

# Vladimir Ankudinov

## List of Publications by Year in descending order

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Version: 2024-02-01

21  
papers

207  
citations

1307594

7  
h-index

1125743

13  
g-index

24  
all docs

24  
docs citations

24  
times ranked

65  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermodynamics of rapid solidification and crystal growth kinetics in glass-forming alloys. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180205.	3.4	32
2	Local non-equilibrium effect on the growth kinetics of crystals. Acta Materialia, 2019, 168, 203-209.	7.9	31
3	Traveling waves of the solidification and melting of cubic crystal lattices. Physical Review E, 2020, 102, 062802.	2.1	19
4	Atomic density functional and diagram of structures in the phase field crystal model. Journal of Experimental and Theoretical Physics, 2016, 122, 298-309.	0.9	18
5	Bell-shaped dendrite velocity-undercooling relationship with an abrupt drop of solidification kinetics in glass forming Cu-Zr(-Ni) melts. Journal of Crystal Growth, 2020, 532, 125411.	1.5	16
6	Growth of different faces in a body centered cubic lattice: A case of the phase-field-crystal modeling. Journal of Crystal Growth, 2020, 539, 125608.	1.5	16
7	Correlated noise effect on the structure formation in the phase-field crystal model. Mathematical Methods in the Applied Sciences, 2021, 44, 12185-12193.	2.3	10
8	A review of continuous modeling of periodic pattern formation with modified phase-field crystal models. European Physical Journal: Special Topics, 2022, 231, 1135-1145.	2.6	8
9	Simulation of crystalline pattern formation by the MPFC method. MATEC Web of Conferences, 2017, 129, 02035.	0.2	7
10	Numerical simulation of selective laser melting with local powder shrinkage using FEM with the refined mesh. European Physical Journal: Special Topics, 2020, 229, 205-216.	2.6	6
11	Structure diagram and dynamics of formation of hexagonal boron nitride in phase-field crystal model. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20200318.	3.4	6
12	Numerical simulation of heat transfer and melting of Fe-based powders in SLM processing. IOP Conference Series: Materials Science and Engineering, 2017, 192, 012026.	0.6	5
13	Kinetics of rapid crystal growth: phase field theory versus atomistic simulations. IOP Conference Series: Materials Science and Engineering, 2019, 529, 012035.	0.6	5
14	Optimisation of processing parameters in laser sintering of metallic powders. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012079.	0.6	4
15	About one unified description of the first and second order phase transitions in the phase-field crystal model. Mathematical Methods in the Applied Sciences, 2020, 44, 12129.	2.3	4
16	The diagram of phase-field crystal structures: an influence of model parameters in a two-mode approximation. IOP Conference Series: Materials Science and Engineering, 2017, 192, 012019.	0.6	3
17	Crystal structures predicted by the PFC method with atomic density fluctuations. Materials Today: Proceedings, 2019, 11, 118-123.	1.8	2
18	Approximation of correlation functions in phase-field crystal model by machine learning approach. Mathematical Methods in the Applied Sciences, 2021, 44, 12203-12210.	2.3	1

#	ARTICLE	IF	CITATIONS
19	Numerical Simulation of Thermal Conductivity of Stainless Steel and Al-12Si Powders for Additive Manufacturing. Journal of Heat Transfer, 2022, 144, .	2.1	1
20	Soft model of solidification with the order-disorder states competition. Mathematical Methods in the Applied Sciences, 0, , .	2.3	1
21	Structural phase-field crystal model for Lennard-Jones pair interaction potential. Modelling and Simulation in Materials Science and Engineering, 0, , .	2.0	0