Michael Kaliske

List of Publications by Year in Descending Order

291 papers	3,470 citations	29 h-index	46 g-index
312 ext. papers	4,141 ext. citations	2.4 avg, IF	6.18 L-index

#	Paper	IF	Citations
291	Thermo-Electro-Mechanical Simulation of Electro-Active Composites.. *Materials*, **2022**, 15,	3.5	1
290	Fatigue fracture characterization by cyclic material forces in viscoelastic solids at small strain. *International Journal of Fracture*, **2022**, 233, 129	2.3	1
289	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	8.6	2
288	Phase-field fracture incorporating cohesive adhesion failure mechanisms within the Representative Crack Element framework. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 392, 114664	5.7	4
287	Isogeometric analysis for accurate modeling of rolling tires. *Computers and Structures*, **2022**, 260, 106717	4.5	1
286	A comparative study of fully implicit staggered and monolithic solution methods. Part I: Coupled bidomain equations of cardiac electrophysiology. *Journal of Computational and Applied Mathematics*, **2022**, 407, 114021	2.4	1
285	A Novel Approach to Phasefield-Fracture for Inelastic Materials and Finite Deformations **2022**, 507-515		
284	Discrete Description of Crack Kinematics in Regularized Free Discontinuities of Crack Faces. *Advanced Structured Materials*, **2022**, 271-310	0.6	1
283	Balancing conduction velocity error in cardiac electrophysiology using a modified quadrature approach.. *International Journal for Numerical Methods in Biomedical Engineering*, **2022**, e3589	2.6	
282	Computational modelling of mechano-electric feedback and its arrhythmogenic effects in human ventricular models.. *Computer Methods in Biomechanics and Biomedical Engineering*, **2022**, 1-17	2.1	
281	Computational material stability analysis in finite thermo-electro-mechanics. *Mechanics Research Communications*, **2022**, 121, 103867	2.2	
280	A novel self-adversarial training scheme for enhanced robustness of inelastic constitutive descriptions by neural networks. *Computers and Structures*, **2022**, 265, 106774	4.5	2
279	An Arbitrary Lagrangian Eulerian formulation for tire production simulation. *Finite Elements in Analysis and Design*, **2022**, 204, 103742	2.2	0
278	Modeling thermal shrinkage of tire cords and its application in FE analysis of Post Cure Inflation. *Finite Elements in Analysis and Design*, **2022**, 205, 103757	2.2	1
277	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	4.2	2
276	Experimental and Numerical Investigation of Tire Tread Wear on Block Level. *Lubricants*, **2021**, 9, 113	3.1	1
275	A temperature dependent constitutive model for functional fatigue in shape memory alloys. *Mechanics of Materials*, **2021**, 165, 104126	3.3	1

274	IN SITU MEASUREMENT OF TIRE PLY STEER BASED ON AN INTELLIGENT TIRE SYSTEM. *Rubber Chemistry and Technology*, **2021**, 94, 180-199	1.7	1
273	On the computational modelling of nonlinear electro-elasticity in heterogeneous bodies at finite deformations. *Mechanics of Soft Materials*, **2021**, 3, 1	2.1	5
272	ALE formulation for thermomechanical inelastic material models applied to tire forming and curing simulations. *Computational Mechanics*, **2021**, 67, 1543-1557	4	2
271	DNN2: A hyper-parameter reinforcement learning game for self-design of neural network based elasto-plastic constitutive descriptions. *Computers and Structures*, **2021**, 249, 106505	4.5	14
270	Incorporation of gradient-enhanced microplane damage model into isogeometric analysis. *Engineering Computations*, **2021**, 38, 3388-3415	1.4	0
269	Robustness versus Performance Nested Inherence of Objectives in Optimization with Polymorphic Uncertain Parameters. *Advances in Engineering Software*, **2021**, 156, 102932	3.6	3
268	Numerical investigation of inelastic and temperature dependent layered asphalt pavements at loading by rolling tyres. *International Journal of Pavement Engineering*, **2021**, 22, 97-117	2.6	6
267	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	3.3	5
266	Impaktsicherheit von Baukonstruktionen durch mineralisch gebundene Komposite: Bauteilebene. *Beton- Und Stahlbetonbau*, **2021**, 116, 58-67	1	1
265	Numerical representation of fracture patterns and post-fracture load-bearing performance of thermally prestressed glass with polymer foil. *Engineering Structures*, **2021**, 226, 111318	4.7	3
264	Finite element modeling of electro-viscoelasticity in fiber reinforced electro-active polymers. *International Journal for Numerical Methods in Engineering*, **2021**, 122, 2005-2037	2.4	7
263	Multi-scale Computational Approaches for Asphalt Pavements Under Rolling Tire Load. *Lecture Notes in Applied and Computational Mechanics*, **2021**, 247-266	0.3	
262	An anisotropic phase-field model at finite strains for composite fracture. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 20, e202000096	0.2	1
261	Simulation Chain: From the Material Behavior to the Thermo-Mechanical Long-Term Response of Asphalt Pavements and the Alteration of Functional Properties (Surface Drainage). *Lecture Notes in Applied and Computational Mechanics*, **2021**, 267-289	0.3	
260	Phase-field Fracture with Representative Crack Elements for Non-linear Material Behaviour. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 20, e202000207	0.2	0
259	Multi-physical and Multi-scale Theoretical-Numerical Modeling of Tire-Pavement Interaction. *Lecture Notes in Applied and Computational Mechanics*, **2021**, 1-39	0.3	
258	Numerical modelling of electro-viscoelasticity for fibre reinforced electro-active polymers. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 20, e202000118	0.2	3
257	Modeling of a Reinforced Concrete Column Under Cyclic Shear Loads by a Plasticity-Damage Microplane Formulation. *Sustainable Civil Infrastructures*, **2021**, 13-21	0.2	

256	A simple phenomenological approach for myocardial contraction: formulation, parameter sensitivity study and applications in organ level simulations. *Mechanics of Soft Materials*, **2021**, 3, 1	2.1	1
255	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	2.6	5
254	A comparative study of micro-mechanical models for fiber pullout behavior of reinforced high performance concrete. *Engineering Fracture Mechanics*, **2021**, 243, 107506	4.2	13
253	Characterization of fatigue crack growth by cyclic material forces. *Engineering Fracture Mechanics*, **2021**, 243, 107514	4.2	3
252	Increasing the Fatigue Resistance of Strain-Hardening Cement-Based Composites (SHCC) by Experimental-Virtual Multi-Scale Material Design. *Materials*, **2021**, 14,	3.5	2
251	The concept of representative crack elements applied to eigenfracture. *Mechanics Research Communications*, **2021**, 116, 103747	2.2	2
250	Efficient Utilization of Surrogate Models for Uncertainty Quantification. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 20, e202000210	0.2	1
249	Local Refinement in Isogeometric Analysis of Complex Tire Models. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 20, e202000147	0.2	1
248	Impaktsicherheit von Baukonstruktionen durch mineralisch gebundene Komposite: Materialebene. *Beton- Und Stahlbetonbau*, **2021**, 116, 45-57	1	1
247	Thermo-Electro-Mechanical Characterization of PDMS-Based Dielectric Elastomer Actuators.. *Materials*, **2021**, 15,	3.5	3
246	Advances in computational dynamics for inelastic continua with anisotropic material behavior: Formulation and numerical implementation of inelastic ductile behavior of spruce wood. *International Journal of Solids and Structures*, **2020**, 198, 41-56	3.1	
245	Understanding fracture of a carbon black filled rubber compound using material force theory. *Theoretical and Applied Fracture Mechanics*, **2020**, 108, 102649	3.7	4
244	A thermo-mechanical material model for rubber curing and tire manufacturing simulation. *Computational Mechanics*, **2020**, 66, 513-535	4	5
243	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	5.7	13
242	A Biomimetic Fish Fin-Like Robot Based on Textile Reinforced Silicone. *Micromachines*, **2020**, 11,	3.3	16
241	Investigation of cord-rubber composite durability by the material force method. *Engineering Fracture Mechanics*, **2020**, 229, 106909	4.2	1
240	An XFEM-approach to model brittle failure of wood. *Engineering Structures*, **2020**, 212, 110236	4.7	3
239	Coupling of microstructural and macrostructural computational approaches for asphalt pavements under rolling tire load. *Computer-Aided Civil and Infrastructure Engineering*, **2020**, 35, 1178-1193	8.4	10

238	Hygro-mechanical Modelling of Wood and Glutin-based Bond Lines of Wooden Cultural Heritage Objects. *Conference Proceedings of the Society for Experimental Mechanics*, **2020**, 273-276	0.3	
237	Multiscale and multiphysical tire-pavement analysis: A mesostructure inspired material model for the short- and long-term material behavior of asphalt **2020**, 315-319		
236	Modelling of Ductile Fracture of Strain-hardening Cement-based Composites - Novel Approaches Based on Microplane and Phase-field Method. *Advanced Structured Materials*, **2020**, 175-199	0.6	1
235	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	5.7	28
234	Variational eigenerosion for rate-dependent plasticity in concrete modeling at small strain. *International Journal for Numerical Methods in Engineering*, **2020**, 121, 1388-1409	2.4	7
233	Finite thermo-elastic decoupled two-scale analysis. *International Journal for Numerical Methods in Engineering*, **2020**, 121, 355-392	2.4	7
232	The concept of representative crack elements for phase-field fracture: Anisotropic elasticity and thermo-elasticity. *International Journal for Numerical Methods in Engineering*, **2020**, 121, 779-805	2.4	27
231	Numerical Mesoscale Analysis of Textile Reinforced Concrete. *Materials*, **2020**, 13,	3.5	2
230	An orthotropic multi-surface damage-plasticity FE-formulation for wood: Part I – Constitutive model. *Computers and Structures*, **2020**, 240, 106350	4.5	4
229	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	3.1	3
228	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	1.5	9
227	A nonlocal softening plasticity based on microplane theory for concrete at finite strains. *Computers and Structures*, **2020**, 241, 106333	4.5	2
226	Neue numerische Simulation f□alte Holzkonstruktionen. *Bautechnik*, **2020**, 97, 708-716	0.5	
225	An orthotropic multi-surface damage-plasticity FE-formulation for wood: Part II – Numerical applications. *Computers and Structures*, **2020**, 240, 106351	4.5	2
224	Fracture and Fatigue Failure Simulation of Polymeric Material at Finite Deformation by the Phase-Field Method and the Material Force Approach. *Advances in Polymer Science*, **2020**, 347-376	1.3	2
223	Fracture simulation of viscoelastic polymers by the phase-field method. *Computational Mechanics*, **2020**, 65, 293-309	4	23
222	Formulation and implementation of strain rate-dependent fracture toughness in context of the phase-field method. *International Journal for Numerical Methods in Engineering*, **2020**, 121, 233-255	2.4	16
221	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	3.1	8

220	Hygro-mechanical analysis of wood-adhesive joints. *Engineering Structures*, **2019**, 193, 258-270	4.7	4
219	Finite strain extension of a gradient enhanced microplane damage model for concrete at static and dynamic loading. *Engineering Fracture Mechanics*, **2019**, 216, 106501	4.2	4
218	Locking Front Model for pull-out behaviour of PVA microfibre embedded in cementitious matrix. *Cement and Concrete Composites*, **2019**, 103, 318-330	8.6	26
217	Development of fuzzy probability based random fields for the numerical structural design. *GAMM Mitteilungen*, **2019**, 42, e201900004	1.8	6
216	Modeling of structures with polymorphic uncertainties at different length scales. *GAMM Mitteilungen*, **2019**, 42, e201900006	1.8	1
215	Assessment and design of an engineering structure with polymorphic uncertainty quantification. *GAMM Mitteilungen*, **2019**, 42, e201900009	1.8	7
214	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	4.5	21
213	Circumventing mesh bias by r- and h-adaptive techniques for variational eigenfracture. *International Journal of Fracture*, **2019**, 220, 129	2.3	7
212	Zur Fortentwicklung des Microplane-Modells f□ die numerische Analyse von Betonstrukturen. *Bautechnik*, **2019**, 96, 415-423	0.5	
211	Polymorphic uncertainty modelling for numerical design of structures. *GAMM Mitteilungen*, **2019**, 42, e201900003	1.8	
210	Modelling of fibre-reinforced composites via fibre super-elements. *Theoretical and Applied Fracture Mechanics*, **2019**, 103, 102294	3.7	6
209	Constitutive model and structural representation of time- and temperature-dependent strain-induced crystallization in rubber **2019**, 42-47		
208	Isogeometric Analysis for Tire Simulation at Steady-State Rolling. *Tire Science and Technology*, **2019**, 47, 174-195	0.7	1
207	Rate-dependent fracture simulation of viscoelastic material by the phase-field method. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900335	0.2	0
206	Application of Recurrent Neural Networks in the numerical analysis of reinforced concrete structures considering polymorphic uncertainty. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900404	0.2	1
205	Embedding aircraft system modeling to ATM safety assessment techniques. *Transportation Research Interdisciplinary Perspectives*, **2019**, 3, 100026	7.3	2
204	On the analysis of crack-closure behaviour using the phase-field method together with the novel concept of Representative Crack Elements. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900314	0.2	2
203	Hygro-mechanical investigations of clavichord replica at cyclic climate load: Experiments and simulations. *Journal of Cultural Heritage*, **2019**, 36, 210-221	2.9	5

202	A phase-field crack model based on directional stress decomposition. *Computational Mechanics*, **2019**, 63, 1019-1046	4	64
201	Enhanced uncertain structural analysis with time- and spatial-dependent (functional) fuzzy results. *Mechanical Systems and Signal Processing*, **2019**, 119, 23-38	7.8	10
200	A gradient enhanced plasticity□damage microplane model for concrete. *Computational Mechanics*, **2018**, 62, 1239-1257	4	34
199	Numerical modeling of thermal aging in steady state rolling tires. *International Journal of Non-Linear Mechanics*, **2018**, 103, 145-153	2.8	13
198	Numerical modeling of time- and temperature-dependent strain-induced crystallization in rubber. *International Journal of Solids and Structures*, **2018**, 141-142, 15-34	3.1	12
197	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	3.1	4
196	Hygro- and Thermo-Mechanical Modeling of Wood at Large Deformations: Application to Densification and Forming of Wooden Structures. *Advanced Structured Materials*, **2018**, 59-97	0.6	2
195	Transient multi-F ick ian hygro-mechanical analysis of wood. *Computers and Structures*, **2018**, 197, 12-27	4.5	30
194	A consistent viscoelastic formulation for the numerical analysis of steady state rolling tires. *International Journal of Plasticity*, **2018**, 101, 24-41	7.6	4
193	Micro-sphere based viscoplastic constitutive model for uncured green rubber. *International Journal of Solids and Structures*, **2018**, 132-133, 201-217	3.1	18
192	Hygro-mechanical numerical investigations of a wooden panel painting from □katharinenaltar□by Lucas Cranach the Elder. *Journal of Cultural Heritage*, **2018**, 29, 1-9	2.9	15
191	Simulation-based development of adaptive fiber-elastomer composites with embedded shape memory alloys. *Journal of Industrial Textiles*, **2018**, 48, 322-332	1.6	0
190	Numerical simulation of wooden structures with polymorphic uncertainty in material properties. *International Journal of Reliability and Safety*, **2018**, 12, 24	0.9	7
189	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	0.7	8
188	Numerische Rissabbildung mit einem Phasenfeldmodell auf Basis einer rissrichtungsabh□gigen Zerlegung des Spannungstensors **2018**, 77-79		
187	Holistic simulation of tire-pavement-system: Mechanics and uncertainty **2018**, 261-264		
186	Simulation of failure in timber with structural inhomogeneities using an automated FE analysis. *Computers and Structures*, **2018**, 207, 19-36	4.5	5
185	Computational cardiology: the bidomain based modified Hill model incorporating viscous effects for cardiac defibrillation. *Computational Mechanics*, **2018**, 62, 253-271	4	6

184	Objective modeling of multixial softening of concrete. *Proceedings in Applied Mathematics and Mechanics*, **2018**, 18, e201800293	0.2	
183	Mesh Bias for the Eigenerosion Approach. *Proceedings in Applied Mathematics and Mechanics*, **2018**, 18, e201800414	0.2	
182	Polymorphic Uncertainty Modeling for Optimization of Timber Structures. *Proceedings in Applied Mathematics and Mechanics*, **2018**, 18, e201800426	0.2	2
181	Moisture-dependent thermo-mechanical constitutive modeling of wood. *Engineering Computations*, **2018**, 36, 2-24	1.4	3
180	Artificial Neural Networks Based Friction Law for Elastomeric Materials Applied in Finite Element Sliding Contact Simulations. *Complexity*, **2018**, 2018, 1-15	1.6	2
179	A consistent multi-scale derivation of a micro-plane model within the framework of RVE homogenisation. *Proceedings in Applied Mathematics and Mechanics*, **2018**, 18, e201800364	0.2	
178	Square block foundation resting on an unbounded soil layer: Long-term prediction of vertical displacement using a time homogenization technique for dynamic loading. *Soil Dynamics and Earthquake Engineering*, **2018**, 115, 448-471	3.5	2
177	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	4
176	Numerical determination of hysteresis friction on different length scales and comparison to experiments. *Tribology International*, **2018**, 127, 165-176	4.9	12
175	Numerical modelling of wooden structures. *Journal of Cultural Heritage*, **2017**, 27, S93-S102	2.9	17
174	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	2.3	9
173	A coupled approach of optimization, uncertainty analysis and configurational mechanics for a fail-safe design of structures. *International Journal for Numerical Methods in Engineering*, **2017**, 109, 125-152	2.4	5
172	A viscoelastic-viscoplastic-damage model for creep and recovery of a semicrystalline thermoplastic. *International Journal of Solids and Structures*, **2017**, 110-111, 340-350	3.1	9
171	A hierarchical sequential ALE poromechanics model for tire-soil-water interaction on fluid-infiltrated roads. *International Journal for Numerical Methods in Engineering*, **2017**, 112, 909-938	2.4	8
170	Numerical characterisation of uncured elastomers by a neural network based approach. *Computers and Structures*, **2017**, 182, 504-525	4.5	33
169	Modeling of a Concrete Dam under Earthquake Loading by a Nonlocal Microplane Approach. *Procedia Engineering*, **2017**, 171, 1010-1018		2
168	Static and dynamic tensile shear test of glued lap wooden joint with four different types of adhesives. *Holzforschung*, **2017**, 71, 391-396	2	18
167	On the relation between phase-field crack approximation and gradient damage modelling. *Computational Mechanics*, **2017**, 59, 717-735	4	26

166	Thermomechanical Analysis Strategies for Elastomer Components Under Dynamic Loading. *Springer Series in Materials Science*, **2017**, 507-516	0.9	
165	Estimating shear properties of walnut wood: a combined experimental and theoretical approach. *Materials and Structures/Materiaux Et Constructions*, **2017**, 50, 1	3.4	10
164	Eigenerosion for static and dynamic brittle fracture. *Engineering Fracture Mechanics*, **2017**, 182, 537-551	4.2	13
163	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	5.7	16
162	Determination of the Elastic Behaviour of Hybrid-yarn Reinforced Elastomers using Twisted-periodic Boundary Conditions. *Proceedings in Applied Mathematics and Mechanics*, **2017**, 17, 467-468	0.2	
161	Crack Detection in Experimental Data by Means of a Spiking Response Model. *Proceedings in Applied Mathematics and Mechanics*, **2017**, 17, 847-848	0.2	
160	Advanced Rebar Formulation within a Thermo-Mechanically Coupled Tire Simulation. *Proceedings in Applied Mathematics and Mechanics*, **2017**, 17, 289-290	0.2	2
159	Multiscale Rubber Friction Analysis on Rough and Flexible Surfaces. *Proceedings in Applied Mathematics and Mechanics*, **2017**, 17, 593-594	0.2	
158	Influence of nonlinear viscoelasticity for steady state rolling **2017**, 509-515		
157	Steady state and sequentially coupled thermo-mechanical simulation of rolling tires **2017**, 617-623		
156	Numerical modelling of tyre–pavement interaction phenomena: coupled structural investigations. *Road Materials and Pavement Design*, **2016**, 17, 563-578	2.6	22
155	VISCOELASTIC LINEAR AND NONLINEAR ANALYSIS OF STEADY STATE ROLLING RUBBER WHEELS: A COMPARISON. *Rubber Chemistry and Technology*, **2016**, 89, 499-525	1.7	10
154	THERMO-MECHANICAL ANALYSIS OF CYCLICALLY LOADED PARTICLE-REINFORCED ELASTOMER COMPONENTS: EXPERIMENT AND FINITE ELEMENT SIMULATION. *Rubber Chemistry and Technology* , **2016**, 89, 154-176	1.7	23
153	A novel approach to computational homogenization and its application to fully coupled two-scale thermomechanics. *Computational Mechanics*, **2016**, 58, 769-796	4	9
152	Crack propagation for the material force approach using adaptive meshing. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 161-162	0.2	
151	A consistent implementation for inelastic materials in an ALE formulation for steady state rolling contact. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 337-338	0.2	
150	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	2.3	23
149	An implicit gradient formulation for microplane Drucker-Prager plasticity. *International Journal of Plasticity*, **2016**, 83, 252-272	7.6	33

148	A novel method for constitutive characterization of the mechanical properties of uncured rubber. *Journal of Elastomers and Plastics*, **2016**, 48, 523-534	1.6	2
147	A configurational force approach to model the branching phenomenon in dynamic brittle fracture. *Engineering Fracture Mechanics*, **2016**, 157, 26-42	4.2	17
146	Numerical optimization of wear performance Utilizing a metamodel based friction law. *Computers and Structures*, **2016**, 165, 10-23	4.5	11
145	Modeling of impact on concrete plates by use of the microplane approach. *International Journal of Non-Linear Mechanics*, **2016**, 80, 107-121	2.8	10
144	Multiscale Simulation to Determine Rubber Friction on Asphalt Surfaces. *Tire Science and Technology*, **2016**, 44, 226-247	0.7	8
143	A Consistent Implementation of Inelastic Material Models into Steady State Rolling. *Tire Science and Technology*, **2016**, 44, 174-190	0.7	5
142	Microplane modeling of cyclic behavior of concrete: a gradient plasticity-damage formulation. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 415-416	0.2	2
141	Viscoelastic-viscoplastic-damage modeling of thermoplastics under long-term cyclic loading. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 413-414	0.2	2
140	Multiscale simulation for description of rubber friction. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 539-540	0.2	1
139	Numerical modeling of inelastic structures at loading of steady state rolling. *Computational Mechanics*, **2016**, 57, 867-886	4	14
138	Thermomechanical modeling of fiber reinforced material including interphasial properties and its application to epoxy/glass composites. *Engineering Computations*, **2016**, 33, 1259-1281	1.4	3
137	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	1.3	6
136	Dynamische Eigenschaften von Beton im Experiment und in der Simulation. *Beton- Und Stahlbetonbau*, **2016**, 111, 41-50	1	10
135	Reliable simulation of timber structures by combined load and displacement control. *Engineering Computations*, **2015**, 32, 766-778	1.4	
134	A thermomechanical interface description and its application to yarn pullout tests. *International Journal of Solids and Structures*, **2015**, 69-70, 531-543	3.1	13
133	Hygro-mechanically coupled modelling of creep in wooden structures, Part I: Mechanics. *International Journal of Solids and Structures*, **2015**, 77, 28-44	3.1	19
132	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	3.1	18
131	Comparison of approaches to model viscoelasticity based on fractional time derivatives. *Computational Materials Science*, **2015**, 98, 287-296	3.2	31

130	A continuum mechanical approach to model asphalt. *International Journal of Pavement Engineering*, **2015**, 16, 105-124	2.6	18
129	Analysis of dynamical processes under consideration of polymorphic uncertainty. *Structural Safety*, **2015**, 52, 194-201	4.9	33
128	Thermo-mechanically coupled investigation of steady state rolling tires by numerical simulation and experiment. *International Journal of Non-Linear Mechanics*, **2015**, 68, 101-131	2.8	43
127	Thermo-mechanical modeling of crack propagation in dynamically loaded elastomer specimens using a scaled boundary finite element approach. *Proceedings in Applied Mathematics and Mechanics* , **2015**, 15, 121-122	0.2	2
126	Thermoplastics under Long-Term Loading: Experiments and Viscoelastic-Viscoplastic Modeling. *Proceedings in Applied Mathematics and Mechanics*, **2015**, 15, 375-376	0.2	3
125	Thermo-mechanical computation of inelastic pavement structures under rolling tire loads. *Proceedings in Applied Mathematics and Mechanics*, **2015**, 15, 439-440	0.2	
124	Steady state rolling simulation for rubber with inelastic properties **2015**, 107-113		
123	Structural design with polymorphic uncertainty models. *International Journal of Reliability and Safety*, **2015**, 9, 112	0.9	17
122	Fully Coupled Cardiac Electromechanics with Orthotropic Viscoelastic Effects. *Procedia IUTAM*, **2015**, 12, 124-133		6
121	Stochastic modelling of uncertainty in timber engineering. *Engineering Structures*, **2015**, 99, 296-310	4.7	15
120	A model reduction approach for hyperelastic materials based on Proper Orthogonal Decomposition. *Proceedings in Applied Mathematics and Mechanics*, **2015**, 15, 203-204	0.2	2
119	Complex step derivative approximation of consistent tangent operators for viscoelasticity based on fractional calculus. *Computational Mechanics*, **2015**, 56, 1055-1071	4	7
118	An orthotropic viscoelastic material model for passive myocardium: theory and algorithmic treatment. *Computer Methods in Biomechanics and Biomedical Engineering*, **2015**, 18, 1160-1172	2.1	26
117	Numerical modelling of tyre□pavement-interaction phenomena: constitutive description of asphalt behaviour based on triaxial material tests. *Road Materials and Pavement Design*, **2015**, 16, 133-153	2.6	10
116	Holistic Analysis of the Coupled Vehicle-Tire-Pavement System for the Design of Durable Pavements. *Tire Science and Technology*, **2015**, 43, 86-116	0.7	14
115	An implicit adaptive node-splitting algorithm to assess the failure mechanism of inelastic elastomeric continua. *International Journal for Numerical Methods in Engineering*, **2014**, 100, 669-688	2.4	12
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