

# Xurong Xu

## List of Publications by Year in descending order

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84  
papers

4,636  
citations

81900

39  
h-index

102487

66  
g-index

86  
all docs

86  
docs citations

86  
times ranked

5385  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Flexible and Degradable Hybrid Mineral as a Plastic Substitute. <i>Advanced Materials</i> , 2022, 34, e2107523.	21.0	34
2	Pressure-driven fusion of amorphous particles into integrated monoliths. <i>Science</i> , 2021, 372, 1466-1470.	12.6	52
3	Crosslinking ionic oligomers as conformable precursors to calcium carbonate. <i>Nature</i> , 2019, 574, 394-398.	27.8	166
4	Improvement in the Photobiological Hydrogen Production of Aggregated <i>Chlorella</i> by Dimethyl Sulfoxide. <i>ChemBioChem</i> , 2018, 19, 669-673.	2.6	16
5	Synergic Effect of Sr <sup>2+</sup> and Mg <sup>2+</sup> on the Stabilization of Amorphous Calcium Phosphate. <i>Crystal Growth and Design</i> , 2018, 18, 6054-6060.	3.0	20
6	Therapeutic Potential of Biomineralization-Based Engineering. <i>Advanced Therapeutics</i> , 2018, 1, 1800079.	3.2	18
7	Protection of Photosynthetic Algae against Ultraviolet Radiation by One-Step CeO <sub>2</sub> Shellization. <i>Langmuir</i> , 2017, 33, 2454-2459.	3.5	29
8	Switchable Chiral Selection of Aspartic Acids by Dynamic States of Brushite. <i>Journal of the American Chemical Society</i> , 2017, 139, 8562-8569.	13.7	16
9	Prevention of Cyanobacterial Blooms Using Nanosilica: A Biomineralization-Inspired Strategy. <i>Environmental Science &amp; Technology</i> , 2017, 51, 12717-12726.	10.0	28
10	Biomimetic inorganic camouflage circumvents antibody-dependent enhancement of infection. <i>Chemical Science</i> , 2017, 8, 8240-8246.	7.4	18
11	Long-term Effect of Biomineralized Insulin Nanoparticles on Type 2 Diabetes Treatment. <i>Theranostics</i> , 2017, 7, 4301-4312.	10.0	13
12	Biomineralized vaccine nanohybrid for needle-free intranasal immunization. <i>Biomaterials</i> , 2016, 106, 286-294.	11.4	35
13	Cells Recognize and Prefer Bone-like Hydroxyapatite: Biochemical Understanding of Ultrathin Mineral Platelets in Bone. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 29997-30004.	8.0	25
14	Improvement of Biological Organisms Using Functional Material Shells. <i>Advanced Functional Materials</i> , 2016, 26, 1862-1880.	14.9	81
15	Intracellular delivery of biomineralized monoclonal antibodies to combat viral infection. <i>Chemical Communications</i> , 2016, 52, 1879-1882.	4.1	12
16	Silicification-Induced Cell Aggregation for the Sustainable Production of H <sub>2</sub> under Aerobic Conditions. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 11961-11965.	13.8	68
17	Phase-controlled crystallization of amorphous calcium carbonate in ethanol-water binary solvents. <i>Crystal Research and Technology</i> , 2015, 50, 312-318.	1.3	11
18	Amorphous calcium phosphate phase-mediated crystal nucleation kinetics and pathway. <i>Faraday Discussions</i> , 2015, 179, 451-461.	3.2	66

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19	High efficient multifunctional Ag <sub>3</sub> PO <sub>4</sub> loaded hydroxyapatite nanowires for water treatment. Journal of Hazardous Materials, 2015, 299, 379-387.	12.4	51
20	Ionization controls for biomineralization-inspired CO <sub>2</sub> chemical looping at constant room temperature. Physical Chemistry Chemical Physics, 2015, 17, 10080-10085.	2.8	11
21	The effect of amorphous calcium phosphate on protein protection against thermal denaturation. Chemical Communications, 2015, 51, 8705-8707.	4.1	27
22	Toward a Detailed Understanding of Magnesium Ions on Hydroxyapatite Crystallization Inhibition. Crystal Growth and Design, 2014, 14, 763-769.	3.0	140
23	Nano Regulation of Cisplatin Chemotherapeutic Behaviors by Biomineralization Controls. Small, 2014, 10, 3644-3649.	10.0	21
24	Calcium phosphate nanoparticles primarily induce cell necrosis through lysosomal rupture: the origination of material cytotoxicity. Journal of Materials Chemistry B, 2014, 2, 3480.	5.8	62
25	Biomimetic construction of cellular shell by adjusting the interfacial energy. Biotechnology and Bioengineering, 2014, 111, 386-395.	3.3	19
26	Biomimetic graphene oxide-hydroxyapatite composites via in situ mineralization and hierarchical assembly. RSC Advances, 2014, 4, 25398-25403.	3.6	33
27	Remineralization of dentin collagen by meta-stabilized amorphous calcium phosphate. CrystEngComm, 2013, 15, 6151.	2.6	39
28	Spontaneously amplified homochiral organic-inorganic nano-helix complexes via self-proliferation. Nanoscale, 2013, 5, 3006.	5.6	9
29	Overcoming cisplatin resistance in chemotherapy by biomineralization. Chemical Communications, 2013, 49, 4932.	4.1	27
30	Alleviation of high light-induced photoinhibition in cyanobacteria by artificially conferred biosilica shells. Chemical Communications, 2013, 49, 7525.	4.1	76
31	Hydration layer structures on calcite facets and their roles in selective adsorptions of biomolecules: A molecular dynamics study. Journal of Chemical Physics, 2013, 139, 234705.	3.0	42
32	Rational design of thermostable vaccines by engineered peptide-induced virus self-biomineralization under physiological conditions. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7619-7624.	7.1	134
33	Lamellar organic-inorganic architecture via classical screw growth. CrystEngComm, 2012, 14, 7184.	2.6	6
34	Transformation of amorphous calcium carbonate into aragonite. Journal of Crystal Growth, 2012, 343, 62-67.	1.5	135
35	Aragonite crystals formation on nacre substrate. Journal of Crystal Growth, 2012, 351, 41-46.	1.5	3
36	Biomineralization-Based Virus Shell Engineering: Towards Neutralization Escape and Tropism Expansion. Advanced Healthcare Materials, 2012, 1, 443-449.	7.6	57

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37	Virus-Shell Engineering: Biom mineralization-Based Virus Shell-Engineering: Towards Neutralization Escape and Tropism Expansion (Adv. Healthcare Mater. 4/2012). Advanced Healthcare Materials, 2012, 1, 366-366.	7.6	0
38	Unique Roles of Acidic Amino Acids in Phase Transformation of Calcium Phosphates. Journal of Physical Chemistry B, 2011, 115, 1151-1157.	2.6	55
39	Mechanism of promoted dipeptide formation on hydroxyapatite crystal surfaces. Science Bulletin, 2011, 56, 633-639.	1.7	10
40	Bio-Inspired Enamel Repair via Glu-Directed Assembly of Apatite Nanoparticles: an Approach to Biomaterials with Optimal Characteristics. Advanced Materials, 2011, 23, 4695-4701.	21.0	105
41	Hybrid Materials that Integrate Living Cells: Improved Eco-Adaptation and Environmental Applications. ChemSusChem, 2011, 4, 1439-1446.	6.8	12
42	A Size-controlled Synthesis of Hollow Apatite Nanospheres at Water-Oil Interfaces. Chemistry Letters, 2010, 39, 674-675.	1.3	16
43	Influence of viscosity on the phase transformation of amorphous calcium carbonate in fluids: An understanding of the medium effect in biomimetic mineralization. Science China Chemistry, 2010, 53, 2208-2214.	8.2	4
44	Self-Assembled Organic-Inorganic Hybrid Elastic Crystal via Biomimetic Mineralization. Advanced Materials, 2010, 22, 3729-3734.	21.0	34
45	Extracellular Silica Nanocoat Confers Thermotolerance on Individual Cells: A Case Study of Material-Based Functionalization of Living Cells. ChemBioChem, 2010, 11, 2368-2373.	2.6	69
46	Formation and Photoluminescence of Fluorescent Polymers. International Journal of Polymer Science, 2010, 2010, 1-2.	2.7	7
47	Guarding Embryo Development of Zebrafish by Shell Engineering: A Strategy to Shield Life from Ozone Depletion. PLoS ONE, 2010, 5, e9963.	2.5	29
48	Preparing nano-calcium phosphate particles via a biologically friendly pathway. Biomedical Materials (Bristol), 2010, 5, 041001.	3.3	12
49	Controlled formation of calcium-phosphate-based hybrid mesocrystals by organic-inorganic co-assembly. Nanoscale, 2010, 2, 2456.	5.6	15
50	Magnesium-aspartate-based crystallization switch inspired from shell molt of crustacean. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22096-22101.	7.1	120
51	Preparation of Calcite and Aragonite Complex Layer Materials Inspired from Biom mineralization. Crystal Growth and Design, 2009, 9, 3095-3099.	3.0	29
52	Biomimetically Triggered Inorganic Crystal Transformation by Biomolecules: A New Understanding of Biom mineralization. Journal of Physical Chemistry B, 2009, 113, 10838-10844.	2.6	34
53	Controls of Tricalcium Phosphate Single-Crystal Formation from Its Amorphous Precursor by Interfacial Energy. Crystal Growth and Design, 2009, 9, 3154-3160.	3.0	40
54	Yeast Cells with an Artificial Mineral Shell: Protection and Modification of Living Cells by Biomimetic Mineralization. Angewandte Chemie - International Edition, 2008, 47, 3560-3564.	13.8	203

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55	Construction of coral-like complex: Controlled growth of vaterite submicron hairs on flat films and hemispheres. <i>Journal of Crystal Growth</i> , 2008, 310, 3049-3054.	1.5	2
56	The roles of water and polyelectrolytes in the phase transformation of amorphous calcium carbonate. <i>Journal of Crystal Growth</i> , 2008, 310, 3779-3787.	1.5	66
57	Role of fetal bovine serum in the prevention of calcification in biological fluids. <i>Journal of Crystal Growth</i> , 2008, 310, 4672-4675.	1.5	15
58	Surface Modification of Hydroxyapatite Nanocrystallite by a Small Amount of Terbium Provides a Biocompatible Fluorescent Probe. <i>Journal of Physical Chemistry C</i> , 2008, 112, 12219-12224.	3.1	82
59	Structural Components and Anisotropic Dissolution Behaviors in One Hexagonal Single Crystal of $\beta$ -Tricalcium Phosphate. <i>Crystal Growth and Design</i> , 2008, 8, 2227-2234.	3.0	44
60	Direct Synthesis of Hollow Vaterite Nanospheres from Amorphous Calcium Carbonate Nanoparticles via Phase Transformation. <i>Journal of Physical Chemistry C</i> , 2008, 112, 11324-11330.	3.1	61
61	Repair of enamel by using hydroxyapatite nanoparticles as the building blocks. <i>Journal of Materials Chemistry</i> , 2008, 18, 4079.	6.7	195
62	Colour tuning of core-shell fluorescent materials. <i>Journal of Materials Chemistry</i> , 2008, 18, 5363.	6.7	12
63	Atomic Force Microscopy Reveals Hydroxyapatite-Citrate Interfacial Structure at the Atomic Level. <i>Langmuir</i> , 2008, 24, 12446-12451.	3.5	54
64	Evolution of Amorphous Calcium Phosphate to Hydroxyapatite Probed by Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2008, 112, 14929-14933.	3.1	57
65	Adsorption Processes of Gly and Glu Amino Acids on Hydroxyapatite Surfaces at the Atomic Level. <i>Langmuir</i> , 2007, 23, 8972-8981.	3.5	119
66	Effect of crystallinity of calcium phosphate nanoparticles on adhesion, proliferation, and differentiation of bone marrow mesenchymal stem cells. <i>Journal of Materials Chemistry</i> , 2007, 17, 4690.	6.7	152
67	Dual Roles of Borax in Kinetics of Calcium Sulfate Dihydrate Formation. <i>Langmuir</i> , 2007, 23, 5070-5076.	3.5	18
68	Improved Luminescence of Lanthanide(III)-Doped Nanophosphors by Linear Aggregation. <i>Journal of Physical Chemistry C</i> , 2007, 111, 4111-4115.	3.1	48
69	Ultrasonic Controlled Morphology Transformation of Hollow Calcium Phosphate Nanospheres: A Smart and Biocompatible Drug Release System. <i>Chemistry of Materials</i> , 2007, 19, 3081-3083.	6.7	161
70	Roles of Amorphous Calcium Phosphate and Biological Additives in the Assembly of Hydroxyapatite Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2007, 111, 13410-13418.	2.6	156
71	Sequential formation of calcium carbonate superstructure: From solid/hollow spheres to sponge-like/solid films. <i>Journal of Crystal Growth</i> , 2007, 308, 110-116.	1.5	23
72	Preparation of large-sized hydroxyapatite single crystals using homogeneous releasing controls. <i>Journal of Crystal Growth</i> , 2007, 308, 151-158.	1.5	37

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73	Two Modes of Transformation of Amorphous Calcium Carbonate Films in Air. <i>Journal of Physical Chemistry B</i> , 2006, 110, 2764-2770.	2.6	94
74	Deposition of Amorphous Calcium Carbonate Hemispheres on Substrates. <i>Langmuir</i> , 2005, 21, 4801-4804.	3.5	40
75	Stable Superhydrophobic Organic-Inorganic Hybrid Films by Electrostatic Self-Assembly. <i>Journal of Physical Chemistry B</i> , 2005, 109, 20773-20778.	2.6	184
76	Biomimetic Fabrication of Vaterite Film from Amorphous Calcium Carbonate on Polymer Melt: Effect of Polymer Chain Mobility and Functionality. <i>Chemistry of Materials</i> , 2005, 17, 136-141.	6.7	53
77	Diverse Access to Artificial Superhydrophobic Surfaces Using Block Copolymers. <i>Langmuir</i> , 2005, 21, 6662-6665.	3.5	219
78	Formation of Amorphous Calcium Carbonate Thin Films and Their Role in Biomineralization. <i>Chemistry of Materials</i> , 2004, 16, 1740-1746.	6.7	125
79	Fabrication of a stable inorganic-organic hybrid multilayer film with uniform and dense inorganic nanoparticle deposition. Electronic supplementary information (ESI) available: IR-ERS spectra of 8 deposition cycles of DR and PSS-coated ZrO <sub>2</sub> on silicon wafer. See <a href="http://www.rsc.org/suppdata/cc/b3/b300581j/">http://www.rsc.org/suppdata/cc/b3/b300581j/</a> . <i>Chemical Communications</i> , 2003, 966-967.	4.1	9
80	Dynamic rheological behaviors of metallocene-based ethylene-butene copolymers and their blends with low-density polyethylene. <i>European Polymer Journal</i> , 2002, 38, 365-375.	5.4	17
81	Effect of composition distribution on miscibility and co-crystallization phenomena in the blends of low density polyethylene with conventional and metallocene-based ethylene-butene copolymers. <i>Polymer</i> , 2001, 42, 3867-3874.	3.8	44
82	Nonisothermal crystallization kinetics of ethylene-butene copolymer/low-density polyethylene blends. <i>Journal of Applied Polymer Science</i> , 2001, 80, 123-129.	2.6	10
83	Effect of short chain-branching distribution on crystallinity and modulus of metallocene-based ethylene-butene copolymers. <i>Journal of Applied Polymer Science</i> , 2000, 77, 1709-1715.	2.6	36
84	Short chain branching distributions of metallocene-based ethylene copolymers. <i>European Polymer Journal</i> , 2000, 36, 685-693.	5.4	36