Hsing-Cheng Hsi

List of Publications by Year
in descending order

97 papers	3,027 citations	172457 29 h-index	182427 51 g-index
98 all docs	98 docs citations	98 times ranked	3069 citing authors

#	Article	IF	Citations
1	Improved performance in capacitive deionization of activated carbon electrodes with a tunable mesopore and micropore ratio. Desalination, 2015, 367, 60-68.	8.2	215
2	Resource Recovery of Waste Fly Ash: Synthesis Of Zeolite-like Materials. Environmental Science & Technology, 1995, 29, 1109-1117.	10.0	198
3	Effects of Sulfur Impregnation Temperature on the Properties and Mercury Adsorption Capacities of Activated Carbon Fibers (ACFs). Environmental Science & Technology, 2001, 35, 2785-2791.	10.0	161
4	Size effect, mutual inhibition and oxidation mechanism of the catalytic removal of a toluene and acetone mixture over TiO2 nanosheet-supported Pt nanocatalysts. Applied Catalysis B: Environmental, 2020, 274, 118963.	20.2	125
5	Electrodeposited Manganese Dioxide/Activated Carbon Composite As a High-Performance Electrode Material for Capacitive Deionization. ACS Sustainable Chemistry and Engineering, 2016, 4, 4762-4770.	6.7	119
6	Influences of acidic/oxidizing gases on elemental mercury adsorption equilibrium and kinetics of sulfur-impregnated activated carbon. Fuel, 2012, 98, 229-235.	6.4	113
7	Mercury Adsorption Properties of Sulfur-Impregnated Adsorbents. Journal of Environmental Engineering, ASCE, 2002, 128, 1080-1089.	1.4	98
8	Characterizing the Emissions of Polybrominated Diphenyl Ethers (PBDEs) and Polybrominated Dibenzo-<i>p</i>-dioxins and Dibenzofurans (PBDD/Fs) from Metallurgical Processes. Environmental Science & Technology, 2010, 44, 1240-1246.	10.0	95
9	Emissions, measurement, and control of odor in livestock farms: A review. Science of the Total Environment, 2021, 776, 145735.	8.0	79
10	Characteristics of PCDD/F content in fly ash discharged from municipal solid waste incinerators. Journal of Hazardous Materials, 2011, 192, 521-529.	12.4	64
11	Highly porous activated carbons from resource-recovered Leucaena leucocephala wood as capacitive deionization electrodes. Chemosphere, 2015, 141, 71-79.	8.2	60
12	Catalytic stability enhancement for pollutant removal via balancing lattice oxygen mobility and VOCs adsorption. Journal of Hazardous Materials, 2022, 424, 127337.	12.4	57
13	Preparation and Evaluation of Coal-Derived Activated Carbons for Removal of Mercury Vapor from Simulated Coal Combustion Flue Gases. Energy & Fuels, 1998, 12, 1061-1070.	5.1	54
14	Impact of Surface Functional Groups, Water Vapor, and Flue Gas Components on Mercury Adsorption and Oxidation by Sulfur-Impregnated Activated Carbons. Energy & Fuels, 2014, 28, 3300-3309.	5.1	53
15	Influences of thermal decontamination on mercury removal, soil properties, and repartitioning of coexisting heavy metals. Chemosphere, 2011, 84, 1244-1249.	8.2	52
16	Preparation of Cu-Doped TiO2 Photocatalyst with Thermal Plasma Torch for Low-Concentration Mercury Removal. Aerosol and Air Quality Research, 2013, 13, 639-648.	2.1	48
17	Optimization of highly microporous activated carbon preparation from Moso bamboo using central composite design approach. Journal of the Taiwan Institute of Chemical Engineers, 2015, 50, 266-275.	5.3	46
18	Control of mercury emissions from coal-combustion flue gases using CuCl2-modified zeolite and evaluating the cobenefit effects on SO2 and NO removal. Fuel Processing Technology, 2014, 126, 138-144.	7.2	45

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19	Effects of properties of manganese oxide-impregnated catalysts and flue gas condition on multipollutant control of Hg0 and NO. Journal of Hazardous Materials, 2015, 291, 1-8.	12.4	44
20	Synthesis of N-doped TiO2 photocatalyst for low-concentration elemental mercury removal under various gas conditions. Applied Catalysis B: Environmental, 2014, 160-161, 558-565.	20.2	43
21	Electronic structure tailoring of Al3+- and Ta5+-doped CeO2 for the synergistic removal of NO and chlorinated organics. Applied Catalysis B: Environmental, 2022, 304, 120939.	20.2	42
22	The neurological effects of prenatal and postnatal mercury/methylmercury exposure on three-year-old children in Taiwan. Chemosphere, 2014, 100, 71-76.	8.2	40
23	Synthesis of a SnO₂/TNT Heterojunction Nanocomposite as a High-Performance Photocatalyst. Journal of Physical Chemistry C, 2017, 121, 6050-6059.	3.1	40
24	Chemical stabilization of cadmium in acidic soil using alkaline agronomic and industrial by-products. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2013, 48, 1748-1756.	1.7	38
25	Enhanced photocatalytic activity of chromium(VI) reduction and EDTA oxidization by photoelectrocatalysis combining cationic exchange membrane processes. Journal of Hazardous Materials, 2013, 248-249, 97-106.	12.4	37
26	Methylmercury Concentration in Fish and Risk-Benefit Assessment of Fish Intake among Pregnant versus Infertile Women in Taiwan. PLoS ONE, 2016, 11, e0155704.	2.5	35
27	Mouthing activity data for children aged 7 to 35 months in Taiwan. Journal of Exposure Science and Environmental Epidemiology, 2015, 25, 388-398.	3.9	34
28	Multipollutant control of Hg/SO2/NO from coal-combustion flue gases using transition metal oxide-impregnated SCR catalysts. Catalysis Today, 2015, 245, 2-9.	4.4	32
29	Using raw and sulfur-impregnated activated carbon as active cap for leaching inhibition of mercury and methylmercury from contaminated sediment. Journal of Hazardous Materials, 2018, 354, 116-124.	12.4	32
30	A short review of bioaerosol emissions from gas bioreactors: Health threats, influencing factors and control technologies. Chemosphere, 2020, 253, 126737.	8.2	32
31	A Resource utilization method for volatile organic compounds emission from the semiconductor industry: Selective catalytic oxidation of isopropanol to acetone Over Au/Î±-Fe2O3 nanosheets. Applied Catalysis B: Environmental, 2020, 275, 119011.	20.2	31
32	Synthesis of TiO2â˜ visible-light photocatalyst using N2/Ar/He thermal plasma for low-concentration elemental mercury removal. Chemical Engineering Journal, 2012, 191, 378-385.	12.7	29
33	Mercury Speciation and Distribution in a 660-Megawatt Utility Boiler in Taiwan Firing Bituminous Coals. Journal of the Air and Waste Management Association, 2010, 60, 514-522.	1.9	28
34	Preparation of Activated Carbons from Raw and Biotreated Agricultural Residues for Removal of Volatile Organic Compounds. Journal of the Air and Waste Management Association, 2011, 61, 543-551.	1.9	28
35	Effects of Sulfur, Nitric Acid, and Thermal Treatments on the Properties and Mercury Adsorption of Activated Carbons from Bituminous Coals. Aerosol and Air Quality Research, 2013, 13, 730-738.	2.1	27
36	Mercury adsorption and re-emission inhibition from actual WFGD wastewater using sulfur-containing activated carbon. Environmental Research, 2019, 168, 319-328.	7.5	27

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37	Fabrication of Al-Doped TiO2Visible-Light Photocatalyst for Low-Concentration Mercury Removal. International Journal of Photoenergy, 2012, 2012, 1-8.	2.5	25
38	A size-segregation method for monitoring the diurnal characteristics of atmospheric black carbon size distribution at urban traffic sites. Atmospheric Environment, 2014, 90, 78-86.	4.1	25
39	Leaching potential of geogenic nickel in serpentine soils from Taiwan and Austria. Journal of Environmental Management, 2017, 186, 151-157.	7.8	25
40	Multipollutant removal of Hg0/SO2/NO from simulated coal-combustion flue gases using metal oxide/mesoporous SiO2 composites. International Journal of Coal Geology, 2017, 170, 60-68.	5.0	25
41	Sustainable Recovery of Gaseous Mercury by Adsorption and Electrothermal Desorption Using Activated Carbon Fiber Cloth. Environmental Science & Technology, 2020, 54, 1857-1866.	10.0	24
42	Adsorption of aqueous Hg2+ and inhibition of Hg0 re-emission from actual seawater flue gas desulfurization wastewater by using sulfurized activated carbon and NaClO. Science of the Total Environment, 2020, 711, 135172.	8.0	23
43	Performance enhancement of a biofilter with pH buffering and filter bed supporting material in removal of chlorobenzene. Chemosphere, 2020, 251, 126358.	8.2	22
44	Influence of soil properties on the bioaccessibility of Cr and Ni in geologic serpentine and anthropogenically contaminated non-serpentine soils in Taiwan. Science of the Total Environment, 2020, 714, 136761.	8.0	22
45	A novel synthesis of sulfurized magnetic biochar for aqueous Hg(II) capture as a potential method for environmental remediation in water. Science of the Total Environment, 2021, 784, 147240.	8.0	21
46	Control of Hg 0 and NO from coal-combustion flue gases using MnO x -CeO x /mesoporous SiO 2 from waste rice husk. Catalysis Today, 2017, 297, 104-112.	4.4	20
47	Gaseous mercury re-emission from wet flue gas desulfurization wastewater aeration basins: A review. Journal of Hazardous Materials, 2021, 420, 126546.	12.4	19
48	Influences of Copper(II) Chloride Impregnation on Activated Carbon for Low-Concentration Elemental Mercury Adsorption from Simulated Coal Combustion Flue Gas. Aerosol and Air Quality Research, 2017, 17, 1637-1648.	2.1	19
49	TiO2â˜x nanoparticles synthesized using He/Ar thermal plasma and their effectiveness on low-concentration mercury vapor removal. Journal of Nanoparticle Research, 2011, 13, 4739-4748.	1.9	17
50	Simultaneous Control of Elemental Mercury/Sulfur Dioxide/Nitrogen Monoxide from Coal-Fired Flue Gases with Metal Oxide-Impregnated Activated Carbon. Aerosol and Air Quality Research, 2015, 15, 2094-2103.	2.1	17
51	Soil ingestion rates for children under 3 years old in Taiwan. Journal of Exposure Science and Environmental Epidemiology, 2017, 27, 33-40.	3.9	16
52	Comparison of separated and combined photodegradation and biofiltration technology for the treatment of volatile organic compounds: A critical review. Critical Reviews in Environmental Science and Technology, 2022, 52, 1325-1355.	12.8	16
53	Fetal Exposure to Environmental Neurotoxins in Taiwan. PLoS ONE, 2014, 9, e109984.	2.5	16
54	Investigation of biogeochemical controls on the formation, uptake and accumulation of methylmercury in rice paddies in the vicinity of a coal-fired power plant and a municipal solid waste incinerator in Taiwan. Chemosphere, 2016, 154, 375-384.	8.2	15

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55	Synthesis of Agâ€modified TiO₂ nanotube and its application in photocatalytic degradation of dyes and elemental mercury. Journal of Chemical Technology and Biotechnology, 2019, 94, 3251-3262.	3.2	14
56	Simultaneous aqueous Hg(II) adsorption and gaseous Hg0 re-emission inhibition from SFGD wastewater by using Cu and S co-impregnated activated carbon. Chemosphere, 2021, 263, 127966.	8.2	14
57	Using Rice-husk-derived Porous Silica Modified with Recycled Cu from Industrial Wastewater and Ce to Remove Hg0 and NO from Simulated Flue Gases. Aerosol and Air Quality Research, 2019, 19, 2557-2567.	2.1	14
58	Effects of remediation train sequence on decontamination of heavy metal-contaminated soil containing mercury. Journal of the Air and Waste Management Association, 2014, 64, 1013-1020.	1.9	13
59	Preliminary study of blood methylmercury effects on reproductive hormones and relevant factors among infertile and pregnant women in Taiwan. Chemosphere, 2015, 135, 411-417.	8.2	13
60	Influence of carbon-functional groups with less hydrophilicity on a TiO 2 photocatalyst for removing low-level elemental mercury. Sustainable Environment Research, 2017, 27, 70-76.	4.2	13
61	Determination of hand soil loading, soil transfer, and particle size variations after hand-pressing and hand-mouthing activities. Science of the Total Environment, 2018, 627, 844-851.	8.0	13
62	Estimation of Soil and Dust Ingestion Rates from the Stochastic Human Exposure and Dose Simulation Soil and Dust Model for Children in Taiwan. Environmental Science & Technology, 2021, 55, 11805-11813.	10.0	13
63	Mouthing activity data for children age 3 to <6 years old and fraction of hand area mouthed for children age <6 years old in Taiwan. Journal of Exposure Science and Environmental Epidemiology, 2018, 28, 182-192.	3.9	12
64	Evaluation of the leachability of polychlorinated dibenzo-p-dioxins and dibenzofurans in raw and solidified air pollution control residues from municipal waste incinerators. Chemosphere, 2007, 67, 1434-1443.	8.2	11
65	Effects of injected activated carbon and solidification treatment on the leachability of polychlorinated dibenzo-p-dioxins and dibenzofurans from air pollution control residues of municipal waste incineration. Chemosphere, 2007, 67, 1394-1402.	8.2	11
66	Iron Sulfide Minerals as Potential Active Capping Materials for Mercury-Contaminated Sediment Remediation: A Minireview. Sustainability, 2019, 11, 1747.	3.2	11
67	Distribution of mercury and methylmercury in surface water and surface sediment of river, irrigation canal, reservoir, and wetland in Taiwan. Environmental Science and Pollution Research, 2019, 26, 17762-17773.	5.3	11
68	Mercury Speciation and Mass Distribution of Cement Production Process in Taiwan. Aerosol and Air Quality Research, 2018, 18, 2801-2812.	2.1	11
69	Single-Step Synthesis of Al-Doped TiO₂Nanoparticles Using Non-Transferred Thermal Plasma Torch. Japanese Journal of Applied Physics, 2012, 51, 01AL01.	1.5	11
70	Preparation of spherical activated phenol-formaldehyde beads from bamboo tar for adsorption of toluene. Journal of the Air and Waste Management Association, 2013, 63, 977-983.	1.9	10
71	Development of HCl-treated titania nanotube photocatalysts for dye photodegradation and low-concentration elemental mercury removal. Catalysis Today, 2017, 297, 113-123.	4.4	10
72	Blood and seminal plasma mercury levels and predatory fish intake in relation to low semen quality. Environmental Science and Pollution Research, 2019, 26, 19425-19433.	5.3	10

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73	Comprehending adsorption of methylethylketone and toluene and microwave regeneration effectiveness for beaded activated carbon derived from recycled waste bamboo tar. Journal of the Air and Waste Management Association, 2020, 70, 616-628.	1.9	10
74	Effects of soil lead exposure and land use characteristics on neurodevelopment among children under 3 years of age in northern Taiwan. Environmental Pollution, 2021, 286, 117288.	7.5	10
75	Inhibiting effect of quorum quenching on biomass accumulation: A clogging control strategy in gas biofilters. Chemical Engineering Journal, 2022, 432, 134313.	12.7	10
76	Soil-to-skin adherence during different activities for children in Taiwan. Environmental Research, 2018, 167, 240-247.	7.5	9
77	A simulation study of mercury immobilization in estuary sediment microcosm by activated carbon/clay-based thin-layer capping under artificial flow and turbation. Science of the Total Environment, 2020, 708, 135068.	8.0	9
78	Using Mixed Active Capping to Remediate Multiple Potential Toxic Metal Contaminated Sediment for Reducing Environmental Risk. Water (Switzerland), 2020, 12, 1886.	2.7	9
79	Mercury vapor adsorption and sustainable recovery using novel electrothermal swing system with gold-electrodeposited activated carbon fiber cloth. Journal of Hazardous Materials, 2021, 410, 124586.	12.4	8
80	Comprehending the Causes of Presence of Copper and Common Heavy Metals in Sediments of Irrigation Canals in Taiwan. Minerals (Basel, Switzerland), 2021, 11, 416.	2.0	8
81	Thermal performance and durability properties of the window glazing with exterior film(s). Indoor and Built Environment, 2014, 23, 1163-1176.	2.8	7
82	Single-Step Synthesis of Al-Doped TiO₂ Nanoparticles Using Non-Transferred Thermal Plasma Torch. Japanese Journal of Applied Physics, 2012, 51, 01AL01.	1.5	6
83	Environmental and Health Risks of Heavy Metals in Farmland Soils of Drinking Water Protection Areas and a Contaminated Paddy Field in Taiwan. Sustainability, 2019, 11, 5166.	3.2	6
84	Development of Porous Template Carbons from Montmorillonite Clays and Evaluation of Their Toluene Adsorption Behaviors. Aerosol and Air Quality Research, 2013, 13, 1779-1789.	2.1	6
85	Preparation of AgCl/TNTs nanocomposites for organic dyes and inorganic heavy metal removal. Environmental Science and Pollution Research, 2019, 26, 22082-22096.	5.3	5
86	Associations of maternal food safety-related risk perceptions and protective behaviors with daily mercury intake and internal doses of Taiwanese women and their preschool children. Environmental Research, 2022, 212, 113344.	7.5	5
87	Quasi-dynamic leaching characteristics of polychlorinated dibenzo-p-dioxins and dibenzofurans from raw and solidified waste incineration residues. Chemosphere, 2008, 71, 284-293.	8.2	4
88	Preparation of oxygen-vacant TiO2â˜'x and activated carbon fiber composite using a single-step thermal plasma method for low-concentration elemental mercury removal. Chemical Engineering Journal, 2012, 200-202, 18-24.	12.7	4
89	Bioregeneration of spent mercury bearing sulfur-impregnated activated carbon adsorbent. Environmental Science and Pollution Research, 2018, 25, 5095-5104.	5.3	4
90	Influence of sulfide, chloride and dissolved organic matter on mercury adsorption by activated carbon in aqueous system. Sustainable Environment Research, 2020, 30, .	4.2	4

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91	Mercury speciation and mass distribution of coal-fired power plants in Taiwan using different air pollution control processes. Journal of the Air and Waste Management Association, 2021, 71, 553-563.	1.9	4
92	Using novel gold nanoparticles-deposited activated carbon fiber cloth for continuous gaseous mercury recovery by electrothermal swing system. Chemical Engineering Journal, 2022, 431, 134325.	12.7	4
93	Valorizing Waste Bamboo Tar to Novel Bead Carbonaceous Adsorbent for Volatile Organic Compound Removal. Journal of Environmental Engineering, ASCE, 2019, 145, .	1.4	3
94	Aqueous Mercury Removal with Carbonaceous and Iron Sulfide Sorbents and Their Applicability as Thin-Layer Caps in Mercury-Contaminated Estuary Sediment. Water (Switzerland), 2020, 12, 1991.	2.7	3
95	Modeling of exposure to mercury in different environmental media over a 30-year period: A case study of Shimen reservoir, northern Taiwan. Human and Ecological Risk Assessment (HERA), 2020, 26, 1379-1390.	3.4	2
96	Performance improvement of a biofilter by using gel-encapsulated microorganisms assembled in a 3D mesh material. Chemosphere, 2020, 251, 126618.	8.2	2
97	Preparation of Cu-Mn and Cu-Mn-Ce Oxide/Mesoporous Silica via Silicate Exfoliation for Removal of NO and Hg0. Aerosol and Air Quality Research, 2019, 19, 1421-1438.	2.1	2