Rikkert J Nap

List of Publications by Year
in descending order

36 papers	1,566 citations	361045 20 h-index	344852 36 g-index
37 all docs	37 docs citations	37 times ranked	2318 citing authors

#	Article	IF	Citations
1	How and Why Nanoparticleâ€™s Curvature Regulates the Apparent pK_a of the Coating Ligands. Journal of the American Chemical Society, 2011, 133, 2192-2197.	6.6	208
2	Weak polyelectrolytes tethered to surfaces: Effect of geometry, acidâ€“base equilibrium and electrical permittivity. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 2638-2662.	2.4	171
3	Assembly of reconfigurable one-dimensional colloidal superlattices due to a synergy of fundamental nanoscale forces. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2240-2245.	3.3	144
4	Geometric curvature controls the chemical patchiness and self-assembly of nanoparticles. Nature Nanotechnology, 2013, 8, 676-681.	15.6	136
5	Covalent-supramolecular hybrid polymers as muscle-inspired anisotropic actuators. Nature Communications, 2018, 9, 2395.	5.8	102
6	The Role of Solution Conditions in the Bacteriophage PP7 Capsid Charge Regulation. Biophysical Journal, 2014, 107, 1970-1979.	0.2	79
7	Double Periodic Lamellar-in-Lamellar Structure in Multiblock Copolymer Melts with Competing Length Scales. Macromolecules, 2006, 39, 6765-6770.	2.2	55
8	Stability of Superparamagnetic Iron Oxide Nanoparticles at Different pH Values: Experimental and Theoretical Analysis. Langmuir, 2012, 28, 6246-6255.	1.6	51
9	The Role of Hydrogen Bonding in Tethered Polymer Layers. Journal of Physical Chemistry B, 2008, 112, 16238-16248.	1.2	49
10	Microphase separation at two length scales. European Physical Journal E, 2001, 4, 515-519.	0.7	43
11	Ordering at Two Length Scales in Combâ^'Coil Diblock Copolymers Consisting of Only Two Different Monomers. Macromolecules, 2002, 35, 952-959.	2.2	43
12	Structure and Interactions of Aggrecans: Statistical Thermodynamic Approach. Biophysical Journal, 2008, 95, 4570-4583.	0.2	43
13	Born energy, acid-base equilibrium, structure and interactions of end-grafted weak polyelectrolyte layers. Journal of Chemical Physics, 2014, 140, 024910.	1.2	39
14	Self-Assembling Block Copolymer Systems Involving Competing Length Scales:Â A Route toward Responsive Materials. Macromolecules, 2004, 37, 4296-4303.	2.2	38
15	Competitive calcium ion binding to end-tethered weak polyelectrolytes. Soft Matter, 2018, 14, 2365-2378.	1.2	38
16	Physical and data structure of 3D genome. Science Advances, 2020, 6, eaay4055.	4.7	32
17	Control of Carbon Nanotubeâ^'Surface Interactions:Â The Role of Grafted Polymers. Langmuir, 2005, 21, 12072-12075.	1.6	29
18	Adsorption of Superparamagnetic Iron Oxide Nanoparticles on Silica and Calcium Carbonate Sand. Langmuir, 2014, 30, 784-792.	1.6	24

#	Article	IF	Citations
19	Tunable Diacetylene Polymerized Shell Microbubbles as Ultrasound Contrast Agents. Langmuir, 2012, 28, 3766-3772.	1.6	23
20	On the stability of nanoparticles coated with polyelectrolytes in high salinity solutions. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 1689-1699.	2.4	21
21	How to optimize binding of coated nanoparticles: coupling of physical interactions, molecular organization and chemical state. Biomaterials Science, 2013, 1, 814.	2.6	20
22	Effect of calcium ions on the interactions between surfaces end-grafted with weak polyelectrolytes. Journal of Chemical Physics, 2018, 149, 163309.	1.2	19
23	Orderâ€“disorder transition induced by surfactant micelles in single-walled carbon nanotubes dispersions. Soft Matter, 2010, 6, 5289.	1.2	16
24	Interacting nanoparticles with functional surface groups. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 852-862.	2.4	16
25	Theoretical Modeling of Chemical Equilibrium in Weak Polyelectrolyte Layers on Curved Nanosystems. Polymers, 2020, 12, 2282.	2.0	16
26	Dynamic Crowding Regulates Transcription. Biophysical Journal, 2020, 118, 2117-2129.	0.2	15
27	Charge regulation mechanism in end-tethered weak polyampholytes. Soft Matter, 2020, 16, 8832-8847.	1.2	13
28	Hydrophobic-induced surface reorganization: molecular dynamics simulations of water nanodroplets on perfluorocarbon self-assembled monolayers. Soft Matter, 2010, 6, 1644.	1.2	11
29	The interplay of nanointerface curvature and calcium binding in weak polyelectrolyte-coated nanoparticles. Biomaterials Science, 2018, 6, 1048-1058.	2.6	11
30	pH-Dependent structure of water-exposed surfaces of CdSe quantum dots. Chemical Communications, 2019, 55, 5435-5438.	2.2	11
31	Confinement induced lateral segregation of polymer coated nanospheres. Soft Matter, 2012, 8, 1688-1700.	1.2	10
32	Highly sensitive gating in pH-responsive nanochannels as a result of ionic bridging and nanoconfinement. Physical Chemistry Chemical Physics, 2018, 20, 16657-16665.	1.3	10
33	Adsorption of Acid and Polymer Coated Nanoparticles: A Statistical Thermodynamics Approach. Langmuir, 2013, 29, 14482-14493.	1.6	7
34	Structural behavior of competitive temperature and pH-responsive tethered polymer layers. Soft Matter, 2017, 13, 6322-6331.	1.2	6
35	Acid-Base Equilibrium and Dielectric Environment Regulate Charge in Supramolecular Nanofibers. Frontiers in Chemistry, 2022, 10, 852164.	1.8	6
36	Effect of Polymer Surface Modification of Superparamagnetic Iron Oxide Nanoparticle Dispersions in High Salinity Environments. Langmuir, 2019, 35, 15864-15871.	1.6	3