

# Juan Pablo Borthagaray

## List of Publications by Year in descending order

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17  
papers

502  
citations

1040056

9  
h-index

1125743

13  
g-index

17  
all docs

17  
docs citations

17  
times ranked

239  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Fractional Laplace Equation: Regularity of Solutions and Finite Element Approximations. SIAM Journal on Numerical Analysis, 2017, 55, 472-495.	2.3	168
2	Numerical methods for fractional diffusion. Computing and Visualization in Science, 2018, 19, 19-46.	1.2	104
3	A short FE implementation for a 2d homogeneous Dirichlet problem of a fractional Laplacian. Computers and Mathematics With Applications, 2017, 74, 784-816.	2.7	83
4	Regularity theory and high order numerical methods for the (1D)-fractional Laplacian. Mathematics of Computation, 2018, 87, 1821-1857.	2.1	35
5	Finite Element Approximation for the Fractional Eigenvalue Problem. Journal of Scientific Computing, 2018, 77, 308-329.	2.3	18
6	Finite Element Approximations for Fractional Evolution Problems. Fractional Calculus and Applied Analysis, 2019, 22, 767-794.	2.2	18
7	Local Energy Estimates for the Fractional Laplacian. SIAM Journal on Numerical Analysis, 2021, 59, 1918-1947.	2.3	15
8	A structure-preserving FEM for the uniaxially constrained $\mathbf{Q}$ -tensor model of nematic liquid crystals. Numerische Mathematik, 2020, 145, 837-881.	1.9	14
9	On the Convergence in $H^1$ -Norm for the Fractional Laplacian. SIAM Journal on Numerical Analysis, 2019, 57, 1723-1743.	2.3	13
10	Weighted Sobolev regularity and rate of approximation of the obstacle problem for the integral fractional Laplacian. Mathematical Models and Methods in Applied Sciences, 2019, 29, 2679-2717.	3.3	11
11	Finite element discretizations of nonlocal minimal graphs: Convergence. Nonlinear Analysis: Theory, Methods & Applications, 2019, 189, 111566.	1.1	10
12	Finite element approximations of the nonhomogeneous fractional Dirichlet problem. IMA Journal of Numerical Analysis, 0, , .	2.9	6
13	Finite element algorithms for nonlocal minimal graphs. Mathematics in Engineering, 2021, 4, 1-29.	0.9	3
14	The Q-tensor model with uniaxial constraint. Handbook of Numerical Analysis, 2021, 22, 313-382.	1.8	3
15	Nonlocal models for interface problems between dielectrics and metamaterials. , 2017, , .		1
16	A mass transportation approach for Sobolev inequalities in variable exponent spaces. Manuscripta Mathematica, 2016, 151, 133-146.	0.6	0
17	Finite element approximation of fractional Neumann problems. IMA Journal of Numerical Analysis, 0, , .	2.9	0