Sharon C Glotzer

List of Publications by Year
in descending order

190	19,687	18482 62	10734 138
papers	citations	h-index	g-index

195	195	195	15290
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A route to hierarchical assembly of colloidal diamond. Soft Matter, 2022, 18, 304-311.	2.7	3
2	A theory of entropic bonding. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	22
3	Particle anisotropy tunes emergent behavior in active colloidal systems. Soft Matter, 2022, 18, 1044-1053.	2.7	7
4	The emergence of valency in colloidal crystals through electron equivalents. Nature Materials, 2022, 21, 580-587.	27.5	37
5	Structural Color Spectral Response of Dense Structures of Discoidal Particles Generated by Evaporative Assembly. Journal of Physical Chemistry B, 2022, 126, 1315-1324.	2.6	3
6	Evaporation-Driven Coassembly of Hierarchical, Multicomponent Networks. ACS Nano, 2022, 16, 4508-4516.	14.6	6
7	Tanks and Truth. ACS Nano, 2022, 16, 4975-4976.	14.6	0
8	Tuning Stoichiometry to Promote Formation of Binary Colloidal Superlattices. Physical Review Letters, 2022, 128, 188001.	7.8	7
9	Shape-driven, emergent behavior in active particle mixtures. New Journal of Physics, 2022, 24, 063007.	2.9	3
10	Particle shape tunes fragility in hard polyhedron glass-formers. Soft Matter, 2021, 17, 600-610.	2.7	2
11	Sculpting crystals one Burgers vector at a time: Toward colloidal lattice robot swarms. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	5
12	Synthesizable nanoparticle eigenshapes for colloidal crystals. Nanoscale, 2021, 13, 13301-13309.	5.6	0
13	Data driven analytics of porous battery microstructures. Energy and Environmental Science, 2021, 14, 2485-2493.	30.8	9
14	The role of complementary shape in protein dimerization. Soft Matter, 2021, 17, 7376-7383.	2.7	3
15	Entropic formation of a thermodynamically stable colloidal quasicrystal with negligible phason strain. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	10
16	Openâ€source molecular modeling software in chemical engineering focusing on the Molecular Simulation Design Framework. AICHE Journal, 2021, 67, e17206.	3.6	16
17	The diversity of three-dimensional photonic crystals. Nature Communications, 2021, 12, 2543.	12.8	61
18	Moving beyond the constraints of chemistry via crystal structure discovery with isotropic multiwell pair potentials. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	10

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19	Accelerated annealing of colloidal crystal monolayers by means of cyclically applied electric fields. Scientific Reports, 2021, 11, 11042.	3.3	5
20	Unexpected Dependence of Photonic Band Gap Size on Randomness in Self-Assembled Colloidal Crystals. Physical Review Letters, 2021, 126, 208002.	7.8	10
21	Anisotropic nanocrystal shape and ligand design for co-assembly. Science Advances, 2021, 7, .	10.3	19
22	coxeter: A Python package for working with shapes. Journal of Open Source Software, 2021, 6, 3098.	4.6	1
23	Shape-driven entropic self-assembly of an open, reconfigurable, binary hostâ€“guest colloidal crystal. Soft Matter, 2021, 17, 2840-2848.	2.7	9
24	Formation of a single quasicrystal upon collision of multiple grains. Nature Communications, 2021, 12, 5790.	12.8	2
25	Effect of Particles of Irregular Size on the Microstructure and Structural Color of Self-Assembled Colloidal Crystals. Langmuir, 2021, 37, 13300-13308.	3.5	7
26	Self-Assembly Mechanism of Complex Corrugated Particles. Journal of the American Chemical Society, 2021, 143, 19655-19667.	13.7	20
27	Inverse design of isotropic pair potentials using digital alchemy with a generalized Fourier potential. European Physical Journal B, 2021, 94, 1.	1.5	2
28	Pressure in rigid body molecular dynamics. Computational Materials Science, 2020, 173, 109430.	3.0	19
29	HOOMD-blue: A Python package for high-performance molecular dynamics and hard particle Monte Carlo simulations. Computational Materials Science, 2020, 173, 109363.	3.0	326
30	Unified memory in HOOMD-blue improves node-level strong scaling. Computational Materials Science, 2020, 173, 109359.	3.0	6
31	Analysis of Self-Assembly Pathways with Unsupervised Machine Learning Algorithms. Journal of Physical Chemistry B, 2020, 124, 69-78.	2.6	34
32	Inverse design of compression-induced solid â€“ solid transitions in colloids. Molecular Simulation, 2020, 46, 1037-1044.	2.0	6
33	A mean-field approach to simulating anisotropic particles. Journal of Chemical Physics, 2020, 153, 084106.	3.0	13
34	Cooperative Switching in Largeâ€Area Assemblies of Magnetic Janus Particles. Advanced Functional Materials, 2020, 30, 1907865.	14.9	13
35	freud: A software suite for high throughput analysis of particle simulation data. Computer Physics Communications, 2020, 254, 107275.	7.5	133
36	Phase separation and state oscillation of active inertial particles. Soft Matter, 2020, 16, 2847-2853.	2.7	21

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37	Announcing the 2020 ACS Nano Award Lecture Laureates. ACS Nano, 2020, 14, 1213-1215.	14.6	4
38	Efficient Phase Diagram Sampling by Active Learning. Journal of Physical Chemistry B, 2020, 124, 1275-1284.	2.6	33
39	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.	8.0	22
40	Scale-free, programmable design of morphable chain loops of kilobots and colloidal motors. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8700-8710.	7.1	6
41	Pinning dislocations in colloidal crystals with active particles that seek stacking faults. Soft Matter, 2020, 16, 4182-4191.	2.7	3
42	Growing Contributions of Nano in 2020. ACS Nano, 2020, 14, 16163-16164.	14.6	1
43	HOOMD-blue version 3.0 A Modern, Extensible, Flexible, Object-Oriented API for Molecular Simulations. , 2020, , .		1
44	The alchemical energy landscape for a pentameric cluster. Journal of Chemical Physics, 2020, 152, 014106.	3.0	2
45	Supraparticle Nanoassemblies with Enzymes. Chemistry of Materials, 2019, 31, 7493-7500.	6.7	24
46	The entropic bond in colloidal crystals. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16703-16710.	7.1	42
47	Designing active particles for colloidal microstructure manipulation via strain field alchemy. Soft Matter, 2019, 15, 6086-6096.	2.7	5
48	Computational self-assembly of colloidal crystals from Platonic polyhedral sphere clusters. Soft Matter, 2019, 15, 6288-6299.	2.7	9
49	Engineering entropy for the inverse design of colloidal crystals from hard shapes. Science Advances, 2019, 5, eaaw0514.	10.3	49
50	Entropic colloidal crystallization pathways via fluidâ€“fluid transitions and multidimensional prenucleation motifs. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14843-14851.	7.1	60
51	Principle of corresponding states for hard polyhedron fluids. Molecular Physics, 2019, 117, 3518-3526.	1.7	2
52	Influence of Softness on the Stability of Binary Colloidal Crystals. ACS Nano, 2019, 13, 13829-13842.	14.6	29
53	FCC â†” BCC Phase Transitions in Convex and Concave Hard Particle Systems. Journal of Physical Chemistry B, 2019, 123, 9038-9043.	2.6	10
54	Colloidal fibers and rings by cooperative assembly. Nature Communications, 2019, 10, 3936.	12.8	61

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55	Anisotropy effects on the kinetics of colloidal crystallization and melting: comparison of spheres and ellipsoids. Soft Matter, 2019, 15, 7479-7489.	2.7	13
56	Shape-controlled crystallisation pathways in dense fluids of ccp-forming hard polyhedra. Molecular Physics, 2019, 117, 3819-3826.	1.7	4
57	Identity crisis in alchemical space drives the entropic colloidal glass transition. Nature Communications, 2019, 10, 64.	12.8	16
58	Phase behavior and design rules for plastic colloidal crystals of hard polyhedra via consideration of directional entropic forces. Soft Matter, 2019, 15, 5380-5389.	2.7	11
59	Hierarchical self-assembly of hard cube derivatives. Soft Matter, 2019, 15, 3733-3739.	2.7	6
60	Symmetries in hard polygon systems determine plastic colloidal crystal mesophases in two dimensions. Soft Matter, 2019, 15, 2571-2579.	2.7	20
61	Alchemical molecular dynamics for inverse design. Molecular Physics, 2019, 117, 3968-3980.	1.7	8
62	Topological order in densely packed anisotropic colloids. Physical Review E, 2019, 100, 032608.	2.1	3
63	Dendrimer Ligand Directed Nanoplate Assembly. ACS Nano, 2019, 13, 14241-14251.	14.6	22
64	Supercharging enables organized assembly of synthetic biomolecules. Nature Chemistry, 2019, 11, 204-212.	13.6	70
65	Shapes within shapes: how particles arrange inside a cavity. Soft Matter, 2018, 14, 3012-3017.	2.7	10
66	Helmuth MÃ¶hwald (1946â€“2018). ACS Nano, 2018, 12, 3053-3055.	14.6	0
67	Phase separation of self-propelled ballistic particles. Physical Review E, 2018, 97, 042609.	2.1	16
68	Relevance of packing to colloidal self-assembly. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1439-1444.	7.1	52
69	Unusual multiscale mechanics of biomimetic nanoparticle hydrogels. Nature Communications, 2018, 9, 181.	12.8	28
70	Simple data and workflow management with the signac framework. Computational Materials Science, 2018, 146, 220-229.	3.0	91
71	Inverse design of simple pair potentials for the self-assembly of complex structures. Journal of Chemical Physics, 2018, 149, 204102.	3.0	30
72	Universal folding pathways of polyhedron nets. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6690-E6696.	7.1	16

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73	Intermediate crystalline structures of colloids in shape space. Soft Matter, 2018, 14, 8692-8697.	2.7	23
74	Strain fields in repulsive colloidal crystals. Physical Review Materials, 2018, 2, .	2.4	11
75	Pressure-tunable photonic band gaps in an entropic colloidal crystal. Physical Review Materials, 2018, 2, .	2.4	16
76	rowan: A Python package for working with quaternions. Journal of Open Source Software, 2018, 3, 787.	4.6	5
77	Shape-dependent ordering of gold nanocrystals into large-scale superlattices. Nature Communications, 2017, 8, 14038.	12.8	141
78	GPU accelerated Discrete Element Method (DEM) molecular dynamics for conservative, faceted particle simulations. Journal of Computational Physics, 2017, 334, 460-467.	3.8	38
79	Clathrate colloidal crystals. Science, 2017, 355, 931-935.	12.6	162
80	Shape-driven solidâ€“solid transitions in colloids. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3892-E3899.	7.1	45
81	Non-close-packed three-dimensional quasicrystals. Journal of Physics Condensed Matter, 2017, 29, 234005.	1.8	22
82	Our First and Next Decades at ACS Nano. ACS Nano, 2017, 11, 7553-7555.	14.6	0
83	Virial Coefficients and Equations of State for Hard Polyhedron Fluids. Langmuir, 2017, 33, 11788-11796.	3.5	19
84	Theory, Simulation, and Computation in Nanoscience and Nanotechnology. ACS Nano, 2017, 11, 6505-6506.	14.6	12
85	Tunable emergent structures and traveling waves in mixtures of passive and contact-triggered-active particles. Soft Matter, 2017, 13, 6332-6339.	2.7	11
86	Shape and Symmetry Determine Two-Dimensional Melting Transitions of Hard Regular Polygons. Physical Review X, 2017, 7, .	8.9	61
87	Quasicrystalline nanocrystal superlattice with partial matching rules. Nature Materials, 2017, 16, 214-219.	27.5	114
88	A Big Year Ahead for Nano in 2018. ACS Nano, 2017, 11, 11755-11757.	14.6	1
89	Nanoscience and Nanotechnology Impacting Diverse Fields of Science, Engineering, and Medicine. ACS Nano, 2016, 10, 10615-10617.	14.6	22
90	Scalable Metropolis Monte Carlo for simulation of hard shapes. Computer Physics Communications, 2016, 204, 21-30.	7.5	69

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91	Role of Short-Range Order and Hyperuniformity in the Formation of Band Gaps in Disordered Photonic Materials. Physical Review Letters, 2016, 117, 053902.	7.8	88
92	Geometry induced sequence of nanoscale Frankâ€“Kasper and quasicrystal mesophases in giant surfactants. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14195-14200.	7.1	201
93	Using depletion to control colloidal crystal assemblies of hard cuboctahedra. Soft Matter, 2016, 12, 5199-5204.	2.7	27
94	Clusters of polyhedra in spherical confinement. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E669-78.	7.1	68
95	Efficient neighbor list calculation for molecular simulation of colloidal systems using graphics processing units. Computer Physics Communications, 2016, 203, 45-52.	7.5	53
96	Rational design of nanomaterials from assembly and reconfigurability of polymer-tethered nanoparticles. MRS Communications, 2015, 5, 397-406.	1.8	36
97	Biomaterials: Simultaneous Nanoâ€•and Microscale Control of Nanofibrous Microspheres Selfâ€Assembled from Starâ€Shaped Polymers (Adv. Mater. 26/2015). Advanced Materials, 2015, 27, 3972-3972.	21.0	0
98	Controlling Chirality of Entropic Crystals. Physical Review Letters, 2015, 115, 158303.	7.8	15
99	A parallel algorithm for implicit depletant simulations. Journal of Chemical Physics, 2015, 143, 184110.	3.0	18
100	Strong orientational coordinates and orientational order parameters for symmetric objects. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 485201.	2.1	15
101	Simultaneous Nanoâ€•and Microscale Control of Nanofibrous Microspheres Selfâ€Assembled from Starâ€Shaped Polymers. Advanced Materials, 2015, 27, 3947-3952.	21.0	63
102	Editorial: Soft Matters. Physical Review Letters, 2015, 114, 050001.	7.8	3
103	Binding kinetics of lock and key colloids. Journal of Chemical Physics, 2015, 142, 174909.	3.0	28
104	Generic, phenomenological, on-the-fly renormalized repulsion model for self-limited organization of terminal supraparticle assemblies. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3161-8.	7.1	24
105	Coarsening dynamics of binary liquids with active rotation. Soft Matter, 2015, 11, 8409-8416.	2.7	18
106	Effect of shape on the self-assembly of faceted patchy nanoplates with irregular shape into tiling patterns. Soft Matter, 2015, 11, 1386-1396.	2.7	17
107	Symmetry Considerations for the Targeted Assembly of Entropically Stabilized Colloidal Crystals via Voronoi Particles. ACS Nano, 2015, 9, 2336-2344.	14.6	26
108	Shape allophiles improve entropic assembly. Soft Matter, 2015, 11, 7250-7256.	2.7	18

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109	A kirigami approach to engineering elasticity in nanocomposites through patterned defects. Nature Materials, 2015, 14, 785-789.	27.5	509
110	Strong scaling of general-purpose molecular dynamics simulations on GPUs. Computer Physics Communications, 2015, 192, 97-107.	7.5	546
111	Digital Alchemy for Materials Design: Colloids and Beyond. ACS Nano, 2015, 9, 9542-9553.	14.6	62
112	Shape control and compartmentalization in active colloidal cells. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4642-50.	7.1	67
113	Metastable orientational order of colloidal discoids. Nature Communications, 2015, 6, 8507.	12.8	40
114	Computational self-assembly of a one-component icosahedral quasicrystal. Nature Materials, 2015, 14, 109-116.	27.5	129
115	Actuation of shape-memory colloidal fibres of Janus ellipsoids. Nature Materials, 2015, 14, 117-124.	27.5	136
116	Assembly engineering: Materials design for the 21st century (2013 P.V. Danckwerts lecture). Chemical Engineering Science, 2015, 121, 3-9.	3.8	23
117	Self-Assembly of Archimedean Tilings with Enthalpically and Entropically Patchy Polygons. ACS Nano, 2014, 8, 2918-2928.	14.6	76
118	Emergent Collective Phenomena in a Mixture of Hard Shapes through Active Rotation. Physical Review Letters, 2014, 112, 075701.	7.8	170
119	A triangular affair. Nature Physics, 2014, 10, 185-186.	16.7	3
120	Terminal supraparticle assemblies from similarly charged protein molecules and nanoparticles. Nature Communications, 2014, 5, 3593.	12.8	97
121	Phase Behavior and Complex Crystal Structures of Self-Assembled Tethered Nanoparticle Telechelics. Nano Letters, 2014, 14, 2071-2078.	9.1	36
122	Understanding shape entropy through local dense packing. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E4812-21.	7.1	199
123	Complexity in Surfaces of Densest Packings for Families of Polyhedra. Physical Review X, 2014, 4, .	8.9	36
124	Digital colloids: reconfigurable clusters as high information density elements. Soft Matter, 2014, 10, 7468-7479.	2.7	50
125	Entropically Patchy Particles: Engineering Valence through Shape Entropy. ACS Nano, 2014, 8, 931-940.	14.6	175
126	Massively parallel Monte Carlo for many-particle simulations on GPUs. Journal of Computational Physics, 2013, 254, 27-38.	3.8	58

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127	Shape Alloys of Nanorods and Nanospheres from Self-Assembly. Nano Letters, 2013, 13, 4980-4988.	9.1	104
128	Hard-disk equation of state: First-order liquid-hexatic transition in two dimensions with three simulation methods. Physical Review E, 2013, 87, 042134.	2.1	192
129	Competition of shape and interaction patchiness for self-assembling nanoplates. Nature Chemistry, 2013, 5, 466-473.	13.6	278
130	A Directional Entropic Force Approach to Assemble Anisotropic Nanoparticles into Superlattices. Angewandte Chemie - International Edition, 2013, 52, 13980-13984.	13.8	90
131	Effect of nanoparticle polydispersity on the self-assembly of polymer tethered nanospheres. Journal of Chemical Physics, 2012, 137, 104901.	3.0	34
132	Self-assembled clusters of spheres related to spherical codes. Physical Review E, 2012, 86, 041124.	2.1	25
133	Screening and designing patchy particles for optimized self-assembly propensity through assembly pathway engineering. Soft Matter, 2012, 8, 2852.	2.7	40
134	Design of patchy particles using ternary self-assembled monolayers. Soft Matter, 2012, 8, 6226.	2.7	38
135	Crystalline Assemblies and Densest Packings of a Family of Truncated Tetrahedra and the Role of Directional Entropic Forces. ACS Nano, 2012, 6, 609-614.	14.6	190
136	Liquid Crystal Order in Colloidal Suspensions of Spheroidal Particles by Direct Current Electric Field Assembly. Small, 2012, 8, 1551-1562.	10.0	71
137	Predictive Self-Assembly of Polyhedra into Complex Structures. Science, 2012, 337, 453-457.	12.6	882
138	Self-Assembly and Reconfigurability of Shape-Shifting Particles. ACS Nano, 2011, 5, 8892-8903.	14.6	76
139	Characterizing Structure Through Shape Matching and Applications to Self-Assembly. Annual Review of Condensed Matter Physics, 2011, 2, 263-285.	14.5	59
140	Degenerate Quasicrystal of Hard Triangular Bipyramids. Physical Review Letters, 2011, 107, 215702.	7.8	49
141	Pseudo-random number generation for Brownian Dynamics and Dissipative Particle Dynamics simulations on GPU devices. Journal of Computational Physics, 2011, 230, 7191-7201.	3.8	148
142	Rigid body constraints realized in massively-parallel molecular dynamics on graphics processing units. Computer Physics Communications, 2011, 182, 2307-2313.	7.5	164
143	Self-assembly of self-limiting monodisperse supraparticles from polydisperse nanoparticles. Nature Nanotechnology, 2011, 6, 580-587.	31.5	488
144	Characterizing complex particle morphologies through shape matching: Descriptors, applications, and algorithms. Journal of Computational Physics, 2011, 230, 6438-6463.	3.8	62

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145	Self-Assembly and Self-Tuning Behavior of Self-Propelled Particles. , 2011, , .		0
146	Self-assembly of soft-matter quasicrystals and their approximants. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20935-20940.	7.1	115
147	Phase diagram of hard tetrahedra. Journal of Chemical Physics, 2011, 135, 194101.	3.0	76
148	Dense Crystalline Dimer Packings of Regular Tetrahedra. Discrete and Computational Geometry, 2010, 44, 253-280.	0.6	87
149	Self-assembly of end-tethered nanorods in a neat system and role of block fractions and aspect ratio. Soft Matter, 2010, 6, 945.	2.7	47
150	Stability of the double gyroid phase to nanoparticle polydispersity in polymer-tethered nanosphere systems. Soft Matter, 2010, 6, 1693.	2.7	46
151	Disordered, quasicrystalline and crystalline phases of densely packed tetrahedra. Nature, 2009, 462, 773-777.	27.8	394
152	Challenges and Opportunities in Preparing Students for Petascale Computational Science and Engineering. Computing in Science and Engineering, 2009, 11, 22-27.	1.2	4
153	Phase behavior of ditethered nanospheres. Soft Matter, 2009, 5, 4492.	2.7	30
154	Visualization and Analysis of GPU Summer School Applicants and Participants. , 2008, , .		0
155	Icosahedral packing of polymer-tethered nanospheres and stabilization of the gyroid phase. Physical Review E, 2007, 75, 040801.	2.1	80
156	How do Quasicrystals Grow?. Physical Review Letters, 2007, 99, 235503.	7.8	138
157	Molecular Dynamics Simulation Study of Self-Assembled Monolayers of Alkanethiol Surfactants on Spherical Gold Nanoparticles. Journal of Physical Chemistry C, 2007, 111, 15857-15862.	3.1	199
158	Simulations and Analysis of Self-Assembly of CdTe Nanoparticles into Wires and Sheets. Nano Letters, 2007, 7, 1670-1675.	9.1	147
159	Anisotropy of building blocks and their assembly into complex structures. Nature Materials, 2007, 6, 557-562.	27.5	2,440
160	Measurement of growing dynamical length scales and prediction of the jamming transition in a granular material. Nature Physics, 2007, 3, 260-264.	16.7	330
161	Self-Assembly of CdTe Nanocrystals into Free-Floating Sheets. Science, 2006, 314, 274-278.	12.6	824
162	NSF NSDL Materials Digital Library & MSE Education. Materials Research Society Symposia Proceedings, 2005, 909, 1.	0.1	1

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163	Simulations of Tetra-Tethered Organic/Inorganic Nanocubeâ^'Polymer Assemblies. Macromolecules, 2005, 38, 6168-6180.	4.8	69
164	Self-Assembly of Patchy Particles into Diamond Structures through Molecular Mimicry. Langmuir, 2005, 21, 11547-11551.	3.5	271
165	Self-Organization of Nanoscopic Building Blocks into Ordered Assemblies. Materials Research Society Symposia Proceedings, 2004, 818, 23.	0.1	0
166	Simulations of Organic-tethered Silsesquioxane Nanocube Assemblies. Materials Research Society Symposia Proceedings, 2004, 847, 1.	0.1	0
167	Multi-Block Copolymers in Selective Solvent: A Brownian Dynamics Simulation. Materials Research Society Symposia Proceedings, 2004, 856, BB8.6.1.	0.1	0
168	MatDL.org: The Materials Digital Library and the National Science Digital Library Program. Materials Research Society Symposia Proceedings, 2004, 827, 231.	0.1	0
169	MATERIALS SCIENCE: Some Assembly Required. Science, 2004, 306, 419-420.	12.6	373
170	Self-Assembly of Patchy Particles. Nano Letters, 2004, 4, 1407-1413.	9.1	722
171	Origin of particle clustering in a simulated polymer nanocomposite and its impact on rheology. Journal of Chemical Physics, 2003, 119, 1777-1788.	3.0	213
172	Tethered Nano Building Blocks:Â Toward a Conceptual Framework for Nanoparticle Self-Assembly. Nano Letters, 2003, 3, 1341-1346.	9.1	311
173	Molecular and Mesoscale Simulation Methods for Polymer Materials. Annual Review of Materials Research, 2002, 32, 401-436.	9.3	194
174	Effects of a nanoscopic filler on the structure and dynamics of a simulated polymer melt and the relationship to ultrathin films. Physical Review E, 2001, 64, 021802.	2.1	247
175	Simulations of Filled Polymers on Multiple Length Scales. Materials Research Society Symposia Proceedings, 2000, 661, KK4.1.1.	0.1	4
176	Spatially heterogeneous dynamics in liquids: insights from simulation. Journal of Non-Crystalline Solids, 2000, 274, 342-355.	3.1	385
177	Time-dependent, four-point density correlation function description of dynamical heterogeneity and decoupling in supercooled liquids. Journal of Chemical Physics, 2000, 112, 509-512.	3.0	204
178	Effect of ordering on spinodal decomposition of liquid-crystal/polymer mixtures. Physical Review E, 1999, 60, R29-R32.	2.1	55
179	Spatial correlations of mobility and immobility in a glass-forming Lennard-Jones liquid. Physical Review E, 1999, 60, 3107-3119.	2.1	455
180	Growing range of correlated motion in a polymer melt on cooling towards the glass transition. Nature, 1999, 399, 246-249.	27.8	374

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181	Growing Spatial Correlations of Particle Displacements in a Simulated Liquid on Cooling toward the Glass Transition. Physical Review Letters, 1999, 82, 5064-5067.	7.8	160
182	Dynamical heterogeneity in the Ising spin glass. Physical Review E, 1998, 57, 7350-7353.	2.1	31
183	Stringlike Cooperative Motion in a Supercooled Liquid. Physical Review Letters, 1998, 80, 2338-2341.	7.8	846
184	Emergence of Fast Local Dynamics on Cooling toward the Ising Spin Glass Transition. Physical Review Letters, 1997, 78, 3394-3397.	7.8	29
185	Dynamical Heterogeneities in a Supercooled Lennard-Jones Liquid. Physical Review Letters, 1997, 79, 2827-2830.	7.8	861
186	On the mechanism of pinning in phaseâ€separating polymer blends. Journal of Chemical Physics, 1995, 103, 9363-9369.	3.0	32
187	Reaction-Controlled Morphology of Phase-Separating Mixtures. Physical Review Letters, 1995, 74, 2034-2037.	7.8	255
188	COMPUTER SIMULATIONS OF SPINODAL DECOMPOSITION IN POLYMER BLENDS. , 1995, , 1-46.		35
189	Computational self-assembly of a one-component icosahedral quasicrystal. , 0, .		1
190	Unraveling the Self-Assembly Pathway of Binary Nanocrystal Superlattices. , 0, , .		0