Guanglian Li

List of Publications by Year
in descending order

24	438	933447 10	713466 21
papers	citations	h-index	g-index

24	24	24	179
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An adaptive GMsFEM for high-contrast flow problems. Journal of Computational Physics, 2014, 273, 54-76.	3.8	99
2	GENERALIZED MULTISCALE FINITE ELEMENT METHODS: OVERSAMPLING STRATEGIES. International Journal for Multiscale Computational Engineering, 2014, 12, 465-484.	1.2	79
3	Randomized Oversampling for Generalized Multiscale Finite Element Methods. Multiscale Modeling and Simulation, 2016, 14, 482-501.	1.6	47
4	Hierarchical multiscale modeling for flows in fractured media using generalized multiscale finite element method. GEM - International Journal on Geomathematics, 2015, 6, 141-162.	1.6	43
5	Generalized multiscale finite element methods for problems in perforated heterogeneous domains. Applicable Analysis, 2016, 95, 2254-2279.	1.3	36
6	Generalized Multiscale Finite Element Methods. Nonlinear Elliptic Equations. Communications in Computational Physics, 2014, 15, 733-755.	1.7	32
7	A generalized multiscale finite element method for the Brinkman equation. Journal of Computational and Applied Mathematics, 2015, 280, 294-309.	2.0	16
8	Edge multiscale methods for elliptic problems with heterogeneous coefficients. Journal of Computational Physics, 2019, 396, 228-242.	3.8	16
9	On the Convergence Rates of GMsFEMs for Heterogeneous Elliptic Problems Without Oversampling Techniques. Multiscale Modeling and Simulation, 2019, 17, 593-619.	1.6	14
10	Error analysis of a variational multiscale stabilization for convection-dominated diffusion equations in two dimensions. IMA Journal of Numerical Analysis, 2018, 38, 1229-1253.	2.9	13
11	On the degree of ill-posedness of multi-dimensional magnetic particle imaging. Inverse Problems, 2018, 34, 095006.	2.0	10
12	On the Decay Rate of the Singular Values of Bivariate Functions. SIAM Journal on Numerical Analysis, 2018, 56, 974-993.	2.3	9
13	Homogenization of High-Contrast Brinkman Flows. Multiscale Modeling and Simulation, 2015, 13, 472-490.	1.6	5
14	An Edge Multiscale Interior Penalty Discontinuous Galerkin method for heterogeneous Helmholtz problems with large varying wavenumber. Journal of Computational Physics, 2021, 441, 110387.	3.8	4
15	Sparse Generalized Multiscale Finite Element Methods and their applications. International Journal for Multiscale Computational Engineering, 2015, , .	1.2	4
16	Low-Rank Approximation to Heterogeneous Elliptic Problems. Multiscale Modeling and Simulation, 2018, 16, 477-502.	1.6	2
17	Homogenization of time-fractional diffusion equations with periodic coefficients. Journal of Computational Physics, 2020, 408, 109231.	3.8	2
18	Wavelet-based edge multiscale parareal algorithm for parabolic equations with heterogeneous coefficients and rough initial data. Journal of Computational Physics, 2021, 444, 110572.	3.8	2

#	Article	IF	Citations
19	Wavelet-based Edge Multiscale Finite Element Method for Helmholtz problems in perforated domains. Multiscale Modeling and Simulation, 2021, 19, 1684-1709.	1.6	2
20	Multiscale Modeling of High Contrast Brinkman Equations with Applications to Deformable Porous Media. , 2013, , .		1
21	A Convergent Adaptive Finite Element Method for Cathodic Protection. Computational Methods in Applied Mathematics, 2017, 17, 105-120.	0.8	1
22	Upscaled HDG Methods for Brinkman Equations with High-Contrast Heterogeneous Coefficient. Journal of Scientific Computing, 2018, 77, 1780-1800.	2.3	1
23	Quasi-optimality of an Adaptive Finite Element Method for Cathodic Protection. ESAIM: Mathematical Modelling and Numerical Analysis, 2019, 53, 1645-1665.	1.9	0
24	On Metrics for Computation of Strength of Coupling in Multiphysics Simulations. The IMA Volumes in Mathematics and Its Applications, 2016, , 137-176.	0.5	0