Ferdinando Auricchio

List of Publications by Year in Descending Order

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	Structural Design and Testing of Digitally Manufactured Concrete Structures. *RILEM State-of-the-Art Reports*, **2022**, 187-222	1.3	1
355	Deep Learning to Automatically Segment and Analyze Abdominal Aortic Aneurysm from Computed Tomography Angiography.. *Cardiovascular Engineering and Technology*, **2022**, 1	2.2	3
354	Topology-preserving scan-based immersed isogeometric analysis. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 392, 114648	5.7	1
353	A theoretical and numerical analysis of a Dirichlet-Neumann domain decomposition method for diffusion problems in heterogeneous media. *Applied Numerical Mathematics*, **2022**, 173, 94-111	2.5	0
352	Free Bloch Wave Propagation in Periodic Cauchy Materials: Analytical and Computational Strategies **2022**, 41-49		
351	Cost-effective and accurate interlaminar stress modeling of composite Kirchhoff plates via immersed isogeometric analysis and equilibrium. *Journal of Mechanics*, **2022**, 38, 32-43	1	0
350	Impact of TEVAR on aortic biomechanics: integration of textit{in-silico} and textit{ex-vivo} analysis using porcine model.. *International Journal for Numerical Methods in Biomedical Engineering*, **2022**, e3594	2.6	
349	The Finite Cell Method for Simulation of Additive Manufacturing. *Lecture Notes in Applied and Computational Mechanics*, **2022**, 355-375	0.3	
348	Three-Dimensional Bioprinted Controlled Release Scaffold Containing Mesenchymal Stem/Stromal Lyosecretome for Bone Regeneration: Sterile Manufacturing and In Vitro Biological Efficacy. *Biomedicines*, **2022**, 10, 1063	4.8	2
347	3D printing technologies and materials in the medical field **2022**, 1-17		
346	Wideband Microstrip to 3-D-Printed Air-Filled Waveguide Transition Using a Radiation Probe. *IEEE Microwave and Wireless Components Letters*, **2022**, 1-4	2.6	1
345	Additive Manufacturing: Challenges and Opportunities for Structural Mechanics **2022**, 437-451		
344	Towards Surgical Training Phantoms Obtained by Additive Manufacturing: Mechanical Characterization of Abdominal and Pelvic Organs. A Literature Review. *Studies in Mechanobiology, Tissue Engineering and Biomaterials*, **2022**, 279-298	0.5	
343	Hierarchical motion of 4D-printed structures using the temperature memory effect **2022**, 279-310		
342	A Small Peptide Targeting the Ligand-Induced Androgen Receptor/Filamin a Interaction Inhibits the Invasive Phenotype of Prostate Cancer Cells.. *Cells*, **2021**, 11,	7.9	3
341	Patient-specific computational fluid dynamics analysis of transcatheter aortic root replacement with chimney coronary grafts. *Interactive Cardiovascular and Thoracic Surgery*, **2021**, 32, 408-416	1.8	
340	Three-D-printed simulator for kidney transplantation. *Surgical Endoscopy and Other Interventional Techniques*, **2021**, 1	5.2	1

339	Early-age creep behaviour of 3D printable mortars: Experimental characterisation and analytical modelling. *Materials and Structures/Materiaux Et Constructions*, **2021**, 54, 1	3.4	1
338	Performance of high conformability vs. high radial force devices in the virtual treatment of TAVI patients with bicuspid aortic valve. *Medical Engineering and Physics*, **2021**, 89, 42-50	2.4	5
337	A novel quantitative analysis method for idiopathic epiretinal membrane. *PLoS ONE*, **2021**, 16, e0247192	3.7	0
336	3D Bioprinted Scaffolds Containing Mesenchymal Stem/Stromal Lyosecretome: Next Generation Controlled Release Device for Bone Regenerative Medicine. *Pharmaceutics*, **2021**, 13,	6.4	10
335	CoreValve vs. Sapien 3 Transcatheter Aortic Valve Replacement: A Finite Element Analysis Study. *Bioengineering*, **2021**, 8,	5.3	5
334	Automatic Differentiation for Solid Mechanics. *Archives of Computational Methods in Engineering*, **2021**, 28, 875-895	7.8	0
333	3D-printed pumpkin-shaped cavity resonator to determine the complex permittivity of liquids. *Microwave and Optical Technology Letters*, **2021**, 63, 1061-1066	1.2	2
332	Simulating the spread of COVID-19 a spatially-resolved susceptible-exposed-infected-recovered-deceased (SEIRD) model with heterogeneous diffusion. *Applied Mathematics Letters*, **2021**, 111, 106617	3.5	74
331	Outcome of transcatheter aortic valve replacement in bicuspid aortic valve stenosis with new-generation devices. *Interactive Cardiovascular and Thoracic Surgery*, **2021**, 32, 20-28	1.8	4
330	. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 69, 616-628	4.1	5
329	Geometric Analysis to Determine Kinking and Shortening of Bridging Stents After Branched Endovascular Aortic Repair. *CardioVascular and Interventional Radiology*, **2021**, 44, 711-719	2.7	2
328	Drag Forces after Thoracic Endovascular Aortic Repair. General Review of the Literature. *Annals of Vascular Surgery*, **2021**, 75, 479-488	1.7	0
327	Shape fidelity and sterility assessment of 3D printed polycaprolactone and hydroxyapatite scaffolds. *Journal of Polymer Research*, **2021**, 28, 1	2.7	3
326	Mixed variational formulations for structural topology optimization based on the phase-field approach. *Structural and Multidisciplinary Optimization*, **2021**, 64, 2627	3.6	2
325	Numerical simulation of particles flow in Laser Metal Deposition technology comparing Eulerian-Eulerian and Lagrangian-Eulerian approaches. *Journal of Manufacturing Processes*, **2021**, 68, 186-197	5	1
324	Additive manufacturing applications of phase-field-based topology optimization using adaptive isogeometric analysis. *GAMM Mitteilungen*, **2021**, 44, e202100013	1.8	5
323	TFA and HS based homogenization techniques for nonlinear composites. *International Journal of Solids and Structures*, **2021**, 225, 111050	3.1	1
322	Uniaxial properties of ascending aortic aneurysms in light of effective stretch. *Acta Biomaterialia*, **2021**, 136, 306-313	10.8	2

321	An immersed boundary approach for residual stress evaluation in selective laser melting processes. *Additive Manufacturing*, **2021**, 46, 102077	6.1	3
320	Finite element analysis of transcatheter aortic valve implantation: Insights on the modelling of self-expandable devices. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 123, 104772	4.1	4
319	The androgen receptor/filamin A complex as a target in prostate cancer microenvironment. *Cell Death and Disease*, **2021**, 12, 127	9.8	23
318	Additively Fabricated Air-Filled Waveguide Integrated With Printed Circuit Board Using a Through-Patch Transition. *IEEE Microwave and Wireless Components Letters*, **2021**, 1-4	2.6	1
317	Patient-specific computational fluid dynamics of femoro-popliteal stent-graft thrombosis. *Medical Engineering and Physics*, **2020**, 86, 57-64	2.4	6
316	Numerical Evaluation of Advanced Laser Control Strategies Influence on Residual Stresses for Laser Powder Bed Fusion Systems. *Integrating Materials and Manufacturing Innovation*, **2020**, 9, 435-445	2.9	7
315	Error-estimate-based adaptive integration for immersed isogeometric analysis. *Computers and Mathematics With Applications*, **2020**, 80, 2481-2516	2.7	8
314	A phase-field-based graded-material topology optimization with stress constraint. *Mathematical Models and Methods in Applied Sciences*, **2020**, 30, 1461-1483	3.5	13
313	Preliminary investigation on a new natural based poly(gamma-glutamic acid)/Chitosan bioink. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2020**, 108, 2718-2732	3.5	10
312	Multi-Material 3D Printed Shape Memory Polymer with Tunable Melting and Glass Transition Temperature Activated by Heat or Light. *Polymers*, **2020**, 12,	4.5	16
311	Multidisciplinary preoperative simulations to optimize surgical outcomes in a challenging case of the complete double aortic arch in the adult. *Journal of Cardiac Surgery*, **2020**, 35, 716-720	1.3	1
310	Effect of testing procedures on buildability properties of 3D-printable concrete. *Construction and Building Materials*, **2020**, 245, 118286	6.7	27
309	Impact of Aortic Tortuosity on Displacement Forces in Descending Thoracic Aortic Aneurysms. *European Journal of Vascular and Endovascular Surgery*, **2020**, 59, 557-564	2.3	5
308	Structural analysis of non-prismatic beams: Critical issues, accurate stress recovery, and analytical definition of the Finite Element (FE) stiffness matrix. *Engineering Structures*, **2020**, 213, 110252	4.7	16
307	Mechanical Characterization of Cement-Based Mortar Used in 3DCP Including Early-Age Creep Effects. *RILEM Bookseries*, **2020**, 407-416	0.5	1
306	Transcatheter aortic valve implantation with the Portico and Evolut R bioprostheses in patients with elliptic aortic annulus. *EuroIntervention*, **2020**, 15, e1588-e1591	3.1	9
305	Three-Dimensional Printed Models Can Help Settle Malpractice Litigation Over Surgical Interventions. *Annals of Vascular Surgery*, **2020**, 65, e292-e294	1.7	0
304	Geometrical Evaluation of Aortic Sac Remodeling During Two-Step Thoracoabdominal Aortic Aneurysm Endovascular Repair. *Annals of Vascular Surgery*, **2020**, 67, 43-51	1.7	2

303	. *IEEE Transactions on Microwave Theory and Techniques*, **2020**, 68, 1175-1184	4.1	18
302	Sequential Motion of 4D Printed Photopolymers with Broad Glass Transition. *Macromolecular Materials and Engineering*, **2020**, 305, 1900370	3.9	14
301	Shape memory response and hierarchical motion capabilities of 4D printed auxetic structures. *Mechanics Research Communications*, **2020**, 103, 103463	2.2	20
300	Feasibility of 3D printed salivary duct models for sialendoscopic skills training: preliminary report. *European Archives of Oto-Rhino-Laryngology*, **2020**, 277, 909-915	3.5	3
299	Modeling and experimental validation of an immersed thermo-mechanical part-scale analysis for laser powder bed fusion processes. *Additive Manufacturing*, **2020**, 36, 101498	6.1	8
298	Bioengineering Case Study to Evaluate Complications of Adverse Anatomy of Aortic Root in Transcatheter Aortic Valve Replacement: Combining Biomechanical Modelling with CT imaging. *Bioengineering*, **2020**, 7,	5.3	5
297	. *IEEE Transactions on Microwave Theory and Techniques*, **2020**, 68, 4361-4368	4.1	6
296	A Fat boundary-type method for localized nonhomogeneous material problems. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 364, 112983	5.7	1
295	3D Automatic Segmentation of Aortic Computed Tomography Angiography Combining Multi-View 2D Convolutional Neural Networks. *Cardiovascular Engineering and Technology*, **2020**, 11, 576-586	2.2	17
294	Use of 3D printer for face mask production to protect endoscopy unit personnel in contact with high-risk patients during COVID-19 pandemic. *Endoscopy*, **2020**, 52, 1146-1147	3.4	3
293	3-D Printed Bandpass Filter Using Conical Posts Interlaced Vertically **2020**,		5
292	Diffusion-reaction compartmental models formulated in a continuum mechanics framework: application to COVID-19, mathematical analysis, and numerical study. *Computational Mechanics*, **2020**, 66, 1-22	4	32
291	Basis of the Lattice Boltzmann Method for Additive Manufacturing. *Archives of Computational Methods in Engineering*, **2020**, 27, 1109-1133	7.8	4
290	Medical image analysis to measure the follow-up geometry of thoraco-abdominal aortic aneurysms treated with multilayer flow modulator stent. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*, **2020**, 8, 126-133	0.9	3
289	Pre-Programmed Tri-Layer Electro-Thermal Actuators Composed of Shape Memory Polymer and Carbon Nanotubes. *Soft Robotics*, **2020**, 7, 123-129	9.2	20
288	An overview on 3D printing for abdominal surgery. *Surgical Endoscopy and Other Interventional Techniques*, **2020**, 34, 1-13	5.2	30
287	A Finite Element Analysis Study from 3D CT to Predict Transcatheter Heart Valve Thrombosis. *Diagnostics*, **2020**, 10,	3.8	11
286	Anomalous aortic origin of coronary artery biomechanical modeling: Toward clinical application. *Journal of Thoracic and Cardiovascular Surgery*, **2020**,	1.5	4

285	Optimization clustering technique for PieceWise Uniform Transformation Field Analysis homogenization of viscoplastic composites. *Computational Mechanics*, **2019**, 64, 1495-1516	4	5
284	Topology optimization of stress-constrained structural elements using risk-factor approach. *Computers and Structures*, **2019**, 224, 106104	4.5	9
283	Expandable drug delivery system for gastric retention based on shape memory polymers: Development via 4D printing and extrusion. *International Journal of Pharmaceutics*, **2019**, 571, 118700	6.5	71
282	An upwind vertex centred finite volume algorithm for nearly and truly incompressible explicit fast solid dynamic applications: Total and Updated Lagrangian formulations. *Journal of Computational Physics: X*, **2019**, 3, 100025	1	3
281	A three-dimensional phenomenological model for shape memory alloys including two-way shape memory effect and plasticity. *Mechanics of Materials*, **2019**, 136, 103085	3.3	23
280	In Vivo Morphological Changes of the Femoropopliteal Arteries due to Knee Flexion After Endovascular Treatment of Popliteal Aneurysm. *Journal of Endovascular Therapy*, **2019**, 26, 496-504	2.5	6
279	A novel layered topology of auxetic materials based on the tetrachiral honeycomb microstructure. *Materials and Design*, **2019**, 179, 107883	8.1	26
278	Graded-material design based on phase-field and topology optimization. *Computational Mechanics*, **2019**, 64, 1589-1600	4	17
277	Computational Fluid Dynamics in Descending Thoracic Aortic Aneurysm: Tortuosity Associated With High Displacement Forces. *Journal of Vascular Surgery*, **2019**, 69, e34	3.5	3
276	Accurate Prediction of Melt Pool Shapes in Laser Powder Bed Fusion by the Non-Linear Temperature Equation Including Phase Changes. *Integrating Materials and Manufacturing Innovation*, **2019**, 8, 167-177	2.9	20
275	Hospital Factory for Manufacturing Customised, Patient-Specific 3D Anatomo-Functional Models and Prostheses **2019**, 233-254		4
274	Androgens Induce Invasiveness of Triple Negative Breast Cancer Cells Through AR/Src/PI3-K Complex Assembly. *Scientific Reports*, **2019**, 9, 4490	4.9	43
273	Bioink Composition and Printing Parameters for 3D Modeling Neural Tissue. *Cells*, **2019**, 8,	7.9	30
272	Polyacrylate/polyacrylate-PEG biomaterials obtained by high internal phase emulsions (HIPEs) with tailorable drug release and effective mechanical and biological properties. *Materials Science and Engineering C*, **2019**, 105, 110060	8.3	13
271	Experimental characterization and computational modeling of hydrogel cross-linking for bioprinting applications. *International Journal of Artificial Organs*, **2019**, 42, 548-557	1.9	10
270	Innovative dampers as floor isolation systems for seismically-retrofit multi-storey critical facilities. *Engineering Structures*, **2019**, 201, 109772	4.7	5
269	Modeling the non-trivial behavior of anisotropic beams: A simple Timoshenko beam with enhanced stress recovery and constitutive relations. *Composite Structures*, **2019**, 229, 111265	5.3	7
268	A New Class of Doublet Based on Slotted Slant Ridge in Additive Manufacturing Technology **2019**,		3

267	3D printing of aortic models as a teaching tool for improving understanding of aortic disease. *Journal of Cardiovascular Surgery*, **2019**, 60, 582-588	0.7	7
266	The mechanical strength of Ti-6Al-4V columns with regular octet microstructure manufactured by electron beam melting. *Materialia*, **2019**, 5, 100232	3.2	13
265	Different Strategies for the Additive Manufacturing of Slotted Slant Ridge Filtering Doublet **2019**,		1
264	Assessment of geometrical remodelling of the aortic arch after hybrid treatment. *European Journal of Cardio-thoracic Surgery*, **2019**, 55, 1045-1053	3	3
263	The Modified Arch Landing Areas Nomenclature identifies hostile zones for endograft deployment: a confirmatory biomechanical study in patients treated by thoracic endovascular aortic repair□ *European Journal of Cardio-thoracic Surgery*, **2019**, 55, 990-997	3	7
262	Numerical investigation on the seismic dissipation of glazed curtain wall equipped on high-rise buildings. *Engineering Structures*, **2019**, 179, 225-245	4.7	11
261	Integrated shape memory alloy devices toward a high-performance glazed curtain wall seismic retrofit. *Engineering Structures*, **2019**, 179, 540-555	4.7	5
260	Visible light 3D printing with epoxidized vegetable oils. *Additive Manufacturing*, **2019**, 25, 317-324	6.1	26
259	Reversed Auxiliary Flow to Reduce Embolism Risk During TAVI: A Computational Simulation and Experimental Study. *Cardiovascular Engineering and Technology*, **2019**, 10, 124-135	2.2	2
258	Skeleton-stabilized immersogeometric analysis for incompressible viscous flow problems. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 344, 421-450	5.7	14
257	Left atrial appendage closure guided by 3D computed tomography printing technology: A case control study. *Journal of Cardiovascular Computed Tomography*, **2019**, 13, 336-339	2.8	9
256	Twelve-year Follow-up Post-Thoracic Endovascular Repair in Type B Aortic Dissection Shown by Three-dimensional Printing. *Annals of Vascular Surgery*, **2019**, 55, 309.e13-309.e19	1.7	3
255	Finite Element Analysis of Additive Manufacturing Based on Fused Deposition Modeling: Distortions Prediction and Comparison With Experimental Data. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2019**, 141,	3.3	35
254	Skeleton-stabilized IsoGeometric Analysis: High-regularity interior-penalty methods for incompressible viscous flow problems. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 337, 324-351	5.7	8
253	Applying functional principal components to structural topology optimization. *International Journal for Numerical Methods in Engineering*, **2018**, 115, 189-208	2.4	7
252	Cross-talk between androgen receptor and nerve growth factor receptor in prostate cancer cells: implications for a new therapeutic approach. *Cell Death Discovery*, **2018**, 4, 5	6.9	20
251	The Modified Arch Landing Areas Nomenclature (MALAN) Improves Prediction of Stent Graft Displacement Forces: Proof of Concept by Computational Fluid Dynamics Modelling. *European Journal of Vascular and Endovascular Surgery*, **2018**, 55, 584-592	2.3	32
250	Spatiotemporal Image Correlation Analysis for 3D Flow Field Mapping in Microfluidic Devices. *Analytical Chemistry*, **2018**, 90, 2277-2284	7.8	5

#	Reference		
249	3D printing of reinforced concrete elements: Technology and design approach. *Construction and Building Materials*, **2018**, 165, 218-231	6.7	152
248	Explicit parametric solutions of lattice structures with proper generalized decomposition (PGD). *Computational Mechanics*, **2018**, 62, 871-891	4	13
247	Planar Timoshenko-like model for multilayer non-prismatic beams. *International Journal of Mechanics and Materials in Design*, **2018**, 14, 51-70	2.5	16
246	Computational Methods for Elastoplasticity: An Overview of Conventional and Less-Conventional Approaches. *Archives of Computational Methods in Engineering*, **2018**, 25, 545-589	7.8	13
245	Effects of clinico-pathological risk factors on in-vitro mechanical properties of human dilated ascending aorta. *Journal of the Mechanical Behavior of Biomedical Materials*, **2018**, 77, 1-11	4.1	18
244	Patient-specific CFD modelling in the thoracic aorta with PC-MRI-based boundary conditions: A least-square three-element Windkessel approach. *International Journal for Numerical Methods in Biomedical Engineering*, **2018**, 34, e3134	2.6	26
243	Temperature-memory effect in 3D printed photopolymers with broad glass transition **2018**,		3
242	Midterm Follow-up Geometrical Analysis of Thoracoabdominal Aortic Aneurysms Treated with Multilayer Flow Modulator. *Annals of Vascular Surgery*, **2018**, 53, 97-104.e2	1.7	4
241	A compliant aortic model for in vitro simulations: Design and manufacturing process. *Medical Engineering and Physics*, **2018**, 59, 21-29	2.4	12
240	Aortic expansion induces lumen narrrowing in anomalous coronary arteries: a parametric structural finite element analysis. *Journal of Biomechanical Engineering*, **2018**,	2.1	5
239	A cost-effective isogeometric approach for composite plates based on a stress recovery procedure. *Composites Part B: Engineering*, **2018**, 138, 12-18	10	21
238	A framework for designing patient-specific bioprosthetic heart valves using immersogeometric fluid-structure interaction analysis. *International Journal for Numerical Methods in Biomedical Engineering*, **2018**, 34, e2938	2.6	56
237	Blood Flow after Endovascular Repair in the Aortic Arch: A Computational Analysis. *Aorta*, **2018**, 6, 81-87	0.9	5
236	A 3D-printed patient-specific model to assist decision making in endovascular treatment of thoracoabdominal aortic aneurysm. *Journal of Cardiovascular Surgery*, **2018**, 59, 291-293	0.7	5
235	. *IEEE Antennas and Wireless Propagation Letters*, **2018**, 17, 2109-2113	3.8	4
234	Complementary Role of the Computed Biomodelling through Finite Element Analysis and Computed Tomography for Diagnosis of Transcatheter Heart Valve Thrombosis. *BioMed Research International*, **2018**, 2018, 1346308	3	7
233	Aortic Endovascular Surgery. *SEMA SIMAI Springer Series*, **2018**, 167-184	0.2	
232	A computational approach based on a multiaxial fatigue criterion combining phase transformation and shakedown response for the fatigue life assessment of Nitinol stents. *Journal of Intelligent Material Systems and Structures*, **2018**, 29, 3710-3724	2.3	5

231	3D-Printed Microfluidic Sensor in Substrate Integrated Waveguide Technology **2018**,		4
230	A one-dimensional phenomenological model for the two-way shape-memory effect in semi-crystalline networks. *Polymer*, **2018**, 158, 130-148	3.9	14
229	The clinical use of 3D printing in surgery. *Updates in Surgery*, **2018**, 70, 381-388	2.9	62
228	Comparative Analysis of Porcine and Human Thoracic Aortic Stiffness. *European Journal of Vascular and Endovascular Surgery*, **2018**, 55, 560-566	2.3	20
227	Effectiveness of 3D printed models in the treatment of complex aortic diseases. *Journal of Cardiovascular Surgery*, **2018**, 59, 699-706	0.7	10
226	Transcatheter Technologies for Valvular Replacement: an Update. *Surgical Technology International*, **2018**, 32, 190-199	0.8	
225	Patient-specific finite element analysis of popliteal stenting. *Meccanica*, **2017**, 52, 633-644	2.1	15
224	Influence of meso-structure and chemical composition on FDM 3D-printed parts. *Composites Part B: Engineering*, **2017**, 113, 371-380	10	89
223	Impact of thoracic endovascular aortic repair on radial strain in an ex vivo porcine model. *European Journal of Cardio-thoracic Surgery*, **2017**, 51, 783-789	3	2
222	Design of a Bioabsorbable Multilayered Patch for Esophagus Tissue Engineering. *Macromolecular Bioscience*, **2017**, 17, 1600426	5.5	10
221	Impact of Thoracic Endovascular Aortic Repair on Pulsatile Circumferential and Longitudinal Strain in Patients With Aneurysm. *Journal of Endovascular Therapy*, **2017**, 24, 281-289	2.5	12
220	Stent-Graft Deployment Increases Aortic Stiffness in an Ex Vivo Porcine Model. *Annals of Vascular Surgery*, **2017**, 43, 302-308	1.7	16
219	On the stability analysis of hyperelastic boundary value problems using three- and two-field mixed finite element formulations. *Computational Mechanics*, **2017**, 60, 479-492	4	11
218	3-D Printed Substrate Integrated Slab Waveguide for Single-Mode Bandwidth Enhancement. *IEEE Microwave and Wireless Components Letters*, **2017**, 27, 536-538	2.6	24
217	Value of 3D printing for the comprehension of surgical anatomy. *Surgical Endoscopy and Other Interventional Techniques*, **2017**, 31, 4102-4110	5.2	70
216	Computational Analysis of Advanced Shape-Memory Alloy Devices Through a Robust Modeling Framework. *Shape Memory and Superelasticity*, **2017**, 3, 109-123	2.8	3
215	A Regression Method Based on Noninvasive Clinical Data to Predict the Mechanical Behavior of Ascending Aorta Aneurysmal Tissue. *IEEE Transactions on Biomedical Engineering*, **2017**, 64, 2607-2617	5	4
214	Extranuclear partners of androgen receptor: at the crossroads of proliferation, migration, and neuritogenesis. *FASEB Journal*, **2017**, 31, 1289-1300	0.9	28

#		IF	Cit
213	Extensibility and Distensibility of the Thoracic Aorta in Patients with Aneurysm. *European Journal of Vascular and Endovascular Surgery*, **2017**, 53, 199-205	2.3	20
212	Impact of Thoracic Endovascular Repair on Pulsatile Aortic Strain in Acute Type B Aortic Dissection: Preliminary Results. *Aorta*, **2017**, 5, 42-52	0.9	6
211	Fiber-reinforced materials: finite elements for the treatment of the inextensibility constraint. *Computational Mechanics*, **2017**, 60, 905-922	4	9
210	Non-prismatic Timoshenko-like beam model: Numerical solution via isogeometric collocation. *Computers and Mathematics With Applications*, **2017**, 74, 1531-1541	2.7	24
209	Finite element analysis of TAVI: Impact of native aortic root computational modeling strategies on simulation outcomes. *Medical Engineering and Physics*, **2017**, 47, 2-12	2.4	36
208	Modular flow chamber for engineering bone marrow architecture and function. *Biomaterials*, **2017**, 146, 60-71	15.6	23
207	Mixed Isogeometric Finite Cell Methods for the Stokes problem. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 316, 400-423	5.7	22
206	A novel insight into the role of entry tears in type B aortic dissection: pressure measurements in an in vitro model. *International Journal of Artificial Organs*, **2017**, 40, 563-574	1.9	6
205	3D printing and metalization methodology for high dielectric resonator waveguide microwave filters **2017**,		4
204	Flow-through micro-capillary refractive index sensor based on T/R spectral shift monitoring. *Biomedical Optics Express*, **2017**, 8, 4438-4453	3.5	11
203	Changes in aortic pulse wave velocity of four thoracic aortic stent grafts in an ex vivo porcine model. *PLoS ONE*, **2017**, 12, e0186080	3.7	14
202	3D Printing Technology for Buildings Accessibility: The Tactile Map for MTE Museum in Pavia. *Journal of Civil Engineering and Architecture*, **2017**, 11,	1.5	2
201	Serviceability Analysis of Non-Prismatic Timber Beams: Derivation and Validation of New and Effective Straightforward Formulas. *Open Journal of Civil Engineering*, **2017**, 07, 32-62	0.3	6
200	DISSIPATING EFFECT OF GLAZED CURTAIN WALL STICK SYSTEM INSTALLED ON HIGH-RISE MEGA-BRACED FRAME-CORE BUILDINGS UNDER NONLINEAR SEISMIC EXCITATION **2017**,		2
199	Fatigue of Metallic Stents: From Clinical Evidence to Computational Analysis. *Annals of Biomedical Engineering*, **2016**, 44, 287-301	4.7	21
198	Human dilated ascending aorta: Mechanical characterization via uniaxial tensile tests. *Journal of the Mechanical Behavior of Biomedical Materials*, **2016**, 53, 257-271	4.1	49
197	From CT scanning to 3-D printing technology for the preoperative planning in laparoscopic splenectomy. *Surgical Endoscopy and Other Interventional Techniques*, **2016**, 30, 366-71	5.2	47
196	Efficiency and effectiveness of implicit and explicit approaches for the analysis of shape-memory alloy bodies. *Journal of Intelligent Material Systems and Structures*, **2016**, 27, 384-402	2.3	5

195	A three-dimensional phenomenological constitutive model for porous shape memory alloys including plasticity effects. *Journal of Intelligent Material Systems and Structures*, **2016**, 27, 608-624	2.3	14
194	Characterization of 3D-printed dielectric substrates with different infill for microwave applications **2016**,		14
193	An experimental investigation of the impact of thoracic endovascular aortic repair on longitudinal strain. *European Journal of Cardio-thoracic Surgery*, **2016**, 50, 955-961	3	13
192	Theoretical and numerical modeling of dense and porous shape memory alloys accounting for coupling effects of plasticity and transformation. *International Journal of Solids and Structures*, **2016**, 88-89, 248-262	3.1	19
191	Non-prismatic beams: A simple and effective Timoshenko-like model. *International Journal of Solids and Structures*, **2016**, 90, 236-250	3.1	46
190	A shakedown analysis of high cycle fatigue of shape memory alloys. *International Journal of Fatigue*, **2016**, 87, 112-123	5	24
189	3D-printed photo-spectroelectrochemical devices for in situ and in operando X-ray absorption spectroscopy investigation. *Journal of Synchrotron Radiation*, **2016**, 23, 622-8	2.4	25
188	Micromechanical modeling for the probabilistic failure prediction of stents in high-cycle fatigue. *International Journal of Fatigue*, **2016**, 87, 405-417	5	6
187	Experimental response of additively manufactured metallic pentamode materials confined between stiffening plates. *Composite Structures*, **2016**, 142, 254-262	5.3	81
186	Prediction of patient-specific post-operative outcomes of TAVI procedure: The impact of the positioning strategy on valve performance. *Journal of Biomechanics*, **2016**, 49, 2513-9	2.9	48
185	Isogeometric collocation mixed methods for rods. *Discrete and Continuous Dynamical Systems - Series S*, **2016**, 9, 33-42	2.8	3
184	3D printing: clinical applications in orthopaedics and traumatology. *EFORT Open Reviews*, **2016**, 1, 121-127	5.5	89
183	A locally anisotropic fluid⸺structure interaction remeshing strategy for thin structures with application to a hinged rigid leaflet. *International Journal for Numerical Methods in Engineering*, **2016**, 107, 155-180	2.4	7
182	On the Use of Anisotropic Triangles with Mixed Finite Elements: Application to an ⸺Immersed⸺ Approach for Incompressible Flow Problems. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2016**, 195-236	0.6	
181	Homogenization techniques for the analysis of porous SMA. *Computational Mechanics*, **2016**, 57, 755-772	4	14
180	Gradient structures for the thermomechanics of shape-memory materials. *Computer Methods in Applied Mechanics and Engineering*, **2016**, 299, 440-469	5.7	6
179	Fractional flow reserve based on computed tomography: an overview. *European Heart Journal Supplements*, **2016**, 18, E49-E56	1.5	8
178	A three-dimensional finite-strain phenomenological model for shape-memory polymers: Formulation, numerical simulations, and comparison with experimental data. *International Journal of Plasticity*, **2016**, 83, 153-177	7.6	38

177	A patient-specific follow up study of the impact of thoracic endovascular repair (TEVAR) on aortic anatomy and on post-operative hemodynamics.. *Computers and Fluids*, **2016**, 141, 54-61	2.8	13
176	Activities at Thoracic Aortic Research Center, IRCCS Policlinico San Donato. *European Heart Journal Supplements*, **2016**, 18, E57-E63	1.5	
175	An innovative strategy for the identification and 3D reconstruction of pancreatic cancer from CT images. *Updates in Surgery*, **2016**, 68, 273-278	2.9	8
174	Numerical Studies on the Stability of Mixed Finite Elements Over Anisotropic Meshes Arising from Immersed Boundary Stokes Problems. *Modeling and Simulation in Science, Engineering and Technology*, **2016**, 319-330	0.8	
173	A phenomenological model for the magneto-mechanical response of single-crystal magnetic shape memory alloys. *European Journal of Mechanics, A/Solids*, **2015**, 52, 1-11	3.7	12
172	Innovative and efficient stent flexibility simulations based on isogeometric analysis. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 295, 347-361	5.7	17
171	Micromechanical analysis of porous SMA. *Smart Materials and Structures*, **2015**, 24, 085035	3.4	14
170	Cross-talk between androgen receptor/filamin A and TrkA regulates neurite outgrowth in PC12 cells. *Molecular Biology of the Cell*, **2015**, 26, 2858-72	3.5	26
169	On a fictitious domain method with distributed Lagrange multiplier for interface problems. *Applied Numerical Mathematics*, **2015**, 95, 36-50	2.5	14
168	Analytical derivation of a general 2D non-prismatic beam model based on the Hellinger Reissner principle. *Engineering Structures*, **2015**, 101, 88-98	4.7	24
167	The dimensional reduction approach for 2D non-prismatic beam modelling: A solution based on Hellinger Reissner principle. *International Journal of Solids and Structures*, **2015**, 63, 264-276	3.1	21
166	Geopolymers from low-T activated kaolin: Implications for the use of alunite-bearing raw materials. *Applied Clay Science*, **2015**, 114, 530-539	5.2	14
165	An Immersed Finite element method based on a locally anisotropic remeshing for the incompressible Stokes problem. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 294, 428-448	5.7	8
164	Biomechanical Changes After Thoracic Endovascular Aortic Repair in Type B Dissection: A Systematic Review. *Journal of Endovascular Therapy*, **2015**, 22, 918-33	2.5	11
163	**2015**,		1
162	Efficient uncertainty quantification in stochastic finite element analysis based on functional principal components. *Computational Mechanics*, **2015**, 56, 533-549	4	7
161	Bayesian Estimation of the Aortic Stiffness based on Non-invasive Computed Tomography Images. *Springer Proceedings in Mathematics and Statistics*, **2015**, 133-142	0.2	
160	Isogeometric collocation methods for the Reissner Mindlin plate problem. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 284, 489-507	5.7	56

159	Patient-specific isogeometric structural analysis of aortic valve closure. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 284, 508-520	5.7	72
158	An experimental, theoretical and numerical investigation of shape memory polymers. *International Journal of Plasticity*, **2015**, 67, 127-147	7.6	19
157	Assumed Natural Strain NURBS-based solid-shell element for the analysis of large deformation elasto-plastic thin-shell structures. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 284, 861-880	5.7	45
156	Hysteresis of Multiconfiguration Assemblies of Nitinol and Steel Strands: Experiments and Phenomenological Identification. *Journal of Engineering Mechanics - ASCE*, **2015**, 141, 04014135	2.4	38
155	Applications of Shape Memory Alloys in Structural Engineering **2015**, 369-403		24
154	SMA Biomedical Applications **2015**, 307-341		20
153	SMA Cardiovascular Applications and Computer-Based Design **2015**, 343-367		4
152	Assessment of a Black-Box Approach for a Parallel Finite Elements Solver in Computational Hemodynamics **2015**,		2
151	Modeling Permanent Deformations of Superelastic and Shape Memory Materials. *Journal of Functional Biomaterials*, **2015**, 6, 398-406	4.8	3
150	An Efficient Finite Element Framework to Assess Flexibility Performances of SMA Self-Expandable Carotid Artery Stents. *Journal of Functional Biomaterials*, **2015**, 6, 585-97	4.8	2
149	Exponential-based integration for Bigoni Piccolroaz plasticity model. *European Journal of Mechanics, A/Solids*, **2015**, 51, 107-122	3.7	9
148	Single-variable formulations and isogeometric discretizations for shear deformable beams. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 284, 988-1004	5.7	77
147	A clinically applicable stochastic approach for noninvasive estimation of aortic stiffness using computed tomography data. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 176-87	5	13
146	A computational approach for the lifetime prediction of cardiovascular balloon-expandable stents. *International Journal of Fatigue*, **2015**, 75, 69-79	5	20
145	Successful Reconstruction of Nerve Defects Using Distraction Neurogenesis with a New Experimental Device. *Basic and Clinical Neuroscience*, **2015**, 6, 253-64	1.4	9
144	A Numerical/Experimental Study of Nitinol Actuator Springs. *Journal of Materials Engineering and Performance*, **2014**, 23, 2420-2428	1.6	20
143	On the Assumed Natural Strain method to alleviate locking in solid-shell NURBS-based finite elements. *Computational Mechanics*, **2014**, 53, 1341-1353	4	51
142	Patient-specific analysis of post-operative aortic hemodynamics: a focus on thoracic endovascular repair (TEVAR). *Computational Mechanics*, **2014**, 54, 943-953	4	17

141	How Constitutive Model Complexity can Affect the Capability to Fit Experimental Data: a Focus on Human Carotid Arteries and Extension/Inflation Data. *Archives of Computational Methods in Engineering*, **2014**, 21, 273-292	7.8	12
140	Computational plasticity of mixed hardening pressure-dependency constitutive equations. *Acta Mechanica*, **2014**, 225, 1699-1733	2.1	10
139	Theoretical and numerical modeling of shape memory alloys accounting for multiple phase transformations and martensite reorientation. *International Journal of Plasticity*, **2014**, 59, 30-54	7.6	94
138	A simple framework to generate 3D patient-specific model of coronary artery bifurcation from single-plane angiographic images. *Computers in Biology and Medicine*, **2014**, 44, 97-109	7	15
137	Patient-specific simulation of a stentless aortic valve implant: the impact of fibres on leaflet performance. *Computer Methods in Biomechanics and Biomedical Engineering*, **2014**, 17, 277-85	2.1	21
136	Simulation of transcatheter aortic valve implantation through patient-specific finite element analysis: two clinical cases. *Journal of Biomechanics*, **2014**, 47, 2547-55	2.9	73
135	Fatigue of 316L stainless steel notched . *International Journal of Fatigue*, **2014**, 68, 231-247	5	15
134	Enhanced modeling approach for multilayer anisotropic plates based on dimension reduction method and HellingerΠReissner principle. *Composite Structures*, **2014**, 118, 622-633	5.3	14
133	A Modified Finite Particle Method: Multi-dimensional elasto-statics and dynamics. *International Journal for Numerical Methods in Engineering*, **2014**, 99, 1-25	2.4	10
132	Simulation of transcatheter aortic valve implantation: a patient-specific finite element approach. *Computer Methods in Biomechanics and Biomedical Engineering*, **2014**, 17, 1347-57	2.1	62
131	A study on unfitted 1D finite element methods. *Computers and Mathematics With Applications*, **2014**, 68, 2080-2102	2.7	10
130	Aortic hemodynamics after thoracic endovascular aortic repair, with particular attention to the bird-beak configuration. *Journal of Endovascular Therapy*, **2014**, 21, 791-802	2.5	26
129	Response of porous SMA: a micromechanical study. *Frattura Ed Integrita Strutturale*, **2014**, 8, 85-96	0.9	6
128	MODIFIED FINITE PARTICLE METHOD: APPLICATIONS TO ELASTICITY AND PLASTICITY PROBLEMS. *International Journal of Computational Methods*, **2014**, 11, 1350050	1.1	4
127	Importance of dynamic aortic evaluation in planning TEVAR. *Annals of Cardiothoracic Surgery*, **2014**, 3, 300-6	4.7	14
126	Locking-free isogeometric collocation methods for spatial Timoshenko rods. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 263, 113-126	5.7	97
125	Approximation of incompressible large deformation elastic problems: some unresolved issues. *Computational Mechanics*, **2013**, 52, 1153-1167	4	45
124	Statistical finite element analysis of the buckling behavior of honeycomb structures. *Composite Structures*, **2013**, 105, 240-255	5.3	56

123	Haemodynamic impact of stent-vessel (mal)apposition following carotid artery stenting: mind the gaps!. *Computer Methods in Biomechanics and Biomedical Engineering*, **2013**, 16, 648-59	2.1	21
122	The dimensional reduction modelling approach for 3D beams: Differential equations and finite-element solutions based on Hellinger−Reissner principle. *International Journal of Solids and Structures*, **2013**, 50, 4184-4196	3.1	6
121	Numerical fatigue life assessment of cardiovascular stents: A two-scale plasticity-damage model. *Journal of Physics: Conference Series*, **2013**, 451, 012031	0.3	1
120	Patient-specific aortic endografting simulation: from diagnosis to prediction. *Computers in Biology and Medicine*, **2013**, 43, 386-94	7	46
119	Aortic root 3D parametric morphological model from 2D-echo images. *Computers in Biology and Medicine*, **2013**, 43, 2196-204	7	12
118	Patient-specific finite element analysis of carotid artery stenting: a focus on vessel modeling. *International Journal for Numerical Methods in Biomedical Engineering*, **2013**, 29, 645-64	2.6	32
117	Aortic Biological Prosthetic Valve for Open-Surgery and Percutaneous Implant: Procedure Simulation and Performance Assessment. *Studies in Mechanobiology, Tissue Engineering and Biomaterials*, **2013**, 131-168	0.5	
116	Contemporary Role of Computational Analysis in Endovascular Treatment for Thoracic Aortic Disease. *Aorta*, **2013**, 1, 171-81	0.9	4
115	A new "flexible" 3D macroscopic model for shape memory alloys. *Discrete and Continuous Dynamical Systems - Series S*, **2013**, 6, 277-291	2.8	2
114	Isogeometric collocation for elastostatics and explicit dynamics. *Computer Methods in Applied Mechanics and Engineering*, **2012**, 249-252, 2-14	5.7	141
113	Evaluation of carotid stent scaffolding through patient-specific finite element analysis. *International Journal for Numerical Methods in Biomedical Engineering*, **2012**, 28, 1043-55	2.6	15
112	A simple algorithm for obtaining nearly optimal quadrature rules for NURBS-based isogeometric analysis. *Computer Methods in Applied Mechanics and Engineering*, **2012**, 249-252, 15-27	5.7	146
111	Fatigue life assessment of cardiovascular balloon-expandable stents: a two-scale plasticity-damage model approach. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 15, 78-92	4.1	30
110	Comparison and critical analysis of invariant-based models with respect to their ability in fitting human aortic valve data. *Annals of Solid and Structural Mechanics*, **2012**, 4, 1-14	0.5	18
109	A New Integration Algorithm for the von-Mises Elasto-Plastic Model. *Lecture Notes in Applied and Computational Mechanics*, **2012**, 233-258	0.3	
108	Computational finite element analyses to optimize graft sizing during aortic valve-sparing procedure. *Journal of Heart Valve Disease*, **2012**, 21, 141-7		3
107	Computer-based analysis to optimize prosthesis sizing during aortic valve surgery. *International Journal of Cardiology*, **2011**, 151, 253-4	3.2	2
106	Androgen-induced cell migration: role of androgen receptor/filamin A association. *PLoS ONE*, **2011**, 6, e17218	3.7	76

105	A computational tool to support pre-operative planning of stentless aortic valve implant. *Medical Engineering and Physics*, **2011**, 33, 1183-92	2.4	24
104	Theoretical and Experimental Investigation on SMA Superelastic Springs. *Journal of Materials Engineering and Performance*, **2011**, 20, 706-711	1.6	13
103	Theoretical and Experimental Study of the Shape Memory Effect of Beams in Bending Conditions. *Journal of Materials Engineering and Performance*, **2011**, 20, 712-718	1.6	15
102	On the robustness and efficiency of integration algorithms for a 3D finite strain phenomenological SMA constitutive model. *International Journal for Numerical Methods in Engineering*, **2011**, 85, 107-134	2.4	25
101	Novel finite particle formulations based on projection methodologies. *International Journal for Numerical Methods in Fluids*, **2011**, 65, 1376-1388	1.9	14
100	A three-dimensional phenomenological model for Magnetic Shape Memory Alloys. *GAMM Mitteilungen*, **2011**, 34, 90-96	1.8	18
99	An improved, fully symmetric, finite-strain phenomenological constitutive model for shape memory alloys. *Finite Elements in Analysis and Design*, **2011**, 47, 166-174	2.2	31
98	Performance evaluation of shape-memory-alloy superelastic behavior to control a stay cable in cable-stayed bridges. *International Journal of Non-Linear Mechanics*, **2011**, 46, 470-477	2.8	42
97	A finite strain kinematic hardening constitutive model based on Hencky strain: General framework, solution algorithm and application to shape memory alloys. *International Journal of Plasticity*, **2011**, 27, 940-961	7.6	91
96	Carotid artery stenting simulation: from patient-specific images to finite element analysis. *Medical Engineering and Physics*, **2011**, 33, 281-9	2.4	121
95	Innovative Superelastic Isolation Device. *Journal of Earthquake Engineering*, **2011**, 15, 72-89	1.8	28
94	Finite element analysis of aortic root dilation: a new procedure to reproduce pathology based on experimental data. *Computer Methods in Biomechanics and Biomedical Engineering*, **2011**, 14, 875-82	2.1	15
93	Impact of carotid stent cell design on vessel scaffolding: a case study comparing experimental investigation and numerical simulations. *Journal of Endovascular Therapy*, **2011**, 18, 397-406	2.5	32
92	Shape Memory Alloys: Material Modeling and Device Finite Element Simulations. *IUTAM Symposium on Cellular, Molecular and Tissue Mechanics*, **2011**, 33-42	0.3	1
91	A METRIC APPROACH TO PLASTICITY VIA HAMILTON–JACOBI EQUATION. *Mathematical Models and Methods in Applied Sciences*, **2010**, 20, 1617-1647	3.5	
90	ISOGEOMETRIC COLLOCATION METHODS. *Mathematical Models and Methods in Applied Sciences*, **2010**, 20, 2075-2107	3.5	257
89	A new modeling approach for planar beams: finite-element solutions based on mixed variational derivations. *Journal of Mechanics of Materials and Structures*, **2010**, 5, 771-794	1.2	11
88	Shape-memory alloys: effective 3D modelling, computational aspects and design of devices. *International Journal of Computational Materials Science and Surface Engineering*, **2010**, 3, 199	0.4	5

87	A 3D finite strain phenomenological constitutive model for shape memory alloys considering martensite reorientation. *Continuum Mechanics and Thermodynamics*, **2010**, 22, 345-362	3.5	30
86	A 3-D phenomenological constitutive model for shape memory alloys under multiaxial loadings. *International Journal of Plasticity*, **2010**, 26, 976-991	7.6	183
85	The importance of the exact satisfaction of the incompressibility constraint in nonlinear elasticity: mixed FEMs versus NURBS-based approximations. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 314-323	5.7	79
84	A Beam Finite Element for Nonlinear Analysis of Shape Memory Alloy Devices. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2010**, 59-97	0.6	1
83	Feasibility Investigation of Superelastic Effect Devices for Seismic Isolation Applications. *Journal of Materials Engineering and Performance*, **2009**, 18, 729-737	1.6	5
82	Nitinol Embolic Protection Filters: Design Investigation by Finite Element Analysis. *Journal of Materials Engineering and Performance*, **2009**, 18, 787-792	1.6	12
81	SMA Numerical Modeling Versus Experimental Results: Parameter Identification and Model Prediction Capabilities. *Journal of Materials Engineering and Performance*, **2009**, 18, 649-654	1.6	34
80	A macroscopic 1D model for shape memory alloys including asymmetric behaviors and transformation-dependent elastic properties. *Computer Methods in Applied Mechanics and Engineering*, **2009**, 198, 1631-1637	5.7	77
79	Response to Comments by Dewey H. Hodges. *International Journal of Solids and Structures*, **2009**, 46, 1597	3.1	
78	Feasibility Assessment of an Innovative Isolation Bearing System with Shape Memory Alloys. *Journal of Earthquake Engineering*, **2009**, 13, 18-39	1.8	43
77	Numerical simulation of Nitinol p eripheral stents: from laser-cutting to deployment in a patient specific anatomy **2009**,		5
76	Rate-dependent Thermo-mechanical Modelling of Superelastic Shape-memory Alloys for Seismic Applications. *Journal of Intelligent Material Systems and Structures*, **2008**, 19, 47-61	2.3	43
75	A RATE-INDEPENDENT MODEL FOR THE ISOTHERMAL QUASI-STATIC EVOLUTION OF SHAPE-MEMORY MATERIALS. *Mathematical Models and Methods in Applied Sciences*, **2008**, 18, 125-164	3.5	45
74	Shape Memory Alloys: Material Modeling and Device Finite Element Simulations. *Materials Science Forum*, **2008**, 583, 257-275	0.4	5
73	On the geometrically exact beam model: A consistent, effective and simple derivation from three-dimensional finite-elasticity. *International Journal of Solids and Structures*, **2008**, 45, 4766-4781	3.1	39
72	Seismic Assessment of Concentrically Braced Steel Frames with Shape Memory Alloy Braces. *Journal of Structural Engineering*, **2007**, 133, 862-870	3	103
71	Generalized midpoint integration algorithms for J2 plasticity with linear hardening. *International Journal for Numerical Methods in Engineering*, **2007**, 72, 422-463	2.4	12
70	Second-order accurate integration algorithms for von-Mises plasticity with a nonlinear kinematic hardening mechanism. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 196, 1827-1846	5.7	40

69	A fully locking-free Isogeometric approach for plane linear elasticity problems: A stream function formulation. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 197, 160-172	5.7	178
68	A three-dimensional model describing stress-induced solid phase transformation with permanent inelasticity. *International Journal of Plasticity*, **2007**, 23, 207-226	7.6	186
67	A 1D rate-dependent viscous constitutive model for superelastic shape-memory alloys: formulation and comparison with experimental data. *Smart Materials and Structures*, **2007**, 16, S39-S50	3.4	19
66	A Phenomenological One-Dimensional Model Describing Stress-Induced Solid Phase Transformation with Permanent Inelasticity. *Mechanics of Advanced Materials and Structures*, **2007**, 14, 43-55	1.8	10
65	A novel 'optimal' exponential-based integration algorithm for von-Mises plasticity with linear hardening: Theoretical analysis on yield consistency, accuracy, convergence and numerical investigations. *International Journal for Numerical Methods in Engineering*, **2006**, 67, 449-498	2.4	37
64	Seismic Vibration Control Using Superelastic Shape Memory Alloys. *Journal of Engineering Materials and Technology, Transactions of the ASME*, **2006**, 128, 294-301	1.8	65
63	Numerical and Experimental Evaluation of the Damping Properties of Shape-Memory Alloys. *Journal of Engineering Materials and Technology, Transactions of the ASME*, **2006**, 128, 312-319	1.8	22
62	Self-sensing CF-GFRP rods as mechanical reinforcement and sensors of concrete beams. *Smart Materials and Structures*, **2006**, 15, 182-186	3.4	16
61	. *Journal of Earthquake Engineering*, **2006**, 10, 45	1.8	5
60	EARTHQUAKE PERFORMANCE OF STEEL FRAMES WITH NITINOL BRACES. *Journal of Earthquake Engineering*, **2006**, 10, 45-66	1.8	35
59	A mixed FSDT finite element for monoclinic laminated plates. *Computers and Structures*, **2006**, 84, 624-639	4.5	21
58	Computational studies of shape memory alloy behavior in biomedical applications. *Journal of Biomechanical Engineering*, **2005**, 127, 716-25	2.1	57
57	A predictive study of the mechanical behaviour of coronary stents by computer modelling. *Medical Engineering and Physics*, **2005**, 27, 13-8	2.4	147
56	A stability study of some mixed finite elements for large deformation elasticity problems. *Computer Methods in Applied Mechanics and Engineering*, **2005**, 194, 1075-1092	5.7	41
55	An analysis of some mixed-enhanced finite element for plane linear elasticity. *Computer Methods in Applied Mechanics and Engineering*, **2005**, 194, 2947-2968	5.7	38
54	Integration schemes for von-Mises plasticity models based on exponential maps: numerical investigations and theoretical considerations. *International Journal for Numerical Methods in Engineering*, **2005**, 64, 1133-1165	2.4	23
53	WELL-POSEDNESS AND APPROXIMATION FOR A ONE-DIMENSIONAL MODEL FOR SHAPE MEMORY ALLOYS. *Mathematical Models and Methods in Applied Sciences*, **2005**, 15, 1301-1327	3.5	7
52	A Finite Element for the Analysis of Monoclinic Laminated Plates **2005**, 333-343		

51	A Mixed FSDT Finite-Element Formulation for the Analysis of Composite Laminates Without Shear Correction Factors **2005**, 345-358		5
50	An asymptotically optimal model for isotropic heterogeneous linearly elastic plates. *ESAIM: Mathematical Modelling and Numerical Analysis*, **2004**, 38, 877-897	1.8	5
49	Kinetic friction. *American Journal of Orthodontics and Dentofacial Orthopedics*, **2004**, 125, 17A; author reply 17A	2.1	7
48	Stainless and shape memory alloy coronary stents: a computational study on the interaction with the vascular wall. *Biomechanics and Modeling in Mechanobiology*, **2004**, 2, 205-17	3.8	110
47	Numerical investigation of the intravascular coronary stent flexibility. *Journal of Biomechanics*, **2004**, 37, 495-501	2.9	98
46	Numerical analysis of a three-dimensional super-elastic constitutive model. *International Journal for Numerical Methods in Engineering*, **2004**, 61, 142-155	2.4	13
45	A three-dimensional model describing stress-temperature induced solid phase transformations: solution algorithm and boundary value problems. *International Journal for Numerical Methods in Engineering*, **2004**, 61, 807-836	2.4	192
44	A three-dimensional model describing stress-temperature induced solid phase transformations: thermomechanical coupling and hybrid composite applications. *International Journal for Numerical Methods in Engineering*, **2004**, 61, 716-737	2.4	84
43	Numerical Algorithm for a Three-dimensional Stress-induced Solid-phase-transformation Model. *Lecture Notes in Applied and Computational Mechanics*, **2004**, 217-224	0.3	
42	Refined First-Order Shear Deformation Theory Models for Composite Laminates. *Journal of Applied Mechanics, Transactions ASME*, **2003**, 70, 381-390	2.7	49
41	A mixed finite element method for beam and frame problems. *Computational Mechanics*, **2003**, 31, 192-203	2.1	98
40	Evaluation of friction of conventional and metal-insert ceramic brackets in various bracket-archwire combinations. *American Journal of Orthodontics and Dentofacial Orthopedics*, **2003**, 124, 403-9	2.1	58
39	Evaluation of friction of stainless steel and esthetic self-ligating brackets in various bracket-archwire combinations. *American Journal of Orthodontics and Dentofacial Orthopedics*, **2003**, 124, 395-402	2.1	128
38	On a new integration scheme for von-Mises plasticity with linear hardening. *International Journal for Numerical Methods in Engineering*, **2003**, 56, 1375-1396	2.4	45
37	Modelling of SMA materials: Training and two way memory effects. *Computers and Structures*, **2003**, 81, 2301-2317	4.5	90
36	On the enhanced strain technique for elasticity problems. *Computers and Structures*, **2003**, 81, 777-787	4.5	28
35	Improvements and algorithmical considerations on a recent three-dimensional model describing stress-induced solid phase transformations. *International Journal for Numerical Methods in Engineering*, **2002**, 55, 1255-1284	2.4	119
34	Remarks on the asymptotic behaviour of Koiter shells. *Computers and Structures*, **2002**, 80, 735-745	4.5	11

33	Mechanical behavior of coronary stents investigated through the finite element method. *Journal of Biomechanics*, **2002**, 35, 803-11	2.9	238
32	A robust integration-algorithm for a finite-strain shape-memory-alloy superelastic model. *International Journal of Plasticity*, **2001**, 17, 971-990	7.6	145
31	Analysis of kinematic linked interpolation methods for ReissnerMindlin plate problems. *Computer Methods in Applied Mechanics and Engineering*, **2001**, 190, 2465-2482	5.7	29
30	Analysis of mixed finite elements for laminated composite plates. *Computer Methods in Applied Mechanics and Engineering*, **2001**, 190, 4767-4783	5.7	11
29	Thermo-mechanical modelling of a superelastic shape-memory wire under cyclic stretchingBending loadings. *International Journal of Solids and Structures*, **2001**, 38, 6123-6145	3.1	77
28	Finite-element Analysis of a Stenotic Artery Revascularization Through a Stent Insertion. *Computer Methods in Biomechanics and Biomedical Engineering*, **2001**, 4, 249-263	2.1	87
27	Mechanical characterisation of orthodontic superelastic Ni-Ti wires. *European Physical Journal Special Topics*, **2001**, 11, Pr8-577-Pr8-582		3
26	PARTIAL SELECTIVE REDUCED INTEGRATION SCHEMES AND KINEMATICALLY LINKED INTERPOLATIONS FOR PLATE BENDING PROBLEMS. *Mathematical Models and Methods in Applied Sciences*, **1999**, 09, 693-722	3.5	14
25	A temperature-dependent beam for shape-memory alloys: Constitutive modelling, finite-element implementation and numerical simulations. *Computer Methods in Applied Mechanics and Engineering*, **1999**, 174, 171-190	5.7	71
24	Partial-mixed formulation and refined models for the analysis of composite laminates within an FSDT. *Composite Structures*, **1999**, 46, 103-113	5.3	25
23	A return-map algorithm for general associative isotropic elasto-plastic materials in large deformation regimes. *International Journal of Plasticity*, **1999**, 15, 1359-1378	7.6	43
22	A mixed-enhanced finite-element for the analysis of laminated composite plates. *International Journal for Numerical Methods in Engineering*, **1999**, 44, 1481-1504	2.4	63
21	A finite-strain cam-clay model in the framework of multiplicative elasto-plasticity. *International Journal of Plasticity*, **1998**, 14, 1155-1187	7.6	39
20	A Superelastic Shape-Memory-Alloy Beam Model. *Journal of Intelligent Material Systems and Structures*, **1997**, 8, 489-501	2.3	93
19	A viscoplastic constitutive equation bounded between two generalized plasticity models. *International Journal of Plasticity*, **1997**, 13, 697-721	7.6	9
18	Shape-memory alloys: modelling and numerical simulations of the finite-strain superelastic behavior. *Computer Methods in Applied Mechanics and Engineering*, **1997**, 143, 175-194	5.7	327
17	Shape-memory alloys: macromodelling and numerical simulations of the superelastic behavior. *Computer Methods in Applied Mechanics and Engineering*, **1997**, 146, 281-312	5.7	425
16	A one-dimensional model for superelastic shape-memory alloys with different elastic properties between austenite and martensite. *International Journal of Non-Linear Mechanics*, **1997**, 32, 1101-1114	2.8	213

15	A uniaxial model for shape-memory alloys. *International Journal of Solids and Structures*, **1997**, 34, 3601-3618	3.1	80
14	Generalized plasticity and shape-memory alloys. *International Journal of Solids and Structures*, **1996**, 33, 991-1003	3.1	137
13	Shape memory alloy superelastic behavior: 3D finite-element simulations **1996**,		9
12	Two material models for cyclic plasticity: Nonlinear kinematic hardening and generalized plasticity. *International Journal of Plasticity*, **1995**, 11, 65-98	7.6	76
11	A triangular thick plate finite element with an exact thin limit. *Finite Elements in Analysis and Design*, **1995**, 19, 57-68	2.2	37
10	An Effective Plate Element for Contact Problems **1995**, 237-241		1
9	A generalized elastoplastic plate theory and its algorithmic implementation. *International Journal for Numerical Methods in Engineering*, **1994**, 37, 2583-2608	2.4	21
8	A shear deformable plate element with an exact thin limit. *Computer Methods in Applied Mechanics and Engineering*, **1994**, 118, 393-412	5.7	64
7	A generalized visco-plasticity model and its algorithmic implementation. *Computers and Structures*, **1994**, 53, 637-647	4.5	9
6	Linked interpolation for Reissner-Mindlin plate elements: Part II—A simple triangle. *International Journal for Numerical Methods in Engineering*, **1993**, 36, 3057-3066	2.4	102
5	A new model of generalized plasticity and its numerical implementation. *International Journal of Solids and Structures*, **1993**, 30, 3171-3184	3.1	44
4	4D Multimaterial Printing of Programmable and Selective Light-Activated Shape-Memory Structures with Embedded Gold Nanoparticles. *Advanced Materials Technologies*,2101058	6.8	3
3	Numerical solution of additive manufacturing problems using a two-level method. *International Journal for Numerical Methods in Engineering*,	2.4	3
2	A continuous model for the simulation of manufacturing swarm robotics. *Computational Mechanics*,1	4	
1	A coupled multiphase Lagrangian-Eulerian fluid-dynamics framework for numerical simulation of Laser Metal Deposition process. *International Journal of Advanced Manufacturing Technology*,1	3.2	