Maria Rosa Aguilar

List of Publications by Year
in descending order

71 papers	1,787 citations	257450 24 h-index	315739 38 g-index
74 all docs	74 docs citations	74 times ranked	2319 citing authors

#	Article	IF	Citations
1	Pore structure in supermacroporous polyacrylamide based cryogels. Soft Matter, 2005, 1, 303.	2.7	222
2	Folic Acid Antagonists: Antimicrobial and Immunomodulating Mechanisms and Applications. International Journal of Molecular Sciences, 2019, 20, 4996.	4.1	101
3	Pore structure of macroporous monolithic cryogels prepared from poly(vinyl alcohol). Journal of Applied Polymer Science, 2006, 100, 1057-1066.	2.6	91
4	In Situ Quantitative1H NMR Monitoring of Monomer Consumption:Â A Simple and Fast Way of Estimating Reactivity Ratios. Macromolecules, 2002, 35, 2036-2041.	4.8	64
5	Bioresorbable and Nonresorbable Macroporous Thermosensitive Hydrogels Prepared by Cryopolymerization. Role of the Cross-Linking Agent. Biomacromolecules, 2008, 9, 66-74.	5.4	61
6	New acrylic bone cements conjugated to vitamin E: Curing parameters, properties, and biocompatibility. Journal of Biomedical Materials Research Part B, 2002, 62, 299-307.	3.1	47
7	Bioactive bilayered dressing for compromised epidermal tissue regeneration with sequential activity of complementary agents. Acta Biomaterialia, 2015, 23, 103-115.	8.3	45
8	Polymeric nanoparticles loaded with dexamethasone or Î±-tocopheryl succinate to prevent cisplatin-induced ototoxicity. Acta Biomaterialia, 2017, 53, 199-210.	8.3	45
9	SAXS Investigation of the Effect of Temperature on the Multiscale Structure of a Macroporous Poly(N-isopropylacrylamide) Gel. Macromolecules, 2010, 43, 2009-2017.	4.8	42
10	Self-assembling polymer systems for advanced treatment of cancer and inflammation. Progress in Polymer Science, 2016, 53, 207-248.	24.7	42
11	Chitosanâ€“gelatin biopolymers as carrier substrata for limbal epithelial stem cells. Journal of Materials Science: Materials in Medicine, 2013, 24, 2819-2829.	3.6	40
12	Amphiphilic polymeric nanoparticles encapsulating curcumin: Antioxidant, anti-inflammatory and biocompatibility studies. Materials Science and Engineering C, 2021, 121, 111793.	7.3	40
13	Chitosan â€“ Rosmarinic acid conjugates with antioxidant, anti-inflammatory and photoprotective properties. Carbohydrate Polymers, 2021, 273, 118619.	10.2	40
14	Macroporous Scaffolds Based on Chitosan and Bioactive Moleculesâ€. Journal of Bioactive and Compatible Polymers, 2007, 22, 621-636.	2.1	39
15	Photothermal and photodynamic activity of polymeric nanoparticles based on Î±-tocopheryl succinate-RAFT block copolymers conjugated to IR-780. Acta Biomaterialia, 2017, 57, 70-84.	8.3	35
16	pH-sensitive polymeric nanoparticles with antioxidant and anti-inflammatory properties against cisplatin-induced hearing loss. Journal of Controlled Release, 2018, 270, 53-64.	9.9	35
17	Anti-angiogenic activity of heparin-like polysulfonated polymeric drugs in 3D human cell culture. Biomaterials, 2010, 31, 7863-7872.	11.4	33
18	Anticancer and Antiangiogenic Activity of Surfactant-Free Nanoparticles Based on Self-Assembled Polymeric Derivatives of Vitamin E: Structureâ€“Activity Relationship. Biomacromolecules, 2015, 16, 1566-1581.	5.4	31

#	Article	IF	Citations
19	Chitosan-stabilized silver nanoclusters with luminescent, photothermal and antibacterial properties. Carbohydrate Polymers, 2020, 250, 116973.	10.2	31
20	Quantitative Analysis of Protein Adsorption via Atomic Force Microscopy and Surface Plasmon Resonance. Macromolecular Bioscience, 2008, 8, 1126-1134.	4.1	29
21	Otoprotective properties of 6Î±-methylprednisolone-loaded nanoparticles against cisplatin: In vitro and in vivo correlation. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 965-976.	3.3	27
22	A Comparative Study on HCN Polymers Synthesized by Polymerization of NH₄CN or Diaminomaleonitrile in Aqueous Media: New Perspectives for Prebiotic Chemistry and Materials Science. Chemistry - A European Journal, 2019, 25, 11437-11455.	3.3	27
23	Oregano Essential Oil Micro- and Nanoencapsulation With Bioactive Properties for Biotechnological and Biomedical Applications. Frontiers in Bioengineering and Biotechnology, 2021, 9, 703684.	4.1	26
24	Evaluation of boronate-containing polymer brushes and gels as substrates for carbohydrate-mediated adhesion and cultivation of animal cells. Colloids and Surfaces B: Biointerfaces, 2010, 75, 510-519.	5.0	25
25	Smart heparin-based bioconjugates synthesized by a combination of ATRP and click chemistry. Polymer Chemistry, 2013, 4, 2800.	3.9	24
26	Antimicrobial polymeric biomaterials based on synthetic, nanotechnology, and biotechnological approaches. Current Opinion in Biotechnology, 2022, 76, 102752.	6.6	24
27	Chain Copolymerization Reactions: An Algorithm To Predict the Reaction Evolution with Conversion. Journal of Chemical Education, 2004, 81, 1210.	2.3	23
28	Anti-inflammatory Surface Coatings Based on Polyelectrolyte Multilayers of Heparin and Polycationic Nanoparticles of Naproxen-Bearing Polymeric Drugs. Biomacromolecules, 2019, 20, 4015-4025.	5.4	23
29	Encapsulation of low molecular weight heparin (bemiparin) into polymeric nanoparticles obtained from cationic block copolymers: properties and cell activity. Journal of Materials Chemistry B, 2013, 1, 850-860.	5.8	22
30	Antimitogenic Polymer Drugs Based on AMPS: Monomer Distributionâ^'Bioactivity Relationship of Water-Soluble Macromolecules. Biomacromolecules, 2010, 11, 626-634.	5.4	21
31	A Kinetic Model To Explain the Zero-Order Release of Drugs from Ionic Polymeric Drug Conjugates:Â Application to AMPSâ^'Triflusal-Derived Polymeric Drugs. Macromolecules, 2003, 36, 8876-8880.	4.8	20
32	Hyaluronic acid (HA)-coated naproxen-nanoparticles selectively target breast cancer stem cells through COX-independent pathways. Materials Science and Engineering C, 2021, 124, 112024.	7.3	20
33	Active viscosupplements for osteoarthritis treatment. Seminars in Arthritis and Rheumatism, 2019, 49, 171-183.	3.4	19
34	Anti-staphylococcal hydrogels based on bacterial cellulose and the antimicrobial biopolyester poly(3-hydroxy-acetylthioalkanoate-co-3-hydroxyalkanoate). International Journal of Biological Macromolecules, 2020, 162, 1869-1879.	7.5	19
35	Modulation of Inflammatory Mediators by Polymeric Nanoparticles Loaded with Anti-Inflammatory Drugs. Pharmaceutics, 2021, 13, 290.	4.5	19
36	Optimization of the Rheological Properties of Self-Assembled Tripeptide/Alginate/Cellulose Hydrogels for 3D Printing. Polymers, 2022, 14, 2229.	4.5	19

#	Article	IF	Citations
37	Modulation of Proteins Adsorption onto the Surface of Chitosan Complexed with Anionic Copolymers. Real Time Analysis by Surface Plasmon Resonance. Macromolecular Bioscience, 2004, 4, 631-638.	4.1	18
38	Thermosensitive Macroporous Cryogels Functionalized With Bioactive Chitosan/<scp>B</scp>emiparin Nanoparticles. Macromolecular Bioscience, 2013, 13, 1556-1567.	4.1	18
39	Î±-TOS-based RAFT block copolymers and their NPs for the treatment of cancer. Polymer Chemistry, 2016, 7, 838-850.	3.9	18
40	Imaging the Structure of Macroporous Hydrogels by Two-Photon Fluorescence Microscopy. Macromolecules, 2009, 42, 2749-2755.	4.8	17
41	Structure, Morphology, and Bioactivity of Biocompatible Systems Derived from Functionalized Acrylic Polymers Based on 5-Amino-2-naphthalene Sulfonic Acid. Biomacromolecules, 2010, 11, 1763-1772.	5.4	16
42	Mitochondrially Targeted Nanoparticles Based on Î±â€TOS for the Selective Cancer Treatment. Macromolecular Bioscience, 2016, 16, 395-411.	4.1	16
43	Î±-Tocopheryl Succinate-Based Polymeric Nanoparticles for the Treatment of Head and Neck Squamous Cell Carcinoma. Biomolecules, 2018, 8, 97.	4.0	16
44	Micellar Electrokinetic Chromatography:Â A Powerful Analytical Tool To Study Copolymerization Reactions Involving Ionic Species. Macromolecules, 2002, 35, 8315-8322.	4.8	15
45	Anti-Inflammatory Polymeric Nanoparticles Based on Ketoprofen and Dexamethasone. Pharmaceutics, 2020, 12, 723.	4.5	14
46	Thermoresponsive biodegradable HEMAâ€“Lactateâ€“Dextran-co-NIPA cryogels for controlled release of simvastatin. Artificial Cells, Nanomedicine and Biotechnology, 2015, 43, 40-49.	2.8	13
47	Biomimetic Gradient Scaffolds Containing Hyaluronic Acid and Sr/Zn Folates for Osteochondral Tissue Engineering. Polymers, 2022, 14, 12.	4.5	13
48	Selective biological response of human pulmonary microvascular endothelial cells and human pulmonary artery smooth muscle cells on cold-plasma-modified polyester vascular prostheses. Biomedical Materials (Bristol), 2011, 6, 065003.	3.3	12
49	Development of Biocomposite Polymeric Systems Loaded with Antibacterial Nanoparticles for the Coating of Polypropylene Biomaterials. Polymers, 2020, 12, 1829.	4.5	12
50	Injectable Tripeptide/Polymer Nanoparticles Supramolecular Hydrogel: A Candidate for the Treatment of Inflammatory Pathologies. ACS Applied Materials & Interfaces, 2022, 14, 10068-10080.	8.0	12
51	Evaluation of Glycerylphytate Crosslinked Semi- and Interpenetrated Polymer Membranes of Hyaluronic Acid and Chitosan for Tissue Engineering. Polymers, 2020, 12, 2661.	4.5	11
52	DEAE-chitosan nanoparticles as a pneumococcus-biomimetic material for the development of antipneumococcal therapeutics. Carbohydrate Polymers, 2021, 273, 118605.	10.2	9
53	Preparation and characterization of hydrogelâ€“nanosilver composites based on copolymers from sodium 2â€acrylamidoâ€2â€methylpropanesulfonate. Journal of Applied Polymer Science, 2013, 129, 537-548.	2.6	8
54	Antibacterial activity and cytotoxicity of hydrogelâ€“nanosilver composites based on copolymers from 2â€acrylamidoâ€2â€methylpropanesulfonate sodium. Journal of Applied Polymer Science, 2014, 131, .	2.6	8

#	Article	IF	Citations
55	Enhanced Bioactivity of Î±â€Tocopheryl Succinate Based Block Copolymer Nanoparticles by Reduced Hydrophobicity. Macromolecular Bioscience, 2016, 16, 1824-1837.	4.1	7
56	Characterization of Novel Synthetic Polyphenols: Validation of Antioxidant and Vasculoprotective Activities. Antioxidants, 2020, 9, 787.	5.1	7
57	Paclitaxel-loaded polymeric nanoparticles based on Î±-tocopheryl succinate for the treatment of head and neck squamous cell carcinoma: inÂvivo murine model. Drug Delivery, 2021, 28, 1376-1388.	5.7	7
58	Polymeric active coatings with functionality in vascular applications. Journal of Materials Science: Materials in Medicine, 2002, 13, 1099-1104.	3.6	6
59	Comparative Methods for the Evaluation of Protein Adsorption. Macromolecular Bioscience, 2009, 9, 661-670.	4.1	6
60	Microstructure and biological activity of sulfonated N-vinylpyrrolidone copolymers. Journal of Bioactive and Compatible Polymers, 2012, 27, 453-466.	2.1	6
61	Multifunctional decoration of alpha-tocopheryl succinate-based NP for cancer treatment: effect of TPP and LTVSPWY peptide. Journal of Materials Science: Materials in Medicine, 2017, 28, 152.	3.6	6
62	Polymeric Nanoparticles for Cancer Therapy and Bioimaging. Nanomedicine and Nanotoxicology, 2018, , 137-172.	0.2	6
63	Polymeric Nanoparticles that Combine Dexamethasone and Naproxen for the Synergistic Inhibition of Il12b Transcription in Macrophages. Macromolecular Bioscience, 2020, 20, 2000002.	4.1	5
64	Polymeric drugs with prolonged sustained delivery of specific anti-aggregant agents for platelets: kinetic analysis of the release mechanism. Journal of Biomaterials Science, Polymer Edition, 2004, 15, 917-928.	3.5	4
65	Antitumor Activity of Nanoparticles Loaded with PHT-427, a Novel AKT/PDK1 Inhibitor, for the Treatment of Head and Neck Squamous Cell Carcinoma. Pharmaceutics, 2021, 13, 1242.	4.5	4
66	Biodegradable and Biocompatible Thermoplastic Poly(Ester-Urethane)s Based on Poly(Îµ-Caprolactone) and Novel 1,3-Propanediol Bis(4-Isocyanatobenzoate) Diisocyanate: Synthesis and Characterization. Polymers, 2022, 14, 1288.	4.5	4
67	bFGF interaction and in vivo angiogenesis inhibition by self-assembling sulfonic acid-based copolymers. Journal of Materials Science: Materials in Medicine, 2012, 23, 129-135.	3.6	1
68	Nanoparticles of 4,7â€dichloroâ€2â€quinolinemethylacrylateâ€based copolymers and their potential cytotoxic activity on human breast carcinoma cells. Journal of Applied Polymer Science, 2019, 136, 47545.	2.6	1
69	A simple procedure to tailor the compositional gradient of copolymeric materials. E-Polymers, 2009, 9, .	3.0	0
70	In situFormation of HEMA-NIPA Compositional Gradients During Polymerization. Journal of Macromolecular Science - Pure and Applied Chemistry, 2009, 46, 727-729.	2.2	0
71	SAXS investigation of the structure of the pore walls in thermosensitive macroporous hydrogels. , 2009, , .		0