Alexander V Evteev

List of Publications by Year
in descending order

72	762	516710 16	642732 23
papers	citations	h-index	g-index

81	81	81	521
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular dynamics simulation of the alloying reaction in Al-coated Ni nanoparticle. Computational Materials Science, 2010, 47, 712-720.	3.0	56
2	Electronic and optical properties of anatase TiO2 nanotubes. Computational Materials Science, 2010, 48, 854-858.	3.0	40
3	Atomic mechanisms of pure iron vitrification. Journal of Experimental and Theoretical Physics, 2004, 99, 522-529.	0.9	33
4	Molecular dynamics simulation and theoretical analysis of carbon diffusion in cementite. Acta Materialia, 2009, 57, 846-853.	7.9	30
5	Kinetics of isothermal nucleation in a supercooled iron melt. Physics of the Solid State, 2006, 48, 815-820.	0.6	28
6	Shrinking kinetics by vacancy diffusion of a pure element hollow nanosphere. Philosophical Magazine, 2007, 87, 3787-3796.	1.6	28
7	Reaction of a Ni-coated Al nanoparticle to formB2-NiAl: A molecular dynamics study. Philosophical Magazine Letters, 2009, 89, 815-830.	1.2	26
8	Atomic mechanisms of formation and structure relaxation of Fe83M17 (M: C, B, P) metallic glass. Acta Materialia, 2003, 51, 2665-2674.	7.9	24
9	Molecular dynamics simulation of alloying in a Ti-coated Al nanoparticle. Intermetallics, 2012, 22, 193-202.	3.9	24
10	Composition dependence of diffusion and thermotransport in Ni-Al melts: A step towards molecular dynamics assisted databases. Acta Materialia, 2017, 136, 74-89.	7.9	24
11	Molecular dynamics determination of the timeâ€“temperatureâ€“transformation diagram for crystallization of an undercooled liquid Ni50Al50 alloy. Acta Materialia, 2011, 59, 6412-6419.	7.9	23
12	Molecular dynamics simulation of the thermophysical properties of an undercooled liquid Ni50Al50 alloy. Computational Materials Science, 2010, 50, 465-473.	3.0	21
13	Interdiffusion and surface-sandwich ordering in initial Ni-coreâ€“Pd-shell nanoparticle. Physical Chemistry Chemical Physics, 2009, 11, 3233.	2.8	20
14	Molecular dynamics study of reaction pathways in an Al-coated Ni nanoparticle. Intermetallics, 2011, 19, 934-941.	3.9	19
15	Molecular dynamics simulation of alloying in an Al-coated Ti nanoparticle. Computational Materials Science, 2013, 79, 316-325.	3.0	19
16	Thermotransport in binary system: case study on Ni₅₀Al₅₀melt. Philosophical Magazine, 2014, 94, 3574-3602.	1.6	19
17	Molecular dynamics prediction of phonon-mediated thermal conductivity of f.c.c. Cu. Philosophical Magazine, 2014, 94, 731-751.	1.6	18
18	Molecular dynamics study of density, surface energy and self-diffusion in a liquid Ni50Al50 alloy. Computational Materials Science, 2010, 50, 331-337.	3.0	16

#	Article	IF	Citations
19	Molecular dynamics simulation of surface segregation in a (110) B2-NiAl thin film. Physical Chemistry Chemical Physics, 2011, 13, 1214-1221.	2.8	16
20	Molecular dynamics simulation of diffusion in a (110) B2-NiAl film. Intermetallics, 2011, 19, 848-854.	3.9	16
21	Shrinking kinetics by vacancy diffusion of hollow binary alloy nanospheres driven by the Gibbsâ€“Thomson effect. Philosophical Magazine, 2008, 88, 1525-1541.	1.6	15
22	Comparison of the Sauer-Freise and Hall Methods for Obtaining Interdiffusion Coefficients in Binary Alloys. Journal of Phase Equilibria and Diffusion, 2015, 36, 366-374.	1.4	14
23	Molecular dynamics study of phonon-mediated thermal transport in a Ni₅₀Al₅₀melt: case analysis of the influence of the process on the kinetics of solidification. Philosophical Magazine, 2015, 95, 90-111.	1.6	12
24	Influence of the interatomic potential on thermotransport in binary liquid alloys: case study on NiAl. Philosophical Magazine, 2016, 96, 3054-3074.	1.6	12
25	Structural model for vitrification of pure metals. JETP Letters, 2002, 76, 104-106.	1.4	11
26	Formation of a Hollow Binary Alloy Nanosphere: A Kinetic Monte Carlo Study. Journal of Nano Research, 0, 7, 11-17.	0.8	11
27	Self-diffusion and â€˜orderâ€“orderâ€™ kinetics in B2-ordering AB binary systems with a tendency for triple-defect formation: Monte Carlo simulation. Philosophical Magazine, 2013, 93, 1987-1998.	1.6	11
28	Atomic mechanisms and kinetics of self-diffusion on the Pd(001) surface. Physics of the Solid State, 2004, 46, 1781-1784.	0.6	10
29	The influence of the icosahedral percolation transition in supercooled liquid iron on the diffusion mobility of atoms. Journal of Experimental and Theoretical Physics, 2005, 101, 521-527.	0.9	10
30	The Manning factor for direct exchange and ring diffusion mechanisms. Philosophical Magazine, 2017, 97, 230-247.	1.6	10
31	Stability of Hollow Nanospheres: A Molecular Dynamics Study. Solid State Phenomena, 0, 129, 125-130.	0.3	9
32	The Synthesis, Stability and Shrinkage of Hollow Nanoparticles: An Overview. Journal of Nano Research, 2009, 7, 19-26.	0.8	9
33	Molecular dynamics simulation of surface segregation, diffusion and reaction phenomena in equiatomic Ni-Al systems. Physics of Metals and Metallography, 2012, 113, 1202-1243.	1.0	9
34	Decomposition model for phonon thermal conductivity of a monatomic lattice. Philosophical Magazine, 2014, 94, 3992-4014.	1.6	9
35	Molecular-dynamics study of the Ni60Ag40 binary alloy glass transition. Journal of Experimental and Theoretical Physics, 2007, 105, 1184-1189.	0.9	8
36	Structural, electronic and optical properties of titania nanotubes. Advances in Applied Ceramics, 2012, 111, 72-93.	1.1	8

#	Article	IF	Citations
37	Theoretical Study of the Heat of Transport in a Liquid Ni₅₀Al₅₀ Alloy: Green-Kubo Approach. , 0, 2, 159-189.		6
38	Kinetic and molecular dynamics analysis of carbon diffusion in austenite. Philosophical Magazine, 2007, 87, 4335-4357.	1.6	5
39	Theoretical Analysis and Atomistic Modelling of Diffusion and Stability of Pure Element Hollow Nanospheres and Nanotubes. Defect and Diffusion Forum, 0, 277, 21-26.	0.4	5
40	A structural model for surface-enhanced stabilization in some metallic glass formers. Philosophical Magazine Letters, 2013, 93, 50-57.	1.2	5
41	Phonon Thermal Conductivity of F.C.C. Cu by Molecular Dynamics Simulation. Defect and Diffusion Forum, 0, 336, 169-184.	0.4	5
42	Phonon-mediated heat dissipation in a monatomic lattice: case study on Ni. Philosophical Magazine, 2015, 95, 3640-3673.	1.6	5
43	Insight into interrelation between single-particle and collective diffusion in binary melts. Physica A: Statistical Mechanics and Its Applications, 2018, 490, 1446-1453.	2.6	5
44	Structural self-organization in a (Crystal-monolayer film) metallic heterogeneous system with large dimensional discrepancy between the components. Doklady Physics, 2004, 49, 292-295.	0.7	4
45	Influence of Liquid-Glass Transition on Diffusion and Nucleation in Computer-Simulated Iron. Defect and Diffusion Forum, 2006, 249, 97-104.	0.4	4
46	Stability and Shrinkage by Diffusion in Hollow Nanotubes. Defect and Diffusion Forum, 2007, 266, 39-47.	0.4	4
47	Modelling of the Formation of Pd-Ni Alloy Nanoparticles by Interdiffusion. Defect and Diffusion Forum, 0, 277, 207-212.	0.4	4
48	Vibrational contribution to thermal transport in liquid cooper: Equilibrium molecular dynamics study. Computational Materials Science, 2015, 96, 229-236.	3.0	4
49	Molecular Dynamics Study of Mass Transport Properties of Liquid Cu-Ag Alloys. , 0, 9, 58-72.		4
50	Insight into lattice thermal impedance via equilibrium molecular dynamics: case study on Al. Philosophical Magazine, 2016, 96, 596-619.	1.6	4
51	Phase and structural transformations in a molecular dynamics model of iron under ultrafast heating and cooling. Physics of the Solid State, 2001, 43, 2284-2289.	0.6	3
52	Cluster model of the structural organization of amorphous iron. Physics of Metals and Metallography, 2010, 109, 563-567.	1.0	3
53	First-principles calculations of a corrugated anatase TiO2 surface. Computational Materials Science, 2012, 51, 78-82.	3.0	3
54	Computer simulation of the crystallization of amorphous iron under isochronous annealing conditions. JETP Letters, 2000, 71, 201-203.	1.4	2

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55	Orientation dependence of the heteroepitaxial growth of Ni films on Pd. Physics of Metals and Metallography, 2006, 101, 577-584.	1.0	2
56	Relaxed atomic structure of the interphase boundary in a â€œhemispherical nanoparticle-crystalâ€• heterogeneous system. Physics of the Solid State, 2007, 49, 785-790.	0.6	2
57	Atomic Mechanism of Carbon Diffusion in Cementite. Defect and Diffusion Forum, 0, 277, 101-106.	0.4	2
58	Carbon Diffusion in Cementite: A Molecular Dynamics Study. Defect and Diffusion Forum, 2009, 283-286, 24-29.	0.4	2
59	Composition Effect on Shrinkage of Hollow Binary Alloy Nanospheres. Defect and Diffusion Forum, 0, 289-292, 665-672.	0.4	2
60	Two-fluid nature of phonon heat conduction in a monatomic lattice. Philosophical Magazine, 2015, 95, 2571-2595.	1.6	2
61	Diffusion in Niâ€“Zr Melts: Insights from Statistical Mechanics and Atomistic Modeling. Advanced Theory and Simulations, 2018, 1, 1800109.	2.8	2
62	Molecular Dynamics Study of Carbon Diffusion in Austenite. Defect and Diffusion Forum, 2006, 258-260, 253-258.	0.4	1
63	Structural organization of icosahedral coordination polyhedra in a molecular dynamics model of the Ni60Ag40 metallic glass. Journal of Experimental and Theoretical Physics, 2008, 107, 430-434.	0.9	1
64	Surface-Sandwich Segregation Phenomena in Bimetallic Ag-Ni and Pd-Ni Nanoparticles: A Molecular Dynamics Study. Defect and Diffusion Forum, 0, 289-292, 657-664.	0.4	1
65	Structure change of the Cu64Zr36 metallic glass in the conditions of uniaxial deformation. Glass Physics and Chemistry, 2013, 39, 155-161.	0.7	1
66	Molecular dynamics simulation of the heteroepitaxial growth of Cu-Pd solid solution films on Pd(001). Physics of the Solid State, 2013, 55, 213-219.	0.6	1
67	Simulation of the Oriented Crystallisation of Cu/Pd(001) Amorphous Film. Solid State Phenomena, 2006, 115, 311-314.	0.3	0
68	Theoretical Studies of Diffusion Kinetics in Austenite. Defect and Diffusion Forum, 2008, 273-276, 455-460.	0.4	0
69	Structural organization in the Cu80Zr20 metallic glass. Journal of Experimental and Theoretical Physics, 2011, 112, 1013-1019.	0.9	0
70	Structural Stability and Energy of a Pd₂Ni Nanofilm: Ab Initio Calculations. Journal of Nanoscience and Nanotechnology, 2012, 12, 8205-8210.	0.9	0
71	Semigrand Canonical and Kinetic Monte Carlo simulations of binary B2-ordered nano-films with triple defects. Intermetallics, 2014, 55, 40-48.	3.9	0
72	Diffusion Kinetics in Binary Liquid Alloys with Ordering and Demixing Tendencies. Springer Series in Materials Science, 2020, , 109-132.	0.6	0