Alberto A JimÃ©nez-SuÃ¡rez

List of Publications by Year
in descending order

83 papers	2,099 citations	257101 24 h-index	264894 42 g-index
83 all docs	83 docs citations	83 times ranked	1869 citing authors

#	Article	IF	Citations
1	Advantages and disadvantages of the addition of graphene nanoplatelets to epoxy resins. European Polymer Journal, 2014, 61, 206-214.	2.6	176
2	Effect of the carbon nanotube functionalization on flexural properties of multiscale carbon fiber/epoxy composites manufactured by VARIM. Composites Part B: Engineering, 2013, 45, 1613-1619.	5.9	139
3	In situ processing of epoxy composites reinforced with graphene nanoplatelets. Composites Science and Technology, 2013, 86, 185-191.	3.8	109
4	Strain monitoring mechanisms of sensors based on the addition of graphene nanoplatelets into an epoxy matrix. Composites Science and Technology, 2016, 123, 65-70.	3.8	97
5	Morphological changes on graphene nanoplatelets induced during dispersion into an epoxy resin by different methods. Composites Part B: Engineering, 2015, 72, 199-205.	5.9	96
6	Graphene nanoplatelets thickness and lateral size influence on the morphology and behavior of epoxy composites. European Polymer Journal, 2014, 53, 292-301.	2.6	79
7	Thermal conductivity and lap shear strength of GNP/epoxy nanocomposites adhesives. International Journal of Adhesion and Adhesives, 2016, 68, 407-410.	1.4	68
8	Critical parameters of carbon nanotube reinforced composites for structural health monitoring applications: Empirical results versus theoretical predictions. Composites Science and Technology, 2019, 171, 44-53.	3.8	67
9	Characterization of carbon nanofiber/epoxy nanocomposites by the nanoindentation technique. Composites Part B: Engineering, 2011, 42, 638-644.	5.9	62
10	Graphene nanoplatelets coated glass fibre fabrics as strain sensors. Composites Science and Technology, 2017, 146, 59-64.	3.8	57
11	DLP 4Dâ€Printing of Remotely, Modularly, and Selectively Controllable Shape Memory Polymer Nanocomposites Embedding Carbon Nanotubes. Advanced Functional Materials, 2021, 31, 2106774.	7.8	56
12	Influence of Thickness and Lateral Size of Graphene Nanoplatelets on Water Uptake in Epoxy/Graphene Nanocomposites. Applied Sciences (Switzerland), 2018, 8, 1550.	1.3	51
13	Electrically conductive functionalized-GNP/epoxy based composites: From nanocomposite to multiscale glass fibre composite material. Composites Part B: Engineering, 2016, 98, 49-55.	5.9	49
14	Effect of type, percentage and dispersion method of multi-walled carbon nanotubes on tribological properties of epoxy composites. Wear, 2015, 324-325, 100-108.	1.5	42
15	Mechanical and Strain-Sensing Capabilities of Carbon Nanotube Reinforced Composites by Digital Light Processing 3D Printing Technology. Polymers, 2020, 12, 975.	2.0	41
16	Novel approach to percolation threshold on electrical conductivity of carbon nanotube reinforced nanocomposites. RSC Advances, 2016, 6, 43418-43428.	1.7	37
17	Influence of the functionalization of carbon nanotubes on calendering dispersion effectiveness in a low viscosity resin for VARIM processes. Composites Part B: Engineering, 2012, 43, 3482-3490.	5.9	36
18	Joule effect self-heating of epoxy composites reinforced with graphitic nanofillers. Journal of Polymer Research, 2016, 23, 1.	1.2	36

#	Article	IF	Citations
19	The influence of mechanical dispersion of MWCNT in epoxy matrix by calendering method: Batch method versus time controlled. Composites Part B: Engineering, 2013, 48, 88-94.	5.9	34
20	Graphene Nanoplatelets. Applied Sciences (Switzerland), 2020, 10, 1753.	1.3	34
21	Strain and crack growth sensing capability of SWCNT reinforced epoxy in tensile and mode I fracture tests. Composites Science and Technology, 2020, 186, 107918.	3.8	32
22	Epoxy Adhesives Modified with Graphene for Thermal Interface Materials. Journal of Adhesion, 2014, 90, 835-847.	1.8	31
23	Sensitivity, influence of the strain rate and reversibility of GNPs based multiscale composite materials for high sensitive strain sensors. Composites Science and Technology, 2018, 155, 100-107.	3.8	29
24	High sensitive damage sensors based on the use of functionalized graphene nanoplatelets coated fabrics as reinforcement in multiscale composite materials. Composites Part B: Engineering, 2018, 149, 31-37.	5.9	27
25	An experimental and numerical investigation of highly strong and tough epoxy based nanocomposite by addition of MWCNTs: Tensile and mode I fracture tests. Composite Structures, 2020, 252, 112692.	3.1	25
26	Reclamation of carbon fibers and added-value gases in a pyrolysis-based composites recycling process. Journal of Cleaner Production, 2020, 273, 123173.	4.6	23
27	The addition of graphene nanoplatelets into epoxy/polycaprolactone composites for autonomous self-healing activation by Joule's heating effect. Composites Science and Technology, 2021, 213, 108950.	3.8	23
28	Dispersion of carbon nanofibres in a low viscosity resin by calendering process to manufacture multiscale composites by VARIM. Composites Part B: Engineering, 2012, 43, 3104-3113.	5.9	22
29	3D printed epoxy-CNTs/GNPs conductive inks with application in anti-icing and de-icing systems. European Polymer Journal, 2020, 141, 110090.	2.6	22
30	Reversible phenomena and failure localization in self-monitoring GNP/epoxy nanocomposites. Composite Structures, 2016, 136, 101-105.	3.1	21
31	Highly sensitive strain gauges with carbon nanotubes: From bulk nanocomposites to multifunctional coatings for damage sensing. Applied Surface Science, 2017, 424, 213-221.	3.1	20
32	Carbon nanotubes to enable autonomous and volumetric self-heating in epoxy/polycaprolactone blends. Composites Science and Technology, 2020, 199, 108321.	3.8	20
33	Highly Multifunctional GNP/Epoxy Nanocomposites: From Strain-Sensing to Joule Heating Applications. Nanomaterials, 2020, 10, 2431.	1.9	20
34	Carbon Nanotube-Doped Adhesive Films for Detecting Crack Propagation on Bonded Joints: A Deeper Understanding of Anomalous Behaviors. ACS Applied Materials & Interfaces, 2017, 9, 43267-43274.	4.0	18
35	Development of bonded joints using novel CNT doped adhesive films: Mechanical and electrical properties. International Journal of Adhesion and Adhesives, 2018, 86, 98-104.	1.4	18
36	Numerical study of static and dynamic fracture behaviours of neat epoxy resin. Mechanics of Materials, 2020, 140, 103214.	1.7	18

#	Article	IF	Citations
37	Oxidation and tribological behaviour of an Fe-based MMC reinforced with TiCN particles. International Journal of Refractory Metals and Hard Materials, 2009, 27, 360-366.	1.7	17
38	Synergistic effects of double-walled carbon nanotubes and nanoclays on mechanical, electrical and piezoresistive properties of epoxy based nanocomposites. Composites Science and Technology, 2020, 200, 108459.	3.8	17
39	Mechanical and strain sensing properties of carbon nanotube reinforced epoxy/poly(caprolactone) blends. Polymer, 2020, 190, 122236.	1.8	17
40	An approach using highly sensitive carbon nanotube adhesive films for crack growth detection under flexural load in composite structures. Composite Structures, 2019, 224, 111087.	3.1	16
41	3D printed anti-icing and de-icing system based on CNT/GNP doped epoxy composites with self-curing and structural health monitoring capabilities. Smart Materials and Structures, 2021, 30, 025016.	1.8	16
42	Use of carbon nanotubes for strain and damage sensing of epoxy-based composites. International Journal of Smart and Nano Materials, 2012, 3, 152-161.	2.0	14
43	Piezoresistive characterization of epoxy based nanocomposites loaded with SWCNTsâ€DWCNTs in tensile and fracture tests. Polymer Composites, 2020, 41, 2598-2609.	2.3	14
44	Effect of filtration in functionalized and non-functionalized CNTs and surface modification of fibers as an effective alternative approach. Composites Part B: Engineering, 2016, 94, 286-291.	5.9	13
45	The role of graphene interactions and geometry on thermal and electrical properties of epoxy nanocomposites: A theoretical to experimental approach. Polymer Testing, 2020, 90, 106638.	2.3	12
46	Complex Geometry Strain Sensors Based on 3D Printed Nanocomposites: Spring, Three-Column Device and Footstep-Sensing Platform. Nanomaterials, 2021, 11, 1106.	1.9	12
47	Coupled health monitoring system for CNT-doped self-sensing composites. Carbon, 2020, 166, 193-204.	5.4	12
48	Exploring the mechanical and sensing capabilities of multi-material bonded joints with carbon nanotube-doped adhesive films. Composite Structures, 2019, 229, 111477.	3.1	11
49	Hardener Isomerism and Content of Dynamic Disulfide Bond Effect on Chemical Recycling of Epoxy Networks. ACS Applied Polymer Materials, 2022, 4, 5068-5076.	2.0	11
50	Evaluation of sensitivity for detecting different failure modes of epoxy matrix composites doped with graphene nanoparticles. Composite Structures, 2019, 225, 111167.	3.1	10
51	Sensitive response of GNP/epoxy coatings as strain sensors: analysis of tensile-compressive and reversible cyclic behavior. Smart Materials and Structures, 2020, 29, 065012.	1.8	10
52	Quality assessment and structural health monitoring of CNT reinforced CFRP and Ti6Al4V multi-material joints. Materials and Design, 2021, 210, 110118.	3.3	10
53	Printable selfâ€heating coatings based on the use of carbon nanoreinforcements. Polymer Composites, 2020, 41, 271-278.	2.3	9
54	Tribological Properties of Different Types of Graphene Nanoplatelets as Additives for the Epoxy Resin. Applied Sciences (Switzerland), 2020, 10, 4363.	1.3	9

#	Article	IF	Citations
55	Monitoring crack propagation in skin-stringer elements using carbon nanotube doped adhesive films: Influence of defects and manufacturing process. Composites Science and Technology, 2020, 193, 108147.	3.8	9
56	Electrical Properties and Strain Sensing Mechanisms in Hybrid Graphene Nanoplatelet/Carbon Nanotube Nanocomposites. Sensors, 2021, 21, 5530.	2.1	9
57	Study of efficiency of different commercial carbon nanotubes on manufacturing of epoxy matrix composites. Journal of Composite Materials, 2014, 48, 3169-3177.	1.2	8
58	Effective addition of nanoclay in enhancement of mechanical and electromechanical properties of SWCNT reinforced epoxy: Strain sensing and crack-induced piezoresistivity. Theoretical and Applied Fracture Mechanics, 2020, 110, 102831.	2.1	8
59	Crack sensing mechanisms of Mode-II and skin-stringer joints between dissimilar materials by using carbon nanotubes. Composites Science and Technology, 2021, 201, 108553.	3.8	8
60	4D-Printed Resins and Nanocomposites Thermally Stimulated by Conventional Heating and IR Radiation. ACS Applied Polymer Materials, 2021, 3, 5207-5215.	2.0	8
61	A comparative study of the incorporation effect of SWCNT-OH and DWCNT with varied microstructural defects on tensile and impact strengths of epoxy based nanocomposite. Journal of Polymer Research, 2020, 27, 1.	1.2	7
62	Influence of Morphology on the Healing Mechanism of PCL/Epoxy Blends. Materials, 2020, 13, 1941.	1.3	7
63	Secondary Raw Materials from Residual Carbon Fiber-Reinforced Composites by An Upgraded Pyrolysis Process. Polymers, 2021, 13, 3408.	2.0	7
64	Sequential and selective shape memory by remote electrical control. European Polymer Journal, 2022, 164, 110888.	2.6	7
65	Electroactive shaping and shape memory of sequential dual-cured off-stoichiometric epoxy/CNT composites. Journal of Materials Research and Technology, 2021, 15, 2970-2981.	2.6	6
66	Multifunctional coatings based on GNP/epoxy systems: Strain sensing mechanisms and Joule's heating capabilities for de-icing applications. Progress in Organic Coatings, 2022, 167, 106829.	1.9	6
67	Optimum Dispersion Technique of Carbon Nanotubes in Epoxy Resin as a Function of the Desired Behaviour. Journal of Nano Research, 0, 26, 177-186.	0.8	5
68	Carbon Nanotube Reinforced Poly(Îµ-caprolactone)/Epoxy Blends for Superior Mechanical and Self-Sensing Performance in Multiscale Glass Fiber Composites. Polymers, 2021, 13, 3159.	2.0	5
69	Electrothermally triggered selective shape memory capabilities of CNT doped nanocomposites by Digital Light Processing. Composites Science and Technology, 2022, 218, 109185.	3.8	5
70	Novel approach for damage detection in multiscale CNT-reinforced composites via wireless Joule heating monitoring. Composites Science and Technology, 2022, 227, 109614.	3.8	5
71	GNPs Reinforced Epoxy Nanocomposites Used as Thermal Interface Materials. Journal of Nano Research, 2016, 38, 18-25.	0.8	4
72	Influence of Manufacturing Process in Structural Health Monitoring and Mechanical Behaviour of CNT Reinforced CFRP and Ti6Al4V Multi-Material Joints. Polymers, 2021, 13, 2488.	2.0	4

#	Article	IF	Citations
73	Assessment of Manufacturing Parameters for New 3D-Printed Heating Circuits Based on CNT-Doped Nanocomposites Processed by UV-Assisted Direct Write. Applied Sciences (Switzerland), 2021, 11, 7534.	1.3	4
74	High mobility of carbon nanotubes into thermosetting matrix. European Polymer Journal, 2016, 74, 209-217.	2.6	3
75	Strain Sensing Based on Multiscale Composite Materials Reinforced with Graphene Nanoplatelets. Journal of Visualized Experiments, 2016, , .	0.2	2
76	Graphene nanoplatelets electrical networks as highly efficient self-heating materials for glass fiber fabrics. Journal of Industrial Textiles, 2022, 51, 4410S-4423S.	1.1	2
77	Electrical Monitoring as a Novel Route to Understanding the Aging Mechanisms of Carbon Nanotube-Doped Adhesive Film Joints. Applied Sciences (Switzerland), 2020, 10, 2566.	1.3	2
78	A preliminary study on self sensing composite structures with carbon nanotubes. , 2017, , .		1
79	Self-sensing of CNT-Doped GFRP Panels During Impact and Compression After Impact Tests. Lecture Notes in Civil Engineering, 2021, , 527-536.	0.3	1
80	Enhanced tensile strength, fracture toughness and piezoresistive performances of CNT based epoxy nanocomposites using toroidal stirring assisted ultra-sonication. Mechanics of Advanced Materials and Structures, 2022, 29, 5557-5566.	1.5	1
81	Monitoring of impact dynamics on carbon nanotube multiscale glass fiber composites by means of electrical measurements. , 2017, , .		0
82	STEM STUDIES NOWADAYS: ANALYSIS OF PERCEPTION, ACTUAL ASPECTS AND NEED OF FURTHER INTERACTION DURING HIGH SCHOOL EDUCATION. , 2020, , .		0
83	Electrical Properties of Carbon Nanotubes. , 2021, , 1-35.		0