Yanwei Zhang

List of Publications by Year
in descending order

58 papers	1,482 citations	331670 21 h-index	345221 36 g-index
58 all docs	58 docs citations	58 times ranked	1264 citing authors

#	Article	IF	Citations
1	Effects of microwave irradiation treatment on physicochemical characteristics of Chinese low-rank coals. Energy Conversion and Management, 2013, 71, 84-91.	9.2	189
2	Photothermal Coupling Factor Achieving CO₂ Reduction Based on Palladium-Nanoparticle-Loaded TiO₂. ACS Catalysis, 2018, 8, 6582-6593.	11.2	124
3	Influence of the hydrothermal dewatering on the combustion characteristics of Chinese low-rank coals. Applied Thermal Engineering, 2015, 90, 174-181.	6.0	86
4	Enhanced mechanism of the photo-thermochemical cycle based on effective Fe-doping TiO2 films and DFT calculations. Applied Catalysis B: Environmental, 2017, 204, 324-334.	20.2	75
5	Photothermal Chemistry Based on Solar Energy: From Synergistic Effects to Practical Applications. Advanced Science, 2022, 9, e2103926.	11.2	61
6	A novel photo-thermochemical cycle for the dissociation of CO 2 using solar energy. Applied Energy, 2015, 156, 223-229.	10.1	49
7	Effect of hydrothermal dewatering on the pyrolysis characteristics of Chinese low-rank coals. Applied Thermal Engineering, 2018, 141, 70-78.	6.0	48
8	Effect of preparation method on platinumâ€“ceria catalysts for hydrogen iodide decomposition in sulfurâ€“iodine cycle. International Journal of Hydrogen Energy, 2008, 33, 602-607.	7.1	47
9	Metal Oxides as Catalysts for Boron Oxidation. Journal of Propulsion and Power, 2014, 30, 47-53.	2.2	45
10	Guiding effective nanostructure design for photo-thermochemical CO2 conversion: From DFT calculations to experimental verifications. Nano Energy, 2017, 41, 308-319.	16.0	41
11	Pyrolysis Characteristics and Evolution of Char Structure during Pulverized Coal Pyrolysis in Drop Tube Furnace: Influence of Temperature. Energy & Fuels, 2017, 31, 4799-4807.	5.1	40
12	A novel thermochemical cycle for the dissociation of CO2 and H2O using sustainable energy sources. Applied Energy, 2013, 108, 1-7.	10.1	33
13	A novel photo-thermochemical cycle of water-splitting for hydrogen production based on TiO 2âˆ’x /TiO 2. International Journal of Hydrogen Energy, 2016, 41, 2215-2221.	7.1	33
14	Detailed kinetic modeling of homogeneous H2SO4 decomposition in the sulfurâ€“iodine cycle for hydrogen production. Applied Energy, 2014, 130, 396-402.	10.1	31
15	Thermal decomposition and combustion characteristics of Al/AP/HTPB propellant. Journal of Thermal Analysis and Calorimetry, 2021, 143, 3935-3944.	3.6	30
16	Hydrogen iodide decomposition over nickelâ€“ceria catalysts for hydrogen production in the sulfurâ€“iodine cycle. International Journal of Hydrogen Energy, 2008, 33, 5477-5483.	7.1	28
17	Catalytic Thermal Decomposition of Hydrogen Iodide in Sulfurâˆ’Iodine Cycle for Hydrogen Production. Energy & Fuels, 2008, 22, 1227-1232.	5.1	27
18	Electrochemical investigation of the Bunsen reaction in the sulfurâ€“iodine cycle. International Journal of Hydrogen Energy, 2013, 38, 14391-14401.	7.1	25

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19	Catalytic performance of different carbon materials for hydrogen production in sulfurâ€“iodine thermochemical cycle. Applied Catalysis B: Environmental, 2015, 166-167, 413-422.	20.2	25
20	Catalytic decomposition of sulfuric acid over CuO/CeO2 in the sulfurâ€“iodine cycle for hydrogen production. International Journal of Hydrogen Energy, 2015, 40, 2099-2106.	7.1	23
21	Electrolysis of the Bunsen Reaction and Properties of the Membrane in the Sulfurâ€“Iodine Thermochemical Cycle. Industrial & Engineering Chemistry Research, 2014, 53, 13581-13588.	3.7	22
22	Effect of raw material sources on activated carbon catalytic activity for HI decomposition in the sulfur-iodine thermochemical cycle for hydrogen production. International Journal of Hydrogen Energy, 2016, 41, 7854-7860.	7.1	21
23	Visible light-responding perovskite oxide catalysts for photo-thermochemical CO2 reduction. Catalysis Communications, 2020, 138, 105955.	3.3	21
24	Photothermal Catalysis for Selective CO₂ Reduction on the Modified Anatase TiO₂ (101) Surface. ACS Applied Energy Materials, 2021, 4, 7702-7709.	5.1	21
25	Catalytic performance and durability of Ni/AC for HI decomposition in sulfurâ€“iodine thermochemical cycle for hydrogen production. Energy Conversion and Management, 2016, 117, 520-527.	9.2	19
26	Pathway Alteration of Water Splitting via Oxygen Vacancy Formation on Anatase Titanium Dioxide in Photothermal Catalysis. Journal of Physical Chemistry C, 2020, 124, 26214-26221.	3.1	19
27	Standalone Solar Carbon-Based Fuel Production Based on Semiconductors. Cell Reports Physical Science, 2020, 1, 100101.	5.6	18
28	Exergy of Blackbody Radiation and Monochromatic Photon. International Journal of Thermophysics, 2017, 38, 1.	2.1	17
29	Accelerating photoelectric CO2 conversion with a photothermal wavelength-dependent plasmonic local field. Applied Catalysis B: Environmental, 2021, 298, 120533.	20.2	17
30	Electrochemical characterization of electrodes in the electrochemical Bunsen reaction of the sulfurâ€“iodine cycle. International Journal of Hydrogen Energy, 2014, 39, 7216-7224.	7.1	16
31	Thermal efficiency evaluation of a ZnSI thermochemical cycle for CO2 conversion and H2 production â€“ Complete system. International Journal of Hydrogen Energy, 2015, 40, 6004-6012.	7.1	15
32	SO3 decomposition over CuOâ€“CeO2 based catalysts in the sulfurâ€“iodine cycle for hydrogen production. International Journal of Hydrogen Energy, 2018, 43, 14876-14884.	7.1	15
33	HI Decomposition over Carbon-Based and Ni-Impregnated Catalysts of the Sulfurâ€“Iodine Cycle for Hydrogen Production. Industrial & Engineering Chemistry Research, 2015, 54, 1498-1504.	3.7	13
34	Catalytic performance of semi-coke on hydrogen iodide decomposition in sulfur-iodine thermochemical cycle for carbon dioxide-free hydrogen production. Energy Conversion and Management, 2018, 173, 659-664.	9.2	13
35	High-Performance Pt Catalyst with Graphene/Carbon Black as a Hybrid Support for SO₂ Electrocatalytic Oxidation. Langmuir, 2020, 36, 20-27.	3.5	13
36	Performance of the Electrochemical Bunsen Reaction Using Two Different Proton Exchange Membranes in the Sulfurâ€“Iodine Cycle. Industrial & Engineering Chemistry Research, 2014, 53, 4966-4974.	3.7	12

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37	Carbon membrane performance on hydrogen separation in H2H2O HI gaseous mixture system in the sulfur-iodine thermochemical cycle. International Journal of Hydrogen Energy, 2017, 42, 3708-3715.	7.1	12
38	Enhanced defect-water hydrogen evolution method for efficient solar utilization: Photo-thermal chemical coupling on oxygen vacancy. Chemical Engineering Journal, 2021, 408, 127248.	12.7	12
39	Photothermal Catalytic Water Splitting at Diverse Two-Phase Interfaces Based on Cuâ€"TiO₂. ACS Applied Energy Materials, 2022, 5, 4564-4576.	5.1	12
40	The Influence of Anionic Additives on the Microwave Dehydration Process of Lignite. Energy & Fuels, 2020, 34, 9401-9410.	5.1	11
41	Introduction and preliminary testing of a 5Âm3/h hydrogen production facility by Iodineâ€"Sulfur thermochemical process. International Journal of Hydrogen Energy, 2022, 47, 25117-25129.	7.1	11
42	Effect of iodine precipitation on HI separation subsection in sulfur-iodine cycle for hydrogen production. International Journal of Hydrogen Energy, 2018, 43, 10896-10904.	7.1	9
43	Effects of Nafion content in membrane electrode assembly on electrochemical Bunsen reaction in high electrolyte acidity. International Journal of Hydrogen Energy, 2019, 44, 11646-11654.	7.1	9
44	Efficient CO2 reduction with H2O via photothermal chemical reaction based on Au-MgO dual catalytic site on TiO2. Journal of CO2 Utilization, 2022, 55, 101801.	6.8	9
45	Equilibrium potential for the electrochemical Bunsen reaction in the sulfurâ€"iodine cycle. International Journal of Hydrogen Energy, 2014, 39, 18727-18733.	7.1	8
46	Study on CuO-CeO₂/SiC catalysts in the sulfur-iodine cycle for hydrogen production. International Journal of Energy Research, 2016, 40, 1062-1072.	4.5	8
47	Study of the mechanism of the catalytic decomposition of hydrogen iodide (HI) over carbon materials for hydrogen production. International Journal of Hydrogen Energy, 2017, 42, 4977-4986.	7.1	7
48	Influence of catalyst coated membranes on electrochemical bunsen reaction in the sulfur-iodine cycle. International Journal of Hydrogen Energy, 2019, 44, 9735-9742.	7.1	7
49	Enhanced Solar Conversion of CO₂ to CO Using Mnâ€doped TiO₂ Based on Photoâ€thermochemical Cycle. ChemistrySelect, 2019, 4, 236-244.	1.5	7
50	Splitting of CO₂ via the Heterogeneous Oxidation of Zinc Powder in Thermochemical Cycles. Industrial & Engineering Chemistry Research, 2016, 55, 534-542.	3.7	6
51	H2SO4 poisoning of Ru-based and Ni-based catalysts for HI decomposition in Sulfur Iodine cycle for hydrogen production. International Journal of Hydrogen Energy, 2019, 44, 9771-9778.	7.1	6
52	A review on fundmental research of oxy-coal combustion technology. Thermal Science, 2022, 26, 1945-1958.	1.1	4
53	Theoretical Study of Oxygen Vacancy on Indium Oxide for Promoted Photothermal Catalytic Water Splitting. Journal of Physical Chemistry C, 2021, 125, 19294-19300.	3.1	4
54	United Conversion Process Coupling CO₂ Mineralization with Thermochemical Hydrogen Production. Environmental Science & Technology, 2019, 53, 12091-12100.	10.0	3

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55	A novel power generation system based on the cascade utilization of coal: concept and preliminary experimental results. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2017, 39, 1955-1962.	2.3	2
56	Catalyst Screening and Development for HI Decomposition in Sulfur-iodine Thermochemical Cycle for Hydrogen Production. Chemistry Letters, 2018, 47, 700-703.	1.3	2
57	Elaborated Reaction Pathway of Photothermal Catalytic CO ₂ Conversion with H ₂ O on Gallium Oxideâ€Decorated and â€Defective Surfaces. Chemistry - A European Journal, 2022, , .	3.3	1
58	Chromium Copper Catalysts for LiClO₄ Decomposition. Propellants, Explosives, Pyrotechnics, 2015, 40, 531-538.	1.6	0