Thomas M Truskett

List of Publications by Citations

176 papers	7,007 citations	41 h-index	77 g-index
186 ext. papers	7,558 ext. citations	4.6 avg, IF	6.05 L-index

#	Paper	IF	Citations
176	Is random close packing of spheres well defined?. *Physical Review Letters*, **2000**, 84, 2064-7	7.4	1017
175	Modeling water, the hydrophobic effect, and ion solvation. *Annual Review of Biophysics and Biomolecular Structure*, **2005**, 34, 173-99		333
174	Hydrophobic hydration from small to large lengthscales: Understanding and manipulating the crossover. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 9475-80	11.5	255
173	Towards a quantification of disorder in materials: distinguishing equilibrium and glassy sphere packings. *Physical Review E*, **2000**, 62, 993-1001	2.4	239
172	Excess-entropy-based anomalies for a waterlike fluid. *Journal of Chemical Physics*, **2006**, 125, 244502	3.9	146
171	A single-bond approach to orientation-dependent interactions and its implications for liquid water. *Journal of Chemical Physics*, **1999**, 111, 2647-2656	3.9	145
170	Layering and position-dependent diffusive dynamics of confined fluids. *Physical Review Letters*, **2008**, 100, 145901	7.4	144
169	Thermodynamic implications of confinement for a waterlike fluid. *Journal of Chemical Physics*, **2001**, 114, 2401-2418	3.9	137
168	Structural precursor to freezing in the hard-disk and hard-sphere systems. *Physical Review E*, **1998**, 58, 3083-3088	2.4	125
167	Thermodynamics predicts how confinement modifies the dynamics of the equilibrium hard-sphere fluid. *Physical Review Letters*, **2006**, 96, 177804	7.4	121
166	The Kauzmann Paradox Revisited *Journal of Physical Chemistry B*, **2001**, 105, 11809-11816	3.4	117
165	A simple molecular thermodynamic theory of hydrophobic hydration. *Journal of Chemical Physics*, **2002**, 116, 2907-2921	3.9	111
164	Effects of lengthscales and attractions on the collapse of hydrophobic polymers in water. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 733-8	11.5	105
163	Relationship between thermodynamics and dynamics of supercooled liquids. *Journal of Chemical Physics*, **2006**, 125, 076102	3.9	103
162	The Equation of State of an Energy Landscape. *Journal of Physical Chemistry B*, **1999**, 103, 7390-7397	3.4	96
161	Free volume in the hard sphere liquid. *Molecular Physics*, **1998**, 95, 289-297	1.7	95
160	Quantitative link between single-particle dynamics and static structure of supercooled liquids. *Journal of Physical Chemistry B*, **2006**, 110, 18147-50	3.4	93

159	Anomalous structure and dynamics of the Gaussian-core fluid. *Physical Review E*, **2009**, 79, 031203	2.4	91
158	Concentrated dispersions of equilibrium protein nanoclusters that reversibly dissociate into active monomers. *ACS Nano*, **2012**, 6, 1357-69	16.7	89
157	Relationships between self-diffusivity, packing fraction, and excess entropy in simple bulk and confined fluids. *Journal of Physical Chemistry B*, **2007**, 111, 10054-63	3.4	88
156	Synergistic formation and stabilization of oil-in-water emulsions by a weakly interacting mixture of zwitterionic surfactant and silica nanoparticles. *Langmuir*, **2014**, 30, 984-94	4	79
155	Modified montmorillonite clay microparticles for stable oil-in-seawater emulsions. *ACS Applied Materials & Interfaces*, **2014**, 6, 11502-13	9.5	73
154	Charged gold nanoparticles with essentially zero serum protein adsorption in undiluted fetal bovine serum. *Journal of the American Chemical Society*, **2013**, 135, 7799-802	16.4	73
153	Steric stabilization of nanoparticles with grafted low molecular weight ligands in highly concentrated brines including divalent ions. *Soft Matter*, **2016**, 12, 2025-39	3.6	70
152	Inverse design of simple pairwise interactions with low-coordinated 3D lattice ground states. *Soft Matter*, **2013**, 9, 3866	3.6	68
151	Generalized Rosenfeld scalings for tracer diffusivities in not-so-simple fluids: mixtures and soft particles. *Physical Review E*, **2009**, 80, 061205	2.4	68
150	Inverse methods for material design. *AICHE Journal*, **2014**, 60, 2732-2740	3.6	65
149	Structural ensemble of an intrinsically disordered polypeptide. *Journal of Physical Chemistry B*, **2013** , 117, 118-24	3.4	64
148	Does confining the hard-sphere fluid between hard walls change its average properties?. *Journal of Chemical Physics*, **2007**, 126, 244708	3.9	61
147	Predicting how nanoconfinement changes the relaxation time of a supercooled liquid. *Physical Review Letters*, **2013**, 111, 235901	7.4	60
146	Tuning density profiles and mobility of inhomogeneous fluids. *Physical Review Letters*, **2008**, 100, 106001	7.4	57
145	How short-range attractions impact the structural order, self-diffusivity, and viscosity of a fluid. *Journal of Chemical Physics*, **2007**, 127, 044502	3.9	57
144	A Simple Statistical Mechanical Model of Water. *Journal of Physical Chemistry B*, **2002**, 106, 11829-11842	3.4	56
143	Theory of supercooled liquids and glasses: Energy landscape and statistical geometry perspectives. *Advances in Chemical Engineering*, **2001**, 28, 21-79	0.6	52
142	On the use of excess entropy scaling to describe the dynamic properties of water. *Journal of Physical Chemistry B*, **2010**, 114, 10558-66	3.4	50

141	Predicting water's phase diagram and liquid-state anomalies. *Journal of Chemical Physics*, **2002**, 117, 5101-5104	3.9	50
140	Equilibrium gold nanoclusters quenched with biodegradable polymers. *ACS Nano*, **2013**, 7, 239-51	16.7	49
139	Nonequilibrium hard-disk packings with controlled orientational order. *Journal of Chemical Physics*, **2000**, 113, 4844	3.9	46
138	Communication: Generalizing Rosenfeld's excess-entropy scaling to predict long-time diffusivity in dense fluids of Brownian particles: from hard to ultrasoft interactions. *Journal of Chemical Physics*, **2011**, 134, 081101	3.9	45
137	Available states and available space: static properties that predict self-diffusivity of confined fluids. *Journal of Statistical Mechanics: Theory and Experiment*, **2009**, 2009, P04006	1.9	41
136	Communication: Inverse design for self-assembly via on-the-fly optimization. *Journal of Chemical Physics*, **2016**, 145, 111101	3.9	41
135	Structural anomalies of fluids: origins in second and higher coordination shells. *Physical Review E*, **2008**, 77, 041201	2.4	39
134	Coarse-grained strategy for modeling protein stability in concentrated solutions. *Biophysical Journal*, **2005**, 89, 2372-84	2.9	38
133	Evidence that amorphous water below 160 K is not a fragile liquid. *Journal of Physical Chemistry B*, **2006**, 110, 11033-6	3.4	38
132	Liquid Structure via Cavity Size Distributions. *Journal of Physical Chemistry B*, **2000**, 104, 12028-12034	3.4	38
131	Inverse methods for design of soft materials. *Journal of Chemical Physics*, **2020**, 152, 140902	3.9	38
130	Probabilistic inverse design for self-assembling materials. *Journal of Chemical Physics*, **2017**, 146, 184103	3.9	37
129	Contrasting the Influence of Cationic Amino Acids on the Viscosity and Stability of a Highly Concentrated Monoclonal Antibody. *Pharmaceutical Research*, **2017**, 34, 193-207	4.5	37
128	On the use of excess entropy scaling to describe single-molecule and collective dynamic properties of hydrocarbon isomer fluids. *Journal of Physical Chemistry B*, **2010**, 114, 16487-93	3.4	36
127	Linking Semiconductor Nanocrystals into Gel Networks through All-Inorganic Bridges. *Angewandte Chemie - International Edition*, **2015**, 54, 14840-4	16.4	35
126	Reversible Self-Assembly of Glutathione-Coated Gold Nanoparticle Clusters via pH-Tunable Interactions. *Langmuir*, **2017**, 33, 12244-12253	4	34
125	Assembly of nothing: equilibrium fluids with designed structured porosity. *Soft Matter*, **2016**, 12, 2663-7	3.6	33
124	Coarse-grained strategy for modeling protein stability in concentrated solutions. II: phase behavior. *Biophysical Journal*, **2006**, 90, 1949-60	2.9	33

123	Heteropolymer collapse theory for protein folding in the pressure-temperature plane. *Biophysical Journal*, **2006**, 91, 2427-35	2.9	33
122	Transport in amorphous solid water films: implications for self-diffusivity. *Journal of Physical Chemistry B*, **2006**, 110, 17987-97	3.4	33
121	The subtleties of water in small spaces. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 10139-40	11.5	33
120	Origin and detection of microstructural clustering in fluids with spatial-range competitive interactions. *Physical Review E*, **2015**, 91, 042312	2.4	31
119	Composition and concentration anomalies for structure and dynamics of Gaussian-core mixtures. *Journal of Chemical Physics*, **2009**, 131, 161101	3.9	31
118	Nanocrystal superlattices that exhibit improved order on heating: an example of inverse melting?. *Faraday Discussions*, **2015**, 181, 181-92	3.6	30
117	Confinement, entropy, and single-particle dynamics of equilibrium hard-sphere mixtures. *Journal of Chemical Physics*, **2007**, 127, 154513	3.9	30
116	Configurational Properties and Corresponding States in Simple Fluids and Water. *Journal of Physical Chemistry B*, **1999**, 103, 5106-5116	3.4	30
115	Equilibrium cluster fluids: pair interactions via inverse design. *Soft Matter*, **2015**, 11, 9342-54	3.6	29
114	High concentration tangential flow ultrafiltration of stable monoclonal antibody solutions with low viscosities. *Journal of Membrane Science*, **2016**, 508, 113-126	9.6	29
113	Dimensionality and Design of Isotropic Interactions that Stabilize Honeycomb, Square, Simple Cubic, and Diamond Lattices. *Physical Review X*, **2014**, 4,	9.1	29
112	High interfacial activity of polymers "grafted through" functionalized iron oxide nanoparticle clusters. *Langmuir*, **2014**, 30, 10188-96	4	29
111	Excess entropy scaling of dynamic quantities for fluids of dumbbell-shaped particles. *Journal of Chemical Physics*, **2010**, 133, 104506	3.9	29
110	Polymer Conductivity through Particle Connectivity. *Chemistry of Materials*, **2009**, 21, 1948-1954	9.6	29
109	Ideal glass transitions in thin films: An energy landscape perspective. *Journal of Chemical Physics*, **2003**, 119, 1897-1900	3.9	29
108	On the formation of equilibrium gels via a macroscopic bond limitation. *Journal of Chemical Physics*, **2016**, 145, 074906	3.9	29
107	Orientationally Ordered Silicon Nanocrystal Cuboctahedra in Superlattices. *Nano Letters*, **2016**, 16, 7814-7821	11.5	28
106	Tunable equilibrium nanocluster dispersions at high protein concentrations. *Soft Matter*, **2013**, 9, 1766-1771	3.6	28

105	Mapping between long-time molecular and Brownian dynamics. *Soft Matter*, **2011**, 7, 9859	3.6	28
104	Density fluctuations in many-body systems. *Physical Review E*, **1998**, 58, 7369-7380	2.4	28
103	Fluids with competing interactions. I. Decoding the structure factor to detect and characterize self-limited clustering. *Journal of Chemical Physics*, **2016**, 145, 064902	3.9	27
102	Impact of surface roughness on diffusion of confined fluids. *Journal of Chemical Physics*, **2011**, 135, 154502	3.9	25
101	Coarse-grained strategy for modeling protein stability in concentrated solutions. III: directional protein interactions. *Biophysical Journal*, **2007**, 92, 4316-24	2.9	24
100	Iso-g(2) Processes in Equilibrium Statistical Mechanics *Journal of Physical Chemistry B*, **2001**, 105, 6592-6597	3.4	24
99	Unsupervised machine learning for detection of phase transitions in off-lattice systems. I. Foundations. *Journal of Chemical Physics*, **2018**, 149, 194109	3.9	24
98	Designing convex repulsive pair potentials that favor assembly of kagome and snub square lattices. *Journal of Chemical Physics*, **2016**, 145, 054901	3.9	23
97	Interactions and design rules for assembly of porous colloidal mesophases. *Soft Matter*, **2017**, 13, 1335-1343	3.4	22
96	Improving Viscosity and Stability of a Highly Concentrated Monoclonal Antibody Solution with Concentrated Proline. *Pharmaceutical Research*, **2018**, 35, 133	4.5	22
95	Attractions, water structure, and thermodynamics of hydrophobic polymer collapse. *Journal of Physical Chemistry B*, **2008**, 112, 13193-6	3.4	22
94	Using available volume to predict fluid diffusivity in random media. *Physical Review E*, **2006**, 74, 040102	2.4	22
93	Excess-entropy scaling of dynamics for a confined fluid of dumbbell-shaped particles. *Physical Review E*, **2010**, 82, 041201	2.4	21
92	A simple analytical model of water. *Biophysical Chemistry*, **2003**, 105, 449-59	3.5	21
91	Inverse design of multicomponent assemblies. *Journal of Chemical Physics*, **2018**, 148, 104509	3.9	20
90	Viscosity Reduction of a Concentrated Monoclonal Antibody with Arginine HCl and Arginine Glutamate. *Industrial & Engineering Chemistry Research*, **2016**, 55, 11225-11234	3.9	20
89	Gelation of plasmonic metal oxide nanocrystals by polymer-induced depletion attractions. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 8925-8930	11.5	20
88	Using Energy Landscapes To Predict the Properties of Thin Films *Journal of Physical Chemistry B*, **2004**, 108, 19769-19779	3.4	20

87	Formation of Small Gold Nanoparticle Chains with High NIR Extinction through Bridging with Calcium Ions. *Langmuir*, **2016**, 32, 1127-38	4	19
86	Protein-Protein Interactions of Highly Concentrated Monoclonal Antibody Solutions via Static Light Scattering and Influence on the Viscosity. *Journal of Physical Chemistry B*, **2019**, 123, 739-755	3.4	19
85	Structure and phase behavior of polymer-linked colloidal gels. *Journal of Chemical Physics*, **2019**, 151, 124901	3.9	18
84	The statistical geometry of voids in liquids. *Fluid Phase Equilibria*, **1999**, 158-160, 549-556	2.5	18
83	Communication: From close-packed to topologically close-packed: Formation of Laves phases in moderately polydisperse hard-sphere mixtures. *Journal of Chemical Physics*, **2018**, 148, 191101	3.9	17
82	Charge Shielding Prevents Aggregation of Supercharged GFP Variants at High Protein Concentration. *Molecular Pharmaceutics*, **2017**, 14, 3269-3280	5.6	17
81	Designing pairwise interactions that stabilize open crystals: Truncated square and truncated hexagonal lattices. *Journal of Chemical Physics*, **2017**, 146, 144501	3.9	16
80	Quenched Assembly of NIR-Active Gold Nanoclusters Capped with Strongly Bound Ligands by Tuning Particle Charge via pH and Salinity. *Journal of Physical Chemistry C*, **2014**, 118, 14291-14298	3.8	16
79	X-ray Scattering and Coarse-Grained Simulations for Clustering and Interactions of Monoclonal Antibodies at High Concentrations. *Journal of Physical Chemistry B*, **2019**, 123, 5274-5290	3.4	15
78	Breadth versus depth: Interactions that stabilize particle assemblies to changes in density or temperature. *Journal of Chemical Physics*, **2016**, 144, 084502	3.9	15
77	Implications of the effective one-component analysis of pair correlations in colloidal fluids with polydispersity. *Journal of Chemical Physics*, **2011**, 135, 124513	3.9	15
76	Putting the squeeze on cavities in liquids: Quantifying pressure effects on solvation using simulations and scaled-particle theory. *Journal of Chemical Physics*, **2011**, 134, 014507	3.9	15
75	Model for the free-volume distributions of equilibrium fluids. *Journal of Chemical Physics*, **2006**, 124, 214502	3.9	15
74	Assembly of particle strings via isotropic potentials. *Journal of Chemical Physics*, **2019**, 150, 124903	3.9	14
73	Communication: Phase behavior of materials with isotropic interactions designed by inverse strategies to favor diamond and simple cubic lattice ground states. *Journal of Chemical Physics*, **2013**, 139, 141102	3.9	14
72	Enhancing tracer diffusivity by tuning interparticle interactions and coordination shell structure. *Soft Matter*, **2012**, 8, 4083-4089	3.6	14
71	Residual multiparticle entropy does not generally change sign near freezing. *Journal of Chemical Physics*, **2008**, 128, 161101	3.9	14
70	Unsupervised machine learning for detection of phase transitions in off-lattice systems. II. Applications. *Journal of Chemical Physics*, **2018**, 149, 194110	3.9	14

69	Structure, thermodynamics, and position-dependent diffusivity in fluids with sinusoidal density variations. *Langmuir*, **2014**, 30, 8247-52	4	13
68	Connection between thermodynamics and dynamics of simple fluids in highly attractive pores. *Langmuir*, **2013**, 29, 14527-35	4	13
67	Insights into crowding effects on protein stability from a coarse-grained model. *Journal of Biomechanical Engineering*, **2009**, 131, 071002	2.1	13
66	Assembly of Linked Nanocrystal Colloids by Reversible Covalent Bonds. *Chemistry of Materials*, **2020**, 32, 10235-10245	9.6	13
65	Inverse Design of Self-Assembling Frank-Kasper Phases and Insights Into Emergent Quasicrystals. *Journal of Physical Chemistry B*, **2018**, 122, 5547-5556	3.4	12
64	Fluids with competing interactions. II. Validating a free energy model for equilibrium cluster size. *Journal of Chemical Physics*, **2016**, 145, 064903	3.9	12
63	Triangle Distribution and Equation of State for Classical Rigid Disks. *Journal of Statistical Physics*, **2000**, 100, 49-72	1.5	12
62	Indocyanine Green J Aggregates in Polymersomes for Near-Infrared Photoacoustic Imaging. *ACS Applied Materials & Interfaces*, **2019**, 11, 46437-46450	9.5	12
61	Colloidal Nanocrystal Gels from Thermodynamic Principles. *Accounts of Chemical Research*, **2021**, 54, 798-807	24.3	12
60	Communication: Local structure-mobility relationships of confined fluids reverse upon supercooling. *Journal of Chemical Physics*, **2015**, 142, 161102	3.9	11
59	Cooling Dodecanethiol-Capped 2 nm Diameter Gold Nanocrystal Superlattices below Room Temperature Induces a Reversible Order□Disorder Structure Transition. *Journal of Physical Chemistry C*, **2016**, 120, 27682-27687	3.8	11
58	Structural signatures of mobility on intermediate time scales in a supercooled fluid. *Journal of Chemical Physics*, **2010**, 132, 184503	3.9	11
57	Breakup of Oil Jets into Droplets in Seawater with Environmentally Benign Nanoparticle and Surfactant Dispersants. *Industrial & Engineering Chemistry Research*, **2015**, 54, 4243-4251	3.9	10
56	Coarse-Grained Molecular Dynamics Simulations for Understanding the Impact of Short-Range Anisotropic Attractions on Structure and Viscosity of Concentrated Monoclonal Antibody Solutions. *Molecular Pharmaceutics*, **2020**, 17, 1748-1756	5.6	10
55	Connection Between Thermodynamics and Dynamics of Simple Fluids in Pores: Impact of Fluid-Fluid Interaction Range and Fluid-Solid Interaction Strength. *Journal of Physical Chemistry C*, **2017**, 121, 16316-16327	3.8	9
54	Note: Position-dependent and pair diffusivity profiles from steady-state solutions of color reaction-counterdiffusion problems. *Journal of Chemical Physics*, **2014**, 141, 046101	3.9	9
53	Antibody nanoparticle dispersions formed with mixtures of crowding molecules retain activity and in vivo bioavailability. *Journal of Pharmaceutical Sciences*, **2012**, 101, 3763-78	3.9	9
52	Free volume in the hard sphere liquid. *Molecular Physics*, **1998**, 95, 289-297	1.7	9

51	Influence of morphology of colloidal nanoparticle gels on ion transport and rheology. *Journal of Chemical Physics*, **2019**, 150, 214903	3.9	8
50	Connecting Solute Diffusion to Morphology in Triblock Copolymer Membranes. *Macromolecules*, **2020**, 53, 2336-2343	5.5	8
49	Free volumes and the anomalous self-diffusivity of attractive colloids. *Journal of Physical Chemistry B*, **2006**, 110, 5166-9	3.4	8
48	Relating Collective Diffusion, Protein–Protein Interactions, and Viscosity of Highly Concentrated Monoclonal Antibodies through Dynamic Light Scattering. *Industrial & Engineering Chemistry Research*, **2019**, 58, 22456-22471	3.9	7
47	Phase diagram for two-dimensional layer of soft particles. *Soft Matter*, **2019**, 15, 4162-4169	3.6	7
46	Universal Gelation of Metal Oxide Nanocrystals via Depletion Attractions. *Nano Letters*, **2020**, 20, 4007-4013	10.8	7
45	Self-diffusion of a highly concentrated monoclonal antibody by fluorescence correlation spectroscopy: insight into protein-protein interactions and self-association. *Soft Matter*, **2019**, 15, 6660-6676	3.6	7
44	Design of two-dimensional particle assemblies using isotropic pair interactions with an attractive well. *AIP Advances*, **2017**, 7, 115307	1.5	7
43	Linking Semiconductor Nanocrystals into Gel Networks through All-Inorganic Bridges. *Angewandte Chemie*, **2015**, 127, 15053-15057	3.6	7
42	Effect of Dilute Nitric Acid on Crystallization and Fracture of Amorphous Solid Water Films. *Journal of Physical Chemistry C*, **2007**, 111, 10438-10447	3.8	7
41	Protein-Protein Interactions, Clustering, and Rheology for Bovine IgG up to High Concentrations Characterized by Small Angle X-Ray Scattering and Molecular Dynamics Simulations. *Journal of Pharmaceutical Sciences*, **2020**, 109, 696-708	3.9	7
40	Transport Mechanisms Underlying Ionic Conductivity in Nanoparticle-Based Single-Ion Electrolytes. *Journal of Physical Chemistry Letters*, **2020**, 11, 6970-6975	6.4	7
39	Prediction and Optimization of Ion Transport Characteristics in Nanoparticle-Based Electrolytes Using Convolutional Neural Networks. *Journal of Physical Chemistry B*, **2021**, 125, 4838-4849	3.4	7
38	The role of pressure in inverse design for assembly. *Journal of Chemical Physics*, **2019**, 151, 104104	3.9	7
37	Effects of linker flexibility on phase behavior and structure of linked colloidal gels. *Journal of Chemical Physics*, **2021**, 154, 074901	3.9	7
36	Gold nanoparticles with high densities of small protuberances on nanocluster cores with strong NIR extinction. *RSC Advances*, **2015**, 5, 104674-104687	3.7	6
35	Shear-rate-dependent structural order and viscosity of a fluid with short-range attractions. *Physical Review E*, **2008**, 78, 010201	2.4	6
34	Influence of pore morphology on the diffusion of water in triblock copolymer membranes. *Journal of Chemical Physics*, **2020**, 152, 014904	3.9	6

33	Impact of solvent granularity and layering on tracer hydrodynamics in confinement. *Soft Matter*, **2016**, 12, 9561-9574	3.6	6
32	Control of Primary Particle Spacing in Gold Nanoparticle Clusters for Both High NIR Extinction and Full Reversibility. *Langmuir*, **2017**, 33, 3413-3426	4	5
31	Enhancing Stability and Reducing Viscosity of a Monoclonal Antibody With Cosolutes by Weakening Protein-Protein Interactions. *Journal of Pharmaceutical Sciences*, **2019**, 108, 2517-2526	3.9	5
30	Quantized bounding volume hierarchies for neighbor search in molecular simulations on graphics processing units. *Computational Materials Science*, **2019**, 164, 139-146	3.2	5
29	Cross-stream migration of a Brownian droplet in a polymer solution under Poiseuille flow. *Soft Matter*, **2019**, 15, 3168-3178	3.6	5
28	Tuning structure and mobility of solvation shells surrounding tracer additives. *Journal of Chemical Physics*, **2015**, 142, 124501	3.9	5
27	Graphoepitaxy for pattern multiplication of nanoparticle monolayers. *Physical Review Letters*, **2014**, 113, 085503	7.4	5
26	Communication: Fine discretization of pair interactions and an approximate analytical strategy for predicting equilibrium behavior of complex fluids. *Journal of Chemical Physics*, **2013**, 139, 161102	3.9	5
25	Equation of state of the rigid disk fluid from its triangle distribution. *Journal of Chemical Physics*, **2000**, 113, 10186-10190	3.9	5
24	Colorimetric quantification of linking in thermoreversible nanocrystal gel assemblies.. *Science Advances*, **2022**, 8, eabm7364	14.3	5
23	Wertheim's thermodynamic perturbation theory with double-bond association and its application to colloid-linker mixtures. *Journal of Chemical Physics*, **2021**, 154, 024905	3.9	5
22	A Conversation with John McKetta. *Annual Review of Chemical and Biomolecular Engineering*, **2017**, 8, 1-11	8.9	4
21	How Local and Average Particle Diffusivities of Inhomogeneous Fluids Depend on Microscopic Dynamics. *Journal of Physical Chemistry B*, **2015**, 119, 9103-13	3.4	4
20	Response to Comment on Residual multiparticle entropy does not generally change sign near freezing [J. Chem. Phys. 130, 037101 (2009)]. *Journal of Chemical Physics*, **2009**, 130, 037102	3.9	4
19	Computing Free Volume, Structural Order, and Entropy of Liquids and Glasses. *Reviews in Computational Chemistry*, **2007**, 125-158		4
18	Volatile diffusional character of cytoplasm. *Journal of Physical Chemistry B*, **2006**, 110, 25606-7	3.4	4
17	Response to Comment on A simple molecular thermodynamic theory of hydrophobic hydration [J. Chem. Phys. 119, 10448 (2003)]. *Journal of Chemical Physics*, **2003**, 119, 10450-10451	3.9	4
16	Graphoepitaxy for translational and orientational ordering of monolayers of rectangular nanoparticles. *Physical Review E*, **2016**, 93, 032606	2.4	3

15	Effects of protein engineering and rational mutagenesis on crystal lattice of single chain antibody fragments. *Proteins: Structure, Function and Bioinformatics*, **2014**, 82, 1884-95	4.2	3
14	RELATIONSHIP BETWEEN SHEAR VISCOSITY AND STRUCTURE OF A MODEL COLLOIDAL SUSPENSION. *Chemical Engineering Communications*, **2009**, 197, 63-75	2.2	3
13	Comment on "Observations on an equation of state for water confined in narrow slit-pores" [J. Chem. Phys. 116, 2565 (2002)]. *Journal of Chemical Physics*, **2002**, 117, 8162-8163	3.9	3
12	Position-Dependent Dynamics Explain Pore-Averaged Diffusion in Strongly Attractive Adsorptive Systems. *Langmuir*, **2017**, 33, 13955-13963	4	2
11	Plasmonic biodegradable gold nanoclusters with high NIR-absorbance for biomedical imaging **2014**,		2
10	Analytical model for studying how environmental factors influence protein conformational stability in solution. *Journal of Chemical Physics*, **2006**, 125, 224903	3.9	2
9	Web applet for predicting structure and thermodynamics of complex fluids. *American Journal of Physics*, **2015**, 83, 219-222	0.7	1
8	Predicting the structure of fluids with piecewise constant interactions: Comparing the accuracy of five efficient integral equation theories. *Physical Review E*, **2015**, 91, 043307	2.4	1
7	Intrinsic vulnerabilities to mechanical failure in nanoscale films. *Mechanics of Materials*, **2006**, 38, 924-932	3.3	1
6	Consequences of minimising pair correlations in fluids for dynamics, thermodynamics and structure. *Molecular Physics*, **2016**, 114, 2411-2423	1.7	1
5	Graphoepitaxy of hard spheres into square lattices. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 585, 124115	5.1	1
4	Machine Learning-Assisted Design of Material Properties.. *Annual Review of Chemical and Biomolecular Engineering*, **2022**,	8.9	1
3	Geometric model of crack-templated networks for transparent conductive films. *Applied Physics Letters*, **2022**, 120, 211108	3.4	1
2	Stability of force-driven shear flows in nonequilibrium molecular simulations with periodic boundaries. *Journal of Chemical Physics*, **2020**, 152, 214113	3.9	
1	Concentration and crowding effects on protein stability from a coarse-grained model1-25		