Miroslav Stepanek

List of Publications by Year
in descending order

79 papers	1,485 citations	279487 23 h-index	377514 34 g-index
86 all docs	86 docs citations	86 times ranked	1548 citing authors

#	Article	IF	Citations
1	Hybrid Polymeric Micelles with Hydrophobic Cores and Mixed Polyelectrolyte/Nonelectrolyte Shells in Aqueous Media. 1. Preparation and Basic Characterization. Langmuir, 2001, 17, 4240-4244.	1.6	88
2	Polystyrene/Poly(2-vinylpyridine) Heteroarm Star Copolymer Micelles in Aqueous Media and Onion Type Micelles Stabilized by Diblock Copolymers+,â€¡. Langmuir, 2000, 16, 6868-6876.	1.6	82
3	Multicompartment Nanoparticles Formed by a Heparin-Mimicking Block Terpolymer in Aqueous Solutions. Macromolecules, 2009, 42, 5605-5613.	2.2	58
4	Thermodynamic and Kinetic Aspects of Coassembly of PEOâ€“PMAA Block Copolymer and DPCl Surfactants into Ordered Nanoparticles in Aqueous Solutions Studied by ITC, NMR, and Time-Resolved SAXS Techniques. Macromolecules, 2013, 46, 2172-2181.	2.2	48
5	Coassembly of Poly(ethylene oxide)-block-poly(methacrylic acid) and N-Dodecylpyridinium Chloride in Aqueous Solutions Leading to Ordered Micellar Assemblies within Copolymer Aggregates. Macromolecules, 2012, 45, 6471-6480.	2.2	46
6	Solvent Relaxation Study of pH-Dependent Hydration of Poly(oxyethylene) Shells in Polystyrene-block-poly(2-vinylpyridine)-block-poly(oxyethylene) Micelles in Aqueous Solutions. Journal of Physical Chemistry A, 2005, 109, 10803-10812.	1.1	45
7	Preparation and Characterization of Self-Assembled Nanoparticles Formed by Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf Solutions. Langmuir, 2007, 23, 3395-3400.	1.6	45
8	Hybrid Polymeric Micelles with Hydrophobic Cores and Mixed Polyelectrolyte/Nonelectrolyte Shells in Aqueous Media. 2. Studies of the Shell Behavior. Langmuir, 2001, 17, 4245-4250.	1.6	43
9	Time-Dependent Behavior of Block Polyelectrolyte Micelles in Aqueous Media Studied by Potentiometric Titrations, QELS and Fluorometry. Langmuir, 2000, 16, 2502-2507.	1.6	42
10	Fluorescence Study of the Solvation of Fluorescent Probes Prodan and Laurdan in Poly(Îµ-caprolactone)-block-poly(ethylene oxide) Vesicles in Aqueous Solutions with Tetrahydrofurane. Langmuir, 2008, 24, 288-295.	1.6	36
11	New insights on the solution behavior and self-assembly of polystyrene/poly(2-vinylpyridine) â€˜hairyâ€™ heteroarm star copolymers with highly asymmetric arms in polar organic and aqueous media. Polymer, 2005, 46, 10493-10505.	1.8	35
12	Polyelectrolyteâ^'Surfactant Complexes Formed by Poly[3,5-bis(trimethylammoniummethyl)4-hydroxystyrene iodide]-block-poly(ethylene oxide) and Sodium Dodecyl Sulfate in Aqueous Solutions. Langmuir, 2011, 27, 5275-5281.	1.6	35
13	Solubilization and release of hydrophobic compounds from block copolymer micelles. I. Partitioning of pyrene between polyelectrolyte micelles and the aqueous phase. Acta Polymerica, 1998, 49, 96-102.	1.4	31
14	Light Scattering, Atomic Force Microscopy and Fluorescence Correlation Spectroscopy Studies of Polystyrene-block-poly(2-vinylpyridine)-block-poly(ethylene oxide) Micelles. Collection of Czechoslovak Chemical Communications, 2003, 68, 2120-2138.	1.0	30
15	Reversible Aggregation of Polystyrene-block-poly(2-vinylpyridine)-block-poly(ethylene oxide) Block Copolymer Micelles in Acidic Aqueous Solutions. Langmuir, 2005, 21, 10783-10790.	1.6	29
16	Poly(N-isopropyl acrylamide)-block-poly(n-butyl acrylate) thermoresponsive amphiphilic copolymers: Synthesis, characterization and self-assembly behavior in aqueous solutions. European Polymer Journal, 2014, 61, 124-132.	2.6	29
17	Glucose-Responsive Hybrid Nanoassemblies in Aqueous Solutions: Ordered Phenylboronic Acid within Intermixed Poly(4-hydroxystyrene)-block-poly(ethylene oxide) Block Copolymer. Biomacromolecules, 2015, 16, 3731-3739.	2.6	29
18	Fluorometric and Ultravioletâ^'Visible Absorption Study of Poly(methacrylic acid) Shells of High-Molar-Mass Block Copolymer Micellesâ€. Langmuir, 1999, 15, 4185-4193.	1.6	28

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19	The C-Terminal Segment of Yeast BMH Proteins Exhibits Different Structure Compared to Other 14-3-3 Protein Isoforms. Biochemistry, 2010, 49, 3853-3861.	1.2	28
20	Fluorometric Studies of the Polyelectrolyte Shell of Block Copolymer Micelles in Aqueous Media. Langmuir, 1999, 15, 8800-8806.	1.6	27
21	pH-Dependent Self-Assembly of Polystyrene-block-Poly((sulfamate-carboxylate)isoprene) Copolymer in Aqueous Media. Langmuir, 2008, 24, 12017-12025.	1.6	26
22	Self-assemblies formed by four-arm star copolymers with amphiphilic diblock arms in aqueous solutions. Polymer, 2009, 50, 3638-3644.	1.8	26
23	Celluloseâ€based graft copolymers with controlled architecture prepared in a homogeneous phase. Journal of Polymer Science Part A, 2011, 49, 4353-4367.	2.5	25
24	Wormlike coreâ€“shell nanoparticles formed by co-assembly of double hydrophilic block polyelectrolyte with oppositely charged fluorosurfactant. Soft Matter, 2012, 8, 9412.	1.2	25
25	Role of pKA in Charge Regulation and Conformation of Various Peptide Sequences. Polymers, 2021, 13, 214.	2.0	24
26	Fluorescence Lifetime Correlation Spectroscopy Reveals Compaction Mechanism of 10 and 49 kbp DNA and Differences between Polycation and Cationic Surfactant. Journal of Physical Chemistry B, 2008, 112, 16823-16829.	1.2	23
27	Association of Poly(4-hydroxystyrene)-block-Poly(Ethylene oxide) in Aqueous Solutions: Block Copolymer Nanoparticles with Intermixed Blocks. Langmuir, 2012, 28, 307-313.	1.6	23
28	Nanoparticles with Embedded Porphyrin Photosensitizers for Photooxidation Reactions and Continuous Oxygen Sensing. ACS Applied Materials & Interfaces, 2017, 9, 36229-36238.	4.0	22
29	Local pH and Effective pK of a Polyelectrolyte Chain: Two Names for One Quantity?. ACS Macro Letters, 2018, 7, 1243-1247.	2.3	22
30	Solubilization and release of hydrophobic compounds from block copolymer micelles. II. Release of pyrene from polyelectrolyte micelles under equilibrium conditions. Acta Polymerica, 1998, 49, 103-107.	1.4	19
31	Self-Assembly of Heteroarm Star Copolymers â€“ A Monte Carlo Study. Macromolecular Theory and Simulations, 2007, 16, 386-398.	0.6	18
32	Quantitative prediction of charge regulation in oligopeptides. Molecular Systems Design and Engineering, 2021, 6, 122-131.	1.7	18
33	Interpolymer Complexes Based on the Core/Shell Micelles. Interaction of Polystyrene-block-poly(methacrylic acid) Micelles with Linear Poly(2-vinylpyridine) in 1,4-Dioxane Water Mixtures and in Aqueous Mediaâ€. Journal of Physical Chemistry B, 2007, 111, 8394-8401.	1.2	16
34	Morphologically Tunable Coassembly of Double Hydrophilic Block Polyelectrolyte with Oppositely Charged Fluorosurfactant. Macromolecules, 2014, 47, 7081-7090.	2.2	16
35	Thermoresponsive behavior of poly(N-isopropylacrylamide)s with dodecyl and carboxyl terminal groups in aqueous solution: pH-dependent cloud point temperature. Colloid and Polymer Science, 2017, 295, 1343-1349.	1.0	16
36	DPD Modelling of the Self- and Co-Assembly of Polymers and Polyelectrolytes in Aqueous Media: Impact on Polymer Science. Polymers, 2022, 14, 404.	2.0	16

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37	Polyelectrolyteâ€“Surfactant Complexes of Poly[3,5-bis(dimethylaminomethyl)-4-hydroxystyrene]-block-poly(ethylene oxide) and Sodium Dodecyl Sulfate: Anomalous Self-Assembly Behavior. Langmuir, 2013, 29, 5443-5449.	1.6	15
38	Complexation of DNA with QPDMAEMA-b-PLMA-b-POEGMA Cationic Triblock Terpolymer Micelles. Macromolecules, 2020, 53, 5747-5755.	2.2	14
39	Structural Modulation of Phosducin by Phosphorylation and 14-3-3 Protein Binding. Biophysical Journal, 2012, 103, 1960-1969.	0.2	13
40	Stabilization of aqueous dispersions of poly(methacrylic acid)-coated iron oxide nanoparticles by double hydrophilic block polyelectrolyte poly(ethylene oxide)-block-poly(N-methyl-2-vinylpyridinium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.3	13
41	Physicochemical Evaluation of Insulin Complexes with QPDMAEMA-b-PLMA-b-POEGMA Cationic Amphiphlic Triblock Terpolymer Micelles. Polymers, 2020, 12, 309.	2.0	13
42	Self-Assembly of Poly(4-methylstyrene)-g-poly(methacrylic acid) Graft Copolymer in Selective Solvents for Grafts: Scattering and Molecular Dynamics Simulation Study. Langmuir, 2010, 26, 9289-9296.	1.6	12
43	Micellization of Zonyl FSN-100 fluorosurfactant in aqueous solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 443, 209-215.	2.3	12
44	Self- and co-assembly of amphiphilic gradient polyelectrolyte in aqueous solution: Interaction with oppositely charged ionic surfactant. European Polymer Journal, 2015, 73, 212-221.	2.6	12
45	Polystyrene and Poly(ethylene glycol)-b-Poly(Îµ-caprolactone) Nanoparticles with Porphyrins: Structure, Size, and Photooxidation Properties. Langmuir, 2020, 36, 302-310.	1.6	12
46	On Mechanism of Intermediate-Sized Circular DNA Compaction Mediated by Spermine: Contribution of Fluorescence Lifetime Correlation Spectroscopy. Journal of Fluorescence, 2008, 18, 679-684.	1.3	11
47	Aggregation of superparamagnetic iron oxide nanoparticles in dilute aqueous dispersions: Effect of coating by double-hydrophilic block polyelectrolyte. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 483, 1-7.	2.3	11
48	Formation of linear and crosslinked polyurethane nanoparticles that self-assemble differently in acetone and in water. Progress in Organic Coatings, 2017, 106, 119-127.	1.9	11
49	Combination of phosphonium and ammonium pendant groups in cationic conjugated polyelectrolytes based on regioregular poly(3-hexylthiophene) polymer chains. European Polymer Journal, 2018, 100, 200-208.	2.6	11
50	Interaction of fluorescent surfactant 5-(N-octadecanoyl)aminofluorescein with polystyrene-block-poly(methacrylic acid) micelles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 147, 79-87.	2.3	10
51	Atomic Force Microscopy and Light Scattering Study of Onion-Type Micelles Formed by Polystyrene-block-poly(2-vinylpyridine) and Poly(2-vinylpyridine)-block-poly(ethylene oxide) Copolymers in Aqueous Solutions. Collection of Czechoslovak Chemical Communications, 2006, 71, 723-738.	1.0	10
52	Influence of Corona Structure on Binding of an Ionic Surfactant in Oppositely Charged Amphiphilic Polyelectrolyte Micelles. Langmuir, 2016, 32, 4059-4065.	1.6	10
53	Dynamics of Chain Exchange Between Self-Assembled Diblock Copolymer Micelles of Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock Czechoslovak Chemical Communications, 2005, 70, 1811-1828.	1.0	9
54	Composite particles formed by complexation of poly(methacrylic acid) â€” stabilized magnetic fluid with chitosan: Magnetic material for bioapplications. Materials Science and Engineering C, 2016, 67, 486-492.	3.8	9

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55	Fluorescence Spectroscopy as a Tool for Investigating the Self-Organized Polyelectrolyte Systems. Advances in Polymer Science, 2010, , 187-249.	0.4	8
56	Imaging of block copolymer vesicles in solvated state by wet scanning transmission electron microscopy. European Polymer Journal, 2011, 47, 1273-1278.	2.6	8
57	Onion Micelles with an Interpolyelectrolyte Complex Middle Layer: Experimental Motivation and Computer Study. Macromolecules, 2020, 53, 6780-6795.	2.2	8
58	PMAA-stabilized ferrofluid/chitosan/yeast composite for bioapplications. Journal of Magnetism and Magnetic Materials, 2017, 427, 29-33.	1.0	7
59	Coassembly of Gemini Surfactants with Double Hydrophilic Block Polyelectrolytes Leading to Complex Nanoassemblies. Macromolecules, 2017, 50, 8745-8754.	2.2	6
60	Formation of core/corona nanoparticles with interpolyelectrolyte complex cores in aqueous solution: insight into chain dynamics in the complex from fluorescence quenching. Soft Matter, 2018, 14, 7578-7585.	1.2	6
61	Lyotropic and Thermotropic Phase Transitions in Films of Ioneneâ^'Alkyl Sulfate Complexes. Langmuir, 2005, 21, 6797-6804.	1.6	5
62	Experimental Study of the Electrophoretic Mobility and Effective Electric Charge of Polystyrene-Block-Poly(Methacrylic Acid) Micelles in Aqueous Media. International Journal of Polymer Analysis and Characterization, 2007, 12, 23-33.	0.9	5
63	pHâ€Ðependent Behavior of Hydrophobically Modified Polyelectrolyte Shells of Polymeric Nanoparticles. Macromolecular Symposia, 2008, 273, 95-102.	0.4	5
64	Multilayer Polymeric Nanoparticles Based on Specific Interactions in Solution: Polystyrene-block-poly(methacrylic acid) Micelles with Linear Poly(2-vinylpyridine) in Aqueous Buffers. Materials and Manufacturing Processes, 2008, 23, 557-560.	2.7	5
65	Coassembly of Poly(N-isopropylacrylamide) with Dodecyl and Carboxyl Terminal Groups with Cationic Surfactant: Critical Comparison of Experimental and Simulation Data. Macromolecules, 2018, 51, 7295-7308.	2.2	5
66	Modification of the Co-assembly Behavior of Double-Hydrophilic Block Polyelectrolytes by Hydrophobic Terminal Groups: Ordered Nanostructures with Interpolyelectrolyte Complex Domains. ACS Applied Polymer Materials, 2021, 3, 1956-1963.	2.0	5
67	Reversible multilayered vesicle-like structures with fluid hydrophobic and interpolyelectrolyte layers. Journal of Colloid and Interface Science, 2021, 599, 313-325.	5.0	5
68	Fluorescence study of the core/shell interface in polyelectrolyte micelles. Binding of fluorescent surfactants in the interfacial region. Journal of Fluorescence, 1998, 8, 21-25.	1.3	4
69	Monte Carlo simulation of fluorescence correlation spectroscopy data. Collection of Czechoslovak Chemical Communications, 2011, 76, 207-222.	1.0	4
70	Stabilization of coated inorganic nanoparticles by amphiphilic copolymers in aqueous media. Dissipative particle dynamics study. Colloid and Polymer Science, 2017, 295, 1429-1441.	1.0	4
71	Evolution of Structure in a Comb Copolymerâ€“Surfactant Coacervate. Macromolecules, 2019, 52, 6303-6310.	2.2	4
72	Polynorbornene-Based Polyelectrolytes with Covalently Attached Metallacarboranes: Synthesis, Characterization, and Lithium-Ion Mobility. Macromolecules, 2021, 54, 6867-6877.	2.2	4

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73	Structure of polymeric nanoparticles in surfactant-stabilized aqueous dispersions of high-molar-mass hydrophobic graft copolymers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 456, 10-17.	2.3	3
74	Anionically Functionalized Glycogen Encapsulates Melittin by Multivalent Interaction. Biomacromolecules, 2022, 23, 3371-3382.	2.6	3
75	Glycation of Human Serum Albumin by DL-Glyceraldehyde: A Fluorescence Quenching Study. Collection of Czechoslovak Chemical Communications, 1997, 62, 1815-1820.	1.0	1
76	Steady-state and time-resolved luminescence of Ru(II) polypyridine complexes attached to Ag nanoparticles: Effect of chemisorption in comparison with electrostatic bonding. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 150, 657-663.	2.0	1
77	Fluorescence Spectroscopy Studies of Amphiphilic Block Copolymer Micelles in Aqueous Solutions. Springer Series on Fluorescence, 2016, , 203-215.	0.8	1
78	Insight into the Structure of a Comb Copolymerâ€“Surfactant Coacervate from Dynamic Measurements by DOSY NMR and Neutron Spin Echo Spectroscopy. Macromolecules, 0, , .	2.2	1
79	Solvent relaxation studies applied to stimuli-responsive core-shell nanoparticles. Proceedings of SPIE, 2010, , .	0.8	0