#### Mehran Kardar

#### List of Publications by Citations

Source: https://exaly.com/author-pdf/2927816/mehran-kardar-publications-by-citations.pdf

Version: 2024-04-19

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.

281 18,765 67 131 h-index g-index citations papers 6.81 5.6 20,412 290 avg, IF L-index ext. citations ext. papers

#	Paper	IF	Citations
281	Dynamic scaling of growing interfaces. <i>Physical Review Letters</i> , <b>1986</b> , 56, 889-892	7.4	3915
280	Burgers equation with correlated noise: Renormalization-group analysis and applications to directed polymers and interface growth. <i>Physical Review A</i> , <b>1989</b> , 39, 3053-3075	2.6	583
279	The <b>fr</b> ictionlof vacuum, and other fluctuation-induced forces. <i>Reviews of Modern Physics</i> , <b>1999</b> , 71, 1233	-4245	490
278	Scaling of directed polymers in random media. <i>Physical Review Letters</i> , <b>1987</b> , 58, 2087-2090	7.4	465
277	Long range interactions in nanoscale science. <i>Reviews of Modern Physics</i> , <b>2010</b> , 82, 1887-1944	40.5	304
276	Replica Bethe ansatz studies of two-dimensional interfaces with quenched random impurities. <i>Nuclear Physics B</i> , <b>1987</b> , 290, 582-602	2.8	296
275	Pressure is not a state function for generic active fluids. <i>Nature Physics</i> , <b>2015</b> , 11, 673-678	16.2	276
274	Statistical mechanics of tethered surfaces. <i>Physical Review Letters</i> , <b>1986</b> , 57, 791-794	7.4	269
273	Dissipative transport in open systems: An investigation of self-organized criticality. <i>Physical Review Letters</i> , <b>1989</b> , 62, 1813-1816	7.4	258
272	Avalanches, hydrodynamics, and discharge events in models of sandpiles. <i>Physical Review A</i> , <b>1992</b> , 45, 7002-7023	2.6	257
271	Statistical Physics of Fields <b>2007</b> ,		253
270	Casimir forces between arbitrary compact objects. <i>Physical Review Letters</i> , <b>2007</b> , 99, 170403	7.4	252
269	Intricate knots in proteins: Function and evolution. <i>PLoS Computational Biology</i> , <b>2006</b> , 2, e122	5	250
268	Anomalous dynamics of translocation. <i>Physical Review E</i> , <b>2002</b> , 65, 011802	2.4	250
267	Anomalous dynamics of forced translocation. <i>Physical Review E</i> , <b>2004</b> , 69, 021806	2.4	240
266	Scattering theory approach to electrodynamic Casimir forces. <i>Physical Review D</i> , <b>2009</b> , 80,	4.9	228
265	Pressure and phase equilibria in interacting active brownian spheres. <i>Physical Review Letters</i> , <b>2015</b> , 114, 198301	7-4	222

264	Tethered surfaces: Statics and dynamics. <i>Physical Review A</i> , <b>1987</b> , 35, 3056-3071	2.6	213
263	Casimir Interaction between a plate and a cylinder. <i>Physical Review Letters</i> , <b>2006</b> , 96, 080403	7.4	183
262	Nonequilibrium dynamics of interfaces and lines. <i>Physics Reports</i> , <b>1998</b> , 301, 85-112	27.7	166
261	Probing the strong boundary shape dependence of the Casimir force. <i>Physical Review Letters</i> , <b>2001</b> , 87, 260402	7.4	157
260	Landau theory of the crumpling transition. <i>Physical Review Letters</i> , <b>1988</b> , 60, 2638-2640	7.4	157
259	Fractional Laplacian in bounded domains. <i>Physical Review E</i> , <b>2007</b> , 76, 021116	2.4	149
258	Roughening by impurities at finite temperatures. <i>Physical Review Letters</i> , <b>1985</b> , 55, 2923	7.4	149
257	Fluctuation-induced forces between rough surfaces. <i>Physical Review Letters</i> , <b>1991</b> , 67, 3275-3278	7.4	147
256	Crumpled and collapsed conformation in graphite oxide membranes. <i>Nature</i> , <b>1992</b> , 355, 426-428	50.4	147
255	The effects of somatic hypermutation on neutralization and binding in the PGT121 family of broadly neutralizing HIV antibodies. <i>PLoS Pathogens</i> , <b>2013</b> , 9, e1003754	7.6	144
254	Instabilities of charged polyampholytes. <i>Physical Review E</i> , <b>1995</b> , 51, 1299-1312	2.4	144
253	Critical dynamics of contact line depinning. <i>Physical Review E</i> , <b>1994</b> , 49, R2532-R2535	2.4	144
252	Knots in globule and coil phases of a model polyethylene. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 15102-6	16.4	143
251	Statistical Physics of Particles <b>2007</b> ,		143
250	Excess Charge in Polyampholytes. <i>Europhysics Letters</i> , <b>1994</b> , 27, 643-648	1.6	132
249	Normal and lateral Casimir forces between deformed plates. <i>Physical Review A</i> , <b>2003</b> , 67,	2.6	130
248	Nonequilibrium electromagnetic fluctuations: heat transfer and interactions. <i>Physical Review Letters</i> , <b>2011</b> , 106, 210404	7.4	129
247	Fluctuation-induced forces between manifolds immersed in correlated fluids. <i>Physical Review A</i> , <b>1992</b> , 46, 6490-6500	2.6	126

246	Manipulating the selection forces during affinity maturation to generate cross-reactive HIV antibodies. <i>Cell</i> , <b>2015</b> , 160, 785-797	56.2	125
245	A Stevedore's protein knot. <i>PLoS Computational Biology</i> , <b>2010</b> , 6, e1000731	5	125
244	Path-integral approach to the dynamic Casimir effect with fluctuating boundaries. <i>Physical Review A</i> , <b>1998</b> , 58, 1713-1722	2.6	124
243	Mechanical Response of Vacuum. <i>Physical Review Letters</i> , <b>1997</b> , 78, 3421-3425	7.4	121
242	Trace formulas for nonequilibrium Casimir interactions, heat radiation, and heat transfer for arbitrary objects. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	113
241	Commensurate-Incommensurate Phase Diagrams for Overlayers from a Helical Potts Model. <i>Physical Review Letters</i> , <b>1982</b> , 48, 1552-1555	7.4	111
240	Attractive Casimir forces in a closed geometry. <i>Physical Review Letters</i> , <b>2005</b> , 95, 250402	7.4	107
239	Collapse of Stiff Polyelectrolytes due to Counterion Fluctuations. <i>Physical Review Letters</i> , <b>1999</b> , 82, 445	6 <del>7</del> 44459	9 106
238	Driven Depinning in Anisotropic Media. <i>Physical Review Letters</i> , <b>1995</b> , 74, 920-923	7.4	102
237	Casimir forces beyond the proximity approximation. <i>Europhysics Letters</i> , <b>2012</b> , 97, 50001	1.6	101
236	Fluctuation-induced interactions between rods on a membrane. <i>Physical Review E</i> , <b>1996</b> , 54, 6725-6734	2.4	100
235	Active Particles with Soft and Curved Walls: Equation of State, Ratchets, and Instabilities. <i>Physical Review Letters</i> , <b>2016</b> , 117, 098001	7.4	98
234	Casimir forces between compact objects: The scalar case. <i>Physical Review D</i> , <b>2008</b> , 77,	4.9	98
233	Purely stochastic binary decisions in cell signaling models without underlying deterministic bistabilities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 18958-63	11.5	98
232	Interference of directed paths in disordered systems. <i>Physical Review Letters</i> , <b>1989</b> , 62, 941-944	7.4	97
231	epsilon expansions for crumpled manifolds. <i>Physical Review Letters</i> , <b>1987</b> , 58, 1289-1292	7.4	91
230	Conformations of polyampholytes. <i>Physical Review Letters</i> , <b>1992</b> , 69, 61-64	7.4	90
229	Diffusion in correlated random potentials, with applications to DNA. <i>Physical Review E</i> , <b>2004</b> , 69, 06190	32.4	89

# (2010-2008)

228	How the thymus designs antigen-specific and self-tolerant T cell receptor sequences. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 16671-6	11.5	88
227	Equilibrium shapes of flat knots. <i>Physical Review Letters</i> , <b>2002</b> , 88, 188101	7.4	88
226	Quantum interference effects for strongly localized electrons. <i>Physical Review B</i> , <b>1992</b> , 46, 9984-10006	3.3	88
225	Commensurate-incommensurate transitions with quenched random impurities. <i>Physical Review Letters</i> , <b>1985</b> , 55, 1157-1160	7.4	88
224	Depinning by quenched randomness. <i>Physical Review Letters</i> , <b>1985</b> , 55, 2235-2238	7·4	88
223	Exact integer algorithm for the two-dimensional +/-J Ising spin glass. <i>Physical Review E</i> , <b>1993</b> , 48, R3221	I- <b>R</b> 3 22	<b>4</b> 85
222	Macroscopic equations for pattern formation in mixtures of microtubules and molecular motors. <i>Physical Review E</i> , <b>2001</b> , 64, 056113	2.4	80
221	Material dependence of Casimir forces: Gradient expansion beyond proximity. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 074110	3.4	79
220	Protein knot server: detection of knots in protein structures. <i>Nucleic Acids Research</i> , <b>2007</b> , 35, W425-8	20.1	74
219	Josephson-junction ladders and quantum fluctuations. <i>Physical Review B</i> , <b>1986</b> , 33, 3125-3128	3.3	73
218	Statistical mechanics of polyampholytes. <i>Physical Review E</i> , <b>1994</b> , 49, 1383-1392	2.4	71
217	Fluctuation-induced interactions between rods on membranes and interfaces. <i>Europhysics Letters</i> , <b>1996</b> , 33, 241-246	1.6	70
216	Dynamic roughening of directed lines. <i>Physical Review Letters</i> , <b>1992</b> , 69, 929-932	7.4	69
215	Growth-induced roughening of crystalline facets. <i>Physical Review Letters</i> , <b>1991</b> , 66, 441-444	7.4	68
214	Casimir forces between cylinders and plates. <i>Physical Review A</i> , <b>2008</b> , 78,	2.6	66
213	Pulling knotted polymers. <i>Europhysics Letters</i> , <b>2002</b> , 60, 53-59	1.6	66
212	Statistical mechanics of self-avoiding tethered manifolds. <i>Physical Review A</i> , <b>1988</b> , 38, 966-982	2.6	63
211	Constraints on stable equilibria with fluctuation-induced (Casimir) forces. <i>Physical Review Letters</i> , <b>2010</b> , 105, 070404	7.4	62

210	First Order Phase Transition and Evidence for Frustrations in Polyampholytic Gels. <i>Physical Review Letters</i> , <b>1999</b> , 82, 4863-4865	7.4	62
209	Disorder-induced unbinding of a flux line from an extended defect. <i>Physical Review B</i> , <b>1994</b> , 49, 13030-	13,0,48	60
208	Adsorption and Wetting Transitions on Rough Substrates. <i>Europhysics Letters</i> , <b>1990</b> , 12, 161-166	1.6	60
207	Evolution of surface patterns on swelling gels. <i>Physical Review Letters</i> , <b>1988</b> , 61, 106-109	7.4	60
206	Spin models inferred from patient-derived viral sequence data faithfully describe HIV fitness landscapes. <i>Physical Review E</i> , <b>2013</b> , 88, 062705	2.4	59
205	Polymers with Random Self-Interactions. <i>Europhysics Letters</i> , <b>1991</b> , 14, 421-426	1.6	59
204	Anisotropic scaling in depinning of a flux line. <i>Physical Review Letters</i> , <b>1994</b> , 73, 1703-1706	7.4	57
203	Folding and unbinding transitions in tethered membranes. <i>Science</i> , <b>1991</b> , 252, 419-22	33.3	57
202	Anisotropic scaling in threshold critical dynamics of driven directed lines. <i>Physical Review B</i> , <b>1996</b> , 53, 3520-3542	3.3	56
201	Crossover to equivalent-neighbor multicritical behavior in arbitrary dimensions. <i>Physical Review B</i> , <b>1983</b> , 28, 244-246	3.3	56
200	The 2DIJ Ising spin glass: exact partition functions in polynomial time. <i>Nuclear Physics B</i> , <b>1994</b> , 432, 641	- <u>6</u> .67	54
199	Magnetic-field effects on strongly localized electrons. <i>Physical Review Letters</i> , <b>1990</b> , 64, 1816-1819	7.4	54
198	Casimir forces in a piston geometry at zero and finite temperatures. <i>Physical Review D</i> , <b>2007</b> , 76,	4.9	53
197	Reentrant melting of krypton adsorbed on graphite and the helical Potts-lattice-gas model. <i>Physical Review B</i> , <b>1985</b> , 31, 4527-4537	3.3	52
196	Phase ordering and roughening on growing films. <i>Physical Review Letters</i> , <b>2000</b> , 85, 614-7	7.4	50
195	Domain walls subject to quenched impurities (invited). <i>Journal of Applied Physics</i> , <b>1987</b> , 61, 3601-3604	2.5	50
194	Anomalous diffusion with absorbing boundary. <i>Physical Review E</i> , <b>2007</b> , 76, 061121	2.4	49
193	Heat radiation from long cylindrical objects. <i>Physical Review E</i> , <b>2012</b> , 85, 046603	2.4	48

# (2012-2007)

192	Dynamics of tumor growth and combination of anti-angiogenic and cytotoxic therapies. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 3665-77	3.8	48
191	Randomly charged polymers: An exact enumeration study. <i>Physical Review E</i> , <b>1995</b> , 52, 835-846	2.4	48
190	Dynamic relaxation of drifting polymers: A phenomenological approach. <i>Physical Review E</i> , <b>1993</b> , 48, 1228-1245	2.4	48
189	Thinning of superfluid films below the critical point. <i>Physical Review E</i> , <b>2007</b> , 76, 030601	2.4	47
188	Casimir forces, surface fluctuations, and thinning of superfluid film. <i>Physical Review Letters</i> , <b>2004</b> , 93, 155302	7.4	44
187	Dynamic scaling phenomena in growth processes. <i>Physica B: Condensed Matter</i> , <b>1996</b> , 221, 60-64	2.8	44
186	Quantum Cherenkov radiation and noncontact friction. <i>Physical Review A</i> , <b>2013</b> , 88,	2.6	43
185	Quorum sensing allows T cells to discriminate between self and nonself. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 11833-8	11.5	43
184	Defects in nematic membranes can buckle into pseudospheres. <i>Physical Review E</i> , <b>2008</b> , 77, 041705	2.4	42
183	Effective membrane model of the immunological synapse. <i>Physical Review Letters</i> , <b>2003</b> , 91, 208101	7.4	41
182	Spin-orbit scattering and magnetoconductance of strongly localized electrons. <i>Physical Review Letters</i> , <b>1991</b> , 66, 3187-3190	7.4	41
181	Orientation dependence of Casimir forces. <i>Physical Review A</i> , <b>2009</b> , 79,	2.6	40
180	Nonequilibrium Fluctuational Quantum Electrodynamics: Heat Radiation, Heat Transfer, and Force. <i>Annual Review of Condensed Matter Physics</i> , <b>2017</b> , 8, 119-143	19.7	38
179	Scattering approach to the dynamical Casimir effect. <i>Physical Review D</i> , <b>2013</b> , 87,	4.9	38
178	Probability distributions for polymer translocation. <i>Physical Review E</i> , <b>2008</b> , 78, 021129	2.4	38
177	Unusual universality of branching interfaces in random media. <i>Physical Review E</i> , <b>1995</b> , 52, R1269-R127	2 2.4	38
176	Optimal immunization cocktails can promote induction of broadly neutralizing Abs against highly mutable pathogens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E7039-E7048	11.5	37
175	Spontaneous emission by rotating objects: a scattering approach. <i>Physical Review Letters</i> , <b>2012</b> , 108, 230403	7.4	37

174	Non-equilibrium Casimir forces: Spheres and sphere-plate. <i>Europhysics Letters</i> , <b>2011</b> , 95, 21002	1.6	37
173	Winding angle distributions for random walks and flux lines. <i>Physical Review E</i> , <b>1996</b> , 53, 5861-5871	2.4	37
172	Nonmonotonic effects of parallel sidewalls on Casimir forces between cylinders. <i>Physical Review A</i> , <b>2008</b> , 77,	2.6	36
171	Fluctuation-Induced Forces in Nonequilibrium Diffusive Dynamics. <i>Physical Review Letters</i> , <b>2015</b> , 114, 230602	7.4	35
170	Thymic selection of T-cell receptors as an extreme value problem. <i>Physical Review Letters</i> , <b>2009</b> , 103, 068103	7.4	35
169	Elastic antiferromagnets on a triangular lattice. Journal of Physics C: Solid State Physics, 1986, 19, 6825-	-6831	35
168	Analytical results on Casimir forces for conductors with edges and tips. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 6867-6871	11.5	34
167	Knots in charged polymers. <i>Physical Review E</i> , <b>2002</b> , 66, 031802	2.4	34
166	Roughness and ordering of growing films. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2000</b> , 281, 295-310	3.3	34
165	Wetting of fractally rough surfaces. <i>Physical Review Letters</i> , <b>1990</b> , 65, 662	7.4	34
165 164	Wetting of fractally rough surfaces. <i>Physical Review Letters</i> , <b>1990</b> , 65, 662  Energy barriers to motion of flux lines in random media. <i>Physical Review Letters</i> , <b>1995</b> , 75, 1170-1173	7·4 7·4	34
164	Energy barriers to motion of flux lines in random media. <i>Physical Review Letters</i> , <b>1995</b> , 75, 1170-1173	7.4	31
164	Energy barriers to motion of flux lines in random media. <i>Physical Review Letters</i> , <b>1995</b> , 75, 1170-1173  Collapse of Randomly Self-Interacting Polymers. <i>Europhysics Letters</i> , <b>1994</b> , 28, 169-174	7.4	31
164 163 162	Energy barriers to motion of flux lines in random media. <i>Physical Review Letters</i> , <b>1995</b> , 75, 1170-1173  Collapse of Randomly Self-Interacting Polymers. <i>Europhysics Letters</i> , <b>1994</b> , 28, 169-174  Surface ordering and finite-size effects in liquid-crystal films. <i>Physical Review B</i> , <b>1991</b> , 44, 8274-8283	7·4 1.6	31 31 31
164 163 162	Energy barriers to motion of flux lines in random media. <i>Physical Review Letters</i> , <b>1995</b> , 75, 1170-1173  Collapse of Randomly Self-Interacting Polymers. <i>Europhysics Letters</i> , <b>1994</b> , 28, 169-174  Surface ordering and finite-size effects in liquid-crystal films. <i>Physical Review B</i> , <b>1991</b> , 44, 8274-8283  Observation of striped phases in adsorbed helium monolayers. <i>Physical Review B</i> , <b>1986</b> , 34, 318-324  Structure and dynamics of vibrated granular chains: comparison to equilibrium polymers. <i>Physical</i>	7·4 1.6 3·3 3·3	31 31 31 31
164 163 162 161	Energy barriers to motion of flux lines in random media. <i>Physical Review Letters</i> , <b>1995</b> , 75, 1170-1173  Collapse of Randomly Self-Interacting Polymers. <i>Europhysics Letters</i> , <b>1994</b> , 28, 169-174  Surface ordering and finite-size effects in liquid-crystal films. <i>Physical Review B</i> , <b>1991</b> , 44, 8274-8283  Observation of striped phases in adsorbed helium monolayers. <i>Physical Review B</i> , <b>1986</b> , 34, 318-324  Structure and dynamics of vibrated granular chains: comparison to equilibrium polymers. <i>Physical Review E</i> , <b>2009</b> , 79, 061304	7·4 1.6 3·3 3·3	31 31 31 31 30

156	Tightness of slip-linked polymer chains. <i>Physical Review E</i> , <b>2002</b> , 65, 061103	2.4	28
155	Freezing Transition of Compact Polyampholytes. <i>Physical Review Letters</i> , <b>1996</b> , 77, 3565-3568	7.4	28
154	Directed waves in random media. <i>Physical Review A</i> , <b>1992</b> , 45, 8859-8866	2.6	28
153	Renormalization-group analysis of the crumpling transition in large d. <i>Physical Review A</i> , <b>1989</b> , 39, 6086	- <u>6</u> 089	28
152	Wetting phenomena on rough substrates. <i>Physical Review B</i> , <b>1990</b> , 42, 6546-6554	3.3	28
151	Positive feedback regulation results in spatial clustering and fast spreading of active signaling molecules on a cell membrane. <i>Journal of Chemical Physics</i> , <b>2009</b> , 130, 245102	3.9	27
150	Formation and stability of synaptic receptor domains. <i>Physical Review Letters</i> , <b>2011</b> , 106, 238104	7.4	27
149	Nonuniversality and analytical continuation in moments of directed polymers on hierarchical lattices. <i>Journal of Statistical Physics</i> , <b>1993</b> , 71, 967-980	1.5	27
148	Scaling of energy barriers for flux lines and other random systems. <i>Physical Review E</i> , <b>1995</b> , 52, 4841-48	<b>52</b> 4	25
147	Expansions for Crumpled Manifolds. <i>Physical Review Letters</i> , <b>1987</b> , 58, 2280-2280	7.4	25
146	Conformal field theory of critical Casimir interactions in 2D. Europhysics Letters, 2013, 104, 21001	1.6	24
145	Model for growth of binary alloys with fast surface equilibration. <i>Physical Review E</i> , <b>1997</b> , 55, 5026-503.	2 2.4	24
144	Passive sliders on growing surfaces and advection in Burger flows. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	24
143	Directed paths on percolation clusters. <i>Journal of Statistical Physics</i> , <b>1992</b> , 67, 1-11	1.5	24
142	Dimensional reduction with correlated random fields. A superspace renormalization-group calculation. <i>Physical Review B</i> , <b>1983</b> , 27, 5875-5878	3.3	24
141	A Population Dynamics Model for Clonal Diversity in a Germinal Center. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 1693	5.7	23
140	Critical hysteresis for n-component magnets. <i>Physical Review E</i> , <b>1999</b> , 59, 1355-1367	2.4	23
139	Transfer Matrix Simulations of 2 d -Interfaces in Three-Dimensional Random Media. <i>Europhysics Letters</i> , <b>1989</b> , 8, 233-238	1.6	23

138	Krypton on graphite and the striped helical Potts model. <i>Physical Review B</i> , <b>1985</b> , 31, 1664-1667	3.3	23
137	Statistical Mechanics of Charged Manifolds. <i>Europhysics Letters</i> , <b>1989</b> , 9, 53-58	1.6	22
136	Phase Transitions in New Solvable Hamiltonians by a Hamiltonian Minimization. <i>Physical Review Letters</i> , <b>1983</b> , 51, 523-526	7.4	22
135	Random-field critical behavior and the Ginzburg criterion. <i>Physical Review B</i> , <b>1985</b> , 31, 2913-2919	3.3	22
134	Identification of drug resistance mutations in HIV from constraints on natural evolution. <i>Physical Review E</i> , <b>2016</b> , 93, 022412	2.4	21
133	Scaling laws describe memories of host-pathogen riposte in the HIV population. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 1965-70	11.5	21
132	Symmetry considerations and development of pinwheels in visual maps. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 16036-40	11.5	21
131	Sensitivity of ballistic deposition to pseudorandom number generators. <i>Physical Review E</i> , <b>1998</b> , 57, 504	l <b>4-</b> .505	2 <sub>21</sub>
130	Delocalization of Flux Lines from Extended Defects by Bulk Randomness. <i>Europhysics Letters</i> , <b>1993</b> , 23, 503-509	1.6	21
129	Tethering, Crumpling, and Melting Transitions in Hexatic Membranes. <i>Europhysics Letters</i> , <b>1990</b> , 13, 441	-4.46	21
128	Diffraction patterns from thin hexatic films. <i>Physical Review Letters</i> , <b>1988</b> , 61, 2855-2858	7.4	21
127	Entropic force of polymers on a cone tip. <i>Europhysics Letters</i> , <b>2011</b> , 96, 66002	1.6	20
126	Polymer-mediated entropic forces between scale-free objects. <i>Physical Review E</i> , <b>2012</b> , 86, 061801	2.4	19
125	Symmetry-breaking motility. <i>Physical Review Letters</i> , <b>2005</b> , 95, 138101	7.4	19
124	Tight and loose shapes in flat entangled dense polymers. European Physical Journal E, 2003, 12, 347-354	1.5	18
123	Roughening of anisotropically reconstructed surfaces and the Hubbard model. <i>Physical Review B</i> , <b>1992</b> , 46, 16031-16044	3.3	18
122	Self-avoiding crumpled manifolds: Perturbative analysis and renormalizability. <i>Physical Review Letters</i> , <b>1990</b> , 64, 2022-2025	7.4	18
121	Linear response relations in fluctuational electrodynamics. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	17

# (2001-2011)

120	Dilution and resonance-enhanced repulsion in nonequilibrium fluctuation forces. <i>Physical Review A</i> , <b>2011</b> , 84,	2.6	17	
119	Necklace model of randomly charged polymers. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1998</b> , 249, 301-306	3.3	17	
118	Kosterlitz-Thouless transition with symmetry-breaking fields and quenched random interactions. <i>Physical Review B</i> , <b>1991</b> , 43, 8331-8336	3.3	17	
117	Nonequilibrium quantum fluctuations of a dispersive medium: Spontaneous emission, photon statistics, entropy generation, and stochastic motion. <i>Physical Review A</i> , <b>2014</b> , 90,	2.6	16	
116	Interplay of roughness/modulation and curvature for surface interactions at proximity. <i>Europhysics Letters</i> , <b>2013</b> , 104, 41001	1.6	16	
115	Force-extension relations for polymers with sliding links. <i>Physical Review E</i> , <b>2002</b> , 66, 022102	2.4	16	
114	Casimir-Polder interaction for gently curved surfaces. <i>Physical Review D</i> , <b>2014</b> , 90,	4.9	15	
113	Free energies for the discrete chain in a periodic potential and the dual Coulomb gas. <i>Physical Review B</i> , <b>1984</b> , 30, 6368-6378	3.3	15	
112	One-dimensional gas of hard needles. <i>Physical Review E</i> , <b>2009</b> , 79, 041109	2.4	14	
111	Electromagnetic Casimir forces of parabolic cylinder and knife-edge geometries. <i>Physical Review D</i> , <b>2011</b> , 83,	4.9	14	
110	Predicting transcription factor specificity with all-atom models. <i>Nucleic Acids Research</i> , <b>2008</b> , 36, 6209-7	<b>17</b> 0.1	14	
109	Probability distributions of line lattices in random media from the 1D Bose gas. <i>Nuclear Physics B</i> , <b>2001</b> , 604, 479-510	2.8	14	
108	Exact criticality condition for randomly layered Ising models with competing interactions on a square lattice. <i>Physical Review B</i> , <b>1982</b> , 26, 219-225	3.3	14	
107	Ramifications of disorder on active particles in one dimension. <i>Physical Review E</i> , <b>2019</b> , 100, 052610	2.4	14	
106	Transient Casimir Forces from Quenches in Thermal and Active Matter. <i>Physical Review Letters</i> , <b>2017</b> , 118, 015702	7.4	13	
105	Coalescence Model for Crumpled Globules Formed in Polymer Collapse. <i>Physical Review Letters</i> , <b>2015</b> , 115, 088303	7.4	13	
104	Self-assembly and plasticity of synaptic domains through a reaction-diffusion mechanism. <i>Physical Review E</i> , <b>2015</b> , 92, 032705	2.4	13	
103	Free energy self-averaging in protein-sized random heteropolymers. <i>Physical Review Letters</i> , <b>2001</b> , 87, 078104	7.4	13	

102	Which came first, protein sequence or structure?. <i>Science</i> , <b>1996</b> , 273, 610	33.3	13
101	Effects of surface enhancement on fluctuation-induced interactions. <i>Physical Review E</i> , <b>1993</b> , 47, 3456-2	3462	13
100	Exact-enumeration approach to tunneling in disordered systems. <i>Physical Review B</i> , <b>1990</b> , 42, 4559-456	23.3	13
99	New phases, commensurate-incommensurate and disordering transitions in a solvable model of adsorbed layers. <i>Physical Review B</i> , <b>1985</b> , 31, 1525-1534	3.3	13
98	Phase boundaries of the isotropic helical Potts model on a square lattice. <i>Physical Review B</i> , <b>1982</b> , 26, 2693-2696	3.3	13
97	Small distance expansion for radiative heat transfer between curved objects. <i>Europhysics Letters</i> , <b>2013</b> , 101, 34002	1.6	12
96	Melting of persistent double-stranded polymers. <i>Physical Review E</i> , <b>2008</b> , 78, 051910	2.4	12
95	Interplay between phase ordering and roughening on growing films. <i>European Physical Journal B</i> , <b>2003</b> , 36, 401-410	1.2	12
94	Competing Criticality of Short- and Infinite-Range Interactions on the Cayley Tree. <i>Physical Review Letters</i> , <b>1983</b> , 51, 1210-1213	7.4	12
93	Correlation and cross-linking effects in imprinting sites for divalent adsorption in gels. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 6636-9	3.4	11
92	Conformations of randomly linked polymers. <i>Physical Review E</i> , <b>1996</b> , 54, 5263-5267	2.4	11
91	Magnetoconductance anisotropy and interference effects in variable-range hopping. <i>Physical Review B</i> , <b>1996</b> , 53, 7663-7672	3.3	11
90	A system of n interacting fermions and its unusual n -n0 limit. <i>Nuclear Physics B</i> , <b>1993</b> , 393, 480-494	2.8	11
89	Fractals and self-organized criticality in dissipative dynamics. <i>Physica D: Nonlinear Phenomena</i> , <b>1989</b> , 38, 198-202	3.3	11
88	Reversing the critical Casimir force by shape deformation. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>2015</b> , 743, 138-142	4.2	10
87	Probability distributions for directed polymers in random media with correlated noise. <i>Physical Review E</i> , <b>2016</b> , 94, 010101	2.4	10
86	Casimir forces between cylinders at different temperatures. <i>Physical Review D</i> , <b>2012</b> , 85,	4.9	10
85	Quantitative model for efficient temporal targeting of tumor cells and neovasculature. <i>Computational and Mathematical Methods in Medicine</i> , <b>2011</b> , 2011, 790721	2.8	10

84	Adsorption of Polymers on a Fluctuating Surface. <i>Europhysics Letters</i> , <b>1995</b> , 29, 303-308	1.6	10
83	Matrix generalizations of some dynamic field theories. <i>Nuclear Physics B</i> , <b>1996</b> , 464, 449-462	2.8	10
82	Kardar, Parisi, and Zhang respond. <i>Physical Review Letters</i> , <b>1986</b> , 57, 1810	7.4	10
81	Kantor, Kardar, and Nelson reply. <i>Physical Review Letters</i> , <b>1988</b> , 60, 238	7.4	10
80	Short-range and infinite-range bond percolation. <i>Physical Review B</i> , <b>1984</b> , 29, 5053-5059	3.3	10
79	Bacterial range expansions on a growing front: Roughness, fixation, and directed percolation. <i>Physical Review E</i> , <b>2019</b> , 99, 042134	2.4	9
78	Nonequilibrium forces following quenches in active and thermal matter. <i>Physical Review E</i> , <b>2018</b> , 97, 032125	2.4	9
77	Configurations of polymers attached to probes. <i>Europhysics Letters</i> , <b>2009</b> , 88, 48001	1.6	9
76	Universality in the jamming limit for elongated hard particles in one dimension. <i>Europhysics Letters</i> , <b>2009</b> , 87, 60002	1.6	9
75	Modified critical correlations close to modulated and rough surfaces. <i>Physical Review Letters</i> , <b>2001</b> , 86, 4596-9	7.4	9
74	Casimir-Polder force between anisotropic nanoparticles and gently curved surfaces. <i>Physical Review D</i> , <b>2015</b> , 92,	4.9	8
73	The elusiveness of polymer knots. <i>European Physical Journal B</i> , <b>2008</b> , 64, 519-523	1.2	8
72	Information flow through a chaotic channel: prediction and postdiction at finite resolution. <i>Physical Review E</i> , <b>2004</b> , 70, 026205	2.4	8
71	Apex exponents for polymer-probe interactions. <i>Physical Review Letters</i> , <b>2005</b> , 94, 198303	7.4	8
70	Transverse Fluctuations of Polyelectrolytes. <i>Physical Review Letters</i> , <b>1999</b> , 83, 745-748	7.4	8
69	Collapse of Randomly Linked Polymers. <i>Physical Review Letters</i> , <b>1996</b> , 77, 4275	7.4	8
68	Directed waves in random media. <i>Physical Review Letters</i> , <b>1991</b> , 66, 2176	7:4	8
67	Pseudodimensional variation and tricriticality of Potts models by hierarchical breaking of translational invariance. <i>Physical Review B</i> , <b>1984</b> , 30, 1609-1611	3.3	8

66	Comment on "Criticality of the Anisotropic Quantum Heisenberg Model on a Self-Dual Hierarchical Lattice". <i>Physical Review Letters</i> , <b>1984</b> , 52, 483-483	7.4	8
65	The low spike density of HIV may have evolved because of the effects of T helper cell depletion on affinity maturation. <i>PLoS Computational Biology</i> , <b>2018</b> , 14, e1006408	5	8
64	Threading dislocation lines in two-sided flux-array decorations. <i>Physical Review B</i> , <b>1997</b> , 56, 11903-119	063.3	7
63	First-passage times and distances along critical curves. <i>Europhysics Letters</i> , <b>2007</b> , 80, 40006	1.6	7
62	Structure space of model proteins: A principal component analysis. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 4277-4284	3.9	7
61	Correlation functions near modulated and rough surfaces. <i>Physical Review E</i> , <b>2002</b> , 65, 046121	2.4	7
60	Information optimization in coupled audio-visual cortical maps. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 15894-7	11.5	7
59	Ordering phenomena on growing films. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1999</b> , 263, 345-353	3.3	7
58	Low-temperature phases of Xe on graphite. <i>Physical Review B</i> , <b>1986</b> , 34, 6557-6560	3.3	7
57	Disorder-Induced Long-Ranged Correlations in Scalar Active Matter. <i>Physical Review Letters</i> , <b>2021</b> , 126, 048003	7.4	7
56	Flight of a heavy particle nonlinearly coupled to a quantum bath. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	6
55	Nonlinear stochastic equations with calculable steady states. <i>Physical Review E</i> , <b>2003</b> , 68, 046108	2.4	6
54	Elasticity and melting of vortex crystals in anisotropic superconductors: Beyond the continuum regime. <i>Physical Review B</i> , <b>2000</b> , 62, 5942-5956	3.3	6
53	Spectroscopic probe of the van der Waals interaction between polar molecules and a curved surface. <i>Physical Review A</i> , <b>2016</b> , 94,	2.6	5
52	Only signaling modules that discriminate sharply between stimulatory and nonstimulatory inputs require basal signaling for fast cellular responses. <i>Journal of Chemical Physics</i> , <b>2010</b> , 133, 105101	3.9	5
51	Generalizing the O(N)-field theory to N-colored manifolds of arbitrary internal dimension D. <i>Nuclear Physics B</i> , <b>1998</b> , 528, 469-522	2.8	5
50	Thermodynamic fingerprints of disorder in flux line lattices and other glassy mesoscopic systems. <i>Physical Review Letters</i> , <b>2000</b> , 85, 2176-9	7.4	5
49	Instability and fluctuations of flux lines with point impurities in a parallel current. <i>Physical Review B</i> , <b>2000</b> , 61, 11729-11738	3.3	5

48	Exact solution of the Ising model on a helix. <i>Physical Review B</i> , <b>1983</b> , 27, 6869-6872	3.3	5
47	Uniaxially compressed magnets. <i>Physical Review B</i> , <b>1984</b> , 30, 4113-4119	3.3	5
46	The Influence of T Cell Development on Pathogen Specificity and Autoreactivity. <i>Journal of Statistical Physics</i> , <b>2012</b> , 149, 203-219	1.5	4
45	Patterns and Symmetries in the Visual Cortex and in Natural Images. <i>Journal of Statistical Physics</i> , <b>2006</b> , 125, 1243-1266	1.5	4
44	Capturing knots in polymers. <i>Chaos</i> , <b>2005</b> , 15, 041103	3.3	4
43	Melting of flux lines in an alternating parallel current. <i>Physical Review B</i> , <b>1999</b> , 59, 9637-9641	3.3	4
42	Population extinction on a random fitness seascape. <i>Physical Review E</i> , <b>2020</b> , 102, 052106	2.4	3
41	How nonuniform contact profiles of T cell receptors modulate thymic selection outcomes. <i>Physical Review E</i> , <b>2018</b> , 97, 032413	2.4	3
40	Evolution in range expansions with competition at rough boundaries. <i>Journal of Theoretical Biology</i> , <b>2019</b> , 478, 153-160	2.3	3
39	Attractive and repulsive polymer-mediated forces between scale-free surfaces. <i>Physical Review E</i> , <b>2017</b> , 96, 022148	2.4	3
38	Hwa, Kardar, and Paczuski reply. <i>Physical Review Letters</i> , <b>1994</b> , 72, 785	7.4	3
37	Tethered networks: Elasticity, rigidity and interactions. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , <b>1988</b> , 5, 209-213		3
36	Pair dispersion in dilute suspension of active swimmers. <i>Journal of Chemical Physics</i> , <b>2019</b> , 150, 064907	3.9	3
35	Spatial optimization for radiation therapy of brain tumours. <i>PLoS ONE</i> , <b>2019</b> , 14, e0217354	3.7	2
34	Pinning of diffusional patterns by non-uniform curvature. <i>Europhysics Letters</i> , <b>2019</b> , 127, 48001	1.6	2
33	Statistical Physics of T-Cell Development and Pathogen Specificity. <i>Annual Review of Condensed Matter Physics</i> , <b>2013</b> , 4, 339-360	19.7	2
32	Unusual percolation in simple small-world networks. <i>Physical Review E</i> , <b>2009</b> , 79, 066112	2.4	2
31	A geometric generalization of field theory to manifolds of arbitrary dimension. <i>European Physical Journal B</i> , <b>1999</b> , 7, 187-190	1.2	2

30	N-color spin models in the large-N limit. <i>Physical Review B</i> , <b>1985</b> , 31, 7282-7284	3.3	2
29	Disordered boundaries destroy bulk phase separation in scalar active matter <i>Physical Review E</i> , <b>2022</b> , 105, 044603	2.4	2
28	Percolation of sites not removed by a random walker in d dimensions. <i>Physical Review E</i> , <b>2019</b> , 100, 027	2125	1
27	Pinning and unbinding of ideal polymers from a wedge corner. <i>Physical Review E</i> , <b>2017</b> , 96, 062132	2.4	1
26	Untangling influences of hydrophobicity on protein sequences and structures. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2006</b> , 62, 1101-6	4.2	1
25	Long-Range Interactions and Rigidity in Surfaces and Lamellar Phases. <i>Materials Research Society Symposia Proceedings</i> , <b>1989</b> , 177, 103		1
24	Near Field Propulsion Forces from Nonreciprocal Media. <i>Physical Review Letters</i> , <b>2021</b> , 126, 170401	7.4	1
23	Fluctuations of Interfaces and Fronts. NATO ASI Series Series B: Physics, 1990, 3-15		1
22	Activated diffusiophoresis. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 084109	3.9	О
21	A simple model for how the risk of pandemics from different virus families depends on viral and human traits. <i>Mathematical Biosciences</i> , <b>2021</b> , 343, 108732	3.9	O
20	Behavior-dependent critical dynamics in collective states of active particles. <i>Europhysics Letters</i> , <b>2021</b> , 134, 64001	1.6	О
19	Active motion of passive asymmetric dumbbells in a non-equilibrium bath. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 024109	3.9	O
18	Localization of random walks to competing manifolds of distinct dimensions. <i>Physical Review E</i> , <b>2018</b> , 98, 022108	2.4	0
17	Optimal paths on the road network as directed polymers. <i>Physical Review E</i> , <b>2017</b> , 96, 050301	2.4	
16	Edouard Brain: Introduction to Statistical Field Theory. <i>Journal of Statistical Physics</i> , <b>2011</b> , 142, 1121-11	<b>22</b> .5	
15	The statistics of lines in natural images and implications for visual detection. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2010</b> , 389, 2975-2980	3.3	
14	Critical Dynamics of Contact Line Depinning. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 366, 51		
13	Statistical Mechanics of Phase Transitions with a Hierarchy of Structures. <i>Materials Research Society Symposia Proceedings</i> , <b>1991</b> , 255, 309		

#### LIST OF PUBLICATIONS

12	Finite-size scaling in layered systems with surface ordering. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1991</b> , 177, 207-212	3.3
11	Confinement between Rough Substrates: FluctuationInduced Forces, and Other Manifestations. <i>Materials Research Society Symposia Proceedings</i> , <b>1992</b> , 290, 153	
10	Seascape origin of Richards growth <i>Physical Review E</i> , <b>2022</b> , 105, 014417	2.4
9	Inferring the intrinsic mutational fitness landscape of influenzalike evolving antigens from temporally ordered sequence data <i>Physical Review E</i> , <b>2022</b> , 105, 024401	2.4
8	FLUCTUATION-INDUCED PHENOMENA: FROM BIOPHYSICS TO CAVITY QED <b>2000</b> , 229-260	
7	STOCHASTIC DYNAMICS OF GROWING FILMS <b>2000</b> , 1-47	
6	Fractal Behavior of Tethered Networks <b>1989</b> , 327-335	
5	Quantum Interference Effects in the Hopping Conductivity <b>1990</b> , 169-179	
4	Quantum Interference Phenomena in Strong Localization <b>1992</b> , 145-156	
3	Nonequilibrium dynamics of fluctuating lines. NATO ASI Series Series B: Physics, 1995, 89-110	
2	Distinct critical behaviors from the same state in quantum spin and population dynamics perspectives. <i>Physical Review E</i> , <b>2021</b> , 103, 012106	2.4
1	Studying Viral Populations with Tools from Quantum Spin Chains. <i>Journal of Statistical Physics</i> , <b>2021</b> , 182, 1	1.5