

Matthias M Ballauff

List of Publications by Year in descending order

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287
papers

23,206
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299
docs citations

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18198
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Kinetic Analysis of Catalytic Reduction of 4-Nitrophenol by Metallic Nanoparticles Immobilized in Spherical Polyelectrolyte Brushes. <i>Journal of Physical Chemistry C</i> , 2010, 114, 8814-8820. | 3.1 | 1,068 |
| 2 | Catalysis by metallic nanoparticles in aqueous solution: model reactions. <i>Chemical Society Reviews</i> , 2012, 41, 5577. | 38.1 | 966 |
| 3 | Thermosensitive Core-Shell Particles as Carriers for Ag Nanoparticles: Modulating the Catalytic Activity by a Phase Transition in Networks. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 813-816. | 13.8 | 698 |
| 4 | Catalytic Activity of Palladium Nanoparticles Encapsulated in Spherical Polyelectrolyte Brushes and Core-Shell Microgels. <i>Chemistry of Materials</i> , 2007, 19, 1062-1069. | 6.7 | 662 |
| 5 | Protein Interactions with Polymer Coatings and Biomaterials. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8004-8031. | 13.8 | 614 |
| 6 | Catalytic Activity of Faceted Gold Nanoparticles Studied by a Model Reaction: Evidence for Substrate-Induced Surface Restructuring. <i>ACS Catalysis</i> , 2011, 1, 908-916. | 11.2 | 504 |
| 7 | Smart nanoparticles: Preparation, characterization and applications. <i>Polymer</i> , 2007, 48, 1815-1823. | 3.8 | 385 |
| 8 | Polyelectrolyte Brushes. <i>Advances in Polymer Science</i> , 2004, , 79-150. | 0.8 | 351 |
| 9 | Thermosensitive Au-PNIPAAm Core-Shell Nanoparticles with Tunable Selectivity for Catalysis. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 2229-2233. | 13.8 | 350 |
| 10 | High Catalytic Activity of Platinum Nanoparticles Immobilized on Spherical Polyelectrolyte Brushes. <i>Langmuir</i> , 2005, 21, 12229-12234. | 3.5 | 344 |
| 11 | Dendrimers in Solution: Insight from Theory and Simulation. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 2998-3020. | 13.8 | 343 |
| 12 | Tuning the Thermoresponsive Properties of Weak Polyelectrolytes: Aqueous Solutions of Star-Shaped and Linear Poly(<i>N,N</i> -dimethylaminoethyl Methacrylate). <i>Macromolecules</i> , 2007, 40, 8361-8366. | 4.8 | 341 |
| 13 | Thermosensitive Core-Shell Particles as Carrier Systems for Metallic Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2006, 110, 3930-3937. | 2.6 | 320 |
| 14 | Kinetic Analysis of the Catalytic Reduction of 4-Nitrophenol by Metallic Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2014, 118, 18618-18625. | 3.1 | 316 |
| 15 | Stiff-Chain Polymers? Structure, Phase Behavior, and Properties. <i>Angewandte Chemie International Edition in English</i> , 1989, 28, 253-267. | 4.4 | 297 |
| 16 | Spherical polyelectrolyte brushes. <i>Progress in Polymer Science</i> , 2007, 32, 1135-1151. | 24.7 | 290 |
| 17 | Polyelectrolyte brushes. <i>Current Opinion in Colloid and Interface Science</i> , 2006, 11, 316-323. | 7.4 | 286 |
| 18 | Thermosensitive core-shell microgels: From colloidal model systems to nanoreactors. <i>Progress in Polymer Science</i> , 2011, 36, 767-792. | 24.7 | 275 |

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Synthesis of Spherical Polyelectrolyte Brushes by Photoemulsion Polymerization. <i>Macromolecules</i> , 1999, 32, 6043-6046. | 4.8 | 264 |
| 20 | Single Nanocrystals of Platinum Prepared by Partial Dissolution of Au-Pt Nanoalloys. <i>Science</i> , 2009, 323, 617-620. | 12.6 | 255 |
| 21 | Tuning the Thermoresponsiveness of Weak Polyelectrolytes by pH and Light: Lower and Upper Critical-Solution Temperature of Poly(<i>N,N</i> -dimethylaminoethyl methacrylate). <i>Journal of the American Chemical Society</i> , 2007, 129, 14538-14539. | 13.7 | 247 |
| 22 | Adsorption of proteins on spherical polyelectrolyte brushes in aqueous solution. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 1671-1677. | 2.8 | 221 |
| 23 | In Situ Formation of Ag Nanoparticles in Spherical Polyacrylic Acid Brushes by UV Irradiation. <i>Journal of Physical Chemistry C</i> , 2007, 111, 7676-7681. | 3.1 | 221 |
| 24 | Water-soluble organo-silica hybrid nanowires. <i>Nature Materials</i> , 2008, 7, 718-722. | 27.5 | 217 |
| 25 | Spatial Dimensions of Colloidal Polyelectrolyte Brushes As Determined by Dynamic Light Scattering. <i>Langmuir</i> , 2000, 16, 8719-8726. | 3.5 | 202 |
| 26 | Title is missing!. <i>Die Makromolekulare Chemie Rapid Communications</i> , 1986, 7, 407-414. | 1.1 | 199 |
| 27 | Thermosensitive core-shell microgel as a nanoreactor for catalytic active metal nanoparticles. <i>Journal of Materials Chemistry</i> , 2009, 19, 3955. | 6.7 | 191 |
| 28 | Stable Bimetallic Gold-Platinum Nanoparticles Immobilized on Spherical Polyelectrolyte Brushes: Synthesis, Characterization, and Application for the Oxidation of Alcohols. <i>Advanced Materials</i> , 2008, 20, 1928-1933. | 21.0 | 188 |
| 29 | Synthesis, Characterization and Behavior in Aqueous Solution of Star-Shaped Poly(acrylic acid). <i>Macromolecular Chemistry and Physics</i> , 2005, 206, 1813-1825. | 2.2 | 183 |
| 30 | Observation of the Volume Transition in Thermosensitive Core-Shell Latex Particles by Small-Angle X-ray Scattering. <i>Macromolecules</i> , 1998, 31, 8912-8917. | 4.8 | 174 |
| 31 | Interaction of proteins with linear polyelectrolytes and spherical polyelectrolyte brushes in aqueous solution. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 5269. | 2.8 | 169 |
| 32 | Self-Assembly of Janus Cylinders into Hierarchical Superstructures. <i>Journal of the American Chemical Society</i> , 2009, 131, 4720-4728. | 13.7 | 165 |
| 33 | Rheology of a Temperature Sensitive Core-Shell Latex. <i>Langmuir</i> , 1999, 15, 102-106. | 3.5 | 162 |
| 34 | Adsorption of \hat{I}^2 -Lactoglobulin on Spherical Polyelectrolyte Brushes: Direct Proof of Counterion Release by Isothermal Titration Calorimetry. <i>Journal of the American Chemical Society</i> , 2010, 132, 3159-3163. | 13.7 | 159 |
| 35 | Formation and Growth of Amorphous Colloidal CaCO ₃ Precursor Particles as Detected by Time-Resolved SAXS. <i>Langmuir</i> , 2002, 18, 8364-8369. | 3.5 | 157 |
| 36 | pH and salt responsive poly(<i>N,N</i> -dimethylaminoethyl methacrylate) cylindrical brushes and their quaternized derivatives. <i>Polymer</i> , 2008, 49, 3957-3964. | 3.8 | 148 |

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | Collapse of Spherical Polyelectrolyte Brushes in the Presence of Multivalent Counterions. <i>Physical Review Letters</i> , 2006, 97, 158301. | 7.8 | 147 |
| 38 | “Nano-tree” type spherical polymer brush particles as templates for metallic nanoparticles. <i>Polymer</i> , 2006, 47, 4985-4995. | 3.8 | 143 |
| 39 | Cationic Spherical Polyelectrolyte Brushes as Nanoreactors for the Generation of Gold Particles. <i>Macromolecular Rapid Communications</i> , 2004, 25, 547-552. | 3.9 | 142 |
| 40 | High Elongation of Polyelectrolyte Chains in the Osmotic Limit of Spherical Polyelectrolyte Brushes: A Study by Cryogenic Transmission Electron Microscopy. <i>Journal of the American Chemical Society</i> , 2005, 127, 9688-9689. | 13.7 | 137 |
| 41 | Activity of Enzymes Immobilized in Colloidal Spherical Polyelectrolyte Brushes. <i>Biomacromolecules</i> , 2005, 6, 948-955. | 5.4 | 131 |
| 42 | Porous Ti ₄ O ₇ Particles with Interconnected Pore Structure as a High Efficiency Polysulfide Mediator for Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1701176. | 14.9 | 127 |
| 43 | Secondary Structure Analysis of Proteins Embedded in Spherical Polyelectrolyte Brushes by FT-IR Spectroscopy. <i>Analytical Chemistry</i> , 2004, 76, 2813-2819. | 6.5 | 124 |
| 44 | Synthesis and Characterization of Star-Shaped Poly(<i>N,N</i> -dimethylaminoethyl methacrylate) and Its Quaternized Ammonium Salts. <i>Macromolecules</i> , 2007, 40, 5689-5697. | 4.8 | 123 |
| 45 | Composite Hydrogels: Robust Carriers for Catalytic Nanoparticles. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 254-261. | 2.2 | 123 |
| 46 | Viscoelasticity and shear flow of concentrated, noncrystallizing colloidal suspensions: Comparison with mode-coupling theory. <i>Journal of Rheology</i> , 2009, 53, 707-726. | 2.6 | 120 |
| 47 | Kettensteife Polymere – Struktur, Phasenverhalten und Eigenschaften. <i>Angewandte Chemie</i> , 1989, 101, 261-276. | 2.0 | 118 |
| 48 | Gaussian effective interaction between flexible dendrimers of fourth generation: A theoretical and experimental study. <i>Journal of Chemical Physics</i> , 2002, 117, 1869-1877. | 3.0 | 118 |
| 49 | Small-angle x-ray and neutron scattering studies of the volume phase transition in thermosensitive core-shell colloids. <i>Journal of Chemical Physics</i> , 2001, 114, 10471-10478. | 3.0 | 116 |
| 50 | Crystallization of Calcium Carbonate Observed In-situ by Combined Small- and Wide-angle X-ray Scattering. <i>Journal of Physical Chemistry B</i> , 2003, 107, 5123-5125. | 2.6 | 112 |
| 51 | Analysis of the Structure of Dendrimers in Solution by Small-Angle Neutron Scattering Including Contrast Variation. <i>Macromolecules</i> , 1999, 32, 4079-4087. | 4.8 | 111 |
| 52 | Single Lamella Nanoparticles of Polyethylene. <i>Nano Letters</i> , 2007, 7, 2024-2029. | 9.1 | 111 |
| 53 | Characterization of the viscoelastic behavior of complex fluids using the piezoelectric axial vibrator. <i>Journal of Rheology</i> , 2005, 49, 851-863. | 2.6 | 104 |
| 54 | Core-shell microgels as smart carriers for enzymes. <i>Soft Matter</i> , 2012, 8, 1428-1436. | 2.7 | 103 |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Title is missing!. Die Makromolekulare Chemie, 1993, 194, 53-64. | 1.1 | 102 |
| 56 | Soft Interaction between Dissolved Flexible Dendrimers: Theory and Experiment. Macromolecules, 2001, 34, 2914-2920. | 4.8 | 102 |
| 57 | Imaging the Volume Transition in Thermosensitive Core-Shell Particles by Cryo-Transmission Electron Microscopy. Langmuir, 2006, 22, 2403-2406. | 3.5 | 102 |
| 58 | Proteins and polyelectrolytes: A charged relationship. Current Opinion in Colloid and Interface Science, 2012, 17, 90-96. | 7.4 | 101 |
| 59 | Mechanism of the Formation of Amorphous Gold Nanoparticles within Spherical Polyelectrolyte Brushes. Macromolecular Chemistry and Physics, 2007, 208, 1542-1547. | 2.2 | 100 |
| 60 | Distribution of End Groups within a Dendritic Structure: A SANS Study Including Contrast Variation. Macromolecules, 2002, 35, 8098-8105. | 4.8 | 99 |
| 61 | Experimental study of electrostatically stabilized colloidal particles: Colloidal stability and charge reversal. Journal of Colloid and Interface Science, 2011, 358, 62-67. | 9.4 | 99 |
| 62 | Phase equilibria in rodlike systems with flexible side chains. Macromolecules, 1986, 19, 1366-1374. | 4.8 | 98 |
| 63 | Synthesis and properties of polyesters based on 2,5-furandicarboxylic acid and 1,4:3,6-dianhydrohexitols. Polymer, 1993, 34, 5003-5006. | 3.8 | 98 |
| 64 | Counterion distributions and effective interactions of spherical polyelectrolyte brushes. Colloid and Polymer Science, 2004, 282, 910-917. | 2.1 | 97 |
| 65 | Thermosensitive core-shell particles as model systems for studying the flow behavior of concentrated colloidal dispersions. Journal of Chemical Physics, 2006, 125, 204906. | 3.0 | 97 |
| 66 | Creep in Colloidal Glasses. Physical Review Letters, 2012, 108, 255701. | 7.8 | 96 |
| 67 | Residual Stresses in Glasses. Physical Review Letters, 2013, 110, 215701. | 7.8 | 95 |
| 68 | Nanostructural Evolution and Self-Healing Mechanism of Micellar Hydrogels. Macromolecules, 2016, 49, 2281-2287. | 4.8 | 95 |
| 69 | Enhanced Activity of Enzymes Immobilized in Thermoresponsive Core-Shell Microgels. Journal of Physical Chemistry B, 2009, 113, 16039-16045. | 2.6 | 94 |
| 70 | Adsorption of proteins to functional polymeric nanoparticles. Polymer, 2013, 54, 2835-2849. | 3.8 | 94 |
| 71 | Degradation of chain molecules. 1. Exact solution of the kinetic equations. Macromolecules, 1981, 14, 654-658. | 4.8 | 92 |
| 72 | Polyelectrolyte-Mediated Protein Adsorption: Fluorescent Protein Binding to Individual Polyelectrolyte Nanospheres. Journal of Physical Chemistry B, 2005, 109, 5418-5420. | 2.6 | 92 |

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| 73 | Nanoblossoms: Light-Induced Conformational Changes of Cationic Polyelectrolyte Stars in the Presence of Multivalent Counterions. <i>Nano Letters</i> , 2007, 7, 167-171. | 9.1 | 92 |
| 74 | Nanoscopic Polymer Particles with a Well-Defined Surface: Synthesis, Characterization, and Properties. <i>Macromolecular Chemistry and Physics</i> , 2003, 204, 220-234. | 2.2 | 90 |
| 75 | Precise and Reversible Protein-Microtubule-Like Structure with Helicity Driven by Dual Supramolecular Interactions. <i>Journal of the American Chemical Society</i> , 2016, 138, 1932-1937. | 13.7 | 85 |
| 76 | Sphere-to-Rod Transition of Micelles formed by the Semicrystalline Polybutadiene- <i>b</i> -Poly(ethylene oxide) Block Copolymer in a Selective Solvent. <i>Macromolecular Rapid Communications</i> , 2010, 31, 449-453. | 3.9 | 84 |
| 77 | Kinetic analysis of the reduction of 4-nitrophenol catalyzed by Au/Pd nanoalloys immobilized in spherical polyelectrolyte brushes. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 28137-28143. | 2.8 | 83 |
| 78 | Supramolecular Structures Generated by Spherical Polyelectrolyte Brushes and their Application in Catalysis. <i>Macromolecular Rapid Communications</i> , 2009, 30, 806-815. | 3.9 | 82 |
| 79 | Rigid rod polymers with flexible side chains. <i>Polymer</i> , 1991, 32, 2096-2105. | 3.8 | 81 |
| 80 | Suzuki- and Heck-Type Cross-Coupling with Palladium Nanoparticles Immobilized on Spherical Polyelectrolyte Brushes. <i>Advanced Synthesis and Catalysis</i> , 2008, 350, 493-500. | 4.3 | 81 |
| 81 | Shear stresses of colloidal dispersions at the glass transition in equilibrium and in flow. <i>Journal of Chemical Physics</i> , 2008, 128, 204902. | 3.0 | 81 |
| 82 | Analysis of thermosensitive core-shell colloids by small-angle neutron scattering including contrast variation. <i>Physical Chemistry Chemical Physics</i> , 2001, 3, 1169-1174. | 2.8 | 80 |
| 83 | Self-Diffusion and Cooperative Diffusion in Semidilute Polymer Solutions As Measured by Fluorescence Correlation Spectroscopy. <i>Macromolecules</i> , 2009, 42, 9537-9547. | 4.8 | 80 |
| 84 | Title is missing!. <i>Die Makromolekulare Chemie</i> , 1987, 188, 2865-2873. | 1.1 | 79 |
| 85 | On the Mechanism of Uptake of Globular Proteins by Polyelectrolyte Brushes: A Two-Gradient Self-Consistent Field Analysis. <i>Langmuir</i> , 2007, 23, 3937-3946. | 3.5 | 77 |
| 86 | Lithiation of Crystalline Silicon As Analyzed by Operando Neutron Reflectivity. <i>ACS Nano</i> , 2016, 10, 7458-7466. | 14.6 | 77 |
| 87 | Protein Sorption to Charged Microgels: Characterizing Binding Isotherms and Driving Forces. <i>Langmuir</i> , 2012, 28, 14373-14385. | 3.5 | 76 |
| 88 | Can dendrimers be viewed as compact colloids? A simulation study of the fluctuations in a dendrimer of fourth generation. <i>Journal of Chemical Physics</i> , 2003, 118, 1979-1988. | 3.0 | 75 |
| 89 | Counterion Distribution around a Spherical Polyelectrolyte Brush Probed by Anomalous Small-Angle X-ray Scattering. <i>Macromolecules</i> , 2004, 37, 8152-8159. | 4.8 | 75 |
| 90 | Ligand-free Gold Nanoparticles as a Reference Material for Kinetic Modelling of Catalytic Reduction of 4-Nitrophenol. <i>Catalysis Letters</i> , 2015, 145, 1105-1112. | 2.6 | 75 |

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|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 91 | The volume transition in thermosensitive core-shell latex particles containing charged groups. <i>Colloid and Polymer Science</i> , 1999, 277, 1210-1214. | 2.1 | 74 |
| 92 | Direct imaging of temperature-sensitive core-shell latexes by cryogenic transmission electron microscopy. <i>Colloid and Polymer Science</i> , 2008, 286, 805-812. | 2.1 | 73 |
| 93 | Catalytic activity of nanoalloys from gold and palladium. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 6487. | 2.8 | 73 |
| 94 | Adsorption of Bovine Hemoglobin onto Spherical Polyelectrolyte Brushes Monitored by Small-Angle X-ray Scattering and Fourier Transform Infrared Spectroscopy. <i>Biomacromolecules</i> , 2007, 8, 3674-3681. | 5.4 | 71 |
| 95 | Ideal Polyethylene Nanocrystals. <i>Journal of the American Chemical Society</i> , 2013, 135, 11645-11650. | 13.7 | 71 |
| 96 | Design of block copolymer micelles via crystallization. <i>Polymer</i> , 2015, 62, A1-A13. | 3.8 | 70 |
| 97 | Hybrids of Magnetic Nanoparticles with Double-â€Hydrophilic Core/Shell Cylindrical Polymer Brushes and Their Alignment in a Magnetic Field. <i>Advanced Functional Materials</i> , 2010, 20, 4182-4189. | 14.9 | 69 |
| 98 | Manipulating cylindrical polyelectrolyte brushes on the nanoscale by counterions: collapse transition to helical structures. <i>Soft Matter</i> , 2009, 5, 379-384. | 2.7 | 68 |
| 99 | The distribution of Sr 2+ counterions around polyacrylate chains analyzed by anomalous small-angle X-ray scattering. <i>Europhysics Letters</i> , 2004, 66, 331-337. | 2.0 | 67 |
| 100 | Spherical polyelectrolyte brushes as nanoreactors for the generation of metallic and oxidic nanoparticles: Synthesis and application in catalysis. <i>Progress in Polymer Science</i> , 2016, 59, 86-104. | 24.7 | 65 |
| 101 | Understanding the Interaction of Polyelectrolyte Architectures with Proteins and Biosystems. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 3882-3904. | 13.8 | 65 |
| 102 | Interaction of human serum albumin with short polyelectrolytes: a study by calorimetry and computer simulations. <i>Soft Matter</i> , 2015, 11, 4630-4639. | 2.7 | 64 |
| 103 | Stimuli-Responsive Organosilica Hybrid Nanowires Decorated with Metal Nanoparticles. <i>Chemistry of Materials</i> , 2010, 22, 2626-2634. | 6.7 | 63 |
| 104 | Self-assembly of crystalline-â€coil diblock copolymers in solution: experimental phase map. <i>Soft Matter</i> , 2012, 8, 3163. | 2.7 | 63 |
| 105 | Directed Motion of Proteins along Tethered Polyelectrolytes. <i>Physical Review Letters</i> , 2008, 100, 158301. | 7.8 | 62 |
| 106 | Crystallization-induced switching of the morphology of poly(ethylene oxide)-block-polybutadiene micelles. <i>Soft Matter</i> , 2009, 5, 208-213. | 2.7 | 62 |
| 107 | Charge Matters: Mutations in Omicron Variant Favor Binding to Cells. <i>ChemBioChem</i> , 2022, 23, e202100681. | 2.6 | 62 |
| 108 | Synthesis and Analysis of Zwitterionic Spherical Polyelectrolyte Brushes in Aqueous Solution. <i>Macromolecules</i> , 2011, 44, 1654-1660. | 4.8 | 61 |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 109 | Switching the Morphologies of Cylindrical Polycation Brushes by Ionic and Supramolecular Inclusion Complexes. <i>Journal of the American Chemical Society</i> , 2009, 131, 1640-1641. | 13.7 | 60 |
| 110 | Adsorption of RNase A on Cationic Polyelectrolyte Brushes: A Study by Isothermal Titration Calorimetry. <i>Biomacromolecules</i> , 2011, 12, 3936-3944. | 5.4 | 60 |
| 111 | Overshoots in stress-strain curves: Colloid experiments and schematic mode coupling theory. <i>Journal of Rheology</i> , 2013, 57, 149-175. | 2.6 | 60 |
| 112 | Quantifying the Reversible Association of Thermosensitive Nanoparticles. <i>Physical Review Letters</i> , 2011, 107, 168303. | 7.8 | 59 |
| 113 | Spherical polyelectrolyte brushes in the presence of multivalent counterions: The effect of fluctuations and correlations as determined by molecular dynamics simulations. <i>Physical Review E</i> , 2008, 77, 031805. | 2.1 | 58 |
| 114 | Microgels as Nanoreactors: Applications in Catalysis. <i>Advances in Polymer Science</i> , 2010, , 129-163. | 0.8 | 58 |
| 115 | Competitive adsorption of multiple proteins to nanoparticles: the Vroman effect revisited. <i>Molecular Physics</i> , 2018, 116, 3154-3163. | 1.7 | 58 |
| 116 | Flow curves of dense colloidal dispersions: Schematic model analysis of the shear-dependent viscosity near the colloidal glass transition. <i>Journal of Chemical Physics</i> , 2005, 122, 094707. | 3.0 | 57 |
| 117 | Binding of Oppositely Charged Surfactants to Spherical Polyelectrolyte Brushes: A Study by Cryogenic Transmission Electron Microscopy. <i>Langmuir</i> , 2007, 23, 3615-3619. | 3.5 | 56 |
| 118 | A Shielding Topology Stabilizes the Early Stage Protein-Mineral Complexes of Fetuin-A and Calcium Phosphate: A Time-Resolved Small-Angle X-ray Study. <i>ChemBioChem</i> , 2009, 10, 735-740. | 2.6 | 56 |
| 119 | Colloidal gelation with variable attraction energy. <i>Journal of Chemical Physics</i> , 2013, 138, 104908. | 3.0 | 56 |
| 120 | Correlation of capacity fading processes and electrochemical impedance spectra in lithium/sulfur cells. <i>Journal of Power Sources</i> , 2016, 323, 107-114. | 7.8 | 55 |
| 121 | Dumbbell-Shaped Polyelectrolyte Brushes Studied by Depolarized Dynamic Light Scattering. <i>Journal of Physical Chemistry B</i> , 2008, 112, 14843-14850. | 2.6 | 54 |
| 122 | Preparation of Polystyrene-Poly(N-isopropylacrylamide) (PS-PNIPA) Core-Shell Particles by Photoemulsion Polymerization. <i>Macromolecular Rapid Communications</i> , 2006, 27, 1137-1141. | 3.9 | 53 |
| 123 | Double-Grafted Cylindrical Brushes: Synthesis and Characterization of Poly(lauryl methacrylate) Brushes. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 1666-1675. | 2.2 | 53 |
| 124 | Analysis of the Spatial Dimensions of Fully Aromatic Dendrimers. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 109-112. | 13.8 | 51 |
| 125 | Interaction of Proteins with Polyelectrolytes: Comparison of Theory to Experiment. <i>Langmuir</i> , 2019, 35, 5373-5391. | 3.5 | 51 |
| 126 | Synthesis and Intrinsic Viscosity in Salt-Free Solution of a Stiff-Chain Cationic Poly(p-phenylene) Polyelectrolyte. <i>Macromolecules</i> , 1996, 29, 6962-6965. | 4.8 | 50 |

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|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 127 | Correlating pore size and shape to local disorder in microporous carbon: A combined small angle neutron and X-ray scattering study. Carbon, 2017, 123, 440-447. | 10.3 | 50 |
| 128 | High Activity of Enzymes Immobilized in Colloidal Nanoreactors. Macromolecular Bioscience, 2004, 4, 13-16. | 4.1 | 49 |
| 129 | Capacity fading in lithium/sulfur batteries: A linear four-state model. Journal of Power Sources, 2014, 267, 648-654. | 7.8 | 49 |
| 130 | In Situ Synthesis of Catalytic Active Au Nanoparticles onto Gibbsiteâ€“Polydopamine Coreâ€“Shell Nanoplates. Langmuir, 2015, 31, 9483-9491. | 3.5 | 49 |
| 131 | Polysulfates Block SARSâ€“CoVâ€“2 Uptake through Electrostatic Interactions**. Angewandte Chemie - International Edition, 2021, 60, 15870-15878. | 13.8 | 49 |
| 132 | Oxidation of an organic dye catalyzed by MnOx nanoparticles. Journal of Catalysis, 2012, 289, 80-87. | 6.2 | 48 |
| 133 | Like-charged protein-polyelectrolyte complexation driven by charge patches. Journal of Chemical Physics, 2015, 143, 064905. | 3.0 | 47 |
| 134 | Thermosensitive Cu ₂ Oâ€“PNIPAM coreâ€“shell nanoreactors with tunable photocatalytic activity. Journal of Materials Chemistry A, 2016, 4, 9677-9684. | 10.3 | 46 |
| 135 | Microsurface Potential Measurements: Repulsive Forces between Polyelectrolyte Brushes in the Presence of Multivalent Counterions. Langmuir, 2008, 24, 10612-10615. | 3.5 | 45 |
| 136 | Polyelectrolyte as Solvent and Reaction Medium. Journal of the American Chemical Society, 2014, 136, 12-15. | 13.7 | 45 |
| 137 | Small-angle X-ray scattering on latexes. Macromolecular Chemistry and Physics, 1996, 197, 3043-3066. | 2.2 | 44 |
| 138 | Interaction of Charged Patchy Protein Models with Like-Charged Polyelectrolyte Brushes. Langmuir, 2017, 33, 417-427. | 3.5 | 44 |
| 139 | Formation of Stable Mesoglobules by a Thermosensitive Dendronized Polymer. Macromolecules, 2009, 42, 7122-7128. | 4.8 | 43 |
| 140 | Fine-Tuning the Structure of Stimuli-Responsive Polymer Films by Hydrostatic Pressure and Temperature. Macromolecules, 2013, 46, 6541-6547. | 4.8 | 43 |
| 141 | Wellâ€“Defined Crystalline TiO ₂ Nanoparticles Generated and Immobilized on a Colloidal Nanoreactor. Macromolecular Chemistry and Physics, 2009, 210, 377-386. | 2.2 | 42 |
| 142 | Catalysis by Metallic Nanoparticles in Solution: Thermosensitive Microgels as Nanoreactors. Zeitschrift Fur Physikalische Chemie, 2018, 232, 773-803. | 2.8 | 42 |
| 143 | Analysis of the conformation of worm-like chains by small-angle scattering: Monte-Carlo simulations in comparison to analytical theory. Macromolecular Theory and Simulations, 2000, 9, 345-353. | 1.4 | 41 |
| 144 | Recoverable Platinum Nanocatalysts Immobilized on Magnetic Spherical Polyelectrolyte Brushes. Industrial & Engineering Chemistry Research, 2012, 51, 5608-5614. | 3.7 | 41 |

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|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 145 | Enzymatic activity of immobilized enzyme determined by isothermal titration calorimetry. <i>Analytical Biochemistry</i> , 2008, 378, 184-189. | 2.4 | 39 |
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