Keiichi Shirasu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2255865/publications.pdf

Version: 2024-02-01

43	768	567144	526166
papers	citations	15 h-index	27 g-index

43	43	43	711
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanotube fracture during the failure of carbon nanotube/alumina composites. Carbon, 2011, 49, 3709-3716.	5.4	105
2	Negative axial thermal expansion coefficient of carbon nanotubes: Experimental determination based on measurements of coefficient of thermal expansion for aligned carbon nanotube reinforced epoxy composites. Carbon, 2015, 95, 904-909.	5.4	89
3	Structureâ€“property relationships in thermally-annealed multi-walled carbon nanotubes. Carbon, 2014, 66, 219-226.	5.4	74
4	Potential use of CNTs for production of zero thermal expansion coefficient composite materials: An experimental evaluation of axial thermal expansion coefficient of CNTs using a combination of thermal expansion and uniaxial tensile tests. Composites Part A: Applied Science and Manufacturing, 2017, 95, 152-160.	3.8	71
5	Tensile mechanical properties of carbon nanotube/epoxy composite fabricated by pultrusion of carbon nanotube spun yarn preform. Composites Part A: Applied Science and Manufacturing, 2014, 62, 32-38.	3.8	49
6	Microstructureâ€“property relationships in pressureless-sintered carbon nanotube/alumina composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 617, 179-186.	2.6	38
7	How do the mechanical properties of carbon nanotubes increase? An experimental evaluation and modeling of the engineering tensile strength of individual carbon nanotubes. Materials Research Express, 2019, 6, 055047.	0.8	32
8	Amine/epoxy stoichiometric ratio dependence of crosslinked structure and ductility in<scp>amineâ€cured</scp>epoxy thermosetting resins. Journal of Applied Polymer Science, 2021, 138, 50542.	1.3	29
9	Thermoset resin curing simulation using quantum-chemical reaction path calculation and dissipative particle dynamics. Soft Matter, 2021, 17, 6707-6717.	1.2	23
10	Development of large-movements and high-force electrothermal bimorph actuators based on aligned carbon nanotube reinforced epoxy composites. Sensors and Actuators A: Physical, 2017, 267, 455-463.	2.0	22
11	Inclined slit-based pullout method for determining interfacial strength of multi-walled carbon nanotubeâ€“alumina composites. Carbon, 2014, 78, 439-445.	5.4	19
12	Molecular Dynamics Simulations and Theoretical Model for Engineering Tensile Properties of Single-and Multi-Walled Carbon Nanotubes. Nanomaterials, 2021, 11, 795.	1.9	18
13	Uncovering the Mechanism of Size Effect on the Thermomechanical Properties of Highly Cross-Linked Epoxy Resins. Journal of Physical Chemistry B, 2022, 126, 2593-2607.	1.2	18
14	Molecular dynamics simulation of cross-linking processes and material properties for epoxy resins using first-principle calculation combined with global reaction route mapping algorithms. Chemical Physics Letters, 2021, 762, 138104.	1.2	17
15	Multiscale modeling of process-induced residual deformation on carbon-fiber-reinforced plastic laminate from quantum calculation to laminate scale finite-element analysis. Mechanics of Materials, 2022, 170, 104332.	1.7	16
16	Effects of processing conditions on microstructure, electrical conductivity and mechanical properties of MWCNT/alumina composites prepared by flocculation. Journal of the European Ceramic Society, 2015, 35, 3903-3908.	2.8	15
17	Key factors limiting carbon nanotube strength: Structural characterization and mechanical properties of multi-walled carbon nanotubes. Mechanical Engineering Journal, 2017, 4, 17-00029-17-00029.	0.2	15
18	Study on the mechanical and electrical properties of twisted CNT yarns fabricated from CNTs with various diameters. Carbon, 2021, 176, 400-410.	5.4	15

#	Article	IF	Citations
19	Relationship between microstructure and mechanical properties in acid-treated carbon nanotube-reinforced alumina composites. Journal of Materials Science, 2015, 50, 6688-6699.	1.7	12
20	Machine Learning-Assisted High-Throughput Molecular Dynamics Simulation of High-Mechanical Performance Carbon Nanotube Structure. Nanomaterials, 2020, 10, 2459.	1.9	12
21	Liquidâ€Phase Assisted Engineering of Highly Strong SiC Composite Reinforced by Multiwalled Carbon Nanotubes. Advanced Science, 2020, 7, 2002225.	5.6	11
22	Experimental and numerical study on open-hole tension/compression properties of carbon-fiber-reinforced thermoplastic laminates. Journal of Composite Materials, 2022, 56, 2211-2225.	1.2	10
23	Effects of high-temperature thermal annealing on properties of aligned multi-walled carbon nanotube sheets and their composites. Composite Interfaces, 2020, 27, 569-586.	1.3	8
24	Enhanced tribological performance of alumina composites reinforced with acid-treated carbon nanotubes under water lubrication. Diamond and Related Materials, 2020, 101, 107657.	1.8	7
25	Epitaxial pyrolytic carbon coatings templated with defective carbon nanotube cores for structural annealing and tensile property improvement. Journal of Materials Science, 2021, 56, 19015-19028.	1.7	7
26	Stack-coating of multishell carbon layers templated with carbon nanotubes. Materials Today Communications, 2019, 21, 100608.	0.9	5
27	Effect of carbon fibres on the static and fatigue mechanical properties of fibre metal laminates. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 1461-1472.	1.7	5
28	Lap-shear strength and fracture behavior of CFRP/3D-printed titanium alloy adhesive joint prepared by hot-press-aided co-bonding. International Journal of Adhesion and Adhesives, 2022, 117, 103169.	1.4	5
29	Open-hole tensile properties of 3D-printed continuous carbon-fiber-reinforced thermoplastic laminates: Experimental study and multiscale analysis. Journal of Thermoplastic Composite Materials, 2023, 36, 2836-2861.	2.6	5
30	Effects of structural defects on strength and fracture properties of multi-walled carbon nanotubes. Transactions of the JSME (in Japanese), 2017, 83, 16-00283-16-00283.	0.1	4
31	Effect of graphitization on mechanical properties of untwisted carbon nanotube yarn and its strength development mechanism. Transactions of the JSME (in Japanese), 2018, 84, 17-00585-17-00585.	0.1	4
32	Effect of Surface Modification of Carbon Nanotube on the Strength Properties of Carbon Nanotube/Alumina Composites and Their Fracture Process. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2011, 77, 774-778.	0.2	2
33	Temperature dependence of axial thermal expansion coefficient of multi-walled carbon nanotubes (A) Tj ETQq1 1 0.784314 rgBT /Ove	0.1	2
34	Evaluation of Mechanical Properties and Microstructures of Multi-Walled Carbon Nanotube/Alumina Composites Prepared by Pressureless Sintering. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2013, 79, 764-768.	0.2	1
35	Application of Aligned Carbon Nanotube-Reinforced Polymer Composite to Electrothermal Actuator. , 2016, , .		1
36	Preparation and performance evaluation of electrothermal actuators using aligned carbon nanotube reinforced epoxy composites. Mechanical Engineering Journal, 2016, 3, 15-00607-15-00607.	0.2	1

#	Article	IF	Citations
37	Mechanical and thermal expansion properties of aligned carbon nanotube reinforced epoxy composites. Mechanical Engineering Journal, 2019, 6, 19-00012-19-00012.	0.2	1
38	Preparation of Carbon Nanotube Reinforced Alumina Composites and Examination of Their Fracture Mechanisms. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2011, 77, 1041-1045.	0.2	0
39	Effects of Annealing Treatment of Carbon Nanotube on the Fracture Properties of Carbon Nanotube/Alumina Composites. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2013, 79, 706-710.	0.2	0
40	Mechanical and Fracture Properties of Carbon Nanotubes. , 0, , .		0
41	112 Preparation of Carbon Nanotube Reinforced Alumina Composites and Examination of Their Fracture Mechanisms. The Proceedings of the Materials and Processing Conference, 2010, 2010.18, _112-1_-_112-5_.	0.0	0
42	191 Observation of the Carbon Nanotube/Alumina Composites Fracture Process and Improvement of Their Mechanical Properties. The Proceedings of Conference of Tohoku Branch, 2011, 2011.46, 184-185.	0.0	0
43	Tensile properties and fracture behavior of carbon nanotube-sheets/carbon fibers epoxy-impregnated bundle composites. Polymers and Polymer Composites, 2022, 30, 096739112211094.	1.0	0