

# Hsing-Cheng Hsi

## List of Publications by Year in descending order

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97  
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172457

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times ranked

3069  
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#	ARTICLE	IF	CITATIONS
1	Comparison of separated and combined photodegradation and biofiltration technology for the treatment of volatile organic compounds: A critical review. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 1325-1355.	12.8	16
2	Catalytic stability enhancement for pollutant removal via balancing lattice oxygen mobility and VOCs adsorption. <i>Journal of Hazardous Materials</i> , 2022, 424, 127337.	12.4	57
3	Electronic structure tailoring of Al <sup>3+</sup> - and Ta <sup>5+</sup> -doped CeO <sub>2</sub> for the synergistic removal of NO and chlorinated organics. <i>Applied Catalysis B: Environmental</i> , 2022, 304, 120939.	20.2	42
4	Using novel gold nanoparticles-deposited activated carbon fiber cloth for continuous gaseous mercury recovery by electrothermal swing system. <i>Chemical Engineering Journal</i> , 2022, 431, 134325.	12.7	4
5	Inhibiting effect of quorum quenching on biomass accumulation: A clogging control strategy in gas biofilters. <i>Chemical Engineering Journal</i> , 2022, 432, 134313.	12.7	10
6	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. <i>Environmental Research</i> , 2022, 212, 113344.	7.5	5
7	Simultaneous aqueous Hg(II) adsorption and gaseous Hg <sup>0</sup> re-emission inhibition from SFGD wastewater by using Cu and S co-impregnated activated carbon. <i>Chemosphere</i> , 2021, 263, 127966.	8.2	14
8	Mercury speciation and mass distribution of coal-fired power plants in Taiwan using different air pollution control processes. <i>Journal of the Air and Waste Management Association</i> , 2021, 71, 553-563.	1.9	4
9	Mercury vapor adsorption and sustainable recovery using novel electrothermal swing system with gold-electrodeposited activated carbon fiber cloth. <i>Journal of Hazardous Materials</i> , 2021, 410, 124586.	12.4	8
10	Comprehending the Causes of Presence of Copper and Common Heavy Metals in Sediments of Irrigation Canals in Taiwan. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 416.	2.0	8
11	Emissions, measurement, and control of odor in livestock farms: A review. <i>Science of the Total Environment</i> , 2021, 776, 145735.	8.0	79
12	Estimation of Soil and Dust Ingestion Rates from the Stochastic Human Exposure and Dose Simulation Soil and Dust Model for Children in Taiwan. <i>Environmental Science &amp; Technology</i> , 2021, 55, 11805-11813.	10.0	13
13	A novel synthesis of sulfurized magnetic biochar for aqueous Hg(II) capture as a potential method for environmental remediation in water. <i>Science of the Total Environment</i> , 2021, 784, 147240.	8.0	21
14	Gaseous mercury re-emission from wet flue gas desulfurization wastewater aeration basins: A review. <i>Journal of Hazardous Materials</i> , 2021, 420, 126546.	12.4	19
15	Effects of soil lead exposure and land use characteristics on neurodevelopment among children under 3 years of age in northern Taiwan. <i>Environmental Pollution</i> , 2021, 286, 117288.	7.5	10
16	Modeling of exposure to mercury in different environmental media over a 30-year period: A case study of Shimen reservoir, northern Taiwan. <i>Human and Ecological Risk Assessment (HERA)</i> , 2020, 26, 1379-1390.	3.4	2
17	Sustainable Recovery of Gaseous Mercury by Adsorption and Electrothermal Desorption Using Activated Carbon Fiber Cloth. <i>Environmental Science &amp; Technology</i> , 2020, 54, 1857-1866.	10.0	24
18	A simulation study of mercury immobilization in estuary sediment microcosm by activated carbon/clay-based thin-layer capping under artificial flow and turbation. <i>Science of the Total Environment</i> , 2020, 708, 135068.	8.0	9

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19	Adsorption of aqueous Hg <sup>2+</sup> and inhibition of Hg <sup>0</sup> re-emission from actual seawater flue gas desulfurization wastewater by using sulfurized activated carbon and NaClO. <i>Science of the Total Environment</i> , 2020, 711, 135172.	8.0	23
20	Influence of sulfide, chloride and dissolved organic matter on mercury adsorption by activated carbon in aqueous system. <i>Sustainable Environment Research</i> , 2020, 30, .	4.2	4
21	Using Mixed Active Capping to Remediate Multiple Potential Toxic Metal Contaminated Sediment for Reducing Environmental Risk. <i>Water (Switzerland)</i> , 2020, 12, 1886.	2.7	9
22	Aqueous Mercury Removal with Carbonaceous and Iron Sulfide Sorbents and Their Applicability as Thin-Layer Caps in Mercury-Contaminated Estuary Sediment. <i>Water (Switzerland)</i> , 2020, 12, 1991.	2.7	3
23	A short review of bioaerosol emissions from gas bioreactors: Health threats, influencing factors and control technologies. <i>Chemosphere</i> , 2020, 253, 126737.	8.2	32
24	Performance enhancement of a biofilter with pH buffering and filter bed supporting material in removal of chlorobenzene. <i>Chemosphere</i> , 2020, 251, 126358.	8.2	22
25	Performance improvement of a biofilter by using gel-encapsulated microorganisms assembled in a 3D mesh material. <i>Chemosphere</i> , 2020, 251, 126618.	8.2	2
26	Comprehending adsorption of methylethylketone and toluene and microwave regeneration effectiveness for beaded activated carbon derived from recycled waste bamboo tar. <i>Journal of the Air and Waste Management Association</i> , 2020, 70, 616-628.	1.9	10
27	Influence of soil properties on the bioaccessibility of Cr and Ni in geologic serpentine and anthropogenically contaminated non-serpentine soils in Taiwan. <i>Science of the Total Environment</i> , 2020, 714, 136761.	8.0	22
28	A Resource utilization method for volatile organic compounds emission from the semiconductor industry: Selective catalytic oxidation of isopropanol to acetone Over Au/±-Fe <sub>2</sub> O <sub>3</sub> nanosheets. <i>Applied Catalysis B: Environmental</i> , 2020, 275, 119011.	20.2	31
29	Size effect, mutual inhibition and oxidation mechanism of the catalytic removal of a toluene and acetone mixture over TiO <sub>2</sub> nanosheet-supported Pt nanocatalysts. <i>Applied Catalysis B: Environmental</i> , 2020, 274, 118963.	20.2	125
30	Synthesis of Ag-modified TiO <sub>2</sub> nanotube and its application in photocatalytic degradation of dyes and elemental mercury. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 3251-3262.	3.2	14
31	Valorizing Waste Bamboo Tar to Novel Bead Carbonaceous Adsorbent for Volatile Organic Compound Removal. <i>Journal of Environmental Engineering, ASCE</i> , 2019, 145, .	1.4	3
32	Environmental and Health Risks of Heavy Metals in Farmland Soils of Drinking Water Protection Areas and a Contaminated Paddy Field in Taiwan. <i>Sustainability</i> , 2019, 11, 5166.	3.2	6
33	Preparation of AgCl/TNTs nanocomposites for organic dyes and inorganic heavy metal removal. <i>Environmental Science and Pollution Research</i> , 2019, 26, 22082-22096.	5.3	5
34	Blood and seminal plasma mercury levels and predatory fish intake in relation to low semen quality. <i>Environmental Science and Pollution Research</i> , 2019, 26, 19425-19433.	5.3	10
35	Iron Sulfide Minerals as Potential Active Capping Materials for Mercury-Contaminated Sediment Remediation: A Minireview. <i>Sustainability</i> , 2019, 11, 1747.	3.2	11
36	Distribution of mercury and methylmercury in surface water and surface sediment of river, irrigation canal, reservoir, and wetland in Taiwan. <i>Environmental Science and Pollution Research</i> , 2019, 26, 17762-17773.	5.3	11

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37	Mercury adsorption and re-emission inhibition from actual WFGD wastewater using sulfur-containing activated carbon. <i>Environmental Research</i> , 2019, 168, 319-328.	7.5	27
38	Preparation of Cu-Mn and Cu-Mn-Ce Oxide/Mesoporous Silica via Silicate Exfoliation for Removal of NO and HgO. <i>Aerosol and Air Quality Research</i> , 2019, 19, 1421-1438.	2.1	2
39	Using Rice-husk-derived Porous Silica Modified with Recycled Cu from Industrial Wastewater and Ce to Remove HgO and NO from Simulated Flue Gases. <i>Aerosol and Air Quality Research</i> , 2019, 19, 2557-2567.	2.1	14
40	Determination of hand soil loading, soil transfer, and particle size variations after hand-pressing and hand-mouthing activities. <i>Science of the Total Environment</i> , 2018, 627, 844-851.	8.0	13
41	Using raw and sulfur-impregnated activated carbon as active cap for leaching inhibition of mercury and methylmercury from contaminated sediment. <i>Journal of Hazardous Materials</i> , 2018, 354, 116-124.	12.4	32
42	Mouthing activity data for children age 3 to <math>\leq 6</math> years old and fraction of hand area mouthed for children age <math>\leq 6</math> years old in Taiwan. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2018, 28, 182-192.	3.9	12
43	Bioregeneration of spent mercury bearing sulfur-impregnated activated carbon adsorbent. <i>Environmental Science and Pollution Research</i> , 2018, 25, 5095-5104.	5.3	4
44	Soil-to-skin adherence during different activities for children in Taiwan. <i>Environmental Research</i> , 2018, 167, 240-247.	7.5	9
45	Mercury Speciation and Mass Distribution of Cement Production Process in Taiwan. <i>Aerosol and Air Quality Research</i> , 2018, 18, 2801-2812.	2.1	11
46	Soil ingestion rates for children under 3 years old in Taiwan. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2017, 27, 33-40.	3.9	16
47	Leaching potential of geogenic nickel in serpentine soils from Taiwan and Austria. <i>Journal of Environmental Management</i> , 2017, 186, 151-157.	7.8	25
48	Influence of carbon-functional groups with less hydrophilicity on a TiO <sub>2</sub> photocatalyst for removing low-level elemental mercury. <i>Sustainable Environment Research</i> , 2017, 27, 70-76.	4.2	13
49	Development of HCl-treated titania nanotube photocatalysts for dye photodegradation and low-concentration elemental mercury removal. <i>Catalysis Today</i> , 2017, 297, 113-123.	4.4	10
50	Control of Hg <sub>0</sub> and NO from coal-combustion flue gases using MnO <sub>x</sub> -CeO <sub>x</sub> /mesoporous SiO <sub>2</sub> from waste rice husk. <i>Catalysis Today</i> , 2017, 297, 104-112.	4.4	20
51	Synthesis of a SnO <sub>2</sub> /TNT Heterojunction Nanocomposite as a High-Performance Photocatalyst. <i>Journal of Physical Chemistry C</i> , 2017, 121, 6050-6059.	3.1	40
52	Multipollutant removal of Hg <sub>0</sub> /SO <sub>2</sub> /NO from simulated coal-combustion flue gases using metal oxide/mesoporous SiO <sub>2</sub> composites. <i>International Journal of Coal Geology</i> , 2017, 170, 60-68.	5.0	25
53	Influences of Copper(II) Chloride Impregnation on Activated Carbon for Low-Concentration Elemental Mercury Adsorption from Simulated Coal Combustion Flue Gas. <i>Aerosol and Air Quality Research</i> , 2017, 17, 1637-1648.	2.1	19
54	Methylmercury Concentration in Fish and Risk-Benefit Assessment of Fish Intake among Pregnant versus Infertile Women in Taiwan. <i>PLoS ONE</i> , 2016, 11, e0155704.	2.5	35

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55	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. <i>Chemosphere</i> , 2016, 154, 375-384.	8.2	15
56	Electrodeposited Manganese Dioxide/Activated Carbon Composite As a High-Performance Electrode Material for Capacitive Deionization. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 4762-4770.	6.7	119
57	Multipollutant control of Hg/SO <sub>2</sub> /NO from coal-combustion flue gases using transition metal oxide-impregnated SCR catalysts. <i>Catalysis Today</i> , 2015, 245, 2-9.	4.4	32
58	Optimization of highly microporous activated carbon preparation from Moso bamboo using central composite design approach. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2015, 50, 266-275.	5.3	46
59	Preliminary study of blood methylmercury effects on reproductive hormones and relevant factors among infertile and pregnant women in Taiwan. <i>Chemosphere</i> , 2015, 135, 411-417.	8.2	13
60	Highly porous activated carbons from resource-recovered <i>Leucaena leucocephala</i> wood as capacitive deionization electrodes. <i>Chemosphere</i> , 2015, 141, 71-79.	8.2	60
61	Mouthing activity data for children aged 7 to 35 months in Taiwan. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2015, 25, 388-398.	3.9	34
62	Effects of properties of manganese oxide-impregnated catalysts and flue gas condition on multipollutant control of HgO and NO. <i>Journal of Hazardous Materials</i> , 2015, 291, 1-8.	12.4	44
63	Improved performance in capacitive deionization of activated carbon electrodes with a tunable mesopore and micropore ratio. <i>Desalination</i> , 2015, 367, 60-68.	8.2	215
64	Simultaneous Control of Elemental Mercury/Sulfur Dioxide/Nitrogen Monoxide from Coal-Fired Flue Gases with Metal Oxide-Impregnated Activated Carbon. <i>Aerosol and Air Quality Research</i> , 2015, 15, 2094-2103.	2.1	17
65	Thermal performance and durability properties of the window glazing with exterior film(s). <i>Indoor and Built Environment</i> , 2014, 23, 1163-1176.	2.8	7
66	The neurological effects of prenatal and postnatal mercury/methylmercury exposure on three-year-old children in Taiwan. <i>Chemosphere</i> , 2014, 100, 71-76.	8.2	40
67	Effects of remediation train sequence on decontamination of heavy metal-contaminated soil containing mercury. <i>Journal of the Air and Waste Management Association</i> , 2014, 64, 1013-1020.	1.9	13
68	Synthesis of N-doped TiO <sub>2</sub> photocatalyst for low-concentration elemental mercury removal under various gas conditions. <i>Applied Catalysis B: Environmental</i> , 2014, 160-161, 558-565.	20.2	43
69	Impact of Surface Functional Groups, Water Vapor, and Flue Gas Components on Mercury Adsorption and Oxidation by Sulfur-Impregnated Activated Carbons. <i>Energy &amp; Fuels</i> , 2014, 28, 3300-3309.	5.1	53
70	A size-segregation method for monitoring the diurnal characteristics of atmospheric black carbon size distribution at urban traffic sites. <i>Atmospheric Environment</i> , 2014, 90, 78-86.	4.1	25
71	Control of mercury emissions from coal-combustion flue gases using CuCl <sub>2</sub> -modified zeolite and evaluating the cobenefit effects on SO <sub>2</sub> and NO removal. <i>Fuel Processing Technology</i> , 2014, 126, 138-144.	7.2	45
72	Fetal Exposure to Environmental Neurotoxins in Taiwan. <i>PLoS ONE</i> , 2014, 9, e109984.	2.5	16

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73	Chemical stabilization of cadmium in acidic soil using alkaline agronomic and industrial by-products. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2013, 48, 1748-1756.	1.7	38
74	Enhanced photocatalytic activity of chromium(VI) reduction and EDTA oxidization by photoelectrocatalysis combining cationic exchange membrane processes. <i>Journal of Hazardous Materials</i> , 2013, 248-249, 97-106.	12.4	37
75	Preparation of spherical activated phenol-formaldehyde beads from bamboo tar for adsorption of toluene. <i>Journal of the Air and Waste Management Association</i> , 2013, 63, 977-983.	1.9	10
76	Effects of Sulfur, Nitric Acid, and Thermal Treatments on the Properties and Mercury Adsorption of Activated Carbons from Bituminous Coals. <i>Aerosol and Air Quality Research</i> , 2013, 13, 730-738.	2.1	27
77	Preparation of Cu-Doped TiO <sub>2</sub> Photocatalyst with Thermal Plasma Torch for Low-Concentration Mercury Removal. <i>Aerosol and Air Quality Research</i> , 2013, 13, 639-648.	2.1	48
78	Development of Porous Template Carbons from Montmorillonite Clays and Evaluation of Their Toluene Adsorption Behaviors. <i>Aerosol and Air Quality Research</i> , 2013, 13, 1779-1789.	2.1	6
79	Fabrication of Al-Doped TiO <sub>2</sub> Visible-Light Photocatalyst for Low-Concentration Mercury Removal. <i>International Journal of Photoenergy</i> , 2012, 2012, 1-8.	2.5	25
80	Single-Step Synthesis of Al-Doped TiO <sub>2</sub> Nanoparticles Using Non-Transferred Thermal Plasma Torch. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 01AL01.	1.5	6
81	Preparation of oxygen-vacant TiO <sub>2-x</sub> and activated carbon fiber composite using a single-step thermal plasma method for low-concentration elemental mercury removal. <i>Chemical Engineering Journal</i> , 2012, 200-202, 18-24.	12.7	4
82	Influences of acidic/oxidizing gases on elemental mercury adsorption equilibrium and kinetics of sulfur-impregnated activated carbon. <i>Fuel</i> , 2012, 98, 229-235.	6.4	113
83	Synthesis of TiO <sub>2-x</sub> visible-light photocatalyst using N <sub>2</sub> /Ar/He thermal plasma for low-concentration elemental mercury removal. <i>Chemical Engineering Journal</i> , 2012, 191, 378-385.	12.7	29
84	Single-Step Synthesis of Al-Doped TiO <sub>2</sub> Nanoparticles Using Non-Transferred Thermal Plasma Torch. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 01AL01.	1.5	11
85	Influences of thermal decontamination on mercury removal, soil properties, and repartitioning of coexisting heavy metals. <i>Chemosphere</i> , 2011, 84, 1244-1249.	8.2	52
86	TiO <sub>2-x</sub> nanoparticles synthesized using He/Ar thermal plasma and their effectiveness on low-concentration mercury vapor removal. <i>Journal of Nanoparticle Research</i> , 2011, 13, 4739-4748.	1.9	17
87	Characteristics of PCDD/F content in fly ash discharged from municipal solid waste incinerators. <i>Journal of Hazardous Materials</i> , 2011, 192, 521-529.	12.4	64
88	Preparation of Activated Carbons from Raw and Biotreated Agricultural Residues for Removal of Volatile Organic Compounds. <i>Journal of the Air and Waste Management Association</i> , 2011, 61, 543-551.	1.9	28
89	Characterizing the Emissions of Polybrominated Diphenyl Ethers (PBDEs) and Polybrominated Dibenzo- <i>p</i> -dioxins and Dibenzofurans (PBDD/Fs) from Metallurgical Processes. <i>Environmental Science &amp; Technology</i> , 2010, 44, 1240-1246.	10.0	95
90	Mercury Speciation and Distribution in a 660-Megawatt Utility Boiler in Taiwan Firing Bituminous Coals. <i>Journal of the Air and Waste Management Association</i> , 2010, 60, 514-522.	1.9	28

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91	Quasi-dynamic leaching characteristics of polychlorinated dibenzo-p-dioxins and dibenzofurans from raw and solidified waste incineration residues. <i>Chemosphere</i> , 2008, 71, 284-293.	8.2	4
92	Evaluation of the leachability of polychlorinated dibenzo-p-dioxins and dibenzofurans in raw and solidified air pollution control residues from municipal waste incinerators. <i>Chemosphere</i> , 2007, 67, 1434-1443.	8.2	11
93	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. <i>Chemosphere</i> , 2007, 67, 1394-1402.	8.2	11
94	Mercury Adsorption Properties of Sulfur-Impregnated Adsorbents. <i>Journal of Environmental Engineering, ASCE</i> , 2002, 128, 1080-1089.	1.4	98
95	Effects of Sulfur Impregnation Temperature on the Properties and Mercury Adsorption Capacities of Activated Carbon Fibers (ACFs). <i>Environmental Science &amp; Technology</i> , 2001, 35, 2785-2791.	10.0	161
96	Preparation and Evaluation of Coal-Derived Activated Carbons for Removal of Mercury Vapor from Simulated Coal Combustion Flue Gases. <i>Energy &amp; Fuels</i> , 1998, 12, 1061-1070.	5.1	54
97	Resource Recovery of Waste Fly Ash: Synthesis Of Zeolite-like Materials. <i>Environmental Science &amp; Technology</i> , 1995, 29, 1109-1117.	10.0	198