Raquel Verdejo

List of Publications by Year
in descending order

112	8,321	46918	46693
papers	citations	47 h-index	89 g-index

113	113	113	10047
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Graphene filled polymer nanocomposites. Journal of Materials Chemistry, 2011, 21, 3301-3310.	6.7	666
2	Multifunctional nanostructured PLA materials for packaging and tissue engineering. Progress in Polymer Science, 2013, 38, 1720-1747.	11.8	527
3	Increasing the performance of dielectric elastomer actuators: A review from the materials perspective. Progress in Polymer Science, 2015, 51, 188-211.	11.8	369
4	Graphene materials with different structures prepared from the same graphite by the Hummers and Brodie methods. Carbon, 2013, 65, 156-164.	5.4	345
5	Functionalized graphene sheet filled silicone foam nanocomposites. Journal of Materials Chemistry, 2008, 18, 2221.	6.7	330
6	Enhanced acoustic damping in flexible polyurethane foams filled with carbon nanotubes. Composites Science and Technology, 2009, 69, 1564-1569.	3.8	272
7	Recent Advances in Clay/Polymer Nanocomposites. Advanced Materials, 2011, 23, 5229-5236.	11.1	262
8	Comparison of filler percolation and mechanical properties in graphene and carbon nanotubes filled epoxy nanocomposites. European Polymer Journal, 2013, 49, 1347-1353.	2.6	236
9	Structure and properties of polylactide/natural rubber blends. Materials Chemistry and Physics, 2011, 129, 823-831.	2.0	228
10	Evolution of self-healing elastomers, from extrinsic to combined intrinsic mechanisms: a review. Materials Horizons, 2020, 7, 2882-2902.	6.4	225
11	Overall performance of natural rubber/graphene nanocomposites. Composites Science and Technology, 2012, 73, 40-46.	3.8	195
12	Removal of oxidation debris from multi-walled carbon nanotubes. Chemical Communications, 2007, , 513-515.	2.2	179
13	Particle-Stabilized Surfactant-Free Medium Internal Phase Emulsions as Templates for Porous Nanocomposite Materials:Â poly-Pickering-Foams. Langmuir, 2007, 23, 2398-2403.	1.6	169
14	Heelâ€“shoe interactions and the durability of EVA foam running-shoe midsoles. Journal of Biomechanics, 2004, 37, 1379-1386.	0.9	159
15	Plasma Fluorination of Chemically Derived Graphene Sheets and Subsequent Modification With Butylamine. Chemistry of Materials, 2009, 21, 3433-3438.	3.2	151
16	Effect of Nanoclay on Natural Rubber Microstructure. Macromolecules, 2008, 41, 6763-6772.	2.2	144
17	Epoxy-Graphene UV-cured nanocomposites. Polymer, 2011, 52, 4664-4669.	1.8	142
18	Allâ€Polystyrene 3Dâ€Printed Electrochemical Device with Embedded Carbon Nanofiberâ€Graphiteâ€Polystyrene Composite Conductor. Electroanalysis, 2016, 28, 1517-1523.	1.5	141

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19	Polymer foams for personal protection: cushions, shoes and helmets. Composites Science and Technology, 2003, 63, 2389-2400.	3.8	126
20	Physical properties of silicone foams filled with carbon nanotubes and functionalized graphene sheets. European Polymer Journal, 2008, 44, 2790-2797.	2.6	118
21	Physicochemical properties of organoclay filled polylactic acid/natural rubber blend bionanocomposites. Composites Science and Technology, 2012, 72, 305-313.	3.8	112
22	Functionalised graphene sheets as effective high dielectric constant fillers. Nanoscale Research Letters, 2011, 6, 508.	3.1	107
23	Poly(lactic acid)/natural rubber/cellulose nanocrystal bionanocomposites Part I. Processing and morphology. Carbohydrate Polymers, 2013, 96, 611-620.	5.1	104
24	Permanent adsorption of organic solvents in graphite oxide and its effect on the thermal exfoliation. Carbon, 2010, 48, 1079-1087.	5.4	103
25	Use of butylamine modified graphene sheets in polymer solar cells. Journal of Materials Chemistry, 2010, 20, 995-1000.	6.7	99
26	Thermal conductivity of carbon nanotubes and graphene in epoxy nanofluids and nanocomposites. Nanoscale Research Letters, 2011, 6, 610.	3.1	99
27	Carbon Nanofibers Allow Foaming of Semicrystalline Poly(ether ether ketone). Advanced Materials, 2005, 17, 2864-2869.	11.1	95
28	Carbon nanotube-enhanced polyurethane scaffolds fabricated by thermally induced phase separation. Journal of Materials Chemistry, 2008, 18, 1865.	6.7	95
29	Purification of single walled carbon nanotubes: The problem with oxidation debris. Chemical Physics Letters, 2008, 460, 162-167.	1.2	94
30	Molecular Dynamics of Natural Rubber/Layered Silicate Nanocomposites As Studied by Dielectric Relaxation Spectroscopy. Macromolecules, 2010, 43, 643-651.	2.2	94
31	Poly(lactic acid)/natural rubber/cellulose nanocrystal bionanocomposites. Part II: Properties evaluation. Carbohydrate Polymers, 2013, 96, 621-627.	5.1	94
32	Thermo-reversible crosslinked natural rubber: A Diels-Alder route for reuse and self-healing properties in elastomers. Polymer, 2019, 175, 15-24.	1.8	82
33	Synergistic effect of graphene nanoplatelets and carbon black in multifunctional EPDM nanocomposites. Composites Science and Technology, 2016, 128, 123-130.	3.8	78
34	Carbon nanotubes provide self-extinguishing grade to silicone-based foams. Journal of Materials Chemistry, 2008, 18, 3933.	6.7	73
35	Towards materials with enhanced electro-mechanical response: CaCu3Ti4O12â€“polydimethylsiloxane composites. Journal of Materials Chemistry, 2012, 22, 24705.	6.7	72
36	Design of Rubber Composites with Autonomous Self-Healing Capability. ACS Omega, 2020, 5, 1902-1910.	1.6	65

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37	Real-Time Crystallization of Organoclay Nanoparticle Filled Natural Rubber under Stretching. Macromolecules, 2008, 41, 2295-2298.	2.2	61
38	Influence of carbon nanoparticles on the polymerization and EMI shielding properties of PU nanocomposite foams. RSC Advances, 2014, 4, 7911.	1.7	59
39	Sustainable mobility: The route of tires through the circular economy model. Waste Management, 2021, 126, 309-322.	3.7	59
40	Electrodeposition of transparent and conducting graphene/carbon nanotube thin films. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2461-2466.	0.8	58
41	Cationic photocured epoxy nanocomposites filled with different carbon fillers. Polymer, 2012, 53, 1831-1838.	1.8	58
42	Reactive polyurethane carbon nanotube foams and their interactions with osteoblasts. Journal of Biomedical Materials Research - Part A, 2009, 88A, 65-73.	2.1	57
43	Effect of montmorillonite intercalant structure on the cure parameters of natural rubber. European Polymer Journal, 2008, 44, 3108-3115.	2.6	55
44	Role of Vulcanizing Additives on the Segmental Dynamics of Natural Rubber. Macromolecules, 2012, 45, 1070-1075.	2.2	54
45	In situ Foaming Evolution of Flexible Polyurethane Foam Nanocomposites. Macromolecular Chemistry and Physics, 2011, 212, 971-979.	1.1	53
46	An effective and sustainable approach for achieving self-healing in nitrile rubber. European Polymer Journal, 2020, 139, 110032.	2.6	52
47	Deformation mechanisms in polylactic acid/natural rubber/organoclay bionanocomposites as revealed by synchrotron X-ray scattering. Soft Matter, 2012, 8, 8990.	1.2	51
48	Comparing the effect of carbon-based nanofillers on the physical properties of flexible polyurethane foams. Journal of Materials Science, 2012, 47, 5673-5679.	1.7	50
49	Molecular dynamics of natural rubber as revealed by dielectric spectroscopy: The role of natural crossâ€“linking. Soft Matter, 2010, 6, 3636.	1.2	47
50	Phosphonium salt intercalated montmorillonites. Applied Clay Science, 2009, 43, 27-32.	2.6	44
51	Thermally reduced graphene is a permissive material for neurons and astrocytes and de novo neurogenesis in the adult olfactory bulb inÂvivo. Biomaterials, 2016, 82, 84-93.	5.7	42
52	Facile and Scalable One-Step Method for Amination of Graphene Using Leuckart Reaction. Chemistry of Materials, 2017, 29, 6698-6705.	3.2	41
53	Giving a Second Opportunity to Tire Waste: An Alternative Path for the Development of Sustainable Self-Healing Styreneâ€“Butadiene Rubber Compounds Overcoming the Magic Triangle of Tires. Polymers, 2019, 11, 2122.	2.0	41
54	Preparation and Mechanical Properties of Graphene/Carbon Fiber-Reinforced Hierarchical Polymer Composites. Journal of Composites Science, 2019, 3, 30.	1.4	39

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55	Confinement of Functionalized Graphene Sheets by Triblock Copolymers. Journal of Physical Chemistry C, 2009, 113, 17973-17978.	1.5	38
56	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.	2.6	37
57	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.	2.6	35
58	Simulating the effects of long distance running on shoe midsole foam. Polymer Testing, 2004, 23, 567-574.	2.3	33
59	Modeling the heat transfer by conduction of nanocellular polymers with bimodal cellular structures. Polymer, 2019, 160, 126-137.	1.8	33
60	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.	1.4	33
61	Molecular confinement of solid and gaseous phases of self-standing bulk nanoporous polymers inducing enhanced and unexpected physical properties. Polymer, 2017, 113, 27-33.	1.8	32
62	Synthesis of fluorinated graphene oxide by using an easy one-pot deoxyfluorination reaction. Journal of Colloid and Interface Science, 2018, 524, 219-226.	5.0	32
63	Morphology and mechanical properties of nanostructured thermoset/block copolymer blends with carbon nanoparticles. Composites Part A: Applied Science and Manufacturing, 2015, 71, 136-143.	3.8	30
64	Dielectric behavior of porous PMMA: From the micrometer to the nanometer scale. Polymer, 2016, 107, 302-305.	1.8	30
65	In Vitro 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.	2.0	29
66	Fluid dynamics of evolving foams. Physical Chemistry Chemical Physics, 2009, 11, 10860.	1.3	27
67	Electro-mechanical actuation performance of SEBS/PU blends. Polymer, 2019, 171, 25-33.	1.8	27
68	Multifunctional Silicone Rubber Nanocomposites by Controlling the Structure and Morphology of Graphene Material. Polymers, 2019, 11, 449.	2.0	25
69	Thermal and bio-disintegration properties of poly(lactic acid)/natural rubber/organoclay nanocomposites. Applied Clay Science, 2014, 93-94, 78-84.	2.6	24
70	Customizing thermally-reduced graphene oxides for electrically conductive or mechanical reinforced epoxy nanocomposites. European Polymer Journal, 2017, 93, 1-7.	2.6	24
71	Effect of hard segment content and carbon-based nanostructures on the kinetics of flexible polyurethane nanocomposite foams. Polymer, 2012, 53, 4025-4032.	1.8	23
72	Epoxy Nanocomposites Filled with Carbon Nanoparticles. Chemical Record, 2018, 18, 928-939.	2.9	22

#	Article	IF	Citations
73	Effects of functionalized carbon nanotubes in peroxide crosslinking of diene elastomers. European Polymer Journal, 2009, 45, 1017-1023.	2.6	21
74	Effect of carbon nanofillers on flexible polyurethane foaming from a chemical and physical perspective. RSC Advances, 2014, 4, 20761.	1.7	21
75	Epoxy resin curing reaction studied by proton multiple-quantum NMR. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1324-1332.	2.4	21
76	Reactive Nanocomposite Foams. Frontiers in Forests and Global Change, 2011, 30, 45-62.	0.6	19
77	Highly Deformable Porous Electromagnetic Wave Absorber Based on Ethyleneâ€“Propyleneâ€“Diene Monomer/Multiwall Carbon Nanotube Nanocomposites. Polymers, 2020, 12, 858.	2.0	19
78	Morphology and properties of injection-moulded carbon-nanofibre poly(etheretherketone) foams. Journal of Materials Science, 2009, 44, 1427-1434.	1.7	18
79	Morphology and Photoelectrical Properties of Solution Processable Butylamine-Modified Graphene- and Pyrene-Based Organic Semiconductor. Journal of Physical Chemistry C, 2010, 114, 11252-11257.	1.5	17
80	The Final Frontier of Sustainable Materials: Current Developments in Self-Healing Elastomers. International Journal of Molecular Sciences, 2022, 23, 4757.	1.8	17
81	The Development of Proton Conducting Polymer Membranes for Fuel Cells Using Sulfonated Carbon Nanofibres. Macromolecular Rapid Communications, 2008, 29, 234-238.	2.0	16
82	Main structural features of graphene materials controlling the transport properties of epoxy resin-based composites. European Polymer Journal, 2018, 101, 56-65.	2.6	16
83	Synthesis of sustainable, lightweight and electrically conductive polymer brushes grafted multi-layer graphene oxide. Polymer Testing, 2021, 93, 106986.	2.3	16
84	Understanding the Molecular Dynamics of Dual Crosslinked Networks by Dielectric Spectroscopy. Polymers, 2021, 13, 3234.	2.0	16
85	Modification of carbon nanotubes with well-controlled fluorescent styrene-based polymers using the Dielsâ€“Alder reaction. Polymer, 2011, 52, 5739-5745.	1.8	15
86	Sulfonation of vulcanized ethyleneâ€“propyleneâ€“diene terpolymer membranes. Acta Materialia, 2008, 56, 4780-4788.	3.8	13
87	Measuring self-healing in epoxy matrices: The need for standard conditions. Reactive and Functional Polymers, 2021, 161, 104847.	2.0	12
88	Solving the Dichotomy between Selfâ€Healing and Mechanical Properties in Rubber Composites by Combining Reinforcing and Sustainable Fillers. Macromolecular Materials and Engineering, 2022, 307, .	1.7	12
89	In-situ cure monitoring of epoxy/graphene nanocomposites by several spectroscopic techniques. Polymer Testing, 2019, 80, 106114.	2.3	11
90	Thermal, electrical, and sensing properties of rubber nanocomposites. , 2020, , 149-175.		10

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91	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, 2278.	2.0	10
92	Flexural electromechanical properties of multilayer graphene sheet/carbon nanotube/vinyl ester hybrid nanocomposites. Composites Science and Technology, 2020, 194, 108164.	3.8	10
93	The role of carbon nanotubes in both physical and chemical liquidâ€“solid transition of polydimethylsiloxane. European Polymer Journal, 2013, 49, 1373-1380.	2.6	9
94	SEBS-Grafted Itaconic Acid as Compatibilizer for Elastomer Nanocomposites Based on BaTiO3 Particles. Polymers, 2020, 12, 643.	2.0	9
95	Melt and solution processable novel photoluminescent polymer blends for multifaceted advanced applications. Polymer, 2021, 215, 123378.	1.8	9
96	Bismuth complex catalysts for the in situ preparation of polycaprolactone/silicate bionanocomposites. Polymer International, 2014, 63, 709-717.	1.6	8
97	Stretchable, Bio-Compatible, Antioxidant and Self-Powering Adhesives from Soluble Silk Fibroin and Vegetal Polyphenols Exfoliated Graphite. Nanomaterials, 2021, 11, 2352.	1.9	8
98	Coalescence analysis for evolving foamsviaoptical flow computation on projection image sequences. Journal of Synchrotron Radiation, 2012, 19, 483-491.	1.0	7
99	Tribological and mechanical characterization of epoxy/graphite composite coatings: Effects of particlesâ€™ size and oxidation. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2021, 235, 129-137.	1.0	7
100	Structure, thermal and mechanical properties of poly (Îµ-caprolactone)/organomodified clay bionanocomposites prepared in open air by in situ polymerization. Journal of Macromolecular Science - Pure and Applied Chemistry, 2020, 57, 865-875.	1.2	6
101	Ethylene â€“ Styrene Interpolymer Foam Blends: Mechanical Properties and Sport Applications. Frontiers in Forests and Global Change, 2002, 21, 237-264.	0.6	5
102	Transport Properties of One-Step Compression Molded Epoxy Nanocomposite Foams. Polymers, 2019, 11, 756.	2.0	5
103	Semiconductive bionanocomposites of poly(3â€hydroxybutyrateâ€coâ€3â€hydroxyhexanoate) and MWCNTs for neural growth applications. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 349-360.	2.4	4
104	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.	0.9	4
105	Effect of terbium(III) species on the structure and physical properties of polyurethane (TPU). Polymer, 2021, 233, 124209.	1.8	4
106	Elastomeric nanocomposite foams with improved properties for extreme conditions. , 2020, , 133-147.		3
107	â€˜In-Situâ€™ Preparation of Carbonaceous Conductive Composite Materials Based on PEDOT and Biowaste for Flexible Pseudocapacitor Application. Journal of Composites Science, 2020, 4, 87.	1.4	3
108	Preface: 2nd International Conference on Structural Nano Composites (NANOSTRUC2014). IOP Conference Series: Materials Science and Engineering, 2014, 64, 011001.	0.3	2

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109	Dielectric Properties of All-Organic Coatings: Comparison of PEDOT and PANI in Epoxy Matrices. Journal of Composites Science, 2020, 4, 26.	1.4	2
110	Effect of filler content on scratch behavior and tribological performance of polyester/graphene oxide nanocomposite coating. Journal of Coatings Technology Research, 2021, 18, 1269-1280.	1.2	2
111	Use of Novel Non-Toxic Bismuth Catalyst for the Preparation of Flexible Polyurethane Foam. Polymers, 2021, 13, 4460.	2.0	2
112	Physical and mechanical properties of hybridized elastomeric foam based on ethylene-propylene-diene-monomer, multiwall carbon nanotube, and barium titanate. Journal of Cellular Plastics, 0, , 0021955X2210851.	1.2	1