Alexandra MuÃ±oz-Bonilla

List of Publications by Year
in descending order

114 papers	4,227 citations	159358 30 h-index	128067 60 g-index
115 all docs	115 docs citations	115 times ranked	5986 citing authors

#	Article	IF	Citations
1	Chitin Nanocrystals: Environmentally Friendly Materials for the Development of Bioactive Films. Coatings, 2022, 12, 144.	1.2	21
2	Antibacterial and compostable polymers derived from biobased itaconic acid as environmentally friendly additives for biopolymers. Polymer Testing, 2022, 109, 107541.	2.3	13
3	Biobased polymers derived from itaconic acid bearing clickable groups with potent antibacterial activity and negligible hemolytic activity. Polymer Chemistry, 2021, 12, 3190-3200.	1.9	19
4	Accelerated disintegration of compostable Ecovio polymer by using ZnO particles as filler. Polymer Degradation and Stability, 2021, 185, 109501.	2.7	24
5	Development of Highly Crystalline Polylactic Acid with Î²-Crystalline Phase from the Induced Alignment of Electrospun Fibers. Polymers, 2021, 13, 2860.	2.0	17
6	Understanding the structural and magnetic evolution of superparamagnetic Zn ferrites nanoparticles synthesized by an easy electrochemical process. Journal of Alloys and Compounds, 2021, 881, 160585.	2.8	2
7	Antibacterial Polymers Based on Poly(2-hydroxyethyl methacrylate) and Thiazolium Groups with Hydrolytically Labile Linkages Leading to Inactive and Low Cytotoxic Compounds. Materials, 2021, 14, 7477.	1.3	4
8	Multifunctional PLA Blends Containing Chitosan Mediated Silver Nanoparticles: Thermal, Mechanical, Antibacterial, and Degradation Properties. Nanomaterials, 2020, 10, 22.	1.9	40
9	Physical methods for controlling bacterial colonization on polymer surfaces. Biotechnology Advances, 2020, 43, 107586.	6.0	40
10	Chemical Hydrogels Bearing Thiazolium Groups with a Broad Spectrum of Antimicrobial Behavior. Polymers, 2020, 12, 2853.	2.0	10
11	Biodegradable and Antimicrobial PLAâ€“OLA Blends Containing Chitosan-Mediated Silver Nanoparticles with Shape Memory Properties for Potential Medical Applications. Nanomaterials, 2020, 10, 1065.	1.9	16
12	Modified Starch as a Filter Controller in Water-Based Drilling Fluids. Materials, 2020, 13, 2794.	1.3	20
13	Antibacterial Character of Cationic Polymers Attached to Carbon-Based Nanomaterials. Nanomaterials, 2020, 10, 1218.	1.9	19
14	Hemolytic and Antimicrobial Activities of a Series of Cationic Amphiphilic Copolymers Comprised of Same Centered Comonomers with Thiazole Moieties and Polyethylene Glycol Derivatives. Polymers, 2020, 12, 972.	2.0	17
15	Toxicity and biodegradation of zinc ferrite nanoparticles in Xenopus laevis. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	6
16	Fatâ€Replacer Properties of Oxidized Cassava Starch Using Hydrogen Peroxide/Sodium Bicarbonate Redox System in Mayonnaise Formulation and Its Stability. Starch/Staerke, 2019, 71, 1900112.	1.1	5
17	Porous Microstructured Surfaces with pHâ€Triggered Antibacterial Properties. Macromolecular Bioscience, 2019, 19, e1900127.	2.1	8
18	Biocompatible Polymer Materials with Antimicrobial Properties for Preparation of Stents. Nanomaterials, 2019, 9, 1548.	1.9	31

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19	Combinations of Antimicrobial Polymers with Nanomaterials and Bioactives to Improve Biocidal Therapies. Polymers, 2019, 11, 1789.	2.0	28
20	Antibacterial PLA Fibers Containing Thiazolium Groups as Wound Dressing Materials. ACS Applied Bio Materials, 2019, 2, 4714-4719.	2.3	23
21	Influence of Polymer Composition and Substrate on the Performance of Bioinspired Coatings with Antibacterial Activity. Coatings, 2019, 9, 733.	1.2	3
22	Environmentally Friendly Fertilizers Based on Starch Superabsorbents. Materials, 2019, 12, 3493.	1.3	7
23	Adhesive antibacterial coatings based on copolymers bearing thiazolium cationic groups and catechol moieties as robust anchors. Progress in Organic Coatings, 2019, 136, 105272.	1.9	12
24	Hydrogels based on oxidized starches from different botanical sources for release of fertilizers. International Journal of Biological Macromolecules, 2019, 136, 813-822.	3.6	33
25	Influence of side chain structure on the thermal and antimicrobial properties of cationic methacrylic polymers. European Polymer Journal, 2019, 117, 86-93.	2.6	12
26	Polymeric Materials: Surfaces, Interfaces and Bioapplications. Materials, 2019, 12, 1312.	1.3	4
27	Thermoresponsive Poly(N-Isopropylacrylamide-co-Dimethylaminoethyl Methacrylate) Microgel Aqueous Dispersions with Potential Antimicrobial Properties. Polymers, 2019, 11, 606.	2.0	19
28	Bio-Based Polymers with Antimicrobial Properties towards Sustainable Development. Materials, 2019, 12, 641.	1.3	123
29	Removal of anionic and cationic dyes with bioadsorbent oxidized chitosans. Carbohydrate Polymers, 2018, 194, 375-383.	5.1	86
30	Preparation of Oxidized and Grafted Chitosan Superabsorbents for Urea Delivery. Journal of Polymers and the Environment, 2018, 26, 728-739.	2.4	22
31	Providing Antibacterial Activity to Poly(2-Hydroxy Ethyl Methacrylate) by Copolymerization with a Methacrylic Thiazolium Derivative. International Journal of Molecular Sciences, 2018, 19, 4120.	1.8	15
32	Poly(ionic liquid)s as antimicrobial materials. European Polymer Journal, 2018, 105, 135-149.	2.6	78
33	Compositional Tuning of Light-to-Heat Conversion Efficiency and of Optical Properties of Superparamagnetic Iron Oxide Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 16389-16396.	1.5	10
34	Antimicrobial Porous Surfaces Prepared by Breath Figures Approach. Materials, 2018, 11, 1266.	1.3	15
35	Tailoring Macromolecular Structure of Cationic Polymers towards Efficient Contact Active Antimicrobial Surfaces. Polymers, 2018, 10, 241.	2.0	19
36	Honeycomb Films with Coreâ€"Shell Dispersed Phases Prepared by the Combination of Breath Figures and Phase Separation Process of Ternary Blends. Langmuir, 2017, 33, 2872-2877.	1.6	4

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37	Antimicrobial surfaces obtained from blends of block copolymers synthesized by simultaneous ATRP and click chemistry reactions. European Polymer Journal, 2017, 93, 53-62.	2.6	9
38	Switchable and pH responsive porous surfaces based on polypeptide-based block copolymers. Materials and Design, 2017, 131, 121-126.	3.3	16
39	Microfluidic Reactors Based on Rechargeable Catalytic Porous Supports: Heterogeneous Enzymatic Catalysis via Reversible Hostâ€“Guest Interactions. ACS Applied Materials & Interfaces, 2017, 9, 4184-4191.	4.0	19
40	Contact Active Antimicrobial Coatings Prepared by Polymer Blending. Macromolecular Bioscience, 2017, 17, 1700258.	2.1	19
41	Magnetite as a platform material in the detection of glucose, ethanol and cholesterol. Sensors and Actuators B: Chemical, 2017, 238, 693-701.	4.0	25
42	Antimicrobial Polymers in the Nano-World. Nanomaterials, 2017, 7, 48.	1.9	121
43	Removal of heavy metal ions in water by starch esters. Starch/Staerke, 2016, 68, 37-46.	1.1	40
44	Synthesis and structural characterization of Zn_xFe_{3âˆ’x}O₄ ferrite nanoparticles obtained by an electrochemical method. RSC Advances, 2016, 6, 40067-40076.	1.7	62
45	The role of the temperature in the morphology and properties of zinc oxide structures obtained by electrosynthesis in aqueous solution. Materials Chemistry and Physics, 2016, 181, 367-374.	2.0	2
46	Natural RAFT Polymerization: Recyclable-Catalyst-Aided, Opened-to-Air, and Sunlight-Photolyzed RAFT Polymerizations. ACS Macro Letters, 2016, 5, 1278-1282.	2.3	78
47	Itaconic Acid Grafted Starch Hydrogels as Metal Remover: Capacity, Selectivity and Adsorption Kinetics. Journal of Polymers and the Environment, 2016, 24, 343-355.	2.4	36
48	Fabrication of honeycomb films from highly functional dendritic structures: electrostatic force driven immobilization of biomolecules. Polymer Chemistry, 2016, 7, 4112-4120.	1.9	9
49	Immobilization of Stimuli-Responsive Nanogels onto Honeycomb Porous Surfaces and Controlled Release of Proteins. Langmuir, 2016, 32, 1854-1862.	1.6	35
50	Toward Cell Selective Surfaces: Cell Adhesion and Proliferation on Breath Figures with Antifouling Surface Chemistry. ACS Applied Materials & Interfaces, 2016, 8, 6344-6353.	4.0	52
51	A biomimicking and electrostatic self-assembly strategy for the preparation of glycopolymer decorated photoactive nanoparticles. Polymer Chemistry, 2016, 7, 2565-2572.	1.9	19
52	Antimicrobial films obtained from latex particles functionalized with quaternized block copolymers. Colloids and Surfaces B: Biointerfaces, 2016, 140, 94-103.	2.5	17
53	Comparison of ferrite nanoparticles obtained electrochemically for catalytical reduction of hydrogen peroxide. Journal of Solid State Electrochemistry, 2016, 20, 1191-1198.	1.2	30
54	The roadmap of antimicrobial polymeric materials in macromolecular nanotechnology. European Polymer Journal, 2015, 65, 46-62.	2.6	136

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55	Heavy metal (Cd²⁺, Ni²⁺, Pb²⁺ and Ni²⁺) adsorption in aqueous solutions by oxidized starches. Polymers for Advanced Technologies, 2015, 26, 147-152.	1.6	26
56	Design of hybrid gradient porous surfaces with magnetic nanoparticles. Polymer, 2015, 70, 100-108.	1.8	5
57	Straightforward functionalization of breath figures: Simultaneous orthogonal hostâ€“guest and pH-responsive interfaces. Journal of Colloid and Interface Science, 2015, 457, 272-280.	5.0	7
58	Functional surfaces obtained from emulsion polymerization using antimicrobial glycosylated block copolymers as surfactants. Polymer Chemistry, 2015, 6, 6171-6181.	1.9	18
59	Adsorption of chromium(VI) onto electrochemically obtained magnetite nanoparticles. International Journal of Environmental Science and Technology, 2015, 12, 4017-4024.	1.8	13
60	Glycopolymeric Materials for Advanced Applications. Materials, 2015, 8, 2276-2296.	1.3	24
61	Enzymatic Catalysis Combining the Breath Figures and Layer-by-Layer Techniques: Toward the Design of Microreactors. ACS Applied Materials & Interfaces, 2015, 7, 12210-12219.	4.0	18
62	Breath Figures: Fabrication of Honeycomb Porous Films Induced by Marangoni Instabilities. , 2015, , 219-256.		1
63	A simple aqueous electrochemical method to synthesize TiO₂ nanoparticles. Physical Chemistry Chemical Physics, 2015, 17, 29319-29326.	1.3	18
64	Visible and ultraviolet antibacterial behavior in PVDFâ€“TiO2 nanocomposite films. European Polymer Journal, 2015, 71, 412-422.	2.6	19
65	Effect of glycounits on the antimicrobial properties and toxicity behavior of polymers based on quaternized DMAEMA. Biomacromolecules, 2015, 16, 295-303.	2.6	74
66	Chemical modification of block copolymers based on 2-hydroxyethyl acrylate to obtain amphiphilic glycopolymers. European Polymer Journal, 2015, 62, 167-178.	2.6	11
67	Dendritic amphiphiles as additives for honeycomb-like patterned surfaces by breath figures: Role of the molecular characteristics on the pore morphology. Journal of Colloid and Interface Science, 2015, 440, 263-271.	5.0	21
68	Honeycomb Structured Films Prepared by Breath Figures: Fabrication and Application for Biorecognition Purposes. , 2015, , 237-271.		0
69	Wellâ€Defined Glycopolymers via RAFT Polymerization: Stabilization of Gold Nanoparticles. Macromolecular Chemistry and Physics, 2014, 215, 1915-1924.	1.1	18
70	Towards hierarchically ordered functional porous polymeric surfaces prepared by the breath figures approach. Progress in Polymer Science, 2014, 39, 510-554.	11.8	222
71	Preparation of amphiphilic glycopolymers with flexible long side chain and their use as stabilizer for emulsion polymerization. Journal of Colloid and Interface Science, 2014, 417, 336-345.	5.0	12
72	Tuning the Pore Composition by Two Simultaneous Interfacial Self-Assembly Processes: Breath Figures and Coffee Stain. Langmuir, 2014, 30, 6134-6141.	1.6	13

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73	One-pot electrochemical synthesis of polydopamine coated magnetite nanoparticles. RSC Advances, 2014, 4, 48353-48361.	1.7	46
74	Formation of Multigradient Porous Surfaces for Selective Bacterial Entrapment. Biomacromolecules, 2014, 15, 3338-3348.	2.6	19
75	Surface modification of magnetite hybrid particles with carbohydrates and gold nanoparticlesvia â€œclickâ€•chemistry. Polymer Chemistry, 2013, 4, 986-995.	1.9	15
76	Fabrication of Structured Porous Films by Breath Figures and Phase Separation Processes: Tuning the Chemistry and Morphology Inside the Pores Using Click Chemistry. ACS Applied Materials & Interfaces, 2013, 5, 3943-3951.	4.0	37
77	Amphiphilic polymers bearing gluconolactone moieties: Synthesis and long side-chain crystalline behavior. Carbohydrate Polymers, 2013, 94, 755-764.	5.1	10
78	Controlled block glycopolymers able to bind specific proteins. Journal of Polymer Science Part A, 2013, 51, 1337-1347.	2.5	28
79	Hybrid materials achieved by polypeptide grafted magnetite nanoparticles through a dopamine biomimetic surface anchored initiator. Polymer Chemistry, 2013, 4, 558-567.	1.9	50
80	Catecholic Chemistry To Obtain Recyclable and Reusable Hybrid Polymeric Particles as Catalytic Systems. Macromolecules, 2013, 46, 2951-2962.	2.2	18
81	Control of the chemistry outside the pores in honeycomb patterned films. Polymer Chemistry, 2013, 4, 4024.	1.9	30
82	CHAPTER 1. Introduction to Antimicrobial Polymeric Materials. RSC Polymer Chemistry Series, 2013, , 1-21.	0.1	8
83	Biodegradable Polycaprolactone-Titania Nanocomposites: Preparation, Characterization and Antimicrobial Properties. International Journal of Molecular Sciences, 2013, 14, 9249-9266.	1.8	60
84	Hierarchically Structured Multifunctional Porous Interfaces through Water Templated Self-Assembly of Ternary Systems. Langmuir, 2012, 28, 9778-9787.	1.6	44
85	Preparation of glycopolymerâ€coated magnetite nanoparticles for hyperthermia treatment. Journal of Polymer Science Part A, 2012, 50, 5087-5096.	2.5	29
86	Magnetiteâ€"Polypeptide Hybrid Materials Decorated with Gold Nanoparticles: Study of Their Catalytic Activity in 4-Nitrophenol Reduction. Journal of Physical Chemistry C, 2012, 116, 24717-24725.	1.5	67
87	Synthesis and lectin recognition studies of glycosylated polystyrene microspheres functionalized via thiolâ€"para-fluorine â€œclickâ€•reaction. Polymer Chemistry, 2012, 3, 3282.	1.9	24
88	Breath figures method to control the topography and the functionality of polymeric surfaces in porous films and microspheres. Journal of Polymer Science Part A, 2012, 50, 851-859.	2.5	28
89	Glycopolymers obtained by chemical modification of wellâ€defined block copolymers. Journal of Polymer Science Part A, 2012, 50, 2565-2577.	2.5	15
90	Influence of glycopolymers structure on the copolymerization reaction and on their binding behavior with lectins. European Polymer Journal, 2012, 48, 963-973.	2.6	10

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91	Polymeric materials with antimicrobial activity. Progress in Polymer Science, 2012, 37, 281-339.	11.8	1,055
92	Glycoparticles and bioactive films prepared by emulsion polymerization using a well-defined block glycopolymer stabilizer. Soft Matter, 2011, 7, 2493.	1.2	25
93	Block Copolymer Surfactants in Emulsion Polymerization: Influence of the Miscibility of the Hydrophobic Block on Kinetics, Particle Morphology, and Film Formation. Macromolecules, 2011, 44, 4282-4290.	2.2	35
94	Gluconolactoneâ€derivated polymers: Copolymerization, thermal properties, and their potential use as polymeric surfactants. Journal of Polymer Science Part A, 2011, 49, 526-536.	2.5	12
95	Amphiphilic block glycopolymers via atom transfer radical polymerization: Synthesis, selfâ€assembly and biomolecular recognition. Journal of Polymer Science Part A, 2011, 49, 2627-2635.	2.5	18
96	Statistical Glycopolymers Based on 2â€Hydroxyethyl Methacrylate: Copolymerization, Thermal Properties, and Lectin Interaction Studies. Macromolecular Chemistry and Physics, 2011, 212, 1294-1304.	1.1	9
97	Glycopolymers with glucosamine pendant groups: Copolymerization, physico-chemical and interaction properties. Reactive and Functional Polymers, 2011, 71, 1-10.	2.0	18
98	Wellâ€controlled amphiphilic block glycopolymers and their molecular recognition with lectins. Journal of Polymer Science Part A, 2010, 48, 3623-3631.	2.5	38
99	Adding stimuli-responsive extensions to antifouling hairy particles. Polymer Chemistry, 2010, 1, 624.	1.9	13
100	Environmentally Responsive Particles: From Superhydrophobic Particle Films to Water-Dispersible Microspheres. Langmuir, 2010, 26, 18617-18620.	1.6	5
101	Preparation of Hairy Particles and Antifouling Films Using Brush-Type Amphiphilic Block Copolymer Surfactants in Emulsion Polymerization. Macromolecules, 2010, 43, 2721-2731.	2.2	91
102	Fabrication and Superhydrophobic Behavior of Fluorinated Microspheres. Langmuir, 2010, 26, 16775-16781.	1.6	23
103	Fabrication of Honeycomb-Structured Porous Surfaces Decorated with Glycopolymers. Langmuir, 2010, 26, 8552-8558.	1.6	52
104	Engineering polymer surfaces with variable chemistry and topography. Journal of Polymer Science Part A, 2009, 47, 2262-2271.	2.5	32
105	Self-Organized Hierarchical Structures in Polymer Surfaces: Self-Assembled Nanostructures within Breath Figures. Langmuir, 2009, 25, 6493-6499.	1.6	76
106	Synthesis of poly(di[methylamine]ethyl methacrylate)â€‹<i>b</i>â€poly(cyclohexyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td (metha ATRP: Condensedâ€phase and solution properties. Journal of Polymer Science Part A, 2008, 46, 85-92.	2.5	9
107	Thermal and Morphological Behaviour of Wellâ€Defined Amphiphilic Triblock Copolymers Based on Cyclohexyl and Di(ethylene glycol) Methyl Ether Methacrylates. Macromolecular Chemistry and Physics, 2008, 209, 184-194.	1.1	2
108	Synthesis and aqueous solution properties of stimuli-responsive triblock copolymers. Soft Matter, 2007, 3, 725-731.	1.2	51

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109	Selfâ€Assembly of ATRPâ€Synthesized PCHâ€<i>b</i>â€P<i>t</i>BAâ€<i>b</i>â€PCH Triblock Copolymers Observed by Timeâ€Resolved SAXS. Macromolecular Chemistry and Physics, 2007, 208, 2654-2664.	1.1	8
110	Aggregation and solubilization of organic solvents and petrol/gasoline in water mediated by block copolymers. European Polymer Journal, 2007, 43, 4583-4592.	2.6	6
111	Physical properties of poly(cyclohexyl methacrylate)-b-poly(iso-butyl acrylate)-b-poly(cyclohexyl) Tj ETQq1 1 0.784314 rgBT /Overlock 1 48, 5581-5589.	1.8	3
112	Atom transfer radical polymerization of cyclohexyl methacrylate at a low temperature. Journal of Polymer Science Part A, 2005, 43, 71-77.	2.5	20
113	Synthesis of triblock copolymers based on two isomer acrylate monomers by atom transfer radical polymerization. Journal of Polymer Science Part A, 2005, 43, 4828-4837.	2.5	15
114	Amylose Modified Starches as Superabsorbent Systems for Release of Potassium Fertilizers. Journal of Polymers and the Environment, 0, , 1.	2.4	1