

# Mechanical damage and strain in carbon fiber thermoplastic matrix electrical resistivity measurement

Polymer Composites

23, 425-432

DOI: [10.1002/pc.10444](https://doi.org/10.1002/pc.10444)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Quantitative damage detection in CFRP composites. <i>Composites Science and Technology</i> , 2003, 63, 1411-1422.	3.8	71
2	Self-sensing of Damage and Strain in Carbon Fiber Polymer-Matrix Structural Composites by Electrical Resistance Measurement. <i>Polymers and Polymer Composites</i> , 2003, 11, 515-525.	1.0	37
3	Identifying Delamination in Cross-ply and Quasi-isotropic Beams of CFRP by a Standardized Electrical Resistance Method. <i>Polymers and Polymer Composites</i> , 2004, 12, 75-85.	1.0	8
4	Electric Resistance Change Method for Cure/Strain/Damage Monitoring of CFRP Laminates. <i>Key Engineering Materials</i> , 2004, 270-273, 1812-1820.	0.4	12
5	Time-dependent uniaxial piezoresistive behavior of high-density polyethylene/short carbon fiber conductive composites. <i>Journal of Materials Research</i> , 2004, 19, 2625-2634.	1.2	57
6	Electrical Resistance Change of Unidirectional CFRP Due to Applied Load. <i>JSME International Journal Series A-Solid Mechanics and Material Engineering</i> , 2004, 47, 357-364.	0.4	109
7	Self-sensing of damage in carbon fiber polymer-matrix composite by measurement of the electrical resistance or potential away from the damaged region. <i>Journal of Materials Science</i> , 2005, 40, 6463-6472.	1.7	38
8	Effects of composite lay-up configuration and thickness on the damage self-sensing behavior of carbon fiber polymer-matrix composite. <i>Journal of Materials Science</i> , 2005, 40, 561-568.	1.7	22
9	Self-sensing of flexural strain and damage in carbon fiber polymer-matrix composite by electrical resistance measurement. <i>Carbon</i> , 2006, 44, 2739-2751.	5.4	172
10	Comparative evaluation of the electrical configurations for the two-dimensional electric potential method of damage monitoring in carbon fiber polymer-matrix composite. <i>Smart Materials and Structures</i> , 2006, 15, 1332-1344.	1.8	52
11	Comparison of the Electrical Resistance and Potential Techniques for the Self-sensing of Damage in Carbon Fiber Polymer-Matrix Composites. <i>Journal of Intelligent Material Systems and Structures</i> , 2006, 17, 853-861.	1.4	29
12	Damage detection using self-sensing concepts. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2007, 221, 509-520.	0.7	49
13	Strain and Damage Monitoring of CFRP Laminates by Means of Electrical Resistance Measurement. <i>Journal of Solid Mechanics and Materials Engineering</i> , 2007, 1, 947-974.	0.5	41
14	Room temperature resistance relaxation behavior for carbon black filled conductive polymer composites. <i>Journal of Applied Polymer Science</i> , 2008, 107, 3083-3089.	1.3	2
15	Percolation transition and hydrostatic piezoresistance for carbon black filled poly(methylvinylsiloxane) vulcanizates. <i>Carbon</i> , 2008, 46, 679-691.	5.4	41
16	Electrical Resistivity, Pulse Velocity, and Compressive Properties of Carbon Fiber-Reinforced Cement Mortar. <i>Journal of Materials in Civil Engineering</i> , 2008, 20, 93-101.	1.3	40
17	Time dependent piezoresistive behavior of polyvinylidene fluoride/carbon nanotube conductive composite. <i>Materials Letters</i> , 2009, 63, 1771-1773.	1.3	29
18	Electrical Resistance Change of CFRP under a Compression Load. <i>Journal of Solid Mechanics and Materials Engineering</i> , 2010, 4, 864-874.	0.5	16

#	ARTICLE	IF	CITATIONS
19	Resistiveâ€“conductive transitions in the time-dependent piezoresponse of PVDF-MWCNT nanocomposites. <i>Polymer Journal</i> , 2010, 42, 567-574.	1.3	14
20	Carbon materials for structural self-sensing, electromagnetic shielding and thermal interfacing. <i>Carbon</i> , 2012, 50, 3342-3353.	5.4	507
21	Strain and Damage Sensing in Polymer Composites and Nanocomposites with Conducting Fillers. <i>Procedia Engineering</i> , 2015, 114, 590-597.	1.2	19
22	Sensitive conductive polymer composites based on polylactic acid filled with multiwalled carbon nanotubes for chemical vapor sensing. <i>Synthetic Metals</i> , 2016, 215, 216-222.	2.1	24
23	Self-sensing structural composites in aerospace engineering. , 2016, , 295-331.		3
25	First report of capacitance-based self-sensing and in-plane electric permittivity of carbon fiber polymer-matrix composite. <i>Carbon</i> , 2018, 140, 413-427.	5.4	36
26	Investigation the conductivity of carbon fiber composites focusing on measurement techniques under dynamic and static loads. <i>Journal of Materials Research and Technology</i> , 2019, 8, 4863-4893.	2.6	52
28	Nonlinear Piezoresistive Behavior of Plain-Woven Carbon Fiber Reinforced Polymer Composite Subjected to Tensile Loading. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1366.	1.3	11
29	Electret behavior of carbon fiber structural composites with carbon and polymer matrices, and its application in self-sensing and self-powering. <i>Carbon</i> , 2020, 160, 361-389.	5.4	31
30	Reverse piezo-resistivity of 3D printed continuous carbon fiber/PA6 composites in a low stress range. <i>Advanced Composite Materials</i> , 2021, 30, 380-395.	1.0	13
31	Piezoresistive sensor composites with oriented 1D structure of conductive filler. <i>Polymer Journal</i> , 2016, 38, 192-204.	0.3	0
32	Nonlinear behavior mechanism of change in electrical resistance on 3D printed carbon fiber / PA6 composites during cyclic tests. <i>Advanced Composite Materials</i> , 2023, 32, 1-20.	1.0	5
33	Strain monitoring in reduced graphene oxideâ€“coated glass fiber/epoxy composite. <i>Polymer Composites</i> , 2022, 43, 7913-7927.	2.3	4
34	Extrusion-Based 3D Printing of Stretchable Electronic Coating for Condition Monitoring of Suction Cups. <i>Micromachines</i> , 2022, 13, 1606.	1.4	5