Juan V Cauich-Rodriguez

List of Publications by Year
in descending order

95 papers	3,548 citations	159585 30 h-index	149698 56 g-index
95 all docs	95 docs citations	95 times ranked	5356 citing authors

#	Article	IF	Citations
1	Electrospun/3D-printed PCL bioactive scaffold for bone regeneration. Polymer Bulletin, 2023, 80, 2533-2552.	3.3	4
2	Design of a polyacrylamide and gelatin hydrogel as a synthetic extracellular matrix. International Journal of Polymeric Materials and Polymeric Biomaterials, 2022, 71, 266-277.	3.4	9
3	Clindamycin-loaded nanofibers of polylactic acid, elastin and gelatin for use in tissue engineering. Polymer Bulletin, 2022, 79, 5495-5513.	3.3	6
4	Polyurethane electrospun membranes with <scp>hydroxyapatiteâ€vancomycin</scp> for potential application in bone tissue engineering and drug delivery. Journal of Applied Polymer Science, 2022, 139, 51893.	2.6	3
5	Effect of barium sulfate surface treatments on the mechanical properties of acrylic bone cements. Polymer Bulletin, 2021, 78, 5997-6010.	3.3	7
6	Synthesis and characterization of metformin-pluronic based polyurethanes for controlled drug delivery. International Journal of Polymeric Materials and Polymeric Biomaterials, 2021, 70, 656-667.	3.4	8
7	Antibacterial Behavior of Chitosan-Sodium Hyaluronate-PEGDE Crosslinked Films. Applied Sciences (Switzerland), 2021, 11, 1267.	2.5	10
8	Segmented Poly(urea)urethane Nanoparticles: Size Optimization Using Taguchi Experimental Design and Nanoprecipitation Method. Current Nanoscience, 2021, 17, 70-80.	1.2	1
9	On arginineâ€based polyurethaneâ€blends specific to vascular prostheses. Journal of Applied Polymer Science, 2021, 138, 51247.	2.6	5
10	Zinc Oxide and Copper Chitosan Composite Films with Antimicrobial Activity. Polymers, 2021, 13, 3861.	4.5	14
11	Design, synthesis, characterization, and cytotoxicity of PCL/PLGA scaffolds through plasma treatment in the presence of pyrrole for possible use in urethral tissue engineering. Journal of Biomaterials Applications, 2020, 34, 840-850.	2.4	9
12	Antibacterial properties and release kinetics of chlorhexidine diacetate from montmorillonite and palygorskite clays. Journal of Biomaterials Applications, 2020, 34, 1052-1058.	2.4	10
13	Synthesis and characterization of pH sensitive hydrogel nanoparticles based on poly(N-isopropyl) Tj ETQq1 1 0.784314 rgBT /Overlock 1	3.6	8
14	Effect of Type and Concentration of Nanoclay on the Mechanical and Physicochemical Properties of Bis-GMA/TTEGDMA Dental Resins. Polymers, 2020, 12, 601.	4.5	10
15	In vitro and in vivo anti-inflammatory properties of Mayan propolis. European Journal of Inflammation, 2020, 18, 205873922093528.	0.5	7
16	Cell-free scaffold from jellyfish Cassiopea andromeda (Cnidaria; Scyphozoa) for skin tissue engineering. Materials Science and Engineering C, 2020, 111, 110748.	7.3	24
17	Flexural electromechanical properties of multilayer graphene sheet/carbon nanotube/vinyl ester hybrid nanocomposites. Composites Science and Technology, 2020, 194, 108164.	7.8	10
18	Antibacterial activity of a glass ionomer cement doped with copper nanoparticles. Dental Materials Journal, 2020, 39, 389-396.	1.8	19

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19	Electro-mechanical properties of thermoplastic polyurethane films and tubes modified by hybrid carbon nanostructures for pressure sensing. Smart Materials and Structures, 2020, 29, 115021.	3.5	8
20	The Effect of PEGDE Concentration and Temperature on Physicochemical and Biological Properties of Chitosan. Polymers, 2019, 11, 1830.	4.5	19
21	Balancing Porosity and Mechanical Properties of Titanium Samples to Favor Cellular Growth against Bacteria. Metals, 2019, 9, 1039.	2.3	23
22	Titanium - castor oil based polyurethane composite foams for bone tissue engineering. Journal of Biomaterials Science, Polymer Edition, 2019, 30, 1415-1432.	3.5	11
23	Effect of two crosslinking methods on the physicochemical and biological properties of the collagen-chitosan scaffolds. European Polymer Journal, 2019, 117, 424-433.	5.4	45
24	Mechanical properties of l-lysine based segmented polyurethane vascular grafts and their shape memory potential. Materials Science and Engineering C, 2019, 102, 887-895.	7.3	22
25	Preparation and Characterization of Flexible, Transparent and Thermally Stable Aromatic Co-polyamides. Chinese Journal of Polymer Science (English Edition), 2019, 37, 136-141.	3.8	10
26	Design and analysis of a burst strength device for testing vascular grafts. Review of Scientific Instruments, 2019, 90, 014301.	1.3	4
27	Study of the release kinetics of (â^’) epicatechin: Effect of its location within the fiber or sphere. Journal of Applied Polymer Science, 2019, 136, 47166.	2.6	1
28	Prediction of circumferential compliance and burst strength of polymeric vascular grafts. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 79, 332-340.	3.1	25
29	Thermal degradation of poly(caprolactone), poly(lactic acid), and poly(hydroxybutyrate) studied by TGA/FTIR and other analytical techniques. Polymer Bulletin, 2018, 75, 4191-4205.	3.3	60
30	Effect of the rigid segment content on the properties of segmented polyurethanes conjugated with atorvastatin as chain extender. Journal of Materials Science: Materials in Medicine, 2018, 29, 161.	3.6	8
31	Design of Silicaâ€Oligourethaneâ€Collagen Membranes for Inflammatory Response Modulation: Characterization and Polarization of a Macrophage Cell Line. Macromolecular Bioscience, 2018, 18, e1800099.	4.1	16
32	Effect of cyclodextrins and Mexican oregano (Lippia graveolens Kunth) chemotypes on the microencapsulation of essential oil. Industrial Crops and Products, 2018, 121, 114-123.	5.2	31
33	Preparation and characterization of titaniumâ€"segmented polyurethane composites for bone tissue engineering. Journal of Biomaterials Applications, 2018, 33, 11-22.	2.4	9
34	Improving Carbon Nanotube/Polymer Interactions in Nanocomposites. , 2018, , 83-115.		11
35	Characterization of model compounds and poly(amide-urea) urethanes based on amino acids by FTIR, NMR and other analytical techniques. European Polymer Journal, 2017, 92, 27-39.	5.4	41
36	Effect of the type of plasma on the polydimethylsiloxane/collagen composites adhesive properties. International Journal of Adhesion and Adhesives, 2017, 77, 85-95.	2.9	13

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37	Electrospun polycaprolactone/chitosan scaffolds for nerve tissue engineering: physicochemical characterization and Schwann cell biocompatibility. Biomedical Materials (Bristol), 2017, 12, 015008.	3.3	67
38	Physico Chemical Characterization of Nanofibrous Poly(Î•-Caprolactone) Electrospun Templates for Cell Adhesion. MRS Advances, 2017, 2, 2689-2694.	0.9	0
39	Influence of rigid segment content on the piezoresistive behavior of multiwall carbon nanotube/segmented polyurethane composites. Journal of Applied Polymer Science, 2017, 134, .	2.6	5
40	Enhancement of Electrochemical Glucose Sensing by Using Multiwall Carbon Nanotubes decorated with Iron Oxide Nanoparticles. International Journal of Electrochemical Science, 2016, 11, 6356-6369.	1.3	16
41	Damage accumulation studied by acoustic emission in bone cement prepared with coreâ€“shell nanoparticles under fatigue. Journal of Materials Science, 2016, 51, 5635-5645.	3.7	6
42	Surface modification of electrospun polycaprolactone microfibers by air plasma treatment: Effect of plasma power and treatment time. European Polymer Journal, 2016, 84, 502-513.	5.4	46
43	Preparation and bioactive properties of nano bioactive glass and segmented polyurethane composites. Journal of Biomaterials Applications, 2016, 30, 1362-1372.	2.4	8
44	Influence of rigid segment and carbon nanotube concentration on the cyclic piezoresistive and hysteretic behavior of multiwall carbon nanotube/segmented polyurethane composites. Composites Science and Technology, 2016, 128, 25-32.	7.8	88
45	Multiwall carbon nanotubes/polycaprolactone scaffolds seeded with human dental pulp stem cells for bone tissue regeneration. Journal of Materials Science: Materials in Medicine, 2016, 27, 35.	3.6	37
46	Human mesenchymal stem cell behavior on segmented polyurethanes prepared with biologically active chain extenders. Journal of Materials Science: Materials in Medicine, 2016, 27, 38.	3.6	8
47	Effect of wettability and surface roughness on the adhesion properties of collagen on PDMS films treated by capacitively coupled oxygen plasma. Applied Surface Science, 2015, 349, 763-773.	6.1	88
48	Evaluation of damage progression and mechanical behavior under compression of bone cements containing coreâ€“shell nanoparticles by using acoustic emission technique. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 46, 137-147.	3.1	6
49	Interactions between the glass fiber coating and oxidized carbon nanotubes. Applied Surface Science, 2015, 330, 383-392.	6.1	40
50	Influence of nanotube physicochemical properties on the decoration of multiwall carbon nanotubes with magnetic particles. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	6
51	Synthesis and characterization of protected oligourethanes as crosslinkers of collagen-based scaffolds. Journal of Materials Chemistry B, 2014, 2, 2874-2882.	5.8	36
52	Physicochemical characterization of segmented polyurethanes prepared with glutamine or ascorbic acid as chain extenders and their hydroxyapatite composites. Journal of Materials Chemistry B, 2014, 2, 1966-1976.	5.8	30
53	Towards optimization of the silanization process of hydroxyapatite for its use in bone cement formulations. Materials Science and Engineering C, 2014, 40, 157-163.	7.3	30
54	On the Role of Fiber Coating in the Deposition of Multiwall Carbon Nanotubes Onto Glass Fibers. Nanoscience and Nanotechnology Letters, 2014, 6, 932-935.	0.4	8

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55	Characterization and biocompatibility studies of new degradable poly(urea)urethanes prepared with arginine, glycine or aspartic acid as chain extenders. Journal of Materials Science: Materials in Medicine, 2013, 24, 1733-1744.	3.6	30
56	Tensile piezoresistivity and disruption of percolation in singlewall and multiwall carbon nanotube/polyurethane composites. Synthetic Metals, 2013, 185-186, 96-102.	3.9	17
57	Synthesis and characterization of coreâ€"shell nanoparticles and their influence on the mechanical behavior of acrylic bone cements. Materials Science and Engineering C, 2013, 33, 1737-1743.	7.3	28
58	Physicochemical and biological characterization of nanocomposites made of segmented polyurethanes and Cloisite 30B. Journal of Biomaterials Applications, 2013, 28, 38-48.	2.4	3
59	Stability and mechanical evaluation of bovine pericardium cross-linked with polyurethane prepolymer in aqueous medium. Materials Science and Engineering C, 2013, 33, 2392-2398.	7.3	35
60	Sensing of large strain using multiwall carbon nanotube/segmented polyurethane composites. Journal of Applied Polymer Science, 2013, 130, 375-382.	2.6	48
61	Platelet adhesion and human umbilical vein endothelial cell cytocompatibility of biodegradable segmented polyurethanes prepared with 4,4â€²-methylene bis(cyclohexyl isocyanate), poly(caprolactone) diol and butanediol or dithioerythritol as chain extenders. Journal of Biomaterials Applications, 2013, 28, 270-277.	2.4	9
62	HUVEC biocompatibility and platelet activation of segmented polyurethanes prepared with either glutathione or its amino acids as chain extenders. Journal of Biomaterials Science, Polymer Edition, 2013, 24, 1601-1617.	3.5	5
63	Mechanical properties of PET composites using multi-walled carbon nanotubes functionalized by inorganic and itaconic acids. EXPRESS Polymer Letters, 2012, 6, 96-106.	2.1	40
64	TEM Examination of MWCNTs Oxidized by Mild Experimental Conditions. Fullerenes Nanotubes and Carbon Nanostructures, 2012, 20, 49-55.	2.1	19
65	Rapid, simple, and cost-effective treatments to achieve long-term hydrophilic PDMS surfaces. Applied Surface Science, 2012, 258, 9864-9875.	6.1	124
66	Comparative study on the mechanical and fracture properties of acrylic bone cements prepared with monomers containing amine groups. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 6, 95-105.	3.1	21
67	On the merits of Raman spectroscopy and thermogravimetric analysis to asses carbon nanotube structural modifications. Applied Physics A: Materials Science and Processing, 2012, 106, 843-852.	2.3	30
68	Combined Influence of Barium Sulfate Content and Co-monomer Concentration on Properties of PMMA Bone Cements for Vertebroplasty. Journal of Biomaterials Science, Polymer Edition, 2011, 22, 1563-1580.	3.5	9
69	A TG/FTIR study on the thermal degradation of poly(vinyl pyrrolidone). Journal of Thermal Analysis and Calorimetry, 2011, 104, 737-742.	3.6	190
70	Decellularization of pericardial tissue and its impact on tensile viscoelasticity and glycosaminoglycan content. Acta Biomaterialia, 2011, 7, 1241-1248.	8.3	148
71	Characterization of the movement of polypyrroleâ€"dodecylbenzenesulfonateâ€"perchlorate/tape artificial muscles. Faradaic control of reactive artificial molecular motors and muscles. Electrochimica Acta, 2011, 56, 3721-3726.	5.2	68
72	Oxidation and silanization of MWCNTs for MWCNT/vinyl ester composites. EXPRESS Polymer Letters, 2011, 5, 766-776.	2.1	42

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73	Degradation studies on segmented polyurethanes prepared with HMDI, PCL and different chain extenders. Acta Biomaterialia, 2010, 6, 2035-2044.	8.3	121
74	Polypyrrole freeâ€standing electrodes sense temperature or current during reaction. Polymer International, 2010, 59, 337-342.	3.1	19
75	Sensing and Tactile Artificial Muscles from Reactive Materials. Sensors, 2010, 10, 2638-2674.	3.8	89
76	TGA/FTIR studies of segmented aliphatic polyurethanes and their nanocomposites prepared with commercial montmorillonites. Polymer Degradation and Stability, 2009, 94, 1666-1677.	5.8	143
77	Evaluation of mild acid oxidation treatments for MWCNT functionalization. Carbon, 2009, 47, 2970-2975.	10.3	531
78	Thermal degradation behavior of polymethacrylates containing amine side groups. Polymer Degradation and Stability, 2008, 93, 1891-1900.	5.8	49
79	Structureâ€"property relationships of DEAEM-containing bone cements: effect of the substitution of a methylene group by an aromatic ring. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 1-16.	3.5	5
80	Synthesis of HMDI-based segmented polyurethanes and their use in the manufacture of elastomeric composites for cardiovascular applications. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 561-578.	3.5	31
81	Thermal degradation of commercially available organoclays studied by TGAâ€"FTIR. Thermochimica Acta, 2007, 457, 92-102.	2.7	254
82	Surface characterisation of various bone cements prepared with functionalised methacrylates/bioactive ceramics in relation to HOB behaviour. Acta Biomaterialia, 2006, 2, 143-154.	8.3	5
83	TGA/FTIR study on thermal degradation of polymethacrylates containing carboxylic groups. Polymer Degradation and Stability, 2006, 91, 3312-3321.	5.8	79
84	Comparative study on the properties of acrylic bone cements prepared with either aliphatic or aromatic functionalized methacrylates. Biomaterials, 2005, 26, 4063-4072.	11.4	23
85	Physicochemical, Mechanical, and Biological Properties of Bone Cements Prepared with Functionalized Methacrylates. Journal of Biomaterials Applications, 2004, 19, 147-161.	2.4	12
86	Comparative study of bone cements prepared with either HA or Î±-TCP and functionalized methacrylates. , 2003, 64B, 27-37.		40
87	Characterization of bone cements prepared with functionalized methacrylates and hydroxyapatite. Journal of Biomaterials Science, Polymer Edition, 2001, 12, 893-910.	3.5	37
88	Physicochemical characterization of hydrogels based on polyvinyl alcohol-vinyl acetate blends. Journal of Applied Polymer Science, 2001, 82, 3578-3590.	2.6	11
89	Effect of cross-linking agents on the dynamic mechanical properties of hydrogel blends of poly(acrylic acid)-poly(vinyl alcohol-vinyl acetate). Biomaterials, 1996, 17, 2259-2264.	11.4	52
90	Characterization of hydrogel blends of poly(vinyl pyrrolidone) and poly(vinyl alcohol-vinyl acetate). Journal of Materials Science: Materials in Medicine, 1996, 7, 269-272.	3.6	9

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91	Dynamic mechanical characterization of hydrogel blends of poly(vinyl alcohol-vinyl acetate) with poly(acrylic acid) or poly(vinyl pyrrolidone). Journal of Materials Science: Materials in Medicine, 1996, 7, 349-353.	3.6	10
92	Study of crosslinking density in polydimethylsiloxane networks by DSC. Journal of Applied Polymer Science, 1995, 55, 1317-1327.	2.6	42
93	Poly(vinyl alcohol)/poly(acrylic acid) blends: Miscibility studies by DSC and characterization of their thermally induced hydrogels. Journal of Applied Polymer Science, 1993, 50, 777-792.	2.6	67
94	Evaluation of the osteoinductive potential of HDPSCs cultured on Î²-glycerol phosphate functionalized MWCNTs/PCL membranes for bone regeneration. Polymer Bulletin, 0, , 1.	3.3	0
95	Bone Cements: Formulation, Modification, and Characterization. , 0, , 1053-1066.		7