

# Zeng-Yei Hseu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7533/publications.pdf>

Version: 2024-02-01

101  
papers

3,505  
citations

159585

30  
h-index

155660

55  
g-index

103  
all docs

103  
docs citations

103  
times ranked

3986  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiple elements of soil biodiversity drive ecosystem functions across biomes. <i>Nature Ecology and Evolution</i> , 2020, 4, 210-220.	7.8	543
2	Evaluating heavy metal contents in nine composts using four digestion methods. <i>Bioresource Technology</i> , 2004, 95, 53-59.	9.6	284
3	Changes in belowground biodiversity during ecosystem development. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6891-6896.	7.1	151
4	Global ecological predictors of the soil priming effect. <i>Nature Communications</i> , 2019, 10, 3481.	12.8	148
5	Digestion Methods for Total Heavy Metals in Sediments and Soils. <i>Water, Air, and Soil Pollution</i> , 2002, 141, 189-205.	2.4	120
6	Remediation techniques and heavy metal uptake by different rice varieties in metal-contaminated soils of Taiwan: New aspects for food safety regulation and sustainable agriculture. <i>Soil Science and Plant Nutrition</i> , 2010, 56, 31-52.	1.9	103
7	Pedogenic Chromium and Nickel Partitioning in Serpentine Soils along a Toposequence. <i>Soil Science Society of America Journal</i> , 2011, 75, 659-668.	2.2	84
8	Soil contamination by potentially toxic elements and the associated human health risk in geo- and anthropogenic contaminated soils: A case study from the temperate region (Germany) and the arid region (Egypt). <i>Environmental Pollution</i> , 2020, 262, 114312.	7.5	77
9	Response of microbial activities to heavy metals in a neutral loamy soil treated with biosolid. <i>Chemosphere</i> , 2006, 64, 63-70.	8.2	76
10	Impacts of Biochar on Physical Properties and Erosion Potential of a Mudstone Slope Land Soil. <i>Scientific World Journal</i> , The, 2014, 2014, 1-10.	2.1	71
11	Release dynamics of As, Co, and Mo in a biochar treated soil under pre-definite redox conditions. <i>Science of the Total Environment</i> , 2019, 657, 686-695.	8.0	69
12	In-Situ Immobilization of Cadmium and Lead by Different Amendments in Two Contaminated Soils. <i>Water, Air, and Soil Pollution</i> , 2002, 140, 73-84.	2.4	68
13	Health Risk-Based Assessment and Management of Heavy Metals-Contaminated Soil Sites in Taiwan. <i>International Journal of Environmental Research and Public Health</i> , 2010, 7, 3595-3614.	2.6	68
14	Extractability and bioavailability of zinc over time in three tropical soils incubated with biosolids. <i>Chemosphere</i> , 2006, 63, 762-771.	8.2	67
15	Efficacy of woody biomass and biochar for alleviating heavy metal bioavailability in serpentine soil. <i>Environmental Geochemistry and Health</i> , 2017, 39, 391-401.	3.4	63
16	Effects of chelators on chromium and nickel uptake by <i>Brassica juncea</i> on serpentine-mine tailings for phytoextraction. <i>Journal of Hazardous Materials</i> , 2007, 148, 366-376.	12.4	59
17	Weathering sequences of clay minerals in soils along a serpentinitic toposequence. <i>Clays and Clay Minerals</i> , 2007, 55, 389-401.	1.3	56
18	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

#	ARTICLE	IF	CITATIONS
19	Partitioning of arsenic in soilâ€‘crop systems irrigated using groundwater: A case study of rice paddy soils in southwestern Taiwan. <i>Chemosphere</i> , 2012, 86, 606-613.	8.2	51
20	CONCENTRATION AND DISTRIBUTION OF CHROMIUM AND NICKEL FRACTIONS ALONG A SERPENTINITIC TOPOSEQUENCE. <i>Soil Science</i> , 2006, 171, 341-353.	0.9	49
21	Using EDDS and NTA for enhanced phytoextraction of Cd by water spinach. <i>Journal of Environmental Management</i> , 2013, 117, 58-64.	7.8	47
22	The influence of soil age on ecosystem structure and function across biomes. <i>Nature Communications</i> , 2020, 11, 4721.	12.8	47
23	Occurrence and cycling of trace elements in ultramafic soils and their impacts on human health: A critical review. <i>Environment International</i> , 2019, 131, 104974.	10.0	43
24	Cadmium accumulation and tolerance of mahogany ( <i>Swietenia macrophylla</i> ) seedlings for phytoextraction applications. <i>Journal of Environmental Management</i> , 2011, 92, 2818-2822.	7.8	41
25	Litter production, decomposition and nutrient return of uplifted coral reef tropical forest. <i>Forest Ecology and Management</i> , 2006, 235, 174-185.	3.2	38
26	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
27	Saturation, Reduction, and Redox Morphology of Seasonally Flooded Alfisols in Taiwan. <i>Soil Science Society of America Journal</i> , 1996, 60, 941-949.	2.2	37
28	Geochemical fractionation of chromium and nickel in serpentine soil profiles along a temperate to tropical climate gradient. <i>Geoderma</i> , 2018, 327, 97-106.	5.1	36
29	Nickel accumulation in paddy rice on serpentine soils containing high geogenic nickel contents in Taiwan. <i>Environmental Geochemistry and Health</i> , 2017, 39, 1325-1334.	3.4	33
30	Pedogeochemical characteristics of chromite in a paddy soil derived from serpentinites. <i>Geoderma</i> , 2013, 202-203, 126-133.	5.1	32
31	Characterization of Placic Horizons in Two Subalpine Forest Inceptisols. <i>Soil Science Society of America Journal</i> , 1999, 63, 941-947.	2.2	31
32	Evaluating heavy metal concentration of plants on a serpentine site for phytoremediation applications. <i>Environmental Earth Sciences</i> , 2013, 70, 191-199.	2.7	31
33	Pedogenic approach to resolving the geomorphic evolution of the Pakua river terraces in central Taiwan. <i>Geomorphology</i> , 2007, 83, 14-28.	2.6	30
34	Hydropedological Implications of Ferromanganiferous Nodules in Riceâ€‘Growing Plinthitic Ultisols under Different Moisture Regimes. <i>Soil Science Society of America Journal</i> , 2010, 74, 880-891.	2.2	30
35	A RIVER TERRACE SOIL CHRONOSEQUENCE OF THE PAKUA TABLELAND IN CENTRAL TAIWAN. <i>Soil Science</i> , 2006, 171, 167-179.	0.9	29
36	Meteoritic <sup>10</sup> Be dating of highly weathered soils from fluvial terraces in Taiwan. <i>Quaternary International</i> , 2008, 188, 185-196.	1.5	29

#	ARTICLE	IF	CITATIONS
37	CLAY MINERALOGY OF SPodosols WITH HIGH CLAY CONTENTS IN THE SUBALPINE FORESTS OF TAIWAN. <i>Clays and Clay Minerals</i> , 2002, 50, 726-735.	1.3	27
38	Nitrogen mineralization potentials in three tropical soils treated with biosolids. <i>Chemosphere</i> , 2005, 59, 447-454.	8.2	26
39	Quantifying Soil Hydromorphology of a Rice-Growing Ultisol Toposequence in Taiwan. <i>Soil Science Society of America Journal</i> , 2001, 65, 270-278.	2.2	25
40	Geochemical Element Differentiation in Serpentine Soils From the Ophiolite Complexes, Eastern Taiwan. <i>Soil Science</i> , 2009, 174, 283-291.	0.9	25
41	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
42	Association between arsenic and different-sized dissolved organic matter in the groundwater of black-foot disease area, Taiwan. <i>Chemosphere</i> , 2016, 159, 214-220.	8.2	24
43	Soil and biomass carbon re-accumulation after landslide disturbances. <i>Geomorphology</i> , 2017, 288, 164-174.	2.6	24
44	Inhibition of ethylenediaminetetraacetic acid ferric sodium salt (EDTA-Fe) and calcium peroxide (CaO <sub>2</sub> ) on arsenic uptake by vegetables in arsenic-rich agricultural soil. <i>Journal of Geochemical Exploration</i> , 2016, 163, 19-27.	3.2	23
45	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
46	Soil genesis along a chronosequence on marine terraces in eastern Taiwan. <i>Catena</i> , 2007, 71, 394-405.	5.0	21
47	Geochemical characterization of placic horizons in subtropical montane forest soils, northeastern Taiwan. <i>European Journal of Soil Science</i> , 2010, 61, 319-332.	3.9	19
48	Irrigation Practices on Rice Crop Production in Arsenic-Rich Paddy Soil. <i>Crop Science</i> , 2016, 56, 422-431.	1.8	19
49	Bioaccumulation and human health risk assessment of chromium and nickel in paddy rice grown in serpentine soils. <i>Environmental Science and Pollution Research</i> , 2021, 28, 17146-17157.	5.3	17
50	Distribution and Accumulation of Arsenic in Rice Plants Grown in Arsenic-Rich Agricultural Soil. <i>Agronomy Journal</i> , 2014, 106, 945-951.	1.8	16
51	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
52	Response of microbial activities in two contrasting soils to 4-nonylphenol treated with biosolids. <i>Chemosphere</i> , 2006, 64, 1769-1776.	8.2	15
53	Pedogenic correlation of lateritic river terraces in central Taiwan. <i>Geomorphology</i> , 2007, 88, 201-213.	2.6	15
54	Evaluation of Phytoavailability of Heavy Metals to Chinese Cabbage ( <i>Brassica chinensis</i> L.) in Rural Soils. <i>Scientific World Journal</i> , The, 2014, 2014, 1-10.	2.1	15

#	ARTICLE	IF	CITATIONS
55	TRANSITIONAL SOIL CHARACTERISTICS OF ULTISOLS AND SPodosols IN THE SUBALPINE FOREST OF TAIWAN. <i>Soil Science</i> , 2004, 169, 457-467.	0.9	14
56	RELATIONS BETWEEN MORPHOLOGICAL COLOR INDEX AND SOIL WETNESS CONDITION OF ANTHRAQUIC SOILS IN TAIWAN. <i>Soil Science</i> , 2004, 169, 871-882.	0.9	14
57	Experiences of Mass Pig Carcass Disposal Related to Groundwater Quality Monitoring in Taiwan. <i>Sustainability</i> , 2017, 9, 46.	3.2	14
58	Evaluating vanadium bioavailability to cabbage in rural soils using geochemical and micro-spectroscopic techniques. <i>Environmental Pollution</i> , 2020, 258, 113699.	7.5	14
59	Influence of Aged Biochar Modified by Cd <sup>2+</sup> on Soil Properties and Microbial Community. <i>Sustainability</i> , 2020, 12, 4868.	3.2	14
60	Pedogeochemical distribution of gallium, indium and thallium, their potential availability and associated risk in highly-weathered soil profiles of Taiwan. <i>Environmental Research</i> , 2021, 197, 110994.	7.5	14
61	Subtropical Soil Chronosequence on Holocene Marine Terraces in Eastern Taiwan. <i>Soil Science Society of America Journal</i> , 2010, 74, 1271-1283.	2.2	13
62	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
63	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
64	Comparison of bacterial communities and their functional profiling using 16S rRNA gene sequencing between the inherent serpentine-associated sites, hyper-accumulator, downgradient agricultural farmlands, and distal non-serpentine soils. <i>Journal of Hazardous Materials</i> , 2022, 431, 128557.	12.4	12
65	Clay-Mineral Transformations and Heavy-Metal Release in Paddy Soils Formed on Serpentinities in Eastern Taiwan. <i>Clays and Clay Minerals</i> , 2015, 63, 119-131.	1.3	11
66	Soilscape of west-central Taiwan: Its pedogenesis and geomorphic implications. <i>Geomorphology</i> , 2016, 255, 81-94.	2.6	11
67	Efficacy of cheap amendments for stabilizing trace elements in contaminated paddy fields. <i>Chemosphere</i> , 2018, 198, 130-138.	8.2	11
68	Pedogenic properties of surface deposits used as evidence for the type of landform formation of the Tadu tableland in central Taiwan. <i>Geomorphology</i> , 2010, 114, 590-600.	2.6	10
69	Rehabilitation of a Sandy Soil With Aluminum-Water Treatment Residual. <i>Soil Science</i> , 2011, 176, 691-698.	0.9	9
70	Soil-to-skin adherence during different activities for children in Taiwan. <i>Environmental Research</i> , 2018, 167, 240-247.	7.5	9
71	Study of transportation and distribution of PCBs using an ecologically simulated growth chamber. <i>Chemosphere</i> , 2006, 64, 565-573.	8.2	8
72	Partition of geogenic nickel in paddy soils derived from serpentinities. <i>Paddy and Water Environment</i> , 2016, 14, 417-426.	1.8	8

#	ARTICLE	IF	CITATIONS
73	Extractable Concentrations of Cobalt from Serpentine Soils with Several Single-Extraction Procedures. Communications in Soil Science and Plant Analysis, 2009, 40, 2200-2224.	1.4	7
74	Chromium Speciation Associated with Iron and Manganese Oxides in Serpentine Mine Tailings. Environmental Engineering Science, 2013, 30, 241-247.	1.6	7
75	Sorption of Paraquat on Clay Components in a Taiwan's Oxisol. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2003, 38, 441-449.	1.5	6
76	Geomorphological and paleoclimatic implications of soil development from siliceous materials on the coral-reef terraces of Liuchiu Island in southern Taiwan. Soil Science and Plant Nutrition, 2011, 57, 114-127.	1.9	6
77	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
78	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
79	Rare earth elements associated with pedogenic iron oxides in humid and tropical soils from different parent materials. Geoderma, 2022, 423, 115966.	5.1	6
80	Sorption and Biodegradation of Phthalic Acid Esters in Freshwater Sediments. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2005, 40, 103-115.	1.7	5
81	Morphology and pedogenesis of placic horizons in podzolic Ultisols with high clay content in humid subtropical forests. Geoderma, 2019, 353, 243-251.	5.1	5
82	Evolution of As speciation with depth in a soil profile with a geothermal As origin. Chemosphere, 2020, 241, 124956.	8.2	4
83	Aeolian additions of podzolic soils on the high-altitude mountains in central Taiwan-sediment origin and pedological implications. Geoderma, 2021, 383, 114726.	5.1	4
84	BASILINE CONCENTRATIONS OF TEN METALS IN THE FRESHWATER SEDIMENTS OF A WATERSHED IN TAIWAN. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2002, 37, 1633-1647.	1.7	3
85	Portable X-Ray Fluorescence (pXRF) for Determining Cr and Ni Contents of Serpentine Soils in the Field. Progress in Soil Science, 2016, , 37-50.	0.8	3
86	Silicon availability in relation to soil properties in Inceptisols on uncultivated lands and paddy fields in Taiwan. Geoderma Regional, 2021, 26, e00406.	2.1	3
87	Fate of Heavy Metals and Evaluation of Eutrophication in a Wetland-Reservoir System. Water Environment Research, 2014, 86, 331-339.	2.7	2
88	Pedogenesis of red soils overlaid coral reef terraces in the Southern Taiwan. Quaternary International, 2017, 441, 62-76.	1.5	2
89	Correcting the classification of plinthic Ultisols on aged alluvial terraces in Taiwan. Soil Science and Plant Nutrition, 2020, 66, 458-468.	1.9	2
90	Erosion Potential Estimation by Network Measurement of Soil Properties in Coastal Areas after Clearcutting. International Journal of Distributed Sensor Networks, 2015, 11, 281321.	2.2	2

#	ARTICLE	IF	CITATIONS
91	Soil connectivity makes university social responsibility practice in Taiwan. <i>Soil Security</i> , 2022, 6, 100046.	2.3	2
92	Kinetics of Chromium Reduction Associated with Varying Characteristics of Agricultural Soils. <i>Water (Switzerland)</i> , 2022, 14, 570.	2.7	2
93	Identification of the water source and groundwater recharge in a paddy field using stable hydrogen and oxygen isotopes. <i>Water Science and Technology: Water Supply</i> , 2022, 22, 6443-6457.	2.1	2
94	Soil Profile Imaging for Estimating the Depth Distributions of Clay, Iron, and Hydrological Conditions of Soils Under Rice in Northern Taiwan. <i>Progress in Soil Science</i> , 2016, , 145-163.	0.8	1
95	Effects of Pine Bark Compost on the Distribution of Cd and Pb in Organic Fractions over Time in Contaminated Soils. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2013, 17, 38-44.	2.0	0
96	Ecological and Health Risk of Soils, Sediments, and Water Contamination. <i>Water (Switzerland)</i> , 2020, 12, 2867.	2.7	0
97	Asian Anthroscapes: China and Taiwan. , 2010, , 205-241.		0
98	Spodosols. <i>World Soils Book Series</i> , 2015, , 83-94.	0.2	0
99	Soil Survey, Information System, and Soil Classification. <i>World Soils Book Series</i> , 2015, , 11-23.	0.2	0
100	Alfisols. <i>World Soils Book Series</i> , 2015, , 25-34.	0.2	0
101	Evaluation of Land Use Adaptation by Sequential Extraction of Soil Trace Elements at an Abandoned Gold and Copper Refinery Site in Northern Taiwan. <i>Sustainability</i> , 2022, 14, 6423.	3.2	0