Gregor Trefalt

List of Publications by Year
in descending order

63 papers	2,221 citations	236925 25 h-index	223800 46 g-index
64 all docs	64 docs citations	64 times ranked	2344 citing authors

#	Article	IF	Citations
1	Thickness of the particle-free layer near charged interfaces in suspensions of like-charged nanoparticles. Soft Matter, 2021, 17, 6212-6224.	2.7	4
2	Forces between interfaces in concentrated nanoparticle suspensions and polyelectrolyte solutions. Current Opinion in Colloid and Interface Science, 2021, 55, 101482.	7.4	8
3	Experimental Evidence for Algebraic Double-Layer Forces. Langmuir, 2020, 36, 47-54.	3.5	7
4	Forces between solid surfaces in aqueous electrolyte solutions. Advances in Colloid and Interface Science, 2020, 275, 102078.	14.7	53
5	Oscillatory structural forces between charged interfaces in solutions of oppositely charged polyelectrolytes. Soft Matter, 2020, 16, 9662-9668.	2.7	3
6	Structural and Double Layer Forces between Silica Surfaces in Suspensions of Negatively Charged Nanoparticles. Langmuir, 2020, 36, 14443-14452.	3.5	6
7	Heteroaggregation and Homoaggregation of Latex Particles in the Presence of Alkyl Sulfate Surfactants. Colloids and Interfaces, 2020, 4, 52.	2.1	9
8	A Simple Method to Determine Critical Coagulation Concentration from Electrophoretic Mobility. Colloids and Interfaces, 2020, 4, 20.	2.1	23
9	Schulze-Hardy rule revisited. Colloid and Polymer Science, 2020, 298, 961-967.	2.1	29
10	Measuring slow heteroaggregation rates in the presence of fast homoaggregation. Journal of Colloid and Interface Science, 2020, 566, 143-152.	9.4	9
11	Heteroaggregation between Charged and Neutral Particles. Langmuir, 2020, 36, 5303-5311.	3.5	5
12	Forces between silica particles in isopropanol solutions of 1:1 electrolytes. Physical Review Research, 2020, 2, .	3.6	2
13	Surfactant mediated particle aggregation in nonpolar solvents. Physical Chemistry Chemical Physics, 2019, 21, 18866-18876.	2.8	15
14	MRI micelles self-assembled from synthetic gadolinium-based nano building blocks. Chemical Communications, 2019, 55, 945-948.	4.1	19
15	Visible light to switch-on desorption from goethite. Nanoscale, 2019, 11, 3794-3798.	5.6	10
16	Squalene-PEG: Pyropheophorbide-a nanoconstructs for tumor theranostics. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 15, 243-251.	3.3	9
17	Unexpectedly Large Decay Lengths of Double-Layer Forces in Solutions of Symmetric, Multivalent Electrolytes. Journal of Physical Chemistry B, 2019, 123, 1733-1740.	2.6	26
18	Aggregation and charging of sulfate and amidine latex particles in the presence of oxyanions. Journal of Colloid and Interface Science, 2018, 524, 456-464.	9.4	17

#	ARTICLE	IF	CITATIONS
19	Interactions between similar and dissimilar charged interfaces in the presence of multivalent anions. Physical Chemistry Chemical Physics, 2018, 20, 9436-9448.	2.8	12
20	Measuring Inner Layer Capacitance with the Colloidal Probe Technique. Colloids and Interfaces, 2018, 2, 65.	2.1	14
21	Aggregation of Colloidal Particles in the Presence of Hydrophobic Anions: Importance of Attractive Non-DLVO Forces. Langmuir, 2018, 34, 14368-14377.	3.5	22
22	Colloidal Stability in Asymmetric Electrolytes: Modifications of the Schulzeâ€"Hardy Rule. Langmuir, 2017, 33, 1695-1704.	3.5	63
23	Interactions between charged particles with bathing multivalent counterions: experiments vs. dressed ion theory. Physical Chemistry Chemical Physics, 2017, 19, 10069-10080.	2.8	17
24	Heteroaggregation of oppositely charged particles in the presence of multivalent ions. Physical Chemistry Chemical Physics, 2017, 19, 15160-15171.	2.8	36
25	Depletion and double layer forces acting between charged particles in solutions of like-charged polyelectrolytes and monovalent salts. Soft Matter, 2017, 13, 3284-3295.	2.7	19
26	Interactions between silica particles in the presence of multivalent coions. Soft Matter, 2017, 13, 5741-5748.	2.7	10
27	Forces between colloidal particles in aqueous solutions containing monovalent and multivalent ions. Current Opinion in Colloid and Interface Science, 2017, 27, 9-17.	7.4	63
28	Dispersion forces acting between silica particles across water: influence of nanoscale roughness. Nanoscale Horizons, 2016, 1, 325-330.	8.0	55
29	Forces between silica particles in the presence of multivalent cations. Journal of Colloid and Interface Science, 2016, 472, 108-115.	9.4	31
30	Interplay between Depletion and Double-Layer Forces Acting between Charged Particles in Solutions of Like-Charged Polyelectrolytes. Physical Review Letters, 2016, 117, 088001.	7.8	25
31	Derivation of the inverse Schulze-Hardy rule. Physical Review E, 2016, 93, 032612.	2.1	24
32	Formation and relaxation kinetics of starchâ€"particle complexes. Soft Matter, 2016, 12, 9509-9519.	2.7	18
33	Charging and aggregation of latex particles in aqueous solutions of ionic liquids: towards an extended Hofmeister series. Physical Chemistry Chemical Physics, 2016, 18, 7511-7520.	2.8	34
34	Nanometer-ranged attraction induced by multivalent ions between similar and dissimilar surfaces probed using an atomic force microscope (AFM). Physical Chemistry Chemical Physics, 2016, 18, 8739-8751.	2.8	15
35	Charge Regulation in the Electrical Double Layer: Ion Adsorption and Surface Interactions. Langmuir, 2016, 32, 380-400.	3.5	237
36	A Voronoi-diagram analysis of the microstructures in bulk-molding compounds and its correlation with the mechanical properties. EXPRESS Polymer Letters, 2016, 10, 493-505.	2.1	10

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37	Interaction Forces and Aggregation Rates of Colloidal Latex Particles in the Presence of Monovalent Counterions. Journal of Physical Chemistry B, 2015, 119, 8184-8193.	2.6	34
38	Long-ranged and soft interactions between charged colloidal particles induced by multivalent coions. Soft Matter, 2015, 11, 1562-1571.	2.7	31
39	Forces between Negatively Charged Interfaces in the Presence of Cationic Multivalent Oligoamines Measured with the Atomic Force Microscope. Journal of Physical Chemistry C, 2015, 119, 15482-15490.	3.1	37
40	Aggregation of Colloidal Particles in the Presence of Multivalent Co-Ions: The Inverse Schulzeâ€“Hardy Rule. Langmuir, 2015, 31, 6610-6614.	3.5	50
41	Specific Ion Effects on Particle Aggregation Induced by Monovalent Salts within the Hofmeister Series. Langmuir, 2015, 31, 3799-3807.	3.5	167
42	Unusual structural-disorder stability of mechanochemically derived-Pb(Sc0.5Nb0.5)O3. Journal of Materials Chemistry C, 2015, 3, 10309-10315.	5.5	15
43	Direct force measurements between silica particles in aqueous solutions of ionic liquids containing 1-butyl-3-methylimidazolium (BMIM). Physical Chemistry Chemical Physics, 2015, 17, 16553-16559.	2.8	19
44	Measurements of dispersion forces between colloidal latex particles with the atomic force microscope and comparison with Lifshitz theory. Journal of Chemical Physics, 2014, 140, 104906.	3.0	55
45	Polyelectrolyte adsorption, interparticle forces, and colloidal aggregation. Soft Matter, 2014, 10, 2479.	2.7	284
46	Particle aggregation mechanisms in ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 9515-9524.	2.8	55
47	Accurate Predictions of Forces in the Presence of Multivalent Ions by Poissonâ€“Boltzmann Theory. Langmuir, 2014, 30, 4551-4555.	3.5	37
48	Electric double-layer potentials and surface regulation properties measured by colloidal-probe atomic force microscopy. Physical Review E, 2014, 90, 012301.	2.1	44
49	Evaluation of the homogeneity in Pb(Zr,Ti)O3â€“zirconia composites prepared by the hetero-agglomeration of precursors using the Voronoi-diagram approach. Journal of the European Ceramic Society, 2014, 34, 669-675.	5.7	4
50	Interaction Forces, Heteroaggregation, and Deposition Involving Charged Colloidal Particles. Journal of Physical Chemistry B, 2014, 118, 6346-6355.	2.6	62
51	Aggregation of Negatively Charged Colloidal Particles in the Presence of Multivalent Cations. Langmuir, 2014, 30, 733-741.	3.5	88
52	Poissonâ€“Boltzmann description of interaction forces and aggregation rates involving charged colloidal particles in asymmetric electrolytes. Journal of Colloid and Interface Science, 2013, 406, 111-120.	9.4	87
53	Investigation of the BaTiO3â€“BaMg1/3Nb2/3O3 system: Structural, dielectric, ferroelectric and electromechanical studies. Journal of Electroceramics, 2013, 30, 206-212.	2.0	4
54	Parametric study of seedâ€layer formation for lowâ€temperature hydrothermal growth of highly oriented Zn<scp>O</scp> films on glass substrates. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1083-1092.	1.8	4

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55	Predicting Aggregation Rates of Colloidal Particles from Direct Force Measurements. Journal of Physical Chemistry B, 2013, 117, 11853-11862.	2.6	54
56	Parametric study of seedâ€layer formation for lowâ€temperature hydrothermal growth of highly oriented Zn<scp>O</scp> films on glass substrates (Phys. Status Solidi A 6/2013). Physica Status Solidi (A) Applications and Materials Science, 2013, 210, .	1.8	0
57	Probing Colloidal Particle Aggregation by Light Scattering. Chimia, 2013, 67, 772.	0.6	26
58	Formulation of an Aqueous Titania Suspension and its Patterning with Inkâ€Jet Printing Technology. Journal of the American Ceramic Society, 2012, 95, 487-493.	3.8	55
59	Synthesis of 0.65<scp><scp>Pb</scp></scp>(<scp><scp>Mg</scp></scp>_{1/3}Nb_{2/3})<scp><scp>O</scp></scp><sub>3</ by Controlled Agglomeration of Precursor Particles. Journal of the American Ceramic Society, 2012, 95, 1858-1865.	3.8	10
60	Formation of colloidal assemblies in suspensions for Pb(Mg1/3Nb2/3)O3 synthesis: Monte Carlo simulation study. Soft Matter, 2011, 7, 5566.	2.7	8
61	Inkâ€Jet Printing of In₂O₃/ZnO Twoâ€Dimensional Structures from Solution. Journal of the American Ceramic Society, 2011, 94, 2834-2840.	3.8	11
62	Synthesis of Pb(Mg_{1/3}Nb_{2/3})O₃ by Selfâ€Assembled Colloidal Aggregates. Journal of the American Ceramic Society, 2011, 94, 2846-2856.	3.8	21
63	Ink-jet Printing of TiO2 Suspensions. Additional Conferences (Device Packaging HiTEC HiTEN & CICMT), 2011, 2011, 000247-000254.	0.2	0