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Publications

Articles

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- 2023 J. Kang, Z. M. Sherman, D. L. Conrad, H. S. N. Cory, M. N. Dominguez, S. A. Valenzuela, E. V. Anslyn, **T. M. Truskett**, and D. J. Milliron, Structural control of plasmon resonance in molecularly linked metal oxide nanocrystal gel assemblies, *ACS Nano* (Accepted)
- 2023 A. A. Chowdhury, N. Manohar, A. Lanzaro, W. D. Kimball, M. A. Witek, M. A. Woldeyes, R. Majumdar, K. K. Qian, S. Xu, Richard E. Gillilan, Qingqiu Huang, **T. M. Truskett**, and K. P. Johnston. Characterizing protein–protein interactions and viscosity of a monoclonal antibody from low to high concentration using small-angle X-ray scattering and molecular dynamics simulations. *Molecular Pharmaceutics* **20**, 5563–5578 (October)
- 2023 K. Kim, Z. M. Sherman, A. Cleri, W. J. Chang, J.-P. Maria, **T. M. Truskett**, D. J. Milliron, Hierarchically doped plasmonic nanocrystal metamaterials. *Nano Letters* **23**, 7633–7641 (August)
- 2023 H. Gauri, Z. M. Sherman, A. Al Harraq, **T. M. Truskett**, and Bhuvnesh Bharti. Magnetic field enabled *in-situ* control over structure and dynamics of colloids interacting via SALR potentials. *Soft Matter*, 2023, **19**, 4439 - 4448 (June)
- 2023 A. A. Chowdhury, N. Manohar, M. A. Witek, M. A. Woldeyes, R. Majumdar, K. K. Qian, W. D. Kimball, S. Xu, A. Lanzaro, **T. M. Truskett**, and K. P. Johnston. Subclass effects on self-association and viscosity of monoclonal antibodies at high concentration. *Molecular Pharmaceutics* **20**, 6, 2991–3008 (May)
- 2023 S. Kadulkar, Z. W. Brotherton, A. L. Lynch, G. Pohlman, Z. Zhang, R. Torres, A. Manthiram, N. A. Lynd, **T. M. Truskett**, and V. Ganesan, The importance of morphology on ion transport in single-ion, comb-branched copolymer electrolytes: Experiments and simulations, *Macromolecules* **56**, 2790–2800 (March)
- 2023 Z. M. Sherman, K. Kim, J. Kang, B. J. Roman, H. S. N. Cory, D. L. Conrad, S. A. Valenzuela, E. Lin, M. N. Dominguez, S. L. Gibbs, E. V. Anslyn, D. J. Milliron, and **T. M. Truskett**, Plasmonic response of complex nanoparticle assemblies, *Nano Letters* **23**, 3030–3037 (March)
- 2023 A. Chowdhury, N. Manohar, G. Guruprasad, A. T. Chen, A. Lanzaro, M. Blanco, K. P. Johnston, **T. M. Truskett**. Characterizing experimental monoclonal antibody interactions and clustering using a coarse-grained simulation library and a viscosity model. *Journal of Physical Chemistry B* **127**, 5, 1120-1137 (January)
- 2023 A. J. Cooper, M. P. Howard, S. Kadulkar, D. Zhao, K. T. Delaney, V. Ganesan, **T. M. Truskett**, G. H. Fredrickson. Multiscale modeling of solute diffusion in triblock copolymer membranes *Journal of Chemical Physics* **158**, 024905 (January)

- 2023 J. Kang, Z. M. Sherman, H. S. N. Crory D. L. Conrad, M. W. Berry, B. J. Roman, E. V. Anslyn, **T. M. Truskett**, and D. J. Milliron. Modular mixing in plasmonic metal oxide nanocrystal gels with thermoreversible links. *Journal of Chemical Physics* **158**, 024903 (January)
- 2022 J. Clarke, F. Cavanna, A. D. Crowell, L. Melcher, J. R. Houser, K. Graham, A. Green, J. C. Stachowiak, **T. M. Truskett**, D. J. Milliron, A. M. Rosales, M. Das, and J. Alvarado. Depletion-driven morphological control of bundled actin networks. [arXiv:2205.01864](https://arxiv.org/abs/2205.01864)
- 2022 C. K. Ofosu, J. Kang, **T. M. Truskett**, and D. J. Milliron. Effective hard-sphere repulsions between oleate-capped metal oxide nanocrystals. *Journal of Physical Chemistry Letters* **13**, 11323–11329 (December)
- 2022 A. M. Green, S. Kadulkar, Z. M. Sherman, T. M. Fitzsimons, C. K. Ofosu, J. Yan, D. Zhao, J. Ilavsky, A. M. Rosales, B. A. Helms, V. Ganesan, **T. M. Truskett**, and D. J. Milliron. Depletion-driven assembly of polymer-coated nanocrystals. *Journal of Physical Chemistry C* **126**, 19507-19518 (November)
- 2022 T. Kwon, T. A. Wilcoxson, D. J. Milliron, and **T. M. Truskett**. Dynamics of equilibrium linked colloidal networks. *Journal of Chemical Physics* **157**, 184902 (October)
- 2022 M. Singh, Z. M. Sherman, D. J. Milliron, and **T. M. Truskett**. Linker-templated structure tuning of optical response in plasmonic nanoparticle gels. *Journal of Physical Chemistry C* **126**, 16885–16893 (September)
- 2022 R. B. Jadrach, B. A. Lindquist, and **T. M. Truskett**. Treating random sequential addition via the replica method. *Journal of Chemical Physics* **157**, 084116 (August)
- 2022 L. Samineni, S. De Respino, Y. Tu, R. Chowdhury, R. P. Mohanty, H. Oh, M. Geitner, C. H. Alberg, A. Roman-White, S. McKinzie, C. Lemus, J. Massey, D. Ghosh, **T. M. Truskett**, S. Velegol, and M. Kumar, Effective pathogen removal in sustainable natural fiber Moringa filters. *npj Clean Water* **5**, 27 (July)
- 2022 A. Al Harraq, A. A. Hymel, E. Lin, **T. M. Truskett**, and B. Bharti, Dual nature of magnetic nanoparticle dispersions enables control over short-range attraction and long-range repulsion interactions. *Communications Chemistry* **5**, 72 (June)
- 2022 J. Kim and **T. M. Truskett**, Geometric model of crack-templated networks for transparent conductive films *Applied Physics Letters* **120**, 211108 (May)
- 2022 S. Kadulkar, Z. M. Sherman, **T. M. Truskett**, and V. Ganesan, Machine learning-assisted design of material properties. *Annual Review of Chemical and Biomolecular Engineering*, **13**, 235-254 (March)
- 2022 J. Kang, S. A. Valenzuela, E. Y. Lin, M. N. Dominguez, Z. M. Sherman, **T. M. Truskett**, E. V. Anslyn, and D. J. Milliron, Colorimetric quantification of linking in thermoreversible nanocrystal gel assemblies. *Science Advances* **8**, eabm7364 (February)
- 2022 A. M. Green, C. K. Ofosu, J. Kang, E. V. Anslyn, **T. M. Truskett**, and D. J. Milliron, Assembling inorganic nanocrystal gels. *Nano Letters* **22**, 1457–1466 (February)
- 2021 S. Kadulkar, M. P. Howard, **T. M. Truskett**, and V. Ganesan, Prediction and optimization of ion transport characteristics in nanoparticle-based electrolytes using convolutional neural networks. *Journal of Physical Chemistry B* **125**, 4838-4849 (April)
- 2021 Z. M. Sherman, A. M. Green, M. P. Howard, E. V. Anslyn, **T. M. Truskett**, and D. J. Milliron, Colloidal nanocrystal gels from thermodynamic principles. *Accounts of Chemical Research* **54**, 798–807 (February)
- 2021 M. P. Howard, Z. M. Sherman, A. N. Sreenivasan, S. A. Valenzuela, E. V. Anslyn, D. J. Milliron, and **T. M. Truskett**, Effects of linker flexibility on phase behavior and structure of linked colloidal gels. *Journal of Chemical Physics* **154**, 074901 (February) [Scilight]
- 2021 M. P. Howard, Z. M. Sherman, D. J. Milliron, and **T. M. Truskett**, Wertheim’s thermodynamic perturbation theory with double-bond association and its application to colloid–linker mixtures. *Journal of Chemical Physics* **154**, 024905 (2021) (January)
- 2020 M. N. Dominguez, M. P. Howard, J. M. Maier, S. A. Valenzuela, Z. M. Sherman, J. F.

- Reuther, L. C. Reimnitz, J. Kang, S. H. Cho, S. L. Gibbs, A. K. Menta, D. L. Zhuang, A. van der Stok, S. J. Kline, E. V. Anslyn, **T. M. Truskett**, and D. J. Milliron, Assembly of linked nanocrystal colloids by reversible covalent bonds. *Chemistry of Materials* **32**, 10235–10245 (November)
- 2020 S. Kadulkar, D. J. Milliron, **T. M. Truskett**, and V. Ganesan, Transport mechanisms underlying ionic conductivity in nanoparticle-based single-ion electrolytes. *Journal of Physical Chemistry Letters* **11**, 6970–6975 (August)
- 2020 M. P. Howard, A. Statt, H. A. Stone, and **T. M. Truskett**, Stability of force-driven shear flows in nonequilibrium molecular simulations with periodic boundaries. *Journal of Chemical Physics* **152**, 214113 (June)
- 2020 C. A. Saez Cabezas, Z. M. Sherman, M. P. Howard, M. N. Dominguez, S. H. Cho, G. K. Ong, A. M. Green, **T. M. Truskett**, and D. J. Milliron, Universal gelation of metal oxide nanocrystals via depletion attractions. *Nano Letters* **20**, 4007-4013 (May)
- 2020 Z. M. Sherman, M. P. Howard, B. A. Lindquist, R. A. Jadrich, and **T. M. Truskett**, Inverse methods for design of soft materials. *Journal of Chemical Physics* **152**, 140902 (April)
- 2020 M. P. Howard, J. Lequieu, K. T. Delaney, V. Ganesan, and **T. M. Truskett**, Connecting solute diffusion to morphology in triblock copolymer membranes. *Macromolecules* **53**, 2336-2343 (March)
- 2020 A. A. Chowdhury, J. A. Bollinger, Barton J. Dear, J. K. Cheung, K. P. Johnston, and **T. M. Truskett**, 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* **5**, 1748-1756 (February)
- 2020 D. Aryal, M. P. Howard, R. Samanta, S. Antoine, R. Segalman, **T. M. Truskett**, and V. Ganesan, Influence of pore morphology on the diffusion of water in triblock copolymer membranes. *Journal of Chemical Physics* **152**, 014904 (January)
- 2020 A. A. Chowdhury, G. Guruprasad, A. T. Chen, C. A. Karouta, M. A. Blanco, **T. M. Truskett**, and K. P. Johnston, 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* **109**, 696-708 (January)
- 2020 X. Zhu, R. T. Bonnecaze, and **T. M. Truskett**, Graphoepitaxy of hard spheres into square lattices. *Colloids and Surfaces A* **585**, 124115 (January)
- 2019 B. Changalvaie, S. Han, E. Moaseri, F. Scaletti, L. Truong, R. Caplan, A. Cao, R. Bouchard, **T. M. Truskett**, K. V. Sokolov, and K. P. Johnston, Indocyanine green J aggregates in polymersomes for near IR photoacoustic imaging. *ACS Applied Materials & Interfaces* **11**, 46437-46450 (December)
- 2019 M. P. Howard, R. B. Jadrich, B. A. Lindquist, F. Khabaz, R. T. Bonnecaze, D. J. Milliron, and **T. M. Truskett**, Structure and phase behavior of polymer-linked colloidal gels. *Journal of Chemical Physics* **151**, 124901 (September) [Scilight]
- 2019 B. A. Lindquist, R. B. Jadrich, M. P. Howard, and **T. M. Truskett**, The role of pressure in inverse design for assembly. *Journal of Chemical Physics* **151**, 104104 (September)
- 2019 B. J. Dear, A. A. Chowdhury, J. J. Hung, C. A. Karouta, K. Ramachandran, M. P. Nieto, L. Wilks, A. Sharma, T. Y. Shay, J. K. Cheung, **T. M. Truskett**, and K. P. Johnston, Relating collective diffusion, protein-protein interactions and viscosity of highly concentrated monoclonal antibodies through dynamic light scattering. *Industrial & Engineering Chemistry Research* **58**, 22456-22471 (August)
- 2019 J. J. Hung, W. F. Zeno, A. A. Chowdhury, B. J. Dear, K. Ramachandran, M. P. Nieto, T. Y. Shay, C. A. Karouta, C. C. Hayden, J. K. Cheung, **T. M. Truskett**, J. C. Stachowiak, and K. P. Johnston, Self-diffusion of a highly concentrated monoclonal antibody by fluorescence correlation spectroscopy: insight into protein–protein interactions and self-

- association. *Soft Matter* **15**, 6660-6676 (August)
- 2019 B. J. Dear, J. J. Hung, J. R. Laber, L. R. Wilks, A. Sharma, **T. M. Truskett**, and K. P. Johnston, Enhancing stability and reducing viscosity of a monoclonal antibody with cosolutes by weakening protein-protein interactions. *Journal of Pharmaceutical Sciences* **108**, 2517-2526 (August)
- 2019 S. Kadulkar, D. Banerjee, F. Khabaz, R. T. Bonnecaze, **T. M. Truskett**, and V. Ganesan, Influence of morphology of colloidal nanoparticle gels on ion transport and rheology. *Journal of Chemical Physics* **150**, 214903 (June)
- 2019 B. J. Dear, J. A. Bollinger, A. Chowdhury, J. J. Hung, L. R. Wilks, C. A. Karouta, K. Ramachandran, T. Y. Shay, M. P. Nieto, A. Sharma, J. K. Cheung, D. Nykypanchuk, P. D. Godfrin, K. P. Johnston, and **T. M. Truskett**, X-ray scattering and coarse-grained simulations for clustering and interactions of monoclonal antibodies at high concentrations. *Journal of Physical Chemistry B* **123**, 5274-5290 (May)
- 2019 X. Zhu, **T. M. Truskett**, and R. T. Bonnecaze, Phase diagram for two-dimensional layer of soft particles. *Soft Matter* **15**, 4162-4169 (April)
- 2019 M. P. Howard, A. Statt, F. Madutsa, **T. M. Truskett**, and A. Z. Panagiotopoulos, Quantized bounding volume hierarchies for neighbor search in molecular simulations on graphics processing units. *Computational Materials Science* **164**, 139-146 (April)
- 2019 M. P. Howard, **T. M. Truskett**, and A. Nikoubashman, Cross-stream migration of a Brownian droplet in a polymer solution under Poiseuille flow. *Soft Matter* **15**, 3168-3178 (April)
- 2019 D. Banerjee, B. A. Lindquist, R. B. Jadrich, and **T. M. Truskett**, Assembly of particle strings via isotropic potentials. *Journal of Chemical Physics* **150**, 124903 (March)
- 2019 J. J. Hung, B. J. Dear, C. A. Karouta, A. A. Chowdhury, P. D. Godfrin, J. A. Bollinger, M. P. Nieto, L. R. Wilks, T. Y. Shay, K. Ramachandran, A. Sharma, J. K. Cheung, **T. M. Truskett**, and K. P. Johnston, Protein-protein interactions of highly concentrated monoclonal antibody solutions via static light scattering and influence on the viscosity. *Journal of Physical Chemistry B* **123**, 739-755 (January)
- 2018 R. B. Jadrich, B. A. Lindquist, and **T. M. Truskett**, Unsupervised machine learning for detection of phase transitions in off-lattice systems. I. Foundations. *Journal of Chemical Physics* **149**, 194109 (October)
- 2018 R. B. Jadrich, B. A. Lindquist, W. D. Piñeros, D. Banerjee, and **T. M. Truskett**, Unsupervised machine learning for detection of phase transitions in off-lattice systems. II. Applications. *Journal of Chemical Physics* **149**, 194110 (October)
- 2018 C. A. Saez Cabezas, G. K. Ong, R. B. Jadrich, B. A. Lindquist, A. Agrawal, **T. M. Truskett**, and D. J. Milliron, Gelation of plasmonic metal oxide nanocrystals by polymer-induced depletion attractions. *Proceedings of the National Academy of Sciences, USA* **115** 8925-8930 (August)
- 2018 B. A. Lindquist, R. B. Jadrich, and **T. M. Truskett**, Communication: From close-packed to topologically close-packed: Formation of Laves phases in moderately polydisperse hard-sphere mixtures. *Journal of Chemical Physics* **148**, 191101 (May) [Cover]
- 2018 J. J. Hung, B. J. Dear, A. K. Dinin, A. U. Borwankar, S. K. Mehta, **T. M. Truskett**, and K. P. Johnston, Improving viscosity and stability of a highly concentrated monoclonal antibody solution with concentrated proline, *Pharmaceutical Research* **35**, 133 (April)
- 2018 B. A. Lindquist, R. B. Jadrich, and **T. M. Truskett**, Inverse design of self-assembling Frank-Kasper phases and insights into emergent quasicrystals. *Journal of Physical Chemistry B* **122**, 5547-5556 (March)
- 2018 W. D. Piñeros, B. A. Lindquist, R. B. Jadrich, and **T. M. Truskett**, Inverse design of multicomponent assemblies. *Journal of Chemical Physics* **148**, 104509 (March) [Scilight]
- 2017 W. P. Krekelberg, D. W. Siderius, V. K. Shen, **T. M. Truskett**, and J. R. Errington, Position-dependent dynamics explain pore-averaged diffusion in strongly attractive

- adsorptive systems. *Langmuir* **33**, 13955–13963 (November)
- 2017 W. D. Piñeros, R. B. Jadrich, and **T. M. Truskett**, Design of two-dimensional particle assemblies using isotropic pair interactions with an attractive well. *AIP Advances* **7**, 115307 (November)
- 2017 E. Moaseri, J. A. Bollinger, B. Changalvaie, J. Schroer, K. P. Johnston, and **T. M. Truskett**, Reversible self-assembly of gold nanoparticle clusters via pH-tunable interactions between glutathione and citrate. *Langmuir* **33**, 12244–12253 (October)
- 2017 J. R. Laber, B. J. Dear, J. D. Gollihar, M. L. Martins, D. E. Jackson, A. D. Ellington, **T. M. Truskett**, K. P. Johnston and J. A. Maynard, Charge shielding prevents aggregation of supercharged GFP variants at high concentration. *Molecular Pharmaceutics* **14**, 3269-3280 (September)
- 2017 W. P. Krekelberg, D. W. Siderius, V. K. Shen, **T. M. Truskett**, and J. R. Errington, 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* **121**, 16316–16327 (July)
- 2017 R. B. Jadrich, B. A. Lindquist, and **T. M. Truskett**, Probabilistic inverse design for self-assembling materials. *Journal of Chemical Physics* **146**, 184103 (May) [Cover][AIP press release]
- 2017 W. D. Piñeros and **T. M. Truskett**, Designing pairwise interactions that stabilize open crystals: Truncated square and truncated hexagonal lattices. *Journal of Chemical Physics* **146**, 144501 (April)
- 2017 E. Moaseri, R. J. Stover, B. Changalvaie, A. Cepeda, **T. M. Truskett**, K. V. Sokolov, and K. P. Johnston, Control of primary particle spacing in gold nanoparticle clusters for both high NIR extinction and full reversibility. *Langmuir* **33**, 3413–3426 (March)
- 2017 B. A. Lindquist, S. Dutta, R. B. Jadrich, D. J. Milliron, and **T. M. Truskett**, Interactions and design rules for assembly of porous colloidal mesophases. *Soft Matter* **13**, 1335 - 1343 (February) [Cover]
- 2017 B. J. Dear, J. J. Hung, **T. M. Truskett**, K. P. Johnston, Contrasting the influence of cationic amino acids on the viscosity and stability of a highly concentrated monoclonal antibody. *Pharmaceutical Research* **34**, 193-207 (January)
- 2016 Y. Yu, A. Guillaussier, V. R. Voggu, W. Pineros, **T. M. Truskett**, D. M. Smilgies, and B. A. Korgel, Cooling dodecanethiol-capped 2 nm diameter gold nanocrystal superlattices below room temperature induces a reversible order-disorder structure transition. *Journal of Physical Chemistry C* **120** 27682 - 27687 (November)
- 2016 Y. Yu, X. Lu, A. Guillaussier, V. R. Voggu, W. Pineros, M. de la Mata, J. Arbiol, D. M. Smilgies, **T.M. Truskett**, and B. A. Korgel, Orientationally ordered silicon nanocrystal cuboctahedra in superlattices. *Nano Letters* **16**, 7814–7821 (November)
- 2016 J. A. Bollinger, J. Carmer, A. Jain, and **T. M. Truskett**, Impact of solvent granularity and layering on tracer hydrodynamics in confinement. *Soft Matter* **12** 9561-9574 (November)
- 2016 B. A. Lindquist, R. B. Jadrich, and **T. M. Truskett**, Inverse design for self assembly via on- the-fly optimization. *Journal of Chemical Physics* **145**, 111101 (September) [2016 Editors' Choice]
- 2016 R. B. Jadrich, B. A. Lindquist, J. A. Bollinger, and **T. M. Truskett**, Consequences of minimising pair correlations in fluids for dynamics, thermodynamics, and structure. *Molecular Physics* **114**, 2411-2423 (September)
- 2016 A. U. Borwankar, B. J. Dear, A. Twu, J. J. Hung, A. K. Dinin, B. K. Wilson, J. Yue, J. A. Maynard, **T.M. Truskett**, and K. P. Johnston, Viscosity reduction of a concentrated monoclonal antibody with arginine·HCl and arginine·glutamate. *Industrial and Engineering Chemistry and Research* **55** 11225–11234 (August)
- 2016 B. A. Lindquist, R. B. Jadrich, D. J. Milliron, and **T. M. Truskett**, On the formation of

- equilibrium gels via a macroscopic bond limitation. *Journal of Chemical Physics* **145**, 074906 (August)
- 2016 J. A. Bollinger and **T. M. Truskett**, Fluids with competing interactions: I. Decoding the structure factor to detect and characterize self-limited clustering. *Journal of Chemical Physics* **145**, 064902 (August)
- 2016 J. A. Bollinger and **T. M. Truskett**, Fluids with competing interactions: II. Validating a free energy model for equilibrium cluster size. *Journal of Chemical Physics* **145**, 064903 (August)
- 2016 W. D. Piñeros, M. Baldea, and **T. M. Truskett**, Designing convex repulsive pair potentials that favor assembly of kagome and snub square lattices. *Journal of Chemical Physics* **145**, 054901 (August)
- 2016 M. E. Ferraro, **T. M. Truskett**, and R. T. Bonnecaze, Graphoepitaxy for translational and orientational ordering of monolayers of rectangular nanoparticles. *Physical Review E* **93**, 032606 (March)
- 2016 J. J. Hung; A. U. Borwankar, B. J. Dear, **T. M. Truskett**, and K. P. Johnston, High concentration tangential flow ultrafiltration of stable monoclonal antibody solutions with low viscosities. *Journal of Membrane Science* **508** 113–126 (February)
- 2016 W. D. Piñeros, M. Baldea, and **T. M. Truskett**, Breadth versus depth: Interactions that stabilize particle assemblies to changes in density or temperature. *Journal of Chemical Physics* **144**, 084502 (February)
- 2016 B. A. Lindquist, R. B. Jadrich, and **T. M. Truskett**, Assembly of nothing: Equilibrium fluids with designed structured porosity. *Soft Matter* **12**, 2663 - 2667 (February)
- 2016 R. J. Stover, E. Moaseri, S. Gourisankar, M. Iqbal, N. K. Rahbar, B. Changalvaie, **T. M. Truskett**, and K. P. Johnston, Formation of small gold nanoparticle chains with high NIR extinction through bridging with calcium ions. *Langmuir* **32**, 1127–1138 (January)
- 2016 A. J. Worthen, V. Tran, K. A. Cornell, **T. M. Truskett**, K. P. Johnston, Steric stabilization of nanoparticles with grafted low molecular weight ligands in highly concentrated brines including divalent ions. *Soft Matter* **12**, 2025-2039 (January)
- 2015 A. U. Borwankar, B. W. Willsey, A. Twu, J. J. Hung, R. J. Stover, T. W. Wang, M. D. Feldman, T.E. Milner, **T. M. Truskett**, and K. P. Johnston, Gold nanoparticles with high densities of small protuberances on nanocluster cores with strong NIR extinction. *RSC Advances* **5**, 104674-104687 (December)
- 2015 A. Singh, B. A. Lindquist, G. K. Ong, R. B. Jadrich, A. Singh, H. Ha, C. J. Ellison, **T. M. Truskett**, and D. J. Milliron, Linking semiconductor nanocrystals into gel networks through all-inorganic bridges. *Angewandte Chemie International Edition* **54**, 14840–14844 (December)
- 2015 R. B. Jadrich, J. A. Bollinger, B. A. Lindquist, and **T. M. Truskett**, Equilibrium cluster fluids: Pair interactions via inverse design *Soft Matter* **11**, 9342 - 9354 (September)
- 2015 J. A. Bollinger, A. Jain, and **T. M. Truskett**, How local and average particle diffusivities of inhomogeneous fluids depend on microscopic dynamics. *Journal of Physical Chemistry B* **119**, 9103–9113 (July)
- 2015 J. A. Bollinger, A. Jain, J. Carmer, and T. M. Truskett, Local structure-mobility relationships of confined fluids reverse upon supercooling. *Journal of Chemical Physics* **142**, 161102 (April)
- 2015 K. B. Hollingshead and **T. M. Truskett**, Predicting the structure of fluids with piecewise constant interactions: Comparing the accuracy of five efficient integral equation theories. *Physical Review E* **91**, 043307 (April)
- 2015 R. B. Jadrich, J. A. Bollinger, K. P. Johnston, and **T. M. Truskett**, Origin and detection of microstructural clustering in fluids with spatial-range competitive interactions. *Physical Review E* **91**, 042312 (April)
- 2015 J. Carmer, A Jain, J. A. Bollinger, F. van Swol, T. M. Truskett, Tuning structure and

- mobility of solvation shells surrounding tracer additives. *Journal of Chemical Physics* **142**, 124501 (March)
- 2015 T. R. Popp III, K. B. Hollingshead, and **T. M. Truskett**, Web applet for predicting structure and thermodynamics of complex fluids. *American Journal of Physics* **83**, 219 (February)
- 2015 Y. Yu, A. Jain, A. Guillaussier, V. Reddy, **T. M. Truskett**, D. Smilgies and B. A. Korgel, Nanocrystal superlattices that exhibit improved order on heating: An example of inverse melting? *Faraday Discussions* **181**, 181-192 (January)
- 2015 G. Yu, J. Dong, L. M. Foster, A. E. Metaxas, **T. M. Truskett** and K. P. Johnston, Breakup of oil jets into droplets in seawater with environmentally benign nanoparticle and surfactant dispersants. *Industrial & Engineering Chemistry Research* **54**, 4243–4251 (November 2014)
- 2014 A. Jain, J. R. Errington, and **T. M. Truskett**, Dimensionality and design of isotropic interactions that stabilize honeycomb, square, simple cubic, and diamond lattices. *Physical Review X* **4**, 031049 (September) Please also see [erratum](#)
- 2014 S. Kalyoncu, J. Hyun, J. C. Pai, J. L. Johnson, K. Etminger, A. Jain, D. Heaner Jr., I. A. Morales, **T.M. Truskett**, J. A. Maynard, and R. L. Lieberman, Effects of protein engineering and rational mutagenesis on crystal lattice of single chain antibody fragments: Implications for membrane protein crystallization chaperones. *Proteins: Structure, Function, and Bioinformatics* **82**, 1884–1895 (September)
- 2014 L. M. Foster, A. J. Worthen, E. Foster, J. Dong, C. Roach, A. Metaxas, C. Hardy, E. Larsen, J. A. Bollinger, **T. M. Truskett**, C. W. Bielawski, and K. P. Johnston, High interfacial activity of polymers “grafted through” functionalized iron oxide nanoparticle clusters. *Langmuir* **30**, 10188–10196 (August)
- 2014 M. E. Ferraro, R. T. Bonnecaze, and **T. M. Truskett**, Graphoepitaxy for pattern multiplication of nanoparticle monolayers. *Physical Review Letters* **113**, 085503 (August)
- 2014 A. Jain, J. A. Bollinger, and **T. M. Truskett**, Perspective: Inverse methods for material design. *AIChE Journal* **60** 2732-2740 (August) (highlighted in [Chemical Engineering Progress](#))
- 2014 J. Carmer, Frank B. van Swol, and **T. M. Truskett**, Note: Position-dependent pair diffusivity profiles from steady-state solutions of color reaction-counterdiffusion problems. *Journal of Chemical Physics* **141**, 046101 (July)
- 2014 J. A. Bollinger, A. Jain, and **T. M. Truskett**, Structure, thermodynamics, and position-dependent diffusivity in fluids with sinusoidal density variations. *Langmuir* **30**, 8247–8252 (July)
- 2014 J. Dong, A. J. Worthen, L. M. Foster, Y. Chen, K. A. Cornell, S. L. Bryant, **T. M. Truskett**, C. W. Bielawski, and K. P. Johnston, Modified montmorillonite clay microparticles for stable oil- in-seawater emulsions. *ACS Applied Materials and Interfaces* **6**, 11502–11513 (June)
- 2014 A. K. Murthy, R. J. Stover, G. D. Nie, S. Gourisankar, **T. M. Truskett**, K. V. Sokolov, and K. P. Johnston, 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* **118**, 14291–14298 (June)
- 2014 A. J. Worthen, L. M. Foster, J. A. Bollinger, J. Dong, A. H. Peterman, L. E. Pastora, S. L. Bryant, **T. M. Truskett**, C. W. Bielawski, and K. P. Johnston, Synergistic formation and stabilization of oil-in-water emulsions by a weakly-interacting mixture of zwitterionic surfactant and silica nanoparticles. *Langmuir* **30**, pp 984–994 (January)
- 2013 W. P. Krekelberg, V. K. Shen, D. W. Siderius, **T. M. Truskett**, and J. R. Errington, Connection between thermodynamics and dynamics of simple fluids in highly attractive pores. *Langmuir* **29**, 14527–14535 (December)
- 2013 T. S. Ingebrigtsen, J. R. Errington, **T. M. Truskett**, and J. C. Dyre, Predicting the

- relaxation time of a nanoconfined supercooled liquid. [Physical Review Letters](#) **111**, 235901 (December)
- 2013 K. B. Hollingshead, A. Jain, and **T. M. Truskett**, Fine discretization of pair interactions and an approximate analytical strategy for predicting equilibrium behavior of complex fluids. [Journal of Chemical Physics](#) **139**, 161102 (October)
- 2013 A. Jain, J. R. Errington, and **T. M. Truskett**, Phase behavior of materials with isotropic interactions designed by inverse strategies to favor diamond and simple cubic lattice ground states. [Journal of Chemical Physics](#) **139** 141102 (October)
- 2013 A. K. Murthy, R. J. Stover, W. G. Hardin, R. Schramm, G. D. Nie, S. Gourisankar, **T. M. Truskett**, K. V. Sokolov, and K. P. Johnston, Charged gold nanoparticles with essentially zero serum protein adsorption in undiluted fetal bovine serum. [Journal of the American Chemical Society](#) **135**, 7799–7802 (April)
- 2013 A. Jain, J. R. Errington, and **T. M. Truskett**, Inverse design of simple pairwise interactions with low coordinated 3D lattice ground states. [Soft Matter](#) **9**, 3866 - 3870 (March)
- 2013 A. K. Murthy, R. J. Stover, A. U. Borwankar, G. D. Nie, S. Gourisankar, **T. M. Truskett**, K. V. Sokolov, and K. P. Johnston, Equilibrium gold nanoclusters quenched with biodegradable polymers. [ACS Nano](#) **7**, 239–251 (January)
- 2013 A. U. Borwankar, A. K. Dinin, J. R. Laber, A. Twu, B. K. Wilson, J. A. Maynard, **T. M. Truskett**, and K. P. Johnston, Tunable equilibrium nanocluster dispersions at high protein concentrations. [Soft Matter](#) **9** 1766-1771 (January)
- 2013 J. Mittal, T. H. Yoo, G. Georgiou, and **T. M. Truskett**, Structural ensemble of an intrinsically disordered polypeptide. [Journal of Physical Chemistry B](#) **117**, 118–124 (January)
- 2012 M. A. Miller, T. A. Khan, K. J. Kaczorowski, B. K. Wilson, A. K. Dinin, A. U. Borwankar, M. A. Rodrigues, **T. M. Truskett**, K. P. Johnston, and J. A. Maynard, Antibody nanoparticle dispersions formed with mixtures of crowding molecules retain activity and in vivo bioavailability, [Journal of Pharmaceutical Sciences](#) **101**, 3763-3778 (October)
- 2012 J. Carmer, G. Goel, M. J. Pond, J. R. Errington, and **T. M. Truskett**, Enhancing tracer diffusivity by tuning interparticle interactions and coordination shell structure. [Soft Matter](#) **8**, 4083-4089 (March)
- 2012 K. P. Johnston, J. A. Maynard, **T. M. Truskett**, A. U. Borwankar, M. A. Miller, B. K. Wilson, A. K. Dinin, T. A. Khan, and K. J. Kaczorowski, Concentrated dispersions of equilibrium protein nanoclusters that reversibly dissociate into active monomers. [ACS Nano](#) **6**, 1357-1369 (January) [highlighted in [Nature Materials](#), [Nanomedicine](#), and [Chemical and Engineering News](#)]
- 2011 W. P. Krekelberg, V. K. Shen, J. R. Errington, and **T. M. Truskett**, Impact of surface roughness on diffusion of confined fluids. [Journal of Chemical Physics](#) **135**, 154502 (October)
- 2011 M. J. Pond, J. R. Errington, and **T. M. Truskett**, Mapping between long-time molecular and Brownian dynamics. [Soft Matter](#) **7**, 9859-9862 (October)
- 2011 M. J. Pond, J. R. Errington, and **T. M. Truskett**, Implications of the effective one-component analysis of pair correlations in colloidal fluids with polydispersity. [Journal of Chemical Physics](#) **135**, 124513 (September)
- 2011 M. J. Pond, J. R. Errington, and **T. M. Truskett**, 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](#) **134** 081101 (February)
- 2011 H. S. Ashbaugh and **T. M. Truskett**, Putting the squeeze on cavities in liquids: Quantifying pressure effects on solvation using simulations and revised scaled-particle theory. [Journal of Chemical Physics](#) **134**, 014507 (January)
- 2010 R. Chopra, **T. M. Truskett**, and J. R. Errington, On the use of excess entropy scaling to

- describe single-molecule and collective dynamic properties of hydrocarbon isomer fluids. [Journal of Physical Chemistry B](#) **114**, 16487 – 16493 (December)
- 2010 R. Chopra, **T. M. Truskett**, and J. R. Errington, Excess entropy scaling of dynamics for a confined fluid of dumbbell-shaped particles. [Physical Review E](#) **82**, 041201 (October)
- 2010 R. Chopra, **T. M. Truskett**, and J. R. Errington, Excess entropy scaling of dynamic quantities for fluids of dumbbell-shaped particles. [Journal of Chemical Physics](#) **133**, 104506 (September)
- 2010 R. Chopra, **T. M. Truskett**, and J. R. Errington, On the use of excess entropy scaling to describe the dynamic properties of water. [Journal of Physical Chemistry B](#) **114**, 10558–10566 (August)
- 2010 W. P. Krekelberg, V. Ganesan, and **T. M. Truskett**, Structural signatures of mobility on intermediate time scales in a supercooled fluid. [Journal of Chemical Physics](#) **132**, 184503 (May)
- 2010 W. P. Krekelberg, **T. M. Truskett**, and V. Ganesan, Relationship between shear viscosity and structure of a model colloidal suspension. [Chemical Engineering Communications](#) **197**, 63-75 (January) [invited for special issue in honor of Howard Brenner’s 80th birthday]
- 2009 W. P. Krekelberg, M. J. Pond, G. Goel, V. K. Shen, J. R. Errington, and **T. M. Truskett**, Generalized Rosenfeld scalings for tracer diffusivities in not-so-simple fluids: Mixtures and soft particles. [Physical Review E](#) **80** 061205 (December)
- 2009 M. J. Pond, W. P. Krekelberg, V. K. Shen, J. R. Errington, and **T. M. Truskett**, Composition and concentration anomalies for structure and dynamics of Gaussian-core mixtures. [Journal of Chemical Physics](#) **131**, 161101 (October) [One of twenty most downloaded Journal of Chemical Physics articles in 10/2009]
- 2009 V. K. Shen, J. K. Cheung, J. R. Errington, and **T. M. Truskett**, Insights into crowding effects on protein stability from a coarse-grained model, [Journal of Biomechanical Engineering](#) **131**, 071002 (July) [invited for special issue on “Nano and multiscale frontiers in biological heat and mass transfer”]
- 2009 J. E. Yoo, W. P. Krekelberg, Y. Sun, J. D. Tarver, **T. M. Truskett**, and Y.-L. Loo, Polymer conductivity through particle connectivity. [Chemistry of Materials](#) **21**, 1948-1954 (May)
- 2009 G. Goel, W. P. Krekelberg, M. J. Pond, J. Mittal, V. K. Shen, J. R. Errington, and **T. M. Truskett**, Available states and available space: Static properties that predict self diffusivity of confined fluids, [Journal of Statistical Mechanics: Theory and Experiment](#) P04006 (April)
- 2009 W. P. Krekelberg, T. Kumar, J. Mittal, J. R. Errington, and **T. M. Truskett**, Anomalous structure and dynamics of the Gaussian-core fluid. [Physical Review E](#) **79**, 031203 (March)
- 2009 W. P. Krekelberg, V. K. Shen, J. R. Errington, and **T. M. Truskett**, Response to Comment on ‘Residual multiparticle entropy does not generally change sign near freezing’ [J. Chem. Phys. 128, 161101 (2008)]. [Journal of Chemical Physics](#) **130**, 037102 (January)
- 2008 G. Goel, M. V. Athawale, S. Garde, and **T. M. Truskett**, Attractions, water structure, and thermodynamics of hydrophobic polymer collapse. [Journal of Physical Chemistry B](#) **112**, 13193–13196 (October)
- 2008 W. P. Krekelberg, V. Ganesan, and **T. M. Truskett**, Shear-rate-dependent structural order and viscosity of a fluid with short-range attractions. [Physical Review E](#) **78**, 010201(R) (July)
- 2008 W. P. Krekelberg, V. K. Shen, J. R. Errington, and **T. M. Truskett**, Residual multiparticle entropy does not generally change sign near freezing. [Journal of Chemical Physics](#) **128**, 161101 (April)
- 2008 W. P. Krekelberg, J. Mittal, V. Ganesan, and **T. M. Truskett**, Structural anomalies of

- fluids: Origins in second and higher coordination shells. [Physical Review E](#) **77**, 041201 (April)
- 2008 J. Mittal, **T. M. Truskett**, J. R. Errington, and G. Hummer, Layering and position-dependent diffusive dynamics of confined fluids. [Physical Review Letters](#) **100**, 145901 (April)
- 2008 G. Goel, W. P. Kregelberg, J. R. Errington, and **T. M. Truskett**, Tuning the density profiles and mobility of inhomogeneous fluids. [Physical Review Letters](#) **100**, 106001 (March)
- 2007 J. Mittal, V. K. Shen, J. R. Errington, and **T. M. Truskett**, Confinement, entropy, and single-particle dynamics of equilibrium hard-sphere mixtures. [Journal of Chemical Physics](#) **127**, 154513 (October)
- 2007 J. Mittal, J. R. Errington, and **T. M. Truskett**, Relationships between self-diffusivity, packing fraction, and excess entropy in simple bulk and confined fluids. [Journal of Physical Chemistry B](#) **111**, 10054-10063 (August) [Feature Article, Journal Cover]
- 2007 W. P. Kregelberg, J. Mittal, V. Ganesan, and **T. M. Truskett**, How short-range attractions impact the structural order, self-diffusivity, and viscosity of a fluid. [Journal of Chemical Physics](#) **127**, 044502 (July)
- 2007 S. M. McClure, E. T. Barlow, M. C. Akin, P. L. Tanaka, D. J. Safarik, **T. M. Truskett**, and C. B. Mullins, Effect of dilute nitric acid on crystallization and fracture of amorphous solid water films. [Journal of Physical Chemistry C](#) **111**, 10438-10447 (July)
- 2007 J. Mittal, J. R. Errington, and **T. M. Truskett**, Does confining the hard-sphere fluid between hard walls change its average properties? [Journal of Chemical Physics](#) **126**, 244708 (June)
- 2007 J. K. Cheung, V. K. Shen, J. R. Errington, and **T. M. Truskett**, Coarse-grained strategy for modeling protein stability in concentrated solutions III: Directional protein interactions. [Biophysical Journal](#) **92**, 4316–4324 (June) [Selected as a Hidden Jewel by F1000 biology]
- 2007 M. V. Athawale, G. Goel, T. Ghosh, **T. M. Truskett**, and S. Garde, Effects of lengthscales and attractions on the collapse of hydrophobic polymers in water. [Proceedings of the National Academy of Sciences USA](#) **104**, 733-738 (January)
- 2006 J. R. Errington, **T. M. Truskett**, and J. Mittal, Excess-entropy-based anomalies for a water-like fluid. [Journal of Chemical Physics](#) **125**, 244502 (December)
- 2006 F. N. Braun, W. P. Kregelberg, and **T. M. Truskett**, Volatile diffusional character of cytoplasm. [Journal of Physical Chemistry B](#) **110**, 25606-25607 (December)
- 2006 J. K. Cheung, P. S. Raverkar, and **T. M. Truskett**, Analytical model for studying how environmental factors influence protein conformational stability in solution. [Journal of Chemical Physics](#) **125**, 224903 (December)
- 2006 J. Mittal, J. R. Errington, and **T. M. Truskett**, Using available volume to predict fluid diffusivity in random media. [Physical Review E](#) **74**, 040102 (October)
- 2006 J. Mittal, J. R. Errington, and **T. M. Truskett**, Quantitative link between single-particle dynamics and static structure of supercooled liquids. [Journal of Physical Chemistry B](#) **110**, 18147–18150 (August)
- 2006 J. Mittal, J. R. Errington, and **T. M. Truskett**, Relationship between thermodynamics and dynamics of supercooled liquids. [Journal of Chemical Physics](#) **125**, 076102 (August). Please also see [erratum](#)
- 2006 S. M. McClure, E. T. Barlow, M. C. Akin, D. J. Safarik, **T. M. Truskett**, and C. B. Mullins, Transport in amorphous solid water films: Implications for self-diffusivity. [Journal of Physical Chemistry B](#) **110**, 17987 – 17997 (August)
- 2006 J. K. Cheung, P. Shah, and **T. M. Truskett**, Heteropolymer collapse theory for protein folding in the pressure-temperature plane. [Biophysical Journal](#) **91**, 2427 – 2435 (October)

- 2006 S. M. McClure, D. J. Safarik, **T. M. Truskett**, and C. B. Mullins, Evidence that amorphous water below 160 K is not a fragile liquid. [Journal of Physical Chemistry B **110**, 11033-11036 \(June\)](#)
- 2006 W. P. Krekelberg, V. Ganesan, and **T. M. Truskett**, Model for the free-volume distributions of equilibrium fluids. [Journal of Chemical Physics **124**, 214502 \(June\)](#)
- 2006 J. Mittal, J. R. Errington, and **T. M. Truskett**, Thermodynamics predicts how confinement modifies the dynamics of the equilibrium hard-sphere fluid. [Physical Review Letters **96**, 177804 \(May\)](#) [highlighted in [MRS Bulletin](#)]
- 2006 P. Shah and **T. M. Truskett**, Intrinsic vulnerabilities to mechanical failure in nanoscale films. [Mechanics of Materials **38**, 924-932 \(August\)](#)
- 2006 W. P. Krekelberg, V. Ganesan, and **T. M. Truskett**, Free volumes and the anomalous self-diffusivity of attractive colloids. [Journal of Physical Chemistry B **110**, 5166-5169 \(March\)](#)
- 2006 V. K. Shen, J. K. Cheung, J. R. Errington, and **T. M. Truskett**, Coarse-grained strategy for modeling protein stability in concentrated solutions II: Phase behavior. [Biophysical Journal **90**, 1949-1960 \(March\)](#)
- 2005 J. K. Cheung and **T. M. Truskett**, Coarse-grained strategy for modeling protein stability in concentrated solutions. [Biophysical Journal **89**, 2372-2384 \(October\)](#)
- 2005 S. Rajamani, **T. M. Truskett**, and S. Garde, Hydrophobic hydration from small to large lengthscales: Understanding and manipulating the crossover. [Proceedings of the National Academy of Sciences USA **102**, 9475-9480 \(July\)](#)
- 2005 K. A. Dill, **T. M. Truskett**, V. Vlachy, and B. Hribar-Lee, Modeling water, the hydrophobic effect, and ion solvation. [Annual Review of Biophysics and Biomolecular Structure **34**, 173-199 \(January\)](#)
- 2004 J. Mittal, P. Shah, and **T. M. Truskett**, Using energy landscapes to predict the properties of thin films. [Journal of Physical Chemistry B **108**, 19769-19779 \(December\)](#)
- 2003 **T. M. Truskett**, The subtleties of water in small spaces. [Proceedings of the National Academy of Sciences USA **100**, 10139-10140 \(September\)](#)
- 2003 **T. M. Truskett** and V. Ganesan, Ideal glass transitions in thin films: An energy landscape perspective. [Journal of Chemical Physics **119**, 1897-1900 \(July\)](#)
- 2003 H. S. Ashbaugh, **T. M. Truskett**, and P. G. Debenedetti, Response to comment on 'A simple molecular thermodynamic theory for hydrophobic hydration'. [Journal of Chemical Physics **119**, 10450-10451 \(November\)](#)
- 2003 **T. M. Truskett** and K. A. Dill, A simple analytical model of water. [Biophysical Chemistry **105**, 449-459 \(September\)](#)
- 2002 **T. M. Truskett**, P. G. Debenedetti, and S. Torquato, 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 **117**, 8162-8163 \(November\)](#)
- 2002 **T. M. Truskett** and K. A. Dill, A simple statistical mechanical model of water. [Journal of Physical Chemistry B **106**, 11829-11842 \(November\)](#)
- 2002 **T. M. Truskett** and K. A. Dill, Predicting water's phase diagram and liquid-state anomalies. [Journal of Chemical Physics **117**, 5101-5104 \(September\)](#).
- 2002 H. S. Ashbaugh, **T. M. Truskett**, and P. G. Debenedetti, A simple molecular thermodynamic theory for hydrophobic hydration. [Journal of Chemical Physics **116**, 2907-2921 \(February\)](#)
- 2001 F. H. Stillinger, P. G. Debenedetti, and **T. M. Truskett**, The Kauzmann paradox revisited. [Journal of Physical Chemistry B **105**, 11809-11816 \(November\)](#) [highlighted in [Science](#) by Phil Szuromi]
- 2001 F. H. Stillinger, S. Torquato, J. M. Eroles, and **T. M. Truskett**, Iso- $g^{(2)}$ processes in equilibrium statistical mechanics. [Journal of Physical Chemistry B **105**, 6592-6597 \(July\)](#)
- 2001 **T. M. Truskett**, P. G. Debenedetti, and S. Torquato, Thermodynamic implications of

- confinement for a waterlike fluid. *Journal of Chemical Physics* **114**, 2401-2418 (February)
- 2000 P. J. in't Veld, M. T. Stone, **T. M. Truskett**, and I. C. Sanchez, Liquid structure via cavity size distributions. *Journal of Physical Chemistry B* **104**, 12028-12034 (December)
- 2000 F. H. Stillinger, D. K. Stillinger, S. Torquato, **T. M. Truskett**, and P. G. Debenedetti, Equation of state of the rigid disk fluid from its triangle distribution. *Journal of Chemical Physics* **113**, 10186-10190 (December)
- 2000 A. R. Kansal, **T. M. Truskett**, and S. Torquato, Non-equilibrium hard-disk packings with controlled orientational order. *Journal of Chemical Physics* **113**, 4844-4851 (September)
- 2000 **T. M. Truskett**, S. Torquato, and P. G. Debenedetti, Towards a quantification of disorder in materials: Distinguishing equilibrium and glassy sphere packings. *Physical Review E* **62**, 993-1001 (July)
- 2000 D. K. Stillinger, F. H. Stillinger, S. Torquato, **T. M. Truskett**, and P. G. Debenedetti, Triangle distribution and equation of state for classical rigid disks. *Journal of Statistical Physics* **100**, 49-72 (July)
- 2000 S. Torquato, **T. M. Truskett**, and P. G. Debenedetti, Is random close packing of spheres well defined? *Physical Review Letters* **84**, 2064-2067 (March) [highlighted in *Nature News* by Philip Ball]
- 1999 P. G. Debenedetti, F. H. Stillinger, **T. M. Truskett**, and C. J. Roberts, The equation of state of an energy landscape. *Journal of Physical Chemistry B* **103**, 7390-7397 (September) [Feature Article]
- 1999 **T. M. Truskett**, P. G. Debenedetti, S. Sastry, and S. Torquato, A single-bond approach to orientation-dependent interactions and its implications for liquid water. *Journal of Chemical Physics* **111**, 2647-2656 (August)
- 1999 I. C. Sanchez, **T. M. Truskett**, and P. J. in't Veld, Configurational properties and corresponding states in simple fluids and water. *Journal of Physical Chemistry B* **103**, 5106-5116 (June)
- 1999 P. G. Debenedetti and **T. M. Truskett**, The statistical geometry of voids in liquids. *Fluid Phase Equilibria* **160**, 549-556 (June)
- 1998 **T. M. Truskett**, S. Torquato, and P. G. Debenedetti, Density fluctuations in many-body systems. *Physical Review E* **58**, 7369-7380 (December)
- 1998 S. Sastry, **T. M. Truskett**, P. G. Debenedetti, S. Torquato, and F. H. Stillinger, Free volume in the hard sphere liquid. *Molecular Physics* **95**, 289-297 (October)
- 1998 **T. M. Truskett**, S. Torquato, S. Sastry, P. G. Debenedetti, and F. H. Stillinger, Structural precursor to freezing in the hard-disk and hard-sphere systems. *Physical Review E* **58**, 3083-3088 (September)

Invited review articles, interviews, and book chapters

- 2017 **T. M. Truskett** and J. J. McKetta, A Conversation with John McKetta. *Annual Review of Chemical and Biomolecular Engineering* **8**, 1-11 (June)
- 2009 J. K. Cheung, V. K. Shen, J. R. Errington, and **T. M. Truskett**, Concentration and crowding effects on protein stability from a coarse-grained model. *Statistical Mechanics of Cellular Systems and Processes*, M. H. Zaman, ed. Cambridge University Press, Cambridge, 1- 25 (January)
- 2007 J. Mittal, W. P. Krekelberg, J. R. Errington, and **T. M. Truskett**. Computing free volume, structural order, and entropy of liquids and glasses. *Reviews in Computational Chemistry* **25**, 125–158 (January)
- 2001 P. G. Debenedetti, F. H. Stillinger, **T. M. Truskett**, and C. P. Lewis, Theory of supercooled liquids and glasses: Statistical geometry and energy landscape

perspectives. [Advances in Chemical Engineering](#) **28**, 22-72 (January)

Patent Applications

- 2016 K. P. Johnston, **T. Truskett**, A. Dinnin, B. Dear, A. U. Borwankar, J. Hung, Low viscosity concentrated protein dispersions, US Patent application (publication no. 20160058863), March 3
- 2012 K. P. Johnston, J. Maynard, M. A. Miller, B. K. Wilson, **T. M. Truskett**, A. U. Borwankar, A. K. Dinin, Protein Nanoparticle Dispersions, US Patent application (publication no. 20120230913), September 13