

# Victor Wei-Chung Chang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9423252/publications.pdf>

Version: 2024-02-01

93  
papers

4,824  
citations

71061

41  
h-index

98753

67  
g-index

94  
all docs

94  
docs citations

94  
times ranked

6020  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancing the catalytic activity of g-C <sub>3</sub> N <sub>4</sub> through Me doping (Me = Cu, Co and Fe) for selective sulfathiazole degradation via redox-based advanced oxidation process. <i>Chemical Engineering Journal</i> , 2017, 323, 260-269.	6.6	243
2	Removal of cytostatic drugs from aquatic environment: A review. <i>Science of the Total Environment</i> , 2013, 445-446, 281-298.	3.9	233
3	Osmotic membrane bioreactor (OMBR) technology for wastewater treatment and reclamation: Advances, challenges, and prospects for the future. <i>Journal of Membrane Science</i> , 2016, 504, 113-132.	4.1	217
4	Fate and distribution of heavy metals during thermal processing of sewage sludge. <i>Fuel</i> , 2018, 226, 721-744.	3.4	203
5	Review of MSWI bottom ash utilization from perspectives of collective characterization, treatment and existing application. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 79, 24-38.	8.2	190
6	Kinetic and mechanistic investigation of azathioprine degradation in water by UV, UV/H <sub>2</sub> O <sub>2</sub> and UV/persulfate. <i>Chemical Engineering Journal</i> , 2016, 302, 526-534.	6.6	153
7	Mining Nutrients (N, K, P) from Urban Source-Separated Urine by Forward Osmosis Dewatering. <i>Environmental Science &amp; Technology</i> , 2014, 48, 3386-3394.	4.6	152
8	Life cycle assessment of the present and proposed food waste management technologies from environmental and economic impact perspectives. <i>Journal of Cleaner Production</i> , 2016, 131, 607-614.	4.6	136
9	Novel Perspectives on the Bioaccumulation of PFCs – the Concentration Dependency. <i>Environmental Science &amp; Technology</i> , 2011, 45, 9758-9764.	4.6	133
10	Developing Singapore Driving Cycle for passenger cars to estimate fuel consumption and vehicular emissions. <i>Atmospheric Environment</i> , 2014, 97, 353-362.	1.9	122
11	Characterization of induced struvite formation from source-separated urine using seawater and brine as magnesium sources. <i>Chemosphere</i> , 2013, 93, 2738-2747.	4.2	117
12	Development of anaerobic osmotic membrane bioreactor for low-strength wastewater treatment at mesophilic condition. <i>Journal of Membrane Science</i> , 2015, 490, 197-208.	4.1	116
13	Thermal comfort, perceived air quality, and cognitive performance when personally controlled air movement is used by tropically acclimatized persons. <i>Indoor Air</i> , 2017, 27, 690-702.	2.0	102
14	Regulation, formation, exposure, and treatment of disinfection by-products (DBPs) in swimming pool waters: A critical review. <i>Environment International</i> , 2018, 121, 1039-1057.	4.8	94
15	Air stripping process for ammonia recovery from source-separated urine: modeling and optimization. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 2208-2217.	1.6	83
16	Removal of haloacetic acids from swimming pool water by reverse osmosis and nanofiltration. <i>Water Research</i> , 2017, 116, 116-125.	5.3	82
17	Comparing mixing and displacement ventilation in tutorial rooms: Students' thermal comfort, sick building syndromes, and short-term performance. <i>Building and Environment</i> , 2016, 102, 128-137.	3.0	77
18	Co-pyrolysis of sewage sludge and organic fractions of municipal solid waste: Synergistic effects on biochar properties and the environmental risk of heavy metals. <i>Journal of Hazardous Materials</i> , 2021, 412, 125200.	6.5	76

#	ARTICLE	IF	CITATIONS
19	Environmental life cycle assessment of reverse osmosis desalination: The influence of different life cycle impact assessment methods on the characterization results. <i>Desalination</i> , 2011, 283, 227-236.	4.0	74
20	Life Cycle Assessment for desalination: A review on methodology feasibility and reliability. <i>Water Research</i> , 2014, 61, 210-223.	5.3	70
21	Human-building interaction under various indoor temperatures through neural-signal electroencephalogram (EEG) methods. <i>Building and Environment</i> , 2018, 129, 46-53.	3.0	70
22	Modeling of cool roof heat transfer in tropical climate. <i>Renewable Energy</i> , 2015, 75, 210-223.	4.3	69
23	An improved life cycle impact assessment (LCIA) approach for assessing aquatic eco-toxic impact of brine disposal from seawater desalination plants. <i>Desalination</i> , 2013, 308, 233-241.	4.0	68
24	Human health and thermal comfort of office workers in Singapore. <i>Building and Environment</i> , 2012, 58, 172-178.	3.0	64
25	Conversion of non-condensable pyrolysis gases from plastics into carbon nanomaterials: Effects of feedstock and temperature. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017, 124, 16-24.	2.6	64
26	Removal of cytostatic drugs from wastewater by an anaerobic osmotic membrane bioreactor. <i>Chemical Engineering Journal</i> , 2018, 339, 153-161.	6.6	62
27	Experimental study on visible-light induced photocatalytic oxidation of gaseous formaldehyde by polyester fiber supported photocatalysts. <i>Chemical Engineering Journal</i> , 2013, 218, 9-18.	6.6	59
28	Upgrading of non-condensable pyrolysis gas from mixed plastics through catalytic decomposition and dechlorination. <i>Fuel Processing Technology</i> , 2018, 170, 13-20.	3.7	59
29	Protocol Improvements for Low Concentration DNA-Based Bioaerosol Sampling and Analysis. <i>PLoS ONE</i> , 2015, 10, e0141158.	1.1	56
30	An insight of disinfection by-product (DBP) formation by alternative disinfectants for swimming pool disinfection under tropical conditions. <i>Water Research</i> , 2016, 101, 535-546.	5.3	56
31	What can eco-driving do for sustainable road transport? Perspectives from a city (Singapore) eco-driving programme. <i>Sustainable Cities and Society</i> , 2015, 14, 82-88.	5.1	55
32	Environmental life cycle assessment of brackish water reverse osmosis desalination for different electricity production models. <i>Energy and Environmental Science</i> , 2011, 4, 2267.	15.6	50
33	Thermal performance of concrete-based roofs in tropical climate. <i>Energy and Buildings</i> , 2014, 76, 392-401.	3.1	49
34	Degradation of cyclophosphamide and 5-fluorouracil in water using UV and UV/H <sub>2</sub> O <sub>2</sub> : Kinetics investigation, pathways and energetic analysis. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 1133-1139.	3.3	49
35	Model-based optimization for vapor compression refrigeration cycle. <i>Energy</i> , 2013, 55, 392-402.	4.5	46
36	Environmental life cycle assessment of different domestic wastewater streams: Policy effectiveness in a tropical urban environment. <i>Journal of Environmental Management</i> , 2014, 140, 60-68.	3.8	46

#	ARTICLE	IF	CITATIONS
37	Particle exposure during the 2013 haze in Singapore: Importance of the built environment. <i>Building and Environment</i> , 2015, 93, 14-23.	3.0	46
38	Direct and indirect photodegradation pathways of cytostatic drugs under UV germicidal irradiation: Process kinetics and influences of water matrix species and oxidant dosing. <i>Journal of Hazardous Materials</i> , 2017, 324, 481-488.	6.5	46
39	Life cycle assessment of adoption of local recycled aggregates and green concrete in Singapore perspective. <i>Journal of Cleaner Production</i> , 2017, 164, 918-926.	4.6	44
40	Role of calcium ions on the removal of haloacetic acids from swimming pool water by nanofiltration: mechanisms and implications. <i>Water Research</i> , 2017, 110, 332-341.	5.3	42
41	Genotoxicity of perfluorinated chemicals (PFCs) to the green mussel ( <i>Perna viridis</i> ). <i>Science of the Total Environment</i> , 2014, 487, 117-122.	3.9	41
42	Co-pyrolysis of sewage sludge and food waste digestate to synergistically improve biochar characteristics and heavy metals immobilization. <i>Waste Management</i> , 2022, 141, 231-239.	3.7	41
43	Preparation of TiO <sub>2</sub> -Coated Polyester Fiber Filter by Spray-Coating and Its Photocatalytic Degradation of Gaseous Formaldehyde. <i>Aerosol and Air Quality Research</i> , 2012, 12, 1327-1335.	0.9	39
44	Environmental toxicity of PFCs: An enhanced integrated biomarker assessment and structure-activity analysis. <i>Environmental Toxicology and Chemistry</i> , 2013, 32, 2226-2233.	2.2	39
45	Application of hydroponic systems for the treatment of source-separated human urine. <i>Ecological Engineering</i> , 2015, 81, 182-191.	1.6	39
46	Indoor and outdoor particles in an air-conditioned building during and after the 2013 haze in Singapore. <i>Building and Environment</i> , 2016, 99, 73-81.	3.0	39
47	Statistical comparison of leaching behavior of incineration bottom ash using seawater and deionized water: Significant findings based on several leaching methods. <i>Journal of Hazardous Materials</i> , 2018, 344, 635-648.	6.5	36
48	Exposure and risk assessment of volatile organic compounds and airborne phthalates in Singapore's Child Care Centers. <i>Chemosphere</i> , 2019, 224, 85-92.	4.2	36
49	Influence of surface morphology on the performance of nanostructured ZnO-loaded ceramic honeycomb for syngas desulfurization. <i>Fuel</i> , 2018, 211, 591-599.	3.4	35
50	Adaptation of urine source separation in tropical cities: Process optimization and odor mitigation. <i>Journal of the Air and Waste Management Association</i> , 2013, 63, 472-481.	0.9	32
51	Measurements, factor analysis and modeling of element leaching from incineration bottom ashes for quantitative component effects. <i>Journal of Cleaner Production</i> , 2017, 165, 477-490.	4.6	29
52	Catalytic activities and resistance to HCl poisoning of Ni-based catalysts during steam reforming of naphthalene. <i>Applied Catalysis A: General</i> , 2018, 557, 25-38.	2.2	29
53	Human exposure and risk assessment of recycling incineration bottom ash for land reclamation: A showcase coupling studies of leachability, transport modeling and bioaccumulation. <i>Journal of Hazardous Materials</i> , 2020, 385, 121600.	6.5	28
54	Real-time occupancy estimation using environmental parameters. , 2015, , .		27

#	ARTICLE	IF	CITATIONS
55	Indoor and outdoor particulate matter in primary school classrooms with fan-assisted natural ventilation in Singapore. <i>Environmental Science and Pollution Research</i> , 2016, 23, 17613-17624.	2.7	27
56	Co-complexation effects during incineration bottom ash leaching via comparison of measurements and geochemical modeling. <i>Journal of Cleaner Production</i> , 2018, 189, 155-168.	4.6	27
57	Distribution and modeling of tar compounds produced during downdraft gasification of municipal solid waste. <i>Renewable Energy</i> , 2019, 136, 1294-1303.	4.3	27
58	A comprehensive performance evaluation of heterogeneous Bi <sub>2</sub> Fe <sub>4</sub> O <sub>9</sub> /peroxymonosulfate system for sulfamethoxazole degradation. <i>Environmental Science and Pollution Research</i> , 2019, 26, 1026-1035.	2.7	27
59	Development of analysis of volatile polyfluorinated alkyl substances in indoor air using thermal desorption-gas chromatography-mass spectrometry. <i>Journal of Chromatography A</i> , 2012, 1238, 114-120.	1.8	26
60	Bioaerosol deposition on an air-conditioning cooling coil. <i>Atmospheric Environment</i> , 2016, 144, 257-265.	1.9	26
61	Influence of moisturizer and relative humidity on human emissions of fluorescent biological aerosol particles. <i>Indoor Air</i> , 2017, 27, 587-598.	2.0	24
62	Kinetics and modeling of trace metal leaching from bottom ashes dominated by diffusion or advection. <i>Science of the Total Environment</i> , 2020, 719, 137203.	3.9	24
63	Cr, Cu, Hg and Ni release from incineration bottom ash during utilization in land reclamation based on lab-scale batch and column leaching experiments and a modeling study. <i>Chemosphere</i> , 2018, 197, 741-748.	4.2	23
64	Exposure to particulate matter and ozone of outdoor origin in Singapore. <i>Building and Environment</i> , 2015, 93, 3-13.	3.0	22
65	Ecological succession of the microbial communities of an air-conditioning cooling coil in the tropics. <i>Indoor Air</i> , 2017, 27, 345-353.	2.0	22
66	Multi-biomarker responses in green mussels exposed to PFCs: effects at molecular, cellular, and physiological levels. <i>Environmental Science and Pollution Research</i> , 2014, 21, 2785-2794.	2.7	20
67	Neural-signal electroencephalogram (EEG) methods to improve human-building interaction under different indoor air quality. <i>Energy and Buildings</i> , 2019, 197, 188-195.	3.1	20
68	Dilution Rates for Tailpipe Emissions: Effects of Vehicle Shape, Tailpipe Position, and Exhaust Velocity. <i>Journal of the Air and Waste Management Association</i> , 2009, 59, 715-724.	0.9	19
69	The Effect of Surface Adsorption and Molecular Geometry on the Determination of Henry's Law Constants for Fluorotelomer Alcohols. <i>Journal of Chemical &amp; Engineering Data</i> , 2011, 56, 3442-3448.	1.0	19
70	A large-scale field trial experiment to derive effective release of heavy metals from incineration bottom ashes during construction in land reclamation. <i>Science of the Total Environment</i> , 2018, 637-638, 182-190.	3.9	19
71	Vertical distribution of heavy metals in seawater column during IBA construction in land reclamation Re-exploration of a large-scale field trial experiment. <i>Science of the Total Environment</i> , 2019, 654, 356-364.	3.9	19
72	Decentralized optimization for vapor compression refrigeration cycle. <i>Applied Thermal Engineering</i> , 2013, 51, 753-763.	3.0	17

#	ARTICLE	IF	CITATIONS
73	Oxidative toxicity of perfluorinated chemicals in green mussel and bioaccumulation factor dependent quantitative structure–activity relationship. <i>Environmental Toxicology and Chemistry</i> , 2014, 33, 2323-2332.	2.2	16
74	Evaluating the potential of biodiesel (via recycled cooking oil) use in Singapore, an urban city. <i>Resources, Conservation and Recycling</i> , 2014, 91, 117-124.	5.3	15
75	A review of building parameters’ roles in conserving energy versus maintaining comfort. <i>Journal of Building Engineering</i> , 2021, 35, 102087.	1.6	13
76	NiO-coated polyester filters for visible light photocatalytic removal of gaseous toluene under static and dynamic flow conditions. <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 357-364.	3.3	11
77	Performance gap in a multi-storey student accommodation complex built to Passivhaus standard. <i>Building and Environment</i> , 2021, 194, 107704.	3.0	10
78	Exploring temporal patterns of bacterial and fungal DNA accumulation on a ventilation system filter for a Singapore university library. <i>PLoS ONE</i> , 2018, 13, e0200820.	1.1	9
79	Machine learning-based analysis of occupant-centric aspects: Critical elements in the energy consumption of residential buildings. <i>Journal of Building Engineering</i> , 2022, 46, 103846.	1.6	9
80	Insights for transformation of contaminants in leachate at a tropical landfill dominated by natural attenuation. <i>Waste Management</i> , 2016, 53, 105-115.	3.7	8
81	Comparative leaching characteristics of fly/bottom ashes from municipal solid waste incineration under various environmental stresses. <i>Journal of Material Cycles and Waste Management</i> , 2020, 22, 46-55.	1.6	8
82	Performance evaluation of filter applications in fan-coil units during the 2015 Southeast Asian haze episode. <i>Building and Environment</i> , 2016, 107, 191-197.	3.0	7
83	Wind Tunnel Measurements of the Dilution of Tailpipe Emissions Downstream of a Car, a Light-Duty Truck, and a Heavy-Duty Truck Tractor Head. <i>Journal of the Air and Waste Management Association</i> , 2009, 59, 704-714.	0.9	6
84	An HPLC-DAD method for rapid and high resolution analysis of concentrated BTEX and styrene aqueous samples. <i>Analytical Methods</i> , 2012, 4, 3545.	1.3	6
85	DNA accumulation on ventilation system filters in university buildings in Singapore. <i>PLoS ONE</i> , 2017, 12, e0186295.	1.1	6
86	Comparison and modeling of leachate transportation dominated by the field permeability with an anisotropic characteristic based on a large-scale field trial study. <i>Chemosphere</i> , 2020, 242, 125254.	4.2	6
87	Balancing BEC and IAQ in civil buildings during rapid urbanization in China: Regulation, interplay and collaboration. <i>Energy Policy</i> , 2011, 39, 5778-5790.	4.2	5
88	Determination of urine-derived odorous compounds in a source separation sanitation system. <i>Journal of Environmental Sciences</i> , 2017, 52, 240-249.	3.2	5
89	Multiple geophysical surveys for old landfill monitoring in Singapore. <i>Environmental Monitoring and Assessment</i> , 2017, 189, 20.	1.3	5
90	Comparison of solvent extraction and thermal desorption methods for determination of volatile polyfluorinated alkyl substances in the urban atmosphere. <i>Analytical Methods</i> , 2013, 5, 3410.	1.3	4

#	ARTICLE	IF	CITATIONS
91	Development of an accelerated leaching method for incineration bottom ash correlated to toxicity characteristic leaching protocol. <i>Electrophoresis</i> , 2016, 37, 2458-2461.	1.3	4
92	Reply to Comment on "The Effect of Surface Adsorption and Molecular Geometry on the Determination of Henry's Law Constants for Fluorotelomer Alcohols". <i>Journal of Chemical &amp; Engineering Data</i> , 2013, 58, 1418-1419.	1.0	0
93	Multi-objective optimal speed for expressways. <i>IES Journal Part A: Civil and Structural Engineering</i> , 2015, 8, 80-88.	0.4	0