Michael Kaliske

List of Publications by Year
in descending order

293	4,902	109311	161844
papers	citations	35 h-index	54 g-index

312	312	312	2798
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Formulation and implementation of three-dimensional viscoelasticity at small and finite strains. Computational Mechanics, 1997, 19, 228-239.	4.0	260
2	An Extended Tube-Model for Rubber Elasticity: Statistical-Mechanical Theory and Finite Element Implementation. Rubber Chemistry and Technology, 1999, 72, 602-632.	1.2	208
3	A formulation of elasticity and viscoelasticity for fibre reinforced material at small and finite strains. Computer Methods in Applied Mechanics and Engineering, 2000, 185, 225-243.	6.6	121
4	A phase-field crack model based on directional stress decomposition. Computational Mechanics, 2019, 63, 1019-1046.	4.0	109
5	Theoretical and numerical formulation of a molecular based constitutive tube-model of rubber elasticity. Computational and Theoretical Polymer Science, 1997, 7, 227-241.	1.1	99
6	Models for numerical failure analysis of wooden structures. Engineering Structures, 2009, 31, 571-579.	5.3	85
7	BergstrÃ¶mâ€“Boyce model for nonlinear finite rubber viscoelasticity: theoretical aspects and algorithmic treatment for the FE method. Computational Mechanics, 2009, 44, 809-823.	4.0	83
8	A fully implicit finite element method for bidomain models of cardiac electromechanics. Computer Methods in Applied Mechanics and Engineering, 2013, 253, 323-336.	6.6	82
9	A ductile phase-field model based on degrading the fracture toughness: Theory and implementation at small strain. Computer Methods in Applied Mechanics and Engineering, 2020, 366, 113068.	6.6	73
10	A micro-continuum-mechanical material model for failure of rubber-like materials: Application to ageing-induced fracturing. Journal of the Mechanics and Physics of Solids, 2009, 57, 1340-1356.	4.8	69
11	A gradient enhanced plasticityâ€“damage microplane model for concrete. Computational Mechanics, 2018, 62, 1239-1257.	4.0	65
12	Thermo-mechanically coupled investigation of steady state rolling tires by numerical simulation and experiment. International Journal of Non-Linear Mechanics, 2015, 68, 101-131.	2.6	60
13	An efficient viscoelastic formulation for steady-state rolling structures. Computational Mechanics, 1998, 22, 395-403.	4.0	58
14	Recurrent Neural Networks for Uncertain Time-Dependent Structural Behavior. Computer-Aided Civil and Infrastructure Engineering, 2010, 25, 322-323.	9.8	57
15	Numerical characterisation of uncured elastomers by a neural network based approach. Computers and Structures, 2017, 182, 504-525.	4.4	57
16	Constitutive approach to rate-independent properties of filled elastomers. International Journal of Solids and Structures, 1998, 35, 2057-2071.	2.7	55
17	On the finite element implementation of rubberâ€like materials at finite strains. Engineering Computations, 1997, 14, 216-232.	1.4	54
18	Fracture simulation of viscoelastic polymers by the phase-field method. Computational Mechanics, 2020, 65, 293-309.	4.0	53

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19	On damage modelling for elastic and viscoelastic materials at large strain. Computers and Structures, 2001, 79, 2133-2141.	4.4	52
20	An implicit gradient formulation for microplane Drucker-Prager plasticity. International Journal of Plasticity, 2016, 83, 252-272.	8.8	51
21	Analysis of dynamical processes under consideration of polymorphic uncertainty. Structural Safety, 2015, 52, 194-201.	5.3	49
22	Three-dimensional numerical analyses of load-bearing behavior and failure of multiple double-shear dowel-type connections in timber engineering. Computers and Structures, 2010, 88, 165-177.	4.4	48
23	Regularization of microplane damage models using an implicit gradient enhancement. International Journal of Solids and Structures, 2014, 51, 3480-3489.	2.7	45
24	Recurrent neural networks for fuzzy data. Integrated Computer-Aided Engineering, 2011, 18, 265-280.	4.6	44
25	Structural Analysis with Fuzzy Data and Neural Network Based Material Description. Computer-Aided Civil and Infrastructure Engineering, 2012, 27, 640-654.	9.8	43
26	Transient multi-F ick ian hygro-mechanical analysis of wood. Computers and Structures, 2018, 197, 12-27.	4.4	42
27	The concept of representative crack elements for phaseâ€field fracture: Anisotropic elasticity and thermoâ€elasticity. International Journal for Numerical Methods in Engineering, 2020, 121, 779-805.	2.8	41
28	Material forces for inelastic models at large strains: application to fracture mechanics. Computational Mechanics, 2007, 40, 1005-1013.	4.0	40
29	A constitutive model for finite deformation of amorphous polymers. International Journal of Mechanical Sciences, 2012, 65, 48-63.	6.7	40
30	A thermomechanically coupled viscoelastic cohesive zone model at large deformation. International Journal of Solids and Structures, 2013, 50, 4279-4291.	2.7	40
31	Time-dependent cohesive zone modelling for discrete fracture simulation. Engineering Fracture Mechanics, 2010, 77, 153-169.	4.3	39
32	Crack propagation in pneumatic tires: Continuum mechanics and fracture mechanics approaches. International Journal of Fatigue, 2012, 37, 69-78.	5.7	39
33	Mechanical characterization of wood: An integrative approach ranging from nanoscale to structure. Computers and Structures, 2013, 127, 53-67.	4.4	38
34	Locking Front Model for pull-out behaviour of PVA microfibre embedded in cementitious matrix. Cement and Concrete Composites, 2019, 103, 318-330.	10.7	37
35	A physically and geometrically nonlinear scaledâ€boundaryâ€based finite element formulation for fracture in elastomers. International Journal for Numerical Methods in Engineering, 2014, 99, 966-999.	2.8	36
36	An orthotropic viscoelastic material model for passive myocardium: theory and algorithmic treatment. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 1160-1172.	1.6	36

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37	Comparison of approaches to model viscoelasticity based on fractional time derivatives. Computational Materials Science, 2015, 98, 287-296.	3.0	36
38	Damping characterization of unidirectional fibre reinforced polymer composites. Composites Part B: Engineering, 1995, 5, 551-567.	0.6	35
39	THERMO-MECHANICAL ANALYSIS OF CYCLICALLY LOADED PARTICLE-REINFORCED ELASTOMER COMPONENTS: EXPERIMENT AND FINITE ELEMENT SIMULATION. Rubber Chemistry and Technology, 2016, 89, 154-176.	1.2	35
40	Thermo-mechanical finite element prediction of the structural long-term response of asphalt pavements subjected to periodic traffic load: Tire-pavement interaction and rutting. Computers and Structures, 2019, 218, 9-31.	4.4	35
41	An endochronic plasticity formulation for filled rubber. International Journal of Solids and Structures, 2010, 47, 2371-2379.	2.7	34
42	Solutions to problems with imprecise dataâ€"An engineering perspective to generalized uncertainty models. Mechanical Systems and Signal Processing, 2013, 37, 105-120.	8.0	34
43	DNN2: A hyper-parameter reinforcement learning game for self-design of neural network based elasto-plastic constitutive descriptions. Computers and Structures, 2021, 249, 106505.	4.4	34
44	A comparative study of the r-adaptive material force approach and the phase-field method in dynamic fracture. International Journal of Fracture, 2016, 201, 97-118.	2.2	33
45	Lifetime prediction using accelerated test data and neural networks. Computers and Structures, 2009, 87, 1187-1194.	4.4	32
46	Numerical modelling of tyreâ€“pavement interaction phenomena: coupled structural investigations. Road Materials and Pavement Design, 2016, 17, 563-578.	4.0	32
47	Numerical simulation of the ductile failure of mechanically and moisture loaded wooden structures. Computers and Structures, 2011, 89, 2460-2470.	4.4	31
48	Formulation and implementation of strain rateâ€dependent fracture toughness in context of the phaseâ€field method. International Journal for Numerical Methods in Engineering, 2020, 121, 233-255.	2.8	31
49	Simulation of cracks in wood using a coupled material model for interface elements. Holzforschung, 2007, 61, 382-389.	1.9	30
50	A fully implicit finite element method for bidomain models of cardiac electrophysiology. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 645-656.	1.6	30
51	A comparative study of micro-mechanical models for fiber pullout behavior of reinforced high performance concrete. Engineering Fracture Mechanics, 2021, 243, 107506.	4.3	30
52	Discrete crack path prediction by an adaptive cohesive crack model. Engineering Fracture Mechanics, 2010, 77, 3541-3557.	4.3	29
53	A hybrid interface-element for the simulation of moisture-induced cracks in wood. Engineering Fracture Mechanics, 2013, 102, 32-50.	4.3	29
54	Evaluation of energy contributions in elasto-plastic fracture: A review of the configurational force approach. Engineering Fracture Mechanics, 2014, 115, 137-153.	4.3	29

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55	Computational cardiology: A modified Hill model to describe the electro-visco-elasticity of the myocardium. Computer Methods in Applied Mechanics and Engineering, 2017, 315, 434-466.	6.6	29
56	A thermomechanical interface element formulation for finite deformations. Computational Mechanics, 2013, 52, 1039-1058.	4.0	28
57	Investigations on the physical and mechanical behaviour of sycamore maple (Acer pseudoplatanus L.). European Journal of Wood and Wood Products, 2013, 71, 91-99.	2.9	28
58	On the relation between phase-field crack approximation and gradient damage modelling. Computational Mechanics, 2017, 59, 717-735.	4.0	28
59	A Biomimetic Fish Fin-Like Robot Based on Textile Reinforced Silicone. Micromachines, 2020, 11, 298.	2.9	28
60	Structural design with polymorphic uncertainty models. International Journal of Reliability and Safety, 2015, 9, 112.	0.2	27
61	Numerical modelling of wooden structures. Journal of Cultural Heritage, 2017, 27, S93-S102.	3.3	27
62	Micro-sphere based viscoplastic constitutive model for uncured green rubber. International Journal of Solids and Structures, 2018, 132-133, 201-217.	2.7	27
63	Finite element analysis of timber containing branches â€“ An approach to model the grain course and the influence on the structural behaviour. Engineering Structures, 2014, 75, 237-247.	5.3	26
64	Formulation and implementation of a constitutive model for semicrystalline polymers. International Journal of Plasticity, 2014, 61, 128-156.	8.8	26
65	Prediction of time-dependent structural behaviour with recurrent neural networks for fuzzy data. Computers and Structures, 2011, 89, 1971-1981.	4.4	25
66	A fuzzy-probabilistic durability concept for strain-hardening cement-based composites (SHCCs) exposed to chlorides. Cement and Concrete Composites, 2012, 34, 754-762.	10.7	25
67	Numerical simulation of pavement structures with inelastic material behaviour under rolling tyres based on an arbitrary Lagrangian Eulerian (ALE) formulation. Road Materials and Pavement Design, 2013, 14, 71-89.	4.0	25
68	Coupling of microstructural and macrostructural computational approaches for asphalt pavements under rolling tire load. Computer-Aided Civil and Infrastructure Engineering, 2020, 35, 1178-1193.	9.8	25
69	Peel process simulation of sealed polymeric film computational modelling of experimental results. Engineering Computations, 2007, 24, 586-607.	1.4	24
70	Description of inhomogeneities in wooden structures: modelling of branches. Wood Science and Technology, 2013, 47, 1051-1070.	3.2	24
71	A material description based on recurrent neural networks for fuzzy data and its application within the finite element method. Computers and Structures, 2013, 124, 29-37.	4.4	24
72	Evaluation and simulation of the peel behavior of polyethylene/polybutene-1 peel systems. Journal of Applied Polymer Science, 2009, 111, 363-370.	2.6	23

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73	Characterisation of moisture-dependent plasticity of beech wood and its application to a multi-surface plasticity model. Holzforschung, 2012, 66, .	1.9	23
74	Hygro-mechanical numerical investigations of a wooden panel painting from â€œKatharinenaltarâ€•by Lucas Cranach the Elder. Journal of Cultural Heritage, 2018, 29, 1-9.	3.3	23
75	A multi-objective optimization approach with consideration of fuzzy variables applied to structural tire design. Computers and Structures, 2013, 116, 7-19.	4.4	22
76	Stochastic modelling of uncertainty in timber engineering. Engineering Structures, 2015, 99, 296-310.	5.3	22
77	Hygro-mechanically coupled modelling of creep in wooden structures, Part I: Mechanics. International Journal of Solids and Structures, 2015, 77, 28-44.	2.7	22
78	Numerical modeling of inelastic structures at loading of steady state rolling. Computational Mechanics, 2016, 57, 867-886.	4.0	22
79	Static and dynamic tensile shear test of glued lap wooden joint with four different types of adhesives. Holzforschung, 2017, 71, 391-396.	1.9	22
80	Eigenerosion for static and dynamic brittle fracture. Engineering Fracture Mechanics, 2017, 182, 537-551.	4.3	21
81	Hygro-mechanically coupled modelling of creep in wooden structures, Part II: Influence of moisture content. International Journal of Solids and Structures, 2015, 77, 45-64.	2.7	20
82	A continuum mechanical approach to model asphalt. International Journal of Pavement Engineering, 2015, 16, 105-124.	4.4	20
83	An anisotropic phase-field model based on the equivalent crack surface energy density at finite strain. Computer Methods in Applied Mechanics and Engineering, 2020, 369, 113202.	6.6	20
84	A Material Model for Simulating the Hysteretic Behavior of Filled Rubber for Rolling Tires. Tire Science and Technology, 1998, 26, 132-148.	0.4	20
85	Experimental Characterization and Constitutive Modeling of the Mechanical Properties of Uncured Rubber. Rubber Chemistry and Technology, 2010, 83, 1-15.	1.2	19
86	A configurational force approach to model the branching phenomenon in dynamic brittle fracture. Engineering Fracture Mechanics, 2016, 157, 26-42.	4.3	19
87	Viscoelastic phase-field fracture using the framework of representative crack elements. International Journal of Fracture, 2022, 237, 139-163.	2.2	19
88	Numerical analysis and design of double-shear dowel-type connections of wood. Engineering Structures, 2012, 41, 234-241.	5.3	18
89	A thermo-mechanical finite element material model for the rubber forming and vulcanization process: From unvulcanized to vulcanized rubber. International Journal of Solids and Structures, 2020, 185-186, 365-379.	2.7	18
90	Phase-field fracture incorporating cohesive adhesion failure mechanisms within the Representative Crack Element framework. Computer Methods in Applied Mechanics and Engineering, 2022, 392, 114664.	6.6	18

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91	Numerical modeling of thermal aging in steady state rolling tires. International Journal of Non-Linear Mechanics, 2018, 103, 145-153.	2.6	17
92	Finite thermoâ€elastic decoupled twoâ€scale analysis. International Journal for Numerical Methods in Engineering, 2020, 121, 355-392.	2.8	17
93	Numerical determination of hysteresis friction on different length scales and comparison to experiments. Tribology International, 2018, 127, 165-176.	5.9	16
94	Modeling of Surface Drainage during the Service Life of Asphalt Pavements Showing Long-Term Rutting: A Modular Hydromechanical Approach. Advances in Materials Science and Engineering, 2020, 2020, 1-15.	1.8	16
95	A thermo-mechanical material model for rubber curing and tire manufacturing simulation. Computational Mechanics, 2020, 66, 513-535.	4.0	16
96	Crack phase-field model equipped with plastic driving force and degrading fracture toughness for ductile fracture simulation. Computational Mechanics, 2022, 69, 151-175.	4.0	16
97	Holistic Analysis of the Coupled Vehicle-Tire-Pavement System for the Design of Durable Pavements. Tire Science and Technology, 2015, 43, 86-116.	0.4	16
98	An experimental and numerical study on the age depended bond-slip behavior between nano-silica modified carbon fibers and cementitious matrices. Cement and Concrete Composites, 2022, 128, 104416.	10.7	16
99	An implicit adaptive nodeâ€splitting algorithm to assess the failure mechanism of inelastic elastomeric continua. International Journal for Numerical Methods in Engineering, 2014, 100, 669-688.	2.8	15
100	A thermomechanical interface description and its application to yarn pullout tests. International Journal of Solids and Structures, 2015, 69-70, 531-543.	2.7	15
101	Numerical modeling of time- and temperature-dependent strain-induced crystallization in rubber. International Journal of Solids and Structures, 2018, 141-142, 15-34.	2.7	15
102	The concept of Representative Crack Elements (RCE) for phase-field fracture: transient thermo-mechanics. Computational Mechanics, 2022, 69, 1165-1176.	4.0	15
103	PREDICTION OF ROLLING RESISTANCE FOR TRUCK BUS RADIAL TIRES WITH NANOCOMPOSITE BASED TREAD COMPOUNDS USING FINITE ELEMENT SIMULATION. Rubber Chemistry and Technology, 2014, 87, 276-290.	1.2	14
104	A viscoelastic-viscoplastic-damage model for creep and recovery of a semicrystalline thermoplastic. International Journal of Solids and Structures, 2017, 110-111, 340-350.	2.7	14
105	Estimating shear properties of walnut wood: a combined experimental and theoretical approach. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	3.1	14
106	Enhanced uncertain structural analysis with time- and spatial-dependent (functional) fuzzy results. Mechanical Systems and Signal Processing, 2019, 119, 23-38.	8.0	14
107	Variational eigenerosion for rateâ€dependent plasticity in concrete modeling at small strain. International Journal for Numerical Methods in Engineering, 2020, 121, 1388-1409.	2.8	14
108	VISCOELASTIC LINEAR AND NONLINEAR ANALYSIS OF STEADY STATE ROLLING RUBBER WHEELS: A COMPARISON. Rubber Chemistry and Technology, 2016, 89, 499-525.	1.2	13

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109	Modeling of impact on concrete plates by use of the microplane approach. International Journal of Non-Linear Mechanics, 2016, 80, 107-121.	2.6	13
110	A numerical study on the effects of spatial and temporal discretization in cardiac electrophysiology. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3443.	2.1	13
111	Fatigue Investigation of Elastomeric Structures. Tire Science and Technology, 2010, 38, 194-212.	0.4	13
112	Characterization of fracture processes by continuum and discrete modelling. Computational Mechanics, 2012, 50, 303-320.	4.0	12
113	Numerical optimization of wear performance â€“ Utilizing a metamodel based friction law. Computers and Structures, 2016, 165, 10-23.	4.4	12
114	A thermodynamically consistent framework to couple damage and plasticity microplane-based formulations for fracture modeling: development and algorithmic treatment. International Journal of Fracture, 2017, 203, 115-134.	2.2	12
115	Heat-transfer and pressure drop characteristics of micro-lattice materials fabricated by selective laser metal melting technology. Heat and Mass Transfer, 2022, 58, 125-141.	2.1	12
116	Multiscale Simulation to Determine Rubber Friction on Asphalt Surfaces. Tire Science and Technology, 2016, 44, 226-247.	0.4	12
117	An extended tube model for thermo-viscoelasticity of rubber like materials. , 2011, , 87-92.		11
118	Computational approach towards structural investigations for the restoration of historical keyboard instruments. Journal of Cultural Heritage, 2012, 13, S165-S174.	3.3	11
119	A hierarchical sequential ALE poromechanics model for tireâ€soilâ€water interaction on fluidâ€infiltrated roads. International Journal for Numerical Methods in Engineering, 2017, 112, 909-938.	2.8	11
120	Towards predictive computer simulations in cardiology: Finite element analysis of personalized heart models. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 2155-2176.	1.6	11
121	Numerical simulation of wooden structures with polymorphic uncertainty in material properties. International Journal of Reliability and Safety, 2018, 12, 24.	0.2	11
122	Development of fuzzy probability based random fields for the numerical structural design. GAMM Mitteilungen, 2019, 42, e201900004.	5.5	11
123	Assessment and design of an engineering structure with polymorphic uncertainty quantification. GAMM Mitteilungen, 2019, 42, e201900009.	5.5	11
124	Finite element modeling of electroâ€viscoelasticity in fiber reinforced electroâ€active polymers. International Journal for Numerical Methods in Engineering, 2021, 122, 2005-2037.	2.8	11
125	Finite Element Based Analysis of Reinforcing Cords in Rolling Tires: Influence of Mechanical and Thermal Cord Properties on Tire Response. Tire Science and Technology, 2018, 46, 294-327.	0.4	11
126	Modelling of microstructural void evolution with configurational forces. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2009, 89, 698-708.	1.6	10

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127	Fracture mechanical behaviour of viscoâ€elastic materials: application to the soâ€called dwellâ€effect. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2009, 89, 677-686.	1.6	10
128	Analysis of stable crack propagation in filled rubber based on a global energy balance. International Journal of Fracture, 2013, 181, 13-23.	2.2	10
129	Complex step derivative approximation of consistent tangent operators for viscoelasticity based on fractional calculus. Computational Mechanics, 2015, 56, 1055-1071.	4.0	10
130	Numerical modelling of tyreâ€“pavement-interaction phenomena: constitutive description of asphalt behaviour based on triaxial material tests. Road Materials and Pavement Design, 2015, 16, 133-153.	4.0	10
131	A novel approach to computational homogenization and its application to fully coupled two-scale thermomechanics. Computational Mechanics, 2016, 58, 769-796.	4.0	10
132	Computational cardiology: the bidomain based modified Hill model incorporating viscous effects for cardiac defibrillation. Computational Mechanics, 2018, 62, 253-271.	4.0	10
133	Modelling of fibre-reinforced composites via fibre super-elements. Theoretical and Applied Fracture Mechanics, 2019, 103, 102294.	4.7	10
134	A continuum mechanical model for asphalt based on the particle size distribution: Numerical formulation for large deformations and experimental validation. Mechanics of Materials, 2021, 153, 103703.	3.2	10
135	A novel self-adversarial training scheme for enhanced robustness of inelastic constitutive descriptions by neural networks. Computers and Structures, 2022, 265, 106774.	4.4	10
136	An anisotropic phase-field approach accounting for mixed fracture modes in wood structures within the Representative Crack Element framework. Engineering Fracture Mechanics, 2022, 269, 108514.	4.3	10
137	An extended tube model for thermo-viscoelasticity of rubberlike materials: Parameter identification and examples. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 353-354.	0.2	9
138	A coupled approach of optimization, uncertainty analysis and configurational mechanics for a failâ€safe design of structures. International Journal for Numerical Methods in Engineering, 2017, 109, 125-152.	2.8	9
139	Finite strain extension of a gradient enhanced microplane damage model for concrete at static and dynamic loading. Engineering Fracture Mechanics, 2019, 216, 106501.	4.3	9
140	Circumventing mesh bias by r- and h-adaptive techniques for variational eigenfracture. International Journal of Fracture, 2019, 220, 129.	2.2	9
141	An orthotropic multi-surface damage-plasticity FE-formulation for wood: Part I â€“ Constitutive model. Computers and Structures, 2020, 240, 106350.	4.4	9
142	The concept of representative crack elements applied to eigenfracture. Mechanics Research Communications, 2021, 116, 103747.	1.8	9
143	Numerical simulation of coupled heat and mass transfer in wood dried at high temperature. Heat and Mass Transfer, 2011, 47, 351-358.	2.1	8
144	Hygro-mechanical investigations of clavichord replica at cyclic climate load: Experiments and simulations. Journal of Cultural Heritage, 2019, 36, 210-221.	3.3	8

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145	Numerical investigation of inelastic and temperature dependent layered asphalt pavements at loading by rolling tyres. International Journal of Pavement Engineering, 2021, 22, 97-117.	4.4	8
146	ALE formulation for thermomechanical inelastic material models applied to tire forming and curing simulations. Computational Mechanics, 2021, 67, 1543-1557.	4.0	8
147	Lifetime Prediction of Tires with Regard to Oxidative Aging. Tire Science and Technology, 2008, 36, 63-79.	0.4	8
148	Fully Coupled Cardiac Electromechanics with Orthotropic Viscoelastic Effects. Procedia IUTAM, 2015, 12, 124-133.	1.2	7
149	The Extended Non-affine Tube Model for Crosslinked Polymer Networks: Physical Basics, Implementation, and Application to Thermomechanical Finite Element Analyses. Advances in Polymer Science, 2016, , 1-70.	0.8	7
150	Simulation of failure in timber with structural inhomogeneities using an automated FE analysis. Computers and Structures, 2018, 207, 19-36.	4.4	7
151	Moisture-dependent thermo-mechanical constitutive modeling of wood. Engineering Computations, 2018, 36, 2-24.	1.4	7
152	Hygro-mechanical analysis of wood-adhesive joints. Engineering Structures, 2019, 193, 258-270.	5.3	7
153	Understanding fracture of a carbon black filled rubber compound using material force theory. Theoretical and Applied Fracture Mechanics, 2020, 108, 102649.	4.7	7
154	Inelastic Fracture Mechanics for Tire Durability Simulations. Tire Science and Technology, 2007, 35, 239-250.	0.4	7
155	Optimized and Robust Design of Tires Based on Numerical Simulation. Tire Science and Technology, 2013, 41, 21-39.	0.4	7
156	On configurational forces in hyperelastic materials under shock and impact. Computational Mechanics, 2011, 47, 93-104.	4.0	6
157	Macroscopical Modeling and Numerical Simulation for the Characterization of Crack and Durability Properties of Particle-Reinforced Elastomers. Lecture Notes in Applied and Computational Mechanics, 2013, , 167-226.	2.2	6
158	Homogenisation by cylindrical RVEs with twisted-periodic boundary conditions for hybrid-yarn reinforced elastomers. International Journal of Solids and Structures, 2018, 139-140, 283-301.	2.7	6
159	A consistent viscoelastic formulation for the numerical analysis of steady state rolling tires. International Journal of Plasticity, 2018, 101, 24-41.	8.8	6
160	Numerical Mesoscale Analysis of Textile Reinforced Concrete. Materials, 2020, 13, 3944.	2.9	6
161	An anisotropic damage formulation for composite materials based on a gradient-enhanced approach: Formulation and implementation at small strain. International Journal of Solids and Structures, 2020, 202, 631-645.	2.7	6
162	On the computational modelling of nonlinear electro-elasticity in heterogeneous bodies at finite deformations. Mechanics of Soft Materials, 2021, 3, 1.	0.9	6

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163	Multi-Objective Optimization of Tree Trunk Axes in Glulam Beam Design Considering Fuzzy Probability-Based Random Fields. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2021, 7, .	1.1	6
164	Robustness versus Performance â€“ Nested Inherence of Objectives in Optimization with Polymorphic Uncertain Parameters. Advances in Engineering Software, 2021, 156, 102932.	3.8	6
165	Isogeometric Analysis for Tire Simulation at Steady-State Rolling. Tire Science and Technology, 2019, 47, 174-195.	0.4	6
166	Thermo-Electro-Mechanical Characterization of PDMS-Based Dielectric Elastomer Actuators. Materials, 2022, 15, 221.	2.9	6
167	Energetically motivated crack orientation vector for phase-field fracture with a directional split. International Journal of Fracture, 2022, 237, 15-46.	2.2	6
168	Hygro- and Thermo-Mechanical Modeling of Wood at Large Deformations: Application to Densification and Forming of Wooden Structures. Advanced Structured Materials, 2018, , 59-97.	0.5	5
169	A nonlocal softening plasticity based on microplane theory for concrete at finite strains. Computers and Structures, 2020, 241, 106333.	4.4	5
170	An XFEM-approach to model brittle failure of wood. Engineering Structures, 2020, 212, 110236.	5.3	5
171	Numerical representation of fracture patterns and post-fracture load-bearing performance of thermally prestressed glass with polymer foil. Engineering Structures, 2021, 226, 111318.	5.3	5
172	A simple phenomenological approach for myocardial contraction: formulation, parameter sensitivity study and applications in organ level simulations. Mechanics of Soft Materials, 2021, 3, 1.	0.9	5
173	Characterization of fatigue crack growth by cyclic material forces. Engineering Fracture Mechanics, 2021, 243, 107514.	4.3	5
174	Modeling and Processing of Uncertainty in Civil Engineering by Means of Fuzzy Randomness. Lecture Notes in Economics and Mathematical Systems, 2012, , 291-306.	0.3	5
175	Neural Network Approaches in Structural Analysis considering Imprecision and Variability. Computational Science, Engineering and Technology Series, 0, , 59-85.	0.2	5
176	Computational Models for Wooden Structures. Computational Technology Reviews, 2010, 2, 145-176.	0.6	5
177	A Consistent Implementation of Inelastic Material Models into Steady State Rolling. Tire Science and Technology, 2016, 44, 174-190.	0.4	5
178	IN SITU MEASUREMENT OF TIRE PLY STEER BASED ON AN INTELLIGENT TIRE SYSTEM. Rubber Chemistry and Technology, 2021, 94, 180-199.	1.2	5
179	Experimental and Numerical Investigation of Tire Tread Wear on Block Level. Lubricants, 2021, 9, 113.	2.9	5
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