Wen Ju Wang

List of Publications by Year
in descending order

108	2,155	201575 27	276775 41
papers	citations	h-index	g-index

108	108	108	2245
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Suppressing the shuttle effect in lithiumâ€sulphur batteries by defective singleâ€walled <scp>ZnO</scp> nanotube: A <scp>DFT</scp> study. Canadian Journal of Chemical Engineering, 2023, 101, 347-353.	0.9	0
2	Exploring anchoring performance of defective <scp>MgO</scp> nanotubes for lithiumâ€“sulphur batteries: A density functional theory (<scp>DFT</scp>) study. Canadian Journal of Chemical Engineering, 2022, 100, 979-989.	0.9	3
3	Study on the dynamic mechanical properties of magnetorheological elastomer (MRE) with Fe@C. Journal of Intelligent Material Systems and Structures, 2022, 33, 1115-1125.	1.4	1
4	Ru-substituted Co nanoalloys encapsulated within graphene as efficient electrocatalysts for accelerating water dissociation in alkaline solution. Applied Surface Science, 2022, 580, 152294.	3.1	4
5	Oxidation of soot promoted by Fe-based spinel catalysts. Materials Research Express, 2022, 9, 015502.	0.8	2
6	Investigation of alkali metals addition on the catalytic activity of CuFe2O4 for soot oxidation. Separation and Purification Technology, 2022, 283, 120224.	3.9	13
7	Mo-doped cobalt hydroxide nanosheets coupled with cobalt phosphide nanoarrays as bifunctional catalyst for efficient and high-stability overall water splitting. International Journal of Hydrogen Energy, 2022, 47, 9915-9924.	3.8	28
8	A Simple, Scalable, Lowâ€Cost Honeycombâ€Like Carbonized Corncob for Highly Efficient Solar Steam Generation. Advanced Sustainable Systems, 2022, 6, .	2.7	9
9	Enhanced soot oxidation by oxygen vacancies via K ⁺ doped <scp> CuFe ₂ O ₄ </scp> spinel catalysts. International Journal of Energy Research, 2022, 46, 15376-15386.	2.2	2
10	The effect of graphene-coating material (G-Fe) on the dynamic mechanical characteristics of magnetorheological elastomer (MRE). Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	5
11	Artificial three-dimensional inverse opal cathode host materials for lithium sulfur batteries. Materials Chemistry and Physics, 2022, 290, 126509.	2.0	1
12	Performance and characteristics of continuous, fluidized bed pyrolysis of reed black liquor. Separation and Purification Technology, 2021, 254, 117573.	3.9	8
13	A brief review for chemical looping combustion as a promising CO2 capture technology: Fundamentals and progress. Science of the Total Environment, 2021, 764, 142892.	3.9	105
14	A brief review of CO2 utilization for alkali carbonate gasification and biomass/coal co-gasification: Reactivity, products and process. Journal of CO2 Utilization, 2021, 43, 101370.	3.3	41
15	Image Inpainting With Learnable Edge-Attention Maps. IEEE Access, 2021, 9, 3816-3827.	2.6	3
16	Stability and activity maintenance of Ni catalysts supported on Laâ€, Ceâ€, and Mgâ€promoted <scp> Al ₂ O ₃ </scp> and <scp> ZrO ₂ </scp> for <scp> H ₂ </scp> production from steam reforming of glycerol. International Journal of Energy Research, 2021, 45, 9369-9381.	2.2	8
17	A Novel Magnetic Coupling to Construct Spiral Deposition of Lithium Ions for Improving Anode Performance of Lithium-Sulfur Batteries. Journal of the Electrochemical Society, 2021, 168, 030522.	1.3	4
18	Syngas production from chemical looping reforming of ethanol over iron-based oxygen carriers: Theoretical analysis and experimental investigation. Chinese Journal of Chemical Engineering, 2021, 38, 123-131.	1.7	7

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19	A Stable Fluorineâ€Containing Solid Electrolyte Interface toward Dendriteâ€Free Lithiumâ€Metal Anode for Lithiumâ€Sulfur Batteries. ChemElectroChem, 2021, 8, 1500-1506.	1.7	7
20	Study of chemical looping co-gasification of lignite and rice husk with Cu-Ni oxygen carrier. International Journal of Low-Carbon Technologies, 2021, 16, 1127-1134.	1.2	5
21	Magnetic Control of Electrolyte Trapping Polysulfide for Enhanced Lithium-Sulfur Batteries. Journal of the Electrochemical Society, 2021, 168, 070510.	1.3	4
22	An effect blending of acetone and acetic acid as bio-oil model compound for steam reforming reaction over Ce doped LaNi0.8Fe0.2O3-based perovskite. Biomass and Bioenergy, 2021, 151, 106177.	2.9	12
23	Onion-like Core-shell Ni@C supported on carbon nanotubes decorated with low Pt as a superior electrocatalyst for hydrogen evolution reaction. Electrochimica Acta, 2021, 386, 138406.	2.6	16
24	The effect of alkali and alkaline earth metals oxides addition on oxygen uncoupling rate of copper-based oxygen carrier: A kinetic and experimental investigations. Separation and Purification Technology, 2021, 275, 119176.	3.9	9
25	Adsorption of SO₂ on pristine and defective single-walled MgO nanotubes: a dispersion-corrected density-functional theory (DFT-D) study. Materials Research Express, 2021, 8, 015023.	0.8	4
26	A study on the diffusion properties of oxygen in Al and W-doped Î»-Ta2O5. AIP Advances, 2021, 11, 125302.	0.6	0
27	Insight into the Anchoring Effect of Two-Dimensional TiX₂ (X = S, Se, Te) Materials for Lithium-Sulfur Batteries: A DFT Study. Journal of the Electrochemical Society, 2021, 168, 120516.	1.3	7
28	Hydrogen production through glycerol steam reforming over beehive-biomimetic graphene-encapsulated nickel catalysts. Renewable Energy, 2020, 145, 2647-2657.	4.3	18
29	High active and easily prepared cobalt encapsulated in carbon nanotubes for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 3948-3958.	3.8	13
30	The study of enhancement of magnetorheological effect based on natural rubber/thermoplastic elastomer SEBS hybrid matrix. Journal of Intelligent Material Systems and Structures, 2020, 31, 339-348.	1.4	7
31	Reduction mechanism study on sorption enhanced chemical looping gasification of biomass waste rice husk for H2 production over multi-functional Ni Ca1â^'O particles. Fuel Processing Technology, 2020, 209, 106524.	3.7	10
32	Accelerating charge transfer to enhance H₂ evolution of defect-rich CoFe₂O₄ by constructing a Schottky junction. Chemical Communications, 2020, 56, 14019-14022.	2.2	34
33	Reinforcing Behaviors of Sulfur-Containing Silane Coupling Agent in Natural Rubber-Based Magnetorheological Elastomers with Various Vulcanization Systems. Materials, 2020, 13, 5163.	1.3	5
34	Catalytic steam reforming of in-situ tar from rice husk over MCM-41 supported LaNiO3 to produce hydrogen rich syngas. Renewable Energy, 2020, 161, 408-418.	4.3	51
35	High-throughput chainmail catalyst FeCo@C nanoparticle for oxygen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 26574-26582.	3.8	18
36	An ionic liquid as a green solvent for high potency synthesis of 2D covalent organic frameworks. New Journal of Chemistry, 2020, 44, 15410-15414.	1.4	19

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37	Chemical looping co-gasification of lignite and rice husk for syngas generation with a Co decorated Cu-based oxygen carrier. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, , 1-12.	1.2	1
38	The dynamic mechanical properties of magnetorheological elastomer: Catalytic effect of carbonyl iron powder. Journal of Intelligent Material Systems and Structures, 2020, 31, 1567-1577.	1.4	3
39	Chemical looping steam reforming of bio-oil for hydrogen-rich syngas production: Effect of doping on LaNi0.8Fe0.2O3 perovskite. International Journal of Hydrogen Energy, 2020, 45, 21123-21137.	3.8	38
40	Solar-driven steam generation on nitrogen-doped graphene in a 2D water path isolation system. Materials Research Express, 2020, 7, 015507.	0.8	10
41	Efficient and stable supercritical-water-synthesized Ni-based catalysts for supercritical water gasification. Journal of Supercritical Fluids, 2020, 160, 104790.	1.6	15
42	Efficient hydrogen production from ethanol steam reforming over layer-controlled graphene-encapsulated Ni catalysts. Journal of Cleaner Production, 2020, 252, 119907.	4.6	25
43	Facile synthesis of ceramic SiC-based nanocomposites and the superior electrochemical lithiation/delithiation performances. Materials Chemistry and Physics, 2020, 243, 122618.	2.0	7
44	Solid-solid reaction of CuFe2O4 with C in chemical looping system: A comprehensive study. Fuel, 2020, 267, 117163.	3.4	35
45	ATMP derived cobalt-metaphosphate complex as highly active catalyst for oxygen reduction reaction. Journal of Catalysis, 2020, 387, 129-137.	3.1	28
46	Density functional theory study of oxygen vacancy defect diffusion properties in Î»-Ta₂O₅. Japanese Journal of Applied Physics, 2020, 59, 121003.	0.8	4
47	Steam reforming of ethanol for hydrogen production over sandwich-structured Fe@G@M catalysts (M=Fe, Ni and Co). Materials Research Express, 2019, 6, 105602.	0.8	1
48	The study of natural rubber/polybutadiene rubber hybrid matrix-based magnetorheological elastomer. Journal of Thermoplastic Composite Materials, 2019, , 089270571987822.	2.6	4
49	Supercritical water synthesized Ni/ZrO2 catalyst for hydrogen production from supercritical water gasification of glycerol. International Journal of Hydrogen Energy, 2019, 44, 30917-30926.	3.8	19
50	A novel approach for fabricating adjustable zero field-modulus magnetorheological elastomer based on IPN matrix. Materials Research Express, 2019, 6, 105706.	0.8	0
51	Dynamic mechanical properties of FeSi alloy particles-filled magnetorheological elastomers. Polymer-Plastics Technology and Materials, 2019, 58, 1625-1637.	0.6	3
52	Controlling oxygen vacancies through gas-assisted hydrothermal method and improving the capacitive properties of MnO2 nanowires. Applied Surface Science, 2019, 491, 24-31.	3.1	31
53	Hydrogen-rich syngas production by chemical looping steam reforming of acetic acid as bio-oil model compound over Fe-doped LaNiO3 oxygen carriers. International Journal of Hydrogen Energy, 2019, 44, 17732-17741.	3.8	40
54	Activating peroxydisulfate by morphology-dependent NiO catalysts: Structural origin of different catalytic properties. Applied Catalysis B: Environmental, 2019, 256, 117806.	10.8	44

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55	Hydrogenâ€rich syngas production from chemical looping steam reforming of bioâ€oil model compound: Effect of bimetal on LaNi _{0.8} M _{0.2} O ₃ (M = Fe, Co, Cu, and Mn). International Journal of Energy Research, 2019, 43, 4534-4545.	2.2	18
56	Nonradical activation of peroxydisulfate promoted by oxygen vacancy-laden NiO for catalytic phenol oxidative polymerization. Applied Catalysis B: Environmental, 2019, 254, 166-173.	10.8	107
57	Study of crosslink structure and dynamic mechanical properties of magnetorheological elastomer: Effect of vulcanization system. Journal of Intelligent Material Systems and Structures, 2019, 30, 1189-1199.	1.4	10
58	Ni-encapsulated graphene chainmail catalyst for ethanol steam reforming. International Journal of Hydrogen Energy, 2019, 44, 6560-6572.	3.8	26
59	Optimization of a fluidized bed reactor for methane decomposition over Fe/Al2O3 catalysts: Activity and regeneration studies. International Journal of Hydrogen Energy, 2019, 44, 31700-31711.	3.8	43
60	Functionalized biomass-derived composites for solar vapor generation. Materials Research Express, 2019, 6, 125613.	0.8	17
61	Size effect of carbon black on the structure and mechanical properties of magnetorheological elastomers. Journal of Materials Science, 2019, 54, 1326-1340.	1.7	19
62	Study of the crystal structure effect and mechanism during chemical looping gasification of coal. Journal of the Energy Institute, 2019, 92, 1284-1293.	2.7	9
63	Study of chemical looping co-gasification (CLCG) of coal and rice husk with an iron-based oxygen carrier via solidâ€“solid reactions. Journal of the Energy Institute, 2019, 92, 382-390.	2.7	20
64	The Study of Magnetorheological Elastomer Based on Natural Rubber (NR)/Thermoplastic Elastomer SEBS Hybrid Matrix: Experimental and Numerical Simulation. , 2019, , .		0
65	The Study of Magnetorheological Elastomer Based on Natural Rubber (NR)/Polybutadiene Rubber (BR) Hybrid Matrix: Experimental and Numerical Simulation. , 2019, , .		0
66	Effects of additives blended in corn straw to control agglomeration and slagging in combustion. BioResources, 2019, 14, 8963-8972.	0.5	4
67	Synergetic Catalysis of Nickel Oxides with Oxygen Vacancies and Nickel Phosphide for the Highly Efficient Hydrodeoxygenation of Phenolic Compounds. ChemCatChem, 2018, 10, 2612-2619.	1.8	13
68	Highly Dispersed Metal Carbide on ZIFâ€Derived Pyridinicâ€Nâ€Doped Carbon for CO₂ Enrichment and Selective Hydrogenation. ChemSusChem, 2018, 11, 1040-1047.	3.6	59
69	Chemical looping gasification of pyrolyzed biomass and coal char with copper ferrite as an oxygen carrier. Journal of Renewable and Sustainable Energy, 2018, 10, .	0.8	22
70	Study on dynamic mechanical properties of magnetorheological elastomers based on natural rubber/thermoplastic elastomer hybrid matrix. Materials Research Express, 2018, 5, 115705.	0.8	6
71	Investigations on the properties of NH₄HCO₃filled natural rubber based magnetorheological elastomers (MREs). Materials Research Express, 2018, 5, 045307.	0.8	4
72	Effect of carbon black with large particle size on dynamic mechanical analysis of magnetorheological elastomers (MREs). Materials Research Express, 2018, 5, 095703.	0.8	10

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73	Hydrogen-Rich Syngas Production from Chemical Looping Gasification of Biomass Char with CaMn_{1â€“x}Fe_xO₃. Energy & Fuels, 2018, 32, 9541-9550.	2.5	33
74	Carbon disulfide (CS 2) adsorption and dissociation on the Cu(100) surface: A quantum chemical study. Applied Surface Science, 2017, 414, 92-100.	3.1	16
75	CO 2 and SO 2 sorption on the alkali metals doped CaO(100)surface: A DFT-D study. Applied Surface Science, 2017, 425, 972-977.	3.1	49
76	Study on chemical looping reforming of ethanol (CLRE) for hydrogen production using NiMn2O4 spinel as oxygen carrier. Journal of the Energy Institute, 2017, 90, 884-892.	2.7	21
77	O2 Release of Mn-Based Oxygen Carrier for Chemical Looping Air Separation (CLAS): An Insight into Kinetic Studies. Aerosol and Air Quality Research, 2016, 16, 453-463.	0.9	15
78	First-Principles Modeling of Direct versus Oxygen-Assisted Water Dissociation on Fe(100) Surfaces. Catalysts, 2016, 6, 29.	1.6	12
79	Catalytic pyrolysis of rice husks for syngas production over Fe-based catalyst in a fixed-bed reactor. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2016, 38, 2190-2196.	1.2	9
80	Steam reforming of glycerol for syngas generation under cold plasma conditions: A DFT study. International Journal of Green Energy, 2016, 13, 1298-1304.	2.1	1
81	Heterogeneous Pd catalyst for mild solvent-free oxidation of benzyl alcohol. Journal of Molecular Catalysis A, 2016, 425, 61-67.	4.8	44
82	A theoretical study of water adsorption and dissociation on Ni(111) surface during oxidative steam reforming and water gas shift processes. Journal of the Energy Institute, 2015, 88, 112-117.	2.7	16
83	Theoretical study of direct versus oxygen-assisted water dissociation on the Cu(110) surface. Applied Surface Science, 2015, 351, 846-852.	3.1	13
84	Higher alcohol synthesis from syngas over KCoMoP catalysts. Catalysis Communications, 2014, 51, 63-67.	1.6	17
85	Hydrogen production via sorption enhanced chemical looping reforming of glycerol using Ni-based oxygen carrier and Ca-based sorbent: Theoretical and experimental study. Korean Journal of Chemical Engineering, 2014, 31, 230-239.	1.2	8
86	Thermodynamic and experimental aspects on chemical looping reforming of ethanol for hydrogen production using a Cu-based oxygen carrier. International Journal of Energy Research, 2014, 38, 1192-1200.	2.2	11
87	Thermodynamic investigation on hydrogen production via self-sufficient chemical looping reforming of glycerol (CLRG) using metal oxide oxygen carriers. Journal of the Energy Institute, 2014, 87, 152-162.	2.7	9
88	Theoretical study of ethanol partial oxidation for syngas production under cold plasma conditions. Journal of the Energy Institute, 2014, 87, 89-95.	2.7	7
89	A combined thermodynamic and experimental study on chemical-looping ethanol reforming with carbon dioxide capture for hydrogen generation. International Journal of Energy Research, 2013, 37, 25-34.	2.2	28
90	Study of Co-pyrolysis Characteristics of Lignite and Rice Husk in a TGA and a Fixed-Bed Reactor. International Journal of Chemical Reactor Engineering, 2013, 11, 479-488.	0.6	9

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91	Combined Carbon Dioxide Reforming with Steam Reforming of Ethanol for Hydrogen Production: Thermodynamic Analysis. International Journal of Green Energy, 2012, 9, 503-516.	2.1	10
92	Natural gas fuelled chemical looping reforming with carbon dioxide capture technology for hydrogen generation: thermodynamic investigation. Journal of the Energy Institute, 2011, 84, 94-101.	2.7	8
93	Production of hydrogen by ethanol steam reforming over nickel-metal oxide catalysts prepared via urea-nitrate combustion method. International Journal of Energy Research, 2011, 35, 501-506.	2.2	35
94	Hydrogen production via dry reforming of butanol: Thermodynamic analysis. Fuel, 2011, 90, 1681-1688.	3.4	27
95	Hydrogen production via sorption enhanced steam reforming of butanol: Thermodynamic analysis. International Journal of Hydrogen Energy, 2011, 36, 2887-2895.	3.8	53
96	Steam reforming of ethanol to hydrogen over nickel metal catalysts. International Journal of Energy Research, 2010, 34, n/a-n/a.	2.2	6
97	Thermodynamic analysis of glycerol partial oxidation for hydrogen production. Fuel Processing Technology, 2010, 91, 1401-1408.	3.7	47
98	DFT study on pathways of steam reforming of ethanol under cold plasma conditions for hydrogen generation. International Journal of Hydrogen Energy, 2010, 35, 1951-1956.	3.8	67
99	Thermodynamic analysis of hydrogen production via glycerol steam reforming with CO2 adsorption. International Journal of Hydrogen Energy, 2010, 35, 7768-7777.	3.8	54
100	Hydrogen-rich gas production for solid oxide fuel cell (SOFC) via partial oxidation of butanol: Thermodynamic analysis. International Journal of Hydrogen Energy, 2010, 35, 13280-13289.	3.8	33
101	Production of Hydrogen by Steam Reforming of Bio-Ethanol Over Nickel-Copper Bimetallic Catalysts. International Journal of Green Energy, 2009, 6, 92-103.	2.1	28
102	Yttrium-stabilized zirconia-promoted metallic nickel catalysts for the partial oxidation of methane to hydrogen. International Journal of Hydrogen Energy, 2009, 34, 2252-2259.	3.8	31
103	Dry reforming of ethanol for hydrogen production: Thermodynamic investigation. International Journal of Hydrogen Energy, 2009, 34, 5382-5389.	3.8	90
104	Zirconia promoted metallic nickel catalysts for the partial oxidation of methane to synthesis gas. Catalysis Communications, 2009, 10, 940-944.	1.6	17
105	Thermodynamic analysis of steam reforming of ethanol for hydrogen generation. International Journal of Energy Research, 2008, 32, 1432-1443.	2.2	60
106	Thermodynamic analysis of hydrogen production via partial oxidation of ethanol. International Journal of Hydrogen Energy, 2008, 33, 5035-5044.	3.8	72
107	Yttria promoted metallic nickel catalysts for the partial oxidation of methane to synthesis gas. Journal of Natural Gas Chemistry, 2008, 17, 344-350.	1.8	21
108	Production of hydrogen and multi-walled carbon nanotubes by ethanol decomposition over Fe/CeO₂ catalysts. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-13.	1.2	0