Yangxian Liu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1949734/publications.pdf

Version: 2024-02-01

125 papers	7,033 citations	34016 52 h-index	66788 78 g-index
125 all docs	125 docs citations	125 times ranked	2713 citing authors

#	Article	IF	Citations
1	Simultaneous removal of NO and SO2 from coal-fired flue gas by UV/H2O2 advanced oxidation process. Chemical Engineering Journal, 2010, 162, 1006-1011.	6.6	237
2	Adsorption of CO2 from flue gas by novel seaweed-based KOH-activated porous biochars. Fuel, 2020, 260, 116382.	3.4	185
3	Simultaneous absorption of SO2 and NO from flue gas using ultrasound/Fe2+/heat coactivated persulfate system. Journal of Hazardous Materials, 2018, 342, 326-334.	6.5	184
4	Carbon dioxide capture using liquid absorption methods: a review. Environmental Chemistry Letters, 2021, 19, 77-109.	8.3	165
5	Removal of Elemental Mercury from Flue Gas by Thermally Activated Ammonium Persulfate in A Bubble Column Reactor. Environmental Science & Technology, 2014, 48, 12181-12189.	4.6	159
6	Novel Process of Simultaneous Removal of Nitric Oxide and Sulfur Dioxide Using a Vacuum Ultraviolet (VUV)-Activated O₂/H₂O/H₂O₂ System in A Wet VUVâ€“Spraying Reactor. Environmental Science & Technology, 2016, 50, 12966-12975.	4.6	156
7	Removal of elemental mercury from flue gas using wheat straw chars modified by Mn-Ce mixed oxides with ultrasonic-assisted impregnation. Chemical Engineering Journal, 2017, 326, 169-181.	6.6	156
8	Simultaneous removal of NO and SO2 using vacuum ultraviolet light (VUV)/heat/peroxymonosulfate (PMS). Chemosphere, 2018, 190, 431-441.	4.2	155
9	A review on modification methods of adsorbents for elemental mercury from flue gas. Chemical Engineering Journal, 2018, 346, 692-711.	6.6	147
10	A review on removal of elemental mercury from flue gas using advanced oxidation process: Chemistry and process. Chemical Engineering Research and Design, 2016, 112, 199-250.	2.7	137
11	Removal of elemental mercury from flue gas using sargassum chars modified by NH4Br reagent. Fuel, 2018, 214, 196-206.	3.4	126
12	Preparation of magnetic Co-Fe modified porous carbon from agricultural wastes by microwave and steam activation for mercury removal. Journal of Hazardous Materials, 2020, 381, 120981.	6.5	125
13	Removal of elemental mercury by bio-chars derived from seaweed impregnated with potassium iodine. Chemical Engineering Journal, 2018, 339, 468-478.	6.6	124
14	Novel carbon-based sorbents for elemental mercury removal from gas streams: A review. Chemical Engineering Journal, 2020, 391, 123514.	6.6	112
15	A review on coal fly ash-based adsorbents for mercury and arsenic removal. Journal of Cleaner Production, 2020, 267, 122143.	4.6	106
16	Removal of gaseous Hg0 using novel seaweed biomass-based activated carbon. Chemical Engineering Journal, 2019, 366, 41-49.	6.6	103
17	Preparation of microwave-activated magnetic bio-char adsorbent and study on removal of elemental mercury from flue gas. Science of the Total Environment, 2019, 697, 134049.	3.9	101
18	Removal of elemental mercury from flue gas using CuOx and CeO2 modified rice straw chars enhanced by ultrasound. Fuel Processing Technology, 2018, 170, 21-31.	3.7	99

#	Article	IF	Citations
19	Elemental mercury removal from flue gas using heat and Co2+/Fe2+ coactivated oxone oxidation system. Chemical Engineering Journal, 2018, 348, 464-475.	6.6	99
20	Mercury removal from flue gas by magnetic iron-copper oxide modified porous char derived from biomass materials. Fuel, 2019, 256, 115977.	3.4	96
21	Simultaneous removal of NO and SO₂ using aqueous peroxymonosulfate with coactivation of Cu²⁺/Fe³⁺ and high temperature. AICHE Journal, 2017, 63, 1287-1302.	1.8	91
22	State-of-the-art review on capture of CO2 using adsorbents prepared from waste materials. Chemical Engineering Research and Design, 2020, 139, 1-25.	2.7	90
23	A Critical Review on Removal of Gaseous Pollutants Using Sulfate Radical-based Advanced Oxidation Technologies. Environmental Science & Technology, 2021, 55, 9691-9710.	4.6	89
24	Oxidative removal of NO from flue gas using ultrasound, Mn2+/Fe2+ and heat coactivation of Oxone in an ultrasonic bubble reactor. Chemical Engineering Journal, 2017, 326, 1166-1176.	6.6	87
25	Oxidation Removal of Nitric Oxide from Flue Gas Using UV Photolysis of Aqueous Hypochlorite. Environmental Science & Technology, 2017, 51, 11950-11959.	4.6	87
26	X-ray Photoelectron Spectroscopy (XPS) Investigation of Nitrogen Functionalities during Coal Char Combustion in O₂/CO₂ and O₂/Ar Atmospheres. Energy & Fuels, 2011, 25, 240-245.	2.5	86
27	A comparative study on combustion characteristics of methane, propane and hydrogen fuels in a micro-combustor. International Journal of Hydrogen Energy, 2015, 40, 16587-16596.	3.8	85
28	Removal of Hg0 and simultaneous removal of Hg0/SO2/NO in flue gas using two Fenton-like reagents in a spray reactor. Fuel, 2015, 145, 180-188.	3.4	84
29	Removal of elemental mercury from flue gas using red mud impregnated by KBr and KI reagent. Chemical Engineering Journal, 2018, 341, 483-494.	6.6	84
30	Removal of gaseous hydrogen sulfide using Fenton reagent in a spraying reactor. Fuel, 2019, 239, 70-75.	3.4	79
31	A review on application of cerium-based oxides in gaseous pollutant purification. Separation and Purification Technology, 2020, 250, 117181.	3.9	79
32	Adsorption of elemental mercury in flue gas using biomass porous carbons modified by microwave/hydrogen peroxide. Fuel, 2021, 291, 120152.	3.4	77
33	Effects of ignition parameters on combustion process of a rotary engine fueled with natural gas. Energy Conversion and Management, 2015, 103, 218-234.	4.4	76
34	Oxidation removal of gaseous Hg0 using enhanced-Fenton system in a bubble column reactor. Fuel, 2019, 246, 358-364.	3.4	76
35	A study on removal of elemental mercury in flue gas using fenton solution. Journal of Hazardous Materials, 2015, 292, 164-172.	6.5	72
36	Advanced oxidation removal of NO and SO2 from flue gas by using ultraviolet/H2O2/NaOH process. Chemical Engineering Research and Design, 2014, 92, 1907-1914.	2.7	70

#	Article	IF	Citations
37	Novel Simultaneous Removal Technology of NO and SO₂ Using a Semi-Dry Microwave Activation Persulfate System. Environmental Science & Technology, 2020, 54, 2031-2042.	4.6	70
38	Removal of gaseous elemental mercury using seaweed chars impregnated by NH4Cl and NH4Br. Journal of Cleaner Production, 2019, 216, 277-287.	4.6	69
39	Investigation on the Removal of NO from SO₂-Containing Simulated Flue Gas by an Ultraviolet/Fenton-Like Reaction. Energy & Fuels, 2012, 26, 5430-5436.	2.5	68
40	Photocatalytic, electrocatalytic and photoelectrocatalytic conversion of carbon dioxide: a review. Environmental Chemistry Letters, 2021, 19, 941-967.	8.3	68
41	A review on arsenic removal from coal combustion: Advances, challenges and opportunities. Chemical Engineering Journal, 2021, 414, 128785.	6.6	68
42	Numerical investigation of direct injection stratified charge combustion in a natural gas-diesel rotary engine. Applied Energy, 2019, 233-234, 453-467.	5.1	67
43	Elimination of nitric oxide using new Fenton process based on synergistic catalysis: Optimization and mechanism. Chemical Engineering Journal, 2019, 372, 92-98.	6.6	64
44	Removal of Hg⁰ from containingâ€¦SO₂/NO flue gas by ultraviolet/H₂O₂ process in a novel photochemical reactor. AICHE Journal, 2014, 60, 2275-2285.	1.8	62
45	Effect of hydrogen injection strategies on mixture formation and combustion process in a hydrogen direct injection plus natural gas port injection rotary engine. Energy Conversion and Management, 2018, 160, 150-164.	4.4	61
46	Removal of Hg⁰ from flue gas using two homogeneous photoâ€fentonâ€like reactions. AICHE Journal, 2015, 61, 1322-1333.	1.8	60
47	Photochemical Oxidation Removal of Hg⁰ from Flue Gas Containing SO₂/NO by an Ultraviolet Irradiation/Hydrogen Peroxide (UV/H₂O₂) Process. Energy & Fuels, 2014, 28, 2135-2143.	2.5	58
48	Removal of nitric oxide from flue gas using novel microwave-activated double oxidants system. Chemical Engineering Journal, 2020, 393, 124754.	6.6	58
49	A review on removal of mercury from flue gas utilizing existing air pollutant control devices (APCDs). Journal of Hazardous Materials, 2022, 427, 128132.	6.5	58
50	Nitrogen-doped activated carbons derived from microalgae pyrolysis by-products by microwave/KOH activation for CO2 adsorption. Fuel, 2021, 306, 121762.	3.4	56
51	Integrating the merits of two-dimensional structure and heteroatom modification into semiconductor photocatalyst to boost NO removal. Chemical Engineering Journal, 2019, 370, 944-951.	6.6	54
52	Gaseous elemental mercury removal using VUV and heat coactivation of Oxone/H2O/O2 in a VUV-spraying reactor. Fuel, 2019, 243, 352-361.	3.4	54
53	Recent developments on gasâ€“solid heterogeneous oxidation removal of elemental mercury from flue gas. Environmental Chemistry Letters, 2019, 17, 19-47.	8.3	53
54	A review of sorbents for high-temperature hydrogen sulfide removal from hot coal gas. Environmental Chemistry Letters, 2019, 17, 259-276.	8.3	53

#	Article	IF	Citations
55	Separation of hydrogen sulfide from gas phase using Ce3+/Mn2+-enhanced fenton-like oxidation system. Chemical Engineering Journal, 2019, 359, 1486-1492.	6.6	53
56	Study on removal of gaseous hydrogen sulfide based on macroalgae biochars. Journal of Natural Gas Science and Engineering, 2020, 73, 103068.	2.1	52
57	Removal of NO from flue gas using UV/S₂ process in a novel photochemical impinging stream reactor. AICHE Journal, 2017, 63, 2968-2980.	1.8	51
58	Review on Magnetic Adsorbents for Removal of Elemental Mercury from Flue Gas. Energy & Fuels, 2020, 34, 13473-13490.	2.5	51
59	A study on mass transferâ€“reaction kinetics of NO absorption by using UV/H2O2/NaOH process. Fuel, 2013, 108, 254-260.	3.4	50
60	Study on absorption of elemental mercury from flue gas by UV/H2O2: Process parameters and reaction mechanism. Chemical Engineering Journal, 2014, 249, 72-78.	6.6	49
61	Sorbents for hydrogen sulfide capture from biogas at low temperature: a review. Environmental Chemistry Letters, 2020, 18, 113-128.	8.3	49
62	A study on kinetics of NO absorption from flue gas by using UV/Fenton wet scrubbing. Chemical Engineering Journal, 2012, 197, 468-474.	6.6	47
63	Kinetic model of NO removal from SO2-containing simulated flue gas by wet UV/H2O2 advanced oxidation process. Chemical Engineering Journal, 2011, 168, 183-189.	6.6	46
64	Numerical investigation of the effect of injection strategy on mixture formation and combustion process in a port injection natural gas rotary engine. Energy Conversion and Management, 2017, 133, 511-523.	4.4	46
65	Removal of pollutants from gas streams using Fenton (-like)-based oxidation systems: A review. Journal of Hazardous Materials, 2021, 416, 125927.	6.5	45
66	Wet Removal of Sulfur Dioxide and Nitric Oxide from Simulated Coal-Fired Flue Gas by UV/H₂O₂ Advanced Oxidation Process. Energy & Fuels, 2010, 24, 4931-4936.	2.5	43
67	The influence of hydrogen injection strategy on mixture formation and combustion process in a port injection (PI) rotary engine fueled with natural gas/hydrogen blends. Energy Conversion and Management, 2018, 173, 527-538.	4.4	41
68	Photocatalytic oxidation removal of elemental mercury from flue gas.ÂA review. Environmental Chemistry Letters, 2020, 18, 417-431.	8.3	40
69	Absorption of NO and Simultaneous Absorption of SO₂/NO Using a Vacuum Ultraviolet Light/Ultrasound/KHSO₅ System. Energy & Fuels, 2017, 31, 12364-12375.	2.5	39
70	Removal of Elemental Mercury from Flue Gas Using Microwave/Ultrasound-Activated Ceâ€“Fe Magnetic Porous Carbon Derived from Biomass Straw. Energy & Fuels, 2019, 33, 8394-8402.	2.5	39
71	Simultaneous absorptionâ€“oxidation of nitric oxide and sulfur dioxide using ammonium persulfate synergistically activated by UV-light and heat. Chemical Engineering Research and Design, 2018, 130, 321-333.	2.7	38
72	Effect of injection strategy on fuel-air mixing and combustion process in a direct injection diesel rotary engine (DI-DRE). Energy Conversion and Management, 2017, 154, 68-80.	4.4	37

#	Article	IF	Citations
73	Numerical investigation of mixture formation and combustion in a hydrogen direct injection plus natural gas port injection (HDIÂ+ÂNGPI) rotary engine. International Journal of Hydrogen Energy, 2018, 43, 4632-4644.	3.8	36
74	Removal of gaseous hydrogen sulfide using ultraviolet/Oxone-induced oxidation scrubbing system. Chemical Engineering Journal, 2020, 393, 124740.	6.6	36
75	Gaseous Elemental Mercury Removal Using Combined Metal Ions and Heat Activated Peroxymonosulfate/H₂O₂ Solutions. AICHE Journal, 2019, 65, 161-174.	1.8	34
76	Review on Removal of SO₂, NO_x, Mercury, and Arsenic from Flue Gas Using Green Oxidation Absorption Technology. Energy & Fuels, 2021, 35, 9775-9794.	2.5	34
77	Removal of Gaseous Hydrogen Sulfide by a Photo-Fenton Wet Oxidation Scrubbing System. Energy & Fuels, 2019, 33, 10812-10819.	2.5	33
78	Alkali Metal Poisoning and Regeneration of Selective Catalytic Reduction Denitration Catalysts: Recent Advances and Future Perspectives. Energy & Fuels, 2022, 36, 5622-5646.	2.5	33
79	Oxidation Absorption of Gaseous H2S Using Fenton-Like Advanced Oxidation Systems. Energy & Fuels, 2018, 32, 11289-11295.	2.5	32
80	Oxidation Removal of Nitric Oxide from Flue Gas Using an Ultraviolet Light and Heat Coactivated Oxone System. Energy & Fuels, 2018, 32, 1999-2008.	2.5	31
81	Fe2+/heat-coactivated PMS oxidation-absorption system for H2S removal from gas phase. Separation and Purification Technology, 2022, 286, 120458.	3.9	30
82	Removal of Hg⁰ from Simulated Flue Gas by Ultraviolet Light/Heat/Persulfate Process in an UV-Impinging Stream Reactor. Energy & Fuels, 2018, 32, 12416-12425.	2.5	27
83	Removal of Carbon Monoxide from Simulated Flue Gas Using Two New Fenton Systems: Mechanism and Kinetics. Environmental Science & Technology, 2019, 53, 10387-10397.	4.6	27
84	Gas-phase elemental mercury removal using ammonium chloride impregnated sargassum chars. Environmental Technology (United Kingdom), 2019, 40, 1923-1936.	1.2	27
85	Oxidation absorption of hydrogen sulfide from gas stream using vacuum ultraviolet/H2O2/urea wet scrubbing system. Chemical Engineering Research and Design, 2020, 140, 348-355.	2.7	27
86	A novel double metal ions-double oxidants coactivation system for NO and SO2 simultaneous removal. Chemical Engineering Journal, 2022, 432, 134398.	6.6	27
87	Elemental mercury captureÂfrom industrial gas emissions using sulfides and selenides: a review. Environmental Chemistry Letters, 2021, 19, 1395-1411.	8.3	26
88	A thermally activated double oxidants advanced oxidation system for gaseous H2S removal: Mechanism and kinetics. Chemical Engineering Journal, 2022, 434, 134430.	6.6	26
89	Preliminary Study on a New Technique for Wet Removal of Nitric Oxide from Simulated Flue Gas with an Ultraviolet (UV)/H₂O₂ Process. Energy & Fuels, 2010, 24, 4925-4930.	2.5	25
90	Oxidative Absorption of Elemental Mercury from Flue Gas Using a Modified Fenton-like Wet Scrubbing System. Energy & Fuels, 2019, 33, 3028-3033.	2.5	23

#	Article	IF	Citations
91	Experimental and kinetic study on Hg0 removal by microwave/hydrogen peroxide modified seaweed-based porous biochars. Environmental Technology and Innovation, 2021, 22, 101411.	3.0	23
92	Removal of elemental Mercury from flue gas using wheat straw chars modified by K₂FeO₄ reagent. Environmental Technology (United Kingdom), 2017, 38, 3047-3054.	1.2	22
93	Porous Biochars Derived from Microalgae Pyrolysis for CO₂ Adsorption. Energy & Fuels, 2021, 35, 7646-7656.	2.5	22
94	Study on enhancement mechanism of NO absorption in K2FeO4 solution basing on mass transfer-reaction theory. Chemical Engineering Research and Design, 2016, 111, 196-203.	2.7	21
95	Absorption of H₂S from Gas Streams by the Wet Ultraviolet/Persulfate Oxidation Process: Mechanism and Kinetics. Energy & Fuels, 2020, 34, 8037-8045.	2.5	21
96	Effect of gas-phase reaction on catalytic reaction for H2/O2 mixture in micro combustor. International Journal of Hydrogen Energy, 2017, 42, 16855-16865.	3.8	20
97	Removal of NO in flue gas using vacuum ultraviolet light/ultrasound/chlorine in a VUV-US coupled reactor. Fuel Processing Technology, 2018, 169, 226-235.	3.7	20
98	Copper Sulfide-Loaded Boron Nitride Nanosheets for Elemental Mercury Removal from Simulated Flue Gas. Energy & Fuels, 2021, 35, 2234-2242.	2.5	19
99	A novel process for removal of Hg0 from flue gas using urea/persulfate activated by high temperature in a spray reactor. Chemical Engineering Research and Design, 2015, 104, 828-834.	2.7	18
100	Simultaneous removal of Hg0 and SO2 from flue gas using vacuum ultraviolet radiation combining with absorption of urea solution. International Journal of Coal Geology, 2017, 170, 41-47.	1.9	18
101	Study on Mass Transfer-Reaction Kinetics of NO Removal from Flue Gas by Using a UV/Fenton-like Reaction. Industrial & Engineering Chemistry Research, 2012, 51, 12065-12072.	1.8	17
102	Simultaneous Removal of SO₂ and NO Using H₂O₂/Urea Activated by Vacuum Ultraviolet Light in a Pilot-Scale Spraying Tower. Energy & Fuels, 2019, 33, 1325-1333.	2.5	17
103	Oxidation Removal of CO from Flue Gas Using Two Fenton-like Wet Scrubbing Systems. Energy & Fuels, 2019, 33, 2961-2966.	2.5	17
104	Optimization analysis of polyurethane based mixed matrix gas separation membranes by incorporation of gamma-cyclodextrin metal organic frame work. Chemical Papers, 2020, 74, 3527-3543.	1.0	17
105	Stratified combustion characteristics analysis and assisted-ignition strategy optimization in a natural gas blended diesel Wankel engine. Fuel, 2021, 292, 120192.	3.4	17
106	Biochars derived from by-products of microalgae pyrolysis for sorption of gaseous H2S. Journal of Environmental Chemical Engineering, 2022, 10, 107370.	3.3	17
107	Quantitative Analysis of NO_x Reduction in Oxy-Coal Combustion. Energy & Fuels, 2011, 25, 1146-1152.	2.5	16
108	Removal of CO₂ from Flue Gas Using Seaweed Porous Carbons Prepared by Urea Doping and KOH Activation. Energy & Fuels, 2020, 34, 16411-16422.	2.5	15

#	Article	IF	Citations
109	Seaweed bio-chars modified with metal chloride for elemental mercury capture from simulated flue gas. Atmospheric Pollution Research, 2020, 11, 122-130.	1.8	15
110	Preparation of Straw Porous Biochars by Microwave-Assisted KOH Activation for Removal of Gaseous H₂S. Energy & Fuels, 2021, 35, 18592-18603.	2.5	15
111	Removal of gaseous H2S using microalgae porous carbons synthesized by thermal/microwave KOH activation. Journal of the Energy Institute, 2022, 101, 45-55.	2.7	15
112	Experimental research on influencing factors of wet removal of NO from coal-fired flue gas by UV/H2O2 advanced oxidation process. Science China Technological Sciences, 2010, 53, 1839-1846.	2.0	14
113	Highly Efficient Adsorption of Oils and Pollutants by Porous Ultrathin Oxygen-Modified BCN Nanosheets. ACS Sustainable Chemistry and Engineering, 2019, 7, 3234-3242.	3.2	14
114	Study on the Kinetics of NO Removal from Simulated Flue Gas by a Wet Ultraviolet/H₂O₂ Advanced Oxidation Process. Energy & Fuels, 2011, 25, 1547-1552.	2.5	12
115	Enhancement in the selectivity of O2/N2 via ZIF-8/CA mixed-matrix membranes and the development of a thermodynamic model to predict the permeability of gases. Environmental Science and Pollution Research, 2020, 27, 24413-24429.	2.7	12
116	Gaseous Hydrogen Sulfide Removal Using Macroalgae Biochars Modified Synergistically by H₂SO₄/H₂O₂. Chemical Engineering and Technology, 2021, 44, 698-709.	0.9	12
117	Removal of Elemental Mercury Using Seaweed Biomass-Based Porous Carbons Prepared from Microwave Activation and H₂O₂ Modification. Energy & Fuels, 2021, 35, 2391-2401.	2.5	10
118	Effects of experimental parameters on simultaneous removal of SO₂ and NO by VUV/H₂O₂ advanced oxidation process in a pilotâ€scale photochemical spraying tower. Journal of Chemical Technology and Biotechnology, 2019, 94, 721-729.	1.6	9
119	Removal of nitric oxide from flue gas using sulfate/hydroxyl radicals from activation of oxone with cobalt and high temperature. Environmental Progress and Sustainable Energy, 2017, 36, 1013-1021.	1.3	8
120	Hg⁰ Removal by Straw Biochars Prepared with Clean Microwave/H₂O₂ Modification. Chemical Engineering and Technology, 2021, 44, 1460-1469.	0.9	8
121	Oxidation Absorption of Hg⁰ in the Gas Phase Using a Double Catalyzersâ€“Double Oxidants Coactivation Technology. Energy & Fuels, 2022, 36, 2656-2665.	2.5	7
122	Experimental Investigation on the Effect of Blending Ethanol on Combustion Characteristic and Idle Performance in a Gasoline Rotary Engine. Journal of Thermal Science, 2021, 30, 1187-1198.	0.9	3
123	Oxidative removal of gaseous hydrogen sulfide by a dual ions-dual oxidants coupling activation system. Chemical Engineering Research and Design, 2022, 161, 454-465.	2.7	3
124	Oxidationâ€separation kinetics of nitric oxide from flue gas using ferrate (VI) reagent in a spraying reactor. Canadian Journal of Chemical Engineering, 2017, 95, 1364-1372.	0.9	2
125	Comprehensive technical review of the high-efficiency low-emission technology in advanced coal-fired power plants. Reviews in Chemical Engineering, 2023, 39, 363-386.	2.3	2