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	Polyelectrolyte adsorption, interparticle forces, and colloidal aggregation. Soft Matter, 2014, 10, 2479.	2.7	284
2	Charge Regulation in the Electrical Double Layer: Ion Adsorption and Surface Interactions. Langmuir, 2016, 32, 380-400.	3.5	237
3	Specific Ion Effects on Particle Aggregation Induced by Monovalent Salts within the Hofmeister Series. Langmuir, 2015, 31, 3799-3807.	3.5	167
4	Aggregation of Negatively Charged Colloidal Particles in the Presence of Multivalent Cations. Langmuir, 2014, 30, 733-741.	3.5	88
5	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
6	Colloidal Stability in Asymmetric Electrolytes: Modifications of the Schulzeâ€"Hardy Rule. Langmuir, 2017, 33, 1695-1704.	3.5	63
7	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
8	Interaction Forces, Heteroaggregation, and Deposition Involving Charged Colloidal Particles. Journal of Physical Chemistry B, 2014, 118, 6346-6355.	2.6	62
9	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
10	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
11	Particle aggregation mechanisms in ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 9515-9524.	2.8	55
12	Dispersion forces acting between silica particles across water: influence of nanoscale roughness. Nanoscale Horizons, 2016, 1, 325-330.	8.0	55
13	Predicting Aggregation Rates of Colloidal Particles from Direct Force Measurements. Journal of Physical Chemistry B, 2013, 117, 11853-11862.	2.6	54
14	Forces between solid surfaces in aqueous electrolyte solutions. Advances in Colloid and Interface Science, 2020, 275, 102078.	14.7	53
15	Aggregation of Colloidal Particles in the Presence of Multivalent Co-Ions: The Inverse Schulzeâ€"Hardy Rule. Langmuir, 2015, 31, 6610-6614.	3.5	50
16	Electric double-layer potentials and surface regulation properties measured by colloidal-probe atomic force microscopy. Physical Review E, 2014, 90, 012301.	2.1	44
17	Accurate Predictions of Forces in the Presence of Multivalent Ions by Poissonâ€"Boltzmann Theory. Langmuir, 2014, 30, 4551-4555.	3.5	37
18	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

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19	Heteroaggregation of oppositely charged particles in the presence of multivalent ions. Physical Chemistry Chemical Physics, 2017, 19, 15160-15171.	2.8	36
20	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
21	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
22	Long-ranged and soft interactions between charged colloidal particles induced by multivalent coions. Soft Matter, 2015, 11, 1562-1571.	2.7	31
23	Forces between silica particles in the presence of multivalent cations. Journal of Colloid and Interface Science, 2016, 472, 108-115.	9.4	31
24	Schulze-Hardy rule revisited. Colloid and Polymer Science, 2020, 298, 961-967.	2.1	29
25	Probing Colloidal Particle Aggregation by Light Scattering. Chimia, 2013, 67, 772.	0.6	26
26	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
27	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
28	Derivation of the inverse Schulze-Hardy rule. Physical Review E, 2016, 93, 032612.	2.1	24
29	A Simple Method to Determine Critical Coagulation Concentration from Electrophoretic Mobility. Colloids and Interfaces, 2020, 4, 20.	2.1	23
30	Aggregation of Colloidal Particles in the Presence of Hydrophobic Anions: Importance of Attractive Non-DLVO Forces. Langmuir, 2018, 34, 14368-14377.	3.5	22
31	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
32	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
33	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
34	MRI micelles self-assembled from synthetic gadolinium-based nano building blocks. Chemical Communications, 2019, 55, 945-948.	4.1	19
35	Formation and relaxation kinetics of starchâ€“particle complexes. Soft Matter, 2016, 12, 9509-9519.	2.7	18
36	Interactions between charged particles with bathing multivalent counterions: experiments vs. dressed ion theory. Physical Chemistry Chemical Physics, 2017, 19, 10069-10080.	2.8	17

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37	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
38	Unusual structural-disorder stability of mechanochemically derived-Pb(Sc0.5Nb0.5)O3. Journal of Materials Chemistry C, 2015, 3, 10309-10315.	5.5	15
39	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
40	Surfactant mediated particle aggregation in nonpolar solvents. Physical Chemistry Chemical Physics, 2019, 21, 18866-18876.	2.8	15
41	Measuring Inner Layer Capacitance with the Colloidal Probe Technique. Colloids and Interfaces, 2018, 2, 65.	2.1	14
42	Interactions between similar and dissimilar charged interfaces in the presence of multivalent anions. Physical Chemistry Chemical Physics, 2018, 20, 9436-9448.	2.8	12
43	Inkâ€Jet Printing of In₂O₃/ZnO Twoâ€Dimensional Structures from Solution. Journal of the American Ceramic Society, 2011, 94, 2834-2840.	3.8	11
44	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
45	Interactions between silica particles in the presence of multivalent coions. Soft Matter, 2017, 13, 5741-5748.	2.7	10
46	Visible light to switch-on desorption from goethite. Nanoscale, 2019, 11, 3794-3798.	5.6	10
47	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
48	Squalene-PEG: Pyropheophorbide-a nanoconstructs for tumor theranostics. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 15, 243-251.	3.3	9
49	Heteroaggregation and Homoaggregation of Latex Particles in the Presence of Alkyl Sulfate Surfactants. Colloids and Interfaces, 2020, 4, 52.	2.1	9
50	Measuring slow heteroaggregation rates in the presence of fast homoaggregation. Journal of Colloid and Interface Science, 2020, 566, 143-152.	9.4	9
51	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
52	Forces between interfaces in concentrated nanoparticle suspensions and polyelectrolyte solutions. Current Opinion in Colloid and Interface Science, 2021, 55, 101482.	7.4	8
53	Experimental Evidence for Algebraic Double-Layer Forces. Langmuir, 2020, 36, 47-54.	3.5	7
54	Structural and Double Layer Forces between Silica Surfaces in Suspensions of Negatively Charged Nanoparticles. Langmuir, 2020, 36, 14443-14452.	3.5	6

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55	Heteroaggregation between Charged and Neutral Particles. Langmuir, 2020, 36, 5303-5311.	3.5	5
56	Investigation of the BaTiO3â€“BaMg1/3Nb2/3O3 system: Structural, dielectric, ferroelectric and electromechanical studies. Journal of Electroceramics, 2013, 30, 206-212.	2.0	4
57	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
58	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
59	Thickness of the particle-free layer near charged interfaces in suspensions of like-charged nanoparticles. Soft Matter, 2021, 17, 6212-6224.	2.7	4
60	Oscillatory structural forces between charged interfaces in solutions of oppositely charged polyelectrolytes. Soft Matter, 2020, 16, 9662-9668.	2.7	3
61	Forces between silica particles in isopropanol solutions of 1:1 electrolytes. Physical Review Research, 2020, 2, .	3.6	2
62	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
63	Ink-jet Printing of TiO2 Suspensions. Additional Conferences (Device Packaging HiTEC HiTEN & CICMT), 2011, 2011, 000247-000254.	0.2	0