Jules John Magda

List of Publications by Year
in descending order

78 papers	3,078 citations	147801 31 h-index	155660 55 g-index
80 all docs	80 docs citations	80 times ranked	2846 citing authors

#	Article	IF	Citations
1	Viscoelastic Particle Focusing and Separation in a Spiral Channel. Micromachines, 2022, 13, 361.	2.9	13
2	A reliable and easy-to-implement optical characterization method for dynamic and static properties of smart hydrogels. Polymer, 2022, 246, 124713.	3.8	2
3	<i>In Vivo</i> Monitoring of Glucose Using Ultrasound-Induced Resonance in Implantable Smart Hydrogel Microstructures. ACS Sensors, 2021, 6, 3587-3595.	7.8	4
4	Experimental and Theoretical Investigations of Waxy Crude Oil in Steady and Transient Pipe Flows. Industrial & Engineering Chemistry Research, 2020, 59, 13783-13798.	3.7	2
5	Smart Hydrogel Micromechanical Resonators with Ultrasound Readout for Biomedical Sensing. ACS Sensors, 2020, 5, 1882-1889.	7.8	17
6	Micromechanical Resonators for Ultrasound-Based Sensors. ECS Meeting Abstracts, 2020, MA2020-01, 2328-2328.	0.0	3
7	Effect of Emulsified Water on Gelled Pipeline Restart of Model Waxy Crude Oil Cold Flows. Energy & Fuels, 2019, 33, 10756-10764.	5.1	5
8	Continuous Hydrogel-Based Glucose Sensors With Reduced pH Interference and Contactâ€“Free Signal Transduction. IEEE Sensors Journal, 2019, 19, 2330-2337.	4.7	4
9	Viscoelastic second normal stress difference dominated multiple-stream particle focusing in microfluidic channels. Applied Physics Letters, 2019, 115, 263702.	3.3	14
10	Bio-mimetic synthetic cell hydrogel magnetometer. Bioinspiration and Biomimetics, 2019, 14, 026003.	2.9	1
11	Manipulation of the isoelectric point of polyampholytic smart hydrogels in order to increase the range and selectivity of continuous glucose sensors. Sensors and Actuators B: Chemical, 2018, 255, 1057-1063.	7.8	20
12	A Sensor Platform for Smart Hydrogels in Biomedical Applications. Proceedings (mdpi), 2018, 2, .	0.2	4
13	Low-Cost Microfluidic Sensors with Smart Hydrogel Patterned Arrays Using Electronic Resistive Channel Sensing for Readout. Gels, 2018, 4, 84.	4.5	17
14	Metal-Oxide-Hydrogel Field-Effect Sensor. , 2018, , .		2
15	Remote Microwave and Field-Effect Sensing Techniques for Monitoring Hydrogel Sensor Response. Micromachines, 2018, 9, 526.	2.9	3
16	Hydrogel Gold Nanoparticle Switch. IEEE Electron Device Letters, 2018, 39, 1421-1424.	3.9	6
17	Effect of the Flow Shutdown Temperature on the Gelation of Slurry Flows in a Waxy Oil Pipeline. Industrial & Engineering Chemistry Research, 2015, 54, 4455-4459.	3.7	13
18	Time Interval and Continuous Testing of Stimuli Responsive Hydrogels. Materials Research Society Symposia Proceedings, 2014, 1622, 153-159.	0.1	0

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19	Effect of chemical composition on the response of zwitterionic glucose sensitive hydrogels studied by design of experiments. Journal of Applied Polymer Science, 2014, 131, .	2.6	2
20	Effects of gamma rays and neutron irradiation on the glucose response of boronic acid-containing â€œsmartâ€•hydrogels. Polymer Degradation and Stability, 2014, 99, 219-222.	5.8	11
21	Evolution of the Pressure Profile during the Gelation and Restart of a Model Waxy Crude Oil. Energy & Fuels, 2013, 27, 1909-1913.	5.1	15
22	Heterogeneous Organic Gels: Rheology and Restart. Energy & Fuels, 2013, 27, 1762-1771.	5.1	16
23	Smart Hydrogels Designed for use in Microfabricated Sensor Arrays. Materials Research Society Symposia Proceedings, 2013, 1570, 1.	0.1	1
24	An Improved Design for Chemomechanical Sensors: A Piezoresistive Pressure Sensor with a Mechanical Boss. Chemosensors, 2013, 1, 33-42.	3.6	1
25	The propagation of pressure in a gelled waxy oil pipeline as studied by particle imaging velocimetry. AICHE Journal, 2012, 58, 302-311.	3.6	35
26	Implantable Biosensor Arrays Based On Smart Hydrogels And Piezoresistive Sensors For Continuous Metabolic Monitoring. Procedia Engineering, 2011, 25, 1008-1011.	1.2	5
27	Fabrication of Highly Uniform Nanoparticles from Recombinant Silk-Elastin-like Protein Polymers for Therapeutic Agent Delivery. ACS Nano, 2011, 5, 5374-5382.	14.6	53
28	Thermodynamic analysis of the selectivity enhancement obtained by using smart hydrogels that are zwitterionic when detecting glucose with boronic acid moieties. Sensors and Actuators B: Chemical, 2011, 160, 1363-1371.	7.8	36
29	Polypeptide grafted hyaluronan: A self-assembling comb-branched polymer constructed from biological components. European Polymer Journal, 2011, 47, 2022-2027.	5.4	3
30	Effect of temperature changes on the performance of ionic strength biosensors based on hydrogels and pressure sensors. , 2011, 2011, 1855-8.		1
31	Biochemical microsensors on the basis of metabolically sensitive hydrogels. Proceedings of SPIE, 2011, , .	0.8	2
32	Hydrogel-based piezoresistive biochemical microsensors. Proceedings of SPIE, 2010, , .	0.8	1
33	Development, fabrication, and characterization of hydrogel based piezoresistive pressure sensors with perforated diaphragms. Sensors and Actuators A: Physical, 2010, 161, 29-38.	4.1	24
34	Hydrogel based sensor arrays (2Ã—2) with perforated piezoresistive diaphragms for metabolic monitoring (in vitro). Sensors and Actuators B: Chemical, 2010, 145, 807-816.	7.8	43
35	Structural, mechanical and osmotic properties of injectable hyaluronan-based composite hydrogels. Polymer, 2010, 51, 4424-4430.	3.8	21
36	Osmotic swelling pressure response of smart hydrogels suitable for chronically implantable glucose sensors. Sensors and Actuators B: Chemical, 2010, 144, 332-336.	7.8	77

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37	The effect of hydrogen bonding on oligoleucine structure in water: A molecular dynamics simulation study. European Polymer Journal, 2010, 46, 2310-2320.	5.4	2
38	Piezoresistive pH Microsensors Based on Stimuli-Sensitive Polyelectrolyte HydrogelsPiezoresistive pH-Mikrosensoren auf der Basis stimuli-sensitiver polyelektrolytischer Hydrogele. TM Technisches Messen, 2010, 77, .	0.7	17
39	Comparison of Surfactants Used to Prepare Aqueous Perfluoropentane Emulsions for Pharmaceutical Applications. Langmuir, 2010, 26, 4655-4660.	3.5	35
40	Smart hydrogel based microsensing platform for continuous glucose monitoring. , 2010, 2010, 677-9.		5
41	A comparison of fluoroalkyl-derivatized imidazolium:TFSI and alkyl-derivatized imidazolium:TFSI ionic liquids: a molecular dynamics simulation study. Physical Chemistry Chemical Physics, 2010, 12, 7064.	2.8	48
42	In vitro investigations of a pH- and ionic-strength-responsive polyelectrolytic hydrogel using a piezoresistive microsensor. Proceedings of SPIE, 2009, 7287, .	0.8	2
43	Confined Smart Hydrogels for Applications in Chemomechanical Sensors for Physiological Monitoring. Materials Research Society Symposia Proceedings, 2009, 1234, 1.	0.1	0
44	Rheological Properties of Crossâ€Linked Hyaluronanâ€"Gelatin Hydrogels for Tissue Engineering. Macromolecular Bioscience, 2009, 9, 20-28.	4.1	210
45	A comparison of three different methods for measuring both normal stress differences of viscoelastic liquids in torsional rheometers. Rheologica Acta, 2009, 48, 191-200.	2.4	22
46	Free swelling and confined smart hydrogels for applications in chemomechanical sensors for physiological monitoring. Sensors and Actuators B: Chemical, 2009, 136, 186-195.	7.8	75
47	Time-Dependent Rheology of a Model Waxy Crude Oil with Relevance to Gelled Pipeline Restart. Energy & Fuels, 2009, 23, 1311-1315.	5.1	56
48	Low-Frequency Dilational Elasticity of the Nematic 4â€˜-Pentyl-4-biphenylcarbonitrile (5CB)/Water Interface. Langmuir, 2007, 23, 7907-7910.	3.5	3
49	Separation of the effects of pH and polymer concentration on the swelling pressure and elastic modulus ofÂa pH-responsive hydrogel. Polymer, 2006, 47, 7335-7338.	3.8	39
50	A novel mesophase formed by top-shaped molecules in the bulk and unsupported thin films: A molecular dynamics study. Journal of Chemical Physics, 2006, 124, 124912.	3.0	1
51	Interfacial Tension of a Nematic Liquid Crystal/Water Interface with Homeotropic Surface Alignment. Langmuir, 2004, 20, 8110-8113.	3.5	48
52	Temperature-dependent transparency of poly(HPMA-co-DMA) hydrogels: effect of synthesis parameters. Polymer, 2003, 44, 4541-4546.	3.8	16
53	Development and relaxation of orientation in sheared concentrated lyotropic solutions of hydroxypropylcellulose in m-cresol. Polymer, 2003, 44, 1203-1210.	3.8	2
54	Monolithic rheometer plate fabricated using silicon micromachining technology and containing miniature pressure sensors for N1 and N2 measurements. Journal of Rheology, 2003, 47, 1249-1260.	2.6	38

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55	Constant-Volume Hydrogel Osmometer:Â A New Device Concept for Miniature Biosensors. Biomacromolecules, 2002, 3, 1271-1275.	5.4	75
56	Polarized Alignment and Surface Immobilization of Microtubules for Kinesin-Powered Nanodevices. Nano Letters, 2001, 1, 277-280.	9.1	81
57	Catalase Effects on Glucose-Sensitive Hydrogels. Macromolecules, 2000, 33, 3332-3336.	4.8	50
58	Adsorption of Globular Proteins at the Air/Water Interface as Measured via Dynamic Surface Tension: Concentration Dependence, Mass-Transfer Considerations, and Adsorption Kinetics. Journal of Colloid and Interface Science, 1995, 173, 16-27.	9.4	214
59	Concentrated entangled and semidilute entangled polystyrene solutions and the second normal stress difference. Polymer, 1994, 35, 1187-1194.	3.8	35
60	Shear-Induced Textures in the Lyotropic Liquid Crystal Poly(.gamma.-benzyl L-glutamate) (PBLG). Macromolecules, 1994, 27, 2784-2788.	4.8	18
61	Flow-induced concentration fluctuations in polymer solutions: Structure/property relationships. Rheologica Acta, 1993, 32, 1-8.	2.4	35
62	Molecular alignment of polymer liquid crystals in shear flows. 1. Spectrographic birefringence technique, steady-state orientation, and normal stress behavior in poly(benzyl glutamate) solutions. Macromolecules, 1993, 26, 772-784.	4.8	90
63	Rheology, flow instabilities, and shear-induced diffusion in polystyrene solutions. Macromolecules, 1993, 26, 1696-1706.	4.8	90
64	Measurements of the second normal stress difference for star polymers with highly entangled branches. Macromolecules, 1992, 25, 4744-4750.	4.8	15
65	Does N 1 or N 2 control the onset of edge fracture?. Rheologica Acta, 1992, 31, 306-308.	2.4	52
66	Shear flows of liquid crystal polymers: measurements of the second normal stress difference and the Doi molecular theory. Macromolecules, 1991, 24, 4460-4468.	4.8	110
67	Second normal stress difference of a Boger fluid. Polymer, 1991, 32, 2000-2009.	3.8	58
68	Unusual pressure profiles and fluctuations during shear flows of liquid crystal polymers. Polymer, 1991, 32, 1794-1796.	3.8	8
69	Coil-stretch transitions in mixed shear and extensional flows of dilute polymer solutions. Macromolecules, 1989, 22, 3004-3010.	4.8	109
70	A transition occurring in ideal elastic liquids during shear flow. Journal of Non-Newtonian Fluid Mechanics, 1988, 30, 1-19.	2.4	112
71	Dimensions of a polymer chain in a mixed solvent. Macromolecules, 1988, 21, 726-732.	4.8	54
72	The transport properties of rodâ€like particles. II. Narrow slit pore. Journal of Chemical Physics, 1988, 88, 1207-1213.	3.0	24

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73	Deformationâ€dependent hydrodynamic interaction in flows of dilute polymer solutions. Journal of Chemical Physics, 1988, 89, 2504-2513.	3.0	73
74	Molecular dynamics of flow in micropores. Journal of Chemical Physics, 1987, 87, 1733-1750.	3.0	256
75	The transport properties of rodâ€like particles via molecular dynamics. I. Bulk fluid. Journal of Chemical Physics, 1986, 85, 6674-6685.	3.0	45
76	Molecular dynamics of narrow, liquidâ€filled pores. Journal of Chemical Physics, 1985, 83, 1888-1901.	3.0	344
77	Smart Hydrogel-Based Biochemical Microsensor Array for Medical Diagnostics. Advances in Science and Technology, 0, , .	0.2	33
78	Evaluating the influence of particle morphology and density on the viscosity and injectability of a novel long-acting local anesthetic suspension. Journal of Biomaterials Applications, 0, , 088532822211064.	2.4	0