Yuri N Osetskiy

List of Publications by Year in descending order

198 papers	8,550 citations	34105 52 h-index	60623 81 g-index
199 all docs	199 docs citations	199 times ranked	2750 citing authors

#	Article	IF	Citations
1	Strengthening of tungsten by coherent rhenium precipitates formed during low fluence irradiation. Tungsten, 2022, 4, 20-27.	4.8	2
2	Tunable Chemical Disorder in Concentrated Alloys: Defect Physics and Radiation Performance. Chemical Reviews, 2022, 122, 789-829.	47.7	47
3	On the origin of internal obstacles to dislocation glide in single-phase NiFe random alloys. Acta Materialia, 2022, 222, 117457.	7.9	6
4	Diffusion-mediated chemical concentration variation and void evolution in ion-irradiated NiCoFeCr high-entropy alloy. Journal of Materials Research, 2021, 36, 298-310.	2.6	15
5	Atomic-scale mechanisms of void strengthening in tungsten. Tungsten, 2021, 3, 65-71.	4.8	10
6	Structural and chemical disorder enhance point defect diffusion and atomic transport in Ni3Al-based Î³â€² phase. Acta Materialia, 2021, 207, 116704.	7.9	11
7	Equilibrium distribution of point defects in Fe-Y-O as a typical representative of nanocluster-strengthened alloys. Journal of Nuclear Materials, 2021, 549, 152875.	2.7	1
8	Sluggish, chemical bias and percolation phenomena in atomic transport by vacancy and interstitial diffusion in Ni Fe alloys. Current Opinion in Solid State and Materials Science, 2021, 25, 100961.	11.5	23
9	Diffusion-mediated chemical concentration variation and void evolution in ion-irradiated NiCoFeCr high-entropy alloy. Journal of Materials Research, 2021, 36, 1-13.	2.6	3
10	From suppressed void growth to significant void swelling in NiCoFeCr complex concentrated solid-solution alloy. Materialia, 2020, 9, 100603.	2.7	22
11	Accelerated kinetic Monte Carlo: A case study; vacancy and dumbbell interstitial diffusion traps in concentrated solid solution alloys. Journal of Chemical Physics, 2020, 153, 074109.	3.0	20
12	Dislocation loop evolution and radiation hardening in nickel-based concentrated solid solution alloys. Journal of Nuclear Materials, 2020, 538, 152247.	2.7	22
13	Tunable chemical complexity to control atomic diffusion in alloys. Npj Computational Materials, 2020, 6, .	8.7	37
14	Atomic-Level Dislocation Dynamics in Irradiated Metals. , 2020, , 663-688.		6
15	Diffusion of point defects in ordered and disordered Niâ€“Fe alloys. Journal of Alloys and Compounds, 2019, 805, 1175-1183.	5.5	33
16	Effects of 3d electron configurations on helium bubble formation and void swelling in concentrated solid-solution alloys. Acta Materialia, 2019, 181, 519-529.	7.9	40
17	Frenkel defect recombination in Ni and Niâ€'containing concentrated solidâ€'solution alloys. Acta Materialia, 2019, 173, 184-194.	7.9	37
18	Simulation of the interaction between an edge dislocation and âŸ¨111âŸ© interstitial dislocation loops in Î±-iron. Radiation Effects and Defects in Solids, 2019, 174, 329-338.	1.2	7

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19	Local-environment dependence of stacking fault energies in concentrated solid-solution alloys. Npj Computational Materials, 2019, 5, .	8.7	80
20	Chemically-biased diffusion and segregation impede void growth in irradiated Ni-Fe alloys. Current Opinion in Solid State and Materials Science, 2019, 23, 92-100.	11.5	27
21	Two modes of screw dislocation glide in fcc single-phase concentrated alloys. Acta Materialia, 2019, 164, 741-748.	7.9	42
22	Helium irradiated cavity formation and defect energetics in Ni-based binary single-phase concentrated solid solution alloys. Acta Materialia, 2019, 164, 283-292.	7.9	44
23	Atomistic simulation of defect-dislocation interactions in concentrated solid-solution alloys. Physical Review Materials, 2019, 3, .	2.4	5
24	On the mobility of defect clusters and their effect on microstructure evolution in fcc Ni under irradiation. Materialia, 2018, 4, 139-146.	2.7	8
25	On the existence and origin of sluggish diffusion in chemically disordered concentrated alloys. Current Opinion in Solid State and Materials Science, 2018, 22, 65-74.	11.5	97
26	Preferential diffusion in concentrated solid solution alloys: NiFe, NiCo and NiCoCr. Acta Materialia, 2017, 128, 391-399.	7.9	124
27	Atomic-scale dynamics of edge dislocations in Ni and concentrated solid solution NiFe alloys. Journal of Alloys and Compounds, 2017, 701, 1003-1008.	5.5	59
28	Accurate classical short-range forces for the study of collision cascades in Feâ€“Niâ€“Cr. Computer Physics Communications, 2017, 219, 11-19.	7.5	39
29	Effect of nickel on point defects diffusion in Fe â€“ Ni alloys. Acta Materialia, 2017, 132, 367-373.	7.9	35
30	Properties of Vacancy Complexes with Hydrogen and Helium Atoms in Tungsten from First Principles. Fusion Science and Technology, 2017, 71, 52-59.	1.1	17
31	Features of primary damage by high energy displacement cascades in concentrated Ni-based alloys. Journal of Applied Physics, 2016, 119, .	2.5	59
32	Impact of Short-Range Forces on Defect Production from High-Energy Collisions. Journal of Chemical Theory and Computation, 2016, 12, 2871-2879.	5.3	49
33	Atomistic material behavior at extreme pressures. Npj Computational Materials, 2016, 2, .	8.7	29
34	Decisive role of magnetism in the interaction of chromium and nickel solute atoms with 1/2ã€ˆ111ã€‰-screw dislocation core in body-centered cubic iron. Acta Materialia, 2016, 121, 137-143.	7.9	7
35	Specific features of defect and mass transport in concentrated fcc alloys. Acta Materialia, 2016, 115, 364-371.	7.9	75
36	The effect of alloying nickel with iron on the supersonic ballistic stage of high energy displacement cascades. Acta Materialia, 2016, 116, 136-142.	7.9	32

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37	Slow relaxation of cascade-induced defects in Fe. Physical Review B, 2015, 91, .	3.2	22
38	Atomic-scale mechanisms of helium bubble hardening in iron. Journal of Nuclear Materials, 2015, 465, 448-454.	2.7	53
39	Self-Evolving Atomistic Kinetic Monte Carlo simulations of defects in materials. Computational Materials Science, 2015, 100, 135-143.	3.0	33
40	Kinetic Activationâ€“Relaxation Technique and Self-Evolving Atomistic Kinetic Monte Carlo: Comparison of on-the-fly Kinetic Monte Carlo algorithms. Computational Materials Science, 2015, 100, 124-134.	3.0	23
41	How do energetic ions damage metallic surfaces?. Current Opinion in Solid State and Materials Science, 2015, 19, 277-286.	11.5	32
42	Molecular dynamics modeling of atomic displacement cascades in 3Câ€“SiC: Comparison of interatomic potentials. Journal of Nuclear Materials, 2015, 465, 83-88.	2.7	27
43	Interstitial loop transformations in FeCr. Journal of Alloys and Compounds, 2015, 640, 219-225.	5.5	31
44	Thermodynamic approach to the stability of multi-phase systems: application to the Y₂O₃â€“Fe system. Journal of Physics Condensed Matter, 2015, 27, 305001.	1.8	4
45	The role of nickel in radiation damage of ferritic alloys. Acta Materialia, 2015, 84, 368-374.	7.9	20
46	Using a scalar parameter to trace dislocation evolution in atomistic modeling. Computational Materials Science, 2015, 96, 85-89.	3.0	10
47	Effect of low-temperature phase transition on mechanical behavior of Feâ€“Cu alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 46-51.	5.6	8
48	Analysis of the anisotropy of point defect diffusion in hcp Zr. Acta Materialia, 2014, 78, 173-180.	7.9	76
49	An atomistic assessment of helium behavior in iron. Journal of Nuclear Materials, 2014, 455, 258-262.	2.7	39
50	Cascade defect evolution processes: Comparison of atomistic methods. Journal of Nuclear Materials, 2013, 443, 66-70.	2.7	23
51	Solving the Puzzle of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mo stretchy="false">âŸ¨</mml:mo><mml:mn>100</mml:mn><mml:mo stretchy="false">âŸ©</mml:mo></mml:math>Interstitial Loop Formation in bcc Iron. Physical Review Letters, 2013, 110, 265503.	7.8	132
52	Interaction of dislocations with Frank loops in Feâ€“Ni alloys and pure Ni: An MD study. Journal of Nuclear Materials, 2013, 442, S628-S632.	2.7	16
53	The influence of transition metal solutes on the dislocation core structure and values of the Peierls stress and barrier in tungsten. Journal of Physics Condensed Matter, 2013, 25, 025403.	1.8	57
54	Cr segregation on dislocation loops enhances hardening in ferritic Feâ€“Cr alloys. Acta Materialia, 2013, 61, 1444-1453.	7.9	66

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55	Self-interstitial configurations in hcp Zr: a first principles analysis. Philosophical Magazine Letters, 2013, 93, 93-100.	1.2	40
56	Mapping strain rate dependence of dislocation-defect interactions by atomistic simulations. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17756-17761.	7.1	93
57	Impact of Vacancy-Type Defects on Thermal Conductivity of Î²-SiC: Molecular Dynamics Versus an Analytical Approach. , 2013, , 248-268.		0
58	Onset Mechanism of Strain-Rate-Induced Flow Stress Upturn. Physical Review Letters, 2012, 109, 135503.	7.8	82
59	Self-evolving atomistic kinetic Monte Carlo: fundamentals and applications. Journal of Physics Condensed Matter, 2012, 24, 375402.	1.8	34
60	Dislocation nucleation and defect formation in copper by stepped spherical indenter. Philosophical Magazine, 2012, 92, 3158-3171.	1.6	7
61	The effect of twist angle on anisotropic mobility of {1 1 0} hexagonal dislocation networks in Î±-iron. Scripta Materialia, 2012, 66, 761-764.	5.2	25
62	Cascade annealing simulations of bcc iron using object kinetic Monte Carlo. Journal of Nuclear Materials, 2012, 423, 102-109.	2.7	39
63	On the structure and mobility of point defect clusters in alpha-zirconium: a comparison for two interatomic potential models. Modelling and Simulation in Materials Science and Engineering, 2011, 19, 035003.	2.0	22
64	Simulating complex atomistic processes: On-the-fly kinetic Monte Carlo scheme with selective active volumes. Physical Review B, 2011, 84, .	3.2	64
65	Atomistic studies of formation and diffusion of helium clusters and bubbles in BCC iron. Journal of Nuclear Materials, 2011, 417, 1110-1114.	2.7	74
66	Molecular dynamics study of influence of vacancy types defects on thermal conductivity of Î²-SiC. Journal of Nuclear Materials, 2011, 418, 174-181.	2.7	28
67	Atomistic Study of Helium Bubbles in Fe: Equilibrium State. Materials Research Society Symposia Proceedings, 2011, 1298, 79.	0.1	2
68	The influence of interaction geometry on the obstacle strength of voids and copper precipitates in iron. Modelling and Simulation in Materials Science and Engineering, 2011, 19, 015004.	2.0	24
69	Competing processes in reactions between an edge dislocation and dislocation loops in a body-centred cubic metal. Scripta Materialia, 2010, 62, 697-700.	5.2	63
70	Effects of temperature on structure and mobility of the ã€ˆ1 0 0ã€‰ edge dislocation in body-centred cubic iron. Acta Materialia, 2010, 58, 2477-2482.	7.9	48
71	Atomistic study of multimechanism diffusion by self-interstitial defects in Î±-Fe. Modelling and Simulation in Materials Science and Engineering, 2010, 18, 025008.	2.0	52
72	Atomic scale modeling of {110} twist grain boundaries in Î±-iron: Structure and energy properties. Philosophical Magazine, 2010, 90, 991-1000.	1.6	27

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73	Geometrical Aspects of Dislocation-Obstacle Interaction in Iron. Advances in Science and Technology, 2010, 73, 109-117.	0.2	3
74	Elasticity to atomistics: Predictive modeling of defect behavior. Philosophical Magazine, 2010, 90, 803-804.	1.6	0
75	On the origin of large interstitial clusters in displacement cascades. Philosophical Magazine, 2010, 90, 863-884.	1.6	128
76	Implementation of a new Feâ€“He three-body interatomic potential for molecular dynamics simulations. Philosophical Magazine, 2010, 90, 923-934.	1.6	28
77	Atomistic studies of helium defect properties in bcc iron: Comparison of Heâ€“Fe potentials. Philosophical Magazine, 2010, 90, 935-944.	1.6	41
78	Dissociation of migrating particle from trap with long-range interaction field. Philosophical Magazine, 2010, 90, 907-921.	1.6	4
79	Atomic-scale mechanisms of void hardening in bcc and fcc metals. Philosophical Magazine, 2010, 90, 945-961.	1.6	105
80	Reactions between a 1/2âŸ¨111âŸ© screw dislocation and âŸ¨100âŸ© interstitial dislocation loops in alpha-iron modelled at atomic scale. Philosophical Magazine, 2010, 90, 1019-1033.	1.6	61
81	Mesoscale thermodynamic analysis of atomic-scale dislocationâ€“obstacle interactions simulated by molecular dynamics. Philosophical Magazine, 2010, 90, 1001-1018.	1.6	38
82	Reaction kinetics of non-localised particleâ€“trap complexes. Philosophical Magazine, 2010, 90, 897-906.	1.6	1
83	What is the Limit of Nanoparticle Strengthening?. MRS Bulletin, 2009, 34, 173-177.	3.5	11
84	Dislocationâ€”Obstacle Interactions at Atomic Level in Irradiated Metals. Mathematics and Mechanics of Solids, 2009, 14, 270-283.	2.4	28
85	Chapter 88 Dislocationâ€“Obstacle Interactions at the Atomic Level. Dislocations in Solids, 2009, 15, 1-90.	1.6	123
86	Mechanisms of hardening due to copper precipitates in Î±-iron. Philosophical Magazine, 2009, 89, 3333-3349.	1.6	46
87	Structure and properties of vacancy and interstitial clusters in Î±-zirconium. Journal of Nuclear Materials, 2008, 374, 87-94.	2.7	38
88	Computer simulation of primary damage creation in displacement cascades in copper. I. Defect creation and cluster statistics. Journal of Nuclear Materials, 2008, 377, 385-395.	2.7	81
89	Computer simulation of cascade damage in Î±-iron with carbon in solution. Journal of Nuclear Materials, 2008, 382, 91-95.	2.7	26
90	Simulation of the interaction between an edge dislocation and a ã€ˆ1 0 0ã€‰ interstitial dislocation loop in Î±-iron. Acta Materialia, 2008, 56, 5034-5046.	7.9	122

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91	Interaction of an edge dislocation with voids in Î±-iron modelled with different interatomic potentials. Journal of Physics Condensed Matter, 2008, 20, 445007.	1.8	81
92	Mechanisms of stacking fault tetrahedra destruction by gliding dislocations in quenched gold. Philosophical Magazine, 2008, 88, 581-597.	1.6	54
93	Effect of mass of the primary knock-on atom on displacement cascade debris in Î± -iron. Philosophical Magazine Letters, 2008, 88, 43-53.	1.2	37
94	First-principles theory of the energetics of He defects in bcc transition metals. Physical Review B, 2008, 78, .	3.2	130
95	On the interaction between a vacancy and self-interstitial atom clusters in metals. Philosophical Magazine, 2007, 87, 3501-3517.	1.6	13
96	Absorbing boundary conditions for molecular dynamics and multiscale modeling. Physical Review B, 2007, 76, .	3.2	18
97	From Bytes to Ingots: Expedient Design of Structural Materials for Advanced Nuclear Energy Systems. Materials Research Society Symposia Proceedings, 2007, 1043, 1.	0.1	1
98	Atomic-scale computer simulation study of the interaction of Cu-rich precipitates with irradiation-produced defects in Î±-Fe. Philosophical Magazine, 2007, 87, 925-943.	1.6	20
99	Strengthening and microstructure modification associated with moving twin boundaries in hcp metals. Philosophical Magazine Letters, 2007, 87, 451-459.	1.2	15
100	The effect of temperature and strain rate on the interaction between an edge dislocation and an interstitial dislocation loop in Î±-iron. Journal of Physics Condensed Matter, 2007, 19, 456211.	1.8	52
101	Computer simulation of carbon diffusion and vacancyâ€“carbon interaction in Î±-iron. Acta Materialia, 2007, 55, 1-11.	7.9	118
102	Computer simulation of interaction of an edge dislocation with a carbon interstitial in Î±-iron and effects on glide. Acta Materialia, 2007, 55, 93-104.	7.9	88
103	Computer simulation of the interaction of carbon atoms with self-interstitial clusters in Î±-iron. Journal of Nuclear Materials, 2007, 361, 52-61.	2.7	35
104	Development of a Feâ€“He interatomic potential based on electronic structure calculations. Journal of Nuclear Materials, 2007, 367-370, 355-360.	2.7	46
105	The atomic-scale modeling of dislocation-obstacle interactions in irradiated metals. Jom, 2007, 59, 40-45.	1.9	22
106	Computer simulation of reactions between an edge dislocation and glissile self-interstitial clusters in iron. Philosophical Magazine, 2006, 86, 3921-3936.	1.6	91
107	Computer simulation of dislocationâ€“solute interaction in dilute Feâ€“Cu alloys. Modelling and Simulation in Materials Science and Engineering, 2006, 14, 1153-1166.	2.0	25
108	Identification and morphology of point defect clusters created in displacement cascades in Î±-zirconium. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 530-533.	1.4	21

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109	Destruction processes of large stacking fault tetrahedra induced by direct interaction with gliding dislocations. Journal of Nuclear Materials, 2006, 351, 285-294.	2.7	48
110	Calculation of helium defect clustering properties in iron using a multi-scale approach. Journal of Nuclear Materials, 2006, 351, 109-118.	2.7	83
111	Dependence of radiation damage accumulation in iron on underlying models of displacement cascades and subsequent defect migration. Journal of Nuclear Materials, 2006, 355, 89-103.	2.7	44
112	Statistics of primary damage creation in high-energy displacement cascades in copper and zirconium. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 68-70.	1.4	20
113	On the features of dislocationâ€“obstacle interaction in thin films: large-scale atomistic simulation. Philosophical Magazine Letters, 2006, 86, 511-519.	1.2	35
114	Atomic-scale study of dislocationâ€“stacking fault tetrahedron interactions. Part I: mechanisms. Philosophical Magazine, 2006, 86, 2295-2313.	1.6	99
115	Correlated Formation and Stability of SIA Loops and Stacking Fault Tetrahedra in High Energy Displacement Cascades in Copper. , 2006, , 285-298.		0
116	Atomic-Scale Simulation of Defect Cluster Formation in High-Energy Displacement Cascades in Zirconium. , 2006, , 299-313.		0
117	Modelling dislocationâ€“obstacle interactions in metals exposed to an irradiation environment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 353-361.	5.6	56
118	Comparison of void strengthening in fcc and bcc metals: Large-scale atomic-level modelling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 374-377.	5.6	68
119	Atomic-scale details of dislocationâ€“stacking fault tetrahedra interaction. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 370-373.	5.6	64
120	Self-interstitial atom clusters as obstacles to glide of edge dislocations in Î±-zirconium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 54-58.	5.6	28
121	Simulation of dislocation glide in dilute Feâ€“Cu alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 109-113.	5.6	16
122	Dynamics of drag of self-interstitial clusters by an edge dislocation in iron. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 378-381.	5.6	12
123	The collapse of stacking-fault tetrahedra by interaction with gliding dislocations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 366-369.	5.6	35
124	Interaction of edge dislocation with point defect clusters created in displacement cascades in Î±-zirconium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 49-53.	5.6	23
125	Core structure, dislocation energy and Peierls stress for edge dislocations with (0001) and slip planes in Î±-Zr. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 45-48.	5.6	23
126	A model for the dynamics of loop drag by a gliding dislocation. Philosophical Magazine, 2005, 85, 1473-1493.	1.6	58

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127	Point-defect properties of, and sputtering events in, the {001} surfaces of Ni3Al. II. Sputtering events at and near surfaces. Philosophical Magazine, 2005, 85, 1687-1700.	1.6	6
128	Simulation of copper atom diffusion via the vacancy mechanism in a dilute Fe-Cu alloy. Physical Review B, 2005, 71, .	3.2	24
129	Migration and directional change of interstitial clusters in Î±-Fe: searching for transition states by the dimer method. Philosophical Magazine, 2005, 85, 619-627.	1.6	13
130	Dislocation dynamics modelling of dislocationâ€“loop interactions in irradiated metals. Philosophical Magazine, 2005, 85, 171-188.	1.6	21
131	Magnetic Interactions Influence the Properties of Helium Defects in Iron. Physical Review Letters, 2005, 94, 046403.	7.8	163
132	Characteristics of the interaction of Cu-rich precipitates with irradiation-produced defects in Î±-Fe. Philosophical Magazine Letters, 2005, 85, 491-501.	1.2	10
133	Point-defect properties of and sputtering events in the {001} surfaces of Ni3Al I. Surface and point-defect properties. Philosophical Magazine, 2004, 84, 173-191.	1.6	6
134	Dynamic properties of edge dislocations decorated by interstitial loops in Î±-iron and copper. Philosophical Magazine Letters, 2004, 84, 745-754.	1.2	29
135	Multiscale modelling of radiation damage in metals: from defect generation to material properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 365, 46-56.	5.6	46
136	Interactions between vacancy and glissile interstitial clusters in iron and copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 365, 101-106.	5.6	12
137	Hardening due to copper precipitates in Î±-iron studied by atomic-scale modelling. Journal of Nuclear Materials, 2004, 329-333, 1233-1237.	2.7	51
138	Dislocationâ€“stacking fault tetrahedron interaction: what can we learn from atomic-scale modelling. Journal of Nuclear Materials, 2004, 329-333, 1228-1232.	2.7	51
139	Features of the interactions between a vacancy and interstitial loops in metals. Philosophical Magazine Letters, 2004, 84, 257-266.	1.2	11
140	Atomic-scale modelling of primary damage and properties of radiation defects in metals. Nuclear Instruments & Methods in Physics Research B, 2003, 202, 31-43.	1.4	17
141	MD description of damage production in displacement cascades in copper and Î±-iron. Journal of Nuclear Materials, 2003, 323, 152-162.	2.7	142
142	Void and precipitate strengthening in Î±-iron: what can we learn from atomic-level modelling?. Journal of Nuclear Materials, 2003, 323, 268-280.	2.7	139
143	An atomic-level model for studying the dynamics of edge dislocations in metals. Modelling and Simulation in Materials Science and Engineering, 2003, 11, 427-446.	2.0	350
144	Point-defect clusters and dislocation loops in bcc metals: Continuum and atomistic study. Philosophical Magazine, 2003, 83, 857-871.	1.6	23

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145	Atomic modelling of strengthening mechanisms due to voids and copper precipitates in Î±-iron. Philosophical Magazine, 2003, 83, 3623-3641.	1.6	147
146	Microstructures Of Irradiated And Mechanically Deformed Metals And Alloys: Fundamental Aspects. Materials Research Society Symposia Proceedings, 2003, 792, 162.	0.1	4
147	One-dimensional atomic transport by clusters of self-interstitial atoms in iron and copper. Philosophical Magazine, 2003, 83, 61-91.	1.6	214
148	Modelling atomic scale radiation damage processes and effects in metals. International Materials Reviews, 2002, 47, 233-241.	19.3	31
149	Mobility of interstitial clusters in alpha-zirconium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 783-789.	2.2	42
150	Statistical analysis of cluster production efficiency in MD simulations of cascades in copper. Journal of Nuclear Materials, 2002, 307-311, 866-870.	2.7	26
151	Atomistic study of the generation, interaction, accumulation and annihilation of cascade-induced defect clusters. Journal of Nuclear Materials, 2002, 307-311, 852-861.	2.7	69
152	Anisotropy of point defect diffusion in alpha-zirconium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 777-782.	2.2	16
153	Defect cluster formation in displacement cascades in copper. Nuclear Instruments & Methods in Physics Research B, 2001, 180, 85-90.	1.4	61
154	Vacancy interaction with glissile interstitial clusters in bcc metals. Philosophical Magazine Letters, 2001, 81, 803-811.	1.2	30
155	Atomistic Study of Self-Diffusion in Ni, Al and Ni₃Al. Defect and Diffusion Forum, 2001, 194-199, 423-428.	0.4	4
156	Atomistic Study of Diffusional Mass Transport in Metals. Defect and Diffusion Forum, 2001, 188-190, 71-92.	0.4	49
157	Mechanism of one-dimensional glide of self-interstitial atom clusters in Î±-iron. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2000, 80, 2709-2720.	0.6	40
158	Mobility of Interstitial Clusters in HCP Zirconium. Materials Research Society Symposia Proceedings, 2000, 650, 3301.	0.1	5
159	Defect Cluster Formation in High Energy Displacement Cascades in Copper. Materials Research Society Symposia Proceedings, 2000, 650, 421.	0.1	3
160	Interactions between Edge Dislocations and Interstitial Clusters in Iron and Copper. Materials Research Society Symposia Proceedings, 2000, 653, .	0.1	4
161	Features of Vacancy Interaction with Interstitial Clusters in BCC Metals. Materials Research Society Symposia Proceedings, 2000, 653, .	0.1	1
162	Stability and mobility of defect clusters and dislocation loops in metals. Journal of Nuclear Materials, 2000, 276, 65-77.	2.7	266

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163	Interactions between mobile dislocation loops in Cu and Î±-Fe. Journal of Nuclear Materials, 2000, 276, 202-212.	2.7	61
164	Properties and evolution of sessile interstitial clusters produced by displacement cascades in Î±-iron. Journal of Nuclear Materials, 2000, 276, 213-220.	2.7	65
165	Quantitative analysis of CTEM images of small dislocation loops in Al and stacking fault tetrahedra in Cu generated by molecular dynamics simulation. Journal of Nuclear Materials, 2000, 276, 251-257.	2.7	15
166	On the validity of the cluster model to describe the evolution of Cu precipitates in Feâ€“Cu alloys. Journal of Nuclear Materials, 2000, 277, 113-115.	2.7	26
167	Cleavage force, tribology and bond breaking in some transition metals. Journal of Physics and Chemistry of Solids, 2000, 61, 2055-2060.	4.0	1
168	The primary damage state in fcc, bcc and hcp metals as seen in molecular dynamics simulations. Journal of Nuclear Materials, 2000, 276, 1-12.	2.7	326
169	Structure and properties of clusters of self-interstitial atoms in fcc copper and bcc iron. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2000, 80, 2131-2157.	0.6	3
170	Structure and properties of clusters of self-interstitial atoms in fcc copper and bcc iron. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2000, 80, 2131-2157.	0.6	95
171	Features of Vacancy Interaction with Interstitial Clusters in BCC Metals. Materials Research Society Symposia Proceedings, 2000, 653, 1.	0.1	0
172	Vacancy loops and stacking-fault tetrahedra in copper I. Structure and properties studied by pair and many-body potentials. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 2259-2283.	0.6	2
173	Atomic-scale computer simulation of primary irradiation damage effects in metals. Journal of Computer-Aided Materials Design, 1999, 6, 225-237.	0.7	19
174	Computer simulation of displacement cascades and the defects they generate in metals. Nuclear Instruments & Methods in Physics Research B, 1999, 153, 87-98.	1.4	60
175	Vacancy loops and stacking-fault tetrahedra in copper. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 2259-2283.	0.6	37
176	Vacancy loops and stacking-fault tetrahedra in copper. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 2285-2311.	0.6	28
177	Thermally activated glide of small dislocation loops in metals. Philosophical Magazine Letters, 1999, 79, 273-282.	1.2	77
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