Humberto Palza

List of Publications by Year
in descending order

86 papers	3,300 citations	159525 30 h-index	161767 54 g-index
88 all docs	88 docs citations	88 times ranked	4519 citing authors

#	Article	IF	Citations
1	Effect of graphene oxide on the <scp>pHâ€responsive</scp> drug release from supramolecular hydrogels. Journal of Applied Polymer Science, 2022, 139, 51420.	1.3	12
2	Shape fidelity, mechanical and biological performance of 3D printed polycaprolactone-bioactive glass composite scaffolds. Materials Science and Engineering C, 2022, 134, 112540.	3.8	12
3	Cytocompatible drug delivery hydrogels based on carboxymethylagarose/chitosan pH-responsive polyelectrolyte complexes. International Journal of Biological Macromolecules, 2022, 199, 96-107.	3.6	14
4	An Overview for the Design of Antimicrobial Polymers: From Standard Antibiotic-Release Systems to Topographical and Smart Materials. Annual Review of Materials Research, 2022, 52, 1-24.	4.3	6
5	Superhydrophobic SLA 3D printed materials modified with nanoparticles biomimicking the hierarchical structure of a rice leaf. Science and Technology of Advanced Materials, 2022, 23, 300-321.	2.8	25
6	Preparation of osteoinductive â€“ Antimicrobial nanocomposite scaffolds based on poly (D,L-lactide-co-glycolide) modified with copper â€“ Doped bioactive glass nanoparticles. Polymers and Polymer Composites, 2022, 30, 096739112210982.	1.0	1
7	Review: Auxetic Polymer-Based Mechanical Metamaterials for Biomedical Applications. ACS Biomaterials Science and Engineering, 2022, 8, 2798-2824.	2.6	25
8	Li-doped bioglassÂ® 45S5 for potential treatment of prevalent oral diseases. Journal of Dentistry, 2021, 105, 103575.	1.7	15
9	A multifunctional bi-phasic graphene oxide/chitosan paper for water treatment. Separation and Purification Technology, 2020, 235, 116181.	3.9	21
10	Chondroinductive Alginate-Based Hydrogels Having Graphene Oxide for 3D Printed Scaffold Fabrication. ACS Applied Materials & Interfaces, 2020, 12, 4343-4357.	4.0	107
11	Electroactive 3D Printed Scaffolds Based on Percolated Composites of Polycaprolactone with Thermally Reduced Graphene Oxide for Antibacterial and Tissue Engineering Applications. Nanomaterials, 2020, 10, 428.	1.9	44
12	Effect of Cu- and Zn-Doped Bioactive Glasses on the In Vitro Bioactivity, Mechanical and Degradation Behavior of Biodegradable PDLLA Scaffolds. Materials, 2020, 13, 2908.	1.3	18
13	Effect of bioglass nanoparticles on the properties and bioactivity of poly(lactic acid) films. Journal of Biomedical Materials Research - Part A, 2020, 108, 2032-2043.	2.1	12
14	Anti-adhesion and antibacterial activity of silver nanoparticles and graphene oxide-silver nanoparticle composites. Revista Materia, 2020, 25, .	0.1	8
15	Antibacterial Silver Nanoparticles Supported on Graphene Oxide with Reduced Cytotoxicity. Jom, 2019, 71, 3698-3705.	0.9	12
16	3D Printing of Antimicrobial Alginate/Bacterial-Cellulose Composite Hydrogels by Incorporating Copper Nanostructures. ACS Biomaterials Science and Engineering, 2019, 5, 6290-6299.	2.6	88
17	Polyethylene/graphene oxide composites toward multifunctional active packaging films. Composites Science and Technology, 2019, 184, 107888.	3.8	33
18	Novel magnetic CoFe2O4/layered double hydroxide nanocomposites for recoverable anionic adsorbents for water treatment. Applied Clay Science, 2019, 183, 105350.	2.6	25

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19	Electroactive Smart Polymers for Biomedical Applications. Materials, 2019, 12, 277.	1.3	141
20	Effect of starch nanoparticles on the crystallization kinetics and photodegradation of high density polyethylene. Composites Part B: Engineering, 2019, 174, 106979.	5.9	28
21	About the relevance of particle shape and graphene oxide on the behavior of direct absorption solar collectors using metal based nanofluids under different radiation intensities. Energy Conversion and Management, 2019, 181, 247-257.	4.4	57
22	Effect of CaCO3 Nanoparticles on the Mechanical and Photo-Degradation Properties of LDPE. Molecules, 2019, 24, 126.	1.7	36
23	Effect of thermally reduced graphene oxides obtained at different temperatures on the barrier and mechanical properties of polypropylene/TRGO and polyamideâ€6/TRGO nanocomposites. Polymer Composites, 2019, 40, E1746-E1756.	2.3	4
24	Polymer Composites With Metal Nanoparticles. , 2019, , 249-286.		35
25	In situ antimicrobial behavior of materials with copper-based additives in a hospital environment. International Journal of Antimicrobial Agents, 2018, 51, 912-917.	1.1	74
26	About the relevance of waviness, agglomeration, and strain on the electrical behavior of polymer composites filled with carbon nanotubes evaluated by a Monte-Carlo simulation. Materials Research Express, 2018, 5, 015044.	0.8	6
27	Encapsulation of specific Salmonella Enteritidis phage f3Î±SE on alginate-spheres as a method for protection and dosification. Electronic Journal of Biotechnology, 2018, 31, 57-60.	1.2	21
28	Cu/Al and Cu/Cr based layered double hydroxide nanoparticles as adsorption materials for water treatment. Journal of Industrial and Engineering Chemistry, 2018, 59, 134-140.	2.9	36
29	Poly(lactic acid) composites based on graphene oxide particles with antibacterial behavior enhanced by electrical stimulus and biocompatibility. Journal of Biomedical Materials Research - Part A, 2018, 106, 1051-1060.	2.1	61
30	Mechanical properties and morphological characteristics of ARALL reinforced with TRGO doped epoxy resin. Revista Materia, 2018, 23, .	0.1	1
31	Mechanical properties and morphological characteristics of ARALL reinforced with TRGO doped epoxy resin. Revista Materia, 2018, 23, .	0.1	1
32	Effect of the Oxidation Degree of Graphene Oxides on their Adsorption, Flocculation, and Antibacterial Behavior. Industrial & Engineering Chemistry Research, 2018, 57, 15722-15730.	1.8	22
33	Shape memory composites based on a thermoplastic elastomer polyethylene with carbon nanostructures stimulated by heat and solar radiation having piezoresistive behavior. Polymer International, 2018, 67, 1046-1053.	1.6	6
34	Effect of copper nanoparticles on the cell viability of polymer composites. International Journal of Polymeric Materials and Polymeric Biomaterials, 2017, 66, 462-468.	1.8	17
35	Role of the Catalyst in the Pyrolysis of Polyolefin Mixtures and Used Tires. Energy & Fuels, 2017, 31, 3111-3120.	2.5	22
36	PDLLA scaffolds with Cuâ€•and Znâ€doped bioactive glasses having multifunctional properties for bone regeneration. Journal of Biomedical Materials Research - Part A, 2017, 105, 746-756.	2.1	52

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37	Antibacterial Carbon Nanotubes by Impregnation with Copper Nanostructures. Jom, 2017, 69, 1319-1324.	0.9	8
38	Influence of Organically-Modified Montmorillonite and Synthesized Layered Silica Nanoparticles on the Properties of Polypropylene and Polyamide-6 Nanocomposites. Polymers, 2016, 8, 386.	2.0	19
39	Effect of Carbon-Based Particles on the Mechanical Behavior of Isotactic Poly(propylene)s. Macromolecular Materials and Engineering, 2016, 301, 429-440.	1.7	12
40	Nanoparticle reinforcement in elastomeric polyethylene composites under tensile tests. Composites Part B: Engineering, 2016, 107, 97-105.	5.9	10
41	Elastomeric ethylene copolymers with carbon nanostructures having tailored strain sensor behavior and their interpretation based on the excluded volume theory. Polymer International, 2016, 65, 1441-1448.	1.6	9
42	Effect of morphology on the permeability, mechanical and thermal properties of polypropylene/SiO₂ nanocomposites. Polymer International, 2015, 64, 1245-1251.	1.6	14
43	Effect of hydrothermally synthesized titanium nanotubes on the behaviour of polypropylene for antimicrobial applications. Polymer International, 2015, 64, 1442-1450.	1.6	13
44	Effect of carbon nanotubes on thermal pyrolysis of high density polyethylene and polypropylene. Polymer Degradation and Stability, 2015, 120, 122-134.	2.7	25
45	Antimicrobial Polymers with Metal Nanoparticles. International Journal of Molecular Sciences, 2015, 16, 2099-2116.	1.8	582
46	Antimicrobial polymer composites with copper micro- and nanoparticles: Effect of particle size and polymer matrix. Journal of Bioactive and Compatible Polymers, 2015, 30, 366-380.	0.8	79
47	Solâ€“gel synthesis and in vitro bioactivity of copper and zinc-doped silicate bioactive glasses and glass-ceramics. Biomedical Materials (Bristol), 2015, 10, 025001.	1.7	103
48	Synthesis of copper nanostructures on silica-based particles for antimicrobial organic coatings. Applied Surface Science, 2015, 357, 86-90.	3.1	31
49	Improving the metal ion release from nanoparticles embedded in a polypropylene matrix for antimicrobial applications. Journal of Applied Polymer Science, 2015, 132, .	1.3	13
50	Electrical behavior of polypropylene composites melt mixed with carbon-based particles: Effect of the kind of particle and annealing process. Composites Science and Technology, 2014, 99, 117-123.	3.8	71
51	Polypropylene in the melt state as a medium for in situ synthesis of copper nanoparticles. AICHE Journal, 2014, 60, 3406-3411.	1.8	9
52	New way to characterize the percolation threshold of polyethylene and carbon nanotube polymer composites using Fourier transform (FT) rheology. Korea Australia Rheology Journal, 2014, 26, 319-326.	0.7	17
53	Designing antimicrobial bioactive glass materials with embedded metal ions synthesized by the solâ€“gel method. Materials Science and Engineering C, 2013, 33, 3795-3801.	3.8	83
54	Effect of Polymer Structure and Incorporation of Nanoparticles on the Behavior of Syndiotactic Polypropylenes. Macromolecular Chemistry and Physics, 2013, 214, 2567-2578.	1.1	3

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55	Effect of Shortâ€Chain Branching on the Melt Behavior of Polypropylene Under Smallâ€Amplitude Oscillatory Shear Conditions. Macromolecular Chemistry and Physics, 2013, 214, 107-116.	1.1	6
56	Polyethylene and poly(ethylene-co-1-octadecene) composites with TiO2 based nanoparticles by metallocenic â€œin situâ€•polymerization. Polymer, 2013, 54, 2690-2698.	1.8	35
57	Functionalization of Silica Nanoparticles for Polypropylene Nanocomposite Applications. Journal of Nanomaterials, 2012, 2012, 1-8.	1.5	41
58	Modifying the electrical behaviour of polypropylene/carbon nanotube composites by adding a second nanoparticle and by annealing processes. EXPRESS Polymer Letters, 2012, 6, 639-646.	1.1	40
59	Nanostructured Manganese Oxide Particles from Coordination Complex Decomposition and Their Catalytic Properties for Ethanol Oxidation. Journal of Nanoscience and Nanotechnology, 2012, 12, 8087-8093.	0.9	2
60	Novel antimicrobial polyethylene composites prepared by metallocenic in situ polymerization with TiO₂â€based nanoparticles. Journal of Polymer Science Part A, 2012, 50, 4055-4062.	2.5	36
61	Electrical, Thermal, and Mechanical Characterization of Poly(propylene)/Carbon Nanotube/Clay Hybrid Composite Materials. Macromolecular Materials and Engineering, 2012, 297, 474-480.	1.7	36
62	Effect of the polymer microstructure on the behavior of syndiotactic polypropylene/organophilic layered silicate composites. Journal of Applied Polymer Science, 2012, 124, 2601-2609.	1.3	5
63	Polypropylene with embedded copper metal or copper oxide nanoparticles as a novel plastic antimicrobial agent. Letters in Applied Microbiology, 2011, 53, 50-54.	1.0	188
64	Synthetic layered and tube-like silica nanoparticles as novel supports for metallocene catalysts in ethylene polymerization. Applied Catalysis A: General, 2011, 407, 181-187.	2.2	14
65	Morphological changes of carbon nanotubes in polyethylene matrices under oscillatory tests as determined by dielectrical measurements. Composites Science and Technology, 2011, 71, 1361-1366.	3.8	11
66	Spherulite Growth Rate in Polypropylene/Silica Nanoparticle Composites: Effect of Particle Morphology and Compatibilizer. Macromolecular Materials and Engineering, 2011, 296, 744-751.	1.7	25
67	Composites of polypropylene melt blended with synthesized silica nanoparticles. Composites Science and Technology, 2011, 71, 535-540.	3.8	69
68	Effect of the Hierarchical Structure in Poly(propylene)/Clay Composites on their Thermal Stability: From Singleâ€•to Multiâ€Step Degradation Processes. Macromolecular Materials and Engineering, 2010, 295, 48-57.	1.7	11
69	Effect of Comonomer Content on the Behavior of Propylene Copolymer/Compatibilizer/Clay Nanocomposites. Macromolecular Materials and Engineering, 2010, 295, 492-501.	1.7	7
70	Improving the Thermal Behavior of Poly(propylene) by Addition of Spherical Silica Nanoparticles. Macromolecular Materials and Engineering, 2010, 295, 899-905.	1.7	37
71	Toward Tailorâ€Made Biocide Materials Based on Poly(propylene)/Copper Nanoparticles. Macromolecular Rapid Communications, 2010, 31, 563-567.	2.0	82
72	Correlation between polyethylene topology and melt flow instabilities by determining in-situ pressure fluctuations and applying advanced data analysis. Polymer, 2010, 51, 522-534.	1.8	23

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73	Characterization of melt flow instabilities in polyethylene/carbon nanotube composites. Polymer, 2010, 51, 3753-3761.	1.8	40
74	Catalytic degradation of polyethylene using nanosized ZSM-2 zeolite. Applied Catalysis A: General, 2010, 384, 186-191.	2.2	22
75	In situ Pressure Fluctuations of Polymer Melt Flow Instabilities: Experimental Evidence about their Origin and Dynamics. Macromolecular Rapid Communications, 2009, 30, 1799-1804.	2.0	19
76	Polypropylene/clay nanocomposites: Effect of different clays and compatibilizers on their morphology. Journal of Applied Polymer Science, 2009, 112, 1278-1286.	1.3	23
77	A study of the synthesis and characterization of ethylene/dicyclopentadiene copolymers using a metallocene catalyst. European Polymer Journal, 2009, 45, 102-106.	2.6	12
78	Effect of comonomer type on the crystallization kinetics and crystalline structure of random isotactic propylene 1-alkene copolymers. Polymer, 2009, 50, 832-844.	1.8	86
79	Nonisothermal crystallization and melting behavior of syndiotactic polypropylenes of different microstructure. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 798-806.	2.4	8
80	Comonomer Length Influence on the Structure and Mechanical Response of Metallocenic Polypropylenic Materials. Macromolecular Chemistry and Physics, 2008, 209, 2259-2267.	1.1	45
81	Decomposition of Dinuclear Manganese Complexes for the Preparation of Nanostructured Oxide Materials. Inorganic Chemistry, 2008, 47, 8306-8314.	1.9	19
82	Dynamic Model of the Homopolymerization of Propylene with the Me₂Si(2-Me-Ind)₂ZrCl Catalyst: The Effect of Reaction Variables. Polymer-Plastics Technology and Engineering, 2006, 45, 85-94.	1.9	4
83	Metallocene copolymers of propene and 1-hexene: The influence of the comonomer content and thermal history on the structure and mechanical properties. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1253-1267.	2.4	62
84	Dynamic Model of the Copolymerization of Propylene and 1-Hexene with the Me2Si(2-Me-Ind)2ZrCl2 Catalytic System: Effect of 1-Hexene Concentration. Polymer-Plastics Technology and Engineering, 2006, 45, 1233-1241.	1.9	7
85	Metallocenic Copolymers of Isotactic Propylene and 1-Octadecene: Crystalline Structure and Mechanical Behavior. Macromolecular Chemistry and Physics, 2005, 206, 1221-1230.	1.1	63
86	Results coming from homogeneous and supported metallocene catalysts in the homo- and copolymerization of olefins. Macromolecular Symposia, 2002, 189, 111-126.	0.4	12