Liejin Guo

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4153836/publications.pdf

Version: 2024-02-01

88 papers	10,940 citations	136950 32 h-index	48315 88 g-index
89 all docs	89 docs citations	89 times ranked	13711 citing authors

#	Article	IF	Citations
1	Semiconductor-based Photocatalytic Hydrogen Generation. Chemical Reviews, 2010, 110, 6503-6570.	47.7	6,836
2	Monolithic integration of hybrid perovskite single crystals with heterogenous substrate for highly sensitive X-ray imaging. Nature Photonics, 2017, 11, 315-321.	31.4	580
3	Vapor-Phase Epitaxial Growth of Aligned Nanowire Networks of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, I). Nano Letters, 2017, 17, 460-466.	9.1	255
4	Boiling coal in water: Hydrogen production and power generation system with zero net CO2 emission based on coal and supercritical water gasification. International Journal of Hydrogen Energy, 2013, 38, 12953-12967.	7.1	215
5	Single-Crystal Thin Films of Cesium Lead Bromide Perovskite Epitaxially Grown on Metal Oxide Perovskite (SrTiO₃). Journal of the American Chemical Society, 2017, 139, 13525-13532.	13.7	209
6	Supercritical water gasification research and development in China. Journal of Supercritical Fluids, 2015, 96, 144-150.	3.2	179
7	Reversible Structural Evolution of NiCoO_xH_y during the Oxygen Evolution Reaction and Identification of the Catalytically Active Phase. ACS Catalysis, 2018, 8, 1238-1247.	11.2	153
8	Hydrogen production from supercritical water gasification of chicken manure. International Journal of Hydrogen Energy, 2016, 41, 22722-22731.	7.1	128
9	Enhanced bio-hydrogen production from corncob by a two-step process: Dark- and photo-fermentation. Bioresource Technology, 2010, 101, 2049-2052.	9.6	107
10	Supercritical water gasification of glycerol: Intermediates and kinetics. Journal of Supercritical Fluids, 2013, 78, 95-102.	3.2	92
11	Hydrogen production by catalytic gasification of coal in supercritical water with alkaline catalysts: Explore the way to complete gasification of coal. International Journal of Hydrogen Energy, 2014, 39, 19583-19592.	7.1	92
12	Experimental study on hydrogen production by lignite gasification in supercritical water fluidized bed reactor using external recycle of liquid residual. Energy Conversion and Management, 2017, 145, 214-219.	9.2	91
13	Industrialization prospects for hydrogen production by coal gasification in supercritical water and novel thermodynamic cycle power generation system with no pollution emission. Science China Technological Sciences, 2015, 58, 1989-2002.	4.0	88
14	High-Efficiency Gasification of Wheat Straw Black Liquor in Supercritical Water at High Temperatures for Hydrogen Production. Energy & Fuels, 2017, 31, 3970-3978.	5.1	86
15	Efficient Unassisted Overall Photocatalytic Seawater Splitting on GaN-Based Nanowire Arrays. Journal of Physical Chemistry C, 2018, 122, 13797-13802.	3.1	85
16	Tin(IV)-Tolerant Vapor-Phase Growth and Photophysical Properties of Aligned Cesium Tin Halide Perovskite (CsSnX₃; X = Br, I) Nanowires. ACS Energy Letters, 2019, 4, 1045-1052.	17.4	84
17	System analysis of pulping process coupled with supercritical water gasification of black liquor for combined hydrogen, heat and power production. Energy, 2017, 132, 238-247.	8.8	69
18	Gasification of indole in supercritical water: Nitrogen transformation mechanisms and kinetics. International Journal of Hydrogen Energy, 2016, 41, 15985-15997.	7.1	65

#	Article	IF	Citations
19	Characterization on hydrogen production performance of a newly isolated Clostridium beijerinckii YA001 using xylose. International Journal of Hydrogen Energy, 2014, 39, 19928-19936.	7.1	52
20	Enhanced hydrogen production from cornstalk by dark- and photo-fermentation with diluted alkali-cellulase two-step hydrolysis. International Journal of Hydrogen Energy, 2015, 40, 12193-12200.	7.1	48
21	Making of an Industry-Friendly Artificial Photosynthesis Device. ACS Energy Letters, 2018, 3, 2230-2231.	17.4	48
22	On the role of metal atom doping in hematite for improved photoelectrochemical properties: a comparison study. RSC Advances, 2016, 6, 101745-101751.	3.6	45
23	Enhanced Oil Recovery and in Situ Upgrading of Heavy Oil by Supercritical Water Injection. Energy & Fuels, 2020, 34, 360-367.	5.1	43
24	Experimental study on oil-containing wastewater gasification in supercritical water in a continuous system. International Journal of Hydrogen Energy, 2019, 44, 15871-15881.	7.1	42
25	Enhanced Bulk and Interfacial Charge Transfer Dynamics for Efficient Photoelectrochemical Water Splitting: The Case of Hematite Nanorod Arrays. ACS Applied Materials & Interfaces, 2016, 8, 23143-23150.	8.0	41
26	Experimental Investigation on Enhanced Oil Recovery of Extra Heavy Oil by Supercritical Water Flooding. Energy & Fuels, 2018, 32, 1685-1692.	5.1	41
27	Hydrogen production by supercritical water gasification of coal: A reaction kinetic model including nitrogen and sulfur elements. International Journal of Hydrogen Energy, 2020, 45, 31732-31744.	7.1	41
28	Kinetics study for sodium transformation in supercritical water gasification of Zhundong coal. International Journal of Hydrogen Energy, 2018, 43, 13869-13878.	7.1	39
29	Single-stage photo-fermentative hydrogen production from hydrolyzed straw biomass using Rhodobacter sphaeroides. International Journal of Hydrogen Energy, 2018, 43, 13810-13820.	7.1	38
30	Effect of operation parameters on anaerobic fermentation using cow dung as a source of microorganisms. International Journal of Hydrogen Energy, 2010, 35, 46-51.	7.1	37
31	Understanding divergent behaviors in the photocatalytic hydrogen evolution reaction on CdS and ZnS: a DFT based study. Physical Chemistry Chemical Physics, 2016, 18, 16862-16869.	2.8	36
32	Sulfur Transformation Characteristics and Mechanisms during Hydrogen Production by Coal Gasification in Supercritical Water. Energy & Fuels, 2017, 31, 12046-12053.	5.1	35
33	Enhanced photo-fermentative hydrogen production by Rhodobacter capsulatus with pigment content manipulation. Bioresource Technology, 2012, 118, 490-495.	9.6	34
34	Î±-Fe₂O₃ quantum dots: low-cost synthesis and photocatalytic oxygen evolution capabilities. RSC Advances, 2016, 6, 41060-41066.	3.6	33
35	A comparison of hydrogen production among three photosynthetic bacterial strains. International Journal of Hydrogen Energy, 2010, 35, 7194-7199.	7.1	32
36	Supercritical water synthesis of bimetallic catalyst and its application in hydrogen production by furfural gasification in supercritical water. International Journal of Hydrogen Energy, 2017, 42, 4943-4950.	7.1	31

#	Article	IF	Citations
37	On factors limiting the performance of photoelectrochemical CO2 reduction. Journal of Chemical Physics, 2020, 152, 100901.	3.0	30
38	On the Theoretical and Experimental Control of Defect Chemistry and Electrical and Photoelectrochemical Properties of Hematite Nanostructures. ACS Applied Materials & Interfaces, 2019, 11, 2031-2041.	8.0	29
39	Photo-biological hydrogen production by a temperature-tolerant mutant of Rhodobacter capsulatus isolated by transposon mutagenesis. Bioresource Technology, 2021, 320, 124286.	9.6	29
40	Experimental investigation on the influence of the pyrolysis operating parameters upon the char reaction activity in supercritical water gasification. International Journal of Hydrogen Energy, 2018, 43, 13887-13895.	7.1	28
41	Nanoporous WO3 films synthesized by tuning anodization conditions for photoelectrochemical water oxidation. Solar Energy Materials and Solar Cells, 2020, 209, 110472.	6.2	28
42	First-Principles Study on Stability and HER Activity of Noble Metal Single Atoms on TiO₂: The Effect of Loading Density. Journal of Physical Chemistry C, 2018, 122, 2546-2553.	3.1	27
43	Photocatalytic overall water splitting without noble-metal: Decorating CoP on Al-doped SrTiO3. Journal of Colloid and Interface Science, 2022, 606, 491-499.	9.4	27
44	Facile Synthesis of Ultrafine Hematite Nanowire Arrays in Mixed Waterâ€“Ethanolâ€“Acetic Acid Solution for Enhanced Charge Transport and Separation. ACS Applied Materials & Interfaces, 2018, 10, 12594-12602.	8.0	25
45	Improved photo â€“ Hydrogen production by transposon mutant of Rhodobacter capsulatus with reduced pigment. International Journal of Hydrogen Energy, 2012, 37, 12229-12233.	7.1	23
46	Effect of Water Adsorption on the Interfacial Structure and Band Edge Alignment of Anatase TiO₂(001)/Water by First-Principles Molecular Dynamics. Journal of Physical Chemistry C, 2018, 122, 26965-26973.	3.1	22
47	High NH3N tolerance of a cheR2-deletion Rhodobacter capsulatus mutant for photo-fermentative hydrogen production using cornstalk. International Journal of Hydrogen Energy, 2019, 44, 15833-15841.	7.1	22
48	Efficient hydrogen production in a spotlight reactor with plate photocatalyst of TiO2/NiO heterojunction supported on nickel foam. Energy, 2021, 228, 120578.	8.8	22
49	Enhanced biohydrogen production from cornstalk through a two-step fermentation: Dark fermentation and photofermentation. International Journal of Energy Research, 2017, 41, 2491-2501.	4.5	21
50	Performance simulation and thermodynamics analysis of hydrogen production based on supercritical water gasification of coal. International Journal of Hydrogen Energy, 2021, 46, 28474-28485.	7.1	21
51	One-Pot Bioconversion of Lignin-Derived Substrates into Gallic Acid. Journal of Agricultural and Food Chemistry, 2021, 69, 11336-11341.	5.2	21
52	Efficient photocatalytic overall water splitting over a core-shell GaInZnON@GaInON homojunction. Applied Catalysis B: Environmental, 2019, 255, 117741.	20.2	20
53	Coexpression of Mo- and Fe-nitrogenase in Rhodobacter capsulatus enhanced its photosynthetic hydrogen production. International Journal of Hydrogen Energy, 2015, 40, 927-934.	7.1	19
54	Overexpressing F0/F1 operon of ATPase in Rhodobacter sphaeroides enhanced its photo-fermentative hydrogen production. International Journal of Hydrogen Energy, 2016, 41, 6743-6751.	7.1	19

#	Article	IF	Citations
55	Thermodynamic modeling and analysis of the heat integration and power generation in pig manure supercritical water gasification system. Energy Conversion and Management, 2021, 248, 114809.	9.2	19
56	Enhanced photosynthetic hydrogen production performance of Rhodobacter capsulatus by deactivating CBB cycle and cytochrome c oxidase. International Journal of Hydrogen Energy, 2014, 39, 3176-3184.	7.1	18
57	The photosynthetic hydrogen production performance of a newly isolated Rhodobacter capsulatus JL1 with various carbon sources. International Journal of Hydrogen Energy, 2018, 43, 13860-13868.	7.1	18
58	High-Yielding Protocatechuic Acid Synthesis from <scp>l</scp>-Tyrosine in Escherichia coli. ACS Sustainable Chemistry and Engineering, 2020, 8, 14949-14954.	6.7	18
59	Experimental Investigation on Supercritical Water Gasification of Organic-Rich Shale with Low Maturity for Syngas Production. Energy & Fuels, 2021, 35, 7657-7665.	5.1	18
60	Directly convert lignocellulosic biomass to H2 without pretreatment and added cellulase by two-stage fermentation in semi-continuous modes. Renewable Energy, 2021, 170, 866-874.	8.9	18
61	Viscosity Measurements of the H₂â€“CO₂, H₂â€“CO₂â€“CH₄, and H₂â€“H₂O Mixtures and the H₂â€“CO₂â€“CH₄â€“COâ€“H₂O System at 280â€“924 K and 0.7â€“33.1 MPa with a Capillary Apparatus. Journal of Chemical & Engineering Data, 2020, 65, 3834-3847.	1.9	16
62	Experiment and simulation study on mechanism and solution of ash agglomeration in supercritical water gasification of coal for hydrogen production. Fuel, 2021, 290, 120016.	6.4	16
63	Enhanced biohydrogen production by an ammonium-tolerant Rhodobacter capsulatus from sugarcane bagasse. Fuel, 2021, 300, 121009.	6.4	16
64	Density Data of Two (H₂ + CO₂) Mixtures and a (H₂ +) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Pressures up to 25 MPa. Journal of Chemical & Engineering Data, 2019, 64, 1693-1704.	1.9	15
65	High-Yielding Terpene-Based Biofuel Production in Rhodobacter capsulatus. ACS Synthetic Biology, 2021, 10, 1545-1552.	3.8	15
66	Enhancement of Hydrogen Production through a Mixed Culture of Enterobacter cloacae and Rhodobacter sphaeroides. Energy & Fuels, 2017, 31, 7234-7240.	5.1	13
67	Disruption of multidrug resistance protein gene of Rhodobacter capsulatus results in improved photoheterotrophic hydrogen production. International Journal of Hydrogen Energy, 2013, 38, 13031-13037.	7.1	12
68	Overexpressing atpXF enhanced photo-fermentative hydrogen production performance of Rhodobacter sphaeroides. International Journal of Hydrogen Energy, 2017, 42, 9641-9649.	7.1	12
69	Effect of cornstalk hydrolysis on photo-fermentative hydrogen production by R.Âcapsulatus. International Journal of Hydrogen Energy, 2019, 44, 11593-11601.	7.1	12
70	Controlled Aqueous Growth of Hematite Nanoplate Arrays Directly on Transparent Conductive Substrates and Their Photoelectrochemical Properties. Chemistry - an Asian Journal, 2016, 11, 2328-2334.	3.3	11
71	Density Measurements of the H2â€“CO2â€“CH4â€“COâ€“H2O System by the Isochoric Method at 722â€“930 K and 15.4â€“30.3 MPa. Journal of Chemical & Engineering Data, 2019, 64, 4024-4036.	1.9	11
72	Combining experiment and density functional theory to study the mechanism of thermochemical sulfate reduction by hydrogen in supercritical water. Journal of Molecular Liquids, 2021, 330, 115654.	4.9	11

#	Article	IF	Citations
73	Hydrogen production by supercritical water gasification of methylhydrazine in continuous system. Journal of Water Process Engineering, 2021, 42, 102037.	5.6	11
74	Phenyl-incorporated carbon nitride photocatalyst with extended visible-light-absorption for enhanced hydrogen production from water splitting. Journal of Colloid and Interface Science, 2022, 622, 494-502.	9.4	10
75	First-principles study on absolute band edge positions for IIâ€“VI semiconductors at (110) surface. Chemical Physics Letters, 2011, 513, 72-76.	2.6	9
76	Enhanced hydrogen production performance of cbbR & pycA inactived R.sphaeroides mutant by improving the ammonium tolerance. International Journal of Hydrogen Energy, 2018, 43, 18142-18150.	7.1	9
77	Variation of pore structure in Zhundong coal particle with stepped K2CO3 loading during supercritical water gasification. Fuel, 2021, 305, 121457.	6.4	9
78	Thermal conductivity measurements of the H2/CO2 mixture using the short-hot-wire method at 323.15â€“620.05ÂK and 2.14â€“9.37ÂMPa. International Journal of Hydrogen Energy, 2020, 45, 31213-31224.	7.1	8
79	CRISPR/Cas12aâ€mediated genome engineering in the photosynthetic bacterium Rhodobacter capsulatus. Microbial Biotechnology, 2021, 14, 2700-2710.	4.2	7
80	Effects of Alkaline Metals on the Reactivity of the Carbon Structure after Partial Supercritical Water Gasification of Coal. Energy & Fuels, 2020, 34, 13916-13923.	5.1	7
81	A Firstâ€Principles Investigation on Microscopic Atom Distribution and Configurationâ€Averaged Properties in Cd_{1â^'x}Zn_xS Solid Solutions. ChemPhysChem, 2014, 15, 3125-3132.	2.1	6
82	Something new under the sun for ultra low-cost single-junction PhotoAnodes for highly efficient photocatalytic water splitting. Solar Energy Materials and Solar Cells, 2019, 201, 110083.	6.2	6
83	Firstâ€Principles Investigation of Î²â€FeOOH for Hydrogen Evolution: Identifying Reactive Sites and Boosting Surface Reactions. Chemistry - A European Journal, 2020, 26, 7118-7123.	3.3	6
84	Thermodynamic analysis of the superiority of the direct mass transfer design in the supercritical water gasification system. Energy, 2022, 244, 122722.	8.8	5
85	PVT Measurements of the H₂â€“CO₂â€“CH₄â€“COâ€“H₂O System at 740â€“939 K and 18.1â€“34.7 MPa with an Isochoric Apparatus and the Development of a Virial Equation of State. Journal of Chemical & Engineering Data, 2020, 65, 4881-4891.	1.9	4
86	A Review of Experimental Researches on the Thermophysical Properties of Hydrogen-Containing Mixtures at High Temperatures and High Pressures. Journal of Chemical & Engineering Data, 2021, 66, 3361-3385.	1.9	4
87	Experimental measurements on chemical reaction and thermal conductivity of the H2/CO2/CO/CH4/H2O system using the short-hot-wire method at 664â€“915 K and 9.2â€“22.2 MPa. International Journal of Heat and Mass Transfer, 2021, 177, 121554.	4.8	4
88	Enhanced photo fermentative H2 production from cornstalk by acid-tolerant R. capsulatus mutation. Biomass Conversion and Biorefinery, 2024, 14, 4677-4686.	4.6	1