SÃ´nia Maria Gomes

List of Publications by Year
in descending order

26	370	840776 11	794594 19
papers	citations	h-index	g-index

26	26	26	212
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	NewH(div)-conforming multiscale hybrid-mixed methods for the elasticity problem on polygonal meshes. ESAIM: Mathematical Modelling and Numerical Analysis, 2021, 55, 1005-1037.	1.9	4
2	Error estimates for the Scaled Boundary Finite Element Method. Computer Methods in Applied Mechanics and Engineering, 2021, 379, 113765.	6.6	7
3	A multiscale mixed finite element method applied to the simulation of two-phase flows. Computer Methods in Applied Mechanics and Engineering, 2021, 383, 113870.	6.6	6
4	Enriched two dimensional mixed finite element models for linear elasticity with weak stress symmetry. Computers and Mathematics With Applications, 2020, 79, 2678-2700.	2.7	3
5	Mixed finite element approximations of a singular elliptic problem based on some anisotropic and hp-adaptive curved quarter-point elements. Applied Numerical Mathematics, 2020, 158, 85-102.	2.1	4
6	H (div) finite elements based on nonaffine meshes for 3D mixed formulations of flow problems with arbitrary high order accuracy of the divergence of the flux. International Journal for Numerical Methods in Engineering, 2020, 121, 2896-2915.	2.8	3
7	H(div)-Conforming Spaces Based on General Meshes, with Interface Constraints: Accuracy Enhancement, Multiscale, and hp-Adaptividy. Lecture Notes in Computational Science and Engineering, 2020, , 83-95.	0.3	0
8	High-order composite finite element exact sequences based on tetrahedralâ€“hexahedralâ€“prismaticâ€“pyramidal partitions. Computer Methods in Applied Mechanics and Engineering, 2019, 355, 952-975.	6.6	14
9	A multiscale hybrid method for Darcyâ€™s problems using mixed finite element local solvers. Computer Methods in Applied Mechanics and Engineering, 2019, 354, 213-244.	6.6	23
10	A remark concerning divergence accuracy order for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e2677" altimg="si16.gif"><mml:mi mathvariant="bold">H</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mtext>div</mml:mtext><mml:mo>)</mml:mo></mml:mrow finite element flux approximations. Computers and Mathematics With Applications, 2019, 77, 1864-1872.	2.7	9
11	Mixed finite element approximations based on 3â€D hpâ€adaptive curved meshes with two types of H(div)â€conforming spaces. International Journal for Numerical Methods in Engineering, 2018, 113, 1045-1060.	2.8	14
12	An object-oriented framework for multiphysics problems combining different approximation spaces. Finite Elements in Analysis and Design, 2018, 151, 34-49.	3.2	6
13	On continuous, discontinuous, mixed, and primal hybrid finite element methods for secondâ€order elliptic problems. International Journal for Numerical Methods in Engineering, 2018, 115, 1083-1107.	2.8	10
14	Two dimensional mixed finite element approximations for elliptic problems with enhanced accuracy for the potential and flux divergence. Computers and Mathematics With Applications, 2017, 74, 3283-3295.	2.7	10
15	Two-dimensional hp adaptive finite element spaces for mixed formulations. Mathematics and Computers in Simulation, 2016, 126, 104-122.	4.4	11
16	Three dimensional hierarchical mixed finite element approximations with enhanced primal variable accuracy. Computer Methods in Applied Mechanics and Engineering, 2016, 306, 479-502.	6.6	22
17	A comparative numerical study of different finite element formulations for 2D model elliptic problems: Continuous and discontinuous Galerkin, mixed and hybrid methods. Finite Elements in Analysis and Design, 2016, 115, 9-20.	3.2	5
18	Hierarchical high order finite element bases for<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si87.gif" display="inline" overflow="scroll"><mml:mstyle mathvariant="bold"><mml:mi>H</mml:mi></mml:mstyle><mml:mrow><mml:mo>(</mml:mo><mml:mtext>div</mml:mtext><mml:mo> based on curved meshes for two-dimensional regions or manifolds. Journal of Computational and Applied Mathematics, 2016, 301, 241-258.	2.0	13

#	ARTICLE	IF	CITATIONS
19	Implementation of continuous <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si35.gif" display="inline" overflow="scroll"><mml:mi>h</mml:mi><mml:mi>p</mml:mi></mml:math>-adaptive finite element spaces without limitations on hanging sides and distribution of approximation orders. Computers and Mathematics With Applications, 2015, 70, 1051-1069.	2.7	19
20	A new procedure for the construction of hierarchical high order Hdiv and Hcurl finite element spaces. Journal of Computational and Applied Mathematics, 2013, 240, 204-214.	2.0	24
21	An adaptive multiresolution method on dyadic grids: Application to transport equations. Journal of Computational and Applied Mathematics, 2012, 236, 3636-3646.	2.0	2
22	Grid structure impact in sparse point representation of derivatives. Journal of Computational and Applied Mathematics, 2010, 234, 2377-2389.	2.0	3
23	Spaceâ€“time adaptive multiresolution methods for hyperbolic conservation laws: Applications to compressible Euler equations. Applied Numerical Mathematics, 2009, 59, 2303-2321.	2.1	52
24	An adaptive multiresolution scheme with local time stepping for evolutionary PDEs. Journal of Computational Physics, 2008, 227, 3758-3780.	3.8	80
25	Wavelets and adaptive grids for the discontinuous Galerkin method. Numerical Algorithms, 2005, 39, 143-154.	1.9	19
26	Approximation inL 2 Sobolev spaces on the 2-sphere by quasi-interpolation. Journal of Fourier Analysis and Applications, 2001, 7, 283-295.	1.0	7