

Daniel Balzani

List of Publications by Year in descending order

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139
papers

1,926
citations

304602

22
h-index

276775

41
g-index

148
all docs

148
docs citations

148
times ranked

1332
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient and robust numerical treatment of a gradient-enhanced damage model at large deformations. International Journal for Numerical Methods in Engineering, 2022, 123, 774-793.	1.5	8
2	Simulation of crack propagation based on eigenerosion in brittle and ductile materials subject to finite strains. Archive of Applied Mechanics, 2022, 92, 1199-1221.	1.2	8
3	Fluid-structure interaction simulation of tissue degradation and its effects on intra-aneurysm hemodynamics. Biomechanics and Modeling in Mechanobiology, 2022, 21, 671-683.	1.4	8
4	A new method for the in vivo identification of degenerated material property ranges of the human eye: feasibility analysis based on synthetic data. Biomechanics and Modeling in Mechanobiology, 2022, 21, 401-418.	1.4	3
5	Simulation of crack propagation through voxel-based, heterogeneous structures based on eigenerosion and finite cells. Computational Mechanics, 2022, 70, 385-406.	2.2	5
6	Continuum multiscale modeling of absorption processes in micro- and nanocatalysts. Archive of Applied Mechanics, 2022, 92, 2207-2223.	1.2	1
7	Simulation of Arterial Walls: Growth, Fiber Reorientation, and Active Response. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2022, , 181-209.	0.7	3
8	Estimating cardiomyofiber strain in vivo by solving a computational model. Medical Image Analysis, 2021, 68, 101932.	7.0	11
9	Rot-free mixed finite elements for gradient elasticity at finite strains. International Journal for Numerical Methods in Engineering, 2021, 122, 1602-1628.	1.5	1
10	Architectural woven polyester fabrics: examination of possible classification of stiffness values in correlation with strength values. Architectural Engineering and Design Management, 2021, 17, 281-298.	1.2	2
11	Computation of the Sharpest Bounds on Probabilities under the Influence of Polymorphic Uncertainties. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000046.	0.2	2
12	Inverse Identification of Material Properties of the Human Eye Using Optical Deformation Measurements. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000052.	0.2	0
13	Simulation of absorption processes in nanoparticle catalysts. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000076.	0.2	0
14	Influence of Micro-Inertia on the Macroscale - A Fully-Coupled Direct Homogenization Framework for Dynamics. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000195.	0.2	0
15	Modeling of the Bayliss-Effect in Vascular Smooth Muscles. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000273.	0.2	1
16	Extension of the eigenerosion approach to ductile crack propagation at large strains and its application on hard metal microstructures. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000077.	0.2	0
17	Rot-free finite elements for gradient-enhanced formulations at finite strains. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000069.	0.2	0
18	A general, implicit, finite-strain FEM framework for the simulation of dynamic problems on two scales. Computational Mechanics, 2021, 67, 1375-1394.	2.2	2

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19	An extended Hamilton principle as unifying theory for coupled problems and dissipative microstructure evolution. <i>Continuum Mechanics and Thermodynamics</i> , 2021, 33, 1931-1956.	1.4	9
20	Truncated hierarchical B-spline material point method for large deformation geotechnical problems. <i>Computers and Geotechnics</i> , 2021, 134, 104097.	2.3	12
21	Efficient identification of material parameters based on experiments providing full-field kinematics. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 20, e202000168.	0.2	1
22	Towards a physiologically accurate ECG from numerical simulations: comparative analyses in a simplified tissue model. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 20, e202000136.	0.2	1
23	A new variational approach for the thermodynamic topology optimization of hyperelastic structures. <i>Computational Mechanics</i> , 2021, 67, 455-480.	2.2	6
24	On the Potential Self-Amplification of Aneurysms Due to Tissue Degradation and Blood Flow Revealed From FSI Simulations. <i>Frontiers in Physiology</i> , 2021, 12, 785780.	1.3	7
25	Efficient Computation of the Sharpest Bounds on the Probability of Failure of a Sheet Metal Forming Process. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 21, .	0.2	1
26	Unique identification of stiffness parameters for nonlinear, anisotropic textile fabrics based on full-field measurements on a single experiment. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 21, .	0.2	0
27	Applicability of the lead field approach in virtual laboratory studies: comparison with full numerical simulations based on the bidomain model. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 21, .	0.2	1
28	Influence of Residual Stresses and Fiber Orientation on Smooth Muscle Contraction in Arterial Walls. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 21, .	0.2	0
29	An enhanced algorithmic scheme for relaxed incremental variational damage formulations at finite strains. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 21, .	0.2	0
30	An extended Hamilton functional for the thermodynamic topology optimization of hyperelastic structures. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 21, .	0.2	0
31	Efficient numerical treatment of a gradient damage model for materials undergoing large deformations. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 21, .	0.2	3
32	Simulation of ductile crack propagation in metal matrix composites – Comparison with cyclic experiments. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 21, .	0.2	1
33	Three-field mixed finite element formulations for gradient elasticity at finite strains. <i>GAMM Mitteilungen</i> , 2020, 43, e202000002.	2.7	4
34	Computational Micro-Macro Analysis of Impact on Strain-Hardening Cementitious Composites (SHCC) Including Microscopic Inertia. <i>Materials</i> , 2020, 13, 4934.	1.3	4
35	The Elastic Share of Inelastic Stress – Strain Paths of Woven Fabrics. <i>Materials</i> , 2020, 13, 4243.	1.3	4
36	Numerical material testing for discontinuous fiber composites using statistically similar representative volume elements. <i>Scientific Reports</i> , 2020, 10, 10608.	1.6	1

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37	Automated simulation of voxel-based microstructures based on enhanced finite cell approach. Archive of Applied Mechanics, 2020, 90, 2255-2273.	1.2	9
38	Saturation of the stress-strain behaviour of architectural fabrics. Materials and Design, 2020, 191, 108584.	3.3	9
39	EXASTEEL: Towards a Virtual Laboratory for the Multiscale Simulation of Dual-Phase Steel Using High-Performance Computing. Lecture Notes in Computational Science and Engineering, 2020, , 351-404.	0.1	3
40	Damage in Soft Biological Tissues. , 2020, , 562-576.		0
41	Quantification of uncertain macroscopic material properties resulting from variations of microstructure morphology based on statistically similar volume elements: application to dual-phase steel microstructures. Computational Mechanics, 2019, 64, 1621-1637.	2.2	11
42	Geometrically nonlinear simulation of textile membrane structures based on orthotropic hyperelastic energy functions. Composite Structures, 2019, 223, 110908.	3.1	28
43	Modeling of structures with polymorphic uncertainties at different length scales. GAMM Mitteilungen, 2019, 42, e201900006.	2.7	1
44	Mechanical damage characterization in human femoropopliteal arteries of different ages. Acta Biomaterialia, 2019, 90, 225-240.	4.1	16
45	A New CO€Continuous FE€Formulation for Finite Gradient Elasticity. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900341.	0.2	1
46	Optimal Bounds for the Probability of Failure of Sheet Metal Forming Processes of DP Steel. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900215.	0.2	1
47	Simulation of Dual€Phase Steel Using the Finite Cell Method and Voxel€Based Microstructure Data. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900316.	0.2	0
48	Simulation of subcritical crack propagation in hard metal microstructures. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900233.	0.2	0
49	Orthotropic Hyperelastic Energy Functions for the Geometrically Nonlinear Simulation of Textile Membrane Structures. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900264.	0.2	2
50	Polyacrylamide Bead Sensors for in vivo Quantification of Cell-Scale Stress in Zebrafish Development. Scientific Reports, 2019, 9, 17031.	1.6	47
51	A new nonlinear polyconvex orthotropic material model for the robust simulation of technical fabrics in civil engineering applications at large strains € Validation with large-scale experiment/Ein neues polykonvexes orthotropes Materialmodell zur robusten Simulation von Textilmembranen im Bauingenieur-wesen unter Ber€cksichtigung gro€yer Deformationen € Validierung anhand eines Gro€bauteilversuchs. Bauingenieur, 2019, 94, 188-197.	0.1	7
52	Influence of microstructure morphology on multi-scale modeling of low-alloyed TRIP-steels. Engineering Computations, 2018, 35, 499-528.	0.7	4
53	Numerical material testing based on statistically similar representative volume elements for discontinuous fiber composites. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800274.	0.2	1
54	Study of model variants in a combined framework for multiplicative growth and remodeling in arterial walls. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800080.	0.2	0

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55	First Steps Towards the Direct Micro-Macro Simulation of Reinforced Concrete Under Impact Loading. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800181.	0.2	5
56	A Method to Quantify Material Parameter Uncertainties Resulting from Microstructure Variation based on Artificial Microstructures. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800394.	0.2	0
57	Remarks on Fluid-Structure Interaction Simulations in Realistic Arterial Geometries with regard to the Transmural Stress Distribution. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800312.	0.2	0
58	A Computational Two-Scale Model for the Simulation of Dual-Phase Steels under Cyclic Loading. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800321.	0.2	0
59	Damage in Soft Biological Tissues. , 2018, , 1-15.		0
60	Construction of statistically similar representative volume elements for discontinuous fiber composites. Composite Structures, 2018, 203, 193-203.	3.1	6
61	A combined growth and remodeling framework for the approximation of residual stresses in arterial walls. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 2072-2100.	0.9	8
62	Method for the quantification of rupture probability in soft collagenous tissues. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e02781.	1.0	7
63	Method for the unique identification of hyperelastic material properties using full-field measures. Application to the passive myocardium material response. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e2866.	1.0	17
64	Basic Ideas for the Quantification of Uncertainty Associated with the Material's Microstructure Morphology using Statistically Similar RVEs. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 431-432.	0.2	0
65	On the Modeling of Textile Membranes with Nonlinear Anisotropic Material Behavior. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 433-434.	0.2	3
66	Ideas regarding a physically motivated selection of snapshots for POD calculations - a potential application to z-pin pullout?. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 483-484.	0.2	0
67	Steps Towards More Realistic FSI Simulations of Coronary Arteries. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 187-188.	0.2	0
68	Modeling residual stresses in arterial walls based on anisotropic growth. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 115-116.	0.2	0
69	Some Basic Ideas for the Simulation of Wave Propagation in Microstructures using Proper Orthogonal Decomposition. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 333-334.	0.2	3
70	A computational two scaled model for the simulation of micro-heterogeneous low-alloyed TRIP steels. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 335-336.	0.2	0
71	A novel mixed finite element for finite anisotropic elasticity; the SKA-element Simplified Kinematics for Anisotropy. Computer Methods in Applied Mechanics and Engineering, 2016, 310, 475-494.	3.4	36
72	Modeling of Microstructure Evolution with Dynamic Recrystallization in Finite Element Simulations of Martensitic Steel. Steel Research International, 2016, 87, 37-45.	1.0	12

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73	An algorithmic scheme for the automated calculation of fiber orientations in arterial walls. Computational Mechanics, 2016, 58, 861-878.	2.2	7
74	Notes on a novel finite element for anisotropy at large strains. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 247-248.	0.2	0
75	Numerical modeling of fluid-structure interaction in arteries with anisotropic polyconvex hyperelastic and anisotropic viscoelastic material models at finite strains. International Journal for Numerical Methods in Biomedical Engineering, 2016, 32, e02756.	1.0	36
76	Relaxed incremental variational approach for the modeling of damage-induced stress hysteresis in arterial walls. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 58, 149-162.	1.5	20
77	Implementation of incremental variational formulations based on the numerical calculation of derivatives using hyper dual numbers. Computer Methods in Applied Mechanics and Engineering, 2016, 301, 216-241.	3.4	19
78	Computational modeling of dual-phase steels based on representative three-dimensional microstructures obtained from EBSD data. Archive of Applied Mechanics, 2016, 86, 575-598.	1.2	51
79	Design and Optimization of Steel Car Body Structures via Local Laser-Strengthening. Engineering, 2016, 08, 276-286.	0.4	5
80	MODELING OF LOW-ALLOYED TRIP-STEELS BASED ON DIRECT MICRO-MACRO SIMULATIONS. , 2016, , .		1
81	Robust Numerical Schemes for an Efficient Implementation of Tangent Matrices: Application to Hyperelasticity, Inelastic Standard Dissipative Materials and Thermo-Mechanics at Finite Strains. Lecture Notes in Applied and Computational Mechanics, 2016, , 1-23.	2.0	1
82	Analytical and Numerical Modelling of a Sub- and Supersonic Moving Load Front Along a Rod's Skin. Advanced Structured Materials, 2016, , 469-489.	0.3	1
83	Relaxed incremental variational approach for damage in arteries. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 81-82.	0.2	0
84	Numerical Calculation of Fiber Orientation in Three-Dimensional Arterial Walls. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 91-92.	0.2	0
85	Automatic Implementation of Elasto-plastic Incremental Formulations at Finite Strains using Hyper-Dual Numbers. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 367-368.	0.2	1
86	Study on statistically similar RVEs for real microstructures based on different statistical descriptors. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 467-468.	0.2	0
87	Numerical modeling of a sub-sonic moving load front along a rod's skin. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 535-536.	0.2	2
88	Influence of isotropic and anisotropic material models on the mechanical response in arterial walls as a result of supra-physiological loadings. Mechanics Research Communications, 2015, 64, 29-37.	1.0	13
89	Selective enzymatic removal of elastin and collagen from human abdominal aortas: Uniaxial mechanical response and constitutive modeling. Acta Biomaterialia, 2015, 17, 125-136.	4.1	60
90	Comparative analysis of damage functions for soft tissues: Properties at damage initialization. Mathematics and Mechanics of Solids, 2015, 20, 480-492.	1.5	10

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91	Numerical calculation of thermo-mechanical problems at large strains based on complex step derivative approximation of tangent stiffness matrices. <i>Computational Mechanics</i> , 2015, 55, 861-871.	2.2	21
92	Design of 3D statistically similar Representative Volume Elements based on Minkowski functionals. <i>Mechanics of Materials</i> , 2015, 90, 185-201.	1.7	31
93	A highly accurate 1st- and 2nd-order differentiation scheme for hyperelastic material models based on hyper-dual numbers. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 283, 22-45.	3.4	42
94	Construction of two- and three-dimensional statistically similar RVEs for coupled micro-macro simulations. <i>Computational Mechanics</i> , 2014, 54, 1269-1284.	2.2	59
95	Two-scale Modeling of DP Steel Incorporating Distributed Properties Inside Micro-constituents. <i>Procedia Engineering</i> , 2014, 81, 1390-1395.	1.2	2
96	Robust numerical calculation of tangent moduli at finite strains based on complex-step derivative approximation and its application to localization analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 269, 454-470.	3.4	47
97	Statistical approach for a continuum description of damage evolution in soft collagenous tissues. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 278, 41-61.	3.4	37
98	Track M. <i>Biomedizinische Technik</i> , 2014, 59, s910-s1027.	0.9	19
99	Calculation of Optimal Bounds on the Probability of Failure of Soft Biological Tissues. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 93-94.	0.2	0
100	Modeling the Physiological Behavior of Arterial Walls – Comparative Study Regarding the Viscoelastic Response. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 95-96.	0.2	1
101	Calculation of Stresses and Consistent Tangent Moduli from Automatic Differentiation of Hyperelastic Strain Energy Functions Through the Use of Hyper Dual Numbers. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 429-430.	0.2	2
102	Comparison of Statistical Descriptors for the Construction of Statistically Similar RVEs. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 539-540.	0.2	0
103	Modeling advanced high-strength steels based on direct micro-macro calculations. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 587-588.	0.2	0
104	Construction of Statistically Similar Representative Volume Elements – Comparative Study Regarding Different Statistical Descriptors. <i>Procedia Engineering</i> , 2014, 81, 1360-1365.	1.2	9
105	Construction of Statistically Similar Representative Volume Elements. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , 2014, , 355-412.	0.3	6
106	Comparative Study of the Influence of Statistically Distributed Microscopic Quantities on the Damage in Collagenous Tissues. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2013, 13, 47-48.	0.2	0
107	Designing Statistically Similar RVEs for 3D Dual Phase Steel Microstructures. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2013, 13, 271-272.	0.2	1
108	Computational model for the cell-mechanical response of the osteocyte cytoskeleton based on self-stabilizing tensegrity structures. <i>Biomechanics and Modeling in Mechanobiology</i> , 2013, 12, 167-183.	1.4	35

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109	Material Modeling of the Damage Behavior of Arterial Tissues. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.9	1
110	Complex-Step Derivative Approximation Schemes for the Robust Calculation of Numerical Constitutive Tangent Moduli. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 167-168.	0.2	2
111	Determination of Mechanical and Microstructural Tissue Quantities for Modeling Damage in Arterial Tissues. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.9	0
112	Parallel simulation of patient-specific atherosclerotic arteries for the enhancement of intravascular ultrasound diagnostics. Engineering Computations, 2012, 29, 888-906.	0.7	31
113	Nano to Micro - Perspectives for Homogenization in Crystalline Solids. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 19-22.	0.2	0
114	A Biphasic Approach for the Simulation of Growth Processes in Soft Biological Tissues Incorporating Damage-Induced Stress Softening. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 91-92.	0.2	0
115	Relaxed Incremental Variational Formulation for Damage in Fiber-Reinforced Materials. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 157-158.	0.2	0
116	Construction of Statistically Similar RVEs for 3D Microstructures. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 429-430.	0.2	1
117	Relaxed incremental variational formulation for damage at large strains with application to fiber-reinforced materials and materials with truss-like microstructures. International Journal for Numerical Methods in Engineering, 2012, 92, 551-570.	1.5	32
118	Constitutive framework for the modeling of damage in collagenous soft tissues with application to arterial walls. Computer Methods in Applied Mechanics and Engineering, 2012, 213-216, 139-151.	3.4	123
119	A new mixed finite element based on different approximations of the minors of deformation tensors. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 3583-3600.	3.4	58
120	Approximation of random microstructures by periodic statistically similar representative volume elements based on lineal-path functions. Archive of Applied Mechanics, 2011, 81, 975-997.	1.2	84
121	On the Reconstruction and Computation of Dual-Phase Steel Microstructures Based on 3D EBSD Data. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 503-504.	0.2	5
122	Simulation of Two-Phase Steels based on Statistically Similar Representative Volume Elements. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 939-942.	0.2	0
123	On the mechanical modeling of anisotropic biological soft tissue and iterative parallel solution strategies. Archive of Applied Mechanics, 2010, 80, 479-488.	1.2	20
124	On the Construction of Statistically Similar Representative Volume Elements Based on the Lineal-Path Function. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 399-400.	0.2	2
125	Applications of anisotropic polyconvex energies: thin shells and biomechanics of arterial walls. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2010, , 131-175.	0.3	3
126	FE2-Simulations in Elasto-Plasticity using Statistically Similar Representative Volume Elements. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 39-42.	0.2	4

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127	Simulation of Damage Hysteresis in Soft Biological Tissues. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 155-156.	0.2	4
128	Construction of anisotropic polyconvex energies and applications to thin shells. Computational Materials Science, 2009, 46, 639-641.	1.4	6
129	Some basic ideas for the reconstruction of statistically similar microstructures for multiscale simulations. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10533-10534.	0.2	10
130	Simulation of Deformation, Damage and Residual Stresses in Arterial Walls. Advanced Engineering Materials, 2008, 10, 315-321.	1.6	5
131	Analysis of thin shells using anisotropic polyconvex energy densities. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 1015-1032.	3.4	28
132	Numerical simulation of residual stresses in arterial walls. Computational Materials Science, 2007, 39, 117-123.	1.4	26
133	Large-scale simulation of arterial walls: mechanical modeling. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4020017-4020018.	0.2	0
134	A polyconvex framework for soft biological tissues. Adjustment to experimental data. International Journal of Solids and Structures, 2006, 43, 6052-6070.	1.3	270
135	Simulation of discontinuous damage incorporating residual stresses in circumferentially overstretched atherosclerotic arteries. Acta Biomaterialia, 2006, 2, 609-618.	4.1	117
136	A variational approach for materially stable anisotropic hyperelasticity. International Journal of Solids and Structures, 2005, 42, 4352-4371.	1.3	160
137	Aspects of Modeling and Computer Simulation of Soft Tissues: Applications to Arterial Walls. Materialwissenschaft Und Werkstofftechnik, 2005, 36, 795-801.	0.5	11
138	A SimpleModel for Anisotropic Damage with Applications to Soft Tissues. Proceedings in Applied Mathematics and Mechanics, 2004, 4, 236-237.	0.2	13
139	MODELING OF ANISOTROPIC GROWTH AND RESIDUAL STRESSES IN ARTERIAL WALLS. Acta Polytechnica CTU Proceedings, 0, 7, 85.	0.3	4