Paul Steinmann

List of Publications by Year in Descending Order

584 papers	11,319 citations	55 h-index	83 g-index
623 ext. papers	12,942 ext. citations	2.7 avg, IF	7.02 L-index

#	Paper	IF	Citations
584	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	4	0
583	Observations on additive plasticity in the logarithmic strain space at excessive strains. *International Journal of Solids and Structures*, **2022**, 239-240, 111416	3.1	1
582	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	5	
581	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	3.1	3
580	Mechanical Balances. *Solid Mechanics and Its Applications*, **2022**, 157-188	0.4	
579	Computational Setting. *Solid Mechanics and Its Applications*, **2022**, 361-395	0.4	
578	Consequences of Thermodynamical Balances. *Solid Mechanics and Its Applications*, **2022**, 329-359	0.4	
577	Node Based Non-invasive Form Finding Revisited–The Challenge of Remeshing **2022**, 83-91		
576	Kinematics on Dimensionally Reduced Smooth Manifolds. *Solid Mechanics and Its Applications*, **2022**, 37-60	0.4	
575	A Model for Translation and Rotation Resistance Tensors for Superellipsoidal Particles in Stokes Flow. *Journal of Marine Science and Engineering*, **2022**, 10, 369	2.4	0
574	Investigation of a nonlinear piezoelectric energy harvester with advanced electric circuits with the finite element method. *SN Applied Sciences*, **2022**, 4, 1	1.8	1
573	On mesh refinement procedures for the virtual element method for two-dimensional elastic problems. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 393, 114849	5.7	0
572	Homogenization of fully nonlinear rod lattice structures: on the size of the RVE and micro structural instabilities. *Computational Mechanics*, **2022**, 69, 947-964	4	0
571	A peridynamic formulation for nonlocal bone remodelling.. *Computer Methods in Biomechanics and Biomedical Engineering*, **2022**, 1-17	2.1	0
570	A variational integrator for the Discrete Element Method. *Journal of Computational Physics*, **2022**, 462, 111253	4.1	1
569	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**, 104661	3.7	
568	Influence of Kinematic Hardening on Clinch Joining of Dual-Phase Steel HCT590X Sheet Metal. *Minerals, Metals and Materials Series*, **2022**, 329-344	0.3	

567	Anisotropic plasticity-damage material model for sheet metal ‖Regularised single surface formulation. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 21,	0.2	1
566	Bone fracture healing within a continuum bone remodelling framework. *Computer Methods in Biomechanics and Biomedical Engineering*, **2021**, 1-11	2.1	2
565	On Optimization Strategies for Inverse Problems in Metalforming. *Lecture Notes in Production Engineering*, **2021**, 354-377	0	1
564	Spatiotemporal modeling of first and second wave outbreak dynamics of COVID-19 in Germany. *Biomechanics and Modeling in Mechanobiology*, **2021**, 21, 119	3.8	2
563	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, 1-17	4	5
562	Towards an holistic account on residual stresses in full-forward extruded rods. *Archive of Applied Mechanics*, **2021**, 91, 3649-3664	2.2	1
561	Generalized interfaces via weighted averages for application to graded interphases at large deformations. *Journal of the Mechanics and Physics of Solids*, **2021**, 149, 104234	5	5
560	A Novel Approach to Predict the Process-Induced Mechanical Behavior of Additively Manufactured Materials. *Journal of Materials Engineering and Performance*, **2021**, 30, 5235-5246	1.6	2
559	Enhanced computational homogenization techniques for modelling size effects in polymer composites. *Computational Mechanics*, **2021**, 68, 371-389	4	0
558	Homogenization of Composites with Extended General interfaces: Comprehensive Review and Unified Modeling. *Applied Mechanics Reviews*, **2021**,	8.6	7
557	Towards elasto-plastic continuum-kinematics-inspired peridynamics. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 380, 113809	5.7	5
556	Risk Assessment of Infection by Airborne Droplets and Aerosols at Different Levels of Cardiovascular Activity. *Archives of Computational Methods in Engineering*, **2021**, 28, 1-20	7.8	2
555	Coupled electro-elastic deformation and instabilities of a toroidal membrane. *Journal of the Mechanics and Physics of Solids*, **2021**, 151, 104221	5	3
554	A thermodynamically consistent theory of stress-gradient plasticity. *Journal of the Mechanics and Physics of Solids*, **2021**, 147, 104266	5	1
553	A geometrically exact formulation of peridynamics. *Theoretical and Applied Fracture Mechanics*, **2021**, 111, 102850	3.7	9
552	Numerical and experimental investigation of the isothermal assumption in selective laser sintering of PA12. *Additive Manufacturing*, **2021**, 37, 101676	6.1	2
551	Kinematically exact peridynamics **2021**, 223-245		0
550	Geometrically exact elastoplastic rods: determination of yield surface in terms of stress resultants. *Computational Mechanics*, **2021**, 67, 723-742	4	1

549	Concurrent consideration of cortical and cancellous bone within continuum bone remodelling. *Computer Methods in Biomechanics and Biomedical Engineering*, **2021**, 24, 1274-1285	2.1	2
548	Continuum-kinematics-inspired peridynamics: Thermo-mechanical problems. *Continuum Mechanics and Thermodynamics*, **2021**, 33, 2039-2063	3.5	4
547	Component residual stress control in forward rod extrusion by material flow and tribology:Experiments and modeling. *Forschung Im Ingenieurwesen/Engineering Research*, **2021**, 85, 733	0.8	
546	Discrete configurational mechanics for the computational study of atomistic fracture mechanics. *Forces in Mechanics*, **2021**, 2, 100009	1.5	2
545	Nonlocal wrinkling instabilities in bilayered systems using peridynamics. *Computational Mechanics*, **2021**, 68, 1023-1037	4	0
544	Modeling crystallization kinetics for selective laser sintering of polyamide 12. *GAMM Mitteilungen*, **2021**, 44, e202100011	1.8	1
543	A coupled MD-FE methodology to characterize mechanical interphases in polymeric nanocomposites. *International Journal of Mechanical Sciences*, **2021**, 204, 106564	5.5	5
542	Variationally consistent computational homogenization of chemomechanical problems with stabilized weakly periodic boundary conditions. *International Journal for Numerical Methods in Engineering*, **2021**, 122, 6429	2.4	1
541	Coupled topology and shape optimization using an embedding domain discretization method. *Structural and Multidisciplinary Optimization*, **2021**, 64, 2687	3.6	0
540	Poro-Viscoelastic Effects During Biomechanical Testing of Human Brain Tissue. *Frontiers in Mechanical Engineering*, **2021**, 7,	2.6	2
539	Atomistic two-, three- and four-body potentials. Spatial and material settings. *Journal of the Mechanics and Physics of Solids*, **2021**, 154, 104507	5	2
538	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	3.1	0
537	A complete thermo-electro-viscoelastic characterization of dielectric elastomers - Part II: Continuum modelling approach. *Journal of the Mechanics and Physics of Solids*, **2021**, 157, 104625	5	1
536	Phonon-based thermal configurational forces: Definitions and applications in rupture of semiconductors. *Engineering Fracture Mechanics*, **2021**, 257, 108014	4.2	
535	A viscoelastic-viscoplastic constitutive model for glassy polymers informed by molecular dynamics simulations. *International Journal of Solids and Structures*, **2021**, 226-227, 111071	3.1	4
534	Atomistic configurational forces in crystalline fracture. *Forces in Mechanics*, **2021**, 4, 100044	1.5	1
533	A complete thermo-electro-viscoelastic characterization of dielectric elastomers, Part I: Experimental investigations. *Journal of the Mechanics and Physics of Solids*, **2021**, 157, 104603	5	4
532	The Catalogue of Computational Material Models **2021**,		2

531	A two-field computational model couples cellular brain development with cortical folding. *Brain Multiphysics*, **2021**, 2, 100025	4.2	7
530	Parametric FEM for computational homogenization of heterogeneous materials with random voids. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 20, e202000071	0.2	
529	A multifield computational model explains the underlying mechanisms of cortical malformations in the developing brain. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 20, e202000171	0.2	1
528	Identification of mechanical models and parameters for alginate-based hydrogels as proxy materials for brain tissue. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 20, e202000338	0.2	
527	Analytical mechanics allows novel vistas on mathematical epidemic dynamics modeling. *Mathematics and Mechanics of Complex Systems*, **2020**, 8, 321-343	3.2	1
526	Modeling the porous and viscous responses of human brain tissue behavior. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 369, 113128	5.7	19
525	On biological availability dependent bone remodeling. *Computer Methods in Biomechanics and Biomedical Engineering*, **2020**, 23, 432-444	2.1	6
524	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	3.1	15
523	A matrix-free approach for finite-strain hyperelastic problems using geometric multigrid. *International Journal for Numerical Methods in Engineering*, **2020**, 121, 2874-2895	2.4	6
522	On age-dependent bone remodeling. *Journal of Biomechanics*, **2020**, 103, 109701	2.9	6
521	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	2.1	9
520	Grain boundary interaction based on gradient crystal inelasticity and decohesion. *Computational Materials Science*, **2020**, 178, 109604	3.2	4
519	Characterization of Polystyrene Under Shear Deformation Using Molecular Dynamics. *Advanced Structured Materials*, **2020**, 219-229	0.6	2
518	Towards microstructure-informed material models for human brain tissue. *Acta Biomaterialia*, **2020**, 104, 53-65	10.8	19
517	Behavior of vibration energy harvesters composed of polymer fibers and piezoelectric ceramic particles. *Sensors and Actuators A: Physical*, **2020**, 303, 111699	3.9	3
516	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	5.7	3
515	Modelling the flexoelectric effect in solids: A micromorphic approach. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 371, 113320	5.7	3
514	A finite element formulation for a direct approach to elastoplasticity in special Cosserat rods. *International Journal for Numerical Methods in Engineering*, **2020**, 122, 1262	2.4	2

513	Shape Optimization of a Backward Extrusion Process Using a Non-Invasive Form Finding Algorithm. *Procedia Manufacturing*, **2020**, 47, 873-880	1.5	2
512	Alginate-based hydrogels show the same complex mechanical behavior as brain tissue. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 111, 103979	4.1	17
511	Assessment of an isogeometric approach with Catmull Clark subdivision surfaces using the Laplace Beltrami problems. *Computational Mechanics*, **2020**, 66, 851-876	4	0
510	The computational framework for continuum-kinematics-inspired peridynamics. *Computational Mechanics*, **2020**, 66, 795-824	4	15
509	A novel two-way coupling model for Euler-Lagrange simulations of multiphase flow. *Engineering Analysis With Boundary Elements*, **2020**, 119, 119-132	2.6	2
508	Memory-based meso-scale modeling of Covid-19: County-resolved timelines in Germany. *Computational Mechanics*, **2020**, 66, 1-11	4	17
507	On thermo-viscoelastic experimental characterization and numerical modelling of VHB polymer. *International Journal of Non-Linear Mechanics*, **2020**, 118, 103263	2.8	37
506	Towards a unified shear-induced lift model for prolate spheroidal particles moving in arbitrary non-uniform flow. *Computers and Fluids*, **2020**, 196, 104323	2.8	2
505	Fifty Shades of Brain: A Review on the Mechanical Testing and Modeling of Brain Tissue. *Archives of Computational Methods in Engineering*, **2020**, 27, 1187-1230	7.8	76
504	On the influence of the compliant electrodes on the mechanical behavior of VHB 4905. *Computational Materials Science*, **2019**, 160, 287-294	3.2	15
503	Systematic study of homogenization and the utility of circular simplified representative volume element. *Mathematics and Mechanics of Solids*, **2019**, 24, 2961-2985	2.3	12
502	On effective behavior of microstructures embedding general interfaces with damage. *Computational Mechanics*, **2019**, 64, 1473-1494	4	6
501	Experimental and numerical investigations of the electro-viscoelastic behavior of VHB 4905TM. *European Journal of Mechanics, A/Solids*, **2019**, 77, 103797	3.7	26
500	Challenges of order reduction techniques for problems involving polymorphic uncertainty. *GAMM Mitteilungen*, **2019**, 42, e201900011	1.8	4
499	Investigations on residual stress generation in full-forward-extrusion. *Production Engineering*, **2019**, 13, 169	1.9	5
498	On spectral fuzzy Stochastic FEM for problems involving polymorphic geometrical uncertainties. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 350, 432-461	5.7	8
497	A computational approach to obtain nonlinearly elastic constitutive relations of special Cosserat rods. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 350, 295-314	5.7	9
496	Settling characteristics of nonspherical porous sludge flocs with nonhomogeneous mass distribution. *Water Research*, **2019**, 158, 159-170	12.5	13

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495	Designing tunable composites with general interfaces. *International Journal of Solids and Structures*, **2019**, 171, 181-188	3.1	6
494	Reduced-Order Modelling and Homogenisation in Magneto-Mechanics: A Numerical Comparison of Established Hyper-Reduction Methods. *Mathematical and Computational Applications*, **2019**, 24, 20	1	1
493	On the emergence of out-of-plane ferroelectricity in ultrathin films. *Archive of Applied Mechanics*, **2019**, 89, 1171-1181	2.2	0
492	Modeling of additively manufactured materials using gradient-enhanced crystal plasticity. *Computers and Mathematics With Applications*, **2019**, 78, 2338-2350	2.7	15
491	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	5.7	9
490	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	5	6
489	Fuzzy dynamics of multibody systems with polymorphic uncertainty in the material microstructure. *Computational Mechanics*, **2019**, 64, 1601-1619	4	2
488	Continuum-kinematics-inspired peridynamics. Mechanical problems. *Journal of the Mechanics and Physics of Solids*, **2019**, 131, 125-146	5	31
487	An energetically consistent heat input model for additive manufacturing. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900297	0.2	0
486	Cutoff-Based Modeling of Coulomb Interactions for Atomistic-to-Continuum Multiscale Methods. *Multiscale Science and Engineering*, **2019**, 1, 299-317	1.2	
485	Extensive CGMD Simulations of Atactic PS Providing Pseudo Experimental Data to Calibrate Nonlinear Inelastic Continuum Mechanical Constitutive Laws. *Polymers*, **2019**, 11,	4.5	8
484	Implementation of generalized mechanical interfaces. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900031	0.2	
483	Gradient Enhanced Crystal Plasticity in Additive Manufacturing Identification of a Macroscopic Yield Criterion. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900308	0.2	
482	Investigation of the Mechanical Behavior of Polystyrene using Molecular Dynamics. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900015	0.2	
481	Challenges and perspectives in brain tissue testing and modeling. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900269	0.2	3
480	Optimisation of the Capriccio Method to Couple Particle- and Continuum-Based Simulations of Polymers. *Multiscale Science and Engineering*, **2019**, 1, 318-333	1.2	8
479	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	3.6	4
478	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	7.6	10

477	A thermoelastoplastic theory for special Cosserat rods. *Mathematics and Mechanics of Solids*, **2019**, 24, 686-700	2.3	3
476	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	3.6	13
475	Two reduction methods for stochastic FEM based homogenization using global basis functions. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 332, 488-519	5.7	11
474	On Constitutive Models for the Momentum Transfer to Particles in Fluid-Dominated Two-Phase Flows. *Advanced Structured Materials*, **2018**, 1-25	0.6	4
473	On the Influence of the Coupled Invariant in Thermo-Electro-Elasticity. *Advanced Structured Materials*, **2018**, 533-554	0.6	1
472	Application of metaheuristic algorithms to the identification of nonlinear magneto-viscoelastic constitutive parameters. *Journal of Magnetism and Magnetic Materials*, **2018**, 464, 116-131	2.8	11
471	Hyperelastic analysis based on a polygonal finite element method. *Mechanics of Advanced Materials and Structures*, **2018**, 25, 930-942	1.8	11
470	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	3.1	16
469	Improvements on a non-invasive, parameter-free approach to inverse form finding. *Computational Mechanics*, **2018**, 61, 433-447	4	5
468	Control of minimum member size in parameter-free structural shape optimization by a medial axis approximation. *Computational Mechanics*, **2018**, 61, 717-727	4	2
467	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, 1800069	1.3	5
466	A non-invasive node-based form finding approach with discretization-independent target configuration. *Advanced Modeling and Simulation in Engineering Sciences*, **2018**, 5,	2.7	4
465	Improvement of the Machining Accuracy in Dry Turning of Aluminum Metal Matrix Composites via Experiments and Finite Element Simulations. *Lecture Notes in Production Engineering*, **2018**, 35-62	0	2
464	Surface plasticity: theory and computation. *Computational Mechanics*, **2018**, 62, 617-634	4	3
463	Bounds on size-dependent behaviour of composites. *Philosophical Magazine*, **2018**, 98, 437-463	1.6	7
462	Modelling electro-active polymers with a dispersion-type anisotropy. *Smart Materials and Structures*, **2018**, 27, 025010	3.4	15
461	Computational first-order homogenization in chemo-mechanics. *Archive of Applied Mechanics*, **2018**, 88, 271-286	2.2	8
460	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	3.1	15

459	Domain decomposition applied to the thermal model of selective beam melting processes. *Proceedings in Applied Mathematics and Mechanics*, **2018**, 18, e201800094	0.2	
458	Single crystal plasticity – A mesoscale based approach for modeling the mechanics of additively manufactured Inconel 718. *Proceedings in Applied Mathematics and Mechanics*, **2018**, 18, e201800389	0.2	1
457	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	1.2	3
456	Region- and loading-specific finite viscoelasticity of human brain tissue. *Proceedings in Applied Mathematics and Mechanics*, **2018**, 18, e201800169	0.2	5
455	Illustration of an improved non-invasive form finding algorithm **2018**,		3
454	Mechanical Interphases in Adhesive Joints: Characterisation Methods and FE-Simulations **2018**, 79-133		2
453	Adhesive Network Formation: Continuum Mechanical Modelling and Simulation **2018**, 43-77		
452	Numerical modeling of thermo-electro-viscoelasticity with field-dependent material parameters. *International Journal of Non-Linear Mechanics*, **2018**, 106, 13-24	2.8	29
451	The origin of compression influences geometric instabilities in bilayers. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2018**, 474, 20180267	2.4	5
450	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	2.4	7
449	Dissipation-consistent modelling and classification of extended plasticity formulations. *Journal of the Mechanics and Physics of Solids*, **2018**, 119, 118-139	5	12
448	A novel spectral formulation for transversely isotropic magneto-elasticity. *Mathematics and Mechanics of Solids*, **2017**, 22, 1158-1176	2.3	18
447	Macroscopic simulation and experimental measurement of melt pool characteristics in selective electron beam melting of Ti-6Al-4V. *International Journal of Advanced Manufacturing Technology*, **2017**, 88, 1309-1317	3.2	62
446	Highly-conductive energetic coherent interfaces subject to in-plane degradation. *Mathematics and Mechanics of Solids*, **2017**, 22, 1696-1716	2.3	4
445	On structural shape optimization using an embedding domain discretization technique. *International Journal for Numerical Methods in Engineering*, **2017**, 109, 1315-1343	2.4	5
444	Some properties of the dissipative model of strain-gradient plasticity. *Philosophical Magazine*, **2017**, 97, 693-717	1.6	11
443	Towards an efficient two-scale approach to model technical textiles. *Computational Mechanics*, **2017**, 59, 385-401	4	9
442	Preparation of magnetorheological elastomers and their slip-free characterization by means of parallel-plate rotational rheometry. *Smart Materials and Structures*, **2017**, 26, 085004	3.4	13

441	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	1.2	3
440	On curvature approximation in 2D and 3D parameter-free shape optimization. *Structural and Multidisciplinary Optimization*, **2017**, 55, 1655-1669	3.6	5
439	Molecular dynamics study of ferroelectric domain nucleation and domain switching dynamics. *Scientific Reports*, **2017**, 7, 806	4.9	32
438	Adaptive Poly-FEM for the analysis of plane elasticity problems. *International Journal for Computational Methods in Engineering Science and Mechanics*, **2017**, 18, 146-165	0.7	5
437	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	4.5	8
436	A numerical study of different projection-based model reduction techniques applied to computational homogenisation. *Computational Mechanics*, **2017**, 60, 613-625	4	21
435	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	4.5	13
434	Wrinkling instabilities in soft bilayered systems. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2017**, 375,	3	30
433	Flow Relations and Yield Functions for Dissipative Strain-Gradient Plasticity. *Advanced Structured Materials*, **2017**, 31-42	0.6	
432	Uniaxial deformation of polystyrene-silica nanocomposites studied by hybrid molecular dynamics-finite element simulations. *Computational Materials Science*, **2017**, 129, 1-12	3.2	12
431	Micro-to-macro transition accounting for general imperfect interfaces. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 317, 274-317	5.7	55
430	On gradient-based optimization strategies for inverse problems in metal forming. *GAMM Mitteilungen*, **2017**, 40, 27-50	1.8	2
429	Towards a thermo-magneto-mechanical coupling framework for magneto-rheological elastomers. *International Journal of Solids and Structures*, **2017**, 128, 117-132	3.1	34
428	Numerical modelling of nonlinear thermo-electro-elasticity. *Mathematics and Mechanics of Solids*, **2017**, 22, 2196-2213	2.3	10
427	Viscoelastic parameter identification of human brain tissue. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 74, 463-476	4.1	78
426	Rheological characterization of human brain tissue. *Acta Biomaterialia*, **2017**, 60, 315-329	10.8	71
425	Mechanical characterization of human brain tissue. *Acta Biomaterialia*, **2017**, 48, 319-340	10.8	268
424	Aspects of implementing constant traction boundary conditions in computational homogenization via semi-Dirichlet boundary conditions. *Computational Mechanics*, **2017**, 59, 21-35	4	15

423	Numerical homogenization of elastic and thermal material properties for metal matrix composites (MMC). *Continuum Mechanics and Thermodynamics*, **2017**, 29, 51-75	3.5	9
422	A thermo-viscoplastic constitutive law for isotropic hardening of metals. *Archive of Applied Mechanics*, **2017**, 87, 129-157	2.2	6
421	Non-coherent energetic interfaces accounting for degradation. *Computational Mechanics*, **2017**, 59, 361-383	4	13
420	Convergence study of the -adaptive PUM and the -adaptive FEM applied to eigenvalue problems in quantum mechanics. *Advanced Modeling and Simulation in Engineering Sciences*, **2017**, 4, 7	2.7	12
419	Preface of the guest editors. *GAMM Mitteilungen*, **2017**, 40, 7-7	1.8	
418	On the modeling of equilibrium twin interfaces in a single-crystalline magnetic shape memory alloy sample. II: numerical algorithm. *Continuum Mechanics and Thermodynamics*, **2016**, 28, 669-698	3.5	9
417	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	0.3	
416	Brain stiffness increases with myelin content. *Acta Biomaterialia*, **2016**, 42, 265-272	10.8	130
415	Compensation of Thermo-mechanically Induced Workpiece and Tool Deformations During Dry Turning. *Procedia CIRP*, **2016**, 46, 31-34	1.8	3
414	Investigation of interphase effects in silica-polystyrene nanocomposites based on a hybrid molecular-dynamics-finite-element simulation framework. *Physical Review E*, **2016**, 93, 052505	2.4	18
413	Comparative computational analysis of the Cahn-Hilliard equation with emphasis on C1-continuous methods. *Journal of Computational Physics*, **2016**, 322, 783-803	4.1	10
412	Computational Homogenisation using Reduced-Order Modelling applied to Hyperelasticity. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 551-552	0.2	
411	Coherent energetic interfaces accounting for in-plane degradation. *International Journal of Fracture*, **2016**, 202, 135-165	2.3	4
410	Modelling additive manufactured materials using a crystal plasticity model. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 355-356	0.2	3
409	A thermo-mechanical energetic cohesive zone model accounting for Kapitza interfaces. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 437-438	0.2	
408	Aspects of computational homogenization in magneto-mechanics. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 501-502	0.2	
407	Preface of the guest editors. *GAMM Mitteilungen*, **2016**, 39, 113-113	1.8	
406	Molecular statics simulations of ferroelectric nanofilms. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 327-328	0.2	

405	On the Computational Homogenization of Transient Diffusion Problems. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 529-530	0.2	2
404	A thermo-mechanical cohesive zone model accounting for mechanically energetic Kapitza interfaces. *International Journal of Solids and Structures*, **2016**, 92-93, 29-44	3.1	10
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