Carlos Alberto Avila-Orta

List of Publications by Year in Descending Order

54 papers	698 citations	15 h-index	25 g-index
59 ext. papers	823 ext. citations	3.5 avg, IF	3.71 L-index

#	Paper	IF	Citations
54	Non-woven fabrics based on Nylon 6/carbon black-graphene nanoplatelets obtained by melt-blowing for adsorption of urea, uric acid and creatinine. *Materials Letters*, **2022**, 320, 132382	3.3	0
53	Polymer Composites: Smart Synthetic Fibers Approach in Energy and Environmental Care **2021**, 1-26		
52	Influence of Ethylene Plasma Treatment of Agave Fiber on the Cellular Morphology and Compressive Properties of Low-Density Polyethylene/Ethylene Vinyl Acetate Copolymer/Agave Fiber Composite Foams. *International Journal of Polymer Science*, **2021**, 2021, 1-13	2.4	
51	Antimicrobial Property of Polypropylene Composites and Functionalized Copper Nanoparticles. *Polymers*, **2021**, 13,	4.5	6
50	Non-Woven Fabrics Based on Nanocomposite Nylon 6/ZnO Obtained by Ultrasound-Assisted Extrusion for Improved Antimicrobial and Adsorption Methylene Blue Dye Properties. *Polymers*, **2021**, 13,	4.5	3
49	Non-isothermal crystallization behavior of isotactic polypropylene/copper nanocomposites. *Journal of Thermal Analysis and Calorimetry*, **2021**, 143, 2919-2932	4.1	1
48	Trends on Synthesis of Polymeric Nanocomposites Based on Green Chemistry **2021**, 1-31		
47	Trends on Synthesis of Polymeric Nanocomposites Based on Green Chemistry **2021**, 1111-1141		
46	Polymer Composites: Smart Synthetic Fibers Approach in Energy and Environmental Care **2021**, 3637-3661		
45	Nanocomposite PLA/C20A Nanoclay by Ultrasound-Assisted Melt Extrusion for Adsorption of Uremic Toxins and Methylene Blue Dye. *Nanomaterials*, **2021**, 11,	5.4	3
44	Computational Study in Bottom Gas Injection Using the Conservative Level Set Method. *Processes*, **2020**, 8, 1643	2.9	0
43	Effect of Modified Hexagonal Boron Nitride Nanoparticles on the Emulsion Stability, Viscosity and Electrochemical Behavior of Nanostructured Acrylic Coatings for the Corrosion Protection of AISI 304 Stainless Steel. *Coatings*, **2020**, 10, 488	2.9	8
42	Plasma-modified CNFs, GPs, and their mixtures for enhanced polypropylene thermal conductivity. *Journal of Applied Polymer Science*, **2020**, 137, 49138	2.9	1
41	Ultrasound-Assisted Surface Modification of MWCNT Using Organic Acids. *Materials*, **2020**, 14,	3.5	1
40	Zeolite 13X modification with gamma-aminobutyric acid (GABA). *Microporous and Mesoporous Materials*, **2020**, 295, 109941	5.3	7
39	Pigmentation and Degradative Activity of TiO on Polyethylene Films Using Masterbatches Fabricated Using Variable-Frequency Ultrasound-Assisted Melt-Extrusion. *Materials*, **2020**, 13,	3.5	4
38	Synthesis and characterization of magnetic nanoparticles Zn1-xMgxFe2O4 with partial substitution of Mg2+ (x= 0.0, 0.25, 0.5, 0.75 and 1.0) for adsorption of uremic toxins. *Ceramics International*, **2020**, 46, 27913-27921	5.1	7

37	Synthesis of Nylon 6/Modified Carbon Black Nanocomposites for Application in Uric Acid Adsorption. *Materials*, **2020**, 13,	3.5	7
36	Graphene Nanoplatelets Modified with Amino-Groups by Ultrasonic Radiation of Variable Frequency for Potential Adsorption of Uremic Toxins. *Nanomaterials*, **2019**, 9,	5.4	16
35	Surface Modification of Graphene Nanoplatelets by Organic Acids and Ultrasonic Radiation for Enhance Uremic Toxins Adsorption. *Materials*, **2019**, 12,	3.5	13
34	Melt-Mixed Thermoplastic Nanocomposite Containing Carbon Nanotubes and Titanium Dioxide for Flame Retardancy Applications. *Polymers*, **2019**, 11,	4.5	15
33	Enhancement of the thermal conductivity of polypropylene with low loadings of CuAg alloy nanoparticles and graphene nanoplatelets. *Materials Today Communications*, **2019**, 21, 100695	2.5	7
32	Ultrasound-Assisted Melt Extrusion of Polymer Nanocomposites **2019**,		4
31	Nanocomposite and biodegradable polymers applied to technical textiles. *DYNA (Colombia)*, **2019**, 86, 288-299	0.6	4
30	Relationship between the passivation of TiO2 particles and LLDPE photodegradation: a comparison between bulk and surface impacts. *Journal of Applied Polymer Science*, **2019**, 136, 47026	2.9	4
29	Microwave-assisted esterification step of poly(ethylene terephthalate) (PET) synthesis through ethylene glycol and terephthalic acid. *Polymer Bulletin*, **2019**, 76, 2931-2944	2.4	4
28	Aniline-Modified Polypropylene as a Compatibilizer in Polypropylene Carbon Nanotube Composites. *Polymer-Plastics Technology and Engineering*, **2018**, 57, 1360-1366		5
27	Transparent Low Electrostatic Charge Films Based on Carbon Nanotubes and Polypropylene. Homopolymer Cast Films. *Polymers*, **2018**, 10,	4.5	4
26	Effect of Sorbitol Templates on the Preferential Crystallographic Growth of Isotactic Polypropylene Wax. *Crystals*, **2018**, 8, 59	2.3	0
25	Synthesis and Thermomechanical Characterization of Nylon 6/Cu Nanocomposites Produced by an Ultrasound-Assisted Extrusion Method. *Advances in Materials Science and Engineering*, **2018**, 2018, 1-10	1.5	9
24	Oxidation of Copper Nanoparticles Protected with Different Coatings and Stored under Ambient Conditions. *Journal of Nanomaterials*, **2018**, 2018, 1-8	3.2	24
23	Surface Modification of nTiO2/Ag Hybrid Nanoparticles Using Microwave-Assisted Polymerization in the Presence of Bis(2-hydroxyethyl) Terephthalate. *Journal of Nanomaterials*, **2017**, 2017, 1-9	3.2	1
22	Surface Modification of Carbon Nanofibers and Graphene Platelets Mixtures by Plasma Polymerization of Propylene. *Journal of Nanomaterials*, **2017**, 2017, 1-10	3.2	6
21	Morphological Study and Dielectric Behavior of Nonisothermally Crystallized Poly(ethylene naphthalate) Nanocomposites as a Function of Graphene Content. *Journal of Nanomaterials*, **2016**, 2016, 1-9	3.2	3
20	Metamaterial Behavior of Polymer Nanocomposites Based on Polypropylene/Multi-Walled Carbon Nanotubes Fabricated by Means of Ultrasound-Assisted Extrusion. *Materials*, **2016**, 9,	3.5	5

19	Structural and morphological studies on the deformation behavior of polypropylene/multi-walled carbon nanotubes nanocomposites prepared through ultrasound-assisted melt extrusion process. *Journal of Polymer Science, Part B: Polymer Physics*, **2015**, 53, 475-491	2.6	13
18	Effect of MWNTs concentration and cooling rate on the morphological, structural, and electrical properties of non-isothermally crystallized PEN/MWNT nanocomposites. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a	2.9	5
17	Ultrasound-Assist Extrusion Methods for the Fabrication of Polymer Nanocomposites Based on Polypropylene/Multi-Wall Carbon Nanotubes. *Materials*, **2015**, 8, 7900-7912	3.5	20
16	Enhanced Antibacterial Activity of Melt Processed Poly(propylene) Ag and Cu Nanocomposites by Argon Plasma Treatment. *Plasma Processes and Polymers*, **2014**, 11, 353-365	3.4	29
15	Back Cover: Plasma Process. Polym. 4□2014. *Plasma Processes and Polymers*, **2014**, 11, 401-401	3.4	
14	Effect of Plasma Modification of Copper Nanoparticles on their Antibacterial Properties. *Plasma Processes and Polymers*, **2014**, 11, 685-693	3.4	19
13	Molecular Weight and Crystallization Temperature Effects on Poly(ethylene terephthalate) (PET) Homopolymers, an Isothermal Crystallization Analysis. *Polymers*, **2014**, 6, 583-600	4.5	33
12	Synthesis of Copper Nanoparticles Coated with Nitrogen Ligands. *Journal of Nanomaterials*, **2014**, 2014, 1-8	3.2	25
11	Synthesis of Copper Nanoparticles by Thermal Decomposition and Their Antimicrobial Properties. *Journal of Nanomaterials*, **2014**, 2014, 1-5	3.2	84
10	Carbon nanotube surface-induced crystallization of polyethylene terephthalate (PET). *Polymer*, **2014**, 55, 642-650	3.9	32
9	Morphology, Thermal Stability, and Electrical Conductivity of Polymer Nanocomposites of Isotactic Polypropylene/Multi-Walled Carbon Nanotubes. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2013**, 62, 635-641	3	26
8	Chemical Modification of Carbon Nanofibers with Plasma of Acrylic Acid. *Plasma Processes and Polymers*, **2013**, 10, 627-633	3.4	14
7	Nanocomposites based on plasma-polymerized carbon nanotubes and Nylon-6. *Polymer Journal*, **2012**, 44, 952-958	2.7	7
6	Preparation of Polymer Nanocomposites with Enhanced Antimicrobial Properties. *Materials Research Society Symposia Proceedings*, **2012**, 1479, 57-62		6
5	Surface modification of carbon nanotubes with ethylene glycol plasma. *Carbon*, **2009**, 47, 1916-1921	10.4	52
4	Combined effect of shear and fibrous fillers on orientation-induced crystallization in discontinuous aramid fiber/isotactic polypropylene composites. *Polymer*, **2008**, 49, 295-302	3.9	52
3	Morphological features and melting behavior of nanocomposites based on isotactic polypropylene and multiwalled carbon nanotubes. *Journal of Applied Polymer Science*, **2007**, 106, 2640-2647	2.9	44
2	On the nature of multiple melting in poly(ethylene terephthalate) (PET) and its copolymers with cyclohexylene dimethylene terephthalate (PET/CT). *Polymer*, **2003**, 44, 1527-1535	3.9	62

1	Composites based on nylon 6/clinoptilolite by ultrasound-assisted extrusion for enhanced flame retardant and mechanical properties. *Polymer Bulletin*,1	2.4	2