List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7729504/publications.pdf Version: 2024-02-01



ASSIMINA A PELECH

#	Article	lF	CITATIONS
1	Determining the Self-Limiting Electrospray Deposition Compositional Limits for Mechanically Tunable Polymer Composites. ACS Applied Polymer Materials, 2022, 4, 3511-3519.	4.4	6
2	Nanoindentation of freestanding single Kevlar® fibers with an adjusted indentation area function. Journal of Materials Research and Technology, 2022, 19, 1472-1483.	5.8	2
3	Sensitivity analysis of effective transverse shear viscoelastic and diffusional properties of myelinated white matter. Physics in Medicine and Biology, 2021, 66, 035027.	3.0	3
4	On the Transversely Isotropic, Hyperelastic Response of Central Nervous System White Matter Using a Hybrid Approach. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2021, 4, .	0.5	2
5	Graphene-reinforced polymer matrix composites fabricated by in situ shear exfoliation of graphite in polymer solution: processing, rheology, microstructure, and properties. Nanotechnology, 2021, 32, 175703.	2.6	5
6	Tunable Electrical Properties of Embossed, Cellulose-Based Paper for Skin-like Sensing. ACS Applied Materials & Interfaces, 2020, 12, 51960-51968.	8.0	10
7	On the transverse indentation moduli of high-performance KM2 single fibers using a curved area function. Acta Mechanica, 2020, 231, 2113-2124.	2.1	2
8	Brain White Matter Model of Orthotropic Viscoelastic Properties in Frequency Domain. , 2019, , .		1
9	Investigation of Cyclic and Frequency Nanoindentation Effects in Polydimethylsiloxane. , 2019, , .		0
10	Limiting role of crystalline domain orientation on the modulus and strength of aramid fibers. Polymer, 2018, 140, 96-106.	3.8	33
11	Analytical model of nonlinear twist dependency for Kevlar yarn based on local filament strain. Acta Mechanica, 2017, 228, 561-574.	2.1	3
12	Estimating axonal strain and failure following white matter stretch using contactin-associated protein as a fiduciary marker. Journal of Biomechanics, 2017, 51, 32-41.	2.1	11
13	Computational-Experimental Investigation of Progressive Damage Using Johnson-Cook and Cohesive Zone Models in Fiberglass Composites. , 2017, , .		0
14	Experimental Investigation of Transverse Mechanical Properties of High-Performance Kevlar KM2 Single Fiber. , 2017, , .		3
15	A Computer Experiment Based Model for a Spirally-Wounded Lithium-Ion Cell. , 2017, , .		0
16	Molecular Dynamics Study of Cubic Boron Nitride Nanoparticles: Decomposition with Phase Segregation during Melting. ACS Nano, 2016, 10, 10563-10572.	14.6	15
17	A Bayesian approach for characterization of soft tissue viscoelasticity in acoustic radiation force imaging. International Journal for Numerical Methods in Biomedical Engineering, 2016, 32, e02741.	2.1	10
18	Multiscale modeling of randomly interwoven fibers for prediction of KM2 Kevlar yarn strength and damage. Acta Mechanica, 2015, 226, 4149-4158.	2.1	10

#	Article	IF	CITATIONS
19	Characterization of the three-dimensional kinematic behavior of axons in central nervous system white matter. Biomechanics and Modeling in Mechanobiology, 2015, 14, 1303-1315.	2.8	15
20	Dynamic Simulation of Viscoelastic Soft Tissue in Acoustic Radiation Force Creep Imaging. Journal of Biomechanical Engineering, 2014, 136, 094502.	1.3	12
21	Fiberwalk: a random walk approach to fiber representative volume element creation. Acta Mechanica, 2014, 225, 1301-1312.	2.1	12
22	Modelling of global boundary effects on harmonic motion imaging of soft tissues. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 1021-1031.	1.6	3
23	Interfacial Debonding of Glass Single Fiber Composites Using the Johnson-Cook Failure Model. , 2013, , .		3
24	Modeling Dynamic Responses of Viscoelastic Heterogeneous Soft Tissues to Step Acoustic Radiation Force. , 2013, , .		1
25	Multiscale modeling of matrix cracking coupled with interfacial debonding in random glass fiber composites based on volume elements. Journal of Composite Materials, 2013, 47, 3389-3399.	2.4	12
26	A Hierarchical Model for Kevlar Fiber Failure. , 2013, , .		3
27	A Micromechanical Model for Shear-Induced Platelet Damage in Capillaries Within Gray Matter. , 2013, ,		0
28	Finite Element Modeling of CNS White Matter Kinematics: Use of a 3D RVE to Determine Material Properties. Frontiers in Bioengineering and Biotechnology, 2013, 1, 19.	4.1	32
29	Strain Rate Effect on the Stiffness of Random Fiber Composites due to Matrix Cracking and Interfacial Debonding. , 2012, , .		0
30	Pseudo 3D RVE Based Finite Element Simulation on White Matter. , 2012, , .		1
31	Contrast-Transfer Efficiency of Localized Harmonic Motion Imaging for Viscoelastic Soft Tissues: A Simulation Study. , 2012, , .		0
32	On Interfacial Fracture Toughness Measurements of a Single Glass Fiber. , 2012, , .		0
33	A Transition Model for Finite Element Simulation of Kinematics of Central Nervous System White Matter. IEEE Transactions on Biomedical Engineering, 2011, 58, 3443-3446.	4.2	22
34	Recent Advances on Composites and Heterogeneous Materials. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	0
35	Simulation of the Mechanical Behavior of White Matter Using a Micromechanics Finite Element Method. Materials Research Society Symposia Proceedings, 2011, 1301, 87.	0.1	1
36	Progressive Damage Analysis of Random Chopped Fiber Composite Using Finite Elements. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	11

#	Article	IF	CITATIONS
37	Three-Dimensional Numerical Simulation of Random Fiber Composites With High Aspect Ratio and High Volume Fraction. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	14
38	Numerical Evaluation of Stiffness and Energy Absorption of a Hybrid Unidirectional/Random Glass Fiber Composite. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133,	1.4	4
39	Emulating the Interfacial Kinematics of CNS White Matter With Finite Element Techniques. , 2011, , .		1
40	Numerical Test Method for Random Chopped Fiber Composites. , 2010, , .		0
41	Influence of matrix plasticity and residual thermal stress on interfacial debonding of a single fiber composite. Journal of Mechanics of Materials and Structures, 2010, 5, 129-142.	0.6	5
42	Integrated System for Soft Tissue Dynamic Simulation. , 2010, , .		0
43	Finite element dynamic analysis of soft tissues using state-space model. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 197-209.	1.6	1
44	Finite Element Analysis on the Random Chopped Fiber Composites. , 2009, , .		0
45	Response of Random Chopped Fiber Reinforced Composite to Uniaxial Tensile Load. , 2009, , .		Ο
46	Nanoindentation on soft film/hard substrate and hard film/soft substrate material systems with finite element analysis. Composites Science and Technology, 2008, 68, 147-155.	7.8	83
47	Dynamic simulation of viscoelastic soft tissues in harmonic motion imaging application. Journal of Biomechanics, 2008, 41, 3031-3037.	2.1	2
48	A mechanical model to compute elastic modulus of tissues for harmonic motion imaging. Journal of Biomechanics, 2008, 41, 2150-2158.	2.1	20
49	Numerical generation of a random chopped fiber composite RVE and its elastic properties. Composites Science and Technology, 2008, 68, 2792-2798.	7.8	170
50	Design of composites using a generic unit cell model coupled with a hybrid genetic algorithm. Composites Part A: Applied Science and Manufacturing, 2008, 39, 1433-1443.	7.6	14
51	Analysis of 3D random chopped fiber reinforced composites using FEM and random sequential adsorption. Computational Materials Science, 2008, 43, 450-461.	3.0	113
52	Interfacial Debonding and Stress Field Analysis on a Single Fiber Composite Using FEM. , 2008, , .		0
53	Numerical characterization of material elastic properties for random fiber composites. Journal of Mechanics of Materials and Structures, 2008, 3, 1279-1298.	0.6	43

54 Dynamic Analysis of Soft Tissues With Hard Inclusions. , 2008, , .

#	Article	IF	CITATIONS
55	Interfacial crack kinking subjected to contact effects. Journal of Mechanics of Materials and Structures, 2008, 3, 591-605.	0.6	8
56	Dynamic Analysis of Soft Tissue Viscoelasticity Under Ultrasonic Radiation Force Using FEM. , 2007, , 121.		0
57	Mapping of Regional Cancerous Tissue Mechanical Property Changes Using Harmonic Motion Imaging. , 2007, , .		1
58	Finite element analysis on nanoindentation with friction contact at the film/substrate interface. Composites Science and Technology, 2007, 67, 1311-1319.	7.8	46
59	Serration effects on interfacial cracks. Journal of Mechanics of Materials and Structures, 2007, 2, 1773-1785.	0.6	1
60	Mechanical Characterization of Thin Film Materials with Nanoindentation Measurements and FE Analysis. Journal of Composite Materials, 2006, 40, 1393-1407.	2.4	18
61	Approximate Analysis of the Buckling Behavior of Composites with Delamination. Journal of Composite Materials, 2003, 37, 673-685.	2.4	11
62	Optimization of Laminates' Fracture Toughness Using Design of Experiments and Response Surface. Journal of Composite Materials, 2003, 37, 579-596.	2.4	17
63	Assessment of the Fracture Behavior of an Asymmetrically Loaded Cantilever Composite Structure. Journal of Engineering Materials and Technology, Transactions of the ASME, 2003, 125, 353-360.	1.4	7
64	Nanoindentation Measurements on Low-k Porous Silica Thin Films Spin Coated on Silicon Substrates. Journal of Engineering Materials and Technology, Transactions of the ASME, 2003, 125, 361-367.	1.4	25
65	Special Issue on Durability and Damage Tolerance of Heterogeneous Materials and Structures. Journal of Engineering Materials and Technology, Transactions of the ASME, 2003, 125, 345-345.	1.4	Ο
66	Failure prediction of graphite/epoxy laminates with induced intermittent load surge during fatigue. Acta Materialia, 2002, 50, 4813-4821.	7.9	0
67	On the Energy Release Rate of Fatigued Composites Subjected to Compressive Overloads. Journal of Engineering Materials and Technology, Transactions of the ASME, 2000, 122, 443-449.	1.4	1
68	Special Issue on Durability and Damage Tolerance of Heterogeneous Materials. Journal of Engineering Materials and Technology, Transactions of the ASME, 1999, 121, 405-405.	1.4	0
69	Evolution of Interlayer and Intralayer Cracks Under Compressive Fatigue in Composites. Journal of Engineering Materials and Technology, Transactions of the ASME, 1999, 121, 430-435.	1.4	5
70	Delamination growth during pre- and post-buckling phases of delaminated composite laminates. International Journal of Solids and Structures, 1998, 35, 19-31.	2.7	32
71	Tests and analysis on the delamination fatigue growth in glass/epoxy composite plates. , 1996, , .		3
72	Growth behavior of internal delaminations in composite beam/plates under compression: effect of the end conditions. International Journal of Fracture, 1996, 75, 49-67.	2.2	8

#	Article	IF	CITATIONS
73	Growth of internal delaminations under cyclic compression in composite plates. Journal of the Mechanics and Physics of Solids, 1995, 43, 847-866.	4.8	50
74	The stability of delamination growth in compressively loaded composite plates. International Journal of Fracture, 1994, 65, 261-276.	2.2	19
75	Tensile properties of zinc coated aluminium. Surface and Coatings Technology, 1993, 57, 203-206.	4.8	6