

# Alessandro Reali

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/2700935/alessandro-reali-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Coupled and uncoupled dynamic mode decomposition in multi-compartmental systems with applications to epidemiological and additive manufacturing problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2022</b> , 391, 114600	5.7	0
154	Topology-preserving scan-based immersed isogeometric analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2022</b> , 392, 114648	5.7	1
153	Explicit high-order generalized- $\Gamma$ methods for isogeometric analysis of structural dynamics. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2022</b> , 389, 114344	5.7	0
152	Cost-effective and accurate interlaminar stress modeling of composite Kirchhoff plates via immersed isogeometric analysis and equilibrium. <i>Journal of Mechanics</i> , <b>2022</b> , 38, 32-43	1	0
151	An accurate strategy for computing reaction forces and fluxes on trimmed locally refined meshes. <i>Journal of Mechanics</i> , <b>2022</b> , 38, 60-76	1	0
150	An efficient isogeometric collocation approach to cardiac electrophysiology. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2022</b> , 393, 114782	5.7	0
149	The Finite Cell Method for Simulation of Additive Manufacturing. <i>Lecture Notes in Applied and Computational Mechanics</i> , <b>2022</b> , 355-375	0.3	
148	Additive Manufacturing: Challenges and Opportunities for Structural Mechanics <b>2022</b> , 437-451		
147	Experimental and Numerical Evaluation of Mechanical Properties of 3D-Printed Stainless Steel 316L Lattice Structures. <i>Journal of Materials Engineering and Performance</i> , <b>2021</b> , 30, 5247-5251	1.6	3
146	Optimal control of cytotoxic and antiangiogenic therapies on prostate cancer growth. <i>Mathematical Models and Methods in Applied Sciences</i> , <b>2021</b> , 31, 1419-1468	3.5	4
145	Assessing the Spatio-temporal Spread of COVID-19 via Compartmental Models with Diffusion in Italy, USA, and Brazil. <i>Archives of Computational Methods in Engineering</i> , <b>2021</b> , 28, 1-19	7.8	3
144	Simulating the spread of COVID-19 a spatially-resolved susceptible-exposed-infected-recovered-deceased (SEIRD) model with heterogeneous diffusion. <i>Applied Mathematics Letters</i> , <b>2021</b> , 111, 106617	3.5	74
143	Accurate equilibrium-based interlaminar stress recovery for isogeometric laminated composite Kirchhoff plates. <i>Composite Structures</i> , <b>2021</b> , 256, 112976	5.3	6
142	Mixed variational formulations for structural topology optimization based on the phase-field approach. <i>Structural and Multidisciplinary Optimization</i> , <b>2021</b> , 64, 2627	3.6	2
141	A curvilinear isogeometric framework for the electromechanical activation of thin muscular tissues. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2021</b> , 382, 113877	5.7	3
140	Dynamic mode decomposition in adaptive mesh refinement and coarsening simulations. <i>Engineering With Computers</i> , <b>2021</b> , 1-28	4.5	3
139	Additive manufacturing applications of phase-field-based topology optimization using adaptive isogeometric analysis. <i>GAMM Mitteilungen</i> , <b>2021</b> , 44, e202100013	1.8	5

138	Efficient equilibrium-based stress recovery for isogeometric laminated curved structures. <i>Composite Structures</i> , <b>2021</b> , 272, 113975	5.3	3
137	An immersed boundary approach for residual stress evaluation in selective laser melting processes. <i>Additive Manufacturing</i> , <b>2021</b> , 46, 102077	6.1	3
136	Removal of spurious outlier frequencies and modes from isogeometric discretizations of second- and fourth-order problems in one, two, and three dimensions. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2021</b> , 387, 114115	5.7	3
135	A rigorous and efficient explicit algorithm for irreversibility enforcement in phase-field finite element modeling of brittle crack propagation. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2021</b> , 387, 114137	5.7	1
134	Numerical Evaluation of Advanced Laser Control Strategies Influence on Residual Stresses for Laser Powder Bed Fusion Systems. <i>Integrating Materials and Manufacturing Innovation</i> , <b>2020</b> , 9, 435-445	2.9	7
133	Efficient extraction of hierarchical B-Splines for local refinement and coarsening of Isogeometric Analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2020</b> , 367, 113131	5.7	5
132	Hierarchically refined isogeometric analysis of trimmed shells. <i>Computational Mechanics</i> , <b>2020</b> , 66, 431-447	4.7	9
131	Error-estimate-based adaptive integration for immersed isogeometric analysis. <i>Computers and Mathematics With Applications</i> , <b>2020</b> , 80, 2481-2516	2.7	8
130	A phase-field-based graded-material topology optimization with stress constraint. <i>Mathematical Models and Methods in Applied Sciences</i> , <b>2020</b> , 30, 1461-1483	3.5	13
129	A simple and effective method based on strain projections to alleviate locking in isogeometric solid shells. <i>Computational Mechanics</i> , <b>2020</b> , 65, 1621-1631	4	7
128	Effects of parameterization and knot placement techniques on primal and mixed isogeometric collocation formulations of spatial shear-deformable beams with varying curvature and torsion. <i>Computers and Mathematics With Applications</i> , <b>2020</b> , 80, 2563-2585	2.7	7
127	Geometrically nonlinear vibration of anisotropic composite beams using isogeometric third-order shear deformation theory. <i>Composite Structures</i> , <b>2020</b> , 252, 112627	5.3	5
126	Mixed stress-displacement isogeometric collocation for nearly incompressible elasticity and elastoplasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2020</b> , 369, 113112	5.7	5
125	A numerical application of the Eshelby theory for geobarometry of non-ideal host-inclusion systems. <i>Meccanica</i> , <b>2020</b> , 55, 751-764	2.1	6
124	A numerical simulation study of the dual role of 5 $\alpha$ -reductase inhibitors on tumor growth in prostates enlarged by benign prostatic hyperplasia via stress relaxation and apoptosis upregulation. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2020</b> , 362, 112843	5.7	6
123	A stress recovery procedure for laminated composite plates based on strong-form equilibrium enforced via the RBF Kansa method. <i>Composite Structures</i> , <b>2020</b> , 244, 112292	5.3	7
122	Studies on knot placement techniques for the geometry construction and the accurate simulation of isogeometric spatial curved beams. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2020</b> , 360, 112705	5.7	6
121	A unified multiscale vision of behavioral crowds. <i>Mathematical Models and Methods in Applied Sciences</i> , <b>2020</b> , 30, 1-22	3.5	36

120	Modeling and experimental validation of an immersed thermo-mechanical part-scale analysis for laser powder bed fusion processes. <i>Additive Manufacturing</i> , <b>2020</b> , 36, 101498	6.1	8
119	Mathematical analysis and simulation study of a phase-field model of prostate cancer growth with chemotherapy and antiangiogenic therapy effects. <i>Mathematical Models and Methods in Applied Sciences</i> , <b>2020</b> , 30, 1253-1295	3.5	8
118	A robust penalty coupling of non-matching isogeometric KirchhoffLove shell patches in large deformations. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2020</b> , 371, 113289	5.7	12
117	Diffusion-reaction compartmental models formulated in a continuum mechanics framework: application to COVID-19, mathematical analysis, and numerical study. <i>Computational Mechanics</i> , <b>2020</b> , 66, 1-22	4	32
116	An immersed-boundary/isogeometric method for fluidstructure interaction involving thin shells. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2020</b> , 364, 112977	5.7	13
115	Mechanistic modelling of prostate-specific antigen dynamics shows potential for personalized prediction of radiation therapy outcome. <i>Journal of the Royal Society Interface</i> , <b>2019</b> , 16, 20190195	4.1	9
114	A simplified KirchhoffLove large deformation model for elastic shells and its effective isogeometric formulation. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2019</b> , 354, 369-396	5.7	26
113	Fast and accurate elastic analysis of laminated composite plates via isogeometric collocation and an equilibrium-based stress recovery approach. <i>Composite Structures</i> , <b>2019</b> , 225, 111026	5.3	11
112	Graded-material design based on phase-field and topology optimization. <i>Computational Mechanics</i> , <b>2019</b> , 64, 1589-1600	4	17
111	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> , <b>2019</b> , 8, 167-177	2.9	20
110	Phase-field modeling for polarization evolution in ferroelectric materials via an isogeometric collocation method. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2019</b> , 351, 789-807	5.7	11
109	A hybrid isogeometric approach on multi-patches with applications to Kirchhoff plates and eigenvalue problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2019</b> , 348, 396-408	5.7	13
108	A novel computational framework to predict patient-specific hemodynamics after TEVAR: Integration of structural and fluid-dynamics analysis by image elaboration. <i>Computers and Fluids</i> , <b>2019</b> , 179, 806-819	2.8	11
107	Modeling the non-trivial behavior of anisotropic beams: A simple Timoshenko beam with enhanced stress recovery and constitutive relations. <i>Composite Structures</i> , <b>2019</b> , 229, 111265	5.3	7
106	Suitably graded THB-spline refinement and coarsening: Towards an adaptive isogeometric analysis of additive manufacturing processes. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2019</b> , 348, 660-679	5.7	26
105	Computer simulations suggest that prostate enlargement due to benign prostatic hyperplasia mechanically impedes prostate cancer growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 1152-1161	11.5	45
104	Symbol-Based Analysis of Finite Element and Isogeometric B-Spline Discretizations of Eigenvalue Problems: Exposition and Review. <i>Archives of Computational Methods in Engineering</i> , <b>2019</b> , 26, 1639-1690	7.8	14
103	A Least Square Residual version of the Modified Finite Particle Method to solve saddle point problems: Application to stationary Stokes and NavierStokes equations. <i>International Journal of Mechanical Sciences</i> , <b>2019</b> , 150, 176-187	5.5	2

102	Skeleton-stabilized immersogeometric analysis for incompressible viscous flow problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2019</b> , 344, 421-450	5.7	14
101	Preface to: Novel computational approaches to old and new problems in mechanics. <i>Meccanica</i> , <b>2018</b> , 53, 1185-1186	2.1	
100	Explicit higher-order accurate isogeometric collocation methods for structural dynamics. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2018</b> , 338, 208-240	5.7	37
99	Skeleton-stabilized IsoGeometric Analysis: High-regularity interior-penalty methods for incompressible viscous flow problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2018</b> , 337, 324-351	5.7	8
98	Mixed isogeometric collocation methods for the simulation of poromechanics problems in 1D. <i>Meccanica</i> , <b>2018</b> , 53, 1441-1454	2.1	7
97	Modified Finite Particle Methods for Stokes problems. <i>Computational Particle Mechanics</i> , <b>2018</b> , 5, 141-160		4
96	A displacement-free formulation for the Timoshenko beam problem and a corresponding isogeometric collocation approach. <i>Meccanica</i> , <b>2018</b> , 53, 1403-1413	2.1	14
95	Multi-level B $\ddot{u}$ ier extraction for hierarchical local refinement of Isogeometric Analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2018</b> , 328, 147-174	5.7	27
94	A cost-effective isogeometric approach for composite plates based on a stress recovery procedure. <i>Composites Part B: Engineering</i> , <b>2018</b> , 138, 12-18	10	21
93	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> , <b>2018</b> , 34, e2938	2.6	56
92	How geometry and anisotropy affect residual strain in host-inclusion systems: Coupling experimental and numerical approaches. <i>American Mineralogist</i> , <b>2018</b> , 103, 2032-2035	2.9	38
91	Aortic Endovascular Surgery. <i>SEMA SIMAI Springer Series</i> , <b>2018</b> , 167-184	0.2	
90	On the application of curve reparameterization in isogeometric vibration analysis of free-from curved beams. <i>Computers and Structures</i> , <b>2018</b> , 209, 117-129	4.5	19
89	Patient-specific finite element analysis of popliteal stenting. <i>Meccanica</i> , <b>2017</b> , 52, 633-644	2.1	15
88	HIGAMod: A Hierarchical IsoGeometric Approach for MODEL reduction in curved pipes. <i>Computers and Fluids</i> , <b>2017</b> , 142, 21-29	2.8	17
87	Non-prismatic Timoshenko-like beam model: Numerical solution via isogeometric collocation. <i>Computers and Mathematics With Applications</i> , <b>2017</b> , 74, 1531-1541	2.7	24
86	An Integrated Design, Material, and Fabrication Platform for Engineering Biomechanically and Biologically Functional Soft Tissues. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 29430-29437	9.5	66
85	Isogeometric analysis for sixth-order boundary value problems of gradient-elastic Kirchhoff plates. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2017</b> , 316, 328-348	5.7	63

84	Mixed Isogeometric Finite Cell Methods for the Stokes problem. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2017</b> , 316, 400-423	5.7	22
83	A natural framework for isogeometric fluid-structure interaction based on BEM-shell coupling. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2017</b> , 316, 522-546	5.7	23
82	Arbitrary-degree T-splines for isogeometric analysis of fully nonlinear Kirchhoff-Love shells. <i>CAD Computer Aided Design</i> , <b>2017</b> , 82, 140-153	2.9	33
81	Phase-field description of brittle fracture in plates and shells. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2016</b> , 312, 374-394	5.7	88
80	Isogeometric collocation using analysis-suitable T-splines of arbitrary degree. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2016</b> , 301, 164-186	5.7	37
79	Prediction of patient-specific post-operative outcomes of TAVI procedure: The impact of the positioning strategy on valve performance. <i>Journal of Biomechanics</i> , <b>2016</b> , 49, 2513-9	2.9	48
78	Isogeometric collocation mixed methods for rods. <i>Discrete and Continuous Dynamical Systems - Series S</i> , <b>2016</b> , 9, 33-42	2.8	3
77	A locally anisotropic fluid-structure interaction remeshing strategy for thin structures with application to a hinged rigid leaflet. <i>International Journal for Numerical Methods in Engineering</i> , <b>2016</b> , 107, 155-180	2.4	7
76	Multi-level hp-adaptivity and explicit error estimation. <i>Advanced Modeling and Simulation in Engineering Sciences</i> , <b>2016</b> , 3,	2.7	6
75	On the Use of Anisotropic Triangles with Mixed Finite Elements: Application to an Immersed Approach for Incompressible Flow Problems. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , <b>2016</b> , 195-236	0.6	
74	Gradient structures for the thermomechanics of shape-memory materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2016</b> , 299, 440-469	5.7	6
73	Carotid artery hemodynamics before and after stenting: A patient specific CFD study. <i>Computers and Fluids</i> , <b>2016</b> , 141, 62-74	2.8	11
72	A patient-specific follow up study of the impact of thoracic endovascular repair (TEVAR) on aortic anatomy and on post-operative hemodynamics.. <i>Computers and Fluids</i> , <b>2016</b> , 141, 54-61	2.8	13
71	Numerical Studies on the Stability of Mixed Finite Elements Over Anisotropic Meshes Arising from Immersed Boundary Stokes Problems. <i>Modeling and Simulation in Science, Engineering and Technology</i> , <b>2016</b> , 319-330	0.8	
70	A phenomenological model for the magneto-mechanical response of single-crystal magnetic shape memory alloys. <i>European Journal of Mechanics, A/Solids</i> , <b>2015</b> , 52, 1-11	3.7	12
69	Innovative and efficient stent flexibility simulations based on isogeometric analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2015</b> , 295, 347-361	5.7	17
68	On a fictitious domain method with distributed Lagrange multiplier for interface problems. <i>Applied Numerical Mathematics</i> , <b>2015</b> , 95, 36-50	2.5	14
67	An Immersed-finite element method based on a locally anisotropic remeshing for the incompressible Stokes problem. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2015</b> , 294, 428-448	5.7	8

66	Dynamic and fluid-structure interaction simulations of bioprosthetic heart valves using parametric design with T-splines and Fung-type material models. <i>Computational Mechanics</i> , <b>2015</b> , 55, 1211-1225	4	158
65	Isogeometric collocation methods with generalized B-splines. <i>Computers and Mathematics With Applications</i> , <b>2015</b> , 70, 1659-1675	2.7	29
64	A locking-free model for Reissner-Mindlin plates: Analysis and isogeometric implementation via NURBS and triangular NURPS. <i>Mathematical Models and Methods in Applied Sciences</i> , <b>2015</b> , 25, 1519-1551	3.5	54
63	Isogeometric Kirchhoff-Love shell formulations for general hyperelastic materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2015</b> , 291, 280-303	5.7	167
62	Isogeometric collocation methods for the Reissner-Mindlin plate problem. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2015</b> , 284, 489-507	5.7	56
61	An isogeometric collocation approach for Bernoulli-Euler beams and Kirchhoff plates. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2015</b> , 284, 623-636	5.7	84
60	Patient-specific isogeometric structural analysis of aortic valve closure. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2015</b> , 284, 508-520	5.7	72
59	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> , <b>2015</b> , 284, 861-880	5.7	45
58	Isogeometric collocation: Neumann boundary conditions and contact. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2015</b> , 284, 21-54	5.7	74
57	Assessment of a Black-Box Approach for a Parallel Finite Elements Solver in Computational Hemodynamics <b>2015</b> ,		2
56	Parameter-free, weak imposition of Dirichlet boundary conditions and coupling of trimmed and non-conforming patches. <i>International Journal for Numerical Methods in Engineering</i> , <b>2015</b> , 101, 670-699	2.4	31
55	An Efficient Finite Element Framework to Assess Flexibility Performances of SMA Self-Expandable Carotid Artery Stents. <i>Journal of Functional Biomaterials</i> , <b>2015</b> , 6, 585-97	4.8	2
54	An Introduction to Isogeometric Collocation Methods. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , <b>2015</b> , 173-204	0.6	6
53	Single-variable formulations and isogeometric discretizations for shear deformable beams. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2015</b> , 284, 988-1004	5.7	77
52	On the Assumed Natural Strain method to alleviate locking in solid-shell NURBS-based finite elements. <i>Computational Mechanics</i> , <b>2014</b> , 53, 1341-1353	4	51
51	Patient-specific analysis of post-operative aortic hemodynamics: a focus on thoracic endovascular repair (TEVAR). <i>Computational Mechanics</i> , <b>2014</b> , 54, 943-953	4	17
50	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> , <b>2014</b> , 17, 277-85	2.1	21
49	Simulation of transcatheter aortic valve implantation through patient-specific finite element analysis: two clinical cases. <i>Journal of Biomechanics</i> , <b>2014</b> , 47, 2547-55	2.9	73

48	Accurate, efficient, and (iso)geometrically flexible collocation methods for phase-field models. <i>Journal of Computational Physics</i> , <b>2014</b> , 262, 153-171	4.1	67
47	Finite element and NURBS approximations of eigenvalue, boundary-value, and initial-value problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2014</b> , 272, 290-320	5.7	147
46	A Modified Finite Particle Method: Multi-dimensional elasto-statics and dynamics. <i>International Journal for Numerical Methods in Engineering</i> , <b>2014</b> , 99, 1-25	2.4	10
45	Simulation of transcatheter aortic valve implantation: a patient-specific finite element approach. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , <b>2014</b> , 17, 1347-57	2.1	62
44	A study on unfitted 1D finite element methods. <i>Computers and Mathematics With Applications</i> , <b>2014</b> , 68, 2080-2102	2.7	10
43	Aortic hemodynamics after thoracic endovascular aortic repair, with particular attention to the bird-beak configuration. <i>Journal of Endovascular Therapy</i> , <b>2014</b> , 21, 791-802	2.5	26
42	MODIFIED FINITE PARTICLE METHOD: APPLICATIONS TO ELASTICITY AND PLASTICITY PROBLEMS. <i>International Journal of Computational Methods</i> , <b>2014</b> , 11, 1350050	1.1	4
41	Locking-free isogeometric collocation methods for spatial Timoshenko rods. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2013</b> , 263, 113-126	5.7	97
40	Approximation of incompressible large deformation elastic problems: some unresolved issues. <i>Computational Mechanics</i> , <b>2013</b> , 52, 1153-1167	4	45
39	Statistical finite element analysis of the buckling behavior of honeycomb structures. <i>Composite Structures</i> , <b>2013</b> , 105, 240-255	5.3	56
38	Patient-specific aortic endografting simulation: from diagnosis to prediction. <i>Computers in Biology and Medicine</i> , <b>2013</b> , 43, 386-94	7	46
37	Isogeometric collocation: Cost comparison with Galerkin methods and extension to adaptive hierarchical NURBS discretizations. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2013</b> , 267, 170-232	5.7	212
36	Isogeometric Collocation: Cost Comparison with Galerkin Methods and Extension to Adaptive Hierarchical NURBS Discretizations. <i>Proceedings in Applied Mathematics and Mechanics</i> , <b>2013</b> , 13, 107-108 <sup>0.2</sup>		2
35	Patient-specific finite element analysis of carotid artery stenting: a focus on vessel modeling. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2013</b> , 29, 645-64	2.6	32
34	Isogeometric collocation for elastostatics and explicit dynamics. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2012</b> , 249-252, 2-14	5.7	141
33	Evaluation of carotid stent scaffolding through patient-specific finite element analysis. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2012</b> , 28, 1043-55	2.6	15
32	A simple algorithm for obtaining nearly optimal quadrature rules for NURBS-based isogeometric analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2012</b> , 249-252, 15-27	5.7	146
31	Avoiding shear locking for the Timoshenko beam problem via isogeometric collocation methods. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2012</b> , 241-244, 38-51	5.7	103



30	GeoPDEs: A research tool for Isogeometric Analysis of PDEs. <i>Advances in Engineering Software</i> , <b>2011</b> , 42, 1020-1034	3.6	156
29	Theoretical and Experimental Study of the Shape Memory Effect of Beams in Bending Conditions. <i>Journal of Materials Engineering and Performance</i> , <b>2011</b> , 20, 712-718	1.6	15
28	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> , <b>2011</b> , 85, 107-134	2.4	25
27	Novel finite particle formulations based on projection methodologies. <i>International Journal for Numerical Methods in Fluids</i> , <b>2011</b> , 65, 1376-1388	1.9	14
26	A three-dimensional phenomenological model for Magnetic Shape Memory Alloys. <i>GAMM Mitteilungen</i> , <b>2011</b> , 34, 90-96	1.8	18
25	An improved, fully symmetric, finite-strain phenomenological constitutive model for shape memory alloys. <i>Finite Elements in Analysis and Design</i> , <b>2011</b> , 47, 166-174	2.2	31
24	Shape Memory Alloys: Material Modeling and Device Finite Element Simulations. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2011</b> , 33-42	0.3	1
23	ISOGEOMETRIC COLLOCATION METHODS. <i>Mathematical Models and Methods in Applied Sciences</i> , <b>2010</b> , 20, 2075-2107	3.5	257
22	A 3D finite strain phenomenological constitutive model for shape memory alloys considering martensite reorientation. <i>Continuum Mechanics and Thermodynamics</i> , <b>2010</b> , 22, 345-362	3.5	30
21	A 3-D phenomenological constitutive model for shape memory alloys under multiaxial loadings. <i>International Journal of Plasticity</i> , <b>2010</b> , 26, 976-991	7.6	183
20	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> , <b>2010</b> , 199, 314-323	5.7	79
19	Efficient quadrature for NURBS-based isogeometric analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2010</b> , 199, 301-313	5.7	355
18	SMA Numerical Modeling Versus Experimental Results: Parameter Identification and Model Prediction Capabilities. <i>Journal of Materials Engineering and Performance</i> , <b>2009</b> , 18, 649-654	1.6	34
17	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> , <b>2009</b> , 198, 1631-1637	5.7	77
16	Response to Comments by Dewey H. Hodges. <i>International Journal of Solids and Structures</i> , <b>2009</b> , 46, 1597	3.1	
15	Stability of Some Finite Element Methods for Finite Elasticity Problems. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , <b>2009</b> , 179-206	0.6	1
14	Shape Memory Alloys: Material Modeling and Device Finite Element Simulations. <i>Materials Science Forum</i> , <b>2008</b> , 583, 257-275	0.4	5
13	Duality and unified analysis of discrete approximations in structural dynamics and wave propagation: Comparison of p-method finite elements with k-method NURBS. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2008</b> , 197, 4104-4124	5.7	285

12	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> , <b>2008</b> , 45, 4766-4781	3.1	39
11	Studies of refinement and continuity in isogeometric structural analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2007</b> , 196, 4160-4183	5.7	475
10	A fully locking-free isogeometric approach for plane linear elasticity problems: A stream function formulation. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2007</b> , 197, 160-172	5.7	178
9	Variational multiscale residual-based turbulence modeling for large eddy simulation of incompressible flows. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2007</b> , 197, 173-201	5.7	681
8	A three-dimensional model describing stress-induced solid phase transformation with permanent inelasticity. <i>International Journal of Plasticity</i> , <b>2007</b> , 23, 207-226	7.6	186
7	A Phenomenological One-Dimensional Model Describing Stress-Induced Solid Phase Transformation with Permanent Inelasticity. <i>Mechanics of Advanced Materials and Structures</i> , <b>2007</b> , 14, 43-55	1.8	10
6	AN ISO GEOMETRIC ANALYSIS APPROACH FOR THE STUDY OF STRUCTURAL VIBRATIONS. <i>Journal of Earthquake Engineering</i> , <b>2006</b> , 10, 1-30	1.8	49
5	Isogeometric analysis of structural vibrations. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2006</b> , 195, 5257-5296	5.7	728
4	A stability study of some mixed finite elements for large deformation elasticity problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2005</b> , 194, 1075-1092	5.7	41
3	An analysis of some mixed-enhanced finite element for plane linear elasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2005</b> , 194, 2947-2968	5.7	38
2	Towards a mathematical theory of behavioral human crowds. <i>Mathematical Models and Methods in Applied Sciences</i> , 1-38	3.5	2
1	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. <i>Mechanics of Advanced Materials and Structures</i> , 1-17	1.8	1