# Alexandra MuÃ±oz-Bonilla

List of Publications by Year
in descending order

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|---|---|---|---|
| 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 | Polymeric materials with antimicrobial activity. Progress in Polymer Science, 2012, 37, 281-339. | 11.8 | 1,055 |
| 2 | Towards hierarchically ordered functional porous polymeric surfaces prepared by the breath figures approach. Progress in Polymer Science, 2014, 39, 510-554. | 11.8 | 222 |
| 3 | The roadmap of antimicrobial polymeric materials in macromolecular nanotechnology. European Polymer Journal, 2015, 65, 46-62. | 2.6 | 136 |
| 4 | Bio-Based Polymers with Antimicrobial Properties towards Sustainable Development. Materials, 2019, 12, 641. | 1.3 | 123 |
| 5 | Antimicrobial Polymers in the Nano-World. Nanomaterials, 2017, 7, 48. | 1.9 | 121 |
| 6 | 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 |
| 7 | Removal of anionic and cationic dyes with bioadsorbent oxidized chitosans. Carbohydrate Polymers, 2018, 194, 375-383. | 5.1 | 86 |
| 8 | Natural RAFT Polymerization: Recyclable-Catalyst-Aided, Opened-to-Air, and Sunlight-Photolyzed RAFT Polymerizations. ACS Macro Letters, 2016, 5, 1278-1282. | 2.3 | 78 |
| 9 | Poly(ionic liquid)s as antimicrobial materials. European Polymer Journal, 2018, 105, 135-149. | 2.6 | 78 |
| 10 | Self-Organized Hierarchical Structures in Polymer Surfaces: Self-Assembled Nanostructures within Breath Figures. Langmuir, 2009, 25, 6493-6499. | 1.6 | 76 |
| 11 | Effect of glycounits on the antimicrobial properties and toxicity behavior of polymers based on quaternized DMAEMA. Biomacromolecules, 2015, 16, 295-303. | 2.6 | 74 |
| 12 | 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 |
| 13 | Synthesis and structural characterization of Zn<sub>x</sub>Fe<sub>3â^'x</sub>O<sub>4</sub> ferrite nanoparticles obtained by an electrochemical method. RSC Advances, 2016, 6, 40067-40076. | 1.7 | 62 |
| 14 | Biodegradable Polycaprolactone-Titania Nanocomposites: Preparation, Characterization and Antimicrobial Properties. International Journal of Molecular Sciences, 2013, 14, 9249-9266. | 1.8 | 60 |
| 15 | Fabrication of Honeycomb-Structured Porous Surfaces Decorated with Glycopolymers. Langmuir, 2010, 26, 8552-8558. | 1.6 | 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. | 4.0 | 52 |
| 17 | Synthesis and aqueous solution properties of stimuli-responsive triblock copolymers. Soft Matter, 2007, 3, 725-731. | 1.2 | 51 |
| 18 | Hybrid materials achieved by polypeptide grafted magnetite nanoparticles through a dopamine biomimetic surface anchored initiator. Polymer Chemistry, 2013, 4, 558-567. | 1.9 | 50 |

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|---|---|---|---|
| 19 | One-pot electrochemical synthesis of polydopamine coated magnetite nanoparticles. RSC Advances, 2014, 4, 48353-48361. | 1.7 | 46 |
| 20 | Hierarchically Structured Multifunctional Porous Interfaces through Water Templated Self-Assembly of Ternary Systems. Langmuir, 2012, 28, 9778-9787. | 1.6 | 44 |
| 21 | Removal of heavy metal ions in water by starch esters. Starch/Staerke, 2016, 68, 37-46. | 1.1 | 40 |
| 22 | Multifunctional PLA Blends Containing Chitosan Mediated Silver Nanoparticles: Thermal, Mechanical, Antibacterial, and Degradation Properties. Nanomaterials, 2020, 10, 22. | 1.9 | 40 |
| 23 | Physical methods for controlling bacterial colonization on polymer surfaces. Biotechnology Advances, 2020, 43, 107586. | 6.0 | 40 |
| 24 | Wellâ€controlled amphiphilic block glycopolymers and their molecular recognition with lectins. Journal of Polymer Science Part A, 2010, 48, 3623-3631. | 2.5 | 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. | 4.0 | 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. | 2.4 | 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. | 2.2 | 35 |
| 28 | Immobilization of Stimuli-Responsive Nanogels onto Honeycomb Porous Surfaces and Controlled Release of Proteins. Langmuir, 2016, 32, 1854-1862. | 1.6 | 35 |
| 29 | 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 |
| 30 | Engineering polymer surfaces with variable chemistry and topography. Journal of Polymer Science Part A, 2009, 47, 2262-2271. | 2.5 | 32 |
| 31 | Biocompatible Polymer Materials with Antimicrobial Properties for Preparation of Stents. Nanomaterials, 2019, 9, 1548. | 1.9 | 31 |
| 32 | Control of the chemistry outside the pores in honeycomb patterned films. Polymer Chemistry, 2013, 4, 4024. | 1.9 | 30 |
| 33 | Comparison of ferrite nanoparticles obtained electrochemically for catalytical reduction of hydrogen peroxide. Journal of Solid State Electrochemistry, 2016, 20, 1191-1198. | 1.2 | 30 |
| 34 | Preparation of glycopolymerâ€coated magnetite nanoparticles for hyperthermia treatment. Journal of Polymer Science Part A, 2012, 50, 5087-5096. | 2.5 | 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. | 2.5 | 28 |
| 36 | Controlled block glycopolymers able to bind specific proteins. Journal of Polymer Science Part A, 2013, 51, 1337-1347. | 2.5 | 28 |

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|---|---|---|---|
| 37 | Combinations of Antimicrobial Polymers with Nanomaterials and Bioactives to Improve Biocidal Therapies. Polymers, 2019, 11, 1789. | 2.0 | 28 |
| 38 | Heavy metal (Cd<sup>2+</sup>, Ni<sup>2+</sup>, Pb<sup>2+</sup> and Ni<sup>2+</sup>) adsorption in aqueous solutions by oxidized starches. Polymers for Advanced Technologies, 2015, 26, 147-152. | 1.6 | 26 |
| 39 | Glycoparticles and bioactive films prepared by emulsion polymerization using a well-defined block glycopolymer stabilizer. Soft Matter, 2011, 7, 2493. | 1.2 | 25 |
| 40 | 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 |
| 41 | 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 |
| 42 | Glycopolymeric Materials for Advanced Applications. Materials, 2015, 8, 2276-2296. | 1.3 | 24 |
| 43 | Accelerated disintegration of compostable Ecovio polymer by using ZnO particles as filler. Polymer Degradation and Stability, 2021, 185, 109501. | 2.7 | 24 |
| 44 | Fabrication and Superhydrophobic Behavior of Fluorinated Microspheres. Langmuir, 2010, 26, 16775-16781. | 1.6 | 23 |
| 45 | Antibacterial PLA Fibers Containing Thiazolium Groups as Wound Dressing Materials. ACS Applied Bio Materials, 2019, 2, 4714-4719. | 2.3 | 23 |
| 46 | Preparation of Oxidized and Grafted Chitosan Superabsorbents for Urea Delivery. Journal of Polymers and the Environment, 2018, 26, 728-739. | 2.4 | 22 |
| 47 | 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 |
| 48 | Chitin Nanocrystals: Environmentally Friendly Materials for the Development of Bioactive Films. Coatings, 2022, 12, 144. | 1.2 | 21 |
| 49 | Atom transfer radical polymerization of cyclohexyl methacrylate at a low temperature. Journal of Polymer Science Part A, 2005, 43, 71-77. | 2.5 | 20 |
| 50 | Modified Starch as a Filter Controller in Water-Based Drilling Fluids. Materials, 2020, 13, 2794. | 1.3 | 20 |
| 51 | Formation of Multigradient Porous Surfaces for Selective Bacterial Entrapment. Biomacromolecules, 2014, 15, 3338-3348. | 2.6 | 19 |
| 52 | Visible and ultraviolet antibacterial behavior in PVDFâ€“TiO2 nanocomposite films. European Polymer Journal, 2015, 71, 412-422. | 2.6 | 19 |
| 53 | A biomimicking and electrostatic self-assembly strategy for the preparation of glycopolymer decorated photoactive nanoparticles. Polymer Chemistry, 2016, 7, 2565-2572. | 1.9 | 19 |
| 54 | 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 |

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|---|---|---|---|
| 55 | Contact Active Antimicrobial Coatings Prepared by Polymer Blending. Macromolecular Bioscience, 2017, 17, 1700258. | 2.1 | 19 |
| 56 | Tailoring Macromolecular Structure of Cationic Polymers towards Efficient Contact Active Antimicrobial Surfaces. Polymers, 2018, 10, 241. | 2.0 | 19 |
| 57 | Thermoresponsive Poly(N-Isopropylacrylamide-co-Dimethylaminoethyl Methacrylate) Microgel Aqueous Dispersions with Potential Antimicrobial Properties. Polymers, 2019, 11, 606. | 2.0 | 19 |
| 58 | Antibacterial Character of Cationic Polymers Attached to Carbon-Based Nanomaterials. Nanomaterials, 2020, 10, 1218. | 1.9 | 19 |
| 59 | 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 |
| 60 | 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 |
| 61 | Glycopolymers with glucosamine pendant groups: Copolymerization, physico-chemical and interaction properties. Reactive and Functional Polymers, 2011, 71, 1-10. | 2.0 | 18 |
| 62 | Catecholic Chemistry To Obtain Recyclable and Reusable Hybrid Polymeric Particles as Catalytic Systems. Macromolecules, 2013, 46, 2951-2962. | 2.2 | 18 |
| 63 | Wellâ€Defined Glycopolymers via RAFT Polymerization: Stabilization of Gold Nanoparticles. Macromolecular Chemistry and Physics, 2014, 215, 1915-1924. | 1.1 | 18 |
| 64 | Functional surfaces obtained from emulsion polymerization using antimicrobial glycosylated block copolymers as surfactants. Polymer Chemistry, 2015, 6, 6171-6181. | 1.9 | 18 |
| 65 | 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 |
| 66 | A simple aqueous electrochemical method to synthesize TiO<sub>2</sub> nanoparticles. Physical Chemistry Chemical Physics, 2015, 17, 29319-29326. | 1.3 | 18 |
| 67 | Antimicrobial films obtained from latex particles functionalized with quaternized block copolymers. Colloids and Surfaces B: Biointerfaces, 2016, 140, 94-103. | 2.5 | 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. Polymers, 2020, 12, 972. | 2.0 | 17 |
| 69 | Development of Highly Crystalline Polylactic Acid with Î²-Crystalline Phase from the Induced Alignment of Electrospun Fibers. Polymers, 2021, 13, 2860. | 2.0 | 17 |
| 70 | Switchable and pH responsive porous surfaces based on polypeptide-based block copolymers. Materials and Design, 2017, 131, 121-126. | 3.3 | 16 |
| 71 | 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 |
| 72 | 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 |

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|---|---|---|---|
| 73 | Glycopolymers obtained by chemical modification of wellâ€defined block copolymers. Journal of Polymer Science Part A, 2012, 50, 2565-2577. | 2.5 | 15 |
| 74 | Surface modification of magnetite hybrid particles with carbohydrates and gold nanoparticlesvia â€œclickâ€•chemistry. Polymer Chemistry, 2013, 4, 986-995. | 1.9 | 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. | 1.8 | 15 |
| 76 | Antimicrobial Porous Surfaces Prepared by Breath Figures Approach. Materials, 2018, 11, 1266. | 1.3 | 15 |
| 77 | Adding stimuli-responsive extensions to antifouling hairy particles. Polymer Chemistry, 2010, 1, 624. | 1.9 | 13 |
| 78 | Tuning the Pore Composition by Two Simultaneous Interfacial Self-Assembly Processes: Breath Figures and Coffee Stain. Langmuir, 2014, 30, 6134-6141. | 1.6 | 13 |
| 79 | Adsorption of chromium(VI) onto electrochemically obtained magnetite nanoparticles. International Journal of Environmental Science and Technology, 2015, 12, 4017-4024. | 1.8 | 13 |
| 80 | Antibacterial and compostable polymers derived from biobased itaconic acid as environmentally friendly additives for biopolymers. Polymer Testing, 2022, 109, 107541. | 2.3 | 13 |
| 81 | 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 |
| 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. | 5.0 | 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. | 1.9 | 12 |
| 84 | Influence of side chain structure on the thermal and antimicrobial properties of cationic methacrylic polymers. European Polymer Journal, 2019, 117, 86-93. | 2.6 | 12 |
| 85 | Chemical modification of block copolymers based on 2-hydroxyethyl acrylate to obtain amphiphilic glycopolymers. European Polymer Journal, 2015, 62, 167-178. | 2.6 | 11 |
| 86 | 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 |
| 87 | Amphiphilic polymers bearing gluconolactone moieties: Synthesis and long side-chain crystalline behavior. Carbohydrate Polymers, 2013, 94, 755-764. | 5.1 | 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. | 1.5 | 10 |
| 89 | Chemical Hydrogels Bearing Thiazolium Groups with a Broad Spectrum of Antimicrobial Behavior. Polymers, 2020, 12, 2853. | 2.0 | 10 |
| 90 | Synthesis of poly(di[methylamine]ethyl methacrylate)â€bâ€poly(cyclohexyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (methac ATRP: Condensedâ€phase and solution properties. Journal of Polymer Science Part A, 2008, 46, 85-92. | 2.5 | 9 |

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|---|---|---|---|
| 91 | 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 |
| 92 | Fabrication of honeycomb films from highly functional dendritic structures: electrostatic force driven immobilization of biomolecules. Polymer Chemistry, 2016, 7, 4112-4120. | 1.9 | 9 |
| 93 | 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 |
| 94 | Selfâ€Assembly of ATRPâ€Synthesized PCHâ€bâ€PtBAâ€bâ€PCH Triblock Copolymers Observed by Timeâ€Resolved SAXS. Macromolecular Chemistry and Physics, 2007, 208, 2654-2664. | 1.1 | 8 |
| 95 | CHAPTER 1. Introduction to Antimicrobial Polymeric Materials. RSC Polymer Chemistry Series, 2013, , 1-21. | 0.1 | 8 |
| 96 | Porous Microstructured Surfaces with pHâ€Triggered Antibacterial Properties. Macromolecular Bioscience, 2019, 19, e1900127. | 2.1 | 8 |
| 97 | 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 |
| 98 | Environmentally Friendly Fertilizers Based on Starch Superabsorbents. Materials, 2019, 12, 3493. | 1.3 | 7 |
| 99 | 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 |
| 100 | Toxicity and biodegradation of zinc ferrite nanoparticles in Xenopus laevis. Journal of Nanoparticle Research, 2019, 21, 1. | 0.8 | 6 |
| 101 | Environmentally Responsive Particles: From Superhydrophobic Particle Films to Water-Dispersible Microspheres. Langmuir, 2010, 26, 18617-18620. | 1.6 | 5 |
| 102 | Design of hybrid gradient porous surfaces with magnetic nanoparticles. Polymer, 2015, 70, 100-108. | 1.8 | 5 |
| 103 | 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 |
| 104 | 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 |
| 105 | Polymeric Materials: Surfaces, Interfaces and Bioapplications. Materials, 2019, 12, 1312. | 1.3 | 4 |
| 106 | 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 |
| 107 | Physical properties of poly(cyclohexyl methacrylate)-b-poly(iso-butyl acrylate)-b-poly(cyclohexyl) Tj ETQq1 1 0.784314 rgBT /Overlock 1<br>48, 5581-5589. | 1.8 | 3 |
| 108 | Influence of Polymer Composition and Substrate on the Performance of Bioinspired Coatings with Antibacterial Activity. Coatings, 2019, 9, 733. | 1.2 | 3 |

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|---|---|---|---|
| 109 | 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 |
| 110 | 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 |
| 111 | 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 |
| 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. Journal of Polymers and the Environment, 0, , 1. | 2.4 | 1 |
| 114 | Honeycomb Structured Films Prepared by Breath Figures: Fabrication and Application for Biorecognition Purposes. , 2015, , 237-271. | | 0 |