

Johannes Roth

List of Publications by Year in descending order

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papers

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687363

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28
docs citations

28
times ranked

672
citing authors

#	ARTICLE	IF	CITATIONS
1	Archimedean-like tiling on decagonal quasicrystalline surfaces. <i>Nature</i> , 2008, 454, 501-504.	27.8	192
2	Classical interaction potentials for diverse materials from <i>ab initio</i> data: a review of <i>potfit</i> . <i>Modelling and Simulation in Materials Science and Engineering</i> , 2015, 23, 074002.	2.0	76
3	Proliferation of anomalous symmetries in colloidal monolayers subjected to quasiperiodic light fields. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 7214-7218.	7.1	70
4	What Phasons Look Like: Particle Trajectories in a Quasicrystalline Potential. <i>Physical Review Letters</i> , 2012, 108, 218301.	7.8	35
5	Phason elastic constants of a binary tiling quasicrystal. <i>Journal of Alloys and Compounds</i> , 2002, 342, 287-290.	5.5	30
6	Direct Wolf summation of a polarizable force field for silica. <i>Journal of Chemical Physics</i> , 2010, 132, 194109.	3.0	27
7	Freezing and Melting of a Colloidal Adsorbate on a 1D Quasicrystalline Substrate. <i>Physical Review Letters</i> , 2006, 97, 158304.	7.8	22
8	Simulation of laser ablation in aluminum: the effectivity of double pulses. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 2207-2216.	2.3	20
9	Simulation of crack propagation in alumina with <i>ab initio</i> based polarizable force field. <i>Journal of Chemical Physics</i> , 2012, 136, 084707.	3.0	18
10	<i>Ab initio</i> based polarizable force field generation and application to liquid silica and magnesia. <i>Journal of Chemical Physics</i> , 2011, 135, 234512.	3.0	17
11	Visualization of Electrostatic Dipoles in Molecular Dynamics of Metal Oxides. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2012, 18, 2061-2068.	4.4	14
12	Atomistic modeling of flexoelectricity in periclase. <i>Physical Review B</i> , 2016, 93, .	3.2	14
13	Shock waves in complex binary solids: Cubic Laves crystals, quasicrystals, and amorphous solids. <i>Physical Review B</i> , 2005, 71, .	3.2	13
14	Shock waves in materials with Dzugutov-potential interactions. <i>Physical Review B</i> , 2005, 72, .	3.2	9
15	Phason-induced dynamics of colloidal particles on quasicrystalline substrates. <i>European Physical Journal E</i> , 2013, 36, 25.	1.6	9
16	2012 IEEE Visualization Contest Winner: Visualizing Polarization Domains in Barium Titanate. <i>IEEE Computer Graphics and Applications</i> , 2013, 33, 9-17.	1.2	9
17	Influence of polarizability on metal oxide properties studied by molecular dynamics simulations. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 485401.	1.8	8
18	Periodic average structures of colloidal quasicrystals. <i>Soft Matter</i> , 2014, 10, 8705-8710.	2.7	7

#	ARTICLE	IF	CITATIONS
19	Phason-elastic energy in a model quasicrystal. <i>Journal of Non-Crystalline Solids</i> , 2004, 334-335, 276-279.	3.1	6
20	Comment on "Quantum Quasicrystals of Spin-Orbit-Coupled Dipolar Bosons", <i>Physical Review Letters</i> , 2014, 113, 079601.	7.8	4
21	Atomistic simulations of ultra-short pulse laser ablation of aluminum: validity of the Lambert-Beer law. <i>Advanced Optical Technologies</i> , 2018, 7, 189-196.	1.7	3
22	IMD "the ITAP molecular dynamics simulation package. <i>European Physical Journal: Special Topics</i> , 2019, 227, 1831-1836.	2.6	3
23	IMD: A Typical Massively Parallel Molecular Dynamics Code for Classical Simulations " Structure, Applications, Latest Developments. , 2013, , 63-76.		3
24	Restricted square-triangle tilings. <i>Zeitschrift für Kristallographie</i> , 2008, 223, 761-764.	1.1	2
25	Shock waves in quasicrystals. <i>Ferroelectrics</i> , 2001, 250, 365-368.	0.6	1
26	Properties of quasiperiodic functions. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 184003.	1.8	0
27	Atomistic simulation of ultra-short pulsed laser ablation of Al: an extension for non-thermalized electrons and ballistic transport. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 135301.	2.8	0