Gennady B Sushko

List of Publications by Year
in descending order

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26	434	759233 12	713466 21
papers	citations	h-index	g-index

28	28	28	358
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular dynamics simulations of the nanoindentation process of titanium crystal. Computational Materials Science, 2013, 76, 20-26.	3.0	65
2	Simulation of ultra-relativistic electrons and positrons channeling in crystals with MBN Explorer. Journal of Computational Physics, 2013, 252, 404-418.	3.8	48
3	Modeling MesoBioNano systems with MBN Studio made easy. Journal of Molecular Graphics and Modelling, 2019, 88, 247-260.	2.4	34
4	Studying chemical reactions in biological systems with MBN Explorer: implementation of molecular mechanics with dynamical topology. European Physical Journal D, 2016, 70, 1.	1.3	33
5	Molecular dynamics for irradiation driven chemistry: application to the FEBID process*. European Physical Journal D, 2016, 70, 1.	1.3	30
6	Transonic Panel Flutter in Accelerating or Decelerating Flow Conditions. AIAA Journal, 2018, 56, 997-1010.	2.6	23
7	Simulation of channeling and radiation of 855 MeV electrons and positrons in a small-amplitude short-period bent crystal. Nuclear Instruments & Methods in Physics Research B, 2016, 387, 41-53.	1.4	21
8	Multi-GeV electron and positron channeling in bent silicon crystals. Nuclear Instruments & Methods in Physics Research B, 2015, 355, 39-43.	1.4	18
9	Radiation emission by electrons channeling in bent silicon crystals. European Physical Journal D, 2014, 68, 1.	1.3	17
10	Multiscale simulation of the focused electron beam induced deposition process. Scientific Reports, 2020, 10, 20827.	3.3	16
11	Molecular Dynamics Simulation of Self-Diffusion Processes in Titanium in Bulk Material, on Grain Junctions and on Surface. Journal of Physical Chemistry A, 2014, 118, 6685-6691.	2.5	14
12	Reactive molecular dynamics simulations of organometallic compound W(CO)6 fragmentation,. European Physical Journal D, 2019, 73, 1.	1.3	13
13	All-atom relativistic molecular dynamics simulations of channeling and radiation processes in oriented crystals. European Physical Journal D, 2021, 75, 1.	1.3	13
14	Kinetics of liquid-solid phase transition in large nickel clusters. Physical Review B, 2013, 88, .	3.2	12
15	Development of collisional data base for elementary processes of electron scattering by atoms and molecules. Nuclear Instruments & Methods in Physics Research B, 2015, 354, 90-95.	1.4	12
16	Channeling and radiation of 855â€¯MeV electrons and positrons in straight and bent tungsten (1 1 0) crystals. Nuclear Instruments & Methods in Physics Research B, 2018, 424, 26-36.	1.4	12
17	Benchmarking of classical force fields by ab initio calculations of atomic clusters: Ti and Niâ€“Ti case. Computational and Theoretical Chemistry, 2013, 1021, 101-108.	2.5	11
18	Reconciling simulated melting and ground-state properties of metals with a modified embedded-atom method potential. Journal of Physics Condensed Matter, 2016, 28, 145201.	1.8	9

#	Article	IF	Citations
19	Validation of Classical Force Fields for the Description of Thermo-Mechanical Properties of Transition Metal Materials. Journal of Physical Chemistry A, 2014, 118, 8426-8436.	2.5	8
20	A small-amplitude crystalline undulator based on 20ÂGeV electrons and positrons: Simulations. St Petersburg Polytechnical University Journal Physics and Mathematics, 2015, 1, 341-345.	0.3	7
21	Irradiation-driven molecular dynamics simulation of the FEBID process for Pt(PF3)4. Beilstein Journal of Nanotechnology, 2021, 12, 1151-1172.	2.8	5
22	Toward the Exploration of the NiTi Phase Diagram with a Classical Force Field. Journal of Physical Chemistry C, 2016, 120, 25043-25052.	3.1	4
23	Channeling of ultra-relativistic positrons in bent diamond crystals. St Petersburg Polytechnical University Journal Physics and Mathematics, 2015, 1, 212-218.	0.3	3
24	Electron and positron propagation in straight and periodically bent axial and planar silicon channels. St Petersburg Polytechnical University Journal Physics and Mathematics, 2015, 1, 332-340.	0.3	3
25	Atomistic simulation of the FEBID-driven growth of iron-based nanostructures. Physical Chemistry Chemical Physics, 2022, 24, 10807-10819.	2.8	2
26	Multiscale modeling of stochastic dynamics processes with <scp>MBN Explorer</scp>. Journal of Computational Chemistry, 2022, 43, 1442-1458.	3.3	1