Yingchao Hu

List of Publications by Year
in descending order

57 papers	2,699 citations	126907 33 h-index	182427 51 g-index
57 all docs	57 docs citations	57 times ranked	1178 citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced performance of extrudedâ€“spheronized carbide slag pellets for high temperature CO 2 capture. Chemical Engineering Journal, 2016, 285, 293-303.	12.7	169
2	CO2 capture by Li4SiO4 sorbents and their applications: Current developments and new trends. Chemical Engineering Journal, 2019, 359, 604-625.	12.7	142
3	Progress in MgO sorbents for cyclic CO₂capture: a comprehensive review. Journal of Materials Chemistry A, 2019, 7, 20103-20120.	10.3	132
4	Screening of inert solid supports for CaO-based sorbents for high temperature CO2 capture. Fuel, 2016, 181, 199-206.	6.4	127
5	One-step synthesis of porous Li4SiO4-based adsorbent pellets via graphite moulding method for cyclic CO2 capture. Chemical Engineering Journal, 2018, 353, 92-99.	12.7	120
6	Structurally improved CaO-based sorbent by organic acids for high temperature CO2 capture. Fuel, 2016, 167, 17-24.	6.4	114
7	A review on nitrogen transformation in hydrochar during hydrothermal carbonization of biomass containing nitrogen. Science of the Total Environment, 2021, 756, 143679.	8.0	108
8	In Situ Decoration of Selenide on Copper Foam for the Efficient Immobilization of Gaseous Elemental Mercury. Environmental Science & Technology, 2020, 54, 2022-2030.	10.0	96
9	Incorporation of CaO into novel Nd2O3 inert solid support for high temperature CO2 capture. Chemical Engineering Journal, 2015, 273, 333-343.	12.7	92
10	Incorporation of CaO into inert supports for enhanced CO2 capture: A review. Chemical Engineering Journal, 2020, 396, 125253.	12.7	92
11	An efficient sorbent based on CuCl2 loaded CeO2-ZrO2 for elemental mercury removal from chlorine-free flue gas. Fuel, 2018, 216, 356-363.	6.4	72
12	Alkaliâ€Doped Lithium Orthosilicate Sorbents for Carbon Dioxide Capture. ChemSusChem, 2016, 9, 2480-2487.	6.8	71
13	Structurally Improved, Core-in-Shell, CaO-Based Sorbent Pellets for CO₂ Capture. Energy & Fuels, 2015, 29, 6636-6644.	5.1	65
14	One-step synthesis of spherical CaO pellets via novel graphite-casting method for cyclic CO2 capture. Chemical Engineering Journal, 2019, 374, 619-625.	12.7	65
15	Manganese doped CeO 2 -ZrO 2 catalyst for elemental mercury oxidation at low temperature. Fuel Processing Technology, 2016, 152, 285-293.	7.2	62
16	Preparation of Novel Li₄SiO₄ Sorbents with Superior Performance at Low CO₂ Concentration. ChemSusChem, 2016, 9, 1607-1613.	6.8	55
17	Porous extruded-spheronized Li4SiO4 pellets for cyclic CO2 capture. Fuel, 2019, 236, 1043-1049.	6.4	54
18	Synthesis of highly efficient, structurally improved Li4SiO4 sorbents for high-temperature CO2 capture. Ceramics International, 2018, 44, 16668-16677.	4.8	52

#	Article	IF	Citations
19	Density Functional Theory Study of Mercury Adsorption on CuS Surface: Effect of Typical Flue Gas Components. Energy & Fuels, 2019, 33, 1540-1546.	5.1	51
20	One-step synthesis of highly efficient CaO-based CO2 sorbent pellets via gel-casting technique. Fuel Processing Technology, 2017, 160, 70-77.	7.2	50
21	Pelletization of MgO-based sorbents for intermediate temperature CO 2 capture. Fuel, 2017, 187, 328-337.	6.4	50
22	Stabilized CO2 capture performance of extrudedâ€“spheronized CaO-based pellets by microalgae templating. Proceedings of the Combustion Institute, 2017, 36, 3977-3984.	3.9	47
23	Preparation of spherical Li4SiO4 pellets by novel agar method for high-temperature CO2 capture. Chemical Engineering Journal, 2020, 380, 122538.	12.7	47
24	Development of selenized magnetite (Fe3O4â^'xSey) as an efficient and recyclable trap for elemental mercury sequestration from coal combustion flue gas. Chemical Engineering Journal, 2020, 394, 125022.	12.7	47
25	Investigation on synergistic oxidation behavior of NO and Hg0 during the newly designed fast SCR process. Fuel, 2018, 225, 134-139.	6.4	46
26	A novel low temperature catalyst regenerated from deactivated SCR catalyst for Hg0 oxidation. Chemical Engineering Journal, 2016, 304, 121-128.	12.7	45
27	Role of SO2 and H2O in the mercury adsorption on ceria surface: A DFT study. Fuel, 2020, 260, 116289.	6.4	45
28	CO₂ Sorption Enhancement of Extruded-Spheronized CaO-Based Pellets by Sacrificial Biomass Templating Technique. Energy & Fuels, 2016, 30, 9605-9612.	5.1	43
29	A novel Ti-based sorbent for reducing ultrafine particulate matter formation during coal combustion. Fuel, 2017, 193, 72-80.	6.4	42
30	Mechanical Modification of Naturally Occurring Limestone for High-Temperature CO₂ Capture. Energy & Fuels, 2016, 30, 6597-6605.	5.1	38
31	Investigation of novel naturally occurring manganocalcite for CO2 capture under oxy-fuel calcination. Chemical Engineering Journal, 2016, 296, 412-419.	12.7	34
32	Novel low cost Li4SiO4-based sorbent with naturally occurring wollastonite as Si-source for cyclic CO2 capture. Chemical Engineering Journal, 2019, 374, 328-337.	12.7	34
33	High Temperature CO₂ Capture on Novel Yb₂O₃-Supported CaO-Based Sorbents. Energy & Fuels, 2016, 30, 6606-6613.	5.1	33
34	Preparation of Li₄SiO₄ Sorbents for Carbon Dioxide Capture via a Spray-Drying Technique. Energy & Fuels, 2018, 32, 4521-4527.	5.1	33
35	High-temperature CO2 capture by Li4SiO4 adsorbents: Effects of pyroligneous acid (PA) modification and existence of CO2 at desorption stage. Fuel Processing Technology, 2020, 197, 106186.	7.2	26
36	Routine Investigation of CO₂ Sorption Enhancement for Extrudedâ€“Spheronized CaO-Based Pellets. Energy & Fuels, 2017, 31, 9660-9667.	5.1	22

#	Article	IF	Citations
37	NaBr-Enhanced CaO-Based Sorbents with a Macropore-Stabilized Microstructure for CO₂ Capture. Energy & Fuels, 2018, 32, 8571-8578.	5.1	22
38	Eutectic doped Li₄SiO₄ adsorbents using the optimal dopants for highly efficient CO₂ removal. Journal of Materials Chemistry A, 2021, 9, 14309-14318.	10.3	22
39	A semi-industrial preparation procedure of CaO-based pellets with high CO2 uptake performance. Fuel Processing Technology, 2019, 193, 149-158.	7.2	21
40	High-temperature CO2 adsorption by one-step fabricated Nd-doped Li4SiO4 pellets. Chemical Engineering Journal, 2021, 410, 128346.	12.7	21
41	Single step fabrication of spherical CaO pellets via novel agar-assisted moulding technique for high-temperature CO2 capture. Chemical Engineering Journal, 2021, 404, 127137.	12.7	18
42	Density Functional Theory Studies of the Adsorption and Interactions between Selenium Species and Mercury on Activated Carbon. Energy & Fuels, 2020, 34, 9779-9786.	5.1	16
43	Thermochemical Energy Storage of Concentrated Solar Power by Novel Y₂O₃-Doped CaO Pellets. Energy & Fuels, 2021, 35, 12610-12618.	5.1	16
44	Structurally improved Li4SiO4 sorbents derived from lithium salicylate precursor for enhanced CO2 capture. Fuel Processing Technology, 2021, 224, 107027.	7.2	14
45	Lithium-based ceramics in nonsilicates for CO₂capture: current status and new trends. Journal of Materials Chemistry A, 2022, 10, 1706-1725.	10.3	14
46	Incorporation of CaO in inert solid matrix by spray drying sol mixture of precursors. RSC Advances, 2016, 6, 57658-57666.	3.6	13
47	Porous spherical calcium aluminate-supported CaO-based pellets manufactured via biomass-templated extrusionâ€“spheronization technique for cyclic CO2 capture. Environmental Science and Pollution Research, 2019, 26, 21972-21982.	5.3	13
48	Mechanochemically activated Li4SiO4-based adsorbent with enhanced CO2 capture performance and its modification mechanisms. Fuel, 2020, 273, 117749.	6.4	13
49	Acidification Optimization and Granulation of a Steelâ€Slagâ€Derived Sorbent for CO₂ Capture. Chemical Engineering and Technology, 2018, 41, 2077-2086.	1.5	12
50	Optimizing Synergy between Phosphogypsum Disposal and Cement Plant CO₂Capture by the Calcium Looping Process. Energy & Fuels, 0, , .	5.1	10
51	A review on granulation of CaO-based sorbent for carbon dioxide capture. Chemical Engineering Journal, 2022, 446, 136880.	12.7	10
52	Enhancement of CO₂ Absorption in Li₄SiO₄ by Acidification and Eutectic Doping. Energy & Fuels, 2018, 32, 12758-12765.	5.1	9
53	Novel synthesis of tailored Li4SiO4-based microspheres for ultrafast CO2 adsorption. Fuel Processing Technology, 2021, 213, 106675.	7.2	9
54	Scalable synthesis of Li4SiO4 sorbent from novel low-cost orthoclase mineral for CO2 capture. Fuel, 2022, 324, 124492.	6.4	8

#	Article	IF	Citations
55	Li4SiO4 pellets templated by rice husk for cyclic CO2 capture: Insight into the modification mechanism. Ceramics International, 2021, 47, 32060-32067.	4.8	7
56	Reactivation of CaO-based sorbents via multi-acidification under N2 or oxy-fuel (with and without) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	6.4	6
57	Efficient reduction of CO 2 to CO by Ag 3 PO 4 /TiO 2 photocatalyst under ultraviolet and visible light irradiation. Asia-Pacific Journal of Chemical Engineering, 2020, 15, e2499.	1.5	4