

# Tongxu Liu

## List of Publications by Year in descending order

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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	Kinetics of antimony biogeochemical processes under pre-definite anaerobic and aerobic conditions in a paddy soil. <i>Journal of Environmental Sciences</i> , 2022, 113, 269-280.	3.2	11
2	Effects of aging and reduction processes on Cr toxicity to wheat root elongation in Cr(VI) spiked soils. <i>Environmental Pollution</i> , 2022, 296, 118784.	3.7	18
3	Production of hydrogen peroxide in an intra-meander hyporheic zone at East River, Colorado. <i>Scientific Reports</i> , 2022, 12, 712.	1.6	3
4	Source and Strategy of Iron Uptake by Rice Grown in Flooded and Drained Soils: Insights from Fe Isotope Fractionation and Gene Expression. <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 2564-2573.	2.4	5
5	A machine-learning-based model for predicting the effective stiffness of precast concrete columns. <i>Engineering Structures</i> , 2022, 260, 114224.	2.6	10
6	Effects of water salinity on cadmium availability at soil-water interface: implication for salt water intrusion. <i>Environmental Science and Pollution Research</i> , 2022, 29, 68892-68903.	2.7	1
7	Towards a better understanding of the role of Fe cycling in soil for carbon stabilization and degradation. , 2022, 1, .		51
8	Hematite-promoted nitrate-reducing Fe(II) oxidation by <i>Acidovorax</i> sp. strain <i>BoFeN1</i> : Roles of mineral catalysis and cell encrustation. <i>Geobiology</i> , 2022, 20, 810-822.	1.1	6
9	Quinone-mediated dissimilatory iron reduction of hematite: Interfacial reactions on exposed {0 0 1} and {1 0 0} facets. <i>Journal of Colloid and Interface Science</i> , 2021, 583, 544-552.	5.0	21
10	Multiple effects of nitrate amendment on the transport, transformation and bioavailability of antimony in a paddy soil-rice plant system. <i>Journal of Environmental Sciences</i> , 2021, 100, 90-98.	3.2	13
11	Cost-Effective UHPC for Accelerated Bridge Construction: Material Properties, Structural Elements, and Structural Applications. <i>Journal of Bridge Engineering</i> , 2021, 26, .	1.4	45
12	Impacts of Redox Conditions on Arsenic and Antimony Transformation in Paddy Soil: Kinetics and Functional Bacteria. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2021, 107, 1121-1127.	1.3	1
13	Fulvic Acid-Mediated Interfacial Reactions on Exposed Hematite Facets during Dissimilatory Iron Reduction. <i>Langmuir</i> , 2021, 37, 6139-6150.	1.6	16
14	New insight into iron biogeochemical cycling in soil-rice plant system using iron isotope fractionation. <i>Fundamental Research</i> , 2021, 1, 277-284.	1.6	5
15	Distinct biofilm formation regulated by different culture media: Implications to electricity generation. <i>Bioelectrochemistry</i> , 2021, 140, 107826.	2.4	4
16	Chemodenitrification by Fe(II) and nitrite: Effects of temperature and dual N O isotope fractionation. <i>Chemical Geology</i> , 2021, 575, 120258.	1.4	16
17	Water Management Alters Cadmium Isotope Fractionation between Shoots and Nodes/Leaves in a Soil-Rice System. <i>Environmental Science &amp; Technology</i> , 2021, 55, 12902-12913.	4.6	12
18	Modelling evaluation of key cadmium transformation processes in acid paddy soil under alternating redox conditions. <i>Chemical Geology</i> , 2021, 581, 120409.	1.4	28

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19	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. <i>Chemical Geology</i> , 2021, 583, 120481.	1.4	16
20	Cysteine induced cascade electron transfer by forming a unique ternary complex with Fe(II) on goethite. <i>Chemical Geology</i> , 2021, 584, 120561.	1.4	20
21	Kinetics of As(V) and carbon sequestration during Fe(II)-induced transformation of ferrihydrite-As(V)-fulvic acid coprecipitates. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 272, 160-176.	1.6	63
22	Acid-base buffering characteristics of non-calcareous soils: Correlation with physicochemical properties and surface complexation constants. <i>Geoderma</i> , 2020, 360, 114005.	2.3	33
23	Extracellular Electron Shuttling Mediated by Soluble <i>c</i> -Type Cytochromes Produced by <i>Shewanella oneidensis</i> MR-1. <i>Environmental Science &amp; Technology</i> , 2020, 54, 10577-10587.	4.6	61
24	Facet-dependent reductive dissolution of hematite nanoparticles by <i>Shewanella putrefaciens</i> CN-32. <i>Environmental Science: Nano</i> , 2020, 7, 2522-2531.	2.2	21
25	Quantifying Microbially Mediated Kinetics of Ferrihydrite Transformation and Arsenic Reduction: Role of the Arsenate-Reducing Gene Expression Pattern. <i>Environmental Science &amp; Technology</i> , 2020, 54, 6621-6631.	4.6	45
26	Dual nitrogen-oxygen isotopic analysis and kinetic model for enzymatic nitrate reduction coupled with Fe(II) oxidation by <i>Pseudogulbenkiania</i> sp. strain 2002. <i>Chemical Geology</i> , 2020, 534, 119456.	1.4	19
27	Chemodenitrification by Fe(II) and nitrite: pH effect, mineralization and kinetic modeling. <i>Chemical Geology</i> , 2020, 541, 119586.	1.4	22
28	Surface charge properties of variable charge soils influenced by environmental factors. <i>Applied Clay Science</i> , 2020, 189, 105522.	2.6	14
29	Physicochemical constraints on the in-situ deposited phenoxazine mediated electron shuttling process. <i>Electrochimica Acta</i> , 2020, 339, 135934.	2.6	6
30	Conduction Band of Hematite Can Mediate Cytochrome Reduction by Fe(II) under Dark and Anoxic Conditions. <i>Environmental Science &amp; Technology</i> , 2020, 54, 4810-4819.	4.6	52
31	Enhanced Current Production by Exogenous Electron Mediators via Synergy of Promoting Biofilm Formation and the Electron Shuttling Process. <i>Environmental Science &amp; Technology</i> , 2020, 54, 7217-7225.	4.6	63
32	Microbially mediated nitrate-reducing Fe(II) oxidation: Quantification of chemodenitrification and biological reactions. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 256, 97-115.	1.6	83
33	Coupled Kinetics Model for Microbially Mediated Arsenic Reduction and Adsorption/Desorption on Iron Oxides: Role of Arsenic Desorption Induced by Microbes. <i>Environmental Science &amp; Technology</i> , 2019, 53, 8892-8902.	4.6	30
34	Influence of Incubation Temperature on 9,10-Anthraquinone-2-Sulfonate (AQS)-Mediated Extracellular Electron Transfer. <i>Frontiers in Microbiology</i> , 2019, 10, 464.	1.5	11
35	Quantifying Redox Dynamics of <i>c</i> -Type Cytochromes in a Living Cell Suspension of Dissimilatory Metal-reducing Bacteria. <i>Analytical Sciences</i> , 2019, 35, 315-321.	0.8	12
36	Microaerobic Fe(II) oxidation coupled to carbon assimilation processes driven by microbes from paddy soil. <i>Science China Earth Sciences</i> , 2019, 62, 1719-1729.	2.3	21

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37	Ligand mediated reduction of c-type cytochromes by Fe(II): Kinetic and mechanistic insights. <i>Chemical Geology</i> , 2019, 513, 23-31.	1.4	11
38	Microbially mediated coupling of nitrate reduction and Fe(II) oxidation under anoxic conditions. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	1.3	57
39	The Kinetics of Aging and Reducing Processes of Cr(VI) in Two Soils. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2019, 103, 82-89.	1.3	12
40	Determination of the Redox Potentials of Solution and Solid Surface of Fe(II) Associated with Iron Oxyhydroxides. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 711-717.	1.2	20
41	Humic Substances Facilitate Arsenic Reduction and Release in Flooded Paddy Soil. <i>Environmental Science &amp; Technology</i> , 2019, 53, 5034-5042.	4.6	121
42	Enhanced immobilization of arsenic and cadmium in a paddy soil by combined applications of woody peat and Fe(NO <sub>3</sub> ) <sub>3</sub> : Possible mechanisms and environmental implications. <i>Science of the Total Environment</i> , 2019, 649, 535-543.	3.9	68
43	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 NO <sub>3</sub> <sup>-</sup> . <i>Science of the Total Environment</i> , 2019, 650, 633-641.	3.9	43
44	Dependence of Secondary Mineral Formation on Fe(II) Production from Ferrihydrite Reduction by <i>Shewanella oneidensis</i> MR-1. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 399-409.	1.2	60
45	Effects of Simultaneous Application of Ferrous Iron and Nitrate on Arsenic Accumulation in Rice Grown in Contaminated Paddy Soil. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 103-111.	1.2	42
46	Investigating the efficiency of microscale zero valent iron-based in situ reactive zone (mZVI-IRZ) for TCE removal in fresh and saline groundwater. <i>Science of the Total Environment</i> , 2018, 626, 638-649.	3.9	33
47	Simultaneous alleviation of cadmium and arsenic accumulation in rice by applying zero-valent iron and biochar to contaminated paddy soils. <i>Chemosphere</i> , 2018, 195, 260-271.	4.2	281
48	Biological and chemical processes of microbially mediated nitrate-reducing Fe(II) oxidation by <i>Pseudogulbenkiania</i> sp. strain 2002. <i>Chemical Geology</i> , 2018, 476, 59-69.	1.4	62
49	Variable charges of a red soil from different depths: Acid-base buffer capacity and surface complexation model. <i>Applied Clay Science</i> , 2018, 159, 107-115.	2.6	24
50	Sustainable Electron Shuttling Processes Mediated by In <sup>3+</sup> -Deposited Phenoxazine. <i>ChemElectroChem</i> , 2018, 5, 2171-2175.	1.7	17
51	Cyclic loading test of self-centering precast segmental unbonded posttensioned UHPFRC bridge columns. <i>Bulletin of Earthquake Engineering</i> , 2018, 16, 5227-5255.	2.3	69
52	Selenium reduces cadmium uptake into rice suspension cells by regulating the expression of lignin synthesis and cadmium-related genes. <i>Science of the Total Environment</i> , 2018, 644, 602-610.	3.9	117
53	Microbial iron reduction as a method for immobilization of a low concentration of dissolved cadmium. <i>Journal of Environmental Management</i> , 2018, 217, 747-753.	3.8	20
54	Rapid Redox Processes of c-Type Cytochromes in A Living Cell Suspension of <i>Shewanella oneidensis</i> MR-1. <i>ChemistrySelect</i> , 2017, 2, 1008-1012.	0.7	14

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55	In situ spectral kinetics of quinone reduction by c-type cytochromes in intact <i>Shewanella oneidensis</i> MR-1 cells. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017, 520, 505-513.	2.3	11
56	Production of Hydrogen Peroxide in Groundwater at Rifle, Colorado. <i>Environmental Science &amp; Technology</i> , 2017, 51, 7881-7891.	4.6	54
57	Silica nanoparticles alleviate cadmium toxicity in rice cells: Mechanisms and size effects. <i>Environmental Pollution</i> , 2017, 228, 363-369.	3.7	257
58	Redox dynamics and equilibria of c-type cytochromes in the presence of Fe(II) under anoxic conditions: Insights into enzymatic iron oxidation. <i>Chemical Geology</i> , 2017, 468, 97-104.	1.4	13
59	The in situ spectral methods for examining redox status of c-type cytochromes in metal-reducing/oxidizing bacteria. <i>Acta Geochimica</i> , 2017, 36, 544-547.	0.7	2
60	Effects of Cd on reductive transformation of lepidocrocite by <i>Shewanella oneidensis</i> MR-1. <i>Acta Geochimica</i> , 2017, 36, 479-481.	0.7	1
61	Response of Soil Microbial Communities to Elevated Antimony and Arsenic Contamination Indicates the Relationship between the Innate Microbiota and Contaminant Fractions. <i>Environmental Science &amp; Technology</i> , 2017, 51, 9165-9175.	4.6	133
62	Microaerobic iron oxidation and carbon assimilation and associated microbial community in paddy soil. <i>Acta Geochimica</i> , 2017, 36, 502-505.	0.7	7
63	The Acid-Base Buffer Capacity of Red Soil Variable Charge Minerals and Its Surface Complexation Model. <i>Acta Chimica Sinica</i> , 2017, 75, 637.	0.5	8
64	Effects of Incubation Conditions on Cr(VI) Reduction by c-type Cytochromes in Intact <i>Shewanella oneidensis</i> MR-1 Cells. <i>Frontiers in Microbiology</i> , 2016, 7, 746.	1.5	46
65	Fe(II)-induced phase transformation of ferrihydrite: The inhibition effects and stabilization of divalent metal cations. <i>Chemical Geology</i> , 2016, 444, 110-119.	1.4	91
66	pH dependence of quinone-mediated extracellular electron transfer in a bioelectrochemical system. <i>Electrochimica Acta</i> , 2016, 213, 408-415.	2.6	29
67	In Situ Spectral Kinetics of Cr(VI) Reduction by c-Type Cytochromes in A Suspension of Living <i>Shewanella putrefaciens</i> 200. <i>Scientific Reports</i> , 2016, 6, 29592.	1.6	22
68	Enhanced visible-light photocatalytic activity of a TiO <sub>2</sub> hydrosol assisted by H <sub>2</sub> O <sub>2</sub> : Surface complexation and kinetic modeling. <i>Journal of Molecular Catalysis A</i> , 2016, 414, 122-129.	4.8	22
69	Changes in the composition and diversity of microbial communities during anaerobic nitrate reduction and Fe(II) oxidation at circumneutral pH in paddy soil. <i>Soil Biology and Biochemistry</i> , 2016, 94, 70-79.	4.2	134
70	Light-Induced Extracellular Electron Transport by the Marine Raphidophyte <i>Chattonella marina</i> . <i>Environmental Science &amp; Technology</i> , 2015, 49, 1392-1399.	4.6	40
71	Kinetic Modeling of the Electro-Fenton Process: Quantification of Reactive Oxygen Species Generation. <i>Electrochimica Acta</i> , 2015, 176, 51-58.	2.6	104
72	Depassivation of Aged Fe <sup>0</sup> by Divalent Cations: Correlation between Contaminant Degradation and Surface Complexation Constants. <i>Environmental Science &amp; Technology</i> , 2014, 48, 14564-14571.	4.6	61

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73	Effects of Al Content and Synthesis Temperature on Al-Substituted Fe Oxides. <i>Soil Science</i> , 2014, 179, 468-475.	0.9	2
74	Profiles, sources, and transport of polycyclic aromatic hydrocarbons in soils affected by electronic waste recycling in Longtang, south China. <i>Environmental Monitoring and Assessment</i> , 2014, 186, 3351-3364.	1.3	22
75	Removal of $\text{CH}_3\text{SH}$ with <i>in situ</i> generated ferrate( $\text{VI}$ ) in a wet scrubbing reactor. <i>Journal of Chemical Technology and Biotechnology</i> , 2014, 89, 455-461.	1.6	13
76	Competitive reduction of nitrate and iron oxides by <i>Shewanella putrefaciens</i> 200 under anoxic conditions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 445, 97-104.	2.3	25
77	Exogenous Electron Shuttle-Mediated Extracellular Electron Transfer of <i>Shewanella putrefaciens</i> 200: Electrochemical Parameters and Thermodynamics. <i>Environmental Science &amp; Technology</i> , 2014, 48, 9306-9314.	4.6	85
78	Fe(III) oxides accelerate microbial nitrate reduction and electricity generation by <i>Klebsiella pneumoniae</i> L17. <i>Journal of Colloid and Interface Science</i> , 2014, 423, 25-32.	5.0	48
79	Kinetics of Competitive Reduction of Nitrate and Iron Oxides by <i>Aeromonas hydrophila</i> HS01. <i>Soil Science Society of America Journal</i> , 2014, 78, 1903-1912.	1.2	16
80	Depassivation of Aged $\text{Fe}^0$ by Ferrous Ions: Implications to Contaminant Degradation. <i>Environmental Science &amp; Technology</i> , 2013, 47, 13712-13720.	4.6	64
81	Electron transfer capacity dependence of quinone-mediated Fe(III) reduction and current generation by <i>Klebsiella pneumoniae</i> L17. <i>Chemosphere</i> , 2013, 92, 218-224.	4.2	68
82	Depassivation of Aged $\text{Fe}^0$ by Inorganic Salts: Implications to Contaminant Degradation in Seawater. <i>Environmental Science &amp; Technology</i> , 2013, 47, 7350-7356.	4.6	41
83	Dependence of the electron transfer capacity on the kinetics of quinone-mediated Fe(III) reduction by two iron/humic reducing bacteria. <i>RSC Advances</i> , 2013, 4, 2284-2290.	1.7	36
84	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). <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 11238-11244.	2.4	51
85	Effect of Cr(VI) on Fe(III) reduction in three paddy soils from the Hani terrace field at high altitude. <i>Applied Clay Science</i> , 2012, 64, 53-60.	2.6	14
86	Reduction of structural Fe(III) in oxyhydroxides by <i>Shewanella decolorationis</i> S12 and characterization of the surface properties of iron minerals. <i>Journal of Soils and Sediments</i> , 2012, 12, 217-227.	1.5	66
87	Enhanced nitrate reduction and current generation by <i>Bacillus</i> sp. in the presence of iron oxides. <i>Journal of Soils and Sediments</i> , 2012, 12, 354-365.	1.5	42
88	Comparison of Aqueous Photoreactions with $\text{TiO}_2$ in its Hydrosol Solution and Powdery Suspension for Light Utilization. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 7841-7848.	1.8	17
89	Reduction of iron oxides by <i>Klebsiella pneumoniae</i> L17: Kinetics and surface properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 379, 143-150.	2.3	23
90	Enhanced reductive dechlorination of DDT in an anaerobic system of dissimilatory iron-reducing bacteria and iron oxide. <i>Environmental Pollution</i> , 2010, 158, 1733-1740.	3.7	113

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91	Enhanced photocatalytic activity of Ce <sup>3+</sup> -TiO <sub>2</sub> hydrosols in aqueous and gaseous phases. <i>Chemical Engineering Journal</i> , 2010, 157, 475-482.	6.6	44
92	Development of a Photocatalytic Wet Scrubbing Process for Gaseous Odor Treatment. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 3617-3622.	1.8	21
93	Effect of <i>Aeromonas hydrophila</i> on Reductive Dechlorination of DDTs by Zero-Valent Iron. <i>Journal of Agricultural and Food Chemistry</i> , 2010, 58, 12366-12372.	2.4	28
94	Interactively interfacial reaction of iron-reducing bacterium and goethite for reductive dechlorination of chlorinated organic compounds. <i>Science Bulletin</i> , 2009, 54, 2800-2804.	4.3	14
95	Foliar application of two silica sols reduced cadmium accumulation in rice grains. <i>Journal of Hazardous Materials</i> , 2009, 161, 1466-1472.	6.5	149
96	TiO <sub>2</sub> hydrosols with high activity for photocatalytic degradation of formaldehyde in a gaseous phase. <i>Journal of Hazardous Materials</i> , 2008, 152, 347-355.	6.5	87
97	Effects of peptizing conditions on nanometer properties and photocatalytic activity of TiO <sub>2</sub> hydrosols prepared by H <sub>2</sub> TiO <sub>3</sub> . <i>Journal of Hazardous Materials</i> , 2008, 155, 90-99.	6.5	23
98	Multi-functional microcapsules produced by aerosol reaction. <i>Journal of Aerosol Science</i> , 2008, 39, 1089-1098.	1.8	37
99	AgNO <sub>3</sub> -Induced Photocatalytic Degradation of Odorous Methyl Mercaptan in Gaseous Phase: Mechanism of Chemisorption and Photocatalytic Reaction. <i>Environmental Science &amp; Technology</i> , 2008, 42, 4540-4545.	4.6	47
100	Effect of Oxalate on Photodegradation of Bisphenol A at the Interface of Different Iron Oxides. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 781-787.	1.8	54
101	Effect of alumina on photocatalytic activity of iron oxides for bisphenol A degradation. <i>Journal of Hazardous Materials</i> , 2007, 149, 199-207.	6.5	94
102	Heterogeneous photodegradation of bisphenol A with iron oxides and oxalate in aqueous solution. <i>Journal of Colloid and Interface Science</i> , 2007, 311, 481-490.	5.0	112
103	Photodegradation of orange I in the heterogeneous iron oxide-oxalate complex system under UVA irradiation. <i>Journal of Hazardous Materials</i> , 2006, 137, 1016-1024.	6.5	70
104	The effect of erbium on the adsorption and photodegradation of orange I in aqueous Er <sup>3+</sup> -TiO <sub>2</sub> suspension. <i>Journal of Hazardous Materials</i> , 2006, 138, 471-478.	6.5	72
105	Effect of iron oxides and carboxylic acids on photochemical degradation of bisphenol A. <i>Biology and Fertility of Soils</i> , 2006, 42, 409-417.	2.3	29