

Alexandra Muñoz-Bonilla

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7281165/publications.pdf>

Version: 2024-02-01

114
papers

4,227
citations

159585

30
h-index

128289

60
g-index

115
all docs

115
docs citations

115
times ranked

5986
citing authors

#	ARTICLE	IF	CITATIONS
1	Polymeric materials with antimicrobial activity. Progress in Polymer Science, 2012, 37, 281-339.	24.7	1,055
2	Towards hierarchically ordered functional porous polymeric surfaces prepared by the breath figures approach. Progress in Polymer Science, 2014, 39, 510-554.	24.7	222
3	The roadmap of antimicrobial polymeric materials in macromolecular nanotechnology. European Polymer Journal, 2015, 65, 46-62.	5.4	136
4	Bio-Based Polymers with Antimicrobial Properties towards Sustainable Development. Materials, 2019, 12, 641.	2.9	123
5	Antimicrobial Polymers in the Nano-World. Nanomaterials, 2017, 7, 48.	4.1	121
6	Preparation of Hairy Particles and Antifouling Films Using Brush-Type Amphiphilic Block Copolymer Surfactants in Emulsion Polymerization. Macromolecules, 2010, 43, 2721-2731.	4.8	91
7	Removal of anionic and cationic dyes with bioadsorbent oxidized chitosans. Carbohydrate Polymers, 2018, 194, 375-383.	10.2	86
8	Natural RAFT Polymerization: Recyclable-Catalyst-Aided, Opened-to-Air, and Sunlight-Photolyzed RAFT Polymerizations. ACS Macro Letters, 2016, 5, 1278-1282.	4.8	78
9	Poly(ionic liquid)s as antimicrobial materials. European Polymer Journal, 2018, 105, 135-149.	5.4	78
10	Self-Organized Hierarchical Structures in Polymer Surfaces: Self-Assembled Nanostructures within Breath Figures. Langmuir, 2009, 25, 6493-6499.	3.5	76
11	Effect of glycounts on the antimicrobial properties and toxicity behavior of polymers based on quaternized DMAEMA. Biomacromolecules, 2015, 16, 295-303.	5.4	74
12	Magnetite-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.	3.1	67
13	Synthesis and structural characterization of $Zn_xFe_{3-x}O_4$ ferrite nanoparticles obtained by an electrochemical method. RSC Advances, 2016, 6, 40067-40076.	3.6	62
14	Biodegradable Polycaprolactone-Titania Nanocomposites: Preparation, Characterization and Antimicrobial Properties. International Journal of Molecular Sciences, 2013, 14, 9249-9266.	4.1	60
15	Fabrication of Honeycomb-Structured Porous Surfaces Decorated with Glycopolymers. Langmuir, 2010, 26, 8552-8558.	3.5	52
16	Toward Cell Selective Surfaces: Cell Adhesion and Proliferation on Breath Figures with Antifouling Surface Chemistry. ACS Applied Materials & Interfaces, 2016, 8, 6344-6353.	8.0	52
17	Synthesis and aqueous solution properties of stimuli-responsive triblock copolymers. Soft Matter, 2007, 3, 725-731.	2.7	51
18	Hybrid materials achieved by polypeptide grafted magnetite nanoparticles through a dopamine biomimetic surface anchored initiator. Polymer Chemistry, 2013, 4, 558-567.	3.9	50

#	ARTICLE	IF	CITATIONS
19	One-pot electrochemical synthesis of polydopamine coated magnetite nanoparticles. RSC Advances, 2014, 4, 48353-48361.	3.6	46
20	Hierarchically Structured Multifunctional Porous Interfaces through Water Templated Self-Assembly of Ternary Systems. Langmuir, 2012, 28, 9778-9787.	3.5	44
21	Removal of heavy metal ions in water by starch esters. Starch/Staerke, 2016, 68, 37-46.	2.1	40
22	Multifunctional PLA Blends Containing Chitosan Mediated Silver Nanoparticles: Thermal, Mechanical, Antibacterial, and Degradation Properties. Nanomaterials, 2020, 10, 22.	4.1	40
23	Physical methods for controlling bacterial colonization on polymer surfaces. Biotechnology Advances, 2020, 43, 107586.	11.7	40
24	Well-controlled amphiphilic block glycopolymers and their molecular recognition with lectins. Journal of Polymer Science Part A, 2010, 48, 3623-3631.	2.3	38
25	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.	8.0	37
26	Itaconic Acid Grafted Starch Hydrogels as Metal Remover: Capacity, Selectivity and Adsorption Kinetics. Journal of Polymers and the Environment, 2016, 24, 343-355.	5.0	36
27	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.	4.8	35
28	Immobilization of Stimuli-Responsive Nanogels onto Honeycomb Porous Surfaces and Controlled Release of Proteins. Langmuir, 2016, 32, 1854-1862.	3.5	35
29	Hydrogels based on oxidized starches from different botanical sources for release of fertilizers. International Journal of Biological Macromolecules, 2019, 136, 813-822.	7.5	33
30	Engineering polymer surfaces with variable chemistry and topography. Journal of Polymer Science Part A, 2009, 47, 2262-2271.	2.3	32
31	Biocompatible Polymer Materials with Antimicrobial Properties for Preparation of Stents. Nanomaterials, 2019, 9, 1548.	4.1	31
32	Control of the chemistry outside the pores in honeycomb patterned films. Polymer Chemistry, 2013, 4, 4024.	3.9	30
33	Comparison of ferrite nanoparticles obtained electrochemically for catalytical reduction of hydrogen peroxide. Journal of Solid State Electrochemistry, 2016, 20, 1191-1198.	2.5	30
34	Preparation of glycopolymer-coated magnetite nanoparticles for hyperthermia treatment. Journal of Polymer Science Part A, 2012, 50, 5087-5096.	2.3	29
35	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.	2.3	28
36	Controlled block glycopolymers able to bind specific proteins. Journal of Polymer Science Part A, 2013, 51, 1337-1347.	2.3	28

#	ARTICLE	IF	CITATIONS
37	Combinations of Antimicrobial Polymers with Nanomaterials and Bioactives to Improve Biocidal Therapies. <i>Polymers</i> , 2019, 11, 1789.	4.5	28
38	Heavy metal (Cd^{2+} , Ni^{2+} , Pb^{2+} and Ni^{2+}) adsorption in aqueous solutions by oxidized starches. <i>Polymers for Advanced Technologies</i> , 2015, 26, 147-152.	3.2	26
39	Glycoparticles and bioactive films prepared by emulsion polymerization using a well-defined block glycopolymer stabilizer. <i>Soft Matter</i> , 2011, 7, 2493.	2.7	25
40	Magnetite as a platform material in the detection of glucose, ethanol and cholesterol. <i>Sensors and Actuators B: Chemical</i> , 2017, 238, 693-701.	7.8	25
41	Synthesis and lectin recognition studies of glycosylated polystyrene microspheres functionalized via thiol-para-fluorine click-reaction. <i>Polymer Chemistry</i> , 2012, 3, 3282.	3.9	24
42	Glycopolymeric Materials for Advanced Applications. <i>Materials</i> , 2015, 8, 2276-2296.	2.9	24
43	Accelerated disintegration of compostable Ecovio polymer by using ZnO particles as filler. <i>Polymer Degradation and Stability</i> , 2021, 185, 109501.	5.8	24
44	Fabrication and Superhydrophobic Behavior of Fluorinated Microspheres. <i>Langmuir</i> , 2010, 26, 16775-16781.	3.5	23
45	Antibacterial PLA Fibers Containing Thiazolium Groups as Wound Dressing Materials. <i>ACS Applied Bio Materials</i> , 2019, 2, 4714-4719.	4.6	23
46	Preparation of Oxidized and Grafted Chitosan Superabsorbents for Urea Delivery. <i>Journal of Polymers and the Environment</i> , 2018, 26, 728-739.	5.0	22
47	Dendritic amphiphiles as additives for honeycomb-like patterned surfaces by breath figures: Role of the molecular characteristics on the pore morphology. <i>Journal of Colloid and Interface Science</i> , 2015, 440, 263-271.	9.4	21
48	Chitin Nanocrystals: Environmentally Friendly Materials for the Development of Bioactive Films. <i>Coatings</i> , 2022, 12, 144.	2.6	21
49	Atom transfer radical polymerization of cyclohexyl methacrylate at a low temperature. <i>Journal of Polymer Science Part A</i> , 2005, 43, 71-77.	2.3	20
50	Modified Starch as a Filter Controller in Water-Based Drilling Fluids. <i>Materials</i> , 2020, 13, 2794.	2.9	20
51	Formation of Multigradient Porous Surfaces for Selective Bacterial Entrapment. <i>Biomacromolecules</i> , 2014, 15, 3338-3348.	5.4	19
52	Visible and ultraviolet antibacterial behavior in PVDF-TiO ₂ nanocomposite films. <i>European Polymer Journal</i> , 2015, 71, 412-422.	5.4	19
53	A biomimicking and electrostatic self-assembly strategy for the preparation of glycopolymer decorated photoactive nanoparticles. <i>Polymer Chemistry</i> , 2016, 7, 2565-2572.	3.9	19
54	Microfluidic Reactors Based on Rechargeable Catalytic Porous Supports: Heterogeneous Enzymatic Catalysis via Reversible Host-Guest Interactions. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 4184-4191.	8.0	19

#	ARTICLE	IF	CITATIONS
55	Contact Active Antimicrobial Coatings Prepared by Polymer Blending. <i>Macromolecular Bioscience</i> , 2017, 17, 1700258.	4.1	19
56	Tailoring Macromolecular Structure of Cationic Polymers towards Efficient Contact Active Antimicrobial Surfaces. <i>Polymers</i> , 2018, 10, 241.	4.5	19
57	Thermoresponsive Poly(N-Isopropylacrylamide-co-Dimethylaminoethyl Methacrylate) Microgel Aqueous Dispersions with Potential Antimicrobial Properties. <i>Polymers</i> , 2019, 11, 606.	4.5	19
58	Antibacterial Character of Cationic Polymers Attached to Carbon-Based Nanomaterials. <i>Nanomaterials</i> , 2020, 10, 1218.	4.1	19
59	Biobased polymers derived from itaconic acid bearing clickable groups with potent antibacterial activity and negligible hemolytic activity. <i>Polymer Chemistry</i> , 2021, 12, 3190-3200.	3.9	19
60	Amphiphilic block glycopolymers via atom transfer radical polymerization: Synthesis, self-assembly and biomolecular recognition. <i>Journal of Polymer Science Part A</i> , 2011, 49, 2627-2635.	2.3	18
61	Glycopolymers with glucosamine pendant groups: Copolymerization, physico-chemical and interaction properties. <i>Reactive and Functional Polymers</i> , 2011, 71, 1-10.	4.1	18
62	Catecholic Chemistry To Obtain Recyclable and Reusable Hybrid Polymeric Particles as Catalytic Systems. <i>Macromolecules</i> , 2013, 46, 2951-2962.	4.8	18
63	Well-Defined Glycopolymers via RAFT Polymerization: Stabilization of Gold Nanoparticles. <i>Macromolecular Chemistry and Physics</i> , 2014, 215, 1915-1924.	2.2	18
64	Functional surfaces obtained from emulsion polymerization using antimicrobial glycosylated block copolymers as surfactants. <i>Polymer Chemistry</i> , 2015, 6, 6171-6181.	3.9	18
65	Enzymatic Catalysis Combining the Breath Figures and Layer-by-Layer Techniques: Toward the Design of Microreactors. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 12210-12219.	8.0	18
66	A simple aqueous electrochemical method to synthesize TiO ₂ nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 29319-29326.	2.8	18
67	Antimicrobial films obtained from latex particles functionalized with quaternized block copolymers. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 140, 94-103.	5.0	17
68	Hemolytic and Antimicrobial Activities of a Series of Cationic Amphiphilic Copolymers Comprised of Same Centered Comonomers with Thiazole Moieties and Polyethylene Glycol Derivatives. <i>Polymers</i> , 2020, 12, 972.	4.5	17
69	Development of Highly Crystalline Polylactic Acid with β^2 -Crystalline Phase from the Induced Alignment of Electrospun Fibers. <i>Polymers</i> , 2021, 13, 2860.	4.5	17
70	Switchable and pH responsive porous surfaces based on polypeptide-based block copolymers. <i>Materials and Design</i> , 2017, 131, 121-126.	7.0	16
71	Biodegradable and Antimicrobial PLA-OLA Blends Containing Chitosan-Mediated Silver Nanoparticles with Shape Memory Properties for Potential Medical Applications. <i>Nanomaterials</i> , 2020, 10, 1065.	4.1	16
72	Synthesis of triblock copolymers based on two isomer acrylate monomers by atom transfer radical polymerization. <i>Journal of Polymer Science Part A</i> , 2005, 43, 4828-4837.	2.3	15

#	ARTICLE	IF	CITATIONS
73	Glycopolymers obtained by chemical modification of well-defined block copolymers. Journal of Polymer Science Part A, 2012, 50, 2565-2577.	2.3	15
74	Surface modification of magnetite hybrid particles with carbohydrates and gold nanoparticles via click chemistry. Polymer Chemistry, 2013, 4, 986-995.	3.9	15
75	Providing Antibacterial Activity to Poly(2-Hydroxy Ethyl Methacrylate) by Copolymerization with a Methacrylic Thiazolium Derivative. International Journal of Molecular Sciences, 2018, 19, 4120.	4.1	15
76	Antimicrobial Porous Surfaces Prepared by Breath Figures Approach. Materials, 2018, 11, 1266.	2.9	15
77	Adding stimuli-responsive extensions to antifouling hairy particles. Polymer Chemistry, 2010, 1, 624.	3.9	13
78	Tuning the Pore Composition by Two Simultaneous Interfacial Self-Assembly Processes: Breath Figures and Coffee Stain. Langmuir, 2014, 30, 6134-6141.	3.5	13
79	Adsorption of chromium(VI) onto electrochemically obtained magnetite nanoparticles. International Journal of Environmental Science and Technology, 2015, 12, 4017-4024.	3.5	13
80	Antibacterial and compostable polymers derived from biobased itaconic acid as environmentally friendly additives for biopolymers. Polymer Testing, 2022, 109, 107541.	4.8	13
81	Gluconolactone-derived polymers: Copolymerization, thermal properties, and their potential use as polymeric surfactants. Journal of Polymer Science Part A, 2011, 49, 526-536.	2.3	12
82	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.	9.4	12
83	Adhesive antibacterial coatings based on copolymers bearing thiazolium cationic groups and catechol moieties as robust anchors. Progress in Organic Coatings, 2019, 136, 105272.	3.9	12
84	Influence of side chain structure on the thermal and antimicrobial properties of cationic methacrylic polymers. European Polymer Journal, 2019, 117, 86-93.	5.4	12
85	Chemical modification of block copolymers based on 2-hydroxyethyl acrylate to obtain amphiphilic glycopolymers. European Polymer Journal, 2015, 62, 167-178.	5.4	11
86	Influence of glycopolymers structure on the copolymerization reaction and on their binding behavior with lectins. European Polymer Journal, 2012, 48, 963-973.	5.4	10
87	Amphiphilic polymers bearing gluconolactone moieties: Synthesis and long side-chain crystalline behavior. Carbohydrate Polymers, 2013, 94, 755-764.	10.2	10
88	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.	3.1	10
89	Chemical Hydrogels Bearing Thiazolium Groups with a Broad Spectrum of Antimicrobial Behavior. Polymers, 2020, 12, 2853.	4.5	10
90	Synthesis of poly(di[methylamine]ethyl methacrylate)- <i>block</i> -poly(cyclohexyl Tj ETQqO O rgBT /Overlock 10 Tf 50 67 Td (methacrylate)- <i>block</i> -poly(cyclohexyl Tj ETQqO O rgBT /Overlock 10 Tf 50 67 Td (methacrylate) ATRP: Condensed phase and solution properties. Journal of Polymer Science Part A, 2008, 46, 85-92.	2.3	9

#	ARTICLE	IF	CITATIONS
91	Statistical Glycopolymers Based on 2-Hydroxyethyl Methacrylate: Copolymerization, Thermal Properties, and Lectin Interaction Studies. <i>Macromolecular Chemistry and Physics</i> , 2011, 212, 1294-1304.	2.2	9
92	Fabrication of honeycomb films from highly functional dendritic structures: electrostatic force driven immobilization of biomolecules. <i>Polymer Chemistry</i> , 2016, 7, 4112-4120.	3.9	9
93	Antimicrobial surfaces obtained from blends of block copolymers synthesized by simultaneous ATRP and click chemistry reactions. <i>European Polymer Journal</i> , 2017, 93, 53-62.	5.4	9
94	Self-Assembly of ATRP-Synthesized PCH- <i>b</i> -PBA- <i>b</i> -PCH Triblock Copolymers Observed by Time-Resolved SAXS. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 2654-2664.	2.2	8
95	CHAPTER 1. Introduction to Antimicrobial Polymeric Materials. <i>RSC Polymer Chemistry Series</i> , 2013, , 1-21.	0.2	8
96	Porous Microstructured Surfaces with pH-Triggered Antibacterial Properties. <i>Macromolecular Bioscience</i> , 2019, 19, e1900127.	4.1	8
97	Straightforward functionalization of breath figures: Simultaneous orthogonal host-guest and pH-responsive interfaces. <i>Journal of Colloid and Interface Science</i> , 2015, 457, 272-280.	9.4	7
98	Environmentally Friendly Fertilizers Based on Starch Superabsorbents. <i>Materials</i> , 2019, 12, 3493.	2.9	7
99	Aggregation and solubilization of organic solvents and petrol/gasoline in water mediated by block copolymers. <i>European Polymer Journal</i> , 2007, 43, 4583-4592.	5.4	6
100	Toxicity and biodegradation of zinc ferrite nanoparticles in <i>Xenopus laevis</i> . <i>Journal of Nanoparticle Research</i> , 2019, 21, 1.	1.9	6
101	Environmentally Responsive Particles: From Superhydrophobic Particle Films to Water-Dispersible Microspheres. <i>Langmuir</i> , 2010, 26, 18617-18620.	3.5	5
102	Design of hybrid gradient porous surfaces with magnetic nanoparticles. <i>Polymer</i> , 2015, 70, 100-108.	3.8	5
103	Fat-Replacer Properties of Oxidized Cassava Starch Using Hydrogen Peroxide/Sodium Bicarbonate Redox System in Mayonnaise Formulation and Its Stability. <i>Starch/Staerke</i> , 2019, 71, 1900112.	2.1	5
104	Honeycomb Films with Core-Shell Dispersed Phases Prepared by the Combination of Breath Figures and Phase Separation Process of Ternary Blends. <i>Langmuir</i> , 2017, 33, 2872-2877.	3.5	4
105	Polymeric Materials: Surfaces, Interfaces and Bioapplications. <i>Materials</i> , 2019, 12, 1312.	2.9	4
106	Antibacterial Polymers Based on Poly(2-hydroxyethyl methacrylate) and Thiazolium Groups with Hydrolytically Labile Linkages Leading to Inactive and Low Cytotoxic Compounds. <i>Materials</i> , 2021, 14, 7477.	2.9	4
107	Physical properties of poly(cyclohexyl methacrylate)- <i>b</i> -poly(iso-butyl acrylate)- <i>b</i> -poly(cyclohexyl) Tj ETQq1 1 0.784314 rgBT /Overlock 1048, 5581-5589.	3.8	3
108	Influence of Polymer Composition and Substrate on the Performance of Bioinspired Coatings with Antibacterial Activity. <i>Coatings</i> , 2019, 9, 733.	2.6	3

#	ARTICLE	IF	CITATIONS
109	Thermal and Morphological Behaviour of Well-Defined Amphiphilic Triblock Copolymers Based on Cyclohexyl and Di(ethylene glycol) Methyl Ether Methacrylates. <i>Macromolecular Chemistry and Physics</i> , 2008, 209, 184-194.	2.2	2
110	The role of the temperature in the morphology and properties of zinc oxide structures obtained by electrosynthesis in aqueous solution. <i>Materials Chemistry and Physics</i> , 2016, 181, 367-374.	4.0	2
111	Understanding the structural and magnetic evolution of superparamagnetic Zn ferrites nanoparticles synthesized by an easy electrochemical process. <i>Journal of Alloys and Compounds</i> , 2021, 881, 160585.	5.5	2
112	Breath Figures: Fabrication of Honeycomb Porous Films Induced by Marangoni Instabilities. , 2015, , 219-256.		1
113	Amylose Modified Starches as Superabsorbent Systems for Release of Potassium Fertilizers. <i>Journal of Polymers and the Environment</i> , 0, , 1.	5.0	1
114	Honeycomb Structured Films Prepared by Breath Figures: Fabrication and Application for Biorecognition Purposes. , 2015, , 237-271.		0