

Prof. Dr. Gerhard Nägele: Publications

Articles:

- [1] G.W. Park and G. Nägele, "**Geometrical influence on particle transport in cross-flow ultrafiltration: Cylindrical and flat sheet membranes**", *Membranes* **11**, 960 (2021).
- [2] 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).
- [3] 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).
- [4] G.W. Park and G. Nägele, "**Modeling cross-flow ultrafiltration of permeable particle dispersions**", *J. Chem. Phys.* **153**, 204110 (2020);
- [5] 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).
- [6] 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).
- [7] 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).
- [8] 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).
- [9] M. Heinen, P. Holmqvist, A.J. Banchio and G. Nägele, "**Short- and long-time dynamics of charged colloidal particles**", *J. Chem. Phys.* **148**, 134902 (2018).
- [10] 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).
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- [12] J. Riest and G. Nägele, "**Short-time dynamics in dispersions with competing short-range attraction and long-range repulsion**", *Soft Matter* **11**, 9273 (2015).
- [13] 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).
- [14] R. Roa, E. K. Zholkovskiy, and G. Nägele, "**Ultrafiltration modeling of non-ionic microgels**", *Soft Matter* **11**, 4106 (2015).

- [15] 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).
- [16] 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).
- [17] 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).
- [18] 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).
- [19] C. Contreras-Aburto and G. Nägele, *"A unifying mode-coupling theory for transport properties of electrolyte solutions: II. Results for binary electrolytes"*, *J. Chem. Phys.* **139**, 134110 (2013).
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