

Hailong Li

List of Publications by Year in descending order

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114
papers

8,176
citations

28274

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48315

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114
all docs

114
docs citations

114
times ranked

3912
citing authors

#	ARTICLE	IF	CITATIONS
1	An overview on engineering the surface area and porosity of biochar. <i>Science of the Total Environment</i> , 2021, 763, 144204.	8.0	434
2	CeO ₂ –TiO ₂ Catalysts for Catalytic Oxidation of Elemental Mercury in Low-Rank Coal Combustion Flue Gas. <i>Environmental Science & Technology</i> , 2011, 45, 7394-7400.	10.0	341
3	Superior activity of MnOx-CeO ₂ /TiO ₂ catalyst for catalytic oxidation of elemental mercury at low flue gas temperatures. <i>Applied Catalysis B: Environmental</i> , 2012, 111-112, 381-388.	20.2	275
4	Development of Nano-Sulfide Sorbent for Efficient Removal of Elemental Mercury from Coal Combustion Fuel Gas. <i>Environmental Science & Technology</i> , 2016, 50, 9551-9557.	10.0	239
5	Mechanisms of peroxymonosulfate pretreatment enhancing production of short-chain fatty acids from waste activated sludge. <i>Water Research</i> , 2019, 148, 239-249.	11.3	188
6	Oxidation and capture of elemental mercury over SiO ₂ –TiO ₂ –V ₂ O ₅ catalysts in simulated low-rank coal combustion flue gas. <i>Chemical Engineering Journal</i> , 2011, 169, 186-193.	12.7	185
7	The underlying mechanism of calcium peroxide pretreatment enhancing methane production from anaerobic digestion of waste activated sludge. <i>Water Research</i> , 2019, 164, 114934.	11.3	184
8	Role of flue gas components in mercury oxidation over TiO ₂ supported MnOx-CeO ₂ mixed-oxide at low temperature. <i>Journal of Hazardous Materials</i> , 2012, 243, 117-123.	12.4	174
9	Nitrogen in bio-oil produced from hydrothermal liquefaction of biomass: A review. <i>Chemical Engineering Journal</i> , 2020, 401, 126030.	12.7	165
10	Unveiling the mechanisms of how cationic polyacrylamide affects short-chain fatty acids accumulation during long-term anaerobic fermentation of waste activated sludge. <i>Water Research</i> , 2019, 155, 142-151.	11.3	159
11	Understanding and mitigating the toxicity of cadmium to the anaerobic fermentation of waste activated sludge. <i>Water Research</i> , 2017, 124, 269-279.	11.3	157
12	SCR Atmosphere Induced Reduction of Oxidized Mercury over CuO–CeO ₂ /TiO ₂ Catalyst. <i>Environmental Science & Technology</i> , 2015, 49, 7373-7379.	10.0	153
13	Triclocarban enhances short-chain fatty acids production from anaerobic fermentation of waste activated sludge. <i>Water Research</i> , 2017, 127, 150-161.	11.3	150
14	Fe(II) catalyzing sodium percarbonate facilitates the dewaterability of waste activated sludge: Performance, mechanism, and implication. <i>Water Research</i> , 2020, 174, 115626.	11.3	150
15	CO ₂ capture by Li ₄ SiO ₄ sorbents and their applications: Current developments and new trends. <i>Chemical Engineering Journal</i> , 2019, 359, 604-625.	12.7	142
16	Magnetic iron–manganese binary oxide supported on carbon nanofiber (Fe ₃ xMnxO ₄ /CNF) for efficient removal of Hg ⁰ from coal combustion flue gas. <i>Chemical Engineering Journal</i> , 2018, 334, 216-224.	12.7	135
17	Selenium Functionalized Metal–Organic Framework MIL-101 for Efficient and Permanent Sequestration of Mercury. <i>Environmental Science & Technology</i> , 2019, 53, 2260-2268.	10.0	133
18	Progress in MgO sorbents for cyclic CO ₂ capture: a comprehensive review. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20103-20120.	10.3	132

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19	A review on pyrolysis of protein-rich biomass: Nitrogen transformation. <i>Bioresource Technology</i> , 2020, 315, 123801.	9.6	131
20	Multiform Sulfur Adsorption Centers and Copper-Terminated Active Sites of Nano-CuS for Efficient Elemental Mercury Capture from Coal Combustion Flue Gas. <i>Langmuir</i> , 2018, 34, 8739-8749.	3.5	128
21	Sulfur abundant S/FeS ₂ for efficient removal of mercury from coal-fired power plants. <i>Fuel</i> , 2018, 232, 476-484.	6.4	126
22	Impact of SO ₂ on elemental mercury oxidation over CeO ₂ @TiO ₂ catalyst. <i>Chemical Engineering Journal</i> , 2013, 219, 319-326.	12.7	125
23	How does zero valent iron activating peroxydisulfate improve the dewatering of anaerobically digested sludge?. <i>Water Research</i> , 2019, 163, 114912.	11.3	124
24	Effects of thermal pretreatment on the biomethane yield and hydrolysis rate of kitchen waste. <i>Applied Energy</i> , 2016, 172, 47-58.	10.1	121
25	Simultaneous removal of SO ₂ , NO and mercury using TiO ₂ -aluminum silicate fiber by photocatalysis. <i>Chemical Engineering Journal</i> , 2012, 192, 21-28.	12.7	113
26	A review on nitrogen transformation in hydrochar during hydrothermal carbonization of biomass containing nitrogen. <i>Science of the Total Environment</i> , 2021, 756, 143679.	8.0	108
27	Fabrication of Heterostructured g-C ₃ N ₄ /Ag-TiO ₂ Hybrid Photocatalyst with Enhanced Performance in Photocatalytic Conversion of CO ₂ Under Simulated Sunlight Irradiation. <i>Applied Surface Science</i> , 2017, 402, 198-207.	6.1	104
28	Magnetic Rattle-Type Fe ₃ O ₄ @CuS Nanoparticles as Recyclable Sorbents for Mercury Capture from Coal Combustion Flue Gas. <i>ACS Applied Nano Materials</i> , 2018, 1, 4726-4736.	5.0	100
29	In Situ Decoration of Selenide on Copper Foam for the Efficient Immobilization of Gaseous Elemental Mercury. <i>Environmental Science & Technology</i> , 2020, 54, 2022-2030.	10.0	96
30	CuO@CeO ₂ /TiO ₂ catalyst for simultaneous NO reduction and Hg ⁰ oxidation at low temperatures. <i>Catalysis Science and Technology</i> , 2015, 5, 5129-5138.	4.1	95
31	Incorporation of CaO into inert supports for enhanced CO ₂ capture: A review. <i>Chemical Engineering Journal</i> , 2020, 396, 125253.	12.7	92
32	Enhanced short-chain fatty acids production from waste activated sludge by sophorolipid: Performance, mechanism, and implication. <i>Bioresource Technology</i> , 2019, 284, 456-465.	9.6	91
33	Machine learning prediction and optimization of bio-oil production from hydrothermal liquefaction of algae. <i>Bioresource Technology</i> , 2021, 342, 126011.	9.6	82
34	Synergy of CuO and CeO ₂ combination for mercury oxidation under low-temperature selective catalytic reduction atmosphere. <i>International Journal of Coal Geology</i> , 2017, 170, 69-76.	5.0	77
35	Kinetics of mercury oxidation in the presence of hydrochloric acid and oxygen over a commercial SCR catalyst. <i>Chemical Engineering Journal</i> , 2013, 220, 53-60.	12.7	76
36	Effect of Nitrogen Oxides on Elemental Mercury Removal by Nanosized Mineral Sulfide. <i>Environmental Science & Technology</i> , 2017, 51, 8530-8536.	10.0	75

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37	Nanosized Copper Selenide Functionalized Zeolitic Imidazolate Framework (CuSe/ZIF-8) for Efficient Immobilization of Gas-Phase Elemental Mercury. <i>Advanced Functional Materials</i> , 2019, 29, 1807191.	14.9	74
38	Promotional effect of CuO loading on the catalytic activity and SO ₂ resistance of MnOx/TiO ₂ catalyst for simultaneous NO reduction and HgO oxidation. <i>Fuel</i> , 2018, 227, 79-88.	6.4	73
39	Enhanced Short-Chain Fatty Acids from Waste Activated Sludge by Heat-CaO ₂ Advanced Thermal Hydrolysis Pretreatment: Parameter Optimization, Mechanisms, and Implications. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 3544-3555.	6.7	71
40	Removal of elemental mercury from flue gas by recyclable CuCl ₂ modified magnetospheres from fly ash. Part 4. Performance of sorbent injection in an entrained flow reactor system. <i>Fuel</i> , 2018, 220, 403-411.	6.4	70
41	Activation of Persulfates Using Siderite as a Source of Ferrous Ions: Sulfate Radical Production, Stoichiometric Efficiency, and Implications. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 3624-3631.	6.7	67
42	One-step synthesis of spherical CaO pellets via novel graphite-casting method for cyclic CO ₂ capture. <i>Chemical Engineering Journal</i> , 2019, 374, 619-625.	12.7	65
43	Heat pretreatment assists free ammonia to enhance hydrogen production from waste activated sludge. <i>Bioresource Technology</i> , 2019, 283, 316-325.	9.6	65
44	Copper slag as a catalyst for mercury oxidation in coal combustion flue gas. <i>Waste Management</i> , 2018, 74, 253-259.	7.4	64
45	Mechanisms of potassium permanganate pretreatment improving anaerobic fermentation performance of waste activated sludge. <i>Chemical Engineering Journal</i> , 2021, 406, 126797.	12.7	64
46	Removal of Gas-Phase Elemental Mercury in Flue Gas by Inorganic Chemically Promoted Natural Mineral Sorbents. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 3039-3047.	3.7	63
47	Bioenergy recovery from wastewater produced by hydrothermal processing biomass: Progress, challenges, and opportunities. <i>Science of the Total Environment</i> , 2020, 748, 142383.	8.0	63
48	Surface-Engineered Sponge Decorated with Copper Selenide for Highly Efficient Gas-Phase Mercury Immobilization. <i>Environmental Science & Technology</i> , 2020, 54, 16195-16203.	10.0	63
49	Electrospun metal oxide-TiO ₂ nanofibers for elemental mercury removal from flue gas. <i>Journal of Hazardous Materials</i> , 2012, 227-228, 427-435.	12.4	62
50	Elemental mercury oxidation over manganese oxide octahedral molecular sieve catalyst at low flue gas temperature. <i>Chemical Engineering Journal</i> , 2019, 356, 142-150.	12.7	62
51	Binding of Mercury Species and Typical Flue Gas Components on ZnS(110). <i>Energy & Fuels</i> , 2017, 31, 5355-5362.	5.1	60
52	Mercury Removal from Flue Gas by Noncarbon Sorbents. <i>Energy & Fuels</i> , 2021, 35, 3581-3610.	5.1	60
53	Role of Sulfur Trioxide (SO ₃) in Gas-Phase Elemental Mercury Immobilization by Mineral Sulfide. <i>Environmental Science & Technology</i> , 2019, 53, 3250-3257.	10.0	58
54	Cobalt doped ceria for abundant storage of surface active oxygen and efficient elemental mercury oxidation in coal combustion flue gas. <i>Applied Catalysis B: Environmental</i> , 2018, 239, 233-244.	20.2	57

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55	Amorphous Molybdenum Selenide Nanosheet as an Efficient Trap for the Permanent Sequestration of Vapor-Phase Elemental Mercury. <i>Advanced Science</i> , 2019, 6, 1901410.	11.2	57
56	Role of flue gas components in HgO oxidation over La _{0.8} Ce _{0.2} MnO ₃ perovskite catalyst in coal combustion flue gas. <i>Chemical Engineering Journal</i> , 2019, 360, 1656-1666.	12.7	56
57	Porous extruded-spheronized Li ₄ SiO ₄ pellets for cyclic CO ₂ capture. <i>Fuel</i> , 2019, 236, 1043-1049.	6.4	54
58	Selenide functionalized natural mineral sulfides as efficient sorbents for elemental mercury capture from coal combustion flue gas. <i>Chemical Engineering Journal</i> , 2020, 398, 125611.	12.7	53
59	An overview of sulfur-functional groups in biochar from pyrolysis of biomass. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107185.	6.7	53
60	Dual Roles of Nano-Sulfide in Efficient Removal of Elemental Mercury from Coal Combustion Flue Gas within a Wide Temperature Range. <i>Environmental Science & Technology</i> , 2018, 52, 12926-12933.	10.0	52
61	Density Functional Theory Study of Mercury Adsorption on CuS Surface: Effect of Typical Flue Gas Components. <i>Energy & Fuels</i> , 2019, 33, 1540-1546.	5.1	51
62	Advances in flue gas mercury abatement by mineral chalcogenides. <i>Chemical Engineering Journal</i> , 2021, 411, 128608.	12.7	51
63	Valorization of the aqueous phase produced from wet and dry thermochemical processing biomass: A review. <i>Journal of Cleaner Production</i> , 2021, 294, 126238.	9.3	48
64	Coexistence of enhanced HgO oxidation and induced Hg ²⁺ reduction on CuO/TiO ₂ catalyst in the presence of NO and NH ₃ . <i>Chemical Engineering Journal</i> , 2017, 330, 1248-1254.	12.7	47
65	Preparation of spherical Li ₄ SiO ₄ pellets by novel agar method for high-temperature CO ₂ capture. <i>Chemical Engineering Journal</i> , 2020, 380, 122538.	12.7	47
66	Development of selenized magnetite (Fe ₃ O ₄ ·xSe _y) as an efficient and recyclable trap for elemental mercury sequestration from coal combustion flue gas. <i>Chemical Engineering Journal</i> , 2020, 394, 125022.	12.7	47
67	Charge distribution modulation and morphology controlling of copper selenide for an enhanced elemental mercury adsorption activity in flue gas. <i>Chemical Engineering Journal</i> , 2022, 442, 136145.	12.7	47
68	Enhanced activity of AgMgOTiO ₂ catalyst for photocatalytic conversion of CO ₂ and H ₂ O into CH ₄ . <i>International Journal of Hydrogen Energy</i> , 2016, 41, 8479-8488.	7.1	45
69	Role of SO ₂ and H ₂ O in the mercury adsorption on ceria surface: A DFT study. <i>Fuel</i> , 2020, 260, 116289.	6.4	45
70	Removal of flue gas mercury by porous carbons derived from one-pot carbonization and activation of wood sawdust in a molten salt medium. <i>Journal of Hazardous Materials</i> , 2022, 424, 127336.	12.4	44
71	NH ₃ inhibits mercury oxidation over low-temperature MnO _x /TiO ₂ SCR catalyst. <i>Fuel Processing Technology</i> , 2018, 176, 124-130.	7.2	39
72	Machine learning aided bio-oil production with high energy recovery and low nitrogen content from hydrothermal liquefaction of biomass with experiment verification. <i>Chemical Engineering Journal</i> , 2021, 425, 130649.	12.7	38

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73	Simultaneous NO Reduction and Hg ⁰ Oxidation over La _{0.8} Ce _{0.2} MnO ₃ Perovskite Catalysts at Low Temperature. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 9374-9385.	3.7	37
74	Recyclable chalcopyrite sorbent for mercury removal from coal combustion flue gas. <i>Fuel</i> , 2021, 290, 120049.	6.4	36
75	Coordinatively Unsaturated Selenides over CuFeSe ₂ toward Highly Efficient Mercury Immobilization. <i>Environmental Science & Technology</i> , 2022, 56, 575-584.	10.0	36
76	Cold Flow Properties of Biodiesel and the Improvement Methods: A Review. <i>Energy & Fuels</i> , 2020, 34, 10364-10383.	5.1	35
77	Facile preparation of nanosized copper sulfide functionalized macroporous skeleton for efficient vapor-phase mercury sequestration. <i>Chemical Engineering Journal</i> , 2021, 419, 129561.	12.7	33
78	Stability of mercury on a novel mineral sulfide sorbent used for efficient mercury removal from coal combustion flue gas. <i>Environmental Science and Pollution Research</i> , 2018, 25, 28583-28593.	5.3	32
79	Amorphous molybdenum selenide intercalated magnetite as a recyclable trap for the effective sequestration of elemental mercury. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14955-14965.	10.3	30
80	Machine learning predicting wastewater properties of the aqueous phase derived from hydrothermal treatment of biomass. <i>Bioresource Technology</i> , 2022, 358, 127348.	9.6	29
81	Nanosized Copper Selenide for Mercury Removal from Indoor Air and Emergency Disposal of Liquid Mercury Leakage. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 21881-21889.	3.7	28
82	Effect of sulfite on divalent mercury reduction and re-emission in a simulated desulfurization aqueous solution. <i>Fuel Processing Technology</i> , 2017, 165, 138-144.	7.2	27
83	Toward an Understanding of Fundamentals Governing the Elemental Mercury Sequestration by Metal Chalcogenides. <i>Environmental Science & Technology</i> , 2020, 54, 9672-9680.	10.0	27
84	The adsorption mechanisms of Hg ⁰ on marcasite-type metal selenides: The influences of metal-terminated site. <i>Chemical Engineering Journal</i> , 2021, 406, 126723.	12.7	27
85	Synergistic effect of HCl and NO in elemental mercury catalytic oxidation over La ₂ O ₃ -TiO ₂ catalyst. <i>Fuel</i> , 2018, 215, 232-238.	6.4	26
86	High-temperature CO ₂ capture by Li ₄ SiO ₄ adsorbents: Effects of pyroligneous acid (PA) modification and existence of CO ₂ at desorption stage. <i>Fuel Processing Technology</i> , 2020, 197, 106186.	7.2	26
87	Performance and Mechanism of Potassium Ferrate(VI) Enhancing Dark Fermentative Hydrogen Accumulation from Waste Activated Sludge. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 8681-8691.	6.7	25
88	Theoretical prediction the removal of mercury from flue gas by MOFs. <i>Fuel</i> , 2016, 184, 474-480.	6.4	24
89	Elemental Mercury Removal from Flue Gas over TiO ₂ Catalyst in an Internal-Illuminated Honeycomb Photoreactor. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 17348-17355.	3.7	23
90	Adsorption and Oxidation of Elemental Mercury on Chlorinated ZnS Surface. <i>Energy & Fuels</i> , 2018, 32, 7745-7751.	5.1	22

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91	Density Functional Theory Study of Elemental Mercury Immobilization on CuSe(001) Surface: Reaction Pathway and Effect of Typical Flue Gas Components. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 13603-13612.	3.7	20
92	Reduction of polycyclic aromatic hydrocarbons (PAHs) emission from household coal combustion using ferroferric oxide as a coal burning additive. <i>Chemosphere</i> , 2020, 252, 126489.	8.2	18
93	Single step fabrication of spherical CaO pellets via novel agar-assisted moulding technique for high-temperature CO ₂ capture. <i>Chemical Engineering Journal</i> , 2021, 404, 127137.	12.7	18
94	The influences of selenium species on mercury removal over pyrite surface: A density functional theory study. <i>Fuel</i> , 2021, 292, 120284.	6.4	17
95	Favorably adjusting the pore characteristics of copper sulfide by template regulation for vapor-phase elemental mercury immobilization. <i>Journal of Materials Chemistry A</i> , 2022, 10, 10729-10737.	10.3	17
96	Density Functional Theory Studies of the Adsorption and Interactions between Selenium Species and Mercury on Activated Carbon. <i>Energy & Fuels</i> , 2020, 34, 9779-9786.	5.1	16
97	Thermochemical Energy Storage of Concentrated Solar Power by Novel Y ₂ O ₃ -Doped CaO Pellets. <i>Energy & Fuels</i> , 2021, 35, 12610-12618.	5.1	16
98	Theoretical Study on Hg ⁰ Adsorption and Oxidation Mechanisms over CuCl ₂ -Impregnated Carbonaceous Material Surface. <i>Energy & Fuels</i> , 2018, 32, 7125-7131.	5.1	13
99	Synthesis of Activated Carbon from Citric Acid Residue by Phosphoric Acid Activation for the Removal of Chemical Oxygen Demand from Sugar-Containing Wastewater. <i>Environmental Engineering Science</i> , 2019, 36, 656-666.	1.6	13
100	Porous spherical calcium aluminate-supported CaO-based pellets manufactured via biomass-templated extrusion-spheronization technique for cyclic CO ₂ capture. <i>Environmental Science and Pollution Research</i> , 2019, 26, 21972-21982.	5.3	13
101	Advances in magnetically recyclable remediators for elemental mercury degradation in coal combustion flue gas. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18624-18650.	10.3	10
102	Reduction of oxidized mercury over NO _x selective catalytic reduction catalysts: A review. <i>Chemical Engineering Journal</i> , 2021, 421, 127745.	12.7	10
103	Binary mineral sulfides sorbent with wide temperature range for rapid elemental mercury uptake from coal combustion flue gas. <i>Environmental Technology (United Kingdom)</i> , 2021, 42, 160-169.	2.2	10
104	The impact of the particle size of meat and bone meal (MBM) incineration ash on phosphate precipitation and phosphorus recovery. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105247.	6.7	9
105	Light irradiation inhibits mercury adsorption by mineral sulfide sorbent. <i>Fuel</i> , 2021, 288, 119663.	6.4	8
106	Numerical simulation of sorbent injection for mercury removal within an electrostatic precipitator: In-flight plus wall-bounded mechanism. <i>Fuel</i> , 2022, 309, 122142.	6.4	8
107	Mechanisms of Gas-Phase Mercury Immobilized by Metal Sulfides from Combustion Flue Gas: A Mini Review. <i>Energy & Fuels</i> , 2022, 36, 6027-6037.	5.1	8
108	Li ₄ SiO ₄ pellets templated by rice husk for cyclic CO ₂ capture: Insight into the modification mechanism. <i>Ceramics International</i> , 2021, 47, 32060-32067.	4.8	7

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109	HgCl ₂ Reduction under a Low-Temperature Selective Catalytic Reduction Atmosphere. <i>Energy & Fuels</i> , 2020, 34, 2417-2424.	5.1	6
110	A Molten-Salt Pyrolysis Synthesis Strategy toward Sulfur-Functionalized Carbon for Elemental Mercury Removal from Coal-Combustion Flue Gas. <i>Energies</i> , 2022, 15, 1840.	3.1	6
111	Facile pathway towards crystallinity adjustment and performance enhancement of copper selenide for vapor-phase elemental mercury sequestration. <i>Chemical Engineering Journal</i> , 2022, 430, 132811.	12.7	5
112	Efficient reduction of CO ₂ to CO by Ag ₃ PO ₄ /TiO ₂ photocatalyst under ultraviolet and visible light irradiation. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2020, 15, e2499.	1.5	4
113	Comprehensive investigation into in-situ chemical oxidation of ferrous iron/sodium percarbonate (Fe(II)/SPC) processing dredged sediments for positive feedback of solid-liquid separation. <i>Chemical Engineering Journal</i> , 2021, 425, 130467.	12.7	4
114	Trace element partition in coal fires. , 2019, , 105-142.		2