Tomo Takeda

List of Publications by Year
in descending order

74 papers	1,201 citations	394421 19 h-index	414414 32 g-index
74 all docs	74 docs citations	74 times ranked	848 citing authors

#	Article	IF	Citations
1	Modeling and characterization of the electrical conductivity of carbon nanotube-based polymer composites. Polymer, 2011, 52, 3852-3856.	3.8	193
2	Electrical resistance-based strain sensing in carbon nanotube/polymer composites under tension: Analytical modeling and experiments. Composites Science and Technology, 2012, 72, 1678-1682.	7.8	92
3	Fracture behavior and crack sensing capability of bonded carbon fiber composite joints with carbon nanotube-based polymer adhesive layer under Mode I loading. Composites Science and Technology, 2017, 146, 26-33.	7.8	65
4	Electrical resistance change and crack behavior in carbon nanotube/polymer composites under tensile loading. Composites Part B: Engineering, 2012, 43, 39-43.	12.0	59
5	Deformation and progressive failure behavior of woven-fabric-reinforced glass/epoxy composite laminates under tensile loading at cryogenic temperatures. Composites Science and Technology, 2005, 65, 1691-1702.	7.8	54
6	Delamination growth mechanisms in woven glass fiber reinforced polymer composites under Mode II fatigue loading at cryogenic temperatures. Composites Science and Technology, 2009, 69, 1904-1911.	7.8	52
7	Effectiveness of flame-based surface treatment for adhesive bonding of carbon fiber reinforced epoxy matrix composites. Composites Part A: Applied Science and Manufacturing, 2019, 119, 30-37.	7.6	38
8	Tensile Characterization of Carbon Nanotube-Reinforced Polymer Composites at Cryogenic Temperatures: Experimens and Multiscale Simulations. Materials Transactions, 2009, 50, 436-445.	1.2	35
9	Three-dimensional thermoelastic analysis of cracked plain weave glass/epoxy composites at cryogenic temperatures. Composites Science and Technology, 2004, 64, 2353-2362.	7.8	34
10	Mechanical Characterization of CFRP Woven Laminates between Room Temperature and 4K. JSME International Journal Series A-Solid Mechanics and Material Engineering, 2003, 46, 359-364.	0.4	30
11	Interlaminar fracture characterization of woven glass/epoxy composites under mixed-mode II/III loading conditions at cryogenic temperatures. Engineering Fracture Mechanics, 2012, 96, 615-625.	4.3	28
12	Cryogenic delamination growth in woven glass/epoxy composite laminates under mixed-mode I/II fatigue loading. Composites Science and Technology, 2011, 71, 647-652.	7.8	26
13	Micromechanics model for three-dimensional effective elastic properties of composite laminates with ply wrinkles. Composite Structures, 2018, 189, 419-427.	5.8	26
14	Effect of damage on the interlaminar shear properties of hybrid composite laminates at cryogenic temperatures. Composite Structures, 2010, 93, 124-131.	5.8	25
15	Stress Intensity Factors for Woven Glass/Epoxy Laminates with Cracks at Cryogenic Temperatures. Mechanics of Advanced Materials and Structures, 2004, 11, 109-132.	2.6	24
16	Short beam interlaminar shear behavior and electrical resistance-based damage self-sensing of woven carbon/epoxy composite laminates in a cryogenic environment. Journal of Composite Materials, 2014, 48, 119-128.	2.4	23
17	Fracture behaviour of cracked carbon nanotubeâ€based polymer composites: Experiments and finite element simulations. Fatigue and Fracture of Engineering Materials and Structures, 2010, 33, 87-93.	3.4	22
18	Mixed-mode interlaminar fracture and damage characterization in woven fabric-reinforced glass/epoxy composite laminates at cryogenic temperatures using the finite element and improved test methods. Engineering Fracture Mechanics, 2008, 75, 5101-5112.	4.3	21

#	Article	IF	Citations
19	Cryogenic mechanical properties of woven glass/epoxy composites modified with multi-walled carbon nanotube and n-butyl glycidyl ether under tensile static and cyclic loadings. Cryogenics, 2013, 58, 33-37.	1.7	20
20	Interlaminar shear properties of composite insulation systems for fusion magnets at cryogenic temperatures. Cryogenics, 2010, 50, 36-42.	1.7	19
21	Mechanical response of nonwoven polyester fabric/epoxy composites at cryogenic temperatures. Cryogenics, 2012, 52, 564-568.	1.7	18
22	Crack growth characteristics of carbon nanotube-based polymer composites subjected to cyclic loading. Engineering Fracture Mechanics, 2011, 78, 3102-3110.	4.3	17
23	Analysis of Mode I Interlaminar Fracture and Damage Behavior of GFRP Woven Laminates at Cryogenic Temperatures. Journal of Composite Materials, 2005, 39, 2053-2066.	2.4	16
24	Cryogenic through-thickness tensile characterization of plain woven glass/epoxy composite laminates using cross specimens: Experimental test and finite element analysis. Composites Part B: Engineering, 2015, 78, 42-49.	12.0	16
25	Three-dimensional stress analysis of cracked satin woven carbon fiber reinforced/polymer composites under tension at cryogenic temperatures. Cryogenics, 2012, 52, 784-792.	1.7	14
26	Nonlinear electromechanical fields and localized polarization switching of piezoelectric macrofiber composites. Journal of Mechanics of Materials and Structures, 2011, 6, 1089-1102.	0.6	13
27	Fatigue delamination growth in woven glass/epoxy composite laminates under mixed-mode II/III loading conditions at cryogenic temperatures. Cryogenics, 2013, 58, 55-61.	1.7	12
28	Flexural stiffness variations of woven carbon fiber composite/shape memory polymer hybrid layered beams. Journal of Composite Materials, 2015, 49, 209-216.	2.4	12
29	Controllability of cryogenic Mode I delamination behavior in woven fabric composites using piezoelectric actuators. Engineering Fracture Mechanics, 2013, 102, 171-179.	4.3	11
30	Crystal-to-crystal structural transformation of hydrogen-bonding molecular crystals of (imidazolium)(3-hydroxy-2-quinoxalinecarboxylate) through H₂O adsorptionâ€“desorption. CrystEngComm, 2015, 17, 5962-5969.	2.6	11
31	Thermoelastic analysis of cracked woven GFRP laminates at cryogenic temperatures. Cryogenics, 2002, 42, 451-462.	1.7	10
32	Flexural fatigue performance and electrical resistance response of carbon nanotube-based polymer composites at cryogenic temperatures. Cryogenics, 2014, 59, 44-48.	1.7	10
33	Electronic and crystal structures of 1,2,3-triazole-fused p-benzoquinone derivatives. CrystEngComm, 2017, 19, 910-917.	2.6	10
34	Experimental characterization of dynamic crack growth behavior in CFRP adhesive interface. Advanced Composite Materials, 2018, 27, 397-411.	1.9	10
35	Mixed-mode I/III fatigue delamination growth in woven glass/epoxy composite laminates at cryogenic temperatures. Journal of Composite Materials, 2014, 48, 1251-1259.	2.4	9
36	Fatigue failure and electrical resistance behaviors of carbon nanotube-based polymer composites under uniaxial tensionâ€“tension loading in a cryogenic environment. Journal of Composite Materials, 2015, 49, 457-463.	2.4	9

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37	Vacuum crack growth behavior of austenitic stainless steel under fatigue loading. Strength of Materials, 2011, 43, 532-536.	0.5	8
38	Numerical and experimental study on the response of multi-walled carbon nanotube/polymer composites under compressive loading. International Journal of Materials and Structural Integrity, 2013, 7, 4.	0.1	8
39	Piezoelectric control of delamination response in woven fabric composites under mode I loading. Acta Mechanica, 2013, 224, 1315-1322.	2.1	8
40	Thermal-mechanical Analysis of Satin Weave CFRP Composites with Cracks at Cryogenic Temperatures. Journal of Reinforced Plastics and Composites, 2009, 28, 1319-1337.	3.1	7
41	Cryogenic Interlaminar Fracture Properties of Woven Glass/Epoxy Composite Laminates Under Mixed-Mode I/III Loading Conditions. Applied Composite Materials, 2013, 20, 587-599.	2.5	7
42	Deformation and failure of hybrid beams consisting of woven carbon fiber composite and shape memory polymer layers under flexural loading. Journal of Sandwich Structures and Materials, 2016, 18, 113-128.	3.5	7
43	Strength and bonding characteristics of adhesive joints with surface-treated titanium-alloy substrates. Journal of Adhesion Science and Technology, 2018, 32, 553-571.	2.6	7
44	Tensile Behavior and Damage/Acoustic Emission Characteristics of Woven Glass Fiber Reinforced/Epoxy Composite Laminates at Cryogenic Temperatures. AIP Conference Proceedings, 2006, , .	0.4	6
45	Numerical and experimental evaluation of cryogenic tensile strength of woven fabric-reinforced glass/epoxy composites using open hole specimens. Journal of Mechanics of Materials and Structures, 2011, 6, 545-556.	0.6	6
46	Electromechanical bending response of PZT/CNT-based polymer laminates subjected to concentrated load. International Journal of Mechanics and Materials in Design, 2014, 10, 193-197.	3.0	5
47	Microfabrication and Characterization of Solid Surfaces Patterned with Enzymes or Antigenâ€"Antibodies by Scanning Electrochemical Microscopy. ACS Symposium Series, 1997, , 202-209.	0.5	4
48	Cryogenic mechanical response of multilayer satin weave CFRP composites with cracks. Mechanics of Composite Materials, 2008, 44, 331-340.	1.4	4
49	Crack and Electrical Resistance Behaviors of Carbon Nanotube-Based Polymer Composites under Mixed-Mode I/II Loading. Materials Transactions, 2013, 54, 1105-1109.	1.2	4
50	Experimental Characterization of Crack Growth Behavior in Adhesive Interface under Impact Loading. Key Engineering Materials, 2016, 715, 116-121.	0.4	4
51	Silica deposition treatment of 2024 aluminum alloy for improved coating adhesion. International Journal of Adhesion and Adhesives, 2021, 105, 102786.	2.9	4
52	Interlaminar Shear and Electrical Resistance Responses of Woven-Carbon-Fiber-Reinforced-Polymer Composite Laminates at Cryogenic Temperatures From Cyclic Short Beam Shear Tests. Journal of Testing and Evaluation, 2014, 42, 573-580.	0.7	4
53	Loading Rate-Dependent Fracture Properties and Electrical Resistance-Based Crack Growth Monitoring of Polycarbonate Reinforced with Carbon Nanotubes Under Tension. Journal of Testing and Evaluation, 2015, 43, 115-122.	0.7	4
54	Analysis of mixed-mode interlaminar fracture and damage behavior of GFRP woven laminates at cryogenic temperatures. Cryogenics, 2009, 49, 80-83.	1.7	3

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55	Strength characterization of woven glass/epoxy composites under tensile fatigue loading at cryogenic temperatures using open hole specimens. Journal of Composite Materials, 2013, 47, 2885-2893.	2.4	3
56	Strength enhancement of adhesively bonded Ti-6Al-4V alloy joints by flame-based surface treatment. Journal of Adhesion, 2022, 98, 1016-1035.	3.0	3
57	Fatigue Crack Growth Behavior of Metastable Austenitic Stainless Steel in Cryogenic High Magnetic Field Environments. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 1863-1867.	2.2	2
58	Electromechanical response of polycarbonate-CNT/PZT laminates subjected to cyclic bending. International Journal of Materials and Product Technology, 2016, 52, 276.	0.2	2
59	Evaluation of Tensile Strength of Woven Carbon/Epoxy Composite Laminates at Cryogenic Temperatures Using the Open Hole Specimens. Journal of Testing and Evaluation, 2011, 39, 690-695.	0.7	2
60	FRACTURE MECHANICS ANALYSIS OF MULTI-LAYER PLAIN WEAVE FABRIC LAMINATES WITH TRANSVERSE CRACKS AT CRYOGENIC TEMPERATURES. International Journal of Computational Methods, 2004, 01, 151-169.	1.3	1
61	The Thermo-Mechanical Problem of Internal and Edge Cracks in Multi-Layered Woven GFRP Laminates at Cryogenic Temperatures. AIP Conference Proceedings, 2004, , .	0.4	1
62	THERMAL-MECHANICAL RESPONSE OF CRACKED SATIN WEAVE CFRP COMPOSITES AT CRYOGENIC TEMPERATURES. AIP Conference Proceedings, 2008, , .	0.4	1
63	Cryogenic Behavior of Cracks in Satin Woven CFRP Laminates under Tensile Loading. Journal of Solid Mechanics and Materials Engineering, 2009, 3, 22-37.	0.5	1
64	Mechanical responses of additively manufactured MoSiBTiC alloy under tensile and compressive loadings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 839, 142848.	5.6	1
65	Damage Development in Hybrid Composite Laminates under Three-Point Bending at Cryogenic Temperatures. Key Engineering Materials, 0, 452-453, 565-568.	0.4	0
66	BENDING RESPONSE OF CARBON NANOTUBE-BASED POLYMER COMPOSITES AT CRYOGENIC TEMPERATURES. , 2010, , .		0
67	Electromechanical filed concentrations and polarization switching due to interdigitated electrodes in piezoelectric macro-fiber composites under tension. , 2011, , .		0
68	Modeling and Characterization of Strain Sensing in CNT-Based Polymer Composites Under Tensile Loading. , 2012, , .		0
69	Interlaminar Delamination Fracture and Fatigue of Woven Glass Fiber Reinforced Polymer Composite Laminates at Cryogenic Temperatures. , 2013, , 115-125.		0
70	Multiscale Modeling and Characterization of Mechanical and Physical Properties for Carbon Nanotube-based Polymer Composites. Materia Japan, 2013, 52, 14-16.	0.1	0
71	CRYOMECHANICS AND CRACK BEHAVIOUR OF WOVEN POLYMER MATRIX COMPOSITES. Computational and Experimental Methods in Structures, 2015, , 159-178.	0.3	0
72	Effects of Loading Rate on the Crack Growth Behavior of Adhesively Bonded CFRP Joints with a Structural Film Adhesive. Zairyo/Journal of the Society of Materials Science, Japan, 2018, 67, 438-444.	0.2	0

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73	214 Mechanical Characterization of CFRP Woven Laminates Between Room Temperature and 4 K. The Proceedings of the JSME Materials and Processing Conference (M&P), 2002, 10.1, 445-450.	0.1	0
74	Tensile Deformation and Progressive Failure Behavior of Woven-Fabric GFRP Laminates at Cryogenic Temperatures. , 2004, , .		0