Wen Xu

List of Publications by Year
in descending order

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67 papers	4,571 citations	71102 41 h-index	98798 67 g-index
67 all docs	67 docs citations	67 times ranked	2044 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.	12.7	237
2	Adsorption of CO2 from flue gas by novel seaweed-based KOH-activated porous biochars. Fuel, 2020, 260, 116382.	6.4	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.	12.4	184
4	Carbon dioxide capture using liquid absorption methods: a review. Environmental Chemistry Letters, 2021, 19, 77-109.	16.2	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.	10.0	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.	10.0	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.	12.7	156
8	Simultaneous removal of NO and SO2 using vacuum ultraviolet light (VUV)/heat/peroxymonosulfate (PMS). Chemosphere, 2018, 190, 431-441.	8.2	155
9	A review on modification methods of adsorbents for elemental mercury from flue gas. Chemical Engineering Journal, 2018, 346, 692-711.	12.7	147
10	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.	12.4	125
11	Novel carbon-based sorbents for elemental mercury removal from gas streams: A review. Chemical Engineering Journal, 2020, 391, 123514.	12.7	112
12	A review on coal fly ash-based adsorbents for mercury and arsenic removal. Journal of Cleaner Production, 2020, 267, 122143.	9.3	106
13	Removal of gaseous Hg0 using novel seaweed biomass-based activated carbon. Chemical Engineering Journal, 2019, 366, 41-49.	12.7	103
14	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.	8.0	101
15	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.	7.2	99
16	Elemental mercury removal from flue gas using heat and Co2+/Fe2+ coactivated oxone oxidation system. Chemical Engineering Journal, 2018, 348, 464-475.	12.7	99
17	Mercury removal from flue gas by magnetic iron-copper oxide modified porous char derived from biomass materials. Fuel, 2019, 256, 115977.	6.4	96
18	State-of-the-art review on capture of CO2 using adsorbents prepared from waste materials. Chemical Engineering Research and Design, 2020, 139, 1-25.	5.6	90

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19	A Critical Review on Removal of Gaseous Pollutants Using Sulfate Radical-based Advanced Oxidation Technologies. Environmental Science & Technology, 2021, 55, 9691-9710.	10.0	89
20	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.	6.4	84
21	Removal of elemental mercury from flue gas using red mud impregnated by KBr and KI reagent. Chemical Engineering Journal, 2018, 341, 483-494.	12.7	84
22	Removal of gaseous hydrogen sulfide using Fenton reagent in a spraying reactor. Fuel, 2019, 239, 70-75.	6.4	79
23	A review on application of cerium-based oxides in gaseous pollutant purification. Separation and Purification Technology, 2020, 250, 117181.	7.9	79
24	Adsorption of elemental mercury in flue gas using biomass porous carbons modified by microwave/hydrogen peroxide. Fuel, 2021, 291, 120152.	6.4	77
25	Oxidation removal of gaseous Hg0 using enhanced-Fenton system in a bubble column reactor. Fuel, 2019, 246, 358-364.	6.4	76
26	Novel Simultaneous Removal Technology of NO and SO₂ Using a Semi-Dry Microwave Activation Persulfate System. Environmental Science & Technology, 2020, 54, 2031-2042.	10.0	70
27	Removal of gaseous elemental mercury using seaweed chars impregnated by NH4Cl and NH4Br. Journal of Cleaner Production, 2019, 216, 277-287.	9.3	69
28	Photocatalytic, electrocatalytic and photoelectrocatalytic conversion of carbon dioxide: a review. Environmental Chemistry Letters, 2021, 19, 941-967.	16.2	68
29	A review on arsenic removal from coal combustion: Advances, challenges and opportunities. Chemical Engineering Journal, 2021, 414, 128785.	12.7	68
30	Elimination of nitric oxide using new Fenton process based on synergistic catalysis: Optimization and mechanism. Chemical Engineering Journal, 2019, 372, 92-98.	12.7	64
31	Removal of Hg⁰ from flue gas using two homogeneous photoâ€fentonâ€like reactions. AICHE Journal, 2015, 61, 1322-1333.	3.6	60
32	Removal of nitric oxide from flue gas using novel microwave-activated double oxidants system. Chemical Engineering Journal, 2020, 393, 124754.	12.7	58
33	A review on removal of mercury from flue gas utilizing existing air pollutant control devices (APCDs). Journal of Hazardous Materials, 2022, 427, 128132.	12.4	58
34	Integrating the merits of two-dimensional structure and heteroatom modification into semiconductor photocatalyst to boost NO removal. Chemical Engineering Journal, 2019, 370, 944-951.	12.7	54
35	Gaseous elemental mercury removal using VUV and heat coactivation of Oxone/H2O/O2 in a VUV-spraying reactor. Fuel, 2019, 243, 352-361.	6.4	54
36	A review of sorbents for high-temperature hydrogen sulfide removal from hot coal gas. Environmental Chemistry Letters, 2019, 17, 259-276.	16.2	53

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37	Separation of hydrogen sulfide from gas phase using Ce3+/Mn2+-enhanced fenton-like oxidation system. Chemical Engineering Journal, 2019, 359, 1486-1492.	12.7	53
38	Study on removal of gaseous hydrogen sulfide based on macroalgae biochars. Journal of Natural Gas Science and Engineering, 2020, 73, 103068.	4.4	52
39	Review on Magnetic Adsorbents for Removal of Elemental Mercury from Flue Gas. Energy & Fuels, 2020, 34, 13473-13490.	5.1	51
40	Sorbents for hydrogen sulfide capture from biogas at low temperature: a review. Environmental Chemistry Letters, 2020, 18, 113-128.	16.2	49
41	Removal of pollutants from gas streams using Fenton (-like)-based oxidation systems: A review. Journal of Hazardous Materials, 2021, 416, 125927.	12.4	45
42	Photocatalytic oxidation removal of elemental mercury from flue gas.ÂA review. Environmental Chemistry Letters, 2020, 18, 417-431.	16.2	40
43	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.	5.1	39
44	Removal of gaseous hydrogen sulfide using ultraviolet/Oxone-induced oxidation scrubbing system. Chemical Engineering Journal, 2020, 393, 124740.	12.7	36
45	Gaseous Elemental Mercury Removal Using Combined Metal Ions and Heat Activated Peroxymonosulfate/H₂O₂ Solutions. AIChE Journal, 2019, 65, 161-174.	3.6	34
46	Review on Removal of SO₂, NO_x, Mercury, and Arsenic from Flue Gas Using Green Oxidation Absorption Technology. Energy & Fuels, 2021, 35, 9775-9794.	5.1	34
47	Removal of Gaseous Hydrogen Sulfide by a Photo-Fenton Wet Oxidation Scrubbing System. Energy & Fuels, 2019, 33, 10812-10819.	5.1	33
48	Fe2+/heat-coactivated PMS oxidation-absorption system for H2S removal from gas phase. Separation and Purification Technology, 2022, 286, 120458.	7.9	30
49	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.	5.1	27
50	Removal of Carbon Monoxide from Simulated Flue Gas Using Two New Fenton Systems: Mechanism and Kinetics. Environmental Science & Technology, 2019, 53, 10387-10397.	10.0	27
51	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.	5.6	27
52	Elemental mercury captureÂfrom industrial gas emissions using sulfides and selenides: a review. Environmental Chemistry Letters, 2021, 19, 1395-1411.	16.2	26
53	A thermally activated double oxidants advanced oxidation system for gaseous H2S removal: Mechanism and kinetics. Chemical Engineering Journal, 2022, 434, 134430.	12.7	26
54	Oxidative Absorption of Elemental Mercury from Flue Gas Using a Modified Fenton-like Wet Scrubbing System. Energy & Fuels, 2019, 33, 3028-3033.	5.1	23

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55	Experimental and kinetic study on Hg0 removal by microwave/hydrogen peroxide modified seaweed-based porous biochars. Environmental Technology and Innovation, 2021, 22, 101411.	6.1	23
56	Removal of elemental Mercury from flue gas using wheat straw chars modified by K₂FeO₄ reagent. Environmental Technology (United Kingdom), 2017, 38, 3047-3054.	2.2	22
57	Porous Biochars Derived from Microalgae Pyrolysis for CO₂ Adsorption. Energy & Fuels, 2021, 35, 7646-7656.	5.1	22
58	Absorption of H₂S from Gas Streams by the Wet Ultraviolet/Persulfate Oxidation Process: Mechanism and Kinetics. Energy & Fuels, 2020, 34, 8037-8045.	5.1	21
59	Oxidation Removal of CO from Flue Gas Using Two Fenton-like Wet Scrubbing Systems. Energy & Fuels, 2019, 33, 2961-2966.	5.1	17
60	Biochars derived from by-products of microalgae pyrolysis for sorption of gaseous H2S. Journal of Environmental Chemical Engineering, 2022, 10, 107370.	6.7	17
61	Removal of CO₂ from Flue Gas Using Seaweed Porous Carbons Prepared by Urea Doping and KOH Activation. Energy & Fuels, 2020, 34, 16411-16422.	5.1	15
62	Preparation of Straw Porous Biochars by Microwave-Assisted KOH Activation for Removal of Gaseous H₂S. Energy & Fuels, 2021, 35, 18592-18603.	5.1	15
63	Removal of gaseous H2S using microalgae porous carbons synthesized by thermal/microwave KOH activation. Journal of the Energy Institute, 2022, 101, 45-55.	5.3	15
64	Gaseous Hydrogen Sulfide Removal Using Macroalgae Biochars Modified Synergistically by H₂SO₄/H₂O₂. Chemical Engineering and Technology, 2021, 44, 698-709.	1.5	12
65	Removal of Elemental Mercury Using Seaweed Biomass-Based Porous Carbons Prepared from Microwave Activation and H₂O₂ Modification. Energy & Fuels, 2021, 35, 2391-2401.	5.1	10
66	Hg⁰ Removal by Straw Biochars Prepared with Clean Microwave/H₂O₂ Modification. Chemical Engineering and Technology, 2021, 44, 1460-1469.	1.5	8
67	Oxidative removal of gaseous hydrogen sulfide by a dual ions-dual oxidants coupling activation system. Chemical Engineering Research and Design, 2022, 161, 454-465.	5.6	3