

Cynthia J O Reichhardt

List of Publications by Year in descending order

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195
papers

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201
times ranked

2806
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#	ARTICLE	IF	CITATIONS
1	Nonequilibrium Dynamic Phase Diagram for Vortex Lattices. <i>Physical Review Letters</i> , 1998, 81, 3757-3760.	7.8	319
2	Dynamic Phases of Vortices in Superconductors with Periodic Pinning. <i>Physical Review Letters</i> , 1997, 78, 2648-2651.	7.8	252
3	Commensurate and incommensurate vortex states in superconductors with periodic pinning arrays. <i>Physical Review B</i> , 1998, 57, 7937-7943.	3.2	246
4	Superconducting Fluxon Pumps and Lenses. <i>Physical Review Letters</i> , 1999, 83, 5106-5109.	7.8	222
5	Depinning and nonequilibrium dynamic phases of particle assemblies driven over random and ordered substrates: a review. <i>Reports on Progress in Physics</i> , 2017, 80, 026501.	20.1	197
6	Rectification of Swimming Bacteria and Self-Driven Particle Systems by Arrays of Asymmetric Barriers. <i>Physical Review Letters</i> , 2008, 101, 018102.	7.8	190
7	Collective Transport Properties of Driven Skyrmions with Random Disorder. <i>Physical Review Letters</i> , 2015, 114, 217202.	7.8	181
8	Ratchet Effects in Active Matter Systems. <i>Annual Review of Condensed Matter Physics</i> , 2017, 8, 51-75.	14.5	174
9	Nonequilibrium dynamic phases and plastic flow of driven vortex lattices in superconductors with periodic arrays of pinning sites. <i>Physical Review B</i> , 1998, 58, 6534-6564.	3.2	171
10	Phase Locking, Devil's Staircases, Farey Trees, and Arnold Tongues in Driven Vortex Lattices with Periodic Pinning. <i>Physical Review Letters</i> , 1999, 82, 414-417.	7.8	169
11	Spatiotemporal dynamics and plastic flow of vortices in superconductors with periodic arrays of pinning sites. <i>Physical Review B</i> , 1996, 54, 16108-16115.	3.2	128
12	Collective Interaction-Driven Ratchet for Transporting Flux Quanta. <i>Physical Review Letters</i> , 2001, 87, 177002.	7.8	115
13	Active matter transport and jamming on disordered landscapes. <i>Physical Review E</i> , 2014, 90, 012701.	2.1	105
14	Novel Colloidal Crystalline States on Two-Dimensional Periodic Substrates. <i>Physical Review Letters</i> , 2002, 88, 248301.	7.8	102
15	Realizing Colloidal Artificial Ice on Arrays of Optical Traps. <i>Physical Review Letters</i> , 2006, 97, 228302.	7.8	102
16	Multiscaling at PointJ: Jamming is a Critical Phenomenon. <i>Physical Review Letters</i> , 2005, 95, 088001.	7.8	100
17	Casimir effect in active matter systems. <i>Physical Review E</i> , 2014, 90, 013019.	2.1	98
18	Noise fluctuations and drive dependence of the skyrmion Hall effect in disordered systems. <i>New Journal of Physics</i> , 2016, 18, 095005.	2.9	98

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19	Colloidal Dynamics on Disordered Substrates. <i>Physical Review Letters</i> , 2002, 89, 078301.	7.8	96
20	Fractal Networks, Braiding Channels, and Voltage Noise in Intermittently Flowing Rivers of Quantized Magnetic Flux. <i>Physical Review Letters</i> , 1998, 80, 2197-2200.	7.8	94
21	Moving Wigner Glasses and Smectics: Dynamics of Disordered Wigner Crystals. <i>Physical Review Letters</i> , 2001, 86, 4354-4357.	7.8	94
22	Creating Artificial Ice States Using Vortices in Nanostructured Superconductors. <i>Physical Review Letters</i> , 2009, 102, 237004.	7.8	90
23	Superconducting vortex avalanches, voltage bursts, and vortex plastic flow: Effect of the microscopic pinning landscape on the macroscopic properties. <i>Physical Review B</i> , 1997, 56, 6175-6194.	3.2	88
24	Complex dynamical flow phases and pinning in superconductors with rectangular pinning arrays. <i>Physical Review B</i> , 2001, 64, .	3.2	85
25	Quantized transport for a skyrmion moving on a two-dimensional periodic substrate. <i>Physical Review B</i> , 2015, 91, .	3.2	81
26	Reversible vortex ratchet effects and ordering in superconductors with simple asymmetric potential arrays. <i>Physical Review B</i> , 2007, 75, .	3.2	80
27	Reversible to Irreversible Flow Transition in Periodically Driven Vortices. <i>Physical Review Letters</i> , 2008, 100, 187002.	7.8	76
28	Dynamical Ordering of Driven Stripe Phases in Quenched Disorder. <i>Physical Review Letters</i> , 2003, 90, 026401.	7.8	72
29	Strongly Enhanced Pinning of Magnetic Vortices in Type-II Superconductors by Conformal Crystal Arrays. <i>Physical Review Letters</i> , 2013, 110, 267001.	7.8	69
30	Random Organization and Plastic Depinning. <i>Physical Review Letters</i> , 2009, 103, 168301.	7.8	63
31	Dynamic phases of active matter systems with quenched disorder. <i>Physical Review E</i> , 2017, 95, 032606.	2.1	61
32	Ratchet Cellular Automata. <i>Physical Review Letters</i> , 2003, 90, 247004.	7.8	60
33	Dynamical Ordering and Directional Locking for Particles Moving over Quasicrystalline Substrates. <i>Physical Review Letters</i> , 2011, 106, 060603.	7.8	59
34	Magnus-induced ratchet effects for skyrmions interacting with asymmetric substrates. <i>New Journal of Physics</i> , 2015, 17, 073034.	2.9	59
35	Individual and multiple vortex pinning in systems with periodic pinning arrays. <i>Physical Review B</i> , 2001, 64, .	3.2	57
36	Microscopic derivation of magnetic-flux-density profiles, magnetization hysteresis loops, and critical currents in strongly pinned superconductors. <i>Physical Review B</i> , 1995, 52, 10441-10446.	3.2	56

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37	Fluctuating Topological Defects in 2D Liquids: Heterogeneous Motion and Noise. <i>Physical Review Letters</i> , 2003, 90, 095504.	7.8	55
38	Depinning by Fracture in a Glassy Background. <i>Physical Review Letters</i> , 2003, 90, 098302.	7.8	52
39	Origin of Reversed Vortex Ratchet Motion. <i>Physical Review Letters</i> , 2007, 99, 247002.	7.8	52
40	Commensurate and incommensurate vortex lattice melting in periodic pinning arrays. <i>Physical Review B</i> , 2001, 64, .	3.2	51
41	Aspects of jamming in two-dimensional athermal frictionless systems. <i>Soft Matter</i> , 2014, 10, 2932.	2.7	51
42	Structural transitions, melting, and intermediate phases for stripe- and clump-forming systems. <i>Physical Review E</i> , 2010, 82, 041502.	2.1	50
43	Local Melting and Drag for a Particle Driven through a Colloidal Crystal. <i>Physical Review Letters</i> , 2004, 92, 108301.	7.8	49
44	Charge Transport Transitions and Scaling in Disordered Arrays of Metallic Dots. <i>Physical Review Letters</i> , 2003, 90, 046802.	7.8	48
45	Dynamics and separation of circularly moving particles in asymmetrically patterned arrays. <i>Physical Review E</i> , 2013, 88, 042306.	2.1	48
46	Point-defect dynamics in two-dimensional colloidal crystals. <i>Physical Review E</i> , 2007, 75, 011403.	2.1	47
47	Fluctuations and noise signatures of driven magnetic skyrmions. <i>Physical Review B</i> , 2017, 96, .	3.2	46
48	Dynamics, Rectification, and Fractionation for Colloids on Flashing Substrates. <i>Physical Review Letters</i> , 2006, 96, 188301.	7.8	45
49	Active microrheology in active matter systems: Mobility, intermittency, and avalanches. <i>Physical Review E</i> , 2015, 91, 032313.	2.1	43
50	Rectification and Phase Locking for Particles on Symmetric Two-Dimensional Periodic Substrates. <i>Physical Review Letters</i> , 2002, 89, 024101.	7.8	42
51	Vortex molecular crystal and vortex plastic crystal states in honeycomb and kagomÃ© pinning arrays. <i>Physical Review B</i> , 2007, 76, .	3.2	41
52	Directional locking effects and dynamics for particles driven through a colloidal lattice. <i>Physical Review E</i> , 2004, 69, 041405.	2.1	39
53	Active matter ratchets with an external drift. <i>Physical Review E</i> , 2013, 88, 062310.	2.1	39
54	Fluctuations, jamming, and yielding for a driven probe particle in disordered disk assemblies. <i>Physical Review E</i> , 2010, 82, 051306.	2.1	38

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55	Structure and melting of two-species charged clusters in a parabolic trap. <i>Physical Review E</i> , 2003, 68, 060401.	2.1	37
56	Depinning and dynamics of systems with competing interactions in quenched disorder. <i>Europhysics Letters</i> , 2003, 61, 221-227.	2.0	37
57	Moving vortex phases, dynamical symmetry breaking, and jamming for vortices in honeycomb pinning arrays. <i>Physical Review B</i> , 2008, 78, .	3.2	37
58	Vortex Plastic Motion in Twinned Superconductors. <i>Physical Review Letters</i> , 1996, 77, 3625-3628.	7.8	36
59	Hysteresis and return-point memory in colloidal artificial spin ice systems. <i>Physical Review E</i> , 2012, 86, 021406.	2.1	36
60	Reversible ratchet effects for vortices in conformal pinning arrays. <i>Physical Review B</i> , 2015, 91, .	3.2	36
61	Shapiro steps for skyrmion motion on a washboard potential with longitudinal and transverse ac drives. <i>Physical Review B</i> , 2015, 92, .	3.2	36
62	Thermal creep and the skyrmion Hall angle in driven skyrmion crystals. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 07LT01.	1.8	36
63	Clogging and depinning of ballistic active matter systems in disordered media. <i>Physical Review E</i> , 2018, 97, 052613.	2.1	35
64	Avalanche dynamics for active matter in heterogeneous media. <i>New Journal of Physics</i> , 2018, 20, 025002.	2.9	34
65	Commensurability effects at nonmatching fields for vortices in diluted periodic pinning arrays. <i>Physical Review B</i> , 2007, 76, .	3.2	33
66	Transport anisotropy as a probe of the interstitial vortex state in superconductors with artificial pinning arrays. <i>Physical Review B</i> , 2009, 79, .	3.2	33
67	Jamming in granular polymers. <i>Physical Review E</i> , 2011, 84, 011303.	2.1	33
68	Crossover from Jamming to Clogging Behaviours in Heterogeneous Environments. <i>Scientific Reports</i> , 2018, 8, 10252.	3.3	33
69	Cooperative behavior and pattern formation in mixtures of driven and nondriven colloidal assemblies. <i>Physical Review E</i> , 2006, 74, 011403.	2.1	32
70	Dynamic regimes for driven colloidal particles on a periodic substrate at commensurate and incommensurate fillings. <i>Physical Review E</i> , 2013, 88, 062301.	2.1	32
71	Reversible vector ratchets for skyrmion systems. <i>Physical Review B</i> , 2017, 95, .	3.2	32
72	Nonequilibrium phases and segregation for skyrmions on periodic pinning arrays. <i>Physical Review B</i> , 2018, 98, .	3.2	32

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73	Rectification and flux reversals for vortices interacting with triangular traps. <i>Physica C: Superconductivity and Its Applications</i> , 2005, 432, 125-132.	1.2	31
74	Transverse depinning in strongly driven vortex lattices with disorder. <i>Physical Review B</i> , 2000, 61, R3811-R3814.	3.2	30
75	Absolute transverse mobility and ratchet effect on periodic two-dimensional symmetric substrates. <i>Physical Review E</i> , 2003, 68, 046102.	2.1	30
76	Enhanced pinning for vortices in hyperuniform pinning arrays and emergent hyperuniform vortex configurations with quenched disorder. <i>Physical Review B</i> , 2017, 96, .	3.2	30
77	Emergent geometric frustration of artificial magnetic skyrmion crystals. <i>Physical Review B</i> , 2016, 94, .	3.2	29
78	Commensurability, jamming, and dynamics for vortices in funnel geometries. <i>Physical Review B</i> , 2010, 81, .	3.2	28
79	Jamming in systems with quenched disorder. <i>Physical Review E</i> , 2012, 86, 061301.	2.1	28
80	Magnus-induced dynamics of driven skyrmions on a quasi-one-dimensional periodic substrate. <i>Physical Review B</i> , 2016, 94, .	3.2	28
81	Clogging and jamming transitions in periodic obstacle arrays. <i>Physical Review E</i> , 2017, 95, 030902.	2.1	28
82	Braiding Majorana fermions and creating quantum logic gates with vortices on a periodic pinning structure. <i>Physical Review B</i> , 2020, 101, .	3.2	27
83	Metastability and transient effects in vortex matter near a decoupling transition. <i>Physical Review B</i> , 2003, 67, .	3.2	26
84	Noise at the Crossover from Wigner Liquid to Wigner Glass. <i>Physical Review Letters</i> , 2004, 93, 176405.	7.8	26
85	Pinning and dynamics of colloids on one-dimensional periodic potentials. <i>Physical Review E</i> , 2005, 72, 032401.	2.1	26
86	Negative differential mobility and trapping in active matter systems. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 015404.	1.8	25
87	Ice rule fragility via topological charge transfer in artificial colloidal ice. <i>Nature Communications</i> , 2018, 9, 4146.	12.8	25
88	Laning and clustering transitions in driven binary active matter systems. <i>Physical Review E</i> , 2018, 98, 022603.	2.1	25
89	Pinning, ordering, and dynamics of vortices in conformal crystal and gradient pinning arrays. <i>Physical Review B</i> , 2014, 90, .	3.2	24
90	Active microrheology, Hall effect, and jamming in chiral fluids. <i>Physical Review E</i> , 2019, 100, 012604.	2.1	24

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91	Dynamic regimes and spontaneous symmetry breaking for driven colloids on triangular substrates. <i>Europhysics Letters</i> , 2004, 68, 303-309.	2.0	23
92	Structural transitions and dynamical regimes for directional locking of vortices and colloids driven over periodic substrates. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 225702.	1.8	23
93	Statics and dynamics of Yukawa cluster crystals on ordered substrates. <i>Physical Review E</i> , 2012, 85, 051401.	2.1	23
94	Collective transport for active matter run-and-tumble disk systems on a traveling-wave substrate. <i>Physical Review E</i> , 2017, 95, 012607.	2.1	23
95	Velocity force curves, laning, and jamming for oppositely driven disk systems. <i>Soft Matter</i> , 2018, 14, 490-498.	2.7	23
96	Anisotropic sliding dynamics, peak effect, and metastability in stripe systems. <i>Physical Review E</i> , 2011, 83, 041501.	2.1	22
97	Inner Phases of Colloidal Hexagonal Spin Ice. <i>Physical Review Letters</i> , 2018, 120, 027204.	7.8	22
98	Avalanches and Criticality in Driven Magnetic Skyrmions. <i>Physical Review Letters</i> , 2018, 120, 117203.	7.8	22
99	Reversibility, pattern formation, and edge transport in active chiral and passive disk mixtures. <i>Journal of Chemical Physics</i> , 2019, 150, 064905.	3.0	22
100	Ordering and melting in colloidal molecular crystal mixtures. <i>Physical Review E</i> , 2005, 71, 062403.	2.1	21
101	Vortex configurations and dynamics in elliptical pinning sites for high matching fields. <i>Physical Review B</i> , 2006, 73, .	3.2	21
102	Spontaneous Transverse Response and Amplified Switching in Superconductors with Honeycomb Pinning Arrays. <i>Physical Review Letters</i> , 2008, 100, 167002.	7.8	21
103	Commensurate states and pattern switching via liquid crystal skyrmions trapped in a square lattice. <i>Soft Matter</i> , 2020, 16, 3338-3343.	2.7	21
104	Skyrmion ratchet in funnel geometries. <i>Physical Review B</i> , 2021, 104, .	3.2	20
105	Crossover from Intermittent to Continuum Dynamics for Locally Driven Colloids. <i>Physical Review Letters</i> , 2006, 96, 028301.	7.8	19
106	Phonon spectra of two-dimensional liquid dusty plasmas on a one-dimensional periodic substrate. <i>Physical Review E</i> , 2018, 98, .	2.1	19
107	Directional locking effects for active matter particles coupled to a periodic substrate. <i>Physical Review E</i> , 2020, 102, 042616.	2.1	19
108	Topological Invariants in Microscopic Transport on Rough Landscapes: Morphology, Hierarchical Structure, and Horton Analysis of Riverlike Networks of Vortices. <i>Physical Review Letters</i> , 1999, 82, 3641-3644.	7.8	18

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109	Dynamics and melting of stripes, crystals, and bubbles with quenched disorder. <i>Physica D: Nonlinear Phenomena</i> , 2004, 193, 303-309.	2.8	18
110	Depinning dynamics of two-dimensional dusty plasmas on a one-dimensional periodic substrate. <i>Physical Review E</i> , 2019, 100, 033207.	2.1	18
111	Nonlinear transport, dynamic ordering, and clustering for driven skyrmions on random pinning. <i>Physical Review B</i> , 2019, 99, .	3.2	18
112	Viscous decoupling transitions for individually dragged particles in systems with quenched disorder. <i>Physical Review E</i> , 2008, 78, 011402.	2.1	17
113	Nonequilibrium phases for driven particle systems with effective orientational degrees of freedom. <i>Physical Review E</i> , 2009, 79, 061403.	2.1	17
114	Dewetting and spreading transitions for active matter on random pinning substrates. <i>Journal of Chemical Physics</i> , 2017, 146, 204903.	3.0	17
115	Reversible to irreversible transitions in periodically driven skyrmion systems. <i>New Journal of Physics</i> , 2019, 21, 013001.	2.9	17
116	Guided skyrmion motion along pinning array interfaces. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 528, 167710.	2.3	17
117	Nonlinear dynamics, rectification, and phase locking for particles on symmetrical two-dimensional periodic substrates with dc and circular ac drives. <i>Physical Review E</i> , 2004, 69, 056115.	2.1	16
118	Dynamical freezing of active matter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 19099-19100.	7.1	16
119	Structures and diffusion of two-dimensional dusty plasmas on one-dimensional periodic substrates. <i>Physical Review E</i> , 2018, 98, .	2.1	16
120	Skyrmion dynamics and topological sorting on periodic obstacle arrays. <i>New Journal of Physics</i> , 2020, 22, 053025.	2.9	16
121	Disordering transitions in vortex matter: peak effect and phase diagram. <i>Physica C: Superconductivity and Its Applications</i> , 2003, 384, 143-148.	1.2	15
122	Orientational ordering, buckling, and dynamic transitions for vortices interacting with a periodic quasi-one-dimensional substrate. <i>Physical Review B</i> , 2016, 93, .	3.2	15
123	Active matter commensuration and frustration effects on periodic substrates. <i>Physical Review E</i> , 2021, 103, 022602.	2.1	15
124	Shear banding, intermittency, jamming, and dynamic phases for skyrmions in inhomogeneous pinning arrays. <i>Physical Review B</i> , 2020, 101, .	3.2	14
125	Static and dynamic phases for magnetic vortex matter with attractive and repulsive interactions. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 345703.	1.8	13
126	Controlled Fluidization, Mobility, and Clogging in Obstacle Arrays Using Periodic Perturbations. <i>Physical Review Letters</i> , 2018, 121, 068001.	7.8	13

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127	Dynamics of Magnus-dominated particle clusters, collisions, pinning, and ratchets. <i>Physical Review E</i> , 2020, 101, 062602.	2.1	13
128	Pattern switching and polarizability for colloids in optical-trap arrays. <i>Physical Review E</i> , 2009, 80, 022401.	2.1	12
129	A Ball-and-Chain Polymer Model. <i>Science</i> , 2009, 326, 374-375.	12.6	12
130	Random organization in periodically driven gliding dislocations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2014, 378, 1675-1678.	2.1	12
131	Dynamic Control of Topological Defects in Artificial Colloidal Ice. <i>Scientific Reports</i> , 2017, 7, 651.	3.3	12
132	Shapiro spikes and negative mobility for skyrmion motion on quasi-one-dimensional periodic substrates. <i>Physical Review B</i> , 2017, 95, .	3.2	12
133	Dynamic phases, clustering, and chain formation for driven disk systems in the presence of quenched disorder. <i>Physical Review E</i> , 2017, 95, 042902.	2.1	12
134	Manipulation of individual superconducting vortices and stick-slip motion in periodic pinning arrays. <i>Physical Review B</i> , 2018, 97, .	3.2	12
135	Structural transitions in vortex systems with anisotropic interactions. <i>New Journal of Physics</i> , 2018, 20, 023005.	2.9	12
136	Plastic flow and the skyrmion Hall effect. <i>Nature Communications</i> , 2020, 11, 738.	12.8	12
137	Frustrated colloidal ordering and fully packed loops in arrays of optical traps. <i>Physical Review E</i> , 2013, 87, 062305.	2.1	11
138	Continuous and discontinuous transitions in the depinning of two-dimensional dusty plasmas on a one-dimensional periodic substrate. <i>Physical Review E</i> , 2020, 102, 063203.	2.1	11
139	Devil's staircase and disordering transitions in sliding vortices and Wigner crystals on random substrates with transverse driving. <i>Physical Review B</i> , 2007, 76, .	3.2	10
140	Switching and jamming transistor effect for vortex matter in honeycomb pinning arrays with ac drives. <i>Physical Review B</i> , 2010, 81, .	3.2	10
141	Avalanches, plasticity, and ordering in colloidal crystals under compression. <i>Physical Review E</i> , 2016, 93, 062607.	2.1	10
142	Shapiro steps and nonlinear skyrmion Hall angles for dc and ac driven skyrmions on a two-dimensional periodic substrate. <i>Physical Review B</i> , 2020, 102, .	3.2	10
143	Ratchet effect and nonlinear transport for particles on random substrates with crossed ac drives. <i>Physical Review E</i> , 2006, 73, 011102.	2.1	9
144	Transverse commensurability effect for vortices in periodic pinning arrays. <i>Physical Review B</i> , 2008, 78, .	3.2	9

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145	Characterizing plastic depinning dynamics with the fluctuation theorem. European Physical Journal E, 2011, 34, 117.	1.6	9
146	Comparing the dynamics of skyrmions and superconducting vortices. Physica C: Superconductivity and Its Applications, 2014, 503, 52-57.	1.2	9
147	Colloidal Dynamics on a Choreographic Time Crystal. Physical Review Letters, 2020, 124, 208004.	7.8	9
148	Oscillation-like diffusion of two-dimensional liquid dusty plasmas on one-dimensional periodic substrates with varied widths. Physics of Plasmas, 2020, 27, 033702.	1.9	9
149	Vortex pinball under crossed ac drives in superconductors with periodic pinning arrays. Physical Review B, 2002, 65, .	3.2	8
150	Skyrmion dynamics and transverse mobility: skyrmion Hall angle reversal on 2D periodic substrates with dc and biharmonic ac drives. European Physical Journal B, 2020, 93, 1.	1.5	8
151	Clogging, dynamics, and reentrant fluid for active matter on periodic substrates. Physical Review E, 2021, 103, 062603.	2.1	8
152	Skyrmion pinball and directed motion on obstacle arrays. Journal of Physics Communications, 2020, 4, 085001.	1.2	8
153	Quenched dynamics of artificial colloidal spin ice. Physical Review Research, 2020, 2, .	3.6	8
154	Dynamically induced locking and unlocking transitions in driven layered systems with quenched disorder. Physical Review B, 2011, 84, .	3.2	7
155	Disordering, clustering, and laning transitions in particle systems with dispersion in the Magnus term. Physical Review E, 2019, 99, 012606.	2.1	7
156	Drive dependence of the Hall angle for a sliding Wigner crystal in a magnetic field. Physical Review B, 2021, 103, .	3.2	7
157	Structure and dynamical properties of two-dimensional dusty plasmas on one-dimensional periodic substrates. Physics of Plasmas, 2021, 28, .	1.9	7
158	Active matter shepherding and clustering in inhomogeneous environments. Physical Review E, 2021, 104, 044613.	2.1	7
159	Phonon spectra of a two-dimensional solid dusty plasma modified by two-dimensional periodic substrates. Physical Review E, 2022, 105, 015202.	2.1	7
160	Directional locking in a two-dimensional Yukawa solid modulated by a two-dimensional periodic substrate. Physical Review E, 2022, 106, .	2.1	7
161	Transverse phase locking for vortex motion in square and triangular pinning arrays. Physical Review B, 2002, 65, .	3.2	6
162	Ratchet superconducting vortex cellular automata. Physica C: Superconductivity and Its Applications, 2004, 404, 266-272.	1.2	6

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163	Structure and fragmentation in colloidal artificial molecules and nuclei. <i>European Physical Journal E</i> , 2007, 22, 11-15.	1.6	6
164	Vortex transport and pinning in conformal pinning arrays. <i>Physica C: Superconductivity and Its Applications</i> , 2014, 503, 123-127.	1.2	6
165	Directional clogging and phase separation for disk flow through periodic and diluted obstacle arrays. <i>Soft Matter</i> , 2021, 17, 1548-1557.	2.7	6
166	Driving an individual vortex in the presence of a periodic pinning array. <i>Physica C: Superconductivity and Its Applications</i> , 2010, 470, 779-781.	1.2	5
167	Vortex dynamics and symmetry locking on quasiperiodic and periodic substrates. <i>Physica C: Superconductivity and Its Applications</i> , 2012, 479, 45-48.	1.2	5
168	Vortex Clogging, Commensuration, and Diodes in Asymmetric Constriction Arrays. <i>Journal of Superconductivity and Novel Magnetism</i> , 2013, 26, 2005-2008.	1.8	5
169	Clogging and transport of driven particles in asymmetric funnel arrays. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 244005.	1.8	5
170	Chiral edge currents for ac-driven skyrmions in confined pinning geometries. <i>Physical Review B</i> , 2019, 100, .	3.2	5
171	Rotational transition, domain formation, dislocations, and defects in vortex systems with combined sixfold and twelvefold anisotropic interactions. <i>Physical Review B</i> , 2020, 101, .	3.2	5
172	Vortex dynamics, pinning, and angle-dependent motion on moiré patterns. <i>Physical Review B</i> , 2021, 104, .	3.2	5
173	Dynamics and nonmonotonic drag for individually driven skyrmions. <i>Physical Review B</i> , 2021, 104, .	3.2	5
174	Commensuration effects on skyrmion Hall angle and drag for manipulation of skyrmions on two-dimensional periodic substrates. <i>Physical Review B</i> , 2022, 105, .	3.2	5
175	Kibble-Zurek mechanism for nonequilibrium phase transitions in driven systems with quenched disorder. <i>Communications Physics</i> , 2022, 5, .	5.3	5
176	Shear banding and spatiotemporal oscillations in vortex matter in nanostructured superconductors. <i>Physical Review B</i> , 2010, 81, .	3.2	4
177	Noise spectra in the reversibleâ€“irreversible transition in amorphous solids under oscillatory driving. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2019, 27, 084004.	2.0	4
178	Collective effects and pattern formation for directional locking of disks moving through obstacle arrays. <i>Physical Review E</i> , 2020, 102, 022608.	2.1	4
179	Directional locking and the influence of obstacle density on skyrmion dynamics in triangular and honeycomb arrays. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 305801.	1.8	4
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