Lijun Wang

List of Publications by Year in Descending Order

72 papers	3,202 citations	27 h-index	56 g-index
78 ext. papers	3,657 ext. citations	6.8 avg, IF	5.51 L-index

#	Paper	IF	Citations
72	Modulation of the calcium oxalate dihydrate to calcium oxalate monohydrate phase transition with citrate and zinc ions. *CrystEngComm*, **2021**, 23, 8588-8600	3.3	0
71	Face-Specific Occlusion of Lipid Vesicles within Calcium Oxalate Monohydrate. *Crystal Growth and Design*, **2021**, 21, 2398-2404	3.5	4
70	Facet-Specific Dissolution–Precipitation at Struvite–Water Interfaces. *Crystal Growth and Design*, **2021**, 21, 4111-4120	3.5	4
69	Role of Hyperoxaluria/Hypercalciuria in Controlling the Hydrate Phase Selection of Pathological Calcium Oxalate Mineralization. *Crystal Growth and Design*, **2021**, 21, 683-691	3.5	3
68	Dynamic force spectroscopy for quantifying single-molecule organo–mineral interactions. *CrystEngComm*, **2021**, 23, 11-23	3.3	1
67	Organically-bound silicon enhances resistance to enzymatic degradation and nanomechanical properties of rice plant cell walls. *Carbohydrate Polymers*, **2021**, 266, 118057	10.3	2
66	Phosphorylated/Nonphosphorylated Motifs in Amelotin Turn Off/On the Acidic Amorphous Calcium Phosphate-to-Apatite Phase Transformation. *Langmuir*, **2020**, 36, 2102-2109	4	7
65	Single-molecule determination of the phase- and facet-dependent adsorption of alginate on iron oxides. *Environmental Science: Nano*, **2020**, 7, 954-962	7.1	5
64	Dissolution and Precipitation Dynamics at Environmental Mineral Interfaces Imaged by In Situ Atomic Force Microscopy. *Accounts of Chemical Research*, **2020**, 53, 1196-1205	24.3	14
63	Molecular insight into the interfacial chemical functionalities regulating heterogeneous calcium-arsenate nucleation. *Journal of Colloid and Interface Science*, **2020**, 575, 464-471	9.3	1
62	Molecular Understanding of Humic Acid-Limited Phosphate Precipitation and Transformation. *Environmental Science & Technology*, **2020**, 54, 207-215	10.3	14
61	Molecular-Scale Investigations Reveal Noncovalent Bonding Underlying the Adsorption of Environmental DNA on Mica. *Environmental Science & Technology*, **2019**, 53, 11251-11259	10.3	12
60	Direct Observations of the Occlusion of Soil Organic Matter within Calcite. *Environmental Science & Technology*, **2019**, 53, 8097-8104	10.3	13
59	Underlying Role of Brushite in Pathological Mineralization of Hydroxyapatite. *Journal of Physical Chemistry B*, **2019**, 123, 2874-2881	3.4	17
58	An Evolutionarily Conserved Subdomain in Amelotin Promotes Amorphous Calcium Phosphate-to-Hydroxyapatite Phase Transition. *Crystal Growth and Design*, **2019**, 19, 2104-2113	3.5	16
57	Inhibition of Spiral Growth and Dissolution at the Brushite (010) Interface by Chondroitin 4-Sulfate. *Journal of Physical Chemistry B*, **2019**, 123, 845-851	3.4	6
56	Organized Assembly of Fluorapatite Nanorods Controlled by Amelotin: Implications for Enamel Regeneration. *ACS Applied Nano Materials*, **2019**, 2, 7566-7576	5.6	2

55	Humic Acids Limit the Precipitation of Cadmium and Arsenate at the Brushite-Fluid Interface. *Environmental Science & Technology*, **2019**, 53, 194-202	10.3	12
54	Direct Observation of Simultaneous Immobilization of Cadmium and Arsenate at the Brushite-Fluid Interface. *Environmental Science & Technology*, **2018**, 52, 3493-3502	10.3	14
53	Mechanisms of Modulation of Calcium Phosphate Pathological Mineralization by Mobile and Immobile Small-Molecule Inhibitors. *Journal of Physical Chemistry B*, **2018**, 122, 1580-1587	3.4	15
52	Occluded Organic Nanofibers Template the Hierarchical Organization of Nanosized Particles in Calcium Oxalate Raphides of Musa spp. *Crystal Growth and Design*, **2018**, 18, 1155-1161	3.5	3
51	A Highly Conserved Motif within the Amelotin Protein Controls the Surface Growth of Brushite. *Crystal Growth and Design*, **2018**, 18, 2502-2509	3.5	5
50	Atomic force microscopy imaging of classical and nonclassical surface growth dynamics of calcium orthophosphates. *CrystEngComm*, **2018**, 20, 2886-2896	3.3	6
49	Interfacial Precipitation of Phosphate on Hematite and Goethite. *Minerals (Basel, Switzerland)*, **2018** , 8, 207	2.4	13
48	Dynamics and Molecular Mechanism of Phosphate Binding to a Biomimetic Hexapeptide. *Environmental Science & Technology*, **2018**, 52, 10472-10479	10.3	6
47	Cell wall-bound silicon optimizes ammonium uptake and metabolism in rice cells. *Annals of Botany*, **2018**, 122, 303-313	4.1	12
46	Synergistic effects between [Si-hemicellulose matrix] ligands and Zn ions in inhibiting Cd ion uptake in rice (Oryza sativa) cells. *Planta*, **2017**, 245, 965-976	4.7	18
45	Halide-Dependent Dissolution of Dicalcium Phosphate Dihydrate and Its Modulation by an Organic Ligand. *Crystal Growth and Design*, **2017**, 17, 3868-3876	3.5	1
44	Energetic Basis for Inhibition of Calcium Phosphate Biomineralization by Osteopontin. *Journal of Physical Chemistry B*, **2017**, 121, 5968-5976	3.4	11
43	Role of Alcoholic Hydroxyls of Dicarboxylic Acids in Regulating Nanoscale Dissolution Kinetics of Dicalcium Phosphate Dihydrate. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 3920-3928	8.3	12
42	In Situ Atomic Force Microscopy Imaging of Octacalcium Phosphate Crystallization and Its Modulation by Amelogenin C-Terminus. *Crystal Growth and Design*, **2017**, 17, 2194-2202	3.5	11
41	Imaging Organophosphate and Pyrophosphate Sequestration on Brucite by in Situ Atomic Force Microscopy. *Environmental Science & Technology*, **2017**, 51, 328-336	10.3	13
40	Visualizing Organophosphate Precipitation at the Calcite-Water Interface by in Situ Atomic-Force Microscopy. *Environmental Science & Technology*, **2016**, 50, 259-68	10.3	12
39	iTRAQ-based proteomic analysis reveals the mechanisms of silicon-mediated cadmium tolerance in rice (Oryza sativa) cells. *Plant Physiology and Biochemistry*, **2016**, 104, 71-80	5.4	28
38	Direct Observation of Spiral Growth, Particle Attachment, and Morphology Evolution of Hydroxyapatite. *Crystal Growth and Design*, **2016**, 16, 4509-4518	3.5	36

37	Direct Nanoscale Imaging of Calcium Oxalate Crystallization on Brushite Reveals the Mechanisms Underlying Stone Formation. *Crystal Growth and Design*, **2015**, 15, 3038-3045	3.5	11
36	In situ imaging of interfacial precipitation of phosphate on Goethite. *Environmental Science & Technology*, **2015**, 49, 4184-92	10.3	42
35	Monomeric Amelogenin C-Terminus Modulates Biomineralization Dynamics of Calcium Phosphate. *Crystal Growth and Design*, **2015**, 15, 4490-4497	3.5	10
34	A hemicellulose-bound form of silicon inhibits cadmium ion uptake in rice (Oryza sativa) cells. *New Phytologist*, **2015**, 206, 1063-1074	9.8	175
33	A hemicellulose-bound form of silicon with potential to improve the mechanical properties and regeneration of the cell wall of rice. *New Phytologist*, **2015**, 206, 1051-1062	9.8	106
32	Templated Biomineralization on Self-Assembled Protein Nanofibers Buried in Calcium Oxalate Raphides of Musa spp.. *Chemistry of Materials*, **2014**, 26, 3862-3869	9.6	14
31	Inhibition of Pathological Mineralization of Calcium Phosphate by Phosphorylated Osteopontin Peptides through Step-Specific Interactions. *Chemistry of Materials*, **2014**, 26, 5605-5612	9.6	23
30	Evidence for 'silicon' within the cell walls of suspension-cultured rice cells. *New Phytologist*, **2013**, 200, 700-709	9.8	86
29	Direct imaging of nanoscale dissolution of dicalcium phosphate dihydrate by an organic ligand: concentration matters. *Environmental Science & Technology*, **2013**, 47, 13365-74	10.3	33
28	Inhibition of cadmium ion uptake in rice (Oryza sativa) cells by a wall-bound form of silicon. *New Phytologist*, **2013**, 200, 691-699	9.8	125
27	Coupled dissolution and precipitation at the cerussite-phosphate solution interface: implications for immobilization of lead in soils. *Environmental Science & Technology*, **2013**, 47, 13502-10	10.3	25
26	Phosphorylated osteopontin peptides inhibit crystallization by resisting the aggregation of calcium phosphate nanoparticles. *CrystEngComm*, **2012**, 14, 8037	3.3	26
25	Kinetics of calcium phosphate nucleation and growth on calcite: implications for predicting the fate of dissolved phosphate species in alkaline soils. *Environmental Science & Technology*, **2012**, 46, 834-42	10.3	70
24	Posner's cluster revisited: direct imaging of nucleation and growth of nanoscale calcium phosphate clusters at the calcite-water interface. *CrystEngComm*, **2012**, 14, 6252	3.3	60
23	Specific effects of background electrolytes on the kinetics of step propagation during calcite growth. *Geochimica Et Cosmochimica Acta*, **2011**, 75, 3803-3814	5.5	51
22	Dynamics of crystallization and dissolution of calcium orthophosphates at the near-molecular level. *Science Bulletin*, **2011**, 56, 713-721		18
21	Direct observations of the modification of calcite growth morphology by Li+ through selectively stabilizing an energetically unfavourable face. *CrystEngComm*, **2011**, 13, 3962	3.3	14
20	How amelogenin orchestrates the organization of hierarchical elongated microstructures of apatite. *Journal of Physical Chemistry B*, **2010**, 114, 2293-300	3.4	93

19	Dynamics of Biomineralization and Biodemineralization. *Metal Ions in Life Sciences*, **2010**, 4, 413-456	2.6	11
18	Pathways to biomineralization and biodemineralization of calcium phosphates: the thermodynamic and kinetic controls. *Dalton Transactions*, **2009**, 2665-72	4.3	86
17	Long-term effects of exogenous silicon on cadmium translocation and toxicity in rice (Oryza sativa L.). *Environmental and Experimental Botany*, **2008**, 62, 300-307	5.9	151
16	Phosphorylation of osteopontin is required for inhibition of calcium oxalate crystallization. *Journal of Physical Chemistry B*, **2008**, 112, 9151-7	3.4	60
15	Mimicking the Self-Organized Microstructure of Tooth Enamel. *Journal of Physical Chemistry C*, **2008**, 112, 5892-5899	3.8	93
14	Calcium orthophosphates: crystallization and dissolution. *Chemical Reviews*, **2008**, 108, 4628-69	68.1	643
13	Amelogenin Promotes the Formation of Elongated Apatite Microstructures in a Controlled Crystallization System. *Journal of Physical Chemistry C*, **2007**, 111, 6398-6404	3.8	74
12	Silicon Decreases Transpiration Rate and Conductance from Stomata of Maize Plants. *Journal of Plant Nutrition*, **2006**, 29, 1637-1647	2.3	178
11	Modulation of calcium oxalate crystallization by linear aspartic acid-rich peptides. *Langmuir*, **2006**, 22, 7279-85	4	70
10	Nanosized particles in bone and dissolution insensitivity of bone mineral. *Biointerphases*, **2006**, 1, 106-11	1.8	48
9	Constant Composition Studies Verify the Utility of the Cabrera–Vermilyea (C-V) Model in Explaining Mechanisms of Calcium Oxalate Monohydrate Crystallization. *Crystal Growth and Design*, **2006**, 6, 1769-1775	3.5	29
8	A new model for nanoscale enamel dissolution. *Journal of Physical Chemistry B*, **2005**, 109, 999-1005	3.4	64
7	Silicon Improves Water Use Efficiency in Maize Plants. *Journal of Plant Nutrition*, **2005**, 27, 1457-1470	2.3	128
6	Dissolution at the nanoscale: self-preservation of biominerals. *Angewandte Chemie - International Edition*, **2004**, 43, 2697-701	16.4	90
5	Dissolution at the Nanoscale: Self-Preservation of Biominerals. *Angewandte Chemie*, **2004**, 116, 2751-2755	3.6	17
4	Size-effects in the dissolution of hydroxyapatite: an understanding of biological demineralization. *Journal of Materials Chemistry*, **2004**, 14, 2341		54
3	Silicon induced cadmium tolerance of rice seedlings. *Journal of Plant Nutrition*, **2000**, 23, 1397-1406	2.3	71
2	Nanoscale imaging of the simultaneous occlusion of nanoplastics and glyphosate within soil minerals. *Environmental Science: Nano*,	7.1	4

1	Crystallization via Nonclassical Pathways: Nanoscale Imaging of Mineral Surfaces. *ACS Symposium Series*,1-35	0.4	0