Guang-Qian Luo

List of Publications by Year
in descending order

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105 papers	3,188 citations	159585 30 h-index	175258 52 g-index
106 all docs	106 docs citations	106 times ranked	2306 citing authors

#	Article	IF	Citations
1	Gas-pressurized torrefaction of biomass wastes: Self-promoted deoxygenation of rice straw at low temperature. Fuel, 2022, 308, 122029.	6.4	10
2	Theoretical research on mercury-laden halogenated activated carbon adsorbent bonding nature. Chemical Engineering Journal, 2022, 428, 131076.	12.7	8
3	Yield prediction of â€œThermal-dissolution based carbon enrichmentâ€•treatment on biomass wastes through coupled model of artificial neural network and AdaBoost. Bioresource Technology, 2022, 343, 126083.	9.6	16
4	Characterization of in-situ and cooling char from ten typical Chinese coals. Combustion and Flame, 2022, 238, 111884.	5.2	3
5	Facile synthesis of phosphorus-doped porous biochars for efficient removal of elemental mercury from coal combustion flue gas. Chemical Engineering Journal, 2022, 432, 134440.	12.7	21
6	Insight into mercury-laden activated carbon adsorbent product bonding nature by DFT calculations. Chemical Engineering Journal, 2022, 433, 134461.	12.7	7
7	Boosted Thermal Storage Performance of LiOHÂ·H2O by Carbon Nanotubes Isolated Multilayered Graphene Oxide Frames. Advances in Materials Science and Engineering, 2022, 2022, 1-11.	1.8	1
8	Simultaneous catalytic oxidation of nitric oxide and elemental mercury over Cu-Fe binary oxide treated by oxygen non-thermal plasma. Fuel, 2022, 320, 123895.	6.4	4
9	Removal of elemental mercury from coal combustion flue gas using bentonite modified with Ce-Fe binary oxides. Applied Surface Science, 2022, 590, 153090.	6.1	11
10	Study on the elemental mercury removal performance of co-pyrolyzed Cl-loading activated carbon and the formation mechanism of C-Cl functional groups. Fuel, 2022, 322, 124229.	6.4	14
11	â€œThermal-dissolution based carbon enrichmentâ€•treatment of biomass: Modeling and kinetic study via combined lumped reaction model and machine learning algorithm. Fuel, 2022, 324, 124701.	6.4	4
12	Surface modification of fly ash by non-thermal air plasma for elemental mercury removal from coal-fired flue gas. Environmental Technology (United Kingdom), 2021, 42, 306-317.	2.2	7
13	Gas-pressurized torrefaction of biomass wastes: The optimization of pressurization condition and the pyrolysis of torrefied biomass. Bioresource Technology, 2021, 319, 124216.	9.6	27
14	Natural ferruginous manganese ore for efficient immobilization of elemental mercury from coal combustion flue gas. Fuel, 2021, 283, 118946.	6.4	45
15	Theoretical research on reaction of solid sulfur allotropes with elemental mercury. Chemical Engineering Journal, 2021, 407, 127113.	12.7	9
16	Mercury stable isotope fractionation during gaseous elemental mercury adsorption onto coal fly ash particles: Experimental and field observations. Journal of Hazardous Materials, 2021, 405, 124280.	12.4	10
17	CFD simulation design and optimization of a novel zigzag wave-plate mist eliminator with perforated plate. Applied Thermal Engineering, 2021, 184, 116212.	6.0	13
18	Gas-pressurized torrefaction of biomass wastes: Co-gasification of gas-pressurized torrefied biomass with coal. Bioresource Technology, 2021, 321, 124505.	9.6	26

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19	Cost-effective sulfurized sorbents derived from one-step pyrolysis of wood and scrap tire for elemental mercury removal from flue gas. Fuel, 2021, 285, 119221.	6.4	40
20	Kinetic Study on Continuous Sampling of Coal Char from a Micro Fluidized Bed. ACS Omega, 2021, 6, 9086-9094.	3.5	4
21	Fate of chromium with the presence of HCl and steam during oxy-coal combustion: Quantum chemistry and experimental study. Journal of Hazardous Materials, 2021, 412, 125218.	12.4	14
22	Potential hazards of novel waste-derived sorbents for efficient removal of mercury from coal combustion flue gas. Journal of Hazardous Materials, 2021, 412, 125226.	12.4	12
23	â€œThermal-dissolution based carbon enrichmentâ€•treatment of biomass wastes: Mechanism study of biomass pyrolysis in a highly-dispersed medium. Energy Conversion and Management, 2021, 238, 114151.	9.2	5
24	Effect of CO₂ and H₂O on Char Properties. Part 3: Semi-Char from Continuous Sampling in a Microfluidized Bed. Energy & Fuels, 2021, 35, 13124-13132.	5.1	2
25	Rod-Shaped Bi₂S₃ Supported on Flaky Carbon Nitride for Effective Removal of Elemental Mercury in Flue Gas. Energy & Fuels, 2021, 35, 14634-14646.	5.1	6
26	Acceleration of the reaction of H2S and SO2 by non-thermal plasma to improve the mercury adsorption performance of activated carbon. Chemical Engineering Journal, 2021, 423, 130144.	12.7	17
27	Enhanced mercury removal performance of Cu-Fe binary oxide sorbents modified by non-thermal plasma. Chemical Engineering Journal, 2021, 425, 131851.	12.7	17
28	Theoretical research on role of sulfur allotropes on activated carbon surface in adsorbing elemental mercury. Chemical Engineering Journal, 2021, 404, 126639.	12.7	16
29	Microscopic Spherical Î±-Fe₂O₃ for Highly Efficient Gaseous Arsenic Capture in Simulated Flue Gas Under a Wide Temperature Range. Energy & Fuels, 2021, 35, 19581-19591.	5.1	16
30	Preparation of CeO₂/CaO with Anti-sintering for Efficient Capture of As₂O₃ from Flue Gas at a High Temperature. Energy & Fuels, 2021, 35, 20197-20205.	5.1	18
31	Theoretical research on mercury-laden halogenated activated carbon adsorbent product stability. The Proceedings of the International Conference on Power Engineering (ICOPE), 2021, 2021.15, 2021-0167.	0.0	0
32	Selenium migration behaviors in wet flue gas desulfurization slurry and an in-situ treatment approach. Chemical Engineering Journal, 2020, 385, 123891.	12.7	28
33	Kinetics, thermodynamics and synergistic effects analyses of petroleum coke and biomass wastes during H2O co-gasification. International Journal of Hydrogen Energy, 2020, 45, 24502-24517.	7.1	31
34	Modeling Study of Selenium Migration Behavior in Wet Flue Gas Desulfurization Spray Towers. Environmental Science & Technology, 2020, 54, 16128-16137.	10.0	34
35	Effect of CO₂ and H₂O on Char Properties. Part 2: In Situ and Ex Situ Char in Oxy-Steam Combustion. Energy & Fuels, 2020, 34, 7554-7563.	5.1	7
36	Gas-pressurized torrefaction of biomass wastes: The effect of varied pressure on pyrolysis kinetics and mechanism of torrefied biomass. Fuel, 2020, 276, 118132.	6.4	18

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37	Deactivation mechanism of KCl and K2SO4 poisoned V2O5/WO3-TiO2 catalyst on gaseous elemental mercury oxidation. Fuel, 2020, 278, 118245.	6.4	15
38	Gas-pressurized torrefaction of biomass wastes: Roles of pressure and secondary reactions. Bioresource Technology, 2020, 313, 123640.	9.6	29
39	Effect of CO₂ and H₂O on Char Properties. Part 1: Pyrolysis Char Structure and Reactivity. Energy & Fuels, 2020, 34, 4243-4250.	5.1	16
40	Preparation of activated carbon nanofibers using degradative solvent extraction products obtained from low-rank coal and their utilization in supercapacitors. RSC Advances, 2020, 10, 8172-8180.	3.6	19
41	Preparation of fly ash adsorbents utilizing non-thermal plasma to add S active sites for Hg0 removal from flue gas. Fuel, 2020, 266, 116936.	6.4	24
42	Kinetic Study of Coal Char Thermal Deactivation. Energy & Fuels, 2019, 33, 11959-11967.	5.1	8
43	Interaction between low-rank coal and biomass during degradative solvent extraction. Journal of Fuel Chemistry and Technology, 2019, 47, 14-22.	2.0	8
44	Using H2S plasma to modify activated carbon for elemental mercury removal. Fuel, 2019, 254, 115549.	6.4	44
45	High-Efficiency CaO-Based Sorbent Modified by Aluminate Cement and Organic Fiber Through Wet Mixing Method. Industrial & Engineering Chemistry Research, 2019, 58, 22040-22047.	3.7	14
46	Particulate matter filtration of the flue gas from iron-ore sintering operations using a magnetically stabilized fluidized bed. Powder Technology, 2019, 342, 335-340.	4.2	14
47	Pyrolysis kinetics of biomasses pretreated by gas-pressurized torrefaction. Energy Conversion and Management, 2019, 182, 117-125.	9.2	52
48	Adsorption and catalytic oxidation of elemental mercury over regenerable magnetic Fe Ce mixed oxides modified by non-thermal plasma treatment. Chemical Engineering Journal, 2019, 358, 1454-1463.	12.7	76
49	Efficient removal of elemental mercury by magnetic chlorinated biochars derived from co-pyrolysis of Fe(NO3)3-laden wood and polyvinyl chloride waste. Fuel, 2019, 239, 982-990.	6.4	110
50	Gas-Phase Mercury Removal by Modified Activated Carbons Treated with Ar-O2 Non-Thermal Plasma under Different O2 Concentrations. International Journal of Chemical Reactor Engineering, 2019, 17, .	1.1	0
51	Degradative solvent extraction of low-rank coals by the mixture of low molecular weight extract and solvent as recycled solvent. Fuel Processing Technology, 2018, 173, 48-55.	7.2	21
52	Transformation of Organically Bound Chromium during Oxy-coal Combustion: The Influence of Steam and Mineral. Energy & Fuels, 2018, 32, 1992-1998.	5.1	18
53	Surface modification of phosphoric acid activated carbon by using non-thermal plasma for enhancement of Cu(II) adsorption from aqueous solutions. Separation and Purification Technology, 2018, 197, 156-169.	7.9	70
54	Surface CO/CO2 ratio of char combustion measured by thermogravimetry and differential scanning calorimetry. Fuel, 2018, 233, 480-485.	6.4	9

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55	Kinetic analyses and synergistic effects of CO2 co-gasification of low sulphur petroleum coke and biomass wastes. Bioresource Technology, 2018, 267, 54-62.	9.6	65
56	Pretreatment of Petroleum Coke To Enhance the Reactivity of Catalytic Gasification in Fluidized Beds. Energy & Fuels, 2018, 32, 8115-8120.	5.1	12
57	A kinetic study on char oxidation in mixtures of O2, CO2 and H2O. Fuel Processing Technology, 2018, 179, 250-257.	7.2	34
58	A gas-pressurized torrefaction method for biomass wastes. Energy Conversion and Management, 2018, 173, 29-36.	9.2	65
59	Development of waste-derived sorbents from biomass and brominated flame retarded plastic for elemental mercury removal from coal-fired flue gas. Chemical Engineering Journal, 2018, 350, 911-919.	12.7	48
60	Study on the effects of carrier and modifier on mercury adsorption behavior over halides modified sorbents using temperature programmed desorption method. Fuel Processing Technology, 2018, 178, 293-300.	7.2	16
61	Kinetic Study on Coal Char Combustion in a Microfluidized Bed. Energy & Fuels, 2017, 31, 3243-3252.	5.1	23
62	Modeling and Kinetic Study of Degradative Solvent Extraction of Biomass Wastes. Energy & Fuels, 2017, 31, 5097-5103.	5.1	11
63	Influence of low pressure on mercury removal from coals via mild pyrolysis. Applied Thermal Engineering, 2017, 113, 1250-1255.	6.0	9
64	Investigation of the anode reactions in solid oxide electrolyte based carbon fuel cells. International Journal of Hydrogen Energy, 2017, 42, 10264-10274.	7.1	6
65	Deep study on effects of activated carbonâ€™s oxygen functional groups for elemental mercury adsorption using temperature programmed desorption method. Fuel, 2017, 200, 100-106.	6.4	74
66	Elemental mercury adsorption and regeneration performance of sorbents FeMnO x enhanced via non-thermal plasma. Chemical Engineering Journal, 2017, 309, 503-512.	12.7	69
67	Influence of Hg occurrence in coal on accuracy of Hg direct measurement based on thermal decomposition. International Journal of Coal Geology, 2017, 170, 14-18.	5.0	10
68	Investigation of the anode reactions in SO-DCFCs fueled by Snâ€“C mixture fuels. Proceedings of the Combustion Institute, 2017, 36, 4435-4442.	3.9	5
69	Kinetic study on in-situ and cooling char combustion in a two-step reaction analyzer. Proceedings of the Combustion Institute, 2017, 36, 2147-2154.	3.9	20
70	Mercury stability of byproducts from wet flue gas desulfurization devices. Fuel, 2016, 186, 215-221.	6.4	27
71	An updated acid dew point temperature estimation method for air-firing and oxy-fuel combustion processes. Fuel Processing Technology, 2016, 154, 204-209.	7.2	10
72	Chlorine-Char composite synthesized by co-pyrolysis of biomass wastes and polyvinyl chloride for elemental mercury removal. Fuel, 2016, 183, 73-79.	6.4	76

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73	Using the Novel Method of Nonthermal Plasma To Add Cl Active Sites on Activated Carbon for Removal of Mercury from Flue Gas. Environmental Science & Technology, 2016, 50, 11837-11843.	10.0	87
74	Steam gasification behavior during coal combustion and CaO regeneration in O2/CO2/steam atmosphere. Fuel, 2016, 184, 409-417.	6.4	19
75	Effect of Coal Combustion on the Reactivity of a CaO-Based Sorbent for CO₂ Capture. Energy & Fuels, 2016, 30, 7571-7578.	5.1	4
76	Determination of the Apparent Carbon Oxidation Reaction Order by a Microfluidized Bed and Its Application to Kinetic Models. Energy & Fuels, 2016, 30, 10868-10874.	5.1	3
77	Experiment and Kinetic Study of Elemental Mercury Adsorption over a Novel Chlorinated Sorbent Derived from Coal and Waste Polyvinyl Chloride. Energy & Fuels, 2016, 30, 10635-10642.	5.1	30
78	Limestone Decomposition in an O₂/CO₂/Steam Atmosphere Integrated with Coal Combustion. Energy & Fuels, 2016, 30, 5092-5100.	5.1	13
79	Influence of different distributions of Ca-mineral in coal on trimodal particulate matter formation during combustion. Journal of Fuel Chemistry and Technology, 2016, 44, 273-278.	2.0	3
80	Experiment study on mercury migration across wet flue gas desulfurization slurry under oxy-coal combustion atmosphere. Fuel, 2016, 181, 1184-1190.	6.4	13
81	Experimental and Modeling Study of Char Gasification with Mixtures of CO₂ and H₂O. Energy & Fuels, 2016, 30, 1628-1635.	5.1	29
82	Homogeneous and heterogeneous contributions of CO 2 and recycled NO to NO emission difference between air and oxy-coal combustion. Fuel, 2016, 163, 1-7.	6.4	21
83	Effect of different sulfides on cadmium distribution during sludge combustion based on experimental and thermodynamic calculation approaches. Environmental Science and Pollution Research, 2015, 22, 1113-1126.	5.3	19
84	Temperature Effect on Central-Mode Particulate Matter Formation in Combustion of Coals with Different Mineral Compositions. Energy & Fuels, 2015, 29, 5245-5252.	5.1	19
85	Effects of sulfur on lead partitioning during sludge incineration based on experiments and thermodynamic calculations. Waste Management, 2015, 38, 336-348.	7.4	32
86	Increasing oxygen functional groups of activated carbon with non-thermal plasma to enhance mercury removal efficiency for flue gases. Chemical Engineering Journal, 2015, 263, 1-8.	12.7	236
87	Synergistic effects and kinetics thermal behaviour of petroleum coke/biomass blends during H2O co-gasification. Energy Conversion and Management, 2014, 79, 355-366.	9.2	104
88	Removal of mercury from flue gas using sewage sludge-based adsorbents. Journal of Material Cycles and Waste Management, 2014, 16, 101-107.	3.0	12
89	The fate of sulfur during rapid pyrolysis of scrap tires. Chemosphere, 2014, 97, 102-107.	8.2	99
90	Chemical Looping Combustion Pretreatment of Fuel Gas for a Novel Mercury Continuous Emissions Monitor by Cold Vapor Atomic Absorption Spectrometry. Energy & Fuels, 2014, 28, 192-198.	5.1	9

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91	Degradative solvent extraction of demineralized and ion-exchanged low-rank coals. Journal of Fuel Chemistry and Technology, 2014, 42, 897-904.	2.0	14
92	Investigations of the structure and thermal kinetic analysis of sugarcane bagasse char during non-isothermal CO2 gasification. Journal of Analytical and Applied Pyrolysis, 2014, 107, 107-115.	5.5	30
93	Pilot-scale study of volatilization behavior of Hg, Se, As, Cl, S during decoupled conversion of coal. Fuel, 2013, 112, 704-709.	6.4	7
94	Comparison of CaOâ€™s effect on the fate of heavy metals during thermal treatment of two typical types of MSWI fly ashes in China. Chemosphere, 2013, 93, 590-596.	8.2	102
95	Effect of pyrolysis conditions on the char gasification with mixtures of CO2 and H2O. Proceedings of the Combustion Institute, 2013, 34, 2453-2460.	3.9	132
96	Fate of chromium during thermal treatment of municipal solid waste incineration (MSWI) fly ash. Proceedings of the Combustion Institute, 2013, 34, 2795-2801.	3.9	60
97	CO2 co-gasification of lower sulphur petroleum coke and sugar cane bagasse via TGâ€“FTIR analysis technique. Bioresource Technology, 2013, 136, 595-603.	9.6	78
98	Hg occurrence in coal and its removal before coal utilization. Fuel, 2013, 104, 70-76.	6.4	49
99	Enhancement of hydrogen production in steam gasification of sewage sludge by reusing the calcium in lime-conditioned sludge. International Journal of Hydrogen Energy, 2013, 38, 1332-1341.	7.1	48
100	Characteristics of "Three Zones" during Underground Coal Gasification. Advanced Materials Research, 2012, 524-527, 56-62.	0.3	3
101	Emission characteristics of nitrogen- and sulfur-containing odorous compounds during different sewage sludge chemical conditioning processes. Journal of Hazardous Materials, 2012, 235-236, 298-306.	12.4	93
102	Identifying modes of occurrence of mercury in coal by temperature programmed pyrolysis. Proceedings of the Combustion Institute, 2011, 33, 2763-2769.	3.9	91
103	Carbon Nanotube-Silver Composite for Mercury Capture and Analysis. Energy & Fuels, 2010, 24, 419-426.	5.1	71
104	Partitioning behavior of mercury during coal combustion: the influence of lowâ€NOx burners and operation load of boiler. Asia-Pacific Journal of Chemical Engineering, 2009, 4, 480-486.	1.5	10
105	Removal of Tar during Pine Sawdust Fast Pyrolysis with Catalysts. Advanced Materials Research, 0, 512-515, 449-454.	0.3	0