FranÃ§oise M Winnik

List of Publications by Year
in descending order

126 papers	13,848 citations	81900 39 h-index	21540 114 g-index
130 all docs	130 docs citations	130 times ranked	16078 citing authors

#	Article	IF	Citations
1	Emerging applications of stimuli-responsive polymer materials. Nature Materials, 2010, 9, 101-113.	27.5	5,007
2	Photophysics of preassociated pyrenes in aqueous polymer solutions and in other organized media. Chemical Reviews, 1993, 93, 587-614.	47.7	1,658
3	Poly(Nâ€isopropylacrylamide) Phase Diagrams: Fifty Years of Research. Angewandte Chemie - International Edition, 2015, 54, 15342-15367.	13.8	772
4	Non-ionic Thermoresponsive Polymers in Water. Advances in Polymer Science, 2010, , 29-89.	0.8	406
5	Fluorescence studies of aqueous solutions of poly(N-isopropylacrylamide) below and above their LCST. Macromolecules, 1990, 23, 233-242.	4.8	391
6	Methanol-water as a co-nonsolvent system for poly(N-isopropylacrylamide). Macromolecules, 1990, 23, 2415-2416.	4.8	362
7	Fluorescence methods in the study of the interactions of surfactants with polymers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 118, 1-39.	4.7	324
8	Temperature-Induced Phase Transition of Well-Defined Cyclic Poly(N-isopropylacrylamide)s in Aqueous Solution. Macromolecules, 2007, 40, 7069-7071.	4.8	302
9	Quantum Dot Cytotoxicity and Ways To Reduce It. Accounts of Chemical Research, 2013, 46, 672-680.	15.6	286
10	Impact of End-Group Association and Main-Chain Hydration on the Thermosensitive Properties of Hydrophobically Modified Telechelic Poly(N-isopropylacrylamides) in Water. Macromolecules, 2006, 39, 341-348.	4.8	284
11	Volumetric Studies of Aqueous Polymer Solutions Using Pressure Perturbation Calorimetry:â€‰ A New Look at the Temperature-Induced Phase Transition of Poly(N-isopropylacrylamide) in Water and D2O. Macromolecules, 2001, 34, 4130-4135.	4.8	252
12	Temperature-Responsive Polymers in Mixed Solvents: Competitive Hydrogen Bonds Cause Cononsolvency. Physical Review Letters, 2008, 101, 028302.	7.8	223
13	Facile and Efficient One-Pot Transformation of RAFT Polymer End Groups via a Mild Aminolysis/Michael Addition Sequence. Macromolecular Rapid Communications, 2006, 27, 1648-1653.	3.9	196
14	Temperature Dependence of the Colloidal Stability of Neutral Amphiphilic Polymers in Water. , 0, , 1-85.		188
15	Formation of Colloidally Stable Phase Separated Poly(N-vinylcaprolactam) in Water:Â A Study by Dynamic Light Scattering, Microcalorimetry, and Pressure Perturbation Calorimetry. Macromolecules, 2004, 37, 2268-2274.	4.8	185
16	In Situ Preparation of Nanocrystalline Î³-Fe2O3in Iron(II) Cross-Linked Alginate Gels. Chemistry of Materials, 1996, 8, 1594-1596.	6.7	170
17	Microcalorimetric Study of the Temperature-Induced Phase Separation in Aqueous Solutions of Poly(2-isopropyl-2-oxazolines). Macromolecules, 2004, 37, 2556-2562.	4.8	169
18	Versatile Synthesis of End-Functionalized Thermosensitive Poly(2-isopropyl-2-oxazolines). Macromolecules, 2004, 37, 6786-6792.	4.8	156

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19	Temperature-Sensitive Properties of Poly(N-isopropylacrylamide) Mesoglobules Formed in Dilute Aqueous Solutions Heated above Their Demixing Point. Macromolecules, 2006, 39, 7686-7693.	4.8	129
20	Temperature-Dependent Properties of Telechelic Hydrophobically Modified Poly(N-isopropylacrylamides) in Water:Â Evidence from Light Scattering and Fluorescence Spectroscopy for the Formation of Stable Mesoglobules at Elevated Temperatures. Macromolecules, 2006, 39, 3048-3055.	4.8	128
21	Dual Stimuli-Responsive Nanogels by Self-Assembly of Polysaccharides Lightly Grafted with Thiol-Terminated Poly(N-isopropylacrylamide) Chains. Macromolecules, 2008, 41, 5985-5987.	4.8	124
22	Interaction of Hydrophobically-Modified Poly-N-isopropylacrylamides with Model Membranesâ€"or Playing a Molecular Accordion. Angewandte Chemie International Edition in English, 1991, 30, 315-318.	4.4	99
23	Hydration and Dynamic Behavior of a Cyclic Poly(N-isopropylacrylamide) in Aqueous Solution: Effects of the Polymer Chain Topology. Macromolecules, 2009, 42, 1400-1403.	4.8	83
24	An efficient synthesis of telechelic poly (Nâ€isopropylacrylamides) and its application to the preparation of Î±,Ï‰â€dicholesteryl and Î±,Ï‰â€dipyrenyl polymers. Journal of Polymer Science Part A, 2008, 46, 314-326.	2.3	80
25	Dissecting the Mechanism of the Heat-Induced Phase Separation and Crystallization of Poly(2-isopropyl-2-oxazoline) in Water through Vibrational Spectroscopy and Molecular Orbital Calculations. Macromolecules, 2012, 45, 3531-3541.	4.8	80
26	Theoretical Modeling of Associated Structures in Aqueous Solutions of Hydrophobically Modified Telechelic PNIPAM Based on a Neutron Scattering Study. Macromolecules, 2008, 41, 9413-9422.	4.8	79
27	Synthesis of Î±,Ï‰-Dimercapto Poly(N-isopropylacrylamides) by RAFT Polymerization with a Hydrophilic Difunctional Chain Transfer Agent. Macromolecules, 2007, 40, 872-878.	4.8	74
28	Self-Association of a Thermosensitive Poly(alkyl-2-oxazoline) Block Copolymer in Aqueous Solution. Macromolecules, 2012, 45, 6111-6119.	4.8	74
29	Synthesis and Characterization of Phosphorylcholine-Substituted Chitosans Soluble in Physiological pH Conditions. Biomacromolecules, 2006, 7, 3151-3156.	5.4	70
30	Interactions of an Anionic Surfactant with a Fluorescent-Dye-Labeled Hydrophobically-Modified Cationic Cellulose Ether. Langmuir, 1997, 13, 111-114.	3.5	64
31	Solution Properties of Hydrophobically Modified Copolymers ofN-Isopropylacrylamide andN-Glycine Acrylamide:Â A Study by Microcalorimetry and Fluorescence Spectroscopy. Macromolecules, 2000, 33, 2958-2966.	4.8	64
32	Do Fluorocarbon, Hydrocarbon, and Polycyclic Aromatic Groups Intermingle? Solution Properties of Pyrene-Labeled Bis(fluorocarbon/hydrocarbon)-Modified Poly(N-isopropylacrylamide). Macromolecules, 2001, 34, 6387-6395.	4.8	59
33	Functional double-shelled silicon nanocrystals for two-photon fluorescence cell imaging: spectral evolution and tuning. Nanoscale, 2016, 8, 9009-9019.	5.6	58
34	In Vitro Evaluation of pH-Sensitive Polymer/Niosome Complexes. Biomacromolecules, 2001, 2, 741-749.	5.4	52
35	New insights into the effects of molecular weight and end group on the temperature-induced phase transition of poly(N-isopropylacrylamide) in water. Science China Chemistry, 2013, 56, 56-64.	8.2	51
36	Hydrophobically Modified Poly(sodium 2-acrylamido-2-methylpropanesulfonate)s Bearing Octadecyl Groups:Â A Fluorescence Study of Their Solution Properties in Water. Macromolecules, 1999, 32, 4317-4326.	4.8	49

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37	One-Step Analysis of DNA/Chitosan Complexes by Field-Flow Fractionation Reveals Particle Size and Free Chitosan Content. Biomacromolecules, 2010, 11, 549-554.	5.4	49
38	A one-pot synthesis of water soluble highly fluorescent silica nanoparticles. Journal of Materials Chemistry B, 2017, 5, 1363-1370.	5.8	49
39	Composite nanomaterials by self-assembly and controlled crystallization of poly(2-isopropyl-2-oxazoline)-grafted polysaccharides. Soft Matter, 2009, 5, 1597.	2.7	47
40	Phosphatase/temperature responsive poly(2-isopropyl-2-oxazoline). Polymer Chemistry, 2011, 2, 306-308.	3.9	42
41	Effect of Heating Rate on the Pathway for Vesicle Formation in Salt-Free Aqueous Solutions of Thermosensitive Cationic Diblock Copolymers. Macromolecules, 2013, 46, 2341-2351.	4.8	40
42	A Look at the Thermodynamics of the Association of Amphiphilic Polyelectrolytes in Aqueous Solutions:â€‰ Strengths and Limitations of Isothermal Titration Calorimetry. Langmuir, 2001, 17, 4416-4421.	3.5	37
43	Self-Association of the Thermosensitive Block Copolymer Poly(2-isopropyl-2-oxazoline)-b-poly(N-isopropylacrylamide) in Waterâ€“Methanol Mixtures. Macromolecules, 2014, 47, 6900-6910.	4.8	36
44	Transitionâ€Metalâ€Doped NIRâ€Emitting Silicon Nanocrystals. Angewandte Chemie - International Edition, 2017, 56, 6157-6160.	13.8	35
45	Cell membrane mimetic films immobilized by synergistic grafting and crosslinking. Soft Matter, 2013, 9, 4501.	2.7	34
46	Membrane Translocation and Organelle-Selective Delivery Steered by Polymeric Zwitterionic Nanospheres. Biomacromolecules, 2016, 17, 1523-1535.	5.4	32
47	Encapsulation and Delivery of Neutrophic Proteins and Hydrophobic Agents Using PMOXAâ€“PDMSâ€“PMOXA Triblock Polymersomes. ACS Omega, 2018, 3, 13882-13893.	3.5	32
48	Effect of chain architecture on the phase transition of star and cyclic poly(N-isopropylacrylamide) in water. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 2059-2068.	2.1	27
49	Stability and binding affinity of DNA/chitosan complexes by polyanion competition. Carbohydrate Polymers, 2017, 176, 167-176.	10.2	27
50	Fluorescence Microscopy Observation of the Adsorption onto Hair of a Fluorescently Labeled Cationic Cellulose Ether. Langmuir, 1999, 15, 3007-3010.	3.5	26
51	Light Scattering Evidence for the Random Association of Flower Micelles of a Telechelic Hydrophobically Modified Poly(N-isopropylacrylamide) in Dilute Aqueous Solution. Macromolecules, 2008, 41, 292-294.	4.8	24
52	Quantum dot agglomerates in biological media and their characterization by asymmetrical flow field-flow fractionation. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 89, 290-299.	4.3	24
53	Interaction of amphiphilic derivatives of chitosan with DPPC (1,2-dipalmitoyl-sn-glycero-3-phosphocholine). Journal of Thermal Analysis and Calorimetry, 2010, 100, 309-313.	3.6	22
54	Dehydration, Micellization, and Phase Separation of Thermosensitive Polyoxazoline Star Block Copolymers in Aqueous Solution. Macromolecules, 2019, 52, 935-944.	4.8	22

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55	Hydration and phase separation of temperature-sensitive water-soluble polymers. Chinese Journal of Polymer Science (English Edition), 2011, 29, 13-21.	3.8	21
56	Optimized triazine-mediated amidation for efficient and controlled functionalization of hyaluronic acid. Carbohydrate Polymers, 2015, 116, 42-50.	10.2	19
57	Fast and effective mitochondrial delivery of ï‰-Rhodamine-B-polysulfobetaine-PEG copolymers. Scientific Reports, 2018, 8, 1128.	3.3	19
58	Azopyridine: a smart photo- and chemo-responsive substituent for polymers and supramolecular assemblies. Polymer Chemistry, 2020, 11, 5955-5961.	3.9	18
59	Robust polymeric nanoparticles for the delivery of aminoglycoside antibiotics using carboxymethyldextran-b-poly(ethyleneglycols) lightly grafted with n-dodecyl groups. Soft Matter, 2010, 6, 4504.	2.7	17
60	pH-Dependent Morphology and Photoresponse of Azopyridine-Terminated Poly(N-isopropylacrylamide) Nanoparticles in Water. Macromolecules, 2019, 52, 2939-2948.	4.8	17
61	Fluorescence studies of a series of monodisperse telechelic Î±,ï‰-dipyrenyl poly(N-isopropylacrylamide)s in ethanol and in water. Canadian Journal of Chemistry, 2011, 89, 163-172.	1.1	16
62	Synthesis of a poly(N-isopropylacrylamide) charm bracelet decorated with a photomobile Î±-cyclodextrin charm. Polymer Chemistry, 2014, 5, 3656-3665.	3.9	15
63	Polysulfobetaine-surfactant solutions and their use in stabilizing hydrophobic compounds in saline solution. Polymer, 2017, 127, 77-87.	3.8	15
64	Isothermal titration calorimetry and fluorescence spectroscopy studies of the interactions between surfactants and a phosphorylcholine-based polybetaine. , 2003, , 149-156.		15
65	Temperature-Dependent Adsorption and Adsorption Hysteresis of a Thermoresponsive Diblock Copolymer. Langmuir, 2014, 30, 4333-4341.	3.5	14
66	Effect of solvent quality and chain density on normal and frictional forces between electrostatically anchored thermoresponsive diblock copolymer layers. Journal of Colloid and Interface Science, 2017, 487, 88-96.	9.4	14
67	Nonequilibrium Liquidâ€“Liquid Phase Separation of Poly(N-isopropylacrylamide) in Water/Methanol Mixtures. Macromolecules, 2017, 50, 4446-4453.	4.8	14
68	Light, temperature, and pH control of aqueous azopyridine-terminated poly(N-isopropylacrylamide) solutions. Polymer Chemistry, 2019, 10, 5080-5086.	3.9	14
69	Nanostickers for cells: a model study using cellâ€“nanoparticle hybrid aggregates. Soft Matter, 2016, 12, 7902-7907.	2.7	13
70	The Two Phase Transitions of Hydrophobically End-Capped Poly(N-isopropylacrylamide)s in Water. Macromolecules, 2020, 53, 5105-5115.	4.8	12
71	Charge complementary enzymatic reconfigurable polymeric nanostructures. Soft Matter, 2012, 8, 5127.	2.7	11
72	Temperature-responsive telechelic dipalmitoylglyceryl poly(N-isopropylacrylamide) vesicles: real-time morphology observation in aqueous suspension and in the presence of giant liposomes. Chemical Communications, 2014, 50, 8350-8352.	4.1	11

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73	Effect of Topology on the Properties of Poly(Nâ€isopropylacrylamide) in Water and in Bulk. Macromolecular Symposia, 2009, 278, 10-13.	0.7	10
74	Synthesis and Association Behavior of Telechelic Poly(N-isopropylacrylamides) with Azobenzene End Groups. Molecular Crystals and Liquid Crystals, 2010, 529, 60-70.	0.9	10
75	Tethered Poly(2-isopropyl-2-oxazoline) Chains: Temperature Effects on Layer Structure and Interactions Probed by AFM Experiments and Modeling. Langmuir, 2015, 31, 3039-3048.	3.5	9
76	Temperature response of aqueous solutions of pyrene endâ€labeled poly(Nâ€isopropylacrylamide)s probed by steadyâ€state and timeâ€resolved fluorescence. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 308-318.	2.1	9
77	ACS Virtual Issue on Multicomponent Systems: Absorption, Adsorption, and Diffusion. Journal of Chemical & Engineering Data, 2018, 63, 3651-3651.	1.9	9
78	Polymeric Nanoparticles Limit the Collective Migration of Cellular Aggregates. Langmuir, 2019, 35, 7396-7404.	3.5	9
79	Poly(2-propyl-2-oxazoline)s in Aqueous Methanol: To Dissolve or not to Dissolve. Macromolecules, 2019, 52, 6361-6368.	4.8	9
80	Solution Properties of Hydrophobically-Modified Copolymers of N-Isopropylacrylamide and N-L-Valine Acrylamide. A Study by Fluorescence Spectroscopy and Microcalorimetry. Polymer Journal, 2001, 33, 277-283.	2.7	8
81	Gadolinium diethylenetriaminepentaacetic acid hyaluronan conjugates: preparation, properties and applications. Macromolecular Symposia, 2002, 186, 105-110.	0.7	8
82	The Thermally Induced Aggregation of Immunoglobulin G in Solution is Prevented by Amphipols. Chemistry Letters, 2012, 41, 1380-1382.	1.3	8
83	Chitosan Nanoparticles for Non-Viral Gene Therapy. ACS Symposium Series, 2006, , 177-200.	0.5	7
84	Thermal response of a PVCLâ€“HA conjugate. Journal of Polymer Science Part A, 2016, 54, 425-436.	2.3	7
85	Synthesis and quantitative characterization of coumarin-caged D-luciferin. Journal of Photochemistry and Photobiology B: Biology, 2018, 189, 81-86.	3.8	7
86	Poly(2-isopropyl-2-oxazoline)-b-poly(lactide) (PiPOx-b-PLA) Nanoparticles in Water: Interblock van der Waals Attraction Opposes Amphiphilic Phase Separation. Macromolecules, 2019, 52, 1317-1326.	4.8	7
87	Synthesis of New Thermoresponsive Polymers Possessing the Dense 1,2,3-Triazole Backbone. Langmuir, 2022, 38, 5156-5165.	3.5	7
88	Materials nanoarchitectonics: a conspectus for polymer scientists. Polymer International, 2014, 63, 377-380.	3.1	6
89	Phosphorylcholine-Modified Chitosan Films as Effective Promoters of Cell Aggregation: Correlation Between the Films Properties and Cellular Response. Macromolecular Bioscience, 2015, 15, 490-500.	4.1	6
90	Enthalpy of the Complexation in Electrolyte Solutions of Polycations and Polyzwitterions of Different Structures and Topologies. Macromolecules, 2021, 54, 6678-6690.	4.8	6

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91	Comparative Thermodynamic Studies of the Micellization of Amphiphilic Block Copolymers before and after Cyclization. Langmuir, 2022, 38, 5033-5039.	3.5	6
92	Phase Separation and pH-Dependent Behavior of Four-Arm Star-Shaped Porphyrin-PNIPAM₄ Conjugates. Macromolecules, 2022, 55, 2109-2122.	4.8	6
93	Stimuli-Responsive Liposome-Polymer Complexes. ACS Symposium Series, 2004, , 26-39.	0.5	5
94	Tuning the Properties and Functions of 17Î²-Estradiol-polysaccharide Conjugates in Thin Films: Impact of Sample History. Biomacromolecules, 2012, 13, 4098-4108.	5.4	5
95	Inversion of crystallization rates in miscible block copolymers of poly(lactide)-block-poly(2-isopropyl-2-oxazoline). Polymer Chemistry, 2018, 9, 1848-1856.	3.9	5
96	Hydroxypropylcellulose in Oral Drug Delivery. ACS Symposium Series, 2006, , 57-75.	0.5	4
97	Theoretical Modelling of Hierarchically Associated Structures in Hydrophobically Modified PNIPAM Aqueous Solutions on the Basis of a Neutron Scattering Study. Macromolecular Symposia, 2010, 291-292, 177-185.	0.7	4
98	How gluttonous cell aggregates clear substrates coated with microparticles. Scientific Reports, 2017, 7, 15729.	3.3	4
99	Inert-living matter, when cells and beads play together. Communications Physics, 2021, 4, .	5.3	4
100	Heat-Induced Flower Nanogels of Both Cholesterol End-Capped Poly(N-isopropylacrylamide)s in Water. Langmuir, 2022, 38, 5218-5225.	3.5	4
101	Fluorescence Studies of Cellulose Ethers. Advances in Chemistry Series, 1996, , 409-423.	0.6	3
102	Responsive Polymer/Liposome Complexes: Design, Characterization and Application. ACS Symposium Series, 2000, , 277-297.	0.5	3
103	Transitionâ€Metalâ€Doped NIRâ€Emitting Silicon Nanocrystals. Angewandte Chemie, 2017, 129, 6253-6256.	2.0	3
104	Thermoresponsive Pentablock Copolymer on Silica: Temperature Effects on Adsorption, Surface Forces, and Friction. Langmuir, 2019, 35, 653-661.	3.5	3
105	Formation of Tethers from Spreading Cellular Aggregates. Langmuir, 2015, 31, 12984-12992.	3.5	2
106	Small-angle X-ray scattering from the concentrated bulk phase separated from an amphiphilic block-copolymer solution. Polymer Journal, 2017, 49, 385-389.	2.7	2
107	Temperature-Controlled Interactions between Poly(N-isopropylacrylamide) Mesoglobules Probed by Fluorescence. Macromolecules, 2018, 51, 1946-1956.	4.8	2
108	Spreading of Cell Aggregates on Zwitterion-Modified Chitosan Films. Langmuir, 2019, 35, 1902-1908.	3.5	2

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109	Phototropic Multiresponsive Active Nanogels. Macromolecular Rapid Communications, 2019, 40, 1900479.	3.9	2
110	Theoretical Study of the Wavelength Selection for the Photocleavage of Coumarinâ€caged Dâ€luciferin. Photochemistry and Photobiology, 2020, 96, 805-814.	2.5	2
111	High-Sensitivity Microcalorimetry and Gel Permeation Chromatography in Tandem Reveal the Complexity of the Synthesis of Poly-(2-isopropyl-2-oxazoline) Stars. Macromolecules, 2021, 54, 6161-6170.	4.8	2
112	Fluorescent Labels: Versatile Tools for Studying the Association of Amphiphilic Polymers in Water. ACS Symposium Series, 2000, , 286-302.	0.5	1
113	Refolding of Aggregation-Prone ScFv Antibody Fragments Assisted by Hydrophobically Modified Poly(sodium acrylate) Derivatives. Macromolecular Bioscience, 2017, 17, 1600213.	4.1	1
114	Editorial. Langmuir, 2018, 34, 15621-15621.	3.5	1
115	Highlights of the Langmuir 2018 Editorial Advisory Board. Langmuir, 2018, 34, 12233-12233.	3.5	1
116	Application Call: Inaugural Langmuir Early Career Advisory Board. Langmuir, 2019, 35, 3231-3231.	3.5	1
117	Fundamentals of Molecular Photonics. , 0, , 9-65.		0
118	The Interaction of Light with Materials. , 0, , 151-175.		0
119	The Interaction of Light with Materials II. , 0, , 177-199.		0
120	Photochemical Reactions. , 0, , 67-103.		0
121	Photophysical Processes. , 0, , 105-149.		0
122	Synthesis and Evaluation of Hydrophobically-Modified Polysaccharides as Oral Delivery Vehicles for Poorly Water-Soluble Drugs. ACS Symposium Series, 2006, , 55-67.	0.5	0
123	Macromol. Biosci. 2/2017. Macromolecular Bioscience, 2017, 17, .	4.1	0
124	Preface to The 15th Pacific Polymer Conference (PPC-15) Virtual Issue. Langmuir, 2019, 35, 4413-4414.	3.5	0
125	Recent Highlights on Interfaces from India: A Virtual Issue. Langmuir, 2020, 36, 479-480.	3.5	0
126	Probing interfacial interactions and dynamics of polymers enclosed in boron nitride nanotubes. Journal of Polymer Science, 2022, 60, 233-243.	3.8	0