

Kai Henrik Nordlund

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/595395/kai-henrik-nordlund-publications-by-year.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

551
papers

19,989
citations

68
h-index

118
g-index

579
ext. papers

21,860
ext. citations

3.1
avg, IF

7
L-index

#	Paper	IF	Citations
551	Effect of cascade overlap and C15 clusters on the damage evolution in Fe: An OKMC study. <i>Materialia</i> , 2022 , 21, 101344	3.2	
550	Nanorod orientation control by swift heavy ion irradiation. <i>Applied Physics Letters</i> , 2022 , 120, 171602	3.4	1
549	Primary radiation damage in silicon from the viewpoint of a machine learning interatomic potential. <i>Physical Review Materials</i> , 2021 , 5,	3.2	1
548	Nuclear stopping powers for DFT potentials. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2021 , 508, 10-18	1.2	0
547	Unravelling the secrets of the resistance of GaN to strongly ionising radiation. <i>Communications Physics</i> , 2021 , 4,	5.4	15
546	Computational study of crystal defect formation in Mo by a machine learning molecular dynamics potential. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2021 , 29, 055001	2	5
545	Data on erosion and hydrogen fuel retention in Beryllium plasma-facing materials. <i>Nuclear Materials and Energy</i> , 2021 , 27, 100994	2.1	7
544	Machine-learning interatomic potential for W-Mo alloys. <i>Journal of Physics Condensed Matter</i> , 2021 , 33,	1.8	5
543	Gradient-based training and pruning of radial basis function networks with an application in materials physics. <i>Neural Networks</i> , 2021 , 133, 123-131	9.1	1
542	Origin of increased helium density inside bubbles in Ni(100)Fe alloys. <i>Scripta Materialia</i> , 2021 , 191, 1-6	5.6	6
541	MD simulation study on defect evolution and doping efficiency of p-type doping of 3C-SiC by Al ion implantation with subsequent annealing. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 2258-2275	7.1	7
540	Nano-vault architecture mitigates stress in silicon-based anodes for lithium-ion batteries. <i>Communications Materials</i> , 2021 , 2,	6	4
539	Temperature effect on irradiation damage in equiatomic multi-component alloys. <i>Computational Materials Science</i> , 2021 , 197, 110571	3.2	1
538	Modeling refractory high-entropy alloys with efficient machine-learned interatomic potentials: Defects and segregation. <i>Physical Review B</i> , 2021 , 104,	3.3	4
537	Solar neutrinos and dark matter detection with diurnal modulation. <i>Physical Review D</i> , 2021 , 104,	4.9	2
536	Parameter-free quantitative simulation of high-dose microstructure and hydrogen retention in ion-irradiated tungsten. <i>Physical Review Materials</i> , 2021 , 5,	3.2	6
535	The cluster species effect on the noble gas cluster interaction with solid surfaces. <i>Surfaces and Interfaces</i> , 2021 , 26, 101397	4.1	0

534	MD simulation of two-temperature model in ion irradiation of 3C-SiC: Effects of electronic and nuclear stopping coupling, ion energy and crystal orientation. <i>Journal of Nuclear Materials</i> , 2021 , 557, 153313	3.3	1
533	Molecular dynamics simulations of high-dose damage production and defect evolution in tungsten. <i>Journal of Nuclear Materials</i> , 2021 , 556, 153158	3.3	1
532	Insights into the primary radiation damage of silicon by a machine learning interatomic potential. <i>Materials Research Letters</i> , 2020 , 8, 364-372	7.4	10
531	Molecular dynamics simulation of the effects of swift heavy ion irradiation on multilayer graphene and diamond-like carbon. <i>Applied Surface Science</i> , 2020 , 527, 146495	6.7	6
530	Segregation of Ni at early stages of radiation damage in NiCoFeCr solid solution alloys. <i>Acta Materialia</i> , 2020 , 196, 44-51	8.4	18
529	New developments in the simulation of Rutherford backscattering spectrometry in channeling mode using arbitrary atom structures. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2020 , 28, 075005	2	1
528	Low energy sputtering of Mo surfaces. <i>Journal of Nuclear Materials</i> , 2020 , 539, 152274	3.3	4
527	Direct observation of ion-induced self-organization and ripple propagation processes in atomistic simulations. <i>Materials Research Letters</i> , 2020 , 8, 110-116	7.4	6
526	Sputtering of beryllium oxide by deuterium at various temperatures simulated with molecular dynamics. <i>Physica Scripta</i> , 2020 , T171, 014024	2.6	4
525	Defect and density evolution under high-fluence ion irradiation of Si/SiO ₂ heterostructures. <i>Physical Review Materials</i> , 2020 , 4,	3.2	1
524	Gaussian approximation potentials for body-centered-cubic transition metals. <i>Physical Review Materials</i> , 2020 , 4,	3.2	10
523	Molecular Dynamics Simulations of Non-equilibrium Systems 2020 , 2161-2192		
522	Modeling of Radiation Damage in Materials: Best Practices and Future Directions 2020 , 2367-2379		
521	Nanocutting mechanism of 6H-SiC investigated by scanning electron microscope online observation and stress-assisted and ion implant-assisted approaches. <i>International Journal of Advanced Manufacturing Technology</i> , 2020 , 106, 3869-3880	3.2	8
520	On the classification and quantification of crystal defects after energetic bombardment by machine learned molecular dynamics simulations. <i>Nuclear Materials and Energy</i> , 2020 , 22, 100724	2.1	5
519	Absence of a Crystal Direction Regime in which Sputtering Corresponds to Amorphous Material. <i>Physical Review Letters</i> , 2020 , 125, 225502	7.4	3
518	On the mechanism of the shape elongation of embedded nanoparticles. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2020 , 475, 44-48	1.2	4
517	Nanopatterning of the (001) surface of crystalline Ge by ion irradiation at off-normal incidence: Experiment and simulation. <i>Physical Review B</i> , 2020 , 102,	3.3	2

516	Computational study of tungsten sputtering by nitrogen. <i>Journal of Nuclear Materials</i> , 2020 , 542, 152465-3	5.3	1
515	Defect accumulation and evolution during prolonged irradiation of Fe and FeCr alloys. <i>Journal of Nuclear Materials</i> , 2020 , 528, 151843	3.3	13
514	Modeling of high-fluence irradiation of amorphous Si and crystalline Al by linearly focused Ar ions. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 075302	1.8	3
513	Modeling of Radiation Damage in Materials: Best Practices and Future Directions 2019 , 1-13		
512	Overview of the JET preparation for deuterium-tritium operation with the ITER like-wall. <i>Nuclear Fusion</i> , 2019 , 59, 112021	3.3	55
511	Historical review of computer simulation of radiation effects in materials. <i>Journal of Nuclear Materials</i> , 2019 , 520, 273-295	3.3	63
510	Elongation mechanism of the ion shaping of embedded gold nanoparticles under swift heavy ion irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019 , 451, 42-48	1.2	6
509	Improved ERO modelling of beryllium erosion at ITER upper first wall panel using JET-ILW and PISCES-B experience. <i>Nuclear Materials and Energy</i> , 2019 , 19, 510-515	2.1	10
508	Optimization of single crystal mirrors for ITER diagnostics. <i>Fusion Engineering and Design</i> , 2019 , 146, 1450-1453	1.7	5
507	Channeling maps for Si ions in Si: Assessing the binary collision approximation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019 , 449, 17-21	1.2	3
506	Site-Specific Wetting of Iron Nanocubes by Gold Atoms in Gas-Phase Synthesis. <i>Advanced Science</i> , 2019 , 6, 1900447	13.6	28
505	Gas-Phase Synthesis of Trimetallic Nanoparticles. <i>Chemistry of Materials</i> , 2019 , 31, 2151-2163	9.6	44
504	Analytical interatomic bond-order potential for simulations of oxygen defects in iron. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 215401	1.8	3
503	Reflection of hydrogen and deuterium atoms from the beryllium, carbon, tungsten surfaces. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019 , 460, 4-9	1.2	5
502	Radiation stability of nanocrystalline single-phase multicomponent alloys. <i>Journal of Materials Research</i> , 2019 , 34, 854-866	2.5	5
501	Molecular dynamics simulation of beryllium oxide irradiated by deuterium ions: sputtering and reflection. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 185001	1.8	4
500	Cascade overlap with vacancy-type defects in Fe. <i>European Physical Journal B</i> , 2019 , 92, 1	1.2	9
499	Velocity-dependent dark matter interactions in single-electron resolution semiconductor detectors with directional sensitivity. <i>Physical Review D</i> , 2019 , 99,	4.9	6

498	Molecular dynamics simulation of helium ion implantation into silicon and its migration. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019 , 456, 53-59	1.2	9
497	Machine-learning interatomic potential for radiation damage and defects in tungsten. <i>Physical Review B</i> , 2019 , 100,	3.3	39
496	Structural properties of protective diamond-like-carbon thin films grown on multilayer graphene. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 505703	1.8	3
495	Collision cascades overlapping with self-interstitial defect clusters in Fe and W. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 245402	1.8	18
494	MD simulation of stress-assisted nanometric cutting mechanism of 3C silicon carbide. <i>Industrial Lubrication and Tribology</i> , 2019 , 71, 686-691	1.3	8
493	Radiation damage in tungsten from cascade overlap with voids and vacancy clusters. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 405402	1.8	9
492	Analytical bond order potential for simulations of BeO 1D and 2D nanostructures and plasma-surface interactions. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 135001	1.8	9
491	Graphitization of amorphous carbon by swift heavy ion impacts: Molecular dynamics simulation. <i>Diamond and Related Materials</i> , 2018 , 83, 134-140	3.5	10
490	Nanoscale density variations induced by high energy heavy ions in amorphous silicon nitride and silicon dioxide. <i>Nanotechnology</i> , 2018 , 29, 144004	3.4	19
489	Slowing down of 100 keV antiprotons in Al foils. <i>Results in Physics</i> , 2018 , 8, 683-685	3.7	0
488	Cu self-sputtering MD simulations for 0.18 keV ions at elevated temperatures. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2018 , 415, 31-40	1.2	5
487	Effects of crystallographic and geometric orientation on ion beam sputtering of gold nanorods. <i>Scientific Reports</i> , 2018 , 8, 512	4.9	5
486	Effects of precipitates and dislocation loops on the yield stress of irradiated iron. <i>Scientific Reports</i> , 2018 , 8, 6914	4.9	30
485	Improving atomic displacement and replacement calculations with physically realistic damage models. <i>Nature Communications</i> , 2018 , 9, 1084	17.4	146
484	Directional Sensitivity in Light-Mass Dark Matter Searches with Single-Electron-Resolution Ionization Detectors. <i>Physical Review Letters</i> , 2018 , 120, 111301	7.4	20
483	A model of defect cluster creation in fragmented cascades in metals based on morphological analysis. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 405701	1.8	9
482	Molecular Dynamics Simulations of Heavy Ion Induced Defects in SiC Schottky Diodes. <i>IEEE Transactions on Device and Materials Reliability</i> , 2018 , 18, 481-483	1.6	6
481	Effects of the short-range repulsive potential on cascade damage in iron. <i>Journal of Nuclear Materials</i> , 2018 , 508, 530-539	3.3	33

480	Vaporlike phase of amorphous SiO ₂ is not a prerequisite for the core/shell ion tracks or ion shaping. <i>Physical Review Materials</i> , 2018 , 2,	3.2	7
479	Dependence of ion channeling on relative atomic number in compounds. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2018 , 435, 61-69	1.2	6
478	Simulation of redistributive and erosive effects in a-Si under Ar ⁺ irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2018 , 414, 133-140	1.2	9
477	Absence of single critical dose for the amorphization of quartz under ion irradiation. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 015403	1.8	5
476	Simulation Study of Al Channeling in 4H-SiC 2018 ,		2
475	Effect of random surface orientation on W sputtering yields. <i>Nuclear Materials and Energy</i> , 2018 , 17, 113-122	2.1	9
474	Molecular Dynamics Simulations of Non-equilibrium Systems 2018 , 1-33		1
473	Primary radiation damage: A review of current understanding and models. <i>Journal of Nuclear Materials</i> , 2018 , 512, 450-479	3.3	208
472	Screening and engineering of colour centres in diamond. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 483002	3	44
471	Defect structures and statistics in overlapping cascade damage in fusion-relevant bcc metals. <i>Journal of Nuclear Materials</i> , 2018 , 511, 64-74	3.3	35
470	Defect Creation in Crystals: A Portal to Directional Dark Matter Searches. <i>Journal of Low Temperature Physics</i> , 2018 , 193, 1146-1150	1.3	
469	Pattern formation on ion-irradiated Si surface at energies where sputtering is negligible. <i>Journal of Applied Physics</i> , 2018 , 123, 235108	2.5	17
468	Gas Phase Synthesis of Multifunctional Fe-Based Nanocubes. <i>Advanced Functional Materials</i> , 2017 , 27, 1605328	15.6	43
467	Atomic force microscope adhesion measurements and atomistic molecular dynamics simulations at different humidities. <i>Measurement Science and Technology</i> , 2017 , 28, 034004	2	5
466	Spatial distribution of particles sputtered from single crystals by gas cluster ions. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2017 , 406, 518-522	1.2	4
465	Probing electron beam effects with chemoresistive nanosensors during in situ environmental transmission electron microscopy. <i>Applied Physics Letters</i> , 2017 , 110, 094103	3.4	7
464	Radiation damage buildup and dislocation evolution in Ni and equiatomic multicomponent Ni-based alloys. <i>Journal of Nuclear Materials</i> , 2017 , 490, 323-332	3.3	49
463	Atomistic simulation of ion irradiation of semiconductor heterostructures. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2017 , 409, 14-18	1.2	6

462	Comparison of repulsive interatomic potentials calculated with an all-electron DFT approach with experimental data. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2017 , 406, 511-517	1.2	20
461	Multi-scale modelling to relate beryllium surface temperature, deuterium concentration and erosion in fusion reactor environment. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 204003	3	12
460	Temperature dependence of underdense nanostructure formation in tungsten under helium irradiation. <i>Journal of Nuclear Materials</i> , 2017 , 490, 108-114	3.3	33
459	Radiation damage buildup by athermal defect reactions in nickel and concentrated nickel alloys. <i>Materials Research Letters</i> , 2017 , 5, 433-439	7.4	21
458	Efficient generation of energetic ions in multi-ion plasmas by radio-frequency heating. <i>Nature Physics</i> , 2017 , 13, 973-978	16.2	50
457	MD and BCA simulations of He and H bombardment of fuzz in bcc elements. <i>Journal of Nuclear Materials</i> , 2017 , 492, 113-121	3.3	11
456	Sputtering and redeposition of ion irradiated Au nanoparticle arrays: direct comparison of simulations to experiments. <i>New Journal of Physics</i> , 2017 , 19, 013023	2.9	9
455	Mechanistic details of the formation and growth of nanoscale voids in Ge under extreme conditions within an ion track. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 225302	3	8
454	Recent advances in modeling and simulation of the exposure and response of tungsten to fusion energy conditions. <i>Nuclear Fusion</i> , 2017 , 57, 092008	3.3	85
453	Atomic-level heterogeneity and defect dynamics in concentrated solid-solution alloys. <i>Current Opinion in Solid State and Materials Science</i> , 2017 , 21, 221-237	12	110
452	Creating nanoporous graphene with swift heavy ions. <i>Carbon</i> , 2017 , 114, 511-518	10.4	43
451	Damage buildup and edge dislocation mobility in equiatomic multicomponent alloys. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2017 , 393, 114-117	1.2	17
450	Local segregation versus irradiation effects in high-entropy alloys: Steady-state conditions in a driven system. <i>Journal of Applied Physics</i> , 2017 , 122, 105106	2.5	36
449	Angular and velocity distributions of tungsten sputtered by low energy argon ions. <i>Journal of Nuclear Materials</i> , 2017 , 496, 18-23	3.3	9
448	Swift heavy ion effects on DLC-nanotube-diamond thin films. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 355301	3	4
447	Cascade fragmentation: deviation from power law in primary radiation damage. <i>Materials Research Letters</i> , 2017 , 5, 357-363	7.4	44
446	Overview of the JET results in support to ITER. <i>Nuclear Fusion</i> , 2017 , 57, 102001	3.3	125
445	ERO modelling of tungsten erosion in the linear plasma device PSI-2. <i>Nuclear Materials and Energy</i> , 2017 , 12, 253-260	2.1	13

444	Atomistic simulation of the measurement of mechanical properties of gold nanorods by AFM. <i>Scientific Reports</i> , 2017 , 7, 16257	4.9	5
443	Cascade debris overlap mechanism of <100> dislocation loop formation in Fe and FeCr. <i>Europhysics Letters</i> , 2017 , 119, 56003	1.6	33
442	Nuclear stopping power of antiprotons. <i>Physical Review A</i> , 2017 , 96,	2.6	5
441	Single and molecular ion irradiation-induced effects in GaN: experiment and cumulative MD simulations. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 505110	3	4
440	Thermal Oxidation of Size-Selected Pd Nanoparticles Supported on CuO Nanowires: The Role of the CuO/Pd Interface. <i>Chemistry of Materials</i> , 2017 , 29, 6153-6160	9.6	19
439	Molecular dynamics simulations of thermally activated edge dislocation unpinning from voids in Fe. <i>Physical Review Materials</i> , 2017 , 1,	3.2	8
438	Tuning the onset of ferromagnetism in heterogeneous bimetallic nanoparticles by gas phase doping. <i>Physical Review Materials</i> , 2017 , 1,	3.2	19
437	Formation and emission mechanisms of Ag nanoclusters in the Ar matrix assembly cluster source. <i>Physical Review Materials</i> , 2017 , 1,	3.2	8
436	Plasma-wall interaction studies within the EUROfusion consortium: progress on plasma-facing components development and qualification. <i>Nuclear Fusion</i> , 2017 , 57, 116041	3.3	50
435	Subcascade formation and defect cluster size scaling in high-energy collision events in metals. <i>Europhysics Letters</i> , 2016 , 115, 26001	1.6	30
434	Multiscale modeling of dislocation-precipitate interactions in Fe: From molecular dynamics to discrete dislocations. <i>Physical Review E</i> , 2016 , 93, 013309	2.4	53
433	Mechanism of Radiation Damage Reduction in Equiatomic Multicomponent Single Phase Alloys. <i>Physical Review Letters</i> , 2016 , 116, 135504	7.4	250
432	Simulation of Rutherford backscattering spectrometry from arbitrary atom structures. <i>Physical Review E</i> , 2016 , 94, 043319	2.4	24
431	Improved ERO modelling for spectroscopy of physically and chemically assisted eroded beryllium from the JET-ILW. <i>Nuclear Materials and Energy</i> , 2016 , 9, 604-609	2.1	14
430	Molecular dynamics simulations of ballistic He penetration into W fuzz. <i>Nuclear Fusion</i> , 2016 , 56, 126015	3.3	16
429	Optimizing the sputter deposition process of polymers for the Storing Matter technique using PMMA. <i>Journal of Mass Spectrometry</i> , 2016 , 51, 889-899	2.2	
428	Ru/Al Multilayers Integrate Maximum Energy Density and Ductility for Reactive Materials. <i>Scientific Reports</i> , 2016 , 6, 19535	4.9	13
427	Formation Mechanism of Fe Nanocubes by Magnetron Sputtering Inert Gas Condensation. <i>ACS Nano</i> , 2016 , 10, 4684-94	16.7	81

426	Non-equilibrium properties of interatomic potentials in cascade simulations in tungsten. <i>Journal of Nuclear Materials</i> , 2016 , 470, 119-127	3.3	46
425	Interatomic Fe-H potential for irradiation and embrittlement simulations. <i>Computational Materials Science</i> , 2016 , 111, 525-531	3.2	11
424	An interatomic potential for W-N interactions. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2016 , 24, 065007	2	2
423	Atomistic simulations of field assisted evaporation in atom probe tomography. <i>Journal Physics D: Applied Physics</i> , 2016 , 49, 045302	3	9
422	Modelling of crater formation on anode surface by high-current vacuum arcs. <i>Journal of Applied Physics</i> , 2016 , 120, 183302	2.5	10
421	Atomistic simulations of deuterium irradiation on iron-based alloys in future fusion reactors. <i>Nuclear Materials and Energy</i> , 2016 , 9, 571-575	2.1	2
420	Large fraction of crystal directions leads to ion channeling. <i>Physical Review B</i> , 2016 , 94,	3.3	58
419	Experimental study and MD simulation of damage formation in GaN under atomic and molecular ion irradiation. <i>Vacuum</i> , 2016 , 129, 166-169	3.7	5
418	Dependence of short and intermediate-range order on preparation in experimental and modeled pure a-Si. <i>Journal of Non-Crystalline Solids</i> , 2016 , 438, 26-36	3.9	14
417	Surface effects and statistical laws of defects in primary radiation damage: Tungsten vs. iron. <i>Europhysics Letters</i> , 2016 , 115, 36001	1.6	36
416	Crystallization of silicon nanoclusters with inert gas temperature control. <i>Physical Review B</i> , 2015 , 91,	3.3	31
415	Atomistic two-temperature modelling of ion track formation in silicon dioxide. <i>Europhysics Letters</i> , 2015 , 110, 16004	1.6	24
414	Capacity of graphite's layered structure to suppress the sputtering yield: A molecular dynamics study. <i>Applied Surface Science</i> , 2015 , 337, 6-11	6.7	8
413	Surface Segregation in Chromium-Doped NiCr Alloy Nanoparticles and Its Effect on Their Magnetic Behavior. <i>Chemistry of Materials</i> , 2015 , 27, 3216-3225	9.6	31
412	Electronic effects in high-energy radiation damage in tungsten. <i>Journal of Physics Condensed Matter</i> , 2015 , 27, 135401	1.8	29
411	Cluster analysis of Dairy Herd Improvement data to discover trends in performance characteristics in large Upper Midwest dairy herds. <i>Journal of Dairy Science</i> , 2015 , 98, 3059-70	4	16
410	Influence of alkane chain length on adsorption on an alumina surface by MD simulations. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2015 , 352, 206-209	1.2	5
409	Atomistic simulations of the effect of reactor-relevant parameters on Be sputtering. <i>Journal of Nuclear Materials</i> , 2015 , 463, 805-809	3.3	14

408	The relationship between gross and net erosion of beryllium at elevated temperature. <i>Journal of Nuclear Materials</i> , 2015 , 463, 777-780	3.3	3
407	Tensile testing of Fe and FeCr nanowires using molecular dynamics simulations. <i>Journal of Applied Physics</i> , 2015 , 117, 014313	2.5	20
406	Simple analytical model of nanocluster coalescence for porous thin film design. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2015 , 23, 015008	2	11
405	Ion-solid interactions at the extremes of electronic energy loss: Examples for amorphous semiconductors and embedded nanostructures. <i>Current Opinion in Solid State and Materials Science</i> , 2015 , 19, 29-38	12	21
404	On the lower energy limit of electronic stopping in simulated collision cascades in Ni, Pd and Pt. <i>Journal of Nuclear Materials</i> , 2015 , 456, 99-105	3.3	27
403	The as-deposited structure of co-sputtered Cu _{100-x} Al _x alloys, studied by X-ray diffraction and molecular dynamics simulations. <i>Acta Materialia</i> , 2015 , 82, 51-63	8.4	28
402	Modification of Pt/Co/Pt film properties by ion irradiation. <i>Physical Review B</i> , 2015 , 92,	3.3	8
401	Orientation dependent annealing kinetics of ion tracks in c-SiO ₂ . <i>Journal of Applied Physics</i> , 2015 , 118, 224305	2.5	5
400	Conditions for forming composite carbon nanotube-diamond like carbon material that retain the good properties of both materials. <i>Journal of Applied Physics</i> , 2015 , 118, 194306	2.5	6
399	Molecular dynamics simulations of cascades in strained carbide inclusions embedded in Iron. <i>AIP Advances</i> , 2015 , 5, 117152	1.5	3
398	Direct observation of size scaling and elastic interaction between nano-scale defects in collision cascades. <i>Europhysics Letters</i> , 2015 , 110, 36001	1.6	80
397	From Field Emission to Vacuum Arc Ignition: A New Tool for Simulating Copper Vacuum Arcs. <i>Contributions To Plasma Physics</i> , 2015 , 55, 299-314	1.4	32
396	Simulations of electromechanical shape transformations of Au nanoparticles. <i>Physica Status Solidi (B): Basic Research</i> , 2015 , 252, 144-148	1.3	2
395	Molecular dynamics investigation of the interaction of dislocations with carbides in BCC Fe. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2015 , 352, 77-80	1.2	8
394	Interaction of dislocations with carbides in BCC Fe studied by molecular dynamics. <i>Journal of Nuclear Materials</i> , 2015 , 460, 23-29	3.3	16
393	Structural analysis of simulated swift heavy ion tracks in quartz. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014 , 326, 289-292	1.2	18
392	Multiscale modelling of irradiation in nanostructures. <i>Journal of Computational Electronics</i> , 2014 , 13, 122-141	1.8	30
391	Swift Heavy Ion Shape Transformation of Au Nanocrystals Mediated by Molten Material Flow and Recrystallization. <i>Materials Research Letters</i> , 2014 , 2, 37-42	7.4	35

390	Investigation of the thermal stability of Cu nanowires using atomistic simulations. <i>Journal of Applied Physics</i> , 2014 , 115, 213518	2.5	14
389	Radiation damage production in massive cascades initiated by fusion neutrons in tungsten. <i>Journal of Nuclear Materials</i> , 2014 , 455, 207-211	3.3	62
388	Effect of ion irradiation on structural properties of Cu ₆₄ Zr ₃₆ metallic glass. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014 , 341, 22-26	1.2	8
387	Loop punching and bubble rupture causing surface roughening – a model for W fuzz growth. <i>Europhysics Letters</i> , 2014 , 105, 25002	1.6	71
386	Crater functions for compound materials: A route to parameter estimation in coupled-PDE models of ion bombardment. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014 , 318, 245-252	1.2	16
385	Adsorption of maleic anhydride on Pt(111). <i>Surface Science</i> , 2014 , 620, 9-16	1.8	2
384	Atomistic simulation of irradiation effects in GaN nanowires. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014 , 326, 15-18	1.2	2
383	Swift heavy ion induced recrystallization in cubic silicon carbide: New insights from designed experiments and MD simulations. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014 , 326, 326-331 ^{1,2}		24
382	Heterogeneous Gas-Phase Synthesis and Molecular Dynamics Modeling of Janus and Core-Satellite Si ₃ N ₄ Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 13869-13875	3.8	65
381	Defect clustering in irradiation of GaN by single and molecular ions. <i>Vacuum</i> , 2014 , 105, 88-90	3.7	7
380	Interaction of Dislocations with Carbides in BCC Fe Studied by Molecular Dynamics. <i>Fusion Science and Technology</i> , 2014 , 66, 283-288	1.1	11
379	Mechanical and elastic changes in cementite Fe ₃ C subjected to cumulative 1 keV Fe recoils. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014 , 338, 119-125	1.2	3
378	Nanoindentation of gold nanorods with an atomic force microscope. <i>Materials Research Express</i> , 2014 , 1, 045042	1.7	5
377	Multiscale modelling of plasma-wall interactions in fusion reactor conditions. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 224018	3	43
376	Atomistic simulations of Be irradiation on W: mixed layer formation and erosion. <i>Nuclear Fusion</i> , 2014 , 54, 083001	3.3	7
375	The effect of beryllium on deuterium implantation in tungsten by atomistic simulations. <i>Nuclear Fusion</i> , 2014 , 54, 123021	3.3	5
374	Radiation effects in nanoclusters embedded in solids. <i>European Physical Journal B</i> , 2014 , 87, 1	1.2	13
373	Thermal response of nanoscale cylindrical inclusions of amorphous silica embedded in quartz. <i>Physical Review B</i> , 2014 , 90,	3.3	9

372	Low-energy irradiation effects in cellulose. <i>Journal of Applied Physics</i> , 2014 , 115, 023521	2.5	7
371	High-energy radiation damage in zirconia: Modeling results. <i>Journal of Applied Physics</i> , 2014 , 115, 083507	2.5	22
370	Experimental and numerical study of submonolayer sputter deposition of polystyrene fragments on silver for the storing matter technique. <i>Analytical Chemistry</i> , 2014 , 86, 11217-25	7.8	4
369	Atomistic simulation of Er irradiation induced defects in GaN nanowires. <i>Journal of Applied Physics</i> , 2014 , 116, 124313	2.5	9
368	Kinetic Monte Carlo simulations of proton conductivity. <i>Physical Review E</i> , 2014 , 90, 012135	2.4	8
367	Electrostatic-elastoplastic simulations of copper surface under high electric fields. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2014 , 17,		11
366	Molecular dynamics simulation of Cr-precipitate demixing in FeCr alloys. <i>Radiation Effects and Defects in Solids</i> , 2014 , 169, 646-654	0.9	2
365	Electronic effects in high-energy radiation damage in iron. <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 085401	1.8	39
364	Modelling of WBe mixed material sputtering under D irradiation. <i>Physica Scripta</i> , 2014 , T159, 014059	2.6	6
363	Comparison of low-energy irradiation effects in polyethylene and cellulose by molecular dynamics simulations. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014 , 326, 174-177	1.2	3
362	Sputtering yields exceeding 1000 by 80keV Xe irradiation of Au nanorods. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014 , 341, 17-21	1.2	14
361	Irradiation effects in high-density polyethylene. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2013 , 312, 54-59	1.2	7
360	Molecular dynamics simulation of radiation damage in CaCd ₆ quasicrystal cubic approximant up to 10 keV. <i>Journal of Chemical Physics</i> , 2013 , 138, 234505	3.9	6
359	MD simulations of onset of tungsten fuzz formation under helium irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2013 , 303, 156-161	1.2	54
358	Latent ion tracks in amorphous silicon. <i>Physical Review B</i> , 2013 , 88,	3.3	28
357	A brief summary of the progress on the EFDA tungsten materials program. <i>Journal of Nuclear Materials</i> , 2013 , 442, S173-S180	3.3	63
356	Radiation effects in nuclear materials: Role of nuclear and electronic energy losses and their synergy. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2013 , 307, 43-48	1.2	39
355	Inoculation of silicon nanoparticles with silver atoms. <i>Scientific Reports</i> , 2013 , 3, 3083	4.9	33

354	Modified embedded-atom method used to derive interatomic potentials for defects and phase formation in the W-C system. <i>Physical Review B</i> , 2013 , 88,	3-3	5
353	Self-assembly of oxide-supported metal clusters into ring-like structures. <i>Nanotechnology</i> , 2013 , 24, 035602	3-4	2
352	Sputtering of Be/C/W compounds in molecular dynamics and ERO simulations. <i>Journal of Nuclear Materials</i> , 2013 , 438, S589-S593	3-3	3
351	Controlled softening of Cu ₆₄ Zr ₃₆ metallic glass by ion irradiation. <i>Applied Physics Letters</i> , 2013 , 102, 181910	3-4	23
350	Microchemical effects in irradiated Fe/Cr alloys as revealed by atomistic simulation. <i>Journal of Nuclear Materials</i> , 2013 , 442, 486-498	3-3	30
349	Comparison of molecular dynamics and binary collision approximation simulations for atom displacement analysis. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2013 , 297, 23-28	1-2	38
348	Variables affecting simulated Be sputtering yields. <i>Journal of Nuclear Materials</i> , 2013 , 439, 174-179	3-3	12
347	Atomistic simulations of MeV ion irradiation of silica. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2013 , 303, 129-132	1-2	11
346	Roughness scaling in titanium thin films: A three-dimensional molecular dynamics study of rotational and static glancing angle deposition. <i>Applied Surface Science</i> , 2013 , 268, 270-273	6-7	7
345	The effect of hydrocarbon chemistry on sputtering in mixed Be/Cr materials. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2013 , 303, 188-191	1-2	2
344	The effect of C concentration on radiation damage in Fe/Cr alloys. <i>Journal of Nuclear Materials</i> , 2013 , 442, S782-S785	3-3	2
343	A new parametrization of the Stillinger-Weber potential for an improved description of defects and plasticity of silicon. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 055801	1-8	40
342	Tracks and voids in amorphous Ge induced by swift heavy-ion irradiation. <i>Physical Review Letters</i> , 2013 , 110, 245502	7-4	76
341	Multiscale modeling of Be/D release and transport in PISCES-B. <i>Journal of Nuclear Materials</i> , 2013 , 438, S276-S279	3-3	13
340	SAXS investigations of the morphology of swift heavy ion tracks in quartz. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 045006	1-8	34
339	Molecular dynamics simulations of swift heavy ion induced defect recovery in SiC. <i>Computational Materials Science</i> , 2013 , 67, 261-265	3-2	71
338	Recent progress in research on tungsten materials for nuclear fusion applications in Europe. <i>Journal of Nuclear Materials</i> , 2013 , 432, 482-500	3-3	494
337	Molecules can be sputtered also from pure metals: sputtering of beryllium hydride by fusion plasma-wall interactions. <i>Plasma Physics and Controlled Fusion</i> , 2013 , 55, 074004	2	25

336	The nature of high-energy radiation damage in iron. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 125402	68
335	Adaptive molecular decomposition: large-scale quantum chemistry for liquids. <i>Journal of Chemical Physics</i> , 2013 , 138, 104108	3.9
334	High-energy collision cascades in tungsten: Dislocation loops structure and clustering scaling laws. <i>Europhysics Letters</i> , 2013 , 103, 46003	1.6 147
333	Temperature dependence of ion track formation in quartz and apatite. <i>Journal of Applied Crystallography</i> , 2013 , 46, 1558-1563	3.8 17
332	Enhanced sputtering yields from single-ion impacts on gold nanorods. <i>Physical Review Letters</i> , 2013 , 111, 065504	7.4 61
331	Atomistic simulations of stainless steels: a many-body potential for the Fe-Cr-C system. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 445401	1.8 42
330	Effects of defect clustering on optical properties of GaN by single and molecular ion irradiation. <i>Journal of Applied Physics</i> , 2013 , 114, 183511	2.5 7
329	Mechanism of vacancy formation induced by hydrogen in tungsten. <i>AIP Advances</i> , 2013 , 3, 122111	1.5 34
328	MD simulations of low energy deuterium irradiation on W, WC and surfaces. <i>Journal of Nuclear Materials</i> , 2012 , 429, 284-292	3.3 21
327	Sputtering of freestanding metal nanocrystals. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012 , 272, 66-69	1.2 28
326	Crater formation by single ions, cluster ions and ion showers. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012 , 272, 374-376	1.2 13
325	A study on the elongation of embedded Au nanoclusters in SiO ₂ by swift heavy ion irradiation using MD simulations. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012 , 282, 76-80	1.2 16
324	Impact of keV-energy argon clusters on diamond and graphite. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012 , 282, 112-115	1.2 8
323	Irradiation cascades in cementite: 0.1-10 keV Fe recoils. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012 , 277, 136-139	1.2 4
322	Modeling high-energy radiation damage in nuclear and fusion applications. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012 , 277, 6-13	1.2 24
321	On the molecular effect in hydrogen molecular ions penetration through thin films. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012 , 287, 46-50	1.2 2
320	Cooperative effect of electronic and nuclear stopping on ion irradiation damage in silica. <i>Journal of Physics D: Applied Physics</i> , 2012 , 45, 505305	3 34
319	Primary radiation defect production in polyethylene and cellulose. <i>Journal of Physical Chemistry B</i> , 2012 , 116, 13932-8	3.4 18

318	Molecular dynamics of irradiation-induced defect production in GaN nanowires. <i>Physical Review B</i> , 2012 , 86,	3.3	13
317	Combined experimental and computational study of the recrystallization process induced by electronic interactions of swift heavy ions with silicon carbide crystals. <i>Physical Review B</i> , 2012 , 86,	3.3	69
316	First-principles and empirical potential simulation study of intrinsic and carbon-related defects in silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012 , 9, 1968-1973		
315	Bond order potential for gold. <i>European Physical Journal B</i> , 2012 , 85, 1	1.2	12
314	Roughness of glancing angle deposited titanium thin films: an experimental and computational study. <i>Nanotechnology</i> , 2012 , 23, 385708	3.4	27
313	Defect model for the dependence of breakdown rate on external electric fields. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2012 , 15,		25
312	Atomistic Simulation of the Explosion Welding Process. <i>Advanced Engineering Materials</i> , 2012 , 14, 265-268,	9.5	11
311	Reactive force field potential for carbon deposition on silicon surfaces. <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 395004	1.8	7
310	Atomic-scale effects behind structural instabilities in Si lamellae during ion beam thinning. <i>AIP Advances</i> , 2012 , 2, 012186	1.5	7
309	Influence of the picosecond defect distribution on damage accumulation in irradiated Fe. <i>Physical Review B</i> , 2012 , 85,	3.3	43
308	Implantation of keV-energy argon clusters and radiation damage in diamond. <i>Physical Review B</i> , 2012 , 85,	3.3	4
307	Analytical model of dislocation nucleation on a near-surface void under tensile surface stress. <i>Philosophical Magazine</i> , 2012 , 92, 3994-4010	1.6	11
306	Atomistic simulation of damage production by atomic and molecular ion irradiation in GaN. <i>Journal of Applied Physics</i> , 2012 , 112, 043517	2.5	12
305	Atomistic modeling of metal surfaces under electric fields: direct coupling of electric fields to a molecular dynamics algorithm. <i>Physical Review E</i> , 2011 , 83, 026704	2.4	41
304	Atomistic simulations of fracture in silica glass through hypervelocity impact. <i>Europhysics Letters</i> , 2011 , 96, 16005	1.6	11
303	The effect of prolonged irradiation on defect production and ordering in Fe-Cr and Fe-Ni alloys. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 355007	1.8	32
302	Molecular dynamics of single-particle impacts predicts phase diagrams for large scale pattern formation. <i>Nature Communications</i> , 2011 , 2, 276	17.4	149
301	Structure of Si/Ge nanoclusters: Kinetics and thermodynamics. <i>Computational Materials Science</i> , 2011 , 50, 1504-1508	3.2	3

300	Electronic processes in molecular dynamics simulations of nanoscale metal tips under electric fields. <i>Computational Materials Science</i> , 2011 , 50, 2075-2079	3.2	20
299	Development of interatomic ReaxFF potentials for Au-S-C-H systems. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 10315-22	2.8	64
298	Primary radiation damage in bcc Fe and Fe/Cr crystals containing dislocation loops. <i>Journal of Nuclear Materials</i> , 2011 , 417, 1063-1066	3.3	22
297	Review on the EFDA programme on tungsten materials technology and science. <i>Journal of Nuclear Materials</i> , 2011 , 417, 463-467	3.3	139
296	Production of defects in hexagonal boron nitride monolayer under ion irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2011 , 269, 1327-1331	1.2	43
295	A One-Dimensional Particle-in-Cell Model of Plasma Build-Up in Vacuum Arcs. <i>Contributions To Plasma Physics</i> , 2011 , 51, 5-21	1.4	38
294	Optimization of large amorphous silicon and silica structures for molecular dynamics simulations of energetic impacts. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2011 , 269, 1568-1571	1.2	7
293	Modelling the erosion of beryllium carbide surfaces. <i>Journal of Nuclear Materials</i> , 2011 , 414, 1-7	3.3	7
292	Molecular dynamics simulations of nanoscale metal tips under electric fields. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2011 , 269, 1748-1751	1.2	8
291	Mechanism of swift chemical sputtering: Comparison of Be/C/W dimer bond breaking. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2011 , 269, 1257-1261	1.2	8
290	The effect of plasma impurities on the sputtering of tungsten carbide. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 085002	1.8	8
289	Dislocation nucleation from near surface void under static tensile stress in Cu. <i>Journal of Applied Physics</i> , 2011 , 110, 023509	2.5	32
288	Combined ab initio and classical potential simulation study on silicon carbide precipitation in silicon. <i>Physical Review B</i> , 2011 , 84,	3.3	16
287	Enhancement of irradiation-induced defect production in Si nanowires. <i>Journal of Applied Physics</i> , 2011 , 110, 043540	2.5	15
286	Energy dependence of processing and breakdown properties of Cu and Mo. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2011 , 14,		10
285	Measurement of two solvation regimes in water-ethanol mixtures using x-ray compton scattering. <i>Physical Review Letters</i> , 2011 , 107, 197401	7.4	44
284	Tracking defect type and strain relaxation in patterned Ge/Si(001) islands by x-ray forbidden reflection analysis. <i>Physical Review B</i> , 2011 , 84,	3.3	15
283	Nanoscale density fluctuations in swift heavy ion irradiated amorphous SiO ₂ . <i>Journal of Applied Physics</i> , 2011 , 110, 123520	2.5	25

282	Fusion materials modeling: Challenges and opportunities. <i>MRS Bulletin</i> , 2011 , 36, 216-222	3.2	49
281	Ion irradiation effects in silicon nanowires. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1354, 59		
280	Contribution of Electronic Energy Deposition to the Atomic Cascade Damage in Nanocrystals. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1264, 1		
279	Response of mechanically strained nanomaterials to irradiation: Insight from atomistic simulations. <i>Physical Review B</i> , 2010 , 82,	3.3	26
278	Amorphous defect clusters of pure Si and type inversion in Si detectors. <i>Physical Review B</i> , 2010 , 82,	3.3	9
277	Effects of ion bombardment on a two-dimensional target: Atomistic simulations of graphene irradiation. <i>Physical Review B</i> , 2010 , 81,	3.3	303
276	Stopping of energetic argon cluster ions in graphite: Role of cluster momentum and charge. <i>Physical Review B</i> , 2010 , 82,	3.3	17
275	Defects in carbon implanted silicon calculated by classical potentials and first-principles methods. <i>Physical Review B</i> , 2010 , 82,	3.3	6
274	Hydrogen interaction with point defects in tungsten. <i>Physical Review B</i> , 2010 , 82,	3.3	182
273	A Be-W interatomic potential. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 352206	1.8	22
272	Kinetics versus thermodynamics in materials modeling: The case of the di-vacancy in iron. <i>Philosophical Magazine</i> , 2010 , 90, 2585-2595	1.6	22
271	Threshold defect production in germanium determined by density functional theory molecular dynamics simulations. <i>Physica Scripta</i> , 2010 , 81, 035601	2.6	26
270	Mechanism of surface modification in the plasma-surface interaction in electrical arcs. <i>Physical Review B</i> , 2010 , 81,	3.3	30
269	Classical molecular dynamics simulations of hypervelocity nanoparticle impacts on amorphous silica. <i>Physical Review B</i> , 2010 , 81,	3.3	19
268	Molecular Dynamics Simulations of Deuterium Trapping and Re-emission in Tungsten Carbide□	3.8	19
267	Effect of iron nanoparticle geometry on the energetics of carbon interstitials. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, NA-NA		1
266	Defect-induced junctions between single- or double-wall carbon nanotubes and metal crystals. <i>Nanoscale</i> , 2010 , 2, 901-5	7.7	18
265	Simulation of cascades in tungsten□helium. <i>Philosophical Magazine</i> , 2010 , 90, 3581-3589	1.6	26

264	Ion-irradiation-induced amorphization of cobalt nanoparticles. <i>Physical Review B</i> , 2010 , 81,	3.3	42
263	Growing multiple layers of porous semiconductors Å molecular-dynamics study. <i>Europhysics Letters</i> , 2010 , 91, 26002	1.6	
262	Ion and electron irradiation-induced effects in nanostructured materials. <i>Journal of Applied Physics</i> , 2010 , 107, 071301	2.5	759
261	Comparison of empirical interatomic potentials for iron applied to radiation damage studies. <i>Journal of Nuclear Materials</i> , 2010 , 406, 19-38	3.3	179
260	Amorphization of Åquartz and comparative study of defects in amorphized quartz and Si nanocrystals embedded in amorphous silica. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2010 , 268, 3095-3098	1.2	1
259	Density evolution in formation of swift heavy ion tracks in insulators. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2010 , 268, 3163-3166	1.2	22
258	Stopping of energetic cobalt clusters and formation of radiation damage in graphite. <i>Physical Review B</i> , 2009 , 80,	3.3	30
257	Damage production in nanoparticles under light ion irradiation. <i>Physical Review B</i> , 2009 , 80,	3.3	10
256	Amorphization of Ge and Si nanocrystals embedded in amorphous SiO ₂ by ion irradiation. <i>Physical Review B</i> , 2009 , 80,	3.3	28
255	Comment on ÅNanoindentation hardness anisotropy of alumina crystal: A molecular dynamics study[Appl. Phys. Lett. 92, 161904 (2008)]. <i>Applied Physics Letters</i> , 2009 , 94, 146101	3.4	1
254	Irradiation-induced densification of cluster-assembled thin films. <i>Physical Review B</i> , 2009 , 79,	3.3	16
253	Quantum and Classical Molecular Dynamics Studies of the Threshold Displacement Energy in Si Bulk and Nanowire. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1181, 72		4
252	Fast three dimensional migration of He clusters in bcc Fe and FeCr alloys. <i>Journal of Applied Physics</i> , 2009 , 105, 103509	2.5	72
251	Improvement of surface processes modelling in the ERO code. <i>Journal of Nuclear Materials</i> , 2009 , 390-391, 175-178	3.3	2
250	Amorphization of Ge nanocrystals embedded in amorphous silica under ion irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009 , 267, 1235-1238	1.2	17
249	Assessment of the relation between ion beam mixing, electron-phonon coupling and damage production in Fe. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009 , 267, 1830-1836	1.2	36
248	Growth of single-walled carbon nanotubes from sharp metal tips. <i>Small</i> , 2009 , 5, 2710-5	11	24
247	Molecular dynamics simulations of the structure of latent tracks in quartz and amorphous SiO ₂ . <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009 , 267, 1456-1459	1.2	39

246	Atomic flows, coronas and cratering in Au, Si and . <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009 , 267, 1420-1423	1.2	7
245	Transition from atomistic to macroscopic cluster stopping in Au. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009 , 267, 2980-2986	1.2	10
244	Modelling radiation effects using the ab-initio based tungsten and vanadium potentials. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009 , 267, 3204-3208	1.2	63
243	Molecular dynamics simulations of collision cascades in FeCrHe. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009 , 267, 3420-3423	1.2	11
242	Molecular dynamics simulation of defect formation and precipitation in heavily carbon doped silicon. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2009 , 159-160, 149-152	3.1	3
241	The EU programme for modelling radiation effects in fusion reactor materials: An overview of recent advances and future goals. <i>Journal of Nuclear Materials</i> , 2009 , 386-388, 1-7	3.3	66
240	Interatomic potentials for the Be-C-H system. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 445002	1.8	43
239	Pinning of size-selected Co clusters on highly ordered pyrolytic graphite. <i>European Physical Journal D</i> , 2009 , 52, 107-110	1.3	10
238	Chemical sputtering of Be due to D bombardment. <i>New Journal of Physics</i> , 2009 , 11, 123017	2.9	56
237	Molecular Dynamic simulations of a double-walled carbon nanotube motor subjected to a sinusoidally varying electric field. <i>Computational Materials Science</i> , 2009 , 44, 979-987	3.2	10
236	Molecular dynamics simulations of Si/Ge cluster condensation. <i>Computational Materials Science</i> , 2009 , 47, 456-459	3.2	17
235	Partial melting mechanisms of embedded nanocrystals. <i>Physical Review B</i> , 2009 , 79,	3.3	12
234	Simulations of cementite: An analytical potential for the Fe-C system. <i>Physical Review B</i> , 2009 , 79,	3.3	66
233	Modeling of film growth by cluster deposition: The effect of size and energy. <i>Physical Review B</i> , 2009 , 79,	3.3	12
232	From multiply twinned to fcc nanoparticles via irradiation-induced transient amorphization. <i>Europhysics Letters</i> , 2009 , 85, 26001	1.6	23
231	Dynamic charge-transfer bond-order potential for gallium nitride. <i>Philosophical Magazine</i> , 2009 , 89, 3477-3497	1.6	17
230	Low energy cluster deposition of nanoalloys. <i>Journal of Applied Physics</i> , 2009 , 106, 063516	2.5	7
229	Nanocluster and Nanovoid Formation by Ion Implantation. <i>Particle Acceleration and Detection</i> , 2009 , 239-249	0.5	

228	Origin of complex impact craters on native oxide coated silicon surfaces. <i>Physical Review B</i> , 2008 , 77,	3.3	52
227	Fine structure in swift heavy ion tracks in amorphous SiO ₂ . <i>Physical Review Letters</i> , 2008 , 101, 175503	7.4	220
226	Atomistic simulation of the transition from atomistic to macroscopic cratering. <i>Physical Review Letters</i> , 2008 , 101, 027601	7.4	54
225	Threshold defect production in silicon determined by density functional theory molecular dynamics simulations. <i>Physical Review B</i> , 2008 , 78,	3.3	120
224	Atomistic simulation of the interface structure of Si nanocrystals embedded in amorphous silica. <i>Physical Review B</i> , 2008 , 77,	3.3	70
223	Emergence of non-linear effects in nanocluster collision cascades in amorphous silicon. <i>New Journal of Physics</i> , 2008 , 10, 023013	2.9	10
222	Enhanced sputtering from nanoparticles and thin films: Size effects. <i>Europhysics Letters</i> , 2008 , 82, 26002	1.6	57
221	The diffusion of carbon atoms inside carbon nanotubes. <i>New Journal of Physics</i> , 2008 , 10, 023022	2.9	38
220	Plastic deformation of single nanometer-sized crystals. <i>Physical Review Letters</i> , 2008 , 101, 156101	7.4	59
219	Atomistic modelling of the interface structure of Si nanocrystals in silica. <i>Journal of Physics: Conference Series</i> , 2008 , 100, 052023	0.3	1
218	Molecular dynamics simulations of C ₂ , C ₂ H, C ₂ H ₂ , C ₂ H ₃ , C ₂ H ₄ , C ₂ H ₅ , and C ₂ H ₆ bombardment of diamond (1 1 1) surfaces. <i>Journal of Nuclear Materials</i> , 2008 , 375, 270-274	3.3	19
217	Molecular dynamics for ion beam analysis. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008 , 266, 1886-1891	1.2	6
216	Cluster ion-solid interactions from meV to MeV energies. <i>Applied Physics A: Materials Science and Processing</i> , 2008 , 91, 561-566	2.6	27
215	Simulation of displacement cascades in Fe ₉₀ Cr ₁₀ using a two band model potential. <i>Journal of Nuclear Materials</i> , 2008 , 372, 312-317	3.3	50
214	Pair potential for Fe-Fe. <i>Journal of Nuclear Materials</i> , 2008 , 382, 143-146	3.3	81
213	The effect of Cr concentration on radiation damage in Fe-Cr alloys. <i>Journal of Nuclear Materials</i> , 2008 , 382, 24-30	3.3	56
212	Interatomic potentials for simulating radiation damage effects in metals. <i>Comptes Rendus Physique</i> , 2008 , 9, 343-352	1.4	26
211	Development of a ReaxFF description for gold. <i>European Physical Journal B</i> , 2008 , 66, 75-79	1.2	53

210	Molecular dynamics simulation of pressure dependence of cluster growth in inert gas condensation. <i>Physical Review B</i> , 2007 , 75,	3.3	42
209	Atomistic simulations of irradiation effects in carbon nanotubes: an overview. <i>Radiation Effects and Defects in Solids</i> , 2007 , 162, 157-169	0.9	14
208	Simulation of threshold displacement energies in FeCr. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 255, 75-77	1.2	33
207	Comparison of silicon potentials for cluster bombardment simulations. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 255, 253-258	1.2	17
206	Light and heavy ion effects on damage clustering in GaAs quantum wells. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 257, 324-327	1.2	8
205	Radiation damage in WC studied with MD simulations. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 257, 614-617	1.2	10
204	Comparative study of cascade damage in Fe simulated with recent potentials. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 259, 853-860	1.2	85
203	Dynamics of cluster induced sputtering in gold. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 263, 375-388	1.2	22
202	Modelling irradiation effects in fusion materials. <i>Fusion Engineering and Design</i> , 2007 , 82, 2413-2421	1.7	40
201	Crater annihilation on silver by cluster ion impacts. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 255, 259-264	1.2	9
200	Hydrocarbon radicals interaction with amorphous carbon surfaces. <i>Journal of Nuclear Materials</i> , 2007 , 363-365, 1283-1288	3.3	18
199	Dynamic Monte-Carlo modeling of hydrogen isotope reactive-diffusive transport in porous graphite. <i>Journal of Nuclear Materials</i> , 2007 , 367-370, 1238-1242	3.3	10
198	MD simulations of the cluster beam deposition of porous Ge. <i>European Physical Journal D</i> , 2007 , 43, 165-168	1.6	6
197	Argon cluster impacts on layered silicon, silica, and graphite surfaces. <i>European Physical Journal D</i> , 2007 , 43, 181-184	1.3	19
196	Effect of the porous structure of graphite on atomic hydrogen diffusion and inventory. <i>Nuclear Fusion</i> , 2007 , 47, 1656-1663	3.3	15
195	Annihilation of craters: Molecular dynamic simulations on a silver surface. <i>Physical Review B</i> , 2007 , 76,	3.3	4
194	Structural modification of a multiply twinned nanoparticle by ion irradiation: A molecular dynamics study. <i>Journal of Applied Physics</i> , 2007 , 102, 124304	2.5	14
193	Contact epitaxy by deposition of Cu, Ag, Au, Pt, and Ni nanoclusters on (100) surfaces: Size limits and mechanisms. <i>Physical Review B</i> , 2007 , 75,	3.3	41

192	Origin of nonlinear sputtering during nanocluster bombardment of metals. <i>Physical Review B</i> , 2007 , 76,	3.3	30
191	Nondislocation origin of GaAs nanoindentation pop-in event. <i>Physical Review Letters</i> , 2007 , 98, 045502	7.4	58
190	Defect cores investigated by x-ray scattering close to forbidden reflections in silicon. <i>Physical Review Letters</i> , 2007 , 99, 225504	7.4	16
189	Relative abundance of single and double vacancies in irradiated single-walled carbon nanotubes. <i>Applied Physics Letters</i> , 2007 , 91, 173109	3.4	41
188	Fusion tritons and plasma-facing components in a fusion reactor. <i>Europhysics Letters</i> , 2007 , 78, 65002	1.6	4
187	Molecular dynamics simulations of hydrogen bombardment of tungsten carbide surfaces. <i>Physical Review B</i> , 2007 , 75,	3.3	25
186	Kinetic Monte Carlo Simulations of the Response of Carbon Nanotubes to Electron Irradiation. <i>Journal of Computational and Theoretical Nanoscience</i> , 2007 , 4, 1153-1159	0.3	17
185	Modelling of Radiation Damage in Fe-Cr Alloys. <i>Journal of ASTM International</i> , 2007 , 4, 100692		20
184	Ultrafast dynamics of Ni ⁺ -irradiated and annealed GaInAs/InP multiple quantum wells. <i>Journal Physics D: Applied Physics</i> , 2006 , 39, 2659-2663	3	6
183	Effects of heavy-ion and light-ion irradiation on the room temperature carrier dynamics of InGaAs/GaAs quantum wells. <i>Semiconductor Science and Technology</i> , 2006 , 21, 661-664	1.8	10
182	Application of molecular dynamics for low-energy ion implantation in crystalline silicon. <i>Journal of Vacuum Science & Technology B</i> , 2006 , 24, 462		2
181	Electronic stopping power calculation method for molecular dynamics simulations using local Firsov and free electron-gas models. <i>Radiation Effects and Defects in Solids</i> , 2006 , 161, 511-521	0.9	11
180	Multi-scale modeling of hydrogen isotope transport in porous graphite. <i>Journal of Plasma Physics</i> , 2006 , 72, 799	2.7	2
179	Anisotropic elasticity of IVB transition-metal mononitrides determined by ab initio calculations. <i>Physical Review B</i> , 2006 , 73,	3.3	41
178	Major elemental asymmetry and recombination effects in irradiated WC. <i>Physical Review B</i> , 2006 , 74,	3.3	6
177	Contact epitaxy in multiple cluster deposition. <i>Applied Physics Letters</i> , 2006 , 89, 253109	3.4	10
176	Damage production in GaAs and GaAsN induced by light and heavy ions. <i>Journal of Applied Physics</i> , 2006 , 100, 053516	2.5	20
175	Energetics, structure, and long-range interaction of vacancy-type defects in carbon nanotubes: Atomistic simulations. <i>Physical Review B</i> , 2006 , 74,	3.3	178

174	Analytic bond-order potential for atomistic simulations of zinc oxide. <i>Journal of Physics Condensed Matter</i> , 2006 , 18, 6585-6605	1.8	57
173	Binding a carbon nanotube to the Si(100) surface using ion irradiation in atomistic simulation study. <i>New Journal of Physics</i> , 2006 , 8, 115-115	2.9	5
172	The Depths of Hydrogen and Helium Bubbles in Tungsten: A Comparison. <i>Fusion Science and Technology</i> , 2006 , 50, 43-57	1.1	49
171	Swift chemical sputtering of covalently bonded materials. <i>Pure and Applied Chemistry</i> , 2006 , 78, 1203-1211	1.1	25
170	Atomistic simulations of plasma-wall interactions in fusion reactors. <i>Physica Scripta</i> , 2006 , T124, 53-57	2.6	5
169	Size dependent epitaxial cluster deposition: The effect of deposition energy. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006 , 242, 161-163	1.2	20
168	Molecular dynamics simulations of helium cluster formation in tungsten. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006 , 244, 377-391	1.2	112
167	Molecular dynamics simulations of threshold displacement energies in Fe. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006 , 246, 322-332	1.2	135
166	Displacement cascades in Fe: A molecular dynamics study. <i>Journal of Nuclear Materials</i> , 2006 , 349, 119-132	3.3	97
165	H, He, Ne, Ar-bombardment of amorphous hydrocarbon structures. <i>Journal of Nuclear Materials</i> , 2006 , 357, 1-8	3.3	20
164	Effect of the interatomic potential on the features of displacement cascades in Fe: A molecular dynamics study. <i>Journal of Nuclear Materials</i> , 2006 , 351, 65-77	3.3	83
163	Methane production from ATJ graphite by slow atomic and molecular D ions: Evidence for projectile molecule-size-dependent yields at low energies. <i>Journal of Nuclear Materials</i> , 2006 , 357, 9-18	3.3	23
162	Multiple scattering of MeV ions: Comparison between the analytical theory and Monte-Carlo and molecular dynamics simulations. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006 , 249, 823-827	1.2	31
161	Sticking of atomic hydrogen on the tungsten (0 0 1) surface. <i>Surface Science</i> , 2006 , 600, 3167-3174	1.8	36
160	Molecular dynamics with phase-shift-based electronic stopping for calibration of ion implantation profiles in crystalline silicon. <i>Thin Solid Films</i> , 2006 , 504, 121-125	2.2	4
159	Evidence for native-defect donors in n-type ZnO. <i>Physical Review Letters</i> , 2005 , 95, 225502	7.4	420
158	Analytical interatomic potential for modeling nonequilibrium processes in the W-Cu system. <i>Journal of Applied Physics</i> , 2005 , 98, 123520	2.5	213
157	Strings and interstitials in liquids, glasses and crystals. <i>Europhysics Letters</i> , 2005 , 71, 625-631	1.6	87

156	Multiwalled carbon nanotubes as apertures and conduits for energetic ions. <i>Physical Review B</i> , 2005 , 71,	3.3	46
155	Measurement of Si 311 defect properties using x-ray scattering. <i>Journal of Applied Physics</i> , 2005 , 98, 073529	2.5	4
154	Two-band modeling of ϵ prime phase formation in Fe-Cr. <i>Physical Review B</i> , 2005 , 72,	3.3	175
153	Multi-scale modeling of hydrogen isotope transport in porous graphite. <i>Journal of Nuclear Materials</i> , 2005 , 337-339, 580-584	3.3	15
152	Channeling of heavy ions through multi-walled carbon nanotubes. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 228, 21-25	1.2	25
151	Segregation in SiGe clusters. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 228, 51-56	1.2	10
150	A molecular dynamics study of the clustering of implanted potassium in multiwalled carbon nanotubes. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 240, 810-818	1.2	14
149	Irradiation-assisted substitution of carbon atoms with nitrogen and boron in single-walled carbon nanotubes. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 228, 31-36	1.2	27
148	Inherent surface roughening as a limiting factor in epitaxial cluster deposition. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 228, 69-74	1.2	13
147	Irradiation-induced stiffening of carbon nanotube bundles. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 228, 142-145	1.2	40
146	The effect of interatomic potential in molecular dynamics simulation of low energy ion implantation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 228, 240-244	1.2	6
145	He, Ne, Ar-bombardment of carbon first wall structures. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 228, 319-324	1.2	4
144	A quantitative and comparative study of sputtering yields in Au. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 239, 331-346	1.2	51
143	Point Defects in Metals 2005 , 1855-1876		2
142	Ion irradiation-induced welding of a carbon nanotube to a Si (100) surface. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 908, 1		
141	Difference in formation of hydrogen and helium clusters in tungsten. <i>Applied Physics Letters</i> , 2005 , 87, 163113	3.4	134
140	Fragmentation of clusters sputtered from silver and gold: Molecular dynamics simulations. <i>Physical Review B</i> , 2005 , 71,	3.3	29
139	B and N ion implantation into carbon nanotubes: Insight from atomistic simulations. <i>Physical Review B</i> , 2005 , 71,	3.3	84

138	Low-energy deposition of Co onto Co islands on Ag(100): Effect on submonolayer growth. <i>Physical Review B</i> , 2005 , 71,	3.3	5
137	Deposition energy dependence in cluster-assembled thin film densities. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 908, 1		1
136	Point Defects in Metals 2005 , 1855-1876		
135	Structure and stability of non-molecular nitrogen at ambient pressure. <i>Europhysics Letters</i> , 2004 , 65, 400-406	1.6	17
134	Evolution of Cu nanoclusters on Cu(100). <i>Journal of Physics Condensed Matter</i> , 2004 , 16, 2995-3003	1.8	21
133	Carbon nanotube mats and fibers with irradiation-improved mechanical characteristics: a theoretical model. <i>Physical Review Letters</i> , 2004 , 93, 215503	7.4	60
132	Improved mechanical load transfer between shells of multiwalled carbon nanotubes. <i>Physical Review B</i> , 2004 , 70,	3.3	126
131	Simulations of the Initial Stages of Blistering in Helium Implanted Tungsten. <i>Physica Scripta</i> , 2004 , 95	2.6	50
130	Molecular dynamics study on stopping powers of channeled He and Li ions in Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 217, 25-32	1.2	3
129	Ion beam induced coherent displacement in Al on Au system. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 216, 308-312	1.2	3
128	Irradiation effects in carbon nanotubes. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 216, 355-366	1.2	181
127	Atomistic simulation of radiation effects in carbon-based materials and nitrides. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 218, 9-18	1.2	9
126	Monte Carlo simulations of multiple scattering effects in ERD measurements. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 219-220, 1058-1061	1.2	11
125	Cooperative mixing induced surface roughening in bilayer metals: a possible novel surface damage mechanism. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 222, 525-532	1.2	9
124	Adsorption and migration of carbon adatoms on carbon nanotubes: Density-functional ab initio and tight-binding studies. <i>Physical Review B</i> , 2004 , 69,	3.3	102
123	Mechanical properties of carbon nanotubes with vacancies and related defects. <i>Physical Review B</i> , 2004 , 70,	3.3	303
122	Adsorption and migration of carbon adatoms on zigzag carbon nanotubes. <i>Carbon</i> , 2004 , 42, 1021-1025	10.4	45
121	Multi-scale modeling of hydrogen isotope diffusion in graphite. <i>Contributions To Plasma Physics</i> , 2004 , 44, 307-310	1.4	20

120	Molecular dynamics simulation of Ge surface segregation. <i>Thin Solid Films</i> , 2004 , 464-465, 95-98	2.2	2
119	Molecular dynamics simulations of CH ₃ sticking on carbon surfaces, angular and energy dependence. <i>Journal of Nuclear Materials</i> , 2004 , 334, 65-70	3.3	11
118	What is the real driving force of bilayer ion beam mixing?. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 226, 517-530	1.2	15
117	Ion ranges and irradiation-induced defects in multiwalled carbon nanotubes. <i>Journal of Applied Physics</i> , 2004 , 96, 2864-2871	2.5	73
116	Modeling of the Diffusion of Hydrogen in Porous Graphite. <i>Physica Scripta</i> , 2004 , 85	2.6	15
115	What is the real driving force of bilayer ion beam mixing?. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 226, 517-530	1.2	2
114	Effects of the surface structure and cluster bombardment on the self-sputtering of molybdenum. <i>Journal of Physics Condensed Matter</i> , 2003 , 15, 5845-5855	1.8	14
113	Molecular dynamics simulation method for calculating fluence-dependent range profiles. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 202, 132-137	1.2	2
112	Molecular dynamics study of defect formation in GaN cascades. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 202, 93-99	1.2	53
111	Nonequilibrium self-organization in alloys under irradiation leading to the formation of nanocomposites. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 202, 206-216	1.2	11
110	Making junctions between carbon nanotubes using an ion beam. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 202, 224-229	1.2	20
109	Stopping of energetic ions in carbon nanotubes. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 206, 18-21	1.2	24
108	Heat spike effect on the straggling of cluster implants. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 206, 61-65	1.2	3
107	Burrowing of cobalt nanoclusters in copper. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 206, 66-70	1.2	1
106	Atomic fingers, bridges and slingshots: formation of exotic surface structures during ion irradiation of heavy metals. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 206, 189-193	1.2	24
105	Molecular dynamics study on Si ₂₀ cluster deposition on Si(001). <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 212, 281-285	1.2	5
104	Au irradiation by 25-keV Aun (n=185600) clusters. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 212, 286-290	1.2	12
103	Explicit phase shift factor stopping model for multi-component targets. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 212, 118-122	1.2	7

102	Does the thermal spike affect low energy ion-induced interfacial mixing?. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 211, 524-532	1.2	14
101	Implantation angle dependence of ion irradiation damage in GaN. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2003 , 105, 111-113	3.1	9
100	Upper size limit of complete contact epitaxy. <i>Thin Solid Films</i> , 2003 , 425, 297-303	2.2	25
99	Molecular dynamics simulations of CH ₃ sticking on carbon first wall structures. <i>Journal of Nuclear Materials</i> , 2003 , 313-316, 52-55	3.3	12
98	Molecular dynamics studies of the sputtering of divertor materials. <i>Journal of Nuclear Materials</i> , 2003 , 313-316, 404-407	3.3	16
97	Structural investigation of keV Ar-ion-induced surface ripples in Si by cross-sectional transmission electron microscopy. <i>Physical Review B</i> , 2003 , 67,	3.3	73
96	Magnetic properties and diffusion of adatoms on a graphene sheet. <i>Physical Review Letters</i> , 2003 , 91, 017202	7.4	391
95	Modelling of compound semiconductors: analytical bond-order potential for gallium, nitrogen and gallium nitride. <i>Journal of Physics Condensed Matter</i> , 2003 , 15, 5649-5662	1.8	174
94	Simulations of dynamical stabilization of Ag/Cu nanocomposites by ion-beam processing. <i>Journal of Applied Physics</i> , 2003 , 93, 2917-2923	2.5	52
93	Atomic-scale simulations of radiation effects in GaN and carbon nanotubes. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 792, 440		
92	Molecular dynamics simulations of CH ₃ sticking on carbon surfaces. <i>Journal of Applied Physics</i> , 2003 , 93, 1826-1831	2.5	17
91	Molecular dynamics study of damage accumulation in GaN during ion beam irradiation. <i>Physical Review B</i> , 2003 , 68,	3.3	87
90	Heat spike effect on the straggling of cluster implants. <i>Physical Review B</i> , 2003 , 68,	3.3	19
89	Mechanism of Co nanocluster burrowing on Cu(100). <i>Physical Review B</i> , 2003 , 67,	3.3	16
88	Computational materials science of ion irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002 , 188, 41-48	1.2	13
87	Molecular dynamics simulation of ion-beam-amorphization of Si, Ge and GaAs. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002 , 193, 294-298	1.2	23
86	Ion-irradiation-induced defects in bundles of carbon nanotubes. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002 , 193, 603-608	1.2	83
85	Effects of damage build-up in range profiles in crystalline Si; Molecular dynamics simulations. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002 , 195, 269-280	1.2	13

84	Recent Developments in Monte Carlo Codes for Edge Plasma Studies. <i>Contributions To Plasma Physics</i> , 2002 , 42, 145-156	1.4	1
83	Tight-Binding Atomistic Simulations of Hydrocarbon Sputtering by Hyperthermal Ions in Tokamak Divertors. <i>Contributions To Plasma Physics</i> , 2002 , 42, 451-457	1.4	4
82	Obtaining Distributions of Plasma Impurities Using Atomistic Simulations. <i>Contributions To Plasma Physics</i> , 2002 , 42, 458-463	1.4	9
81	Enhanced erosion of tungsten by atom clusters. <i>Journal of Nuclear Materials</i> , 2002 , 305, 60-65	3.3	6
80	Signatures of irradiation-induced defects in scanning-tunneling microscopy images of carbon nanotubes. <i>Physics of the Solid State</i> , 2002 , 44, 470-472	0.8	11
79	Modeling the metal-semiconductor interaction: Analytical bond-order potential for platinum-carbon. <i>Physical Review B</i> , 2002 , 65,	3.3	130
78	Reduced chemical sputtering of carbon by silicon doping. <i>Journal of Applied Physics</i> , 2002 , 92, 2216-2218	2.5	8
77	Carbon nanotubes as masks against ion irradiation: An insight from atomistic simulations. <i>Applied Physics Letters</i> , 2002 , 81, 1101-1103	3.4	36
76	Stability of irradiation-induced point defects on walls of carbon nanotubes. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002 , 20, 728		49
75	Modeling of compound semiconductors: Analytical bond-order potential for Ga, As, and GaAs. <i>Physical Review B</i> , 2002 , 66,	3.3	119
74	Ion-irradiation-induced welding of carbon nanotubes. <i>Physical Review B</i> , 2002 , 66,	3.3	128
73	Amorphization mechanism and defect structures in ion-beam-amorphized Si, Ge, and GaAs. <i>Physical Review B</i> , 2002 , 65,	3.3	74
72	Diffuse x-ray scattering from 311 defects in Si. <i>Journal of Applied Physics</i> , 2002 , 91, 2978-2983	2.5	8
71	Sputtering of amorphous hydrogenated carbon by hyperthermal ions as studied by tight-binding molecular dynamics. <i>Computational Materials Science</i> , 2002 , 25, 427-434	3.2	24
70	Production of defects in supported carbon nanotubes under ion irradiation. <i>Physical Review B</i> , 2002 , 65,	3.3	183
69	Recent Developments in Monte Carlo Codes for Edge Plasma Studies 2002 , 42, 145		1
68	Obtaining Distributions of Plasma Impurities Using Atomistic Simulations 2002 , 42, 458		1
67	Chemical sputtering of amorphous silicon carbide under hydrogen bombardment. <i>Applied Surface Science</i> , 2001 , 184, 387-390	6.7	8

66	Carbon erosion mechanisms in tokamak divertor materials: insight from molecular dynamics simulations. <i>Journal of Nuclear Materials</i> , 2001 , 290-293, 144-147	3.3	13
65	Chemical effects in collision cascades. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2001 , 175-177, 31-35	1.2	4
64	Sputtering of hydrocarbons by ion-induced breaking of chemical bonds. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2001 , 180, 77-84	1.2	15
63	Self-Interstitial Atoms at High Temperatures in Dense Metals. <i>Defect and Diffusion Forum</i> , 2001 , 188-190, 59-70	0.7	3
62	Ions mimic the impact of meteorites. <i>Physics World</i> , 2001 , 14, 22-24	0.5	8
61	Ion-induced mixing and demixing in the immiscible Ni-Ag system. <i>Physical Review B</i> , 2001 , 63,	3.3	22
60	Melting temperature effects on the size of ion-induced craters. <i>Applied Physics Letters</i> , 2001 , 79, 3624-3626	3.3	23
59	Burrowing of nanoparticles on clean metal substrates: Surface smoothing on a nanoscale. <i>Physical Review B</i> , 2001 , 64,	3.3	19
58	Determination of strain fields and composition of self-organized quantum dots using x-ray diffraction. <i>Physical Review B</i> , 2001 , 63,	3.3	143
57	Defect clustering during ion irradiation of GaAs: Insight from molecular dynamics simulations. <i>Journal of Applied Physics</i> , 2001 , 90, 1710-1717	2.5	43
56	Mechanism of electron-irradiation-induced recrystallization in Si. <i>Physical Review B</i> , 2001 , 64,	3.3	30
55	Grazing incidence diffuse x-ray scattering investigation of the properties of irradiation-induced point defects in silicon. <i>Physical Review B</i> , 2001 , 64,	3.3	44
54	Formation of ion-irradiation-induced atomic-scale defects on walls of carbon nanotubes. <i>Physical Review B</i> , 2001 , 63,	3.3	267
53	Swift chemical sputtering of amorphous hydrogenated carbon. <i>Physical Review B</i> , 2001 , 63,	3.3	110
52	Electronic stopping calculated using explicit phase shift factors. <i>Physical Review B</i> , 2001 , 63,	3.3	23
51	Cratering-energy regimes: From linear collision cascades to heat spikes to macroscopic impacts. <i>Physical Review B</i> , 2001 , 64,	3.3	64
50	Effects of Ion Irradiation on Supported Carbon Nanotubes and Nanotube-Substrate Interfaces. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 706, 1		
49	Collision cascades in metals and semiconductors: defect creation and interface behavior. <i>Journal of Nuclear Materials</i> , 2000 , 276, 194-201	3.3	27

48	Heat spike effects on ion beam mixing. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000 , 164-165, 441-452	1.2	17
47	Strain effects in Ge surface cascades. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000 , 164-165, 482-486	1.2	3
46	Strain-induced Kirkendall mixing at semiconductor interfaces. <i>Computational Materials Science</i> , 2000 , 18, 283-294	3.2	41
45	Bond-breaking mechanism of sputtering. <i>Europhysics Letters</i> , 2000 , 52, 504-510	1.6	35
44	Atomistic simulation of diffuse x-ray scattering from defects in solids. <i>Journal of Applied Physics</i> , 2000 , 88, 2278-2288	2.5	24
43	Diffuse x-ray streaks from stacking faults in Si analyzed by atomistic simulations. <i>Applied Physics Letters</i> , 2000 , 76, 846-848	3.4	19
42	Electronic stopping of Si from a three-dimensional charge distribution. <i>Physical Review B</i> , 2000 , 62, 3109-3116	3.3	27
41	Deuterium Retention in si Doped Carbon Films 2000 , 281-287		
40	Suppression of carbon erosion by hydrogen shielding during high-flux hydrogen bombardment. <i>Physical Review B</i> , 1999 , 60, R14005-R14008	3.3	47
39	Formation of stacking-fault tetrahedra in collision cascades. <i>Applied Physics Letters</i> , 1999 , 74, 2720-2722	3.4	64
38	Surface Defects and Bulk Defect Migration Produced by Ion Bombardment of Si(001). <i>Physical Review Letters</i> , 1999 , 83, 4788-4791	7.4	30
37	Burrowing of Co Nanoparticles on Clean Cu and Ag Surfaces. <i>Physical Review Letters</i> , 1999 , 83, 1163-1166	6.4	102
36	Inverse Kirkendall mixing in collision cascades. <i>Physical Review B</i> , 1999 , 59, 20-23	3.3	73
35	Coherent displacement of atoms during ion irradiation. <i>Nature</i> , 1999 , 398, 49-51	50.4	138
34	Glancing incidence diffuse X-ray scattering studies of implantation damage in Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1999 , 147, 399-409	1.2	6
33	Recoils, flows and explosions: surface damage mechanisms in metals and semiconductors during 50 eV to 10 keV ion bombardment. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1999 , 148, 74-82	1.2	41
32	Defect creation by low-energy ion bombardment on GaAs (001) and Ge (001) surfaces. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1999 , 153, 209-212	1.2	10
31	Heat spike and ballistic contributions to mixing in Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1999 , 153, 378-382	1.2	9

30	Non-equilibrium properties of GaAs interatomic potentials. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1999 , 159, 183-186	1.2	11
29	Molecular dynamics investigations of surface damage produced by kiloelectronvolt self-bombardment of solids. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1999 , 79, 795-820		258
28	Surface Smoothing upon Deposition of Nanoparticles on Single Crystalline Substrates. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 585, 21		
27	Channeling in Manufacturing Sharp Junctions: a Molecular Dynamics Study. <i>Physica Scripta</i> , 1999 , T79, 272	2.6	3
26	Defect production in collision cascades in elemental semiconductors and fcc metals. <i>Physical Review B</i> , 1998 , 57, 7556-7570	3.3	671
25	Role of Self-Interstitial Atoms on the High Temperature Properties of Metals. <i>Physical Review Letters</i> , 1998 , 80, 4201-4204	7.4	73
24	Defect production in tungsten: A comparison between field-ion microscopy and molecular-dynamics simulations. <i>Physical Review B</i> , 1998 , 58, 2361-2364	3.3	47
23	Effect of surface on defect creation by self-ion bombardment of Si(001). <i>Physical Review B</i> , 1998 , 58, 9907-9915	3.3	30
22	Mechanisms of ion beam mixing in metals and semiconductors. <i>Journal of Applied Physics</i> , 1998 , 83, 1238-1246	2.46	65
21	Role of electron-phonon coupling on collision cascade development in Ni, Pd, and Pt. <i>Physical Review B</i> , 1998 , 57, R13965-R13968	3.3	74
20	Atomic displacement processes in irradiated amorphous and crystalline silicon. <i>Applied Physics Letters</i> , 1997 , 70, 3101-3103	3.4	20
19	Hillock formation on ion-irradiated graphite surfaces. <i>Radiation Effects and Defects in Solids</i> , 1997 , 142, 459-469	0.9	5
18	Effect of Atomic Bonding on Defect Production in Collision Cascades. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 469, 113		2
17	Fully Atomistic Analysis of Diffuse X-Ray Scattering Spectra of Silicon Defects. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 469, 199		6
16	Point defect movement and annealing in collision cascades. <i>Physical Review B</i> , 1997 , 56, 2421-2431	3.3	131
15	Repulsive interatomic potentials calculated using Hartree-Fock and density-functional theory methods. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1997 , 132, 45-54	1.2	121
14	Formation of Ion Irradiation-Induced Small-Scale Defects on Graphite Surfaces. <i>Physical Review Letters</i> , 1996 , 77, 699-702	7.4	281
13	Diffuse X-Ray Scattering Study of Defects Created by keV Ion Implants in Si. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 438, 77		1

12	Diffuse X-Ray Scattering Study of Defects Created by KeV Ion Implants in Si. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 439, 89		3
11	Stopping of 5000 keV helium in tantalum, niobium, tungsten, and AISI 316L steel. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1996 , 111, 1-6	1.2	19
10	Molecular dynamics simulation of ion ranges at keV energies. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1996 , 115, 528-531	1.2	14
9	Comparison of TOF-ERDA and nuclear resonance reaction techniques for range profile measurements of keV energy implants. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1996 , 119, 533-542	1.2	120
8	Range profiles in self-ion-implanted crystalline Si. <i>Physical Review B</i> , 1995 , 52, 15170-15175	3.3	20
7	Molecular dynamics simulation of ion ranges in the 1000 keV energy range. <i>Computational Materials Science</i> , 1995 , 3, 448-456	3.2	337
6	Lifetimes in ^{15}N from gamma-ray line shapes produced in the $^2\text{H}(^{14}\text{N}, p \text{ gamma})$ and $^{14}\text{N}(\text{thermal n}, \text{ gamma})$ reactions. <i>Physical Review C</i> , 1994 , 50, 682-697	2.7	13
5	First-principles simulation of collision cascades in Si to test pair-potentials for Si-Si interaction at 10 eV. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1994 , 88, 382-386	1.2	27
4	A low-level detection system for hydrogen analysis with the reaction $^1\text{H}(^{15}\text{N}, p)^{12}\text{C}$. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1994 , 84, 105-110	1.2	30
3	Effect of the interatomic Si-Si-potential on vacancy production during ion implantation of Si. <i>Physica Scripta</i> , 1994 , T54, 34-37	2.6	23
2	Molecular dynamics investigations of surface damage produced by kiloelectronvolt self-bombardment of solids		6
1	Interface effects on heat dynamics in embedded metal nanoparticles during swift heavy ion irradiation. <i>Journal Physics D: Applied Physics</i> ,	3	2