Xiongqi Peng

List of Publications by Year
in descending order

62	1,352	394421 19	361022 35
papers	citations	h-index	g-index

62	62	62	841
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A dual homogenization and finite element approach for material characterization of textile composites. Composites Part B: Engineering, 2002, 33, 45-56.	12.0	141
2	A non-orthogonal constitutive model for characterizing woven composites. Composites Part A: Applied Science and Manufacturing, 2003, 34, 183-193.	7.6	138
3	A simple anisotropic hyperelastic constitutive model for textile fabrics with application to forming simulation. Composites Part B: Engineering, 2013, 52, 275-281.	12.0	121
4	Textile composite double dome stamping simulation using a non-orthogonal constitutive model. Composites Science and Technology, 2011, 71, 1075-1081.	7.8	65
5	An anisotropic hyperelastic constitutive model for thermoplastic woven composite prepregs. Composites Science and Technology, 2016, 128, 17-24.	7.8	64
6	Validation of a non-orthogonal constitutive model for woven composite fabrics via hemispherical stamping simulation. Composites Part A: Applied Science and Manufacturing, 2011, 42, 400-407.	7.6	58
7	Mechanical modeling of incompressible particle-reinforced neo-Hookean composites based on numerical homogenization. Mechanics of Materials, 2014, 70, 1-17.	3.2	54
8	Large deformation response of a hyperelastic fibre reinforced composite: Theoretical model and numerical validation. Composites Part A: Applied Science and Manufacturing, 2007, 38, 1842-1851.	7.6	50
9	An approach in modeling the temperature effect in thermo-stamping of woven composites. Composite Structures, 2003, 61, 413-420.	5.8	47
10	On constitutive modelling of porous neo-Hookean composites. Journal of the Mechanics and Physics of Solids, 2008, 56, 2338-2357.	4.8	47
11	An analytical model on through-thickness stresses and warpage of composite laminates due to toolâ€“part interaction. Composites Part B: Engineering, 2016, 91, 408-413.	12.0	43
12	An anisotropic hyperelastic constitutive model with shear interaction for cordâ€“rubber composites. Composites Science and Technology, 2013, 78, 69-74.	7.8	32
13	A 3D finite strain viscoelastic constitutive model for thermally induced shape memory polymers based on energy decomposition. International Journal of Plasticity, 2018, 110, 166-182.	8.8	31
14	An anisotropic visco-hyperelastic model for thermally-actuated shape memory polymer-based woven fabric-reinforced composites. International Journal of Plasticity, 2020, 129, 102697.	8.8	28
15	Draping of plain woven carbon fabrics over a double-curvature mold. Composites Science and Technology, 2014, 92, 64-69.	7.8	27
16	Fibreâ€“matrix interaction in the human annulus fibrosus. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 5, 193-205.	3.1	22
17	Forming of thermoplastic plain woven carbon composites. Journal of Thermoplastic Composite Materials, 2015, 28, 730-742.	4.2	21
18	A lamination model for forming simulation of woven fabric reinforced thermoplastic prepregs. Composite Structures, 2018, 196, 89-95.	5.8	21

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19	Influence of tensionâ€“shear coupling on draping of plain weave fabrics. Journal of Materials Science, 2019, 54, 6310-6322.	3.7	21
20	A comprehensive review of characterization and simulation methods for thermo-stamping of 2D woven fabric reinforced thermoplastics. Composites Part B: Engineering, 2020, 203, 108462.	12.0	20
21	A CNC grinding method and envelope residual model for face gear. International Journal of Advanced Manufacturing Technology, 2015, 79, 1689-1698.	3.0	19
22	Synergy effects of multi-walled carbon nanotube and graphene nanoplate filled epoxy adhesive on the shear properties of unidirectional composite bonded joints. Polymer Testing, 2020, 82, 106299.	4.8	18
23	Refinement of a 3D finite strain viscoelastic constitutive model for thermally induced shape memory polymers. Polymer Testing, 2021, 96, 107139.	4.8	18
24	Statistical modelling of tensile properties of natural fiber yarns considering probability distributions of fiber crimping and effective yarn elastic modulus. Composites Science and Technology, 2022, 218, 109142.	7.8	17
25	Characterization of inter-ply slipping behaviors in hot diaphragm preforming: Experiments and modelling. Composites Part A: Applied Science and Manufacturing, 2019, 121, 28-35.	7.6	15
26	A Hyperelastic Constitutive Model for Chain-Structured Particle Reinforced Neo-Hookean Composites. Materials and Design, 2016, 95, 580-590.	7.0	13
27	An Anisotropic Hyperelastic Constitutive Model with Tensionâ€“Shear Coupling for Woven Composite Reinforcements. International Journal of Applied Mechanics, 2017, 09, 1750083.	2.2	13
28	An anisotropic hyperelastic constitutive model for plain weave fabric considering biaxial tension coupling. Textile Reseach Journal, 2019, 89, 434-444.	2.2	13
29	Study on Macroscopic and Microscopic Mechanical Behavior of Magnetorheological Elastomers by Representative Volume Element Approach. Advances in Condensed Matter Physics, 2014, 2014, 1-8.	1.1	12
30	A Visco-Hyperelastic Constitutive Model for Human Spine Ligaments. Cell Biochemistry and Biophysics, 2015, 71, 1147-1156.	1.8	12
31	Comparison of Material Models for Spring Back Prediction in an Automotive Panel Using Finite Element Method. Journal of Materials Engineering and Performance, 2013, 22, 2990-2996.	2.5	10
32	Experimental investigation on fabrication and thermal-stamping of woven jute/polylactic acid biocomposites. Journal of Composite Materials, 2019, 53, 851-861.	2.4	10
33	Thermal-Assisted Single Point Incremental Forming of Jute Fabric Reinforced Poly(lactic acid) Biocomposites. Fibers and Polymers, 2020, 21, 2373-2379.	2.1	10
34	Development and verification of a finite element model for double diaphragm preforming of unidirectional carbon fiber prepreg. Composites Part A: Applied Science and Manufacturing, 2020, 135, 105924.	7.6	10
35	A hybrid lamination model for simulation of woven fabric reinforced thermoplastic composites solid-state thermo-stamping. Materials and Design, 2021, 200, 109419.	7.0	10
36	Enhancing mode I fracture toughness of adhesively bonded unidirectional composite joints using surfactant-stabilized multi-walled carbon nanotube and graphene nanoplate. Polymer Testing, 2021, 96, 107110.	4.8	9

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37	A temperature-dependent 3D anisotropic visco-hyperelastic constitutive model for jute woven fabric reinforced poly (butylene succinate) biocomposite in thermoforming. Composites Part B: Engineering, 2021, 208, 108584.	12.0	8
38	Shear stiffness of neo-Hookean materials with spherical voids. Composite Structures, 2016, 150, 21-27.	5.8	7
39	A 3D finite strain viscoelastic model with uncoupled structural and stress relaxations for shape memory polymers. Polymer Testing, 2021, 103, 107373.	4.8	7
40	Investigation on V-Bending and Springback of Laminated Steel Sheets. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	2.2	6
41	Effect of sacral slope on the biomechanical behavior of the low lumbar spine. Experimental and Therapeutic Medicine, 2017, 13, 2203-2210.	1.8	6
42	Development of a Carbon Fiber Reinforced Composite Chassis Longitudinal Arm. Science of Advanced Materials, 2016, 8, 2133-2141.	0.7	6
43	A new method for polygon effect analysis of saw chain. Journal of Mechanical Science and Technology, 2012, 26, 2705-2710.	1.5	5
44	Biomechanical analysis of C4â€“C6 spine segment considering anisotropy of annulus fibrosus. Biomedizinische Technik, 2013, 58, 343-51.	0.8	5
45	A Numerical Simulation Method for the One-Step Compression-Stamping Process of Continuous Fiber Reinforced Thermoplastic Composites. Polymers, 2021, 13, 3237.	4.5	5
46	Experimental and numerical analysis on mode II fracture toughness of CFRP adhesive joints using a nonlinear cohesive/friction coupled model. International Journal of Adhesion and Adhesives, 2022, 114, 103100.	2.9	5
47	A Visco-Hyperelastic Constitutive Model for Multilayer Polymer Membranes and its Application in Packaging Air Cushion. International Journal of Applied Mechanics, 2016, 08, 1650062.	2.2	4
48	Crashworthiness of Thermoplastic Woven Glass Fabric Reinforced Composite Tubes Manufactured by Pultrusion. Fibers and Polymers, 2020, 21, 416-427.	2.1	4
49	Anisotropic Hyperelastic Constitutive Model for Woven Composite Fabrics under Large Deformation. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2012, 48, 45.	0.5	4
50	Modelling energy dissipation and hysteresis of woven fabrics with large deformation under single loading-unloading cycle. Composite Structures, 2022, 279, 114781.	5.8	4
51	A Phenomenological Thermal-Mechanical Viscoelastic Constitutive Modeling for Polypropylene Wood Composites. Advances in Materials Science and Engineering, 2012, 2012, 1-7.	1.8	3
52	Biomechanical analysis of lumbar interbody fusion with an anisotropic hyperelastic model for annulus fibrosis. Archive of Applied Mechanics, 2013, 83, 579-590.	2.2	3
53	Testing, characterizing, and forming of glass twill fabric/polypropylene prepregs. Journal of Composite Materials, 2019, 53, 3939-3950.	2.4	3
54	An anisotropic constitutive model with biaxial-tension coupling for woven composite reinforcements. AIP Conference Proceedings, 2016, , .	0.4	2

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55	FINITE ELEMENT CONTACT ANALYSIS OF A HUMAN SAGITTAL KNEE JOINT. Journal of Mechanics in Medicine and Biology, 2010, 10, 225-236.	0.7	1
56	NUMERICAL VALIDATION OF A FIBER-REINFORCED HYPERELASTIC CONSTITUTIVE MODEL FOR HUMAN INTERVERTEBRAL DISC ANNULUS FIBROSUS. Journal of Mechanics in Medicine and Biology, 2011, 11, 163-176.	0.7	1
57	Long-term hemodynamic effects of artery banding on patient-specific pulmonary flow. , 2014, , .		1
58	Optimization design of bonnet inner based on pedestrian head protection and stiffness requirements. International Journal of Computational Materials Science and Engineering, 2017, 06, 1750005.	0.7	1
59	A lamination model for shape memory polymer/woven fabric composites. International Journal of Computational Materials Science and Engineering, 2019, 08, 1950004.	0.7	1
60	Numerical Simulation of Textile Composite Stamping On Double Dome. , 2011, , .		0
61	Development and application of hyperelastic model for diaphragm considering the influence of temperature. International Journal of Computational Materials Science and Engineering, 2019, 08, 1950010.	0.7	0
62	A new method of grafting multi-walled carbon nanotubes on carbon fibers for improving the mechanical and thermal properties of woven fabric composites. Journal of Composite Materials, 2021, 55, 2559-2575.	2.4	0