Xoan FernÃ¡ndez SÃ¡nchez-Romate

List of Publications by Year
in descending order

42 papers	601 citations	566801 15 h-index	642321 23 g-index
43 all docs	43 docs citations	43 times ranked	346 citing authors

#	Article	IF	Citations
1	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
2	A proof of concept of a structural supercapacitor made of graphene coated woven carbon fibers: EIS study and mechanical performance. Electrochimica Acta, 2021, 370, 137746.	2.6	42
3	Mechanical and Strain-Sensing Capabilities of Carbon Nanotube Reinforced Composites by Digital Light Processing 3D Printing Technology. Polymers, 2020, 12, 975.	2.0	41
4	Novel approach to percolation threshold on electrical conductivity of carbon nanotube reinforced nanocomposites. RSC Advances, 2016, 6, 43418-43428.	1.7	37
5	Effect of graphene nanoplatelets thickness on strain sensitivity of nanocomposites: A deeper theoretical to experimental analysis. Composites Science and Technology, 2019, 181, 107697.	3.8	33
6	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
7	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
8	Carbon nanotubes to enable autonomous and volumetric self-heating in epoxy/polycaprolactone blends. Composites Science and Technology, 2020, 199, 108321.	3.8	20
9	Highly Multifunctional GNP/Epoxy Nanocomposites: From Strain-Sensing to Joule Heating Applications. Nanomaterials, 2020, 10, 2431.	1.9	20
10	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
11	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
12	Fatigue crack growth identification in bonded joints by using carbon nanotube doped adhesive films. Smart Materials and Structures, 2020, 29, 035032.	1.8	18
13	Ultrasensitive and highly stretchable sensors for human motion monitoring made of graphene reinforced polydimethylsiloxane: Electromechanical and complex impedance sensing performance. Carbon, 2022, 192, 234-248.	5.4	18
14	Mechanical and strain sensing properties of carbon nanotube reinforced epoxy/poly(caprolactone) blends. Polymer, 2020, 190, 122236.	1.8	17
15	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
16	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
17	Structural health monitoring of a CFRP structural bonded repair by using a carbon nanotube modified adhesive film. Composite Structures, 2021, 270, 114091.	3.1	16
18	Hydrothermal ageing on self-sensing bonded joints with novel carbon nanomaterial reinforced adhesive films. Polymer Degradation and Stability, 2020, 177, 109170.	2.7	12

#	ARTICLE	IF	CITATIONS
19	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
20	Complex Geometry Strain Sensors Based on 3D Printed Nanocomposites: Spring, Three-Column Device and Footstep-Sensing Platform. Nanomaterials, 2021, 11, 1106.	1.9	12
21	Flexible Wearable Sensors Based in Carbon Nanotubes Reinforced Poly(Ethylene Glycol) Diglycidyl Ether (PEGDGE): Analysis of Strain Sensitivity and Proof of Concept. Chemosensors, 2021, 9, 158.	1.8	12
22	Wearable Sensors Based on Graphene Nanoplatelets Reinforced Polydimethylsiloxane for Human Motion Monitoring: Analysis of Crack Propagation and Cycling Load Monitoring. Chemosensors, 2022, 10, 75.	1.8	12
23	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
24	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
25	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
26	Electrical Properties and Strain Sensing Mechanisms in Hybrid Graphene Nanoplatelet/Carbon Nanotube Nanocomposites. Sensors, 2021, 21, 5530.	2.1	9
27	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
28	4D-Printed Resins and Nanocomposites Thermally Stimulated by Conventional Heating and IR Radiation. ACS Applied Polymer Materials, 2021, 3, 5207-5215.	2.0	8
29	Easy-Scalable Flexible Sensors Made of Carbon Nanotube-Doped Polydimethylsiloxane: Analysis of Manufacturing Conditions and Proof of Concept. Sensors, 2022, 22, 5147.	2.1	8
30	Influence of Morphology on the Healing Mechanism of PCL/Epoxy Blends. Materials, 2020, 13, 1941.	1.3	7
31	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
32	Carbon Nanotube Reinforced Poly(ε-caprolactone)/Epoxy Blends for Superior Mechanical and Self-Sensing Performance in Multiscale Glass Fiber Composites. Polymers, 2021, 13, 3159.	2.0	5
33	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
34	Directional Response of Randomly Dispersed Carbon Nanotube Strain Sensors. Sensors, 2020, 20, 2980.	2.1	4
35	Mechanical and Crack-Sensing Capabilities of Mode-I Joints with Carbon-Nanotube-Reinforced Adhesive Films under Hydrothermal Aging Conditions. Nanomaterials, 2020, 10, 2290.	1.9	3
36	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

#	Article	IF	Citations
37	Analysis of strain sensitivity under flexural load of 3D printed carbon nanotube-doped epoxy circuits. Nanotechnology, 2021, 32, 185501.	1.3	2
38	Smart Coatings with Carbon Nanoparticles. , 2020, , .		1
39	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
40	On the Dynamic Acquisition of Electrical Signals for Structural Health Monitoring of Carbon Nanotube Doped Composites. , 0, , .		1
41	Monitoring of impact dynamics on carbon nanotube multiscale glass fiber composites by means of electrical measurements. , 2017, , .		0
42	Electrical Properties of Carbon Nanotubes. , 2021, , 1-35.		0