

Tapio Ala-Nissila

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

348 papers	8,600 citations	46 h-index	75 g-index
369 ext. papers	9,549 ext. citations	3.5 avg, IF	6.22 L-index

#	Paper	IF	Citations
348	Collective and single particle diffusion on surfaces. <i>Advances in Physics</i> , 2002 , 51, 949-1078	18.4	455
347	Global transition path search for dislocation formation in Ge on Si(001). <i>Computer Physics Communications</i> , 2016 , 205, 13-21	4.2	203
346	Coarse-graining polymers with the MARTINI force-field: polystyrene as a benchmark case. <i>Soft Matter</i> , 2011 , 7, 698-708	3.6	186
345	On-Chip Maxwell's Demon as an Information-Powered Refrigerator. <i>Physical Review Letters</i> , 2015 , 115, 260602	7.4	177
344	Influence of polymer-pore interactions on translocation. <i>Physical Review Letters</i> , 2007 , 99, 148102	7.4	154
343	Thermodynamics of bcc metals in phase-field-crystal models. <i>Physical Review E</i> , 2009 , 80, 031602	2.4	151
342	Theory of classical surface diffusion. <i>Progress in Surface Science</i> , 1992 , 39, 227-323	6.6	140
341	Polymer translocation: the first two decades and the recent diversification. <i>Soft Matter</i> , 2014 , 10, 9016-376	3.7	132
340	The hydrophobic effect and its role in cold denaturation. <i>Cryobiology</i> , 2010 , 60, 91-9	2.7	131
339	Sequence dependence of DNA translocation through a nanopore. <i>Physical Review Letters</i> , 2008 , 100, 058101	7.4	130
338	Langevin dynamics simulations of polymer translocation through nanopores. <i>Journal of Chemical Physics</i> , 2006 , 125, 124901	3.9	121
337	Driven polymer translocation through nanopores: Slow-vs.-fast dynamics. <i>Europhysics Letters</i> , 2009 , 88, 68006	1.6	108
336	Microscopic mechanism for cold denaturation. <i>Physical Review Letters</i> , 2008 , 100, 118101	7.4	103
335	Polymer translocation through a nanopore: a two-dimensional Monte Carlo study. <i>Journal of Chemical Physics</i> , 2006 , 124, 034714	3.9	102
334	Polymer translocation through a nanopore under an applied external field. <i>Journal of Chemical Physics</i> , 2006 , 124, 114704	3.9	99
333	Kinetic Roughening in Slow Combustion of Paper. <i>Physical Review Letters</i> , 1997 , 79, 1515-1518	7.4	94
332	Scaling exponents for kinetic roughening in higher dimensions. <i>Journal of Statistical Physics</i> , 1993 , 72, 207-225	1.5	93

331	Energetics and vibrational states for hydrogen on Pt(111). <i>Physical Review Letters</i> , 2002 , 88, 136101	7.4	90
330	Dynamical scaling exponents for polymer translocation through a nanopore. <i>Physical Review E</i> , 2008 , 78, 050901	2.4	89
329	Unifying model of driven polymer translocation. <i>Physical Review E</i> , 2012 , 85, 051803	2.4	88
328	Distribution of entropy production in a single-electron box. <i>Nature Physics</i> , 2013 , 9, 644-648	16.2	86
327	Diffusion-controlled anisotropic growth of stable and metastable crystal polymorphs in the phase-field crystal model. <i>Physical Review Letters</i> , 2009 , 103, 035702	7.4	85
326	Scaling exponents of forced polymer translocation through a nanopore. <i>European Physical Journal E</i> , 2009 , 29, 423-9	1.5	79
325	Physical tests for random numbers in simulations. <i>Physical Review Letters</i> , 1994 , 73, 2513-2516	7.4	79
324	Thermal conductivity decomposition in two-dimensional materials: Application to graphene. <i>Physical Review B</i> , 2017 , 95,	3.3	78
323	Effect of kinks and concerted diffusion mechanisms on mass transport and growth on stepped metal surfaces. <i>Surface Science</i> , 1997 , 387, 167-182	1.8	77
322	Island Diffusion on Metal fcc (100) Surfaces. <i>Physical Review Letters</i> , 1999 , 82, 2733-2736	7.4	74
321	Surface growth and crossover behaviour in a restricted solid-on-solid model. <i>Journal of Physics A</i> , 1991 , 24, 5569-5586		71
320	Liquid Conservation and Nonlocal Interface Dynamics in Imbibition. <i>Physical Review Letters</i> , 1999 , 83, 1628-1631	7.4	66
319	Polymer translocation through a nanopore under a pulling force. <i>Physical Review E</i> , 2007 , 75, 061912	2.4	65
318	Influence of non-universal effects on dynamical scaling in driven polymer translocation. <i>Journal of Chemical Physics</i> , 2012 , 137, 085101	3.9	59
317	Influence of particle size and shape on turbulent heat transfer characteristics and pressure losses in water-based nanofluids. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 61, 439-448	4.9	57
316	Kinetic roughening of surfaces: Derivation, solution, and application of linear growth equations. <i>Physical Review B</i> , 1996 , 53, 8071-8082	3.3	57
315	Multiscale modeling of polycrystalline graphene: A comparison of structure and defect energies of realistic samples from phase field crystal models. <i>Physical Review B</i> , 2016 , 94,	3.3	56
314	Influence of nanoparticle size, loading, and shape on the mechanical properties of polymer nanocomposites. <i>Journal of Chemical Physics</i> , 2012 , 137, 214901	3.9	56

313	Heteropolymer translocation through nanopores. <i>Journal of Chemical Physics</i> , 2007 , 126, 145101	3.9	56
312	Influence of thermostatting on nonequilibrium molecular dynamics simulations of heat conduction in solids. <i>Journal of Chemical Physics</i> , 2019 , 151, 234105	3.9	56
311	Vibrational states of a H monolayer on the Pt(111) surface. <i>Physical Review B</i> , 2003 , 68,	3.3	55
310	Kinetic roughening in slow combustion of paper. <i>Physical Review E</i> , 2001 , 64, 036101	2.4	55
309	Nanoparticles of TiO ₂ and VO ₂ in dielectric media: Conditions for low optical scattering, and comparison between effective medium and four-flux theories. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 130, 132-137	6.4	54
308	Extended phase diagram of the three-dimensional phase field crystal model. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 205402	1.8	54
307	Diffusion of small two-dimensional Cu islands on Cu(111) studied with a kinetic Monte Carlo method. <i>Physical Review B</i> , 2006 , 73,	3.3	53
306	Three-dimensional "Mercedes-Benz" model for water. <i>Journal of Chemical Physics</i> , 2009 , 131, 054505	3.9	52
305	A MARTINI Coarse-Grained Model of a Thermoset Polyester Coating. <i>Macromolecules</i> , 2011 , 44, 6198-6208	3.5	51
304	Phase diagram and commensurate-incommensurate transitions in the phase field crystal model with an external pinning potential. <i>Physical Review E</i> , 2006 , 74, 021104	2.4	51
303	Physical models as tests of randomness. <i>Physical Review E</i> , 1995 , 52, 3205-3214	2.4	51
302	Patterning of heteroepitaxial overlayers from nano to micron scales. <i>Physical Review Letters</i> , 2012 , 108, 226102	7.4	45
301	Correct interpretation of nanofluid convective heat transfer. <i>International Journal of Thermal Sciences</i> , 2018 , 129, 504-531	4.1	44
300	Energetics and many-particle mechanisms of two-dimensional cluster diffusion on Cu(100) surfaces. <i>Physical Review B</i> , 2000 , 62, 1611-1614	3.3	44
299	Diffusive spreading of chainlike molecules on surfaces. <i>Physical Review Letters</i> , 1996 , 76, 4003-4006	7.4	43
298	A comparative study of some pseudorandom number generators. <i>Computer Physics Communications</i> , 1995 , 86, 209-226	4.2	43
297	Hydrophobicity within the three-dimensional Mercedes-Benz model: potential of mean force. <i>Journal of Chemical Physics</i> , 2011 , 134, 065106	3.9	42
296	Translocation dynamics with attractive nanopore-polymer interactions. <i>Physical Review E</i> , 2008 , 78, 061918	2.8	42

295	Scaling and noise in slow combustion of paper. <i>Physical Review Letters</i> , 2000 , 84, 1946-9	7.4	41
294	Adatom dynamics and diffusion in a model of O/W(110). <i>Physical Review B</i> , 1998 , 57, 1896-1907	3.3	41
293	Influence of pore friction on the universal aspects of driven polymer translocation. <i>Europhysics Letters</i> , 2013 , 103, 38001	1.6	40
292	Influence of hydrodynamics on many-particle diffusion in 2D colloidal suspensions. <i>European Physical Journal E</i> , 2004 , 13, 267-75	1.5	40
291	Influence of particle properties on convective heat transfer of nanofluids. <i>International Journal of Thermal Sciences</i> , 2018 , 124, 187-195	4.1	39
290	Equivalence of the equilibrium and the nonequilibrium molecular dynamics methods for thermal conductivity calculations: From bulk to nanowire silicon. <i>Physical Review B</i> , 2018 , 97,	3.3	38
289	Fluctuating lattice-Boltzmann model for complex fluids. <i>Journal of Chemical Physics</i> , 2011 , 134, 064902	3.9	38
288	Non-Arrhenius Behavior of Surface Diffusion near a Phase Transition Boundary. <i>Physical Review Letters</i> , 1997 , 79, 257-260	7.4	38
287	Dynamics and scaling of two-dimensional polymers in a dilute solution. <i>Physical Review E</i> , 2003 , 68, 050102	1.4	38
286	Fiber deposition models in two and three spatial dimensions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2000 , 165, 209-229	5.1	38
285	Memory expansion for diffusion coefficients. <i>Physical Review B</i> , 1998 , 58, 2170-2178	3.3	38
284	Spreading dynamics of polymer microdroplets: A molecular-dynamics study. <i>Physical Review E</i> , 1994 , 49, 4228-4236	2.4	38
283	Novel microstructured polyol/polystyrene composites for seasonal heat storage. <i>Applied Energy</i> , 2016 , 172, 96-106	10.7	38
282	Phase-field-crystal models and mechanical equilibrium. <i>Physical Review E</i> , 2014 , 89, 032411	2.4	36
281	Microscopic formulation of nonlocal electrostatics in polar liquids embedding polarizable ions. <i>Physical Review E</i> , 2013 , 87, 063201	2.4	36
280	Dynamical transitions and sliding friction of the phase-field-crystal model with pinning. <i>Physical Review E</i> , 2010 , 81, 011121	2.4	36
279	Dynamics of DNA translocation through an attractive nanopore. <i>Physical Review E</i> , 2008 , 78, 061911	2.4	34
278	Kapitza thermal resistance across individual grain boundaries in graphene. <i>Carbon</i> , 2017 , 125, 384-390	10.4	33

277	Iso-flux tension propagation theory of driven polymer translocation: the role of initial configurations. <i>Journal of Chemical Physics</i> , 2014 , 141, 214907	3.9	33
276	Collective effects in settling of spheroids under steady-state sedimentation. <i>Physical Review Letters</i> , 2003 , 90, 094502	7.4	33
275	Instability and wavelength selection during step flow growth of metal surfaces vicinal to fcc(001). <i>Physical Review Letters</i> , 2001 , 86, 5317-20	7.4	33
274	Preparation of paraffin and fatty acid phase changing nanoemulsions for heat transfer. <i>Thermochimica Acta</i> , 2015 , 601, 33-38	2.9	32
273	Electrostatic correlations in inhomogeneous charged fluids beyond loop expansion. <i>Journal of Chemical Physics</i> , 2012 , 137, 104902	3.9	32
272	Flame propagation in random media. <i>Physical Review E</i> , 1995 , 51, 4232-4236	2.4	32
271	Model of diffusion on deformable lattices. III. Adatom-interaction effects. <i>Physical Review B</i> , 1992 , 46, 846-854	3.3	32
270	Comment on "Phase transition in a restricted solid-on-solid surface-growth model in 2+1 dimensions". <i>Physical Review Letters</i> , 1990 , 64, 2333	7.4	32
269	Thermal transport in MoS2 from molecular dynamics using different empirical potentials. <i>Physical Review B</i> , 2019 , 99,	3.3	31
268	Polymer translocation under time-dependent driving forces: resonant activation induced by attractive polymer-pore interactions. <i>Journal of Chemical Physics</i> , 2012 , 136, 205104	3.9	31
267	Correlations between mechanical, structural, and dynamical properties of polymer nanocomposites. <i>Physical Review E</i> , 2012 , 85, 041803	2.4	31
266	Energetics and diffusion paths of gallium and arsenic adatoms on flat and stepped GaAs(001) surfaces. <i>Surface Science</i> , 1999 , 425, 31-47	1.8	31
265	Diffusion processes and growth on stepped metal surfaces. <i>Physical Review B</i> , 1995 , 52, R8715-R8720	3.3	31
264	Role of concerted atomic movements on the diffusion of small islands on fcc(100) metal surfaces. <i>Physical Review B</i> , 2001 , 64,	3.3	30
263	Memory effects and coverage dependence of surface diffusion in a model adsorption system. <i>Physical Review B</i> , 1999 , 59, 7697-7707	3.3	30
262	Homogeneous nonequilibrium molecular dynamics method for heat transport and spectral decomposition with many-body potentials. <i>Physical Review B</i> , 2019 , 99,	3.3	29
261	Aggregation in colloidal suspensions: evaluation of the role of hydrodynamic interactions by means of numerical simulations. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 14509-17	3.4	29
260	Thermal properties and convective heat transfer of phase changing paraffin nanofluids. <i>International Journal of Thermal Sciences</i> , 2017 , 117, 163-171	4.1	28

259	Turbulent heat transfer characteristics in a circular tube and thermal properties of n-decane-in-water nanoemulsion fluids and micelles-in-water fluids. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 81, 246-251	4.9	28
258	Molecular Dynamics Study of a MARTINI Coarse-Grained Polystyrene Brush in Good Solvent: Structure and Dynamics. <i>Macromolecules</i> , 2012 , 45, 563-571	5.5	28
257	Comment on Upper Critical Dimension of the Kardar-Parisi-Zhang Equation <i>Physical Review Letters</i> , 1998 , 80, 887-887	7.4	28
256	Consistent Hydrodynamics for Phase Field Crystals. <i>Physical Review Letters</i> , 2016 , 116, 024303	7.4	27
255	Efficient protocol for qubit initialization with a tunable environment. <i>Npj Quantum Information</i> , 2017 , 3,	8.6	27
254	Driven translocation of a semi-flexible polymer through a nanopore. <i>Scientific Reports</i> , 2017 , 7, 7423	4.9	27
253	Sedimentation dynamics of spherical particles in confined geometries. <i>Physical Review E</i> , 2004 , 69, 066310	7.4	27
252	Kinetics of the order-disorder transition of the two-dimensional anisotropic next-nearest-neighbor Ising model. <i>Physical Review B</i> , 1985 , 31, 310-315	3.3	27
251	Eighth-order phase-field-crystal model for two-dimensional crystallization. <i>Physical Review E</i> , 2010 , 82, 061602	2.4	25
250	Nonlinear driven response of a phase-field crystal in a periodic pinning potential. <i>Physical Review E</i> , 2009 , 79, 011606	2.4	25
249	Thermohydrodynamics of boiling in a van der Waals fluid. <i>Physical Review E</i> , 2012 , 85, 026320	2.4	25
248	A dynamical mean field theory for the study of surface diffusion constants. <i>Surface Science</i> , 1997 , 380, L501-L505	1.8	25
247	Kinetics of the order-disorder transition of the two-dimensional anisotropic next-nearest-neighbor Ising model with Kawasaki dynamics. <i>Physical Review B</i> , 1986 , 33, 7583-7593	3.3	25
246	Thermodynamics and efficiency of an autonomous on-chip Maxwell's demon. <i>Scientific Reports</i> , 2016 , 6, 21126	4.9	24
245	Controlling polymer translocation and ion transport via charge correlations. <i>Langmuir</i> , 2014 , 30, 12907-15	7.4	24
244	Polymer translocation out of confined environments. <i>Physical Review E</i> , 2009 , 80, 021907	2.4	24
243	Conserved dynamics and interface roughening in spontaneous imbibition: A phase field model. <i>European Physical Journal B</i> , 2000 , 15, 701-714	1.2	24
242	Atomic mechanisms of cluster diffusion on metal fcc(1 0 0) surfaces. <i>Surface Science</i> , 2001 , 482-485, 365-389	7.4	24

241	The Hydrodynamic Radius of Particles in the Hybrid Lattice Boltzmann--Molecular Dynamics Method. <i>Multiscale Modeling and Simulation</i> , 2013 , 11, 213-243	1.8	23
240	Flux-tunable heat sink for quantum electric circuits. <i>Scientific Reports</i> , 2018 , 8, 6325	4.9	21
239	Conformations of DNA in Triangular Nanochannels. <i>Macromolecules</i> , 2013 , 46, 4198-4206	5.5	21
238	Bcc crystal-fluid interfacial free energy in Yukawa systems. <i>Journal of Chemical Physics</i> , 2013 , 138, 044705.9	5.9	21
237	Bimodal Grain-Size Scaling of Thermal Transport in Polycrystalline Graphene from Large-Scale Molecular Dynamics Simulations. <i>Nano Letters</i> , 2017 , 17, 5919-5924	11.5	21
236	Moments of work in the two-point measurement protocol for a driven open quantum system. <i>Physical Review B</i> , 2014 , 90,	3.3	21
235	Non-equilibrium surface diffusion in the system. <i>Surface Science</i> , 1996 , 366, L697-L702	1.8	21
234	Density correlations in paper. <i>Physical Review E</i> , 1996 , 54, R36-R38	2.4	21
233	Universal properties of classical surface diffusion. <i>Physical Review Letters</i> , 1990 , 65, 879-882	7.4	21
232	Electrostatic correlations on the ionic selectivity of cylindrical membrane nanopores. <i>Journal of Chemical Physics</i> , 2014 , 140, 064701	3.9	20
231	Ion size effects upon ionic exclusion from dielectric interfaces and slit nanopores. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2011 , 2011, P05033	1.9	20
230	Thermal fluctuations and phase diagrams of the phase-field crystal model with pinning. <i>Physical Review E</i> , 2008 , 78, 031109	2.4	20
229	Quantum diffusion of H/Ni(111) through a Monte Carlo wave function formalism. <i>Physical Review Letters</i> , 2001 , 86, 5092-5	7.4	20
228	Dynamics of chainlike molecules on surfaces. <i>Physical Review E</i> , 1998 , 57, 1864-1872	2.4	20
227	Diffusion anomaly near structural phase transitions. <i>Physical Review Letters</i> , 1992 , 68, 1866-1868	7.4	20
226	Domain growth and topological defects in an Ising model with competing interactions. <i>Physical Review B</i> , 1988 , 37, 179-195	3.3	20
225	Stretching of DNA confined in nanochannels with charged walls. <i>Biomicrofluidics</i> , 2014 , 8, 064121	3.2	19
224	Tracer diffusion in colloidal suspensions under dilute and crowded conditions with hydrodynamic interactions. <i>Journal of Chemical Physics</i> , 2012 , 137, 014503	3.9	19

223	Dynamics and scaling of polymers in a dilute solution: analytical treatment in two and higher dimensions. <i>Journal of Chemical Physics</i> , 2005 , 122, 094904	3.9	19
222	Phase-field modeling of wetting on structured surfaces. <i>Journal of Chemical Physics</i> , 2005 , 123, 194702	3.9	19
221	Interface dynamics and kinetic roughening in fractals. <i>Physical Review E</i> , 2002 , 65, 052104	2.4	19
220	Quantum jump model for a system with a finite-size environment. <i>Physical Review E</i> , 2016 , 93, 062106	2.4	18
219	Influence of high-refractive-index oxide coating on optical properties of metal nanoparticles. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2013 , 30, 338	1.7	18
218	Cutting ice: nanowire regelation. <i>Physical Review Letters</i> , 2010 , 105, 086102	7.4	18
217	Polymer translocation induced by a bad solvent. <i>Physical Review E</i> , 2011 , 83, 011914	2.4	18
216	Thermal transport properties of single-layer black phosphorus from extensive molecular dynamics simulations. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2018 , 26, 085001	2	18
215	Heat transport in pristine and polycrystalline single-layer hexagonal boron nitride. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 24602-24612	3.6	18
214	Evolution of Temporal Coherence in Confined Exciton-Polariton Condensates. <i>Physical Review Letters</i> , 2018 , 120, 017401	7.4	17
213	Heat flux and information backflow in cold environments. <i>Physical Review A</i> , 2016 , 94,	2.6	17
212	Entropy production in a non-Markovian environment. <i>Physical Review E</i> , 2015 , 92, 012107	2.4	17
211	Theory of polymer translocation through a flickering nanopore under an alternating driving force. <i>Journal of Chemical Physics</i> , 2015 , 143, 074905	3.9	17
210	Fluctuations of work in nearly adiabatically driven open quantum systems. <i>Physical Review E</i> , 2015 , 91, 022126	2.4	17
209	Biopolymer filtration in corrugated nanochannels. <i>Physical Review Letters</i> , 2014 , 112, 118301	7.4	17
208	Polymer translocation in a double-force arrangement. <i>European Physical Journal E</i> , 2009 , 28, 385-93	1.5	17
207	Finding transition paths and rate coefficients through accelerated Langevin dynamics. <i>Physical Review E</i> , 2002 , 65, 042101	2.4	17
206	Non-equilibrium effects in profile evolution measurements of surface diffusion. <i>Surface Science</i> , 2000 , 447, L162-L168	1.8	17

205	Scaling, propagation, and kinetic roughening of flame fronts in random media. <i>Journal of Statistical Physics</i> , 1995 , 81, 737-759	1.5	17
204	Microscopic theory of surface diffusion. <i>Physical Review B</i> , 1990 , 42, 10264-10274	3.3	17
203	Theory of pore-driven and end-pulled polymer translocation dynamics through a nanopore: an overview. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 274002	1.8	17
202	Ionic current inversion in pressure-driven polymer translocation through nanopores. <i>Physical Review Letters</i> , 2015 , 114, 088303	7.4	16
201	On the applicability of discrete dipole approximation for plasmonic particles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016 , 169, 23-35	2.1	16
200	Percolation and spatial correlations in a two-dimensional continuum deposition model. <i>Physical Review E</i> , 2000 , 61, 5002-8	2.4	16
199	Diffusion anisotropy of oxygen and hydrogen adatoms on W(110). <i>Surface Science</i> , 1989 , 218, L476-L482	1.8	16
198	Shape effects on surface plasmons in spherical, cubic, and rod-shaped silver nanoparticles. <i>Applied Physics A: Materials Science and Processing</i> , 2016 , 122, 1	2.6	15
197	Theoretical approaches to collective diffusion on stepped surfaces. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2006 , 2006, P10003-P10003	1.9	15
196	Energetics and atomic mechanisms of dislocation nucleation in strained epitaxial layers. <i>Physical Review B</i> , 2003 , 68,	3.3	15
195	Diffusion and mobility of interacting particles on stepped surfaces along the ledges. <i>Surface Science</i> , 2004 , 566-568, 143-147	1.8	15
194	Interface pinning in spontaneous imbibition. <i>Physical Review E</i> , 2001 , 64, 051605	2.4	15
193	Minimum energy paths for dislocation nucleation in strained epitaxial layers. <i>Physical Review B</i> , 2002 , 65,	3.3	15
192	Mission Impossible: Find a Random Pseudorandom Number Generator. <i>Computers in Physics</i> , 1995 , 9, 500		15
191	Driven Growth in the Restricted Solid-On-Solid Model in Higher Dimensions. <i>Europhysics Letters</i> , 1992 , 19, 1-5	1.6	15
190	Energetics and structure of grain boundary triple junctions in graphene. <i>Scientific Reports</i> , 2017 , 7, 4754	4.9	14
189	Growth, percolation, and correlations in disordered fiber networks. <i>Journal of Statistical Physics</i> , 1997 , 87, 385-413	1.5	14
188	Diffusion and mobility of interacting particles on stepped surfaces. <i>Surface Science</i> , 2003 , 544, L703-L708	1.8	14

187	Dynamics and kinetic roughening of interfaces in two-dimensional forced wetting. <i>European Physical Journal B</i> , 2005 , 46, 553-561	1.2	14
186	Diffusion of hard disks and rodlike molecules on surfaces. <i>Physical Review E</i> , 2001 , 64, 021204	2.4	14
185	Dynamics of Spreading of Small Droplets of Chainlike Molecules on Surfaces. <i>Europhysics Letters</i> , 1994 , 25, 593-598	1.6	14
184	Quantum work in the Bohmian framework. <i>Physical Review A</i> , 2018 , 97,	2.6	13
183	Hydrodynamic forces on steady and oscillating porous particles. <i>Journal of Fluid Mechanics</i> , 2012 , 709, 123-148	3.7	13
182	Hydrodynamic effects on confined polymers. <i>Soft Matter</i> , 2013 , 9, 3478	3.6	13
181	Alteration of gas phase ion polarizabilities upon hydration in high dielectric liquids. <i>Journal of Chemical Physics</i> , 2013 , 139, 044907	3.9	13
180	Interplay between steps and nonequilibrium effects in surface diffusion for a lattice-gas model of OW(110). <i>Journal of Chemical Physics</i> , 2007 , 126, 114705	3.9	13
179	Strain relief in Cu-Pd heteroepitaxy. <i>Physical Review Letters</i> , 2005 , 94, 146105	7.4	13
178	Velocity correlations and diffusion during sedimentation. <i>Physical Review E</i> , 2001 , 63, 061505	2.4	13
177	Morphology of ledge patterns during step flow growth of metal surfaces vicinal to fcc (001). <i>Physical Review B</i> , 2002 , 65,	3.3	13
176	Molecular ordering of precursor films during spreading of tiny liquid droplets. <i>Physical Review E</i> , 1995 , 52, R2165-R2167	2.4	13
175	Model for diffusion on deformable lattices. I. Collective diffusion. <i>Physical Review B</i> , 1991 , 44, 2122-2132	3.3	13
174	Universal domain growth in a lattice-gas model of O/Pd(110). <i>Physical Review B</i> , 1988 , 38, 11418-11431	3.3	13
173	System-environment correlations in qubit initialization and control. <i>Physical Review Research</i> , 2019 , 1,	3.9	13
172	Thermodynamics of information exchange between two coupled quantum dots. <i>Physical Review E</i> , 2016 , 93, 032147	2.4	12
171	Modeling self-organization of thin strained metallic overlayers from atomic to micron scales. <i>Physical Review B</i> , 2013 , 88,	3.3	12
170	Influence of high-refractive-index oxide cores on optical properties of metal nanoshells. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2014 , 31, 494	1.7	12

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- 168 Electronic properties of H on vicinal Pt surfaces: First-principles study. *Physical Review B*, **2009**, 80, 3.3 12
- 167 Nucleation, Growth, and Scaling in Slow Combustion. *Journal of Statistical Physics*, **1998**, 90, 1401-1411 1.5 12
- 166 Dynamical mean field theory: an efficient method to study surface diffusion coefficients. *Surface Science*, **1998**, 402-404, 253-256 1.8 12
- 165 Non-equilibrium effects in profile spreading on stepped surfaces. *Surface Science*, **2003**, 529, L256-L262 1.8 12
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- 163 Do tree stems shrink and swell with the tides?. *Tree Physiology*, **2000**, 20, 633-635 4.2 12
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