Juan Rodriguez-Hernandez

List of Publications by Year in Descending Order

128 papers	4,087 citations	27 h-index	61 g-index
133 ext. papers	4,457 ext. citations	6.3 avg, IF	5.96 L-index

#	Paper	IF	Citations
128	Thermosensitive hydrogels functionalized with pH sensitive COOH groups for bone cell harvesting. *European Polymer Journal*, **2022**, 169, 111131	5.2	0
127	Thermoresponsive microwrinkled hydrogel surfaces with modulated chemical composition. *Polymer*, **2021**, 231, 124109	3.9	1
126	Hybrid functionalized coatings on Metallic Biomaterials for Tissue Engineering. *Surface and Coatings Technology*, **2021**, 422, 127508	4.4	6
125	Fabrication of 3D-Printed Biodegradable Porous Scaffolds Combining Multi-Material Fused Deposition Modeling and Supercritical CO Techniques. *Nanomaterials*, **2020**, 10,	5.4	13
124	p 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	4.1	1
123	Biocompatible fluorinated wrinkled hydrogel films with antimicrobial activity. *Materials Science and Engineering C*, **2020**, 114, 111031	8.3	3
122	Introduction to Micropatterned Surfaces **2020**, 1-11		
121	From Planar Surfaces to 3D Porous Interfaces **2020**, 189-206		
120	Breath-Figures Formation: Physical Aspects **2020**, 13-49		
119	Polymers Employed and Role of the Molecular Characteristics on the BFs Formation **2020**, 51-110		
118	Applications of the Porous Structures Obtained with the Breath-Figures Self-Assembly **2020**, 207-228		
117	Hierarchically Ordered Microporous Surfaces **2020**, 169-187		
116	Methodologies Involved in Manufacturing Self-Assembled Breath-Figures Patterns: Drop-Casting and Spin- and Dip-Coating Characterization of Microporous Surfaces **2020**, 111-148		1
115	Introducing Chemical Functionalities to Microporous Surfaces: Strategies **2020**, 149-168		2
114	Innovative procedure for precise deposition of wrinkled hydrogel films using direct inkjet printing. *Materials and Design*, **2020**, 194, 108959	8.1	4
113	Fabrication of porous films from immiscible polymer blends: Role of the surface structure on the cell adhesion. *Polymer Testing*, **2020**, 91, 106797	4.5	6
112	General approach to prepare polymers bearing pendant isocyanate groups. *Polymer Chemistry*, **2020**, 11, 5140-5146	4.9	0

111	Weak polyelectrolyte brushes: re-entrant swelling and self-organization. *Soft Matter*, **2020**, 16, 7727-7736	3.6	1
110	Breath Figures **2020**,		3
109	Hierarchical Functionalized Polymeric-Ceramic Coatings on Mg-Ca Alloys for Biodegradable Implant Applications. *Macromolecular Bioscience*, **2019**, 19, e1900179	5.5	8
108	Microwrinkled pH-sensitive hydrogel films and their role on the cell adhesion/proliferation. *Materials Science and Engineering C*, **2019**, 103, 109872	8.3	7
107	Polymers for additive manufacturing and 4D-printing: Materials, methodologies, and biomedical applications. *Progress in Polymer Science*, **2019**, 94, 57-116	29.6	214
106	Strategies for the Fabrication of Wrinkled Polymer Surfaces **2019**, 19-59		6
105	Wrinkles Obtained by Frontal Polymerization/Vitrification **2019**, 63-84		1
104	Micrometric Wrinkled Patterns Spontaneously Formed on Hydrogel Thin Films via Argon Plasma Exposure. *Molecules*, **2019**, 24,	4.8	7
103	Formation of responsive hierarchical wrinkled patterns on hydrogel films via multi-step methodology. *Polymer*, **2019**, 179, 121662	3.9	8
102	Introduction to Surface Instabilities and Wrinkle Formation **2019**, 3-18		1
101	Micro- and Nano-patterned Hydrogels Fabricated by Taking Advantage of Surface Instabilities **2019**, 183-204		
100	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	4.1	8
99	Design and fabrication of biocompatible wrinkled hydrogel films with selective antibiofouling properties. *Materials Science and Engineering C*, **2019**, 97, 803-812	8.3	10
98	Thermosensitive hydrogel platforms with modulated ionic load for optimal cell sheet harvesting. *European Polymer Journal*, **2018**, 103, 400-409	5.2	6
97	In vitro and in vivo evaluation of PEO-modified titanium for bone implant applications. *Surface and Coatings Technology*, **2018**, 347, 358-368	4.4	33
96	Fabrication of biocompatible and efficient antimicrobial porous polymer surfaces by the Breath Figures approach. *Journal of Colloid and Interface Science*, **2018**, 513, 820-830	9.3	13
95	Fabrication of 3D printed objects with controlled surface chemistry and topography. *European Polymer Journal*, **2018**, 98, 21-27	5.2	12
94	Immobilization of Polyoxometalates on Tailored Polymeric Surfaces. *Nanomaterials*, **2018**, 8,	5.4	4

93	Combining Breath Figures and Supercritical Fluids To Obtain Porous Polymer Scaffolds. *ACS Omega*, **2018**, 3, 12593-12599	3.9	13
92	Smart pH-Responsive Antimicrobial Hydrogel Scaffolds Prepared by Additive Manufacturing.. *ACS Applied Bio Materials*, **2018**, 1, 1337-1347	4.1	21
91	Micro-wrinkled hydrogel patterned surfaces using pH-sensitive monomers. *Applied Surface Science*, **2018**, 457, 902-913	6.7	13
90	Aqueous micro and nanoreactors based on alternating copolymers of phenylmaleimide and vinylpyrrolidone bearing pendant l-proline stabilized with PEG grafted chains. *Journal of Polymer Science Part A*, **2017**, 55, 1228-1236	2.5	5
89	Chemical and Topographical Modification of Polycarbonate Surfaces through Diffusion/Photocuring Processes of Hydrogel Precursors Based on Vinylpyrrolidone. *Langmuir*, **2017**, 33, 1614-1622	4	7
88	Honeycomb Films with Core-Shell Dispersed Phases Prepared by the Combination of Breath Figures and Phase Separation Process of Ternary Blends. *Langmuir*, **2017**, 33, 2872-2877	4	2
87	Interference lithography with functional block copolymer blends: Hierarchical structuration and anisotropic wetting. *European Polymer Journal*, **2017**, 90, 25-36	5.2	
86	Nanopatterned polystyrene-b-poly(acrylic acid) surfaces to modulate cell-material interaction. *Materials Science and Engineering C*, **2017**, 75, 229-236	8.3	4
85	Electrowetting of Weak Polyelectrolyte-Coated Surfaces. *Langmuir*, **2017**, 33, 4996-5005	4	6
84	Nano/Microstructured Antibacterial Surfaces **2017**, 125-154		3
83	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	9.5	11
82	Hydrogels with Modulated Ionic Load for Mammalian Cell Harvesting with Reduced Bacterial Adhesion. *Biomacromolecules*, **2017**, 18, 1521-1531	6.9	12
81	Microfluidic Reactors Based on Rechargeable Catalytic Porous Supports: Heterogeneous Enzymatic Catalysis via Reversible Host-Guest Interactions. *ACS Applied Materials & Interfaces*, **2017**, 9, 4184-4191	9.5	15
80	Antimicrobial 3D Porous Scaffolds Prepared by Additive Manufacturing and Breath Figures. *ACS Applied Materials & Interfaces*, **2017**, 9, 37454-37462	9.5	22
79	Highly Efficient Antibacterial Surfaces Based on Bacterial/Cell Size Selective Microporous Supports. *ACS Applied Materials & Interfaces*, **2017**, 9, 44270-44280	9.5	22
78	Facile one-pot exfoliation and integration of 2D layered materials by dispersion in a photocurable polymer precursor. *Nanoscale*, **2017**, 9, 10590-10595	7.7	9
77	Polymers against Microorganisms **2017**,		8
76	Strategies to Fabricate Polypeptide-Based Structures via Ring-Opening Polymerization of N-Carboxyanhydrides. *Polymers*, **2017**, 9,	4.5	29

75	Advances in the Fabrication of Antimicrobial Hydrogels for Biomedical Applications. *Materials*, **2017**, 10,	3.5	49
74	Fabrication of micro and sub-micrometer wrinkled hydrogel surfaces through thermal and photocrosslinking processes. *Polymer*, **2016**, 101, 24-33	3.9	15
73	Modification of poly(dimethylsiloxane) as a basis for surface wrinkle formation: Chemical and mechanical characterization. *Polymer*, **2016**, 98, 327-335	3.9	16
72	Phase Structures in Thin Films of Nanostructured Polymer Blends **2016**, 313-364		
71	Toward Cell Selective Surfaces: Cell Adhesion and Proliferation on Breath Figures with Antifouling Surface Chemistry. *ACS Applied Materials & Interfaces*, **2016**, 8, 6344-53	9.5	43
70	Nano-microporous structured surfaces prepared by the breath figures approach and their biorelated applications **2016**, 107-133		2
69	Antimicrobial micro/nanostructured functional polymer surfaces **2016**, 153-192		3
68	Smart Polymer Surfaces **2016**, 105-120		1
67	Design of hybrid gradient porous surfaces with magnetic nanoparticles. *Polymer*, **2015**, 70, 100-108	3.9	5
66	Straightforward functionalization of breath figures: Simultaneous orthogonal host-guest and pH-responsive interfaces. *Journal of Colloid and Interface Science*, **2015**, 457, 272-80	9.3	7
65	Poly(ethylene oxide) functionalized polyimide-based microporous films to prevent bacterial adhesion. *ACS Applied Materials & Interfaces*, **2015**, 7, 9716-24	9.5	18
64	Breath Figures: Fabrication of Honeycomb Porous Films Induced by Marangoni Instabilities **2015**, 219-256		1
63	Chemical modification of block copolymers based on 2-hydroxyethyl acrylate to obtain amphiphilic glycopolymers. *European Polymer Journal*, **2015**, 62, 167-178	5.2	9
62	Wrinkled interfaces: Taking advantage of surface instabilities to pattern polymer surfaces. *Progress in Polymer Science*, **2015**, 42, 1-41	29.6	209
61	Fabrication of hierarchical wrinkled morphologies through sequential UVO treatments. *Journal of Applied Polymer Science*, **2015**, 132,	2.9	10
60	Patterning of individual Staphylococcus aureus bacteria onto photogenerated polymeric surface structures. *Polymer Chemistry*, **2015**, 6, 2677-2684	4.9	12
59	Nanostructured Interfaces by Surface Segregation of Block Copolymers **2015**, 99-142		1
58	Nonconventional Methods for Patterning Polymer Surfaces **2015**, 1-21		

57	Honeycomb Structured Films Prepared by Breath Figures: Fabrication and Application for Biorecognition Purposes **2015**, 237-271		
56	Versatile approach for the fabrication of functional wrinkled polymer surfaces. *Langmuir*, **2014**, 30, 13244-54	4	9
55	Tuning the pore composition by two simultaneous interfacial self-assembly processes: breath figures and coffee stain. *Langmuir*, **2014**, 30, 6134-41	4	13
54	Formation of multigradient porous surfaces for selective bacterial entrapment. *Biomacromolecules*, **2014**, 15, 3338-48	6.9	19
53	Nano/Micro and Hierarchical Structured Surfaces in Polymer Blends **2014**, 357-421		3
52	Fabrication of Functional Wrinkled Interfaces from Polymer Blends: Role of the Surface Functionality on the Bacterial Adhesion. *Polymers*, **2014**, 6, 2845-2861	4.5	11
51	Direct micrometer patterning and functionalization of polymer blend surfaces by using hot embossing. *European Polymer Journal*, **2014**, 59, 333-340	5.2	7
50	Towards hierarchically ordered functional porous polymeric surfaces prepared by the breath figures approach. *Progress in Polymer Science*, **2014**, 39, 510-554	29.6	186
49	Reversible functionalization of nanostructured polymer surfaces via stimuli-responsive interpolymer complexes. *European Polymer Journal*, **2013**, 49, 130-138	5.2	5
48	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, 3943-51	9.5	34
47	Constructing robust and functional micropatterns on polystyrene surfaces by using deep UV irradiation. *Langmuir*, **2013**, 29, 2756-63	4	26
46	Hydrophilic polyisophthalamides containing poly(ethylene oxide) side chains: Synthesis, characterization, and physical properties. *Journal of Polymer Science Part A*, **2013**, 51, 963-976	2.5	6
45	Hybrid materials achieved by polypeptide grafted magnetite nanoparticles through a dopamine biomimetic surface anchored initiator. *Polymer Chemistry*, **2013**, 4, 558-567	4.9	47
44	Control of the chemistry outside the pores in honeycomb patterned films. *Polymer Chemistry*, **2013**, 4, 4024	4.9	29
43	Honeycomb patterned surfaces functionalized with polypeptide sequences for recognition and selective bacterial adhesion. *Biomaterials*, **2013**, 34, 1453-60	15.6	42
42	Versatile functional microstructured polystyrene-based platforms for protein patterning and recognition. *Biomacromolecules*, **2013**, 14, 3147-54	6.9	5
41	Boundary lubricant polymer films: effect of cross-linking. *Langmuir*, **2013**, 29, 12936-49	4	14
40	Hierarchically structured multifunctional porous interfaces through water templated self-assembly of ternary systems. *Langmuir*, **2012**, 28, 9778-87	4	40

39	Functional micropatterned surfaces prepared by simultaneous UV-lithography and surface segregation of fluorinated copolymers. *Journal of Polymer Science Part A*, **2012**, 50, 4902-4910	2.5	5
38	Water-Soluble Pendant Copolymers Bearing Proline and Permethylated β-Cyclodextrin: pH-Dependent Catalytic Nanoreactors. *Macromolecules*, **2012**, 45, 7676-7683	5.5	32
37	Synthesis and lectin recognition studies of glycosylated polystyrene microspheres functionalized via thiol–para-fluorine "click" reaction. *Polymer Chemistry*, **2012**, 3, 3282	4.9	23
36	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	27
35	Glycopolymers obtained by chemical modification of well-defined block copolymers. *Journal of Polymer Science Part A*, **2012**, 50, 2565-2577	2.5	15
34	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	5.5	26
33	Nanogels based on poly(vinyl acetate) for the preparation of patterned porous films. *Langmuir*, **2011**, 27, 4290-5	4	9
32	Surface segregation of polypeptide-based block copolymer micelles: An approach to engineer nanostructured and stimuli responsive surfaces. *European Polymer Journal*, **2011**, 47, 2063-2068	5.2	10
31	Environmentally responsive particles: from superhydrophobic particle films to water-dispersible microspheres. *Langmuir*, **2010**, 26, 18617-20	4	4
30	Fabrication and superhydrophobic behavior of fluorinated microspheres. *Langmuir*, **2010**, 26, 16775-81	4	18
29	Fabrication of honeycomb-structured porous surfaces decorated with glycopolymers. *Langmuir*, **2010**, 26, 8552-8	4	47
28	Reinforcing the Hydrophobicity of Polymeric Surfaces from Fluorinated Star Polymers and Nanogels. *Macromolecules*, **2010**, 43, 1299-1308	5.5	13
27	Supramolecular structures from self-assembled poly(ε-benzyl-l-glutamate)–polydimethylsiloxane–poly(ε-benzyl-l-glutamate) triblock copolypeptides in thin films. *European Polymer Journal*, **2010**, 46, 891-899	5.2	13
26	Structured multistimuli-responsive functional polymer surfaces obtained by interfacial diffusion of amphiphilic block copolymers. *Journal of Polymer Science Part A*, **2010**, 48, 1952-1961	2.5	22
25	pH responsive surfaces with nanoscale topography. *Journal of Polymer Science Part A*, **2010**, 48, 2982-2990	2.5	23
24	Single-step process to produce functionalized multiresponsive polymeric particles. *Journal of Polymer Science Part A*, **2010**, 48, 3523-3533	2.5	8
23	Engineering polymer surfaces with variable chemistry and topography. *Journal of Polymer Science Part A*, **2009**, 47, 2262-2271	2.5	31
22	Adhesives based on polyurethane graft multiblock copolymers: Tack, rheology and first morphological analyses. *International Journal of Adhesion and Adhesives*, **2009**, 29, 1-8	3.4	26

21	Self-assembly of graft polyurethanes having both crystallizable poly(ε-caprolactone) blocks and soft poly(n-butyl acrylate) segments. *Thin Solid Films*, **2009**, 517, 3281-3286	2.2	11
20	Self-organized hierarchical structures in polymer surfaces: self-assembled nanostructures within breath figures. *Langmuir*, **2009**, 25, 6493-9	4	71
19	Design of polypeptide-functionalized polystyrene microspheres. *Biomacromolecules*, **2008**, 9, 1811-7	6.9	12
18	Tunable hierarchical assembly on polymer surfaces: combining microphase and macrophase separation in copolymer/homopolymer blends. *Langmuir*, **2008**, 24, 6391-4	4	18
17	Functional pH-Responsive Polystyrene Microspheres Prepared by Surface Segregation of Diblock Copolymers. *Macromolecules*, **2007**, 40, 9549-9554	5.5	16
16	Structured assemblies of ferromagnetic particles through covalent immobilization on functionalized polymer surfaces obtained by surface segregation. *Langmuir*, **2007**, 23, 6879-82	4	16
15	pH-responsive micelles and vesicles nanocapsules based on polypeptide diblock copolymers. *New Biotechnology*, **2007**, 24, 81-5		90
14	Nanostructured thermotropic PBLG-PDMS-PBLG block copolymers. *Polymer*, **2007**, 48, 3717-3725	3.9	33
13	Boundary lubricant films under shear: effect of roughness and adhesion. *Journal of Chemical Physics* , **2007**, 126, 184906	3.9	20
12	Self-assemblies of magnetic nanoparticles and di-block copolymers: Magnetic micelles and vesicles. *Journal of Magnetism and Magnetic Materials*, **2006**, 300, 71-74	2.8	27
11	Thermotropic liquid crystal behavior on PBLG-PDMS-PBLG triblock copolymers. *Journal of Polymer Science Part A*, **2006**, 44, 4668-4679	2.5	35
10	Self-assembled nanostructures from peptide-synthetic hybrid block copolymers: complex, stimuli-responsive rod-coil architectures. *Faraday Discussions*, **2005**, 128, 179-92	3.6	91
9	Preparation of shell cross-linked nano-objects from hybrid-peptide block copolymers. *Biomacromolecules*, **2005**, 6, 2213-20	6.9	76
8	Toward "smart" nano-objects by self-assembly of block copolymers in solution. *Progress in Polymer Science*, **2005**, 30, 691-724	29.6	685
7	Reversible inside-out micellization of pH-responsive and water-soluble vesicles based on polypeptide diblock copolymers. *Journal of the American Chemical Society*, **2005**, 127, 2026-7	16.4	615
6	Magnetic Nanocomposite Micelles and Vesicles. *Advanced Materials*, **2005**, 17, 712-718	24	155
5	Relationship Between Architecture and Adhesion in Polyurethane-Based Copolymers, 2. *Macromolecular Chemistry and Physics*, **2005**, 206, 2381-2389	2.6	8
4	Highly branched poly(L-lysine). *Biomacromolecules*, **2003**, 4, 249-58	6.9	59

List of Publications

3	Hierarchical Self-Assembly of Poly(ε-benzyl-l-glutamate)-*b*-poly(ethylene glycol)-*b*-poly(ε-benzyl-l-glutamate) Rod-Coil-Rod Triblock Copolymers. *Macromolecules*, **2003**, 36, 3673-3683	5.5	171
2	Dendritic-Graft Polypeptides. *Macromolecules*, **2002**, 35, 8718-8723	5.5	46
1	Additive Manufacturing of Polymers: 3D and 4D Printing, Methodologies, Type of Polymeric Materials, and Applications1-65		0