Konstantinos Tserpes

List of Publications by Year
in descending order

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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	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
2	A review on failure theories and simulation models for adhesive joints. Journal of Adhesion, 2022, 98, 1855-1915.	3.0	46
3	Life-Cycle Analysis and Evaluation of Mechanical Properties of a Bio-Based Structural Adhesive. Aerospace, 2022, 9, 64.	2.2	6
4	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
5	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
6	Production of a novel bio-based structural adhesive and characterization of mechanical properties. Journal of Adhesion, 2021, 97, 936-951.	3.0	8
7	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
8	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
9	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
10	Synthesis and Experimental Characterization of a MWCNT-Filled Bio-Based Adhesive. Aerospace, 2021, 8, 26.	2.2	2
11	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
12	Integrating Extended Non-destructive Testing in the LifeÂCycle Management of Bonded Productsâ€"Some Perspectives. , 2021, , 331-350.		1
13	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
14	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
15	Development of a Numerical Model to Simulate Laser-Shock Paint Stripping on Aluminum Substrates. Aerospace, 2021, 8, 233.	2.2	5
16	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
17	Mechanical Characterization of Nanocrystalline Materials via a Finite Element Nanoindentation Model. Metals, 2021, 11, 1827.	2.3	3
18	Influence of Embedding Fiber Optical Sensors in CFRP Film Adhesive Joints on Bond Strength. Sensors, 2020, 20, 1665.	3.8	12

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19	Electrical Conductivity and Electromagnetic Shielding Effectiveness of Bio-Composites. Journal of Composites Science, 2020, 4, 28.	3.0	16
20	Modelling and Experimental Validation of the Porosity Effect on the Behaviour of Nano-Crystalline Materials. Metals, 2020, 10, 821.	2.3	3
21	Adhesive Bonding of Aircraft Structures. , 2020, , 337-357.		9
22	Nano-enabled Multifunctional Materials: Mechanical Behavior and Multi-scale Modeling. , 2020, , 193-230.		1
23	Nanoindentation testing and simulation of nanocrystalline materials. Procedia Structural Integrity, 2020, 28, 1644-1649.	0.8	6
24	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
25	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
26	Special Issue â€œECO-COMPASS: Ecological and Multifunctional Composites for Application in Aircraft Interior and Secondary Structuresâ€• Aerospace, 2019, 6, 17.	2.2	6
27	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
28	Numerical Computation of Material Properties of Nanocrystalline Materials Utilizing Three-Dimensional Voronoi Models. Metals, 2019, 9, 202.	2.3	5
29	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
30	Fatigue crack growth simulation in adhesively bonded composite joints. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 1430-1440.	3.4	11
31	Fatigue crack growth characterization in adhesive CFRP joints. Composite Structures, 2019, 207, 531-536.	5.8	21
32	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
33	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
34	Outlook on ecologically improved composites for aviation interior and secondary structures. CEAS Aeronautical Journal, 2018, 9, 533-543.	1.7	33
35	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
36	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

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37	A parametric prediction of the Youngâ€™s modulus of polymers enhanced with ÎœWCNTs. MATEC Web of Conferences, 2018, 233, 00025.	0.2	0
38	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
39	Computation of elastic moduli of nanocrystalline materials using Voronoi models of representative volume elements. MATEC Web of Conferences, 2018, 188, 02006.	0.2	1
40	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
41	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
42	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
43	Numerical Simulation of Tensile Behavior of Corroded Aluminum Alloy 2024 T3 Considering the Hydrogen Embrittlement. Metals, 2018, 8, 56.	2.3	6
44	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
45	Mechanical and nanomechanical properties of MWCNT/PP nanocomposite. Frattura Ed Integrita Strutturale, 2018, 12, 73-83.	0.9	6
46	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
47	Prediction of yield strength of MWCNT/PP nanocomposite considering the interphase and agglomeration. Composite Structures, 2017, 168, 657-662.	5.8	24
48	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
49	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
50	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
51	Brittle or Quasi-Brittle Fracture of Engineering Materials 2016. Advances in Materials Science and Engineering, 2016, 2016, 1-2.	1.8	2
52	Advances in Characterization and Modeling of Nanoreinforced Composites. Journal of Nanomaterials, 2016, 2016, 1-1.	2.7	1
53	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
54	Parametric numerical simulation of impact response of carbon nanotube/polymer nanocomposites. Plastics, Rubber and Composites, 2016, 45, 157-165.	2.0	2

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55	Crack stopping in composite adhesively bonded joints through corrugation. Theoretical and Applied Fracture Mechanics, 2016, 83, 152-157.	4.7	25
56	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
57	Numerical simulation of tensile behavior of corroded aluminum alloy 2024 T3. International Journal of Structural Integrity, 2015, 6, 451-467.	3.3	4
58	Compression after impact and fatigue behavior of CFRP stiffened panels. International Journal of Structural Integrity, 2015, 6, 176-193.	3.3	5
59	Buckling analysis of pristine and defected graphene. Mechanics Research Communications, 2015, 64, 50-56.	1.8	11
60	Finite element modeling of carbon nanotube agglomerates in polymers. Composite Structures, 2015, 132, 1141-1148.	5.8	51
61	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
62	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
63	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
64	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
65	Tensile behaviour of carbon nanotube/polypropylene composite material. Plastics, Rubber and Composites, 2014, 43, 330-336.	2.0	13
66	Adhesive bonding of composite aircraft structures: Challenges and recent developments. Science China: Physics, Mechanics and Astronomy, 2014, 57, 2-11.	5.1	55
67	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
68	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
69	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
70	Efficient progressive damage modeling of hybrid composite/titanium bolted joints. Composites Part A: Applied Science and Manufacturing, 2014, 56, 51-63.	7.6	40
71	Parametric numerical evaluation of the effective elastic properties of carbon nanotube-reinforced polymers. Composite Structures, 2013, 99, 366-374.	5.8	74
72	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

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73	Strength of Pi shaped non-crimp fabric adhesively bonded joints. Plastics, Rubber and Composites, 2012, 41, 100-106.	2.0	9
74	Adaptative Progressive Damage Modeling for Large-scale Composite Structures. International Journal of Damage Mechanics, 2012, 21, 441-462.	4.2	24
75	Strength of graphenes containing randomly dispersed vacancies. Acta Mechanica, 2012, 223, 669-678.	2.1	31
76	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
77	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
78	The structural integrity of a novel composite adhesively bonded flap-track beam. Composite Structures, 2011, 93, 2049-2059.	5.8	5
79	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
80	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
81	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
82	SIZE EFFECTS IN THE MECHANICAL PROPERTIES OF CARBON NANOTUBES. , 2010, , .		0
83	Progressive fracture analysis of planar lattices and shape-morphing Kagome-structure. Theoretical and Applied Fracture Mechanics, 2009, 51, 41-47.	4.7	7
84	Mesomechanical analysis of non-crimp fabric composite structural parts. Composite Structures, 2009, 87, 358-369.	5.8	45
85	Continuum modeling of carbon nanotube-based super-structures. Composite Structures, 2009, 91, 131-137.	5.8	21
86	Multi-scale modeling of tensile behavior of carbon nanotube-reinforced composites. Theoretical and Applied Fracture Mechanics, 2008, 49, 51-60.	4.7	154
87	Equivalent beams for carbon nanotubes. Computational Materials Science, 2008, 43, 345-352.	3.0	70
88	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
89	Initiation and progression of composite patch debonding in adhesively repaired cracked metallic sheets. Composite Structures, 2007, 81, 303-311.	5.8	39
90	Role of intertube spacing in the pullout forces of double-walled carbon nanotubes. Materials & Design, 2007, 28, 2197-2201.	5.1	11

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91	A progressive fracture model for carbon nanotubes. Composites Part B: Engineering, 2006, 37, 662-669.	12.0	85
92	Progressive damage modelling of bonded composite repairs. Theoretical and Applied Fracture Mechanics, 2005, 43, 189-198.	4.7	45
93	Finite element modeling of single-walled carbon nanotubes. Composites Part B: Engineering, 2005, 36, 468-477.	12.0	481
94	Fatigue damage accumulation and residual strength assessment of CFRP laminates. Composite Structures, 2004, 63, 219-230.	5.8	77
95	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
96	Strength prediction of bolted joints in graphite/epoxy composite laminates. Composites Part B: Engineering, 2002, 33, 521-529.	12.0	231
97	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
98	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
99	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