

Prof. Dr. Gerhard Nägele: Publications

Articles:

- [1] Z. Tan, V. Calandrini, J.K.G. Dhont and G. Nägele, *Quasi-two-dimensional dispersions of Brownian particles with competitive interactions: phase behavior and structural properties*", Soft Matter **20**, 9528 (2024).
- [2] M.E. Brito, G. Nägele and A.R. Denton, *Effective interactions, structure, and pressure in charge-stabilized colloidal suspensions: Critical assessment of charge renormalization methods*", J. Chem. Phys. **159**, 204904 (2023).
- [3] G.W. Park and G. Nägele, *Geometrical influence on particle transport in cross-flow ultrafiltration: Cylindrical and flat sheet membranes*", Membranes **11**, 960 (2021).
- [4] Z. Tan, V. Calandrini, J.K.G. Dhont, G. Nägele and R.G. Winkler, *Hydrodynamics of immiscible binary fluids with viscosity contrast: A multiparticle collision dynamics approach*", Soft Matter **17**, 7978 (2021).
- [5] J. Linkhorst, J. Lölsberg, S. Thill, J. Lohaus, A. Lüken, G. Nägele and M. Wessling, *Templating the morphology of soft microgel assemblies using a nanolithographic 3D-printed membrane*", Scientific Reports **11**, 812 (2021).
- [6] G.W. Park and G. Nägele, *Modeling cross-flow ultrafiltration of permeable particle dispersions*", J. Chem. Phys. **153**, 204110 (2020);
- [7] M.E. Brito, A.R. Denton and G. Nägele, *Modeling deswelling, thermodynamics, structure, and dynamics in ionic microgel suspensions*", J. Chem. Phys. **151**, 224901 (2019).
- [8] A. Pamvouxoglou, P. Bogri, G. Nägele, K. Ohno and G. Petekidis, *Structure and dynamics in suspensions of soft core-shell colloids in the fluid regime*", J. Chem. Phys. **151**, 024901 (2019).
- [9] J. Riest, G. Nägele, Y. Liu, N. J. Wagner and P. D. Godfrin, *Short-time dynamics of lysozyme solutions with competing short-range attraction and long-range repulsion: Experiment and theory*", J. Chem. Phys. **148**, 065101 (2018).
- [10] S. Das, J. Riest, R.G. Winkler, G. Gompper, J.K.G. Dhont and G. Nägele, *Clustering and dynamics of particles in dispersions with competing interactions: Theory and simulation*", Soft Matter **14**, 91 (2018).
- [11] A.J. Banchio, M. Heinen, P. Holmqvist and G. Nägele, *Short- and long-time diffusion and dynamic scaling in suspensions of charged colloidal particles*", J. Chem. Phys. **148**, 134902 (2018).
- [12] R. Roa, D. Menne, J. Riest, P. Buzatu, E. K. Zholkovski, J. K. G. Dhont, M. Wessling, and G. Nägele, *Ultrafiltration of charge-stabilized dispersions at low salinity*", Soft Matter **12**, 4638 (2016).
- [13] P. S. Mohanty, S. Nöjd, M.J. Bergman, G. Nägele, S. Arrese-Igor, A. Alegria, R. Roa, P. Schurtenberger and J.K.G. Dhont, *Dielectric spectroscopy of ionic microgel suspensions*", Soft Matter **12**, 9705 (2016).

- [14] J. Riest and G. Nägele, *"Short-time dynamics in dispersions with competing short-range attraction and long-range repulsion"*, Soft Matter **11**, 9273 (2015).
- [15] K. Makuch, G. C. Abade, M. Heinen and G. Nägele, *"Rotational self-diffusion in suspensions of charged particles: Revised Beenakker-Mazur and pairwise additivity methods and simulations"*, Soft Matter **11**, 5313 (2015).
- [16] R. Roa, E. K. Zholkovskiy, and G. Nägele, *"Ultrafiltration modeling of non-ionic microgels"*, Soft Matter **11**, 4106 (2015).
- [17] J. Riest, T. Eckert, W. Richtering and G. Nägele, *"Dynamics of suspensions of hydrodynamically structure particles: Analytic theory and applications to experiments "*, Soft Matter **11**, 2821 (2015).
- [18] A. J. Schmid, J. Riest, T. Eckert, P. Lindner, G. Nägele, and W. Richtering, *"Comparison of the microstructure of stimuli responsive zwitterionic PNIPAM-co-sulfobetaine microgels with PNIPAM microgels and classical hard-sphere systems"*, Z. Phys. Chem. **228**, 1033 (2014).
- [19] J. Gapinski, G. Nägele and A. Patkowski, *"Freezing lines of colloidal Yukawa spheres. II. Local structure and characteristic lengths"*, J. Chem. Phys. **141**, 124505 (2014).
- [20] G. Nägele, M. Heinen, A.J. Banchio and C. Contreras-Aburto, *"Electrokinetic and hydrodynamic properties of charged-particles systems: From small electrolyte ions to large colloids"*, Eur. Phys. J. Special Topic **222**, 2855 (2013).
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