

# Marcus Sarkis

## List of Publications by Year in descending order

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34  
papers

1,045  
citations

623734

14  
h-index

501196

28  
g-index

37  
all docs

37  
docs citations

37  
times ranked

545  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Restricted Additive Schwarz Preconditioner for General Sparse Linear Systems. SIAM Journal of Scientific Computing, 1999, 21, 792-797.	2.8	443
2	BDDC methods for discontinuous Galerkin discretization of elliptic problems. Journal of Complexity, 2007, 23, 715-739.	1.3	75
3	Nonstandard coarse spaces and Schwarz methods for elliptic problems with discontinuous coefficients using non-conforming elements. Numerische Mathematik, 1997, 77, 383-406.	1.9	72
4	A linearized method for the frequency analysis of three-dimensional fluid/structure interaction problems in all flow regimes. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 3121-3146.	6.6	66
5	Restricted Additive Schwarz Preconditioners with Harmonic Overlap for Symmetric Positive Definite Linear Systems. SIAM Journal on Numerical Analysis, 2003, 41, 1209-1231.	2.3	52
6	Overlapping Nonmatching Grid Mortar Element Methods for Elliptic Problems. SIAM Journal on Numerical Analysis, 1999, 36, 581-606.	2.3	45
7	A Finite Element Method for High-Contrast Interface Problems with Error Estimates Independent of Contrast. Journal of Scientific Computing, 2017, 73, 330-365.	2.3	32
8	FETI and BDD preconditioners for Stokes-Mortar-Darcy Systems. Communications in Applied Mathematics and Computational Science, 2010, 5, 1-30.	1.8	29
9	Restricted overlapping balancing domain decomposition methods and restricted coarse problems for the Helmholtz problem. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 1507-1514.	6.6	28
10	A FETI-DP Preconditioner for a Composite Finite Element and Discontinuous Galerkin Method. SIAM Journal on Numerical Analysis, 2013, 51, 400-422.	2.3	23
11	Robust flux error estimation of an unfitted Nitsche method for high-contrast interface problems. IMA Journal of Numerical Analysis, 2018, 38, 646-668.	2.9	23
12	Optimal left and right additive Schwarz preconditioning for minimal residual methods with Euclidean and energy norms. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 1612-1621.	6.6	21
13	A scaled and minimum overlap restricted additive Schwarz method with application to aerodynamics. Computer Methods in Applied Mechanics and Engineering, 2000, 184, 391-400.	6.6	15
14	Convergence Analysis for The Numerical Boundary Corrector for Elliptic Equations with Rapidly Oscillating Coefficients. SIAM Journal on Numerical Analysis, 2008, 46, 545-576.	2.3	15
15	Neumann-Neumann methods for a DG discretization on geometrically nonconforming substructures. Numerical Methods for Partial Differential Equations, 2012, 28, 1194-1226.	3.6	10
16	Balancing Domain Decomposition Methods for Mortar Coupling Stokes-Darcy Systems. , 2007, , 373-380.		10
17	New Theoretical Coefficient Robustness Results for FETI-DP. Lecture Notes in Computational Science and Engineering, 2013, , 313-320.	0.3	10
18	Balancing Domain Decomposition Methods for Discontinuous Galerkin Discretization. Lecture Notes in Computational Science and Engineering, 2008, , 271-278.	0.3	9

#	ARTICLE	IF	CITATIONS
19	Technical Tools for Boundary Layers and Applications to Heterogeneous Coefficients. Lecture Notes in Computational Science and Engineering, 2011, , 205-212.	0.3	9
20	Partition of Unity Coarse Spaces and Schwarz Methods with Harmonic Overlap. Lecture Notes in Computational Science and Engineering, 2002, , 77-94.	0.3	8
21	The analysis of a FETI-DP preconditioner for a full DG discretization of elliptic problems in two dimensions. Numerische Mathematik, 2015, 131, 737-770.	1.9	7
22	Hybrid Localized Spectral Decomposition for Multiscale Problems. SIAM Journal on Numerical Analysis, 2021, 59, 829-863.	2.3	7
23	On high-order conservative finite element methods. Computers and Mathematics With Applications, 2018, 75, 1852-1867.	2.7	6
24	N <sup>n</sup> Solvers for a DG Discretization for Geometrically Nonconforming Substructures and Discontinuous Coefficients. Lecture Notes in Computational Science and Engineering, 2011, , 27-38.	0.3	6
25	CONTINUOUS Q <sub>1</sub> Q <sub>1</sub> STOKES ELEMENTS STABILIZED WITH NON-CONFORMING NULL EDGE AVERAGE VELOCITY FUNCTIONS. Mathematical Models and Methods in Applied Sciences, 2007, 17, 439-459.	3.3	5
26	Domain Decomposition Methods. , 2002, , 3-29.		3
27	3-D FETI-DP Preconditioners for Composite Finite Element-Discontinuous Galerkin Methods. Lecture Notes in Computational Science and Engineering, 2014, , 127-140.	0.3	2
28	FETI-DP for Stokes-Mortar-Darcy Systems. Lecture Notes in Computational Science and Engineering, 2011, , 221-228.	0.3	1
29	A Deluxe FETI-DP Preconditioner for a Composite Finite Element and DG Method. Computational Methods in Applied Mathematics, 2015, 15, 465-482.	0.8	1
30	Singular Function Mortar Finite Element Methods. Computational Methods in Applied Mathematics, 2003, 3, 202-218.	0.8	0
31	On High-Order Approximation and Stability with Conservative Properties. Lecture Notes in Computational Science and Engineering, 2018, , 253-260.	0.3	0
32	A Coarse Space for Elasticity. , 2002, , 261-273.		0
33	A Deluxe FETI-DP Method for Full DG Discretization of Elliptic Problems. Lecture Notes in Computational Science and Engineering, 2016, , 157-165.	0.3	0
34	A Proposal for a Dynamically Adapted Inexact Additive Schwarz Preconditioner. , 2007, , 341-345.		0