

# Sharon C Glotzer

## List of Publications by Year in descending order

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190  
papers

19,687  
citations

18436

62  
h-index

10708

138  
g-index

195  
all docs

195  
docs citations

195  
times ranked

15290  
citing authors

#	ARTICLE	IF	CITATIONS
1	Anisotropy of building blocks and their assembly into complex structures. <i>Nature Materials</i> , 2007, 6, 557-562.	13.3	2,440
2	Predictive Self-Assembly of Polyhedra into Complex Structures. <i>Science</i> , 2012, 337, 453-457.	6.0	882
3	Dynamical Heterogeneities in a Supercooled Lennard-Jones Liquid. <i>Physical Review Letters</i> , 1997, 79, 2827-2830.	2.9	861
4	Stringlike Cooperative Motion in a Supercooled Liquid. <i>Physical Review Letters</i> , 1998, 80, 2338-2341.	2.9	846
5	Self-Assembly of CdTe Nanocrystals into Free-Floating Sheets. <i>Science</i> , 2006, 314, 274-278.	6.0	824
6	Self-Assembly of Patchy Particles. <i>Nano Letters</i> , 2004, 4, 1407-1413.	4.5	722
7	Strong scaling of general-purpose molecular dynamics simulations on GPUs. <i>Computer Physics Communications</i> , 2015, 192, 97-107.	3.0	546
8	A kirigami approach to engineering elasticity in nanocomposites through patterned defects. <i>Nature Materials</i> , 2015, 14, 785-789.	13.3	509
9	Self-assembly of self-limiting monodisperse supraparticles from polydisperse nanoparticles. <i>Nature Nanotechnology</i> , 2011, 6, 580-587.	15.6	488
10	Spatial correlations of mobility and immobility in a glass-forming Lennard-Jones liquid. <i>Physical Review E</i> , 1999, 60, 3107-3119.	0.8	455
11	Disordered, quasicrystalline and crystalline phases of densely packed tetrahedra. <i>Nature</i> , 2009, 462, 773-777.	13.7	394
12	Spatially heterogeneous dynamics in liquids: insights from simulation. <i>Journal of Non-Crystalline Solids</i> , 2000, 274, 342-355.	1.5	385
13	Growing range of correlated motion in a polymer melt on cooling towards the glass transition. <i>Nature</i> , 1999, 399, 246-249.	13.7	374
14	MATERIALS SCIENCE: Some Assembly Required. <i>Science</i> , 2004, 306, 419-420.	6.0	373
15	Measurement of growing dynamical length scales and prediction of the jamming transition in a granular material. <i>Nature Physics</i> , 2007, 3, 260-264.	6.5	330
16	HOOMD-blue: A Python package for high-performance molecular dynamics and hard particle Monte Carlo simulations. <i>Computational Materials Science</i> , 2020, 173, 109363.	1.4	326
17	Tethered Nano Building Blocks: Toward a Conceptual Framework for Nanoparticle Self-Assembly. <i>Nano Letters</i> , 2003, 3, 1341-1346.	4.5	311
18	Competition of shape and interaction patchiness for self-assembling nanoplates. <i>Nature Chemistry</i> , 2013, 5, 466-473.	6.6	278

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19	Self-Assembly of Patchy Particles into Diamond Structures through Molecular Mimicry. <i>Langmuir</i> , 2005, 21, 11547-11551.	1.6	271
20	Reaction-Controlled Morphology of Phase-Separating Mixtures. <i>Physical Review Letters</i> , 1995, 74, 2034-2037.	2.9	255
21	Effects of a nanoscopic filler on the structure and dynamics of a simulated polymer melt and the relationship to ultrathin films. <i>Physical Review E</i> , 2001, 64, 021802.	0.8	247
22	Origin of particle clustering in a simulated polymer nanocomposite and its impact on rheology. <i>Journal of Chemical Physics</i> , 2003, 119, 1777-1788.	1.2	213
23	Time-dependent, four-point density correlation function description of dynamical heterogeneity and decoupling in supercooled liquids. <i>Journal of Chemical Physics</i> , 2000, 112, 509-512.	1.2	204
24	Geometry induced sequence of nanoscale Frank-Kasper and quasicrystal mesophases in giant surfactants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 14195-14200.	3.3	201
25	Molecular Dynamics Simulation Study of Self-Assembled Monolayers of Alkanethiol Surfactants on Spherical Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2007, 111, 15857-15862.	1.5	199
26	Understanding shape entropy through local dense packing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E4812-21.	3.3	199
27	Molecular and Mesoscale Simulation Methods for Polymer Materials. <i>Annual Review of Materials Research</i> , 2002, 32, 401-436.	4.3	194
28	Hard-disk equation of state: First-order liquid-hexatic transition in two dimensions with three simulation methods. <i>Physical Review E</i> , 2013, 87, 042134.	0.8	192
29	Crystalline Assemblies and Densest Packings of a Family of Truncated Tetrahedra and the Role of Directional Entropic Forces. <i>ACS Nano</i> , 2012, 6, 609-614.	7.3	190
30	Entropically Patchy Particles: Engineering Valence through Shape Entropy. <i>ACS Nano</i> , 2014, 8, 931-940.	7.3	175
31	Emergent Collective Phenomena in a Mixture of Hard Shapes through Active Rotation. <i>Physical Review Letters</i> , 2014, 112, 075701.	2.9	170
32	Rigid body constraints realized in massively-parallel molecular dynamics on graphics processing units. <i>Computer Physics Communications</i> , 2011, 182, 2307-2313.	3.0	164
33	Clathrate colloidal crystals. <i>Science</i> , 2017, 355, 931-935.	6.0	162
34	Growing Spatial Correlations of Particle Displacements in a Simulated Liquid on Cooling toward the Glass Transition. <i>Physical Review Letters</i> , 1999, 82, 5064-5067.	2.9	160
35	Pseudo-random number generation for Brownian Dynamics and Dissipative Particle Dynamics simulations on GPU devices. <i>Journal of Computational Physics</i> , 2011, 230, 7191-7201.	1.9	148
36	Simulations and Analysis of Self-Assembly of CdTe Nanoparticles into Wires and Sheets. <i>Nano Letters</i> , 2007, 7, 1670-1675.	4.5	147

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37	Shape-dependent ordering of gold nanocrystals into large-scale superlattices. <i>Nature Communications</i> , 2017, 8, 14038.	5.8	141
38	How do Quasicrystals Grow?. <i>Physical Review Letters</i> , 2007, 99, 235503.	2.9	138
39	Actuation of shape-memory colloidal fibres of Janus ellipsoids. <i>Nature Materials</i> , 2015, 14, 117-124.	13.3	136
40	freud: A software suite for high throughput analysis of particle simulation data. <i>Computer Physics Communications</i> , 2020, 254, 107275.	3.0	133
41	Computational self-assembly of a one-component icosahedral quasicrystal. <i>Nature Materials</i> , 2015, 14, 109-116.	13.3	129
42	Self-assembly of soft-matter quasicrystals and their approximants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 20935-20940.	3.3	115
43	Quasicrystalline nanocrystal superlattice with partial matching rules. <i>Nature Materials</i> , 2017, 16, 214-219.	13.3	114
44	Shape Alloys of Nanorods and Nanospheres from Self-Assembly. <i>Nano Letters</i> , 2013, 13, 4980-4988.	4.5	104
45	Terminal supraparticle assemblies from similarly charged protein molecules and nanoparticles. <i>Nature Communications</i> , 2014, 5, 3593.	5.8	97
46	Simple data and workflow management with the signac framework. <i>Computational Materials Science</i> , 2018, 146, 220-229.	1.4	91
47	A Directional Entropic Force Approach to Assemble Anisotropic Nanoparticles into Superlattices. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13980-13984.	7.2	90
48	Role of Short-Range Order and Hyperuniformity in the Formation of Band Gaps in Disordered Photonic Materials. <i>Physical Review Letters</i> , 2016, 117, 053902.	2.9	88
49	Dense Crystalline Dimer Packings of Regular Tetrahedra. <i>Discrete and Computational Geometry</i> , 2010, 44, 253-280.	0.4	87
50	Icosahedral packing of polymer-tethered nanospheres and stabilization of the gyroid phase. <i>Physical Review E</i> , 2007, 75, 040801.	0.8	80
51	Self-Assembly and Reconfigurability of Shape-Shifting Particles. <i>ACS Nano</i> , 2011, 5, 8892-8903.	7.3	76
52	Phase diagram of hard tetrahedra. <i>Journal of Chemical Physics</i> , 2011, 135, 194101.	1.2	76
53	Self-Assembly of Archimedean Tilings with Enthalpically and Entropically Patchy Polygons. <i>ACS Nano</i> , 2014, 8, 2918-2928.	7.3	76
54	Liquid Crystal Order in Colloidal Suspensions of Spheroidal Particles by Direct Current Electric Field Assembly. <i>Small</i> , 2012, 8, 1551-1562.	5.2	71

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55	Supercharging enables organized assembly of synthetic biomolecules. <i>Nature Chemistry</i> , 2019, 11, 204-212.	6.6	70
56	Simulations of Tetra-Tethered Organic/Inorganic Nanocubeâˆ™Polymer Assemblies. <i>Macromolecules</i> , 2005, 38, 6168-6180.	2.2	69
57	Scalable Metropolis Monte Carlo for simulation of hard shapes. <i>Computer Physics Communications</i> , 2016, 204, 21-30.	3.0	69
58	Clusters of polyhedra in spherical confinement. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E669-78.	3.3	68
59	Shape control and compartmentalization in active colloidal cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E4642-50.	3.3	67
60	Simultaneous Nanoâ€•and Microscale Control of Nanofibrous Microspheres Selfâ€•Assembled from Starâ€•Shaped Polymers. <i>Advanced Materials</i> , 2015, 27, 3947-3952.	11.1	63
61	Characterizing complex particle morphologies through shape matching: Descriptors, applications, and algorithms. <i>Journal of Computational Physics</i> , 2011, 230, 6438-6463.	1.9	62
62	Digital Alchemy for Materials Design: Colloids and Beyond. <i>ACS Nano</i> , 2015, 9, 9542-9553.	7.3	62
63	Shape and Symmetry Determine Two-Dimensional Melting Transitions of Hard Regular Polygons. <i>Physical Review X</i> , 2017, 7, .	2.8	61
64	Colloidal fibers and rings by cooperative assembly. <i>Nature Communications</i> , 2019, 10, 3936.	5.8	61
65	The diversity of three-dimensional photonic crystals. <i>Nature Communications</i> , 2021, 12, 2543.	5.8	61
66	Entropic colloidal crystallization pathways via fluidâ€•fluid transitions and multidimensional prenucleation motifs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 14843-14851.	3.3	60
67	Characterizing Structure Through Shape Matching and Applications to Self-Assembly. <i>Annual Review of Condensed Matter Physics</i> , 2011, 2, 263-285.	5.2	59
68	Massively parallel Monte Carlo for many-particle simulations on GPUs. <i>Journal of Computational Physics</i> , 2013, 254, 27-38.	1.9	58
69	Effect of ordering on spinodal decomposition of liquid-crystal/polymer mixtures. <i>Physical Review E</i> , 1999, 60, R29-R32.	0.8	55
70	Efficient neighbor list calculation for molecular simulation of colloidal systems using graphics processing units. <i>Computer Physics Communications</i> , 2016, 203, 45-52.	3.0	53
71	Relevance of packing to colloidal self-assembly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 1439-1444.	3.3	52
72	Digital colloids: reconfigurable clusters as high information density elements. <i>Soft Matter</i> , 2014, 10, 7468-7479.	1.2	50

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73	Degenerate Quasicrystal of Hard Triangular Bipyramids. <i>Physical Review Letters</i> , 2011, 107, 215702.	2.9	49
74	Engineering entropy for the inverse design of colloidal crystals from hard shapes. <i>Science Advances</i> , 2019, 5, eaaw0514.	4.7	49
75	Self-assembly of end-tethered nanorods in a neat system and role of block fractions and aspect ratio. <i>Soft Matter</i> , 2010, 6, 945.	1.2	47
76	Stability of the double gyroid phase to nanoparticle polydispersity in polymer-tethered nanosphere systems. <i>Soft Matter</i> , 2010, 6, 1693.	1.2	46
77	Shape-driven solid–solid transitions in colloids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E3892-E3899.	3.3	45
78	The entropic bond in colloidal crystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 16703-16710.	3.3	42
79	Screening and designing patchy particles for optimized self-assembly propensity through assembly pathway engineering. <i>Soft Matter</i> , 2012, 8, 2852.	1.2	40
80	Metastable orientational order of colloidal discoids. <i>Nature Communications</i> , 2015, 6, 8507.	5.8	40
81	Design of patchy particles using ternary self-assembled monolayers. <i>Soft Matter</i> , 2012, 8, 6226.	1.2	38
82	GPU accelerated Discrete Element Method (DEM) molecular dynamics for conservative, faceted particle simulations. <i>Journal of Computational Physics</i> , 2017, 334, 460-467.	1.9	38
83	The emergence of valency in colloidal crystals through electron equivalents. <i>Nature Materials</i> , 2022, 21, 580-587.	13.3	37
84	Phase Behavior and Complex Crystal Structures of Self-Assembled Tethered Nanoparticle Telechelics. <i>Nano Letters</i> , 2014, 14, 2071-2078.	4.5	36
85	Complexity in Surfaces of Densest Packings for Families of Polyhedra. <i>Physical Review X</i> , 2014, 4, .	2.8	36
86	Rational design of nanomaterials from assembly and reconfigurability of polymer-tethered nanoparticles. <i>MRS Communications</i> , 2015, 5, 397-406.	0.8	36
87	COMPUTER SIMULATIONS OF SPINODAL DECOMPOSITION IN POLYMER BLENDS. , 1995, , 1-46.		35
88	Effect of nanoparticle polydispersity on the self-assembly of polymer tethered nanospheres. <i>Journal of Chemical Physics</i> , 2012, 137, 104901.	1.2	34
89	Analysis of Self-Assembly Pathways with Unsupervised Machine Learning Algorithms. <i>Journal of Physical Chemistry B</i> , 2020, 124, 69-78.	1.2	34
90	Efficient Phase Diagram Sampling by Active Learning. <i>Journal of Physical Chemistry B</i> , 2020, 124, 1275-1284.	1.2	33

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91	On the mechanism of pinning in phase-separating polymer blends. <i>Journal of Chemical Physics</i> , 1995, 103, 9363-9369.	1.2	32
92	Dynamical heterogeneity in the Ising spin glass. <i>Physical Review E</i> , 1998, 57, 7350-7353.	0.8	31
93	Phase behavior of ditethered nanospheres. <i>Soft Matter</i> , 2009, 5, 4492.	1.2	30
94	Inverse design of simple pair potentials for the self-assembly of complex structures. <i>Journal of Chemical Physics</i> , 2018, 149, 204102.	1.2	30
95	Emergence of Fast Local Dynamics on Cooling toward the Ising Spin Glass Transition. <i>Physical Review Letters</i> , 1997, 78, 3394-3397.	2.9	29
96	Influence of Softness on the Stability of Binary Colloidal Crystals. <i>ACS Nano</i> , 2019, 13, 13829-13842.	7.3	29
97	Binding kinetics of lock and key colloids. <i>Journal of Chemical Physics</i> , 2015, 142, 174909.	1.2	28
98	Unusual multiscale mechanics of biomimetic nanoparticle hydrogels. <i>Nature Communications</i> , 2018, 9, 181.	5.8	28
99	Using depletion to control colloidal crystal assemblies of hard cuboctahedra. <i>Soft Matter</i> , 2016, 12, 5199-5204.	1.2	27
100	Symmetry Considerations for the Targeted Assembly of Entropically Stabilized Colloidal Crystals via Voronoi Particles. <i>ACS Nano</i> , 2015, 9, 2336-2344.	7.3	26
101	Self-assembled clusters of spheres related to spherical codes. <i>Physical Review E</i> , 2012, 86, 041124.	0.8	25
102	Generic, phenomenological, on-the-fly renormalized repulsion model for self-limited organization of terminal supraparticle assemblies. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E3161-8.	3.3	24
103	Supraparticle Nanoassemblies with Enzymes. <i>Chemistry of Materials</i> , 2019, 31, 7493-7500.	3.2	24
104	Assembly engineering: Materials design for the 21st century (2013 P.V. Danckwerts lecture). <i>Chemical Engineering Science</i> , 2015, 121, 3-9.	1.9	23
105	Intermediate crystalline structures of colloids in shape space. <i>Soft Matter</i> , 2018, 14, 8692-8697.	1.2	23
106	Nanoscience and Nanotechnology Impacting Diverse Fields of Science, Engineering, and Medicine. <i>ACS Nano</i> , 2016, 10, 10615-10617.	7.3	22
107	Non-close-packed three-dimensional quasicrystals. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 234005.	0.7	22
108	Dendrimer Ligand Directed Nanoplate Assembly. <i>ACS Nano</i> , 2019, 13, 14241-14251.	7.3	22

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109	Effect of Defective Microstructure and Film Thickness on the Reflective Structural Color of Self-Assembled Colloidal Crystals. ACS Applied Materials & Interfaces, 2020, 12, 9842-9850.	4.0	22
110	A theory of entropic bonding. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	22
111	Phase separation and state oscillation of active inertial particles. Soft Matter, 2020, 16, 2847-2853.	1.2	21
112	Symmetries in hard polygon systems determine plastic colloidal crystal mesophases in two dimensions. Soft Matter, 2019, 15, 2571-2579.	1.2	20
113	Self-Assembly Mechanism of Complex Corrugated Particles. Journal of the American Chemical Society, 2021, 143, 19655-19667.	6.6	20
114	Virial Coefficients and Equations of State for Hard Polyhedron Fluids. Langmuir, 2017, 33, 11788-11796.	1.6	19
115	Pressure in rigid body molecular dynamics. Computational Materials Science, 2020, 173, 109430.	1.4	19
116	Anisotropic nanocrystal shape and ligand design for co-assembly. Science Advances, 2021, 7, .	4.7	19
117	A parallel algorithm for implicit depletant simulations. Journal of Chemical Physics, 2015, 143, 184110.	1.2	18
118	Coarsening dynamics of binary liquids with active rotation. Soft Matter, 2015, 11, 8409-8416.	1.2	18
119	Shape allophiles improve entropic assembly. Soft Matter, 2015, 11, 7250-7256.	1.2	18
120	Effect of shape on the self-assembly of faceted patchy nanoplates with irregular shape into tiling patterns. Soft Matter, 2015, 11, 1386-1396.	1.2	17
121	Phase separation of self-propelled ballistic particles. Physical Review E, 2018, 97, 042609.	0.8	16
122	Universal folding pathways of polyhedron nets. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6690-E6696.	3.3	16
123	Identity crisis in alchemical space drives the entropic colloidal glass transition. Nature Communications, 2019, 10, 64.	5.8	16
124	Open-source molecular modeling software in chemical engineering focusing on the Molecular Simulation Design Framework. AIChE Journal, 2021, 67, e17206.	1.8	16
125	Pressure-tunable photonic band gaps in an entropic colloidal crystal. Physical Review Materials, 2018, 2, .	0.9	16
126	Controlling Chirality of Entropic Crystals. Physical Review Letters, 2015, 115, 158303.	2.9	15

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127	Strong orientational coordinates and orientational order parameters for symmetric objects. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 485201.	0.7	15
128	Anisotropy effects on the kinetics of colloidal crystallization and melting: comparison of spheres and ellipsoids. <i>Soft Matter</i> , 2019, 15, 7479-7489.	1.2	13
129	A mean-field approach to simulating anisotropic particles. <i>Journal of Chemical Physics</i> , 2020, 153, 084106.	1.2	13
130	Cooperative Switching in Large-Area Assemblies of Magnetic Janus Particles. <i>Advanced Functional Materials</i> , 2020, 30, 1907865.	7.8	13
131	Theory, Simulation, and Computation in Nanoscience and Nanotechnology. <i>ACS Nano</i> , 2017, 11, 6505-6506.	7.3	12
132	Tunable emergent structures and traveling waves in mixtures of passive and contact-triggered-active particles. <i>Soft Matter</i> , 2017, 13, 6332-6339.	1.2	11
133	Phase behavior and design rules for plastic colloidal crystals of hard polyhedra via consideration of directional entropic forces. <i>Soft Matter</i> , 2019, 15, 5380-5389.	1.2	11
134	Strain fields in repulsive colloidal crystals. <i>Physical Review Materials</i> , 2018, 2, .	0.9	11
135	Shapes within shapes: how particles arrange inside a cavity. <i>Soft Matter</i> , 2018, 14, 3012-3017.	1.2	10
136	FCC $\leftrightarrow$ BCC Phase Transitions in Convex and Concave Hard Particle Systems. <i>Journal of Physical Chemistry B</i> , 2019, 123, 9038-9043.	1.2	10
137	Entropic formation of a thermodynamically stable colloidal quasicrystal with negligible phason strain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	10
138	Moving beyond the constraints of chemistry via crystal structure discovery with isotropic multiwell pair potentials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	10
139	Unexpected Dependence of Photonic Band Gap Size on Randomness in Self-Assembled Colloidal Crystals. <i>Physical Review Letters</i> , 2021, 126, 208002.	2.9	10
140	Computational self-assembly of colloidal crystals from Platonic polyhedral sphere clusters. <i>Soft Matter</i> , 2019, 15, 6288-6299.	1.2	9
141	Data driven analytics of porous battery microstructures. <i>Energy and Environmental Science</i> , 2021, 14, 2485-2493.	15.6	9
142	Shape-driven entropic self-assembly of an open, reconfigurable, binary host-guest colloidal crystal. <i>Soft Matter</i> , 2021, 17, 2840-2848.	1.2	9
143	Alchemical molecular dynamics for inverse design. <i>Molecular Physics</i> , 2019, 117, 3968-3980.	0.8	8
144	Effect of Particles of Irregular Size on the Microstructure and Structural Color of Self-Assembled Colloidal Crystals. <i>Langmuir</i> , 2021, 37, 13300-13308.	1.6	7

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145	Particle anisotropy tunes emergent behavior in active colloidal systems. <i>Soft Matter</i> , 2022, 18, 1044-1053.	1.2	7
146	Tuning Stoichiometry to Promote Formation of Binary Colloidal Superlattices. <i>Physical Review Letters</i> , 2022, 128, 188001.	2.9	7
147	Hierarchical self-assembly of hard cube derivatives. <i>Soft Matter</i> , 2019, 15, 3733-3739.	1.2	6
148	Unified memory in HOOMD-blue improves node-level strong scaling. <i>Computational Materials Science</i> , 2020, 173, 109359.	1.4	6
149	Inverse design of compression-induced solid $\leftrightarrow$ solid transitions in colloids. <i>Molecular Simulation</i> , 2020, 46, 1037-1044.	0.9	6
150	Scale-free, programmable design of morphable chain loops of kilobots and colloidal motors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 8700-8710.	3.3	6
151	Evaporation-Driven Coassembly of Hierarchical, Multicomponent Networks. <i>ACS Nano</i> , 2022, 16, 4508-4516.	7.3	6
152	Designing active particles for colloidal microstructure manipulation <i>via</i> strain field alchemy. <i>Soft Matter</i> , 2019, 15, 6086-6096.	1.2	5
153	Sculpting crystals one Burgers vector at a time: Toward colloidal lattice robot swarms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	5
154	Accelerated annealing of colloidal crystal monolayers by means of cyclically applied electric fields. <i>Scientific Reports</i> , 2021, 11, 11042.	1.6	5
155	rowan: A Python package for working with quaternions. <i>Journal of Open Source Software</i> , 2018, 3, 787.	2.0	5
156	Simulations of Filled Polymers on Multiple Length Scales. <i>Materials Research Society Symposia Proceedings</i> , 2000, 661, KK4.1.1.	0.1	4
157	Challenges and Opportunities in Preparing Students for Petascale Computational Science and Engineering. <i>Computing in Science and Engineering</i> , 2009, 11, 22-27.	1.2	4
158	Shape-controlled crystallisation pathways in dense fluids of <i>ccp</i> -forming hard polyhedra. <i>Molecular Physics</i> , 2019, 117, 3819-3826.	0.8	4
159	Announcing the 2020 ACS Nano Award Lecture Laureates. <i>ACS Nano</i> , 2020, 14, 1213-1215.	7.3	4
160	A triangular affair. <i>Nature Physics</i> , 2014, 10, 185-186.	6.5	3
161	Editorial: Soft Matters. <i>Physical Review Letters</i> , 2015, 114, 050001.	2.9	3
162	Topological order in densely packed anisotropic colloids. <i>Physical Review E</i> , 2019, 100, 032608.	0.8	3

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163	Pinning dislocations in colloidal crystals with active particles that seek stacking faults. <i>Soft Matter</i> , 2020, 16, 4182-4191.	1.2	3
164	The role of complementary shape in protein dimerization. <i>Soft Matter</i> , 2021, 17, 7376-7383.	1.2	3
165	A route to hierarchical assembly of colloidal diamond. <i>Soft Matter</i> , 2022, 18, 304-311.	1.2	3
166	Structural Color Spectral Response of Dense Structures of Discoidal Particles Generated by Evaporative Assembly. <i>Journal of Physical Chemistry B</i> , 2022, 126, 1315-1324.	1.2	3
167	Shape-driven, emergent behavior in active particle mixtures. <i>New Journal of Physics</i> , 2022, 24, 063007.	1.2	3
168	Principle of corresponding states for hard polyhedron fluids. <i>Molecular Physics</i> , 2019, 117, 3518-3526.	0.8	2
169	Particle shape tunes fragility in hard polyhedron glass-formers. <i>Soft Matter</i> , 2021, 17, 600-610.	1.2	2
170	Formation of a single quasicrystal upon collision of multiple grains. <i>Nature Communications</i> , 2021, 12, 5790.	5.8	2
171	The alchemical energy landscape for a pentameric cluster. <i>Journal of Chemical Physics</i> , 2020, 152, 014106.	1.2	2
172	Inverse design of isotropic pair potentials using digital alchemy with a generalized Fourier potential. <i>European Physical Journal B</i> , 2021, 94, 1.	0.6	2
173	NSF NSDL Materials Digital Library & MSE Education. <i>Materials Research Society Symposia Proceedings</i> , 2005, 909, 1.	0.1	1
174	A Big Year Ahead for Nano in 2018. <i>ACS Nano</i> , 2017, 11, 11755-11757.	7.3	1
175	coxeter: A Python package for working with shapes. <i>Journal of Open Source Software</i> , 2021, 6, 3098.	2.0	1
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