

Jim J Wang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/39664/publications.pdf>

Version: 2024-02-01

109
papers

6,276
citations

76196

40
h-index

71532

76
g-index

111
all docs

111
docs citations

111
times ranked

6266
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancing phosphate adsorption by Mg/Al layered double hydroxide functionalized biochar with different Mg/Al ratios. <i>Science of the Total Environment</i> , 2016, 559, 121-129.	3.9	453
2	Simultaneous capture removal of phosphate, ammonium and organic substances by MgO impregnated biochar and its potential use in swine wastewater treatment. <i>Journal of Cleaner Production</i> , 2017, 147, 96-107.	4.6	351
3	Nutrient transformations during composting of pig manure with bentonite. <i>Bioresource Technology</i> , 2012, 121, 362-368.	4.8	314
4	Soil heavy metal contamination and health risks associated with artisanal gold mining in Tongguan, Shaanxi, China. <i>Ecotoxicology and Environmental Safety</i> , 2017, 141, 17-24.	2.9	305
5	Recovery of phosphate from aqueous solution by magnesium oxide decorated magnetic biochar and its potential as phosphate-based fertilizer substitute. <i>Bioresource Technology</i> , 2016, 215, 209-214.	4.8	297
6	An overview of carbothermal synthesis of metal-biochar composites for the removal of oxyanion contaminants from aqueous solution. <i>Carbon</i> , 2018, 129, 674-687.	5.4	282
7	Recent developments in biochar utilization as an additive in organic solid waste composting: A review. <i>Bioresource Technology</i> , 2017, 246, 203-213.	4.8	224
8	Denitrification potential and its relation to organic carbon quality in three coastal wetland soils. <i>Science of the Total Environment</i> , 2008, 407, 471-480.	3.9	164
9	Fundamental and molecular composition characteristics of biochars produced from sugarcane and rice crop residues and by-products. <i>Chemosphere</i> , 2016, 142, 4-13.	4.2	159
10	Recovery of phosphate and dissolved organic matter from aqueous solution using a novel CaO-MgO hybrid carbon composite and its feasibility in phosphorus recycling. <i>Science of the Total Environment</i> , 2018, 642, 526-536.	3.9	157
11	High-efficiency removal of Pb(II) and humate by a CeO ₂ -MoS ₂ hybrid magnetic biochar. <i>Bioresource Technology</i> , 2019, 273, 335-340.	4.8	152
12	Degradation of Orange G by Fenton-like reaction with Fe-impregnated biochar catalyst. <i>Bioresource Technology</i> , 2018, 249, 368-376.	4.8	149
13	Removing tetracycline and Hg(II) with ball-milled magnetic nanobiochar and its potential on polluted irrigation water reclamation. <i>Journal of Hazardous Materials</i> , 2020, 384, 121095.	6.5	140
14	Removal of Pb(II) and Cd(II) ions from aqueous solution by thiosemicarbazide modified chitosan. <i>International Journal of Biological Macromolecules</i> , 2016, 86, 876-884.	3.6	121
15	Improving pig manure composting efficiency employing Ca-bentonite. <i>Ecological Engineering</i> , 2016, 87, 157-161.	1.6	119
16	Cadmium adsorption characteristics of biochars derived using various pine tree residues and pyrolysis temperatures. <i>Journal of Colloid and Interface Science</i> , 2019, 553, 298-307.	5.0	115
17	Removing mercury from aqueous solution using sulfurized biochar and associated mechanisms. <i>Environmental Pollution</i> , 2019, 244, 627-635.	3.7	108
18	Application effects of coated urea and urease and nitrification inhibitors on ammonia and greenhouse gas emissions from a subtropical cotton field of the Mississippi delta region. <i>Science of the Total Environment</i> , 2015, 533, 329-338.	3.9	95

#	ARTICLE	IF	CITATIONS
19	Enhanced sorption of hexavalent chromium [Cr(VI)] from aqueous solutions by diluted sulfuric acid-assisted MgO-coated biochar composite. <i>Chemosphere</i> , 2018, 208, 408-416.	4.2	88
20	Facilitative capture of As(V), Pb(II) and methylene blue from aqueous solutions with MgO hybrid sponge-like carbonaceous composite derived from sugarcane leafy trash. <i>Journal of Environmental Management</i> , 2018, 212, 77-87.	3.8	85
21	Adsorption/desorption behavior of cationic and anionic dyes by biochars prepared at normal and high pyrolysis temperatures. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 572, 274-282.	2.3	85
22	Influence of humic substances on bioavailability of Cu and Zn during sewage sludge composting. <i>Bioresource Technology</i> , 2011, 102, 8022-8026.	4.8	81
23	Recycling of rice straw through pyrolysis and its adsorption behaviors for Cu and Zn ions in aqueous solution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017, 533, 330-337.	2.3	77
24	Remediation of crude oil-contaminated coastal marsh soil: Integrated effect of biochar, rhamnolipid biosurfactant and nitrogen application. <i>Journal of Hazardous Materials</i> , 2020, 396, 122595.	6.5	74
25	Characterization of labile organic carbon in coastal wetland soils of the Mississippi River deltaic plain: Relationships to carbon functionalities. <i>Science of the Total Environment</i> , 2012, 435-436, 151-158.	3.9	73
26	Soil Salinity Using Saturated Paste and 1:1 Soil to Water Extracts. <i>Soil Science Society of America Journal</i> , 2005, 69, 1146-1151.	1.2	68
27	Removal of Cd(II) and Cr(VI) ions by highly cross-linked Thiocarbohydrazide-chitosan gel. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 1072-1081.	3.6	68
28	Zinc and Cadmium Adsorption to Aluminum Oxide Nanoparticles Affected by Naturally Occurring Ligands. <i>Journal of Environmental Quality</i> , 2014, 43, 498-506.	1.0	65
29	Effect of Biochar Amendment on Tylosin Adsorption-Desorption and Transport in Two Different Soils. <i>Journal of Environmental Quality</i> , 2012, 41, 1185-1192.	1.0	63
30	Effect of pyrolysis temperature on phosphate adsorption characteristics and mechanisms of crawfish char. <i>Journal of Colloid and Interface Science</i> , 2018, 525, 143-151.	5.0	61
31	Biochar produced from mineral salt-impregnated chicken manure: Fertility properties and potential for carbon sequestration. <i>Waste Management</i> , 2018, 78, 802-810.	3.7	61
32	Characterization of phosphorus engineered biochar and its impact on immobilization of Cd and Pb from smelting contaminated soils. <i>Journal of Soils and Sediments</i> , 2020, 20, 3041-3052.	1.5	60
33	Phosphate removal in constructed wetland with rapid cooled basic oxygen furnace slag. <i>Chemical Engineering Journal</i> , 2017, 327, 713-724.	6.6	58
34	Effect of KOH-enhanced biochar on increasing soil plant-available silicon. <i>Geoderma</i> , 2018, 321, 22-31.	2.3	56
35	Removal of Eriochrome Black T by sulfate radical generated from Fe-impregnated biochar/persulfate in Fenton-like reaction. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 71, 201-209.	2.9	53
36	Comparison of Soil-Test Extractants for Phosphorus, Potassium, Calcium, Magnesium, Sodium, Zinc, Copper, Manganese, and Iron in Louisiana Soils. <i>Communications in Soil Science and Plant Analysis</i> , 2004, 35, 145-160.	0.6	52

#	ARTICLE	IF	CITATIONS
37	Effect of Ammonium, Potassium, and Sodium Cations and Phosphate, Nitrate, and Chloride Anions on Zinc Sorption and Lability in Selected Acid and Calcareous Soils. <i>Soil Science Society of America Journal</i> , 2005, 69, 1036-1046.	1.2	52
38	Soil Characteristics and Phosphorus Level Effect on Phosphorus Loss in Runoff. <i>Journal of Environmental Quality</i> , 2005, 34, 1640-1650.	1.0	46
39	Potassium Buffering Characteristics of Three Soils Low in Exchangeable Potassium. <i>Soil Science Society of America Journal</i> , 2004, 68, 654-661.	1.2	45
40	Removal of cadmium(II) cations from an aqueous solution with aminothiourea chitosan strengthened magnetic biochar. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46239.	1.3	43
41	Ammonia and greenhouse gas emissions from a subtropical wheat field under different nitrogen fertilization strategies. <i>Journal of Environmental Sciences</i> , 2017, 57, 196-210.	3.2	42
42	Characteristics and phytotoxicity assay of biochars derived from a Zn-rich antibiotic residue. <i>Journal of Analytical and Applied Pyrolysis</i> , 2015, 113, 575-583.	2.6	41
43	Influence of poultry litter and biochar on soil water dynamics and nutrient leaching from a very fine sandy loam soil. <i>Soil and Tillage Research</i> , 2019, 189, 44-51.	2.6	41
44	FRACTIONATION AND SORPTION OF INORGANIC PHOSPHORUS IN LOUISIANA CALCAREOUS SOILS. <i>Soil Science</i> , 2006, 171, 39-51.	0.9	39
45	Potentiometric Determination of Potassium Q/I Relationships. <i>Soil Science Society of America Journal</i> , 1988, 52, 657-662.	1.2	38
46	Computer-Simulated Evaluation of Possible Mechanisms for Quenching Heavy Metal Ion Activity in Plant Vacuoles. <i>Plant Physiology</i> , 1991, 97, 1154-1160.	2.3	38
47	Effect of Organic Matter Oxidation on the Fractionation of Copper, Zinc, Lead, and Arsenic in Sewage Sludge and Amended Soils. <i>Journal of Environmental Quality</i> , 2011, 40, 1162-1171.	1.0	38
48	Conversion of Cu(II)-polluted biomass into an environmentally benign Cu nanoparticles-embedded biochar composite and its potential use on cyanobacteria inhibition. <i>Journal of Cleaner Production</i> , 2019, 216, 25-32.	4.6	36
49	Heavy metals and metalloid contamination in Louisiana Lake Pontchartrain Estuary along I-10 Bridge. <i>Transportation Research, Part D: Transport and Environment</i> , 2016, 44, 66-77.	3.2	32
50	Heavy metal distribution and water quality characterization of water bodies in Louisiana's Lake Pontchartrain Basin, USA. <i>Environmental Monitoring and Assessment</i> , 2016, 188, 628.	1.3	32
51	SOIL SILICON EXTRACTABILITY WITH SEVEN SELECTED EXTRACTANTS IN RELATION TO COLORIMETRIC AND ICP DETERMINATION. <i>Soil Science</i> , 2004, 169, 861-870.	0.9	30
52	Effect of nitrogen fertilization and residue management practices on ammonia emissions from subtropical sugarcane production. <i>Atmospheric Environment</i> , 2016, 139, 122-130.	1.9	30
53	Potential use of biochar and rhamnolipid biosurfactant for remediation of crude oil-contaminated coastal wetland soil: Ecotoxicity assessment. <i>Chemosphere</i> , 2020, 253, 126617.	4.2	30
54	Predicting Runoff of Suspended Solids and Particulate Phosphorus for Selected Louisiana Soils Using Simple Soil Tests. <i>Journal of Environmental Quality</i> , 2007, 36, 1310-1317.	1.0	28

#	ARTICLE	IF	CITATIONS
55	Molecular Composition of Humic Acids from Coastal Wetland Soils along a Salinity Gradient. <i>Soil Science Society of America Journal</i> , 2012, 76, 1592-1605.	1.2	28
56	Effectiveness of Bauxite Residues in Immobilizing Contaminants in Manure-Amended Soils. <i>Soil Science</i> , 2009, 174, 676-686.	0.9	24
57	Heavy metals and metalloids content and enrichment in Gulf Coast sediments in the vicinity of an oil refinery. <i>Journal of Geochemical Exploration</i> , 2015, 159, 93-100.	1.5	24
58	Stronger network connectivity with lower diversity of soil fungal community was presented in coastal marshes after sixteen years of freshwater restoration. <i>Science of the Total Environment</i> , 2020, 744, 140623.	3.9	24
59	Application of biochar in estrogen hormone-contaminated and manure-affected soils: Impact on soil respiration, microbial community and enzyme activity. <i>Chemosphere</i> , 2021, 270, 128625.	4.2	24
60	Effect of biochar amendment on sorption-desorption and dissipation of 17 β -ethinylestradiol in sandy loam and clay soils. <i>Science of the Total Environment</i> , 2019, 686, 959-967.	3.9	23
61	Integrated application effects of biochar and plant residue on ammonia loss, heavy metal immobilization, and estrogen dissipation during the composting of poultry manure. <i>Waste Management</i> , 2021, 131, 117-125.	3.7	23
62	Carbon gas production under different electron acceptors in a freshwater marsh soil. <i>Chemosphere</i> , 2009, 76, 517-522.	4.2	22
63	Soil Carbon Characteristics in Two Mississippi River Deltaic Marshland Profiles. <i>Wetlands</i> , 2011, 31, 157-166.	0.7	22
64	Mercury adsorption in the Mississippi River deltaic plain freshwater marsh soil of Louisiana Gulf coastal wetlands. <i>Chemosphere</i> , 2018, 195, 455-462.	4.2	21
65	Response of microbial populations regulating nutrient biogeochemical cycles to oiling of coastal saltmarshes from the Deepwater Horizon oil spill. <i>Environmental Pollution</i> , 2018, 241, 136-147.	3.7	21
66	Effect of experimental relevance on potassium Q/I relationships and its implications for surface and subsurface soils. <i>Communications in Soil Science and Plant Analysis</i> , 2001, 32, 2561-2575.	0.6	20
67	Impacts of land use change on soil organic matter chemistry in the Everglades, Florida - a characterization with pyrolysis-gas chromatography-mass spectrometry. <i>Geoderma</i> , 2019, 338, 393-400.	2.3	20
68	Effect of alkali-enhanced biochar on silicon uptake and suppression of gray leaf spot development in perennial ryegrass. <i>Crop Protection</i> , 2019, 119, 9-16.	1.0	19
69	Nitrification inhibitors reduce nitrogen losses and improve soil health in a subtropical pastureland. <i>Geoderma</i> , 2021, 388, 114947.	2.3	18
70	Macroscopic and Extended X-ray Absorption Fine Structure Spectroscopic Investigation of Ligand Effect on Zinc Adsorption to Kaolinite as a Function of pH. <i>Soil Science</i> , 2011, 176, 464-471.	0.9	16
71	Fresh and weathered crude oil effects on potential denitrification rates of coastal marsh soil. <i>Chemosphere</i> , 2015, 134, 120-126.	4.2	16
72	Biochemical Oxygen Demand Relationships in Typical Agricultural Effluents. <i>Water, Air, and Soil Pollution</i> , 2010, 213, 237-249.	1.1	15

#	ARTICLE	IF	CITATIONS
73	Lead sorption characteristics of various chicken bone part-derived chars. <i>Environmental Geochemistry and Health</i> , 2019, 41, 1675-1685.	1.8	15
74	Physico-chemical forms of copper in water and sediments of Lake Pontchartrain basin, USA. <i>Chemosphere</i> , 2018, 195, 448-454.	4.2	14
75	Heterogeneous fenton oxidation of methylene blue with Fe-impregnated biochar catalyst. <i>Biochar</i> , 2020, 2, 165-176.	6.2	14
76	Removal of potentially toxic metal by biochar derived from rendered solid residue with high content of protein and bone tissue. <i>Ecotoxicology and Environmental Safety</i> , 2021, 208, 111690.	2.9	14
77	Determination of exchangeable potassium in soil using ion-selective electrodes in soil suspensions. <i>European Journal of Soil Science</i> , 2001, 52, 143-150.	1.8	13
78	Phosphorus Loss in Runoff from Long-term Continuous Wheat Fertility Trials. <i>Soil Science Society of America Journal</i> , 2006, 70, 163-171.	1.2	13
79	Potassium Buffering Characteristics of Three Soils Low in Exchangeable Potassium. <i>Soil Science Society of America Journal</i> , 2004, 68, 654.	1.2	13
80	Impacts of N-stabilizers and Biochar on Nitrogen Losses, Nitrogen Phytoavailability, and Cotton Yield in Poultry Litter-fertilized Soils. <i>Agronomy Journal</i> , 2018, 110, 2016-2024.	0.9	12
81	COMPARISON OF ION-SELECTIVE ELECTRODE METHODS FOR DETERMINING POTASSIUM Q/I RELATIONSHIPS. <i>Canadian Journal of Soil Science</i> , 1990, 70, 693-704.	0.5	11
82	EVALUATION OF THREE- AND FIVE-STEP INORGANIC PHOSPHORUS CHEMICAL FRACTIONATION PROCEDURES ALONG WITH INDUCTIVELY COUPLED PLASMA DETERMINATION FOR CALCAREOUS SOILS. <i>Soil Science</i> , 2007, 172, 55-67.	0.9	11
83	Reducing Potential Leaching of Phosphorus, Heavy Metals, and Fecal Coliform From Animal Wastes Using Bauxite Residues. <i>Water, Air, and Soil Pollution</i> , 2011, 214, 241-252.	1.1	11
84	Surface Water Quality as Affected by Sugarcane Residue Management Techniques. <i>Water, Air, and Soil Pollution</i> , 2010, 208, 119-128.	1.1	10
85	Ants alter molecular characteristics of soil organic carbon determined by pyrolysis-chromatography/mass spectrometry. <i>Applied Soil Ecology</i> , 2018, 130, 91-97.	2.1	9
86	Greenhouse Gas Emissions as Influenced by Nitrogen Fertilization and Harvest Residue Management in Sugarcane Production. , 2019, 2, 1-10.		9
87	Effect of pyrolysis temperature on Si release of alkali-enhanced Si-rich biochar and plant response. <i>Biochar</i> , 2021, 3, 469-484.	6.2	9
88	Comparison of catalytic activity for treating recalcitrant organic pollutant in heterogeneous Fenton oxidation with iron-impregnated biochar and activated carbon. <i>Journal of Water Process Engineering</i> , 2021, 42, 102141.	2.6	9
89	Lignin chemistry of wetland soil profiles in two contrasting basins of the Louisiana Gulf coast. <i>Organic Geochemistry</i> , 2019, 137, 103902.	0.9	8
90	Performance and economic analyses of year-round forage systems for forage-fed beef production in the Gulf Coast1. <i>Journal of Animal Science</i> , 2014, 92, 5704-5715.	0.2	7

#	ARTICLE	IF	CITATIONS
91	ANALYSIS OF PASTURE SYSTEMS TO MAXIMIZE THE PROFITABILITY AND SUSTAINABILITY OF GRASS-FED BEEF PRODUCTION. <i>Journal of Agricultural & Applied Economics</i> , 2015, 47, 193-212.	0.8	7
92	Sorption and Desorption Characteristics of Tylosin in Three Louisiana Soils. <i>Journal of Environmental Quality</i> , 2019, 48, 1472-1480.	1.0	7
93	Sorption characteristics of phosphate by bauxite residue in aqueous solution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 618, 126465.	2.3	7
94	Changes in Root Cell Wall Chemistry Induced by Manganese Exposure with Two Tobacco Genotypes. <i>Journal of Plant Nutrition</i> , 2003, 26, 1527-1540.	0.9	6
95	Rapid detection of estrogen compounds using surface-enhanced Raman spectroscopy with a Zn/Au-Ag/Ag sandwich-structured substrate. <i>Optical Materials</i> , 2021, 112, 110759.	1.7	6
96	Characteristics of adsorption behavior of potentially toxic metals by biochar derived from fallen leaves (<i>Platanus</i>) and its mechanism. <i>Sustainable Chemistry and Pharmacy</i> , 2022, 29, 100776.	1.6	6
97	Kinetics of Manganese Uptake by Excised Roots of Sensitive and Tolerant Tobacco Genotypes. <i>Journal of Plant Nutrition</i> , 2003, 26, 1439-1450.	0.9	5
98	Effect of Silicon Application on Silicon Contents in "Fuji" Apple in Loess Plateau. <i>Communications in Soil Science and Plant Analysis</i> , 2016, 47, 2325-2333.	0.6	5
99	The biochar impact on miscanthus and sunflower growth in marginal lands. <i>Agrology</i> , 2020, 3, 3-11.	0.8	4
100	Effects of biochar and N-stabilizers on greenhouse gas emissions from a subtropical pasture field applied with organic and inorganic nitrogen fertilizers. <i>Journal of Environmental Management</i> , 2022, 306, 114423.	3.8	4
101	Copper in Lake Pontchartrain bottom sediment: Relationship to sediment properties. <i>Aquatic Ecosystem Health and Management</i> , 2009, 12, 456-460.	0.3	3
102	Agronomic and environmental performance of biochar amendment in alluvial soils under subtropical sugarcane production. , 2021, 4, e20209.		3
103	Nutrient Chemistry of Manure and Manure-Impacted Soils as Influenced by Application of Bauxite Residue. , 2014, , 239-266.		3
104	Characteristics and Functions of Labile Organic Carbon in Coastal Wetland Soils of the Mississippi River Deltaic Plain. <i>SSSA Special Publication Series</i> , 2015, , 315-336.	0.2	2
105	Exploring anaerobic CO ₂ production response to elevated nitrate levels in Gulf of Mexico coastal wetlands: Phenomena and relationships. <i>Science of the Total Environment</i> , 2020, 709, 136158.	3.9	2
106	Mass concentration and size distribution of particles released from harvesting and biomass burning of sugarcane. <i>Agricultural and Environmental Letters</i> , 2020, 5, e20028.	0.8	2
107	Transcriptional insights into Cu related tolerance strategies in maize linked to a novel tea-biochar. <i>Environmental Pollution</i> , 2022, 293, 118500.	3.7	2
108	Effects of residue management on nitrogen losses in surface and sub-surface water from sugarcane fields. <i>Archives of Agronomy and Soil Science</i> , 2014, 60, 103-118.	1.3	1

#	ARTICLE	IF	CITATIONS
109	Biochar for Effective Cleaning of Contaminated Dumpsite Soil: A Sustainable and Cost-Effective Remediation Technique for Developing Nations. , 2019, , 3-29.		0