

Ferdinando Auricchio

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356
papers

10,398
citations

56
h-index

88
g-index

385
ext. papers

11,961
ext. citations

3.5
avg. IF

6.66
L-index

#	Paper	IF	Citations
356	Shape-memory alloys: macromodelling and numerical simulations of the superelastic behavior. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1997 , 146, 281-312	5.7	425
355	Shape-memory alloys: modelling and numerical simulations of the finite-strain superelastic behavior. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1997 , 143, 175-194	5.7	327
354	ISOGEOMETRIC COLLOCATION METHODS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2010 , 20, 2075-2107	3.5	257
353	Mechanical behavior of coronary stents investigated through the finite element method. <i>Journal of Biomechanics</i> , 2002 , 35, 803-11	2.9	238
352	A one-dimensional model for superelastic shape-memory alloys with different elastic properties between austenite and martensite. <i>International Journal of Non-Linear Mechanics</i> , 1997 , 32, 1101-1114	2.8	213
351	A three-dimensional model describing stress-temperature induced solid phase transformations: solution algorithm and boundary value problems. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 61, 807-836	2.4	192
350	A three-dimensional model describing stress-induced solid phase transformation with permanent inelasticity. <i>International Journal of Plasticity</i> , 2007 , 23, 207-226	7.6	186
349	A 3-D phenomenological constitutive model for shape memory alloys under multiaxial loadings. <i>International Journal of Plasticity</i> , 2010 , 26, 976-991	7.6	183
348	A fully locking-free isogeometric approach for plane linear elasticity problems: A stream function formulation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2007 , 197, 160-172	5.7	178
347	3D printing of reinforced concrete elements: Technology and design approach. <i>Construction and Building Materials</i> , 2018 , 165, 218-231	6.7	152
346	A predictive study of the mechanical behaviour of coronary stents by computer modelling. <i>Medical Engineering and Physics</i> , 2005 , 27, 13-8	2.4	147
345	A simple algorithm for obtaining nearly optimal quadrature rules for NURBS-based isogeometric analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012 , 249-252, 15-27	5.7	146
344	A robust integration-algorithm for a finite-strain shape-memory-alloy superelastic model. <i>International Journal of Plasticity</i> , 2001 , 17, 971-990	7.6	145
343	Isogeometric collocation for elastostatics and explicit dynamics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012 , 249-252, 2-14	5.7	141
342	Generalized plasticity and shape-memory alloys. <i>International Journal of Solids and Structures</i> , 1996 , 33, 991-1003	3.1	137
341	Evaluation of friction of stainless steel and esthetic self-ligating brackets in various bracket-archwire combinations. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2003 , 124, 395-402	2.1	128
340	Carotid artery stenting simulation: from patient-specific images to finite element analysis. <i>Medical Engineering and Physics</i> , 2011 , 33, 281-9	2.4	121

339	Improvements and algorithmical considerations on a recent three-dimensional model describing stress-induced solid phase transformations. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 55, 1255-1284	2.4	119
338	Stainless and shape memory alloy coronary stents: a computational study on the interaction with the vascular wall. <i>Biomechanics and Modeling in Mechanobiology</i> , 2004 , 2, 205-17	3.8	110
337	Seismic Assessment of Concentrically Braced Steel Frames with Shape Memory Alloy Braces. <i>Journal of Structural Engineering</i> , 2007 , 133, 862-870	3	103
336	Linked interpolation for Reissner-Mindlin plate elements: Part II, simple triangle. <i>International Journal for Numerical Methods in Engineering</i> , 1993 , 36, 3057-3066	2.4	102
335	Numerical investigation of the intravascular coronary stent flexibility. <i>Journal of Biomechanics</i> , 2004 , 37, 495-501	2.9	98
334	A mixed finite element method for beam and frame problems. <i>Computational Mechanics</i> , 2003 , 31, 192-203		98
333	Locking-free isogeometric collocation methods for spatial Timoshenko rods. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013 , 263, 113-126	5.7	97
332	Theoretical and numerical modeling of shape memory alloys accounting for multiple phase transformations and martensite reorientation. <i>International Journal of Plasticity</i> , 2014 , 59, 30-54	7.6	94
331	A Superelastic Shape-Memory-Alloy Beam Model. <i>Journal of Intelligent Material Systems and Structures</i> , 1997 , 8, 489-501	2.3	93
330	A finite strain kinematic hardening constitutive model based on Hencky strain: General framework, solution algorithm and application to shape memory alloys. <i>International Journal of Plasticity</i> , 2011 , 27, 940-961	7.6	91
329	Modelling of SMA materials: Training and two way memory effects. <i>Computers and Structures</i> , 2003 , 81, 2301-2317	4.5	90
328	Influence of meso-structure and chemical composition on FDM 3D-printed parts. <i>Composites Part B: Engineering</i> , 2017 , 113, 371-380	10	89
327	3D printing: clinical applications in orthopaedics and traumatology. <i>EFORT Open Reviews</i> , 2016 , 1, 121-127	5	89
326	Finite-element Analysis of a Stenotic Artery Revascularization Through a Stent Insertion. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2001 , 4, 249-263	2.1	87
325	A three-dimensional model describing stress-temperature induced solid phase transformations: thermomechanical coupling and hybrid composite applications. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 61, 716-737	2.4	84
324	Experimental response of additively manufactured metallic pentamode materials confined between stiffening plates. <i>Composite Structures</i> , 2016 , 142, 254-262	5.3	81
323	A uniaxial model for shape-memory alloys. <i>International Journal of Solids and Structures</i> , 1997 , 34, 3601-3618	3.6	80
322	The importance of the exact satisfaction of the incompressibility constraint in nonlinear elasticity: mixed FEMs versus NURBS-based approximations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010 , 199, 314-323	5.7	79

321	Single-variable formulations and isogeometric discretizations for shear deformable beams. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015 , 284, 988-1004	5-7	77
320	A macroscopic 1D model for shape memory alloys including asymmetric behaviors and transformation-dependent elastic properties. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2009 , 198, 1631-1637	5-7	77
319	Thermo-mechanical modelling of a superelastic shape-memory wire under cyclic stretchingBending loadings. <i>International Journal of Solids and Structures</i> , 2001 , 38, 6123-6145	3-1	77
318	Androgen-induced cell migration: role of androgen receptor/filamin A association. <i>PLoS ONE</i> , 2011 , 6, e17218	3-7	76
317	Two material models for cyclic plasticity: Nonlinear kinematic hardening and generalized plasticity. <i>International Journal of Plasticity</i> , 1995 , 11, 65-98	7-6	76
316	Simulating the spread of COVID-19 a spatially-resolved susceptible-exposed-infected-recovered-deceased (SEIRD) model with heterogeneous diffusion. <i>Applied Mathematics Letters</i> , 2021 , 111, 106617	3-5	74
315	Simulation of transcatheter aortic valve implantation through patient-specific finite element analysis: two clinical cases. <i>Journal of Biomechanics</i> , 2014 , 47, 2547-55	2-9	73
314	Patient-specific isogeometric structural analysis of aortic valve closure. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015 , 284, 508-520	5-7	72
313	Expandable drug delivery system for gastric retention based on shape memory polymers: Development via 4D printing and extrusion. <i>International Journal of Pharmaceutics</i> , 2019 , 571, 118700	6-5	71
312	A temperature-dependent beam for shape-memory alloys: Constitutive modelling, finite-element implementation and numerical simulations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1999 , 174, 171-190	5-7	71
311	Value of 3D printing for the comprehension of surgical anatomy. <i>Surgical Endoscopy and Other Interventional Techniques</i> , 2017 , 31, 4102-4110	5-2	70
310	Seismic Vibration Control Using Superelastic Shape Memory Alloys. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2006 , 128, 294-301	1-8	65
309	A shear deformable plate element with an exact thin limit. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1994 , 118, 393-412	5-7	64
308	A mixed-enhanced finite-element for the analysis of laminated composite plates. <i>International Journal for Numerical Methods in Engineering</i> , 1999 , 44, 1481-1504	2-4	63
307	Simulation of transcatheter aortic valve implantation: a patient-specific finite element approach. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014 , 17, 1347-57	2-1	62
306	The clinical use of 3D printing in surgery. <i>Updates in Surgery</i> , 2018 , 70, 381-388	2-9	62
305	Evaluation of friction of conventional and metal-insert ceramic brackets in various bracket-archwire combinations. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2003 , 124, 403-9	2-1	58
304	Computational studies of shape memory alloy behavior in biomedical applications. <i>Journal of Biomechanical Engineering</i> , 2005 , 127, 716-25	2-1	57

303	Isogeometric collocation methods for the Reissner-Mindlin plate problem. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015 , 284, 489-507	5.7	56
302	Statistical finite element analysis of the buckling behavior of honeycomb structures. <i>Composite Structures</i> , 2013 , 105, 240-255	5.3	56
301	A framework for designing patient-specific bioprosthetic heart valves using immersogeometric fluid-structure interaction analysis. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e2938	2.6	56
300	On the Assumed Natural Strain method to alleviate locking in solid-shell NURBS-based finite elements. <i>Computational Mechanics</i> , 2014 , 53, 1341-1353	4	51
299	Human dilated ascending aorta: Mechanical characterization via uniaxial tensile tests. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 53, 257-271	4.1	49
298	Refined First-Order Shear Deformation Theory Models for Composite Laminates. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2003 , 70, 381-390	2.7	49
297	Prediction of patient-specific post-operative outcomes of TAVI procedure: The impact of the positioning strategy on valve performance. <i>Journal of Biomechanics</i> , 2016 , 49, 2513-9	2.9	48
296	From CT scanning to 3-D printing technology for the preoperative planning in laparoscopic splenectomy. <i>Surgical Endoscopy and Other Interventional Techniques</i> , 2016 , 30, 366-71	5.2	47
295	Non-prismatic beams: A simple and effective Timoshenko-like model. <i>International Journal of Solids and Structures</i> , 2016 , 90, 236-250	3.1	46
294	Patient-specific aortic endografting simulation: from diagnosis to prediction. <i>Computers in Biology and Medicine</i> , 2013 , 43, 386-94	7	46
293	Assumed Natural Strain NURBS-based solid-shell element for the analysis of large deformation elasto-plastic thin-shell structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015 , 284, 861-880	5.7	45
292	Approximation of incompressible large deformation elastic problems: some unresolved issues. <i>Computational Mechanics</i> , 2013 , 52, 1153-1167	4	45
291	A RATE-INDEPENDENT MODEL FOR THE ISOTHERMAL QUASI-STATIC EVOLUTION OF SHAPE-MEMORY MATERIALS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2008 , 18, 125-164	3.5	45
290	On a new integration scheme for von-Mises plasticity with linear hardening. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 1375-1396	2.4	45
289	A new model of generalized plasticity and its numerical implementation. <i>International Journal of Solids and Structures</i> , 1993 , 30, 3171-3184	3.1	44
288	Androgens Induce Invasiveness of Triple Negative Breast Cancer Cells Through AR/Src/PI3-K Complex Assembly. <i>Scientific Reports</i> , 2019 , 9, 4490	4.9	43
287	Feasibility Assessment of an Innovative Isolation Bearing System with Shape Memory Alloys. <i>Journal of Earthquake Engineering</i> , 2009 , 13, 18-39	1.8	43
286	Rate-dependent Thermo-mechanical Modelling of Superelastic Shape-memory Alloys for Seismic Applications. <i>Journal of Intelligent Material Systems and Structures</i> , 2008 , 19, 47-61	2.3	43

285	A return-map algorithm for general associative isotropic elasto-plastic materials in large deformation regimes. <i>International Journal of Plasticity</i> , 1999 , 15, 1359-1378	7.6	43
284	Performance evaluation of shape-memory-alloy superelastic behavior to control a stay cable in cable-stayed bridges. <i>International Journal of Non-Linear Mechanics</i> , 2011 , 46, 470-477	2.8	42
283	A stability study of some mixed finite elements for large deformation elasticity problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2005 , 194, 1075-1092	5.7	41
282	Second-order accurate integration algorithms for von-Mises plasticity with a nonlinear kinematic hardening mechanism. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2007 , 196, 1827-1846	5.7	40
281	A finite-strain cam-clay model in the framework of multiplicative elasto-plasticity. <i>International Journal of Plasticity</i> , 1998 , 14, 1155-1187	7.6	39
280	On the geometrically exact beam model: A consistent, effective and simple derivation from three-dimensional finite-elasticity. <i>International Journal of Solids and Structures</i> , 2008 , 45, 4766-4781	3.1	39
279	Hysteresis of Multiconfiguration Assemblies of Nitinol and Steel Strands: Experiments and Phenomenological Identification. <i>Journal of Engineering Mechanics - ASCE</i> , 2015 , 141, 04014135	2.4	38
278	An analysis of some mixed-enhanced finite element for plane linear elasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2005 , 194, 2947-2968	5.7	38
277	A three-dimensional finite-strain phenomenological model for shape-memory polymers: Formulation, numerical simulations, and comparison with experimental data. <i>International Journal of Plasticity</i> , 2016 , 83, 153-177	7.6	38
276	A novel optimal-exponential-based integration algorithm for von-Mises plasticity with linear hardening: Theoretical analysis on yield consistency, accuracy, convergence and numerical investigations. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 67, 449-498	2.4	37
275	A triangular thick plate finite element with an exact thin limit. <i>Finite Elements in Analysis and Design</i> , 1995 , 19, 57-68	2.2	37
274	Finite element analysis of TAVI: Impact of native aortic root computational modeling strategies on simulation outcomes. <i>Medical Engineering and Physics</i> , 2017 , 47, 2-12	2.4	36
273	EARTHQUAKE PERFORMANCE OF STEEL FRAMES WITH NITINOL BRACES. <i>Journal of Earthquake Engineering</i> , 2006 , 10, 45-66	1.8	35
272	Finite Element Analysis of Additive Manufacturing Based on Fused Deposition Modeling: Distortions Prediction and Comparison With Experimental Data. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2019 , 141,	3.3	35
271	SMA Numerical Modeling Versus Experimental Results: Parameter Identification and Model Prediction Capabilities. <i>Journal of Materials Engineering and Performance</i> , 2009 , 18, 649-654	1.6	34
270	The Modified Arch Landing Areas Nomenclature (MALAN) Improves Prediction of Stent Graft Displacement Forces: Proof of Concept by Computational Fluid Dynamics Modelling. <i>European Journal of Vascular and Endovascular Surgery</i> , 2018 , 55, 584-592	2.3	32
269	Patient-specific finite element analysis of carotid artery stenting: a focus on vessel modeling. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2013 , 29, 645-64	2.6	32
268	Impact of carotid stent cell design on vessel scaffolding: a case study comparing experimental investigation and numerical simulations. <i>Journal of Endovascular Therapy</i> , 2011 , 18, 397-406	2.5	32

267	Diffusion-reaction compartmental models formulated in a continuum mechanics framework: application to COVID-19, mathematical analysis, and numerical study. <i>Computational Mechanics</i> , 2020 , 66, 1-22	4	32
266	An improved, fully symmetric, finite-strain phenomenological constitutive model for shape memory alloys. <i>Finite Elements in Analysis and Design</i> , 2011 , 47, 166-174	2.2	31
265	Bioink Composition and Printing Parameters for 3D Modeling Neural Tissue. <i>Cells</i> , 2019 , 8,	7.9	30
264	Fatigue life assessment of cardiovascular balloon-expandable stents: a two-scale plasticity-damage model approach. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012 , 15, 78-92	4.1	30
263	A 3D finite strain phenomenological constitutive model for shape memory alloys considering martensite reorientation. <i>Continuum Mechanics and Thermodynamics</i> , 2010 , 22, 345-362	3.5	30
262	An overview on 3D printing for abdominal surgery. <i>Surgical Endoscopy and Other Interventional Techniques</i> , 2020 , 34, 1-13	5.2	30
261	Analysis of kinematic linked interpolation methods for ReissnerMindlin plate problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2001 , 190, 2465-2482	5.7	29
260	Extranuclear partners of androgen receptor: at the crossroads of proliferation, migration, and neuritogenesis. <i>FASEB Journal</i> , 2017 , 31, 1289-1300	0.9	28
259	Innovative Superelastic Isolation Device. <i>Journal of Earthquake Engineering</i> , 2011 , 15, 72-89	1.8	28
258	On the enhanced strain technique for elasticity problems. <i>Computers and Structures</i> , 2003 , 81, 777-787	4.5	28
257	Effect of testing procedures on buildability properties of 3D-printable concrete. <i>Construction and Building Materials</i> , 2020 , 245, 118286	6.7	27
256	A novel layered topology of auxetic materials based on the tetrachiral honeycomb microstructure. <i>Materials and Design</i> , 2019 , 179, 107883	8.1	26
255	Cross-talk between androgen receptor/filamin A and TrkA regulates neurite outgrowth in PC12 cells. <i>Molecular Biology of the Cell</i> , 2015 , 26, 2858-72	3.5	26
254	Patient-specific CFD modelling in the thoracic aorta with PC-MRI-based boundary conditions: A least-square three-element Windkessel approach. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e3134	2.6	26
253	Aortic hemodynamics after thoracic endovascular aortic repair, with particular attention to the bird-beak configuration. <i>Journal of Endovascular Therapy</i> , 2014 , 21, 791-802	2.5	26
252	Visible light 3D printing with epoxidized vegetable oils. <i>Additive Manufacturing</i> , 2019 , 25, 317-324	6.1	26
251	3D-printed photo-spectroelectrochemical devices for in situ and in operando X-ray absorption spectroscopy investigation. <i>Journal of Synchrotron Radiation</i> , 2016 , 23, 622-8	2.4	25
250	On the robustness and efficiency of integration algorithms for a 3D finite strain phenomenological SMA constitutive model. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 85, 107-134	2.4	25

249	Partial-mixed formulation and refined models for the analysis of composite laminates within an FSDT. <i>Composite Structures</i> , 1999 , 46, 103-113	5.3	25
248	3-D Printed Substrate Integrated Slab Waveguide for Single-Mode Bandwidth Enhancement. <i>IEEE Microwave and Wireless Components Letters</i> , 2017 , 27, 536-538	2.6	24
247	Analytical derivation of a general 2D non-prismatic beam model based on the HellingerReissner principle. <i>Engineering Structures</i> , 2015 , 101, 88-98	4.7	24
246	Applications of Shape Memory Alloys in Structural Engineering 2015 , 369-403		24
245	A shakedown analysis of high cycle fatigue of shape memory alloys. <i>International Journal of Fatigue</i> , 2016 , 87, 112-123	5	24
244	Non-prismatic Timoshenko-like beam model: Numerical solution via isogeometric collocation. <i>Computers and Mathematics With Applications</i> , 2017 , 74, 1531-1541	2.7	24
243	A computational tool to support pre-operative planning of stentless aortic valve implant. <i>Medical Engineering and Physics</i> , 2011 , 33, 1183-92	2.4	24
242	A three-dimensional phenomenological model for shape memory alloys including two-way shape memory effect and plasticity. <i>Mechanics of Materials</i> , 2019 , 136, 103085	3.3	23
241	Modular flow chamber for engineering bone marrow architecture and function. <i>Biomaterials</i> , 2017 , 146, 60-71	15.6	23
240	Integration schemes for von-Mises plasticity models based on exponential maps: numerical investigations and theoretical considerations. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 64, 1133-1165	2.4	23
239	The androgen receptor/filamin A complex as a target in prostate cancer microenvironment. <i>Cell Death and Disease</i> , 2021 , 12, 127	9.8	23
238	Mixed Isogeometric Finite Cell Methods for the Stokes problem. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017 , 316, 400-423	5.7	22
237	Numerical and Experimental Evaluation of the Damping Properties of Shape-Memory Alloys. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2006 , 128, 312-319	1.8	22
236	Fatigue of Metallic Stents: From Clinical Evidence to Computational Analysis. <i>Annals of Biomedical Engineering</i> , 2016 , 44, 287-301	4.7	21
235	The dimensional reduction approach for 2D non-prismatic beam modelling: A solution based on HellingerReissner principle. <i>International Journal of Solids and Structures</i> , 2015 , 63, 264-276	3.1	21
234	Patient-specific simulation of a stentless aortic valve implant: the impact of fibres on leaflet performance. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014 , 17, 277-85	2.1	21
233	Haemodynamic impact of stent-vessel (mal)apposition following carotid artery stenting: mind the gaps!. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013 , 16, 648-59	2.1	21
232	A mixed FSDT finite element for monoclinic laminated plates. <i>Computers and Structures</i> , 2006 , 84, 624-639	1.5	21

231	A generalized elastoplastic plate theory and its algorithmic implementation. <i>International Journal for Numerical Methods in Engineering</i> , 1994 , 37, 2583-2608	2.4	21
230	A cost-effective isogeometric approach for composite plates based on a stress recovery procedure. <i>Composites Part B: Engineering</i> , 2018 , 138, 12-18	10	21
229	Extensibility and Distensibility of the Thoracic Aorta in Patients with Aneurysm. <i>European Journal of Vascular and Endovascular Surgery</i> , 2017 , 53, 199-205	2.3	20
228	Accurate Prediction of Melt Pool Shapes in Laser Powder Bed Fusion by the Non-Linear Temperature Equation Including Phase Changes. <i>Integrating Materials and Manufacturing Innovation</i> , 2019 , 8, 167-177	2.9	20
227	SMA Biomedical Applications 2015 , 307-341		20
226	Cross-talk between androgen receptor and nerve growth factor receptor in prostate cancer cells: implications for a new therapeutic approach. <i>Cell Death Discovery</i> , 2018 , 4, 5	6.9	20
225	A Numerical/Experimental Study of Nitinol Actuator Springs. <i>Journal of Materials Engineering and Performance</i> , 2014 , 23, 2420-2428	1.6	20
224	A computational approach for the lifetime prediction of cardiovascular balloon-expandable stents. <i>International Journal of Fatigue</i> , 2015 , 75, 69-79	5	20
223	Shape memory response and hierarchical motion capabilities of 4D printed auxetic structures. <i>Mechanics Research Communications</i> , 2020 , 103, 103463	2.2	20
222	Pre-Programmed Tri-Layer Electro-Thermal Actuators Composed of Shape Memory Polymer and Carbon Nanotubes. <i>Soft Robotics</i> , 2020 , 7, 123-129	9.2	20
221	Comparative Analysis of Porcine and Human Thoracic Aortic Stiffness. <i>European Journal of Vascular and Endovascular Surgery</i> , 2018 , 55, 560-566	2.3	20
220	An experimental, theoretical and numerical investigation of shape memory polymers. <i>International Journal of Plasticity</i> , 2015 , 67, 127-147	7.6	19
219	Theoretical and numerical modeling of dense and porous shape memory alloys accounting for coupling effects of plasticity and transformation. <i>International Journal of Solids and Structures</i> , 2016 , 88-89, 248-262	3.1	19
218	A 1D rate-dependent viscous constitutive model for superelastic shape-memory alloys: formulation and comparison with experimental data. <i>Smart Materials and Structures</i> , 2007 , 16, S39-S50	3.4	19
217	Effects of clinico-pathological risk factors on in-vitro mechanical properties of human dilated ascending aorta. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 77, 1-11	4.1	18
216	Comparison and critical analysis of invariant-based models with respect to their ability in fitting human aortic valve data. <i>Annals of Solid and Structural Mechanics</i> , 2012 , 4, 1-14	0.5	18
215	A three-dimensional phenomenological model for Magnetic Shape Memory Alloys. <i>GAMM Mitteilungen</i> , 2011 , 34, 90-96	1.8	18
214	. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2020 , 68, 1175-1184	4.1	18

213	Graded-material design based on phase-field and topology optimization. <i>Computational Mechanics</i> , 2019 , 64, 1589-1600	4	17
212	Innovative and efficient stent flexibility simulations based on isogeometric analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015 , 295, 347-361	5-7	17
211	Patient-specific analysis of post-operative aortic hemodynamics: a focus on thoracic endovascular repair (TEVAR). <i>Computational Mechanics</i> , 2014 , 54, 943-953	4	17
210	3D Automatic Segmentation of Aortic Computed Tomography Angiography Combining Multi-View 2D Convolutional Neural Networks. <i>Cardiovascular Engineering and Technology</i> , 2020 , 11, 576-586	2.2	17
209	Stent-Graft Deployment Increases Aortic Stiffness in an ExVivo Porcine Model. <i>Annals of Vascular Surgery</i> , 2017 , 43, 302-308	1.7	16
208	Multi-Material 3D Printed Shape Memory Polymer with Tunable Melting and Glass Transition Temperature Activated by Heat or Light. <i>Polymers</i> , 2020 , 12,	4.5	16
207	Structural analysis of non-prismatic beams: Critical issues, accurate stress recovery, and analytical definition of the Finite Element (FE) stiffness matrix. <i>Engineering Structures</i> , 2020 , 213, 110252	4.7	16
206	Planar Timoshenko-like model for multilayer non-prismatic beams. <i>International Journal of Mechanics and Materials in Design</i> , 2018 , 14, 51-70	2.5	16
205	Self-sensing CF-GFRP rods as mechanical reinforcement and sensors of concrete beams. <i>Smart Materials and Structures</i> , 2006 , 15, 182-186	3.4	16
204	Patient-specific finite element analysis of popliteal stenting. <i>Meccanica</i> , 2017 , 52, 633-644	2.1	15
203	A simple framework to generate 3D patient-specific model of coronary artery bifurcation from single-plane angiographic images. <i>Computers in Biology and Medicine</i> , 2014 , 44, 97-109	7	15
202	Fatigue of 316L stainless steel notched . <i>International Journal of Fatigue</i> , 2014 , 68, 231-247	5	15
201	Evaluation of carotid stent scaffolding through patient-specific finite element analysis. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2012 , 28, 1043-55	2.6	15
200	Theoretical and Experimental Study of the Shape Memory Effect of Beams in Bending Conditions. <i>Journal of Materials Engineering and Performance</i> , 2011 , 20, 712-718	1.6	15
199	Finite element analysis of aortic root dilation: a new procedure to reproduce pathology based on experimental data. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011 , 14, 875-82	2.1	15
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