Ana Barros-Timmons

List of Publications by Year
in descending order

119 papers	4,655 citations	109264 35 h-index	110317 64 g-index
123 all docs	123 docs citations	123 times ranked	5888 citing authors

#	Article	IF	Citations
1	Polyurethane Foams: Past, Present, and Future. Materials, 2018, 11, 1841.	1.3	463
2	Graphene oxide modified with PMMA via ATRP as a reinforcement filler. Journal of Materials Chemistry, 2010, 20, 9927.	6.7	423
3	Plasma surface modification of polyethylene. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 222, 125-131.	2.3	172
4	Phase change materials and carbon nanostructures for thermal energy storage: A literature review. Renewable and Sustainable Energy Reviews, 2017, 79, 1212-1228.	8.2	161
5	Production and characterization of a bioemulsifier from Yarrowia lipolytica. Process Biochemistry, 2006, 41, 1894-1898.	1.8	156
6	Surface properties of polyethylene after low-temperature plasma treatment. Colloid and Polymer Science, 2003, 281, 1025-1033.	1.0	124
7	Bio-based polyurethane foams toward applications beyond thermal insulation. Materials & Design, 2015, 76, 77-85.	5.1	120
8	Interactions of bioactive molecules & nanomaterials with Langmuir monolayers as cell membrane models. Thin Solid Films, 2015, 593, 158-188.	0.8	114
9	Processing and characterization of polyurethane nanocomposite foam reinforced with montmorilloniteâ€"carbon nanotube hybrids. Composites Part A: Applied Science and Manufacturing, 2013, 44, 1-7.	3.8	105
10	Polymer Grafting from CdS Quantum Dots via AGET ATRP in Miniemulsion. Small, 2007, 3, 1230-1236.	5.2	100
11	Novel SiO2/cellulose nanocomposites obtained by in situ synthesis and via polyelectrolytes assembly. Composites Science and Technology, 2008, 68, 1088-1093.	3.8	97
12	Evaluating the hazardous impact of ionic liquids â€" Challenges and opportunities. Journal of Hazardous Materials, 2021, 412, 125215.	6.5	82
13	Nanostructured Bacterial Celluloseâ€"Poly(4-styrene sulfonic acid) Composite Membranes with High Storage Modulus and Protonic Conductivity. ACS Applied Materials & Interfaces, 2014, 6, 7864-7875.	4.0	81
14	Nanostructured Composites Obtained by ATRP Sleeving of Bacterial Cellulose Nanofibers with Acrylate Polymers. Biomacromolecules, 2013, 14, 2063-2073.	2.6	73
15	Surface modification of alumina nanoparticles with silane coupling agents. Journal of the Brazilian Chemical Society, 2010, 21, 2238-2245.	0.6	69
16	Recycling of polyurethane scraps via acidolysis. Chemical Engineering Journal, 2020, 395, 125102.	6.6	67
17	Sound absorption properties of polyurethane foams derived from crude glycerol and liquefied coffee grounds polyol. Polymer Testing, 2017, 62, 13-22.	2.3	64
18	Oxypropylation of Cork and the Use of the Ensuing Polyols in Polyurethane Formulations. Biomacromolecules, 2002, 3, 57-62.	2.6	63

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19	Synthetic hollow zinc oxide microparticles. Materials Research Bulletin, 2001, 36, 1099-1108.	2.7	60
20	Probing the interaction of oppositely charged gold nanoparticles with DPPG and DPPC Langmuir monolayers as cell membrane models. Colloids and Surfaces B: Biointerfaces, 2013, 108, 120-126.	2.5	60
21	Dielectric properties of polystyreneâ€"CCTO composite. Journal of Non-Crystalline Solids, 2008, 354, 5321-5322.	1.5	59
22	Ecopolyol Production from Industrial Cork Powder via Acid Liquefaction Using Polyhydric Alcohols. ACS Sustainable Chemistry and Engineering, 2014, 2, 846-854.	3.2	58
23	NanocompÃ³sitos de matriz polimÃ©rica: estratÃ©gias de sÃntese de materiais hÃbridos. Quimica Nova, 2004, 27, 798-806.	0.3	55
24	Antimicrobial bacterial cellulose nanocomposites prepared by in situ polymerization of 2-aminoethyl methacrylate. Carbohydrate Polymers, 2015, 123, 443-453.	5.1	55
25	Enhancement of physical and reaction to fire properties of crude glycerol polyurethane foams filled with expanded graphite. Polymer Testing, 2018, 69, 199-207.	2.3	55
26	3D printed cork/polyurethane composite foams. Materials and Design, 2019, 179, 107905.	3.3	55
27	Cure and performance of castor oil polyurethane adhesive. International Journal of Adhesion and Adhesives, 2019, 95, 102413.	1.4	53
28	Biofunctionalisation of colloidal gold nanoparticles via polyelectrolytes assemblies. Colloid and Polymer Science, 2014, 292, 33-50.	1.0	52
29	Cell surface characterization ofYarrowia lipolytica IMUFRJ 50682. Yeast, 2006, 23, 867-877.	0.8	49
30	Insights into the physical properties of biobased polyurethane/expanded graphite composite foams. Composites Science and Technology, 2017, 138, 24-31.	3.8	49
31	Electrostatic Interactions Are Not Sufficient to Account for Chitosan Bioactivity. ACS Applied Materials & Interfaces, 2010, 2, 246-251.	4.0	43
32	Rigid polyurethane foams derived from cork liquefied at atmospheric pressure. Polymer International, 2015, 64, 250-257.	1.6	39
33	Polymer Encapsulation of CdE (E = S, Se) Quantum Dot Ensembles via <I>In-Situ</I> Radical Polymerization in Miniemulsion. Journal of Nanoscience and Nanotechnology, 2005, 5, 766-771.	0.9	38
34	Biocompatible Bacterial Cellulose-Poly(2-hydroxyethyl methacrylate) Nanocomposite Films. BioMed Research International, 2013, 2013, 1-14.	0.9	38
35	Spent coffee grounds as a renewable source for ecopolyols production. Journal of Chemical Technology and Biotechnology, 2015, 90, 1480-1488.	1.6	38
36	The oxypropylation of cork residues: preliminary results. Bioresource Technology, 2000, 73, 187-189.	4.8	34

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37	Preparation and optical properties of CdSe/polymer nanocomposites. Scripta Materialia, 2000, 43, 567-571.	2.6	34
38	Selection and Optimization of Culture Medium for Exopolysaccharide Production by Coriolus (Trametes) Versicolor. World Journal of Microbiology and Biotechnology, 2005, 21, 1499-1507.	1.7	34
39	Thermal Energy Storage and Mechanical Performance of Crude Glycerol Polyurethane Composite Foams Containing Phase Change Materials and Expandable Graphite. Materials, 2018, 11, 1896.	1.3	32
40	N -Vinylformamide as a route to amine-containing latexes and microgels. Colloid and Polymer Science, 2004, 282, 256-263.	1.0	31
41	Statistical evaluation of the effect of formulation on the properties of crude glycerol polyurethane foams. Polymer Testing, 2016, 56, 200-206.	2.3	30
42	Polymer encapsulation effects on the magnetism of EuS nanocrystals. Journal of Materials Chemistry, 2008, 18, 4572.	6.7	29
43	3D Printed Thermoplastic Polyurethane Filled with Polyurethane Foams Residues. Journal of Polymers and the Environment, 2020, 28, 1560-1570.	2.4	28
44	Studies on PLA grafting onto graphene oxide and its effect on the ensuing composite films. Materials Chemistry and Physics, 2015, 166, 122-132.	2.0	27
45	Utilization and characterization of amino resins for the production of wood-based panels with emphasis on particleboards (PB) and medium density fibreboards (MDF). A review. Holzforschung, 2018, 72, 653-671.	0.9	27
46	Understanding the interactions of imidazolium-based ionic liquids with cell membrane models. Physical Chemistry Chemical Physics, 2018, 20, 29764-29777.	1.3	27
47	Recycling of polyurethane by acidolysis: The effect of reaction conditions on the properties of the recovered polyol. Polymer, 2021, 219, 123561.	1.8	27
48	Langmuir monolayers of lignins obtained with different isolation methods. Thin Solid Films, 1999, 354, 215-221.	0.8	26
49	Recycling of polyurethane wastes using different carboxylic acids via acidolysis to produce wood adhesives. Journal of Polymer Science, 2021, 59, 697-705.	2.0	26
50	Crystallization behaviour of new poly(tetramethyleneterephthalamide) nanocomposites containing SiO2 fillers with distinct morphologies. Composites Part B: Engineering, 2005, 36, 51-59.	5.9	25
51	A green-emitting CdSe/poly(butyl acrylate) nanocomposite. Nanotechnology, 2005, 16, 1969-1973.	1.3	25
52	Preparation of nanocomposites by reversible additionâ€fragmentation chain transfer polymerization from the surface of quantum dots in miniemulsion. Journal of Polymer Science Part A, 2009, 47, 5367-5377.	2.5	25
53	Polymer@gold Nanoparticles Prepared via RAFT Polymerization for Opto-Biodetection. Polymers, 2018, 10, 189.	2.0	25
54	Surface Pressure and Surface Potential Isotherms of Ytterbium Bisphthalocyanine Langmuir Monolayers. Langmuir, 1999, 15, 3944-3949.	1.6	23

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55	Development of polyurethane foam incorporating phase change material for thermal energy storage. Journal of Energy Storage, 2020, 28, 101177.	3.9	23
56	Effect of unrefined crude glycerol composition on the properties of polyurethane foams. Journal of Cellular Plastics, 2018, 54, 633-649.	1.2	22
57	Experimental and numerical analysis of the thermal performance of polyurethane foams panels incorporating phase change material. Energy, 2021, 216, 119213.	4.5	22
58	Recycling of different types of polyurethane foam wastes via acidolysis to produce polyurethane coatings. Sustainable Materials and Technologies, 2021, 29, e00330.	1.7	22
59	Preparation and characterization of organosilicon thin films for selective adhesion ofYarrowia lipolytica yeast cells. Journal of Chemical Technology and Biotechnology, 2007, 82, 360-366.	1.6	21
60	Functionalization of carbon nanofibers (CNFs) through atom transfer radical polymerization for the preparation of poly(<i>tert</i>â€butyl acrylate)/CNF materials: Spectroscopic, thermal, morphological, and physical characterizations. Journal of Polymer Science Part A, 2008, 46, 3326-3335.	2.5	20
61	Interaction of Cationic, Anionic, and Nonionic Macroraft Homo- and Copolymers with Laponite Clay. Langmuir, 2019, 35, 11512-11523.	1.6	18
62	Langmuirâ€“Blodgett manipulation of capped cadmium sulfide quantum dots. Thin Solid Films, 2001, 389, 272-277.	0.8	17
63	Deposition of <i>Yarrowia lipolytica</i> on plasma prepared teflonlike thin films. Surface Engineering, 2008, 24, 23-27.	1.1	17
64	Investigation of the Adsorption of Amphipathic macroRAFT Agents onto Montmorillonite Clay. Langmuir, 2017, 33, 9598-9608.	1.6	17
65	Weak-gel formation in dispersions of silica particles in a matrix of a non-ionic polysaccharide: Structure and rheological characterization. Carbohydrate Polymers, 2010, 82, 1219-1227.	5.1	16
66	Preparation and Characterization of Chitosan/SiO₂ Composite Films. Journal of Nanoscience and Nanotechnology, 2010, 10, 2816-2825.	0.9	16
67	Grafting Poly(Methyl Methacrylate) (PMMA) from Cork via Atom Transfer Radical Polymerization (ATRP) towards Higher Quality of Three-Dimensional (3D) Printed PMMA/Cork-g-PMMA Materials. Polymers, 2020, 12, 1867.	2.0	15
68	Hopping conduction on PPy/SiO2 nanocomposites obtained via in situ emulsion polymerization. Journal of Materials Science, 2008, 43, 3333-3337.	1.7	14
69	Surface treatment of eucalyptus wood for improved HDPE composites properties. Journal of Applied Polymer Science, 2020, 137, 48619.	1.3	14
70	Luminescent SiO2-coated Gd2O3:Eu3+ nanorods/poly(styrene) nanocomposites by in situ polymerization. Optical Materials, 2010, 32, 1622-1628.	1.7	13
71	A Comparative Study of Chemical Routes for Coating Gold Nanoparticles via Controlled RAFT Emulsion Polymerization. Particle and Particle Systems Characterization, 2017, 34, 1600202.	1.2	13
72	Attachment/detachment of Saccharomyces cerevisiae on plasma deposited organosilicon thin films. European Physical Journal D, 2006, 56, B1256-B1262.	0.4	12

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73	ZnO nanostructures for photovoltaic cells. Physica Status Solidi (B): Basic Research, 2010, 247, 1633-1636.	0.7	12
74	Adsorption study of a macro-RAFT agent onto SiO 2 -coated Gd 2 O 3 :Eu 3+ nanorods: Requirements and limitations. Applied Surface Science, 2017, 394, 519-527.	3.1	12
75	Effect of colloidal silver and gold nanoparticles on the thermal behavior of poly(t-butyl acrylate) composites. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 436, 231-236.	2.3	11
76	Piezoelectric poly(lactide) stereocomplexes with a cholinium organic ionic plastic crystal. Journal of Materials Chemistry C, 2017, 5, 12134-12142.	2.7	11
77	Insights into the photoluminescence properties of gel-like carbon quantum dots embedded in poly(methyl methacrylate) polymer. Materials Today Communications, 2019, 18, 32-38.	0.9	11
78	Development of structural layers PVC incorporating phase change materials for thermal energy storage. Applied Thermal Engineering, 2020, 179, 115707.	3.0	11
79	Effect of different catalysts on the oxyalkylation of eucalyptus LignoboostÂ® kraft lignin. Holzforschung, 2020, 74, 567-576.	0.9	11
80	Synthesis of Lignosulfonate-Based Dispersants for Application in Concrete Formulations. Materials, 2021, 14, 7388.	1.3	11
81	Partial replacement of melamine by benzoguanamine in MUF resins towards improved flexibility of agglomerated cork panels. International Journal of Adhesion and Adhesives, 2018, 87, 142-150.	1.4	10
82	Highly flexible glycol-urea-formaldehyde resins. European Polymer Journal, 2018, 105, 167-176.	2.6	10
83	Chemically modified bamboo fiber/ABS composites for high-quality additive manufacturing. Polymer Journal, 2021, 53, 1459-1467.	1.3	10
84	Statistical evaluation of the effect of urea-formaldehyde resins synthesis parameters on particleboard properties. Polymer Testing, 2018, 68, 193-200.	2.3	9
85	Lignosulfonate-Based Polyurethane Adhesives. Materials, 2021, 14, 7072.	1.3	9
86	Biotinylation of optically responsive gold/polyelectrolyte nanostructures. Gold Bulletin, 2015, 48, 3-11.	1.1	8
87	Blocked melamineâ€“ureaâ€“formaldehyde resins and their usage in agglomerated cork panels. Journal of Applied Polymer Science, 2018, 135, 46663.	1.3	8
88	Yarrowia lipolytica Adhesion and Immobilization onto Residual Plastics. Polymers, 2020, 12, 649.	2.0	8
89	Laccase-catalyzed oxidative modification of lignosulfonates from acidic sulfite pulping of eucalyptus wood. Holzforschung, 2020, 74, 589-596.	0.9	8
90	PU/Lignocellulosic Composites Produced from Recycled Raw Materials. Journal of Polymers and the Environment, 0, , 1.	2.4	8

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91	Impact of the Synthesis Procedure on Urea-Formaldehyde Resins Prepared by Alkalineâ€“Acid Process. Industrial & Engineering Chemistry Research, 2019, 58, 5665-5676.	1.8	7
92	Insights into PU/EVA Blends Produced Using Industrial Residues Towards Eco-efficient Materials. Journal of Polymers and the Environment, 2022, 30, 1451-1461.	2.4	7
93	Oxyalkylation of Lignoboostâ„¢ Kraft Lignin with Propylene Carbonate: Design of Experiments towards Synthesis Optimization. Materials, 2022, 15, 1925.	1.3	7
94	Enzymatic synthesis of poly(glycerol sebacate) pre-polymer with crude glycerol, by-product from biodiesel prodution. AIP Conference Proceedings, 2018, , .	0.3	6
95	PU composites based on different types of textile fibers. Journal of Composite Materials, 2021, 55, 3615-3626.	1.2	6
96	Enhanced compatibility between coconut fibers/PP via chemical modification for 3D printing. Progress in Additive Manufacturing, 2022, 7, 213-223.	2.5	6
97	Langmuir and Langmuirâ€"Blodgett films of derivatives of Î±-olefinâ€"maleic anhydride alternating copolymers prepared from olefins containing hydrophilic groups. Polymer, 1995, 36, 1707-1714.	1.8	5
98	Optical Properties of the Synthetic Nanocomposites SiO₂/CdS/Poly(styrene-<I>co</I>-maleic anhydride) and SiO₂/CdS/Poly(styrene-<I>co</I>-maleimide). Journal of Nanoscience and Nanotechnology, 2002, 2, 177-181.	0.9	5
99	Preparation and Characterization of Hybrid Organic/Inorganic Nanocomposites by In Situ Miniemulsion Polymerization. Materials Science Forum, 2006, 514-516, 1201-1205.	0.3	5
100	Effect of filler functionalization on thermo-mechanical properties of polyamide-12/carbon nanofibers composites: a study of fillerâ€“matrix molecular interactions. Journal of Materials Science, 2013, 48, 8427-8437.	1.7	5
101	3D scaffolds from vertically aligned carbon nanotubes/poly(methyl methacrylate) composites via atom transfer radical polymerization. Materials Chemistry and Physics, 2015, 149-150, 378-384.	2.0	5
102	Introducing flexibility in ureaâ€“formaldehyde resins: Copolymerization with polyetheramines. Journal of Polymer Science Part A, 2018, 56, 1834-1843.	2.5	5
103	Study of the synthesis parameters of a urea-formaldehyde resin synthesized according to alkaline-acid process. International Journal of Adhesion and Adhesives, 2020, 102, 102646.	1.4	5
104	Polyamide 6/modified pine bark particle composites for additive manufacturing. Journal of Materials Science, 0, , 1.	1.7	5
105	Synthesis of SiO₂-Coated Bi₂S₃/Poly(styrene) Nanocomposites by <I>In-Situ</I> Polymerization. Journal of Nanoscience and Nanotechnology, 2006, 6, 414-420.	0.9	5
106	Langmuir films from semi-amphiphilic sequence-controlled heterocyclic copolymers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 198-200, 313-321.	2.3	4
107	Impact of critical micelle concentration of macroRAFT agents on the encapsulation of colloidal Au nanoparticles. Journal of Colloid and Interface Science, 2019, 545, 251-258.	5.0	4
108	Effects of resin content on mechanical properties of cork-based panels bound with melamine-urea-formaldehyde and polyurethane binders. International Journal of Adhesion and Adhesives, 2020, 101, 102632.	1.4	4

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109	Poly(l-lactic acid)/lithium ferrite composites: Electrical properties. Polymer, 2021, 230, 124100.	1.8	4
110	Size and Shape-Tuned Overgrowth on Au Nanorods Regulated by Polyallylamine. Journal of Nanoscience and Nanotechnology, 2006, 6, 3373-3375.	0.9	3
111	Langmuir monolayers of fractions of cork suberin extract. Colloids and Surfaces B: Biointerfaces, 2010, 79, 516-520.	2.5	3
112	Impact of alkalineâ€“acid and strongly acid process on the synthesis of ureaâ€“formaldehyde resins and derived composites: a comparison study. European Journal of Wood and Wood Products, 2019, 77, 1177-1187.	1.3	3
113	Improvement of viscoelastic, elastic and plastic properties of Poly(L-lactide)/Graphene Oxide-Graft-Poly(L-lactide) nanocomposites by modulation of grafted chain length. Composites Science and Technology, 2020, 199, 108350.	3.8	3
114	Biofunctional Polymer Coated Au Nanoparticles Prepared via RAFT-Assisted Encapsulating Emulsion Polymerization and Click Chemistry. Polymers, 2020, 12, 1442.	2.0	3
115	Modified cork/<scp>SEBS</scp> composites for <scp>3D</scp> printed elastomers. Polymers for Advanced Technologies, 2022, 33, 1881-1891.	1.6	3
116	Langmuir films from tailor-made semi-amphiphilic alternating (AB) heterocyclic copolymers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 198-200, 331-338.	2.3	2
117	Studies on the release of polymeric Langmuirâ€“Blodgett multilayers from the solid supports on which they were prepared. Polymer, 2002, 43, 3519-3525.	1.8	1
118	Lignosulfonate-Based Conducting Flexible Polymeric Membranes for Liquid Sensing Applications. Materials, 2021, 14, 5331.	1.3	1
119	Ionic Liquidâ€“Poly(lactic acid) Blends as Green Polymer Electrolyte Membranes. Journal of Physical Chemistry C, 2022, 126, 551-562.	1.5	1