Bo N J Persson

List of Publications by Year in Descending Order

407 papers	22,854 citations	80 h-index	136 g-index
414 ext. papers	24,661 ext. citations	3.3 avg, IF	7.56 L-index

#	Paper	IF	Citations
407	On the Stability of Spinning Asteroids. *Tribology Letters*, **2022**, 70, 1	2.8	2
406	Air, Helium and Water Leakage in Rubber O-ring Seals with Application to Syringes. *Tribology Letters*, **2022**, 70, 1	2.8	0
405	Fluid Leakage in Static Rubber Seals. *Tribology Letters*, **2022**, 70, 1	2.8	0
404	Air leakage in seals with application to syringes. *Applied Surface Science Advances*, **2022**, 8, 100222	2.6	
403	Rubber Wear and the Role of Transfer Films on Rubber Friction on Hard Rough Substrates. *Tribology Letters*, **2021**, 69, 1	2.8	3
402	Rubber Adhesion and Friction: Role of Surface Energy and Contamination Films. *Frontiers in Mechanical Engineering*, **2021**, 6,	2.6	2
401	Side-leakage of face mask. *European Physical Journal E*, **2021**, 44, 75	1.5	2
400	Comments on the Theory of Fluid Flow Between Solids with Anisotropic Roughness. *Tribology Letters*, **2021**, 69, 1	2.8	3
399	Cylinder-Flat Contact Mechanics with Surface Roughness. *Tribology Letters*, **2021**, 69, 1	2.8	4
398	A simple model for viscoelastic crack propagation. *European Physical Journal E*, **2021**, 44, 3	1.5	4
397	General theory of electroadhesion. *Journal of Physics Condensed Matter*, **2021**, 33,	1.8	2
396	On Opening Crack Propagation in Viscoelastic Solids. *Tribology Letters*, **2021**, 69, 1	2.8	4
395	Physics of Suction Cups in Air and in Water. *Biologically-inspired Systems*, **2021**, 187-209	0.7	2
394	Lubricated sliding friction: Role of interfacial fluid slip and surface roughness. *European Physical Journal E*, **2020**, 43, 9	1.5	5
393	Comment on On the Origin of Frictional Energy Dissipation *Tribology Letters*, **2020**, 68, 1	2.8	1
392	Electric field effect in heat transfer in 2D devices. *Journal of Physics Condensed Matter*, **2020**, 32, 255301	1.8	5
391	Conveyor Belt Drive Physics. *Tribology Letters*, **2020**, 68, 1	2.8	4

390	Fluid Leakage in Metallic Seals. *Tribology Letters*, **2020**, 68, 1	2.8	5
389	Plastic Deformation of Rough Metallic Surfaces. *Tribology Letters*, **2020**, 68, 1	2.8	6
388	Interfacial fluid flow for systems with anisotropic roughness. *European Physical Journal E*, **2020**, 43, 25	1.5	5
387	Sphere and cylinder contact mechanics during slip. *Journal of the Mechanics and Physics of Solids*, **2020**, 143, 104094	5	11
386	Adhesion paradox: Why adhesion is usually not observed for macroscopic solids. *Physical Review E*, **2020**, 102, 042803	2.4	8
385	Cylinder-flat-surface contact mechanics during sliding. *Physical Review E*, **2020**, 102, 043002	2.4	1
384	Viscoelastic Crack Propagation: Review of Theories and Applications. *Advances in Polymer Science*, **2020**, 377-420	1.3	6
383	Electroadhesion with application to touchscreens. *Soft Matter*, **2019**, 15, 1758-1775	3.6	20
382	Adhesion and Friction for Three Tire Tread Compounds. *Lubricants*, **2019**, 7, 20	3.1	14
381	Linear and Nonlinear Viscoelastic Modulus of Rubber. *Lubricants*, **2019**, 7, 22	3.1	7
380	Surface topography and water contact angle of sandblasted and thermally annealed glass surfaces. *Journal of Chemical Physics*, **2019**, 150, 054701	3.9	2
379	Contact Mechanics for Solids with Randomly Rough Surfaces and Plasticity. *Lubricants*, **2019**, 7, 90	3.1	4
378	Electroadhesion for soft adhesive pads and robotics: theory and numerical results. *Soft Matter*, **2019**, 15, 8032-8039	3.6	10
377	Physics of suction cups. *Soft Matter*, **2019**, 15, 9482-9499	3.6	11
376	Rolling friction of elastomers: role of strain softening. *Soft Matter*, **2019**, 15, 9233-9243	3.6	4
375	The dependency of adhesion and friction on electrostatic attraction. *Journal of Chemical Physics*, **2018**, 148, 144701	3.9	19
374	Adhesion, friction and viscoelastic properties for non-aged and aged Styrene Butadiene rubber. *Tribology International*, **2018**, 121, 78-83	4.9	9
373	Some Comments on Hydrogel and Cartilage Contact Mechanics and Friction. *Tribology Letters*, **2018**, 66, 1	2.8	8

372	On the load dependence of friction: Role of the long-range elastic coupling. *Tribology International*, **2018**, 123, 209-215	4.9	3
371	Contact mechanics for polydimethylsiloxane: from liquid to solid. *Soft Matter*, **2018**, 14, 1142-1148	3.6	10
370	Influence of anisotropic surface roughness on lubricated rubber friction: Extended theory and an application to hydraulic seals. *Wear*, **2018**, 410-411, 43-62	3.5	15
369	Adhesion between rubber and glass in dry and lubricated condition. *Journal of Chemical Physics*, **2018**, 148, 234702	3.9	8
368	Rubber friction: The contribution from the area of real contact. *Journal of Chemical Physics*, **2018**, 148, 224701	3.9	19
367	Adhesion and friction between glass and rubber in the dry state and in water: role of contact hydrophobicity. *Soft Matter*, **2018**, 14, 5428-5441	3.6	7
366	Interfacial leakage of elastomer seals at low temperatures. *International Journal of Pressure Vessels and Piping*, **2018**, 160, 14-23	2.4	12
365	Contact mechanics between the human finger and a touchscreen under electroadhesion. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12668-12673	11.5	42
364	Ice friction: Glacier sliding on hard randomly rough bed surface. *Journal of Chemical Physics*, **2018**, 149, 234701	3.9	5
363	On the Use of Silicon Rubber Replica for Surface Topography Studies. *Tribology Letters*, **2018**, 66, 1	2.8	12
362	Atomistic modeling of tribological properties of Pd and Al nanoparticles on a graphene surface. *Beilstein Journal of Nanotechnology*, **2018**, 9, 1239-1246	3	4
361	Elastic Contact Mechanics of Randomly Rough Surfaces: An Assessment of Advanced Asperity Models and Persson's Theory. *Tribology Letters*, **2018**, 66, 1	2.8	48
360	The effect of surface roughness and viscoelasticity on rubber adhesion. *Soft Matter*, **2017**, 13, 3602-3621	3.6	58
359	Elastohydrodynamics for Soft Solids with Surface Roughness: Transient Effects. *Tribology Letters*, **2017**, 65, 1	2.8	3
358	Meeting the Contact-Mechanics Challenge. *Tribology Letters*, **2017**, 65, 1	2.8	163
357	Crack propagation in finite-sized viscoelastic solids with application to adhesion. *Europhysics Letters* , **2017**, 119, 18002	1.6	12
356	Simple contact mechanics model of the vertebrate cartilage. *Soft Matter*, **2017**, 13, 6349-6362	3.6	4
355	Rubber contact mechanics: adhesion, friction and leakage of seals. *Soft Matter*, **2017**, 13, 9103-9121	3.6	37

354	Role of Preload in Adhesion of Rough Surfaces. *Physical Review Letters*, **2017**, 118, 238001	7.4	23
353	Dependency of Rubber Friction on Normal Force or Load: Theory and Experiment. *Tire Science and Technology*, **2017**, 45, 25-54	0.7	15
352	Multiscale Contact Mechanics with Application to Seals and Rubber Friction on Dry and Lubricated Surfaces. *Advances in Polymer Science*, **2016**, 103-156	1.3	7
351	Quantum Vavilov-Cherenkov radiation from shearing two transparent dielectric plates. *Physical Review B*, **2016**, 93,	3.3	3
350	The effect of finite roughness size and bulk thickness on the prediction of rubber friction and contact mechanics. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, **2016**, 230, 1398-1409	1.3	6
349	Rubber Friction on Ice: Experiments and Modeling. *Tribology Letters*, **2016**, 62, 1	2.8	26
348	On the dependency of friction on load: Theory and experiment. *Europhysics Letters*, **2016**, 113, 56002	1.6	15
347	Shearing Nanometer-Thick Confined Hydrocarbon Films: Friction and Adhesion. *Tribology Letters*, **2016**, 62, 1	2.8	5
346	Fundamentals of Adhesion **2016**,		1
345	Soft matter dynamics: Accelerated fluid squeeze-out during slip. *Journal of Chemical Physics*, **2016**, 144, 124903	3.9	15
344	Rubber friction directional asymmetry. *Europhysics Letters*, **2016**, 116, 66002	1.6	7
343	Contact mechanics for poroelastic, fluid-filled media, with application to cartilage. *Journal of Chemical Physics*, **2016**, 145, 234703	3.9	4
342	Silicone Rubber Adhesion and Sliding Friction. *Tribology Letters*, **2016**, 62, 1	2.8	15
341	The effect of surface nano-corrugation on the squeeze-out of molecular thin hydrocarbon films between curved surfaces with long range elasticity. *Nanotechnology*, **2016**, 27, 445401	3.4	6
340	Leakage of Metallic Seals: Role of Plastic Deformations. *Tribology Letters*, **2016**, 63, 1	2.8	16
339	Contact Mechanics for Randomly Rough Surfaces: On the Validity of the Method of Reduction of Dimensionality. *Tribology Letters*, **2015**, 58, 1	2.8	8
338	Rubber friction on road surfaces: Experiment and theory for low sliding speeds. *Journal of Chemical Physics*, **2015**, 142, 194701	3.9	69
337	General contact mechanics theory for randomly rough surfaces with application to rubber friction. *Journal of Chemical Physics*, **2015**, 143, 224111	3.9	20

336	Fluid contact angle on solid surfaces: Role of multiscale surface roughness. *Journal of Chemical Physics*, **2015**, 143, 134705	3.9	20
335	General theory of frictional heating with application to rubber friction. *Journal of Physics Condensed Matter*, **2015**, 27, 175008	1.8	17
334	Ice friction: Role of non-uniform frictional heating and ice premelting. *Journal of Chemical Physics*, **2015**, 143, 224701	3.9	25
333	Author Response to the Comment by Popov on "Contact Mechanics for Randomly Rough Surfaces: On the Validity of the Method of Reduction of Dimensionality" *Tribology Letters*, **2015**, 60, 1	2.8	1
332	Friction and universal contact area law for randomly rough viscoelastic contacts. *Journal of Physics Condensed Matter*, **2015**, 27, 105102	1.8	34
331	On the Fractal Dimension of Rough Surfaces. *Tribology Letters*, **2014**, 54, 99-106	2.8	173
330	Rolling Friction: Comparison of Analytical Theory with Exact Numerical Results. *Tribology Letters*, **2014**, 55, 15-21	2.8	16
329	Role of hydrophobicity on interfacial fluid flow: theory and some applications. *European Physical Journal E*, **2014**, 37, 12	1.5	13
328	Theory of viscoelastic lubrication. *Tribology International*, **2014**, 72, 118-130	4.9	43
327	Master curve of viscoelastic solid: Using causality to determine the optimal shifting procedure, and to test the accuracy of measured data. *Polymer*, **2014**, 55, 565-571	3.9	38
326	Surface topography and contact mechanics of dry and wet human skin. *Beilstein Journal of Nanotechnology*, **2014**, 5, 1341-8	3	28
325	Tire–Road Contact Stiffness. *Tribology Letters*, **2014**, 56, 397-402	2.8	23
324	Role of Frictional Heating in Rubber Friction. *Tribology Letters*, **2014**, 56, 77-92	2.8	18
323	Comment on "Fully covariant radiation force on a polarizable particle" *New Journal of Physics*, **2014**, 16, 118001	2.9	10
322	Thermal interface resistance: crossover from nanoscale to macroscale. *Journal of Physics Condensed Matter*, **2014**, 26, 015009	1.8	8
321	Theory of adhesion: role of surface roughness. *Journal of Chemical Physics*, **2014**, 141, 124701	3.9	126
320	Finite-size scaling in the interfacial stiffness of rough elastic contacts. *Physical Review E*, **2013**, 87, 062809	2.4	74
319	Contact Mechanics and Friction on Dry and Wet Human Skin. *Tribology Letters*, **2013**, 50, 17-30	2.8	46

318	Comment on "Friction between a viscoelastic body and a rigid surface with random self-affine roughness". *Physical Review Letters*, **2013**, 111, 189401	7.4	13
317	On the Validity of the Method of Reduction of Dimensionality: Area of Contact, Average Interfacial Separation and Contact Stiffness. *Tribology Letters*, **2013**, 52, 223-229	2.8	11
316	Effect of the electric current on the Casimir force between graphene sheets. *JETP Letters*, **2013**, 98, 143-149	1.4	1
315	Adhesion of cellulose fibers in paper. *Journal of Physics Condensed Matter*, **2013**, 25, 045002	1.8	35
314	Rubber friction for tire tread compound on road surfaces. *Journal of Physics Condensed Matter*, **2013**, 25, 095007	1.8	36
313	Adhesion: role of bulk viscoelasticity and surface roughness. *Journal of Physics Condensed Matter*, **2013**, 25, 225004	1.8	40
312	Contact electrification and the work of adhesion. *Europhysics Letters*, **2013**, 103, 36003	1.6	14
311	Static or breakloose friction for lubricated contacts: the role of surface roughness and dewetting. *Journal of Physics Condensed Matter*, **2013**, 25, 445013	1.8	22
310	Optical In Situ Micro Tribometer for Analysis of Real Contact Area for Contact Mechanics, Adhesion, and Sliding Experiments. *Tribology Letters*, **2012**, 45, 185-194	2.8	140
309	Time-Dependent Fluid Squeeze-Out Between Soft Elastic Solids with Randomly Rough Surfaces. *Tribology Letters*, **2012**, 47, 409-416	2.8	20
308	Effective viscosity of confined hydrocarbons. *Physical Review Letters*, **2012**, 108, 036102	7.4	41
307	Contact mechanics for layered materials with randomly rough surfaces. *Journal of Physics Condensed Matter*, **2012**, 24, 095008	1.8	20
306	Elastic contact mechanics: percolation of the contact area and fluid squeeze-out. *European Physical Journal E*, **2012**, 35, 5	1.5	40
305	Reply to the Discussion of the Paper by Krick et al.: Optical In Situ Micro Tribometer for Analysis of Real Contact Area for Contact Mechanics, Adhesion, and Sliding Experiments *Tribology Letters*, **2012**, 46, 207-209	2.8	1
304	On the origin of why static or breakloose friction is larger than kinetic friction, and how to reduce it: the role of aging, elasticity and sequential interfacial slip. *Journal of Physics Condensed Matter*, **2012**, 24, 225008	1.8	17
303	Self-affine elastic contacts: percolation and leakage. *Physical Review Letters*, **2012**, 108, 244301	7.4	113
302	Quantum friction. *Physical Review Letters*, **2011**, 106, 094502	7.4	80
301	Transverse and normal interfacial stiffness of solids with randomly rough surfaces. *Journal of Physics Condensed Matter*, **2011**, 23, 085001	1.8	97

300	Near-field radiative heat transfer and van der Waals friction between closely spaced graphene and amorphous SiO2. *Journal of Physics: Conference Series*, **2011**, 291, 012018	0.3	2
299	Interfacial separation between elastic solids with randomly rough surfaces: Comparison between theory and numerical techniques. *Journal of the Mechanics and Physics of Solids*, **2011**, 59, 2355-2369	5	106
298	Lubricated sliding dynamics: flow factors and Stribeck curve. *European Physical Journal E*, **2011**, 34, 113	1.5	31
297	Rubber friction: comparison of theory with experiment. *European Physical Journal E*, **2011**, 34, 1-11	1.5	55
296	Lubrication in soft rough contacts: A novel homogenized approach. Part I - Theory. *Soft Matter*, **2011**, 7, 10395	3.6	57
295	Phononic heat transfer across an interface: thermal boundary resistance. *Journal of Physics Condensed Matter*, **2011**, 23, 045009	1.8	47
294	Comment on No quantum friction between uniformly moving plates *New Journal of Physics*, **2011**, 13, 068001	2.9	15
293	Fluid squeeze-out between rough surfaces: comparison of theory with experiment. *Journal of Physics Condensed Matter*, **2011**, 23, 355005	1.8	9
292	Adhesion between elastic solids with randomly rough surfaces: Comparison of analytical theory with molecular-dynamics simulations. *Europhysics Letters*, **2011**, 96, 66003	1.6	32
291	Near-field radiative heat transfer between closely spaced graphene and amorphous SiO2. *Physical Review B*, **2011**, 83,	3.3	64
290	Rubber friction and tire dynamics. *Journal of Physics Condensed Matter*, **2011**, 23, 015003	1.8	37
289	Heat transfer between graphene and amorphous SiO2. *Journal of Physics Condensed Matter*, **2010**, 22, 462201	1.8	35
288	Lateral hopping of CO on Cu(111) induced by femtosecond laser pulses. *Physical Review B*, **2010**, 82,	3.3	3
287	Comment on "Diffusion and dimer formation of CO molecules induced by femtosecond laser pulses". *Physical Review Letters*, **2010**, 104, 239601	7.4	
286	Surface roughness of peeled adhesive tape: A mystery?. *Europhysics Letters*, **2010**, 92, 46001	1.6	22
285	Fluid dynamics at the interface between contacting elastic solids with randomly rough surfaces. *Journal of Physics Condensed Matter*, **2010**, 22, 265004	1.8	34
284	Heat transfer between weakly coupled systems: Graphene on a-SiO 2. *Europhysics Letters*, **2010**, 91, 56001	1.6	37
283	On the dependence of the leak rate of seals on the skewness of the surface height probability distribution. *Europhysics Letters*, **2010**, 90, 38002	1.6	19

282	Velocity dependence of friction of confined hydrocarbons. *Langmuir*, **2010**, 26, 8721-8	4	32
281	Surface-roughness-induced electric-field enhancement and triboluminescence. *Europhysics Letters*, **2010**, 91, 46003	1.6	24
280	Heat transfer between elastic solids with randomly rough surfaces. *European Physical Journal E*, **2010**, 31, 3-24	1.5	64
279	Leak rate of seals: Effective-medium theory and comparison with experiment. *European Physical Journal E*, **2010**, 31, 159-67	1.5	80
278	Time-dependent fluid squeeze-out between solids with rough surfaces. *European Physical Journal E*, **2010**, 32, 281-90	1.5	29
277	Rolling friction for hard cylinder and sphere on viscoelastic solid. *European Physical Journal E*, **2010**, 33, 327-33	1.5	65
276	Lateral hopping of CO molecules on Pt(111) surface by femtosecond laser pulses. *Physical Review B*, **2009**, 80,	3.3	5
275	Numerical and Experimental Investigation on O-Ring-Seals in Dynamic Applications. *International Journal of Fluid Power*, **2009**, 10, 51-59		7
274	Leak rate of seals: Comparison of theory with experiment. *Europhysics Letters*, **2009**, 86, 44006	1.6	56
273	On the transition from boundary lubrication to hydrodynamic lubrication in soft contacts. *Journal of Physics Condensed Matter*, **2009**, 21, 185002	1.8	39
272	Theory of powdery rubber wear. *Journal of Physics Condensed Matter*, **2009**, 21, 485001	1.8	22
271	Interfacial separation between elastic solids with randomly rough surfaces: comparison of experiment with theory. *Journal of Physics Condensed Matter*, **2009**, 21, 015003	1.8	33
270	Contact mechanics and rubber friction for randomly rough surfaces with anisotropic statistical properties. *European Physical Journal E*, **2009**, 29, 275-84	1.5	105
269	Theory of the interaction forces and the radiative heat transfer between moving bodies. *Physical Review B*, **2008**, 78,	3.3	71
268	On the origin of Amonton's friction law. *Journal of Physics Condensed Matter*, **2008**, 20, 395006	1.8	49
267	Contact mechanics: contact area and interfacial separation from small contact to full contact. *Journal of Physics Condensed Matter*, **2008**, 20, 215214	1.8	114
266	Rubber friction on (apparently) smooth lubricated surfaces. *Journal of Physics Condensed Matter*, **2008**, 20, 085223	1.8	27
265	Capillary adhesion between elastic solids with randomly rough surfaces. *Journal of Physics Condensed Matter*, **2008**, 20, 315007	1.8	59

264	On the elastic energy and stress correlation in the contact between elastic solids with randomly rough surfaces. *Journal of Physics Condensed Matter*, **2008**, 20, 312001	1.8	50
263	Heat transfer between adsorbate and laser-heated hot electrons. *Journal of Physics Condensed Matter*, **2008**, 20, 224016	1.8	7
262	Contact mechanics with adhesion: Interfacial separation and contact area. *Europhysics Letters*, **2008**, 84, 46004	1.6	24
261	Adsorbate hopping via vibrational-mode coupling induced by femtosecond laser pulses. *Physical Review B*, **2008**, 78,	3.3	8
260	Molecular dynamics study of contact mechanics: contact area and interfacial separation from small to full contact. *Physical Review Letters*, **2008**, 100, 024303	7.4	59
259	Theory of the leak-rate of seals. *Journal of Physics Condensed Matter*, **2008**, 20, 315011	1.8	90
258	van der Waals frictional drag induced by liquid flow in low-dimensional systems. *Physical Review B*, **2008**, 77,	3.3	4
257	Heating of adsorbate by vibrational-mode coupling. *Physical Review B*, **2008**, 77,	3.3	18
256	Influence of frozen capillary waves on contact mechanics. *Wear*, **2008**, 264, 746-749	3.5	8
255	Nanodroplets on rough hydrophilic and hydrophobic surfaces. *European Physical Journal E*, **2008**, 25, 139-52	1.5	52
254	Frictional properties of confined polymers. *European Physical Journal E*, **2008**, 27, 37-46	1.5	27
253	On pattern transfer in replica molding. *Langmuir*, **2008**, 24, 6636-9	4	27
252	Relation between interfacial separation and load: a general theory of contact mechanics. *Physical Review Letters*, **2007**, 99, 125502	7.4	166
251	Giant enhancement of noncontact friction between closely spaced bodies by dielectric films and two-dimensional systems. *Journal of Experimental and Theoretical Physics*, **2007**, 104, 96-110	1	13
250	. *Physics-Uspekhi*, **2007**, 50, 879	2.8	19
249	Heat transfer at surfaces exposed to short-pulsed laser fields. *Physical Review B*, **2007**, 76,	3.3	15
248	Effect of Surface Roughness and Adsorbates on Superlubricity **2007**, 131-146		2
247	Action spectroscopy for single-molecule motion induced by vibrational excitation with a scanning tunneling microscope. *Physical Review B*, **2007**, 75,	3.3	33

246	Vibrational heating of molecules adsorbed on insulating surfaces using localized photon tunneling. *Physical Review B*, **2007**, 75,	3.3	5
245	Biological Adhesion for Locomotion on Rough Surfaces: Basic Principles and A Theorist's View. *MRS Bulletin*, **2007**, 32, 486-490	3.2	51
244	Wet adhesion with application to tree frog adhesive toe pads and tires. *Journal of Physics Condensed Matter*, **2007**, 19, 376110	1.8	92
243	Near-field radiative heat transfer and noncontact friction. *Reviews of Modern Physics*, **2007**, 79, 1291-1329	40.5	474
242	Biological adhesion for locomotion: basic principles. *Journal of Adhesion Science and Technology*, **2007**, 21, 1145-1173	2	56
241	Theory of Noncontact Friction. *Nanoscience and Technology*, **2007**, 393-438	0.6	
240	A Multiscale Molecular Dynamics Approach to Contact Mechanics and Friction: From Continuum Mechanics to Molecular Dynamics. *Nanoscience and Technology*, **2007**, 307-343	0.6	1
239	Contact Mechanics, Friction and Adhesion with Application to Quasicrystals. *Nanoscience and Technology*, **2007**, 269-306	0.6	2
238	Role of surface roughness in superlubricity. *Journal of Physics Condensed Matter*, **2006**, 18, 4143-60	1.8	21
237	How do liquids confined at the nanoscale influence adhesion?. *Journal of Physics Condensed Matter*, **2006**, 18, 11521-11530	1.8	6
236	Impact of molecular structure on the lubricant squeeze-out between curved surfaces with long range elasticity. *Journal of Chemical Physics*, **2006**, 125, 014704	3.9	30
235	Rubber friction: role of the flash temperature. *Journal of Physics Condensed Matter*, **2006**, 18, 7789-823	1.8	130
234	Chemical contribution to surface-enhanced Raman scattering. *Physical Review Letters*, **2006**, 96, 207401	7.4	156
233	Enhancement of noncontact friction between closely spaced bodies by two-dimensional systems. *Physical Review B*, **2006**, 73,	3.3	24
232	Persson, Zhao, and Zhang Reply:. *Physical Review Letters*, **2006**, 97,	7.4	2
231	Quantum field theory of van der Waals friction. *Physical Review B*, **2006**, 74,	3.3	27
230	A multiscale molecular dynamics approach to contact mechanics. *European Physical Journal E*, **2006**, 19, 47-58	1.5	97
229	Influence of surface roughness on superhydrophobicity. *Physical Review Letters*, **2006**, 97, 116103	7.4	226

228	Contact mechanics for randomly rough surfaces. *Surface Science Reports*, **2006**, 61, 201-227	12.9	477
227	Rubber friction on smooth surfaces. *European Physical Journal E*, **2006**, 21, 69-80	1.5	84
226	Hot cracks in rubber: origin of the giant toughness of rubberlike materials. *Physical Review Letters*, **2005**, 95, 114301	7.4	38
225	On the nature of surface roughness with application to contact mechanics, sealing, rubber friction and adhesion. *Journal of Physics Condensed Matter*, **2005**, 17, R1-R62	1.8	613
224	Crack propagation in rubber-like materials. *Journal of Physics Condensed Matter*, **2005**, 17, R1071-R1142	1.8	178
223	Adsorbate vibrational mode enhancement of radiative heat transfer and van der Waals friction. *Surface Science*, **2005**, 587, 88-101	1.8	4
222	Crack motion in viscoelastic solids: the role of the flash temperature. *European Physical Journal E*, **2005**, 17, 261-81	1.5	51
221	Rubber friction on wet and dry road surfaces: The sealing effect. *Physical Review B*, **2005**, 71,	3.3	74
220	Adsorbate motions induced by inelastic-tunneling current: theoretical scenarios of two-electron processes. *Journal of Chemical Physics*, **2005**, 123, 084707	3.9	45
219	Adsorbate-induced enhancement of electrostatic noncontact friction. *Physical Review Letters*, **2005**, 94, 086104	7.4	50
218	Influence of surface roughness on adhesion between elastic bodies. *Physical Review Letters*, **2005**, 95, 124301	7.4	95
217	Crack propagation in viscoelastic solids. *Physical Review E*, **2005**, 71, 036123	2.4	156
216	Contact area between a viscoelastic solid and a hard, randomly rough, substrate. *Journal of Chemical Physics*, **2004**, 120, 8779-93	3.9	105
215	Squeezing wetting and nonwetting liquids. *Journal of Chemical Physics*, **2004**, 120, 1997-2004	3.9	8
214	The effect of surface roughness on the adhesion of solid surfaces for systems with and without liquid lubricant. *Journal of Chemical Physics*, **2004**, 121, 9639-47	3.9	17
213	Dewetting at soft viscoelastic interfaces. *Journal of Chemical Physics*, **2004**, 121, 2246-52	3.9	23
212	Adhesion between a thin elastic plate and a hard randomly rough substrate. *Physical Review B*, **2004**, 70,	3.3	47
211	Squeeze-out and wear: fundamental principles and applications. *Journal of Physics Condensed Matter*, **2004**, 16, R295-R355	1.8	71

210	Sealing is at the origin of rubber slipping on wet roads. *Nature Materials*, **2004**, 3, 882-5	27	35
209	Squeezing Molecularly Thin Alkane Lubrication Films: Layering Transitions and Wear. *Tribology Letters*, **2004**, 16, 195-200	2.8	3
208	Theoretical state-of-the art in adsorbate motions and reactions induced by inelastic tunneling current with STM. *Surface Science*, **2004**, 566-568, 1-12	1.8	27
207	Electronic friction and liquid-flow-induced voltage in nanotubes. *Physical Review B*, **2004**, 69,	3.3	69
206	Resonant photon tunneling enhancement of the radiative heat transfer. *Physical Review B*, **2004**, 69,	3.3	97
205	Dimethyl Ether: New Advances in Wear Testing: Theoretical and Experimental Results **2003**,		1
204	Role of the external pressure on the dewetting of soft interfaces. *European Physical Journal E*, **2003** , 11, 409-13	1.5	28
203	On the nature of the static friction, kinetic friction and creep. *Wear*, **2003**, 254, 835-851	3.5	94
202	Adsorbate vibrational mode enhancement of radiative heat transfer. *JETP Letters*, **2003**, 78, 457-460	1.2	15
201	Nanoadhesion. *Wear*, **2003**, 254, 832-834	3.5	45
200	The effect of surface roughness on the adhesion of elastic plates with application to biological systems. *Journal of Chemical Physics*, **2003**, 119, 11437-11444	3.9	327
199	Noncontact friction between nanostructures. *Physical Review B*, **2003**, 68,	3.3	56
198	On the mechanism of adhesion in biological systems. *Journal of Chemical Physics*, **2003**, 118, 7614	3.9	281
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