

# 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	A continuum theory for mineral solid solutions undergoing chemo-mechanical processes. Continuum Mechanics and Thermodynamics, 2022, 34, 17-38.	2.2	4
2	Explicit high-order generalized- $\hat{L}_{\pm}$ methods for isogeometric analysis of structural dynamics. Computer Methods in Applied Mechanics and Engineering, 2022, 389, 114344.	6.6	8
3	Exploiting the Kronecker product structure of $\hat{L}$ functions in exponential integrators. International Journal for Numerical Methods in Engineering, 2022, 123, 2142-2161.	2.8	4
4	A spatio-temporal adaptive phase-field fracture method. Computer Methods in Applied Mechanics and Engineering, 2022, 392, 114675.	6.6	7
5	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
6	Recent Advances in Multiscale Petrophysics Characterization and Multiphase Flow in Unconventional Reservoirs. Energies, 2022, 15, 2874.	3.1	1
7	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
8	Localized folding of thick layers. Journal of Structural Geology, 2022, 161, 104669.	2.3	3
9	Refined isogeometric analysis of quadratic eigenvalue problems. Computer Methods in Applied Mechanics and Engineering, 2022, 399, 115327.	6.6	3
10	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
11	A nonlinear weak constraint enforcement method for advection-dominated diffusion problems. Mechanics Research Communications, 2021, 112, 103602.	1.8	7
12	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
13	Maxwell's equations and variational formulations. , 2021, , 47-75.		0
14	Modeling of resistivity geophysical measurements. , 2021, , 77-113.		2
15	Parallel implementation. , 2021, , 257-264.		0
16	Phase-field gradient theory. Zeitschrift Fur Angewandte Mathematik Und Physik, 2021, 72, 1.	1.4	9
17	DGIRM: Discontinuous Galerkin based isogeometric residual minimization for the Stokes problem. Journal of Computational Science, 2021, 50, 101306.	2.9	8
18	Split generalized- $\hat{L}_{\pm}$ 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

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19	Goal-oriented adaptivity for a conforming residual minimization method in a dual discontinuous Galerkin norm. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 377, 113686.	6.6	11
20	Higher-order generalized $\hat{L}_\pm$ methods for hyperbolic problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 378, 113725.	6.6	11
21	Extended Larch-Cahn framework for reactive Cahn-Hilliard multicomponent systems. <i>Continuum Mechanics and Thermodynamics</i> , 2021, 33, 2391-2410.	2.2	3
22	Automatically adaptive stabilized finite elements and continuation analysis for compaction banding in geomaterials. <i>International Journal for Numerical Methods in Engineering</i> , 2021, 122, 6234-6252.	2.8	7
23	Refined isogeometric analysis for generalized Hermitian eigenproblems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 381, 113823.	6.6	4
24	A boundary penalization technique to remove outliers from isogeometric analysis on tensor-product meshes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 383, 113907.	6.6	15
25	Automatically adaptive, stabilized finite element method via residual minimization for heterogeneous, anisotropic advection-diffusion-reaction problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 385, 114027.	6.6	13
26	Outlier Removal for Isogeometric Spectral Approximation with the Optimally-Blended Quadratures. <i>Lecture Notes in Computer Science</i> , 2021, , 315-328.	1.3	1
27	A variationally separable splitting for the generalized $\hat{L}_\pm$ method for parabolic equations. <i>International Journal for Numerical Methods in Engineering</i> , 2020, 121, 828-841.	2.8	13
28	Higher order stable generalized finite element method for the elliptic eigenvalue and source problems with an interface in 1D. <i>Journal of Computational and Applied Mathematics</i> , 2020, 368, 112558.	2.0	4
29	Efficient mass and stiffness matrix assembly via weighted Gaussian quadrature rules for B-splines. <i>Journal of Computational and Applied Mathematics</i> , 2020, 371, 112626.	2.0	8
30	Generalized Swift-Hohenberg and phase-field-crystal equations based on a second-gradient phase-field theory. <i>Meccanica</i> , 2020, 55, 1853-1868.	2.0	11
31	High-order generalized-alpha method. <i>Applications in Engineering Science</i> , 2020, 4, 100021.	0.8	2
32	Splitting schemes for phase-field models. <i>Applied Numerical Mathematics</i> , 2020, 156, 192-209.	2.1	6
33	Fast isogeometric solvers for hyperbolic wave propagation problems. <i>Computers and Mathematics With Applications</i> , 2020, 80, 109-120.	2.7	4
34	An adaptive stabilized conforming finite element method via residual minimization on dual discontinuous Galerkin norms. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 363, 112891.	6.6	26
35	Automatic Variationally Stable Analysis for FE Computations: An Introduction. <i>Lecture Notes in Computational Science and Engineering</i> , 2020, , 19-43.	0.3	3
36	A Stable Discontinuous Galerkin Based Isogeometric Residual Minimization for the Stokes Problem. <i>Lecture Notes in Computer Science</i> , 2020, , 197-211.	1.3	4

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37	Linear computational cost implicit solver for elliptic problems. Computer Science, 2020, 21, .	0.6	2
38	Isogeometric spectral approximation for elliptic differential operators. Journal of Computational Science, 2019, 36, 100879.	2.9	5
39	Refined isogeometric analysis for fluid mechanics and electromagnetics. Computer Methods in Applied Mechanics and Engineering, 2019, 356, 598-628.	6.6	12
40	Variational formulations for explicit Runge-Kutta Methods. Finite Elements in Analysis and Design, 2019, 165, 77-93.	3.2	3
41	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
42	Parallel Refined Isogeometric Analysis in 3D. IEEE Transactions on Parallel and Distributed Systems, 2019, 30, 1134-1142.	5.6	4
43	Forward-in-time goal-oriented adaptivity. International Journal for Numerical Methods in Engineering, 2019, 119, 490-505.	2.8	3
44	Dispersion optimized quadratures for isogeometric analysis. Journal of Computational and Applied Mathematics, 2019, 355, 283-300.	2.0	16
45	Recent advances on the inversion of deep directional borehole resistivity measurements. ASEG Extended Abstracts, 2019, 2019, 1-3.	0.1	2
46	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
47	Explicit-in-time goal-oriented adaptivity. Computer Methods in Applied Mechanics and Engineering, 2019, 347, 176-200.	6.6	8
48	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
49	Reactive n-species Cahn-Hilliard system: A thermodynamically-consistent model for reversible chemical reactions. Journal of Computational and Applied Mathematics, 2019, 350, 143-154.	2.0	7
50	Residual Minimization for Isogeometric Analysis in Reduced and Mixed Forms. Lecture Notes in Computer Science, 2019, , 463-476.	1.3	1
51	Spectral approximation properties of isogeometric analysis with variable continuity. Computer Methods in Applied Mechanics and Engineering, 2018, 334, 22-39.	6.6	20
52	Refined Isogeometric Analysis for a preconditioned conjugate gradient solver. Computer Methods in Applied Mechanics and Engineering, 2018, 335, 490-509.	6.6	10
53	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
54	PyFly: A fast, portable aerodynamics simulator. Journal of Computational and Applied Mathematics, 2018, 344, 875-903.	2.0	4

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55	Localized harmonic characteristic basis functions for multiscale finite element methods. Computational and Applied Mathematics, 2018, 37, 1986-2000.	1.3	0
56	Dispersion-minimizing quadrature rules for quadratic isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2018, 328, 554-564.	2.6	10
57	An energy-stable generalized method for the Swift-Hohenberg equation. Journal of Computational and Applied Mathematics, 2018, 344, 836-851.	2.0	23
58	Spectral approximation of elliptic operators by the Hybrid High-Order method. Mathematics of Computation, 2018, 88, 1559-1586.	2.1	15
59	Generalization of the Pythagorean Eigenvalue Error Theorem and Its Application to Isogeometric Analysis. SEMA SIMAI Springer Series, 2018, , 147-170.	0.7	2
60	Dispersion-minimized mass for isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 71-92.	6.6	14
61	A Numerical 1.5D Method for the Rapid Simulation of Geophysical Resistivity Measurements. Geosciences (Switzerland), 2018, 8, 225.	2.2	15
62	Cell-element simulations to optimize the performance of osmotic processes in porous membranes. Computers and Mathematics With Applications, 2018, 76, 361-376.	2.7	2
63	Editorial: Algorithmic Aspects of High-Performance Computing for Mechanics and Physics. Journal of Computational and Applied Mathematics, 2018, 344, 739.	2.0	0
64	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
65	An energy-stable time-integrator for phase-field models. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 1179-1214.	6.6	22
66	Online Adaptive POD-DEIM Model Reduction for Fast Simulation of Flows in Heterogeneous Media. , 2017, , .		4
67	Gaussian quadrature rules for quintic splines with uniform knot vectors. Journal of Computational and Applied Mathematics, 2017, 322, 57-70.	2.0	11
68	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
69	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
70	Quadrature blending for isogeometric analysis. Procedia Computer Science, 2017, 108, 798-807.	2.0	13
71	Time-domain goal-oriented adaptivity using pseudo-dual error representations. Computer Methods in Applied Mechanics and Engineering, 2017, 325, 395-415.	6.6	5
72	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

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73	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
74	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
75	Parallel Fast Isogeometric Solvers for Explicit Dynamics. Computing and Informatics, 2017, 36, 423-448.	0.7	16
76	Model Reduction for Coupled Near-Well and Reservoir Models Using Multiple Space-Time Discretizations. Modeling, Simulation and Applications, 2017, , 471-490.	1.3	0
77	Energy exchange analysis in droplet dynamics via the Navierâ€Stokesâ€Cahnâ€Hilliard model. Journal of Fluid Mechanics, 2016, 797, 389-430.	3.4	25
78	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
79	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
80	Fast Multiscale Reservoir Simulations With POD-DEIM Model Reduction. SPE Journal, 2016, 21, 2141-2154.	3.1	40
81	Randomized Oversampling for Generalized Multiscale Finite Element Methods. Multiscale Modeling and Simulation, 2016, 14, 482-501.	1.6	47
82	3D morphology design for forward osmosis. Journal of Membrane Science, 2016, 516, 172-184.	8.2	5
83	PetIGA: A framework for high-performance isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2016, 308, 151-181.	6.6	114
84	Multiscale stabilization for convection-dominated diffusion in heterogeneous media. Computer Methods in Applied Mechanics and Engineering, 2016, 304, 359-377.	6.6	10
85	Gaussian quadrature for splines via homotopy continuation: Rules for $C^2$ cubic splines. Journal of Computational and Applied Mathematics, 2016, 296, 709-723.	2.0	41
86	Asymptotic expansions for high-contrast linear elasticity. Journal of Computational and Applied Mathematics, 2016, 295, 25-34.	2.0	2
87	Dynamics with Matrices Possessing Kronecker Product Structure. Procedia Computer Science, 2015, 51, 286-295.	2.0	29
88	Telescopic Hybrid Fast Solver for 3D Elliptic Problems with Point Singularities. Procedia Computer Science, 2015, 51, 2744-2748.	2.0	2
89	Fast Multiscale Reservoir Simulations using POD-DEIM Model Reduction. , 2015, , .		31
90	Self-Assembled Asymmetric Block Copolymer Membranes: Bridging the Gap from Ultra- to Nanofiltration. Angewandte Chemie - International Edition, 2015, 54, 13937-13941.	13.8	122

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91	Quasi-Optimal Elimination Trees for 2D Grids with Singularities. Scientific Programming, 2015, 2015, 1-18.	0.7	10
92	Water flow prediction for membranes using 3D simulations with detailed morphology. Journal of Membrane Science, 2015, 487, 19-31.	8.2	16
93	Impact of element-level static condensation on iterative solver performance. Computers and Mathematics With Applications, 2015, 70, 2331-2341.	2.7	11
94	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
95	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
96	Direct solvers performance on $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.gif" display="inline" overflow="scroll">\langle \text{mml:mi}h\langle \text{mml:mi}\rangle \langle \text{mml:math}\rangle$ -adapted grids. Computers and Mathematics With Applications, 2015, 70, 282-295.	2.7	7
97	Coupling Navier-stokes and Cahn-hilliard Equations in a Two-dimensional Annular flow Configuration. Procedia Computer Science, 2015, 51, 934-943.	2.0	20
98	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
99	Stretch-minimising stream surfaces. Graphical Models, 2015, 79, 12-22.	2.4	7
100	Topology and Shape Control for Assemblies of Block Copolymer Blends in Solution. Macromolecules, 2015, 48, 8036-8044.	4.8	20
101	An energy-stable convex splitting for the phase-field crystal equation. Computers and Structures, 2015, 158, 355-368.	4.4	48
102	Consistent model reduction of polymer chains in solution in dissipative particle dynamics: Model description. Computer Physics Communications, 2015, 196, 255-266.	7.5	3
103	Explicit Gaussian quadrature rules for $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si41.gif" display="inline" overflow="scroll">\langle \text{mml:msup}\langle \text{mml:mrow}\langle \text{mml:mi}C\langle \text{mml:mi}\rangle \langle \text{mml:mrow}\langle \text{mml:mrow}\langle \text{mml:mn}1\langle \text{mml:mn}\rangle \langle \text{mml:mrow}\rangle \langle \text{mml:math}\rangle$ cubic splines with symmetrically stretched knot sequences. Journal of Computational and Applied Mathematics, 2015, 289, 543-552.	2.0	28
104	Global-local nonlinear model reduction for flows in heterogeneous porous media. Computer Methods in Applied Mechanics and Engineering, 2015, 292, 122-137.	6.6	43
105	Micro-cantilever flow sensor for small aircraft. JVC/Journal of Vibration and Control, 2015, 21, 2043-2058.	2.6	5
106	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
107	Enclosure enhancement of flight performance. Theoretical and Applied Mechanics Letters, 2014, 4, 062003.	2.8	3
108	ASYMPTOTIC EXPANSIONS FOR HIGH-CONTRAST ELLIPTIC EQUATIONS. Mathematical Models and Methods in Applied Sciences, 2014, 24, 465-494.	3.3	22

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109	On the computational efficiency of isogeometric methods for smooth elliptic problems using direct solvers. <i>International Journal for Numerical Methods in Engineering</i> , 2014, 100, 620-632.	2.8	22
110	Computational cost estimates for parallel shared memory isogeometric multi-frontal solvers. <i>Computers and Mathematics With Applications</i> , 2014, 67, 1864-1883.	2.7	28
111	Fast isogeometric solvers for explicit dynamics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 274, 19-41.	6.6	58
112	Analysis of the discontinuous Petrov-Galerkin method with optimal test functions for the Reissner-Mindlin plate bending model. <i>Computers and Mathematics With Applications</i> , 2014, 66, 2570-2586.	2.7	22
113	On the shape optimization of flapping wings and their performance analysis. <i>Aerospace Science and Technology</i> , 2014, 32, 274-292.	4.8	26
114	WiP abstract: Optimal multi-agent path planning for fast inverse modeling in UAV-based flood sensing applications. , 2014, , .		1
115	Multiscale empirical interpolation for solving nonlinear PDEs. <i>Journal of Computational Physics</i> , 2014, 278, 204-220.	3.8	23
116	Optimal multi-agent path planning for fast inverse modeling in UAV-based flood sensing applications. , 2014, , .		8
117	Mode decomposition methods for flows in high-contrast porous media. A global approach. <i>Journal of Computational Physics</i> , 2014, 257, 400-413.	3.8	16
118	Modeling Phase-transitions Using a High-performance, Isogeometric Analysis Framework. <i>Procedia Computer Science</i> , 2014, 29, 980-990.	2.0	5
119	Restrictions in Model Reduction for Polymer Chain Models in Dissipative Particle Dynamics. <i>Procedia Computer Science</i> , 2014, 29, 728-739.	2.0	2
120	Dynamic Programming Algorithm for Generation of Optimal Elimination Trees for Multi-frontal Direct Solver Over H-refined Grids. <i>Procedia Computer Science</i> , 2014, 29, 947-959.	2.0	15
121	Micropolar Fluids Using B-spline Divergence Conforming Spaces. <i>Procedia Computer Science</i> , 2014, 29, 991-1001.	2.0	5
122	On Stochastic Error and Computational Efficiency of the Markov Chain Monte Carlo Method. <i>Communications in Computational Physics</i> , 2014, 16, 467-490.	1.7	1
123	Flapping wings in line formation flight: a computational analysis. <i>Aeronautical Journal</i> , 2014, 118, 485-501.	1.6	17
124	Solving Nonlinear, High-Order Partial Differential Equations Using a High-Performance Isogeometric Analysis Framework. <i>Communications in Computer and Information Science</i> , 2014, , 236-247.	0.5	3
125	Lattice Boltzmann Flow Simulations With Applications of Reduced Order Modeling Techniques.. , 2014, , .		1
126	Mode decomposition methods for flows in high-contrast porous media. Global-local approach. <i>Journal of Computational Physics</i> , 2013, 253, 226-238.	3.8	52



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127	Discontinuous Petrov-Galerkin method based on the optimal test space norm for steady transport problems in one space dimension. <i>Journal of Computational Science</i> , 2013, 4, 157-163.	2.9	12
128	Self-assembly in casting solutions of block copolymer membranes. <i>Soft Matter</i> , 2013, 9, 5557.	2.7	100
129	Isogeometric Analysis of Hyperelastic Materials Using PetIGA. <i>Procedia Computer Science</i> , 2013, 18, 1604-1613.	2.0	7
130	The Cost of Continuity: Performance of Iterative Solvers on Isogeometric Finite Elements. <i>SIAM Journal of Scientific Computing</i> , 2013, 35, A767-A784.	2.8	66
131	Multiscale Lattice Boltzmann Method for Flow Simulations in Highly Heterogenous Porous Media. , 2013, , .		3
132	Automatically stable discontinuous Petrov-Galerkin methods for stationary transport problems: Quasi-optimal test space norm. <i>Computers and Mathematics With Applications</i> , 2013, 66, 2096-2113.	2.7	23
133	Grammar-Based Multi-Frontal Solver for One Dimensional Isogeometric Analysis with Multiple Right-Hand-Sides. <i>Procedia Computer Science</i> , 2013, 18, 1574-1583.	2.0	4
134	Time adaptivity in the diffusive wave approximation to the shallow water equations. <i>Journal of Computational Science</i> , 2013, 4, 152-156.	2.9	8
135	Multiscale Modeling of Blood Flow: Coupling Finite Elements with Smoothed Dissipative Particle Dynamics. <i>Procedia Computer Science</i> , 2013, 18, 2565-2574.	2.0	26
136	Phase Field Modeling Using PetIGA. <i>Procedia Computer Science</i> , 2013, 18, 1614-1623.	2.0	14
137	Using Shape Memory Alloys: A Dynamic Data Driven Approach. <i>Procedia Computer Science</i> , 2013, 18, 1844-1850.	2.0	2
138	Phase-coexistence simulations of fluid mixtures by the Markov Chain Monte Carlo method using single-particle models. <i>Journal of Computational Physics</i> , 2013, 249, 233-248.	3.8	2
139	A direct solver with reutilization of LU factorizations forh-adaptive finite element grids with point singularities. <i>Computers and Mathematics With Applications</i> , 2013, 65, 1140-1151.	2.7	11
140	Gradient-based estimation of Manning's friction coefficient from noisy data. <i>Journal of Computational and Applied Mathematics</i> , 2013, 238, 1-13.	2.0	9
141	Simulation of laminar and turbulent concentric pipe flows with the isogeometric variational multiscale method. <i>Computers and Fluids</i> , 2013, 71, 146-155.	2.5	29
142	DynEarthSol2D: An efficient unstructured finite element method to study long-term tectonic deformation. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 2429-2444.	3.4	25
143	Influence of borehole-centred tools on wireline and logging-while-drilling sonic logging measurements. <i>Geophysical Prospecting</i> , 2013, 61, 268-283.	1.9	25
144	Complexity Reduction of Multi-Phase Flows in Heterogeneous Porous Media. , 2013, , .		4

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145	Graph Grammar Based Multi-Frontal Solver for Isogeometric FEM Simulations On GPU. International Journal of Aerospace and Lightweight Structures (IJALS), 2013, 3, 277.	0.1	1
146	Graph Grammar-Based Multi-Frontal Parallel Direct Solver for Two-Dimensional Isogeometric Analysis. Procedia Computer Science, 2012, 9, 1454-1463.	2.0	9
147	hp-HGS strategy for inverse 3D DC resistivity logging measurement simulations. Procedia Computer Science, 2012, 9, 927-936.	2.0	3
148	An Introduction to a Porous Shape Memory Alloy Dynamic Data Driven Application System. Procedia Computer Science, 2012, 9, 1081-1089.	2.0	4
149	On Round-off Error for Adaptive Finite Element Methods. Procedia Computer Science, 2012, 9, 1474-1483.	2.0	9
150	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
151	A survey on direct solvers for Galerkin methods. Boletín De La Sociedad Española De Matemática Aplicada, 2012, 57, 107-134.	0.9	21
152	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
153	A finite strain Eulerian formulation for compressible and nearly incompressible hyperelasticity using high-order B-spline finite elements. International Journal for Numerical Methods in Engineering, 2012, 89, 762-785.	2.8	39
154	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
155	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
156	Monte Carlo Molecular Simulation of Phase-coexistence for Oil Production and Processing. , 2011, , .		2
157	Three Dimensional Model for Particle Saltation Close to Stream Beds, Including a Detailed Description of the Particle Interaction with Turbulence and Inter-Particle Collisions. , 2011, , .		1
158	Goal-Oriented Self-Adaptive hp Finite Element Simulation of 3D DC Borehole Resistivity Simulations. Procedia Computer Science, 2011, 4, 1485-1495.	2.0	10
159	A class of discontinuous Petrov-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
160	Simulation of wireline sonic logging measurements acquired with Borehole-Eccentered tools using a high-order adaptive finite-element method. Journal of Computational Physics, 2011, 230, 6320-6333.	3.8	10
161	Diffusive Wave Approximation to the Shallow Water Equations: Computational Approach. Procedia Computer Science, 2011, 4, 1828-1833.	2.0	6
162	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

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163	Discontinuous Petrov-Galerkin method based on the optimal test space norm for one-dimensional transport problems. <i>Procedia Computer Science</i> , 2011, 4, 1862-1869.	2.0	10
164	Improving stability of stabilized and multiscale formulations in flow simulations at small time steps. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 828-840.	6.6	199
165	Isogeometric analysis of the isothermal Navier-Stokes-Korteweg equations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 1828-1840.	6.6	191
166	A parallel direct solver for the self-adaptive hp Finite Element Method. <i>Journal of Parallel and Distributed Computing</i> , 2010, 70, 270-281.	4.1	42
167	Automatic terrain modeling using transfinite element analysis. <i>Procedia Computer Science</i> , 2010, 1, 1963-1970.	2.0	1
168	Isogeometric variational multiscale modeling of wall-bounded turbulent flows with weakly enforced boundary conditions on unstretched meshes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 780-790.	6.6	241
169	Isogeometric analysis using T-splines. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 229-263.	6.6	834
170	Turbulence modeling for large eddy simulations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 779.	6.6	3
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