

Christo N Nanev

List of Publications by Year in descending order

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53
papers

882
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471509

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53
docs citations

53
times ranked

650
citing authors

#	ARTICLE	IF	CITATIONS
1	Nucleation of lysozyme crystals under external electric and ultrasonic fields. <i>Journal of Crystal Growth</i> , 2001, 232, 285-293.	1.5	107
2	Heterogeneous nucleation (and adhesion) of lysozyme crystals. <i>Journal of Crystal Growth</i> , 1999, 196, 226-233.	1.5	73
3	Temperature-independent solubility and interactions between apoferritin monomers and dimers in solution. <i>Journal of Crystal Growth</i> , 2001, 232, 21-29.	1.5	58
4	Kinetics of Insulin Crystal Nucleation, Energy Barrier, and Nucleus Size. <i>Crystal Growth and Design</i> , 2011, 11, 196-202.	3.0	43
5	Enhancement and suppression of protein crystal nucleation due to electrically driven convection. <i>Journal of Crystal Growth</i> , 2005, 275, e1527-e1532.	1.5	40
6	Protein crystal nucleation in pores. <i>Scientific Reports</i> , 2017, 7, 35821.	3.3	38
7	On the Slow Kinetics of Protein Crystallization. <i>Crystal Growth and Design</i> , 2007, 7, 1533-1540.	3.0	36
8	Protein crystal nucleation: Recent notions. <i>Crystal Research and Technology</i> , 2007, 42, 4-12.	1.3	35
9	Polyhedral instability and skeletal and dendritic growth. <i>Progress in Crystal Growth and Characterization of Materials</i> , 1997, 35, 1-26.	4.0	28
10	Sigmoid kinetics of protein crystal nucleation. <i>Journal of Crystal Growth</i> , 2015, 427, 48-53.	1.5	26
11	Advancements (and challenges) in the study of protein crystal nucleation and growth; thermodynamic and kinetic explanations and comparison with small-molecule crystallization. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2020, 66, 100484.	4.0	25
12	Instability of Faceted Crystal Shapes and their Transformation into Skeletons during Growth under Diffusion Control. <i>Crystallography Reviews</i> , 1994, 4, 3-71.	1.5	21
13	Kinetics and intimate mechanism of protein crystal nucleation. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2013, 59, 133-169.	4.0	21
14	Nucleation rate determination by a concentration pulse technique: application on ferritin crystals to show the effect of surface treatment of a substrate. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2002, 58, 1588-1592.	2.5	20
15	Protocol for growing insulin crystals of uniform size. <i>Journal of Crystal Growth</i> , 2013, 375, 10-15.	1.5	19
16	Hydrophobic Interface-Assisted Protein Crystallization: Theory and Experiment. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 12931-12940.	8.0	19
17	Recent Insights into the Crystallization Process; Protein Crystal Nucleation and Growth Peculiarities; Processes in the Presence of Electric Fields. <i>Crystals</i> , 2017, 7, 310.	2.2	17
18	Recent Insights into Protein Crystal Nucleation. <i>Crystals</i> , 2018, 8, 219.	2.2	14

#	ARTICLE	IF	CITATIONS
19	Steering a crystallization process to reduce crystal polydispersity; case study of insulin crystallization. <i>Journal of Crystal Growth</i> , 2017, 480, 164-169.	1.5	13
20	Relationship between number and sizes of crystals growing in batch crystallization: Nuclei number density, nucleation kinetics and crystal polydispersity. <i>Journal of Crystal Growth</i> , 2020, 546, 125786.	1.5	13
21	Nucleation of Insulin Crystals in a Wide Continuous Supersaturation Gradient. <i>Annals of the New York Academy of Sciences</i> , 2004, 1027, 56-63.	3.8	11
22	Application of mean-field separation networks method to protein crystal nucleation. <i>Crystal Research and Technology</i> , 2008, 43, 229-233.	1.3	11
23	Temperature control of protein crystal nucleation. <i>Crystal Research and Technology</i> , 2012, 47, 1195-1200.	1.3	11
24	Brittleness of protein crystals. <i>Crystal Research and Technology</i> , 2012, 47, 922-927.	1.3	11
25	Phenomenological Consideration of Protein Crystal Nucleation; the Physics and Biochemistry behind the Phenomenon. <i>Crystals</i> , 2017, 7, 193.	2.2	11
26	Peculiarities of Protein Crystal Nucleation and Growth. <i>Crystals</i> , 2018, 8, 422.	2.2	11
27	On the polygonized growth of a step anchored in two screw dislocations of opposite sign. <i>Journal of Crystal Growth</i> , 1976, 35, 113-119.	1.5	9
28	On the morphological instability of growing crystals (I) morphological peculiarities of the transition shapes of crystals in diffusion-controlled regime of growth. <i>Crystal Research and Technology</i> , 1988, 23, 585-594.	1.3	9
29	Polyhedral instability and transition to skeletal growth during electrocrystallization of cadmium. <i>Journal of Crystal Growth</i> , 1996, 158, 136-143.	1.5	9
30	Theory of Nucleation. , 2015, , 315-358.		9
31	Evaluation of the critical nucleus size without using interface free energy. <i>Journal of Crystal Growth</i> , 2020, 535, 125521.	1.5	9
32	On the polygonized case of the screw-dislocation mechanism of crystal growth. <i>Journal of Crystal Growth</i> , 1974, 23, 125-128.	1.5	8
33	Effects of Buoyancy-Driven Convection on Nucleation and Growth of Protein Crystals. <i>Annals of the New York Academy of Sciences</i> , 2004, 1027, 1-9.	3.8	8
34	Is Crystal Growth under Low Supersaturations Influenced by a Tendency to a Minimum of the Surface-Free Energy?. <i>Annals of the New York Academy of Sciences</i> , 2006, 1077, 194-207.	3.8	8
35	On the elementary processes of protein crystallization: Bond selection mechanism. <i>Journal of Crystal Growth</i> , 2014, 402, 195-202.	1.5	8
36	On some aspects of crystallization process energetics, logistic new phase nucleation kinetics, crystal size distribution and Ostwald ripening. <i>Journal of Applied Crystallography</i> , 2017, 50, 1021-1027.	4.5	8

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37	Crystal Size Distribution Resulting from the Time Dependence of Crystal Nucleation. <i>Crystal Research and Technology</i> , 2018, 53, 1700248.	1.3	8
38	2D Monte Carlo Simulation of Patchy Particles Association and Protein Crystal Polymorph Selection. <i>Crystals</i> , 2019, 9, 508.	2.2	7
39	Polyhedral (in-)stability of protein crystals. <i>Journal of Crystal Growth</i> , 2002, 237-239, 283-288.	1.5	6
40	Equilibrium forms of protein crystals. <i>Journal of Crystal Growth</i> , 2012, 361, 171-175.	1.5	6
41	Growth of rhombohedral insulin crystals and <i>in vitro</i> modeling of their dissolution in the blood stream. <i>Crystal Research and Technology</i> , 2011, 46, 119-126.	1.3	5
42	Theoretical and experimental investigation of protein crystal nucleation in pores and crevices. <i>IUCr</i> , 2021, 8, 270-280.	2.2	5
43	On the Vitality of the Classical Theory of Crystal Nucleation; Crystal Nucleation in Pure Own Melt; Atmospheric Ice and Snow; Ice in Frozen Foods. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2022, 68, 100567.	4.0	5
44	Hypergravity as a Crystallization Tool. <i>Annals of the New York Academy of Sciences</i> , 2006, 1077, 172-183.	3.8	4
45	Recent experimental and theoretical studies on protein crystallization. <i>Crystal Research and Technology</i> , 2017, 52, 1600210.	1.3	4
46	How do crystal lattice contacts reveal protein crystallization mechanism?. <i>Crystal Research and Technology</i> , 2008, 43, 914-920.	1.3	3
47	Growth and dissolution of equally sized insulin crystals. <i>Crystal Research and Technology</i> , 2013, 48, 1003-1010.	1.3	3
48	Bond selection during protein crystallization: Crystal shapes. <i>Crystal Research and Technology</i> , 2015, 50, 451-457.	1.3	3
49	How to Manage a Crystallization Process Aimed at Obtaining a Desired Combination of Number of Crystals and Their Distribution by Size: Learn Here. <i>Crystal Research and Technology</i> , 2021, 56, 2000190.	1.3	3
50	Crystallization in melts; exploration of atmospheric ice formation and snowfall. <i>Journal of Crystal Growth</i> , 2021, 575, 126342.	1.5	2
51	On the slope of the growing pyramids. <i>Crystal Research and Technology: Journal of Experimental and Industrial Crystallography</i> , 1977, 12, 587-598.	0.3	1
52	On the role of surface energy in the flattening of a crystal face. <i>Open Chemistry</i> , 2005, 3, 188-197.	1.9	0
53	A Contemporary Look at the Polyhedral Shape Instability of Crystals Growing under Conditions of Diffusion Limited Supply of Building Material. <i>Crystal Research and Technology</i> , 0, , 2100212.	1.3	0