

# Review on Hydrogel-based pH Sensors and Microsensors

Sensors

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Multiresponsive Biopolyelectrolyte Membrane. <i>Advanced Materials</i> , 2008, 20, 4588-4593.	11.1	54
2	Gelation Mechanism of Poly( <i>N</i> -isopropylacrylamide)-Clay Nanocomposite Hydrogels Synthesized by Photopolymerization. <i>Langmuir</i> , 2008, 24, 12627-12635.	1.6	30
3	Comparison of a hydrogel model to the Poisson-Boltzmann cell model. <i>Journal of Chemical Physics</i> , 2009, 131, 094903.	1.2	69
4	pH sensor based on boron nitride nanotubes. <i>Nanotechnology</i> , 2009, 20, 415501.	1.3	38
5	Modeling for analysis of the effect of Young's modulus on soft active hydrogels subject to pH stimulus. <i>Smart Materials and Structures</i> , 2009, 18, 045010.	1.8	0
6	Application of hydrogel-coated microcantilevers as sensing elements for pH. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 127002.	1.5	12
7	Tunable Gel Formation by Both Sonication and Thermal Processing in a Cholesterol-Based Self-Assembly System. <i>Chemistry - A European Journal</i> , 2009, 15, 6234-6243.	1.7	76
8	Columnar Mesophases Controlled by Counterions in Potassium Complexes of Dibenzo[18]crown-6 Derivatives. <i>Chemistry - A European Journal</i> , 2009, 15, 9530-9542.	1.7	43
9	Responsive hydrogel layers—from synthesis to applications. <i>Colloid and Polymer Science</i> , 2009, 287, 881-891.	1.0	123
10	A hydrogel-based passive wireless sensor using a flex-circuit inductive transducer. <i>Sensors and Actuators A: Physical</i> , 2009, 155, 58-65.	2.0	107
11	Novel Platforms for Oral Drug Delivery. <i>Pharmaceutical Research</i> , 2009, 26, 601-611.	1.7	92
12	Free swelling and confined smart hydrogels for applications in chemomechanical sensors for physiological monitoring. <i>Sensors and Actuators B: Chemical</i> , 2009, 136, 186-195.	4.0	75
13	The effect of perchlorate ions on a pyridine-based microgel. <i>Advances in Colloid and Interface Science</i> , 2009, 147-148, 67-73.	7.0	7
14	Swelling behaviour of thermo-sensitive hydrogels based on oligo(ethylene glycol) methacrylates. <i>European Polymer Journal</i> , 2009, 45, 3418-3425.	2.6	49
15	Optoelectrothermic Control of Highly Integrated Polymer-Based MEMS Applied in an Artificial Skin. <i>Advanced Materials</i> , 2009, 21, 979-983.	11.1	70
16	Supramolecular Interactions in Chemomechanical Polymers. <i>Accounts of Chemical Research</i> , 2009, 42, 1489-1500.	7.6	113
17	Tuning the pH Responsiveness of $\beta$ -Hairpin Peptide Folding, Self-Assembly, and Hydrogel Material Formation. <i>Biomacromolecules</i> , 2009, 10, 2619-2625.	2.6	161
18	Grafted Functional Polymer Nanostructures Patterned Bottom-Up by Colloidal Lithography and Initiated Chemical Vapor Deposition (iCVD). <i>Chemistry of Materials</i> , 2009, 21, 742-750.	3.2	68

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19	Oxygen Diffusion in Cross-Linked, Ethanol-Swollen Poly(vinyl alcohol) Gels: Counter-Intuitive Results Reflect Microscopic Heterogeneities. <i>Langmuir</i> , 2009, 25, 1148-1153.	1.6	13
20	Hydrogels for Actuators. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2009, , 221-248.	0.5	27
21	Micropumps operated by swelling and shrinking of temperature-sensitive hydrogels. <i>Lab on A Chip</i> , 2009, 9, 613-618.	3.1	101
22	Molecular recognition in chemomechanical polymers. <i>Journal of Materials Chemistry</i> , 2009, 19, 569-573.	6.7	12
23	Stimuli-responsive hydrogel thin films. <i>Soft Matter</i> , 2009, 5, 511-524.	1.2	514
24	Synthesis of Microgels by Radiation Methods. <i>Advances in Polymer Science</i> , 2010, , 95-128.	0.4	6
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26	Luminescent N-isopropylacrylamide“surfmer copolymer hydrogels prepared upon electrostatic self-assembly of 1-pyrenesulfonate. <i>Colloid and Polymer Science</i> , 2010, 288, 1479-1484.	1.0	6
27	Synthesis of water-soluble homo- and block-copolymers by RAFT polymerization under $\hat{1}^3$ -irradiation in aqueous media. <i>Polymer</i> , 2010, 51, 4319-4328.	1.8	40
28	Hydrogel-based devices for biomedical applications. <i>Sensors and Actuators B: Chemical</i> , 2010, 147, 765-774.	4.0	368
29	Kinetics of BSA release from poly(N-isopropylacrylamide) hydrogels. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010, 49, 581-588.	1.8	22
30	Hydrogel-based photonic sensor for a biopotential wearable recording system. <i>Biosensors and Bioelectronics</i> , 2010, 26, 80-86.	5.3	25
31	Diffusion Kinetics of BSA Protein in Stimuli Responsive Hydrogels. <i>Defect and Diffusion Forum</i> , 0, 297-301, 664-669.	0.4	2
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37	Temperature-Responsive Properties of Poly(acrylic acid-co-acrylamide) Hydrophobic Association Hydrogels with High Mechanical Strength. <i>Macromolecules</i> , 2010, 43, 10645-10651.	2.2	114
38	Molecular dynamics in smart hydrogel systems. <i>Journal of Non-Crystalline Solids</i> , 2010, 356, 754-756.	1.5	8
39	Mesoporous Hydrogels: Revealing Reversible Porosity by Cryoporometry, X-ray Scattering, and Gas Adsorption. <i>Langmuir</i> , 2010, 26, 10158-10164.	1.6	36
40	Preliminary characterization of a glucose-sensitive hydrogel. , 2010, 2010, 5014-7.		0
41	Actively-moving materials based on stimuli-responsive polymers. <i>Journal of Materials Chemistry</i> , 2010, 20, 3382.	6.7	83
42	A theory of constrained swelling of a pH-sensitive hydrogel. <i>Soft Matter</i> , 2010, 6, 784.	1.2	288
43	Poroelastic swelling kinetics of thin hydrogel layers: comparison of theory and experiment. <i>Soft Matter</i> , 2010, 6, 6004.	1.2	186
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51	Aqueous polymeric sensors based on temperature-induced polymer phase transitions and solvatochromic dyes. <i>Chemical Communications</i> , 2011, 47, 8750.	2.2	161
52	Reversible Tuning of Plasmon Coupling in Gold Nanoparticle Chains Using Ultrathin Responsive Polymer Film. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 945-951.	4.0	39
53	Composites of functional polymeric hydrogels and porous membranes. <i>Journal of Materials Chemistry</i> , 2011, 21, 2783-2811.	6.7	186
54	Responsive Polymers in Biology and Technology. <i>Polymer Reviews</i> , 2011, 51, 53-97.	5.3	73

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56	Drug-carrier/hydrogel scaffold for controlled growth of cells. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2011, 78, 346-354.	2.0	27
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65	Thermo- and pH-sensitive hydrogels based on 2-(2-methoxyethoxy)ethyl methacrylate and methacrylic acid. <i>Polymer International</i> , 2011, 60, 178-185.	1.6	16
66	Thermoresponsiveness of Integrated Ultra-Thin Silicon with Poly( <i>N</i> -isopropylacrylamide) Hydrogels. <i>Macromolecular Rapid Communications</i> , 2011, 32, 820-824.	2.0	12
67	Hydrogel composites with temperature induced phase transition for biocatalysis. <i>Journal of Chemical Technology and Biotechnology</i> , 2011, 86, 519-524.	1.6	6
69	Electrically Tunable Hysteretic Photonic Gels for Nonvolatile Display Pixels. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 6311-6314.	7.2	75
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77	Toward a Continuous Intravascular Glucose Monitoring System. <i>Sensors</i> , 2011, 11, 409-424.	2.1	11
78	Hydrogels in Biosensing Applications. , 2011, , 491-517.		6
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80	Gel-based optical waveguides with live cell encapsulation and integrated microfluidics. <i>Optics Letters</i> , 2012, 37, 1472.	1.7	76
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85	Fluidic microchemomechanical integrated circuits processing chemical information. <i>Lab on A Chip</i> , 2012, 12, 5034.	3.1	42
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91	CVD of polymeric thin films: applications in sensors, biotechnology, microelectronics/organic electronics, microfluidics, MEMS, composites and membranes. <i>Reports on Progress in Physics</i> , 2012, 75, 016501.	8.1	152
93	Thin Hydrogel Films for Optical Biosensor Applications. <i>Membranes</i> , 2012, 2, 40-69.	1.4	141
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97	Indentation: A simple, nondestructive method for characterizing the mechanical and transport properties of pH-sensitive hydrogels. <i>Journal of Materials Research</i> , 2012, 27, 152-160.	1.2	52
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141	Disposable Fluorescence Optical pH Sensor for Near Neutral Solutions. <i>Sensors</i> , 2013, 13, 484-499.	2.1	42
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168	Poly(N,N-dimethylaminoethyl methacrylate)/graphene oxide hybrid hydrogels: pH and temperature sensitivities and Cr(VI) adsorption. Reactive and Functional Polymers, 2014, 81, 8-13.	2.0	24
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