Rodolfo Araya

List of Publications by Year
in descending order

37 papers	460 citations	758635 12 h-index	713013 21 g-index
37 all docs	37 docs citations	37 times ranked	306 citing authors

#	Article	IF	Citations
1	On a multiscale a posteriori error estimator for the stokes and Brinkman equations. IMA Journal of Numerical Analysis, 2021, 41, 344-380.	1.5	2
2	An adaptive multiscale hybrid-mixed method for the Oseen equations. Advances in Computational Mathematics, 2021, 47, 1.	0.8	2
3	An adaptive stabilized finite element method for the Darcy's equations with pressure dependent viscosities. Computer Methods in Applied Mechanics and Engineering, 2021, 387, 114100.	3.4	4
4	Numerical analysis of a time domain elastoacoustic problem. IMA Journal of Numerical Analysis, 2020, 40, 1122-1153.	1.5	2
5	An adaptive stabilized method for advection–diffusion–reaction equation. Journal of Computational and Applied Mathematics, 2020, 376, 112858.	1.1	6
6	Analysis of an adaptive HDG method for the Brinkman problem. IMA Journal of Numerical Analysis, 2019, 39, 1502-1528.	1.5	14
7	A posteriori error analysis of an HDG method for the Oseen problem. Applied Numerical Mathematics, 2019, 146, 291-308.	1.2	6
8	An a posteriori error estimator for a LPS method for Navier–Stokes equations. Applied Numerical Mathematics, 2018, 127, 179-195.	1.2	2
9	Multiscale hybrid-mixed method for the Stokes and Brinkman equations—The method. Computer Methods in Applied Mechanics and Engineering, 2017, 324, 29-53.	3.4	19
10	Depth‐Dependent Geometry of the LiquiÃ±e‐Ofqui Fault Zone and Its Relation to Paths of Slab‐Derived Fluids. Geophysical Research Letters, 2017, 44, 10,916.	1.5	3
11	Depth-dependent geometry of margin-parallel strike-slip faults within oblique subduction zones. Andean Geology, 2017, 44, 79.	0.2	3
12	Interseismic deformation at subduction zones investigated by 2D numerical modeling: case study before the 2010 Maule earthquake. Andean Geology, 2016, 43, .	0.2	0
13	Relationship between slab dip and topography segmentation in an oblique subduction zone: Insights from numerical modeling. Geophysical Research Letters, 2015, 42, 5786-5795.	1.5	20
14	A low-order local projection method for the incompressible Navier–Stokes equations in two- and three-dimensions. IMA Journal of Numerical Analysis, 2015, , drv004.	1.5	1
15	An adaptive residual local projection finite element method for the Navier–Stokes equations. Advances in Computational Mathematics, 2014, 40, 1093-1119.	0.8	7
16	An a posteriori error estimator for an unsteady advection–diffusion–reaction problem. Computers and Mathematics With Applications, 2014, 66, 2456-2476.	1.4	5
17	Multiscale Hybrid-Mixed Method. SIAM Journal on Numerical Analysis, 2013, 51, 3505-3531.	1.1	62
18	Convergence Analysis of a Residual Local Projection Finite Element Method for the Navier–Stokes Equations. SIAM Journal on Numerical Analysis, 2012, 50, 669-699.	1.1	21

#	Article	IF	Citations
19	On a hierarchical error estimator combined with a stabilized method for the Navier–Stokes equations. Numerical Methods for Partial Differential Equations, 2012, 28, 782-806.	2.0	6
20	Finite-element analysis of a static fluid-solid interaction problem. IMA Journal of Numerical Analysis, 2011, 31, 886-913.	1.5	2
21	Stabilization arising from PGEM: A review and further developments. Applied Numerical Mathematics, 2009, 59, 2065-2081.	1.2	15
22	An adaptive stabilized finite element method for the generalized Stokes problem. Journal of Computational and Applied Mathematics, 2008, 214, 457-479.	1.1	14
23	A stabilized finite-element method for the Stokes problem including element and edge residuals. IMA Journal of Numerical Analysis, 2007, 27, 172-197.	1.5	11
24	An adaptive stabilized finite element scheme for a water quality model. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 2800-2812.	3.4	6
25	Error estimators for advection–reaction–diffusion equations based on the solution of local problems. Journal of Computational and Applied Mathematics, 2007, 206, 440-453.	1.1	8
26	A posteriori error estimates for elliptic problems with Dirac delta source terms. Numerische Mathematik, 2006, 105, 193-216.	0.9	43
27	Stabilized Finite Element Methods Based on Multiscale Enrichment for the Stokes Problem. SIAM Journal on Numerical Analysis, 2006, 44, 322-348.	1.1	64
28	Stabilizing the $\mathbb{P}1/\mathbb{P}0$ Element for the Stokes Problem via Multiscale Enrichment. , 2006, , 752-760.		1
29	An adaptive stabilized finite element scheme for the advection–reaction–diffusion equation. Applied Numerical Mathematics, 2005, 54, 491-503.	1.2	36
30	The role of wave propagation in hydrocyclone operations I: An axisymmetric streamfunction formulation for a conical hydrocyclone. Chemical Engineering Journal, 2005, 111, 205-211.	6.6	7
31	A multiscale a posteriori error estimate. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 2077-2094.	3.4	23
32	A HIERARCHICAL A POSTERIORI ERROR ESTIMATE FOR AN ADVECTION-DIFFUSION-REACTION PROBLEM. Mathematical Models and Methods in Applied Sciences, 2005, 15, 1119-1139.	1.7	23
33	A posteriori error estimates for a mixed-FEM formulation of a non-linear elliptic problem. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 2317-2336.	3.4	11
34	Adaptative finite element analysis for strongly heterogeneous elasticity problems. Revue Europeenne Des Elements, 1998, 7, 635-655.	0.1	1
35	A boundary-field equation method for a nonlinear exterior elasticity problem in the plane. Journal of Elasticity, 1996, 43, 45-68.	0.9	10
36	A new Pretov-Galerkin scheme for the two-point boundary value problem. Proyecciones, 1994, 13, 63-84.	0.1	0

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37	A new nonconforming Galerkin scheme for the stokes problem: Partially circumventing the discrete BabÇ"ska-Brezzi condition. Computer Methods in Applied Mechanics and Engineering, 1993, 107, 193-208.	3.4	0