Alessandro Reali

List of Publications by Citations

155 papers	7,539 citations	42 h-index	84 g-index
165 ext. papers	8,684 ext. citations	4 avg, IF	6.38 L-index

#	Paper	IF	Citations
155	Isogeometric analysis of structural vibrations. *Computer Methods in Applied Mechanics and Engineering*, **2006**, 195, 5257-5296	5.7	728
154	Variational multiscale residual-based turbulence modeling for large eddy simulation of incompressible flows. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 197, 173-201	5.7	681
153	Studies of refinement and continuity in isogeometric structural analysis. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 196, 4160-4183	5.7	475
152	Efficient quadrature for NURBS-based isogeometric analysis. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 301-313	5.7	355
151	Duality and unified analysis of discrete approximations in structural dynamics and wave propagation: Comparison of p-method finite elements with k-method NURBS. *Computer Methods in Applied Mechanics and Engineering*, **2008**, 197, 4104-4124	5.7	285
150	ISOGEOMETRIC COLLOCATION METHODS. *Mathematical Models and Methods in Applied Sciences*, **2010**, 20, 2075-2107	3.5	257
149	Isogeometric collocation: Cost comparison with Galerkin methods and extension to adaptive hierarchical NURBS discretizations. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 267, 170-232	5.7	212
148	A three-dimensional model describing stress-induced solid phase transformation with permanent inelasticity. *International Journal of Plasticity*, **2007**, 23, 207-226	7.6	186
147	A 3-D phenomenological constitutive model for shape memory alloys under multiaxial loadings. *International Journal of Plasticity*, **2010**, 26, 976-991	7.6	183
146	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
145	Isogeometric Kirchhoff–Love shell formulations for general hyperelastic materials. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 291, 280-303	5.7	167
144	Dynamic and fluid-structure interaction simulations of bioprosthetic heart valves using parametric design with T-splines and Fung-type material models. *Computational Mechanics*, **2015**, 55, 1211-1225	4	158
143	GeoPDEs: A research tool for Isogeometric Analysis of PDEs. *Advances in Engineering Software*, **2011**, 42, 1020-1034	3.6	156
142	Finite element and NURBS approximations of eigenvalue, boundary-value, and initial-value problems. *Computer Methods in Applied Mechanics and Engineering*, **2014**, 272, 290-320	5.7	147
141	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
140	Isogeometric collocation for elastostatics and explicit dynamics. *Computer Methods in Applied Mechanics and Engineering*, **2012**, 249-252, 2-14	5.7	141
139	Avoiding shear locking for the Timoshenko beam problem via isogeometric collocation methods. *Computer Methods in Applied Mechanics and Engineering*, **2012**, 241-244, 38-51	5.7	103

138	Locking-free isogeometric collocation methods for spatial Timoshenko rods. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 263, 113-126	5.7	97
137	Phase-field description of brittle fracture in plates and shells. *Computer Methods in Applied Mechanics and Engineering*, **2016**, 312, 374-394	5.7	88
136	An isogeometric collocation approach for Bernoulli–Euler beams and Kirchhoff plates. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 284, 623-636	5.7	84
135	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
134	Single-variable formulations and isogeometric discretizations for shear deformable beams. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 284, 988-1004	5.7	77
133	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
132	Isogeometric collocation: Neumann boundary conditions and contact. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 284, 21-54	5.7	74
131	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
130	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
129	Patient-specific isogeometric structural analysis of aortic valve closure. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 284, 508-520	5.7	72
128	Accurate, efficient, and (iso)geometrically flexible collocation methods for phase-field models. *Journal of Computational Physics*, **2014**, 262, 153-171	4.1	67
127	An Integrated Design, Material, and Fabrication Platform for Engineering Biomechanically and Biologically Functional Soft Tissues. *ACS Applied Materials & Interfaces*, **2017**, 9, 29430-29437	9.5	66
126	Isogeometric analysis for sixth-order boundary value problems of gradient-elastic Kirchhoff plates. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 316, 328-348	5.7	63
125	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
124	Isogeometric collocation methods for the Reissner–Mindlin plate problem. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 284, 489-507	5.7	56
123	Statistical finite element analysis of the buckling behavior of honeycomb structures. *Composite Structures*, **2013**, 105, 240-255	5.3	56
122	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
121	A locking-free model for Reissner–Mindlin plates: Analysis and isogeometric implementation via NURBS and triangular NURPS. *Mathematical Models and Methods in Applied Sciences*, **2015**, 25, 1519-1551	3.5	54

120	On the Assumed Natural Strain method to alleviate locking in solid-shell NURBS-based finite elements. *Computational Mechanics*, **2014**, 53, 1341-1353	4	51
119	AN ISO GEOMETRIC ANALYSIS APPROACH FOR THE STUDY OF STRUCTURAL VIBRATIONS. *Journal of Earthquake Engineering*, **2006**, 10, 1-30	1.8	49
118	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
117	Patient-specific aortic endografting simulation: from diagnosis to prediction. *Computers in Biology and Medicine*, **2013**, 43, 386-94	7	46
116	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
115	Approximation of incompressible large deformation elastic problems: some unresolved issues. *Computational Mechanics*, **2013**, 52, 1153-1167	4	45
114	Computer simulations suggest that prostate enlargement due to benign prostatic hyperplasia mechanically impedes prostate cancer growth. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 1152-1161	11.5	45
113	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
112	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
111	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
110	How geometry and anisotropy affect residual strain in host-inclusion systems: Coupling experimental and numerical approaches. *American Mineralogist*, **2018**, 103, 2032-2035	2.9	38
109	Explicit higher-order accurate isogeometric collocation methods for structural dynamics. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 338, 208-240	5.7	37
108	Isogeometric collocation using analysis-suitable T-splines of arbitrary degree. *Computer Methods in Applied Mechanics and Engineering*, **2016**, 301, 164-186	5.7	37
107	A unified multiscale vision of behavioral crowds. *Mathematical Models and Methods in Applied Sciences*, **2020**, 30, 1-22	3.5	36
106	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
105	Arbitrary-degree T-splines for isogeometric analysis of fully nonlinear Kirchhoff–Love shells. *CAD Computer Aided Design*, **2017**, 82, 140-153	2.9	33
104	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
103	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

102	Parameter-free, weak imposition of Dirichlet boundary conditions and coupling of trimmed and non-conforming patches. *International Journal for Numerical Methods in Engineering*, **2015**, 101, 670-699	2.4	31
101	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
100	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
99	Isogeometric collocation methods with generalized B-splines. *Computers and Mathematics With Applications*, **2015**, 70, 1659-1675	2.7	29
98	Multi-level B□zier extraction for hierarchical local refinement of Isogeometric Analysis. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 328, 147-174	5.7	27
97	A simplified Kirchhoff□Love large deformation model for elastic shells and its effective isogeometric formulation. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 354, 369-396	5.7	26
96	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
95	Suitably graded THB-spline refinement and coarsening: Towards an adaptive isogeometric analysis of additive manufacturing processes. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 348, 660-679	5.7	26
94	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
93	Non-prismatic Timoshenko-like beam model: Numerical solution via isogeometric collocation. *Computers and Mathematics With Applications*, **2017**, 74, 1531-1541	2.7	24
92	A natural framework for isogeometric fluid□structure interaction based on BEM□shell coupling. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 316, 522-546	5.7	23
91	Mixed Isogeometric Finite Cell Methods for the Stokes problem. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 316, 400-423	5.7	22
90	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
89	A cost-effective isogeometric approach for composite plates based on a stress recovery procedure. *Composites Part B: Engineering*, **2018**, 138, 12-18	10	21
88	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
87	On the application of curve reparameterization in isogeometric vibration analysis of free-from curved beams. *Computers and Structures*, **2018**, 209, 117-129	4.5	19
86	A three-dimensional phenomenological model for Magnetic Shape Memory Alloys. *GAMM Mitteilungen*, **2011**, 34, 90-96	1.8	18
85	HIGAMod: A Hierarchical IsoGeometric Approach for MODel reduction in curved pipes. *Computers and Fluids*, **2017**, 142, 21-29	2.8	17

84	Graded-material design based on phase-field and topology optimization. *Computational Mechanics*, **2019**, 64, 1589-1600	4	17
83	Innovative and efficient stent flexibility simulations based on isogeometric analysis. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 295, 347-361	5.7	17
82	Patient-specific analysis of post-operative aortic hemodynamics: a focus on thoracic endovascular repair (TEVAR). *Computational Mechanics*, **2014**, 54, 943-953	4	17
81	Patient-specific finite element analysis of popliteal stenting. *Meccanica*, **2017**, 52, 633-644	2.1	15
80	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
79	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
78	On a fictitious domain method with distributed Lagrange multiplier for interface problems. *Applied Numerical Mathematics*, **2015**, 95, 36-50	2.5	14
77	A displacement-free formulation for the Timoshenko beam problem and a corresponding isogeometric collocation approach. *Meccanica*, **2018**, 53, 1403-1413	2.1	14
76	Novel finite particle formulations based on projection methodologies. *International Journal for Numerical Methods in Fluids*, **2011**, 65, 1376-1388	1.9	14
75	Symbol-Based Analysis of Finite Element and Isogeometric B-Spline Discretizations of Eigenvalue Problems: Exposition and Review. *Archives of Computational Methods in Engineering*, **2019**, 26, 1639-1690	7.8	14
74	Skeleton-stabilized immersogeometric analysis for incompressible viscous flow problems. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 344, 421-450	5.7	14
73	A hybrid isogeometric approach on multi-patches with applications to Kirchhoff plates and eigenvalue problems. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 348, 396-408	5.7	13
72	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
71	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
70	An immersed-boundary/isogeometric method for fluid–structure interaction involving thin shells. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 364, 112977	5.7	13
69	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
68	A robust penalty coupling of non-matching isogeometric Kirchhoff–Love shell patches in large deformations. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 371, 113289	5.7	12
67	Fast and accurate elastic analysis of laminated composite plates via isogeometric collocation and an equilibrium-based stress recovery approach. *Composite Structures*, **2019**, 225, 111026	5.3	11

66	Phase-field modeling for polarization evolution in ferroelectric materials via an isogeometric collocation method. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 351, 789-807	5.7	11
65	A novel computational framework to predict patient-specific hemodynamics after TEVAR: Integration of structural and fluid-dynamics analysis by image elaboration. *Computers and Fluids*, **2019**, 179, 806-819	2.8	11
64	Carotid artery hemodynamics before and after stenting: A patient specific CFD study. *Computers and Fluids*, **2016**, 141, 62-74	2.8	11
63	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
62	A study on unfitted 1D finite element methods. *Computers and Mathematics With Applications*, **2014** , 68, 2080-2102	2.7	10
61	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
60	Mechanistic modelling of prostate-specific antigen dynamics shows potential for personalized prediction of radiation therapy outcome. *Journal of the Royal Society Interface*, **2019**, 16, 20190195	4.1	9
59	Hierarchically refined isogeometric analysis of trimmed shells. *Computational Mechanics*, **2020**, 66, 431-447	4	9
58	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
57	Error-estimate-based adaptive integration for immersed isogeometric analysis. *Computers and Mathematics With Applications*, **2020**, 80, 2481-2516	2.7	8
56	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
55	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
54	Mathematical analysis and simulation study of a phase-field model of prostate cancer growth with chemotherapy and antiangiogenic therapy effects. *Mathematical Models and Methods in Applied Sciences*, **2020**, 30, 1253-1295	3.5	8
53	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
52	A simple and effective method based on strain projections to alleviate locking in isogeometric solid shells. *Computational Mechanics*, **2020**, 65, 1621-1631	4	7
51	Effects of parameterization and knot placement techniques on primal and mixed isogeometric collocation formulations of spatial shear-deformable beams with varying curvature and torsion. *Computers and Mathematics With Applications*, **2020**, 80, 2563-2585	2.7	7
50	A stress recovery procedure for laminated composite plates based on strong-form equilibrium enforced via the RBF Kansa method. *Composite Structures*, **2020**, 244, 112292	5.3	7
49	Mixed isogeometric collocation methods for the simulation of poromechanics problems in 1D. *Meccanica*, **2018**, 53, 1441-1454	2.1	7

48	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
47	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
46	A numerical application of the Eshelby theory for geobarometry of non-ideal host-inclusion systems. *Meccanica*, **2020**, 55, 751-764	2.1	6
45	A numerical simulation study of the dual role of 5α-reductase inhibitors on tumor growth in prostates enlarged by benign prostatic hyperplasia via stress relaxation and apoptosis upregulation. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 362, 112843	5.7	6
44	An Introduction to Isogeometric Collocation Methods. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2015**, 173-204	0.6	6
43	Studies on knot placement techniques for the geometry construction and the accurate simulation of isogeometric spatial curved beams. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 360, 112705	5.7	6
42	Multi-level hp-adaptivity and explicit error estimation. *Advanced Modeling and Simulation in Engineering Sciences*, **2016**, 3,	2.7	6
41	Gradient structures for the thermomechanics of shape-memory materials. *Computer Methods in Applied Mechanics and Engineering*, **2016**, 299, 440-469	5.7	6
40	Accurate equilibrium-based interlaminar stress recovery for isogeometric laminated composite Kirchhoff plates. *Composite Structures*, **2021**, 256, 112976	5.3	6
39	Efficient extraction of hierarchical B-Splines for local refinement and coarsening of Isogeometric Analysis. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 367, 113131	5.7	5
38	Geometrically nonlinear vibration of anisotropic composite beams using isogeometric third-order shear deformation theory. *Composite Structures*, **2020**, 252, 112627	5.3	5
37	Mixed stress-displacement isogeometric collocation for nearly incompressible elasticity and elastoplasticity. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 369, 113112	5.7	5
36	Shape Memory Alloys: Material Modeling and Device Finite Element Simulations. *Materials Science Forum*, **2008**, 583, 257-275	0.4	5
35	Additive manufacturing applications of phase-field-based topology optimization using adaptive isogeometric analysis. *GAMM Mitteilungen*, **2021**, 44, e202100013	1.8	5
34	Modified Finite Particle Methods for Stokes problems. *Computational Particle Mechanics*, **2018**, 5, 141-160	3	4
33	MODIFIED FINITE PARTICLE METHOD: APPLICATIONS TO ELASTICITY AND PLASTICITY PROBLEMS. *International Journal of Computational Methods*, **2014**, 11, 1350050	1.1	4
32	Optimal control of cytotoxic and antiangiogenic therapies on prostate cancer growth. *Mathematical Models and Methods in Applied Sciences*, **2021**, 31, 1419-1468	3.5	4
31	Isogeometric collocation mixed methods for rods. *Discrete and Continuous Dynamical Systems - Series S*, **2016**, 9, 33-42	2.8	3

30	Experimental and Numerical Evaluation of Mechanical Properties of 3D-Printed Stainless Steel 316L Lattice Structures. *Journal of Materials Engineering and Performance*, **2021**, 30, 5247-5251	1.6	3
29	Assessing the Spatio-temporal Spread of COVID-19 via Compartmental Models with Diffusion in Italy, USA, and Brazil. *Archives of Computational Methods in Engineering*, **2021**, 28, 1-19	7.8	3
28	A curvilinear isogeometric framework for the electromechanical activation of thin muscular tissues. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 382, 113877	5.7	3
27	Dynamic mode decomposition in adaptive mesh refinement and coarsening simulations. *Engineering With Computers*, **2021**, 1-28	4.5	3
26	Efficient equilibrium-based stress recovery for isogeometric laminated curved structures. *Composite Structures*, **2021**, 272, 113975	5.3	3
25	An immersed boundary approach for residual stress evaluation in selective laser melting processes. *Additive Manufacturing*, **2021**, 46, 102077	6.1	3
24	Removal of spurious outlier frequencies and modes from isogeometric discretizations of second- and fourth-order problems in one, two, and three dimensions. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 387, 114115	5.7	3
23	Assessment of a Black-Box Approach for a Parallel Finite Elements Solver in Computational Hemodynamics **2015**,		2
22	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
21	Isogeometric Collocation: Cost Comparison with Galerkin Methods and Extension to Adaptive Hierarchical NURBS Discretizations. *Proceedings in Applied Mathematics and Mechanics*, **2013**, 13, 107-108	0.2	2
20	Towards a mathematical theory of behavioral human crowds. *Mathematical Models and Methods in Applied Sciences*,1-38	3.5	2
19	A Least Square Residual version of the Modified Finite Particle Method to solve saddle point problems: Application to stationary Stokes and Navier-Stokes equations. *International Journal of Mechanical Sciences*, **2019**, 150, 176-187	5.5	2
18	Mixed variational formulations for structural topology optimization based on the phase-field approach. *Structural and Multidisciplinary Optimization*, **2021**, 64, 2627	3.6	2
17	Topology-preserving scan-based immersed isogeometric analysis. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 392, 114648	5.7	1
16	Stability of Some Finite Element Methods for Finite Elasticity Problems. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2009**, 179-206	0.6	1
15	Shape Memory Alloys: Material Modeling and Device Finite Element Simulations. *IUTAM Symposium on Cellular, Molecular and Tissue Mechanics*, **2011**, 33-42	0.3	1
14	A rigorous and efficient explicit algorithm for irreversibility enforcement in phase-field finite element modeling of brittle crack propagation. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 387, 114137	5.7	1
13	Finite element analysis of coupled phase-field and thermoelasticity equations at large strains for martensitic phase transformations based on implicit and explicit time discretization schemes. *Mechanics of Advanced Materials and Structures*,1-17	1.8	1

12	Coupled and uncoupled dynamic mode decomposition in multi-compartmental systems with applications to epidemiological and additive manufacturing problems. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 391, 114600	5.7	0
11	Explicit high-order generalized-methods for isogeometric analysis of structural dynamics. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 389, 114344	5.7	0
10	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
9	An accurate strategy for computing reaction forces and fluxes on trimmed locally refined meshes. *Journal of Mechanics*, **2022**, 38, 60-76	1	0
8	An efficient isogeometric collocation approach to cardiac electrophysiology. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 393, 114782	5.7	0
7	Preface to: Novel computational approaches to old and new problems in mechanics. *Meccanica*, **2018**, 53, 1185-1186	2.1	
6	Response to Comments by Dewey H. Hodges. *International Journal of Solids and Structures*, **2009**, 46, 1597	3.1	
5	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	
4	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	
3	Aortic Endovascular Surgery. *SEMA SIMAI Springer Series*, **2018**, 167-184	0.2	
2	The Finite Cell Method for Simulation of Additive Manufacturing. *Lecture Notes in Applied and Computational Mechanics*, **2022**, 355-375	0.3	
1	Additive Manufacturing: Challenges and Opportunities for Structural Mechanics **2022**, 437-451		