Gustavo A Abraham

List of Publications by Year
in descending order

103 papers	2,582 citations	186265 28 h-index	214800 47 g-index
105 all docs	105 docs citations	105 times ranked	3563 citing authors

#	Article	IF	Citations
1	Current advances in electrospun gelatin-based scaffolds for tissue engineering applications. International Journal of Pharmaceutics, 2017, 523, 441-453.	5.2	209
2	Synthesis and characterization of biodegradable non-toxic poly(ester-urethane-urea)s based on poly(Îµ-caprolactone) and amino acid derivatives. Polymer, 2006, 47, 785-798.	3.8	135
3	Microwave-assisted polymer synthesis (MAPS) as a tool in biomaterials science: How new and how powerful. Progress in Polymer Science, 2011, 36, 1050-1078.	24.7	122
4	Effect of nanotube functionalization on the properties of single-walled carbon nanotube/polyurethane composites. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 490-501.	2.1	121
5	Crosslinkable PEO-PPO-PEO-based reverse thermo-responsive gels as potentially injectable materials. Journal of Biomaterials Science, Polymer Edition, 2003, 14, 227-239.	3.5	85
6	Smart lipid nanoparticles containing levofloxacin and DNase for lung delivery. Design and characterization. Colloids and Surfaces B: Biointerfaces, 2016, 143, 168-176.	5.0	83
7	Fabrication of Gelatin Methacrylate (GelMA) Scaffolds with Nano- and Micro-Topographical and Morphological Features. Nanomaterials, 2019, 9, 120.	4.1	81
8	Genetically engineered Pseudomonas: a factory of new bioplastics with broad applications. Environmental Microbiology, 2001, 3, 612-618.	3.8	79
9	Hydrophilic hybrid IPNs of segmented polyurethanes and copolymers of vinylpyrrolidone for applications in medicine. Biomaterials, 2001, 22, 1971-1985.	11.4	77
10	Effect of the hard segment chemistry and structure on the thermal and mechanical properties of novel biomedical segmented poly(esterurethanes). Journal of Materials Science: Materials in Medicine, 2009, 20, 145-155.	3.6	70
11	Mechanical behavior of bilayered small-diameter nanofibrous structures as biomimetic vascular grafts. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 60, 220-233.	3.1	64
12	Electrospinning of novel biodegradable poly(ester urethane)s and poly(ester urethane urea)s for soft tissue-engineering applications. Journal of Materials Science: Materials in Medicine, 2009, 20, 2129-2137.	3.6	51
13	Physical and mechanical behavior of sterilized biomedical segmented polyurethanes. Journal of Applied Polymer Science, 1997, 65, 1193-1203.	2.6	50
14	New acrylic bone cements conjugated to vitamin E: Curing parameters, properties, and biocompatibility. Journal of Biomedical Materials Research Part B, 2002, 62, 299-307.	3.1	47
15	Bioresorbable poly(ester-ether urethane)s fromL-lysine diisocyanate and triblock copolymers with different hydrophilic character. Journal of Biomedical Materials Research - Part A, 2006, 76A, 729-736.	4.0	46
16	Microbial Synthesis of Poly(Î²-hydroxyalkanoates) Bearing Phenyl Groups fromPseudomonasputida:Â Chemical Structure and Characterization. Biomacromolecules, 2001, 2, 562-567.	5.4	45
17	Antithrombogenic properties of bioconjugate streptokinase-polyglycerol dendrimers. Journal of Materials Science: Materials in Medicine, 2006, 17, 105-111.	3.6	45
18	Immobilization of a nonsteroidal antiinflammatory drug onto commercial segmented polyurethane surface to improve haemocompatibility properties. Biomaterials, 2002, 23, 1625-1638.	11.4	44

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19	Amoxicillin-loaded electrospun nanocomposite membranes for dental applications. , 2017, 105, 966-976.		43
20	Optimization of poly(l-lactic acid)/segmented polyurethane electrospinning process for the production of bilayered small-diameter nanofibrous tubular structures. Materials Science and Engineering C, 2014, 42, 489-499.	7.3	42
21	Nanofibrous membranes as smart wound dressings that release antibiotics when an injury is infected. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 587, 124313.	4.7	42
22	Segmented poly(esterurethane urea)s from novel ureaâ€"diol chain extenders: Synthesis, characterization and in vitro biological properties. Acta Biomaterialia, 2008, 4, 976-988.	8.3	41
23	Development of new hydroactive dressings based on chitosan membranes: Characterization andin vivobehavior. Journal of Biomedical Materials Research - Part A, 2003, 64A, 147-154.	4.0	40
24	?-Caprolactone/ZnCl2 complex formation: Characterization and ring-opening polymerization mechanism. Journal of Polymer Science Part A, 2000, 38, 1355-1365.	2.3	39
25	Surface-modified bioresorbable electrospun scaffolds for improving hemocompatibility of vascular grafts. Materials Science and Engineering C, 2017, 75, 1115-1127.	7.3	39
26	Combination of electrospinning with other techniques for the fabrication of 3D polymeric and composite nanofibrous scaffolds with improved cellular interactions. Nanotechnology, 2020, 31, 172002.	2.6	37
27	Electrospun nanofibrous scaffolds of segmented polyurethanes based on PEG, PLLA and PTMC blocks: Physico-chemical properties and morphology. Materials Science and Engineering C, 2015, 56, 511-517.	7.3	36
28	Resistive-type humidity sensors based on PVP-Co and PVP-I2 complexes. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 459-469.	2.1	35
29	Physicochemical and antimicrobial properties of boron-complexed polyglycerolâ€"chitosan dendrimers. Journal of Biomaterials Science, Polymer Edition, 2006, 17, 689-707.	3.5	35
30	Self-curing acrylic formulations containing PMMA/PCL composites: Properties and antibiotic release behavior. Journal of Biomedical Materials Research Part B, 2002, 61, 66-74.	3.1	28
31	Immobilization of vaginal Lactobacillus in polymeric nanofibers for its incorporation in vaginal probiotic products. European Journal of Pharmaceutical Sciences, 2021, 156, 105563.	4.0	27
32	Synthesis, characterization and applications of amphiphilic elastomeric polyurethane networks in drug delivery. Polymer Journal, 2013, 45, 331-338.	2.7	26
33	Microheterogeneous polymer systems prepared by suspension polymerization of methyl methacrylate in the presence of poly(-caprolactone). Macromolecular Materials and Engineering, 2000, 282, 44-50.	3.6	24
34	Influence of cross-linked PMMA beads on the mechanical behavior of self-curing acrylic cements. , 2004, 70B, 407-416.		24
35	Structural characterization of electrospun micro/nanofibrous scaffolds by liquid extrusion porosimetry: A comparison with other techniques. Materials Science and Engineering C, 2014, 41, 335-342.	7.3	24
36	Chain Copolymerization Reactions: An Algorithm To Predict the Reaction Evolution with Conversion. Journal of Chemical Education, 2004, 81, 1210.	2.3	23

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37	Polymeric matrices based on graft copolymers of PCL onto acrylic backbones for releasing antitumoral drugs. Journal of Biomedical Materials Research - Part A, 2003, 64A, 638-647.	4.0	21
38	Controlled release of 5-fluorouridine from radiation-crosslinked poly(ethylene-co-vinyl acetate) films. Acta Biomaterialia, 2006, 2, 641-650.	8.3	21
39	Elasticity assessment of electrospun nanofibrous vascular grafts: A comparison with femoral ovine arteries. Materials Science and Engineering C, 2014, 45, 446-454.	7.3	21
40	Electrospun scaffolds with enlarged pore size: Porosimetry analysis. Materials Letters, 2018, 227, 191-193.	2.6	19
41	InÂvitro degradation of electrospun poly(l-lactic acid)/segmented poly(ester urethane) blends. Polymer Degradation and Stability, 2016, 126, 159-169.	5.8	18
42	Biodegradable polyurethanes: Comparative study of electrospun scaffolds and films. Journal of Applied Polymer Science, 2011, 121, 3292-3299.	2.6	17
43	HMDSO-plasma coated electrospun fibers of poly(cyclodextrin)s for antifungal dressings. International Journal of Pharmaceutics, 2016, 513, 518-527.	5.2	17
44	Effect of benign solvents composition on poly(Îµ-caprolactone) electrospun fiber properties. Materials Letters, 2019, 245, 86-89.	2.6	17
45	Electrospun ethylcellulose-based nanofibrous mats with insect-repellent activity. Materials Letters, 2019, 253, 289-292.	2.6	16
46	The role of emulsion parameters in tramadol sustained-release from electrospun mats. Materials Science and Engineering C, 2019, 99, 1493-1501.	7.3	16
47	Ring-opening polymerization of Ïµ-caprolactone by iodine charge-transfer complex. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 714-722.	2.1	15
48	Central Neural Tumor Destruction by Controlled Release of a Synthetic Glycoside Dispersed in a Biodegradable Polymeric Matrix. Journal of Medicinal Chemistry, 2003, 46, 1286-1288.	6.4	14
49	Fast and efficient synthesis of high molecular weight poly(epsilonâ€caprolactone) diols by microwaveâ€assisted polymer synthesis. Journal of Applied Polymer Science, 2011, 121, 1321-1329.	2.6	14
50	Random and aligned PLLA : PRGF electrospun scaffolds for regenerative medicine. Journal of Applied Polymer Science, 2015, 132, .	2.6	14
51	Temperature-sensitive biocompatible IPN hydrogels based on poly(NIPA-PEGdma) and photocrosslinkable gelatin methacrylate. Soft Materials, 2017, 15, 341-349.	1.7	14
52	Effect of topology on the adhesive forces between electrospun polymer fibers using a T-peel test. Polymer Engineering and Science, 2013, 53, 2219-2227.	3.1	13
53	An Evolutionary Approach to the Estimation of Reactivity Ratios. Macromolecular Theory and Simulations, 2002, 11, 525.	1.4	12
54	Dispersion and release of embelin from electrospun, biodegradable, polymeric membranes. Polymer Journal, 2012, 44, 1105-1111.	2.7	12

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55	Didanosine-loaded poly(epsilon-caprolactone) microparticles by a coaxial electrohydrodynamic atomization (CEHDA) technique. Journal of Materials Chemistry B, 2015, 3, 102-111.	5.8	12
56	Amphiphilic electrospun scaffolds of PLLAâ€“PEOâ€“PPO block copolymers: preparation, characterization and drug-release behaviour. RSC Advances, 2017, 7, 161-172.	3.6	11
57	14-3-3Îµ protein-immobilized PCL-HA electrospun scaffolds with enhanced osteogenicity. Journal of Materials Science: Materials in Medicine, 2019, 30, 99.	3.6	11
58	Evaluation of human umbilical vein endothelial cells growth onto heparin-modified electrospun vascular grafts. International Journal of Biological Macromolecules, 2021, 179, 567-575.	7.5	11
59	Macroporous poly(Ïµ-caprolactone) with antimicrobial activity obtained by iodine polymerization. Journal of Biomedical Materials Research - Part A, 2004, 68A, 473-478.	4.0	10
60	Molding of biomedical segmented polyurethane delamination events and stretching behavior. Journal of Applied Polymer Science, 1998, 69, 2159-2167.	2.6	9
61	Dexamethasone-Loaded Chitosan Beads Coated with a pH-Dependent Interpolymer Complex for Colon-Specific Drug Delivery. International Journal of Polymer Science, 2019, 2019, 1-9.	2.7	9
62	Mechanical characterization of self-curing acrylic cements formulated with poly(methylmethacrylate)/poly(Ïµ-caprolactone) beads. , 2004, 70B, 340-347.		8
63	Latest advances in electrospun plant-derived protein scaffolds for biomedical applications. Current Opinion in Biomedical Engineering, 2021, 18, 100243.	3.4	8
64	Development of Electrospun Nanofibers for Biomedical Applications: State of the Art in Latin America. Journal of Biomaterials and Tissue Engineering, 2013, 3, 39-60.	0.1	8
65	Drug complexation and physicochemical properties of vinylpyrrolidone-N,Nâ€²-dimethylacrylamide copolymers. Journal of Applied Polymer Science, 2004, 93, 1337-1347.	2.6	7
66	Mechanical behavior of polyurethane-based small-diameter vascular grafts. , 2016, , 451-477.		7
67	Aligned ovine diaphragmatic myoblasts overexpressing human connexin-43 seeded on poly (l-lactic) Tj ETQq1 1 0.784314 rgBT /Overl	1.6	7
68	Nanocomposite electrospun micro/nanofibers for biomedical applications. , 2019, , 89-126.		7
69	Polyurethane-based structures obtained by additive manufacturing technologies. , 2019, , 235-258.		7
70	Novel threeâ€dimensional printing of poly(ester urethane) scaffolds for biomedical applications. Polymers for Advanced Technologies, 2021, 32, 3309-3321.	3.2	7
71	Osteoblast Behavior on Novel Porous Polymeric Scaffolds. Journal of Biomaterials and Tissue Engineering, 2011, 1, 86-92.	0.1	7
72	Multilayered electrospun nanofibrous scaffolds for tailored controlled release of embelin. Soft Materials, 2018, 16, 51-61.	1.7	6

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73	Coreâ€"sheath nanofibrous membranes based on poly(acrylonitrileâ€butadieneâ€styrene), polyacrylonitrile, and zinc oxide nanoparticles for photoreduction of Cr(VI) ions in aqueous solutions. Journal of Applied Polymer Science, 2020, 137, 48429.	2.6	6
74	14-3-3Îµ protein-loaded 3D hydrogels favor osteogenesis. Journal of Materials Science: Materials in Medicine, 2020, 31, 105.	3.6	6
75	<I>A Special Issue on</I> Nanomedicine in Latin America. Journal of Biomaterials and Tissue Engineering, 2013, 3, 1-3.	0.1	6
76	Modeling of Segmented Polyurethane Drying Process. International Polymer Processing, 1998, 13, 369-378.	0.5	6
77	Effect of processing techniques on new poly(Îµâ€caprolactone)â€embelin microparticles of biomedical interest. Advances in Polymer Technology, 2018, 37, 1570-1580.	1.7	5
78	Effect of poly (l-lactic acid) scaffolds seeded with aligned diaphragmatic myoblasts overexpressing connexin-43 on infarct size and ventricular function in sheep with acute coronary occlusion. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 717-724.	2.8	5
79	Novel Poly(ester urethane urea)/Polydioxanone Blends: Electrospun Fibrous Meshes and Films. Molecules, 2021, 26, 3847.	3.8	5
80	Microcomposites of Poly(-caprolactone) and Poly(methyl methacrylate) Prepared by Suspension Polymerization in the Presence of Poly(-caprolactone) Macromonomer. Macromolecular Materials and Engineering, 2002, 287, 938-945.	3.6	4
81	Elasticity response of electrospun bioresorbable small-diameter vascular grafts: Towards a biomimetic mechanical response. Materials Letters, 2017, 209, 175-177.	2.6	4
82	Photocatalytic Reduction of Hexavalent Chromium Ions from Aqueous Solutions Using Polymeric Microfibers Surface Modified with ZnO Nanoparticles. Fibers and Polymers, 2021, 22, 3271-3280.	2.1	4
83	Zuccagnia punctata Cav. Essential Oil into Poly(Îµ-caprolactone) Matrices as a Sustainable and Environmentally Friendly Strategy Biorepellent against Triatoma infestans (Klug) (Hemiptera,) Tj ETQq1 1 0.784314 rg BT /Overlock 10	3.8	4
84	Nanofibrous scaffolds for skin tissue engineering and wound healing applications. , 2022, , 645-681.		4
85	A modular platform based on electrospun carbon nanofibers and poly(<i>N</i>â€isopropylacrylamide) hydrogel for sensor applications. Polymers for Advanced Technologies, 2021, 32, 4815-4825.	3.2	3
86	Transport properties and mechanical behavior of poly(methyl-phenylsiloxane) membranes as a function of methyl to phenyl groups ratio. Journal of Applied Polymer Science, 2002, 85, 1624-1633.	2.6	2
87	A Novel Bone Scaffolds Based on Hyperbranched Polyglycerol Fibers Filled with Hydroxyapatite Nanoparticles: <i>In Vitro</i> Cell Response. Key Engineering Materials, 0, 396-398, 633-636.	0.4	2
88	Micro/nanofiber-based scaffolds for soft tissue engineering applications. , 2016, , 201-229.		2
89	Lysine-oligoether-modified electrospun poly(carbonate urethane) matrices for improving hemocompatibility response. Polymer Journal, 2021, 53, 1393-1402.	2.7	2
90	Photo-crosslinked soy protein-based electrospun scaffolds. Materials Letters: X, 2021, 12, 100115.	0.7	2

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91	Poliuretanos biomÃ©dicos: sÃntesis, propiedades, procesamiento y aplicaciones. , 0, , 147-181.		2
92	Additive manufacturing of bioresorbable poly(esterâ€urethane)/glassâ€ceramic composite scaffolds. Polymer Composites, 2022, 43, 5611-5622.	4.6	2
93	Key-Properties and Recent Advances in Bone Cements Technology. , 2002, , 69-92.		1
94	Similarities of arterial collagen pressure-diameter relationship in ovine femoral arteries and PLLA vascular grafts. , 2014, 2014, 2302-5.		1
95	Evaluation of in vitro cytotoxic activity of mono-PEGylated StAP3 (Solanum tuberosum aspartic) Tj ETQq1 1 0.784314 rgBT /Overlock 10	4.4	1
96	An In Vitro Set Up for the Assessment of Electrospun Nanofibrous Vascular Grafts. IFMBE Proceedings, 2015, , 144-147.	0.3	1
97	CuantificaciÃ³n de la MorfologÃa en ImÃ¡genes de Nanofibras PolimÃ©ricas para IngenierÃa de Tejidos. IFMBE Proceedings, 2013, , 1015-1018.	0.3	0
98	A biomechanical international network for the assessment of tissue engineered blood vessels. , 2015, , .		0
99	High pressure assessment of bilayered electrospun vascular grafts by means of an Electroforce Biodynamic System®. , 2015, 2015, 3533-6.		0
100	Small-diameter polymer-based vascular grafts: towards a biomimetic mechanical response. EXPRESS Polymer Letters, 2020, 14, 102-102.	2.1	0
101	Development and validation of a mechanistic model for the release of embelin from a polycaprolactone matrix. Polymer Testing, 2020, 91, 106855.	4.8	0
102	Polymeric Matrices for Release of Growth Factors, Hormones and Other Bioactive Agents. , 2002, , 37-52.		0
103	Resorbable Polymeric Delivery Systems. , 0, , 6973-6985.		0