

Ashit Rao

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

36
papers

601
citations

16
h-index

24
g-index

38
ext. papers

714
ext. citations

6.3
avg, IF

4.31
L-index

#	Paper	IF	Citations
36	New Horizons of Nonclassical Crystallization. <i>Journal of the American Chemical Society</i> , 2019 , 141, 10120-10136	10.1	3699
35	Sweet on biomineralization: effects of carbohydrates on the early stages of calcium carbonate crystallization. <i>European Journal of Mineralogy</i> , 2014 , 26, 537-552	2.2	58
34	Roles of larval sea urchin spicule SM50 domains in organic matrix self-assembly and calcium carbonate mineralization. <i>Journal of Structural Biology</i> , 2013 , 183, 205-15	3.4	37
33	A nacre protein, n16.3, self-assembles to form protein oligomers that dimensionally limit and organize mineral deposits. <i>Biochemistry</i> , 2014 , 53, 2739-48	3.2	35
32	An oligomeric C-RING nacre protein influences prenucleation events and organizes mineral nanoparticles. <i>Biochemistry</i> , 2014 , 53, 7259-68	3.2	32
31	Phyto-inspired silica nanowires: characterization and application in lipase immobilization. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 871-7	9.5	28
30	pH-Dependent Schemes of Calcium Carbonate Formation in the Presence of Alginates. <i>Crystal Growth and Design</i> , 2016 , 16, 1349-1359	3.5	26
29	Facile synthesis of size-tunable gold nanoparticles by pomegranate (<i>Punica granatum</i>) leaf extract: Applications in arsenate sensing. <i>Materials Research Bulletin</i> , 2013 , 48, 1166-1173	5.1	25
28	Synergistic Biomineralization Phenomena Created by a Combinatorial Nacre Protein Model System. <i>Biochemistry</i> , 2016 , 55, 2401-10	3.2	22
27	Self-Assembly Toolbox of Tailored Supramolecular Architectures Based on an Amphiphilic Protein Library. <i>Small</i> , 2019 , 15, e1900163	11	20
26	A Model Sea Urchin Spicule Matrix Protein Self-Associates To Form Mineral-Modifying Protein Hydrogels. <i>Biochemistry</i> , 2016 , 55, 4410-21	3.2	20
25	Insect Cell Glycosylation and Its Impact on the Functionality of a Recombinant Intracrystalline Nacre Protein, AP24. <i>Biochemistry</i> , 2016 , 55, 1024-35	3.2	19
24	Stabilization of Mineral Precursors by Intrinsically Disordered Proteins. <i>Advanced Functional Materials</i> , 2018 , 28, 1802063	15.6	18
23	On Biomineralization: Enzymes Switch on Mesocrystal Assembly. <i>ACS Central Science</i> , 2019 , 5, 357-364	16.8	16
22	From Solute, Fluidic and Particulate Precursors to Complex Organizations of Matter. <i>Chemical Record</i> , 2018 , 18, 1203	6.6	16
21	Nacre Protein Sequence Compartmentalizes Mineral Polymorphs in Solution. <i>Crystal Growth and Design</i> , 2014 , 14, 1501-1505	3.5	16
20	On mechanisms of mesocrystal formation: magnesium ions and water environments regulate the crystallization of amorphous minerals. <i>CrystEngComm</i> , 2018 , 20, 4395-4405	3.3	16

19	Cloning and expression of a tyrosinase from <i>Aspergillus oryzae</i> in <i>Yarrowia lipolytica</i> : application in L-DOPA biotransformation. <i>Applied Microbiology and Biotechnology</i> , 2011 , 92, 951-9	5.7	14
18	Mineralization and non-ideality: on nature's foundry. <i>Biophysical Reviews</i> , 2016 , 8, 309-329	3.7	14
17	On the biophysical regulation of mineral growth: Standing out from the crowd. <i>Journal of Structural Biology</i> , 2016 , 196, 232-243	3.4	13
16	Distinct Effects of Avian Egg Derived Anionic Proteoglycans on the Early Stages of Calcium Carbonate Mineralization. <i>Crystal Growth and Design</i> , 2015 , 15, 2052-2056	3.5	12
15	Mineral Interfaces and Oil Recovery: A Microscopic View on Surface Reconstruction, Organic Modification, and Wettability Alteration of Carbonates. <i>Energy & Fuels</i> , 2020 , 34, 5611-5622	4.1	8
14	On Mineral Retrosynthesis of a Complex Biogenic Scaffold. <i>Inorganics</i> , 2017 , 5, 16	2.9	7
13	Uncovering the Role of Bicarbonate in Calcium Carbonate Formation at Near-Neutral pH. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 16707-16713	16.4	7
12	Effects of salinity, organic acids and alkalinity on the growth of calcite spherulites: Implications for evaporitic lacustrine sedimentation. <i>Depositional Record</i> ,	2	5
11	Additive Speciation and Phase Behavior Modulating Mineralization. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 21641-21649	3.8	4
10	Modulating Nucleation by Kosmotropes and Chaotropes: Testing the Waters. <i>Crystals</i> , 2017 , 7, 302	2.3	4
9	Hierarchically Nanostructured Biological Materials 2014 , 35-70		3
8	Artificial Diagenesis of Carbonates: Temperature-Dependent Inorganic and Organic Modifications in Reservoir Mimetic Fluids. <i>SPE Journal</i> , 2020 , 1-15	3.1	2
7	Optical measurements of oil release from calcite packed beds in microfluidic channels. <i>Microfluidics and Nanofluidics</i> , 2020 , 24, 1	2.8	2
6	Tapping into liquid precursors of crystals. <i>Materials Today</i> , 2017 , 20, 220-221	21.8	1
5	Crystallization and preliminary X-ray analysis of the C-type lectin domain of the spicule matrix protein SM50 from <i>Strongylocentrotus purpuratus</i> . <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2014 , 70, 260-2	1.1	1
4	Nonmonotonic Coupled Dissolution-Precipitation Reactions at the Mineral-Water Interface. <i>Advanced Functional Materials</i> , 2021 , 31, 2106396	15.6	1
3	Effects of Fluid Aging and Reservoir Temperature on Waterflooding in 2.5D Glass Micromodels. <i>Energy & Fuels</i> , 2022 , 36, 1388-1401	4.1	0
2	Aufdeckung der Rolle von Hydrogencarbonat-Ionen bei der Bildung von Calciumcarbonat im nahezu neutralen pH-Bereich. <i>Angewandte Chemie</i> , 2021 , 133, 16843-16850	3.6	

- 1 Nonmonotonic Coupled Dissolution-Precipitation Reactions at the Mineral-Water Interface (Adv. Funct. Mater. 51/2021). *Advanced Functional Materials*, **2021**, 31, 2170379 15.6