

# Lijun Wang

## List of Publications by Citations

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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	Calcium orthophosphates: crystallization and dissolution. <i>Chemical Reviews</i> , <b>2008</b> , 108, 4628-69	68.1	643
71	Silicon Decreases Transpiration Rate and Conductance from Stomata of Maize Plants. <i>Journal of Plant Nutrition</i> , <b>2006</b> , 29, 1637-1647	2.3	178
70	A hemicellulose-bound form of silicon inhibits cadmium ion uptake in rice ( <i>Oryza sativa</i> ) cells. <i>New Phytologist</i> , <b>2015</b> , 206, 1063-1074	9.8	175
69	Long-term effects of exogenous silicon on cadmium translocation and toxicity in rice ( <i>Oryza sativa</i> L.). <i>Environmental and Experimental Botany</i> , <b>2008</b> , 62, 300-307	5.9	151
68	Silicon Improves Water Use Efficiency in Maize Plants. <i>Journal of Plant Nutrition</i> , <b>2005</b> , 27, 1457-1470	2.3	128
67	Inhibition of cadmium ion uptake in rice ( <i>Oryza sativa</i> ) cells by a wall-bound form of silicon. <i>New Phytologist</i> , <b>2013</b> , 200, 691-699	9.8	125
66	A hemicellulose-bound form of silicon with potential to improve the mechanical properties and regeneration of the cell wall of rice. <i>New Phytologist</i> , <b>2015</b> , 206, 1051-1062	9.8	106
65	How amelogenin orchestrates the organization of hierarchical elongated microstructures of apatite. <i>Journal of Physical Chemistry B</i> , <b>2010</b> , 114, 2293-300	3.4	93
64	Mimicking the Self-Organized Microstructure of Tooth Enamel. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 5892-5899	3.8	93
63	Dissolution at the nanoscale: self-preservation of biominerals. <i>Angewandte Chemie - International Edition</i> , <b>2004</b> , 43, 2697-701	16.4	90
62	Evidence for 'silicon' within the cell walls of suspension-cultured rice cells. <i>New Phytologist</i> , <b>2013</b> , 200, 700-709	9.8	86
61	Pathways to biomineralization and biodemineralization of calcium phosphates: the thermodynamic and kinetic controls. <i>Dalton Transactions</i> , <b>2009</b> , 2665-72	4.3	86
60	Amelogenin Promotes the Formation of Elongated Apatite Microstructures in a Controlled Crystallization System. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 6398-6404	3.8	74
59	Silicon induced cadmium tolerance of rice seedlings. <i>Journal of Plant Nutrition</i> , <b>2000</b> , 23, 1397-1406	2.3	71
58	Kinetics of calcium phosphate nucleation and growth on calcite: implications for predicting the fate of dissolved phosphate species in alkaline soils. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 834-42	10.3	70
57	Modulation of calcium oxalate crystallization by linear aspartic acid-rich peptides. <i>Langmuir</i> , <b>2006</b> , 22, 7279-85	4	70
56	A new model for nanoscale enamel dissolution. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 999-1005	3.4	64

55	Posner's cluster revisited: direct imaging of nucleation and growth of nanoscale calcium phosphate clusters at the calcite-water interface. <i>CrystEngComm</i> , <b>2012</b> , 14, 6252	3-3	60
54	Phosphorylation of osteopontin is required for inhibition of calcium oxalate crystallization. <i>Journal of Physical Chemistry B</i> , <b>2008</b> , 112, 9151-7	3-4	60
53	Size-effects in the dissolution of hydroxyapatite: an understanding of biological demineralization. <i>Journal of Materials Chemistry</i> , <b>2004</b> , 14, 2341		54
52	Specific effects of background electrolytes on the kinetics of step propagation during calcite growth. <i>Geochimica Et Cosmochimica Acta</i> , <b>2011</b> , 75, 3803-3814	5-5	51
51	Nanosized particles in bone and dissolution insensitivity of bone mineral. <i>Biointerphases</i> , <b>2006</b> , 1, 106-111	1-8	48
50	In situ imaging of interfacial precipitation of phosphate on Goethite. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 4184-92	10-3	42
49	Direct Observation of Spiral Growth, Particle Attachment, and Morphology Evolution of Hydroxyapatite. <i>Crystal Growth and Design</i> , <b>2016</b> , 16, 4509-4518	3-5	36
48	Direct imaging of nanoscale dissolution of dicalcium phosphate dihydrate by an organic ligand: concentration matters. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 13365-74	10-3	33
47	Constant Composition Studies Verify the Utility of the Cabrera-Vermilyea (C-V) Model in Explaining Mechanisms of Calcium Oxalate Monohydrate Crystallization. <i>Crystal Growth and Design</i> , <b>2006</b> , 6, 1769-1775	3-5	29
46	iTRAQ-based proteomic analysis reveals the mechanisms of silicon-mediated cadmium tolerance in rice ( <i>Oryza sativa</i> ) cells. <i>Plant Physiology and Biochemistry</i> , <b>2016</b> , 104, 71-80	5-4	28
45	Phosphorylated osteopontin peptides inhibit crystallization by resisting the aggregation of calcium phosphate nanoparticles. <i>CrystEngComm</i> , <b>2012</b> , 14, 8037	3-3	26
44	Coupled dissolution and precipitation at the cerussite-phosphate solution interface: implications for immobilization of lead in soils. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 13502-10	10-3	25
43	Inhibition of Pathological Mineralization of Calcium Phosphate by Phosphorylated Osteopontin Peptides through Step-Specific Interactions. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 5605-5612	9-6	23
42	Synergistic effects between [Si-hemicellulose matrix] ligands and Zn ions in inhibiting Cd ion uptake in rice ( <i>Oryza sativa</i> ) cells. <i>Planta</i> , <b>2017</b> , 245, 965-976	4-7	18
41	Dynamics of crystallization and dissolution of calcium orthophosphates at the near-molecular level. <i>Science Bulletin</i> , <b>2011</b> , 56, 713-721		18
40	Underlying Role of Brushite in Pathological Mineralization of Hydroxyapatite. <i>Journal of Physical Chemistry B</i> , <b>2019</b> , 123, 2874-2881	3-4	17
39	Dissolution at the Nanoscale: Self-Preservation of Biominerals. <i>Angewandte Chemie</i> , <b>2004</b> , 116, 2751-2755	5-6	17
38	An Evolutionarily Conserved Subdomain in Amelotin Promotes Amorphous Calcium Phosphate-to-Hydroxyapatite Phase Transition. <i>Crystal Growth and Design</i> , <b>2019</b> , 19, 2104-2113	3-5	16

37	Mechanisms of Modulation of Calcium Phosphate Pathological Mineralization by Mobile and Immobile Small-Molecule Inhibitors. <i>Journal of Physical Chemistry B</i> , <b>2018</b> , 122, 1580-1587	3-4	15
36	Direct Observation of Simultaneous Immobilization of Cadmium and Arsenate at the Brushite-Fluid Interface. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 3493-3502	10-3	14
35	Templated Biomineralization on Self-Assembled Protein Nanofibers Buried in Calcium Oxalate Raphides of <i>Musa spp.</i> . <i>Chemistry of Materials</i> , <b>2014</b> , 26, 3862-3869	9-6	14
34	Direct observations of the modification of calcite growth morphology by Li <sup>+</sup> through selectively stabilizing an energetically unfavourable face. <i>CrystEngComm</i> , <b>2011</b> , 13, 3962	3-3	14
33	Dissolution and Precipitation Dynamics at Environmental Mineral Interfaces Imaged by In Situ Atomic Force Microscopy. <i>Accounts of Chemical Research</i> , <b>2020</b> , 53, 1196-1205	24-3	14
32	Molecular Understanding of Humic Acid-Limited Phosphate Precipitation and Transformation. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 207-215	10-3	14
31	Imaging Organophosphate and Pyrophosphate Sequestration on Brucite by in Situ Atomic Force Microscopy. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 328-336	10-3	13
30	Direct Observations of the Occlusion of Soil Organic Matter within Calcite. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 8097-8104	10-3	13
29	Interfacial Precipitation of Phosphate on Hematite and Goethite. <i>Minerals (Basel, Switzerland)</i> , <b>2018</b> , 8, 207	2-4	13
28	Role of Alcoholic Hydroxyls of Dicarboxylic Acids in Regulating Nanoscale Dissolution Kinetics of Dicalcium Phosphate Dihydrate. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2017</b> , 5, 3920-3928	8-3	12
27	Molecular-Scale Investigations Reveal Noncovalent Bonding Underlying the Adsorption of Environmental DNA on Mica. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 11251-11259	10-3	12
26	Visualizing Organophosphate Precipitation at the Calcite-Water Interface by in Situ Atomic-Force Microscopy. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 259-68	10-3	12
25	Humic Acids Limit the Precipitation of Cadmium and Arsenate at the Brushite-Fluid Interface. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 194-202	10-3	12
24	Cell wall-bound silicon optimizes ammonium uptake and metabolism in rice cells. <i>Annals of Botany</i> , <b>2018</b> , 122, 303-313	4-1	12
23	Energetic Basis for Inhibition of Calcium Phosphate Biomineralization by Osteopontin. <i>Journal of Physical Chemistry B</i> , <b>2017</b> , 121, 5968-5976	3-4	11
22	In Situ Atomic Force Microscopy Imaging of Octacalcium Phosphate Crystallization and Its Modulation by Amelogenin's C-Terminus. <i>Crystal Growth and Design</i> , <b>2017</b> , 17, 2194-2202	3-5	11
21	Direct Nanoscale Imaging of Calcium Oxalate Crystallization on Brushite Reveals the Mechanisms Underlying Stone Formation. <i>Crystal Growth and Design</i> , <b>2015</b> , 15, 3038-3045	3-5	11
20	Dynamics of Biomineralization and Biodemineralization. <i>Metal Ions in Life Sciences</i> , <b>2010</b> , 4, 413-456	2-6	11

19	Monomeric Amelogenin C-Terminus Modulates Biomineralization Dynamics of Calcium Phosphate. <i>Crystal Growth and Design</i> , <b>2015</b> , 15, 4490-4497	3.5	10
18	Phosphorylated/Nonphosphorylated Motifs in Amelotin Turn Off/On the Acidic Amorphous Calcium Phosphate-to-Apatite Phase Transformation. <i>Langmuir</i> , <b>2020</b> , 36, 2102-2109	4	7
17	Atomic force microscopy imaging of classical and nonclassical surface growth dynamics of calcium orthophosphates. <i>CrystEngComm</i> , <b>2018</b> , 20, 2886-2896	3.3	6
16	Dynamics and Molecular Mechanism of Phosphate Binding to a Biomimetic Hexapeptide. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 10472-10479	10.3	6
15	Inhibition of Spiral Growth and Dissolution at the Brushite (010) Interface by Chondroitin 4-Sulfate. <i>Journal of Physical Chemistry B</i> , <b>2019</b> , 123, 845-851	3.4	6
14	Single-molecule determination of the phase- and facet-dependent adsorption of alginate on iron oxides. <i>Environmental Science: Nano</i> , <b>2020</b> , 7, 954-962	7.1	5
13	A Highly Conserved Motif within the Amelotin Protein Controls the Surface Growth of Brushite. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 2502-2509	3.5	5
12	Face-Specific Occlusion of Lipid Vesicles within Calcium Oxalate Monohydrate. <i>Crystal Growth and Design</i> , <b>2021</b> , 21, 2398-2404	3.5	4
11	Facet-Specific Dissolution/Precipitation at Struvite/Water Interfaces. <i>Crystal Growth and Design</i> , <b>2021</b> , 21, 4111-4120	3.5	4
10	Nanoscale imaging of the simultaneous occlusion of nanoplastics and glyphosate within soil minerals. <i>Environmental Science: Nano</i> ,	7.1	4
9	Occluded Organic Nanofibers Template the Hierarchical Organization of Nanosized Particles in Calcium Oxalate Raphides of Musa spp. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 1155-1161	3.5	3
8	Role of Hyperoxaluria/Hypercalciuria in Controlling the Hydrate Phase Selection of Pathological Calcium Oxalate Mineralization. <i>Crystal Growth and Design</i> , <b>2021</b> , 21, 683-691	3.5	3
7	Organized Assembly of Fluorapatite Nanorods Controlled by Amelotin: Implications for Enamel Regeneration. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 7566-7576	5.6	2
6	Organically-bound silicon enhances resistance to enzymatic degradation and nanomechanical properties of rice plant cell walls. <i>Carbohydrate Polymers</i> , <b>2021</b> , 266, 118057	10.3	2
5	Halide-Dependent Dissolution of Dicalcium Phosphate Dihydrate and Its Modulation by an Organic Ligand. <i>Crystal Growth and Design</i> , <b>2017</b> , 17, 3868-3876	3.5	1
4	Molecular insight into the interfacial chemical functionalities regulating heterogeneous calcium-arsenate nucleation. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 575, 464-471	9.3	1
3	Dynamic force spectroscopy for quantifying single-molecule organomineral interactions. <i>CrystEngComm</i> , <b>2021</b> , 23, 11-23	3.3	1
2	Modulation of the calcium oxalate dihydrate to calcium oxalate monohydrate phase transition with citrate and zinc ions. <i>CrystEngComm</i> , <b>2021</b> , 23, 8588-8600	3.3	0

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

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