Ana VallÃ©s-Lluch

List of Publications by Year
in descending order

89 papers	1,440 citations	331538 21 h-index	395590 33 g-index
92 all docs	92 docs citations	92 times ranked	2185 citing authors

#	Article	IF	Citations
1	Thermal degradation of polypropylene/starch-based materials with enhanced biodegradability. Polymer Degradation and Stability, 2004, 86, 483-491.	2.7	119
2	PLA/PCL electrospun membranes of tailored fibres diameter as drug delivery systems. European Polymer Journal, 2018, 99, 445-455.	2.6	85
3	Calorimetric and thermogravimetric studies of UV-irradiated polypropylene/starch-based materials aged in soil. Polymer Degradation and Stability, 2006, 91, 44-51.	2.7	50
4	Improvement of mechanical and biological properties of Polycaprolactone loaded with Hydroxyapatite and Halloysite nanotubes. Materials Science and Engineering C, 2017, 75, 418-424.	3.8	46
5	Ultrawideband Technology for Medical In-Body Sensor Networks: An Overview of the Human Body as a Propagation Medium, Phantoms, and Approaches for Propagation Analysis. IEEE Antennas and Propagation Magazine, 2018, 60, 19-33.	1.2	45
6	Correlating synthesis parameters with physicochemical properties of poly(glycerol sebacate). European Polymer Journal, 2017, 87, 406-419.	2.6	44
7	k-Space tutorial: an MRI educational tool for a better understanding of k-space. Biomedical Imaging and Intervention Journal, 2008, 4, e15.	0.5	42
8	Channeled scaffolds implanted in adult rat brain. Journal of Biomedical Materials Research - Part A, 2012, 100A, 3276-3286.	2.1	40
9	Biomimetic apatite coating on P(EMA-co-HEA)/SiO2 hybrid nanocomposites. Polymer, 2009, 50, 2874-2884.	1.8	36
10	Microcomputed tomography and microfinite element modeling for evaluating polymer scaffolds architecture and their mechanical properties. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 191-202.	1.6	33
11	Experimental Path Loss Models for In-Body Communications within 2.36-2.5 GHz. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1-1.	3.9	32
12	Determination of moisture content in nylon 6,6 by near-infrared spectroscopy and chemometrics. Journal of Applied Polymer Science, 2003, 87, 2165-2170.	1.3	31
13	Hyaluronic Acidâ€“Silica Nanohybrid Gels. Biomacromolecules, 2013, 14, 4217-4225.	2.6	28
14	Schwann-cell cylinders grown inside hyaluronic-acid tubular scaffolds with gradient porosity. Acta Biomaterialia, 2016, 30, 199-211.	4.1	28
15	Bioactive scaffolds mimicking natural dentin structure. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 182-194.	1.6	27
16	Effect of the silica content on the physico-chemical and relaxation properties of hybrid polymer/silica nanocomposites of P(EMA-co-HEA). European Polymer Journal, 2010, 46, 910-917.	2.6	27
17	Tailor-Made Tissue Phantoms Based on Acetonitrile Solutions for Microwave Applications up to 18 GHz. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 3987-3994.	2.9	26
18	Tunability of polycaprolactone hydrophilicity by carboxymethyl cellulose loading. Journal of Applied Polymer Science, 2018, 135, 46134.	1.3	25

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19	Candidate Polyurethanes Based on Castor Oil (Ricinus communis), with Polycaprolactone Diol and Chitosan Additions, for Use in Biomedical Applications. Molecules, 2019, 24, 237.	1.7	25
20	Engineered 3D bioimplants using elastomeric scaffold, self-assembling peptide hydrogel, and adipose tissue-derived progenitor cells for cardiac regeneration. American Journal of Translational Research (discontinued), 2014, 6, 291-301.	0.0	24
21	Thermal analysis characterization of the degradation of biodegradable starch blends in soil. Journal of Applied Polymer Science, 2005, 96, 358-371.	1.3	23
22	Electrospun adherentâ€“antiadherent bilayered membranes based on cross-linked hyaluronic acid for advanced tissue engineering applications. Materials Science and Engineering C, 2013, 33, 4086-4093.	3.8	23
23	Influence of chemistry and fiber diameter of electrospun PLA, PCL and their blend membranes, intended as cell supports, on their biological behavior. Polymer Testing, 2021, 103, 107364.	2.3	23
24	Influence of water on the viscoelastic behavior of recycled nylon 6,6. Journal of Applied Polymer Science, 2002, 85, 2211-2218.	1.3	21
25	Surface modification of P(EMA-co-HEA)/SiO2 nanohybrids for faster hydroxyapatite deposition in simulated body fluid?. Colloids and Surfaces B: Biointerfaces, 2009, 70, 218-225.	2.5	21
26	Mimicking Natural Dentin Using Bioactive Nanohybrid Scaffolds for Dentinal Tissue Engineering. Tissue Engineering - Part A, 2010, 16, 2783-2793.	1.6	21
27	Glass Transition and Water Dynamics in Hyaluronic Acid Hydrogels. Food Biophysics, 2013, 8, 192-202.	1.4	21
28	Combining self-assembling peptide gels with three-dimensional elastomer scaffolds. Acta Biomaterialia, 2013, 9, 9451-9460.	4.1	20
29	Polyurethane-based bioadhesive synthesized from polyols derived from castor oil (Ricinus communis) and low concentration of chitosan. Journal of Materials Research, 2017, 32, 3699-3711.	1.2	20
30	Spatial In-Body Channel Characterization Using an Accurate UWB Phantom. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 3995-4002.	2.9	19
31	Influence of synthesis parameters on hyaluronic acid hydrogels intended as nerve conduits. Biofabrication, 2016, 8, 045011.	3.7	19
32	Coating typologies and constrained swelling of hyaluronic acid gels within scaffold pores. Journal of Colloid and Interface Science, 2011, 361, 361-369.	5.0	18
33	Development and Characterization of Polyester and Acrylate-Based Composites with Hydroxyapatite and Halloysite Nanotubes for Medical Applications. Polymers, 2020, 12, 1703.	2.0	17
34	Synthesis and characterization of poly(EMA-co-HEA)/SiO2 nanohybrids. European Polymer Journal, 2010, 46, 1446-1455.	2.6	15
35	In vitro assessment of the biological response of Ti6Al4V implants coated with hydroxyapatite microdomains. Journal of Biomedical Materials Research - Part A, 2016, 104, 2723-2729.	2.1	15
36	Influence of the Hydrophobicâ€“Hydrophilic Nature of Biomedical Polymers and Nanocomposites on In Vitro Biological Development. Macromolecular Materials and Engineering, 2017, 302, 1700259.	1.7	15

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37	Design and Assembly Procedures for Large-Sized Biohybrid Scaffolds as Patches for Myocardial Infarct. Tissue Engineering - Part C: Methods, 2014, 20, 817-827.	1.1	13
38	Elastomeric cardiopatch scaffold for myocardial repair and ventricular support. European Journal of Cardio-thoracic Surgery, 2019, 57, 545-555.	0.6	13
39	Role of Electrospinning Parameters on Poly(Lactic-co-Glycolic Acid) and Poly(Caprolactone-co-Glycolic acid) Membranes. Polymers, 2021, 13, 695.	2.0	13
40	Effect of an organotin catalyst on the physicochemical properties and biocompatibility of castor oil-based polyurethane/cellulose composites. Journal of Materials Research, 2018, 33, 2598-2611.	1.2	12
41	Nanocomposites based on poly(glycerol sebacate) with silica nanoparticles with potential application in dental tissue engineering. International Journal of Polymeric Materials and Polymeric Biomaterials, 2020, 69, 761-772.	1.8	12
42	Differential scanning calorimetry studies on high- and low-density annealed and irradiated polyethylenes: Influence of aging. Journal of Applied Polymer Science, 2003, 89, 3260-3271.	1.3	11
43	Ultra wideband propagation for future in-body sensor networks. , 2014, , .		11
44	Formulas for easy-to-prepare tailored phantoms at 2.4 GHz ISM band. , 2017, , .		11
45	Chemical and thermal characterization of high- and low-density irradiated polyethylenes. Journal of Applied Polymer Science, 2002, 86, 1953-1958.	1.3	10
46	Structure and biological response of polymer/silica nanocomposites prepared by solâ€“gel technique. Composites Science and Technology, 2010, 70, 1789-1795.	3.8	10
47	Thermal, mechanical and viscoelastic properties of compatibilized polypropylene/multi-walled carbon nanotube nanocomposites. Journal of Elastomers and Plastics, 2016, 48, 576-599.	0.7	10
48	Polyurethanes from modified castor oil and chitosan. Journal of Elastomers and Plastics, 2018, 50, 419-434.	0.7	10
49	Unsupervised segmentation of brain regions with similar microstructural properties: Application to alcoholism. , 2013, 2013, 1053-6.		9
50	Frequency Dependence of UWB In-Body Radio Channel Characteristics. IEEE Microwave and Wireless Components Letters, 2018, 28, 359-361.	2.0	9
51	Gel Phantoms for Body Microwave Propagation in the (2 to 26.5) GHz Frequency Band. IEEE Transactions on Antennas and Propagation, 2019, 67, 6564-6573.	3.1	9
52	Influence of pre-polymerisation atmosphere on the properties of pre- and poly(glycerol sebacate). Materials Science and Engineering C, 2021, 119, 111429.	3.8	9
53	Degradation studies of LDPE-Mater-Bi blends annealed and aged in soil. Journal of Applied Polymer Science, 2002, 86, 405-413.	1.3	8
54	Ageing effect on morphology, thermal and mechanical properties of impact modified LDPE/PP blends from virgin and recycled materials. Journal of Elastomers and Plastics, 2014, 46, 427-447.	0.7	8

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55	Routing Design in Wireless Sensor Networks and a Solution for Healthcare Environments. IEEE Latin America Transactions, 2011, 9, 408-414.	1.2	7
56	New Semi-Biodegradable Materials from Semi-Interpenetrated Networks of Poly(Ïµ-caprolactone) and Poly(ethyl acrylate). Macromolecular Bioscience, 2015, 15, 229-240.	2.1	7
57	Wideband phantoms of different body tissues for heterogeneous models in body area networks. , 2017, 2017, 3032-3035.		7
58	Development and evaluation of hyaluronan nanocomposite conduits for neural tissue regeneration. Journal of Biomaterials Science, Polymer Edition, 2021, 32, 2227-2245.	1.9	7
59	Calorimetric studies of PP/Mater-Bi blends aged in soil. Journal of Applied Polymer Science, 2006, 100, 3446-3453.	1.3	6
60	Topologically controlled hyaluronan-based gel coatings of hydrophobic grid-like scaffolds to modulate drug delivery. Colloids and Surfaces B: Biointerfaces, 2016, 140, 412-420.	2.5	6
61	Improved Mechanical, Thermal, and Hydrophobic Properties of PLA Modified with Alkoxysilanes by Reactive Extrusion Process. Polymers, 2021, 13, 2475.	2.0	6
62	Influence of previous annealing on first stage of degradation of blends of low-density polyethylene and Mater-Bi AF05H aged in soil: Comparative thermal analysis study. Journal of Applied Polymer Science, 2003, 90, 3359-3373.	1.3	5
63	Volume Mesh Generation and Finite Element Analysis of Trabecular Bone Magnetic Resonance Images. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1603-6.	0.5	5
64	Materials for Central Nervous System Tissue Engineering. , 0, , .		5
65	Peptide gel in a scaffold as a composite matrix for endothelial cells. Journal of Biomedical Materials Research - Part A, 2015, 103, 3293-3302.	2.1	5
66	in vitro development of bioimplants made up of elastomeric scaffolds with peptide gel filling seeded with human subcutaneous adipose tissueâ€derived progenitor cells. Journal of Biomedical Materials Research - Part A, 2015, 103, 3419-3430.	2.1	5
67	Development of Bioactive Patch for Maintenance of Implanted Cells at the Myocardial Infarcted Site. Journal of Nanomaterials, 2015, 2015, 1-14.	1.5	5
68	Influence of scaffold morphology on coâ€cultures of human endothelial and adipose tissueâ€derived stem cells. Journal of Biomedical Materials Research - Part A, 2016, 104, 1523-1533.	2.1	5
69	Full-Spectrum Phantoms for cm-Wave and Medical Wireless Communications. , 2018, , .		5
70	Amphipathic Substrates Based on Crosslinker-Free Poly(Îµ-Caprolactone):Poly(2-Hydroxyethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 1256.	2.0	5
71	Role of Curing Temperature of Poly(Glycerol Sebacate) Substrates on Protein-Cell Interaction and Early Cell Adhesion. Polymers, 2021, 13, 382.	2.0	5
72	One-Dimensional Migration of Olfactory Ensheathing Cells on Synthetic Materials: Experimental and Numerical Characterization. Cell Biochemistry and Biophysics, 2013, 65, 21-36.	0.9	4

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73	Scaffolds based on hyaluronan and carbon nanotubes gels. Journal of Biomaterials Applications, 2016, 31, 534-543.	1.2	4
74	Hydrophilic surface modification of acrylate-based biomaterials. Journal of Biomaterials Applications, 2016, 30, 1429-1441.	1.2	4
75	Accurate broadband measurement of electromagnetic tissue phantoms using open-ended coaxial systems. , 2017, , .		4
76	The effect of salt fusion processing variables on structural, physicochemical and biological properties of poly(glycerol sebacate) scaffolds. International Journal of Polymeric Materials and Polymeric Biomaterials, 2020, 69, 938-945.	1.8	3
77	Magnetic resonance imaging gridding reconstruction methods with and without density compensation functions. IEEE Latin America Transactions, 2011, 9, 774-778.	1.2	2
78	Channeled polymeric scaffolds with polypeptide gel filling for lengthwise guidance of neural cells. European Polymer Journal, 2015, 70, 331-341.	2.6	2
79	Hyaluronic acid â€" gelatin hydrogels as bioelectrets: Charge transport and dielectric polarization effects. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 1387-1394.	1.8	2
80	Grid polymeric scaffolds with polypeptide gel filling as patches for infarcted tissue regeneration. , 2013, 2013, 6961-4.		1
81	Initial Results of Semisolid Phantoms Based on Synthetic Hydrogels for the cmWave Band. , 2018, , .		1
82	Clinical Software for the Assessment of Trabecular Bone Disease in Distal Radius Based on a Magnetic Resonance Structural Analysis. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2073-6.	0.5	0
83	ICA for Ovary Tissue Classification of Perfusion Magnetic Resonance Images. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1611-4.	0.5	0
84	Interaction between acrylic substrates and RAD16-I peptide in its self-assembling. Journal of Polymer Research, 2016, 23, 1.	1.2	0
85	Elaboration of Simple Gel Phantoms for 5G/mm Wave Communications. , 2018, , .		0
86	Bioactive Implants for Myocardial Support and Regeneration. IFMBE Proceedings, 2011, , 1322-1325.	0.2	0
87	WEB BASED ON E-LEARNING OBJECTS AS SUPPORT TO THE DEVELOPMENT OF TRANSVERSAL COMPETENCES FOR ENGINEERING STUDENTS. , 2020, , .		0
88	EMPLOYERSâ€™ PERCEPTION OF THE SUSTAINABLE DEVELOPMENT GOALS IN HIGHER TECHNICAL EDUCATION: A REVISION. INTED Proceedings, 2022, , .	0.0	0
89	HOW TO KNOW THE AWARENESS OF SUSTAINABLE DEVELOPMENT GOALS AMONG STUDENTS? A REVISION OF QUESTIONNAIRE SURVEYS. INTED Proceedings, 2022, , .	0.0	0