# Michal Borkovec

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2928697/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 219 papers | 19,540 citations | 17405 63 h-index | 11899 134 g-index |
| 223 all docs | 223 docs citations | 223 times ranked | 13990 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. | 1.2 | 4 |
| 2 | Particle Deposition to Silica Surfaces Functionalized with Cationic Polyelectrolytes. Colloids and Interfaces, 2021, 5, 26. | 0.9 | 1 |
| 3 | Forces between interfaces in concentrated nanoparticle suspensions and polyelectrolyte solutions. Current Opinion in Colloid and Interface Science, 2021, 55, 101482. | 3.4 | 8 |
| 4 | Forces between solid surfaces in aqueous electrolyte solutions. Advances in Colloid and Interface Science, 2020, 275, 102078. | 7.0 | 53 |
| 5 | Oscillatory structural forces between charged interfaces in solutions of oppositely charged polyelectrolytes. Soft Matter, 2020, 16, 9662-9668. | 1.2 | 3 |
| 6 | Structural and Double Layer Forces between Silica Surfaces in Suspensions of Negatively Charged Nanoparticles. Langmuir, 2020, 36, 14443-14452. | 1.6 | 6 |
| 7 | Heteroaggregation and Homoaggregation of Latex Particles in the Presence of Alkyl Sulfate Surfactants. Colloids and Interfaces, 2020, 4, 52. | 0.9 | 9 |
| 8 | Schulze-Hardy rule revisited. Colloid and Polymer Science, 2020, 298, 961-967. | 1.0 | 29 |
| 9 | Structuring of colloidal silica nanoparticle suspensions near waterâ€“silica interfaces probed by specular neutron reflectivity. Physical Chemistry Chemical Physics, 2020, 22, 6449-6456. | 1.3 | 5 |
| 10 | Measuring slow heteroaggregation rates in the presence of fast homoaggregation. Journal of Colloid and Interface Science, 2020, 566, 143-152. | 5.0 | 9 |
| 11 | Heteroaggregation between Charged and Neutral Particles. Langmuir, 2020, 36, 5303-5311. | 1.6 | 5 |
| 12 | In situ Imaging of Single Polyelectrolyte Chains with the Atomic Force Microscope. Chimia, 2019, 73, 17. | 0.3 | 5 |
| 13 | Unexpectedly Large Decay Lengths of Double-Layer Forces in Solutions of Symmetric, Multivalent Electrolytes. Journal of Physical Chemistry B, 2019, 123, 1733-1740. | 1.2 | 26 |
| 14 | Aggregation and charging of sulfate and amidine latex particles in the presence of oxyanions. Journal of Colloid and Interface Science, 2018, 524, 456-464. | 5.0 | 17 |
| 15 | Persistence Length of Poly(vinyl amine): Quantitative Image Analysis versus Single Molecule Force Response. Macromolecules, 2018, 51, 3632-3639. | 2.2 | 14 |
| 16 | Interactions between similar and dissimilar charged interfaces in the presence of multivalent anions. Physical Chemistry Chemical Physics, 2018, 20, 9436-9448. | 1.3 | 12 |
| 17 | Attractive non-DLVO forces induced by adsorption of monovalent organic ions. Physical Chemistry Chemical Physics, 2018, 20, 158-164. | 1.3 | 15 |
| 18 | Measuring Inner Layer Capacitance with the Colloidal Probe Technique. Colloids and Interfaces, 2018, 2, 65. | 0.9 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Aggregation of Colloidal Particles in the Presence of Hydrophobic Anions: Importance of Attractive Non-DLVO Forces. Langmuir, 2018, 34, 14368-14377. | 1.6 | 22 |
| 20 | Colloidal Stability in Asymmetric Electrolytes: Modifications of the Schulzeâ€“Hardy Rule. Langmuir, 2017, 33, 1695-1704. | 1.6 | 63 |
| 21 | Heteroaggregation of oppositely charged particles in the presence of multivalent ions. Physical Chemistry Chemical Physics, 2017, 19, 15160-15171. | 1.3 | 36 |
| 22 | Quantitative Nano-characterization of Polymers Using Atomic Force Microscopy. Chimia, 2017, 71, 195. | 0.3 | 2 |
| 23 | Depletion and double layer forces acting between charged particles in solutions of like-charged polyelectrolytes and monovalent salts. Soft Matter, 2017, 13, 3284-3295. | 1.2 | 19 |
| 24 | Influence of Solvent Quality on the Force Response of Individual Poly(styrene) Polymer Chains. ACS Macro Letters, 2017, 6, 1052-1055. | 2.3 | 26 |
| 25 | Influence of ligand-receptor interactions on force-extension behavior within the freely jointed chain model. Physical Review E, 2017, 96, 062501. | 0.8 | 10 |
| 26 | Forces between colloidal particles in aqueous solutions containing monovalent and multivalent ions. Current Opinion in Colloid and Interface Science, 2017, 27, 9-17. | 3.4 | 63 |
| 27 | Mechanically induced cis-to-trans isomerization of carbonâ€“carbon double bonds using atomic force microscopy. Physical Chemistry Chemical Physics, 2016, 18, 31202-31210. | 1.3 | 18 |
| 28 | The persistence length of adsorbed dendronized polymers. Nanoscale, 2016, 8, 13498-13506. | 2.8 | 12 |
| 29 | Recording stretching response of single polymer chains adsorbed on solid substrates. Polymer, 2016, 102, 350-362. | 1.8 | 15 |
| 30 | Dispersion forces acting between silica particles across water: influence of nanoscale roughness. Nanoscale Horizons, 2016, 1, 325-330. | 4.1 | 55 |
| 31 | Forces between silica particles in the presence of multivalent cations. Journal of Colloid and Interface Science, 2016, 472, 108-115. | 5.0 | 31 |
| 32 | Interplay between Depletion and Double-Layer Forces Acting between Charged Particles in Solutions of Like-Charged Polyelectrolytes. Physical Review Letters, 2016, 117, 088001. | 2.9 | 25 |
| 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. | 1.3 | 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. | 1.3 | 15 |
| 35 | Charge Regulation in the Electrical Double Layer: Ion Adsorption and Surface Interactions. Langmuir, 2016, 32, 380-400. | 1.6 | 237 |
| 36 | Interaction Forces and Aggregation Rates of Colloidal Latex Particles in the Presence of Monovalent Counterions. Journal of Physical Chemistry B, 2015, 119, 8184-8193. | 1.2 | 34 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Adsorption of polyelectrolytes to like-charged substrates induced by multivalent counterions as exemplified by poly(styrene sulfonate) and silica. Physical Chemistry Chemical Physics, 2015, 17, 10348-10352. | 1.3 | 39 |
| 38 | Probing effects of polymer adsorption in colloidal particle suspensions by light scattering as relevant for the aquatic environment: An overview. Science of the Total Environment, 2015, 535, 131-140. | 3.9 | 25 |
| 39 | Long-ranged and soft interactions between charged colloidal particles induced by multivalent coions. Soft Matter, 2015, 11, 1562-1571. | 1.2 | 31 |
| 40 | 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. | 1.5 | 37 |
| 41 | Aggregation of Colloidal Particles in the Presence of Multivalent Co-Ions: The Inverse Schulzeâ€“Hardy Rule. Langmuir, 2015, 31, 6610-6614. | 1.6 | 50 |
| 42 | Specific Ion Effects on Particle Aggregation Induced by Monovalent Salts within the Hofmeister Series. Langmuir, 2015, 31, 3799-3807. | 1.6 | 167 |
| 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. | 1.3 | 19 |
| 44 | Metal loading of lanthanidopolymers driven by positive cooperativity. Dalton Transactions, 2015, 44, 13250-13260. | 1.6 | 13 |
| 45 | 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. | 1.2 | 55 |
| 46 | The intrinsic view of ionization equilibria of polyprotic molecules. New Journal of Chemistry, 2014, 38, 5679-5685. | 1.4 | 4 |
| 47 | Mechanism of Chitosan Adsorption on Silica from Aqueous Solutions. Langmuir, 2014, 30, 4980-4988. | 1.6 | 51 |
| 48 | Polyelectrolyte adsorption, interparticle forces, and colloidal aggregation. Soft Matter, 2014, 10, 2479. | 1.2 | 284 |
| 49 | Particle aggregation mechanisms in ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 9515-9524. | 1.3 | 55 |
| 50 | Accurate Predictions of Forces in the Presence of Multivalent Ions by Poissonâ€“Boltzmann Theory. Langmuir, 2014, 30, 4551-4555. | 1.6 | 37 |
| 51 | Single-Molecule Force Measurements by Nano-Handling of Individual Dendronized Polymers. ACS Nano, 2014, 8, 2237-2245. | 7.3 | 15 |
| 52 | Electric double-layer potentials and surface regulation properties measured by colloidal-probe atomic force microscopy. Physical Review E, 2014, 90, 012301. | 0.8 | 44 |
| 53 | Interaction Forces, Heteroaggregation, and Deposition Involving Charged Colloidal Particles. Journal of Physical Chemistry B, 2014, 118, 6346-6355. | 1.2 | 62 |
| 54 | Aggregation of Negatively Charged Colloidal Particles in the Presence of Multivalent Cations. Langmuir, 2014, 30, 733-741. | 1.6 | 88 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | 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. | 5.0 | 87 |
| 56 | Attractive Forces between Charged Colloidal Particles Induced by Multivalent Ions Revealed by Confronting Aggregation and Direct Force Measurements. Journal of Physical Chemistry Letters, 2013, 4, 648-652. | 2.1 | 89 |
| 57 | Direct measurements of forces between different charged colloidal particles and their prediction by the theory of Derjaguin, Landau, Verwey, and Overbeek (DLVO). Journal of Chemical Physics, 2013, 138, 234705. | 1.2 | 31 |
| 58 | Charging and aggregation of negatively charged colloidal latex particles in the presence of multivalent oligoamine cations. Journal of Colloid and Interface Science, 2013, 392, 34-41. | 5.0 | 35 |
| 59 | Interactions between Individual Charged Dendronized Polymers and Surfaces. Macromolecules, 2013, 46, 3603-3610. | 2.2 | 18 |
| 60 | Predicting Aggregation Rates of Colloidal Particles from Direct Force Measurements. Journal of Physical Chemistry B, 2013, 117, 11853-11862. | 1.2 | 54 |
| 61 | Probing Colloidal Particle Aggregation by Light Scattering. Chimia, 2013, 67, 772. | 0.3 | 26 |
| 62 | Charging and Aggregation of Positively Charged Colloidal Latex Particles in Presence of Multivalent Polycarboxylate Anions. Zeitschrift Fur Physikalische Chemie, 2012, 226, 597-612. | 1.4 | 15 |
| 63 | Exploring Forces between Individual Colloidal Particles with the Atomic Force Microscope. Chimia, 2012, 66, 214. | 0.3 | 2 |
| 64 | Destabilization of Colloidal Suspensions by Multivalent Ions and Polyelectrolytes: From Screening to Overcharging. Langmuir, 2012, 28, 6211-6215. | 1.6 | 52 |
| 65 | Investigating forces between charged particles in the presence of oppositely charged polyelectrolytes with the multi-particle colloidal probe technique. Advances in Colloid and Interface Science, 2012, 179-182, 85-98. | 7.0 | 79 |
| 66 | Response of Adsorbed Polyelectrolyte Monolayers to Changes in Solution Composition. Langmuir, 2012, 28, 17506-17516. | 1.6 | 41 |
| 67 | Ion-Specific Responsiveness of Polyamidoamine (PAMAM) Dendrimers Adsorbed on Silica Substrates. Macromolecules, 2012, 45, 3919-3927. | 2.2 | 23 |
| 68 | Resolution of Microscopic Protonation Enthalpies of Polyprotic Molecules by Means of Cluster Expansions. Journal of Physical Chemistry B, 2012, 116, 4300-4309. | 1.2 | 11 |
| 69 | Structure of Adsorbed Polyelectrolyte Monolayers Investigated by Combining Optical Reflectometry and Piezoelectric Techniques. Langmuir, 2012, 28, 5642-5651. | 1.6 | 62 |
| 70 | Novel self-associative and multiphasic nanostructured soft carriers based on amphiphilic hyaluronic acid derivatives. Carbohydrate Polymers, 2012, 87, 444-451. | 5.1 | 40 |
| 71 | Molecular mass dependence of adsorbed amount and hydrodynamic thickness of polyelectrolyte layers. Physical Chemistry Chemical Physics, 2011, 13, 12716. | 1.3 | 59 |
| 72 | Conformational Changes of Polyamidoamine (PAMAM) Dendrimers Adsorbed on Silica Substrates. Macromolecules, 2011, 44, 5069-5071. | 2.2 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Zipper and Layer-by-Layer Assemblies of Artificial Photosystems Analyzed by Combining Optical and Piezoelectric Surface Techniques. Langmuir, 2011, 27, 7213-7221. | 1.6 | 8 |
| 74 | Influence of the Degree of Ionization and Molecular Mass of Weak Polyelectrolytes on Charging and Stability Behavior of Oppositely Charged Colloidal Particles. Langmuir, 2011, 27, 9270-9276. | 1.6 | 31 |
| 75 | Charge Reversal of Sulfate Latex Particles by Adsorbed Linear Poly(ethylene imine) Probed by Multiparticle Colloidal Probe Technique. Journal of Physical Chemistry B, 2011, 115, 9098-9105. | 1.2 | 37 |
| 76 | Adsorption of monovalent and divalent cations on planar water-silica interfaces studied by optical reflectivity and Monte Carlo simulations. Journal of Chemical Physics, 2011, 135, 064701. | 1.2 | 44 |
| 77 | Towards Ã...ngstrÃ¶m Resolution with Dynamic Light Scattering. Chimia, 2011, 65, 439-439. | 0.3 | 0 |
| 78 | Adsorption and surface-induced precipitation of poly(acrylic acid) on calcite revealed with atomic force microscopy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 390, 225-230. | 2.3 | 8 |
| 79 | Probing adsorption of sodium poly(acrylate) at the calciteâ€“water interface by ellipsometry. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 384, 17-22. | 2.3 | 4 |
| 80 | Charging and stability of anionic latex particles in the presence of linear poly(ethylene imine). Journal of Colloid and Interface Science, 2011, 360, 580-585. | 5.0 | 34 |
| 81 | Large Mechanical Response of Single Dendronized Polymers Induced by Ionic Strength. Angewandte Chemie - International Edition, 2010, 49, 4250-4253. | 7.2 | 31 |
| 82 | Stability of negatively charged latex particles in the presence of a strong cationic polyelectrolyte at elevated ionic strengths. Journal of Colloid and Interface Science, 2010, 347, 202-208. | 5.0 | 37 |
| 83 | Proton binding by linear, branched, and hyperbranched polyelectrolytes. Polymer, 2010, 51, 5649-5662. | 1.8 | 78 |
| 84 | Highly-sensitive reflectometry setup capable of probing the electrical double layer on silica. Sensors and Actuators B: Chemical, 2010, 151, 250-255. | 4.0 | 16 |
| 85 | Adsorption of poly(l-lysine) on silica probed by optical reflectometry. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 360, 20-25. | 2.3 | 43 |
| 86 | Importance of Charge Regulation in Attractive Double-Layer Forces between Dissimilar Surfaces. Physical Review Letters, 2010, 104, 228301. | 2.9 | 89 |
| 87 | Charge regulation effects on electrostatic patch-charge attraction induced by adsorbed dendrimers. Physical Chemistry Chemical Physics, 2010, 12, 4863. | 1.3 | 49 |
| 88 | Electrostatic Stabilization of Charged Colloidal Particles with Adsorbed Polyelectrolytes of Opposite Charge. Langmuir, 2010, 26, 15109-15111. | 1.6 | 109 |
| 89 | Attractive and Repulsive Electrostatic Forces between Positively Charged Latex Particles in the Presence of Anionic Linear Polyelectrolytes. Journal of Physical Chemistry B, 2010, 114, 3170-3177. | 1.2 | 130 |
| 90 | Effective Charge of Adsorbed Poly(amido amine) Dendrimers: Transition from Heterogeneous to Homogeneous Charge Distribution. Macromolecules, 2010, 43, 1129-1136. | 2.2 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Probing Nanometer-Thick Polyelectrolyte Layers Adsorbed on Oppositely Charged Particles by Dynamic Light Scattering. Macromolecules, 2010, 43, 9108-9116. | 2.2 | 37 |
| 92 | Topologically Matching Supramolecular n/pâ€Heterojunction Architectures. Angewandte Chemie - International Edition, 2009, 48, 6461-6464. | 7.2 | 46 |
| 93 | Influence of alkali metal counterions on the charging behavior of poly(acrylic acid). Polymer, 2009, 50, 3950-3954. | 1.8 | 31 |
| 94 | Protonation of silica particles in the presence of a strong cationic polyelectrolyte. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 339, 20-25. | 2.3 | 18 |
| 95 | Attractive Electrostatic Forces between Identical Colloidal Particles Induced by Adsorbed Polyelectrolytes. Journal of Physical Chemistry B, 2009, 113, 8458-8461. | 1.2 | 63 |
| 96 | Long-Ranged Attractive Forces Induced by Adsorbed Dendrimers: Direct Force Measurements and Computer Simulations. Langmuir, 2009, 25, 12435-12438. | 1.6 | 27 |
| 97 | Structure of an Adsorbed Polyelectrolyte Monolayer on Oppositely Charged Colloidal Particles. Langmuir, 2009, 25, 4864-4867. | 1.6 | 31 |
| 98 | Effective Charge of Adsorbed Poly(amidoamine) Dendrimers from Direct Force Measurements. Macromolecules, 2009, 42, 1749-1758. | 2.2 | 27 |
| 99 | Ionâ^'Ion Correlation and Charge Reversal at Titrating Solid Interfaces. Langmuir, 2009, 25, 7209-7213. | 1.6 | 85 |
| 100 | Transition from Completely Reversible to Irreversible Adsorption of Poly(amido amine) Dendrimers on Silica. Langmuir, 2009, 25, 2928-2934. | 1.6 | 35 |
| 101 | Ordered and Oriented Supramolecular n/p-Heterojunction Surface Architectures: Completion of the Primary Color Collection. Journal of the American Chemical Society, 2009, 131, 11106-11116. | 6.6 | 111 |
| 102 | Adsorption and Self-Organization of Dendrimers at Waterâ€“Solid Interfaces. Chimia, 2009, 63, 279. | 0.3 | 3 |
| 103 | Linear Polynuclear Helicates as a Link between Discrete Supramolecular Complexes and Programmed Infinite Polymetallic Chains. Chemistry - A European Journal, 2008, 14, 2994-3005. | 1.7 | 42 |
| 104 | Interactions between solid surfaces with adsorbed polyelectrolytes of opposite charge. Current Opinion in Colloid and Interface Science, 2008, 13, 429-437. | 3.4 | 123 |
| 105 | Interaction and Structure of Surfaces Coated by Poly(vinyl amines) of Different Line Charge Densities. Journal of Physical Chemistry B, 2008, 112, 14609-14619. | 1.2 | 34 |
| 106 | Electrostatic Double Layer Forces in the Case of Extreme Charge Regulation. Journal of Physical Chemistry B, 2008, 112, 10795-10799. | 1.2 | 44 |
| 107 | Adsorption of Poly(amido amine) (PAMAM) Dendrimers on Silica:â€‰ Importance of Electrostatic Three-Body Attraction. Langmuir, 2008, 24, 465-473. | 1.6 | 99 |
| 108 | Tuneable Intramolecular Intermetallic Interactions as a New Tool for Programming Linear Heterometallic 4fâ^'4f Complexes. Inorganic Chemistry, 2007, 46, 9312-9322. | 1.9 | 43 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Nano-patterning of solid substrates by adsorbed dendrimers. Chemical Communications, 2007, , 266-268. | 2.2 | 40 |
| 110 | Symmetry Numbers and Statistical Factors in Self-Assembly and Multivalency. Journal of Physical Chemistry B, 2007, 111, 12195-12203. | 1.2 | 110 |
| 111 | Charging and Aggregation of Positively Charged Latex Particles in the Presence of Anionic Polyelectrolytesâ€. Journal of Physical Chemistry B, 2007, 111, 8626-8633. | 1.2 | 82 |
| 112 | Protonation of carboxyl latex particles in the presence of a strong cationic polyelectrolyte. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 294, 174-180. | 2.3 | 9 |
| 113 | Thin adsorbed films of a strong cationic polyelectrolyte on silica substrates. Journal of Colloid and Interface Science, 2007, 309, 28-35. | 5.0 | 66 |
| 114 | Colloid Facilitated Transport in Natural Porous Media: Fundamental Phenomena and Modelling. , 2007, , 3-27. | | 4 |
| 115 | Probing the validity of the Derjaguin approximation for heterogeneous colloidal particles. Physical Chemistry Chemical Physics, 2006, 8, 2531. | 1.3 | 75 |
| 116 | Ionization Equilibria and Conformational Transitions in Polyprotic Molecules and Polyelectrolytes. Journal of Physical Chemistry B, 2006, 110, 10937-10950. | 1.2 | 51 |
| 117 | Decomposing Bridging Adhesion between Polyelectrolyte Layers into Single Molecule Contributions. Langmuir, 2006, 22, 10880-10884. | 1.6 | 18 |
| 118 | Ion binding to polyelectrolytes. Current Opinion in Colloid and Interface Science, 2006, 11, 280-289. | 3.4 | 75 |
| 119 | Interaction forces and molecular adhesion between pre-adsorbed poly(ethylene imine) layers. Journal of Colloid and Interface Science, 2006, 296, 496-506. | 5.0 | 37 |
| 120 | Deposition of nanosized latex particles onto silica and cellulose surfaces studied by optical reflectometry. Journal of Colloid and Interface Science, 2006, 303, 460-471. | 5.0 | 67 |
| 121 | Simple thermodynamics for unravelling sophisticated self-assembly processes. Dalton Transactions, 2006, , 1473. | 1.6 | 87 |
| 122 | Release of colloidal particles in natural porous media by monovalent and divalent cations. Journal of Contaminant Hydrology, 2006, 87, 155-175. | 1.6 | 77 |
| 123 | scyllo â€‰nositol Pentakisphosphate as an Analogue of myo â€‰nositol 1,3,4,5,6â€Pentakisphosphate: Chemical Synthesis, Physicochemistry and Biological Applications. ChemBioChem, 2006, 7, 1114-1122. | 1.3 | 23 |
| 124 | Heteroaggregation in Binary Mixtures of Oppositely Charged Colloidal Particles. Langmuir, 2006, 22, 1038-1047. | 1.6 | 112 |
| 125 | Effects of heat treatment on the aggregation and charging of StÃ¶ber-type silica. Journal of Colloid and Interface Science, 2005, 292, 139-147. | 5.0 | 145 |
| 126 | Strict self-assembly of polymetallic helicates: the concepts behind the semantics. Coordination Chemistry Reviews, 2005, 249, 705-726. | 9.5 | 253 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | A Simple Thermodynamic Model for Quantitatively Addressing Cooperativity in Multicomponent Self-Assembly Processesâ€"Part 2: Extension to Multimetallic Helicates Possessing Different Binding Sites. Chemistry - A European Journal, 2005, 11, 5227-5237. | 1.7 | 53 |
| 128 | A Simple Thermodynamic Model for Quantitatively Addressing Cooperativity in Multicomponent Self-Assembly Processesâ€"Part 1: Theoretical Concepts and Application to Monometallic Coordination Complexes and Bimetallic Helicates Possessing Identical Binding Sites. Chemistry - A European Journal, 2005, 11, 5217-5226. | 1.7 | 61 |
| 129 | Measurement of heteroaggregation rate constants by simultaneous static and dynamic light scattering. Physical Chemistry Chemical Physics, 2005, 7, 1464. | 1.3 | 17 |
| 130 | Inframolecular Protonation Process of Norbadione A:â€‰ Influence of the Ionic Environment and Stereochemical Consequences. Journal of the American Chemical Society, 2005, 127, 1323-1333. | 6.6 | 21 |
| 131 | Colloid-Facilitated Transport of Strongly Sorbing Contaminants in Natural Porous Media:Â Mathematical Modeling and Laboratory Column Experimentsâ€. Environmental Science & Technology, 2005, 39, 6378-6386. | 4.6 | 113 |
| 132 | Super-Stoichiometric Charge Neutralization in Particleâ^'Polyelectrolyte Systems. Langmuir, 2005, 21, 3688-3698. | 1.6 | 130 |
| 133 | Aggregation and Charging of Colloidal Silica Particles:Â Effect of Particle Size. Langmuir, 2005, 21, 5761-5769. | 1.6 | 352 |
| 134 | Light-scattering form factors of asymmetric particle dimers from heteroaggregation experiments. Journal of Chemical Physics, 2005, 123, 064709. | 1.2 | 21 |
| 135 | Direct Force Measurements between Cellulose Surfaces and Colloidal Silica Particles. Biomacromolecules, 2005, 6, 3057-3066. | 2.6 | 52 |
| 136 | Programming Heteropolymetallic Lanthanide Helicates: Thermodynamic Recognition of Different Metal Ions Along the Strands. Chemistry - A European Journal, 2004, 10, 1091-1105. | 1.7 | 72 |
| 137 | Microscopic ionization mechanism of inositol tetrakisphosphates. Physical Chemistry Chemical Physics, 2004, 6, 1144. | 1.3 | 11 |
| 138 | Statistical mechanical approach to competitive binding of metal ions to multi-center receptors. Dalton Transactions, 2004, , 4096-4105. | 1.6 | 45 |
| 139 | Interaction between Charged Surfaces on the Poissonâ^'Boltzmann Level:Â The Constant Regulation Approximation. Journal of Physical Chemistry B, 2004, 108, 19467-19475. | 1.2 | 93 |
| 140 | Atomic Force Microscopy Study of the Adsorption and Electrostatic Self-Organization of Poly(amidoamine) Dendrimers on Mica. Langmuir, 2004, 20, 3264-3270. | 1.6 | 98 |
| 141 | A Simple Thermodynamic Model for Rationalizing the Formation of Self-Assembled Multimetallic Edifices:â€‰ Application to Triple-Stranded Helicates. Journal of the American Chemical Society, 2004, 126, 11589-11601. | 6.6 | 50 |
| 142 | Imaging the Coil-to-Globule Conformational Transition of a Weak Polyelectrolyte by Tuning the Polyelectrolyte Charge Density. Nano Letters, 2004, 4, 149-152. | 4.5 | 125 |
| 143 | Charging and Aggregation of Latex Particles by Oppositely Charged Dendrimers. Langmuir, 2004, 20, 7465-7473. | 1.6 | 105 |
| 144 | Synthesis and Protonation Behavior of Comblike Poly(ethyleneimine). Macromolecules, 2003, 36, 2500-2507. | 2.2 | 80 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Microscopic Protonation Equilibria of Poly(amidoamine) Dendrimers from Macroscopic Titrations. Macromolecules, 2003, 36, 4201-4207. | 2.2 | 305 |
| 146 | Resolution of Microscopic Protonation Mechanisms in Polyprotic Molecules. Chimia, 2002, 56, 695-701. | 0.3 | 10 |
| 147 | Predicting the Wettability of Quartz Surfaces Exposed to Dense Nonaqueous Phase Liquids. Environmental Science & Technology, 2001, 35, 2207-2213. | 4.6 | 47 |
| 148 | Binding of Metal Ions to Polyelectrolytes and Their Oligomeric Counterparts:Â An Application of a Generalized Potts Modelâ€. Journal of Physical Chemistry B, 2001, 105, 6666-6674. | 1.2 | 46 |
| 149 | Aggregation of Colloidal Particles in the Presence of Oppositely Charged Polyelectrolytes:Â Effect of Surface Charge Heterogeneities. Langmuir, 2001, 17, 5225-5231. | 1.6 | 105 |
| 150 | Release and transport of colloidal particles in natural porous media: 2. Experimental results and effects of ligands. Water Resources Research, 2001, 37, 571-582. | 1.7 | 40 |
| 151 | Release and transport of colloidal particles in natural porous media: 1. Modeling. Water Resources Research, 2001, 37, 559-570. | 1.7 | 27 |
| 152 | Ionization properties of interfaces and linear polyelectrolytes: a discrete charge Ising model. Physica A: Statistical Mechanics and Its Applications, 2001, 298, 1-23. | 1.2 | 21 |
| 153 | Aggregation and deposition kinetics of mobile colloidal particles in natural porous media. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 191, 179-188. | 2.3 | 112 |
| 154 | Ionization Processes and Proton Binding in Polyprotic Systems: Small Molecules, Proteins, Interfaces, and Polyelectrolytes. , 2001, , 99-339. | | 65 |
| 155 | Influence of the Secondary Interaction Energy Minimum on the Early Stages of Colloidal Aggregation. Journal of Colloid and Interface Science, 2000, 225, 460-465. | 5.0 | 28 |
| 156 | Diffusional deposition of colloidal particles: electrostatic interaction and size polydispersity effects. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2000, 165, 79-93. | 2.3 | 58 |
| 157 | Charging and Aggregation Properties of Carboxyl Latex Particles:Â Experiments versus DLVO Theory. Langmuir, 2000, 16, 2566-2575. | 1.6 | 272 |
| 158 | A Cluster Expansion Method for the Complete Resolution of Microscopic Ionization Equilibria from NMR Titrations. Analytical Chemistry, 2000, 72, 3272-3279. | 3.2 | 38 |
| 159 | Observation of the Mobility Maximum Predicted by the Standard Electrokinetic Model for Highly Charged Amidine Latex Particles. Langmuir, 2000, 16, 5209-5212. | 1.6 | 55 |
| 160 | Exact Poisson-Boltzmann solution for the interaction of dissimilar charge-regulating surfaces. Physical Review E, 1999, 60, 7040-7048. | 0.8 | 117 |
| 161 | Ion binding to natural organic matter: competition, heterogeneity, stoichiometry and thermodynamic consistency. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 151, 147-166. | 2.3 | 708 |
| 162 | Electrostatic Interaction of Colloidal Surfaces with Variable Charge. Journal of Physical Chemistry B, 1999, 103, 2918-2928. | 1.2 | 144 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Electric double layer interaction of ionizable surfaces: Charge regulation for arbitrary potentials. Journal of Chemical Physics, 1999, 111, 382-385. | 1.2 | 53 |
| 164 | Influence of the distance between ionizable groups on the protonation behavior of various hexaamines. Physical Chemistry Chemical Physics, 1999, 1, 5649-5652. | 1.3 | 11 |
| 165 | Multicomponent Transport of Sulfate in a Goethiteâ^'Silica Sand System at Variable pH and Ionic Strength. Environmental Science & Technology, 1999, 33, 3443-3450. | 4.6 | 24 |
| 166 | Mobile Subsurface Colloids and Their Role in Contaminant Transport. Advances in Agronomy, 1999, 66, 121-193. | 2.4 | 531 |
| 167 | Long-Term Release Kinetics of Colloidal Particles from Natural Porous Media. Environmental Science & Technology, 1999, 33, 4054-4060. | 4.6 | 62 |
| 168 | Colloidal Particles at Water-Glass Interface: Deposition Kinetics and Surface Heterogeneity. Journal of Colloid and Interface Science, 1998, 206, 314-321. | 5.0 | 35 |
| 169 | Acid-base properties of poly(propylene imine)dendrimers. Polymer, 1998, 39, 2657-2664. | 1.8 | 131 |
| 170 | Modeling of Competitive Ion Binding to Heterogeneous Materials with Affinity Distributions. , 1998, , 467-482. | | 4 |
| 171 | Classical theories of reaction dynamics: Transition state theory, spatial diffusion controlled reactions, and the energy diffusion limit. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 2717-2723. | 1.7 | 7 |
| 172 | Transport of in Situ Mobilized Colloidal Particles in Packed Soil Columns. Environmental Science & Technology, 1998, 32, 3562-3569. | 4.6 | 219 |
| 173 | Towards a quantitative description of ionization properties of linear and branched polyelectrolytes. , 1998, , 142-152. | | 5 |
| 174 | Determination of light-scattering form factors of latex particle dimers with simultaneous static and dynamic light scattering in an aggregating suspension. Physical Review E, 1997, 56, 6945-6953. | 0.8 | 33 |
| 175 | Proton Binding Characteristics of Branched Polyelectrolytes. Macromolecules, 1997, 30, 2151-2158. | 2.2 | 142 |
| 176 | Origin of 1-pK and 2-pK Models for Ionizable Waterâ^'Solid Interfaces. Langmuir, 1997, 13, 2608-2613. | 1.6 | 103 |
| 177 | Experimental determination of colloid deposition rates and collision efficiencies in natural porous media. Water Resources Research, 1997, 33, 1129-1137. | 1.7 | 257 |
| 178 | Reply to the preceding comment by J.A. Schwarz. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 122, 267-268. | 2.3 | 0 |
| 179 | Interpretation of Competitive Adsorption Isotherms in Terms of Affinity Distributions. Journal of Colloid and Interface Science, 1997, 191, 247-255. | 5.0 | 48 |
| 180 | Measurement of Absolute Coagulation Rate Constants for Colloidal Particles: Comparison of Single and Multiparticle Light Scattering Techniques. Journal of Colloid and Interface Science, 1997, 192, 463-470. | 5.0 | 95 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Colloid-Facilitated Transport of Strongly Sorbing Contaminants in Natural Porous Media:Â A Laboratory Column Study. Environmental Science & Technology, 1996, 30, 3118-3123. | 4.6 | 305 |
| 182 | Predicting Multicomponent Adsorption and Transport of Fluoride at Variable pH in a Goethiteâ"Silica Sand System. Environmental Science & Technology, 1996, 30, 481-488. | 4.6 | 53 |
| 183 | Affinity Distribution Description of Competitive Ion Binding to Heterogeneous Materials. Langmuir, 1996, 12, 6127-6137. | 1.6 | 60 |
| 184 | Ising models and acidâ€base properties of weak polyelectrolytes. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 764-769. | 0.9 | 14 |
| 185 | Coagulation Rate Measurements of Colloidal Particles by Simultaneous Static and Dynamic Light Scattering. Langmuir, 1996, 12, 5541-5549. | 1.6 | 394 |
| 186 | Affinity distributions and acid-base properties of homogeneous and heterogeneous sorbents: exact results versus experimental data inversion. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 107, 285-296. | 2.3 | 42 |
| 187 | Quantitative description of multi-component reactive transport in porous media: An empirical approach. Transport in Porous Media, 1996, 25, 193-204. | 1.2 | 9 |
| 188 | Measurement of Sorption Isotherms with Flow-Through Reactors. Environmental Science & Technology, 1995, 29, 2317-2321. | 4.6 | 51 |
| 189 | Regularized Least-Squares Methods for the Calculation of Discrete and Continuous Affinity Distributions for Heterogeneous Sorbents. Environmental Science & Technology, 1995, 29, 413-425. | 4.6 | 101 |
| 190 | Modeling of Heavy Metal Transport in a Contaminated Soil. Journal of Environmental Quality, 1994, 23, 1239-1248. | 1.0 | 34 |
| 191 | Ising Models of Polyprotic Acids and Bases. The Journal of Physical Chemistry, 1994, 98, 6038-6045. | 2.9 | 60 |
| 192 | Cation transport in natural porous media on laboratory scale: multicomponent effects. Journal of Contaminant Hydrology, 1994, 16, 319-337. | 1.6 | 23 |
| 193 | Convective transport of acids and bases in porous media. Water Resources Research, 1994, 30, 2937-2944. | 1.7 | 33 |
| 194 | Chromatographic Charge Density Determination of Materials with Low Surface Area. Langmuir, 1994, 10, 855-860. | 1.6 | 15 |
| 195 | Affinity Distributions of Polyampholytes with Interacting Acid-Base Groups. Langmuir, 1994, 10, 2863-2865. | 1.6 | 24 |
| 196 | Stability ratios for doublet formation and for deposition of colloidal particles with arbitrary interaction potentials: An analytical approximation. Langmuir, 1993, 9, 2247-2249. | 1.6 | 11 |
| 197 | Determination of nonlinear adsorption isotherms from column experiments: an alternative to batch studies. Environmental Science & Technology, 1993, 27, 943-948. | 4.6 | 130 |
| 198 | Phenomenological theories of globular microemulsions. Advances in Colloid and Interface Science, 1992, 37, 195-217. | 7.0 | 34 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Reaction-rate theory: fifty years after Kramers. Reviews of Modern Physics, 1990, 62, 251-341. | 16.4 | 5,326 |
| 200 | Generalized reactive flux method for numerical evaluation of rate constants. Journal of Chemical Physics, 1990, 92, 5307-5310. | 1.2 | 24 |
| 201 | Surfactant monolayer rigidities from Kerr effect measurements on microemulsions. Chemical Physics Letters, 1989, 157, 457-461. | 1.2 | 41 |
| 202 | Polydispersity in dilute microemulsions: A consequence of the monomer-droplet equilibrium. Journal of Colloid and Interface Science, 1989, 131, 366-381. | 5.0 | 18 |
| 203 | Conductivity of water-in-oil microemulsions: a quantitative charge fluctuation model. The Journal of Physical Chemistry, 1989, 93, 314-317. | 2.9 | 255 |
| 204 | From micelles to microemulsion droplets: Size distributions, shape fluctuations, and interfacial tensions. Journal of Chemical Physics, 1989, 91, 6268-6281. | 1.2 | 71 |
| 205 | Shape fluctuations and polarizability of droplets. Chemical Physics Letters, 1988, 147, 195-202. | 1.2 | 12 |
| 206 | Two percolation processes in microemulsions. The Journal of Physical Chemistry, 1988, 92, 206-211. | 2.9 | 129 |
| 207 | Classical and modern methods in reaction rate theory. The Journal of Physical Chemistry, 1988, 92, 3711-3725. | 2.9 | 377 |
| 208 | Molecular dynamics study of an isomerizing diatomic in a Lennardâ€Jones fluid. Journal of Chemical Physics, 1988, 89, 4833-4847. | 1.2 | 122 |
| 209 | Calculation of dynamic friction on intramolecular degrees of freedom. The Journal of Physical Chemistry, 1987, 91, 4995-4998. | 2.9 | 120 |
| 210 | Activated barrier crossing for many degrees of freedom: Corrections to the low friction Kramers result. Journal of Chemical Physics, 1987, 86, 2444-2446. | 1.2 | 23 |
| 211 | Numerical simulation of rate constants for a two degree of freedom system in the weak collision limit. Journal of Chemical Physics, 1987, 86, 4296-4297. | 1.2 | 18 |
| 212 | The influence of intramolecular vibrational relaxation on the pressure dependence of unimolecular rate constants. Journal of Chemical Physics, 1986, 85, 146-149. | 1.2 | 28 |
| 213 | Energy and angular momentum diffusion theory of dissociation rate constants. Journal of Chemical Physics, 1986, 84, 4327-4331. | 1.2 | 20 |
| 214 | Nonâ€Markovian activated rate processes: Comparison of current theories with numerical simulation data. Journal of Chemical Physics, 1986, 84, 1788-1794. | 1.2 | 161 |
| 215 | Collisional model for diatomic recombination reactions. The Journal of Physical Chemistry, 1985, 89, 3994-3998. | 2.9 | 17 |
| 216 | Reaction dynamics in the low pressure regime: The Kramers model and collisional models of molecules with many degrees of freedom. Journal of Chemical Physics, 1985, 82, 794-799. | 1.2 | 76 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | Shortcomings of current theories of nonâ€Markovian activated rate processes. Journal of Chemical Physics, 1985, 83, 3172-3174. | 1.2 | 52 |
| 218 | Solution of the Poisson-Boltzmann equation for surface excesses of ions in the diffuse layer at the oxide-electrolyte interface. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1983, 150, 325-337. | 0.3 | 30 |
| 219 | Stabilization of Aqueous Colloidal Dispersions: Electrostatic and Steric Forces. , 0, , 6840-6849. | | 0 |