Konstantinos Tserpes

List of Publications by Year
in descending order

99	3,098	172457 29	168389 53
papers	citations	h-index	g-index

103	103	103	2007
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Finite element modeling of single-walled carbon nanotubes. Composites Part B: Engineering, 2005, 36, 468-477.	12.0	481
2	Strength prediction of bolted joints in graphite/epoxy composite laminates. Composites Part B: Engineering, 2002, 33, 521-529.	12.0	231
3	Multi-scale modeling of tensile behavior of carbon nanotube-reinforced composites. Theoretical and Applied Fracture Mechanics, 2008, 49, 51-60.	4.7	154
4	A three-dimensional progressive damage model for bolted joints in composite laminates subjected to tensile loading. Fatigue and Fracture of Engineering Materials and Structures, 2001, 24, 663-675.	3.4	125
5	The effect of Stoneâ€“Wales defect on the tensile behavior and fracture of single-walled carbon nanotubes. Composite Structures, 2007, 79, 581-589.	5.8	125
6	The effects of manufacturing-induced and in-service related bonding quality reduction on the mode-I fracture toughness of composite bonded joints for aeronautical use. Composites Part B: Engineering, 2013, 45, 556-564.	12.0	124
7	A progressive fracture model for carbon nanotubes. Composites Part B: Engineering, 2006, 37, 662-669.	12.0	85
8	Mode-I, mode-II and mixed-mode I+II fracture behavior of composite bonded joints: Experimental characterization and numerical simulation. Composites Part B: Engineering, 2015, 78, 459-468.	12.0	78
9	Fatigue damage accumulation and residual strength assessment of CFRP laminates. Composite Structures, 2004, 63, 219-230.	5.8	77
10	Parametric numerical evaluation of the effective elastic properties of carbon nanotube-reinforced polymers. Composite Structures, 2013, 99, 366-374.	5.8	74
11	Fracture toughness and shear behavior of composite bonded joints based on a novel aerospace adhesive. Composites Part B: Engineering, 2012, 43, 240-248.	12.0	73
12	Analytical calculation of local buckling and post-buckling behavior of isotropic and orthotropic stiffened panels. Thin-Walled Structures, 2011, 49, 422-430.	5.3	71
13	Evaluation of porosity effects on the mechanical properties of carbon fiber-reinforced plastic unidirectional laminates by X-ray computed tomography and mechanical testing. Journal of Composite Materials, 2016, 50, 2087-2098.	2.4	71
14	Equivalent beams for carbon nanotubes. Computational Materials Science, 2008, 43, 345-352.	3.0	70
15	Degradation of Mode-I Fracture Toughness of CFRP Bonded Joints Due to Release Agent and Moisture Pre-Bond Contamination. Journal of Adhesion, 2014, 90, 156-173.	3.0	58
16	Modelling of fatigue damage progression and life of CFRP laminates. Fatigue and Fracture of Engineering Materials and Structures, 2003, 26, 37-47.	3.4	56
17	Adhesive bonding of composite aircraft structures: Challenges and recent developments. Science China: Physics, Mechanics and Astronomy, 2014, 57, 2-11.	5.1	55
18	Finite element modeling of carbon nanotube agglomerates in polymers. Composite Structures, 2015, 132, 1141-1148.	5.8	51

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19	A review on failure theories and simulation models for adhesive joints. Journal of Adhesion, 2022, 98, 1855-1915.	3.0	46
20	Progressive damage modelling of bonded composite repairs. Theoretical and Applied Fracture Mechanics, 2005, 43, 189-198.	4.7	45
21	Mesomechanical analysis of non-crimp fabric composite structural parts. Composite Structures, 2009, 87, 358-369.	5.8	45
22	Efficient progressive damage modeling of hybrid composite/titanium bolted joints. Composites Part A: Applied Science and Manufacturing, 2014, 56, 51-63.	7.6	40
23	Initiation and progression of composite patch debonding in adhesively repaired cracked metallic sheets. Composite Structures, 2007, 81, 303-311.	5.8	39
24	Strain and damage monitoring in CFRP fuselage panels using fiber Bragg grating sensors. Part II: Mechanical testing and validation. Composite Structures, 2014, 107, 737-744.	5.8	38
25	Quality assessment of porous CFRP specimens using X-ray Computed Tomography data and Artificial Neural Networks. Composite Structures, 2018, 192, 327-335.	5.8	36
26	Progressive damage modelling of 3D fully interlaced woven composite materials. Fatigue and Fracture of Engineering Materials and Structures, 2014, 37, 696-706.	3.4	34
27	A numerical methodology for simulating the mechanical behavior of CFRP laminates containing pores using X-ray computed tomography data. Composites Part B: Engineering, 2016, 102, 122-133.	12.0	33
28	Outlook on ecologically improved composites for aviation interior and secondary structures. CEAS Aeronautical Journal, 2018, 9, 533-543.	1.7	33
29	Strength of graphenes containing randomly dispersed vacancies. Acta Mechanica, 2012, 223, 669-678.	2.1	31
30	Strain and damage monitoring in CFRP fuselage panels using fiber Bragg grating sensors. Part I: Design, manufacturing and impact testing. Composite Structures, 2014, 107, 726-736.	5.8	29
31	Crack stopping in composite adhesively bonded joints through corrugation. Theoretical and Applied Fracture Mechanics, 2016, 83, 152-157.	4.7	25
32	Adaptative Progressive Damage Modeling for Large-scale Composite Structures. International Journal of Damage Mechanics, 2012, 21, 441-462.	4.2	24
33	A detailed experimental study of the effects of pre-bond contamination with a hydraulic fluid, thermal degradation, and poor curing on fracture toughness of composite-bonded joints. Journal of Adhesion Science and Technology, 2014, 28, 1865-1880.	2.6	24
34	Prediction of yield strength of MWCNT/PP nanocomposite considering the interphase and agglomeration. Composite Structures, 2017, 168, 657-662.	5.8	24
35	Effect of hygrothermal ageing on the interlaminar shear strength of carbon fiber-reinforced rosin-based epoxy bio-composites. Composite Structures, 2019, 226, 111211.	5.8	24
36	Continuum modeling of carbon nanotube-based super-structures. Composite Structures, 2009, 91, 131-137.	5.8	21

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37	Fatigue crack growth characterization in adhesive CFRP joints. Composite Structures, 2019, 207, 531-536.	5.8	21
38	Towards selective laser paint stripping using shock waves produced by laser-plasma interaction for aeronautical applications on AA 2024 based substrates. Optics and Laser Technology, 2021, 141, 107095.	4.6	19
39	Monitoring of compressive behaviour of stiffened composite panels using embedded fibre optic and strain gauge sensors. International Journal of Structural Integrity, 2017, 8, 134-150.	3.3	18
40	Experimental study of the effect of preâ€bond contamination with deâ€icing fluid and ageing on the fracture toughness of composite bonded joints. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 1581-1591.	3.4	18
41	Numerical simulation of quasi-static and fatigue debonding growth in adhesively bonded composite joints containing bolts as crack stoppers. Journal of Adhesion, 2021, 97, 611-633.	3.0	18
42	The effect of imperfect bonding on the pull-out behavior of non-crimp fabric Pi-shaped joints. Computational Materials Science, 2011, 50, 1372-1380.	3.0	17
43	Electrical Conductivity and Electromagnetic Shielding Effectiveness of Bio-Composites. Journal of Composites Science, 2020, 4, 28.	3.0	16
44	Towards a Circular Economy in the Aviation Sector Using Eco-Composites for Interior and Secondary Structures. Results and Recommendations from the EU/China Project ECO-COMPASS. Aerospace, 2021, 8, 131.	2.2	16
45	Experimental and numerical investigation of the influence of imperfect bonding on the strength of NCF double-lap shear joints. Composite Structures, 2010, 92, 1673-1682.	5.8	15
46	Multiscale finite element prediction of shear and flexural properties of porous CFRP laminates utilizing X-ray CT data. Theoretical and Applied Fracture Mechanics, 2018, 97, 303-313.	4.7	14
47	Tensile behaviour of carbon nanotube/polypropylene composite material. Plastics, Rubber and Composites, 2014, 43, 330-336.	2.0	13
48	Influence of Embedding Fiber Optical Sensors in CFRP Film Adhesive Joints on Bond Strength. Sensors, 2020, 20, 1665.	3.8	12
49	Role of intertube spacing in the pullout forces of double-walled carbon nanotubes. Materials & Design, 2007, 28, 2197-2201.	5.1	11
50	Buckling analysis of pristine and defected graphene. Mechanics Research Communications, 2015, 64, 50-56.	1.8	11
51	Experimental Investigation of the Effect of Pre-Bond Contamination with Fingerprints and Ageing on the Fracture Toughness of Composite Bonded Joints. Applied Composite Materials, 2019, 26, 1001-1019.	2.5	11
52	Fatigue crack growth simulation in adhesively bonded composite joints. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 1430-1440.	3.4	11
53	Experimental investigation of the effect of hygrothermal aging on the mechanical performance of carbon nanotube/PA6 nanocomposite. Plastics, Rubber and Composites, 2017, 46, 239-244.	2.0	10
54	Strength of Pi shaped non-crimp fabric adhesively bonded joints. Plastics, Rubber and Composites, 2012, 41, 100-106.	2.0	9

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55	A Multi-Scale Modeling Approach for Simulating Crack Sensing in Polymer Fibrous Composites Using Electrically Conductive Carbon Nanotube Networks. Part II: Meso- and Macro-Scale Analyses. Aerospace, 2018, 5, 106.	2.2	9
56	Adhesive Bonding of Aircraft Structures. , 2020, , 337-357.		9
57	A numerical methodology for optimizing the geometry of composite structural parts with regard to strength. Composites Part B: Engineering, 2015, 68, 176-184.	12.0	8
58	Determination of adhesion strength of pre-bond contaminated composite-to-metal bonded joints by centrifuge tests. Composites Part B: Engineering, 2018, 147, 114-121.	12.0	8
59	Experimental characterization of the hygrothermal ageing effects on the bulk mechanical properties and lap-shear strength of the novel bio-based epichlorohydrin/cardanol adhesive. Journal of Adhesion, 2022, 98, 49-67.	3.0	8
60	Production of a novel bio-based structural adhesive and characterization of mechanical properties. Journal of Adhesion, 2021, 97, 936-951.	3.0	8
61	Analytical and Numerical Modeling of Stress Field and Fracture in Aluminum/Epoxy Interface Subjected to Laser Shock Wave: Application to Paint Stripping. Materials, 2022, 15, 3423.	2.9	8
62	Progressive fracture analysis of planar lattices and shape-morphing Kagome-structure. Theoretical and Applied Fracture Mechanics, 2009, 51, 41-47.	4.7	7
63	Multi-scale modeling of the mechanical response of plain weave composites and cellular solids. Theoretical and Applied Fracture Mechanics, 2010, 54, 172-179.	4.7	7
64	Mechanical and Non-Destructive Study of CFRP Adhesive Bonds Subjected to Pre-Bond Thermal Treatment and De-Icing Fluid Contamination. Aerospace, 2018, 5, 36.	2.2	7
65	Numerical Simulation of Tensile Behavior of Corroded Aluminum Alloy 2024 T3 Considering the Hydrogen Embrittlement. Metals, 2018, 8, 56.	2.3	6
66	A multi-scale modeling approach for simulating crack sensing in polymer fibrous composites using electrically conductive carbon nanotube networks. Part I: Micro-scale analysis. Computational Materials Science, 2018, 154, 530-537.	3.0	6
67	Special Issue â€œECO-COMPASS: Ecological and Multifunctional Composites for Application in Aircraft Interior and Secondary Structuresâ€• Aerospace, 2019, 6, 17.	2.2	6
68	Mechanical and nanomechanical properties of MWCNT/PP nanocomposite. Frattura Ed Integrita Strutturale, 2018, 12, 73-83.	0.9	6
69	Nanoindentation testing and simulation of nanocrystalline materials. Procedia Structural Integrity, 2020, 28, 1644-1649.	0.8	6
70	Life-Cycle Analysis and Evaluation of Mechanical Properties of a Bio-Based Structural Adhesive. Aerospace, 2022, 9, 64.	2.2	6
71	The structural integrity of a novel composite adhesively bonded flap-track beam. Composite Structures, 2011, 93, 2049-2059.	5.8	5
72	Compression after impact and fatigue behavior of CFRP stiffened panels. International Journal of Structural Integrity, 2015, 6, 176-193.	3.3	5

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73	Numerical Computation of Material Properties of Nanocrystalline Materials Utilizing Three-Dimensional Voronoi Models. Metals, 2019, 9, 202.	2.3	5
74	Development of a Numerical Model to Simulate Laser-Shock Paint Stripping on Aluminum Substrates. Aerospace, 2021, 8, 233.	2.2	5
75	Effect of Water Absorption on Strength of the Aeronautical Composite Material Fiberdux HTA/6376. Key Engineering Materials, 0, 417-418, 457-460.	0.4	4
76	Numerical simulation of tensile behavior of corroded aluminum alloy 2024 T3. International Journal of Structural Integrity, 2015, 6, 451-467.	3.3	4
77	Molecular mechanics-based finite element analysis of graphene sheet and carbon nanotubes using the rebo potential. International Journal of Modeling, Simulation, and Scientific Computing, 2017, 08, 1750038.	1.4	4
78	Experimental and numerical investigation of the effects of porosity on the in-plane shear properties of CFRPs using the V-notched rail shear test method. International Journal of Material Forming, 2021, 14, 67-82.	2.0	4
79	Numerical evaluation of crack stopping mechanisms in composite bonded joints due to corrugation and bolts. MATEC Web of Conferences, 2019, 304, 01003.	0.2	4
80	Computation of mechanical, thermal and electrical properties of CNT/polymer multifunctional nanocomposites using numerical and analytical models. MATEC Web of Conferences, 2019, 304, 01013.	0.2	3
81	Modelling and Experimental Validation of the Porosity Effect on the Behaviour of Nano-Crystalline Materials. Metals, 2020, 10, 821.	2.3	3
82	Mechanical Characterization of Nanocrystalline Materials via a Finite Element Nanoindentation Model. Metals, 2021, 11, 1827.	2.3	3
83	Interval-Based Computation of the Uncertainty in the Mechanical Properties and the Failure Analysis of Unidirectional Composite Materials. Mathematical and Computational Applications, 2022, 27, 38.	1.3	3
84	Brittle or Quasi-Brittle Fracture of Engineering Materials 2016. Advances in Materials Science and Engineering, 2016, 2016, 1-2.	1.8	2
85	Parametric numerical simulation of impact response of carbon nanotube/polymer nanocomposites. Plastics, Rubber and Composites, 2016, 45, 157-165.	2.0	2
86	Synthesis and Experimental Characterization of a MWCNT-Filled Bio-Based Adhesive. Aerospace, 2021, 8, 26.	2.2	2
87	Multiscale modeling of polymers filled with MWCNTs: the effect of dispersion, waviness, interphase and agglomerations. Aircraft Engineering and Aerospace Technology, 2020, 92, 1429-1440.	1.2	2
88	Advances in Characterization and Modeling of Nanoreinforced Composites. Journal of Nanomaterials, 2016, 2016, 1-1.	2.7	1
89	CFRP Fuselage Panel Behavior Monitoring Using Fibre Optic and Resistance Sensors and Optical Contactless Measurements. Applied Mechanics and Materials, 0, 827, 51-56.	0.2	1
90	Computation of elastic moduli of nanocrystalline materials using Voronoi models of representative volume elements. MATEC Web of Conferences, 2018, 188, 02006.	0.2	1

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91	A holistic End-of-Life (EoL) Index for the quantitative impact assessment of CFRP waste recycling techniques. Manufacturing Review, 2021, 8, 18.	1.5	1
92	Characterization of Pre-bond Contamination and Aging Effects for CFRP Bonded Joints Using Reference Laboratory Methods, Mechanical Tests, and Numerical Simulation. , 2021, , 51-117.		1
93	Integrating Extended Non-destructive Testing in the LifeÂCycle Management of Bonded Productsâ€"Some Perspectives. , 2021, , 331-350.		1
94	The Effect of Pre-Bond Contamination by Thermal Degradation and De-Icing Fluid on the Tensile Strength of Scarf Composite Bonded Joints. Journal of Composites Science, 2021, 5, 168.	3.0	1
95	Nano-enabled Multifunctional Materials: Mechanical Behavior and Multi-scale Modeling. , 2020, , 193-230.		1
96	SIZE EFFECTS IN THE MECHANICAL PROPERTIES OF CARBON NANOTUBES. , 2010, , .		0
97	A parametric prediction of the Youngâ€™s modulus of polymers enhanced with ÎœWCNTs. MATEC Web of Conferences, 2018, 233, 00025.	0.2	0
98	Prediction of mechanical properties of nanocrystalline materials using Voronoi FE models of representative volume elements. MATEC Web of Conferences, 2018, 233, 00029.	0.2	0
99	Prediction of mechanical properties of porous CFRP specimens by ANNs and X-ray CT data. MATEC Web of Conferences, 2018, 188, 01002.	0.2	0