Ricardo Oyarzua

List of Publications by Year
in descending order

48 papers	1,023 citations	430874 18 h-index	477307 29 g-index
48 all docs	48 docs citations	48 times ranked	235 citing authors

#	Article	IF	Citations
1	A conforming mixed finite-element method for the coupling of fluid flow with porous media flow. IMA Journal of Numerical Analysis, 2008, 29, 86-108.	2.9	105
2	Analysis of fully-mixed finite element methods for the Stokes-Darcy coupled problem. Mathematics of Computation, 2011, 80, 1911-1948.	2.1	75
3	Locking-Free Finite Element Methods for Poroelasticity. SIAM Journal on Numerical Analysis, 2016, 54, 2951-2973.	2.3	72
4	A residual-based a posteriori error estimator for a fully-mixed formulation of the Stokesâ€“Darcy coupled problem. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1877-1891.	6.6	59
5	Analysis of an augmented mixedâ€primal formulation for the stationary <scp>B</scp>oussinesq problem. Numerical Methods for Partial Differential Equations, 2016, 32, 445-478.	3.6	49
6	New fully-mixed finite element methods for the Stokesâ€“Darcy coupling. Computer Methods in Applied Mechanics and Engineering, 2015, 295, 362-395.	6.6	48
7	An exactly divergence-free finite element method for a generalized Boussinesq problem. IMA Journal of Numerical Analysis, 2014, 34, 1104-1135.	2.9	41
8	Convergence of a family of Galerkin discretizations for the Stokes-Darcy coupled problem. Numerical Methods for Partial Differential Equations, 2011, 27, 721-748.	3.6	35
9	A priori and a posteriori error analysis of a mixed scheme for the Brinkman problem. Numerische Mathematik, 2016, 133, 781-817.	1.9	27
10	An augmented fully-mixed finite element method for the stationary Boussinesq problem. Calcolo, 2017, 54, 167-205.	1.1	27
11	Analysis of a conforming finite element method for the Boussinesq problem with temperature-dependent parameters. Journal of Computational and Applied Mathematics, 2017, 323, 71-94.	2.0	25
12	Conservative discontinuous finite volume and mixed schemes for a new four-field formulation in poroelasticity. ESAIM: Mathematical Modelling and Numerical Analysis, 2020, 54, 273-299.	1.9	25
13	An Augmented Mixed Finite Element Method for the Navier--Stokes Equations with Variable Viscosity. SIAM Journal on Numerical Analysis, 2016, 54, 1069-1092.	2.3	24
14	Numerical analysis of a dual-mixed problem in non-standard Banach spaces. Electronic Transactions on Numerical Analysis, 0, 48, 114-130.	0.0	23
15	A conforming mixed finite element method for the Navierâ€“Stokes/Darcy coupled problem. Numerische Mathematik, 2017, 135, 571-606.	1.9	22
16	A twofold saddle point approach for the coupling of fluid flow with nonlinear porous media flow. IMA Journal of Numerical Analysis, 2012, 32, 845-887.	2.9	21
17	Analysis of an augmented mixed-FEM for the Navier-Stokes problem. Mathematics of Computation, 2016, 86, 589-615.	2.1	21
18	Analysis of an augmented fully-mixed approach for the coupling of quasi-Newtonian fluids and porous media. Computer Methods in Applied Mechanics and Engineering, 2014, 270, 76-112.	6.6	20

#	Article	IF	Citations
19	A fully-mixed finite element method for the Navierâ€“Stokes/Darcy coupled problem with nonlinear viscosity. Journal of Numerical Mathematics, 2017, 25, .	3.5	20
20	Analysis of a momentum conservative <scp>mixedâ€FEM</scp> for the stationary <scp>Navierâ€“Stokes</scp> problem. Numerical Methods for Partial Differential Equations, 2021, 37, 2895-2923.	3.6	18
21	Fixed point strategies for mixed variational formulations of the stationary Boussinesq problem. Comptes Rendus Mathematique, 2016, 354, 57-62.	0.3	17
22	A mixedâ€“primal finite element method for the Boussinesq problem with temperature-dependent viscosity. Calcolo, 2018, 55, 1.	1.1	16
23	A posteriori error analysis of a fully-mixed formulation for the Navierâ€“Stokes/Darcy coupled problem with nonlinear viscosity. Computer Methods in Applied Mechanics and Engineering, 2017, 315, 943-971.	6.6	15
24	An augmented stressâ€based mixed finite element method for the steady state Navierâ€Stokes equations with nonlinear viscosity. Numerical Methods for Partial Differential Equations, 2017, 33, 1692-1725.	3.6	15
25	Error analysis of an augmented mixed method for the Navierâ€“Stokes problem with mixed boundary conditions. IMA Journal of Numerical Analysis, 2018, 38, 1452-1484.	2.9	13
26	A conforming mixed finite element method for the Navierâ€“Stokes/Darcyâ€“Forchheimer coupled problem. ESAIM: Mathematical Modelling and Numerical Analysis, 2020, 54, 1689-1723.	1.9	13
27	A Fully-Mixed Formulation for the Steady Double-Diffusive Convection System Based upon Brinkmanâ€“Forchheimer Equations. Journal of Scientific Computing, 2020, 85, 1.	2.3	13
28	Banach spaces-based analysis of a fully-mixed finite element method for the steady-state model of fluidized beds. Computers and Mathematics With Applications, 2021, 84, 244-276.	2.7	13
29	A posteriori error analysis of an augmented mixed-primal formulation for the stationary Boussinesq model. Calcolo, 2017, 54, 1055-1095.	1.1	12
30	A new mixed-FEM for steady-state natural convection models allowing conservation of momentum and thermal energy. Calcolo, 2020, 57, 1.	1.1	12
31	<i>A priori</i>and<i>a posteriori</i>error analysis of a pseudostress-based mixed formulation of the Stokes problem with varying density. IMA Journal of Numerical Analysis, 2016, 36, 947-983.	2.9	11
32	A posteriori error analysis of an augmented fully-mixed formulation for the stationary Boussinesq model. Computers and Mathematics With Applications, 2019, 77, 693-714.	2.7	11
33	A Posteriori Error Analysis of a Mixed-Primal Finite Element Method for the Boussinesq Problem with Temperature-Dependent Viscosity. Journal of Scientific Computing, 2019, 78, 887-917.	2.3	10
34	A High Order Mixed-FEM for Diffusion Problems on Curved Domains. Journal of Scientific Computing, 2019, 79, 49-78.	2.3	10
35	A three-field Banach spaces-based mixed formulation for the unsteady Brinkmanâ€“Forchheimer equations. Computer Methods in Applied Mechanics and Engineering, 2022, 394, 114895.	6.6	10
36	Mixed Kirchhoff stressâ€“displacementâ€“pressure formulations for incompressible hyperelasticity. Computer Methods in Applied Mechanics and Engineering, 2021, 374, 113562.	6.6	9

#	Article	IF	Citations
37	A priori and a posteriori error analysis of an augmented mixed-FEM for the Navierâ€“Stokesâ€“Brinkman problem. Computers and Mathematics With Applications, 2018, 75, 2420-2444.	2.7	8
38	A new mixed finite element method for the <i>n</i>-dimensional Boussinesq problem with temperature-dependent viscosity. Networks and Heterogeneous Media, 2020, 15, 215-245.	1.1	8
39	A priorierror analysis of a fully-mixed finite element method for a two-dimensional fluid-solid interaction problem. ESAIM: Mathematical Modelling and Numerical Analysis, 2013, 47, 471-506.	1.9	7
40	Analysis of an augmented fully-mixed formulation for the coupling of the Stokes and heat equations. ESAIM: Mathematical Modelling and Numerical Analysis, 2018, 52, 1947-1980.	1.9	7
41	A priori and a posteriori error analyses of a high order unfitted mixed-FEM for Stokes flow. Computer Methods in Applied Mechanics and Engineering, 2020, 360, 112780.	6.6	7
42	A posteriori error analysis of an augmented fully mixed formulation for the nonisothermal Oldroydâ€“Stokes problem. Numerical Methods for Partial Differential Equations, 2019, 35, 295-324.	3.6	6
43	Residual-based<i>a posteriori</i>error analysis for the coupling of the Navierâ€“Stokes and Darcyâ€“Forchheimer equations. ESAIM: Mathematical Modelling and Numerical Analysis, 2021, 55, 659-687.	1.9	6
44	A posteriori error analysis of a momentum conservative Banach spaces based mixed-FEM for the Navierâ€“Stokes problem. Applied Numerical Mathematics, 2022, 176, 134-158.	2.1	5
45	A five-field augmented fully-mixed finite element method for the Navierâ€“Stokes/Darcy coupled problem. Computers and Mathematics With Applications, 2020, 80, 1944-1963.	2.7	4
46	A Divergence-Conforming DG-Mixed Finite Element Method for the Stationary Boussinesq Problem. Journal of Scientific Computing, 2020, 85, 1.	2.3	4
47	Error analysis of a conforming and locking-free four-field formulation for the stationary Biotâ€™s model. ESAIM: Mathematical Modelling and Numerical Analysis, 2021, 55, S475-S506.	1.9	3
48	Analysis of an unfitted mixed finite element method for a class of quasi-Newtonian Stokes flow. Computers and Mathematics With Applications, 2022, 114, 225-243.	2.7	1