Araceli Flores

List of Publications by Citations

65 papers	1,513 citations	19 h-index	36 g-index
66 ext. papers	1,661 ext. citations	4.4 avg, IF	4.32 L-index

#	Paper	IF	Citations
65	Nanoindentation in polymer nanocomposites. *Progress in Materials Science*, **2015**, 67, 1-94	42.2	246
64	Polymorphism of Isotactic Poly(1-butene) as Revealed by Microindentation Hardness. 1. Kinetics of the Transformation. *Macromolecules*, **2002**, 35, 9069-9073	5.5	122
63	Crystallization of oriented amorphous poly(ethylene terephthalate) as revealed by X-ray diffraction and microhardness. *Polymer*, **1999**, 40, 6475-6484	3.9	110
62	From the glassy state to ordered polymer structures: A microhardness study. *Polymer*, **2009**, 50, 729-746	3.9	102
61	Polymorphism of isotactic polybutene-1 as revealed by microindentation hardness. Part II: correlations to microstructure. *Polymer*, **2003**, 44, 1641-1645	3.9	72
60	Microhardness studies of chain-extended PE: III. Correlation with yield stress and elastic modulus. *Polymer*, **2000**, 41, 5431-5435	3.9	70
59	Influence of the chemical functionalization of graphene on the properties of polypropylene-based nanocomposites. *Composites Part A: Applied Science and Manufacturing*, **2017**, 100, 31-39	8.4	42
58	Elastic properties of oriented polymers, blends and reinforced composites using the microindentation technique. *Colloid and Polymer Science*, **2002**, 280, 591-598	2.4	35
57	Nanoindentation Assessment of the Interphase in Carbon Nanotube-Based Hierarchical Composites. *Journal of Physical Chemistry C*, **2012**, 116, 24193-24200	3.8	34
56	Microhardness-structure correlation of iPP/EPR blends: influence of molecular weight and EPR particle content. *Colloid and Polymer Science*, **1998**, 276, 786-793	2.4	30
55	Development of Advanced Elastomeric Conductive Nanocomposites by Selective Chemical Affinity of Modified Graphene. *Macromolecules*, **2016**, 49, 4948-4956	5.5	29
54	Depth-sensing indentation applied to polymers: A comparison between standard methods of analysis in relation to the nature of the materials. *European Polymer Journal*, **2013**, 49, 4047-4053	5.2	28
53	Creep behavior and elastic properties of annealed cold-drawn poly(ethylene terephthalate): The role of the smectic structure as a precursor of crystallization. *Journal of Applied Physics*, **2001**, 90, 6006-6010	2.5	27
52	Structure formation in poly(ethylene terephthalate) upon annealing as revealed by microindentation hardness and X-ray scattering. *Polymer*, **2005**, 46, 9404-9410	3.9	26
51	Layer structure formation in oriented poly(ethylene terephthalate) relating to micromechanical properties. *Polymer*, **2007**, 48, 542-555	3.9	23
50	Influence of filler structure on microhardness of carbon black/polymer composites. *Journal of Applied Polymer Science*, **2001**, 79, 90-95	2.9	22
49	Evaluating the Reinforcement of Inorganic Fullerene-like Nanoparticles in Thermoplastic Matrices by Depth-Sensing Indentation. *Journal of Physical Chemistry C*, **2013**, 117, 20936-20943	3.8	20

48	The unit cell expansion of branched polyethylene as detected by Raman spectroscopy: an experimental and simulation approach. *Journal of Materials Science*, **2007**, 42, 1046-1049	4.3	20
47	Local mechanical properties of graphene/polyethylene-based nanocomposites by depth-sensing indentation. *European Polymer Journal*, **2016**, 74, 120-129	5.2	19
46	Finite size effects in multilayered polymer systems: Development of PET lamellae under physical confinement. *Polymer*, **2010**, 51, 4530-4539	3.9	19
45	Recrystallization studies on isotropic cold-crystallized PET: Influence of heating rate. *Polymer*, **2008**, 49, 965-973	3.9	18
44	Reversible changes in the solid state of HBA/HNA liquid crystalline copolyesters studied by X-ray diffraction. *Polymer*, **1993**, 34, 2915-2920	3.9	18
43	Nanostructure and crystallization phenomena in multilayered films of alternating iPP and PA6 semicrystalline polymers. *European Polymer Journal*, **2012**, 48, 86-96	5.2	17
42	A three-phase microstructural model to explain the mechanical relaxations of branched polyethylene: a DSC, WAXD and DMTA combined study. *Colloid and Polymer Science*, **2011**, 289, 257-268	2.4	17
41	Microindentation studies at the near surface of glassy polymers: Influence of molecular weight. *Journal of Applied Polymer Science*, **2004**, 93, 1951-1956	2.9	17
40	The role of the amorphous phase in the re-crystallization process of cold-crystallized poly(ethylene terephthalate). *European Physical Journal E*, **2008**, 27, 365-73	1.5	16
39	Crystallization kinetics of poly(ethylene naphthalene-2,6-dicarboxylate) as revealed by microhardness. *Polymer*, **2000**, 41, 7769-7772	3.9	16
38	Structural Features of Random Polyester-Amide Copolymers As Revealed by X-ray Scattering and Microindentation Hardness. *Macromolecules*, **2001**, 34, 8094-8100	5.5	16
37	Numerical-experimental method for the identification of plastic properties of polymers from microhardness tests. *Computational Materials Science*, **1998**, 11, 233-244	3.2	15
36	Nanostructure and Micromechanical Properties of Silica/Silicon Oxycarbide Porous Composites. *Journal of the American Ceramic Society*, **2005**, 87, 2093-2100	3.8	15
35	Control of the structure and properties of SEBS nanocomposites via chemical modification of graphene with polymer brushes. *European Polymer Journal*, **2017**, 97, 1-13	5.2	14
34	EVIDENCE OF A TRANSCRYSTALLINE INTERPHASE IN FIBER PE HOMOCOMPOSITES AS REVEALED BY MICRODIFFRACTION EXPERIMENTS USING SYNCHROTRON RADIATION. *Journal of Macromolecular Science - Physics*, **2001**, 40, 749-761	1.4	14
33	Electrospun polylactic acid non-woven mats incorporating silver nanoparticles. *Polymer Bulletin*, **2014**, 71, 2437-2452	2.4	13
32	Influence of rubber on the curing kinetics of DGEBA epoxy and the effect on the morphology and hardness of the composites. *Polymer Bulletin*, **2014**, 71, 1241-1262	2.4	13
31	The overlooked role of reduced graphene oxide in the reinforcement of hydrophilic polymers. *Journal of Materials Chemistry C*, **2015**, 3, 1177-1180	7.1	13

30	Confined crystallization of nanolayered poly(ethylene terephthalate) using X-ray diffraction methods. *Polymer*, **2012**, 53, 3986-3993	3.9	13
29	Novel aspects of microindentation hardness in very low crystallinity ethylene-1-octene copolymers: A model for deformation. *Polymer*, **2006**, 47, 5602-5609	3.9	13
28	Nanoindentation mapping of multiscale composites of graphene-reinforced polypropylene and carbon fibres. *Composites Science and Technology*, **2019**, 169, 151-157	8.6	13
27	Cold-drawn induced microstructure in PVC-bentonite nanocomposites. *Polymers for Advanced Technologies*, **2011**, 22, 836-846	3.2	12
26	Nanostructural and electrical properties of functionally terminated self-assembled monolayers on silicon surfaces. *Journal of Applied Physics*, **2005**, 98, 054312	2.5	11
25	Recrystallization processes in cold-crystallized poly(ethylene terephthalate): Interplay between structure evolution and conformational relaxation. *Polymer*, **2011**, 52, 3155-3162	3.9	10
24	Novel aspects of microstructure of liquid crystalline copolyesters as studied by microhardness: influence of composition and temperature. *Polymer*, **1997**, 38, 5447-5453	3.9	10
23	Elastoplastic Properties of Starch-Based Materials as Revealed by Microindentation Measurements. *Journal of Macromolecular Science - Physics*, **2000**, 39, 749-759	1.4	10
22	Confinement-induced vitrification in polyethylene terephthalate. *Physical Review B*, **2007**, 75,	3.3	9
21	Graphene and Polyethylene: A Strong Combination Towards Multifunctional Nanocomposites. *Polymers*, **2020**, 12,	4.5	9
20	The influence of crystal formation on segmental mobility in polymers: hints from a statistical mechanical relaxation model. *Colloid and Polymer Science*, **2010**, 288, 365-376	2.4	8
19	Mechanical changes linked to embrittlement at the wear surface of polyethylene implants in hip joints. *Polymer*, **2000**, 41, 7635-7639	3.9	8
18	Nanostructure and viscoelasticity of layered silicate nanocomposite electrolyte supports. *Journal of Applied Polymer Science*, **2012**, 123, 944-955	2.9	6
17	Kinetics of crystallization of biodegradable PHA copolymers: a combined X-ray scattering and micro-indentation study. *Materials Research Society Symposia Proceedings*, **2011**, 1301, 279		6
16	Non-woven Membranes Electrospun from Polylactic Acid Incorporating Silver Nanoparticles as Biocide. *Materials Research Society Symposia Proceedings*, **2012**, 1376, 78		6
15	Microhardness of sintered poly (4-hydroxybenzoate) and poly(2-hydroxy-6-naphtoate) homopolymers: Influence of pressure and morphology. *Journal of Materials Science Letters*, **1995**, 14, 1571-1573		6
14	Searching for effective compatibilizing agents for the preparation of poly(ether ether ketone)/graphene nanocomposites with enhanced properties. *Composites Part A: Applied Science and Manufacturing*, **2018**, 113, 180-188	8.4	5
13	Electrospun Nylon-Graphene Nanocomposites Synthesis and Microstructure. *Materials Research Society Symposia Proceedings*, **2012**, 1453, 7		4

12	Real-time WAXS study of induced orientation in a liquid crystalline polyester under the influence of a magnetic field. *Polymer*, **2003**, 44, 5909-5913	3.9	4
11	Density Fluctuations as Precursors of Crystallization in Polyamide 6,6 Using Time-Resolved X-Ray Scattering Techniques. *Journal of Macromolecular Science - Physics*, **2003**, 42, 653-661	1.4	4
10	NUMERICAL MODELING OF MICROHARDNESS TESTS FOR POLYMER MATERIALS*. *Journal of Macromolecular Science - Physics*, **2001**, 40, 763-774	1.4	4
9	Mapping the Mechanical Properties of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Banded Spherulites by Nanoindentation. *Polymers*, **2016**, 8,	4.5	4
8	Influence of microfillers on molecular alignment and tensile stress fracture in thermotropic liquid crystalline polymer. *Emerging Materials Research*, **2012**, 1, 146-156	1.4	3
7	Mechanical study of sintered aromatic polyesters as revealed by microindentation measurements. *Journal of Materials Science*, **1998**, 33, 3567-3571	4.3	3
6	Sequential Crystallization and Multicrystalline Morphology in PE-b-PEO-b-PCL-b-PLLA Tetrablock Quarterpolymers. *Macromolecules*, **2021**, 54, 7244-7257	5.5	2
5	Electrospinning of poly(□hydroxybutyrate) scaffolds: morphology and aging. *Emerging Materials Research*, **2019**, 8, 127-136	1.4	1
4	Detection of ferroelectric to paraelectric phase transition in copolymers of vinylidene fluoride by magnetic susceptibility. *Acta Polymerica*, **1993**, 44, 83-86		1
3	Creep behaviour of elastomeric nanocomposites by flat punch indentation: Influence of graphene modification and content. *Composites Science and Technology*, **2020**, 198, 108311	8.6	0
2	Dependence of conformational relaxation on nanoconfinement in semicrystalline poly(ethylene terephthalate). *Mechanics of Materials*, **2013**, 67, 119-125	3.3	
1	A New Thermodynamic Approach to the Microindentation Process on Polymeric Crystals. *Polymer Journal*, **1999**, 31, 747-748	2.7	