Natlia M Alves

List of Publications by Citations

80 papers	3,706 citations	34 h-index	60 g-index
85 ext. papers	4,054 ext. citations	5 avg, IF	5.61 L-index

#	Paper	IF	Citations
80	Chitosan derivatives obtained by chemical modifications for biomedical and environmental applications. *International Journal of Biological Macromolecules*, **2008**, 43, 401-14	7.9	594
79	Controlling cell behavior through the design of polymer surfaces. *Small*, **2010**, 6, 2208-20	11	257
78	Chitosan/poly(epsilon-caprolactone) blend scaffolds for cartilage repair. *Biomaterials*, **2011**, 32, 1068-79	15.6	182
77	Drug release of pH/temperature-responsive calcium alginate/poly(N-isopropylacrylamide) semi-IPN beads. *Macromolecular Bioscience*, **2006**, 6, 358-63	5.5	138
76	Designing biomaterials based on biomineralization of bone. *Journal of Materials Chemistry*, **2010**, 20, 2911		134
75	Nanostructured polymeric coatings based on chitosan and dopamine-modified hyaluronic acid for biomedical applications. *Small*, **2014**, 10, 2459-69	11	131
74	Glass transition and structural relaxation in semi-crystalline poly(ethylene terephthalate): a DSC study. *Polymer*, **2002**, 43, 4111-4122	3.9	125
73	Glass transition dynamics and structural relaxation of PLLA studied by DSC: Influence of crystallinity. *Polymer*, **2005**, 46, 8258-8265	3.9	121
72	Self assembling and crosslinking of polyelectrolyte multilayer films of chitosan and alginate studied by QCM and IR spectroscopy. *Macromolecular Bioscience*, **2009**, 9, 776-85	5.5	111
71	Chitosan coated alginate beads containing poly(N-isopropylacrylamide) for dual-stimuli-responsive drug release. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2008**, 84, 595-603	3.5	106
70	New poly(epsilon-caprolactone)/chitosan blend fibers for tissue engineering applications. *Acta Biomaterialia*, **2010**, 6, 418-28	10.8	93
69	Cell interactions with superhydrophilic and superhydrophobic surfaces. *Journal of Adhesion Science and Technology*, **2014**, 28, 843-863	2	88
68	Chemical modification of bioinspired superhydrophobic polystyrene surfaces to control cell attachment/proliferation. *Soft Matter*, **2011**, 7, 8932	3.6	88
67	Bioinspired superhydrophobic poly(L-lactic acid) surfaces control bone marrow derived cells adhesion and proliferation. *Journal of Biomedical Materials Research - Part A*, **2009**, 91, 480-8	5.4	87
66	Chitosan membranes containing micro or nano-size bioactive glass particles: evolution of biomineralization followed by in situ dynamic mechanical analysis. *Journal of the Mechanical Behavior of Biomedical Materials*, **2013**, 20, 173-83	4.1	85
65	Stimuli-Responsive Thin Coatings Using Elastin-Like Polymers for Biomedical Applications. *Advanced Functional Materials*, **2009**, 19, 3210-3218	15.6	78
64	Crosslink effect and albumin adsorption onto chitosan/alginate multilayered systems: an in situ QCM-D study. *Macromolecular Bioscience*, **2010**, 10, 1444-55	5.5	63

63	Thermally Responsive Biomineralization on Biodegradable Substrates. *Advanced Functional Materials*, **2007**, 17, 3312-3318	15.6	60
62	Enthalpy relaxation studies in polymethyl methacrylate networks with different crosslinking degrees. *Polymer*, **2005**, 46, 491-504	3.9	56
61	Nanostructured multilayer coatings combining chitosan with bioactive glass nanoparticles. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 1741-8	1.3	55
60	Nanostructured self-assembled films containing chitosan fabricated at neutral pH. *Carbohydrate Polymers*, **2010**, 80, 570-573	10.3	52
59	Graphene-polymer nanocomposites for biomedical applications. *Polymers for Advanced Technologies*, **2018**, 29, 687-700	3.2	51
58	Chitosan nanocomposites based on distinct inorganic fillers for biomedical applications. *Science and Technology of Advanced Materials*, **2016**, 17, 626-643	7.1	51
57	Departure from the Vogel behaviour in the glass transition□hermally stimulated recovery, creep and dynamic mechanical analysis studies. *Polymer*, **2004**, 45, 1007-1017	3.9	49
56	pH Responsiveness of Multilayered Films and Membranes Made of Polysaccharides. *Langmuir*, **2015** , 31, 11318-28	4	46
55	New Thermo-responsive Hydrogels Based on Poly (N-isopropylacrylamide)/ Hyaluronic Acid Semi-interpenetrated Polymer Networks: Swelling Properties and Drug Release Studies. *Journal of Bioactive and Compatible Polymers*, **2010**, 25, 169-184	2	45
54	pH-Responsive biomineralization onto chitosan grafted biodegradable substrates. *Journal of Materials Chemistry*, **2008**, 18, 2493		45
53	Biodegradable polymer nanocomposites for ligament/tendon tissue engineering. *Journal of Nanobiotechnology*, **2020**, 18, 23	9.4	44
52	Adhesive free-standing multilayer films containing sulfated levan for biomedical applications. *Acta Biomaterialia*, **2018**, 69, 183-195	10.8	42
51	Dual responsive nanostructured surfaces for biomedical applications. *Langmuir*, **2011**, 27, 8415-23	4	42
50	Antibacterial bioadhesive layer-by-layer coatings for orthopedic applications. *Journal of Materials Chemistry B*, **2016**, 4, 5385-5393	7.3	41
49	Molecular mobility in polymers studied with thermally stimulated recovery. II. Study of the glass transition of a semicrystalline PET and comparison with DSC and DMA results. *Polymer*, **2002**, 43, 3627-3633	3.9	36
48	Glass transition of semi-crystalline PLLA with different morphologies as studied by dynamic mechanical analysis. *Colloid and Polymer Science*, **2007**, 285, 575-580	2.4	34
47	Morphology and mechanical properties of injection molded poly(ethylene terephthalate). *Polymer Engineering and Science*, **2004**, 44, 2174-2184	2.3	34
46	Adhesive Bioactive Coatings Inspired by Sea Life. *Langmuir*, **2016**, 32, 560-8	4	32

45	Towards bioinspired superhydrophobic poly(L-lactic acid) surfaces using phase inversion-based methods. *Bioinspiration and Biomimetics*, **2008**, 3, 034003	2.6	31
44	Optimization of silver-containing bioglass nanoparticles envisaging biomedical applications. *Materials Science and Engineering C*, **2019**, 94, 161-168	8.3	28
43	Bioactivity and viscoelastic characterization of chitosan/bioglass® composite membranes. *Macromolecular Bioscience*, **2012**, 12, 1106-13	5.5	26
42	Nacre-inspired nanocomposites produced using layer-by-layer assembly: Design strategies and biomedical applications. *Materials Science and Engineering C*, **2017**, 76, 1263-1273	8.3	22
41	Biomimetic polysaccharide/bioactive glass nanoparticles multilayer membranes for guided tissue regeneration. *RSC Advances*, **2016**, 6, 75988-75999	3.7	22
40	Structural relaxation in a polyester thermoset as seen by thermally stimulated recovery. *Polymer*, **2001**, 42, 4173-4180	3.9	18
39	Microhardness of starch based biomaterials in simulated physiological conditions. *Acta Biomaterialia*, **2007**, 3, 69-76	10.8	16
38	Antibacterial free-standing polysaccharide composite films inspired by the sea. *International Journal of Biological Macromolecules*, **2019**, 133, 933-944	7.9	13
37	Bioactive and adhesive properties of multilayered coatings based on catechol-functionalized chitosan/hyaluronic acid and bioactive glass nanoparticles. *International Journal of Biological Macromolecules*, **2020**, 157, 119-134	7.9	13
36	Biomedical films of graphene nanoribbons and nanoflakes with natural polymers. *RSC Advances*, **2017**, 7, 27578-27594	3.7	12
35	Molecular mobility in a thermoset as seen by TSR and DMA near Tg. *Materials Research Innovations*, **2001**, 4, 170-178	1.9	12
34	High performance free-standing films by layer-by-layer assembly of graphene flakes and ribbons with natural polymers. *Journal of Materials Chemistry B*, **2016**, 4, 7718-7730	7.3	12
33	Membranes of poly(dl-lactic acid)/Bioglass® with asymmetric bioactivity for biomedical applications. *Journal of Bioactive and Compatible Polymers*, **2012**, 27, 429-440	2	11
32	Analysis of the thermal environment inside the furnace of a dynamic mechanical analyser. *Polymer Testing*, **2003**, 22, 471-481	4.5	11
31	Molecular motions in a polycarbonate composite as studied by thermally stimulated recovery and dynamic mechanical analysis. *Macromolecular Symposia*, **1999**, 148, 437-454	0.8	11
30	Biomineralization in chitosan/Bioglass® composite membranes under different dynamic mechanical conditions. *Materials Science and Engineering C*, **2013**, 33, 4480-3	8.3	10
29	Molecular mobility in polymers studied with thermally stimulated recovery. *Magyar Apród Közlemények*, **2002**, 70, 633-649	0	10
28	Layer-by-layer films based on catechol-modified polysaccharides produced by dip- and spin-coating onto different substrates. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2020**, 108, 1412-1427	3.5	9

27	3D printing of graphene-based polymeric nanocomposites for biomedical applications. *Functional Composite Materials*, **2021**, 2,	1.7	9
26	Confinement effects on the dynamic behavior of poly(D,L-lactic acid) upon incorporation in □cyclodextrin. *Journal of Physical Chemistry B*, **2014**, 118, 6972-81	3.4	8
25	Inclusion complexes of □cyclodextrins with poly(d,l-lactic acid): structural, characterization, and glass transition dynamics. *Colloid and Polymer Science*, **2014**, 292, 863-871	2.4	8
24	Cell behaviour in new poly(l-lactic acid) films with crystallinity gradients. *Materials Letters*, **2012**, 87, 105-108	3.0	8
23	In vitro monitoring of surface mechanical properties of poly(L-lactic acid) using microhardness. *Journal of Applied Polymer Science*, **2007**, 105, 3860-3864	2.9	8
22	3D-printed cryomilled poly(□caprolactone)/graphene composite scaffolds for bone tissue regeneration. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2021**, 109, 961-972	3.5	8
21	Spin-Coated Polysaccharide-Based Multilayered Freestanding Films with Adhesive and Bioactive Moieties. *Molecules*, **2020**, 25,	4.8	7
20	Spin-coated freestanding films for biomedical applications. *Journal of Materials Chemistry B*, **2021**, 9, 3778-3799	7.3	7
19	Novel Antibacterial and Bioactive Silicate Glass Nanoparticles for Biomedical Applications. *Advanced Engineering Materials*, **2018**, 20, 1700855	3.5	6
18	Temperature correction of dynamic mechanical and thermomechanical analysers during heating, cooling and isothermal experiments. *Thermochimica Acta*, **2000**, 346, 133-145	2.9	6
17	Nanostructured Biopolymer/Few-Layer Graphene Freestanding Films with Enhanced Mechanical and Electrical Properties. *Macromolecular Materials and Engineering*, **2018**, 303, 1700316	3.9	5
16	Polymeric biomaterials inspired by marine mussel adhesive proteins. *Reactive and Functional Polymers*, **2021**, 159, 104802	4.6	5
15	Homogeneous poly(L-lactic acid)/chitosan blended films. *Polymers for Advanced Technologies*, **2014**, 25, 1492-1500	3.2	4
14	Preparation and Characterization of New Biodegradable Films Made from Poly(L-Lactic Acid) and Chitosan Blends Using a Common Solvent. *Journal of Macromolecular Science - Physics*, **2011**, 50, 1121-1129	1.4	4
13	Study of the Molecular Mobility in Polymers with the Thermally Stimulated Recovery Technique□A Review. *Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics*, **2005**, 45, 99-124		4
12	The Dynamics of the Glass Transition in a Semicrystalline PET Studied by Mechanical and Dielectric Spectroscopic Methods. *Defect and Diffusion Forum*, **2002**, 206-207, 131-134	0.7	4
11	Comparing dielectric measurements on poly(ethylene terephthalate) at constant heating rates with isothermal measurements. *Polymer*, **1999**, 40, 2675-2679	3.9	4
10	Poly(Lactic Acid)/Graphite Nanoplatelet Nanocomposite Filaments for Ligament Scaffolds. *Nanomaterials*, **2021**, 11,	5.4	4

9	Bioactivity and Viscoelastic Characterization in Physiological Simulated Conditions of Chitosan/Bioglass Composite Membranes. *Materials Science Forum*, **2010**, 636-637, 26-30	0.4	3
8	Influence of experimental variables on thermally stimulated recovery results: analysis of simulations and real data on a polymeric system. *Polymer International*, **2002**, 51, 434-442	3.3	3
7	Adhesive and biodegradable membranes made of sustainable catechol-functionalized marine collagen and chitosan.. *Colloids and Surfaces B: Biointerfaces*, **2022**, 213, 112409	6	3
6	Development of new poly(?-caprolactone)/chitosan films. *Polymer International*, **2013**, 62, 1425-1432	3.3	2
5	Stimuli-Responsive Surfaces for Biomedical Applications **2013**, 63-87		1
4	Surfaces with Extreme Wettability Ranges for Biomedical Applications **2012**, 237-257		1
3	The Potential of Beeswax Colloidal Emulsion/Films for Hydrophobization of Natural Fibers Prior to NTRM Manufacturing. *Key Engineering Materials*,916, 82-90	0.4	0
2	Surfaces Inducing Biomineralization **2012**, 333-351		
1	Polymer Patterns and Scaffolds for Biomedical Applications and Tissue Engineering **2011**, 291-302		