Victor Calo

List of Publications by Year in descending order

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190 papers	8,038 citations	126907 33 h-index	51608 86 g-index
199 all docs	199 docs citations	199 times ranked	3379 citing authors

#	Article	IF	Citations
1	Variational multiscale residual-based turbulence modeling for large eddy simulation of incompressible flows. Computer Methods in Applied Mechanics and Engineering, 2007, 197, 173-201.	6.6	835
2	Isogeometric analysis using T-splines. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 229-263.	6.6	834
3	Isogeometric fluid-structure interaction: theory, algorithms, and computations. Computational Mechanics, 2008, 43, 3-37.	4.0	768
4	Isogeometric Fluidâ€“structure Interaction Analysis with Applications to Arterial Blood Flow. Computational Mechanics, 2006, 38, 310-322.	4.0	561
5	Isogeometric analysis of the Cahnâ€“Hilliard phase-field model. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 4333-4352.	6.6	514
6	and projection methods for nearly incompressible linear and non-linear elasticity and plasticity using higher-order NURBS elements. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 2732-2762.	6.6	297
7	Isogeometric variational multiscale modeling of wall-bounded turbulent flows with weakly enforced boundary conditions on unstretched meshes. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 780-790.	6.6	241
8	The role of continuity in residual-based variational multiscale modeling of turbulence. Computational Mechanics, 2007, 41, 371-378.	4.0	202
9	Weak Dirichlet boundary conditions for wall-bounded turbulent flows. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4853-4862.	6.6	200
10	Improving stability of stabilized and multiscale formulations in flow simulations at small time steps. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 828-840.	6.6	199
11	Isogeometric analysis of the isothermal Navierâ€“Stokesâ€“Korteweg equations. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 1828-1840.	6.6	191
12	YZÎ² discontinuity capturing for advection-dominated processes with application to arterial drug delivery. International Journal for Numerical Methods in Fluids, 2007, 54, 593-608.	1.6	129
13	Selfâ€Assembled Asymmetric Block Copolymer Membranes: Bridging the Gap from Ultraâ€•to Nanofiltration. Angewandte Chemie - International Edition, 2015, 54, 13937-13941.	13.8	122
14	A class of discontinuous Petrovâ€“Galerkin methods. Part IV: The optimal test norm and time-harmonic wave propagation in 1D. Journal of Computational Physics, 2011, 230, 2406-2432.	3.8	115
15	PetIGA: A framework for high-performance isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2016, 308, 151-181.	6.6	114
16	Self-assembly in casting solutions of block copolymer membranes. Soft Matter, 2013, 9, 5557.	2.7	100
17	The cost of continuity: A study of the performance of isogeometric finite elements using direct solvers. Computer Methods in Applied Mechanics and Engineering, 2012, 213-216, 353-361.	6.6	99
18	Mathematical modeling of coupled drug and drug-encapsulated nanoparticle transport in patient-specific coronary artery walls. Computational Mechanics, 2012, 49, 213-242.	4.0	86

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19	Optimal quadrature rules for odd-degree spline spaces and their application to tensor-product-based isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2016, 305, 217-240.	6.6	72
20	The Cost of Continuity: Performance of Iterative Solvers on Isogeometric Finite Elements. SIAM Journal of Scientific Computing, 2013, 35, A767-A784.	2.8	66
21	Fast isogeometric solvers for explicit dynamics. Computer Methods in Applied Mechanics and Engineering, 2014, 274, 19-41.	6.6	58
22	Gaussâ€“Galerkin quadrature rules for quadratic and cubic spline spaces and their application to isogeometric analysis. CAD Computer Aided Design, 2017, 82, 57-67.	2.7	58
23	Multiphysics model for blood flow and drug transport with application to patient-specific coronary artery flow. Computational Mechanics, 2008, 43, 161-177.	4.0	54
24	Mode decomposition methods for flows in high-contrast porous media. Globalâ€“local approach. Journal of Computational Physics, 2013, 253, 226-238.	3.8	52
25	Isogeometric variational multiscale large-eddy simulation of fully-developed turbulent flow over a wavy wall. Computers and Fluids, 2012, 68, 94-104.	2.5	48
26	An energy-stable convex splitting for the phase-field crystal equation. Computers and Structures, 2015, 158, 355-368.	4.4	48
27	Randomized Oversampling for Generalized Multiscale Finite Element Methods. Multiscale Modeling and Simulation, 2016, 14, 482-501.	1.6	47
28	Dispersion-optimized quadrature rules for isogeometric analysis: Modified inner products, their dispersion properties, and optimally blended schemes. Computer Methods in Applied Mechanics and Engineering, 2017, 320, 421-443.	6.6	45
29	Globalâ€“local nonlinear model reduction for flows in heterogeneous porous media. Computer Methods in Applied Mechanics and Engineering, 2015, 292, 122-137.	6.6	43
30	A parallel direct solver for the self-adaptive hp Finite Element Method. Journal of Parallel and Distributed Computing, 2010, 70, 270-281.	4.1	42
31	Gaussian quadrature for splines via homotopy continuation: Rules for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si57.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow><mml:mi>C</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mm cubic splines. Journal of Computational and Applied Mathematics, 2016, 296, 709-723.	2.0	41
32	Fast Multiscale Reservoir Simulations With POD-DEIM Model Reduction. SPE Journal, 2016, 21, 2141-2154.	3.1	40
33	A finite strain Eulerian formulation for compressible and nearly incompressible hyperelasticity using highâ€order Bâ€spline finite elements. International Journal for Numerical Methods in Engineering, 2012, 89, 762-785.	2.8	39
34	Fourier series expansion in a non-orthogonal system of coordinates for the simulation of 3D alternating current borehole resistivity measurements. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 3836-3849.	6.6	32
35	Fast Multiscale Reservoir Simulations using POD-DEIM Model Reduction. , 2015, , .		31
36	Dispersion-minimizing quadrature rules for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml5" display="inline" overflow="scroll" altimg="si1.gif"><mml:msup><mml:mrow><mml:mi>C</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup></mm quadratic isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2018, 328, 554-564.	6.6	31

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37	Simulation of laminar and turbulent concentric pipe flows with the isogeometric variational multiscale method. Computers and Fluids, 2013, 71, 146-155.	2.5	29
38	Dynamics with Matrices Possessing Kronecker Product Structure. Procedia Computer Science, 2015, 51, 286-295.	2.0	29
39	PetIGA-MF: A multi-field high-performance toolbox for structure-preserving B-splines spaces. Journal of Computational Science, 2017, 18, 117-131.	2.9	29
40	Fourier series expansion in a non-orthogonal system of coordinates for the simulation of 3D-DC borehole resistivity measurements. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 1906-1925.	6.6	28
41	Computational cost estimates for parallel shared memory isogeometric multi-frontal solvers. Computers and Mathematics With Applications, 2014, 67, 1864-1883.	2.7	28
42	Synthesis of highly porous poly(tert-butyl acrylate)-b-polysulfone-b-poly(tert-butyl acrylate) asymmetric membranes. Polymer Chemistry, 2016, 7, 3076-3089.	3.9	28
43	Multiscale Modeling of Blood Flow: Coupling Finite Elements with Smoothed Dissipative Particle Dynamics. Procedia Computer Science, 2013, 18, 2565-2574.	2.0	26
44	On the shape optimization of flapping wings and their performance analysis. Aerospace Science and Technology, 2014, 32, 274-292.	4.8	26
45	Preconditioners based on the Alternating-Direction-Implicit algorithm for the 2D steady-state diffusion equation with orthotropic heterogeneous coefficients. Journal of Computational and Applied Mathematics, 2015, 273, 274-295.	2.0	26
46	The value of continuity: Refined isogeometric analysis and fast direct solvers. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 586-605.	6.6	26
47	An adaptive stabilized conforming finite element method via residual minimization on dual discontinuous Galerkin norms. Computer Methods in Applied Mechanics and Engineering, 2020, 363, 112891.	6.6	26
48	Error control and loss functions for the deep learning inversion of borehole resistivity measurements. International Journal for Numerical Methods in Engineering, 2021, 122, 1629-1657.	2.8	26
49	A note on variational multiscale methods for high-contrast heterogeneous porous media flows with rough source terms. Advances in Water Resources, 2011, 34, 1177-1185.	3.8	25
50	Computational complexity and memory usage for multi-frontal direct solvers used in p finite element analysis. Procedia Computer Science, 2011, 4, 1854-1861.	2.0	25
51	DynEarthSol2D: An efficient unstructured finite element method to study longâ€term tectonic deformation. Journal of Geophysical Research: Solid Earth, 2013, 118, 2429-2444.	3.4	25
52	Influence of boreholeâ€eccentred tools on wireline and loggingâ€whileâ€drilling sonic logging measurements. Geophysical Prospecting, 2013, 61, 268-283.	1.9	25
53	Energy exchange analysis in droplet dynamics via the Navierâ€“Stokesâ€“Cahnâ€“Hilliard model. Journal of Fluid Mechanics, 2016, 797, 389-430.	3.4	25
54	Gaussian quadrature rules for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si54.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow><mml:mi>C</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:mrow></m quintic splines with uniform knot vectors. Journal of Computational and Applied Mathematics, 2017, 322, 57-70.	2.0	24

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55	Automatically stable discontinuous Petrovâ€“Galerkin methods for stationary transport problems: Quasi-optimal test space norm. Computers and Mathematics With Applications, 2013, 66, 2096-2113.	2.7	23
56	Multiscale empirical interpolation for solving nonlinear PDEs. Journal of Computational Physics, 2014, 278, 204-220.	3.8	23
57	Explicit Gaussian quadrature rules for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si41.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow><mml:mi>C</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:math> cubic splines with symmetrically stretched knot sequences. Journal of Computational and Applied Mathematics, 2015, 290, 543-552.	2.0	23
58	An energy-stable generalized-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml42" display="inline" overflow="scroll" altimg="si42.gif"><mml:mi>Î±</mml:mi></mml:math> method for the Swiftâ€“Hohenberg equation. Journal of Computational and Applied Mathematics, 2018, 344, 836-851.	2.0	23
59	ASYMPTOTIC EXPANSIONS FOR HIGH-CONTRAST ELLIPTIC EQUATIONS. Mathematical Models and Methods in Applied Sciences, 2014, 24, 465-494.	3.3	22
60	On the computational efficiency of isogeometric methods for smooth elliptic problems using direct solvers. International Journal for Numerical Methods in Engineering, 2014, 100, 620-632.	2.8	22
61	Analysis of the discontinuous Petrovâ€“Galerkin method with optimal test functions for the Reissnerâ€“Mindlin plate bending model. Computers and Mathematics With Applications, 2014, 66, 2570-2586.	2.7	22
62	An energy-stable time-integrator for phase-field models. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 1179-1214.	6.6	22
63	A survey on direct solvers for Galerkin methods. BoletÃn De La Sociedad EspaÃ‘ola De MatemÃ¡tica Aplicada, 2012, 57, 107-134.	0.9	21
64	Coupling Navier-stokes and Cahn-hilliard Equations in a Two-dimensional Annular flow Configuration. Procedia Computer Science, 2015, 51, 934-943.	2.0	20
65	Topology and Shape Control for Assemblies of Block Copolymer Blends in Solution. Macromolecules, 2015, 48, 8036-8044.	4.8	20
66	Spectral approximation properties of isogeometric analysis with variable continuity. Computer Methods in Applied Mechanics and Engineering, 2018, 334, 22-39.	6.6	20
67	Performance evaluation of block-diagonal preconditioners for the divergence-conforming B-spline discretization of the Stokes system. Journal of Computational Science, 2015, 11, 123-136.	2.9	19
68	Interpretation of deep directional resistivity measurements acquired in high-angle and horizontal wells using 3-D inversion. Geophysical Journal International, 2018, 213, 1135-1145.	2.4	18
69	Flapping wings in line formation flight: a computational analysis. Aeronautical Journal, 2014, 118, 485-501.	1.6	17
70	Mode decomposition methods for flows in high-contrast porous media. A global approach. Journal of Computational Physics, 2014, 257, 400-413.	3.8	16
71	Water flow prediction for membranes using 3D simulations with detailed morphology. Journal of Membrane Science, 2015, 487, 19-31.	8.2	16
72	Computational cost of isogeometric multi-frontal solvers on parallel distributed memory machines. Computer Methods in Applied Mechanics and Engineering, 2015, 284, 971-987.	6.6	16

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73	Dispersion optimized quadratures for isogeometric analysis. Journal of Computational and Applied Mathematics, 2019, 355, 283-300.	2.0	16
74	Parallel Fast Isogeometric Solvers for Explicit Dynamics. Computing and Informatics, 2017, 36, 423-448.	0.7	16
75	Dynamic Programming Algorithm for Generation of Optimal Elimination Trees for Multi-frontal Direct Solver Over H-refined Grids. Procedia Computer Science, 2014, 29, 947-959.	2.0	15
76	Spectral approximation of elliptic operators by the Hybrid High-Order method. Mathematics of Computation, 2018, 88, 1559-1586.	2.1	15
77	A Numerical 1.5D Method for the Rapid Simulation of Geophysical Resistivity Measurements. Geosciences (Switzerland), 2018, 8, 225.	2.2	15
78	A boundary penalization technique to remove outliers from isogeometric analysis on tensor-product meshes. Computer Methods in Applied Mechanics and Engineering, 2021, 383, 113907.	6.6	15
79	Phase Field Modeling Using PetIGA. Procedia Computer Science, 2013, 18, 1614-1623.	2.0	14
80	Pore-scale modeling and simulation of flow, transport, and adsorptive or osmotic effects in membranes: the influence of membrane microstructure. International Journal of Advances in Engineering Sciences and Applied Mathematics, 2015, 7, 2-13.	1.1	14
81	Dispersion-minimized mass for isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 71-92.	6.6	14
82	Quadrature blending for isogeometric analysis. Procedia Computer Science, 2017, 108, 798-807.	2.0	13
83	A variationally separable splitting for the generalizedâ€Î± method for parabolic equations. International Journal for Numerical Methods in Engineering, 2020, 121, 828-841.	2.8	13
84	Automatically adaptive, stabilized finite element method via residual minimization for heterogeneous, anisotropic advectionâ€“diffusionâ€“reaction problems. Computer Methods in Applied Mechanics and Engineering, 2021, 385, 114027.	6.6	13
85	Variational and Multiscale Methods in Turbulence. , 2005, , 153-163.		12
86	F-bar projection method for finite deformation elasticity and plasticity using NURBS based isogeometric analysis. International Journal of Material Forming, 2008, 1, 1091-1094.	2.0	12
87	Discontinuous Petrovâ€“Galerkin method based on the optimal test space norm for steady transport problems in one space dimension. Journal of Computational Science, 2013, 4, 157-163.	2.9	12
88	Refined isogeometric analysis for fluid mechanics and electromagnetics. Computer Methods in Applied Mechanics and Engineering, 2019, 356, 598-628.	6.6	12
89	A direct solver with reutilization of LU factorizations forh-adaptive finite element grids with point singularities. Computers and Mathematics With Applications, 2013, 65, 1140-1151.	2.7	11
90	Impact of element-level static condensation on iterative solver performance. Computers and Mathematics With Applications, 2015, 70, 2331-2341.	2.7	11

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91	Drained pore modulus and Biot coefficient from pore-scale digital rock simulations. International Journal of Rock Mechanics and Minings Sciences, 2019, 114, 62-70.	5.8	11
92	Generalized Swiftâ€“Hohenberg and phase-field-crystal equations based on a second-gradient phase-field theory. Meccanica, 2020, 55, 1853-1868.	2.0	11
93	Goal-oriented adaptivity for a conforming residual minimization method in a dual discontinuous Galerkin norm. Computer Methods in Applied Mechanics and Engineering, 2021, 377, 113686.	6.6	11
94	Higher-order generalized-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e183" altimg="si282.svg"><mml:mi>Î±</mml:mi></mml:math> methods for hyperbolic problems. Computer Methods in Applied Mechanics and Engineering, 2021, 378, 113725.	6.6	11
95	Goal-Oriented Self-Adaptive hp Finite Element Simulation of 3D DC Borehole Resistivity Simulations. Procedia Computer Science, 2011, 4, 1485-1495.	2.0	10
96	Simulation of wireline sonic logging measurements acquired with Boreholeâ€“Eccentered tools using a high-order adaptive finite-element method. Journal of Computational Physics, 2011, 230, 6320-6333.	3.8	10
97	Discontinuous Petrov-Galerkin method based on the optimal test space norm for one-dimensional transport problems. Procedia Computer Science, 2011, 4, 1862-1869.	2.0	10
98	Quasi-Optimal Elimination Trees for 2D Grids with Singularities. Scientific Programming, 2015, 2015, 1-18.	0.7	10
99	Multiscale stabilization for convection-dominated diffusion in heterogeneous media. Computer Methods in Applied Mechanics and Engineering, 2016, 304, 359-377.	6.6	10
100	Refined Isogeometric Analysis for a preconditioned conjugate gradient solver. Computer Methods in Applied Mechanics and Engineering, 2018, 335, 490-509.	6.6	10
101	Graph Grammar-Based Multi-Frontal Parallel Direct Solver for Two-Dimensional Isogeometric Analysis. Procedia Computer Science, 2012, 9, 1454-1463.	2.0	9
102	On Round-off Error for Adaptive Finite Element Methods. Procedia Computer Science, 2012, 9, 1474-1483.	2.0	9
103	Gradient-based estimation of Manningâ€™s friction coefficient from noisy data. Journal of Computational and Applied Mathematics, 2013, 238, 1-13.	2.0	9
104	Optimal spectral approximation of 2n-order differential operators by mixed isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2019, 343, 297-313.	6.6	9
105	Phase-field gradient theory. Zeitschrift Fur Angewandte Mathematik Und Physik, 2021, 72, 1.	1.4	9
106	Isogeometric Analysis: Toward Unification of Computer Aided Design and Finite Element Analysis. Computational Science, Engineering and Technology Series, 0, , 1-16.	0.2	9
107	Interactive Visualization and Analysis of Transitional Flow. IEEE Transactions on Visualization and Computer Graphics, 2008, 14, 1420-1427.	4.4	8
108	Time adaptivity in the diffusive wave approximation to the shallow water equations. Journal of Computational Science, 2013, 4, 152-156.	2.9	8

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109	Optimal multi-agent path planning for fast inverse modeling in UAV-based flood sensing applications. , 2014, , .		8
110	A scalable block-preconditioning strategy for divergence-conforming B-spline discretizations of the Stokes problem. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 839-858.	6.6	8
111	Parallel splitting solvers for the isogeometric analysis of the Cahn-Hilliard equation. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 1269-1281.	1.6	8
112	Explicit-in-time goal-oriented adaptivity. Computer Methods in Applied Mechanics and Engineering, 2019, 347, 176-200.	6.6	8
113	Efficient mass and stiffness matrix assembly via weighted Gaussian quadrature rules for B-splines. Journal of Computational and Applied Mathematics, 2020, 371, 112626.	2.0	8
114	Isogeometric Residual Minimization Method (iGRM) with direction splitting preconditioner for stationary advection-dominated diffusion problems. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113214.	6.6	8
115	DGIRM: Discontinuous Galerkin based isogeometric residual minimization for the Stokes problem. Journal of Computational Science, 2021, 50, 101306.	2.9	8
116	Explicit high-order generalized-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1843" altimg="si570.svg"><mml:mi>Î±</mml:mi></mml:math> methods for isogeometric analysis of structural dynamics. Computer Methods in Applied Mechanics and Engineering, 2022, 389, 114344.	6.6	8
117	Dendrite formation in rechargeable lithium-metal batteries: Phase-field modeling using open-source finite element library. Journal of Energy Storage, 2022, 53, 104892.	8.1	8
118	Isogeometric Analysis of Hyperelastic Materials Using PetIGA. Procedia Computer Science, 2013, 18, 1604-1613.	2.0	7
119	Direct solvers performance on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.gif" display="inline" overflow="scroll"><mml:mi>h</mml:mi></mml:math>-adapted grids. Computers and Mathematics With Applications, 2015, 70, 282-295.	2.7	7
120	Stretch-minimising stream surfaces. Graphical Models, 2015, 79, 12-22.	2.4	7
121	Reactive n-species Cahnâ€“Hilliard system: A thermodynamically-consistent model for reversible chemical reactions. Journal of Computational and Applied Mathematics, 2019, 350, 143-154.	2.0	7
122	A nonlinear weak constraint enforcement method for advection-dominated diffusion problems. Mechanics Research Communications, 2021, 112, 103602.	1.8	7
123	Automatically adaptive stabilized finite elements andÂcontinuation analysis for compaction banding in geomaterials. International Journal for Numerical Methods in Engineering, 2021, 122, 6234-6252.	2.8	7
124	A spatio-temporal adaptive phase-field fracture method. Computer Methods in Applied Mechanics and Engineering, 2022, 392, 114675.	6.6	7
125	Incompressible flow modeling using an adaptive stabilized finite element method based on residual minimization. International Journal for Numerical Methods in Engineering, 2022, 123, 1717-1735.	2.8	7
126	Diffusive Wave Approximation to the Shallow Water Equations: Computational Approach. Procedia Computer Science, 2011, 4, 1828-1833.	2.0	6

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127	Splitting schemes for phase-field models. Applied Numerical Mathematics, 2020, 156, 192-209.	2.1	6
128	Modeling Phase-transitions Using a High-performance, Isogeometric Analysis Framework. Procedia Computer Science, 2014, 29, 980-990.	2.0	5
129	Micropolar Fluids Using B-spline Divergence Conforming Spaces. Procedia Computer Science, 2014, 29, 991-1001.	2.0	5
130	Micro-cantilever flow sensor for small aircraft. JVC/Journal of Vibration and Control, 2015, 21, 2043-2058.	2.6	5
131	3D morphology design for forward osmosis. Journal of Membrane Science, 2016, 516, 172-184.	8.2	5
132	Element Partition Trees For H-Refined Meshes to Optimize Direct Solver Performance. Part I: Dynamic Programming. International Journal of Applied Mathematics and Computer Science, 2017, 27, 351-365.	1.5	5
133	Time-domain goal-oriented adaptivity using pseudo-dual error representations. Computer Methods in Applied Mechanics and Engineering, 2017, 325, 395-415.	6.6	5
134	Isogeometric spectral approximation for elliptic differential operators. Journal of Computational Science, 2019, 36, 100879.	2.9	5
135	An Introduction to a Porous Shape Memory Alloy Dynamic Data Driven Application System. Procedia Computer Science, 2012, 9, 1081-1089.	2.0	4
136	Grammar-Based Multi-Frontal Solver for One Dimensional Isogeometric Analysis with Multiple Right-Hand-Sides. Procedia Computer Science, 2013, 18, 1574-1583.	2.0	4
137	Complexity Reduction of Multi-Phase Flows in Heterogeneous Porous Media. , 2013, , .		4
138	Online Adaptive POD-DEIM Model Reduction for Fast Simulation of Flows in Heterogeneous Media. , 2017, , .		4
139	PyFly: A fast, portable aerodynamics simulator. Journal of Computational and Applied Mathematics, 2018, 344, 875-903.	2.0	4
140	Parallel Refined Isogeometric Analysis in 3D. IEEE Transactions on Parallel and Distributed Systems, 2019, 30, 1134-1142.	5.6	4
141	Higher order stable generalized finite element method for the elliptic eigenvalue and source problems with an interface in 1D. Journal of Computational and Applied Mathematics, 2020, 368, 112558.	2.0	4
142	Fast isogeometric solvers for hyperbolic wave propagation problems. Computers and Mathematics With Applications, 2020, 80, 109-120.	2.7	4
143	Split generalized-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1110" altimg="si252.svg"><mml:mi>l±</mml:mi></mml:math> method: A linear-cost solver for multi-dimensional second-order hyperbolic systems. Computer Methods in Applied Mechanics and Engineering, 2021, 376, 113656.	6.6	4
144	A continuum theory for mineral solid solutions undergoing chemo-mechanical processes. Continuum Mechanics and Thermodynamics, 2022, 34, 17-38.	2.2	4

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145	Refined isogeometric analysis for generalized Hermitian eigenproblems. Computer Methods in Applied Mechanics and Engineering, 2021, 381, 113823.	6.6	4
146	A Stable Discontinuous Galerkin Based Isogeometric Residual Minimization for the Stokes Problem. Lecture Notes in Computer Science, 2020, , 197-211.	1.3	4
147	Exploiting the Kronecker product structure of Ï†â^'functions in exponential integrators. International Journal for Numerical Methods in Engineering, 2022, 123, 2142-2161.	2.8	4
148	Turbulence modeling for large eddy simulations. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 779.	6.6	3
149	hp-HGS strategy for inverse 3D DC resistivity logging measurement simulations. Procedia Computer Science, 2012, 9, 927-936.	2.0	3
150	Multiscale Lattice Boltzmann Method for Flow Simulations in Highly Heterogenous Porous Media. , 2013, , .		3
151	Enclosure enhancement of flight performance. Theoretical and Applied Mechanics Letters, 2014, 4, 062003.	2.8	3
152	Consistent model reduction of polymer chains in solution in dissipative particle dynamics: Model description. Computer Physics Communications, 2015, 196, 255-266.	7.5	3
153	Variational formulations for explicit Runge-Kutta Methods. Finite Elements in Analysis and Design, 2019, 165, 77-93.	3.2	3
154	Forwardâ€inâ€time goalâ€oriented adaptivity. International Journal for Numerical Methods in Engineering, 2019, 119, 490-505.	2.8	3
155	Extended LarchÃ©â€“Cahn framework for reactive Cahnâ€“Hilliard multicomponent systems. Continuum Mechanics and Thermodynamics, 2021, 33, 2391-2410.	2.2	3
156	Automatic Variationally Stable Analysis for FE Computations: An Introduction. Lecture Notes in Computational Science and Engineering, 2020, , 19-43.	0.3	3
157	Solving Nonlinear,ÂHigh-Order Partial Differential Equations Using a High-Performance Isogeometric Analysis Framework. Communications in Computer and Information Science, 2014, , 236-247.	0.5	3
158	Isogeometric Shell Formulation based on a Classical Shell Model. , 0, , .		3
159	Localized folding of thick layers. Journal of Structural Geology, 2022, 161, 104669.	2.3	3
160	Refined isogeometric analysis of quadratic eigenvalue problems. Computer Methods in Applied Mechanics and Engineering, 2022, 399, 115327.	6.6	3
161	Monte Carlo Molecular Simulation of Phase-coexistence for Oil Production and Processing. , 2011, , .		2
162	Using Shape Memory Alloys: A Dynamic Data Driven Approach. Procedia Computer Science, 2013, 18, 1844-1850.	2.0	2

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163	Phase-coexistence simulations of fluid mixtures by the Markov Chain Monte Carlo method using single-particle models. Journal of Computational Physics, 2013, 249, 233-248.	3.8	2
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