Ramon Codina

List of Publications by Citations

188 papers	5,945 citations	39 h-index	70 g-index
194 ext. papers	6,520 ext. citations	3.6 avg, IF	6.36 L-index

#	Paper	IF	Citations
188	Comparison of some finite element methods for solving the diffusion-convection-reaction equation. *Computer Methods in Applied Mechanics and Engineering*, **1998**, 156, 185-210	5.7	318
187	A general algorithm for compressible and incompressible flow—Part I. the split, characteristic-based scheme. *International Journal for Numerical Methods in Fluids*, **1995**, 20, 869-885	1.9	301
186	Stabilized finite element approximation of transient incompressible flows using orthogonal subscales. *Computer Methods in Applied Mechanics and Engineering*, **2002**, 191, 4295-4321	5.7	274
185	Stabilization of incompressibility and convection through orthogonal sub-scales in finite element methods. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 190, 1579-1599	5.7	237
184	A stabilized finite element method for generalized stationary incompressible flows. *Computer Methods in Applied Mechanics and Engineering*, **2001**, 190, 2681-2706	5.7	175
183	A discontinuity-capturing crosswind-dissipation for the finite element solution of the convection-diffusion equation. *Computer Methods in Applied Mechanics and Engineering*, **1993**, 110, 325-342	5.7	172
182	Pressure Stability in Fractional Step Finite Element Methods for Incompressible Flows. *Journal of Computational Physics*, **2001**, 170, 112-140	4.1	161
181	Time dependent subscales in the stabilized finite element approximation of incompressible flow problems. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 196, 2413-2430	5.7	159
180	The characteristic-based-split procedure: an efficient and accurate algorithm for fluid problems. *International Journal for Numerical Methods in Fluids*, **1999**, 31, 359-392	1.9	149
179	On stabilized finite element methods for linear systems of convection–diffusion-reaction equations. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 188, 61-82	5.7	121
178	Stabilized finite element method for the transient Navier–Stokes equations based on a pressure gradient projection. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 182, 277-300	5.7	118
177	A finite element formulation for the Stokes problem allowing equal velocity-pressure interpolation. *Computer Methods in Applied Mechanics and Engineering*, **1997**, 143, 373-391	5.7	114
176	The Characteristic-Based Split (CBS) scheme—a unified approach to fluid dynamics. *International Journal for Numerical Methods in Engineering*, **2006**, 66, 1514-1546	2.4	99
175	Mixed stabilized finite element methods in nonlinear solid mechanics. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 2559-2570	5.7	93
174	A general algorithm for compressible and incompressible flows. Part III: The semi-implicit form. *International Journal for Numerical Methods in Fluids*, **1998**, 27, 13-32	1.9	93
173	Analysis of a stabilized finite element approximation of the Oseen equations using orthogonal subscales. *Applied Numerical Mathematics*, **2008**, 58, 264-283	2.5	93
172	Mixed stabilized finite element methods in nonlinear solid mechanics: Part II: Strain localization. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 2571-2589	5.7	88

171	A general algorithm for compressible and incompressible flow—Part II. tests on the explicit form. *International Journal for Numerical Methods in Fluids*, **1995**, 20, 887-913	1.9	85
170	Unified Stabilized Finite Element Formulations for the Stokes and the Darcy Problems. *SIAM Journal on Numerical Analysis*, **2009**, 47, 1971-2000	2.4	84
169	The intrinsic time for the streamline upwind/Petrov-Galerkin formulation using quadratic elements. *Computer Methods in Applied Mechanics and Engineering*, **1992**, 94, 239-262	5.7	73
168	On the computational efficiency and implementation of block-iterative algorithms for nonlinear coupled problems. *Engineering Computations*, **1996**, 13, 4-30	1.4	69
167	Assessment of variational multiscale models for the large eddy simulation of turbulent incompressible flows. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 285, 32-63	5.7	68
166	Analysis of a pressure-stabilized finite element approximation of the stationary Navier-Stokes equations. *Numerische Mathematik*, **2000**, 87, 59-81	2.2	62
165	A Chimera method based on a Dirichlet/Neumann(Robin) coupling for the Navier–Stokes equations. *Computer Methods in Applied Mechanics and Engineering*, **2003**, 192, 3343-3377	5.7	60
164	The fixed-mesh ALE approach for the numerical approximation of flows in moving domains. *Journal of Computational Physics*, **2009**, 228, 1591-1611	4.1	57
163	Analysis of a stabilized finite element approximation of the transient convection-diffusion-reaction equation using orthogonal subscales. *Computing and Visualization in Science*, **2002**, 4, 167-174	1	56
162	Improving Eulerian two-phase flow finite element approximation with discontinuous gradient pressure shape functions. *International Journal for Numerical Methods in Fluids*, **2005**, 49, 1287-1304	1.9	54
161	Mixed stabilized finite element methods in nonlinear solid mechanics. Part III: Compressible and incompressible plasticity. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 285, 752-775	5.7	52
160	A finite element method for the solution of rotary pumps. *Computers and Fluids*, **2007**, 36, 667-679	2.8	49
159	Dynamic subscales in the finite element approximation of thermally coupled incompressible flows. *International Journal for Numerical Methods in Fluids*, **2007**, 54, 707-730	1.9	47
158	Approximation of the incompressible Navier–Stokes equations using orthogonal subscale stabilization and pressure segregation on anisotropic finite element meshes. *Computer Methods in Applied Mechanics and Engineering*, **2004**, 193, 1403-1419	5.7	47
157	Mesh objective modeling of cracks using continuous linear strain and displacement interpolations. *International Journal for Numerical Methods in Engineering*, **2011**, 87, 962-987	2.4	46
156	The dissipative structure of variational multiscale methods for incompressible flows. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 791-801	5.7	46
155	Implementation of a stabilized finite element formulation for the incompressible Navier–Stokes equations based on a pressure gradient projection. *International Journal for Numerical Methods in Fluids*, **2001**, 37, 419-444	1.9	45
154	A symmetric method for weakly imposing Dirichlet boundary conditions in embedded finite element meshes. *International Journal for Numerical Methods in Engineering*, **2012**, 90, 636-658	2.4	44

153	CBS versus GLS stabilization of the incompressible Navier–Stokes equations and the role of the time step as stabilization parameter. *Communications in Numerical Methods in Engineering*, **2001**, 18, 99-112		44
152	Mould filling simulation using finite elements. *International Journal of Numerical Methods for Heat and Fluid Flow*, **1994**, 4, 291-310	4.5	44
151	Variational multi-scale stabilized formulations for the stationary three-field incompressible viscoelastic flow problem. *Computer Methods in Applied Mechanics and Engineering*, **2014**, 279, 579-605	5.7	43
150	Stabilized Finite Element Approximation of the Stationary Magneto-Hydrodynamics Equations. *Computational Mechanics*, **2006**, 38, 344-355	4	42
149	Explicit reduced-order models for the stabilized finite element approximation of the incompressible Navier–Stokes equations. *International Journal for Numerical Methods in Fluids*, **2013** , 72, 1219-1243	1.9	39
148	Stabilized continuous and discontinuous Galerkin techniques for Darcy flow. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 1654-1667	5.7	39
147	Analysis of a Stabilized Finite Element Approximation of the Transient Convection-Diffusion Equation Using an ALE Framework. *SIAM Journal on Numerical Analysis*, **2006**, 44, 2159-2197	2.4	39
146	Subscales on the element boundaries in the variational two-scale finite element method. *Computer Methods in Applied Mechanics and Engineering*, **2009**, 198, 838-852	5.7	37
145	A fractional-step method for the incompressible Navier–Stokes equations related to a predictor–multicorrector algorithm. *International Journal for Numerical Methods in Fluids*, **1998**, 28, 1391-1419	1.9	37
144	Effect of steel fibers on static and blast response of high strength concrete. *International Journal of Impact Engineering*, **2017**, 107, 23-37	4	36
143	Finite element approximation of the hyperbolic wave equation in mixed form. *Computer Methods in Applied Mechanics and Engineering*, **2008**, 197, 1305-1322	5.7	36
142	Stabilized stress–velocity–pressure finite element formulations of the Navier–Stokes problem for fluids with non-linear viscosity. *Computer Methods in Applied Mechanics and Engineering*, **2014**, 279, 554-578	5.7	33
141	On an unconditionally convergent stabilized finite element approximation of resistive magnetohydrodynamics. *Journal of Computational Physics*, **2013**, 234, 399-416	4.1	33
140	Finite element approximation of turbulent thermally coupled incompressible flows with numerical sub-grid scale modelling. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2010**, 20, 492-516	4.5	32
139	Approximation of the inductionless MHD problem using a stabilized finite element method. *Journal of Computational Physics*, **2011**, 230, 2977-2996	4.1	32
138	Finite Element Approximation of the Three-Field Formulation of the Stokes Problem Using Arbitrary Interpolations. *SIAM Journal on Numerical Analysis*, **2009**, 47, 699-718	2.4	32
137	Shock capturing viscosities for the general fluid mechanics algorithm **1998**, 28, 1325-1353		32
136	Immersed stress method for fluid–structure interaction using anisotropic mesh adaptation. *International Journal for Numerical Methods in Engineering*, **2013**, 94, 805-825	2.4	31

135	On some fluid–structure iterative algorithms using pressure segregation methods. Application to aeroelasticity. *International Journal for Numerical Methods in Engineering*, **2007**, 72, 46-71	2.4	31
134	A numerical model to track two-fluid interfaces based on a stabilized finite element method and the level set technique. *International Journal for Numerical Methods in Fluids*, **2002**, 40, 293-301	1.9	31
133	Space and time error estimates for a first order, pressure stabilized finite element method for the incompressible Navier–Stokes equations. *Applied Numerical Mathematics*, **2001**, 38, 475-497	2.5	31
132	A Nodal-based Finite Element Approximation of the Maxwell Problem Suitable for Singular Solutions. *SIAM Journal on Numerical Analysis*, **2012**, 50, 398-417	2.4	30
131	On a multiscale approach to the transient Stokes problem: Dynamic subscales and anisotropic space–time discretization. *Applied Mathematics and Computation*, **2009**, 207, 415-433	2.7	29
130	On some pressure segregation methods of fractional-step type for the finite element approximation of incompressible flow problems. *Computer Methods in Applied Mechanics and Engineering*, **2006**, 195, 2900-2918	5.7	28
129	Approximate imposition of boundary conditions in immersed boundary methods. *International Journal for Numerical Methods in Engineering*, **2009**, 80, 1379-1405	2.4	27
128	A stabilized finite element predictor–corrector scheme for the incompressible Navier–Stokes equations using a nodal-based implementation. *International Journal for Numerical Methods in Fluids*, **2004**, 44, 483-503	1.9	27
127	A domain decomposition strategy for reduced order models. Application to the incompressible Navier–Stokes equations. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 267, 23-42	5.7	25
126	Reduced-order subscales for POD models. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 291, 173-196	5.7	24
125	Spatial approximation of the radiation transport equation using a subgrid-scale finite element method. *Computer Methods in Applied Mechanics and Engineering*, **2011**, 200, 425-438	5.7	24
124	First, second and third order fractional step methods for the three-field viscoelastic flow problem. *Journal of Computational Physics*, **2015**, 296, 113-137	4.1	23
123	A mixed three-field FE formulation for stress accurate analysis including the incompressible limit. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 283, 1095-1116	5.7	23
122	A Sommerfeld non-reflecting boundary condition for the wave equation in mixed form. *Computer Methods in Applied Mechanics and Engineering*, **2014**, 276, 122-148	5.7	23
121	Statistical behavior of the orthogonal subgrid scale stabilization terms in the finite element large eddy simulation of turbulent flows. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 261-262, 154-166	5.7	23
120	SPLIT, CHARACTERISTIC BASED SEMI-IMPLICIT ALGORITHM FOR LAMINAR/TURBULENT INCOMPRESSIBLE FLOWS. *International Journal for Numerical Methods in Fluids*, **1996**, 23, 787-809	1.9	23
119	A finite element dynamical nonlinear subscale approximation for the low Mach number flow equations. *Journal of Computational Physics*, **2011**, 230, 7988-8009	4.1	22
118	Error estimates for an operator-splitting method for incompressible flows. *Applied Numerical Mathematics*, **2004**, 51, 1-17	2.5	22

117	Finite element implementation of two-equation and algebraic stress turbulence models for steady incompressible flows. *International Journal for Numerical Methods in Fluids*, **1999**, 30, 309-333	1.9	22
116	Error analysis of discontinuous Galerkin methods for the Stokes problem under minimal regularity. *IMA Journal of Numerical Analysis*, **2014**, 34, 800-819	1.8	21
115	Numerical comparison of CBS and SGS as stabilization techniques for the incompressible Navier–Stokes equations. *International Journal for Numerical Methods in Engineering*, **2006**, 66, 1672-1689	2.4	21
114	Fourier analysis of an equal-order incompressible flow solver stabilized by pressure gradient projection. *International Journal for Numerical Methods in Fluids*, **2000**, 34, 65-92	1.9	21
113	Stability analysis of the forward Euler scheme for the convection-diffusion equation using the SUPG formulation in space. *International Journal for Numerical Methods in Engineering*, **1993**, 36, 1445-1464	2.4	21
112	Finite element approximation of the modified Boussinesq equations using a stabilized formulation. *International Journal for Numerical Methods in Fluids*, **2008**, 57, 1249-1268	1.9	20
111	Experimental and numerical analysis of blast response of High Strength Fiber Reinforced Concrete slabs. *Engineering Structures*, **2018**, 175, 113-122	4.7	19
110	Approximation of the thermally coupled MHD problem using a stabilized finite element method. *Journal of Computational Physics*, **2011**, 230, 1281-1303	4.1	19
109	Finite element solution of the Stokes problem with dominating Coriolis force. *Computer Methods in Applied Mechanics and Engineering*, **1997**, 142, 215-234	5.7	19
108	On the stabilization parameter in the subgrid scale approximation of scalar convection–diffusion–reaction equations on distorted meshes. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 1386-1402	5.7	18
107	A finite element model for free surface flows on fixed meshes. *International Journal for Numerical Methods in Fluids*, **2007**, 54, 1151-1171	1.9	18
106	An algebraic subgrid scale finite element method for the convected Helmholtz equation in two dimensions with applications in aeroacoustics. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 196, 4672-4689	5.7	18
105	Algebraic Pressure Segregation Methods for the Incompressible Navier-Stokes Equations. *Archives of Computational Methods in Engineering*, **2008**, 15, 343-369	7.8	18
104	An iterative penalty method for the finite element solution of the stationary Navier-Stokes equations. *Computer Methods in Applied Mechanics and Engineering*, **1993**, 110, 237-262	5.7	18
103	An adaptive Fixed-Mesh ALE method for free surface flows. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 313, 159-188	5.7	17
102	Approximation of the two-fluid flow problem for viscoelastic fluids using the level set method and pressure enriched finite element shape functions. *Journal of Non-Newtonian Fluid Mechanics*, **2015**, 225, 37-53	2.7	17
101	The Fixed-Mesh ALE approach for the numerical simulation of floating solids. *International Journal for Numerical Methods in Fluids*, **2011**, 67, 1004-1023	1.9	17
100	Long-Term Stability Estimates and Existence of a Global Attractor in a Finite Element Approximation of the Navier–Stokes Equations with Numerical Subgrid Scale Modeling. *SIAM Journal on Numerical Analysis*, **2010**, 48, 1013-1037	2.4	17

99	An iteration-by-subdomain overlapping Dirichlet/Robin domain decomposition method for advection–diffusion problems. *Journal of Computational and Applied Mathematics*, **2003**, 158, 243-276	2.4	17
98	A nodal-based implementation of a stabilized finite element method for incompressible flow problems. *International Journal for Numerical Methods in Fluids*, **2000**, 33, 737-766	1.9	17
97	Dynamic term-by-term stabilized finite element formulation using orthogonal subgrid-scales for the incompressible Navier–Stokes problem. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 349, 701-721	5.7	16
96	Anisotropic adaptive meshing and monolithic Variational Multiscale method for fluid–structure interaction. *Computers and Structures*, **2013**, 122, 88-100	4.5	16
95	Analysis of an Unconditionally Convergent Stabilized Finite Element Formulation for Incompressible Magnetohydrodynamics. *Archives of Computational Methods in Engineering*, **2015**, 22, 621-636	7.8	15
94	Large eddy simulation of low Mach number flows using dynamic and orthogonal subgrid scales. *Computers and Fluids*, **2014**, 99, 44-66	2.8	15
93	Variational Multiscale error estimators for solid mechanics adaptive simulations: An Orthogonal Subgrid Scale approach. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 325, 37-55	5.7	15
92	Convergence analysis of the FEM approximation of the first order projection method for incompressible flows with and without the inf-sup condition. *Numerische Mathematik*, **2007**, 107, 533-557	2.2	15
91	Numerical modeling of magma withdrawal during explosive caldera-forming eruptions. *Journal of Geophysical Research*, **2001**, 106, 16163-16175		15
90	A Stabilized Finite Element Method for the Mixed Wave Equation in an ALE Framework With Application to Diphthong Production. *Acta Acustica United With Acustica*, **2016**, 102, 94-106	1.5	14
89	Stokes, Maxwell and Darcy: A single finite element approximation for three model problems. *Applied Numerical Mathematics*, **2012**, 62, 246-263	2.5	14
88	Transmission conditions with constraints in finite element domain decomposition methods for flow problems. *Communications in Numerical Methods in Engineering*, **2001**, 17, 179-190		14
87	A pseudo-compressible variational multiscale solver for turbulent incompressible flows. *Computational Mechanics*, **2016**, 58, 1051-1069	4	14
86	A finite element reduced-order model based on adaptive mesh refinement and artificial neural networks. *International Journal for Numerical Methods in Engineering*, **2020**, 121, 588-601	2.4	14
85	Stationary and time-dependent numerical approximation of the lid-driven cavity problem for power-law fluid flows at high Reynolds numbers using a stabilized finite element formulation of the VMS type. *Journal of Non-Newtonian Fluid Mechanics*, **2018**, 257, 22-43	2.7	13
84	A stabilized finite element approximation of low speed thermally coupled flows. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2008**, 18, 835-867	4.5	13
83	A finite element model for the simulation of lost foam casting. *International Journal for Numerical Methods in Fluids*, **2004**, 46, 203-226	1.9	13
82	A numerical model for temporal variations during explosive central vent eruptions. *Journal of Geophysical Research*, **1998**, 103, 20883-20899		13

81	COMPUTATIONAL AEROACOUSTICS OF VISCOUS LOW SPEED FLOWS USING SUBGRID SCALE FINITE ELEMENT METHODS. *Journal of Computational Acoustics*, **2009**, 17, 309-330		12
80	Algebraic pressure segregation methods for the incompressible Navier-Stokes equations. *Archives of Computational Methods in Engineering*, **2007**, 15, 1-52	7.8	12
79	Numerical Solution of the Incompressible Navier–Stokes Equations with Coriolis Forces Based on the Discretization of the Total Time Derivative. *Journal of Computational Physics*, **1999**, 148, 467-496	4.1	12
78	Computational aeroacoustics to identify sound sources in the generation of sibilant /s/. *International Journal for Numerical Methods in Biomedical Engineering*, **2019**, 35, e3153	2.6	12
77	Projection-based reduced order models for flow problems: A variational multiscale approach. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 363, 112844	5.7	11
76	Stability, Convergence, and Accuracy of Stabilized Finite Element Methods for the Wave Equation in Mixed Form. *SIAM Journal on Numerical Analysis*, **2014**, 52, 1729-1752	2.4	11
75	Reduced order models for thermally coupled low Mach flows. *Advanced Modeling and Simulation in Engineering Sciences*, **2018**, 5,	2.7	11
74	Variational Multiscale Methods in Computational Fluid Dynamics1-28		11
73	Finite element approximation of the viscoelastic flow problem: A non-residual based stabilized formulation. *Computers and Fluids*, **2017**, 142, 72-78	2.8	10
72	Thermal coupling of fluid flow and structural response of a tunnel induced by fire. *International Journal for Numerical Methods in Engineering*, **2011**, 87, 361-385	2.4	10
71	Pressure segregation methods based on a discrete pressure Poisson equation. An algebraic approach. *International Journal for Numerical Methods in Fluids*, **2008**, 56, 351-382	1.9	10
70	Variational multi-scale finite element approximation of the compressible Navier-Stokes equations. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2016**, 26, 1240-1271	4.5	10
69	A variational multiscale method with subscales on the element boundaries for the Helmholtz equation. *International Journal for Numerical Methods in Engineering*, **2013**, 93, 664-684	2.4	9
68	Finite element approximation of transmission conditions in fluids and solids introducing boundary subgrid scales. *International Journal for Numerical Methods in Engineering*, **2011**, 87, 386-411	2.4	9
67	A free surface finite element model for low Froude number mould filling problems on fixed meshes. *International Journal for Numerical Methods in Fluids*, **2011**, 66, 833-851	1.9	9
66	An adaptive Finite Element strategy for the numerical simulation of additive manufacturing processes. *Additive Manufacturing*, **2021**, 37, 101650	6.1	9
65	Residual-based stabilization of the finite element approximation to the acoustic perturbation equations for low Mach number aeroacoustics. *International Journal for Numerical Methods in Fluids* , **2016**, 82, 839-857	1.9	8
64	A combined nodal continuous–discontinuous finite element formulation for the Maxwell problem. *Applied Mathematics and Computation*, **2011**, 218, 4276-4294	2.7	8

63	Logarithmic conformation reformulation in viscoelastic flow problems approximated by a VMS-type stabilized finite element formulation. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 354, 706-731	5.7	7
62	A stabilized mixed finite element approximation for incompressible finite strain solid dynamics using a total Lagrangian formulation. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 368, 113164	5.7	7
61	Fluid structure interaction by means of variational multiscale reduced order models. *International Journal for Numerical Methods in Engineering*, **2020**, 121, 2601-2625	2.4	7
60	Full-scale testing of leakage of blast waves inside a partially vented room exposed to external air blast loading. *Shock Waves*, **2018**, 28, 227-241	1.6	7
59	A stabilized finite element method for the two-field and three-field Stokes eigenvalue problems. *Computer Methods in Applied Mechanics and Engineering*, **2016**, 310, 886-905	5.7	7
58	Pseudoplastic fluid flows for different Prandtl numbers: Steady and time-dependent solutions. *International Journal of Thermal Sciences*, **2019**, 145, 106022	4.1	7
57	On the design of discontinuous Galerkin methods for elliptic problems based on hybrid formulations. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 263, 158-168	5.7	7
56	Alternatives to prevent progressive collapse protecting reinforced concrete columns subjected to near field blast loading. *Procedia Engineering*, **2017**, 199, 2445-2450		7
55	Numerical modeling of chlorine concentration in water storage tanks. *International Journal for Numerical Methods in Fluids*, **2015**, 79, 84-107	1.9	7
54	Weak imposition of essential boundary conditions in the finite element approximation of elliptic problems with non-matching meshes. *International Journal for Numerical Methods in Engineering*, **2015**, 104, 624-654	2.4	7
53	The fixed-mesh ALE approach applied to solid mechanics and fluid□structure interaction problems. *International Journal for Numerical Methods in Engineering*, **2009**, 81, n/a-n/a	2.4	7
52	Chebyshev spectral collocation method approximations of the Stokes eigenvalue problem based on penalty techniques. *Applied Numerical Mathematics*, **2019**, 145, 188-200	2.5	6
51	Variational multiscale error estimators for the adaptive mesh refinement of compressible flow simulations. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 337, 501-526	5.7	6
50	Reduced-Order Modelling Strategies for the Finite Element Approximation of the Incompressible Navier-Stokes Equations. *Computational Methods in Applied Sciences (Springer)*, **2014**, 189-216	0.4	6
49	A third-order velocity correction scheme obtained at the discrete level. *International Journal for Numerical Methods in Fluids*, **2012**, 69, 57-72	1.9	6
48	A numerical approximation of the thermal coupling of fluids and solids. *International Journal for Numerical Methods in Fluids*, **2009**, 59, 1181-1201	1.9	6
47	A fractional-step finite-element method for the Navier□Stokes equations applied to magma-chamber withdrawal. *Computers and Geosciences*, **1999**, 25, 263-275	4.5	6
46	Finite Element Approximation of the Convection-Diffusion Equation: Subgrid-Scale Spaces, Local Instabilities and Anisotropic Space-Time Discretizations. *Lecture Notes in Computational Science and Engineering*, **2011**, 85-97	0.3	6

45	Concurrent finite element simulation of quadrupolar and dipolar flow noise in low Mach number aeroacoustics. *Computers and Fluids*, **2016**, 133, 129-139	2.8	6
44	A Dirichlet/Neumann domain decomposition method for incompressible turbulent flows on overlapping subdomains. *Computers and Fluids*, **2004**, 33, 771-782	2.8	5
43	Finite element approximation of turbulent thermally coupled incompressible flows with numerical sub-grid scale modeling. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2010**, 20,	4.5	5
42	Time-dependent semidiscrete analysis of the viscoelastic fluid flow problem using a variational multiscale stabilized formulation. *IMA Journal of Numerical Analysis*, **2019**, 39, 792-819	1.8	5
41	Variational multiscale approximation of the one-dimensional forced Burgers equation: The role of orthogonal subgrid scales in turbulence modeling. *International Journal for Numerical Methods in Fluids*, **2018**, 86, 313-328	1.9	5
40	Element boundary terms in reduced order models for flow problems: Domain decomposition and adaptive coarse mesh hyper-reduction. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 368, 113159	5.7	4
39	Unified solver for fluid dynamics and aeroacoustics in isentropic gas flows. *Journal of Computational Physics*, **2018**, 363, 11-29	4.1	4
38	Interpolation with restrictions between finite element meshes for flow problems in an ALE setting. *International Journal for Numerical Methods in Engineering*, **2017**, 110, 1203-1226	2.4	4
37	Finite element dynamical subgrid-scale model for low Mach number flows with radiative heat transfer. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2015**, 25, 1361-1384	4.5	4
36	Finite element simulation of the filling of thin moulds. *International Journal for Numerical Methods in Engineering*, **1999**, 46, 1559-1573	2.4	4
35	A penalty finite element method for non-Newtonian creeping flows. *International Journal for Numerical Methods in Engineering*, **1993**, 36, 1395-1412	2.4	4
34	On some time marching schemes for the stabilized finite element approximation of the mixed wave equation. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 296, 295-326	5.7	3
33	A three-field stabilized finite element method for fluid-structure interaction: elastic solid and rigid body limit. *International Journal for Numerical Methods in Engineering*, **2015**, 104, 566-584	2.4	3
32	A numerical strategy to compute optical parameters in turbulent flow: Application to telescopes. *Computers and Fluids*, **2010**, 39, 87-98	2.8	3
31	The enclosure for the European Solar Telescope (EST) **2010**,		3
30	Finite element modeling of the lost foam casting process tackling back-pressure effects. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2006**, 16, 573-589	4.5	3
29	Effectiveness of block iterative schemes in computing the seismic response of buildings with nonlinear base isolation. *Computers and Structures*, **1996**, 58, 133-141	4.5	3
28	A fractional step method for computational aeroacoustics using weak imposition of Dirichlet boundary conditions. *Computers and Fluids*, **2020**, 197, 104374	2.8	3

27	Solution of low Mach number aeroacoustic flows using a Variational Multi-Scale finite element formulation of the compressible Navier–Stokes equations written in primitive variables. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 344, 1073-1103	5.7	3
26	Finite element modeling of nonlinear reaction–diffusion–advection systems of equations. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2018**, 28, 2688-2715	4.5	3
25	Numerical analysis of a stabilized finite element approximation for the three-field linearized viscoelastic fluid problem using arbitrary interpolations. *ESAIM: Mathematical Modelling and Numerical Analysis*, **2016**,	1.8	2
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23	Numerical aerodynamic analysis of large buildings using a finite element model with application to a telescope building. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2000**, 10, 616-633	4.5	2
22	Dissipative Structure and Long Term Behavior of a Finite Element Approximation of Incompressible Flows with Numerical Subgrid Scale Modeling. *Lecture Notes in Applied and Computational Mechanics*, **2010**, 75-93	0.3	2
21	Solution of transient viscoelastic flow problems approximated by a term-by-term VMS stabilized finite element formulation using time-dependent subgrid-scales. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 367, 113074	5.7	2
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