Luigi Vertuccio

List of Publications by Year
in descending order

70	2,236	218381	223531
papers	citations	26 h-index	46 g-index

70	70	70	2201
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of functionalization on the thermo-mechanical and electrical behavior of multi-wall carbon nanotube/epoxy composites. Carbon, 2011, 49, 1919-1930.	5.4	230
2	Mechanical and barrier properties of epoxy resin filled with multi-walled carbon nanotubes. Carbon, 2009, 47, 2419-2430.	5.4	150
3	Nano clay reinforced PCL/starch blends obtained by high energy ball milling. Carbohydrate Polymers, 2009, 75, 172-179.	5.1	135
4	Development of epoxy mixtures for application in aeronautics and aerospace. RSC Advances, 2014, 4, 15474-15488.	1.7	133
5	The role of carbon nanofiber defects on the electrical and mechanical properties of CNF-based resins. Nanotechnology, 2013, 24, 305704.	1.3	97
6	Epoxy/MWCNT Composite as Temperature Sensor and Electrical Heating Element. IEEE Nanotechnology Magazine, 2011, 10, 688-693.	1.1	93
7	Strain and damage monitoring in carbon-nanotube-based composite under cyclic strain. Composites Part A: Applied Science and Manufacturing, 2015, 71, 9-16.	3.8	84
8	Experimental and theoretical study on piezoresistive properties of a structural resin reinforced with carbon nanotubes for strain sensing and damage monitoring. Composites Part B: Engineering, 2018, 145, 90-99.	5.9	79
9	Influence of carbon nanoparticles/epoxy matrix interaction on mechanical, electrical and transport properties of structural advanced materials. Nanotechnology, 2017, 28, 094001.	1.3	72
10	Optimization of graphene-based materials outperforming host epoxy matrices. RSC Advances, 2015, 5, 36969-36978.	1.7	71
11	Effective formulation and processing of nanofilled carbon fiber reinforced composites. RSC Advances, 2015, 5, 6033-6042.	1.7	62
12	Development of self-healing multifunctional materials. Composites Part B: Engineering, 2017, 128, 30-38.	5.9	58
13	Reversible Self-Healing Carbon-Based Nanocomposites for Structural Applications. Polymers, 2019, 11, 903.	2.0	58
14	Cure Behavior and Physical Properties of Epoxy Resinâ€"Filled with Multiwalled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 2686-2693.	0.9	49
15	Influence of carbon nanofillers on the curing kinetics of epoxy-amine resin. RSC Advances, 2015, 5, 90437-90450.	1.7	49
16	Electrical conductivity of carbon nanofiber reinforced resins: Potentiality of Tunneling Atomic Force Microscopy (TUNA) technique. Composites Part B: Engineering, 2018, 143, 148-160.	5.9	47
17	Multifunctionality of structural nanohybrids: the crucial role of carbon nanotube covalent and non-covalent functionalization in enabling high thermal, mechanical and self-healing performance. Nanotechnology, 2020, 31, 225708.	1.3	41
18	Comparison of the physical properties of epoxyâ€based composites filled with different types of carbon nanotubes for aeronautic applications. Advances in Polymer Technology, 2012, 31, 205-218.	0.8	39

#	Article	IF	Citations
19	Improvement of the electrical conductivity in multiphase epoxy-based MWCNT nanocomposites by means of an optimized clay content. Composites Science and Technology, 2013, 89, 69-76.	3.8	38
20	Antimicrobial Membranes of Bio-Based PA 11 and HNTs Filled with Lysozyme Obtained by an Electrospinning Process. Nanomaterials, 2018, 8, 139.	1.9	35
21	Nano-Charged Polypropylene Application: Realistic Perspectives for Enhancing Durability. Materials, 2017, 10, 943.	1.3	34
22	Toughening of Epoxy Adhesives by Combined Interaction of Carbon Nanotubes and Silsesquioxanes. Materials, 2017, 10, 1131.	1.3	34
23	Damage Monitoring of Structural Resins Loaded with Carbon Fillers: Experimental and Theoretical Study. Nanomaterials, 2020, 10, 434.	1.9	32
24	Green pesticides based on cinnamate anion incorporated in layered double hydroxides and dispersed in pectin matrix. Carbohydrate Polymers, 2019, 209, 356-362.	5.1	30
25	Active packaging for table grapes: Evaluation of antimicrobial performances of packaging for shelf life of the grapes under thermal stress. Food Packaging and Shelf Life, 2020, 25, 100545.	3.3	30
26	Development of a new stable ruthenium initiator suitably designed for self-repairing applications in high reactive environments. Journal of Industrial and Engineering Chemistry, 2017, 54, 234-251.	2.9	28
27	Evaluation of zein/halloysite nano-containers as reservoirs of active molecules for packaging applications: Preparation and analysis of physical properties. Journal of Cereal Science, 2016, 70, 66-71.	1.8	27
28	Active coating for storage of Mozzarella cheese packaged under thermal abuse. Food Control, 2016, 64, 10-16.	2.8	27
29	Experimental evaluation and modeling of thermal conductivity of tetrafunctional epoxy resin containing different carbon nanostructures. Polymer Engineering and Science, 2017, 57, 779-786.	1.5	25
30	Low-Voltage Icing Protection Film for Automotive and Aeronautical Industries. Nanomaterials, 2020, 10, 1343.	1.9	23
31	Different Methods of Dispersing Carbon Nanotubes in Epoxy Resin and Initial Evaluation of the Obtained Nanocomposite as a Matrix of Carbon Fiber Reinforced Laminate in Terms of Vibroacoustic Performance and Flammability. Materials, 2019, 12, 2998.	1.3	22
32	Thermal conductivity of epoxy resins filled with <scp>MWCNT</scp> and hydrotalcite clay: Experimental data and theoretical predictive modeling. Polymer Composites, 2015, 36, 1118-1123.	2.3	19
33	Multi-functional nanotechnology integration for aeronautical structures performance enhancement. International Journal of Structural Integrity, 2018, 9, 737-752.	1.8	19
34	Multifunctional Performance of a Nano-Modified Fiber Reinforced Composite Aeronautical Panel. Materials, 2019, 12, 869.	1.3	19
35	Eco-friendly polymer nanocomposites designed for self-healing applications. Polymer, 2021, 223, 123718.	1.8	18
36	Behavior of epoxy composite resins in environments at high moisture content. Journal of Polymer Research, 2013, 20, 1.	1.2	17

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37	Electrical Current Map and Bulk Conductivity of Carbon Fiber-Reinforced Nanocomposites. Polymers, 2019, 11, 1865.	2.0	17
38	Carbon-Based Aeronautical Epoxy Nanocomposites: Effectiveness of Atomic Force Microscopy (AFM) in Investigating the Dispersion of Different Carbonaceous Nanoparticles. Polymers, 2019, 11, 832.	2.0	16
39	Simulation of self-heating process on the nanoscale: a multiscale approach for molecular models of nanocomposite materials. Nanoscale Advances, 2020, 2, 3164-3180.	2.2	15
40	Influence of multi-walled carbon nanotubes on the Î² form crystallization of syndiotactic polystyrene at low temperature. EXPRESS Polymer Letters, 2010, 4, 339-345.	1.1	14
41	Design of Multifunctional Composites: New Strategy to Save Energy and Improve Mechanical Performance. Nanomaterials, 2020, 10, 2285.	1.9	14
42	Functional structural nanocomposites with integrated self-healing ability. Materials Today: Proceedings, 2021, 34, 243-249.	0.9	14
43	PET and Active Coating Based on a LDH Nanofiller Hosting p-Hydroxybenzoate and Food-Grade Zeolites: Evaluation of Antimicrobial Activity of Packaging and Shelf Life of Red Meat. Nanomaterials, 2019, 9, 1727.	1.9	12
44	Correlations between microstructural characterization and thermal properties of well defined poly(Îµ-caprolactone) samples by ring opening polymerization with neutral and cationic bis(2,4,6-triisopropylphenyl)tin(IV) compounds. Reactive and Functional Polymers, 2010, 70, 151-158.	2.0	11
45	Resistive Response of Carbon Nanotube-Based Composites Subjected to Water Aging. Nanomaterials, 2021, 11, 2183.	1.9	10
46	Electrical properties of multi-walled carbon nanotube/tetrafunctional epoxy-amine composites. , 2012, , .		9
47	Damping assessment of new multifunctional epoxy resin for aerospace structures. Materials Today: Proceedings, 2021, 34, 180-183.	0.9	8
48	Self-Sensing Nanocomposites for Structural Applications: Choice Criteria. Nanomaterials, 2021, 11, 833.	1.9	8
49	Analysis of the Effects of Hydrotalcite Inclusion on the Temperature-Sensing Properties of CNT-Epoxy Nanocomposites. IEEE Sensors Journal, 2016, 16, 7977-7985.	2.4	7
50	Ice-Prevention and De-Icing Capacity of Epoxy Resin Filled with Hybrid Carbon-Nanostructured Forms: Self-Heating by Joule Effect. Nanomaterials, 2021, 11, 2427.	1.9	7
51	Development of multifunctional carbon fiber reinforced composites (CFRCs) - Manufacturing process. , 2014, , .		6
52	Design of self-healing catalysts for aircraft application. International Journal of Structural Integrity, 2018, 9, 723-736.	1.8	6
53	Graphene/epoxy resins: Rheological behavior and morphological analysis by Atomic Force Microscopy (AFM). Materials Today: Proceedings, 2021, 34, 160-163.	0.9	6
54	A Food-Grade Resin with LDHâ€“Salicylate to Extend Mozzarella Cheese Shelf Life. Processes, 2021, 9, 884.	1.3	6

#	Article	IF	Citations
55	Humidity sensing of an epoxy/MWCNT composite by electrical conductivity measurements. , 2013, , .		4
56	Dynamic performance of self-sensing epoxy resin for aerospace structures. AIP Conference Proceedings, 2018, , .	0.3	4
57	Piezoresistive strain sensing of carbon nanotubes-based composite skin for aeronautical morphing structures. , 2018, , .		4
58	Evaluation of the electrical properties of epoxy-based nanocomposites for motor insulation. , 2011, , .		3
59	Development of aeronautical epoxy nanocomposites having an integrated selfhealing ability. MATEC Web of Conferences, 2018, 233, 00021.	0.1	3
60	Thermal degradation and fire properties of epoxy modified resins. AIP Conference Proceedings, 2018, , .	0.3	3
61	Electrical properties of multiphase composites based on carbon nanotubes and an optimized clay content. AIP Conference Proceedings, 2016, , .	0.3	2
62	Self-sensing nanocomposites in automotive/aeronautic field. Materials Today: Proceedings, 2021, 34, 125-127.	0.9	2
63	Thermal conductivity of epoxy nanocomposites filled with MWCNT and hydrotalcite clay: A preliminary study. , 2014, , .		1
64	Temperature effects on the electrical properties of multiphase polymer composites. , 2014, , .		0
65	Thermal investigation of tetrafunctional epoxy resin filled with different carbonaceous nanostructures. AIP Conference Proceedings, 2016, , .	0.3	0
66	Investigation on strain sensing properties of carbon-based nanocomposites for structural aircraft applications. AIP Conference Proceedings, 2016, , .	0.3	0
67	Morphological and electrical properties of epoxy-based composites reinforced with exfoliated graphite. AIP Conference Proceedings, 2016, , .	0.3	0
68	Nanocomposites conductivity point measurement using Tunneling AFM (TUNA). MATEC Web of Conferences, 2018, 233, 00022.	0.1	0
69	Electrical characterization of aeronautical nanocomposites supported by Tunneling AFM (TUNA). MATEC Web of Conferences, 2018, 233, 00023.	0.1	0
70	Investigation of Electrical Properties of Graphene-Based Nanocomposites Supported by Tunnelling AFM (TUNA). Lecture Notes in Electrical Engineering, 2020, , 375-387.	0.3	0