

# Ellen Kuhl

## List of Publications by Year in descending order

Source: [//exaly.com/author-pdf/5403099/publications.pdf](https://exaly.com/author-pdf/5403099/publications.pdf)

Version: 2024-02-01

314  
papers

16,494  
citations

13818

67  
h-index

26426

108  
g-index

359  
all docs

359  
docs citations

359  
times ranked

14001  
citing authors

#	ARTICLE	IF	CITATIONS
1	On automated model discovery and a universal material subroutine for hyperelastic materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2024, 418, 116534.	6.7	16
2	Discovering a reaction–diffusion model for Alzheimer’s disease by combining PINNs with symbolic regression. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2024, 419, 116647.	6.7	10
3	On sparse regression, $\ell_1$ -regularization, and automated model discovery. <i>International Journal for Numerical Methods in Engineering</i> , 2024, 125, .	2.9	6
4	Best-in-class modeling: A novel strategy to discover constitutive models for soft matter systems. <i>Extreme Mechanics Letters</i> , 2024, 70, 102181.	4.2	2
5	Minimal Design of the Elephant Trunk as an Active Filament. <i>Physical Review Letters</i> , 2024, 132, .	8.0	2
6	Automated model discovery for human cardiac tissue: Discovering the best model and parameters. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2024, 428, 117078.	6.7	2
7	Minimal activation with maximal reach: Reachability clouds of bio-inspired slender manipulators. <i>Extreme Mechanics Letters</i> , 2024, 71, 102207.	4.2	0
8	Automated data-driven discovery of material models based on symbolic regression: A case study on the human brain cortex. <i>Acta Biomaterialia</i> , 2024, , .	8.8	0
9	Automated model discovery for textile structures: The unique mechanical signature of warp knitted fabrics. <i>Acta Biomaterialia</i> , 2024, , .	8.8	0
10	Mechanics of axon growth and damage: A systematic review of computational models. <i>Seminars in Cell and Developmental Biology</i> , 2023, 140, 13-21.	5.4	5
11	A new family of Constitutive Artificial Neural Networks towards automated model discovery. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2023, 403, 115731.	6.7	76
12	A Simulation Tool for Physics-Informed Control of Biomimetic Soft Robotic Arms. <i>IEEE Robotics and Automation Letters</i> , 2023, 8, 936-943.	5.2	6
13	Automated model discovery for skin: Discovering the best model, data, and experiment. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2023, 410, 116007.	6.7	16
14	Automated model discovery for human brain using Constitutive Artificial Neural Networks. <i>Acta Biomaterialia</i> , 2023, 160, 134-151.	8.8	34
15	Bayesian design optimization of biomimetic soft actuators. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2023, 408, 115939.	6.7	5
16	Principal-stretch-based constitutive neural networks autonomously discover a subclass of Ogden models for human brain tissue. <i>Brain Multiphysics</i> , 2023, 4, 100066.	2.4	21
17	Evaluating Passive Myocardial Stiffness Using in vivo cine, cDTI, and Tagged MRI. <i>Lecture Notes in Computer Science</i> , 2023, , 527-536.	1.0	0
18	Automated model discovery for muscle using constitutive recurrent neural networks. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2023, 145, 106021.	3.1	13

#	ARTICLE	IF	CITATIONS
19	Discovering the mechanics of artificial and real meat. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2023, 415, 116236.	6.7	14
20	Growth and remodeling in the pulmonary autograft: Computational evaluation using kinematic growth models and constrained mixture theory. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2022, 38, e3545.	2.2	9
21	Sex Matters: A Comprehensive Comparison of Female and Male Hearts. <i>Frontiers in Physiology</i> , 2022, 13, 831179.	2.8	77
22	How drugs modulate the performance of the human heart. <i>Computational Mechanics</i> , 2022, 69, 1397-1411.	4.0	7
23	How viscous is the beating heart? Insights from a computational study. <i>Computational Mechanics</i> , 2022, 70, 565-579.	4.0	4
24	Correlating tau pathology to brain atrophy using a physics-based Bayesian model. <i>Engineering With Computers</i> , 2022, 38, 3867-3877.	5.8	9
25	Bayesian Physics Informed Neural Networks for real-world nonlinear dynamical systems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022, 402, 115346.	6.7	50
26	Rheology of growing axons. <i>Physical Review Research</i> , 2022, 4, .	3.6	2
27	Correlating the microstructural architecture and macrostructural behaviour of the brain. <i>Acta Biomaterialia</i> , 2022, 151, 379-395.	8.8	8
28	Multiscale Modeling Meets Machine Learning: What Can We Learn?. <i>Archives of Computational Methods in Engineering</i> , 2021, 28, 1017-1037.	10.6	191
29	Are college campuses superspreaders? A data-driven modeling study. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2021, 24, 1136-1145.	1.7	69
30	Global and local mobility as a barometer for COVID-19 dynamics. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021, 20, 651-669.	3.0	46
31	A Framework for Evaluating Myocardial Stiffness Using 3D-Printed Heart Phantoms. <i>Lecture Notes in Computer Science</i> , 2021, , 305-314.	1.0	2
32	Precision medicine in human heart modeling. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021, 20, 803-831.	3.0	107
33	Bayesian Physics-Based Modeling of Tau Propagation in Alzheimer's Disease. <i>Frontiers in Physiology</i> , 2021, 12, 702975.	2.8	17
34	COVID-19 dynamics across the US: A deep learning study of human mobility and social behavior. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 382, 113891.	6.7	35
35	Effects of B.1.1.7 and B.1.351 on COVID-19 Dynamics: A Campus Reopening Study. <i>Archives of Computational Methods in Engineering</i> , 2021, 28, 4225-4236.	10.6	4
36	Sex Differences in Drug-Induced Arrhythmogenesis. <i>Frontiers in Physiology</i> , 2021, 12, 708435.	2.8	15

#	ARTICLE	IF	CITATIONS
37	Predicting brain atrophy from tau pathology: a summary of clinical findings and their translation into personalized models. <i>Brain Multiphysics</i> , 2021, 2, 100039.	2.4	17
38	Fifty Shades of Brain: A Review on the Mechanical Testing and Modeling of Brain Tissue. <i>Archives of Computational Methods in Engineering</i> , 2020, 27, 1187-1230.	10.6	256
39	Viscoelasticity of the axon limits stretch-mediated growth. <i>Computational Mechanics</i> , 2020, 65, 587-595.	4.0	13
40	Modeling the life cycle of the human brain. <i>Current Opinion in Biomedical Engineering</i> , 2020, 15, 16-25.	3.7	15
41	Towards microstructure-informed material models for human brain tissue. <i>Acta Biomaterialia</i> , 2020, 104, 53-65.	8.8	67
42	Spatially-extended nucleation-aggregation-fragmentation models for the dynamics of prion-like neurodegenerative protein-spreading in the brain and its connectome. <i>Journal of Theoretical Biology</i> , 2020, 486, 110102.	1.7	42
43	Editorial overview: Biomechanics and mechanobiology of tissue growth and remodeling: Current opinions. <i>Current Opinion in Biomedical Engineering</i> , 2020, 15, A1-A2.	3.7	0
44	Visualizing the invisible: The effect of asymptomatic transmission on the outbreak dynamics of COVID-19. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 372, 113410.	6.7	61
45	The reproduction number of COVID-19 and its correlation with public health interventions. <i>Computational Mechanics</i> , 2020, 66, 1035-1050.	4.0	158
46	Is it safe to lift COVID-19 travel bans? The Newfoundland story. <i>Computational Mechanics</i> , 2020, 66, 1081-1092.	4.0	58
47	Neuronal Oscillations on Evolving Networks: Dynamics, Damage, Degradation, Decline, Dementia, and Death. <i>Physical Review Letters</i> , 2020, 125, 128102.	8.0	32
48	Modeling and simulation of infectious diseases. <i>Computational Mechanics</i> , 2020, 66, 1053-1053.	4.0	0
49	Network Diffusion Modeling Explains Longitudinal Tau PET Data. <i>Frontiers in Neuroscience</i> , 2020, 14, 566876.	2.9	19
50	Folding drives cortical thickness variations. <i>European Physical Journal: Special Topics</i> , 2020, 229, 2757-2778.	2.6	11
51	Outbreak dynamics of COVID-19 in Europe and the effect of travel restrictions. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2020, 23, 710-717.	1.7	252
52	Physics-Informed Neural Networks for Cardiac Activation Mapping. <i>Frontiers in Physics</i> , 2020, 8, .	2.2	200
53	Special Issue on Uncertainty Quantification, Machine Learning, and Data-Driven Modeling of Biological Systems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 362, 112832.	6.7	1
54	Nervous Tissue Stiffens Postinjury. <i>Biophysical Journal</i> , 2020, 118, 276-278.	0.5	0

#	ARTICLE	IF	CITATIONS
55	Classifying Drugs by their Arrhythmogenic Risk Using Machine Learning. <i>Biophysical Journal</i> , 2020, 118, 1165-1176.	0.5	27
56	Outbreak dynamics of COVID-19 in China and the United States. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 2179-2193.	3.0	132
57	Data-driven modeling of COVID-19's Lessons learned. <i>Extreme Mechanics Letters</i> , 2020, 40, 100921.	4.2	54
58	Growth and remodelling of living tissues: perspectives, challenges and opportunities. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20190233.	3.4	159
59	Connectomics of neurodegeneration. <i>Nature Neuroscience</i> , 2019, 22, 1200-1202.	14.5	6
60	Prion-like spreading of Alzheimer's disease within the brain's connectome. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20190356.	3.4	84
61	Multi-fidelity classification using Gaussian processes: Accelerating the prediction of large-scale computational models. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 357, 112602.	6.7	31
62	Multiscale characterization of heart failure. <i>Acta Biomaterialia</i> , 2019, 86, 66-76.	8.8	30
63	A computational model to predict cell traction-mediated prestretch in the mitral valve. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2019, 22, 1174-1185.	1.7	4
64	Using machine learning to characterize heart failure across the scales. <i>Biomechanics and Modeling in Mechanobiology</i> , 2019, 18, 1987-2001.	3.0	63
65	The interplay of biochemical and biomechanical degeneration in Alzheimer's disease. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 352, 369-388.	6.7	25
66	Modeling neurodegeneration in chronic traumatic encephalopathy using gradient damage models. <i>Computational Mechanics</i> , 2019, 64, 1375-1387.	4.0	19
67	Revisiting the wrinkling of elastic bilayers: linear analysis. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20180076.	3.5	29
68	Machine learning in drug development: Characterizing the effect of 30 drugs on the QT interval using Gaussian process regression, sensitivity analysis, and uncertainty quantification. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 348, 313-333.	6.7	80
69	Understanding the mechanical link between oriented cell division and cerebellar morphogenesis. <i>Soft Matter</i> , 2019, 15, 2204-2215.	2.8	22
70	Do annuloplasty rings designed to treat ischemic/functional mitral regurgitation alter left-ventricular dimensions in the acutely ischemic ovine heart?. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2019, 158, 1058-1068.	2.7	8
71	On the implementation of finite deformation gradient-enhanced damage models. <i>Computational Mechanics</i> , 2019, 64, 847-877.	4.0	47
72	Challenges and perspectives in brain tissue testing and modeling. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2019, 19, e201900269.	0.2	4

#	ARTICLE	IF	CITATIONS
73	Integrating machine learning and multiscale modelingâ€”perspectives, challenges, and opportunities in the biological, biomedical, and behavioral sciences. <i>Npj Digital Medicine</i> , 2019, 2, 115.	11.3	375
74	The Shrinking Brain: Cerebral Atrophy Following Traumatic Brain Injury. <i>Annals of Biomedical Engineering</i> , 2019, 47, 1941-1959.	2.6	85
75	Predicting critical drug concentrations and torsadogenic risk using a multiscale exposure-response simulator. <i>Progress in Biophysics and Molecular Biology</i> , 2019, 144, 61-76.	3.0	11
76	A physics-based model explains the prion-like features of neurodegeneration in Alzheimerâ€™s disease, Parkinsonâ€™s disease, and amyotrophic lateral sclerosis. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 124, 264-281.	4.9	88
77	Predicting the cardiac toxicity of drugs using a novel multiscale exposureâ€”response simulator. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2018, 21, 232-246.	1.7	27
78	Predicting drugâ€”induced arrhythmias by multiscale modeling. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018, 34, e2964.	2.2	31
79	Growth and remodeling play opposing roles during postnatal human heart valve development. <i>Scientific Reports</i> , 2018, 8, 1235.	3.4	19
80	A physical multifield model predicts the development of volume and structure in the human brain. <i>Journal of the Mechanics and Physics of Solids</i> , 2018, 112, 563-576.	4.9	26
81	Microtubule Polymerization and Cross-Link Dynamics Explain Axonal Stiffness and Damage. <i>Biophysical Journal</i> , 2018, 114, 201-212.	0.5	37
82	On skin microrelief and the emergence of expression micro-wrinkles. <i>Soft Matter</i> , 2018, 14, 1292-1300.	2.8	45
83	Improving tissue expansion protocols through computational modeling. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 82, 224-234.	3.1	24
84	Determining the Differential Effects of Stretch and Growth in Tissue-Expanded Skin: Combining Isogeometric Analysis and Continuum Mechanics in a Porcine Model. <i>Dermatologic Surgery</i> , 2018, 44, 48-52.	0.9	14
85	Passive Stretch Induces Structural and Functional Maturation of Engineered Heart Muscle as Predicted by Computational Modeling. <i>Stem Cells</i> , 2018, 36, 265-277.	3.6	118
86	Magnetic resonance elastography of the brain: A comparison between pigs and humans. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 77, 702-710.	3.1	53
87	Interpreting Activation Mapping of Atrial Fibrillation: A Hybrid Computational/Physiological Study. <i>Annals of Biomedical Engineering</i> , 2018, 46, 257-269.	2.6	16
88	Regionâ€”and loadingâ€”specific finite viscoelasticity of human brain tissue. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2018, 18, e201800169.	0.2	7
89	Symmetry Breaking in Wrinkling Patterns: Gyri Are Universally Thicker than Sulci. <i>Physical Review Letters</i> , 2018, 121, 228002.	8.0	51
90	Modeling the Axon as an Active Partner with the Growth Cone in Axonal Elongation. <i>Biophysical Journal</i> , 2018, 115, 1783-1795.	0.5	27

#	ARTICLE	IF	CITATIONS
91	Multiphysics of Prionlike Diseases: Progression and Atrophy. <i>Physical Review Letters</i> , 2018, 121, 158101.	8.0	91
92	Brain stiffens post mortem. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 84, 88-98.	3.1	72
93	Physical Biology of Axonal Damage. <i>Frontiers in Cellular Neuroscience</i> , 2018, 12, 144.	3.8	23
94	Mechanical Cues in Spinal Cord Injury. <i>Biophysical Journal</i> , 2018, 115, 751-753.	0.5	2
95	Title is missing!. , 2018, , .		2
96	A virtual sizing tool for mitral valve annuloplasty. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2017, 33, e02788.	2.2	34
97	The Pursuit of Engineering the Ideal Heart Valve Replacement or Repair: A Special Issue of the <i>Annals of Biomedical Engineering</i> . <i>Annals of Biomedical Engineering</i> , 2017, 45, 307-309.	2.6	10
98	The mechanical importance of myelination in the central nervous system. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 76, 119-124.	3.1	63
99	A family of hyperelastic models for human brain tissue. <i>Journal of the Mechanics and Physics of Solids</i> , 2017, 106, 60-79.	4.9	136
100	The importance of mechano-electrical feedback and inertia in cardiac electromechanics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 320, 352-368.	6.7	56
101	Wrinkling instabilities in soft bilayered systems. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2017, 375, 20160163.	3.5	41
102	Molecular mechanisms of chronic traumatic encephalopathy. <i>Current Opinion in Biomedical Engineering</i> , 2017, 1, 23-30.	3.7	15
103	Modeling molecular mechanisms in the axon. <i>Computational Mechanics</i> , 2017, 59, 523-537.	4.0	31
104	Quantification of Strain in a Porcine Model of Skin Expansion Using Multi-View Stereo and Isogeometric Kinematics. <i>Journal of Visualized Experiments</i> , 2017, , .	0.3	5
105	Viscoelastic parameter identification of human brain tissue. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 74, 463-476.	3.1	133
106	Pilot Findings of Brain Displacements and Deformations during Roller Coaster Rides. <i>Journal of Neurotrauma</i> , 2017, 34, 3198-3205.	3.6	20
107	Dimensional, Geometrical, and Physical Constraints in Skull Growth. <i>Physical Review Letters</i> , 2017, 118, 248101.	8.0	29
108	Rheological characterization of human brain tissue. <i>Acta Biomaterialia</i> , 2017, 60, 315-329.	8.8	136

#	ARTICLE	IF	CITATIONS
109	Bulging Brains. <i>Journal of Elasticity</i> , 2017, 129, 197-212.	2.0	25
110	Mechanical characterization of human brain tissue. <i>Acta Biomaterialia</i> , 2017, 48, 319-340.	8.8	466
111	The mechanics of decompressive craniectomy: Personalized simulations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 314, 180-195.	6.7	40
112	Instabilities of soft films on compliant substrates. <i>Journal of the Mechanics and Physics of Solids</i> , 2017, 98, 350-365.	4.9	61
113	Weekly Time Course of Neuro-Muscular Adaptation to Intensive Strength Training. <i>Frontiers in Physiology</i> , 2017, 8, 329.	2.8	8
114	Partial LVAD Restores Ventricular Outputs and Normalizes LV but not RV Stress Distributions in the Acutely Failing Heart in Silico. <i>International Journal of Artificial Organs</i> , 2016, 39, 421-430.	1.5	34
115	A Finite Element Model for Mixed Porohyperelasticity with Transport, Swelling, and Growth. <i>PLoS ONE</i> , 2016, 11, e0152806.	2.5	18
116	Multiphysics and multiscale modelling, data-driven model fusion and integration of organ physiology in the clinic: ventricular cardiac mechanics. <i>Interface Focus</i> , 2016, 6, 20150083.	3.2	173
117	Tri-layer wrinkling as a mechanism for anchoring center initiation in the developing cerebellum. <i>Soft Matter</i> , 2016, 12, 5613-5620.	2.8	48
118	Elastosis during airway wall remodeling explains multiple co-existing instability patterns. <i>Journal of Theoretical Biology</i> , 2016, 403, 209-218.	1.7	37
119	Response to Letters Regarding Article, "Segmental Aortic Stiffening Contributes to Experimental Abdominal Aortic Aneurysm Development". <i>Circulation</i> , 2016, 133, e11-2.	9.3	1
120	Stress Singularities in Swelling Soft Solids. <i>Physical Review Letters</i> , 2016, 117, 138001.	8.0	25
121	Brain stiffness increases with myelin content. <i>Acta Biomaterialia</i> , 2016, 42, 265-272.	8.8	203
122	The mechanics of decompressive craniectomy: Bulging in idealized geometries. <i>Journal of the Mechanics and Physics of Solids</i> , 2016, 96, 572-590.	4.9	9
123	Terminating atrial fibrillation by cooling the heart. <i>Heart Rhythm</i> , 2016, 13, 2259-2260.	0.8	0
124	Unfolding the brain. <i>Nature Physics</i> , 2016, 12, 533-534.	11.8	26
125	Using 3D Printing to Create Personalized Brain Models for Neurosurgical Training and Preoperative Planning. <i>World Neurosurgery</i> , 2016, 90, 668-674.	1.5	154
126	Generating Purkinje networks in the human heart. <i>Journal of Biomechanics</i> , 2016, 49, 2455-2465.	2.1	85



#	ARTICLE	IF	CITATIONS
127	Constitutive Modeling of Brain Tissue: Current Perspectives. <i>Applied Mechanics Reviews</i> , 2016, 68, .	10.3	103
128	The Incompatibility of Living Systems: Characterizing Growth-Induced Incompatibilities in Expanded Skin. <i>Annals of Biomedical Engineering</i> , 2016, 44, 1734-1752.	2.6	22
129	Computational modeling of acute myocardial infarction. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 1107-1115.	1.7	25
130	Computational modeling of chemo-bio-mechanical coupling: a systems-biology approach toward wound healing. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 13-30.	1.7	41
131	Modeling Pathologies of Diastolic and Systolic Heart Failure. <i>Annals of Biomedical Engineering</i> , 2016, 44, 112-127.	2.6	76
132	Systems biology and mechanics of growth. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2015, 7, 401-412.	6.7	33
133	Primary and secondary instabilities in soft bilayered systems. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2015, 15, 281-282.	0.2	1
134	Modeling Tissue Expansion with Isogeometric Analysis. <i>Plastic and Reconstructive Surgery</i> , 2015, 136, 31-32.	1.6	1
135	Segmental Aortic Stiffening Contributes to Experimental Abdominal Aortic Aneurysm Development. <i>Circulation</i> , 2015, 131, 1783-1795.	9.3	117
136	Isogeometric Kirchhoff-“Love shell formulations for biological membranes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 293, 328-347.	6.7	90
137	Morphoelastic control of gastro-intestinal organogenesis: Theoretical predictions and numerical insights. <i>Journal of the Mechanics and Physics of Solids</i> , 2015, 78, 493-510.	4.9	53
138	Neuromechanics. <i>Advances in Applied Mechanics</i> , 2015, , 79-139.	1.0	57
139	Tau-ism: The Yin and Yang of Microtubule Sliding, Detachment, and Rupture. <i>Biophysical Journal</i> , 2015, 109, 2215-2217.	0.5	25
140	Multi-view stereo analysis reveals anisotropy of prestrain, deformation, and growth in living skin. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 1007-1019.	3.0	32
141	A new sparse matrix vector multiplication graphics processing unit algorithm designed for finite element problems. <i>International Journal for Numerical Methods in Engineering</i> , 2015, 102, 1784-1814.	2.9	21
142	Mechanics of the brain: perspectives, challenges, and opportunities. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 931-965.	3.0	304
143	Period-doubling and period-tripling in growing bilayered systems. <i>Philosophical Magazine</i> , 2015, 95, 3208-3224.	1.6	89
144	Computational aspects of growth-induced instabilities through eigenvalue analysis. <i>Computational Mechanics</i> , 2015, 56, 405-420.	4.0	47

#	ARTICLE	IF	CITATIONS
145	Size and curvature regulate pattern selection in the mammalian brain. <i>Extreme Mechanics Letters</i> , 2015, 4, 193-198.	4.2	51
146	Use it or lose it: multiscale skeletal muscle adaptation to mechanical stimuli. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 195-215.	3.0	125
147	Patient-Specific Airway Wall Remodeling in Chronic Lung Disease. <i>Annals of Biomedical Engineering</i> , 2015, 43, 2538-2551.	2.6	39
148	Emerging Brain Morphologies from Axonal Elongation. <i>Annals of Biomedical Engineering</i> , 2015, 43, 1640-1653.	2.6	86
149	Human Cardiac Function Simulator for the Optimal Design of a Novel Annuloplasty Ring with a Sub-valvular Element for Correction of Ischemic Mitral Regurgitation. <i>Cardiovascular Engineering and Technology</i> , 2015, 6, 105-116.	1.7	56
150	Secondary instabilities modulate cortical complexity in the mammalian brain. <i>Philosophical Magazine</i> , 2015, 95, 3244-3256.	1.6	41
151	Mechanical properties of gray and white matter brain tissue by indentation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 46, 318-330.	3.1	535
152	Heterogeneous growth-induced prestrain in the heart. <i>Journal of Biomechanics</i> , 2015, 48, 2080-2089.	2.1	78
153	Physical biology of human brain development. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 257.	3.8	211
154	On high heels and short muscles: A multiscale model for sarcomere loss in the gastrocnemius muscle. <i>Journal of Theoretical Biology</i> , 2015, 365, 301-310.	1.7	36
155	The emergence of extracellular matrix mechanics and cell traction forces as important regulators of cellular self-organization. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 1-13.	3.0	64
156	A computational model that predicts reverse growth in response to mechanical unloading. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 217-229.	3.0	41
157	Human pluripotent stem cell tools for cardiac optogenetics. , 2014, 2014, 6171-4.		14
158	Computational modelling of electrocardiograms: repolarisation and T-wave polarity in the human heart. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014, 17, 986-996.	1.7	34
159	Pattern Selection in Growing Tubular Tissues. <i>Physical Review Letters</i> , 2014, 113, 248101.	8.0	97
160	The Living Heart Project: A robust and integrative simulator for human heart function. <i>European Journal of Mechanics, A/Solids</i> , 2014, 48, 38-47.	3.8	280
161	A novel strategy to identify the critical conditions for growth-induced instabilities. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 29, 20-32.	3.1	21
162	Growing matter: A review of growth in living systems. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 29, 529-543.	3.1	135

#	ARTICLE	IF	CITATIONS
163	Computational modeling of hypertensive growth in the human carotid artery. <i>Computational Mechanics</i> , 2014, 53, 1183-1196.	4.0	41
164	Generating fibre orientation maps in human heart models using Poisson interpolation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014, 17, 1217-1226.	1.7	99
165	Characterization of living skin using multi-view stereo and isogeometric analysis. <i>Acta Biomaterialia</i> , 2014, 10, 4822-4831.	8.8	42
166	The generalized Hill model: A kinematic approach towards active muscle contraction. <i>Journal of the Mechanics and Physics of Solids</i> , 2014, 72, 20-39.	4.9	51
167	Computational modeling of skin: Using stress profiles as predictor for tissue necrosis in reconstructive surgery. <i>Computers and Structures</i> , 2014, 143, 32-39.	4.5	39
168	The role of mechanics during brain development. <i>Journal of the Mechanics and Physics of Solids</i> , 2014, 72, 75-92.	4.9	203
169	Modeling and simulation of viscous electro-active polymers. <i>European Journal of Mechanics, A/Solids</i> , 2014, 48, 112-128.	3.8	50
170	Frontiers in Finite-Deformation Electromechanics. <i>European Journal of Mechanics, A/Solids</i> , 2014, 48, 1-2.	3.8	0
171	On the mechanics of growing thin biological membranes. <i>Journal of the Mechanics and Physics of Solids</i> , 2014, 63, 128-140.	4.9	37
172	A mechanical approach to explain cortical folding phenomena in healthy and diseased brains. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 101-102.	0.2	1
173	Application of Finite Element Modeling to Optimize Flap Design with Tissue Expansion. <i>Plastic and Reconstructive Surgery</i> , 2014, 134, 785-792.	1.6	24
174	Towards an instrumented tissue expander. , 2014, , .		0
175	A mechanical model predicts morphological abnormalities in the developing human brain. <i>Scientific Reports</i> , 2014, 4, 5644.	3.4	167
176	Mechanics of the Mitral Annulus in Chronic Ischemic Cardiomyopathy. <i>Annals of Biomedical Engineering</i> , 2013, 41, 2171-2180.	2.6	27
177	Mathematical modeling of collagen turnover in biological tissue. <i>Journal of Mathematical Biology</i> , 2013, 67, 1765-1793.	1.9	26
178	Growth on demand: Reviewing the mechanobiology of stretched skin. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013, 28, 495-509.	3.1	96
179	Mechanics of the mitral valve. <i>Biomechanics and Modeling in Mechanobiology</i> , 2013, 12, 1053-1071.	3.0	71
180	A three-constituent damage model for arterial clamping in computer-assisted surgery. <i>Biomechanics and Modeling in Mechanobiology</i> , 2013, 12, 123-136.	3.0	41

#	ARTICLE	IF	CITATIONS
181	On the mechanics of continua with boundary energies and growing surfaces. Journal of the Mechanics and Physics of Solids, 2013, 61, 1446-1463.	4.9	57
182	Systems-based approaches toward wound healing. Pediatric Research, 2013, 73, 553-563.	2.4	79
183	Cardiovascular Tissue Damage: An Experimental and Computational Framework. , 2013, , 129-148.		0
184	On the effect of prestrain and residual stress in thin biological membranes. Journal of the Mechanics and Physics of Solids, 2013, 61, 1955-1969.	4.9	95
185	A fully implicit finite element method for bidomain models of cardiac electromechanics. Computer Methods in Applied Mechanics and Engineering, 2013, 253, 323-336.	6.7	82
186	On the mechanics of thin films and growing surfaces. Mathematics and Mechanics of Solids, 2013, 18, 561-575.	2.4	34
187	On the Role of Mechanics in Chronic Lung Disease. Materials, 2013, 6, 5639-5658.	3.0	41
188	Characterisation of electrophysiological conduction in cardiomyocyte co-cultures using co-occurrence analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 185-197.	1.7	9
189	Computational modeling of chemo-electro-mechanical coupling: A novel implicit monolithic finite element approach. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 1104-1133.	2.2	29
190	Micro-structurally Based Kinematic Approaches to Electromechanics of the Heart. , 2013, , 175-187.		7
191	Modeling Growth in Tissue Expansion. , 2012, , .		0
192	Computational Modelling of Optogenetics in Cardiac Cells. , 2012, , .		0
193	Chronic Mitral Valve Leaflet Growth Following Myocardial Infarction. , 2012, , .		0
194	Finite Element Modeling of Flap Design After Skin Expansion. , 2012, , .		0
195	How Do Annuloplasty Rings Affect Mitral Annular Strains in the Normal Beating Ovine Heart?. Circulation, 2012, 126, S231-8.	9.3	29
196	Consistent formulation of the growth process at the kinematic and constitutive level for soft tissues composed of multiple constituents. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 547-561.	1.7	23
197	Stretching skin: The physiological limit and beyond. International Journal of Non-Linear Mechanics, 2012, 47, 938-949.	2.7	82
198	Evidence of adaptive mitral leaflet growth. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 15, 208-217.	3.1	59

#	ARTICLE	IF	CITATIONS
199	A fully implicit finite element method for bidomain models of cardiac electrophysiology. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 645-656.	1.7	30
200	Computational modeling of bone density profiles in response to gait: a subject-specific approach. <i>Biomechanics and Modeling in Mechanobiology</i> , 2012, 11, 379-390.	3.0	12
201	Growing skin: tissue expansion in pediatric forehead reconstruction. <i>Biomechanics and Modeling in Mechanobiology</i> , 2012, 11, 855-867.	3.0	62
202	Mitral Valve Annuloplasty. <i>Annals of Biomedical Engineering</i> , 2012, 40, 750-761.	2.6	67
203	Anisotropic density growth of bone—A computational micro-sphere approach. <i>International Journal of Solids and Structures</i> , 2012, 49, 1928-1946.	2.7	24
204	On the biomechanics and mechanobiology of growing skin. <i>Journal of Theoretical Biology</i> , 2012, 297, 166-175.	1.7	93
205	Frontiers in growth and remodeling. <i>Mechanics Research Communications</i> , 2012, 42, 1-14.	1.9	185
206	Growth and remodeling of the left ventricle: A case study of myocardial infarction and surgical ventricular restoration. <i>Mechanics Research Communications</i> , 2012, 42, 134-141.	1.9	54
207	Kinematics of cardiac growth: In vivo characterization of growth tensors and strains. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 8, 165-177.	3.1	25
208	Computational optogenetics: A novel continuum framework for the photoelectrochemistry of living systems. <i>Journal of the Mechanics and Physics of Solids</i> , 2012, 60, 1158-1178.	4.9	33
209	Stretching Skeletal Muscle: Chronic Muscle Lengthening through Sarcomerogenesis. <i>PLoS ONE</i> , 2012, 7, e45661.	2.5	98
210	IN VITRO/IN SILICO CHARACTERIZATION OF ACTIVE AND PASSIVE STRESSES IN CARDIAC MUSCLE. <i>International Journal for Multiscale Computational Engineering</i> , 2012, 10, 171-188.	1.3	13
211	Electrophysiological Modeling of Channelrhodopsin-2 in Cardiac Cells. <i>Biophysical Journal</i> , 2011, 100, 437a.	0.5	0
212	Multiscale Computational Models for Optogenetic Control of Cardiac Function. <i>Biophysical Journal</i> , 2011, 101, 1326-1334.	0.5	93
213	In vitro and In silico Optogenetic Control of Differentiated Human Pluripotent Stem Cells. <i>Biophysical Journal</i> , 2011, 100, 368a.	0.5	1
214	Active contraction of cardiac muscle: In vivo characterization of mechanical activation sequences in the beating heart. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 1167-1176.	3.1	24
215	Growing skin: A computational model for skin expansion in reconstructive surgery. <i>Journal of the Mechanics and Physics of Solids</i> , 2011, 59, 2177-2190.	4.9	115
216	Computational modeling of electrochemical coupling: A novel finite element approach towards ionic models for cardiac electrophysiology. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2011, 200, 3139-3158.	6.7	43

#	ARTICLE	IF	CITATIONS
217	A Novel Method for Quantifying the In-Vivo Mechanical Effect of Material Injected Into a Myocardial Infarction. <i>Annals of Thoracic Surgery</i> , 2011, 92, 935-941.	1.4	69
218	Computational modeling of growth: systemic and pulmonary hypertension in the heart. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011, 10, 799-811.	3.0	88
219	Characterization of Mitral Valve Annular Dynamics in the Beating Heart. <i>Annals of Biomedical Engineering</i> , 2011, 39, 1690-1702.	2.6	60
220	A three-field, bi-domain based approach to the strongly coupled electromechanics of the heart. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2011, 11, 931-934.	0.2	3
221	Computational modeling of passive myocardium. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2011, 27, 1-12.	2.2	120
222	Perspectives on biological growth and remodeling. <i>Journal of the Mechanics and Physics of Solids</i> , 2011, 59, 863-883.	4.9	382
223	In vivo dynamic strains of the ovine anterior mitral valve leaflet. <i>Journal of Biomechanics</i> , 2011, 44, 1149-1157.	2.1	64
224	Rigid, Complete Annuloplasty Rings Increase Anterior Mitral Leaflet Strains in the Normal Beating Ovine Heart. <i>Circulation</i> , 2011, 124, S81-96.	9.3	48
225	Cahn-Hilliard Generalized Diffusion Modeling Using the Natural Element Method. <i>Advanced Structured Materials</i> , 2011, , 325-337.	0.0	0
226	Finite Element Modeling of Mechanically Driven Skin Growth due to Different Expander Geometries. , 2011, , .		0
227	In-Vivo Dynamic Strains of the Ovine Anterior Mitral Valve Leaflet. , 2011, , .		0
228	A multiscale model for eccentric and concentric cardiac growth through sarcomerogenesis. <i>Journal of Theoretical Biology</i> , 2010, 265, 433-442.	1.7	198
229	Anterior mitral leaflet curvature in the beating ovine heart: a case study using videofluoroscopic markers and subdivision surfaces. <i>Biomechanics and Modeling in Mechanobiology</i> , 2010, 9, 281-293.	3.0	23
230	Electromechanics of the heart: a unified approach to the strongly coupled excitationâ€“contraction problem. <i>Computational Mechanics</i> , 2010, 45, 227-243.	4.0	185
231	Natural element analysis of the Cahnâ€“Hilliard phase-field model. <i>Computational Mechanics</i> , 2010, 46, 471-493.	4.0	38
232	Computational modeling of electrocardiograms: A finite element approach toward cardiac excitation. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2010, 26, 524-533.	2.2	33
233	Characterization of indentation response and stiffness reduction of bone using a continuum damage model. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2010, 3, 189-202.	3.1	63
234	A generic approach towards finite growth with examples of athlete's heart, cardiac dilation, and cardiac wall thickening. <i>Journal of the Mechanics and Physics of Solids</i> , 2010, 58, 1661-1680.	4.9	131

#	ARTICLE	IF	CITATIONS
235	Stress concentrations in fractured compact bone simulated with a special class of anisotropic gradient elasticity. <i>International Journal of Solids and Structures</i> , 2010, 47, 1099-1107.	2.7	87
236	Application of a Viscoelastic Material Model in Electro-Mechanics. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2010, 10, 387-388.	0.2	2
237	Anterior Mitral Leaflet Curvature During the Cardiac Cycle in the Normal Ovine Heart. <i>Circulation</i> , 2010, 122, 1683-1689.	9.3	28
238	Computational Homogenization of Confined Frictional Granular Matter. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2010, , 157-169.	0.0	2
239	Imaging-Based Computation of the Dynamics of Pelvic Floor Deformation and Strain Visualization Analysis. <i>Lecture Notes in Computer Science</i> , 2010, , 604-612.	1.0	0
240	Integration of liver behaviour in FE simulation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009, 12, 83-85.	1.7	14
241	Active stiffening of mitral valve leaflets in the beating heart. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2009, 296, H1766-H1773.	3.4	47
242	Computational modeling of cardiac electrophysiology: A novel finite element approach. <i>International Journal for Numerical Methods in Engineering</i> , 2009, 79, 156-178.	2.9	84
243	Computational modeling of muscular thin films for cardiac repair. <i>Computational Mechanics</i> , 2009, 43, 535-544.	4.0	42
244	Towards the treatment of boundary conditions for global crack path tracking in three-dimensional brittle fracture. <i>Computational Mechanics</i> , 2009, 45, 91-107.	4.0	15
245	Electromechanics of Cardiac Tissue: A Unified Approach to the Fully Coupled Excitation-Contraction Problem. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2009, 9, 159-160.	0.2	3
246	Stress-strain behavior of mitral valve leaflets in the beating ovine heart. <i>Journal of Biomechanics</i> , 2009, 42, 1909-1916.	2.1	63
247	The phenomenon of twisted growth: humeral torsion in dominant arms of high performance tennis players. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009, 12, 83-93.	1.7	31
248	Regional stiffening of the mitral valve anterior leaflet in the beating ovine heart. <i>Journal of Biomechanics</i> , 2009, 42, 2697-2701.	2.1	35
249	Mechanics in biology: cells and tissues. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2009, 367, 3335-3337.	3.5	3
250	On the Multiscale Computation of Confined Granular Media. , 2009, , 121-133.		6
251	Computational Simulation of Traveling Arrhythmic Waves in Myocardial Tissue. , 2009, , .		0
252	On local tracking algorithms for the simulation of three-dimensional discontinuities. <i>Computational Mechanics</i> , 2008, 42, 395-406.	4.0	25



#	ARTICLE	IF	CITATIONS
253	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.	3.4	26
254	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.	2.9	38
255	Modeling three-dimensional crack propagation—A comparison of crack path tracking strategies. International Journal for Numerical Methods in Engineering, 2008, 76, 1328-1352.	2.9	78
256	Brittle fracture during folding of rocks: A finite element study. Philosophical Magazine, 2008, 88, 3245-3263.	1.6	21
257	Computational modelling of thermal impact welded PEEK/steel single lap tensile specimens. Computational Materials Science, 2008, 41, 287-296.	3.1	17
258	Visualization of Particle Interactions in Granular Media. IEEE Transactions on Visualization and Computer Graphics, 2008, 14, 1110-1125.	4.5	4
259	Acceleration insensitive encapsulated silicon microresonator. Applied Physics Letters, 2008, 93, 234103.	3.2	7
260	Material properties of the ovine mitral valve anterior leaflet in vivo from inverse finite element analysis. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H1141-H1149.	3.4	78
261	Exploring Cellular Tensegrity: Physical Modeling and Computational Simulation. , 2008, , .		0
262	Critical Loading During Serve: Modeling Stress-Induced Bone Growth in Performance Tennis Players. , 2008, , .		0
263	First Attempts Towards the Computational Simulation of Novel Stem-Cell Based Post Infarct Therapies. , 2008, , .		0
264	How to Treat the Loss of Beat: Modeling and Simulation of Ventricular Growth and Remodeling and Novel Post-Infarction Therapies. , 2008, , .		0
265	Quantification of In Vivo Stresses in the Ovine Anterior Mitral Valve Leaflet. , 2008, , .		0
266	On the Application of Hansbo's Method for Interface Problems. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2007, , 255-265.	0.0	1
267	Diamond elements: a finite element/discrete-mechanics approximation scheme with guaranteed optimal convergence in incompressible elasticity. International Journal for Numerical Methods in Engineering, 2007, 72, 253-294.	2.9	31
268	On deformational and configurational mechanics of micromorphic hyperelasticity — Theory and computation. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4027-4044.	6.7	50
269	A continuum model for remodeling in living structures. Journal of Materials Science, 2007, 42, 8811-8823.	3.7	88
270	Computational modeling of arterial wall growth. Biomechanics and Modeling in Mechanobiology, 2007, 6, 321-331.	3.0	144



#	ARTICLE	IF	CITATIONS
271	Computational Modeling of Mineral Unmixing and Growth. Computational Mechanics, 2007, 39, 439-451.	4.0	25
272	On the convexity of transversely isotropic chain network models. Philosophical Magazine, 2006, 86, 3241-3258.	1.6	26
273	Theory and Implementation of Time-Dependent Fibre Reorientation in Transversely Isotropic Materials. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 131-132.	0.2	0
274	Simulation of Thermal Impact Welded Lightweight Structures. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 201-202.	0.2	1
275	Modelling and Computation of 3D Discontinuities in Solids. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 383-384.	0.2	0
276	Failure of granular materials at different scales - microscale approach. Proceedings in Applied Mathematics and Mechanics, 2006, 6, 399-400.	0.2	1
277	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.	3.8	10
278	A discontinuous Galerkin method for the Cahn-Hilliard equation. Journal of Computational Physics, 2006, 218, 860-877.	3.9	174
279	Towards the algorithmic treatment of 3D strong discontinuities. Communications in Numerical Methods in Engineering, 2006, 23, 97-108.	1.3	39
280	Modeling and Simulation of Remodeling in Soft Biological Tissues. , 2006, , 77-89.		3
281	Computational Spatial and Material Settings of Continuum Mechanics. An Arbitrary Lagrangian Eulerian Formulation. , 2005, , 115-125.		0
282	Remodeling of biological tissue: Mechanically induced reorientation of a transversely isotropic chain network. Journal of the Mechanics and Physics of Solids, 2005, 53, 1552-1573.	4.9	166
283	A finite element method for the computational modelling of cohesive cracks. International Journal for Numerical Methods in Engineering, 2005, 63, 276-289.	2.9	211
284	Structural optimization by simultaneous equilibration of spatial and material forces. Communications in Numerical Methods in Engineering, 2005, 21, 433-442.	1.3	14
285	A hyperelastodynamic ALE formulation based on referential, spatial and material settings of continuum mechanics. Acta Mechanica, 2005, 174, 201-222.	2.1	6
286	Modelling of Mass Changes in Anisotropic Materials. Proceedings in Applied Mathematics and Mechanics, 2005, 5, 299-300.	0.2	1
287	On Well Posedness in Continuum Interface Problems. Proceedings in Applied Mathematics and Mechanics, 2005, 5, 369-370.	0.2	0
288	Material Force Method. Continuum Damage & Thermo-Hyperelasticity. , 2005, , 95-104.		1

#	ARTICLE	IF	CITATIONS
289	Gaussian Approximations in the Stochastic Theory of Spontaneous Ignition of Coal Particles. <i>Nonlinear Oscillations</i> , 2004, 7, 109-112.	0.1	0
290	Computational modeling of healing: an application of the material force method. <i>Biomechanics and Modeling in Mechanobiology</i> , 2004, 2, 187-203.	3.0	19
291	Theory and implementation of orthotropic materials in growing continua. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2004, 4, 320-321.	0.2	0
292	A finite element method for cohesive crack modelling. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2004, 4, 350-351.	0.2	2
293	A hybrid discontinuous Galerkin/interface method for the computational modelling of failure. <i>Communications in Numerical Methods in Engineering</i> , 2004, 20, 511-519.	1.3	94
294	Application of the material force method to thermo-hyperelasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004, 193, 3303-3325.	6.7	25
295	An ALE formulation based on spatial and material settings of continuum mechanics. Part 1: Generic hyperelastic formulation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004, 193, 4207-4222.	6.7	70
296	An ALE formulation based on spatial and material settings of continuum mechanics. Part 2: Classification and applications. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004, 193, 4223-4245.	6.7	54
297	Material forces in open system mechanics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004, 193, 2357-2381.	6.7	32
298	On spatial and material settings of thermo-hyperelastodynamics for open systems. <i>Acta Mechanica</i> , 2003, 160, 179-217.	2.1	42
299	Computational modeling of growth. <i>Computational Mechanics</i> , 2003, 32, 71-88.	4.0	99
300	An arbitrary Lagrangian Eulerian finite-element approach for fluid-structure interaction phenomena. <i>International Journal for Numerical Methods in Engineering</i> , 2003, 57, 117-142.	2.9	92
301	Theory and numerics of geometrically non-linear open system mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2003, 58, 1593-1615.	2.9	57
302	Mass- and volume-specific views on thermodynamics for open systems. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2003, 459, 2547-2568.	2.1	71
303	A thermodynamically consistent approach to microplane theory. Part II. Dissipation and inelastic constitutive modeling. <i>International Journal of Solids and Structures</i> , 2001, 38, 2933-2952.	2.7	50
304	Microplane modelling and particle modelling of cohesive-frictional materials. <i>Lecture Notes in Physics</i> , 2001, , 31-46.	0.0	6
305	Failure analysis of elasto-plastic material models on different levels of observation. <i>International Journal of Solids and Structures</i> , 2000, 37, 7259-7280.	2.7	15
306	An anisotropic gradient damage model for quasi-brittle materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000, 183, 87-103.	6.7	126

#	ARTICLE	IF	CITATIONS
307	A comparison of discrete granular material models with continuous microplane formulations. Granular Matter, 2000, 2, 113-121.	2.2	30
308	Parameter identification of gradient enhanced damage models with the finite element method. European Journal of Mechanics, A/Solids, 1999, 18, 819-835.	3.8	49
309	Simulation of strain localization with gradient enhanced damage models. Computational Materials Science, 1999, 16, 176-185.	3.1	39
310	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.	2.7	33
311	On the linearization of the microplane model. International Journal for Numerical and Analytical Methods in Geomechanics, 1998, 3, 343-364.	0.9	23
312	On the linearization of the microplane model. International Journal for Numerical and Analytical Methods in Geomechanics, 1998, 3, 343-364.	0.9	0
313	Outbreak dynamics of COVID-19 in Europe and the effect of travel restrictions. , 0, .		1
314	A universal material model subroutine for soft matter systems. Engineering With Computers, 0, , .	5.8	0