Doped Tungsten Oxide Thin Films for Hydrogen Gas Sensing. Sensors, 2010, 10, 7705-7715.	2.1	90

#	Article	IF	Citations
59	Optimization approach for kinetics parameters determination for oil palm waste steam gasification with in-situ CO<inf>2</inf> capture for hydrogen production. , 2011, , .		1
60	Photocatalytic Hydrogen Evolution under Highly Basic Conditions by Using Ru Nanoparticles and 2-Phenyl-4-(1-naphthyl)quinolinium Ion. Journal of the American Chemical Society, 2011, 133, 16136-16145.	6.6	98
61	Gasochromic Performance of WO3 Nanorod Thin Films for Low Concentration H2 Sensing. Procedia Engineering, 2011, 25, 1065-1068.	1.2	9
62	High Performance Low Temperature Methanol-Water Plasma Reforming. Journal of Thermal Science and Technology, 2011, 6, 344-359.	0.6	2
63	Recent advances in production of hydrogen from biomass. Energy Conversion and Management, 2011, 52, 1778-1789.	4.4	282
64	Comparative study of NiLaZr and CoLaZr catalysts for hydrogen production by ethanol steam reforming: Effect of CO2 injection to the gas reactants. Evidence of Rh role as a promoter. Applied Catalysis A: General, 2011, 407, 204-210.	2.2	24
65	Behavior of heteroatom compounds in hydrothermal gasification of biowaste for hydrogen production. Applied Energy, 2011, 88, 4874-4878.	5.1	27
66	Exergy analysis of a high pressure multistage hydrogen gas storage system. International Journal of Hydrogen Energy, 2011, 36, 11440-11450.	3.8	15
67	Fabrication of monodisperse precursor gel microspheres for hollow glass microspheres by combining the sol-microemulsion-gel process with a T-shaped microfluidic device. International Journal of Hydrogen Energy, 2011, 36, 9758-9766.	3.8	28
68	Improving the performance of a gasoline engine with the addition of hydrogenâ€“oxygen mixtures. International Journal of Hydrogen Energy, 2011, 36, 11164-11173.	3.8	49
69	Fabrication and characterization of NiCoZnâ€“M (M: Ag, Pd and Pt) electrocatalysts as cathode materials for electrochemical hydrogen production. International Journal of Hydrogen Energy, 2011, 36, 12079-12087.	3.8	95
70	Hydrogen production from acid hydrolyzed molasses by the hydrogen overproducing Escherichia coli strain HD701 and subsequent use of the waste bacterial biomass for biosorption of Cd(II) and Zn(II). International Journal of Hydrogen Energy, 2011, 36, 14381-14390.	3.8	31
71	Electrooxidation of H2/CO on carbon-supported PtRu-MoO nanoparticles for polymer electrolyte fuel cells. International Journal of Hydrogen Energy, 2011, 36, 14590-14598.	3.8	26
72	A novel technique to fabricate horizontally aligned CNT nanostructure film for hydrogen gas sensing. International Journal of Hydrogen Energy, 2011, 36, 15919-15926.	3.8	10
73	Simulation of hybrid biomass gasification using Aspen plus: A comparative performance analysis for food, municipal solid and poultry waste. Biomass and Bioenergy, 2011, 35, 3962-3969.	2.9	265
74	Catalytic mechanisms of hydrogen evolution with homogeneous and heterogeneous catalysts. Energy and Environmental Science, 2011, 4, 2754.	15.6	169
75	Electrocatalytic hydrogen evolution reaction on microwave assisted solâ€“gel-derived carbon ceramic electrodes modified with metalophthalocyanines. Journal of Electroanalytical Chemistry, 2011, 652, 32-36.	1.9	12
76	Sustainability aspects of hydrogen and fuel cell systems. Energy for Sustainable Development, 2011, 15, 137-146.	2.0	80

#	Article	IF	Citations
77	Experimental study on a spark ignition engine fueled by CH 4 /H 2 (70/30) and LPG. International Journal of Hydrogen Energy, 2011, 36, 9260-9266.	3.8	15
78	Comparative life cycle assessment of three biohydrogen pathways. Bioresource Technology, 2011, 102, 2684-2694.	4.8	79
79	The Hydrogen Issue. ChemSusChem, 2011, 4, 21-36.	3.6	772
80	Experimental results of an air-cooled lab-scale H2 storage tank based on sodium alanate. International Journal of Hydrogen Energy, 2011, 36, 3556-3565.	3.8	22
81	Escherichia coli hydrogenase activity and H2 production under glycerol fermentation at a low pH. International Journal of Hydrogen Energy, 2011, 36, 4323-4331.	3.8	64
82	Effect of substrate concentration on fermentative hydrogen production from sweet sorghum extract. International Journal of Hydrogen Energy, 2011, 36, 4843-4851.	3.8	54
83	Technical and financial study of the development in Venezuela of the hydrogen energy system. Renewable Energy, 2011, 36, 3114-3123.	4.3	10
84	OPTICAL SENSING PROPERTIES OF WO₃ NANOSTRUCTURED THIN FILMS ON SAPPHIRE SUBSTRATE TOWARD HYDROGEN. Biomedical Engineering - Applications, Basis and Communications, 2012, 24, 123-129.	0.3	2
85	Evaluation of Hydrogen Combustors for Gas Turbines. , 2012, , .		0
86	Photocatalytic hydrogen evolution from carbon-neutral oxalate with 2-phenyl-4-(1-naphthyl)quinolinium ion and metal nanoparticles. Physical Chemistry Chemical Physics, 2012, 14, 10564.	1.3	32
87	Electrocatalytic pathways towards sustainable fuel production from water and CO2. Coordination Chemistry Reviews, 2012, 256, 2571-2600.	9.5	138
88	Investigating the Water in Hydrated sPEEK Membranes Using Multiple Quantum Filtered ²H NMR Spectroscopy. Journal of Physical Chemistry B, 2012, 116, 14724-14730.	1.2	7
89	Development of a biohydrogen economy in the United States, China, Japan, and India: With discussion of a chicken-and-egg debate. International Journal of Hydrogen Energy, 2012, 37, 15736-15745.	3.8	32
90	Mesophilic fermentative hydrogen production from sago starch-processing wastewater using enriched mixed cultures. International Journal of Hydrogen Energy, 2012, 37, 15588-15597.	3.8	44
91	Hydrogen peroxide as a sustainable energy carrier: Electrocatalytic production of hydrogen peroxide and the fuel cell. Electrochimica Acta, 2012, 82, 493-511.	2.6	245
92	Electrochemical and Optical Properties of Magnesium-Alloy Hydrides Reviewed. Crystals, 2012, 2, 1410-1433.	1.0	21
93	Ceâ€"Ni mixed oxide as efficient catalyst for H2 production and nanofibrous carbon material from ethanol in the presence of water. RSC Advances, 2012, 2, 9626.	1.7	36
94	Multiple and reversible hydrogenases for hydrogen production byEscherichia coli: dependence on fermentation substrate, pH and the F₀F₁-ATPase. Critical Reviews in Biochemistry and Molecular Biology, 2012, 47, 236-249.	2.3	101

#	Article	IF	Citations
95	Photocatalytic Hydrogen Evolution Using 9-Phenyl-10-methyl-acridinium Ion Derivatives as Efficient Electron Mediators and Ru-Based Catalysts. Australian Journal of Chemistry, 2012, 65, 1573.	0.5	9
96	Environmental Impacts of Hydrogen Production by Hydrothermal Gasification of a Real Biowaste. , 0, , .		1
97	Symmetric and Asymmetric Zeolitic Imidazolate Frameworks (ZIFs)/Polybenzimidazole (PBI) Nanocomposite Membranes for Hydrogen Purification at High Temperatures. Advanced Energy Materials, 2012, 2, 1358-1367.	10.2	138
98	Photocatalytic hydrogen evolution with Ni nanoparticles by using 2-phenyl-4-(1-naphthyl)quinolinium ion as a photocatalyst. Energy and Environmental Science, 2012, 5, 6111.	15.6	89
99	Production and characterization of hollow glass microspheres with high diffusivity for hydrogen storage. International Journal of Hydrogen Energy, 2012, 37, 1518-1530.	3.8	31
100	A rigorous computational model for hydrogen production from bio-ethanol to feed a fuel cell stack. International Journal of Hydrogen Energy, 2012, 37, 3108-3129.	3.8	21
101	Hydrogen production from methane and natural gas steam reforming in conventional and microreactor reaction systems. International Journal of Hydrogen Energy, 2012, 37, 7026-7033.	3.8	112
102	Bimetallic complexes in artificial photosynthesis for hydrogen production: A review. International Journal of Hydrogen Energy, 2012, 37, 3066-3087.	3.8	51
103	Procedure for optimal design of hydrogen production plants with reserve storage and a stand-alone photovoltaic power system. International Journal of Hydrogen Energy, 2012, 37, 4018-4025.	3.8	21
104	Hydrogen production from vegetable waste by bioaugmentation of indigenous fermentative communities. International Journal of Hydrogen Energy, 2012, 37, 5612-5622.	3.8	71
105	Yeast extract as an effective nitrogen source stimulating cell growth and enhancing hydrogen photoproduction by Rhodobacter sphaeroides strains from mineral springs. International Journal of Hydrogen Energy, 2012, 37, 6519-6526.	3.8	53
106	Self-organized TiO2 nanotube arrays with uniform platinum nanoparticles for highly efficient water splitting. International Journal of Hydrogen Energy, 2012, 37, 6438-6446.	3.8	78
107	Hydrogen production from hydrogen sulfide in a packed-bed DBD reactor. International Journal of Hydrogen Energy, 2012, 37, 8217-8222.	3.8	19
108	Hydrogen as an energy carrier: Prospects and challenges. Renewable and Sustainable Energy Reviews, 2012, 16, 3024-3033.	8.2	1,021
109	Influencing factors of water electrolysis electrical efficiency. Renewable and Sustainable Energy Reviews, 2012, 16, 4257-4263.	8.2	206
110	Biohydrogen from Renewable Resources. , 2013, , 185-221.		16
111	Autothermal reforming of iso-octane and gasoline over Rh-based catalysts: Influence of CeO2/Î³-Al2O3-based mixed oxides on hydrogen production. International Journal of Hydrogen Energy, 2013, 38, 15140-15151.	3.8	6
112	An energy self-sufficient public building using integrated renewable sources and hydrogen storage. Energy, 2013, 57, 95-105.	4.5	46

#	Article	IF	Citations
113	High electrocatalytic effect of Auâ€“Pd alloy nanoparticles electrodeposited on microwave assisted solâ€“gel-derived carbon ceramic electrode for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2013, 38, 1883-1891.	3.8	63
114	Heat and gas transport properties in pelletized hydrideâ€“graphite-composites for hydrogen storage applications. International Journal of Hydrogen Energy, 2013, 38, 1685-1691.	3.8	47
115	Autothermal reforming and waterâ€“gas shift double bed reactor for H2 production from ethanol. Chemical Engineering and Processing: Process Intensification, 2013, 74, 14-18.	1.8	19
116	Ag3PO4 photocatalyst: Hydrothermal preparation and enhanced O2 evolution under visible-light irradiation. International Journal of Hydrogen Energy, 2013, 38, 11870-11877.	3.8	57
117	Protonation Equilibrium and Hydrogen Production by a Dinuclear Cobaltâ€“Hydride Complex Reduced by Cobaltocene with Trifluoroacetic Acid. Journal of the American Chemical Society, 2013, 135, 15294-15297.	6.6	82
118	Analysis of a metal hydride reactor for hydrogen storage. International Journal of Hydrogen Energy, 2013, 38, 942-951.	3.8	31
119	Electrochemical preparation and characterization of C/Niâ€“NiIr composite electrodes as novel cathode materials for alkaline water electrolysis. International Journal of Hydrogen Energy, 2013, 38, 2251-2256.	3.8	48
120	Stand-alone operation of an alkaline water electrolyser fed by wind and photovoltaic systems. International Journal of Hydrogen Energy, 2013, 38, 14952-14967.	3.8	77
121	Bio-fuel reformation for solid oxide fuel cell applications. Part 1: Fuel vaporization and reactant mixing. International Journal of Hydrogen Energy, 2013, 38, 12024-12034.	3.8	20
122	Electrocatalytic approach for the efficiency increase of electrolytic hydrogen production: Proof-of-concept using platinum--dysprosium alloys. Energy, 2013, 50, 486-492.	4.5	54
123	Optical and photoelectrochemical properties of a TiO2 thin film doped with a ruteniumâ€“tungsten bimetallic complex. Ceramics International, 2013, 39, 2699-2707.	2.3	12
124	Comparison of four nickel-based electrodes for hydrogen evolution reaction. Electrochimica Acta, 2013, 88, 390-394.	2.6	60
125	NiMn composite electrodes as cathode material for hydrogen evolution reaction in alkaline solution. International Journal of Hydrogen Energy, 2013, 38, 4466-4473.	3.8	54
126	Lignocellulosic Materials Into Biohydrogen and Biomethane: Impact of Structural Features and Pretreatment. Critical Reviews in Environmental Science and Technology, 2013, 43, 260-322.	6.6	318
127	Porous carbon-based materials for hydrogen storage: advancement and challenges. Journal of Materials Chemistry A, 2013, 1, 9365.	5.2	320
128	Room Temperature Hydrogen Production from Ethanol over CeNi_XH_ZO_Y Nanoâ€Oxyhydride Catalysts. ChemCatChem, 2013, 5, 2207-2216.	1.8	46
129	Electric Conditioning and Efficiency of Hydrogen Production Systems and Their Integration with Renewable Energies. , 2013, , 333-360.		9
130	Robustness of Ru/SiO₂ as a Hydrogen-Evolution Catalyst in a Photocatalytic System Using an Organic Photocatalyst. Journal of Physical Chemistry C, 2013, 117, 13143-13152.	1.5	29

#	Article	IF	Citations
131	High performance ZIF-8/PBI nano-composite membranes for high temperature hydrogen separation consisting of carbon monoxide and water vapor. International Journal of Hydrogen Energy, 2013, 38, 229-239.	3.8	125
132	Ethanol reforming for supplying molten carbonate fuel cells. International Journal of Low-Carbon Technologies, 2013, 8, 140-145.	1.2	22
133	DSC-TGA Hydrogen Evaluation during Mechanical Milling of AlFe Intermetallic. Materials Science Forum, 2013, 755, 105-110.	0.3	3
134	Elementary Flux Mode Analysis of Acetyl-CoA Pathway in Carboxydothermus hydrogenoformans Z-2901. Advances in Bioinformatics, 2014, 2014, 1-10.	5.7	15
135	Carbon-palladium films as gas sensors (hydrogen, ammonia, methane). Proceedings of SPIE, 2014, , .	0.8	0
136	Preparation and characterization of hollow glass microspheres (HGMs) for hydrogen storage using urea as a blowing agent. Microelectronic Engineering, 2014, 126, 65-70.	1.1	28
137	Bacterial symbionts enhance photo-fermentative hydrogen evolution of Chlamydomonas algae. Green Chemistry, 2014, 16, 4716-4727.	4.6	75
138	Electrochemical Deuteration of Metastable MgTi Alloys: An Effective Way to Inhibit Phase Segregation. Advanced Energy Materials, 2014, 4, 1300590.	10.2	17
139	Electrochemical Preparation, Characterization, and Application of a Novel Cathode Material, Mild Steel/Ni/NiZn-Pt, for Alkaline Water Electrolysis. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2014, 36, 1212-1218.	1.2	13
140	Sequencing batch reactors (SBRs) for BioH2 production: Reactor operation criteria. International Journal of Hydrogen Energy, 2014, 39, 4863-4869.	3.8	12
141	Studies on waterâ€“gas-shift enhanced by adsorption and membrane permeation. Catalysis Today, 2014, 236, 57-63.	2.2	23
142	Hydrogen production from bioethanol catalyzed by NiXMg2AlOY ex-hydrotalcite catalysts. Applied Catalysis B: Environmental, 2014, 152-153, 370-382.	10.8	46
143	The role of hydrogen in achieving the decarbonization targets for the UK domestic sector. International Journal of Hydrogen Energy, 2014, 39, 4158-4169.	3.8	36
144	Perspective on hydrogen energy carrier and its automotive applications. International Journal of Hydrogen Energy, 2014, 39, 8482-8494.	3.8	339
145	Magnesium and iron loaded hollow glass microspheres (HGMs) for hydrogen storage. International Journal of Hydrogen Energy, 2014, 39, 16451-16458.	3.8	23
146	Thermodynamic evaluation of geothermal energy powered hydrogen production by PEM water electrolysis. Energy, 2014, 69, 592-602.	4.5	105
147	Colloidal hybrid heterostructures based on IIâ€“VI semiconductor nanocrystals for photocatalytic hydrogen generation. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2014, 19, 52-61.	5.6	67
148	Amorphous Molybdenum Sulfides as Hydrogen Evolution Catalysts. Accounts of Chemical Research, 2014, 47, 2671-2681.	7.6	529

#	Article	IF	Citations
149	In situ aqueous synthesis of silver nanoparticles supported on titanium as active electrocatalyst for the hydrogen evolution reaction. International Journal of Hydrogen Energy, 2014, 39, 19519-19540.	3.8	61
150	Biohydrogen production by a novel thermotolerant photosynthetic bacterium Rhodopseudomonas pentothenatexigens strain KKU-SN1/1. International Journal of Hydrogen Energy, 2014, 39, 15424-15432.	3.8	14
151	Hydrogen generation by the hydrolysis of magnesiumâ€“aluminumâ€“iron material in aqueous solutions. International Journal of Hydrogen Energy, 2014, 39, 10843-10852.	3.8	60
152	Structure and bonding features of Ae6Mg7H26 (Ae=Sr, Ba) with complex polyhedrons: First-principles calculations. Computational Materials Science, 2014, 95, 235-241.	1.4	0
153	Electrocatalytic Activity of Nickel-Cerium Alloys for Hydrogen Evolution in Alkaline Water Electrolysis. Journal of the Electrochemical Society, 2014, 161, F386-F390.	1.3	44
154	Additives in proticâ€“hydridic hydrogen storage compounds: a molecular study. RSC Advances, 2014, 4, 52785-52795.	1.7	1
155	Hydrogen production by Escherichia coli without nitrogen sparging and subsequent use of the waste culture for fast mass scale one-pot green synthesis of silver nanoparticles. International Journal of Hydrogen Energy, 2014, 39, 11902-11912.	3.8	15
156	Electrospun Granular Hollow SnO₂ Nanofibers Hydrogen Gas Sensors Operating at Low Temperatures. Journal of Physical Chemistry C, 2014, 118, 3129-3139.	1.5	166
157	Engine performance powered by a mixture of hydrogen and oxygen fuel obtained from water electrolysis. International Journal of Automotive Technology, 2014, 15, 97-101.	0.7	15
158	Optimal liquid acquisition device screen weave for a liquid hydrogen fuel depot. International Journal of Hydrogen Energy, 2014, 39, 4356-4366.	3.8	32
159	Influence of a reaction mixture streamline on partial oxidation of methane in an asymmetric microchannel reactor. International Journal of Hydrogen Energy, 2014, 39, 325-330.	3.8	8
160	Development of hydrogen absorptionâ€“desorption experimental test bench for hydrogen storage material. International Journal of Hydrogen Energy, 2014, 39, 13596-13602.	3.8	29
161	Screen channel LAD bubble point tests in liquid hydrogen. International Journal of Hydrogen Energy, 2014, 39, 853-861.	3.8	29
162	Effect of Co loading on the hydrogen storage characteristics of hollow glass microspheres (HGMs). International Journal of Hydrogen Energy, 2014, 39, 3304-3312.	3.8	17
163	Tests on LmNi4.91Sn0.15 based solid state hydrogen storage device with embedded cooling tubes â€“ Part B: Desorption process. International Journal of Hydrogen Energy, 2014, 39, 4966-4972.	3.8	27
164	Insight into the adsorption and decomposition mechanism of H2S on clean and S-covered Au (1 0 0) surface: A theoretical study. Applied Surface Science, 2014, 311, 40-46.	3.1	21
165	Continuous operation characteristics of chemical looping hydrogen production system. Applied Energy, 2014, 113, 1667-1674.	5.1	67
166	Tunable Hydrogen Separation in Porous Graphene Membrane: First-Principle and Molecular Dynamic Simulation. ACS Applied Materials & Interfaces, 2014, 6, 8048-8058.	4.0	159

#	Article	IF	Citations
167	Hydrogen production by steam reforming of ethanol over P123-assisted mesoporous Niâ€“Al2O3â€“ZrO2 xerogel catalysts. International Journal of Hydrogen Energy, 2014, 39, 10445-10453.	3.8	27
168	Enhanced hydrogen evolution rates at high pH with a colloidal cadmium sulphideâ€“platinum hybrid system. APL Materials, 2014, 2, 126102.	2.2	9
169	Thermal and Photocatalytic Production of Hydrogen Peroxide and its Use in Hydrogen Peroxide Fuel Cells. Australian Journal of Chemistry, 2014, 67, 354.	0.5	32
170	Emission of Internal Combustion with Low Temperature Plasma Reformer. Energy Procedia, 2015, 75, 3036-3041.	1.8	5
172	The effect of environmental conditions on the operation of a hydrogen refuelling station. International Journal of Hydrogen Energy, 2015, 40, 17153-17162.	3.8	11
173	Novel properties of photofermentative biohydrogen production by purple bacteria Rhodobacter sphaeroides: effects of protonophores and inhibitors of responsible enzymes. Microbial Cell Factories, 2015, 14, 131.	1.9	28
174	Effect of Cobalt Addition on the Activity of Nanocrystalline Iron Catalysts in the Cracking of Methane Reaction. Adsorption Science and Technology, 2015, 33, 559-566.	1.5	3
175	A review on biomass-based hydrogen production for renewable energy supply. International Journal of Energy Research, 2015, 39, 1597-1615.	2.2	139
176	Contamination Effects on Improving the Hydrogenation/Dehydrogenation Kinetics of Binary Magnesium Hydride/Titanium Carbide Systems Prepared by Reactive Ball Milling. Materials, 2015, 8, 6880-6892.	1.3	15
177	Fabrication of a Microtubular La0.6Sr0.4Ti0.2Fe0.8O3â^'ÎMembrane by Electrophoretic Deposition for Hydrogen Production. Advances in Materials Science and Engineering, 2015, 2015, 1-6.	1.0	2
178	Theoretical Prediction of Hydrogen Separation Performance of Two-Dimensional Carbon Network of Fused Pentagon. ACS Applied Materials & Interfaces, 2015, 7, 28502-28507.	4.0	36
179	Superior catalytic effect of nanocrystalline big-cube Zr2Ni metastable phase for improving the hydrogen sorption/desorption kinetics and cyclability of MgH2 powders. Energy, 2015, 91, 274-282.	4.5	35
180	Urban traffic pollution reduction for sedan cars using petrol engines by hydro-oxide gas inclusion. Journal of the Air and Waste Management Association, 2015, 65, 1456-1460.	0.9	5
181	Hydrogen evolution reaction at Ru-modified nickel-coated carbon fibre in 0.1 M NaOH. Polish Journal of Chemical Technology, 2015, 17, 18-22.	0.3	6
182	Synechocystissp. PCC6803 metabolic models for the enhanced production of hydrogen. Critical Reviews in Biotechnology, 2015, 35, 184-198.	5.1	7
183	Structureâ€“reactivity relationships of Niâ€“NiO coreâ€“shell co-catalysts on Ta2O5 for solar hydrogen production. Applied Catalysis B: Environmental, 2015, 172-173, 58-64.	10.8	39
184	Enhanced efficiency and stability for visible light driven water splitting hydrogen production over Cd 0.5 Zn 0.5 S/g-C 3 N 4 composite photocatalyst. International Journal of Hydrogen Energy, 2015, 40, 7546-7552.	3.8	74
185	Optical Gas Sensing Properties of Nanoporous Nb₂O₅ Films. ACS Applied Materials & Interfaces, 2015, 7, 4751-4758.	4.0	66

#	Article	IF	Citations
186	Photocatalytic H2 production by ethanol photodehydrogenation: Effect of anatase/brookite nanocomposites composition. Inorganica Chimica Acta, 2015, 431, 197-205.	1.2	41
187	A composite photocatalyst of an organic electron donorâ€“acceptor dyad and a Pt catalyst supported on semiconductor nanosheets for efficient hydrogen evolution from oxalic acid. Catalysis Science and Technology, 2015, 5, 428-437.	2.1	16
188	A CO₂â€stable hollowâ€fiber membrane with high hydrogen permeation flux. AIChE Journal, 2015, 61, 1997-2007.	1.8	45
189	Hydrogen production by Escherichia coli during glucose fermentation: Effects of oxidative andÂreductive routes used by the strain lackingÂhydrogen oxidizing hydrogenases 1Â(hya)Âand 2 (hyb). International Journal of Hydrogen Energy, 2015, 40, 7459-7464.	3.8	4
190	Escherichia coli growth and hydrogen production in batch culture upon formate alone and with glycerol co-fermentation at different pHs. International Journal of Hydrogen Energy, 2015, 40, 9935-9941.	3.8	22
191	Effect of temperature and thickness of graphene on the hydrogen storage properties. , 2015, , .		0
192	Fabrication of zinc-loaded hollow glass microspheres (HGMs) for hydrogen storage. International Journal of Energy Research, 2015, 39, 717-726.	2.2	8
193	Photocatalytic hydrogen evolution with simultaneous photocatalytic reforming of biomass by Er3+:YAlO3/Ptâ€“TiO2 membranes under visible light driving. Chemical Engineering Journal, 2015, 273, 277-285.	6.6	29
194	Autonomous hydrogen production system. International Journal of Hydrogen Energy, 2015, 40, 7465-7474.	3.8	17
195	Photocatalytic H2 evolution from NADH with carbon quantum dots/Pt and 2-phenyl-4-(1-naphthyl)quinolinium ion. Journal of Photochemistry and Photobiology B: Biology, 2015, 152, 63-70.	1.7	28
196	Metalâ€“Organic Framework/PVDF Composite Membranes with High H₂ Permselectivity Synthesized by Ammoniation. Chemistry - A European Journal, 2015, 21, 7224-7230.	1.7	72
197	Hydrogen production by partial oxidation of methane over Co based, Ni and Ru monolithic catalysts. International Journal of Hydrogen Energy, 2015, 40, 7439-7451.	3.8	47
198	Membrane reactors for biohydrogen production andÂprocessing. , 2015, , 267-286.		3
199	Niâ€“Cu alloy nanoparticles loaded on various metal oxides acting as efficient catalysts for photocatalytic H₂ evolution. RSC Advances, 2015, 5, 44912-44919.	1.7	10
200	Environmental impact assessment and comparison of some hydrogen production options. International Journal of Hydrogen Energy, 2015, 40, 6976-6987.	3.8	147
201	Hydrogen transportation properties in carbon nano-scroll investigated by using molecular dynamics simulations. Computational Materials Science, 2015, 102, 7-13.	1.4	7
202	CO₂-free electric power circulation via direct charge and discharge using the glycolic acid/oxalic acid redox couple. Energy and Environmental Science, 2015, 8, 1456-1462.	15.6	40
203	Radiation-Grafted Polymer Electrolyte Membranes for Water Electrolysis Cells: Evaluation of Key Membrane Properties. ACS Applied Materials & Interfaces, 2015, 7, 22203-22212.	4.0	59

#	Article	IF	Citations
204	Hydrogen production by steam reforming of m-cresol, a bio-oil model compound, using catalysts supported on conventional and unconventional supports. International Journal of Hydrogen Energy, 2015, 40, 14445-14455.	3.8	34
205	Exergetic cost evaluation of hydrogen production powered by combined flash-binary geothermal power plant. International Journal of Hydrogen Energy, 2015, 40, 14021-14030.	3.8	83
206	Electrocatalytic hydrogen evolution reaction with metallophthalocyanines modified with click electrochemistry. International Journal of Hydrogen Energy, 2015, 40, 12973-12984.	3.8	32
207	Model predictive control of hydrogen production by renewable energy. , 2015, , .		8
208	Two dimetallocenes with vanadium and chromium: Electronic structures and their promising application in hydrogen storage. International Journal of Hydrogen Energy, 2015, 40, 12047-12056.	3.8	11
209	Qualitative and quantitative analysis of solar hydrogen generation literature from 2001 to 2014. Scientometrics, 2015, 105, 759-771.	1.6	24
210	Solar hydrogen power system for isolated passive house. International Journal of Hydrogen Energy, 2015, 40, 16001-16009.	3.8	13
211	Graphene meshes decorated with palladium nanoparticles for hydrogen detection. Journal Physics D: Applied Physics, 2015, 48, 475103.	1.3	13
212	Electrocatalytic hydrogen production by bulk and nano Fe2O3 and carbon nanotube modified with Fe2O3. Journal of Electroanalytical Chemistry, 2015, 739, 73-83.	1.9	9
213	In operando visualization of hydride-graphite composites during cyclic hydrogenation by high-resolution neutron imaging. Journal of Power Sources, 2015, 277, 360-369.	4.0	17
214	Mechanisms for hydrogen production by different bacteria during mixed-acid and photo-fermentation and perspectives of hydrogen production biotechnology. Critical Reviews in Biotechnology, 2015, 35, 103-113.	5.1	58
215	Integration of the environmental management aspect in the optimization of the design and planning of energy systems. Journal of Cleaner Production, 2015, 106, 576-593.	4.6	39
217	Application of Pd-modified Nickel Foam Cathodes to the Process of Alkaline Water Electrolysis. International Journal of Electrochemical Science, 2016, 11, 4865-4877.	0.5	3
218	DFT Study of Synergistic Catalysis of the Waterâ€Gasâ€Shift Reaction on Cuâ€"Au Bimetallic Surfaces. ChemCatChem, 2016, 8, 1208-1217.	1.8	14
219	Thermophilic biohydrogen production for commercial application: the whole picture. International Journal of Energy Research, 2016, 40, 127-145.	2.2	25
220	In-situ catalyzation approach for enhancing the hydrogenation/dehydrogenation kinetics of MgH2 powders with Ni particles. Scientific Reports, 2016, 6, 37335.	1.6	43
221	Modeling and simulation of a SOFC/MGT hybrid system fueled by hydrogen. , 2016, , .		5
222	Improvement in the Sensing Response of Nano-Crystalline ZnO-Based Hydrogen Sensor: Effect of Swift Heavy Ion Irradiation. IEEE Sensors Journal, 2016, 16, 7586-7592.	2.4	12

#	Article	IF	Citations
223	Convertible hydrogen biradicals storage by graphene nanosheets. International Journal of Hydrogen Energy, 2016, 41, 7590-7599.	3.8	5
224	Unfamiliar fuel: How the UK public views the infrastructure required to supply hydrogen for road transport. International Journal of Hydrogen Energy, 2016, 41, 6534-6543.	3.8	35
225	Advanced functionalized Mg 2 AlNi X H Z O Y nano-oxyhydrides ex-hydrotalcites for hydrogen production from oxidative steam reforming of ethanol. International Journal of Hydrogen Energy, 2016, 41, 15443-15452.	3.8	34
226	Effect of the addition of glycerol on hydrogen production from industrial municipal solid waste. Fuel, 2016, 180, 343-347.	3.4	40
227	Sankey-Diagram-based insights into the hydrogen economy of today. International Journal of Hydrogen Energy, 2016, 41, 7744-7753.	3.8	88
228	Biomassâ€derived hydrogen energy potential in <scp>A</scp>frica. Environmental Progress and Sustainable Energy, 2016, 35, 289-297.	1.3	8
229	Electrochemical growth of triazine based metal ion containing polymers on nanostructured nickel electrodeposits and their hydrogen evolution activities in acidic condition. International Journal of Hydrogen Energy, 2016, 41, 8829-8838.	3.8	10
230	Comparative impact assessment study of various hydrogen production methods in terms of emissions. International Journal of Hydrogen Energy, 2016, 41, 8364-8375.	3.8	79
231	Sulfide pendants in cobalt clathrochelate complexes as a proton pump for the electrochemical H2 generation. International Journal of Hydrogen Energy, 2016, 41, 9312-9319.	3.8	15
232	Synergistic dosing effect of TiC/FeCr nanocatalysts on the hydrogenation/dehydrogenation kinetics of nanocrystalline MgH2 powders. Energy, 2016, 104, 158-170.	4.5	44
233	Effect of crystalline structure and pore geometry of silica based supported materials on the catalytic behavior of metallic nickel particles during methane decomposition to CO -free hydrogen and carbon nanomaterials. International Journal of Hydrogen Energy, 2016, 41, 16890-16902.	3.8	51
234	Electrochemical insights into the mechanism of NiFe membrane-bound hydrogenases. Biochemical Society Transactions, 2016, 44, 315-328.	1.6	30
235	Low powered, tunable and ultra-light aerographite sensor for climate relevant gas monitoring. Journal of Materials Chemistry A, 2016, 4, 16723-16730.	5.2	49
236	Hydrogen Peroxide used as a Solar Fuel in Oneâ€Compartment Fuel Cells. ChemElectroChem, 2016, 3, 1978-1989.	1.7	84
237	Optimal operation of a hydrogen refuelling station combined with wind power in the electricity market. International Journal of Hydrogen Energy, 2016, 41, 21057-21066.	3.8	56
238	Nano-fibrillated cellulose (NFC) as versatile carriers of TiO₂ nanoparticles (TNPs) for photocatalytic hydrogen generation. RSC Advances, 2016, 6, 89457-89466.	1.7	32
239	Synthesis of palladiumâ€"carbon nanotubeâ€"metal organic framework composite and its application as electrocatalyst for hydrogen production. Journal of Nanostructure in Chemistry, 2016, 6, 299-308.	5.3	24
240	Influence of the main gasifier parameters on a real system for hydrogen production from biomass. International Journal of Hydrogen Energy, 2016, 41, 11965-11973.	3.8	43

#	Article	IF	Citations
241	Ecological perspectives of hydrogen fermentation by microbial consortia: What we have learned and the way forward. International Journal of Hydrogen Energy, 2016, 41, 17297-17308.	3.8	24
242	Assessment of similarity relations using helium for prediction of hydrogen dispersion and safety in an enclosure. International Journal of Hydrogen Energy, 2016, 41, 15388-15398.	3.8	38
243	The interactions of Li3FeN2 with H2 and NH3. International Journal of Hydrogen Energy, 2016, 41, 14171-14177.	3.8	8
244	Green hydrogen energy system: a policy on reducing petroleum-based global unrest. International Journal of Global Warming, 2016, 10, 354.	0.2	14
245	Hydrogen production by steam reforming of ethanol over Ni-Sr-Al 2 O 3 -ZrO 2 aerogel catalyst. Journal of Molecular Catalysis A, 2016, 424, 342-350.	4.8	16
246	Metallic glassy Zr70Ni20Pd10 powders for improving the hydrogenation/dehydrogenation behavior of MgH2. Scientific Reports, 2016, 6, 26936.	1.6	46
247	Performance evaluation at different process parameters of an innovative prototype of biomass gasification system aimed to hydrogen production. Energy Conversion and Management, 2016, 130, 34-43.	4.4	41
249	Fabrication of amorphous CoMoS₄as a bifunctional electrocatalyst for water splitting under strong alkaline conditions. Nanoscale, 2016, 8, 18887-18892.	2.8	91
250	Structural characterization and proton reduction electrocatalysis of thiolate-bridged bimetallic (CoCo and CoFe) complexes. Dalton Transactions, 2016, 45, 18559-18565.	1.6	26
251	Experimental and numerical investigation on premixed H2/air combustion. International Journal of Hydrogen Energy, 2016, 41, 10496-10506.	3.8	15
252	Study of production optimization and effect of hydroxyl gas on a CI engine performance and emission fueled with biodiesel blends. International Journal of Hydrogen Energy, 2016, 41, 14519-14528.	3.8	66
253	High-Throughput Computational Screening of Perovskites for Thermochemical Water Splitting Applications. Chemistry of Materials, 2016, 28, 5621-5634.	3.2	191
254	MgO/NiAl2O4 as a new formulation of reforming catalysts: Tuning the surface properties for the enhanced partial oxidation of methane. Applied Catalysis B: Environmental, 2016, 199, 372-383.	10.8	57
255	Catalytic performance of nickel immobilized on organically modified montmorillonite in the steam reforming of ethanol for hydrogen production. Journal of Fuel Chemistry and Technology, 2016, 44, 689-697.	0.9	9
256	Integration of commercial alkaline water electrolysers with renewable energies: Limitations and improvements. International Journal of Hydrogen Energy, 2016, 41, 12852-12861.	3.8	63
257	Reducing pollutant emissions from a heavy-duty diesel engine by using hydrogen additions. Fuel, 2016, 172, 89-95.	3.4	71
258	Hydrogen production from renewable and sustainable energy resources: Promising green energy carrier for clean development. Renewable and Sustainable Energy Reviews, 2016, 57, 850-866.	8.2	1,523
259	Steam reforming, partial oxidation and oxidative steam reforming for hydrogen production from ethanol over cerium nickel based oxyhydride catalyst. Applied Catalysis A: General, 2016, 518, 78-86.	2.2	55

#	Article	IF	Citations
260	Improved synthesis of perfluoroalkyl substituted 1,3,4-oxadiazoles as precursors for corresponding 1,2,4-triazoles. Journal of Fluorine Chemistry, 2016, 183, 30-35.	0.9	10
261	Hydrogen production from NaBH4 using Coâ€“Cuâ€“B catalysts prepared in methanol: Effect of plasma treatment. International Journal of Hydrogen Energy, 2016, 41, 1600-1608.	3.8	56
262	Microwave pyrolysis of oil palm fiber (OPF) for hydrogen production: Parametric investigation. Energy Conversion and Management, 2016, 115, 232-243.	4.4	65
263	Electrocatalytic hydrogen evolution reaction on reduced graphene oxide electrode decorated with cobaltphthalocyanine. Applied Catalysis B: Environmental, 2016, 188, 217-226.	10.8	76
264	Characteristics of a sintered porous Niâ€“Cu alloy cathode for hydrogen production in a potassium hydroxide solution. Energy, 2016, 97, 498-505.	4.5	72
265	Density function theory study of water gas shift reaction on 2Cu/ZnO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mo		

#	Article	IF	Citations
279	Fabrication and characterization ofÂthermochemical hydrogen sensor withÂlaminated structure. International Journal of Hydrogen Energy, 2017, 42, 749-756.	3.8	18
280	Custom designed metal anchored SnO2 sensor forÂH2 detection. International Journal of Hydrogen Energy, 2017, 42, 4597-4609.	3.8	46
281	Gold-supported activated NiZn coatings: hydrogen evolution and corrosion studies. International Journal of Energy Research, 2017, 41, 1452-1459.	2.2	28
282	Latest progress in hydrogen production from solar water splitting via photocatalysis, photoelectrochemical, and photovoltaic-photoelectrochemical solutions. Chinese Journal of Catalysis, 2017, 38, 5-12.	6.9	206
283	Introduction to biofuel cells: A biological source of energy. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2017, 39, 419-425.	1.2	10
284	Ethanol steam reforming for hydrogen production: Latest and effective catalyst modification strategies to minimize carbonaceous deactivation. Renewable and Sustainable Energy Reviews, 2017, 74, 89-103.	8.2	218
285	In-situ constructing NiO nanoplatelets network on La 0.75 Sr 0.25 Mn 0.5 Cr 0.5 O 3-Î´ electrode with enhanced steam electrolysis. International Journal of Hydrogen Energy, 2017, 42, 5657-5666.	3.8	4
286	Ni/Pd-promoted Al 2 O 3 â€“La 2 O 3 catalyst for hydrogen production from polyethylene terephthalate waste via steam reforming. International Journal of Hydrogen Energy, 2017, 42, 10708-10721.	3.8	37
287	Synthesis and characterization of KOH/boron modified activated carbons from coal and their hydrogen sorption characteristics. International Journal of Hydrogen Energy, 2017, 42, 23606-23616.	3.8	27
288	The effect of NiCl2 and Na2CO3 on hydrogen production by Al/H2O system. International Journal of Hydrogen Energy, 2017, 42, 3586-3592.	3.8	17
289	Two in one: N-doped tubular carbon nanostructure as an efficient metal-free dual electrocatalyst for hydrogen evolution and oxygen reduction reactions. Journal of Materials Chemistry A, 2017, 5, 6025-6031.	5.2	73
290	Rapid hydrogen sensing response and aging of Î±-MoO 3 nanowires paper sensor. International Journal of Hydrogen Energy, 2017, 42, 8399-8405.	3.8	47
291	Transition and transformation: A review of the concept of change in the progress towards future sustainable energy systems. Energy Policy, 2017, 107, 11-26.	4.2	35
292	Investigation of hydrogen production methods in accordance with green chemistry principles. International Journal of Hydrogen Energy, 2017, 42, 23395-23401.	3.8	105
293	Methanol as a High Purity Hydrogen Source for Fuel Cells: A Brief Review of Catalysts and Rate Expressions. Chemical and Process Engineering - Inzynieria Chemiczna I Procesowa, 2017, 38, 147-162.	0.7	8
294	Fatigue crack growth behavior of JIS SCM440 steel near fatigue threshold in 9-MPa hydrogen gas environment. International Journal of Hydrogen Energy, 2017, 42, 13158-13170.	3.8	20
295	Theoretical study of H 2 separation performance of two-dimensional graphitic carbon oxide membrane. International Journal of Hydrogen Energy, 2017, 42, 13120-13126.	3.8	17
296	Exergetic sustainability indicators for a high pressure hydrogen production and storage system. International Journal of Hydrogen Energy, 2017, 42, 21379-21391.	3.8	18

#	Article	IF	Citations
297	Green synthesized N-doped graphitic carbon sheets coated carbon cloth as efficient metal free electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2017, 42, 14390-14399.	3.8	82
298	Hydrogen from algal biomass: A review of production process. Biotechnology Reports (Amsterdam,) Tj ETQq1 1 0.784314 rgBT /Overlo	2.1	154
299	Enhanced hydrogen permeability and reverse waterâ€"gas shift reaction activity via magneli Ti 4 O 7 doping into SrCe 0.9 Y 0.1 O 3â^'Î´ hollow fiber membrane. International Journal of Hydrogen Energy, 2017, 42, 12301-12309.	3.8	21
300	Palladium nanoparticle binding in functionalized track etched PET membrane for hydrogen gas separation. International Journal of Hydrogen Energy, 2017, 42, 16186-16194.	3.8	24
301	Renewable hydrogen production from bio-oil derivative via catalytic steam reforming: An overview. Renewable and Sustainable Energy Reviews, 2017, 79, 347-357.	8.2	156
302	Process modelling of an alkaline water electrolyzer. International Journal of Hydrogen Energy, 2017, 42, 15689-15707.	3.8	108
304	A Hybrid Biomass Hydrothermal Gasification- Solid Oxide Fuel Cell System Combined with Improved CHP Plant for Sustainable Power Generation. Energy Procedia, 2017, 112, 467-472.	1.8	4
305	Integrated Biorefinery Approach for the Valorization of Olive Mill Waste Streams Towards Sustainable Biofuels and Bio-Based Products. , 2017, , 211-238.		7
306	Selective storage and evolution of hydrogen on nafion/NaCl/graphene quantum dot mixed matrix using tensammetry as power electrochemical technique. International Journal of Hydrogen Energy, 2017, 42, 9428-9439.	3.8	2
307	Structure, morphology and hydrogen storage kinetics of nanocomposite MgH2/10Âwt% ZrNi5 powders. Materials Today Energy, 2017, 3, 60-71.	2.5	38
308	Parametric study on the steam reforming of phenol-PET solution to hydrogen production over Ni promoted on Al 2 O 3 -La 2 O 3 catalyst. Energy Conversion and Management, 2017, 142, 127-142.	4.4	51
309	Photocurrent increase by metal modification of Fe 2 O 3 photoanodes and its effect on photoelectrocatalytic hydrogen production by degradation of organic substances. Applied Surface Science, 2017, 400, 176-183.	3.1	53
310	Metal ion-containing C₃N₃S₃coordination polymers chemisorbed to a copper surface as acid stable hydrogen evolution electrocatalysts. Journal of Materials Chemistry A, 2017, 5, 2052-2065.	5.2	48
311	Kinetics study and modelling of steam methane reforming process over a NiO/Al2O3 catalyst in an adiabatic packed bed reactor. International Journal of Hydrogen Energy, 2017, 42, 2889-2903.	3.8	129
312	Highly defective porous CoP nanowire as electrocatalyst for full water splitting. International Journal of Hydrogen Energy, 2017, 42, 29080-29090.	3.8	68
313	Iron(II) clathrochelates as electrocatalysts of hydrogen evolution reaction at low pH. International Journal of Hydrogen Energy, 2017, 42, 27084-27093.	3.8	16
314	Synthetic nanocomposite MgH2/5 wt. % TiMn2 powders for solid-hydrogen storage tank integrated with PEM fuel cell. Scientific Reports, 2017, 7, 13296.	1.6	34
315	Hydrogen production by steam reforming of natural gas over butyric acid-assisted nickel/alumina catalyst. International Journal of Hydrogen Energy, 2017, 42, 28377-28385.	3.8	36

#	Article	IF	Citations
316	Optimal network design of hydrogen production by integrated utility and biogas supply networks. Applied Energy, 2017, 208, 195-209.	5.1	20
317	Diffusion of hydrogen molecules in MOF-508a with a reversible open-dense framework: A computational study. Chemical Physics Letters, 2017, 686, 26-33.	1.2	1
318	Review of modelling approaches used in the HSC context for the UK. International Journal of Hydrogen Energy, 2017, 42, 24927-24938.	3.8	24
319	Synthesis of effective electrocatalyst for water splitting application from simple Cu-Ni bath. Surface Engineering and Applied Electrochemistry, 2017, 53, 352-359.	0.3	1
320	Economic analysis on the use of wired and wireless recharging systems. , 2017, , .		1
321	Effect of operating parameters on hydrogen production by electrolysis of water. International Journal of Hydrogen Energy, 2017, 42, 25550-25557.	3.8	124
322	CFD simulations of premixed hydrogen combustion using the Eddy Dissipation and the Turbulent Flame Closure models. International Journal of Hydrogen Energy, 2017, 42, 21990-22004.	3.8	29
323	Effect of Preparation Conditions on the Polymorphism and Transport Properties of La_{6â€“x}MoO_{12â^’Î´} (0 â‰ x â‰ 0.8). Chemistry of Materials, 2017, 29, 6966-6975.	3.2	35
324	A first principles study of hydrogen storage inÂlithium decorated defective phosphorene. International Journal of Hydrogen Energy, 2017, 42, 23018-23027.	3.8	56
325	Two-dimensional graphene oxide membrane for H2/CH4 separation: Insights from molecular dynamics simulations. International Journal of Hydrogen Energy, 2017, 42, 30653-30660.	3.8	28
326	A facile non-photocatalytic technique for hydrogen gas production by hydroelectric cell. International Journal of Hydrogen Energy, 2017, 42, 30584-30590.	3.8	29
327	Gas sensors for sustainable and safe integrated gasification-FC system. International Journal of Hydrogen Energy, 2017, 42, 29606-29619.	3.8	7
328	Hydrogen Energy in General. Green Energy and Technology, 2017, , 59-69.	0.4	1
329	Preparation of Ag/Ga2O3 nanofibers via electrospinning and enhanced photocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2017, 42, 19913-19919.	3.8	28
330	[FeFe]-Hydrogenase H-cluster mimics mediated by naphthalene monoimide derivatives of peri-substituted dichalcogenides. Dalton Transactions, 2017, 46, 11180-11191.	1.6	43
331	Hydrogen Evolution from Native Biomass with Fe3+/Fe2+ Redox Couple Catalyzed Electrolysis. Electrochimica Acta, 2017, 246, 1163-1173.	2.6	54
332	Ultrasonication-assisted wet-chemical fabrication of uniform AuPt nanodendrites as efficient electrocatalyst for oxygen reduction and hydrogen evolution reactions. International Journal of Hydrogen Energy, 2017, 42, 2071-2080.	3.8	21
333	Effect of ceria and zirconia promotors on Ni/SBA-15 catalysts for coking and sintering resistant steam reforming of propylene glycol in microreactors. Applied Catalysis B: Environmental, 2017, 203, 859-869.	10.8	89

#	Article	IF	Citations
334	Preparation and characterization of Pd-modified Raney-type NiZn coatings and their application for alkaline water electrolysis. International Journal of Hydrogen Energy, 2017, 42, 2464-2475.	3.8	45
335	Waste-to-Hydrogen Energy in Saudi Arabia: Challenges and Perspectives. , 2017, , 237-252.		29
336	Fabrication and characterization of three-dimensional silver nanodomes: Application for alkaline water electrolysis. International Journal of Hydrogen Energy, 2017, 42, 2476-2484.	3.8	22
337	A comparative overview of hydrogen production processes. Renewable and Sustainable Energy Reviews, 2017, 67, 597-611.	8.2	1,842
338	Highâ€rate hydrogen separation using an MIEC oxygen permeable membrane reactor. AICHE Journal, 2017, 63, 1278-1286.	1.8	28
339	Thermal stability of the sensing properties in H2 sensors composed of Pd nanogaps on an Elastomeric Substrate. Sensors and Actuators B: Chemical, 2017, 240, 186-192.	4.0	29
340	Comparison of hydrogen absorption in metallic and semiconductor single-walled Ge- and GeO2-doped carbon nanotubes. International Journal of Hydrogen Energy, 2017, 42, 969-977.	3.8	9
341	Analysis of Tokamak fusion device parameters affecting the efficiency of Tokamak operation. PAM Review Energy Science & Technology, 2017, 4, 87-102.	0.2	1
342	Hybrid Hydrogen and Mechanical Distributed Energy Storage. Energies, 2017, 10, 2035.	1.6	18
343	Numerical Simulation of Hydrogen Combustion: Global Reaction Model and Validation. Frontiers in Energy Research, 2017, 5, .	1.2	5
344	Hydrogen Production from Cyclic Chemical Looping Steam Methane Reforming over Yttrium Promoted Ni/SBA-16 Oxygen Carrier. Catalysts, 2017, 7, 286.	1.6	43
345	Photocatalytic Water Splitting on Semiconductor-Based Photocatalysts. Advances in Catalysis, 2017, 60, 1-57.	0.1	72
346	Preliminary optimization of process conditions for biohydrogen production from sago wastewater. , 2017, , .		1
347	Electrochemical Characterization of Nickel in Oxalic Acid Solutions and the Effect of Halides and Azide Ions Additions on Its Behavior. International Journal of Electrochemical Science, 2017, , 9378-9397.	0.5	5
348	A Rechargeable Hydrogen Battery. Journal of Physical Chemistry Letters, 2018, 9, 2492-2497.	2.1	21
349	A new sulfur source for the preparation of efficient Cd(1-x)ZnxS photocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2018, 43, 8206-8220.	3.8	14
350	Hydrogen Generation in an Annular Micro-Reactor: An Experimental Investigation and Reaction Modelling by Shrinking Core Model (SCM). International Journal of Chemical Reactor Engineering, 2018, 16, .	0.6	3
351	Fabrication of Mo-modified carbon felt as candidate substrate for electrolysis: Optimization of pH, current and metal amount. International Journal of Hydrogen Energy, 2018, 43, 10540-10548.	3.8	16

#	Article	IF	Citations
352	Enhanced Hydrogen Purification in Nanoporous Phosphorene Membrane with Applied Electric Field. Journal of Physical Chemistry C, 2018, 122, 3497-3505.	1.5	18
354	Fabrication of CdS/Î²-SiC/TiO2 tri-composites that exploit hole- and electron-transfer processes for photocatalytic hydrogen production under visible light. International Journal of Hydrogen Energy, 2018, 43, 2207-2211.	3.8	18
355	Efficient and Stable Pt/TiO₂/CdS/Cu₂BaSn(S,Se)₄ Photocathode for Water Electrolysis Applications. ACS Energy Letters, 2018, 3, 177-183.	8.8	75
356	Electrocatalysis of hydrogen evolution reaction on tri-metallic Rh@Pd/Pt(poly) electrode. International Journal of Hydrogen Energy, 2018, 43, 2763-2771.	3.8	22
357	Technology Assessment: Developing Geothermal Energy Resources for Supporting Electrical System in Oregon. Innovation, Technology and Knowledge Management, 2018, , 67-175.	0.4	1
358	Impacts of nano-metal oxides on hydrogen production in anaerobic digestion of palm oil mill effluent â€“ A novel approach. International Journal of Hydrogen Energy, 2018, 43, 2666-2676.	3.8	92
359	Molecular Models for the Hydrogen Age: Hydrogen, Nitrogen, Oxygen, Argon, and Water. Journal of Chemical & Engineering Data, 2018, 63, 305-320.	1.0	32
360	Techno-economic analysis and life cycle assessment of hydrogen production from different biomass gasification processes. International Journal of Hydrogen Energy, 2018, 43, 9514-9528.	3.8	184
361	CO2 mitigation costs of catalytic methane decomposition. Energy, 2018, 151, 826-838.	4.5	19
362	An investigation of the efficiency of using O2 and H2 (hydrooxile gas -HHO) gas additives in a ci engine operating on diesel fuel and biodiesel. Energy, 2018, 152, 640-651.	4.5	72
363	Sodium Silicide As A Hydrogen Source For Portable Energy Devices: A Review. Materials Today: Proceedings, 2018, 5, 3563-3570.	0.9	21
364	Acceptorless Dehydrogenation of Hydrocarbons by Noble-Metal-Free Hybrid Catalyst System. Organic Letters, 2018, 20, 2042-2045.	2.4	44
365	Three-dimensional nickel nanodomes: Efficient electrocatalysts for water splitting. International Journal of Hydrogen Energy, 2018, 43, 10580-10585.	3.8	19
366	Aerogel sheet of carbon nanotubes decorated with palladium nanoparticles for hydrogen gas sensing. International Journal of Hydrogen Energy, 2018, 43, 6456-6461.	3.8	23
367	The effect of 3D silver nanodome size on hydrogen evolution activity in alkaline solution. International Journal of Hydrogen Energy, 2018, 43, 10586-10594.	3.8	21
368	Semiclassical SAFT-VR-2D modeling of adsorption selectivities for binary mixtures of hydrogen and methane adsorbed onto MOFs. Fluid Phase Equilibria, 2018, 462, 153-171.	1.4	6
369	Modification of porous nickel electrodes with silver nanoparticles for hydrogen production. Journal of Electroanalytical Chemistry, 2018, 808, 420-426.	1.9	9
370	Energy, exergy and exergoeconomic analysis of a cogeneration system for power and hydrogen production purpose based on TRR method and using low grade geothermal source. Geothermics, 2018, 71, 132-145.	1.5	89

#	Article	IF	Citations
371	Doped phosphorene for hydrogen capture: A DFT study. Applied Surface Science, 2018, 433, 249-255.	3.1	48
372	Functionalized and engineered nanochannels for gas separation. Pure and Applied Chemistry, 2018, 90, 1063-1071.	0.9	7
373	Theoretical and Experimental Performance of Oxy-hydrogen Generators. Arabian Journal for Science and Engineering, 2018, 43, 1279-1289.	1.7	9
374	Amorphous-versus big cube- Zr2Ni for improving the kinetics of hydrogenation/dehydrogenation behaviors for MgH2 powders. Materials Chemistry and Physics, 2018, 203, 17-26.	2.0	19
375	Ab-initio study of electronic and elastic properties of Mg(BH4)(NH2) complex hydride. International Journal of Hydrogen Energy, 2018, 43, 1587-1595.	3.8	3
376	Water dissociation and CO oxidation over Au/anatase catalyst. A DFT-D2 study. Applied Surface Science, 2018, 435, 1168-1173.	3.1	10
377	Large-scale liquid hydrogen production methods and approaches: A review. Applied Energy, 2018, 212, 57-83.	5.1	210
378	Influence of the Fe:Ni Ratio and Reaction Temperature on the Efficiency of (Fe_xNi_{1â€“x})₉S₈ Electrocatalysts Applied in the Hydrogen Evolution Reaction. ACS Catalysis, 2018, 8, 987-996.	5.5	134
379	Cost metrics of electrical energy storage technologies in potential power system operations. Sustainable Energy Technologies and Assessments, 2018, 25, 43-59.	1.7	84
380	Energy, exergy, economic and environmental (4E) analysis of using city gate station (CGS) heater waste for power and hydrogen production: AÂcomparative study. International Journal of Hydrogen Energy, 2018, 43, 1855-1874.	3.8	60
381	Macroporous platinum electrodes for hydrogen oxidation in ionic liquids. Electrochemistry Communications, 2018, 86, 43-47.	2.3	11
382	Analysis of Research Topics and Scientific Collaborations in Renewable Energy Using Community Detection. Sustainability, 2018, 10, 4510.	1.6	21
383	Hydrogen is essential for sustainability. Current Opinion in Electrochemistry, 2018, 12, 166-181.	2.5	99
384	Hydrogen Production from Light Hydrocarbons. , 2018, , .		6
385	Design and Optimization of High-Pressure Hydrogen Cylinders for Intermodal Container Transportation. , 2018, , .		0
387	An ultrafine ruthenium nanocrystal with extremely high activity for the hydrogen evolution reaction in both acidic and alkaline media. Chemical Communications, 2018, 54, 13076-13079.	2.2	39
388	Hydrogen evolution on Pd modified CoCuZn and CoMnZn cathodes. International Journal of Hydrogen Energy, 2018, 43, 22797-22806.	3.8	8
389	Effect of DSA electrode (A304|RuO2) on the electrochemical production of H2(g). International Journal of Electrochemical Science, 2018, 13, 10873-10883.	0.5	2

#	Article	IF	Citations
390	Electrochemical Preparation and Post-treatment of Composite Porous Foam NiZn Alloy Electrodes with High Activity for Hydrogen Evolution. Scientific Reports, 2018, 8, 15071.	1.6	10
391	Joint Learning with Keyword Extraction for Event Detection in Social Media. , 2018, , .		4
392	Layered Trichalcogenidophosphate: A New Catalyst Family for Water Splitting. Nano-Micro Letters, 2018, 10, 67.	14.4	65
393	Ball-milling preparation of titanium/graphene composites and its enhanced hydrogen storage ability. International Journal of Hydrogen Energy, 2018, 43, 19164-19173.	3.8	20
394	Contribution of upcycling surplus hydrogen to design a sustainable supply chain: The case study of Northern Spain. Applied Energy, 2018, 231, 777-787.	5.1	44
395	Synergistic electrocatalytic effect of Pd and Rh nanoislands co-deposited on Au(poly) on HER in alkaline solution. International Journal of Hydrogen Energy, 2018, 43, 19420-19431.	3.8	13
396	Fabrication of Pt-doped carbon aerogels for hydrogen storage by radiation method. International Journal of Hydrogen Energy, 2018, 43, 19174-19181.	3.8	13
397	Influence of Electrodeposited Ni-Mo Alloy on Hydrogen Evolution Reaction at Nickel Foam Cathode. International Journal of Electrochemical Science, 2018, 13, 621-630.	0.5	9
398	Impact of Strontium-Substitution on Oxygen Evolution Reaction of Lanthanum Nickelates in Alkaline Solution. Journal of the Electrochemical Society, 2018, 165, J3236-J3245.	1.3	34
399	Electrocatalytic characterization of Niâ€"Feâ€"TiO2 overlayers for hydrogen evolution reaction in alkaline solution. Rare Metals, 2018, , 1.	3.6	1
401	Metal Nanoparticle-Catalyzed Hydrogen Generation from Liquid Chemical Hydrides. Bulletin of the Chemical Society of Japan, 2018, 91, 1606-1617.	2.0	40
402	Effect of anodes-cathodes inter-distances of HHO fuel cell on gasoline engine performance operating by a blend of HHO. International Journal of Hydrogen Energy, 2018, 43, 19213-19221.	3.8	32
403	Electrocatalytic Properties of Nickel Foam-Based Ni-Mo, Ni +Mo and Ni+Mo/Ni-Mo Electrodes for Hydrogen Evolution Reaction. Materials Science Forum, 2018, 921, 134-140.	0.3	4
404	Novel process for preparation of metal-polymer composite membranes for hydrogen separation. International Journal of Hydrogen Energy, 2018, 43, 12146-12152.	3.8	27
405	Crystallinity Dependence of Ruthenium Nanocatalyst toward Hydrogen Evolution Reaction. ACS Catalysis, 2018, 8, 5714-5720.	5.5	162
406	Photothermocatalytic Hydrogen Evolution over Ni₂P/TiO₂ for Full-Spectrum Solar Energy Conversion. Industrial & Engineering Chemistry Research, 2018, 57, 7846-7854.	1.8	61
407	Catalytic performance of M@Ni (M = Fe, Ru, Ir) coreâˆ'shell nanoparticles towards ammonia decomposition for COx-free hydrogen production. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	11
408	Hydrogen and syngas production from catalytic steam gasification of char derived from ion-exchangeable Na- and Ca-loaded coal. International Journal of Hydrogen Energy, 2018, 43, 12034-12048.	3.8	30

#	Article	IF	Citations
409	Evidence of nano-galvanic couple formation on in-situ formed nano-aluminum amalgam surfaces for passivation-bypassed water splitting. International Journal of Hydrogen Energy, 2018, 43, 10878-10886.	3.8	6
410	Effect of Li₂CoMn₃O₈ Nanostructures Synthesized by a Combustion Method on Montmorillonite K10 as a Potential Hydrogen Storage Material. Journal of Physical Chemistry C, 2018, 122, 16498-16509.	1.5	84
411	A Robust Fiber Bragg Grating Hydrogen Gas Sensor Using Platinum-Supported Silica Catalyst Film. Journal of Sensors, 2018, 2018, 1-8.	0.6	5
412	Study on Molasses Concentration from Sugarcanne Bagasse for Biohydrogen Production using Enriched Granular Activated Carbon (GAC) Immobilised Cells by Repeated Batch Cultivation. E3S Web of Conferences, 2018, 34, 02044.	0.2	2
414	Facile fabrication of NiTiO3/graphene nanocomposites for photocatalytic hydrogen generation. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 365, 86-93.	2.0	74
415	Intensification of the combustion process in a gasoline engine by adding a hydrogen-containing gas. International Journal of Hydrogen Energy, 2018, 43, 16334-16343.	3.8	20
416	Improving the utilization factor of a PEM electrolyzer powered by a 15ÂMW PV park by combining wind power and battery storage â€“ Feasibility study. International Journal of Hydrogen Energy, 2018, 43, 16468-16478.	3.8	46
417	Hydrogen Production from Methanol Steam Reforming over TiO2 and CeO2 Pillared Clay Supported Au Catalysts. Applied Sciences (Switzerland), 2018, 8, 176.	1.3	22
418	Ultralow Overpotential of Hydrogen Evolution Reaction using Feâ€Doped Defective Graphene: A Density Functional Study. ChemCatChem, 2018, 10, 4450-4455.	1.8	22
419	Preparation, characterization and hydrogen production performance of MoPd deposited carbon felt/Mo electrodes. International Journal of Hydrogen Energy, 2018, 43, 10530-10539.	3.8	26
420	Hydrogen effects on the diesel engine performance and emissions. International Journal of Hydrogen Energy, 2018, 43, 10511-10519.	3.8	136
421	A critical review on design aspects and developmental status of metal hydride based thermal machines. International Journal of Hydrogen Energy, 2018, 43, 17753-17779.	3.8	83
422	Synergistic Effect in Photoelectrochemical Hydrogen Evolution by RGOâ€Supported Nickel Molybdenum Catalysts. ChemistrySelect, 2018, 3, 8955-8961.	0.7	2
423	Optimal activated carbon for separation of CO2 from (H2â€‰+â€‰CO2) gas mixture. Petroleum Science, 2018, 15, 625-633.	2.4	9
424	A state-of-the-art review of biohydrogen producing from sewage sludge. International Journal of Energy Research, 2018, 42, 4301-4312.	2.2	26
425	Influence of addition of hydrogen produced on board in the performance of a stationary diesel engine. International Journal of Hydrogen Energy, 2018, 43, 17889-17897.	3.8	29
426	Nickel-cobalt-oxide cathodes for hydrogen production by water electrolysis in acidic and alkaline media. International Journal of Hydrogen Energy, 2018, 43, 12917-12928.	3.8	40
427	Optimization of a closedâ€loop HHO production system for vehicles and houses. Environmental Progress and Sustainable Energy, 2019, 38, 268-277.	1.3	2

#	Article	IF	Citations
428	Geothermal energy use in hydrogen production: A review. International Journal of Energy Research, 2019, 43, 7823.	2.2	45
429	Efficient photocatalytic water splitting through titanium silicalite stabilized CoO nanodots. Nanoscale, 2019, 11, 15984-15990.	2.8	28
430	In-situ visualization of hydrogen evolution sites on helium ion treated molybdenum dichalcogenides under reaction conditions. Npj 2D Materials and Applications, 2019, 3, .	3.9	35
431	Moving from acridinium to pyridinium: From complex to simple. 2,4,6-Triphenylpyridine and 2,4,6-triphenylpyrilium perchlorate as â€œmetal-freeâ€•electrocatalysts of hydrogen evolution reaction (HER): The influence of the nature of the heteroatom and acid on the pathway HER. International Journal of Hydrogen Energy, 2019, 44, 21495-21505.	3.8	15
432	Mechanistic Study on the Photogeneration of Hydrogen by Decamethylruthenocene. Chemistry - A European Journal, 2019, 25, 12769-12779.	1.7	9
433	Enhanced reversible hydrogen storage in nickel nano hollow spheres. International Journal of Hydrogen Energy, 2019, 44, 22032-22038.	3.8	14
434	Shaping well-defined noble-metal-based nanostructures for fabricating high-performance electrocatalysts: advances and perspectives. Inorganic Chemistry Frontiers, 2019, 6, 2582-2618.	3.0	51
435	Intensive investigation on hydrogen storage properties and reaction mechanism of the NaBH4-Li3AlH6 destabilized system. International Journal of Hydrogen Energy, 2019, 44, 21965-21978.	3.8	17
436	The potential role of green hydrogen production in the South Africa energy mix. Journal of Renewable and Sustainable Energy, 2019, 11, 044301.	0.8	26
437	Development of tungsten doped Ni-Zn nano-ferrites with fast response and recovery time for hydrogen gas sensing application. Results in Physics, 2019, 15, 102531.	2.0	31
438	Water-Dissociation-Assisted Electrolysis for Hydrogen Production in a Salinity Power Cell. ACS Sustainable Chemistry and Engineering, 2019, 7, 13023-13030.	3.2	21
439	Microstructure and improved hydrogen storage properties of Mg85Zn5Ni10 alloy catalyzed by Cr2O3 nanoparticles. Journal of Physics and Chemistry of Solids, 2019, 134, 295-306.	1.9	12
440	Regulating Electrocatalysts via Surface and Interface Engineering for Acidic Water Electrooxidation. ACS Energy Letters, 2019, 4, 2719-2730.	8.8	218
441	An extended Kozeny-Carman-Klinkenberg model for gas permeability in micro/nano-porous media. Physics of Fluids, 2019, 31, .	1.6	15
442	Crumpled and Stretchable Graphene Gas Sensor with Enhanced Sensitivity to Hydrogen. , 2019, , .		0
443	Biochar-Assisted Water Electrolysis. Energy & Fuels, 2019, 33, 11246-11252.	2.5	24
444	External stimulus controlled recombination of hydrogen in photochromic dithienylethene frustrated lewis pairs. International Journal of Hydrogen Energy, 2019, 44, 31141-31152.	3.8	11
445	Effect of boron substitution on hydrogen storage in Ca/DCV graphene: A first-principle study. International Journal of Hydrogen Energy, 2019, 44, 27511-27528.	3.8	35

#	Article	IF	Citations
446	Grafting Poly(acrylic acid) from PEDOT To Control the Deposition and Growth of Platinum Nanoparticles for Enhanced Electrocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2019, 2, 1436-1444.	2.5	9
447	Ti/TiO2/Cu2O electrodes for photocatalytic applications: Synthesis and characterization. AIP Conference Proceedings, 2019, , .	0.3	4
448	Hydrogen Fuel Exhaling Znâˆ'Ferricyanide Redox Flow Battery. ACS Sustainable Chemistry and Engineering, 2019, 7, 16241-16246.	3.2	7
449	ZnO/In2S3/Coâ€"Pi ternary composite photoanodes for enhanced photoelectrochemical properties. Journal of Materials Science: Materials in Electronics, 2019, 30, 18943-18949.	1.1	6
450	Pure hydrogen production by steam reforming of methane mixtures with various propane contents in a membrane reactor with the industrial nickel catalyst and a Pdâ€"Ru alloy foil. International Journal of Hydrogen Energy, 2019, 44, 26396-26404.	3.8	21
451	Experimental and Modeling Study of the Fabrication of Mg Nano-Sculpted Films by Magnetron Sputtering Combined with Glancing Angle Deposition. Coatings, 2019, 9, 361.	1.2	8
452	Investigation of the microstructure, crystal structure and hydrogenation kinetics of Ti-V-Cr alloy with Zr addition. Journal of Alloys and Compounds, 2019, 785, 1115-1120.	2.8	25
453	Palladium/Bismuth/Copper Hierarchical Nano-Architectures for Efficient Hydrogen Evolution and Stable Hydrogen Detection. ACS Applied Materials & Interfaces, 2019, 11, 6248-6256.	4.0	23
454	Synthesis and characterization of epoxy/graphite/nano-copper nanocomposite for the fabrication of bipolar plate for PEMFCs. Journal of Nanostructure in Chemistry, 2019, 9, 11-18.	5.3	22
455	Thermochemical Route for Biohydrogen Production. , 2019, , 187-218.		9
456	Efficient hydrogen storage with the combination of metal Mg and porous nanostructured material. International Journal of Hydrogen Energy, 2019, 44, 16824-16832.	3.8	18
457	High oxygen evolution reaction activity on lithiated nickel oxides - Activity descriptors. Electrochimica Acta, 2019, 318, 809-819.	2.6	2
458	High-sensitivity and fast-response fiber-tip Fabryâ€"PÃ©rot hydrogen sensor with suspended palladium-decorated graphene. Nanoscale, 2019, 11, 15821-15827.	2.8	49
459	Green synthesis, characterization and investigation of the electrochemical hydrogen storage properties of Dy2Ce2O7 nanostructures with fig extract. International Journal of Hydrogen Energy, 2019, 44, 20110-20120.	3.8	79
460	Phase and Vacancy Modulation in Tungsten Oxide: Electrochemical Hydrogen Evolution. ChemElectroChem, 2019, 6, 3420-3428.	1.7	35
461	A DFT study of H2 adsorption on Pdn/SnO2 (110) surfaces (n = 1â˜10). European Physical Journal B, 2019, 92, 1.	0.6	3
462	Simulation and characterization of hydrogen evolution reaction on porous Ni Cu electrode using surface response methodology. International Journal of Hydrogen Energy, 2019, 44, 13296-13309.	3.8	25
463	Catalyst modification strategies to enhance the catalyst activity and stability during steam reforming of acetic acid for hydrogen production. International Journal of Hydrogen Energy, 2019, 44, 12983-13010.	3.8	61

#	Article	IF	Citations
464	Energetic and economic analysis of a stand alone photovoltaic system with hydrogen storage. Renewable Energy, 2019, 142, 316-329.	4.3	60
465	Anodic fabrication of nanostructured Cu_xS and CuNiS_x thin films and their hydrogen evolution activities in acidic electrolytes. New Journal of Chemistry, 2019, 43, 7674-7682.	1.4	10
466	Fast responding hydrogen gas sensors using platinum nanoparticle modified microchannels and ionic liquids. Analytica Chimica Acta, 2019, 1072, 35-45.	2.6	31
467	Comparison of optimum design, sizing, and economic analysis of standalone photovoltaic/battery without and with hydrogen production systems. Renewable Energy, 2019, 141, 107-123.	4.3	36
468	Hydrogen evolution reaction on bimetallic Ir/Pt(poly) electrodes in alkaline solution. Electrochimica Acta, 2019, 306, 18-27.	2.6	22
469	Fabrication, characterization and application of three-dimensional copper nanodomes as efficient cathodes for hydrogen production. International Journal of Hydrogen Energy, 2019, 44, 14108-14116.	3.8	17
470	Three-dimensional graphene surface-mounted nickel-based metal organic framework for oxygen evolution reaction. Electrochimica Acta, 2019, 305, 338-348.	2.6	51
471	Carbon Nanotube-Supported MoSe₂ Holey Flake:Mo₂C Ball Hybrids for Bifunctional pH-Universal Water Splitting. ACS Nano, 2019, 13, 3162-3176.	7.3	120
472	Metabolic engineering for the optimization of hydrogen production in Escherichia coli: A review. Biotechnology Advances, 2019, 37, 616-633.	6.0	29
473	Supercritical water gasification of wastewater sludge for hydrogen production. International Journal of Hydrogen Energy, 2019, 44, 10328-10349.	3.8	96
474	Hydrogen production by Escherichia coli during anaerobic utilization of mixture of lactose and glycerol: Enhanced rate and yield, prolonged production. International Journal of Hydrogen Energy, 2019, 44, 9272-9281.	3.8	24
475	Thermodynamic and exergoeconomic analyses of a proton exchange membrane fuel cell (PEMFC) system and the feasibility evaluation of integrating with a proton exchange membrane electrolyzer (PEME). Energy Conversion and Management, 2019, 186, 487-499.	4.4	113
476	Hydrogen production from aluminum-water reactions subject to varied pressures and temperatures. International Journal of Hydrogen Energy, 2019, 44, 11448-11458.	3.8	55
477	First principles study of H₂ adsorption on Ni-decorated silicene. Materials Research Express, 2019, 6, 055509.	0.8	12
478	Modeling and thermo-economic optimization of a new multi-generation system with geothermal heat source and LNG heat sink. Energy Conversion and Management, 2019, 189, 153-166.	4.4	89
479	Effects of interfacial structure of Pdâ€“Pt nanoparticles on hydrogen solubility. Journal of Alloys and Compounds, 2019, 791, 1263-1269.	2.8	10
480	Simple fabrication of Pr2Ce2O7 nanostructures via a new and eco-friendly route; a potential electrochemical hydrogen storage material. Journal of Alloys and Compounds, 2019, 791, 792-799.	2.8	107
481	Synergy of Nb Doping and Surface Alloy Enhanced on Waterâ€“Alkali Electrocatalytic Hydrogen Generation Performance in Tiâ€Based MXene. Advanced Science, 2019, 6, 1900116.	5.6	97

#	Article	IF	Citations
482	Seed Pretreatment for Increased Hydrogen Production Using Mixed-Culture Systems with Advantages over Pure-Culture Systems. Energies, 2019, 12, 530.	1.6	47
483	Transitionâ€Metalâ€Doped RuIr Bifunctional Nanocrystals for Overall Water Splitting in Acidic Environments. Advanced Materials, 2019, 31, e1900510.	11.1	449
484	Low Temperature Hydrogen Production by Ethanol Steam Reforming over Supported Metal Catalysts in an Electric Field. Journal of the Japan Petroleum Institute, 2019, 62, 264-271.	0.4	2
485	Flexible hydrogen sensor based on Pd/TiO2 nanofilm with fast response. IOP Conference Series: Materials Science and Engineering, 2019, 634, 012002.	0.3	2
486	Less defective graphene aerogel and its application in microwave-assisted biomass pyrolysis to prepare H₂-rich gas. Journal of Materials Chemistry A, 2019, 7, 27236-27240.	5.2	9
487	Techno-economic study of hydrogen production using PV, wind power and battery storage. , 2019, , .		2
488	Niobium disulphide (NbS₂)-based (heterogeneous) electrocatalysts for an efficient hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 25593-25608.	5.2	50
489	Production of bio-hydrogen from dairy wastewater using pretreated landfill leachate sludge as an inoculum. Journal of Bioscience and Bioengineering, 2019, 127, 150-159.	1.1	31
490	In-situ synthesis of AgNbO3/g-C3N4 photocatalyst via microwave heating method for efficiently photocatalytic H2 generation. Journal of Colloid and Interface Science, 2019, 534, 163-171.	5.0	174
491	Research of performance and emission indicators of the compression-ignition engine powered by hydrogen - Diesel mixtures. International Journal of Hydrogen Energy, 2019, 44, 10129-10138.	3.8	49
492	Performance assessment of solar-powered high pressure proton exchange membrane electrolyzer: A case study for Erzincan. International Journal of Hydrogen Energy, 2019, 44, 9701-9707.	3.8	17
493	Improving the hydrogen sensing properties of SnO2 nanowire-based conductometric sensors by Pd-decoration. Sensors and Actuators B: Chemical, 2019, 285, 358-367.	4.0	93
494	A Schottky-junction-based platinum nanoclusters@silicon carbide nanosheet as long-term stable hydrogen sensors. Applied Surface Science, 2019, 473, 641-648.	3.1	20
495	Effects of Fe doping on the photoelectrochemical properties of CuO photoelectrodes. Composites Part B: Engineering, 2019, 163, 59-66.	5.9	24
496	Photocatalytic Gas Phase Reactions. Chemistry of Materials, 2019, 31, 597-618.	3.2	74
497	Synthesis of dysprosium cerate nanostructures using Phoenix dactylifera extract as novel green fuel and investigation of their electrochemical hydrogen storage and Coulombic efficiency. Journal of Cleaner Production, 2019, 215, 480-487.	4.6	50
498	Hydrogen Generation in an Annular Micro-Reactor: an Experimental Investigation of Water Splitting Reaction Using Aluminum in Presence of Potassium Hydroxide. International Journal of Chemical Reactor Engineering, 2019, 17, .	0.6	0
499	Potassium Hydroxide Activated Hydrogen Generation Using Aluminum in Water Splitting Reaction. International Journal of Chemical Reactor Engineering, 2019, 17, .	0.6	3

#	Article	IF	Citations
500	Dualâ€phase membrane reactor for hydrogen separation with high tolerance to CO₂ and H₂S impurities. AIChE Journal, 2019, 65, 1088-1096.	1.8	31
501	A review on the role, cost and value of hydrogen energy systems for deep decarbonisation. Renewable and Sustainable Energy Reviews, 2019, 101, 279-294.	8.2	378
502	Adaptive neuro-fuzzy inference system (ANFIS) â€" based model predictive control (MPC) for carbon dioxide reforming of methane (CDRM) in a plug flow tubular reactor for hydrogen production. Thermal Science and Engineering Progress, 2019, 9, 148-161.	1.3	20
503	High performance n+p-Si/Ti/NiS O photocathode for photoelectrochemical hydrogen evolution in alkaline solution. Journal of Energy Chemistry, 2019, 30, 101-107.	7.1	17
504	The changing role of diesel oil-gasoil-LPG and hydrogen based fuels in human health risk: A numerical investigation in ferry ship operations. International Journal of Hydrogen Energy, 2020, 45, 3660-3669.	3.8	14
505	Study on an original cobalt-chlorine thermochemical cycle for nuclear hydrogen production. International Journal of Hydrogen Energy, 2020, 45, 26090-26103.	3.8	15
506	Active block copolymer layer on carboxyl-functionalized PET film for hydrogen separation. International Journal of Hydrogen Energy, 2020, 45, 18676-18684.	3.8	9
507	Review on the interface engineering in the carbonaceous titania for the improved photocatalytic hydrogen production. International Journal of Hydrogen Energy, 2020, 45, 7584-7615.	3.8	44
508	Hydrogen evolution reaction of metal di-chalcogenides: ZrS2, ZrSe2 and Janus ZrSSe. International Journal of Hydrogen Energy, 2020, 45, 23920-23927.	3.8	43
509	Hydrogen evolution and oxygen evolution reactions of pristine and alkali metal doped SnSe2 monolayer. International Journal of Hydrogen Energy, 2020, 45, 18657-18665.	3.8	32
510	Effect of ammonia and boron modifications on the surface and hydrogen sorption characteristics of activated carbons from coal. International Journal of Hydrogen Energy, 2020, 45, 10494-10506.	3.8	28
511	Hydrogen chloride removal from hydrogen gas by adsorption on hydrated ion-exchanged zeolites. Chemical Engineering Journal, 2020, 381, 122512.	6.6	44
512	Biohydrogen production from waste materials: benefits and challenges. International Journal of Environmental Science and Technology, 2020, 17, 559-576.	1.8	41
513	Study of the synthesis of PMMA-Mg nanocomposite for hydrogen storage application. International Journal of Hydrogen Energy, 2020, 45, 4743-4753.	3.8	21
514	Modeling, system identification and design of fuzzy PID controller for discharge dynamics of metal hydride hydrogen storage bed. International Journal of Hydrogen Energy, 2020, 45, 4703-4719.	3.8	22
515	Defect enhanced CoP/Reduced graphene oxide electrocatalytic hydrogen production with pt-like activity. Applied Catalysis B: Environmental, 2020, 265, 118576.	10.8	34
516	Investigating hydrogen evolution reaction properties of a new honeycomb 2D AlC. International Journal of Hydrogen Energy, 2020, 45, 18602-18611.	3.8	11
517	Methods for Electrocatalysis. , 2020, , .		2

#	Article	IF	Citations
518	The potential and economic viability of hydrogen production from the use of hydroelectric and wind farms surplus energy in Brazil: A national and pioneering analysis. International Journal of Hydrogen Energy, 2020, 45, 1373-1384.	3.8	51
519	Conductively monolithic polypyrrole 3-D porous architecture with micron-sized channels as superior salt-resistant solar steam generators. Solar Energy Materials and Solar Cells, 2020, 206, 110347.	3.0	98
520	Control of the substituent at the nitrogen atom in a 2,4,6-triphenylpyridinium perchlorates tunes the electrocatalytic hydrogen evolution mechanism and efficiency. International Journal of Hydrogen Energy, 2020, 45, 501-507.	3.8	11
521	Simulation and optimization of hydrogen production by steam reforming of natural gas for refining and petrochemical demands in Lebanon. International Journal of Hydrogen Energy, 2020, 45, 33235-33247.	3.8	45
522	Alkali Halide Boost of Carbon Nitride for Photocatalytic H₂ Evolution in Seawater. ACS Applied Materials & Interfaces, 2020, 12, 48526-48532.	4.0	19
523	Sol-gel Synthesis of Ce0.8Sr0.2Co1-(x+y)NixFeyO3-Î´ (xâ€‰=â€‰0.1, 0.2, and yâ€‰=â€‰0.2, 0.5, 0.7)â€”a Nanocomposite-Type Electrocatalyst for the Oxygen Evolution Reaction in Alkaline Media. Electrocatalysis, 2020, 11, 628-641.	1.5	0
524	Formation of porous Ni surface by electrodeposition and dissolution in molten salt. International Journal of Hydrogen Energy, 2020, 45, 28252-28259.	3.8	7
525	Optoelectronic properties of the novel perovskite materials LiPb(Cl:Br:I)3 for enhanced hydrogen production by visible photo-catalytic activity: Theoretical prediction based on empirical formulae and DFT. International Journal of Hydrogen Energy, 2020, 45, 33466-33477.	3.8	16
526	Highly Porous MIL-100(Fe) for the Hydrogen Evolution Reaction (HER) in Acidic and Basic Media. ACS Omega, 2020, 5, 18941-18949.	1.6	62
527	TaS₂, TaSe₂, and Their Heterogeneous Films as Catalysts for the Hydrogen Evolution Reaction. ACS Catalysis, 2020, 10, 3313-3325.	5.5	60
528	Low temperature electrochemical production of hydrogen: Challenge in anode and cathode materials. , 2020, , 135-169.		0
529	Hydrogen Fuel Cell Vehicle Development in China: An Industry Chain Perspective. Energy Technology, 2020, 8, 2000179.	1.8	65
530	A New Combustion Method in a Burner with Three Separate Jets. , 2020, , .		1
531	Improvement of Multilevel DC/DC Converter for E-Mobility Charging Station. Electronics (Switzerland), 2020, 9, 2037.	1.8	3
532	Potential Liquid-Organic Hydrogen Carrier (LOHC) Systems: A Review on Recent Progress. Energies, 2020, 13, 6040.	1.6	145
533	Amine-Containing Membranes with Functionalized Multi-Walled Carbon Nanotubes for CO2/H2 Separation. Membranes, 2020, 10, 333.	1.4	13
534	Hydrogen from biomass. , 2020, , 43-73.		1
535	Optimal design and global sensitivity analysis of a 100% renewable energy sources based smart energy network for electrified and hydrogen cities. Energy Conversion and Management, 2020, 223, 113252.	4.4	47

#	Article	IF	Citations
536	Unravelling Crystal Superstructures and Transformations in the La6â€“xMoO12â^'Î´ (0.6 â‰ x â‰ 3.0) Series: A System with Tailored Ionic/Electronic Conductivity. Chemistry of Materials, 2020, 32, 7052-7062.	3.2	7
537	Valence Alignment of Mixed Niâ€“Fe Hydroxide Electrocatalysts through Preferential Templating on Graphene Edges for Enhanced Oxygen Evolution. ACS Nano, 2020, 14, 11327-11340.	7.3	42
538	Interface Engineering with Ultralow Ruthenium Loading for Efficient Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 36177-36185.	4.0	35
539	Defect-rich MoS2/r-GO hybrid via microwave-assisted solvothermal process for efficient electrocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2020, 45, 22459-22468.	3.8	13
540	Assessment of supercritical water gasification process for combustible gas production from thermodynamic, environmental and techno-economic perspectives: A review. Energy Conversion and Management, 2020, 226, 113497.	4.4	43
541	Nano Highâ€Entropy Materials: Synthesis Strategies and Catalytic Applications. Small Structures, 2020, 1, 2000033.	6.9	80
542	Hydrogen Adsorption/Desorption Properties of Anhydrous Metal Oxalates; Metal = Mg2+ and Ca2+. Bulletin of the Chemical Society of Japan, 2020, 93, 985-987.	2.0	1
543	Peopleâ€™s Attitude to Energy from Hydrogenâ€"From the Point of View of Modern Energy Technologies and Social Responsibility. Energies, 2020, 13, 6495.	1.6	55
544	On the Way of Policy Making to Reduce the Reliance of Fossil Fuels: Case Study of Iran. Sustainability, 2020, 12, 10606.	1.6	15
545	Hierarchical Ti-Based MOF with Embedded RuO₂ Nanoparticles: a Highly Efficient Photoelectrode for Visible Light Water Oxidation. ACS Sustainable Chemistry and Engineering, 2020, 8, 18366-18376.	3.2	16
546	Catalytic Dehydrogenative Cyclization of oâ€Teraryls under pHâ€Neutral and Oxidantâ€Free Conditions. Angewandte Chemie - International Edition, 2020, 59, 15249-15253.	7.2	26
547	Catalytic Dehydrogenative Cyclization of o â€Teraryls under pHâ€Neutral and Oxidantâ€Free Conditions. Angewandte Chemie, 2020, 132, 15361-15365.	1.6	6
548	Functionalized Graphitic Carbon Nitride Decorated with Palladium: an Efficient Heterogeneous Catalyst for Hydrogenation Reactions Using KHCO₂ as a Mild and Noncorrosive Source of Hydrogen. ACS Omega, 2020, 5, 12302-12312.	1.6	14
549	Hydrogen vs. Battery in the Long-term Operation. A Comparative Between Energy Management Strategies for Hybrid Renewable Microgrids. Electronics (Switzerland), 2020, 9, 698.	1.8	19
550	Robust scheduling of hydrogen based smart micro energy hub with integrated demand response. Journal of Cleaner Production, 2020, 267, 122041.	4.6	131
551	Enhanced hydrogen gas production from mixture of beer spent grains (BSG) and distiller's grains (DG) with glycerol by Escherichia coli. International Journal of Hydrogen Energy, 2020, 45, 17233-17240.	3.8	11
552	Hydrogen oxidation reaction response of noble-metal based bulk metallic glasses. Electrochimica Acta, 2020, 353, 136616.	2.6	9
553	Spatially decoupled hydrogen evolution in alkaline conditions with a redox targeting-based flow battery. International Journal of Hydrogen Energy, 2020, 45, 18888-18894.	3.8	15

#	Article	IF	Citations
554	The prospect and challenges of renewable hydrogen production in Iraq. IOP Conference Series: Materials Science and Engineering, 2020, 737, 012197.	0.3	2
555	FeCoNiP Alloy Nanoparticles Integrated on Vertically Aligned Phosphorus-doped Single-walled Carbon Nanotubes for Overall Water Splitting. Journal of the Electrochemical Society, 2020, 167, 102515.	1.3	6
556	Highly efficient ternary hierarchical NiV2S4 nanosphere as hydrogen evolving electrocatalyst. International Journal of Hydrogen Energy, 2020, 45, 21308-21318.	3.8	8
557	Functional use of CO2 for environmentally benign production of hydrogen through catalytic pyrolysis of polymeric waste. Chemical Engineering Journal, 2020, 399, 125889.	6.6	37
558	Support ionic liquid-heteropolyacid hybrid on mesoporous carbon aerogel with a high surface area for highly efficient desulfurization under mild conditions. Microporous and Mesoporous Materials, 2020, 305, 110392.	2.2	10
559	Template assisted synthesis of Ni,N co-doped porous carbon from Ni incorporated ZIF-8 frameworks for electrocatalytic oxygen reduction reaction. New Journal of Chemistry, 2020, 44, 12343-12354.	1.4	15
560	Metalloenzyme mimic: diironhexacarbonyl cluster coupled to redox-active 4-mercapto-1,8-naphthalic anhydride ligands. Transition Metal Chemistry, 2020, 45, 577-581.	0.7	2
561	Advanced integrated systems for hydrogen production and storage from low-rank fuels. , 2020, , 115-146.		0
562	Synergic effect of heat and light on the catalytic reforming of methanol over Cu/x-TiO2(x=La, Zn, Sm,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.2	23
563	Multi-Level DC/DC Converter for E-Mobility Charging Stations. IEEE Access, 2020, 8, 48774-48783.	2.6	17
564	Ideal two-dimensional molecular sieves for gas separation: Metal trihalides MX3 with precise atomic pores. Journal of Membrane Science, 2020, 602, 117786.	4.1	12
565	Facile fabrication of novel Ag2S/K-g-C3N4 composite and its enhanced performance in photocatalytic H2 evolution. Journal of Colloid and Interface Science, 2020, 568, 117-129.	5.0	167
566	Coâˆ’Oâˆ’P composite nanocatalysts for hydrogen generation from the hydrolysis of alkaline sodium borohydride solution. International Journal of Hydrogen Energy, 2020, 45, 10745-10753.	3.8	25
567	Ruâ€“Ni/Al₂O₃ bimetallic catalysts with high catalytic activity for N-propylcarbazole hydrogenation. Catalysis Science and Technology, 2020, 10, 2268-2276.	2.1	33
568	Microalgal biovalorization. , 2020, , 319-342.		1
569	Determination of resource curse hypothesis in mediation of financial development and clean energy sources: Go-for-green resource policies. Resources Policy, 2020, 66, 101640.	4.2	58
570	Catalytic Acceptorless Dehydrogenation of Aliphatic Alcohols. Journal of the American Chemical Society, 2020, 142, 4493-4499.	6.6	112
571	Waste-to-energy nexus for circular economy and environmental protection: Recent trends in hydrogen energy. Science of the Total Environment, 2020, 713, 136633.	3.9	249

#	Article	IF	Citations
572	CFD simulation and experimental study of a hydrogen leak in a semi-closed space with the purpose of risk mitigation. International Journal of Hydrogen Energy, 2020, 45, 9231-9240.	3.8	59
573	Design of C₃N₄â€Based Hybrid Heterojunctions for Enhanced Photocatalytic Hydrogen Production Activity. ChemSusChem, 2020, 13, 876-881.	3.6	26
574	Ti(IV)-containing aluminophosphate material TAPO-25 for photoelectrochemical water oxidation. Molecular Catalysis, 2020, 486, 110876.	1.0	1
575	The study of highly mineralized peat sedimentation products in terms of their use as an energy source. Fuel, 2020, 271, 117593.	3.4	8
576	Gd-doped ceria enhanced triple-conducting membrane for efficient hydrogen separation. Separation and Purification Technology, 2021, 256, 117798.	3.9	10
577	A hybrid fuel cell system integrated with methanol steam reformer and methanation reactor. International Journal of Hydrogen Energy, 2021, 46, 2565-2576.	3.8	16
578	Ligand effects on structural, protophilic and reductive features of stannylated dinuclear iron dithiolato complexes. New Journal of Chemistry, 2021, 45, 36-44.	1.4	12
579	Li-doped fullerene pillared graphene nanocomposites for enhancing hydrogen storage: A computational study. Computational Materials Science, 2021, 186, 110023.	1.4	25
580	Hydrogen production through water splitting at low temperature over Fe3O4 pellet: Effects of electric power, magnetic field, and temperature. Fuel Processing Technology, 2021, 211, 106606.	3.7	36
581	Modelling of one-dimensional heterogeneous catalytic steam methane reforming over various catalysts in an adiabatic packed bed reactor. International Journal of Hydrogen Energy, 2021, 46, 5112-5130.	3.8	20
582	Steam Conversion of Propane in a Membrane Reactor with a Commercial Nickel Catalyst. Petroleum Chemistry, 2021, 61, 92-100.	0.4	2
583	Formateâ€Bicarbonate Cycle as a Vehicle for Hydrogen and Energy Storage. ChemSusChem, 2021, 14, 1258-1283.	3.6	31
584	Experimental evaluation of the role of oxygen on the growth of MgOx nano-sculpted thin films synthesized by reactive magnetron sputtering combined with glancing angle deposition. Thin Solid Films, 2021, 718, 138480.	0.8	1
585	Visible-light-enhanced catalytic hydrolysis of ammonia borane using RuP2 quantum dots supported by graphitic carbon nitride. International Journal of Hydrogen Energy, 2021, 46, 3811-3820.	3.8	29
586	Investigations on a platinum catalyzed membrane for electrolysis step of copperâ€chlorine thermochemical cycle for hydrogen production. International Journal of Energy Research, 2021, 45, 5912-5921.	2.2	5
587	Intensification of hydrogen generation through liquid metal gallium in water splitting reaction using aluminum in presence of potassium hydroxide. Chemical Engineering Communications, 2021, 208, 126-136.	1.5	5
588	A photoassisted hydrogen peroxide fuel cell using dual photoelectrodes under tandem illumination for electricity generation. Journal of Electroanalytical Chemistry, 2021, 881, 114948.	1.9	5
589	Size-selective synthesis of platinum nanoparticles on transition-metal dichalcogenides for the hydrogen evolution reaction. Chemical Communications, 2021, 57, 2879-2882.	2.2	51

#	Article	IF	Citations
590	Hydrogen Production by Utilizing Bio-Processing Techniques. Clean Energy Production Technologies, 2021, , 169-193.	0.3	1
591	The Role of Hydrogen in the Black Sea for the Future Energy Supply Security of Turkey. Advances in Environmental Engineering and Green Technologies Book Series, 2021, , 1-15.	0.3	28
592	Exergy analysis. , 2021, , 43-60.		7
593	Simultaneous improvement of kinetics and thermodynamics based on SrF₂ and SrF₂@Gr additives on hydrogen sorption in MgH₂. Materials Advances, 2021, 2, 4277-4290.	2.6	21
594	Spectroscopic and transport properties of Baâ€•and Tiâ€doped BaLaInO 4. Journal of Raman Spectroscopy, 2021, 52, 980-987.	1.2	7
595	Thermochemical analysis of dry methane reforming hydrogen production in biomimetic venous hierarchical porous structure solar reactor for improving energy storage. International Journal of Hydrogen Energy, 2021, 46, 7733-7744.	3.8	41
597	Sulfur conversion and distribution during supercritical water gasification of sewage sludge. Journal of the Energy Institute, 2021, 95, 61-68.	2.7	23
598	Co-overexpression of the malate dehydrogenase (Mdh) and the malic enzyme A (MaeA) in several Escherichia coli mutant backgrounds increases malate redirection towards hydrogen production. International Journal of Hydrogen Energy, 2021, 46, 15337-15350.	3.8	5
599	Reaction and hydrogen production phenomena of ethanol steam reforming in a catalytic membrane reactor. Energy, 2021, 220, 119737.	4.5	12
601	Evaluation of interfacial pH change during water splitting at pulsed regime using finite element method. International Journal of Hydrogen Energy, 2021, 46, 17644-17652.	3.8	8
602	Ba2+/Ti4+- co-doped layered perovskite BÐ°LaInO4: The structure and ionic (O2âˆ’, H+) conductivity. International Journal of Hydrogen Energy, 2021, 46, 16868-16877.	3.8	19
603	Highly efficient hybrid electrocatalyst Fe4.5Ni4.5S8/Fe7S8 extracted from nickel ore for hydrogen evolution reaction. Ceramics International, 2021, 47, 12002-12009.	2.3	15
604	Pristine hexagonal CdS assembled with NiV LDH nanosheet formed p-n heterojunction for efficient photocatalytic hydrogen evolution. Applied Surface Science, 2021, 548, 149212.	3.1	39
605	N-enriched porous carbon doped with co, ni, and Mo as efficient electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2021, 46, 18318-18325.	3.8	14
606	Wind and Solar Intermittency and the Associated Integration Challenges: A Comprehensive Review Including the Status in the Belgian Power System. Energies, 2021, 14, 2630.	1.6	28
607	Assessment of natural gas/hydrogen blends as an alternative fuel for industrial heat treatment furnaces. International Journal of Hydrogen Energy, 2021, 46, 21672-21686.	3.8	46
608	Facile synthesis of SnO2 nanostructures for enhanced electrochemical hydrogen evolution reaction. Journal of Alloys and Compounds, 2021, 865, 158597.	2.8	15
609	Technoâ€Economic Evaluation of Photocatalytic H₂S Splitting. Energy Technology, 2021, 9, 2100163.	1.8	4

#	Article	IF	Citations
610	Enhancement in the catalytic activity of two-dimensional Î±-CN by B, Si and P doping for hydrogen evolution and oxygen evolution reactions. International Journal of Hydrogen Energy, 2021, 46, 22478-22498.	3.8	23
611	Hexagonal boron nitride (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf material: A density functional theory (DFT) study. Surfaces and Interfaces, 2021, 24, 101043.	1.5	38
612	Synthesis of Ultrathin and Gridâ€Structural Carbon Nanosheets Coupled with Mo₂C for Electrocatalytic Hydrogen Production. Chemistry - an Asian Journal, 2021, 16, 2107-2112.	1.7	13
613	Impact of product gas impurities from dehydrogenation of perhydro-dibenzyltoluene on the performance of a 10ÂÎ¼m PdAg-membrane. Journal of Membrane Science, 2021, 628, 119094.	4.1	2
614	Local initiative hydrogen production by utilization of aluminum waste materials and natural acidic hot-spring water. Applied Energy, 2021, 293, 116909.	5.1	14
615	Investigation of Performance and Emission Parameters of Hydroxygen (HHO)-Enriched Diesel Fuel with Water Injection in the Compression Ignition Engine. Clean Technologies, 2021, 3, 537-562.	1.9	3
616	Availability, versatility, and viability of feedstocks for hydrogen production: Product space perspective. Renewable and Sustainable Energy Reviews, 2021, 145, 110843.	8.2	57
617	Optimal design of wind-powered hydrogen refuelling station for some selected cities of South Africa. International Journal of Hydrogen Energy, 2021, 46, 24919-24930.	3.8	53
618	Porous Niâ€"Co surface formation and analysis of hydrogen generation by gas sensor. International Journal of Hydrogen Energy, 2021, 46, 26263-26271.	3.8	4
619	Boosting solar driven hydrogen evolution rate of CdS nanorods adorned with MoS2 and SnS2 nanostructures. Colloids and Interface Science Communications, 2021, 43, 100437.	2.0	9
620	Response Surface Methodology Routed Optimization of Performance of Hydroxy Gas Enriched Diesel Fuel in Compression Ignition Engines. Processes, 2021, 9, 1355.	1.3	7
621	Artificial Neural Network Led Optimization of Oxyhydrogen Hybridized Diesel Operated Engine. Sustainability, 2021, 13, 9373.	1.6	6
622	A novel approach to measuring science-technology linkage: From the perspective of knowledge network coupling. Journal of Informetrics, 2021, 15, 101167.	1.4	15
623	New Equivalent Electrical Model of a Fuel Cell and Comparative Study of Several Existing Models with Experimental Data from the PEMFC Nexa 1200 W. Micromachines, 2021, 12, 1047.	1.4	23
624	Modeling and Simulation of Prereformed Naphtha and Methane Steam Reforming in a Catalytic Membrane Reactor. Industrial & Engineering Chemistry Research, 2021, 60, 13661-13673.	1.8	4
625	Effects of catalysts on water decomposition and hydrogen oxidation reactions in oxygen transport membrane reactors. Journal of Membrane Science, 2021, 634, 119394.	4.1	6
626	The electronic properties and catalytic activity of precious-metals adsorbed silicene for hydrogen evolution reaction and oxygen evolution reaction. Applied Surface Science, 2021, 560, 150041.	3.1	27
627	Emerging Photocatalysts for Hydrogen Production. Green Chemistry and Sustainable Technology, 2022, , 647-671.	0.4	1

#	Article	IF	Citations
628	The effect of calcination temperature on the electrocatalytic activity of Niâ€"Coâ€"Ir-oxide and Niâ€"Coâ€"Ru-oxide anodes in the oxygen evolution reaction in alkaline medium. Solid State Sciences, 2021, 119, 106703.	1.5	6
629	Grand Canonical Monte Carlo Simulations to Determine the Optimal Interlayer Distance of a Graphene Slit-Shaped Pore for Adsorption of Methane, Hydrogen and their Equimolar Mixture. Nanomaterials, 2021, 11, 2534.	1.9	5
630	Towards high-performance electrocatalysts and photocatalysts: Design and construction of MXenes-based nanocomposites for water splitting. Chemical Engineering Journal, 2021, 421, 129944.	6.6	50
631	Chemical synthesis of a microsphere-like copper molybdate electrode for oxygen evolution reaction. Surfaces and Interfaces, 2021, 26, 101425.	1.5	8
632	A review of recent advances in electrode materials for emerging bioelectrochemical systems: From biofilm-bearing anodes to specialized cathodes. Chemosphere, 2021, 283, 131138.	4.2	61
633	Continuous aqueous phase reforming of wastewater streams: A catalyst deactivation study. Fuel, 2021, 305, 121506.	3.4	13
634	In situ coupled MoO3 with CoP/rGO to construct three-dimensional self-supported catalyst for highly efficient alkaline hydrogen evolution reaction. Journal of Materials Science and Technology, 2022, 104, 194-201.	5.6	15
635	Selenium tethered copper phthalocyanine hierarchical aggregates as electrochemical hydrogen evolution catalysts. Sustainable Energy and Fuels, 2021, 5, 3617-3631.	2.5	2
636	Operational challenges for low and high temperature electrolyzers exploiting curtailed wind energy for hydrogen production. International Journal of Hydrogen Energy, 2021, , .	3.8	36
637	Electrical Conductivity of BaLaIn0.9M0.1O3.95 (M = Mg, Zn)â€"New Complex Oxides with the Ruddlesdenâ€"Popper Structure. Inorganic Materials, 2021, 57, 60-67.	0.2	2
638	Cellulose as Sacrificial Biomass for Photocatalytic Hydrogen Evolution over Oneâ€dimensional CdS Loaded with NiS₂ as a Cocatalyst. ChemistrySelect, 2020, 5, 1470-1477.	0.7	17
639	Exergy Analysis of Green Energy Systems. Progress in Green Energy, 2011, , 17-65.	0.0	9
640	Interface Chemistry of Platinum-Based Materials for Electrocatalytic Hydrogen Evolution in Alkaline Conditions. , 2020, , 453-473.		3
641	Glycerol Fermentation and Molecular Hydrogen Production by Escherichia Coli Batch Cultures Affected by Some Reducing Reagents and Heavy Metal Ions. NATO Science for Peace and Security Series C: Environmental Security, 2013, , 153-163.	0.1	1
642	Flow control based 5ÂMW wind turbine enhanced energy production for hydrogen generation cost reduction. International Journal of Hydrogen Energy, 2022, 47, 7049-7061.	3.8	9
643	Catalyst-Integrated Gas Diffusion Electrodes for Polymer Electrolyte Membrane Water Electrolysis: Porous Titanium Sheets with Nanostructured TiO₂ Surfaces Decorated with Ir Electrocatalysts. Journal of the Electrochemical Society, 2020, 167, 124523.	1.3	10
644	Response Characteristics of Silicon Microring Resonator Hydrogen Gas Sensor. IEEJ Transactions on Sensors and Micromachines, 2019, 139, 2-6.	0.0	4
645	Energetic, economic and environmental sustainability of integrated techniques for energy production in buildings using hydrogen as storage system. Renewable Energy and Power Quality Journal, 0, , 1240-1244.	0.2	1

#	Article	IF	Citations
646	EVALUATING THE CRUCIAL FACTORS AFFECTING HYDROGEN GAS GENERATION FROM MUNICIPAL SOLID WASTE INCINERATION BOTTOM ASH (MSWIBA). Detritus, 2018, 2, 150.	0.4	3
647	Synthesis and Characterization of the Cu_{0.72}Co_{2.28}O₄ Catalyst for Oxygen Evolution Reaction in an Anion Exchange Membrane Water Electrolyzer. Journal of Korean Institute of Metals and Materials, 2020, 58, 49-58.	0.4	12
648	Hydrogen Fuel Cell Technology for the Sustainable Future of Stationary Applications. Energies, 2019, 12, 4593.	1.6	218
649	Effect of Process Parameters on Hydrogen Production and Efficiency in Biomass Gasification using Modelling Approach. Journal of Applied Sciences, 2010, 10, 3183-3190.	0.1	41
650	Multiple Effects of Molecular Hydrogen and its Distinct Mechanism. Journal of Neurological Disorders, 2014, 02, .	0.1	3
651	Development of Dedicated Lubricant for Hydrogen Fuelled Spark Ignition Engine. , 0, , .		7
652	Rh-Ni and Rh-Co Catalysts for Autothermal Reforming of Gasoline. Bulletin of the Korean Chemical Society, 2014, 35, 231-235.	1.0	2
654	The grand canonical Monte Carlo simulation of hydrogen physisorption on single-walled carbon nanotubes at the low and normal temperatures. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 038801.	0.2	3
655	Designing of noble metal free high performance mesoporous electrocatalysts for water splitting. International Journal of Hydrogen Energy, 2021, 46, 39799-39809.	3.8	7
656	Multi-dimensional applications of graphitic carbon nitride nanomaterials â€“ A review. Journal of Molecular Liquids, 2021, 344, 117820.	2.3	46
660	BIOFUEL AND HYDROGEN INFLUENCE FOR OPERATION PARAMETERS OF SPARK IGNITION ENGINE / BIODEGALÅ² IR VANDENILIO Ä®TAKA KIBIRKÅTINIO UÅ½DEGIMO VARIKLIO VEIKIMO RODIKLIAMS. Science: Future of Lithuania, 2016, 8, 526-532.	0.0	0
661	Wire-array-applied ultrafine tungsten wire coated with Alâ€“Mg alloy layer via electron beam evaporation. Transactions of the Institute of Metal Finishing, 2017, 95, 185-189.	0.6	0
662	Release of chemisorbed hydrogen from carbon nanotubes: Insights from ab-initio molecular dynamics simulations. International Journal of Hydrogen Energy, 2017, 42, 21191-21197.	3.8	2
663	Introduction to hydrogen technology applications. , 2018, , 363-365.		0
665	Utilization of carbon nanotubes in hydrogen electrosynthesis from tropical fruit fermentation. Revista Materia, 2020, 25, .	0.1	0
666	Novel materials and technologies for hydrogen storage. , 2020, , 337-365.		4
667	Performance Evaluation of Hydrogen-Fuelled Internal Combustion Engine. Lecture Notes in Mechanical Engineering, 2021, , 177-192.	0.3	0
668	Influence of biomass waste from agro-industries on obtaining energetic gases assisted by chronoamperometric process. International Journal of Hydrogen Energy, 2022, 47, 735-746.	3.8	1

#	Article	IF	Citations
669	Enhanced Stability of B-Site W Doped Pr0.6Sr0.4Fe1-xWxO3-Î´ Ceramic Membranes for Water Splitting. Minerals, Metals and Materials Series, 2020, , 657-668.	0.3	0
670	The function of porous working electrodes for hydrogen production from water splitting in non-thermal plasma reactor. Fuel, 2022, 310, 122156.	3.4	5
671	Investigation of Novel Configuration of Hydrogen Micromix Combustor for Low NOx Emission. , 2020, , .		1
672	Rod-Shaped Î²-FeOOH Synthesis for Hydrogen Production under Light Irradiation. ACS Omega, 2021, 6, 30562-30568.	1.6	7
673	Environmental Scope. Green Energy and Technology, 2008, , 637-653.	0.4	0
674	Effect of Noble Metals on Hydrogen Sensing Properties of Metal Oxide-based Gas Sensors. Journal of Sensor Science and Technology, 2020, 29, 365-368.	0.1	8
675	Recent Advances in Liquid Organic Hydrogen Carriers: An Alcohol-Based Hydrogen Economy. ACS Catalysis, 2021, 11, 14712-14726.	5.5	45
676	Hydrogenation of cyclohexene catalyzed by nanoporous SPE-PtNi/C membrane electrode. International Journal of Hydrogen Energy, 2022, 47, 2500-2510.	3.8	1
677	Analysis of biomimetic hierarchical porous structure regulating radiation field to improve solar thermochemical performance based on minimum Gibbs free energy. International Journal of Hydrogen Energy, 2022, 47, 2832-2845.	3.8	26
678	Economic evaluation of fuel cell-powered OFF-ROAD machinery using stochastic analysis. International Journal of Hydrogen Energy, 2022, 47, 2771-2782.	3.8	3
679	A review on underground hydrogen storage: Insight into geological sites, influencing factors and future outlook. Energy Reports, 2022, 8, 461-499.	2.5	207
680	Effect of Nickel Precursor on the Catalytic Performance of Graphene Aerogelâ€Supported Nickel Nanoparticles for the Production of CO_xâ€free Hydrogen by Ammonia Decomposition. Energy Technology, 2022, 10, .	1.8	15
681	Development of cobalt catalyst supported on MgOâ€“Ln2O3 (Ln = La, Nd, Eu) mixed oxide systems for ammonia synthesis. International Journal of Hydrogen Energy, 2022, 47, 6666-6678.	3.8	16
682	Environmental sustainability of alternative marine propulsion technologies powered by hydrogen - a life cycle assessment approach. Science of the Total Environment, 2022, 820, 153189.	3.9	29
683	Prospects of enhancing the understanding of material-hydrogen interaction by novel in-situ and in-operando methods. International Journal of Hydrogen Energy, 2022, 47, 10097-10111.	3.8	4
684	General aspects in the modeling of fuel cells: from conventional fuel cells to nano fuel cells. , 2022, , 77-121.		6
686	World water crisis and possible solutions. , 2022, , 1-37.		1
687	Electrocatalytic proton reduction by dinuclear cobalt complexes in a nonaqueous electrolyte. New Journal of Chemistry, 2022, 46, 6027-6038.	1.4	8

#	Article	IF	Citations
688	Two-dimensional titanium carbonitride MXene as a highly efficient electrocatalyst for hydrogen evolution reaction. Materials Reports Energy, 2022, 2, 100075.	1.7	20
689	Co-Mn-B Nanoparticles Supported on Epoxy-Based Polymer as Catalyst for Evolution of H2 from Ammonia Borane Semi-Methanolysis. Journal of Electronic Materials, 2022, 51, 2356-2368.	1.0	6
690	Bifunctional WCâ€Supported RuO₂ Nanoparticles for Robust Water Splitting in Acidic Media. Angewandte Chemie - International Edition, 2022, 61, .	7.2	89
691	Bifunctional WCâ€Supported RuO₂ Nanoparticles for Robust Water Splitting in Acidic Media. Angewandte Chemie, 2022, 134, .	1.6	11
692	A review on hydrogen generation by phthalocyanines. International Journal of Hydrogen Energy, 2022, 47, 12865-12881.	3.8	24
693	A review on Chemical Looping Water Splitting (CLWS) as a potential alternative to Steam Methane Reforming (SMR) for hydrogen production. Journal of Physics: Conference Series, 2022, 2208, 012015.	0.3	4
694	Bimetal Moâ€"Ni/NC as an effective electrocatalyst with accelerated kinetics for the oxygen evolution reaction. Journal of Physics and Chemistry of Solids, 2022, 165, 110651.	1.9	8
695	Energy and Emissions Saving in Urban Guided Transport Systems: Effectiveness and Assessment of Hydrogen-Based Solutions. Lecture Notes in Mobility, 2022, , 1-17.	0.2	1
696	Supraparticles for Bareâ€Eye H₂ Indication and Monitoring: Design, Working Principle, and Molecular Mobility. Advanced Functional Materials, 2022, 32, .	7.8	12
697	Exchange current density of reversible solid oxide cell electrodes. International Journal of Hydrogen Energy, 2022, 47, 16626-16639.	3.8	9
699	Substrate effect on hydrogen evolution reaction in two-dimensional Mo2C monolayers. Scientific Reports, 2022, 12, 6076.	1.6	3
701	Enhanced Hydrogen Production at Optimum pH for the Recovery Cycle of Î²-FeOOH. ACS Omega, 2022, 7, 16049-16054.	1.6	5
702	A Glimpse on the plethora of applications of prodigious material MXene. Sustainable Materials and Technologies, 2022, 32, e00439.	1.7	9
703	Copper-doped activated carbon from amorphous cellulose for hydrogen, methane and carbon dioxide storage. International Journal of Hydrogen Energy, 2022, 47, 18384-18395.	3.8	8
704	The use of avocado seed selfâ€assembly monolayer films for the catalysis of methanol electrooxidation reaction. Journal of the Chinese Chemical Society, 2022, 69, 801-811.	0.8	2
705	Enhancement of biohydrogen production by employing a packed-filter bioreactor (PFBR) utilizing sulfite-rich organic effluent obtained from a washing process of beverage manufactures. Biomass and Bioenergy, 2022, 161, 106451.	2.9	8
706	Reduced graphene oxide supported zinc/cobalt oxide nanoparticles as highly efficient electrocatalyst for oxygen evolution reaction. Inorganica Chimica Acta, 2022, 539, 121008.	1.2	8
707	Highly dispersed platinum on LaNi nanoparticles/nanoporous carbon for highly efficient electrocatalyic hydrogen evolution. International Journal of Hydrogen Energy, 2022, , .	3.8	4

#	Article	IF	Citations
708	Covalent Organic Frameworksâ€Based Membranes as Promising Modalities from Preparation to Separation Applications: An Overview. Chemical Record, 2022, 22, .	2.9	10
709	Corrosion performance of carbide/nitride/oxide (C/N/O)-based reactor during thermochemical hydrogen production by Na redox reaction. Journal of Alloys and Compounds, 2022, , 165732.	2.8	0
711	Achievement of excellent hydrogen sorption through swift hydrogen transport in 1:2ÂMg(NH2)2â€"LiH catalyzed by Li4BH4(NH2)3and carbon nanostructures. International Journal of Hydrogen Energy, 2022, 47, 23679-23693.	3.8	6
712	CdS/VS ₂ Heterostructured Nanoparticles as Efficient Visibleâ€Lightâ€Driven Photocatalysts for Boosting Hydrogen Evolution. ChemNanoMat, 0, , .	1.5	1
713	Anion exchange membrane water electrolysis using Aemionâ„¢ membranes and nickel electrodes. Journal of Materials Chemistry A, 2022, 10, 16061-16070.	5.2	25
714	Interface-assisted phase transition in MOF-derived MoS₂/CoS₂ heterostructures for highly efficient dual-pH hydrogen evolution and overall water splitting. Journal of Materials Chemistry A, 2022, 10, 16115-16126.	5.2	18
715	Photocatalytic Water Splitting for Hydrogen Production^{â€»}. Acta Chimica Sinica, 2022, 80, 827.	0.5	6
716	Support Effect in Bimetallic Particles PtNi for Hydrogen Oxidation Reaction in Alkaline Media. Topics in Catalysis, 2022, 65, 1251-1261.	1.3	2
717	Rational design of W-doped BiVO4 photoanode coupled with FeOOH for highly efficient photoelectrochemical catalyzing water oxidation. International Journal of Hydrogen Energy, 2022, 47, 27012-27022.	3.8	22
718	Safe Ventilation Methods against Leaks in Hydrogen Fuel Cell Rooms in Homes. Energies, 2022, 15, 5434.	1.6	7
719	Permeation barriers for hydrogen embrittlement prevention in metals â€" A review on mechanisms, materials suitability and efficiency. International Journal of Hydrogen Energy, 2022, 47, 32707-32731.	3.8	49
720	Development of compact and efficient volumetric apparatus for measuring absorption/desorption properties of hydrogen storage materials. International Journal of Hydrogen Energy, 2022, 47, 32565-32581.	3.8	7
721	High capacity hydrogen storage on zirconium decorated Î³-graphyne: A systematic first-principles study. International Journal of Hydrogen Energy, 2023, 48, 37834-37846.	3.8	6
722	Experimental optimization analysis on operating conditions of CO removal process from hydrogen-rich reformate. International Journal of Hydrogen Energy, 2023, 48, 25216-25230.	3.8	1
723	Nanoarchitectonic manganese-cobalt phosphide through zeoliticâ€"imidazolate framework for efficient electrocatalysis in hydrogen evolution reaction. Journal of Alloys and Compounds, 2022, 926, 166991.	2.8	6
724	Titania Hybrid Carbon Spherogelsfor Photocatalytic Hydrogen Evolution. SSRN Electronic Journal, 0, , .	0.4	0
725	Conversion of Biogas Generated from Anaerobic Digestion of Food Waste to Electricity Using Internal Combustion Engine and Fuel Cell. Clean Energy Production Technologies, 2022, , 53-91.	0.3	0
726	Formation of LaNi5 Hydrogen Storage Alloy by Electrodeposition of La Using Molten Salt. Coatings, 2022, 12, 1268.	1.2	2

#	Article	IF	Citations
727	Accelerated bubble departure and reduced overpotential with nanoengineered porous bifunctional Ni5P4 electrocatalyst for PV-driven water splitting. International Journal of Hydrogen Energy, 2022, 47, 36504-36516.	3.8	10
728	Fabrication of Ag/TiO2 nanotube array as active electrocatalyst for the hydrogen evolution reaction. Digest Journal of Nanomaterials and Biostructures, 2022, 17, 999-1010.	0.3	2
729	Effect of Fe on the Hydrogen Production Properties of Al-Bi-Sn Composite Powders. Materials, 2022, 15, 6702.	1.3	1
730	Hydrogen Separation with a Graphenylene Monolayer: Diffusion Monte Carlo Study. Journal of Chemical Physics, 0, , .	1.2	0
731	Electronic Properties and Electrocatalytic Water Splitting Activity for Precious-Metal-Adsorbed Silicene with Nonmetal Doping. ACS Omega, 2022, 7, 33156-33166.	1.6	2
732	H2 and CO adsorption ability of cationic lithiated carbenes: A computational study. International Journal of Hydrogen Energy, 2022, 47, 39917-39930.	3.8	1
733	Improvement in Performance of CI Engine Running with Dual Fuel Mode: Biodiesel & Hydrogen. , 0, , 33-39.		0
734	Progress, Barriers, and Prospects for Achieving a â€œHydrogen Societyâ€•and Opportunities for Biochar Technology. ACS ES&T Engineering, 2022, 2, 1987-2001.	3.7	7
735	Study on Hydriding Kinetics, Structural Properties and Electrical Conductivity of D.C. Magnetron Sputtered Mg/Al Thin Films. Solid State Phenomena, 0, 338, 83-90.	0.3	1
736	Peony flower-like CuxS@NiMn LDH heterostructure as an efficient electrocatalyst for the oxygen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 1347-1359.	3.8	9
737	Effect of Pt Addition on the Formation of Niâ€“Pt Porous Layer. Coatings, 2022, 12, 1645.	1.2	1
738	Optimization of the Laminate Structure of a Composite Cylinder Based on the Combination of Response Surface Methodology (RSM) and Finite Element Analysis (FEA). Molecules, 2022, 27, 7361.	1.7	2
739	Influence of a Hydride-Forming Multi-Component Alloy on the Carbonization Behavior of Vulcanized Elastomer Composites. Metals, 2022, 12, 1847.	1.0	1
740	Fe-Cu-Rh ternary alloy nanofibers as an outstanding pH-universal electrocatalyst for hydrogen evolution reaction: The catalytic roles of Fe depending on pH. Applied Surface Science, 2023, 611, 155484.	3.1	2
741	Titania hybrid carbon spherogels for photocatalytic hydrogen evolution. Carbon, 2023, 202, 487-494.	5.4	2
742	Recent update on gasification and pyrolysis processes of lignocellulosic and algal biomass for hydrogen production. Fuel, 2023, 332, 126169.	3.4	37
743	Numerical simulation and application of photofermentative bio-hydrogen production system. , 2023, , 15-63.		0
744	Synthesis, crystal structure and properties of electro-catalysis for hydrogen production of a molecular nickel catalyst based on bis(1,2,5-thiadiazole-3,4-dithiolate) ligand. Journal of Molecular Structure, 2023, 1274, 134501.	1.8	3

#	Article	IF	Citations
745	Room-temperature hydrogen gas sensor composed of palladium thin film deposited on NiCo2O4 nanoneedle forest. Sensors and Actuators B: Chemical, 2023, 376, 132958.	4.0	12
746	Hydrogen adsorption in nanotube and cylindrical pore: A grand canonical Monte Carlo simulation study. International Journal of Hydrogen Energy, 2023, 48, 2731-2741.	3.8	2
747	Feasibility analysis of hydrogen production potential from rooftop solar power plant for industrial zones in Vietnam. Energy Reports, 2022, 8, 14089-14101.	2.5	5
748	Photoredox (NN)Mn(I) Catalysed Acceptorless Dehydrogenation: Synthesis of Amides, Aldehydes and Ketones. Advanced Synthesis and Catalysis, 2022, 364, 4371-4383.	2.1	4
749	Effect of Combined Hole Storage and Blocking Interfaces on the Photoelectrochemical Water Splitting Performance of BiVO₄ Photoanodes. ACS Applied Energy Materials, 2022, 5, 14891-14900.	2.5	6
750	On the effect of metal loading on the performance of Co catalysts supported on mixed MgOâ€"La₂O₃ oxides for ammonia synthesis. RSC Advances, 2022, 12, 33876-33888.	1.7	8
751	Sustainable and Mild Catalytic Acceptorless Dehydrogenations. Synlett, 0, , .	1.0	1
752	Defects and doping engineered two-dimensional o-B2N2 for hydrogen evolution reaction catalyst: Insights from DFT simulation. International Journal of Hydrogen Energy, 2023, 48, 5138-5151.	3.8	13
753	Investigation of transition metal (Fe, Ni, Co) complexes based on 1,10- phenanthroline as electrocatalysts for hydrogen evolution reaction. International Journal of Electrochemical Science, 2022, 17, 221227.	0.5	2
754	Advanced Photoelectrochemical Hydrogen Generation by CdO-g-C3N4 in Aqueous Medium under Visible Light. Molecules, 2022, 27, 8646.	1.7	3
755	Nanomaterials as Photocatalystsâ€"Synthesis and Their Potential Applications. Materials, 2023, 16, 193.	1.3	7
756	Impact of the lanthanide size on the polymorphism and electrical properties of Ln5.4MoO11.1 (Ln = Nd,) Tj ETQq1 1 0.784314 rgBT /Ov	2.3	1
757	The effect of copper coated metal hydride at different ratios on the reaction kinetics. International Journal of Hydrogen Energy, 2023, 48, 23067-23076.	3.8	2
758	Graphene-Based Derivatives Heterostructured Catalytic Systems for Sustainable Hydrogen Energy via Overall Water Splitting. Catalysts, 2023, 13, 109.	1.6	11
759	The investigation of optical and photocatalytic properties in Dy2M2O7 (M= Hf, Zr and Ce)â€¯. Revista Mexicana De FÃsica, 2023, 69, .	0.2	0
760	Hydrogen ortho-para conversion: process sensitivities and optimisation. Chemical Engineering and Processing: Process Intensification, 2023, 184, 109272.	1.8	3
761	The effect of hydrogen addition on methane/air explosion characteristics in a 20-L spherical device. Fuel, 2023, 338, 127351.	3.4	11
762	Hydrogen production from syngas. , 2023, , 27-43.		1

#	Article	IF	Citations
763	Business Operation Optimization of Electricity Hydrogen Integrated Station Based on Multi-agent Game Analysis. , 2022, , .		0
764	Random Forest Approach to Resilience-Oriented Infrastructure Post-Disruption Repair Optimization. , 2022, , .		0
765	Electronic properties and hydrogen evolution reaction performance of silicene with precious metal-doped nonmetal ring: first-principles calculations. Journal of Materials Science, 2023, 58, 4487-4498.	1.7	0
766	Enhanced H2 permeation and CO2 tolerance of self-assembled ceramic-metal-ceramic BZCYYb-Ni-CeO2 hybrid membrane for hydrogen separation. Journal of Energy Chemistry, 2023, 82, 47-55.	7.1	2
767	Exploring Mg decorated antimonene for promising hydrogen storage material: A DFT outlook. Materials Science in Semiconductor Processing, 2023, 161, 107471.	1.9	1
768	Algal Biohydrogen Production: Opportunities and Challenges. Clean Energy Production Technologies, 2023, , 77-103.	0.3	1
769	Tuning of magnetic, electronic and electrolytic water properties of silicene supported precious-metal by non-metal doping and vacancy defect. FlatChem, 2023, 38, 100486.	2.8	2
770	Application of transition metal high entropy boride in electrocatalytic hydrogen evolution reaction. International Journal of Hydrogen Energy, 2023, 48, 18233-18244.	3.8	2
771	Sustainable Energy Research Trend: A Bibliometric Analysis Using VOSviewer, RStudio Bibliometrix, and CiteSpace Software Tools. Sustainability, 2023, 15, 3618.	1.6	10
772	Transition metal atoms anchored 2D holey graphyne for hydrogen evolution reaction: Acumen from DFT simulation. International Journal of Hydrogen Energy, 2023, 48, 18326-18337.	3.8	13
773	Visible Light Promoted Ironâ€Catalyzed Oneâ€Pot Synthesis of 2â€Aryliminoâ€2Hâ€Chromenes from 2â€Hydroxybenzyl Alcohols and Î²â€Ketothioamides at Room Temperature. European Journal of Organic Chemistry, 2023, 26, .	1.2	1
774	A Review on Research and Technology Development of Green Hydrogen Energy Systems with Thermal Management and Heat Recovery. Heat Transfer Engineering, 2024, 45, 300-322.	1.2	3
775	Technoeconomic Optimization of a Photovoltaic Wind Energyâ€Based Hydrogen Refueling Station: A Case Study. Energy Technology, 2023, 11, .	1.8	1
776	Enhanced green H2 generation using biomass-derived nitrogen-doped carbon dots incorporated with rare earth metal hydroxide [Gd(OH)3] nanorods. International Journal of Hydrogen Energy, 2024, 52, 456-469.	3.8	1
777	Hydrogen storage in North America: Status, prospects, and challenges. Journal of Environmental Chemical Engineering, 2023, 11, 109957.	3.3	13
783	Boron Nitride Nanocomposites Used as Hydrogen Storage Material. Composites Science and Technology, 2023, , 163-180.	0.4	0
793	Hydrogen safety/standards (national and international document standards on hydrogen energy and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		1
794	Hydrogen storage in high entropy alloys. , 2024, , 133-164.		0

#	Article	IF	Citations
803	Overview of Hydrogen-Powered Air Transportation. , 2023, , 385-393.		0
804	Techno-economic analysis of a heat and power combination system based on hybrid photovoltaic-fuel cell systems using hydrogen as an energy vector. , 2024, , 231-252.		0
808	Electrochemical hydrogen production: sustainable hydrogen economy. Green Chemistry, 2023, 25, 9543-9573.	4.6	3
817	Green Hydrogen Production: Energy and Exergy Analysis. , 2023, , .		0
819	Application of Hydrogen as a Fuel in Domestic Appliances. , 2023, , .		0
828	Dark Fermentative Hydrogen Production from Spent Coffee Grounds Hydrolysate by Clostridium butyricum. Korean Journal of Chemical Engineering, 2024, 41, 95-101.	1.2	0
830	Solar Light-Triggered Hybrid Approaches for Green Hydrogen. Green Energy and Technology, 2024, , 127-138.	0.4	0