Tongxu Liu

List of Publications by Year
in descending order

105 papers	4,591 citations	70961 41 h-index	114278 63 g-index
106 all docs	106 docs citations	106 times ranked	4234 citing authors

#	Article	IF	Citations
1	Simultaneous alleviation of cadmium and arsenic accumulation in rice by applying zero-valent iron and biochar to contaminated paddy soils. Chemosphere, 2018, 195, 260-271.	4.2	281
2	Silica nanoparticles alleviate cadmium toxicity in rice cells: Mechanisms and size effects. Environmental Pollution, 2017, 228, 363-369.	3.7	257
3	Foliar application of two silica sols reduced cadmium accumulation in rice grains. Journal of Hazardous Materials, 2009, 161, 1466-1472.	6.5	149
4	Changes in the composition and diversity of microbial communities during anaerobic nitrate reduction and Fe(II) oxidation at circumneutral pH in paddy soil. Soil Biology and Biochemistry, 2016, 94, 70-79.	4.2	134
5	Response of Soil Microbial Communities to Elevated Antimony and Arsenic Contamination Indicates the Relationship between the Innate Microbiota and Contaminant Fractions. Environmental Science & Technology, 2017, 51, 9165-9175.	4.6	133
6	Humic Substances Facilitate Arsenic Reduction and Release in Flooded Paddy Soil. Environmental Science & Technology, 2019, 53, 5034-5042.	4.6	121
7	Selenium reduces cadmium uptake into rice suspension cells by regulating the expression of lignin synthesis and cadmium-related genes. Science of the Total Environment, 2018, 644, 602-610.	3.9	117
8	Enhanced reductive dechlorination of DDT in an anaerobic system of dissimilatory iron-reducing bacteria and iron oxide. Environmental Pollution, 2010, 158, 1733-1740.	3.7	113
9	Heterogeneous photodegradation of bisphenol A with iron oxides and oxalate in aqueous solution. Journal of Colloid and Interface Science, 2007, 311, 481-490.	5.0	112
10	Kinetic Modeling of the Electro-Fenton Process: Quantification of Reactive Oxygen Species Generation. Electrochimica Acta, 2015, 176, 51-58.	2.6	104
11	Effect of alumina on photocatalytic activity of iron oxides for bisphenol A degradation. Journal of Hazardous Materials, 2007, 149, 199-207.	6.5	94
12	Fe(II)-induced phase transformation of ferrihydrite: The inhibition effects and stabilization of divalent metal cations. Chemical Geology, 2016, 444, 110-119.	1.4	91
13	TiO2 hydrosols with high activity for photocatalytic degradation of formaldehyde in a gaseous phase. Journal of Hazardous Materials, 2008, 152, 347-355.	6.5	87
14	Exogenous Electron Shuttle-Mediated Extracellular Electron Transfer of <i>Shewanella putrefaciens</i> 200: Electrochemical Parameters and Thermodynamics. Environmental Science & Technology, 2014, 48, 9306-9314.	4.6	85
15	Microbially mediated nitrate-reducing Fe(II) oxidation: Quantification of chemodenitrification and biological reactions. Geochimica Et Cosmochimica Acta, 2019, 256, 97-115.	1.6	83
16	The effect of erbium on the adsorption and photodegradation of orange I in aqueous Er3+-TiO2 suspension. Journal of Hazardous Materials, 2006, 138, 471-478.	6.5	72
17	Photodegradation of orange I in the heterogeneous iron oxideâ€“oxalate complex system under UVA irradiation. Journal of Hazardous Materials, 2006, 137, 1016-1024.	6.5	70
18	Cyclic loading test of self-centering precast segmental unbonded posttensioned UHPFRC bridge columns. Bulletin of Earthquake Engineering, 2018, 16, 5227-5255.	2.3	69

#	Article	IF	Citations
19	Electron transfer capacity dependence of quinone-mediated Fe(III) reduction and current generation by Klebsiella pneumoniae L17. Chemosphere, 2013, 92, 218-224.	4.2	68
20	Enhanced immobilization of arsenic and cadmium in a paddy soil by combined applications of woody peat and Fe(NO3)3: Possible mechanisms and environmental implications. Science of the Total Environment, 2019, 649, 535-543.	3.9	68
21	Reduction of structural Fe(III) in oxyhydroxides by Shewanella decolorationis S12 and characterization of the surface properties of iron minerals. Journal of Soils and Sediments, 2012, 12, 217-227.	1.5	66
22	Depassivation of Aged Fe⁰ by Ferrous Ions: Implications to Contaminant Degradation. Environmental Science & Technology, 2013, 47, 13712-13720.	4.6	64
23	Kinetics of As(V) and carbon sequestration during Fe(II)-induced transformation of ferrihydrite-As(V)-fulvic acid coprecipitates. Geochimica Et Cosmochimica Acta, 2020, 272, 160-176.	1.6	63
24	Enhanced Current Production by Exogenous Electron Mediators via Synergy of Promoting Biofilm Formation and the Electron Shuttling Process. Environmental Science & Technology, 2020, 54, 7217-7225.	4.6	63
25	Biological and chemical processes of microbially mediated nitrate-reducing Fe(II) oxidation by Pseudogulbenkiania sp. strain 2002. Chemical Geology, 2018, 476, 59-69.	1.4	62
26	Depassivation of Aged Fe⁰ by Divalent Cations: Correlation between Contaminant Degradation and Surface Complexation Constants. Environmental Science & Technology, 2014, 48, 14564-14571.	4.6	61
27	Extracellular Electron Shuttling Mediated by Soluble <i>c</i>-Type Cytochromes Produced by <i>Shewanella oneidensis</i> MR-1. Environmental Science & Technology, 2020, 54, 10577-10587.	4.6	61
28	Dependence of Secondary Mineral Formation on Fe(II) Production from Ferrihydrite Reduction by <i>Shewanella oneidensis</i> MR-1. ACS Earth and Space Chemistry, 2018, 2, 399-409.	1.2	60
29	Microbially mediated coupling of nitrate reduction and Fe(II) oxidation under anoxic conditions. FEMS Microbiology Ecology, 2019, 95, .	1.3	57
30	Effect of Oxalate on Photodegradation of Bisphenol A at the Interface of Different Iron Oxides. Industrial & Engineering Chemistry Research, 2007, 46, 781-787.	1.8	54
31	Production of Hydrogen Peroxide in Groundwater at Rifle, Colorado. Environmental Science & Technology, 2017, 51, 7881-7891.	4.6	54
32	Conduction Band of Hematite Can Mediate Cytochrome Reduction by Fe(II) under Dark and Anoxic Conditions. Environmental Science & Technology, 2020, 54, 4810-4819.	4.6	52
33	Enhanced Biotransformation of DDTs by an Iron- and Humic-Reducing Bacteria <i>Aeromonas hydrophila</i> HS01 upon Addition of Goethite and Anthraquinone-2,6-Disulphonic Disodium Salt (AQDS). Journal of Agricultural and Food Chemistry, 2012, 60, 11238-11244.	2.4	51
34	Towards a better understanding of the role of Fe cycling in soil for carbon stabilization and degradation. , 2022, 1, .		51
35	Fe(III) oxides accelerate microbial nitrate reduction and electricity generation by Klebsiella pneumoniae L17. Journal of Colloid and Interface Science, 2014, 423, 25-32.	5.0	48
36	AgNO₃-Induced Photocatalytic Degradation of Odorous Methyl Mercaptan in Gaseous Phase: Mechanism of Chemisorption and Photocatalytic Reaction. Environmental Science & Technology, 2008, 42, 4540-4545.	4.6	47

#	Article	IF	Citations
37	Effects of Incubation Conditions on Cr(VI) Reduction by c-type Cytochromes in Intact Shewanella oneidensis MR-1 Cells. Frontiers in Microbiology, 2016, 7, 746.	1.5	46
38	Quantifying Microbially Mediated Kinetics of Ferrihydrite Transformation and Arsenic Reduction: Role of the Arsenate-Reducing Gene Expression Pattern. Environmental Science & Technology, 2020, 54, 6621-6631.	4.6	45
39	Cost-Effective UHPC for Accelerated Bridge Construction: Material Properties, Structural Elements, and Structural Applications. Journal of Bridge Engineering, 2021, 26, .	1.4	45
40	Enhanced photocatalytic activity of Ce3+-TiO2 hydrosols in aqueous and gaseous phases. Chemical Engineering Journal, 2010, 157, 475-482.	6.6	44
41	The translocation of antimony in soil-rice system with comparisons to arsenic: Alleviation of their accumulation in rice by simultaneous use of Fe(II) and NO3â^'. Science of the Total Environment, 2019, 650, 633-641.	3.9	43
42	Enhanced nitrate reduction and current generation by Bacillus sp. in the presence of iron oxides. Journal of Soils and Sediments, 2012, 12, 354-365.	1.5	42
43	Effects of Simultaneous Application of Ferrous Iron and Nitrate on Arsenic Accumulation in Rice Grown in Contaminated Paddy Soil. ACS Earth and Space Chemistry, 2018, 2, 103-111.	1.2	42
44	Depassivation of Aged Fe⁰ by Inorganic Salts: Implications to Contaminant Degradation in Seawater. Environmental Science & Technology, 2013, 47, 7350-7356.	4.6	41
45	Light-Induced Extracellular Electron Transport by the Marine Raphidophyte <i>Chattonella marina</i>. Environmental Science & Technology, 2015, 49, 1392-1399.	4.6	40
46	Multi-functional microcapsules produced by aerosol reaction. Journal of Aerosol Science, 2008, 39, 1089-1098.	1.8	37
47	Dependence of the electron transfer capacity on the kinetics of quinone-mediated Fe(<scp>iii</scp>) reduction by two iron/humic reducing bacteria. RSC Advances, 2013, 4, 2284-2290.	1.7	36
48	Investigating the efficiency of microscale zero valent iron-based in situ reactive zone (mZVI-IRZ) for TCE removal in fresh and saline groundwater. Science of the Total Environment, 2018, 626, 638-649.	3.9	33
49	Acid-base buffering characteristics of non-calcareous soils: Correlation with physicochemical properties and surface complexation constants. Geoderma, 2020, 360, 114005.	2.3	33
50	Coupled Kinetics Model for Microbially Mediated Arsenic Reduction and Adsorption/Desorption on Iron Oxides: Role of Arsenic Desorption Induced by Microbes. Environmental Science & Technology, 2019, 53, 8892-8902.	4.6	30
51	Effect of iron oxides and carboxylic acids on photochemical degradation of bisphenol A. Biology and Fertility of Soils, 2006, 42, 409-417.	2.3	29
52	pH dependence of quinone-mediated extracellular electron transfer in a bioelectrochemical system. Electrochimica Acta, 2016, 213, 408-415.	2.6	29
53	Effect of <i>Aeromonas hydrophila</i> on Reductive Dechlorination of DDTs by Zero-Valent Iron. Journal of Agricultural and Food Chemistry, 2010, 58, 12366-12372.	2.4	28
54	Modelling evaluation of key cadmium transformation processes in acid paddy soil under alternating redox conditions. Chemical Geology, 2021, 581, 120409.	1.4	28

#	Article	IF	Citations
55	Competitive reduction of nitrate and iron oxides by Shewanella putrefaciens 200 under anoxic conditions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 445, 97-104.	2.3	25
56	Variable charges of a red soil from different depths: Acid-base buffer capacity and surface complexation model. Applied Clay Science, 2018, 159, 107-115.	2.6	24
57	Effects of peptizing conditions on nanometer properties and photocatalytic activity of TiO2 hydrosols prepared by H2TiO3. Journal of Hazardous Materials, 2008, 155, 90-99.	6.5	23
58	Reduction of iron oxides by Klebsiella pneumoniae L17: Kinetics and surface properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 379, 143-150.	2.3	23
59	Profiles, sources, and transport of polycyclic aromatic hydrocarbons in soils affected by electronic waste recycling in Longtang, south China. Environmental Monitoring and Assessment, 2014, 186, 3351-3364.	1.3	22
60	In Situ Spectral Kinetics of Cr(VI) Reduction by c-Type Cytochromes in A Suspension of Living Shewanella putrefaciens 200. Scientific Reports, 2016, 6, 29592.	1.6	22
61	Enhanced visible-light photocatalytic activity of a TiO2 hydrosol assisted by H2O2: Surface complexation and kinetic modeling. Journal of Molecular Catalysis A, 2016, 414, 122-129.	4.8	22
62	Chemodenitrification by Fe(II) and nitrite: pH effect, mineralization and kinetic modeling. Chemical Geology, 2020, 541, 119586.	1.4	22
63	Development of a Photocatalytic Wet Scrubbing Process for Gaseous Odor Treatment. Industrial & Engineering Chemistry Research, 2010, 49, 3617-3622.	1.8	21
64	Microaerobic Fe(II) oxidation coupled to carbon assimilation processes driven by microbes from paddy soil. Science China Earth Sciences, 2019, 62, 1719-1729.	2.3	21
65	Facet-dependent reductive dissolution of hematite nanoparticles by <i>Shewanella putrefaciens</i> CN-32. Environmental Science: Nano, 2020, 7, 2522-2531.	2.2	21
66	Quinone-mediated dissimilatory iron reduction of hematite: Interfacial reactions on exposed {0 0 1} and {1 0 0} facets. Journal of Colloid and Interface Science, 2021, 583, 544-552.	5.0	21
67	Microbial iron reduction as a method for immobilization of a low concentration of dissolved cadmium. Journal of Environmental Management, 2018, 217, 747-753.	3.8	20
68	Determination of the Redox Potentials of Solution and Solid Surface of Fe(II) Associated with Iron Oxyhydroxides. ACS Earth and Space Chemistry, 2019, 3, 711-717.	1.2	20
69	Cysteine induced cascade electron transfer by forming a unique ternary complex with Fe(II) on goethite. Chemical Geology, 2021, 584, 120561.	1.4	20
70	Dual nitrogen-oxygen isotopic analysis and kinetic model for enzymatic nitrate reduction coupled with Fe(II) oxidation by Pseudogulbenkiania sp. strain 2002. Chemical Geology, 2020, 534, 119456.	1.4	19
71	Effects of aging and reduction processes on Cr toxicity to wheat root elongation in Cr(VI) spiked soils. Environmental Pollution, 2022, 296, 118784.	3.7	18
72	Comparison of Aqueous Photoreactions with TiO₂ in its Hydrosol Solution and Powdery Suspension for Light Utilization. Industrial & Engineering Chemistry Research, 2011, 50, 7841-7848.	1.8	17

#	Article	IF	Citations
73	Sustainable Electron Shuttling Processes Mediated by <i>Inâ€...Situâ€</i>Deposited Phenoxazine. ChemElectroChem, 2018, 5, 2171-2175.	1.7	17
74	Kinetics of Competitive Reduction of Nitrate and Iron Oxides by <i>Aeromonas hydrophila</i> HS01. Soil Science Society of America Journal, 2014, 78, 1903-1912.	1.2	16
75	Fulvic Acid-Mediated Interfacial Reactions on Exposed Hematite Facets during Dissimilatory Iron Reduction. Langmuir, 2021, 37, 6139-6150.	1.6	16
76	Chemodenitrification by Fe(II) and nitrite: Effects of temperature and dual N O isotope fractionation. Chemical Geology, 2021, 575, 120258.	1.4	16
77	Interfacial photoreactions of Cr(VI) and oxalate on lepidocrocite surface under oxic and acidic conditions: Reaction mechanism and potential implications for contaminant degradation in surface waters. Chemical Geology, 2021, 583, 120481.	1.4	16
78	Interactively interfacial reaction of iron-reducing bacterium and goethite for reductive dechlorination of chlorinated organic compounds. Science Bulletin, 2009, 54, 2800-2804.	4.3	14
79	Effect of Cr(VI) on Fe(III) reduction in three paddy soils from the Hani terrace field at high altitude. Applied Clay Science, 2012, 64, 53-60.	2.6	14
80	Rapid Redox Processes of <i>c</i>â€Type Cytochromes in A Living Cell Suspension of <i>Shewanella oneidensis</i> MRâ€1. ChemistrySelect, 2017, 2, 1008-1012.	0.7	14
81	Surface charge properties of variable charge soils influenced by environmental factors. Applied Clay Science, 2020, 189, 105522.	2.6	14
82	Removal of <scp>CH₃SH</scp> with inâ€situ generated ferrate(<scp>VI</scp>) in a wetâ€scrubbing reactor. Journal of Chemical Technology and Biotechnology, 2014, 89, 455-461.	1.6	13
83	Redox dynamics and equilibria of c-type cytochromes in the presence of Fe(II) under anoxic conditions: Insights into enzymatic iron oxidation. Chemical Geology, 2017, 468, 97-104.	1.4	13
84	Multiple effects of nitrate amendment on the transport, transformation and bioavailability of antimony in a paddy soil-rice plant system. Journal of Environmental Sciences, 2021, 100, 90-98.	3.2	13
85	Quantifying Redox Dynamics of c-Type Cytochromes in a Living Cell Suspension of Dissimilatory Metal-reducing Bacteria. Analytical Sciences, 2019, 35, 315-321.	0.8	12
86	The Kinetics of Aging and Reducing Processes of Cr(VI) in Two Soils. Bulletin of Environmental Contamination and Toxicology, 2019, 103, 82-89.	1.3	12
87	Water Management Alters Cadmium Isotope Fractionation between Shoots and Nodes/Leaves in a Soil-Rice System. Environmental Science & Technology, 2021, 55, 12902-12913.	4.6	12
88	In situ spectral kinetics of quinone reduction by c-type cytochromes in intact Shewanella oneidensis MR-1 cells. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 520, 505-513.	2.3	11
89	Influence of Incubation Temperature on 9,10-Anthraquinone-2-Sulfonate (AQS)-Mediated Extracellular Electron Transfer. Frontiers in Microbiology, 2019, 10, 464.	1.5	11
90	Ligand mediated reduction of c-type cytochromes by Fe(II): Kinetic and mechanistic insights. Chemical Geology, 2019, 513, 23-31.	1.4	11

#	Article	IF	Citations
91	Kinetics of antimony biogeochemical processes under pre-definite anaerobic and aerobic conditions in a paddy soil. Journal of Environmental Sciences, 2022, 113, 269-280.	3.2	11
92	A machine-learning-based model for predicting the effective stiffness of precast concrete columns. Engineering Structures, 2022, 260, 114224.	2.6	10
93	The Acid-Base Buffer Capacity of Red Soil Variable Charge Minerals and Its Surface Complexation Model. Acta Chimica Sinica, 2017, 75, 637.	0.5	8
94	Microaerobic iron oxidation and carbon assimilation and associated microbial community in paddy soil. Acta Geochimica, 2017, 36, 502-505.	0.7	7
95	Physicochemical constraints on the in-situ deposited phenoxazine mediated electron shuttling process. Electrochimica Acta, 2020, 339, 135934.	2.6	6
96	Hematiteâ€promoted nitrateâ€reducing Fe(<scp>II</scp>) oxidation by <i>Acidovorax</i> sp. strain <scp>BoFeN1</scp>: Roles of mineral catalysis and cell encrustation. Geobiology, 2022, 20, 810-822.	1.1	6
97	New insight into iron biogeochemical cycling in soil-rice plant system using iron isotope fractionation. Fundamental Research, 2021, 1, 277-284.	1.6	5
98	Source and Strategy of Iron Uptake by Rice Grown in Flooded and Drained Soils: Insights from Fe Isotope Fractionation and Gene Expression. Journal of Agricultural and Food Chemistry, 2022, 70, 2564-2573.	2.4	5
99	Distinct biofilm formation regulated by different culture media: Implications to electricity generation. Bioelectrochemistry, 2021, 140, 107826.	2.4	4
100	Production of hydrogen peroxide in an intra-meander hyporheic zone at East River, Colorado. Scientific Reports, 2022, 12, 712.	1.6	3
101	Effects of Al Content and Synthesis Temperature on Al-Substituted Fe Oxides. Soil Science, 2014, 179, 468-475.	0.9	2
102	The in situ spectral methods for examining redox status of c-type cytochromes in metal-reducing/oxidizing bacteria. Acta Geochimica, 2017, 36, 544-547.	0.7	2
103	Effects of Cd on reductive transformation of lepidocrocite by Shewanella oneidensis MR-1. Acta Geochimica, 2017, 36, 479-481.	0.7	1
104	Impacts of Redox Conditions on Arsenic and Antimony Transformation in Paddy Soil: Kinetics and Functional Bacteria. Bulletin of Environmental Contamination and Toxicology, 2021, 107, 1121-1127.	1.3	1
105	Effects of water salinity on cadmium availability at soilâ€“water interface: implication for salt water intrusion. Environmental Science and Pollution Research, 2022, 29, 68892-68903.	2.7	1