Juan Rodriguez-Hernandez

List of Publications by Year
in descending order

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132 papers	4,799 citations	172457 29 h-index	102487 66 g-index
133 all docs	133 docs citations	133 times ranked	5832 citing authors

#	Article	IF	Citations
1	4D Printing Using Multifunctional Polymeric Materials: A Review. , 2022, , 17-36.		2
2	Innovation in Additive Manufacturing Using Polymers: A Survey on the Technological and Material Developments. Polymers, 2022, 14, 1351.	4.5	16
3	Electroresponsive Weak Polyelectrolyte Brushes. Macromolecules, 2022, 55, 2636-2648.	4.8	3
4	Thermosensitive hydrogels functionalized with pH sensitive COOH groups for bone cell harvesting. European Polymer Journal, 2022, 169, 111131.	5.4	3
5	Thermoresponsive microwrinkled hydrogel surfaces with modulated chemical composition. Polymer, 2021, 231, 124109.	3.8	5
6	Hybrid functionalized coatings on Metallic Biomaterials for Tissue Engineering. Surface and Coatings Technology, 2021, 422, 127508.	4.8	26
7	Wrinkling on Stimuli-Responsive Functional Polymer Surfaces as a Promising Strategy for the Preparation of Effective Antibacterial/Antibiofouling Surfaces. Polymers, 2021, 13, 4262.	4.5	6
8	Innovative procedure for precise deposition of wrinkled hydrogel films using direct inkjet printing. Materials and Design, 2020, 194, 108959.	7.0	8
9	Fabrication of porous films from immiscible polymer blends: Role of the surface structure on the cell adhesion. Polymer Testing, 2020, 91, 106797.	4.8	9
10	General approach to prepare polymers bearing pendant isocyanate groups. Polymer Chemistry, 2020, 11, 5140-5146.	3.9	4
11	Weak polyelectrolyte brushes: re-entrant swelling and self-organization. Soft Matter, 2020, 16, 7727-7738.	2.7	2
12	Breath Figures. , 2020, , .		9
13	Fabrication of 3D-Printed Biodegradable Porous Scaffolds Combining Multi-Material Fused Deposition Modeling and Supercritical CO2 Techniques. Nanomaterials, 2020, 10, 1080.	4.1	22
14	pK_a Modulation of Pyrrolidine-Based Catalytic Polymers Used for the Preparation of Glycosyl Hydrazides at Physiological pH and Temperature. ACS Applied Bio Materials, 2020, 3, 1955-1967.	4.6	2
15	Biocompatible fluorinated wrinkled hydrogel films with antimicrobial activity. Materials Science and Engineering C, 2020, 114, 111031.	7.3	9
16	Introducing Chemical Functionalities to Microporous Surfaces: Strategies. , 2020, , 149-168.		3
17	Applications of the Porous Structures Obtained with the Breath-Figures Self-Assembly. , 2020, , 207-228.		0
18	Hierarchically Ordered Microporous Surfaces. , 2020, , 169-187.		0

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19	Methodologies Involved in Manufacturing Self-Assembled Breath-Figures Patterns: Drop-Casting and Spin- and Dip-Coating â€“ Characterization of Microporous Surfaces. , 2020, , 111-148.		1
20	Introduction to Micropatterned Surfaces. , 2020, , 1-11.		0
21	From Planar Surfaces to 3D Porous Interfaces. , 2020, , 189-206.		0
22	Breath-Figures Formation: Physical Aspects. , 2020, , 13-49.		1
23	Polymers Employed and Role of the Molecular Characteristics on the BFs Formation. , 2020, , 51-110.		0
24	Formation of responsive hierarchical wrinkled patterns on hydrogel films via multi-step methodology. Polymer, 2019, 179, 121662.	3.8	8
25	Hierarchical Functionalized Polymericâ€Ceramic Coatings on Mgâ€Ca Alloys for Biodegradable Implant Applications. Macromolecular Bioscience, 2019, 19, e1900179.	4.1	13
26	Microwrinkled pH-sensitive hydrogel films and their role on the cell adhesion/proliferation. Materials Science and Engineering C, 2019, 103, 109872.	7.3	9
27	Polymers for additive manufacturing and 4D-printing: Materials, methodologies, and biomedical applications. Progress in Polymer Science, 2019, 94, 57-116.	24.7	364
28	Strategies for the Fabrication of Wrinkled Polymer Surfaces. , 2019, , 19-59.		7
29	Wrinkles Obtained by Frontal Polymerization/Vitrification. , 2019, , 63-84.		1
30	Micrometric Wrinkled Patterns Spontaneously Formed on Hydrogel Thin Films via Argon Plasma Exposure. Molecules, 2019, 24, 751.	3.8	9
31	Introduction to Surface Instabilities and Wrinkle Formation. , 2019, , 3-18.		1
32	Micro- and Nano-patterned Hydrogels Fabricated by Taking Advantage of Surface Instabilities. , 2019, , 183-204.		0
33	Wrinkled Hydrogel Surfaces with Modulated Surface Chemistry and Topography: Evaluation As Supports for Cell Growth and Transplant. ACS Applied Bio Materials, 2019, 2, 654-664.	4.6	9
34	Design and fabrication of biocompatible wrinkled hydrogel films with selective antibiofouling properties. Materials Science and Engineering C, 2019, 97, 803-812.	7.3	19
35	Thermosensitive hydrogel platforms with modulated ionic load for optimal cell sheet harvesting. European Polymer Journal, 2018, 103, 400-409.	5.4	12
36	In vitro and in vivo evaluation of PEO-modified titanium for bone implant applications. Surface and Coatings Technology, 2018, 347, 358-368.	4.8	45

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37	Fabrication of biocompatible and efficient antimicrobial porous polymer surfaces by the Breath Figures approach. Journal of Colloid and Interface Science, 2018, 513, 820-830.	9.4	17
38	Fabrication of 3D printed objects with controlled surface chemistry and topography. European Polymer Journal, 2018, 98, 21-27.	5.4	13
39	Combining Breath Figures and Supercritical Fluids To Obtain Porous Polymer Scaffolds. ACS Omega, 2018, 3, 12593-12599.	3.5	16
40	Smart pH-Responsive Antimicrobial Hydrogel Scaffolds Prepared by Additive Manufacturing. ACS Applied Bio Materials, 2018, 1, 1337-1347.	4.6	44
41	Micro-wrinkled hydrogel patterned surfaces using pH-sensitive monomers. Applied Surface Science, 2018, 457, 902-913.	6.1	18
42	Immobilization of Polyoxometalates on Tailored Polymeric Surfaces. Nanomaterials, 2018, 8, 142.	4.1	6
43	Aqueous micro and nanoreactors based on alternating copolymers of phenylmaleimide and vinylpyrrolidone bearing pendant <scp>l</scp>â€proline stabilized with PEG grafted chains. Journal of Polymer Science Part A, 2017, 55, 1228-1236.	2.3	6
44	Chemical and Topographical Modification of Polycarbonate Surfaces through Diffusion/Photocuring Processes of Hydrogel Precursors Based on Vinylpyrrolidone. Langmuir, 2017, 33, 1614-1622.	3.5	7
45	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.	3.5	4
46	Interference lithography with functional block copolymer blends: Hierarchical structuration and anisotropic wetting. European Polymer Journal, 2017, 90, 25-36.	5.4	0
47	Nanopatterned polystyrene-b-poly(acrylic acid) surfaces to modulate cell-material interaction. Materials Science and Engineering C, 2017, 75, 229-236.	7.3	5
48	Electrowetting of Weak Polyelectrolyte-Coated Surfaces. Langmuir, 2017, 33, 4996-5005.	3.5	10
49	Nano/Microstructured Antibacterial Surfaces. , 2017, , 125-154.		3
50	Wrinkling and Folding on Patched Elastic Surfaces: Modulation of the Chemistry and Pattern Size of Microwrinkled Surfaces. ACS Applied Materials & Interfaces, 2017, 9, 20188-20195.	8.0	14
51	Hydrogels with Modulated Ionic Load for Mammalian Cell Harvesting with Reduced Bacterial Adhesion. Biomacromolecules, 2017, 18, 1521-1531.	5.4	17
52	Microfluidic Reactors Based on Rechargeable Catalytic Porous Supports: Heterogeneous Enzymatic Catalysis via Reversible Hostâ€“Guest Interactions. ACS Applied Materials & Interfaces, 2017, 9, 4184-4191.	8.0	19
53	Antimicrobial 3D Porous Scaffolds Prepared by Additive Manufacturing and Breath Figures. ACS Applied Materials & Interfaces, 2017, 9, 37454-37462.	8.0	31
54	Highly Efficient Antibacterial Surfaces Based on Bacterial/Cell Size Selective Microporous Supports. ACS Applied Materials & Interfaces, 2017, 9, 44270-44280.	8.0	29

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55	Facile one-pot exfoliation and integration of 2D layered materials by dispersion in a photocurable polymer precursor. Nanoscale, 2017, 9, 10590-10595.	5.6	12
56	Polymers against Microorganisms. , 2017, , .		10
57	Strategies to Fabricate Polypeptide-Based Structures via Ring-Opening Polymerization of N-Carboxyanhydrides. Polymers, 2017, 9, 551.	4.5	36
58	Advances in the Fabrication of Antimicrobial Hydrogels for Biomedical Applications. Materials, 2017, 10, 232.	2.9	62
59	Antimicrobial micro/nanostructured functional polymer surfaces. , 2016, , 153-192.		3
60	Smart Polymer Surfaces. , 2016, , 105-120.		1
61	Fabrication of micro and sub-micrometer wrinkled hydrogel surfaces through thermal and photocrosslinking processes. Polymer, 2016, 101, 24-33.	3.8	17
62	Modification of poly(dimethylsiloxane) as a basis for surface wrinkle formation: Chemical and mechanical characterization. Polymer, 2016, 98, 327-335.	3.8	20
63	Phase Structures in Thin Films of Nanostructured Polymer Blends. , 2016, , 313-364.		0
64	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
65	Nano-microporous structured surfaces prepared by the breath figures approach and their biorelated applications. , 2016, , 107-133.		3
66	Fabrication of hierarchical wrinkled morphologies through sequential <scp>UVO</scp> treatments. Journal of Applied Polymer Science, 2015, 132, .	2.6	10
67	Patterning of individual Staphylococcus aureus bacteria onto photogenerated polymeric surface structures. Polymer Chemistry, 2015, 6, 2677-2684.	3.9	15
68	Design of hybrid gradient porous surfaces with magnetic nanoparticles. Polymer, 2015, 70, 100-108.	3.8	5
69	Straightforward functionalization of breath figures: Simultaneous orthogonal hostâ€“guest and pH-responsive interfaces. Journal of Colloid and Interface Science, 2015, 457, 272-280.	9.4	7
70	Poly(Ethylene Oxide) Functionalized Polyimide-Based Microporous Films to Prevent Bacterial Adhesion. ACS Applied Materials & Interfaces, 2015, 7, 9716-9724.	8.0	21
71	Breath Figures: Fabrication of Honeycomb Porous Films Induced by Marangoni Instabilities. , 2015, , 219-256.		1
72	Chemical modification of block copolymers based on 2-hydroxyethyl acrylate to obtain amphiphilic glycopolymers. European Polymer Journal, 2015, 62, 167-178.	5.4	11

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73	Wrinkled interfaces: Taking advantage of surface instabilities to pattern polymer surfaces. Progress in Polymer Science, 2015, 42, 1-41.	24.7	270
74	Nanostructured Interfaces by Surface Segregation of Block Copolymers. , 2015, , 99-142.		1
75	Nonconventional Methods for Patterning Polymer Surfaces. , 2015, , 1-21.		0
76	Honeycomb Structured Films Prepared by Breath Figures: Fabrication and Application for Biorecognition Purposes. , 2015, , 237-271.		0
77	Fabrication of Functional Wrinkled Interfaces from Polymer Blends: Role of the Surface Functionality on the Bacterial Adhesion. Polymers, 2014, 6, 2845-2861.	4.5	14
78	Direct micrometer patterning and functionalization of polymer blend surfaces by using hot embossing. European Polymer Journal, 2014, 59, 333-340.	5.4	7
79	Towards hierarchically ordered functional porous polymeric surfaces prepared by the breath figures approach. Progress in Polymer Science, 2014, 39, 510-554.	24.7	222
80	Versatile Approach for the Fabrication of Functional Wrinkled Polymer Surfaces. Langmuir, 2014, 30, 13244-13254.	3.5	10
81	Tuning the Pore Composition by Two Simultaneous Interfacial Self-Assembly Processes: Breath Figures and Coffee Stain. Langmuir, 2014, 30, 6134-6141.	3.5	13
82	Formation of Multigradient Porous Surfaces for Selective Bacterial Entrapment. Biomacromolecules, 2014, 15, 3338-3348.	5.4	19
83	Nano/Micro and Hierarchical Structured Surfaces in Polymer Blends. , 2014, , 357-421.		5
84	Reversible functionalization of nanostructured polymer surfaces via stimuli-responsive interpolymer complexes. European Polymer Journal, 2013, 49, 130-138.	5.4	7
85	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
86	Constructing Robust and Functional Micropatterns on Polystyrene Surfaces by Using Deep UV Irradiation. Langmuir, 2013, 29, 2756-2763.	3.5	28
87	Hydrophilic polyisophthalamides containing poly(ethylene oxide) side chains: Synthesis, characterization, and physical properties. Journal of Polymer Science Part A, 2013, 51, 963-976.	2.3	6
88	Hybrid materials achieved by polypeptide grafted magnetite nanoparticles through a dopamine biomimetic surface anchored initiator. Polymer Chemistry, 2013, 4, 558-567.	3.9	50
89	Control of the chemistry outside the pores in honeycomb patterned films. Polymer Chemistry, 2013, 4, 4024.	3.9	30
90	Honeycomb patterned surfaces functionalized with polypeptide sequences forÂrecognition and selective bacterial adhesion. Biomaterials, 2013, 34, 1453-1460.	11.4	42

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91	Versatile Functional Microstructured Polystyrene-Based Platforms for Protein Patterning and Recognition. Biomacromolecules, 2013, 14, 3147-3154.	5.4	5
92	Boundary Lubricant Polymer Films: Effect of Cross-Linking. Langmuir, 2013, 29, 12936-12949.	3.5	15
93	Hierarchically Structured Multifunctional Porous Interfaces through Water Templated Self-Assembly of Ternary Systems. Langmuir, 2012, 28, 9778-9787.	3.5	44
94	Functional micropatterned surfaces prepared by simultaneous UVâ€lithography and surface segregation of fluorinated copolymers. Journal of Polymer Science Part A, 2012, 50, 4902-4910.	2.3	5
95	Water-Soluble Pendant Copolymers Bearing Proline and Permethylated Î²-Cyclodextrin: pH-Dependent Catalytic Nanoreactors. Macromolecules, 2012, 45, 7676-7683.	4.8	33
96	Synthesis and lectin recognition studies of glycosylated polystyrene microspheres functionalized via thiolâ€“para-fluorine â€œclickâ€•reaction. Polymer Chemistry, 2012, 3, 3282.	3.9	24
97	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
98	Glycopolymers obtained by chemical modification of wellâ€defined block copolymers. Journal of Polymer Science Part A, 2012, 50, 2565-2577.	2.3	15
99	Linear Copolymers of Proline Methacrylate and Styrene as Catalysts for Aldol Reactions in Water: Effect of the Copolymer Aggregation on the Enantioselectivity. Macromolecules, 2011, 44, 6268-6276.	4.8	28
100	Nanogels Based on Poly(vinyl acetate) for the Preparation of Patterned Porous Films. Langmuir, 2011, 27, 4290-4295.	3.5	9
101	Surface segregation of polypeptide-based block copolymer micelles: An approach to engineer nanostructured and stimuli responsive surfaces. European Polymer Journal, 2011, 47, 2063-2068.	5.4	10
102	Supramolecular structures from self-assembled poly(Î³-benzyl-l-glutamate)â€“polydimethylsiloxaneâ€“poly(Î³-benzyl-l-glutamate) triblock copolypeptides in thin films. European Polymer Journal, 2010, 46, 891-899.	5.4	13
103	Structured multistimuliâ€responsive functional polymer surfaces obtained by interfacial diffusion of amphiphilic block copolymers. Journal of Polymer Science Part A, 2010, 48, 1952-1961.	2.3	23
104	pH responsive surfaces with nanoscale topography. Journal of Polymer Science Part A, 2010, 48, 2982-2990.	2.3	25
105	Singleâ€step process to produce functionalized multiresponsive polymeric particles. Journal of Polymer Science Part A, 2010, 48, 3523-3533.	2.3	8
106	Environmentally Responsive Particles: From Superhydrophobic Particle Films to Water-Dispersible Microspheres. Langmuir, 2010, 26, 18617-18620.	3.5	5
107	Fabrication and Superhydrophobic Behavior of Fluorinated Microspheres. Langmuir, 2010, 26, 16775-16781.	3.5	23
108	Fabrication of Honeycomb-Structured Porous Surfaces Decorated with Glycopolymers. Langmuir, 2010, 26, 8552-8558.	3.5	52

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109	Reinforcing the Hydrophobicity of Polymeric Surfaces from Fluorinated Star Polymers and Nanogels. Macromolecules, 2010, 43, 1299-1308.	4.8	15
110	Engineering polymer surfaces with variable chemistry and topography. Journal of Polymer Science Part A, 2009, 47, 2262-2271.	2.3	32
111	Adhesives based on polyurethane graft multiblock copolymers: Tack, rheology and first morphological analyses. International Journal of Adhesion and Adhesives, 2009, 29, 1-8.	2.9	32
112	Self-assembly of graft polyurethanes having both crystallizable poly(Îµ-caprolactone) blocks and soft poly(n-butyl acrylate) segments. Thin Solid Films, 2009, 517, 3281-3286.	1.8	13
113	Self-Organized Hierarchical Structures in Polymer Surfaces: Self-Assembled Nanostructures within Breath Figures. Langmuir, 2009, 25, 6493-6499.	3.5	76
114	Design of Polypeptide-Functionalized Polystyrene Microspheres. Biomacromolecules, 2008, 9, 1811-1817.	5.4	12
115	Tunable Hierarchical Assembly on Polymer Surfaces: Combining Microphase and Macrophase Separation in Copolymer/Homopolymer Blends. Langmuir, 2008, 24, 6391-6394.	3.5	19
116	Boundary lubricant films under shear: Effect of roughness and adhesion. Journal of Chemical Physics, 2007, 126, 184906.	3.0	21
117	Functional pH-Responsive Polystyrene Microspheres Prepared by Surface Segregation of Diblock Copolymers. Macromolecules, 2007, 40, 9549-9554.	4.8	16
118	Structured Assemblies of Ferromagnetic Particles through Covalent Immobilization on Functionalized Polymer Surfaces Obtained by Surface Segregation. Langmuir, 2007, 23, 6879-6882.	3.5	17
119	pH-responsive micelles and vesicles nanocapsules based on polypeptide diblock copolymers. New Biotechnology, 2007, 24, 81-85.	2.7	93
120	Nanostructured thermotropic PBLGâ€“PDMSâ€“PBLG block copolymers. Polymer, 2007, 48, 3717-3725.	3.8	35
121	Thermotropic liquid crystal behavior on PBLG-PDMS-PBLG triblock copolymers. Journal of Polymer Science Part A, 2006, 44, 4668-4679.	2.3	36
122	Self-assemblies of magnetic nanoparticles and di-block copolymers: Magnetic micelles and vesicles. Journal of Magnetism and Magnetic Materials, 2006, 300, 71-74.	2.3	31
123	Toward â€˜smartâ€™ nano-objects by self-assembly of block copolymers in solution. Progress in Polymer Science, 2005, 30, 691-724.	24.7	748
124	Reversible Insideâ€™Out Micellization of pH-responsive and Water-Soluble Vesicles Based on Polypeptide Diblock Copolymers. Journal of the American Chemical Society, 2005, 127, 2026-2027.	13.7	656
125	Magnetic Nanocomposite Micelles and Vesicles. Advanced Materials, 2005, 17, 712-718.	21.0	170
126	Relationship Between Architecture and Adhesion in Polyurethane-Based Copolymers, 2. Macromolecular Chemistry and Physics, 2005, 206, 2381-2389.	2.2	8

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127	Peptide Dendrimers and Other Branched Polypeptide Architectures. ChemInform, 2005, 36, no.	0.0	0
128	Self-assembled nanostructures from peptideâ€“synthetic hybrid block copolymers: Complex, stimuli-responsive rodâ€“coil architectures. Faraday Discussions, 2005, 128, 179-192.	3.2	97
129	Preparation of Shell Cross-Linked Nano-Objects from Hybrid-Peptide Block Copolymers. Biomacromolecules, 2005, 6, 2213-2220.	5.4	79
130	Highly Branched Poly(l-lysine). Biomacromolecules, 2003, 4, 249-258.	5.4	65
131	Hierarchical Self-Assembly of Poly(Î³-benzyl-l-glutamate)â^'Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 587 Td (glycoâ 3673-3683.	4.8	178
132	Dendriticâ^'Graft Polypeptides. Macromolecules, 2002, 35, 8718-8723.	4.8	50