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	Toward â€˜smartâ€™ nano-objects by self-assembly of block copolymers in solution. Progress in Polymer Science, 2005, 30, 691-724.	24.7	748
2	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
3	Polymers for additive manufacturing and 4D-printing: Materials, methodologies, and biomedical applications. Progress in Polymer Science, 2019, 94, 57-116.	24.7	364
4	Wrinkled interfaces: Taking advantage of surface instabilities to pattern polymer surfaces. Progress in Polymer Science, 2015, 42, 1-41.	24.7	270
5	Towards hierarchically ordered functional porous polymeric surfaces prepared by the breath figures approach. Progress in Polymer Science, 2014, 39, 510-554.	24.7	222
6	Hierarchical Self-Assembly of Poly(Î³-benzyl-l-glutamate)â^'Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (glycol)â^'Poly(Î³- 3673-3683.	4.8	178
7	Magnetic Nanocomposite Micelles and Vesicles. Advanced Materials, 2005, 17, 712-718.	21.0	170
8	Self-assembled nanostructures from peptideâ€“synthetic hybrid block copolymers: Complex, stimuli-responsive rodâ€“coil architectures. Faraday Discussions, 2005, 128, 179-192.	3.2	97
9	pH-responsive micelles and vesicles nanocapsules based on polypeptide diblock copolymers. New Biotechnology, 2007, 24, 81-85.	2.7	93
10	Preparation of Shell Cross-Linked Nano-Objects from Hybrid-Peptide Block Copolymers. Biomacromolecules, 2005, 6, 2213-2220.	5.4	79
11	Self-Organized Hierarchical Structures in Polymer Surfaces: Self-Assembled Nanostructures within Breath Figures. Langmuir, 2009, 25, 6493-6499.	3.5	76
12	Highly Branched Poly(l-lysine). Biomacromolecules, 2003, 4, 249-258.	5.4	65
13	Advances in the Fabrication of Antimicrobial Hydrogels for Biomedical Applications. Materials, 2017, 10, 232.	2.9	62
14	Fabrication of Honeycomb-Structured Porous Surfaces Decorated with Glycopolymers. Langmuir, 2010, 26, 8552-8558.	3.5	52
15	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
16	Dendriticâ^'Graft Polypeptides. Macromolecules, 2002, 35, 8718-8723.	4.8	50
17	Hybrid materials achieved by polypeptide grafted magnetite nanoparticles through a dopamine biomimetic surface anchored initiator. Polymer Chemistry, 2013, 4, 558-567.	3.9	50
18	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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19	Hierarchically Structured Multifunctional Porous Interfaces through Water Templated Self-Assembly of Ternary Systems. Langmuir, 2012, 28, 9778-9787.	3.5	44
20	Smart pH-Responsive Antimicrobial Hydrogel Scaffolds Prepared by Additive Manufacturing. ACS Applied Bio Materials, 2018, 1, 1337-1347.	4.6	44
21	Honeycomb patterned surfaces functionalized with polypeptide sequences forÂrecognition and selective bacterial adhesion. Biomaterials, 2013, 34, 1453-1460.	11.4	42
22	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
23	Thermotropic liquid crystal behavior on PBLG-PDMS-PBLG triblock copolymers. Journal of Polymer Science Part A, 2006, 44, 4668-4679.	2.3	36
24	Strategies to Fabricate Polypeptide-Based Structures via Ring-Opening Polymerization of N-Carboxyanhydrides. Polymers, 2017, 9, 551.	4.5	36
25	Nanostructured thermotropic PBLGâ€“PDMSâ€“PBLG block copolymers. Polymer, 2007, 48, 3717-3725.	3.8	35
26	Water-Soluble Pendant Copolymers Bearing Proline and Permethylated Î²-Cyclodextrin: pH-Dependent Catalytic Nanoreactors. Macromolecules, 2012, 45, 7676-7683.	4.8	33
27	Engineering polymer surfaces with variable chemistry and topography. Journal of Polymer Science Part A, 2009, 47, 2262-2271.	2.3	32
28	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
29	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
30	Antimicrobial 3D Porous Scaffolds Prepared by Additive Manufacturing and Breath Figures. ACS Applied Materials & Interfaces, 2017, 9, 37454-37462.	8.0	31
31	Control of the chemistry outside the pores in honeycomb patterned films. Polymer Chemistry, 2013, 4, 4024.	3.9	30
32	Highly Efficient Antibacterial Surfaces Based on Bacterial/Cell Size Selective Microporous Supports. ACS Applied Materials & Interfaces, 2017, 9, 44270-44280.	8.0	29
33	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
34	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
35	Constructing Robust and Functional Micropatterns on Polystyrene Surfaces by Using Deep UV Irradiation. Langmuir, 2013, 29, 2756-2763.	3.5	28
36	Hybrid functionalized coatings on Metallic Biomaterials for Tissue Engineering. Surface and Coatings Technology, 2021, 422, 127508.	4.8	26

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37	pH responsive surfaces with nanoscale topography. Journal of Polymer Science Part A, 2010, 48, 2982-2990.	2.3	25
38	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
39	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
40	Fabrication and Superhydrophobic Behavior of Fluorinated Microspheres. Langmuir, 2010, 26, 16775-16781.	3.5	23
41	Fabrication of 3D-Printed Biodegradable Porous Scaffolds Combining Multi-Material Fused Deposition Modeling and Supercritical CO2 Techniques. Nanomaterials, 2020, 10, 1080.	4.1	22
42	Boundary lubricant films under shear: Effect of roughness and adhesion. Journal of Chemical Physics, 2007, 126, 184906.	3.0	21
43	Poly(Ethylene Oxide) Functionalized Polyimide-Based Microporous Films to Prevent Bacterial Adhesion. ACS Applied Materials & Interfaces, 2015, 7, 9716-9724.	8.0	21
44	Modification of poly(dimethylsiloxane) as a basis for surface wrinkle formation: Chemical and mechanical characterization. Polymer, 2016, 98, 327-335.	3.8	20
45	Tunable Hierarchical Assembly on Polymer Surfaces: Combining Microphase and Macrophase Separation in Copolymer/Homopolymer Blends. Langmuir, 2008, 24, 6391-6394.	3.5	19
46	Formation of Multigradient Porous Surfaces for Selective Bacterial Entrapment. Biomacromolecules, 2014, 15, 3338-3348.	5.4	19
47	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
48	Design and fabrication of biocompatible wrinkled hydrogel films with selective antibiofouling properties. Materials Science and Engineering C, 2019, 97, 803-812.	7.3	19
49	Micro-wrinkled hydrogel patterned surfaces using pH-sensitive monomers. Applied Surface Science, 2018, 457, 902-913.	6.1	18
50	Structured Assemblies of Ferromagnetic Particles through Covalent Immobilization on Functionalized Polymer Surfaces Obtained by Surface Segregation. Langmuir, 2007, 23, 6879-6882.	3.5	17
51	Fabrication of micro and sub-micrometer wrinkled hydrogel surfaces through thermal and photocrosslinking processes. Polymer, 2016, 101, 24-33.	3.8	17
52	Hydrogels with Modulated Ionic Load for Mammalian Cell Harvesting with Reduced Bacterial Adhesion. Biomacromolecules, 2017, 18, 1521-1531.	5.4	17
53	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
54	Functional pH-Responsive Polystyrene Microspheres Prepared by Surface Segregation of Diblock Copolymers. Macromolecules, 2007, 40, 9549-9554.	4.8	16

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55	Combining Breath Figures and Supercritical Fluids To Obtain Porous Polymer Scaffolds. ACS Omega, 2018, 3, 12593-12599.	3.5	16
56	Innovation in Additive Manufacturing Using Polymers: A Survey on the Technological and Material Developments. Polymers, 2022, 14, 1351.	4.5	16
57	Reinforcing the Hydrophobicity of Polymeric Surfaces from Fluorinated Star Polymers and Nanogels. Macromolecules, 2010, 43, 1299-1308.	4.8	15
58	Glycopolymers obtained by chemical modification of wellâ€defined block copolymers. Journal of Polymer Science Part A, 2012, 50, 2565-2577.	2.3	15
59	Boundary Lubricant Polymer Films: Effect of Cross-Linking. Langmuir, 2013, 29, 12936-12949.	3.5	15
60	Patterning of individual Staphylococcus aureus bacteria onto photogenerated polymeric surface structures. Polymer Chemistry, 2015, 6, 2677-2684.	3.9	15
61	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
62	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
63	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
64	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
65	Tuning the Pore Composition by Two Simultaneous Interfacial Self-Assembly Processes: Breath Figures and Coffee Stain. Langmuir, 2014, 30, 6134-6141.	3.5	13
66	Fabrication of 3D printed objects with controlled surface chemistry and topography. European Polymer Journal, 2018, 98, 21-27.	5.4	13
67	Hierarchical Functionalized Polymericâ€Ceramic Coatings on Mgâ€Ca Alloys for Biodegradable Implant Applications. Macromolecular Bioscience, 2019, 19, e1900179.	4.1	13
68	Design of Polypeptide-Functionalized Polystyrene Microspheres. Biomacromolecules, 2008, 9, 1811-1817.	5.4	12
69	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
70	Thermosensitive hydrogel platforms with modulated ionic load for optimal cell sheet harvesting. European Polymer Journal, 2018, 103, 400-409.	5.4	12
71	Chemical modification of block copolymers based on 2-hydroxyethyl acrylate to obtain amphiphilic glycopolymers. European Polymer Journal, 2015, 62, 167-178.	5.4	11
72	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

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73	Versatile Approach for the Fabrication of Functional Wrinkled Polymer Surfaces. Langmuir, 2014, 30, 13244-13254.	3.5	10
74	Fabrication of hierarchical wrinkled morphologies through sequential <scp>UVO</scp> treatments. Journal of Applied Polymer Science, 2015, 132, .	2.6	10
75	Electrowetting of Weak Polyelectrolyte-Coated Surfaces. Langmuir, 2017, 33, 4996-5005.	3.5	10
76	Polymers against Microorganisms. , 2017, , .		10
77	Nanogels Based on Poly(vinyl acetate) for the Preparation of Patterned Porous Films. Langmuir, 2011, 27, 4290-4295.	3.5	9
78	Microwrinkled pH-sensitive hydrogel films and their role on the cell adhesion/proliferation. Materials Science and Engineering C, 2019, 103, 109872.	7.3	9
79	Micrometric Wrinkled Patterns Spontaneously Formed on Hydrogel Thin Films via Argon Plasma Exposure. Molecules, 2019, 24, 751.	3.8	9
80	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
81	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
82	Breath Figures. , 2020, , .		9
83	Biocompatible fluorinated wrinkled hydrogel films with antimicrobial activity. Materials Science and Engineering C, 2020, 114, 111031.	7.3	9
84	Relationship Between Architecture and Adhesion in Polyurethane-Based Copolymers, 2. Macromolecular Chemistry and Physics, 2005, 206, 2381-2389.	2.2	8
85	Singleâ€step process to produce functionalized multiresponsive polymeric particles. Journal of Polymer Science Part A, 2010, 48, 3523-3533.	2.3	8
86	Formation of responsive hierarchical wrinkled patterns on hydrogel films via multi-step methodology. Polymer, 2019, 179, 121662.	3.8	8
87	Innovative procedure for precise deposition of wrinkled hydrogel films using direct inkjet printing. Materials and Design, 2020, 194, 108959.	7.0	8
88	Reversible functionalization of nanostructured polymer surfaces via stimuli-responsive interpolymer complexes. European Polymer Journal, 2013, 49, 130-138.	5.4	7
89	Direct micrometer patterning and functionalization of polymer blend surfaces by using hot embossing. European Polymer Journal, 2014, 59, 333-340.	5.4	7
90	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

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91	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
92	Strategies for the Fabrication of Wrinkled Polymer Surfaces. , 2019, , 19-59.		7
93	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
94	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
95	Immobilization of Polyoxometalates on Tailored Polymeric Surfaces. Nanomaterials, 2018, 8, 142.	4.1	6
96	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
97	Environmentally Responsive Particles: From Superhydrophobic Particle Films to Water-Dispersible Microspheres. Langmuir, 2010, 26, 18617-18620.	3.5	5
98	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
99	Versatile Functional Microstructured Polystyrene-Based Platforms for Protein Patterning and Recognition. Biomacromolecules, 2013, 14, 3147-3154.	5.4	5
100	Nano/Micro and Hierarchical Structured Surfaces in Polymer Blends. , 2014, , 357-421.		5
101	Design of hybrid gradient porous surfaces with magnetic nanoparticles. Polymer, 2015, 70, 100-108.	3.8	5
102	Nanopatterned polystyrene-b-poly(acrylic acid) surfaces to modulate cell-material interaction. Materials Science and Engineering C, 2017, 75, 229-236.	7.3	5
103	Thermoresponsive microwrinkled hydrogel surfaces with modulated chemical composition. Polymer, 2021, 231, 124109.	3.8	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.	3.5	4
105	General approach to prepare polymers bearing pendant isocyanate groups. Polymer Chemistry, 2020, 11, 5140-5146.	3.9	4
106	Antimicrobial micro/nanostructured functional polymer surfaces. , 2016, , 153-192.		3
107	Nano/Microstructured Antibacterial Surfaces. , 2017, , 125-154.		3
108	Introducing Chemical Functionalities to Microporous Surfaces: Strategies. , 2020, , 149-168.		3

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109	Nano-microporous structured surfaces prepared by the breath figures approach and their biorelated applications. , 2016, , 107-133.		3
110	Electroresponsive Weak Polyelectrolyte Brushes. Macromolecules, 2022, 55, 2636-2648.	4.8	3
111	Thermosensitive hydrogels functionalized with pH sensitive COOH groups for bone cell harvesting. European Polymer Journal, 2022, 169, 111131.	5.4	3
112	Weak polyelectrolyte brushes: re-entrant swelling and self-organization. Soft Matter, 2020, 16, 7727-7738.	2.7	2
113	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
114	4D Printing Using Multifunctional Polymeric Materials: A Review. , 2022, , 17-36.		2
115	Breath Figures: Fabrication of Honeycomb Porous Films Induced by Marangoni Instabilities. , 2015, , 219-256.		1
116	Smart Polymer Surfaces. , 2016, , 105-120.		1
117	Wrinkles Obtained by Frontal Polymerization/Vitrification. , 2019, , 63-84.		1
118	Introduction to Surface Instabilities and Wrinkle Formation. , 2019, , 3-18.		1
119	Nanostructured Interfaces by Surface Segregation of Block Copolymers. , 2015, , 99-142.		1
120	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
121	Breath-Figures Formation: Physical Aspects. , 2020, , 13-49.		1
122	Peptide Dendrimers and Other Branched Polypeptide Architectures. ChemInform, 2005, 36, no.	0.0	0
123	Phase Structures in Thin Films of Nanostructured Polymer Blends. , 2016, , 313-364.		0
124	Interference lithography with functional block copolymer blends: Hierarchical structuration and anisotropic wetting. European Polymer Journal, 2017, 90, 25-36.	5.4	0
125	Micro- and Nano-patterned Hydrogels Fabricated by Taking Advantage of Surface Instabilities. , 2019, , 183-204.		0
126	Nonconventional Methods for Patterning Polymer Surfaces. , 2015, , 1-21.		0

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127	Honeycomb Structured Films Prepared by Breath Figures: Fabrication and Application for Biorecognition Purposes. , 2015, , 237-271.		0
128	Applications of the Porous Structures Obtained with the Breath-Figures Self-Assembly. , 2020, , 207-228.		0
129	Hierarchically Ordered Microporous Surfaces. , 2020, , 169-187.		0
130	Introduction to Micropatterned Surfaces. , 2020, , 1-11.		0
131	From Planar Surfaces to 3D Porous Interfaces. , 2020, , 189-206.		0
132	Polymers Employed and Role of the Molecular Characteristics on the BFs Formation. , 2020, , 51-110.		0