

Guang-Hui Yu

List of Publications by Year in descending order

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Version: 2024-02-01

110
papers

5,995
citations

61857

43
h-index

76769

74
g-index

118
all docs

118
docs citations

118
times ranked

5364
citing authors

#	ARTICLE	IF	CITATIONS
1	Stratification Structure of Sludge Flocs with Implications to Dewaterability. <i>Environmental Science & Technology</i> , 2008, 42, 7944-7949.	4.6	333
2	Insights into extracellular polymeric substances of <i>Cyanobacterium Microcystis aeruginosa</i> using fractionation procedure and parallel factor analysis. <i>Water Research</i> , 2013, 47, 2005-2014.	5.3	251
3	Improving manure nutrient management towards sustainable agricultural intensification in China. <i>Agriculture, Ecosystems and Environment</i> , 2015, 209, 34-46.	2.5	244
4	Characteristics of extracellular polymeric substances (EPS) fractions from excess sludges and their effects on bioflocability. <i>Bioresource Technology</i> , 2009, 100, 3193-3198.	4.8	225
5	Extracellular proteins, polysaccharides and enzymes impact on sludge aerobic digestion after ultrasonic pretreatment. <i>Water Research</i> , 2008, 42, 1925-1934.	5.3	185
6	Novel insights into sludge dewaterability by fluorescence excitation-emission matrix combined with parallel factor analysis. <i>Water Research</i> , 2010, 44, 797-806.	5.3	177
7	Changes in biochemical and microbiological parameters during the period of rapid composting of dairy manure with rice chaff. <i>Bioresource Technology</i> , 2011, 102, 9040-9049.	4.8	167
8	Mineral Availability as a Key Regulator of Soil Carbon Storage. <i>Environmental Science & Technology</i> , 2017, 51, 4960-4969.	4.6	167
9	Binding of Organic Ligands with Al(III) in Dissolved Organic Matter from Soil: Implications for Soil Organic Carbon Storage. <i>Environmental Science & Technology</i> , 2012, 46, 6102-6109.	4.6	159
10	Heavy metal concentrations and arsenic speciation in animal manure composts in China. <i>Waste Management</i> , 2017, 64, 333-339.	3.7	158
11	Combination of two-dimensional correlation spectroscopy and parallel factor analysis to characterize the binding of heavy metals with DOM in lake sediments. <i>Journal of Hazardous Materials</i> , 2013, 263, 412-421.	6.5	155
12	A review on halloysite-based adsorbents to remove pollutants in water and wastewater. <i>Journal of Molecular Liquids</i> , 2018, 269, 855-868.	2.3	150
13	Harzianolide, a novel plant growth regulator and systemic resistance elicitor from <i>Trichoderma harzianum</i> . <i>Plant Physiology and Biochemistry</i> , 2013, 73, 106-113.	2.8	141
14	In situ observation of the growth of biofouling layer in osmotic membrane bioreactors by multiple fluorescence labeling and confocal laser scanning microscopy. <i>Water Research</i> , 2015, 75, 188-200.	5.3	126
15	Effect of proteins, polysaccharides, and particle sizes on sludge dewaterability. <i>Journal of Environmental Sciences</i> , 2009, 21, 83-88.	3.2	124
16	Multiple Fluorescence Labeling and Two Dimensional FTIR- ¹³ C NMR Heterospectral Correlation Spectroscopy to Characterize Extracellular Polymeric Substances in Biofilms Produced during Composting. <i>Environmental Science & Technology</i> , 2011, 45, 9224-9231.	4.6	116
17	Response of the bacterial diversity and soil enzyme activity in particle-size fractions of Mollisol after different fertilization in a long-term experiment. <i>Biology and Fertility of Soils</i> , 2014, 50, 901-911.	2.3	110
18	Investigation on extracellular polymeric substances from mucilaginous cyanobacterial blooms in eutrophic freshwater lakes. <i>Chemosphere</i> , 2013, 93, 75-81.	4.2	106

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19	Functional Groups Determine Biochar Properties (pH and EC) as Studied by Two-Dimensional ¹³ C NMR Correlation Spectroscopy. <i>PLoS ONE</i> , 2013, 8, e65949.	1.1	106
20	PARAFAC modeling of fluorescence excitation-emission spectra for rapid assessment of compost maturity. <i>Bioresource Technology</i> , 2010, 101, 8244-8251.	4.8	104
21	Toward understanding the mechanism of improving the production of volatile fatty acids from activated sludge at pH 10.0. <i>Water Research</i> , 2008, 42, 4637-4644.	5.3	102
22	Fenton chemistry and reactive oxygen species in soil: Abiotic mechanisms of biotic processes, controls and consequences for carbon and nutrient cycling. <i>Earth-Science Reviews</i> , 2021, 214, 103525.	4.0	99
23	Towards understanding the role of extracellular polymeric substances in cyanobacterial <i>Microcystis</i> aggregation and mucilaginous bloom formation. <i>Chemosphere</i> , 2014, 117, 815-822.	4.2	89
24	Different analysis techniques for fluorescence excitation-emission matrix spectroscopy to assess compost maturity. <i>Chemosphere</i> , 2011, 82, 1202-1208.	4.2	84
25	Enzyme activities in activated sludge flocs. <i>Applied Microbiology and Biotechnology</i> , 2007, 77, 605-612.	1.7	82
26	Ten-year long-term organic fertilization enhances carbon sequestration and calcium-mediated stabilization of aggregate-associated organic carbon in a reclaimed Cambisol. <i>Geoderma</i> , 2019, 355, 113880.	2.3	78
27	Rusty sink of rhizodeposits and associated keystone microbiomes. <i>Soil Biology and Biochemistry</i> , 2020, 147, 107840.	4.2	73
28	Exploring the interactions and binding sites between Cd and functional groups in soil using two-dimensional correlation spectroscopy and synchrotron radiation based spectromicroscopies. <i>Journal of Hazardous Materials</i> , 2017, 326, 18-25.	6.5	66
29	Assessment of the maturity and biological parameters of compost produced from dairy manure and rice chaff by excitation-emission matrix fluorescence spectroscopy. <i>Bioresource Technology</i> , 2012, 110, 330-337.	4.8	63
30	Fate of biopolymers during rapeseed meal and wheat bran composting as studied by two-dimensional correlation spectroscopy in combination with multiple fluorescence labeling techniques. <i>Bioresource Technology</i> , 2012, 105, 88-94.	4.8	62
31	Insights into complexation of dissolved organic matter and Al(III) and nanominerals formation in soils under contrasting fertilizations using two-dimensional correlation spectroscopy and high resolution-transmission electron microscopy techniques. <i>Chemosphere</i> , 2014, 111, 441-449.	4.2	59
32	In situ measurement of perfluoroalkyl substances in aquatic systems using diffusive gradients in thin-films technique. <i>Water Research</i> , 2018, 144, 162-171.	5.3	59
33	Optimization of the production of poly- ^l -glutamic acid by <i>Bacillus amyloliquefaciens</i> C1 in solid-state fermentation using dairy manure compost and monosodium glutamate production residues as basic substrates. <i>Bioresource Technology</i> , 2011, 102, 7548-7554.	4.8	57
34	The role of non-crystalline Fe in the increase of SOC after long-term organic manure application to the red soil of southern China. <i>European Journal of Soil Science</i> , 2013, 64, 797-804.	1.8	57
35	Heterogeneity in metal binding by individual fluorescent components in a eutrophic algae-rich lake. <i>Ecotoxicology and Environmental Safety</i> , 2013, 98, 266-272.	2.9	56
36	Impact of agricultural fertilization practices on organo-mineral associations in four long-term field experiments: Implications for soil C sequestration. <i>Science of the Total Environment</i> , 2019, 651, 591-600.	3.9	56

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37	Redox interface-associated organo-mineral interactions: A mechanism for C sequestration under a rice-wheat cropping system. <i>Soil Biology and Biochemistry</i> , 2018, 120, 12-23.	4.2	55
38	Fluorescence excitation-emission spectroscopy with regional integration analysis for assessment of compost maturity. <i>Waste Management</i> , 2011, 31, 1729-1736.	3.7	50
39	Production and characterization of acidophilic xylanolytic enzymes from <i>Penicillium oxalicum</i> GZ-2. <i>Bioresource Technology</i> , 2012, 123, 117-124.	4.8	50
40	Enzyme extraction by ultrasound from sludge flocs. <i>Journal of Environmental Sciences</i> , 2009, 21, 204-210.	3.2	49
41	Contrasting effects of inorganic and organic fertilisation regimes on shifts in Fe redox bacterial communities in red soils. <i>Soil Biology and Biochemistry</i> , 2018, 117, 56-67.	4.2	48
42	Using new hetero-spectral two-dimensional correlation analyses and synchrotron-radiation-based spectromicroscopy to characterize binding of Cu to soil dissolved organic matter. <i>Environmental Pollution</i> , 2017, 223, 457-465.	3.7	46
43	In situ visualisation and characterisation of the capacity of highly reactive minerals to preserve soil organic matter (SOM) in colloids at submicron scale. <i>Chemosphere</i> , 2015, 138, 225-232.	4.2	45
44	Root exudate chemistry affects soil carbon mobilization via microbial community reassembly. <i>Fundamental Research</i> , 2022, 2, 697-707.	1.6	41
45	Long-Term Fertilization Practices Alter Aluminum Fractions and Coordinate State in Soil Colloids. <i>Soil Science Society of America Journal</i> , 2014, 78, 2083-2089.	1.2	40
46	Fungus-initiated catalytic reactions at hyphal-mineral interfaces drive iron redox cycling and biomineralization. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 260, 192-203.	1.6	40
47	Effects of ultrasonic pretreatment on sludge dewaterability and extracellular polymeric substances distribution in mesophilic anaerobic digestion. <i>Journal of Environmental Sciences</i> , 2010, 22, 474-480.	3.2	39
48	New strategies for submicron characterization the carbon binding of reactive minerals in long-term contrasting fertilized soils: implications for soil carbon storage. <i>Biogeosciences</i> , 2016, 13, 3607-3618.	1.3	38
49	DOM as an indicator of occurrence and risks of antibiotics in a city-river-reservoir system with multiple pollution sources. <i>Science of the Total Environment</i> , 2019, 686, 276-289.	3.9	36
50	Effect of ultrasonic pretreatment on anaerobic digestion and its sludge dewaterability. <i>Journal of Environmental Sciences</i> , 2011, 23, 1472-1478.	3.2	35
51	Humic-Like Substances from Different Compost Extracts Could Significantly Promote Cucumber Growth. <i>Pedosphere</i> , 2012, 22, 815-824.	2.1	33
52	An iron-dependent burst of hydroxyl radicals stimulates straw decomposition and CO ₂ emission from soil hotspots: Consequences of Fenton or Fenton-like reactions. <i>Geoderma</i> , 2020, 375, 114512.	2.3	32
53	Fungal Nanophase Particles Catalyze Iron Transformation for Oxidative Stress Removal and Iron Acquisition. <i>Current Biology</i> , 2020, 30, 2943-2950.e4.	1.8	32
54	Arbuscular mycorrhizal fungi and goethite promote carbon sequestration via hyphal-aggregate mineral interactions. <i>Soil Biology and Biochemistry</i> , 2021, 162, 108417.	4.2	31

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55	Total and available metal concentrations in soils from six long-term fertilization sites across China. <i>Environmental Science and Pollution Research</i> , 2018, 25, 31666-31678.	2.7	30
56	Effects of long-term fertilization on calcium-associated soil organic carbon: Implications for C sequestration in agricultural soils. <i>Science of the Total Environment</i> , 2021, 772, 145037.	3.9	30
57	Enhanced aerobic granulation with extracellular polymeric substances (EPS)-free pellets. <i>Bioresource Technology</i> , 2009, 100, 4611-4615.	4.8	29
58	Fungal biomineralization of montmorillonite and goethite to short-range-ordered minerals. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 191, 17-31.	1.6	28
59	Toward understanding the binding of Zn in soils by two-dimensional correlation spectroscopy and synchrotron-radiation-based spectromicroscopies. <i>Geoderma</i> , 2019, 337, 238-245.	2.3	27
60	Extracellular enzymes in sludge flocs collected at 14 full-scale wastewater treatment plants. <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 1717-1725.	1.6	25
61	Phytotoxicity analysis of extracts from compost and their ability to inhibit soil-borne pathogenic fungi and reduce root-knot nematodes. <i>World Journal of Microbiology and Biotechnology</i> , 2012, 28, 1193-1201.	1.7	24
62	Isolates identification and characteristics of microorganisms in biotrickling filter and biofilter system treating H ₂ S and NH ₃ . <i>Journal of Environmental Sciences</i> , 2007, 19, 859-863.	3.2	23
63	Fungal-Mineral Interactions Modulating Intrinsic Peroxidase-like Activity of Iron Nanoparticles: Implications for the Biogeochemical Cycles of Nutrient Elements and Attenuation of Contaminants. <i>Environmental Science & Technology</i> , 2022, 56, 672-680.	4.6	23
64	Iron minerals inhibit the growth of <i>Pseudomonas brassicacearum</i> J12 via a free-radical mechanism: implications for soil carbon storage. <i>Biogeosciences</i> , 2019, 16, 1433-1445.	1.3	22
65	Enhanced storage stability of aerobic granules seeded with pellets. <i>Bioresource Technology</i> , 2010, 101, 8031-8037.	4.8	21
66	Carbon Sequestration Potential Promoted by Oxalate Extractable Iron Oxides through Organic Fertilization. <i>Soil Science Society of America Journal</i> , 2017, 81, 1359-1370.	1.2	21
67	Filterability and extracellular polymeric substances of aerobic granules for AGMBR process. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2009, 40, 479-483.	2.7	20
68	Intrinsic enzyme-like activity of magnetite particles is enhanced by cultivation with <i>Trichoderma guizhouense</i> . <i>Environmental Microbiology</i> , 2021, 23, 893-907.	1.8	20
69	Molybdenum Bioavailability and Asymbiotic Nitrogen Fixation in Soils are Raised by Iron (Oxyhydr)oxide-Mediated Free Radical Production. <i>Environmental Science & Technology</i> , 2021, 55, 14979-14989.	4.6	20
70	Highly reactive nanomineral assembly in soil colloids: Implications for paddy soil carbon storage. <i>Science of the Total Environment</i> , 2020, 703, 134728.	3.9	19
71	Biological removal of cadmium from biogas residues during vermicomposting, and the effect of earthworm hydrolysates on <i>Trichoderma guizhouense</i> sporulation. <i>Bioresource Technology</i> , 2020, 312, 123635.	4.8	19
72	Unexpected bulk density and microstructures response to long-term pig manure application in a Ferralic Cambisol Soil: Implications for rebuilding a healthy soil. <i>Soil and Tillage Research</i> , 2020, 203, 104668.	2.6	19

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73	Spectroscopic Evidence of the Improvement of Reactive Iron Mineral Content in Red Soil by Long-Term Application of Swine Manure. <i>PLoS ONE</i> , 2016, 11, e0146364.	1.1	19
74	Enhancement of lipopeptides production in a two-temperature-stage process under SSF conditions and its bioprocess in the fermenter. <i>Bioresource Technology</i> , 2013, 127, 209-215.	4.8	18
75	Coupling thermophilic composting and vermicomposting processes to remove Cr from biogas residues and produce high value-added biofertilizers. <i>Bioresource Technology</i> , 2021, 329, 124869.	4.8	18
76	Reconsideration of anaerobic fermentation from excess sludge at pH 10.0 as an eco-friendly process. <i>Journal of Hazardous Materials</i> , 2010, 175, 510-517.	6.5	17
77	Vertical variations of soil carbon under different land uses in a karst critical zone observatory (CZO), SW China. <i>Geoderma</i> , 2022, 412, 115741.	2.3	17
78	Microbial community mediates hydroxyl radical production in soil slurries by iron redox transformation. <i>Water Research</i> , 2022, 220, 118689.	5.3	16
79	Rapid and Accurate Evaluation of the Quality of Commercial Organic Fertilizers Using Near Infrared Spectroscopy. <i>PLoS ONE</i> , 2014, 9, e88279.	1.1	15
80	Strategy for Microscale Characterization of Soil Mineral-Organic Associations by Synchrotron-Radiation-Based FTIR Technology. <i>Soil Science Society of America Journal</i> , 2018, 82, 1583-1591.	1.2	15
81	Influence of biodiversity and iron availability on soil peroxide: Implications for soil carbon stabilization and storage. <i>Land Degradation and Development</i> , 2020, 31, 463-472.	1.8	15
82	Silicon Effects on Biomass Carbon and Phytolith-Occluded Carbon in Grasslands Under High-Salinity Conditions. <i>Frontiers in Plant Science</i> , 2020, 11, 657.	1.7	15
83	Nanozyme-mediated elemental biogeochemical cycling and environmental effects. <i>Science China Earth Sciences</i> , 2021, 64, 1015-1025.	2.3	15
84	Hydrolytic Amino Acids Employed as a Novel Organic Nitrogen Source for the Preparation of PGPF-Containing Bio-Organic Fertilizer for Plant Growth Promotion and Characterization of Substance Transformation during BOF Production. <i>PLoS ONE</i> , 2016, 11, e0149447.	1.1	14
85	Mechanisms of potentially toxic metal removal from biogas residues via vermicomposting revealed by synchrotron radiation-based spectromicroscopies. <i>Waste Management</i> , 2020, 113, 80-87.	3.7	14
86	Weathered Microplastics Induce Silver Nanoparticle Formation. <i>Environmental Science and Technology Letters</i> , 2022, 9, 179-185.	3.9	14
87	Soil ionic and enzymatic responses and correlations to fertilizations amended with and without organic fertilizer in long-term experiments. <i>Scientific Reports</i> , 2016, 6, 24559.	1.6	13
88	A new strategy for assessing the binding microenvironments in intact soil microaggregates. <i>Soil and Tillage Research</i> , 2019, 189, 123-130.	2.6	13
89	Investigation of carbon dynamics in rhizosphere by synchrotron radiation-based Fourier transform infrared combined with two dimensional correlation spectroscopy. <i>Science of the Total Environment</i> , 2021, 762, 143078.	3.9	13
90	Further Insights into Metal-DOM Interaction: Consideration of Both Fluorescent and Non-Fluorescent Substances. <i>PLoS ONE</i> , 2014, 9, e112272.	1.1	12

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91	Response of the population size and community structure of <i>Paenibacillus</i> spp. to different fertilization regimes in a long-term experiment of red soil. <i>Plant and Soil</i> , 2014, 383, 87-98.	1.8	12
92	Extracellular Polymeric Substances (EPS) and Extracellular Enzymes in Aerobic Granules. <i>Drying Technology</i> , 2010, 28, 910-915.	1.7	11
93	Optimization of <i>Trichoderma harzianum</i> T-E5 biomass and determining the degradation sequence of biopolymers by FTIR in solid-state fermentation. <i>Industrial Crops and Products</i> , 2013, 49, 619-627.	2.5	10
94	Preservation of organic carbon promoted by iron redox transformation in a rice-wheat cropping system. <i>Applied Soil Ecology</i> , 2020, 147, 103425.	2.1	10
95	Fouling Layer with Fractionated Extracellular Polymeric Substances of Activated Sludge. <i>Separation Science and Technology</i> , 2010, 45, 993-1002.	1.3	9
96	Towards a mechanistic understanding of microbial and nonmicrobial mediated topsoil organic carbon sequestration efficiency in a rice-wheat cropping system. <i>Applied Soil Ecology</i> , 2022, 170, 104259.	2.1	8
97	Structure of chemical components in different compost extracts characterized by chromatogram and spectroscopy analysis and its influence on plant growth promotion. <i>Journal of Material Cycles and Waste Management</i> , 2012, 14, 325-333.	1.6	7
98	Long-Term Fertilization Modifies the Structures of Soil Fulvic Acids and Their Binding Capability with Al. <i>PLoS ONE</i> , 2014, 9, e105567.	1.1	7
99	Molecular Trade-Offs between Lattice Oxygen and Oxygen Vacancy Drive Organic Pollutant Degradation in Fungal Biomineralized Exoskeletons. <i>Environmental Science & Technology</i> , 2022, 56, 8132-8141.	4.6	7
100	Breakage and Regrowth of Sludge Flocs by Removal and Readdition of Extracellular Polymeric Substances Fractions. <i>Environmental Engineering Science</i> , 2009, 26, 1533-1540.	0.8	5
101	Root Exudates and Microbial Communities Drive Mineral Dissolution and the Formation of Nano-size Minerals in Soils: Implications for Soil Carbon Storage. <i>Soil Biology</i> , 2018, , 143-166.	0.6	5
102	Organic amendments stimulate co-precipitation of ferrihydrite and dissolved organic matter in soils. <i>Geoderma</i> , 2021, 402, 115352.	2.3	5
103	Rejuvenation of iron oxides enhances carbon sequestration by the "iron gate"™ and "enzyme latch"™ mechanisms in a rice-wheat cropping system. <i>Science of the Total Environment</i> , 2022, 839, 156209.	3.9	5
104	Characteristics and kinetics of ammonia and N ₂ O emissions of aged refuse irrigated from landfill leachate. <i>Waste Management</i> , 2013, 33, 1229-1236.	3.7	4
105	Compost Process and Organic Fertilizers Application in China. , 2016, , .		4
106	Aromatic Moieties from Matured Chicken Manure and Agriculture Residues Compost Suppress Growth of <i>Lepidium sativum</i> L. and <i>Trichoderma harzianum</i> . <i>Pedosphere</i> , 2013, 23, 826-834.	2.1	2
107	Visualizing Mineral-Associated Organic Matters in Long-Term Fertilization Treated Soils by NanoSIMS and SR-FTIR. <i>Frontiers in Soil Science</i> , 2022, 2, .	0.8	2
108	A comparison of organic matters responsible for immersed ultrafiltration membranes fouling in drinking water treatment. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2013, 8, 339-345.	0.8	1

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109	çŸŸç%©ç³ç±³é...¶ä»«â¼çš,,â...fç´ç”Ÿç%©âœ°çfâĒ-â â¼çŽ-âšçŽ-âçfæ•â°”. SCIENTIA SINICA Terrae, 2021, 51, 1203-1213.		
110	Review of: "Multiple soil map comparison highlights challenges for predicting topsoil organic carbon concentration at national scale". Qeios, 0, , .	0.0	0