Raquel Verdejo

List of Publications by Citations

108 papers	6,736 citations	43 h-index	81 g-index
113 ext. papers	7,551 ext. citations	5.8 avg, IF	6.02 L-index

#	Paper	IF	Citations
108	Graphene filled polymer nanocomposites. *Journal of Materials Chemistry*, **2011**, 21, 3301-3310		596
107	Multifunctional nanostructured PLA materials for packaging and tissue engineering. *Progress in Polymer Science*, **2013**, 38, 1720-1747	29.6	421
106	Functionalized graphene sheet filled silicone foam nanocomposites. *Journal of Materials Chemistry*, **2008**, 18, 2221		311
105	Graphene materials with different structures prepared from the same graphite by the Hummers and Brodie methods. *Carbon*, **2013**, 65, 156-164	10.4	272
104	Increasing the performance of dielectric elastomer actuators: A review from the materials perspective. *Progress in Polymer Science*, **2015**, 51, 188-211	29.6	264
103	Enhanced acoustic damping in flexible polyurethane foams filled with carbon nanotubes. *Composites Science and Technology*, **2009**, 69, 1564-1569	8.6	232
102	Comparison of filler percolation and mechanical properties in graphene and carbon nanotubes filled epoxy nanocomposites. *European Polymer Journal*, **2013**, 49, 1347-1353	5.2	202
101	Structure and properties of polylactide/natural rubber blends. *Materials Chemistry and Physics*, **2011**, 129, 823-831	4.4	202
100	Removal of oxidation debris from multi-walled carbon nanotubes. *Chemical Communications*, **2007**, 513-5	5.8	164
99	Overall performance of natural rubber/graphene nanocomposites. *Composites Science and Technology*, **2012**, 73, 40-46	8.6	153
98	Particle-stabilized surfactant-free medium internal phase emulsions as templates for porous nanocomposite materials: poly-Pickering-Foams. *Langmuir*, **2007**, 23, 2398-403	4	153
97	Plasma Fluorination of Chemically Derived Graphene Sheets and Subsequent Modification With Butylamine. *Chemistry of Materials*, **2009**, 21, 3433-3438	9.6	135
96	Effect of Nanoclay on Natural Rubber Microstructure. *Macromolecules*, **2008**, 41, 6763-6772	5.5	131
95	Heel-shoe interactions and the durability of EVA foam running-shoe midsoles. *Journal of Biomechanics*, **2004**, 37, 1379-86	2.9	131
94	Epoxy-Graphene UV-cured nanocomposites. *Polymer*, **2011**, 52, 4664-4669	3.9	124
93	All-Polystyrene 3D-Printed Electrochemical Device with Embedded Carbon Nanofiber-Graphite-Polystyrene Composite Conductor. *Electroanalysis*, **2016**, 28, 1517-1523	3	111
92	Polymer foams for personal protection: cushions, shoes and helmets. *Composites Science and Technology*, **2003**, 63, 2389-2400	8.6	106

91	Physicochemical properties of organoclay filled polylactic acid/natural rubber blend bionanocomposites. *Composites Science and Technology*, **2012**, 72, 305-313	8.6	101
90	Physical properties of silicone foams filled with carbon nanotubes and functionalized graphene sheets. *European Polymer Journal*, **2008**, 44, 2790-2797	5.2	99
89	Use of butylamine modified graphene sheets in polymer solar cells. *Journal of Materials Chemistry*, **2010**, 20, 995-1000		92
88	Functionalised graphene sheets as effective high dielectric constant fillers. *Nanoscale Research Letters*, **2011**, 6, 508	5	91
87	Permanent adsorption of organic solvents in graphite oxide and its effect on the thermal exfoliation. *Carbon*, **2010**, 48, 1079-1087	10.4	90
86	Poly(lactic acid)/natural rubber/cellulose nanocrystal bionanocomposites part I. Processing and morphology. *Carbohydrate Polymers*, **2013**, 96, 611-20	10.3	88
85	Thermal conductivity of carbon nanotubes and graphene in epoxy nanofluids and nanocomposites. *Nanoscale Research Letters*, **2011**, 6, 610	5	88
84	Purification of single walled carbon nanotubes: The problem with oxidation debris. *Chemical Physics Letters*, **2008**, 460, 162-167	2.5	88
83	Carbon Nanofibers Allow Foaming of Semicrystalline Poly(ether ether ketone). *Advanced Materials*, **2005**, 17, 2864-2869	24	88
82	Carbon nanotube-enhanced polyurethane scaffolds fabricated by thermally induced phase separation. *Journal of Materials Chemistry*, **2008**, 18, 1865		87
81	Evolution of self-healing elastomers, from extrinsic to combined intrinsic mechanisms: a review. *Materials Horizons*, **2020**, 7, 2882-2902	14.4	87
80	Poly(lactic acid)/natural rubber/cellulose nanocrystal bionanocomposites. Part II: properties evaluation. *Carbohydrate Polymers*, **2013**, 96, 621-7	10.3	82
79	Molecular Dynamics of Natural Rubber/Layered Silicate Nanocomposites As Studied by Dielectric Relaxation Spectroscopy. *Macromolecules*, **2010**, 43, 643-651	5.5	82
78	Towards materials with enhanced electro-mechanical response: CaCu3Ti4O12Þolydimethylsiloxane composites. *Journal of Materials Chemistry*, **2012**, 22, 24705		67
77	Carbon nanotubes provide self-extinguishing grade to silicone-based foams. *Journal of Materials Chemistry*, **2008**, 18, 3933		60
76	Synergistic effect of graphene nanoplatelets and carbon black in multifunctional EPDM nanocomposites. *Composites Science and Technology*, **2016**, 128, 123-130	8.6	58
75	Real-Time Crystallization of Organoclay Nanoparticle Filled Natural Rubber under Stretching. *Macromolecules*, **2008**, 41, 2295-2298	5.5	56
74	Reactive polyurethane carbon nanotube foams and their interactions with osteoblasts. *Journal of Biomedical Materials Research - Part A*, **2009**, 88, 65-73	5.4	54

73	Influence of carbon nanoparticles on the polymerization and EMI shielding properties of PU nanocomposite foams. *RSC Advances*, **2014**, 4, 7911	3.7	53
72	Effect of montmorillonite intercalant structure on the cure parameters of natural rubber. *European Polymer Journal*, **2008**, 44, 3108-3115	5.2	53
71	Electrodeposition of transparent and conducting graphene/carbon nanotube thin films. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 2461-2466	1.6	52
70	Thermo-reversible crosslinked natural rubber: A Diels-Alder route for reuse and self-healing properties in elastomers. *Polymer*, **2019**, 175, 15-24	3.9	50
69	Cationic photocured epoxy nanocomposites filled with different carbon fillers. *Polymer*, **2012**, 53, 1831-1838	3.9	48
68	Comparing the effect of carbon-based nanofillers on the physical properties of flexible polyurethane foams. *Journal of Materials Science*, **2012**, 47, 5673-5679	4.3	47
67	Deformation mechanisms in polylactic acid/natural rubber/organoclay bionanocomposites as revealed by synchrotron X-ray scattering. *Soft Matter*, **2012**, 8, 8990	3.6	46
66	In situ Foaming Evolution of Flexible Polyurethane Foam Nanocomposites. *Macromolecular Chemistry and Physics*, **2011**, 212, 971-979	2.6	42
65	Molecular dynamics of natural rubber as revealed by dielectric spectroscopy: The role of natural cross□nking. *Soft Matter*, **2010**, 6, 3636	3.6	42
64	Phosphonium salt intercalated montmorillonites. *Applied Clay Science*, **2009**, 43, 27-32	5.2	41
63	Design of Rubber Composites with Autonomous Self-Healing Capability. *ACS Omega*, **2020**, 5, 1902-1910	3.9	39
62	Role of Vulcanizing Additives on the Segmental Dynamics of Natural Rubber. *Macromolecules*, **2012**, 45, 1070-1075	5.5	37
61	Thermally reduced graphene is a permissive material for neurons and astrocytes and de novo neurogenesis in the adult olfactory bulb in□vivo. *Biomaterials*, **2016**, 82, 84-93	15.6	35
60	Confinement of Functionalized Graphene Sheets by Triblock Copolymers. *Journal of Physical Chemistry C*, **2009**, 113, 17973-17978	3.8	34
59	A comparative study on the mechanical, electrical and piezoresistive properties of polymer composites using carbon nanostructures of different topology. *European Polymer Journal*, **2018**, 99, 394-402	5.2	31
58	Molecular confinement of solid and gaseous phases of self-standing bulk nanoporous polymers inducing enhanced and unexpected physical properties. *Polymer*, **2017**, 113, 27-33	3.9	27
57	Dielectric behavior of porous PMMA: From the micrometer to the nanometer scale. *Polymer*, **2016**, 107, 302-305	3.9	27
56	Fluid dynamics of evolving foams. *Physical Chemistry Chemical Physics*, **2009**, 11, 10860-6	3.6	26

55	Simulating the effects of long distance running on shoe midsole foam. *Polymer Testing*, **2004**, 23, 567-574	4.5	26
54	Preparation and Mechanical Properties of Graphene/Carbon Fiber-Reinforced Hierarchical Polymer Composites. *Journal of Composites Science*, **2019**, 3, 30	3	25
53	Giving a Second Opportunity to Tire Waste: An Alternative Path for the Development of Sustainable Self-Healing Styrene-Butadiene Rubber Compounds Overcoming the Magic Triangle of Tires. *Polymers*, **2019**, 11,	4.5	25
52	Facile and Scalable One-Step Method for Amination of Graphene Using Leuckart Reaction. *Chemistry of Materials*, **2017**, 29, 6698-6705	9.6	24
51	Morphology and mechanical properties of nanostructured thermoset/block copolymer blends with carbon nanoparticles. *Composites Part A: Applied Science and Manufacturing*, **2015**, 71, 136-143	8.4	23
50	Design of a new generation of sustainable SBR compounds with good trade-off between mechanical properties and self-healing ability. *European Polymer Journal*, **2018**, 106, 273-283	5.2	22
49	Evaluation of Biocompatibility of Uncoated Thermally Reduced Graphene and Carbon Nanotube-Loaded PVDF Membranes with Adult Neural Stem Cell-Derived Neurons and Glia. *Frontiers in Bioengineering and Biotechnology*, **2016**, 4, 94	5.8	22
48	Customizing thermally-reduced graphene oxides for electrically conductive or mechanical reinforced epoxy nanocomposites. *European Polymer Journal*, **2017**, 93, 1-7	5.2	21
47	Synthesis of fluorinated graphene oxide by using an easy one-pot deoxyfluorination reaction. *Journal of Colloid and Interface Science*, **2018**, 524, 219-226	9.3	21
46	Modeling the heat transfer by conduction of nanocellular polymers with bimodal cellular structures. *Polymer*, **2019**, 160, 126-137	3.9	21
45	Thermal and bio-disintegration properties of poly(lactic acid)/natural rubber/organoclay nanocomposites. *Applied Clay Science*, **2014**, 93-94, 78-84	5.2	20
44	Effect of hard segment content and carbon-based nanostructures on the kinetics of flexible polyurethane nanocomposite foams. *Polymer*, **2012**, 53, 4025-4032	3.9	20
43	Electro-mechanical actuation performance of SEBS/PU blends. *Polymer*, **2019**, 171, 25-33	3.9	19
42	An effective and sustainable approach for achieving self-healing in nitrile rubber. *European Polymer Journal*, **2020**, 139, 110032	5.2	18
41	Effect of carbon nanofillers on flexible polyurethane foaming from a chemical and physical perspective. *RSC Advances*, **2014**, 4, 20761	3.7	17
40	Epoxy resin curing reaction studied by proton multiple-quantum NMR. *Journal of Polymer Science, Part B: Polymer Physics*, **2015**, 53, 1324-1332	2.6	17
39	Reactive Nanocomposite Foams. *Frontiers in Forests and Global Change*, **2011**, 30, 45-62	1.6	17
38	Morphology and Photoelectrical Properties of Solution Processable Butylamine-Modified Graphene- and Pyrene-Based Organic Semiconductor. *Journal of Physical Chemistry C*, **2010**, 114, 11252-11257	3.8	17

37	Effects of functionalized carbon nanotubes in peroxide crosslinking of diene elastomers. *European Polymer Journal*, **2009**, 45, 1017-1023	5.2	17
36	Main structural features of graphene materials controlling the transport properties of epoxy resin-based composites. *European Polymer Journal*, **2018**, 101, 56-65	5.2	14
35	Sustainable mobility: The route of tires through the circular economy model. *Waste Management*, **2021**, 126, 309-322	8.6	14
34	Multifunctional Silicone Rubber Nanocomposites by Controlling the Structure and Morphology of Graphene Material. *Polymers*, **2019**, 11,	4.5	13
33	Epoxy Nanocomposites Filled with Carbon Nanoparticles. *Chemical Record*, **2018**, 18, 928-939	6.6	13
32	Morphology and properties of injection-moulded carbon-nanofibre poly(etheretherketone) foams. *Journal of Materials Science*, **2009**, 44, 1427-1434	4.3	13
31	The Development of Proton Conducting Polymer Membranes for Fuel Cells Using Sulfonated Carbon Nanofibres. *Macromolecular Rapid Communications*, **2008**, 29, 234-238	4.8	13
30	Modification of carbon nanotubes with well-controlled fluorescent styrene-based polymers using the Diels–Alder reaction. *Polymer*, **2011**, 52, 5739-5745	3.9	12
29	On the Use of Mechano-Chemically Modified Ground Tire Rubber (GTR) as Recycled and Sustainable Filler in Styrene-Butadiene Rubber (SBR) Composites. *Journal of Composites Science*, **2021**, 5, 68	3	12
28	Sulfonation of vulcanized ethylene–propylene–diene terpolymer membranes. *Acta Materialia*, **2008**, 56, 4780-4788	8.4	11
27	The role of carbon nanotubes in both physical and chemical liquid–solid transition of polydimethylsiloxane. *European Polymer Journal*, **2013**, 49, 1373-1380	5.2	9
26	Bismuth complex catalysts for the in situ preparation of polycaprolactone/silicate bionanocomposites. *Polymer International*, **2014**, 63, 709-717	3.3	8
25	Coalescence analysis for evolving foams via optical flow computation on projection image sequences. *Journal of Synchrotron Radiation*, **2012**, 19, 483-91	2.4	7
24	Thermal, electrical, and sensing properties of rubber nanocomposites **2020**, 149-175		7
23	Highly Deformable Porous Electromagnetic Wave Absorber Based on Ethylene-Propylene-Diene Monomer/Multiwall Carbon Nanotube Nanocomposites. *Polymers*, **2020**, 12,	4.5	6
22	In-situ cure monitoring of epoxy/graphene nanocomposites by several spectroscopic techniques. *Polymer Testing*, **2019**, 80, 106114	4.5	5
21	Ethylene–Styrene Interpolymer Foam Blends: Mechanical Properties and Sport Applications. *Frontiers in Forests and Global Change*, **2002**, 21, 237-264	1.6	5
20	Preparation and Characterization of Highly Elastic Foams with Enhanced Electromagnetic Wave Absorption Based on Ethylene-Propylene-Diene-Monomer Rubber Filled with Barium Titanate/Multiwall Carbon Nanotube Hybrid. *Polymers*, **2020**, 12,	4.5	5

19	Melt and solution processable novel photoluminescent polymer blends for multifaceted advanced applications. *Polymer*, **2021**, 215, 123378	3.9	5
18	SEBS-Grafted Itaconic Acid as Compatibilizer for Elastomer Nanocomposites Based on BaTiO Particles. *Polymers*, **2020**, 12,	4.5	4
17	Flexural electromechanical properties of multilayer graphene sheet/carbon nanotube/vinyl ester hybrid nanocomposites. *Composites Science and Technology*, **2020**, 194, 108164	8.6	4
16	Simple, convenient, and nondestructive electromagnetic characterization technique for composite and multiscale hybrid samples at microwave frequencies. *Microwave and Optical Technology Letters*, **2014**, 56, 504-509	1.2	4
15	Measuring self-healing in epoxy matrices: The need for standard conditions. *Reactive and Functional Polymers*, **2021**, 161, 104847	4.6	4
14	Synthesis of sustainable, lightweight and electrically conductive polymer brushes grafted multi-layer graphene oxide. *Polymer Testing*, **2021**, 93, 106986	4.5	4
13	Transport Properties of One-Step Compression Molded Epoxy Nanocomposite Foams. *Polymers*, **2019**, 11,	4.5	3
12	Semiconductive bionanocomposites of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) and MWCNTs for neural growth applications. *Journal of Polymer Science, Part B: Polymer Physics*, **2014**, 52, 349-360	2.6	3
11	Vulcanization Characteristics and Curing Kinetic of Rubber□Organoclay Nanocomposites **2011**, 275-303		3
10	Structure, thermal and mechanical properties of poly (□caprolactone)/organomodified clay bionanocomposites prepared in open air by in situ polymerization. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2020**, 57, 865-875	2.2	3
9	Elastomeric nanocomposite foams with improved properties for extreme conditions **2020**, 133-147		3
8	Tribological and mechanical characterization of epoxy/graphite composite coatings: Effects of particles□size and oxidation. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, **2021**, 235, 129-137	1.4	3
7	Stretchable, Bio-Compatible, Antioxidant and Self-Powering Adhesives from Soluble Silk Fibroin and Vegetal Polyphenols Exfoliated Graphite. *Nanomaterials*, **2021**, 11,	5.4	3
6	Understanding the Molecular Dynamics of Dual Crosslinked Networks by Dielectric Spectroscopy. *Polymers*, **2021**, 13,	4.5	3
5	Dielectric Properties of All-Organic Coatings: Comparison of PEDOT and PANI in Epoxy Matrices. *Journal of Composites Science*, **2020**, 4, 26	3	2
4	□n-Situ□Preparation of Carbonaceous Conductive Composite Materials Based on PEDOT and Biowaste for Flexible Pseudocapacitor Application. *Journal of Composites Science*, **2020**, 4, 87	3	2
3	Physical and mechanical properties of hybridized elastomeric foam based on ethylene-propylene-diene-monomer, multiwall carbon nanotube, and barium titanate. *Journal of Cellular Plastics*,0021955X2210851	1.5	1
2	Effect of filler content on scratch behavior and tribological performance of polyester/graphene oxide nanocomposite coating **2021**, 18, 1269-1280		0

1	Effect of terbium(III) species on the structure and physical properties of polyurethane (TPU). *Polymer*, **2021**, 233, 124209	3.9	0