

# Herbert M Urbassek

## List of Publications by Citations

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349  
papers

6,606  
citations

43  
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62  
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363  
ext. papers

7,196  
ext. citations

2.8  
avg, IF

6.43  
L-index

#	Paper	IF	Citations
349	Metal ablation by picosecond laser pulses: A hybrid simulation. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	204
348	A gas-flow model for the sputtering of condensed gases. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1987</b> , 22, 480-490	1.2	124
347	Sputtering of Au (111) induced by 16-keV Au cluster bombardment: Spikes, craters, late emission, and fluctuations. <i>Physical Review B</i> , <b>2000</b> , 62, 8487-8493	3.3	122
346	Influence of crystal anisotropy on elastic deformation and onset of plasticity in nanoindentation: A simulational study. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 061807	2.5	113
345	Molecular-dynamics simulation of sputtering. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1997</b> , 122, 427-441	1.2	100
344	Comparative simulation study of the structure of the plastic zone produced by nanoindentation. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2015</b> , 75, 58-75	5	92
343	Kinetic study of pulsed desorption flows into vacuum. <i>Physical Review A</i> , <b>1991</b> , 43, 6722-6734	2.6	92
342	Pair vs many-body potentials: Influence on elastic and plastic behavior in nanoindentation of fcc metals. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2009</b> , 57, 1514-1526	5	90
341	Nanoindentation and nanoscratching of iron: Atomistic simulation of dislocation generation and reactions. <i>Computational Materials Science</i> , <b>2014</b> , 90, 232-240	3.2	85
340	On laser fusion cutting of metals. <i>Journal Physics D: Applied Physics</i> , <b>1987</b> , 20, 481-488	3	81
339	Hydrodynamical instability of melt flow in laser cutting. <i>Journal Physics D: Applied Physics</i> , <b>1987</b> , 20, 140-145	3	81
338	Effect of gas-phase collisions in pulsed-laser desorption: A three-dimensional Monte Carlo simulation study. <i>Journal of Applied Physics</i> , <b>1993</b> , 73, 8544-8551	2.5	77
337	Atomistic simulation of tantalum nanoindentation: Effects of indenter diameter, penetration velocity, and interatomic potentials on defect mechanisms and evolution. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 613, 390-403	5.3	76
336	Polycrystalline iron under compression: Plasticity and phase transitions. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	76
335	Ablation by ultrashort laser pulses: Atomistic and thermodynamic analysis of the processes at the ablation threshold. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	75
334	Pressure-transmitting boundary conditions for molecular-dynamics simulations. <i>Computational Materials Science</i> , <b>2002</b> , 24, 421-429	3.2	74
333	Molecular dynamics simulation of free and forced BSA adsorption on a hydrophobic graphite surface. <i>Langmuir</i> , <b>2011</b> , 27, 12938-43	4	73

332	Finite-size effects in Fe-nanowire solid-solid phase transitions: a molecular dynamics approach. <i>Nano Letters</i> , <b>2009</b> , 9, 2290-4	11.5	70
331	The Bain versus Nishiyama-Wassermann path in the martensitic transformation of Fe. <i>New Journal of Physics</i> , <b>2009</b> , 11, 103027	2.9	68
330	Spikes in condensed rare gases induced by keV-atom bombardment. <i>Physical Review Letters</i> , <b>1991</b> , 67, 105-108	7.4	68
329	Gas-phase segregation effects in pulsed laser desorption from binary targets. <i>Physical Review Letters</i> , <b>1993</b> , 70, 1886-1889	7.4	68
328	Molecular-dynamics simulations of bulk and surface damage production in low-energy Cu-atom bombardment. <i>Journal of Applied Physics</i> , <b>1992</b> , 71, 5410-5418	2.5	67
327	Sputtering from spherical Au clusters by energetic atom bombardment. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2001</b> , 180, 293-298	1.2	65
326	Molecular-dynamics simulation of adatom formation under keV-ion bombardment of Pt(111). <i>Physical Review B</i> , <b>1994</b> , 50, 11167-11174	3.3	63
325	Au sputtering by cluster bombardment: A molecular dynamics study. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2000</b> , 164-165, 687-696	1.2	62
324	Sputtered cluster mass distributions, thermodynamic equilibrium and critical phenomena. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1988</b> , 31, 541-550	1.2	61
323	Characterization of Fe potentials with respect to the stability of the bcc and fcc phase. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2008</b> , 16, 035005	2	60
322	Linearity and additivity in cluster-induced sputtering: A molecular-dynamics study of van der Waals bonded systems. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	60
321	Pair versus many-body potentials in atomic emission processes from a Cu surface. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1992</b> , 69, 232-241	1.2	59
320	Implantation and damage under low-energy Si self-bombardment. <i>Physical Review B</i> , <b>1998</b> , 57, 4756-4763	3.3	56
319	Atom ejection from a fast-ion track: A molecular-dynamics study. <i>Physical Review B</i> , <b>1994</b> , 49, 786-795	3.3	56
318	Nanoscratching of iron: A molecular dynamics study of the influence of surface orientation and scratching direction. <i>Computational Materials Science</i> , <b>2015</b> , 103, 77-89	3.2	52
317	Contact angle of sessile drops in Lennard-Jones systems. <i>Langmuir</i> , <b>2014</b> , 30, 13606-14	4	52
316	Molecular-dynamics study of craters formed by energetic Cu cluster impact on Cu. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2000</b> , 164-165, 697-704	1.2	51
315	Reflection coefficient of low-energy light ions. <i>Physical Review B</i> , <b>1991</b> , 44, 7234-7242	3.3	51

314	Model study of keV-ion mixing of metallic interfaces: Influence of materials properties and deposited energy. <i>Physical Review B</i> , <b>1995</b> , 51, 14559-14569	3-3	49
313	Shock waves in polycrystalline iron: Plasticity and phase transitions. <i>Physical Review B</i> , <b>2014</b> , 89,	3-3	47
312	Sputtering of nanoparticles: Molecular dynamics study of Au impact on 20nm sized Au nanoparticles. <i>International Journal of Mass Spectrometry</i> , <b>2008</b> , 272, 91-97	1.9	47
311	Nanoindentation of hcp metals: a comparative simulation study of the evolution of dislocation networks. <i>Nanotechnology</i> , <b>2016</b> , 27, 045706	3-4	46
310	Sputtering of Si nanospheres. <i>Physical Review B</i> , <b>2014</b> , 90,	3-3	46
309	Monte Carlo study of Knudsen layers in evaporation from elemental and binary media. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1993</b> , 5, 243-256		45
308	Nanoindentation into a high-entropy alloy [An atomistic study. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 803, 618-624	5-7	44
307	Mechanisms of pattern formation in grazing-incidence ion bombardment of Pt(111). <i>Physical Review B</i> , <b>2006</b> , 73,	3-3	43
306	Consequences of Hydrocarbon Contamination for Wettability and Protein Adsorption on Graphite Surfaces. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 12496-12501	3.8	41
305	Visualization of ke V-ion-induced spikes in metals. <i>Radiation Effects and Defects in Solids</i> , <b>1997</b> , 142, 439-447		41
304	Phase transitions in an Fe system containing a bcc/fcc phase boundary: An atomistic study. <i>Physical Review B</i> , <b>2013</b> , 87,	3-3	40
303	Molecular-dynamics investigation of the fcc-bcc phase transformation in Fe. <i>Computational Materials Science</i> , <b>2008</b> , 41, 297-304	3-2	40
302	Energy and angular distributions of sputtered particles: A comparison between analytical theory and computer simulation results. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1988</b> , 30, 507-513	1.2	40
301	Adsorption of BMP-2 on a hydrophobic graphite surface: A molecular dynamics study. <i>Chemical Physics Letters</i> , <b>2011</b> , 510, 252-256	2.5	38
300	Cluster-size dependence of ranges of 100eV/atom Au <sub>n</sub> clusters. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2005</b> , 228, 57-63	1.2	38
299	Statistical properties of collision cascades. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1990</b> , 48, 399-403	1.2	38
298	Transformation pathways in the solid-solid phase transitions of iron nanowires. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 191909	3-4	37
297	Step edge sputtering yield at grazing incidence ion bombardment. <i>Physical Review Letters</i> , <b>2004</b> , 92, 246106	7-4	37

296	Solid-solid phase transitions and phonon softening in an embedded-atom method model for iron. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	36
295	Solid-solid phase transitions in Fe nanowires induced by axial strain. <i>Nanotechnology</i> , <b>2009</b> , 20, 325704	3.4	35
294	Atomic dynamics of explosive boiling of liquid-argon films. <i>Applied Physics B: Lasers and Optics</i> , <b>2005</b> , 81, 675-679	1.9	35
293	A phase field approach for multivariant martensitic transformations of stable and metastable phases. <i>Archive of Applied Mechanics</i> , <b>2013</b> , 83, 849-859	2.2	33
292	Monte Carlo simulation of growth and decay processes in a cluster aggregation source. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1999</b> , 17, 256-265	2.9	33
291	Atomistic Studies of Nanoindentation – Review of Recent Advances. <i>Crystals</i> , <b>2017</b> , 7, 293	2.3	32
290	COLLISIONS OF POROUS CLUSTERS: A GRANULAR-MECHANICS STUDY OF COMPACTION AND FRAGMENTATION. <i>Astrophysical Journal</i> , <b>2012</b> , 752, 151	4.7	32
289	Experimental and atomistic study of the elastic properties of $\epsilon$ -Fe $\alpha$ martensite. <i>Acta Materialia</i> , <b>2012</b> , 60, 4901-4907	8.4	32
288	Molecular-dynamics study of the $\epsilon$ - $\alpha$ phase transition in Fe $\alpha$ . <i>Computational Materials Science</i> , <b>2014</b> , 82, 399-404	3.2	30
287	Molecular dynamics study of the $\epsilon$ phase transition in Fe induced by shear deformation. <i>Acta Materialia</i> , <b>2013</b> , 61, 5979-5987	8.4	30
286	Superior regularity in erosion patterns by planar subsurface channeling. <i>Physical Review Letters</i> , <b>2006</b> , 96, 106103	7.4	30
285	Adatom formation and atomic layer growth on Al(1 1 1) by ion bombardment: experiments and molecular dynamics simulations. <i>Surface Science</i> , <b>2001</b> , 488, 346-366	1.8	30
284	Surface binding energies of alloys: a many-body approach. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1994</b> , 88, 218-228	1.2	30
283	Collision cascades as fractals. <i>Physica Scripta</i> , <b>1987</b> , 36, 689-692	2.6	30
282	Enhancing protein adsorption simulations by using accelerated molecular dynamics. <i>PLoS ONE</i> , <b>2014</b> , 8, e64883	3.7	29
281	Sputtering of a Au surface covered with large spherical clusters. <i>International Journal of Mass Spectrometry</i> , <b>2001</b> , 208, 29-35	1.9	29
280	Nanoscratching of metallic glasses – An atomistic study. <i>Tribology International</i> , <b>2019</b> , 139, 1-11	4.9	28
279	Ta cluster bombardment of graphite: molecular dynamics study of penetration and damage. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1998</b> , 145, 503-508	1.2	28

278	Ranges and fragmentation behavior of fullerene molecules: A molecular-dynamics study of the dependence on impact energy and target material. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2007</b> , 255, 247-252	1.2	28
277	Melting and fragmentation of ultra-thin metal films due to ultrafast laser irradiation: a molecular-dynamics study. <i>Journal Physics D: Applied Physics</i> , <b>2005</b> , 38, 2933-2941	3	28
276	Simulation of the influence of energetic atoms on Si homoepitaxial growth. <i>Physical Review B</i> , <b>1998</b> , 58, 2050-2054	3.3	28
275	keV-atom bombardment of condensed rare gases: molecular dynamics simulation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1993</b> , 73, 14-28	1.2	28
274	Scratching of nanocrystalline metals: A molecular dynamics study of Fe. <i>Applied Surface Science</i> , <b>2016</b> , 389, 688-695	6.7	28
273	Sputtered atom transport in high-current gas discharges: A self-consistent computer simulation study. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1993</b> , 11, 676-681	2.9	27
272	Scratching of hcp metals: A molecular-dynamics study. <i>Computational Materials Science</i> , <b>2016</b> , 113, 187-197	3.7	26
271	Sputter yield of curved surfaces. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	26
270	Interplay of plasticity and phase transformation in shock wave propagation in nanocrystalline iron. <i>New Journal of Physics</i> , <b>2014</b> , 16, 093032	2.9	26
269	Step-edge sputtering through grazing incidence ions investigated by scanning tunneling microscopy and molecular dynamics simulations. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	26
268	Influence of Tip Geometry on Nanoscratching. <i>Tribology Letters</i> , <b>2017</b> , 65, 1	2.8	25
267	Sputtering of Au by cluster impact. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2007</b> , 255, 208-213	3.3	25
266	Evolution of plasticity in nanometric cutting of Fe single crystals. <i>Applied Surface Science</i> , <b>2014</b> , 317, 6-106.7	6.7	24
265	Influence of local curvature on sputtering. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 113108	3.4	24
264	Effect of surface steps on sputtering and surface defect formation: molecular-dynamics study of 5 keV Xe+ bombardment of Pt(1 1 1) at glancing incidence angles. <i>Surface Science</i> , <b>2003</b> , 547, 315-323	1.8	24
263	Interplay of dislocation-based plasticity and phase transformation during Si nanoindentation. <i>Computational Materials Science</i> , <b>2016</b> , 119, 82-89	3.2	24
262	A LAMMPS implementation of granular mechanics: Inclusion of adhesive and microscopic friction forces. <i>Computer Physics Communications</i> , <b>2012</b> , 183, 986-992	4.2	23
261	Collision-spike Sputtering of Au Nanoparticles. <i>Nanoscale Research Letters</i> , <b>2015</b> , 10, 1009	5	23

260	Influence of phase transition on shock-induced spallation in nanocrystalline iron. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 185902	2.5	22
259	Ion-induced mixing and demixing in the immiscible Ni-Ag system. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	22
258	Preferential sputtering of alloys: a molecular-dynamics study. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1995</b> , 102, 261-271	1.2	22
257	Energy deposition, reflection and sputtering in hyperthermal rare-gas-ion bombardment. <i>Applied Physics A: Materials Science and Processing</i> , <b>1995</b> , 61, 39-43	2.6	22
256	Sputtering of a metal nanofoam by Au ions. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2015</b> , 342, 234-239	1.2	21
255	Accelerated Molecular Dynamics Study of the Effects of Surface Hydrophilicity on Protein Adsorption. <i>Langmuir</i> , <b>2016</b> , 32, 9156-62	4	21
254	Atomistic dynamics of the bcc-<math>\alpha\text{-Fe}</math> phase transition in iron: Competition of homo- and heterogeneous phase growth. <i>Computational Materials Science</i> , <b>2014</b> , 81, 170-177	3.2	21
253	Influence of electronic stopping on sputtering induced by cluster impact on metallic targets. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	21
252	Morphological changes in polycrystalline Fe after compression and release. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 085901	2.5	20
251	Accelerating Steered Molecular Dynamics: Toward Smaller Velocities in Forced Unfolding Simulations. <i>Journal of Chemical Theory and Computation</i> , <b>2016</b> , 12, 1380-4	6.4	20
250	Dislocation interactions during nanoindentation of nickel-graphene nanocomposites. <i>Computational Materials Science</i> , <b>2019</b> , 170, 109158	3.2	20
249	Effect of laser pulse width on material phenomena in ultrathin metal films irradiated by an ultrafast laser: molecular-dynamics study. <i>Journal Physics D: Applied Physics</i> , <b>2007</b> , 40, 3518-3526	3	20
248	Influence of the spatial and temporal structure of the deposited-energy distribution in swift-ion-induced sputtering. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	20
247	Shear-Transformation Zone Activation during Loading and Unloading in Nanoindentation of Metallic Glasses. <i>Materials</i> , <b>2019</b> , 12,	3.5	19
246	Probing the limitations of Sigmund's model of spatially resolved sputtering using Monte Carlo simulations. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	19
245	Short-pulse Laser Induced Transient Structure Formation and Ablation Studied with Time-resolved Coherent XUV-scattering <b>2010</b> ,		19
244	Tight-binding molecular-dynamics study of aSi:H: Preparation, structure, and dynamics. <i>Physical Review B</i> , <b>1999</b> , 60, 5478-5484	3.3	19
243	Comparison of classical and tight-binding molecular dynamics for silicon growth. <i>Physical Review B</i> , <b>1996</b> , 53, 16497-16503	3.3	19

242	Energy partitioning and particle spectra in multicomponent collision cascades. <i>Physical Review B</i> , <b>1993</b> , 47, 617-629	3.3	19
241	Crater formation caused by nanoparticle impact: A molecular dynamics study of crater volume and shape. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	18
240	Stress relaxation in aBi induced by ion bombardment. <i>Physical Review B</i> , <b>2000</b> , 62, 11219-11224	3.3	18
239	Monte Carlo description of gas flow from laser-evaporated silver. <i>Applied Physics A: Materials Science and Processing</i> , <b>1999</b> , 69, S577-S581	2.6	18
238	Nuclear sputtering of condensed diatomic gases. <i>The Journal of Physical Chemistry</i> , <b>1995</b> , 99, 15565-15572		18
237	Indentation into an Al/Si composite: enhanced dislocation mobility at interface. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 799-813	4.3	18
236	Nanoindentation tests of heavy-ion-irradiated Au foams: molecular dynamics simulation. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 225903	2.5	17
235	Preferential effects in low-energy Si bombardment of SiC. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1998</b> , 142, 287-294	1.2	17
234	Sputtering of Au (111) by 64keV/atom Au clusters. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2005</b> , 228, 75-83	1.2	17
233	Effect of binding energy and mass in cluster-induced sputtering of van-der-Waals bonded systems. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2005</b> , 228, 84-91	1.2	17
232	Dimer emission in alloy sputtering and the concept of the "clustering probability". <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1995</b> , 103, 131-138	1.2	17
231	Dislocation-based strengthening mechanisms in metal-matrix nanocomposites: a molecular dynamics study of the influence of reinforcement shape in the Al-Si system. <i>Computational Materials Science</i> , <b>2018</b> , 145, 109-115	3.2	16
230	Computer simulation of strain-induced phase transformations in thin Fe films. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2013</b> , 21, 085007	2	16
229	Cluster-induced crater formation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2009</b> , 267, 3122-3125		16
228	Effect of material stiffness on hardness: A computational study based on model potentials. <i>Philosophical Magazine</i> , <b>2009</b> , 89, 2225-2238	1.6	16
227	Collision cascades in binary media: Analytical results for power-law cross sections. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1992</b> , 69, 413-426	1.2	16
226	Nanoscratching of iron: A novel approach to characterize dislocation microstructures. <i>Computational Materials Science</i> , <b>2017</b> , 135, 181-188	3.2	15
225	The bouncing threshold in silica nanograin collisions. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 16555-16562		15



224	Ultrafast laser irradiation of spherical nanoparticles: molecular-dynamics results on fragmentation and small-angle scattering. <i>European Physical Journal D</i> , <b>2015</b> , 69, 1	1.3	15
223	Forced Desorption of Bovine Serum Albumin and Lysozyme from Graphite: Insights from Molecular Dynamics Simulation. <i>Journal of Physical Chemistry B</i> , <b>2016</b> , 120, 7889-95	3.4	15
222	Dynamics of L-Phenylalanine Sputtering by Argon Cluster Bombardment. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 7962-7970	3.8	15
221	Martensitic and austenitic phase transformations in Fe <sub>1</sub> nanowires. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2014</b> , 22, 045003	2	15
220	Why nanoprojectiles work differently than macroimpactors: the role of plastic flow. <i>Physical Review Letters</i> , <b>2012</b> , 108, 027601	7.4	15
219	Trails of kilovolt ions created by subsurface channeling. <i>Physical Review Letters</i> , <b>2010</b> , 104, 075501	7.4	15
218	Particle-in-cell simulation of the pulsed planar expansion of a fully ionized plasma off a surface. <i>Physics of Plasmas</i> , <b>2002</b> , 9, 3209-3216	2.1	15
217	Preferential sputtering of atoms and dimers from ordered and disordered Cu <sub>3</sub> Au. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1999</b> , 152, 459-471	1.2	15
216	Sputtering of large clusters: Information from mass spectra. <i>Radiation Effects and Defects in Solids</i> , <b>1989</b> , 109, 293-300	0.9	15
215	Fractal structure of collision cascades. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1990</b> , 48, 404-407	1.2	15
214	Influence of porosity on collisions between dust aggregates. <i>Astronomy and Astrophysics</i> , <b>2016</b> , 589, A30	5.1	15
213	Compaction and plasticity in nanofoams induced by shock waves: A molecular dynamics study. <i>Computational Materials Science</i> , <b>2016</b> , 119, 27-32	3.2	15
212	The elastic-plastic transition in nanoparticle collisions. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 3423-9	3.6	14
211	Impact on porous targets: penetration, crater formation, target compaction, and ejection. <i>Physical Review E</i> , <b>2012</b> , 86, 061313	2.4	14
210	Crater formation by nanoparticle impact: contributions of gas, melt and plastic flow. <i>New Journal of Physics</i> , <b>2012</b> , 14, 083016	2.9	14
209	News on sputter theory: Molecular targets, nanoparticle desorption, rough surfaces. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2011</b> , 269, 947-954	1.2	14
208	Ultrashort-pulse laser irradiation of metal films: the effect of a double-peak laser pulse. <i>Applied Physics A: Materials Science and Processing</i> , <b>2010</b> , 101, 509-515	2.6	14
207	Chemical energy release and radical formation in cluster-induced sputtering of diatomic molecular targets: a molecular-dynamics model study. <i>Physical Review Letters</i> , <b>2007</b> , 99, 027602	7.4	14

206	Ion peening and stress relaxation induced by low-energy atom bombardment of covalent solids. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	14
205	Influence of adatom coverage on sputter yield. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1996</b> , 117, 361-366	1.2	14
204	The Influence of Lubrication and the Solid-Fluid Interaction on Thermodynamic Properties in a Nanoscopic Scratching Process. <i>Langmuir</i> , <b>2019</b> , 35, 16948-16960	4	14
203	Temperature-induced phase transformation of Fe <sub>1-x</sub> Ni <sub>x</sub> alloys: molecular-dynamics approach. <i>European Physical Journal B</i> , <b>2015</b> , 88, 1	1.2	13
202	Nucleation of plasticity in nanoparticle collisions. <i>Physical Review E</i> , <b>2016</b> , 93, 063004	2.4	13
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200	Energy and angular distribution of pulsed-laser desorbed particles: the influence of a hot contribution on a cold desorbing species. <i>Journal Physics D: Applied Physics</i> , <b>1997</b> , 30, 185-193	3	13
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