Paul Steinmann

List of Articles by Year in descending order

Source: //exaly.com/author-pdf/7894661/publications.pdf

Version: 2025-02-01

650 peer-reviewed articles	16,430 peer-reviewed citations	20786 60 peer-reviewed h-index	1341496 2.04 score
769 documents	18501 doc citations	21781 64 h-index	13559 citing authors

#	Article	IF	Citations
1	Mass distribution impacts on particle translation and orientation dynamics in dilute flows. Powder Technology, 2025, 452, 120424.	3.7	2
2	A continuum model for novel electromechanical-instability-free dielectric elastomers. Journal of the Mechanics and Physics of Solids, 2025, 196, 105994.	4.7	18
3	Quasi-optimal mesh generation for the virtual element method: A fully adaptive remeshing procedure. Computer Methods in Applied Mechanics and Engineering, 2025, 435, 117630.	5.6	4
4	Mechanical characteristics of spinal cord tissue by indentation. Journal of the Mechanical Behavior of Biomedical Materials, 2025, 163, 106863.	2.7	11
5	Modelling of stress-state-dependent ductile damage with gradient-enhancement exemplified for clinch joining. Journal of the Mechanics and Physics of Solids, 2025, 196, 106026.	4.7	5
6	Microstructural buckling in soft visco-hyperelastic laminates. International Journal of Solids and Structures, 2025, 311, 113242.	3.0	5
7	Continuum-kinematics-inspired peridynamics for transverse isotropy. Computer Methods in Applied Mechanics and Engineering, 2025, 437, 117780.	5.6	4
8	Computational fluid dynamics challenge on indoor dispersion of pathogen-laden aerosols. Physics of Fluids, 2025, 37, .	2.2	11
9	Convex neural networks learn generalized standard material models. Journal of the Mechanics and Physics of Solids, 2025, 200, 106103.	4.7	42
10	A novel energy-fitted hexagonal quadrature scheme enables low-cost and high-fidelity peridynamic computations. Computer Methods in Applied Mechanics and Engineering, 2025, 440, 117918.	5.6	1
11	A Geometrically Nonlinear Correspondence Model for Continuum-Kinematics-Inspired Peridynamics. Journal of Peridynamics and Nonlocal Modeling, 2025, 7, .	1.3	1
12	On a canonical interface model with application to micro-heterogeneous elastic solids. Computer Methods in Applied Mechanics and Engineering, 2025, 440, 117925.	5.6	3
13	Application of stress-state-dependent ductile damage and failure model to clinch joining for a wide range of tool and material combinations. Journal of Advanced Joining Processes, 2025, 11, 100299.	1.7	2
14	Ellipsoidal soft micro-particles suspended in dilute viscous flow. Computer Methods in Applied Mechanics and Engineering, 2025, 441, 117973.	5.6	2
15	A cellular-meso-macro three-scale approach captures remodelling of cancellous bone in health and disease. Biomechanics and Modeling in Mechanobiology, 2025, 24, 975-998.	1.7	3
16	On mesh refinement procedures for polygonal virtual elements. Applications in Engineering Science, 2025, 22, 100222.	0.7	1
17	Plane stress finite element modelling of arbitrary compressible hyperelastic materials. Acta Mechanica, 2025, 236, 3975-3994.	2.2	2
18	A Fully Nonlocal Quasicontinuum Method for Ionic Crystals. Multiscale Science and Engineering, 2025, 7, 115-134.	2.1	1

#	Article	IF	Citations
19	Statistical theory for polymer elasticity: From molecular kinematics to continuum behavior. Physical Review E, 2025, 112, .	1.5	4
20	A two-step variational approach towards the modeling of high-frequency thermo-magneto-mechanical response of magnetic shape memory alloys. Journal of the Mechanics and Physics of Solids, 2025, 204, 106272.	4.7	2
21	Experimental insights into the thermo-mechanical fracture performance of soft shape memory polymers. Engineering Fracture Mechanics, 2025, 327, 111439.	4.3	3
22	Modelling the flexoelectric effect in human bone—A micromorphic approach. Computer Methods in Applied Mechanics and Engineering, 2025, 446, 118234.	5.6	2
23	Configurational-force-driven adaptive refinement and coarsening in topology optimization. Structural and Multidisciplinary Optimization, 2025, 68, .	2.7	4
24	Reactive coarse-grained MD models to capture interphase formation in epoxy-based structural adhesive joints. European Journal of Mechanics, A/Solids, 2025, 116, 105801.	3.1	4
25	A novel micromorphic approach captures non-locality in continuum bone remodelling. Computer Methods in Biomechanics and Biomedical Engineering, 2024, 27, 1042-1055.	1.4	2
26	On adaptive mesh coarsening procedures for the virtual element method for two-dimensional elastic problems. Computer Methods in Applied Mechanics and Engineering, 2024, 418, 116507.	5.6	6
27	Mean zero artificial diffusion for stable finite element approximation of convection in cellular aggregate formation. Computer Methods in Applied Mechanics and Engineering, 2024, 419, 116649.	5.6	2
28	Electro-mechanical actuation modulates fracture performance of soft dielectric elastomers. International Journal of Engineering Science, 2024, 195, 104008.	4.1	22
29	Nonlocal interfaces accounting for progressive damage within continuum-kinematics-inspired peridynamics. International Journal of Solids and Structures, 2024, 290, 112641.	3.0	7
30	Time–temperature correlations of amorphous thermoplastics at large strains based on molecular dynamics simulations. Mechanics of Materials, 2024, 190, 104926.	2.8	13
31	Coefficient of tangential restitution for non-spherical particles. Powder Technology, 2024, 437, 119526.	3.7	10
32	Towards advanced piezoelectric metamaterial design via combined topology and shape optimization. Structural and Multidisciplinary Optimization, 2024, 67, .	2.7	21
33	Configurational force method enables fracture assessment in soft materials. Journal of the Mechanics and Physics of Solids, 2024, 186, 105602.	4.7	22
34	Revealing the percolation–agglomeration transition in polymer nanocomposites via MD-informed continuum RVEs with elastoplastic interphases. Composites Part B: Engineering, 2024, 281, 111477.	10.5	11
35	A computational two-scale approach to cancellous bone remodelling. Advanced Modeling and Simulation in Engineering Sciences, 2024, 11, .	2.5	2
36	Modeling steady state rate- and temperature-dependent strain hardening behavior of glassy polymers. Mechanics of Materials, 2024, 195, 105044.	2.8	14

#	Article	IF	Citations
37	Experimental and numerical investigation of the photo-mechanical response of azobenzene filled soft elastomers, Part I: Experimental investigations. Extreme Mechanics Letters, 2024, 70, 102182.	3.1	3
38	Impact of the unimodal molar mass distribution on the mechanical behavior of polymer nanocomposites below the glass transition temperature: A generic, coarse-grained molecular dynamics study. European Journal of Mechanics, A/Solids, 2024, 107, 105379.	3.1	7
39	Evaluating the impact of filler size and filler content on the stiffness, strength, and toughness of polymer nanocomposites using coarse-grained molecular dynamics. Engineering Fracture Mechanics, 2024, 307, 110270.	4.3	22
40	Versatile data-adaptive hyperelastic energy functions for soft materials. Computer Methods in Applied Mechanics and Engineering, 2024, 430, 117208.	5.6	24
41	Material Parameter Identification for a Stress-State-Dependent Ductile Damage and Failure Model Applied to Clinch Joining. Journal of Manufacturing and Materials Processing, 2024, 8, 157.	1.5	3
42	A novel pseudo-rigid body approach to the non-linear dynamics of soft micro-particles in dilute viscous flow. Journal of Computational Physics, 2024, 519, 113377.	2.9	8
43	Investigating fracture mechanisms in glassy polymers using coupled particle-continuum simulations. Journal of the Mechanics and Physics of Solids, 2024, 193, 105884.	4.7	13
44	Model-driven exploration of poro-viscoelasticity in human brain tissue: be careful with the parameters!. Interface Focus, 2024, 14, .	1.9	18
45	Crosslinking degree variations enable programming and controlling soft fracture via sideways cracking. Npj Computational Materials, 2024, 10, .	8.0	10
46	Characterization of the material behavior and identification of effective elastic moduli based on molecular dynamics simulations of coarse-grained silica. Mathematics and Mechanics of Solids, 2023, 28, 1216-1231.	1.1	4
47	Peridynamic modeling of nonlocal degrading interfaces in composites. Forces in Mechanics, 2023, 10, 100124.	2.4	16
48	Shape matters: Lagrangian tracking of complex nonspherical microparticles in superellipsoidal approximation. International Journal of Multiphase Flow, 2023, 158, 104283.	2.8	18
49	Testing, modelling, and parameter identification for adhesively bonded joints under the influence of temperature. Journal of Adhesion Science and Technology, 2023, 37, 2285-2316.	2.3	5
50	A new micro–macro transition for hyperelastic materials. Journal of the Mechanics and Physics of Solids, 2023, 171, 105156.	4.7	64
51	Numerical Optimization of a Nonlinear Nonideal Piezoelectric Energy Harvester Using Deep Learning. Journal of Low Power Electronics and Applications, 2023, 13, 8.	1.0	3
52	Efficient gradient enhancements for plasticity with ductile damage in the logarithmic strain space. European Journal of Mechanics, A/Solids, 2023, 99, 104946.	3.1	15
53	A general continuum damage model for soft composites. Journal of the Mechanics and Physics of Solids, 2023, 175, 105290.	4.7	35
54	A generalized anisotropic damage interface model for finite strains. Journal of the Mechanics and Physics of Solids, 2023, 174, 105255.	4.7	8

#	Article	IF	Citations
55	Additive manufacturing of cellular structures: Multiscale simulation and optimization. Journal of Manufacturing Processes, 2023, 95, 275-290.	5.1	21
56	Hard magnetics in ultra-soft magnetorheological elastomers enhance fracture toughness and delay crack propagation. Journal of the Mechanics and Physics of Solids, 2023, 173, 105232.	4.7	40
57	An implicitly coupled finite element-electronic circuit simulator method for efficient system simulations of piezoelectric energy harvesters. Journal of Intelligent Material Systems and Structures, 2023, 34, 1825-1840.	1.7	3
58	Poro-viscoelastic material parameter identification of brain tissue-mimicking hydrogels. Frontiers in Bioengineering and Biotechnology, 2023, 11, .	3.1	24
59	Extending a generic and fast coarse-grained molecular dynamics model to examine the mechanical behavior of grafted polymer nanocomposites. Forces in Mechanics, 2023, 12, 100207.	2.4	10
60	A novel particle–particle and particle–wall collision model for superellipsoidal particles. Computational Particle Mechanics, 2023, 11, 211-234.	1.9	8
61	Multifield finite strain plasticity: Theory and numerics. Computer Methods in Applied Mechanics and Engineering, 2023, 414, 116101.	5.6	9
62	A unifying finite strain modeling framework for anisotropic mixed-mode fracture in soft materials. Computational Mechanics, 2023, 73, 123-137.	2.5	13
63	Computational instability analysis of inflated hyperelastic thin shells using subdivision surfaces. Computational Mechanics, 2023, 73, 257-276.	2.5	17
64	On the influence of free space in topology optimization of electro-active polymers. Structural and Multidisciplinary Optimization, 2023, 66, .	2.7	5
65	Automated discovery of interpretable hyperelastic material models for human brain tissue with EUCLID. Journal of the Mechanics and Physics of Solids, 2023, 180, 105404.	4.7	49
66	Modeling the dynamic magneto-mechanical response of magnetic shape memory alloys based on Hamilton's principle: The numerical algorithm. Journal of the Mechanics and Physics of Solids, 2023, 180, 105408.	4.7	5
67	Configurational peridynamics. Mechanics of Materials, 2023, 185, 104751.	2.8	6
68	Discrete data-adaptive approximation of hyperelastic energy functions. Computer Methods in Applied Mechanics and Engineering, 2023, 416, 116366.	5.6	13
69	Buckling optimization of additively manufactured cellular structures using numerical homogenization based on beam models. Archive of Applied Mechanics, 2023, 93, 4445-4465.	2.0	4
70	A versatile implicit computational framework for continuum-kinematics-inspired peridynamics. Computational Mechanics, 2023, 73, 1371-1399.	2.5	4
71	A numerical study on the visco-plastic regularization of a rate-independent strain gradient crystal plasticity formulation. Computational Mechanics, 2023, 74, 23-30.	2.5	1
72	Nonlinear finite element system simulation of piezoelectric vibration-based energy harvesters. Journal of Intelligent Material Systems and Structures, 2022, 33, 1292-1307.	1.7	21

#	Article	IF	Citations
73	Bone fracture healing within a continuum bone remodelling framework. Computer Methods in Biomechanics and Biomedical Engineering, 2022, 25, 1040-1050.	1.4	14
74	Modeling the dynamic magneto-mechanical response of magnetic shape memory alloys based on Hamilton's principle: The governing equation system. Journal of the Mechanics and Physics of Solids, 2022, 160, 104761.	4.7	9
75	Relationships between the material parameters of continuum-kinematics-inspired peridynamics and isotropic linear elasticity for two-dimensional problems. International Journal of Solids and Structures, 2022, 238, 111366.	3.0	22
76	A hybrid analytical–numerical model for calculating the maximum elastic force acting on a flow-driven elastic prolate spheroidal particle during its collision with a rigid wall. Computational Mechanics, 2022, 69, 1021-1029.	2.5	8
77	Observations on additive plasticity in the logarithmic strain space at excessive strains. International Journal of Solids and Structures, 2022, 239-240, 111416.	3.0	9
78	A p-adaptive, implicit-explicit mixed finite element method for diffusion-reaction problems. International Journal for Numerical Methods in Engineering, 2022, 123, 3237-3263.	2.3	9
79	A Model for Translation and Rotation Resistance Tensors for Superellipsoidal Particles in Stokes Flow. Journal of Marine Science and Engineering, 2022, 10, 369.	1.8	10
80	Investigation of a nonlinear piezoelectric energy harvester with advanced electric circuits with the finite element method. SN Applied Sciences, 2022, 4, .	2.2	6
81	A nonlocal interface approach to peridynamics exemplified by continuum-kinematics-inspired peridynamics. International Journal for Numerical Methods in Engineering, 2022, 123, 3464-3484.	2.3	11
82	On mesh refinement procedures for the virtual element method for two-dimensional elastic problems. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114849.	5.6	13
83	Numerical drag and lift prediction framework for superellipsoidal particles in multiphase flows. International Journal of Computational Methods and Experimental Measurements, 2022, 10, 38-49.	0.1	3
84	A peridynamic formulation for nonlocal bone remodelling. Computer Methods in Biomechanics and Biomedical Engineering, 2022, 25, 1835-1851.	1.4	9
85	Open system peridynamics. Continuum Mechanics and Thermodynamics, 2022, 34, 1125-1141.	1.4	4
86	Vibration analysis of piezoelectric Kirchhoff–Love shells based on Catmull–Clark subdivision surfaces. International Journal for Numerical Methods in Engineering, 2022, 123, 4296-4322.	2.3	12
87	A variational integrator for the Discrete Element Method. Journal of Computational Physics, 2022, 462, 111253.	2.9	10
88	Experimental and numerical investigations of the electro-mechanical response of particle filled elastomers—Part II: Continuum modeling approach. European Journal of Mechanics, A/Solids, 2022, 96, 104661.	3.1	3
89	Experimental and numerical investigation of the electro-mechanical response of particle filled elastomers - Part I: Experimental investigations. European Journal of Mechanics, A/Solids, 2022, 96, 104651.	3.1	5
90	Sequential topology and shape optimization framework to design compliant mechanisms with boundary stress constraints. Structural and Multidisciplinary Optimization, 2022, 65, .	2.7	14

#	Article	IF	Citations
91	Geometrically nonlinear design of compliant mechanisms: Topology and shape optimization with stress and curvature constraints. Computer Methods in Applied Mechanics and Engineering, 2022, 397, 115161.	5.6	23
92	Thermomechanical coupling in glassy polymers: An effective temperature theory. International Journal of Plasticity, 2022, 156, 103361.	10.9	44
93	Fractional and fractal order effects in soft elastomers: Strain rate and temperature dependent nonlinear mechanics. Mechanics of Materials, 2022, 172, 104390.	2.8	23
94	Two-scale off-and online approaches to geometrically exact elastoplastic rods. Computational Mechanics, 2022, 71, 1-24.	2.5	15
95	A quantitative interphase model for polymer nanocomposites: Verification, validation, and consequences regarding size effects. Composites Part A: Applied Science and Manufacturing, 2022, 161, 107094.	6.0	36
96	On continuum modeling of cell aggregation phenomena. Journal of the Mechanics and Physics of Solids, 2022, 167, 105004.	4.7	5
97	Hybrid magnetorheological elastomers enable versatile soft actuators. Npj Computational Materials, 2022, 8, .	8.0	80
98	Anatomy matters: The role of the subject-specific respiratory tract on aerosol deposition — A CFD study. Computer Methods in Applied Mechanics and Engineering, 2022, 401, 115372.	5.6	68
99	Extended general interfaces: Mori–Tanaka homogenization and average fields. International Journal of Solids and Structures, 2022, 254-255, 111933.	3.0	7
100	From two- to three-dimensional continuum-kinematics-inspired peridynamics: More than just another dimension. Mechanics of Materials, 2022, 173, 104417.	2.8	11
101	Applying a generic and fast coarse-grained molecular dynamics model to extensively study the mechanical behavior of polymer nanocomposites. EXPRESS Polymer Letters, 2022, 16, 1304-1321.	1.4	12
102	Thermo-mechanical simulations of powder bed fusion processes: accuracy and efficiency. Advanced Modeling and Simulation in Engineering Sciences, 2022, 9, .	2.5	21
103	A specific slip length model for the Maxwell slip boundary conditions in the Navier–Stokes solution of flow around a microparticle in the no-slip and slip flow regimes. Theoretical and Computational Fluid Dynamics, 2022, 36, 723-740.	1.7	9
104	LEFM is agnostic to geometrical nonlinearities arising at atomistic crack tips. Forces in Mechanics, 2022, 9, 100127.	2.4	10
105	Generalized interfaces enabling macroscopic modeling of structural adhesives and their failure. Forces in Mechanics, 2022, 9, 100137.	2.4	2
106	A viscoelastic Mooney–Rivlin model for adhesive curing and first steps toward its calibration based on photoelasticity measurements. Archive of Applied Mechanics, 2022, 92, 3943-3965.	2.0	8
107	An energetically consistent surface correction method for bond-based peridynamics. Forces in Mechanics, 2022, 9, 100132.	2.4	15
108	A graded interphase enhanced phase-field approach for modeling fracture in polymer composites. Forces in Mechanics, 2022, 9, 100135.	2.4	11

#	Article	IF	Citations
109	A finite element formulation for a direct approach to elastoplasticity in special Cosserat rods. International Journal for Numerical Methods in Engineering, 2021, , .	2.3	7
110	Coupled electro-elastic deformation and instabilities of a toroidal membrane. Journal of the Mechanics and Physics of Solids, 2021, 151, 104221.	4.7	23
111	A thermodynamically consistent theory of stress-gradient plasticity. Journal of the Mechanics and Physics of Solids, 2021, 147, 104266.	4.7	7
112	A geometrically exact formulation of peridynamics. Theoretical and Applied Fracture Mechanics, 2021, 111, 102850.	3.9	18
113	Numerical and experimental investigation of the isothermal assumption in selective laser sintering of PA12. Additive Manufacturing, 2021, 37, 101676.	2.0	22
114	Geometrically exact elastoplastic rods: determination of yield surface in terms of stress resultants. Computational Mechanics, 2021, 67, 723-742.	2.5	13
115	Concurrent consideration of cortical and cancellous bone within continuum bone remodelling. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 1274-1285.	1.4	11
116	Continuum-kinematics-inspired peridynamics: Thermo-mechanical problems. Continuum Mechanics and Thermodynamics, 2021, 33, 2039-2063.	1.4	16
117	Can CFD establish a connection to a milder COVID-19 disease in younger people? Aerosol deposition in lungs of different age groups based on Lagrangian particle tracking in turbulent flow. Computational Mechanics, 2021, 67, 1497-1513.	2.5	46
118	Towards an holistic account on residual stresses in full-forward extruded rods. Archive of Applied Mechanics, 2021, 91, 3649-3664.	2.0	1
119	Generalized interfaces via weighted averages for application to graded interphases at large deformations. Journal of the Mechanics and Physics of Solids, 2021, 149, 104234.	4.7	15
120	A Novel Approach to Predict the Process-Induced Mechanical Behavior of Additively Manufactured Materials. Journal of Materials Engineering and Performance, 2021, 30, 5235-5246.	1.1	13
121	Enhanced computational homogenization techniques for modelling size effects in polymer composites. Computational Mechanics, 2021, 68, 371-389.	2.5	10
122	Homogenization of Composites With Extended General Interfaces: Comprehensive Review and Unified Modeling. Applied Mechanics Reviews, 2021, 73, .	11.7	82
123	Towards elasto-plastic continuum-kinematics-inspired peridynamics. Computer Methods in Applied Mechanics and Engineering, 2021, 380, 113809.	5.6	19
124	Risk Assessment of Infection by Airborne Droplets and Aerosols at Different Levels of Cardiovascular Activity. Archives of Computational Methods in Engineering, 2021, 28, 4297-4316.	6.9	18
125	Component residual stress control in forward rod extrusion by material flow and tribology—experiments and modeling. Forschung Im Ingenieurwesen/Engineering Research, 2021, 85, 733-744.	1.2	5
126	Discrete configurational mechanics for the computational study of atomistic fracture mechanics. Forces in Mechanics, 2021, 2, 100009.	2.4	5

#	Article	IF	Citations
127	Nonlocal wrinkling instabilities in bilayered systems using peridynamics. Computational Mechanics, 2021, 68, 1023-1037.	2.5	15
128	Modeling crystallization kinetics for selective laser sintering of polyamide 12. GAMM Mitteilungen, 2021, 44, .	0.9	13
129	A coupled MD-FE methodology to characterize mechanical interphases in polymeric nanocomposites. International Journal of Mechanical Sciences, 2021, 204, 106564.	8.2	30
130	Variationally consistent computational homogenization of chemomechanical problems with stabilized weakly periodic boundary conditions. International Journal for Numerical Methods in Engineering, 2021, 122, 6429-6454.	2.3	11
131	Coupled topology and shape optimization using an embedding domain discretization method. Structural and Multidisciplinary Optimization, 2021, 64, 2687-2707.	2.7	18
132	Poro-Viscoelastic Effects During Biomechanical Testing of Human Brain Tissue. Frontiers in Mechanical Engineering, 2021, 7, .	1.8	40
133	A particle-continuum coupling method for multiscale simulations of viscoelastic–viscoplastic amorphous glassy polymers. International Journal for Numerical Methods in Engineering, 2021, 122, 7431-7451.	2.3	19
134	Atomistic two-, three- and four-body potentials. Spatial and material settings. Journal of the Mechanics and Physics of Solids, 2021, 154, 104507.	4.7	10
135	A geometrically exact continuum framework for light-matter interaction in photo-active polymers I. Variational setting. International Journal of Solids and Structures, 2021, 226-227, 111073.	3.0	1
136	A complete thermo-electro-viscoelastic characterization of dielectric elastomers, Part II: Continuum modeling approach. Journal of the Mechanics and Physics of Solids, 2021, 157, 104625.	4.7	17
137	Phonon-based thermal configurational forces: Definitions and applications in rupture of semiconductors. Engineering Fracture Mechanics, 2021, 257, 108014.	4.3	0
138	A viscoelastic-viscoplastic constitutive model for glassy polymers informed by molecular dynamics simulations. International Journal of Solids and Structures, 2021, 226-227, 111071.	3.0	19
139	Atomistic configurational forces in crystalline fracture. Forces in Mechanics, 2021, 4, 100044.	2.4	2
140	A complete thermo–electro–viscoelastic characterization of dielectric elastomers, Part I: Experimental investigations. Journal of the Mechanics and Physics of Solids, 2021, 157, 104603.	4.7	21
141	A two-field computational model couples cellular brain development with cortical folding. Brain Multiphysics, 2021, 2, 100025.	2.0	32
142	Parametric FEM for computational homogenization of heterogeneous materials with random voids. Proceedings in Applied Mathematics and Mechanics, 2021, 20, .	0.4	1
143	A multifield computational model explains the underlying mechanisms of cortical malformations in the developing brain. Proceedings in Applied Mathematics and Mechanics, 2021, 20, .	0.4	2
144	Identification of mechanical models and parameters for alginate-based hydrogels as proxy materials for brain tissue. Proceedings in Applied Mathematics and Mechanics, 2021, 20, .	0.4	4

#	Article	IF	Citations
145	Stochastic local FEM for computational homogenization of heterogeneous materials exhibiting large plastic deformations. Computational Mechanics, 2021, 69, 467-488.	2.5	10
146	Spatiotemporal modeling of first and second wave outbreak dynamics of COVID-19 in Germany. Biomechanics and Modeling in Mechanobiology, 2021, 21, 119-133.	1.7	12
147	Anisotropic plasticity-damage material model for sheet metal — Regularised single surface formulation. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.4	6
148	Exploring the interplay between cellular development and mechanics in the developing human brain. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.4	4
149	Homogenization of fully nonlinear rod lattice structures: on the size of the RVE and micro structural instabilities. Computational Mechanics, 2021, 69, 947-964.	2.5	20
150	Configurational Forces in Bond Order Potentials. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.4	0
151	On thermo-viscoelastic experimental characterization and numerical modelling of VHB polymer. International Journal of Non-Linear Mechanics, 2020, 118, 103263.	2.3	101
152	Towards a unified shear-induced lift model for prolate spheroidal particles moving in arbitrary non-uniform flow. Computers and Fluids, 2020, 196, 104323.	2.0	7
153	Towards microstructure-informed material models for human brain tissue. Acta Biomaterialia, 2020, 104, 53-65.	6.7	107
154	Behavior of vibration energy harvesters composed of polymer fibers and piezoelectric ceramic particles. Sensors and Actuators A: Physical, 2020, 303, 111699.	3.6	6
155	Acceleration of the spectral stochastic FEM using POD and element based discrete empirical approximation for a micromechanical model of heterogeneous materials with random geometry. Computer Methods in Applied Mechanics and Engineering, 2020, 360, 112689.	5.6	11
156	Modelling the flexoelectric effect in solids: A micromorphic approach. Computer Methods in Applied Mechanics and Engineering, 2020, 371, 113320.	5.6	23
157	Shape Optimization of a Backward Extrusion Process Using a Non-Invasive Form Finding Algorithm. Procedia Manufacturing, 2020, 47, 873-880.	1.8	2
158	Alginate-based hydrogels show the same complex mechanical behavior as brain tissue. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 103979.	2.7	68
159	Assessment of an isogeometric approach with Catmull–Clark subdivision surfaces using the Laplace–Beltrami problems. Computational Mechanics, 2020, 66, 851-876.	2.5	9
160	The computational framework for continuum-kinematics-inspired peridynamics. Computational Mechanics, 2020, 66, 795-824.	2.5	43
161	A novel two-way coupling model for Euler-Lagrange simulations of multiphase flow. Engineering Analysis With Boundary Elements, 2020, 119, 119-132.	2.5	10
162	Memory-based meso-scale modeling of Covid-19. Computational Mechanics, 2020, 66, 1069-1079.	2.5	22

#	Article	IF	Citations
163	Analytical mechanics allows novel vistas on mathematical epidemic dynamics modeling. Mathematics and Mechanics of Complex Systems, 2020, 8, 321-343.	2.3	2
164	Modeling the porous and viscous responses of human brain tissue behavior. Computer Methods in Applied Mechanics and Engineering, 2020, 369, 113128.	5.6	69
165	On biological availability dependent bone remodeling. Computer Methods in Biomechanics and Biomedical Engineering, 2020, 23, 432-444.	1.4	11
166	FE2 simulations of magnetorheological elastomers: influence of microscopic boundary conditions, microstructures and free space on the macroscopic responses of MREs. International Journal of Solids and Structures, 2020, 193-194, 338-356.	3.0	36
167	A matrix-free approach for finite-strain hyperelastic problems using geometric multigrid. International Journal for Numerical Methods in Engineering, 2020, 121, 2874-2895.	2.3	24
168	On age-dependent bone remodeling. Journal of Biomechanics, 2020, 103, 109701.	1.6	17
169	Temperature distribution and entropy generation during Darcy–Forchheimer–Brinkman electrokinetic flow in a microfluidic tube subject to a prescribed heat flux. Meccanica, 2020, 55, 1079-1098.	1.2	22
170	Grain boundary interaction based on gradient crystal inelasticity and decohesion. Computational Materials Science, 2020, 178, 109604.	2.6	10
171	Modeling of additively manufactured materials using gradient-enhanced crystal plasticity. Computers and Mathematics With Applications, 2019, 78, 2338-2350.	1.7	30
172	On periodic boundary conditions and ergodicity in computational homogenization of heterogeneous materials with random microstructure. Computer Methods in Applied Mechanics and Engineering, 2019, 357, 112563.	5.6	25
173	A novel continuum approach to gradient plasticity based on the complementing concepts of dislocation and disequilibrium densities. Journal of the Mechanics and Physics of Solids, 2019, 132, 103680.	4.7	6
174	Fuzzy dynamics of multibody systems with polymorphic uncertainty in the material microstructure. Computational Mechanics, 2019, 64, 1601-1619.	2.5	8
175	Continuum-kinematics-inspired peridynamics. Mechanical problems. Journal of the Mechanics and Physics of Solids, 2019, 131, 125-146.	4.7	73
176	An energetically consistent heat input model for additive manufacturing. Proceedings in Applied Mathematics and Mechanics, 2019, 19, .	0.4	1
177	Cutoff-Based Modeling of Coulomb Interactions for Atomistic-to-Continuum Multiscale Methods. Multiscale Science and Engineering, 2019, 1, 299-317.	2.1	3
178	Extensive CGMD Simulations of Atactic PS Providing Pseudo Experimental Data to Calibrate Nonlinear Inelastic Continuum Mechanical Constitutive Laws. Polymers, 2019, 11, 1824.	3.4	20
179	On the influence of the compliant electrodes on the mechanical behavior of VHB 4905. Computational Materials Science, 2019, 160, 287-294.	2.6	24
180	Systematic study of homogenization and the utility of circular simplified representative volume element. Mathematics and Mechanics of Solids, 2019, 24, 2961-2985.	1.1	27

#	Article	IF	Citations
181	On effective behavior of microstructures embedding general interfaces with damage. Computational Mechanics, 2019, 64, 1473-1494.	2.5	11
182	Experimental and numerical investigations of the electro-viscoelastic behavior of VHB 4905TM. European Journal of Mechanics, A/Solids, 2019, 77, 103797.	3.1	57
183	Challenges of order reduction techniques for problems involving polymorphic uncertainty. GAMM Mitteilungen, 2019, 42, .	0.9	7
184	Investigations on residual stress generation in full-forward-extrusion. Production Engineering, 2019, , .	1.0	6
185	On spectral fuzzy–stochastic FEM for problems involving polymorphic geometrical uncertainties. Computer Methods in Applied Mechanics and Engineering, 2019, 350, 432-461.	5.6	14
186	A computational approach to obtain nonlinearly elastic constitutive relations of special Cosserat rods. Computer Methods in Applied Mechanics and Engineering, 2019, 350, 295-314.	5.6	30
187	Settling characteristics of nonspherical porous sludge flocs with nonhomogeneous mass distribution. Water Research, 2019, 158, 159-170.	9.9	31
188	Designing tunable composites with general interfaces. International Journal of Solids and Structures, 2019, 171, 181-188.	3.0	10
189	Reduced-Order Modelling and Homogenisation in Magneto-Mechanics: A Numerical Comparison of Established Hyper-Reduction Methods. Mathematical and Computational Applications, 2019, 24, 20.	0.7	8
190	On the emergence of out-of-plane ferroelectricity in ultrathin films. Archive of Applied Mechanics, 2019, 89, 1171-1181.	2.0	5
191	Implementation of generalized mechanical interfaces. Proceedings in Applied Mathematics and Mechanics, 2019, 19, .	0.4	0
192	Gradient Enhanced Crystal Plasticity in Additive Manufacturing Identification of a Macroscopic Yield Criterion. Proceedings in Applied Mathematics and Mechanics, 2019, 19, .	0.4	0
193	Investigation of the Mechanical Behavior of Polystyrene using Molecular Dynamics. Proceedings in Applied Mathematics and Mechanics, 2019, 19, .	0.4	1
194	Challenges and perspectives in brain tissue testing and modeling. Proceedings in Applied Mathematics and Mechanics, 2019, 19, .	0.4	6
195	Optimisation of the Capriccio Method to Couple Particle- and Continuum-Based Simulations of Polymers. Multiscale Science and Engineering, 2019, 1, 318-333.	2.1	24
196	A novel model for the lift force acting on a prolate spheroidal particle in arbitrary non-uniform flow. Part II. Lift force taking into account the non-streamwise flow shear. International Journal of Multiphase Flow, 2019, 111, 232-240.	2.8	15
197	Thermodynamic formulation of a unified multi-mechanism continuum viscoplastic damage model with application to high-Cr steels. International Journal of Plasticity, 2019, 114, 15-39.	10.9	28
198	A thermoelastoplastic theory for special Cosserat rods. Mathematics and Mechanics of Solids, 2019, 24, 686-700.	1.1	17

#	Article	IF	Citations
199	Fifty Shades of Brain: A Review on the Mechanical Testing and Modeling of Brain Tissue. Archives of Computational Methods in Engineering, 2019, 27, 1187-1230.	6.9	429
200	A novel model for the lift force acting on a prolate spheroidal particle in an arbitrary non-uniform flow. Part I. Lift force due to the streamwise flow shear. International Journal of Multiphase Flow, 2018, 104, 103-112.	2.8	39
201	Two reduction methods for stochastic FEM based homogenization using global basis functions. Computer Methods in Applied Mechanics and Engineering, 2018, 332, 488-519.	5.6	15
202	Application of metaheuristic algorithms to the identification of nonlinear magneto-viscoelastic constitutive parameters. Journal of Magnetism and Magnetic Materials, 2018, 464, 116-131.	2.1	24
203	Hyperelastic analysis based on a polygonal finite element method. Mechanics of Advanced Materials and Structures, 2018, 25, 930-942.	2.8	24
204	Aspects of computational homogenization in magneto-mechanics: Boundary conditions, RVE size and microstructure composition. International Journal of Solids and Structures, 2018, 130-131, 105-121.	3.0	25
205	Bounds on size-dependent behaviour of composites. Philosophical Magazine, 2018, 98, 437-463.	0.8	10
206	Modelling electro-active polymers with a dispersion-type anisotropy. Smart Materials and Structures, 2018, 27, 025010.	2.4	25
207	On the influence of inhomogeneous stiffness and growth on mechanical instabilities in the developing brain. International Journal of Solids and Structures, 2018, 132-133, 31-41.	3.0	34
208	Domain decomposition applied to the thermal model of selective beam melting processes. Proceedings in Applied Mathematics and Mechanics, 2018, 18, .	0.4	0
209	Single crystal plasticity – A mesoscale based approach for modeling the mechanics of additively manufactured Inconel 718. Proceedings in Applied Mathematics and Mechanics, 2018, 18, .	0.4	1
210	Growth-induced instabilities of an elastic film on a viscoelastic substrate: analytical solution and computational approach via eigenvalue analysis. Journal of Mechanics of Materials and Structures, 2018, 13, 571-585.	0.6	3
211	Region- and loading-specific finite viscoelasticity of human brain tissue. Proceedings in Applied Mathematics and Mechanics, 2018, 18, .	0.4	7
212	Numerical modeling of thermo-electro-viscoelasticity with field-dependent material parameters. International Journal of Non-Linear Mechanics, 2018, 106, 13-24.	2.3	56
213	The origin of compression influences geometric instabilities in bilayers. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20180267.	1.4	7
214	Fuzzy-stochastic FEM–based homogenization framework for materials with polymorphic uncertainties in the microstructure. International Journal for Numerical Methods in Engineering, 2018, 116, 633-660.	2.3	15
215	Dissipation-consistent modelling and classification of extended plasticity formulations. Journal of the Mechanics and Physics of Solids, 2018, 119, 118-139.	4.7	20
216	Matrix-Free Locally Adaptive Finite Element Solution of Density-Functional Theory With Nonorthogonal Orbitals and Multigrid Preconditioning. Physica Status Solidi (B): Basic Research, 2018, 255, .	1.0	8

#	Article	IF	Citations
217	A non-invasive node-based form finding approach with discretization-independent target configuration. Advanced Modeling and Simulation in Engineering Sciences, 2018, 5, .	2.5	5
218	A novel spectral formulation for transversely isotropic magneto-elasticity. Mathematics and Mechanics of Solids, 2017, 22, 1158-1176.	1.1	30
219	Highly-conductive energetic coherent interfaces subject to in-plane degradation. Mathematics and Mechanics of Solids, 2017, 22, 1696-1716.	1.1	6
220	On structural shape optimization using an embedding domain discretization technique. International Journal for Numerical Methods in Engineering, 2017, 109, 1315-1343.	2.3	13
221	Some properties of the dissipative model of strain-gradient plasticity. Philosophical Magazine, 2017, 97, 693-717.	0.8	16
222	Preparation of magnetorheological elastomers and their slip-free characterization by means of parallel-plate rotational rheometry. Smart Materials and Structures, 2017, 26, 085004.	2.4	21
223	Coupled thermally general imperfect and mechanically coherent energetic interfaces subject to in-plane degradation. Journal of Mechanics of Materials and Structures, 2017, 12, 289-312.	0.6	3
224	Molecular dynamics study of ferroelectric domain nucleation and domain switching dynamics. Scientific Reports, 2017, 7, .	2.7	91
225	Adaptive Poly-FEM for the analysis of plane elasticity problems. International Journal for Computational Methods in Engineering Science and Mechanics, 2017, 18, 146-165.	0.9	5
226	On the wall slip phenomenon of elastomers in oscillatory shear measurements using parallel-plate rotational rheometry: II. Influence of experimental conditions. Polymer Testing, 2017, 61, 455-463.	3.9	15
227	A numerical study of different projection-based model reduction techniques applied to computational homogenisation. Computational Mechanics, 2017, 60, 613-625.	2.5	46
228	On the wall slip phenomenon of elastomers in oscillatory shear measurements using parallel-plate rotational rheometry: I. Detecting wall slip. Polymer Testing, 2017, 61, 430-440.	3.9	36
229	Wrinkling instabilities in soft bilayered systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160163.	1.6	50
230	Uniaxial deformation of polystyrene–silica nanocomposites studied by hybrid molecular dynamics–finite element simulations. Computational Materials Science, 2017, 129, 1-12.	2.6	26
231	Micro-to-macro transition accounting for general imperfect interfaces. Computer Methods in Applied Mechanics and Engineering, 2017, 317, 274-317.	5.6	102
232	On gradient-based optimization strategies for inverse problems in metal forming. GAMM Mitteilungen, 2017, 40, 27-50.	0.9	2
233	Towards a thermo-magneto-mechanical coupling framework for magneto-rheological elastomers. International Journal of Solids and Structures, 2017, 128, 117-132.	3.0	54
234	Numerical modelling of nonlinear thermo-electro-elasticity. Mathematics and Mechanics of Solids, 2017, 22, 2196-2213.	1.1	20

#	Article	IF	Citations
235	Viscoelastic parameter identification of human brain tissue. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 74, 463-476.	2.7	182
236	Rheological characterization of human brain tissue. Acta Biomaterialia, 2017, 60, 315-329.	6.7	194
237	Mechanical characterization of human brain tissue. Acta Biomaterialia, 2017, 48, 319-340.	6.7	653
238	Convergence study of the h-adaptive PUM and the hp-adaptive FEM applied to eigenvalue problems in quantum mechanics. Advanced Modeling and Simulation in Engineering Sciences, 2017, 4, .	2.5	19
239	Improvements on a non-invasive, parameter-free approach to inverse form finding. Computational Mechanics, 2017, 61, 433-447.	2.5	7
240	Control of minimum member size in parameter-free structural shape optimization by a medial axis approximation. Computational Mechanics, 2017, 61, 717-727.	2.5	4
241	Surface plasticity: theory and computation. Computational Mechanics, 2017, 62, 617-634.	2.5	7
242	Computational first-order homogenization in chemo-mechanics. Archive of Applied Mechanics, 2017, 88, 271-286.	2.0	19
243	Case study on the influence of kinematic hardening within a parameter-free and non-invasive form finding approach. MATEC Web of Conferences, 2016, 80, 11007.	0.2	1
244	Effects of Boiling Water Reactor Medium on the Fatigue Life of Austenitic Stainless Steels. Journal of Pressure Vessel Technology, Transactions of the ASME, 2016, 138, .	0.9	0
245	On the adaptive finite element analysis of the Kohn–Sham equations: methods, algorithms, and implementation. International Journal for Numerical Methods in Engineering, 2016, 106, 863-888.	2.3	26
246	Computational electro-elasticity and magneto-elasticity for quasi-incompressible media immersed in free space. International Journal for Numerical Methods in Engineering, 2016, 108, 1307-1342.	2.3	66
247	Size effects of 109° domain walls in rhombohedral barium titanate single crystals—A molecular statics analysis. Journal of Applied Physics, 2016, 119, .	1.6	7
248	Reduced-order modelling for linear heat conduction with parametrised moving heat sources. GAMM Mitteilungen, 2016, 39, 170-188.	0.9	18
249	Aspects of Computational Homogenization at Finite Deformations: A Unifying Review From Reuss' to Voigt's Bound. Applied Mechanics Reviews, 2016, 68, .	11.7	204
250	Turning of aluminum metal matrix composites: influence of the reinforcement and the cutting condition on the surface layer of the workpiece. Advances in Manufacturing, 2016, 4, 225-236.	1.9	24
251	On stochastic FEM based computational homogenization of magneto-active heterogeneous materials with random microstructure. Computational Mechanics, 2016, 58, 981-1002.	2.5	14
252	Brain stiffness increases with myelin content. Acta Biomaterialia, 2016, 42, 265-272.	6.7	262

#	Article	IF	Citations
253	Compensation of Thermo-mechanically Induced Workpiece and Tool Deformations During Dry Turning. Procedia CIRP, 2016, 46, 31-34.	0.9	4
254	Investigation of interphase effects in silica-polystyrene nanocomposites based on a hybrid molecular-dynamics–finite-element simulation framework. Physical Review E, 2016, 93, .	1.5	28
255	Comparative computational analysis of the Cahn–Hilliard equation with emphasis on C1-continuous methods. Journal of Computational Physics, 2016, 322, 783-803.	2.9	26
256	Computational Homogenisation using Reduced-Order Modelling applied to Hyperelasticity. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 551-552.	0.4	2
257	Coherent energetic interfaces accounting for in-plane degradation. International Journal of Fracture, 2016, 202, 135-165.	1.9	7
258	Modelling additive manufactured materials using a crystal plasticity model. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 355-356.	0.4	4
259	A thermo-mechanical energetic cohesive zone model accounting for Kapitza interfaces. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 437-438.	0.4	0
260	Aspects of computational homogenization in magneto-mechanics. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 501-502.	0.4	0
261	Molecular statics simulations of ferroelectric nanofilms. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 327-328.	0.4	0
262	On the Computational Homogenization of Transient Diffusion Problems. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 529-530.	0.4	2
263	A thermo-mechanical cohesive zone model accounting for mechanically energetic Kapitza interfaces. International Journal of Solids and Structures, 2016, 92-93, 29-44.	3.0	20
264	A non-invasive form finding method with application to metal forming. Production Engineering, 2016, 10, 93-102.	1.0	8
265	On nonlinear thermo-electro-elasticity. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160170.	1.4	34
266	Two-scale elastic parameter identification from noisy macroscopic data. Archive of Applied Mechanics, 2016, 86, 303-320.	2.0	5
267	Macroscopic simulation and experimental measurement of melt pool characteristics in selective electron beam melting of Ti-6Al-4V. International Journal of Advanced Manufacturing Technology, 2016, 88, 1309-1317.	2.1	107
268	Towards an efficient two-scale approach to model technical textiles. Computational Mechanics, 2016, 59, 385-401.	2.5	12
269	On curvature approximation in 2D and 3D parameter–free shape optimization. Structural and Multidisciplinary Optimization, 2016, 55, 1655-1669.	2.7	8
270	Aspects of implementing constant traction boundary conditions in computational homogenization via semi-Dirichlet boundary conditions. Computational Mechanics, 2016, 59, 21-35.	2.5	20

#	Article	IF	Citations
271	Numerical homogenization of elastic and thermal material properties for metal matrix composites (MMC). Continuum Mechanics and Thermodynamics, 2016, 29, 51-75.	1.4	15
272	A thermo-viscoplastic constitutive law for isotropic hardening of metals. Archive of Applied Mechanics, 2016, 87, 129-157.	2.0	7
273	Non-coherent energetic interfaces accounting for degradation. Computational Mechanics, 2016, 59, 361-383.	2.5	21
274	Molecular statics simulations of ferroelectric barium titanate in the rhombohedral phase. GAMM Mitteilungen, 2015, 38, 132-146.	0.9	6
275	Computational homogenization of nano-materials accounting for size effects via surface elasticity. GAMM Mitteilungen, 2015, 38, 285-312.	0.9	34
276	Towards modelling the curing process in particle-filled electro-active polymers. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 301-302.	0.4	1
277	Determination of material parameters of heterogeneous viscoelastic curing polymers. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 315-316.	0.4	0
278	Computational Homogenization of Micromechanically Resolved Textile Materials. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 461-462.	0.4	1
279	A staggered approach to structural shape and topology optimization. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 575-576.	0.4	0
280	On curvature control in node–based shape optimization. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 579-580.	0.4	5
281	Primary and secondary instabilities in soft bilayered systems. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 281-282.	0.4	1
282	An atomistic scale analysis of ferroelectric nanodomain interfaces. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 287-288.	0.4	1
283	Identification of elastoplastic microscopic material parameters within a homogenization scheme. International Journal for Numerical Methods in Engineering, 2015, 104, 391-407.	2.3	14
284	Interface properties influence the effective dielectric constant of composites. Philosophical Magazine, 2015, 95, 3402-3412.	0.8	16
285	On molecular statics simulations of ferroelectric functional materials. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 15-18.	0.4	0
286	A global damping factor for a non-invasive form finding algorithm. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 327-328.	0.4	2
287	Simulation of creep and cyclic viscoplastic strains in high-Cr steel components based on a modified Becker–Hackenberg model. International Journal of Pressure Vessels and Piping, 2015, 128, 36-47.	2.6	14
288	Computational homogenization of rope-like technical textiles. Computational Mechanics, 2015, 55, 577-590.	2.5	16

#	Article	IF	Citations
289	Modelling the mechanical aspects of the curing process of magneto-sensitive elastomeric materials. International Journal of Solids and Structures, 2015, 58, 257-269.	3.0	31
290	A staggered approach to shape and topology optimization using the traction method and an evolutionary-type advancing front algorithm. Computer Methods in Applied Mechanics and Engineering, 2015, 287, 1-30.	5.6	19
291	Inverse analysis for heterogeneous materials and its application to viscoelastic curing polymers. Computational Mechanics, 2015, 55, 603-615.	2.5	11
292	Effects of Pressurized Water Reactor Medium on the Fatigue Life of Austenitic Stainless Steels. Journal of Pressure Vessel Technology, Transactions of the ASME, 2015, 137, .	0.9	5
293	Identification of thermal effects on the diameter deviation of inhomogeneous aluminum metal matrix composite workpieces when dry turning. Production Engineering, 2015, 9, 473-485.	1.0	5
294	A multi-scale approach to model the curing process in magneto-sensitive polymeric materials. International Journal of Solids and Structures, 2015, 69-70, 34-44.	3.0	27
295	Size and curvature regulate pattern selection in the mammalian brain. Extreme Mechanics Letters, 2015, 4, 193-198.	3.1	65
296	Modelling the curing process in magneto-sensitive polymers: Rate-dependence and shrinkage. International Journal of Non-Linear Mechanics, 2015, 74, 108-121.	2.3	30
297	Secondary instabilities modulate cortical complexity in the mammalian brain. Philosophical Magazine, 2015, 95, 3244-3256.	0.8	51
298	Mechanical properties of gray and white matter brain tissue by indentation. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 46, 318-330.	2.7	685
299	Physical biology of human brain development. Frontiers in Cellular Neuroscience, 2015, 9, .	2.4	280
300	Phase field simulations of the poling behavior of BaTiO3 nano-scale thin films with SrRuO3 and Au electrodes. European Journal of Mechanics, A/Solids, 2015, 49, 455-466.	3.1	12
301	Multiscale modelling for composites with energetic interfaces at the micro- or nanoscale. Mathematics and Mechanics of Solids, 2015, 20, 1130-1145.	1.1	41
302	Reviewing the roots of continuum formulations in molecular systems. Part III: Stresses, couple stresses, heat fluxes. Mathematics and Mechanics of Solids, 2015, 20, 1153-1170.	1.1	9
303	Modelling of iron-filled magneto-active polymers with a dispersed chain-like microstructure. European Journal of Mechanics, A/Solids, 2015, 50, 132-151.	3.1	38
304	Molecular statics simulations of head to head and tail to tail nanodomains of rhombohedral barium titanate. Computational Materials Science, 2015, 97, 20-25.	2.6	4
305	On the formulation and implementation of geometric and manufacturing constraints in node–based shape optimization. Structural and Multidisciplinary Optimization, 2015, 53, 881-892.	2.7	16
306	Effect of the cutting condition and the reinforcement phase on the thermal load of the workpiece when dry turning aluminum metal matrix composites. International Journal of Advanced Manufacturing Technology, 2015, 82, 1317-1334.	2.1	28

#	Article	IF	Citations
307	A web-based tool for the interactive visualization of stresses in an infinite plate with an elliptical hole under simple tension: www.ltm.fau.de/plate. Archive of Applied Mechanics, 2015, 86, 617-625.	2.0	3
308	A non-invasive heuristic approach to shape optimization in forming. Computational Mechanics, 2015, 57, 169-191.	2.5	11
309	Modified SFEM for computational homogenization of heterogeneous materials with microstructural geometric uncertainties. Computational Mechanics, 2015, 57, 123-147.	2.5	27
310	On the modeling of equilibrium twin interfaces in a single-crystalline magnetic shape-memory alloy sample—III: Magneto-mechanical behaviors. Continuum Mechanics and Thermodynamics, 2015, 28, 885-913.	1.4	12
311	A Study on Mixed Finite Element Formulations Applied to Diffusion Problems. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 485-486.	0.4	1
312	Size Effects in a Silica-Polystyrene Nanocomposite: Molecular Dynamics and Surface-enhanced Continuum Approaches. Soft Materials, 2014, 12, S142-S151.	0.8	6
313	An extended molecular statics algorithm simulating the electromechanical continuum response of ferroelectric materials. Computational Mechanics, 2014, 54, 1515-1527.	2.5	8
314	Reviewing the roots of continuum formulations in molecular systems. Part I: Particle dynamics, statistical physics, mass and linear momentum balance equations. Mathematics and Mechanics of Solids, 2014, 19, 411-433.	1.1	10
315	Magneto-Sensitive Elastomers: An Experimental Point of View. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 403-404.	0.4	4
316	A comparison between a recursive method based on an inverse mechanical formulation and shape optimization for solving inverse form finding problems in isotropic elastoplasticity. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 423-424.	0.4	0
317	Molecular dynamics and finite elements: an approach to couple different worlds. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 569-570.	0.4	0
318	Thermomechanical Simulation of the Electron Beam Melting Process for TiAl6V4. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 463-464.	0.4	0
319	Numerical Simulation of Particle Movement in Cellular Flows under the Influence of Magnetic Forces. International Journal of Simulation Modelling, 2014, 13, 300-311.	0.5	3
320	Comparison of several staggered atomistic-to-continuum concurrent coupling strategies. Computer Methods in Applied Mechanics and Engineering, 2014, 277, 260-280.	5.6	20
321	General imperfect interfaces. Computer Methods in Applied Mechanics and Engineering, 2014, 275, 76-97.	5.6	97
322	A novel strategy to identify the critical conditions for growth-induced instabilities. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 29, 20-32.	2.7	22
323	On rate-dependent dissipation effects in electro-elasticity. International Journal of Non-Linear Mechanics, 2014, 62, 1-11.	2.3	36
324	Surface electrostatics: theory and computations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20130628.	1.4	9

#	Article	IF	Citations
325	Homogenization in periodically heterogeneous elastic bodies with multiple micro-contact. Mathematics and Mechanics of Solids, 2014, 19, 1011-1021.	1.1	15
326	Unified magnetomechanical homogenization framework with application to magnetorheological elastomers. Mathematics and Mechanics of Solids, 2014, 19, 193-211.	1.1	70
327	Nonlinear magneto-viscoelasticity of transversally isotropic magneto-active polymers. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140082.	1.4	56
328	An integrated approach to shape optimization and mesh adaptivity based on material residual forces. Computer Methods in Applied Mechanics and Engineering, 2014, 278, 640-663.	5.6	16
329	The role of mechanics during brain development. Journal of the Mechanics and Physics of Solids, 2014, 72, 75-92.	4.7	245
330	Thermomechanical finite element simulations of selective electron beam melting processes: performance considerations. Computational Mechanics, 2014, 54, 109-122.	2.5	49
331	A unified computational framework for bulk and surface elasticity theory: a curvilinear-coordinate-based finite element methodology. Computational Mechanics, 2014, 54, 745-762.	2.5	69
332	On a recursive formulation for solving inverse form finding problems in isotropic elastoplasticity. Advanced Modeling and Simulation in Engineering Sciences, 2014, 1, 10.	2.5	16
333	Reviewing the roots of continuum formulations in molecular systems. Part II: Energy and angular momentum balance equations. Mathematics and Mechanics of Solids, 2014, 19, 852-867.	1.1	5
334	Modelling, simulation and experimental validation of heat transfer in selective laser melting of the polymeric material PA12. Computational Materials Science, 2014, 93, 239-248.	2.6	89
335	Modeling and simulation of viscous electro-active polymers. European Journal of Mechanics, A/Solids, 2014, 48, 112-128.	3.1	60
336	Thermo-elastic deformations of the workpiece when dry turning aluminum alloys - A finite element model to predict thermal effects in the workpiece. CIRP Journal of Manufacturing Science and Technology, 2014, 7, 233-245.	4.0	30
337	High gradient magnetic particle separation in a channel with bifurcations. Engineering Analysis With Boundary Elements, 2014, 49, 22-30.	2.5	7
338	Two-scale computational homogenization of electro-elasticity at finite strains. Computer Methods in Applied Mechanics and Engineering, 2014, 278, 62-79.	5.6	96
339	On the discrete variant of the traction method in parameter-free shape optimization. Computer Methods in Applied Mechanics and Engineering, 2014, 278, 119-144.	5.6	18
340	Magnetic force and torque on particles subject to a magnetic field. European Journal of Mechanics, A/Solids, 2014, 48, 23-37.	3.1	21
341	Finite Element Model to Calculate the Thermal Expansions of the Tool and the Workpiece in Dry Turning. Procedia CIRP, 2014, 14, 535-540.	0.9	9
342	Optimum blank design by using the FEM based on inverse motion in orthotropic elasto-plasticity. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 353-354.	0.4	0

#	Article	IF	Citations
343	Thermomechanical coupling of geometrically non-coherent interfaces. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 455-456.	0.4	0
344	A mechanical approach to explain cortical folding phenomena in healthy and diseased brains. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 101-102.	0.4	2
345	A two-scale simulation method accounting for thermal effects during turning. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 237-238.	0.4	0
346	A variational approach towards the modeling of equilibrium twin interfaces in a single-crystalline magnetic shape memory alloy sample. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 405-406.	0.4	0
347	Molecular static simulations of ferroelectric material hysteresis behaviour. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 409-410.	0.4	0
348	Microscale modeling and homogenization of rope-like textiles. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 549-550.	0.4	3
349	On regularization in parameter-free shape optimization. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 785-786.	0.4	0
350	Manufacturing constraints in parameter-free shape optimization. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 787-788.	0.4	1
351	Sensitivities for topological graph changes in finite element meshes and application to adaptive refinement. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 873-874.	0.4	1
352	A comprehensive characterization of the electro-mechanically coupled properties of VHB 4910 polymer. Archive of Applied Mechanics, 2014, 85, 523-537.	2.0	71
353	Surface magnetoelasticity theory. Archive of Applied Mechanics, 2014, 85, 1265-1288.	2.0	6
354	On the modeling of equilibrium twin interfaces in a single-crystalline magnetic shape memory alloy sample. II: numerical algorithm. Continuum Mechanics and Thermodynamics, 2014, 28, 669-698.	1.4	16
355	A cohesive crack propagation model: Mathematical theory and numerical solution. Communications on Pure and Applied Analysis, 2013, 12, 1705-1729.	0.6	15
356	Simulation of Adhesive Joints by Viscoelastic Interface Material Model. Advanced Engineering Materials, 2013, 15, 861-867.	2.2	0
357	On molecular statics and surface-enhanced continuum modeling of nano-structures. Computational Materials Science, 2013, 69, 510-519.	2.6	56
358	Phenomenological modelling of self-healing polymers based on integrated healing agents. Computational Mechanics, 2013, 52, 681-692.	2.5	54
359	An Arlequin-based method to couple molecular dynamics and finite element simulations of amorphous polymers and nanocomposites. Computer Methods in Applied Mechanics and Engineering, 2013, 260, 109-129.	5.6	63
360	Geometrically nonlinear higher-gradient elasticity with energetic boundaries. Journal of the Mechanics and Physics of Solids, 2013, 61, 2381-2401.	4.7	206

#	Article	IF	Citations
361	Modeling Deformations of the Workpiece and Removal of Material when Turning. Procedia CIRP, 2013, 8, 39-44.	0.9	10
362	Simulation of 3D fatigue crack propagation using an implicit time integration scheme. International Journal of Fatigue, 2013, 50, 2-9.	5.2	2
363	Finite element simulation of the magneto-mechanical response of a magnetic shape memory alloy sample. Philosophical Magazine, 2013, 93, 2630-2653.	0.8	21
364	A theory of finite deformation magneto-viscoelasticity. International Journal of Solids and Structures, 2013, 50, 3886-3897.	3.0	140
365	Numerical Analysis of the Mechanical Behavior of Lightweight Metal-CFRP Joints. Advanced Engineering Materials, 2013, 15, 846-852.	2.2	6
366	On some mixed variational principles in magneto-elastostatics. International Journal of Non-Linear Mechanics, 2013, 51, 157-169.	2.3	34
367	Computational homogenization in magneto-mechanics. International Journal of Solids and Structures, 2013, 50, 4197-4216.	3.0	133
368	Computational modelling and homogenization of technical textiles. Engineering Structures, 2013, 50, 68-73.	5.4	20
369	On the mechanics of continua with boundary energies and growing surfaces. Journal of the Mechanics and Physics of Solids, 2013, 61, 1446-1463.	4.7	61
370	Micro-to-macro transitions for continua with surface structure at the microscale. International Journal of Solids and Structures, 2013, 50, 2561-2572.	3.0	57
371	Investigations on the polygonal finite element method: Constrained adaptive Delaunay tessellation and conformal interpolants. Computers and Structures, 2013, 120, 33-46.	3.8	23
372	Numerical modelling of thermomechanical solids with highly conductive energetic interfaces. International Journal for Numerical Methods in Engineering, 2013, 93, 551-574.	2.3	23
373	Thermomechanics of Solids With Lower-Dimensional Energetics: On the Importance of Surface, Interface, and Curve Structures at the Nanoscale. A Unifying Review. Applied Mechanics Reviews, 2013, 65, .	11.7	173
374	More hyperelastic models for rubber-like materials: consistent tangent operators and comparative study. Journal of the Mechanical Behavior of Materials, 2013, 22, 27-50.	1.3	150
375	Mathematical modelling of finite strain magneto-viscoelastic deformations. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 163-164.	0.4	2
376	On Molecular Statics Simulation of Ferroelectric Barium Titanate. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 133-134.	0.4	0
377	Degree of cure-dependent modelling for polymer curing processes at small strains. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 217-218.	0.4	0
378	On generalized crystal-plasticity based on defect-densities in a second-order continuum. GAMM Mitteilungen, 2013, 36, 203-218.	0.9	1

#	Article	IF	Citations
379	Modeling and Simulation of Curing and Damage in Thermosetting Adhesives. Journal of Adhesion, 2013, 89, 111-127.	1.9	3
380	Design and validation of a new fixture for the shear testing of cellular solids. Archive of Applied Mechanics, 2013, 84, 309-321.	2.0	8
381	Analysis of the machining accuracy when dry turning via experiments and finite element simulations. Production Engineering, 2013, 8, 41-50.	1.0	14
382	Degree of cure-dependent modelling for polymer curing processes at small-strain. Part I: consistent reformulation. Computational Mechanics, 2013, 53, 777-787.	2.5	32
383	On the modeling of equilibrium twin interfaces in a single-crystalline magnetic shape memory alloy sample. I: theoretical formulation. Continuum Mechanics and Thermodynamics, 2013, 26, 563-592.	1.4	21
384	On the spatial and material motion problems in nonlinear electro-elastostatics with consideration of free space. Mathematics and Mechanics of Solids, 2012, 17, 803-823.	1.1	18
385	Adaptive refinement based on asymptotic expansions of finite element solutions for node insertion in 1d. GAMM Mitteilungen, 2012, 35, 175-190.	0.9	1
386	Micro-to-macro transitions for continua with surface structure at the microscale. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 23-26.	0.4	0
387	On two different inverse form finding methods for hyperelastic and elastoplastic materials. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 263-264.	0.4	0
388	Single- and multiscale aspects of the modeling of curing polymers. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 303-304.	0.4	0
389	On consistent tangent operator derivation and comparative study of rubber-like material models at finite strains. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 349-350.	0.4	0
390	Macroscopic modelling of the selective beam melting process. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 381-382.	0.4	2
391	Viscoelastic effects and shrinkage as accompanying phenomena of the curing of polymers. Single- and multiscale effects. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 435-436.	0.4	0
392	Separation of magnetic particles in channel flows by BEM. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 475-476.	0.4	0
393	Hyperelastic models for rubber-like materials: consistent tangent operators and suitability for Treloar's data. Archive of Applied Mechanics, 2012, 82, 1183-1217.	2.0	407
394	Optimal Design of Brittle Composite Materials: a Nonsmooth Approach. Journal of Optimization Theory and Applications, 2012, 155, 962-985.	1.0	4
395	The multiscale approach to the curing of polymers incorporating viscous and shrinkage effects. International Journal of Solids and Structures, 2012, 49, 3883-3900.	3.0	18
396	Modelling and computation of curing and damage of thermosets. Computational Materials Science, 2012, 53, 359-367.	2.6	27

#	Article	IF	Citations
397	Experimental study and numerical modelling of VHB 4910 polymer. Computational Materials Science, 2012, 59, 65-74.	2.6	181
398	Numerical modelling of thermomechanical solids with mechanically energetic (generalised) Kapitza interfaces. Computational Materials Science, 2012, 65, 542-551.	2.6	37
399	Relationships between the admissible range of surface material parameters and stability of linearly elastic bodies. Philosophical Magazine, 2012, 92, 3540-3563.	0.8	33
400	Mechanical behavior of a cellular composite under quasi-static, static, and cyclic compression loading. Journal of Materials Science, 2012, 47, 5635-5645.	2.8	9
401	Dynamic performance of dielectric elastomers utilized as acoustic actuators. Applied Physics A: Materials Science and Processing, 2012, 107, 531-538.	2.1	48
402	On 3-D coupled BEM–FEM simulation of nonlinear electro-elastostatics. Computer Methods in Applied Mechanics and Engineering, 2012, 201-204, 82-90.	5.6	42
403	A deformational and configurational framework for geometrically non-linear continuum thermomechanics coupled to diffusion. International Journal of Non-Linear Mechanics, 2012, 47, 215-227.	2.3	23
404	On some mixed variational principles in electro-elastostatics. International Journal of Non-Linear Mechanics, 2012, 47, 341-354.	2.3	29
405	Modeling of curing processes based on a multi-field potential. Single- and multiscale aspects. International Journal of Solids and Structures, 2012, 49, 2320-2333.	3.0	25
406	Micro-to-macro transitions for heterogeneous material layers accounting for in-plane stretch. Journal of the Mechanics and Physics of Solids, 2012, 60, 1221-1239.	4.7	48
407	A variational approach towards the modeling of magnetic field-induced strains in magnetic shape memory alloys. Journal of the Mechanics and Physics of Solids, 2012, 60, 1179-1200.	4.7	56
408	Analytical study on the stress-induced phase or variant transformation in slender shape memory alloy samples. Meccanica, 2012, 48, 943-970.	1.2	5
409	MULTISCALE PARAMETER IDENTIFICATION. International Journal for Multiscale Computational Engineering, 2012, 10, 327-342.	0.9	8
410	Geometrically nonlinear continuum thermomechanics with surface energies coupled to diffusion. Journal of the Mechanics and Physics of Solids, 2011, 59, 2116-2133.	4.7	57
411	Geometrically nonlinear gravito-elasticity: Hyperelastostatics coupled to Newtonian gravitation. International Journal of Engineering Science, 2011, 49, 1452-1460.	4.1	3
412	Identification of weak spots in the metrological investigation of dynamic machine behaviour. Production Engineering, 2011, 5, 679-689.	1.0	3
413	A comparison between inverse form finding and shape optimization methods for anisotropic hyperelasticity in logarithmic strain space. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 367-368.	0.4	4
414	Extension of the Arruda-Boyce model to the modelling of the curing process of polymers. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 389-390.	0.4	4

#	Article	IF	Citations
415	Geometrically Nonlinear Continuum Thermomechanics with Surface Energies Coupled to Diffusion. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 483-484.	0.4	1
416	Microscale modelling and homogenization of fiber structured materials. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 513-514.	0.4	0
417	On the Homogenization of Material Forces. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 549-550.	0.4	0
418	Numerical simulation of particles movement in cellular flows under the influence of magnetic forces. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 573-574.	0.4	0
419	Isogeometric structural shape optimization using a fictitious energy regularization. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 709-710.	0.4	1
420	Computational homogenization and parameter-identification for heterogeneous inelastic materials. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 951-954.	0.4	2
421	Die Entwicklung der Analytischen Mechanik von Euler, Lagrange und Hamilton aus studentischer Sicht. GAMM Mitteilungen, 2011, 34, 183-193.	0.9	0
422	Towards optimization of crack resistance of composite materials by adjustment of fiber shapes. Engineering Fracture Mechanics, 2011, 78, 944-960.	4.3	31
423	A finite element framework for continua with boundary energies. Part III: The thermomechanical case. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1963-1977.	5.6	33
424	Quality of alveolar bone — Structure-dependent material properties and design of a novel measurement technique. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 541-548.	2.7	11
425	Models of Solvent Penetration in Glassy Polymers With an Emphasis on Case II Diffusion. A Comparative Review. Applied Mechanics Reviews, 2011, 64, .	11.7	24
426	Nonperiodic stochastic boundary conditions for molecular dynamics simulations of materials embedded into a continuum mechanics domain. Journal of Chemical Physics, 2011, 134, .	2.2	36
427	A comparison of staggered solution schemes for coupled particle–continuum systems modeled with the Arlequin method. Computational Mechanics, 2011, 49, 565-579.	2.5	26
428	A finite strain framework for the simulation of polymer curing. Part II. Viscoelasticity and shrinkage. Computational Mechanics, 2010, 46, 363-375.	2.5	52
429	Natural element analysis of the Cahn–Hilliard phase-field model. Computational Mechanics, 2010, 46, 471-493.	2.5	44
430	A comparison of different approaches in the multi-scale computation of configurational forces. International Journal of Fracture, 2010, 166, 203-214.	1.9	15
431	A fictitious energy approach for shape optimization. International Journal for Numerical Methods in Engineering, 2010, 82, 269-302.	2.3	46
432	On the C1 continuous discretization of non-linear gradient elasticity: A comparison of NEM and FEM based on Bernstein–Bézier patches. International Journal for Numerical Methods in Engineering, 2010, 82, 1282-1307.	2.3	50

#	Article	IF	Citations
433	A finite element framework for continua with boundary energies. Part II: The three-dimensional case. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 755-765.	5.6	106
434	A 2-D coupled BEM–FEM simulation of electro-elastostatics at large strain. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 1124-1133.	5.6	56
435	On thermomechanical solids with boundary structures. International Journal of Solids and Structures, 2010, 47, 3245-3253.	3.0	62
436	?1 continuous discretization of gradient elasticity. Proceedings in Applied Mathematics and Mechanics, 2010, 9, 435-436.	0.4	0
437	On Inverse Form Finding For Anisotropic Materials. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 159-160.	0.4	1
438	Application of a Viscoelastic Material Model in Electro-Mechanics. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 387-388.	0.4	2
439	Direct Evaluation of Nonlinear Gradient Elasticity in 2D with C1 Continuous Discretization Methods. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 559-560.	0.4	5
440	Analysis and Application of the Rational B-Spline Finite Element Method in 2D. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 561-562.	0.4	1
441	Material and Spatial Motion Problems in Nonlinear Electro- and Magneto-elastostatics. Mathematics and Mechanics of Solids, 2010, 15, 239-257.	1.1	24
442	Finite element analysis of an inelastic interface in ultrasonic welded metal/fibre-reinforced polymer joints. Computational Materials Science, 2010, 50, 184-190.	2.6	32
443	Simulation of fracture in heterogeneous elastic materials with cohesive zone models. International Journal of Fracture, 2010, 168, 15-29.	1.9	34
444	Isogeometric analysis of 2D gradient elasticity. Computational Mechanics, 2010, 47, 325-334.	2.5	133
445	Unconstrained and Cauchy-Born-constrained atomistic systems: deformational and configurational mechanics. Archive of Applied Mechanics, 2010, 81, 669-684.	2.0	13
446	Material Forces in Non-Classical Thermo-Hyperelasticity. Journal of Thermal Stresses, 2009, 32, 361-393.	1.5	7
447	Classification of Concepts in Thermodynamically Consistent Generalized Plasticity. Journal of Engineering Mechanics - ASCE, 2009, 135, 156-170.	1.9	34
448	A finite strain framework for the simulation of polymer curing. Part I: elasticity. Computational Mechanics, 2009, 44, 621-630.	2.5	72
449	Towards the treatment of boundary conditions for global crack path tracking in three-dimensional brittle fracture. Computational Mechanics, 2009, 45, 91-107.	2.5	16
450	Chemical and structural characterisation of DGEBA-based epoxies by time of flight secondary ion mass spectrometry (ToF-SIMS) as a preliminary to polymer interphase characterisation. Analytical and Bioanalytical Chemistry, 2009, 393, 1879-1888.	2.6	5

#	Article	IF	Citations
451	Secret and joy of configurational mechanics: From foundations in continuum mechanics to applications in computational mechanics. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2009, 89, 614-630.	1.8	35
452	A finite element framework for continnua with boundary potentials. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 227-228.	0.4	0
453	Elastic-plastic stress analysis of cracked structures using the boundary element method. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 243-244.	0.4	0
454	Polygonal finite element formulations for 2d linear-elastic FE problems. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 245-246.	0.4	0
455	On bridging domain methods to couple particle- and finite-element-based simulations. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 441-442.	0.4	0
456	Computational multiscale modelling of heterogeneous material layers. Engineering Fracture Mechanics, 2009, 76, 793-812.	4.3	68
457	Micro–macro characterisation of DGEBA-based epoxies as a preliminary to polymer interphase modelling. International Journal of Adhesion and Adhesives, 2009, 29, 478-487.	2.8	32
458	A finite element framework for continua with boundary energies. Part I: The two-dimensional case. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2198-2208.	5.6	94
459	On energetic changes due to configurational motion of standard continua. International Journal of Solids and Structures, 2009, 46, 1464-1475.	3.0	18
460	On deformational and configurational poro-mechanics: dissipative versus non-dissipative modelling of two-phase solid/fluid mixtures. Archive of Applied Mechanics, 2009, 80, 969-984.	2.0	6
461	On the Multiscale Computation of Defect Driving Forces. International Journal for Multiscale Computational Engineering, 2009, 7, 457-474.	0.9	16
462	On the propagation of second-sound in linear and nonlinear media: Results from Green–Naghdi theory. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 4418-4424.	1.6	33
463	Precise 3D crack growth simulations. International Journal of Fracture, 2008, 149, 175-192.	1.9	5
464	An incremental variational formulation of dissipative and non-dissipative coupled thermoelasticity for solids. Heat and Mass Transfer, 2008, 45, 107-116.	1.6	13
465	On local tracking algorithms for the simulation of three-dimensional discontinuities. Computational Mechanics, 2008, 42, 395-406.	2.5	29
466	The Adaptive Delaunay Tessellation: a neighborhood covering meshing technique. Computational Mechanics, 2008, 42, 655-669.	2.5	12
467	Interfacial Fatigue Modelling of Ultrasonic Metal Welded Tensile Specimens. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10245-10246.	0.4	0
468	Towards the analysis of materials with strain gradient effects using -Natural Element Method. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10255-10256.	0.4	0

#	Article	IF	Citations
469	A finite element framework for the numerical implementation of boundary potentials. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10293-10294.	0.4	1
470	Towards Modeling the Curing Processes of Thermosets. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10427-10428.	0.4	0
471	Continuum-Atomistic Coupling based on Computational Homogenization. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10565-10566.	0.4	0
472	A note on the generation of periodic granular microstructures based on grain size distributions. International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 509-522.	2.6	26
473	Time-dependent fibre reorientation of transversely isotropic continua—Finite element formulation and consistent linearization. International Journal for Numerical Methods in Engineering, 2008, 73, 1413-1433.	2.3	40
474	Modeling three-dimensional crack propagation—A comparison of crack path tracking strategies. International Journal for Numerical Methods in Engineering, 2008, 76, 1328-1352.	2.3	89
475	Computational modelling of microcracking effects in polycrystalline piezoelectric ceramics. GAMM Mitteilungen, 2008, 31, 151-165.	0.9	1
476	On boundary potential energies in deformational and configurational mechanics. Journal of the Mechanics and Physics of Solids, 2008, 56, 772-800.	4.7	143
477	On a solution strategy for energy-based mesh optimization in finite hyperelastostatics. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 609-622.	5.6	14
478	A consistent time FE-method for large strain elasto-plasto-dynamics. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 3024-3044.	5.6	17
479	Galerkin-based mechanical integrators for finite elastodynamics formulated in principal stretches – Pitfalls and remedies. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 4444-4466.	5.6	7
480	Aspects of bifurcation in an isotropic elastic continuum with orthotropic inelastic interface. European Journal of Mechanics, A/Solids, 2008, 27, 532-547.	3.1	9
481	On the simulation of cohesive fatigue effects in grain boundaries of a piezoelectric mesostructure. International Journal of Solids and Structures, 2008, 45, 4687-4708.	3.0	25
482	Modeling and simulation of first and second sound in solids. International Journal of Solids and Structures, 2008, 45, 6067-6073.	3.0	27
483	Computational modelling of thermal impact welded PEEK/steel single lap tensile specimens. Computational Materials Science, 2008, 41, 287-296.	2.6	17
484	Visualization of Particle Interactions in Granular Media. IEEE Transactions on Visualization and Computer Graphics, 2008, 14, 1110-1125.	2.9	6
485	Parameteridentifikation für Getriebegehäuse. ATZ Automobiltechnische Zeitschrift, 2008, 110, 248-255.	0.0	1
486	Parameter identification for transmission housings. ATZ Worldwide, 2008, 110, 46-51.	0.0	1

#	Article	IF	Citations
487	Computational homogenization of material layers with micromorphic mesostructure. Philosophical Magazine, 2008, 88, 3603-3631.	0.8	35
488	A small-strain model to simulate the curing of thermosets. Computational Mechanics, 2008, 43, 769-779.	2.5	89
489	Modelling and simulation of process: machine interaction in grinding. Production Engineering, 2008, 3, 111-120.	1.0	88
490	Towards the algorithmic treatment of 3D strong discontinuities. Communications in Numerical Methods in Engineering, 2007, 23, 97-108.	1.4	41
491	Studies of validity of the Cauchy–Born rule by direct comparison of continuum and atomistic modelling. Modelling and Simulation in Materials Science and Engineering, 2007, 15, S271-S281.	1.5	57
492	On the Material Setting of Gradient Hyperelasticity. Mathematics and Mechanics of Solids, 2007, 12, 559-580.	1.1	22
493	Interaction of process and machine during high-performance grinding: towards a comprehensive simulation concept. International Journal of Manufacturing Technology and Management, 2007, 12, 155.	0.1	7
494	Numerical modelling of non-linear electroelasticity. International Journal for Numerical Methods in Engineering, 2007, 70, 685-704.	2.3	196
495	On deformational and configurational mechanics of micromorphic hyperelasticity – Theory and computation. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4027-4044.	5.6	63
496	Generalized parameter identification for finite viscoelasticity. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 3315-3334.	5.6	36
497	On configurational forces in multiplicative elastoplasticity. International Journal of Solids and Structures, 2007, 44, 4442-4471.	3.0	40
498	Nonlinear electro- and magneto-elastostatics: Material and spatial settings. International Journal of Solids and Structures, 2007, 44, 7891-7905.	3.0	69
499	Numerical simulation of nonlinear electro-elastostatics. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1090707-1090708.	0.4	2
500	Towards the computational homogenization of discrete microstructures. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4080021-4080022.	0.4	1
501	Material force method within the framework of the X-FEM-distribution of nodal material forces. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4030017-4030018.	0.4	1
502	On phenomenological and micro-mechanical models in finite elasticity and viscoelasticity for rubber-like materials. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4060051-4060052.	0.4	4
503	Classical results for a non-classical theory: remarks on thermodynamic relations in Green–Naghdi thermo-hyperelasticity. Continuum Mechanics and Thermodynamics, 2007, 19, 59-66.	1.4	24
504	Theoretical and numerical aspects of the material and spatial settings in nonlinear electro-elastostatics. International Journal of Fracture, 2007, 147, 109-116.	1.9	8

#	Article	IF	Citations
505	Energy-based r-adaptivity: a solution strategy and applications to fracture mechanics. International Journal of Fracture, 2007, 147, 117-132.	1.9	11
506	An adaptive singular finite element in nonlinear fracture mechanics. International Journal of Fracture, 2007, 147, 181-190.	1.9	5
507	The discrete null space method for the energy-consistent integration of constrained mechanical systems. Part III: Flexible multibody dynamics. Multibody System Dynamics, 2007, 19, 45-72.	1.5	55
508	Theory and Implementation of Time-Dependent Fibre Reorientation in Transversely Isotropic Materials. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 131-132.	0.4	0
509	Simulation of Thermal Impact Welded Lightweight Structures. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 201-202.	0.4	1
510	Computational Material Forces in Micromorphic Continua. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 379-380.	0.4	0
511	Modelling and Computation of 3D Discontinuities in Solids. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 383-384.	0.4	0
512	Failure of granular materials at different scales - microscale approach. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 399-400.	0.4	1
513	Modeling of non-classical thermoelasticity. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 425-426.	0.4	0
514	Galerkin-based Time Integrators for Geometrically Nonlinear Elasto-Plastodynamics. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 827-828.	0.4	0
515	Objective energy–momentum conserving integration for the constrained dynamics of geometrically exact beams. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 2313-2333.	5.6	60
516	A geometrically nonlinear FE approach for the simulation of strong and weak discontinuities. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5037-5052.	5.6	46
517	Theoretical and computational aspects of non-classical thermoelasticity. Computer Methods in Applied Mechanics and Engineering, 2006, 196, 516-527.	5.6	51
518	An illustration of the equivalence of the loss of ellipticity conditions in spatial and material settings of hyperelasticity. European Journal of Mechanics, A/Solids, 2006, 25, 199-214.	3.1	12
519	RVE-based studies on the coupled effects of void size and void shape on yield behavior and void growth at micron scales. International Journal of Plasticity, 2006, 22, 1195-1216.	10.9	49
520	Transition to Plasticity in Continuum-Atomistic Modelling. Multidiscipline Modeling in Materials and Structures, 2006, 2, 249-286.	2.2	4
521	Mechanics of extended continua: modeling and simulation of elastic microstretch materials. Computational Mechanics, 2006, 40, 651-666.	2.5	30
522	A framework for multiplicative elastoplasticity with kinematic hardening coupled to anisotropic damage. International Journal of Plasticity, 2005, 21, 397-434.	10.9	122

#	Article	IF	Citations
523	A finite element method for the computational modelling of cohesive cracks. International Journal for Numerical Methods in Engineering, 2005, 63, 276-289.	2.3	222
524	Conservation properties of a time FE method. Part IV: Higher order energy and momentum conserving schemes. International Journal for Numerical Methods in Engineering, 2005, 63, 1849-1897.	2.3	59
525	Structural optimization by simultaneous equilibration of spatial and material forces. Communications in Numerical Methods in Engineering, 2005, 21, 433-442.	1.4	15
526	On material interfaces in thermomechanical solids. Archive of Applied Mechanics, 2005, 75, 31-41.	2.0	35
527	A note on material forces in finite inelasticity. Archive of Applied Mechanics, 2005, 74, 800-807.	2.0	12
528	A hyperelastodynamic ALE formulation based on referential, spatial and material settings of continuum mechanics. Acta Mechanica, 2005, 174, 201-222.	2.2	6
529	Modelling of Mass Changes in Anisotropic Materials. Proceedings in Applied Mathematics and Mechanics, 2005, 5, 299-300.	0.4	1
530	On Well Posedness in Continuum Interface Problems. Proceedings in Applied Mathematics and Mechanics, 2005, 5, 369-370.	0.4	0
531	A unifying treatise on variational principles for gradient and micromorphic continua. Philosophical Magazine, 2005, 85, 3875-3895.	0.8	63
532	Material forces in computational single-slip crystal-plasticity. Computational Materials Science, 2005, 32, 446-454.	2.6	16
533	Computational modeling of healing: an application of the material force method. Biomechanics and Modeling in Mechanobiology, 2004, 2, .	1.7	19
534	On the computation of material forces in continuum-atomistic modelling. Proceedings in Applied Mathematics and Mechanics, 2004, 4, 294-295.	0.4	0
535	Theory and implementation of orthotropic materials in growing continua. Proceedings in Applied Mathematics and Mechanics, 2004, 4, 320-321.	0.4	0
536	Mechanical integrators for constrained dynamics of geometrically exact beams. Proceedings in Applied Mathematics and Mechanics, 2004, 4, 344-345.	0.4	0
537	A finite element method for cohesive crack modelling. Proceedings in Applied Mathematics and Mechanics, 2004, 4, 350-351.	0.4	2
538	A hybrid discontinuous Galerkin/interface method for the computational modelling of failure. Communications in Numerical Methods in Engineering, 2004, 20, 511-519.	1.4	99
539	Application of the material force method to thermo-hyperelasticity. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 3303-3325.	5.6	25
540	An ALE formulation based on spatial and material settings of continuum mechanics. Part 1: Generic hyperelastic formulation. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 4207-4222.	5.6	81

#	Article	IF	Citations
541	An ALE formulation based on spatial and material settings of continuum mechanics. Part 2: Classification and applications. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 4223-4245.	5.6	58
542	On the comparison of two approaches to compute material forces for inelastic materials. Application to single-slip crystal-plasticity. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 5411-5428.	5.6	39
543	Material forces in open system mechanics. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 2357-2381.	5.6	32
544	On spatial and material settings of thermo-hyperelastodynamics for open systems. Acta Mechanica, 2003, 160, 179-217.	2.2	45
545	Application of the material force method to isotropic continuum damage. Computational Mechanics, 2003, 30, 171-184.	2.5	42
546	Constrained dynamics of geometrically exact beams. Computational Mechanics, 2003, 31, 49-59.	2.5	68
547	Computational modeling of growth. Computational Mechanics, 2003, 32, 71-88.	2.5	104
548	Geometrically non-linear anisotropic inelasticity based on fictitious configurations: Application to the coupling of continuum damage and multiplicative elasto-plasticity. International Journal for Numerical Methods in Engineering, 2003, 56, 2233-2266.	2.3	36
549	Theory and numerics of geometrically non-linear open system mechanics. International Journal for Numerical Methods in Engineering, 2003, 58, 1593-1615.	2.3	61
550	Studies in elastic fracture mechanics based on the material force method. International Journal for Numerical Methods in Engineering, 2003, 58, 1817-1835.	2.3	87
551	On higher gradients in continuum-atomistic modelling. International Journal of Solids and Structures, 2003, 40, 6877-6896.	3.0	145
552	Theory and numerics of geometrically non-linear gradient plasticity. International Journal of Engineering Science, 2003, 41, 1603-1629.	4.1	54
553	A micropolar microplane theory. International Journal of Engineering Science, 2003, 41, 1631-1648.	4.1	17
554	On the spatial formulation of anisotropic multiplicative elasto-plasticity. Computer Methods in Applied Mechanics and Engineering, 2003, 192, 3431-3470.	5.6	75
555	A view on anisotropic finite hyper-elasticity. European Journal of Mechanics, A/Solids, 2003, 22, 71-87.	3.1	34
556	Analysis of coupled finite element and atomistic models. Proceedings in Applied Mathematics and Mechanics, 2003, 3, 240-241.	0.4	0
557	Computational modelling of failure with the discontinuous Galerkin method. Proceedings in Applied Mathematics and Mechanics, 2003, 3, 306-307.	0.4	0
558	Anisotropic damage with the MCR effect coupled to plasticity. International Journal of Engineering Science, 2003, 41, 1535-1551.	4.1	34

#	Article	IF	Citations
559	Mass– and volume–specific views on thermodynamics for open systems. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2003, 459, 2547-2568.	1.4	80
560	Energy-conserving integration of constrained Hamiltonian systems ? a comparison of approaches. Computational Mechanics, 2003, 33, 174-185.	2.5	39
561	Two Strategies Towards Geometrically Non-Linear Isotropic Gradient Damage. Journal of the Mechanical Behavior of Materials, 2002, 13, 175-194.	1.3	5
562	Conservation properties of a time FE method?part III: Mechanical systems with holonomic constraints. International Journal for Numerical Methods in Engineering, 2002, 53, 2271-2304.	2.3	73
563	Anisotropic damage coupled to plasticity: Modelling based on the effective configuration concept. International Journal for Numerical Methods in Engineering, 2002, 54, 1409-1430.	2.3	42
564	Frame-indifferent beam finite elements based upon the geometrically exact beam theory. International Journal for Numerical Methods in Engineering, 2002, 54, 1775-1788.	2.3	180
565	A formulation for an unsaturated porous medium undergoing large inelastic strains. Computational Mechanics, 2002, 28, 137-151.	2.5	77
566	On spatial and material settings of hyperelastodynamics. Acta Mechanica, 2002, 156, 193-218.	2.2	44
567	On spatial and material settings of hyperelastostatic crystal defects. Journal of the Mechanics and Physics of Solids, 2002, 50, 1743-1766.	4.7	63
568	Title is missing!. Multibody System Dynamics, 2002, 8, 365-389.	1.5	47
569	Title is missing!. Journal of Elasticity, 2002, 66, 109-157.	1.2	52
570	Localization analysis of mixed continuum-atomistic models. European Physical Journal Special Topics, 2001, 11, Pr5-251-Pr5-258.	0.3	5
571	On the theory and computation of anisotropic damage at large strains. Revue Europeenne Des Elements, 2001, 10, 369-383.	0.2	1
572	Some aspects of a gradient damage formulation. Revue Europeenne Des Elements, 2001, 10, 157-172.	0.2	0
573	Theoretical and computational aspects of a thermodynamically consistent framework for geometrically linear gradient damage. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 6555-6576.	5.6	96
574	Constrained integration of rigid body dynamics. Computer Methods in Applied Mechanics and Engineering, 2001, 191, 467-488.	5.6	92
575	A finite element algorithm for parameter identification of material models for fluid saturated porous media. International Journal for Numerical and Analytical Methods in Geomechanics, 2001, 25, 415-434.	2.6	13
576	Conservation properties of a time FE method?part II: Time-stepping schemes for non-linear elastodynamics. International Journal for Numerical Methods in Engineering, 2001, 50, 1931-1955.	2.3	123

#	Article	IF	Citations
577	Theory and numerics of a thermodynamically consistent framework for geometrically linear gradient plasticity. International Journal for Numerical Methods in Engineering, 2001, 51, 1437-1467.	2.3	69
578	A thermodynamically consistent approach to microplane theory. Part II. Dissipation and inelastic constitutive modeling. International Journal of Solids and Structures, 2001, 38, 2933-2952.	3.0	55
579	Application of material forces to hyperelastostatic fracture mechanics. II. Computational setting. International Journal of Solids and Structures, 2001, 38, 5509-5526.	3.0	159
580	A theoretical and computational framework for anisotropic continuum damage mechanics at large strains. International Journal of Solids and Structures, 2001, 38, 9505-9523.	3.0	72
581	Title is missing!. Journal of Elasticity, 2001, 62, 171-201.	1.2	27
582	Conservation properties of a time FE method. Part I: time-stepping schemes forN-body problems. International Journal for Numerical Methods in Engineering, 2000, 49, 599-638.	2.3	85
583	Inherently Energy Conserving Time Finite Elements for Classical Mechanics. Journal of Computational Physics, 2000, 160, 88-116.	2.9	76
584	Application of material forces to hyperelastostatic fracture mechanics. I. Continuum mechanical setting. International Journal of Solids and Structures, 2000, 37, 7371-7391.	3.0	178
585	Derivation of the fourth-order tangent operator based on a generalized eigenvalue problem. International Journal of Solids and Structures, 2000, 37, 1615-1628.	3.0	4
586	A localization capturing FE-interface based on regularized strong discontinuities at large inelastic strains. International Journal of Solids and Structures, 2000, 37, 4061-4082.	3.0	11
587	On the continuum formulation of higher gradient plasticity for single and polycrystals. Journal of the Mechanics and Physics of Solids, 2000, 48, 1777-1796.	4.7	168
588	Parameter Identification of Constitutive Models for Fluidsaturated Porous Media within an FE-Setting. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2000, 80, 161-164.	1.8	0
589	HIGHER GRADIENT SINGLE CRYSTAL PLASTICITY BASED ON THE CONTINUUM THEORY OF DISLOCATIONS. Journal of the Mechanical Behavior of Materials, 2000, 11, 213-220.	1.3	0
590	On localization in thermo-elastoplastic solids subjected to adiabatic conditions. European Journal of Mechanics, A/Solids, 1999, 18, 557-579.	3.1	6
591	Formulation and computation of geometrically non-linear gradient damage. International Journal for Numerical Methods in Engineering, 1999, 46, 757-779.	2.3	84
592	A finite element formulation for strong discontinuities in fluid-saturated porous media. International Journal for Numerical and Analytical Methods in Geomechanics, 1999, 4, 133-152.	0.8	28
593	Finite element embedded localization band for finite strain plasticity based on a regularized strong discontinuity. International Journal for Numerical and Analytical Methods in Geomechanics, 1999, 4, 171-194.	0.8	33
594	A framework for geometrically nonlinear continuum damage mechanics. International Journal of Engineering Science, 1998, 36, 1793-1814.	4.1	50

#	Article	IF	Citations
595	Aspects of non-associated single crystal plasticity: Influence of non-schmid effects and localization analysis. International Journal of Solids and Structures, 1998, 35, 4437-4456.	3.0	35
596	On the formulation of higher gradient single and polycrystal plasticity. European Physical Journal Special Topics, 1998, 08, Pr8-239-Pr8-247.	0.3	1
597	FE plane stress analysis incorporating arbitrary 3D large strain constitutive models. Engineering Computations, 1997, 14, 175-201.	1.2	14
598	A unifying treatise of variational principles for two types of micropolar continua. Acta Mechanica, 1997, 121, 215-232.	2.2	59
599	Enhanced finite element formulation for geometrically linear fluid-saturated porous media. International Journal for Numerical and Analytical Methods in Geomechanics, 1997, 2, 185-203.	0.8	13
600	On the localization properties of multiplicative hyperelasto-plastic continua with strong discontinuities. International Journal of Solids and Structures, 1997, 34, 969-990.	3.0	57
601	Modelling and computation of instability phenomena in multisurface elasto-plasticity. Computational Mechanics, 1996, 18, 245-258.	2.5	9
602	On the numerical treatment and analysis of finite deformation ductile single crystal plasticity. Computer Methods in Applied Mechanics and Engineering, 1996, 129, 235-254.	5.6	107
603	Fast transient dynamic plane stress analysis of orthotropic Hill-type solids at finite elastoplastic strains. International Journal of Solids and Structures, 1996, 33, 1543-1562.	3.0	9
604	On localization analysis in multisurface hyperelasto-plasticity. Journal of the Mechanics and Physics of Solids, 1996, 44, 1691-1713.	4.7	15
605	Views on multiplicative elastoplasticity and the continuum theory of dislocations. International Journal of Engineering Science, 1996, 34, 1717-1735.	4.1	158
606	Theory and numerics of ductile micropolar elastoplastic damage. International Journal for Numerical Methods in Engineering, 1995, 38, 583-606.	2.3	58
607	On a mixed finite element formulation involving large rotations for geometrically nonlinear elasticity. Revue Europeenne Des Elements, 1995, 4, 577-596.	0.2	0
608	Instability phenomena in plasticity: Modelling and computation. Computational Mechanics, 1995, 17, 74-87.	2.5	16
609	Comparison of different finite deformation inelastic damage models within multiplicative elastoplasticity for ductile materials. Computational Mechanics, 1994, 13, 458-474.	2.5	74
610	An improved FE expansion for micropolar localization analysis. Communications in Numerical Methods in Engineering, 1994, 10, 1005-1012.	1.4	10
611	A micropolar theory of finite deformation and finite rotation multiplicative elastoplasticity. International Journal of Solids and Structures, 1994, 31, 1063-1084.	3.0	166
612	On the localization analysis of orthotropic hill type elastoplastic solids. Journal of the Mechanics and Physics of Solids, 1994, 42, 1969-1994.	4.7	21

#	Article	IF	Citations
613	Finite-Element Analysis of Elastoplastic Discontinuities. Journal of Engineering Mechanics - ASCE, 1994, 120, 2428-2442.	1.9	17
614	Micropolar elastoplasticity and its role in localization. International Journal of Plasticity, 1993, 9, 813-831.	10.9	84
615	Performance of enhanced finite element formulations in localized failure computations. Computer Methods in Applied Mechanics and Engineering, 1991, 90, 845-867.	5.6	26
616	Finite elements for capturing localized failure. Archive of Applied Mechanics, 1991, 61, 259-275.	2.0	12
617	On the Material Setting of Gradient Hyperelasticity. Mathematics and Mechanics of Solids, 0, , .	1.1	3
618	Biaxial characterization of soft elastomers: Experiments and data-adaptive configurational forces for fracture. Journal of the Mechanics and Physics of Solids, 0, 205, 106339.	4.7	12
619	Modeling strain hardening in glassy polymers based on the microscopic mechanisms revealed by molecular dynamic simulations. Journal of the Mechanics and Physics of Solids, 0, 206, 106384.	4.7	4
620	Overview of eXtended IsoGeometrical FEM for non-deterministic problems. Computational Mechanics, 0, 77, 1119-1140.	2.5	1
621	Efficient phase-field fracture simulations for fracture analysis in heterogeneous materials. Computational Mechanics, 0, 77, 705-727.	2.5	2
622	A novel data-driven surrogate approach for fast evaluation of the dynamics of soft ellipsoidal micro-particles in dilute viscous flow. Computer Methods in Applied Mechanics and Engineering, 0, 448, 118452.	5.6	0
623	One-way coupled staggered implementation of gradient-enhanced damage models coupled to thermoplasticity. Finite Elements in Analysis and Design, 0, 253, 104471.	2.3	1
624	A nonlinear correspondence model for three-dimensional continuum-kinematics-inspired peridynamics. Mechanics Research Communications, 0, 150, 104563.	1.7	0
625	Compression-Tension-Asymmetry and Stiffness Nonlinearity of Collagen-Matrigel Composite Hydrogels. Advanced Healthcare Materials, 0, 15, .	6.6	3
626	A damage formulation for continuum-kinematics-inspired peridynamics to capture fracture experiments. Engineering Fracture Mechanics, 0, 332, 111784.	4.3	3
627	Upscaling elastic interphases to canonical interface models. Computer Methods in Applied Mechanics and Engineering, 0, 451, 118694.	5.6	1
628	Cellular aggregate formation: Continuum modelling and computational aspects. Computer Methods in Applied Mechanics and Engineering, 0, 451, 118687.	5.6	0
629	Data-adaptive spline-based viscoelasticity for soft solids. Computer Methods in Applied Mechanics and Engineering, 0, 451, 118705.	5.6	7
630	Cutting soft materials: how material differences shape the response. Npj Computational Materials, 0, 12, .	8.0	4

#	Article	IF	Citations
631	Configurational forces explain echelon cracks in soft materials. Journal of the Mechanics and Physics of Solids, 0, 212, 106549.	4.7	0
632	Ellipsoidal particle transport and deposition in an averaged human nasal airway — A CFD study. International Journal of Multiphase Flow, 0, 198, 105657.	2.8	2
633	Modelling of magneto-mechanically coupled soft thin shells. International Journal of Solids and Structures, 0, 331, 113851.	3.0	0
634	Optimizing remanent magnetization in magnetorheological elastomers under external permanent magnet actuation. Computer Methods in Applied Mechanics and Engineering, 0, 453, 118822.	5.6	3
635	Quasi-optimal mesh generation for heterogeneous materials: A fully adaptive virtual element method. Computers and Structures, 0, 324, 108180.	3.8	1
636	A novel multi-thickness topology optimization method for balancing structural performance and manufacturability. Structural and Multidisciplinary Optimization, 0, 69, .	2.7	1
637	A micromorphic-based artificial diffusion method for stabilized finite element approximation of convection-diffusion problems. Archive of Applied Mechanics, 0, 96, .	2.0	2
638	Crack-tip deformation transitions and fracture mechanisms in glassy polymers revealed by particle-continuum coupling simulations. Journal of the Mechanics and Physics of Solids, 0, 212, 106595.	4.7	1
639	Asymptotics of a heterogeneous Canham–Helfrich flexoelectric biomembrane. Mathematics and Mechanics of Complex Systems, 0, 14, 257-283.	2.3	0
640	A chemo-mechanical model coupling damage and mechanofluorescence for tough interpenetrating elastomers. Journal of the Mechanics and Physics of Solids, 0, 213, 106627.	4.7	2
641	Transient dynamics of prolate particle–wall collisions in gas–solid flows: A hybrid analytical–numerical framework. International Journal of Multiphase Flow, 0, 200, 105746.	2.8	1
642	Multimodal mechanical characterization pipeline for spinal cord tissue. Acta Biomaterialia, 0, 216, 248-271.	6.7	0
643	A convex route to thermoelasticity: Learning internal energy and dissipation. Computer Methods in Applied Mechanics and Engineering, 0, 459, 119082.	5.6	1
644	Deblurring structural edges in variable thickness topology optimization via density-gradient-informed projection. Structural and Multidisciplinary Optimization, 0, 69, .	2.7	0
645	Spatial scale of indentation explains shift in ratio between spinal cord gray and white matter stiffness. Scientific Reports, 0, 16, .	2.7	0
646	Data-adaptive spline surfaces for non-separable hyperelastic energy functions. Computer Methods in Applied Mechanics and Engineering, 0, 461, 119245.	5.6	0
647	Unsupervised material fingerprinting: Ultra-fast hyperelastic model discovery from full-field experimental measurements. Computer Methods in Applied Mechanics and Engineering, 0, 461, 119256.	5.6	0
648	Arbitrary Lagrangian–Eulerian Formulation in a Rotating Frame to Model Friction Spinning. Proceedings in Applied Mathematics and Mechanics, 0, 26, .	0.4	0

#	Article	IF	Citations
649	Mesh refinement ergodicity in heterogeneous concrete fracture: a combined virtual-interface element approach. Frontiers in Materials, 0, 13, .	2.0	0
650	A micromechanically informed model under finite deformation explains structural evolution in glassy polymers. Journal of the Mechanics and Physics of Solids, 0, 217, 106817.	4.7	0