

# Wen Liu

## List of Publications by Year in descending order

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42  
papers

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citations

218381

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44  
docs citations

44  
times ranked

2145  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synergistic interaction between inorganic layered materials and intumescent fire retardants for advanced fire protection. <i>Carbon</i> , 2022, 187, 290-301.	5.4	15
2	Organogel-assisted porous organic polymer embedding Cu NPs for selectivity control in the semi hydrogenation of alkynes. <i>Nanoscale</i> , 2022, 14, 1505-1519.	2.8	14
3	Synthetic solid oxide sorbents for CO <sub>2</sub> capture: state-of-the art and future perspectives. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1682-1705.	5.2	40
4	Optimisation of syngas production from a novel two-step chemical looping reforming process using Fe-dolomite as oxygen carriers. <i>Fuel Processing Technology</i> , 2022, 228, 107169.	3.7	11
5	CO <sub>2</sub> hydrogenation to methanol on tungsten-doped Cu/CeO <sub>2</sub> catalysts. <i>Applied Catalysis B: Environmental</i> , 2022, 306, 121098.	10.8	50
6	Heteroatom-doped microporous carbon nanosheets derived from pentaerythritol-melamine for supercapacitors and CO <sub>2</sub> capture. <i>Materials Today Energy</i> , 2022, , 101010.	2.5	2
7	Boosting Electrocatalytic Hydrogen Evolution with Anodic Oxidative Upgrading of Formaldehyde over Trimetallic Carbides. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7108-7116.	3.2	5
8	Breaking the Stoichiometric Limit in Oxygen-Carrying Capacity of Fe-Based Oxygen Carriers for Chemical Looping Combustion using the Mg-Fe-O Solid Solution System. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7242-7252.	3.2	6
9	Carbon-catalyzed oxygen-mediated dehydrogenation of formaldehyde in alkaline solution for efficient hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 27877-27886.	3.8	5
10	Controlling lattice oxygen activity of oxygen carrier materials by design: a review and perspective. <i>Reaction Chemistry and Engineering</i> , 2021, 6, 1527-1537.	1.9	21
11	Coupling chemical looping combustion of solid fuels with advanced steam cycles for CO <sub>2</sub> capture: A process modelling study. <i>Energy Conversion and Management</i> , 2021, 244, 114455.	4.4	30
12	Intensified solar thermochemical CO <sub>2</sub> splitting over iron-based redox materials via perovskite-mediated dealloying-exsolution cycles. <i>Chinese Journal of Catalysis</i> , 2021, 42, 2049-2058.	6.9	13
13	Single-step production of hydrogen-rich syngas from toluene using multifunctional Ni-dolomite catalysts. <i>Chemical Engineering Journal</i> , 2021, 425, 131522.	6.6	17
14	Co-pyrolysis of sewage sludge and hydrochar with coals: Pyrolytic behaviors and kinetics analysis using TG-FTIR and a discrete distributed activation energy model. <i>Energy Conversion and Management</i> , 2020, 203, 112226.	4.4	43
15	Barium aluminate improved iron ore for the chemical looping combustion of syngas. <i>Applied Energy</i> , 2020, 272, 115236.	5.1	29
16	Developing Oxygen Carriers for Chemical Looping Biomass Processing: Challenges and Opportunities. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000099.	2.7	26
17	Oxygen-mediated water splitting on metal-free heterogeneous photocatalyst under visible light. <i>Applied Catalysis B: Environmental</i> , 2020, 279, 119378.	10.8	14
18	Synthesizing High-Volume Chemicals from CO <sub>2</sub> without Direct H <sub>2</sub> Input. <i>ChemSusChem</i> , 2020, 13, 6066-6089.	3.6	15

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19	High performance Ni catalysts prepared by freeze drying for efficient dry reforming of methane. <i>Applied Catalysis B: Environmental</i> , 2020, 275, 119109.	10.8	60
20	Porous Organic Polymer Triggered Advancement of Sustainable Magnetic Efficient Catalyst for Chemoselective Hydrogenation of Cinnamaldehyde. <i>ChemCatChem</i> , 2020, 12, 3687-3704.	1.8	24
21	Aging amorphous/crystalline heterophase PdCu nanosheets for catalytic reactions. <i>National Science Review</i> , 2019, 6, 955-961.	4.6	75
22	Synergistic effect of hydrothermal co-carbonization of sewage sludge with fruit and agricultural wastes on hydrochar fuel quality and combustion behavior. <i>Waste Management</i> , 2019, 100, 171-181.	3.7	107
23	Phase interactions in Ni-Cu-Al <sub>2</sub> O <sub>3</sub> mixed oxide oxygen carriers for chemical looping applications. <i>Applied Energy</i> , 2019, 236, 635-647.	5.1	33
24	High-Performance Ni-Fe Redox Catalysts for Selective CH <sub>4</sub> to Syngas Conversion via Chemical Looping. <i>ACS Catalysis</i> , 2018, 8, 1748-1756.	5.5	72
25	Mesoporous MgO promoted with NaNO <sub>3</sub> /NaNO <sub>2</sub> for rapid and high-capacity CO <sub>2</sub> capture at moderate temperatures. <i>Chemical Engineering Journal</i> , 2018, 332, 216-226.	6.6	88
26	Oxygen Vacancy Promoting Dimethyl Carbonate Synthesis from CO <sub>2</sub> and Methanol over Zr-Doped CeO <sub>2</sub> Nanorods. <i>ACS Catalysis</i> , 2018, 8, 10446-10456.	5.5	370
27	Synthetic Architecture of MgO/C Nanocomposite from Hierarchical-Structured Coordination Polymer toward Enhanced CO <sub>2</sub> Capture. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 9592-9602.	4.0	57
28	Phase interactions in Mg-Ni-Al-O oxygen carriers for chemical looping applications. <i>Chemical Engineering Journal</i> , 2017, 326, 470-476.	6.6	31
29	Synthesis, Application, and Carbonation Behavior of Ca <sub>2</sub> Fe <sub>2</sub> O <sub>5</sub> for Chemical Looping H <sub>2</sub> Production. <i>Energy &amp; Fuels</i> , 2016, 30, 6220-6232.	2.5	55
30	Ultrafine Alloy Nanoparticles Converted from 2D Intercalated Coordination Polymers for Catalytic Application. <i>Advanced Functional Materials</i> , 2016, 26, 5658-5668.	7.8	41
31	In situ studies of materials for high temperature CO <sub>2</sub> capture and storage. <i>Faraday Discussions</i> , 2016, 192, 217-240.	1.6	12
32	Improving hydrogen yields, and hydrogen:steam ratio in the chemical looping production of hydrogen using Ca <sub>2</sub> Fe <sub>2</sub> O <sub>5</sub> . <i>Chemical Engineering Journal</i> , 2016, 296, 406-411.	6.6	61
33	Large scale computational screening and experimental discovery of novel materials for high temperature CO <sub>2</sub> capture. <i>Energy and Environmental Science</i> , 2016, 9, 1346-1360.	15.6	61
34	Structural evolution in synthetic, Ca-based sorbents for carbon capture. <i>Chemical Engineering Science</i> , 2016, 139, 15-26.	1.9	24
35	Development and performance of iron based oxygen carriers containing calcium ferrites for chemical looping combustion and production of hydrogen. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 4073-4084.	3.8	60
36	Inhibiting the interaction between FeO and Al <sub>2</sub> O <sub>3</sub> during chemical looping production of hydrogen. <i>RSC Advances</i> , 2015, 5, 1759-1771.	1.7	72

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37	The performance of Fe <sub>2</sub> O <sub>3</sub> -CaO Oxygen Carriers and the Interaction of Iron Oxides with CaO during Chemical Looping Combustion and H <sub>2</sub> production. Energy Procedia, 2014, 63, 87-97.	1.8	44
38	Kinetics of the reduction of w <sup>1/4</sup> stite by hydrogen and carbon monoxide for the chemical looping production of hydrogen. Chemical Engineering Science, 2014, 120, 149-166.	1.9	63
39	A high performance oxygen storage material for chemical looping processes with CO <sub>2</sub> capture. Energy and Environmental Science, 2013, 6, 288-298.	15.6	112
40	Reversible CO <sub>2</sub> Absorption by the 6H Perovskite Ba <sub>4</sub> Sb <sub>2</sub> O <sub>9</sub> . Chemistry of Materials, 2013, 25, 4881-4891.	3.2	17
41	The Effect of Addition of ZrO <sub>2</sub> to Fe <sub>2</sub> O <sub>3</sub> for Hydrogen Production by Chemical Looping. Industrial & Engineering Chemistry Research, 2012, 51, 16597-16609.	1.8	70
42	An investigation of the kinetics of CO <sub>2</sub> uptake by a synthetic calcium based sorbent. Chemical Engineering Science, 2012, 69, 644-658.	1.9	81