Javier Principe

List of Publications by Year
in descending order

32 papers	910 citations	567281 15 h-index	454955 30 g-index
33 all docs	33 docs citations	33 times ranked	494 citing authors

#	Article	IF	Citations
1	Time dependent subscales in the stabilized finite element approximation of incompressible flow problems. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 2413-2430.	6.6	191
2	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.	6.6	82
3	Multilevel Balancing Domain Decomposition at Extreme Scales. SIAM Journal of Scientific Computing, 2016, 38, C22-C52.	2.8	53
4	Dynamic subscales in the finite element approximation of thermally coupled incompressible flows. International Journal for Numerical Methods in Fluids, 2007, 54, 707-730.	1.6	51
5	The dissipative structure of variational multiscale methods for incompressible flows. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 791-801.	6.6	50
6	Subscales on the element boundaries in the variational two-scale finite element method. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 838-852.	6.6	45
7	A variational subgrid scale model for transient incompressible flows. International Journal of Computational Fluid Dynamics, 2008, 22, 135-152.	1.2	38
8	Finite element approximation of turbulent thermally coupled incompressible flows with numerical subâ€grid scale modelling. International Journal of Numerical Methods for Heat and Fluid Flow, 2010, 20, 492-516.	2.8	38
9	FEMPAR: An Object-Oriented Parallel Finite Element Framework. Archives of Computational Methods in Engineering, 2018, 25, 195-271.	10.2	34
10	A Highly Scalable Parallel Implementation of Balancing Domain Decomposition by Constraints. SIAM Journal of Scientific Computing, 2014, 36, C190-C218.	2.8	32
11	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.	6.6	27
12	A finite element dynamical nonlinear subscale approximation for the low Mach number flow equations. Journal of Computational Physics, 2011, 230, 7988-8009.	3.8	25
13	Implementation and Scalability Analysis of Balancing Domain Decomposition Methods. Archives of Computational Methods in Engineering, 2013, 20, 239-262.	10.2	24
14	Finite element approximation of the modified Boussinesq equations using a stabilized formulation. International Journal for Numerical Methods in Fluids, 2008, 57, 1249-1268.	1.6	23
15	On the stabilization parameter in the subgrid scale approximation of scalar convectionâ€"diffusionâ€"reaction equations on distorted meshes. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 1386-1402.	6.6	23
16	Large eddy simulation of low Mach number flows using dynamic and orthogonal subgrid scales. Computers and Fluids, 2014, 99, 44-66.	2.5	17
17	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.	2.8	15
18	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.	2.8	15

#	Article	IF	Citations
19	Enhanced balancing Neumann–Neumann preconditioning in computational fluid and solid mechanics. International Journal for Numerical Methods in Engineering, 2013, 96, 203-230.	2.8	13
20	On the scalability of inexact balancing domain decomposition by constraints with overlapped coarse/fine corrections. Parallel Computing, 2015, 50, 1-24.	2.1	13
21	Mixed finite element methods with convection stabilization for the large eddy simulation of incompressible turbulent flows. Computer Methods in Applied Mechanics and Engineering, 2016, 304, 294-318.	6.6	12
22	Applications of a (k-?) model for the analysis of continuous casting processes. International Journal for Numerical Methods in Engineering, 1999, 46, 1505-1519.	2.8	11
23	Numerical modeling of chlorine concentration in water storage tanks. International Journal for Numerical Methods in Fluids, 2015, 79, 84-107.	1.6	10
24	EMBEDDED MULTILEVEL MONTE CARLO FOR UNCERTAINTY QUANTIFICATION IN RANDOM DOMAINS. , 2021, 11, 119-142.		10
25	A new approach to the analysis of vessel residence time distribution curves. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2001, 32, 1185-1193.	2.1	9
26	A robust and scalable unfitted adaptive finite element framework for nonlinear solid mechanics. Computer Methods in Applied Mechanics and Engineering, 2021, 386, 114093.	6.6	8
27	A numerical approximation of the thermal coupling of fluids and solids. International Journal for Numerical Methods in Fluids, 2009, 59, 1181-1201.	1.6	7
28	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.	2.8	4
29	Driving mechanisms and streamwise homogeneity in molecular dynamics simulations of nanochannel flows. Physical Review Fluids, 2018, 3, .	2.5	4
30	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.	2.2	3
31	Fully coupled numerical simulation of fire in tunnels: From fire scenario to structural response. MATEC Web of Conferences, 2013, 6, 05005.	0.2	2
32	Editorial: Algorithmic Aspects of High-Performance Computing for Mechanics and Physics. Journal of Computational and Applied Mathematics, 2018, 344, 739.	2.0	0