Christoph Schwab

List of Publications by Year
in descending order

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178	8,341	41344	51608
papers	citations	49 h-index	86 g-index

181	181	181	2637
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Discontinuoushp-Finite Element Methods for Advection-Diffusion-Reaction Problems. SIAM Journal on Numerical Analysis, 2002, 39, 2133-2163.	2.3	389
2	Finite elements for elliptic problems with stochastic coefficients. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 205-228.	6.6	316
3	Boundary Element Methods. Springer Series in Computational Mathematics, 2011, , .	0.2	315
4	Karhunenâ€“LoÃ¨ve approximation of random fields by generalized fast multipole methods. Journal of Computational Physics, 2006, 217, 100-122.	3.8	287
5	Multi-level Monte Carlo Finite Element method for elliptic PDEs with stochastic coefficients. Numerische Mathematik, 2011, 119, 123-161.	1.9	248
6	ANALYTIC REGULARITY AND POLYNOMIAL APPROXIMATION OF PARAMETRIC AND STOCHASTIC ELLIPTIC PDE'S. Analysis and Applications, 2011, 09, 11-47.	2.2	230
7	Convergence Rates of Best N-term Galerkin Approximations for a Class of Elliptic sPDEs. Foundations of Computational Mathematics, 2010, 10, 615-646.	2.5	228
8	Local Discontinuous Galerkin Methods for the Stokes System. SIAM Journal on Numerical Analysis, 2002, 40, 319-343.	2.3	226
9	Sparse tensor discretizations of high-dimensional parametric and stochastic PDEs. Acta Numerica, 2011, 20, 291-467.	10.7	197
10	Optimal a priori error estimates for the hp-version of the local discontinuous Galerkin method for convection--diffusion problems. Mathematics of Computation, 2001, 71, 455-479.	2.1	186
11	Quasi-Monte Carlo Finite Element Methods for a Class of Elliptic Partial Differential Equations with Random Coefficients. SIAM Journal on Numerical Analysis, 2012, 50, 3351-3374.	2.3	176
12	Convergence rates for sparse chaos approximations of elliptic problems with stochastic coefficients. IMA Journal of Numerical Analysis, 2007, 27, 232-261.	2.9	168
13	Time Discretization of Parabolic Problems by the HP-Version of the Discontinuous Galerkin Finite Element Method. SIAM Journal on Numerical Analysis, 2000, 38, 837-875.	2.3	161
14	Space-time adaptive wavelet methods for parabolic evolution problems. Mathematics of Computation, 2009, 78, 1293-1318.	2.1	146
15	Deep learning in high dimension: Neural network expression rates for generalized polynomial chaos expansions in UQ. Analysis and Applications, 2019, 17, 19-55.	2.2	133
16	High-Dimensional Adaptive Sparse Polynomial Interpolation and Applications to Parametric PDEs. Foundations of Computational Mathematics, 2014, 14, 601-633.	2.5	126
17	The p and hp versions of the finite element method for problems with boundary layers. Mathematics of Computation, 1996, 65, 1403-1430.	2.1	123
18	Mixedhp-DGFEM for Incompressible Flows. SIAM Journal on Numerical Analysis, 2002, 40, 2171-2194.	2.3	123

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19	Sparse finite elements for elliptic problems with stochastic loading. Numerische Mathematik, 2003, 95, 707-734.	1.9	121
20	Tensor-Structured Galerkin Approximation of Parametric and Stochastic Elliptic PDEs. SIAM Journal of Scientific Computing, 2011, 33, 364-385.	2.8	121
21	Sparse high order FEM for elliptic sPDEs. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 1149-1170.	6.6	114
22	Breaking the curse of dimensionality in sparse polynomial approximation of parametric PDEs. Journal Des Mathematiques Pures Et Appliquees, 2015, 103, 400-428.	1.6	114
23	Stabilizedhp-Finite Element Methods for First-Order Hyperbolic Problems. SIAM Journal on Numerical Analysis, 2000, 37, 1618-1643.	2.3	107
24	Isotropic Gaussian random fields on the sphere: Regularity, fast simulation and stochastic partial differential equations. Annals of Applied Probability, 2015, 25, .	1.3	105
25	Direct Solution of the Chemical Master Equation Using Quantized Tensor Trains. PLoS Computational Biology, 2014, 10, e1003359.	3.2	103
26	Wavelet approximations for first kind boundary integral equations on polygons. Numerische Mathematik, 1996, 74, 479-516.	1.9	101
27	Fast deterministic pricing of options on LÃ©vy driven assets. ESAIM: Mathematical Modelling and Numerical Analysis, 2004, 38, 37-71.	1.9	97
28	Sparse second moment analysis for elliptic problems in stochastic domains. Numerische Mathematik, 2008, 109, 385-414.	1.9	93
29	Sparse, adaptive Smolyak quadratures for Bayesian inverse problems. Inverse Problems, 2013, 29, 065011.	2.0	92
30	Numerical solution of parabolic equations in high dimensions. ESAIM: Mathematical Modelling and Numerical Analysis, 2004, 38, 93-127.	1.9	90
31	Heterogeneous Multiscale FEM for Diffusion Problems on Rough Surfaces. Multiscale Modeling and Simulation, 2005, 3, 195-220.	1.6	87
32	Multiwavelets for Second-Kind Integral Equations. SIAM Journal on Numerical Analysis, 1997, 34, 2212-2227.	2.3	84
33	Adaptive Petrov--Galerkin Methods for First Order Transport Equations. SIAM Journal on Numerical Analysis, 2012, 50, 2420-2445.	2.3	82
34	Wavelet Galerkin Algorithms for Boundary Integral Equations. SIAM Journal of Scientific Computing, 1999, 20, 2195-2222.	2.8	78
35	Adaptive stochastic Galerkin FEM. Computer Methods in Applied Mechanics and Engineering, 2014, 270, 247-269.	6.6	78
36	Multi-level Quasi-Monte Carlo Finite Element Methods for a Class of Elliptic PDEs with Random Coefficients. Foundations of Computational Mathematics, 2015, 15, 411-449.	2.5	75

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37	EXISTENCE OF GLOBAL WEAK SOLUTIONS FOR SOME POLYMERIC FLOW MODELS. Mathematical Models and Methods in Applied Sciences, 2005, 15, 939-983.	3.3	74
38	Sparse adaptive Taylor approximation algorithms for parametric and stochastic elliptic PDEs. ESAIM: Mathematical Modelling and Numerical Analysis, 2013, 47, 253-280.	1.9	74
39	High-Dimensional Finite Elements for Elliptic Problems with Multiple Scales. Multiscale Modeling and Simulation, 2005, 3, 168-194.	1.6	73
40	Complexity analysis of accelerated MCMC methods for Bayesian inversion. Inverse Problems, 2013, 29, 085010.	2.0	73
41	Adaptive wavelet algorithms for elliptic PDE's on product domains. Mathematics of Computation, 2008, 77, 71-92.	2.1	72
42	EXPONENTIAL CONVERGENCE OF hp-FEM FOR MAXWELL EQUATIONS WITH WEIGHTED REGULARIZATION IN POLYGONAL DOMAINS. Mathematical Models and Methods in Applied Sciences, 2005, 15, 575-622.	3.3	71
43	Higher Order QMC Petrov--Galerkin Discretization for Affine Parametric Operator Equations with Random Field Inputs. SIAM Journal on Numerical Analysis, 2014, 52, 2676-2702.	2.3	70
44	Sparse finite element methods for operator equations with stochastic data. Applications of Mathematics, 2006, 51, 145-180.	0.9	69
45	Sparse Tensor Discretization of Elliptic sPDEs. SIAM Journal of Scientific Computing, 2010, 31, 4281-4304.	2.8	68
46	Boundary Element Methods. Springer Series in Computational Mathematics, 2010, , 183-287.	0.2	62
47	Fast Numerical Solution of Parabolic Integrodifferential Equations with Applications in Finance. SIAM Journal of Scientific Computing, 2005, 27, 369-393.	2.8	58
48	Multilevel Quasi-Monte Carlo methods for lognormal diffusion problems. Mathematics of Computation, 2017, 86, 2827-2860.	2.1	54
49	An Adaptive Wavelet Method for Solving High-Dimensional Elliptic PDEs. Constructive Approximation, 2009, 30, 423-455.	3.0	53
50	Deep ReLU networks and high-order finite element methods. Analysis and Applications, 2020, 18, 715-770.	2.2	52
51	Multilevel Monte Carlo method for parabolic stochastic partial differential equations. BIT Numerical Mathematics, 2013, 53, 3-27.	2.0	51
52	Two-scale FEM for homogenization problems. ESAIM: Mathematical Modelling and Numerical Analysis, 2002, 36, 537-572.	1.9	44
53	DNN Expression Rate Analysis of High-Dimensional PDEs: Application to Option Pricing. Constructive Approximation, 2022, 55, 3-71.	3.0	43
54	N-TERM WIENER CHAOS APPROXIMATION RATES FOR ELLIPTIC PDEs WITH LOGNORMAL GAUSSIAN RANDOM INPUTS. Mathematical Models and Methods in Applied Sciences, 2014, 24, 797-826.	3.3	42

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55	Multilevel frames for sparse tensor product spaces. Numerische Mathematik, 2008, 110, 199-220.	1.9	41
56	First order k-th moment finite element analysis of nonlinear operator equations with stochastic data. Mathematics of Computation, 2013, 82, 1859-1888.	2.1	40
57	Analytic regularity of Stokes flow on polygonal domains in countably weighted Sobolev spaces. Journal of Computational and Applied Mathematics, 2006, 190, 487-519.	2.0	39
58	Analytic Regularity and GPC Approximation for Control Problems Constrained by Linear Parametric Elliptic and Parabolic PDEs. SIAM Journal on Control and Optimization, 2013, 51, 2442-2471.	2.1	38
59	Mixed hp-FEM on anisotropic meshes II: Hanging nodes and tensor products of boundary layer meshes. Numerische Mathematik, 1999, 83, 667-697.	1.9	35
60	Multilevel Higher Order QMC Petrov--Galerkin Discretization for Affine Parametric Operator Equations. SIAM Journal on Numerical Analysis, 2016, 54, 2541-2568.	2.3	35
61	A convergent adaptive stochastic Galerkin finite element method with quasi-optimal spatial meshes. ESAIM: Mathematical Modelling and Numerical Analysis, 2015, 49, 1367-1398.	1.9	34
62	Multilevel higher-order quasi-Monte Carlo Bayesian estimation. Mathematical Models and Methods in Applied Sciences, 2017, 27, 953-995.	3.3	34
63	Tensor FEM for Spectral Fractional Diffusion. Foundations of Computational Mathematics, 2019, 19, 901-962.	2.5	34
64	Sparse-grid, reduced-basis Bayesian inversion. Computer Methods in Applied Mechanics and Engineering, 2015, 297, 84-115.	6.6	33
65	Compressive sensing Petrov-Galerkin approximation of high-dimensional parametric operator equations. Mathematics of Computation, 2016, 86, 661-700.	2.1	33
66	Computational Methods for Quantitative Finance. Springer Finance, 2013, , .	0.0	32
67	Sparse-grid, reduced-basis Bayesian inversion: Nonaffine-parametric nonlinear equations. Journal of Computational Physics, 2016, 316, 470-503.	3.8	32
68	Higher Order Quasi--Monte Carlo Integration for Holomorphic, Parametric Operator Equations. SIAM-ASA Journal on Uncertainty Quantification, 2016, 4, 48-79.	2.0	31
69	The Optimalp-Version Approximation of Singularities on Polyhedra in the Boundary Element Method. SIAM Journal on Numerical Analysis, 1996, 33, 729-759.	2.3	30
70	Sparse finite element approximation of high-dimensional transport-dominated diffusion problems. ESAIM: Mathematical Modelling and Numerical Analysis, 2008, 42, 777-819.	1.9	30
71	Sparse Adaptive Approximation of High Dimensional Parametric Initial Value Problems. Vietnam Journal of Mathematics, 2013, 41, 181-215.	0.8	30
72	Exponential convergence ofhpquadrature for integral operators with Gevrey kernels. ESAIM: Mathematical Modelling and Numerical Analysis, 2011, 45, 387-422.	1.9	28

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73	Low-rank tensor structure of linear diffusion operators in the TT and QTT formats. Linear Algebra and Its Applications, 2013, 438, 4204-4221.	0.9	28
74	Numerical Solution of Scalar Conservation Laws with Random Flux Functions. SIAM-ASA Journal on Uncertainty Quantification, 2016, 4, 552-591.	2.0	28
75	Electromagnetic wave scattering by random surfaces: Shape holomorphy. Mathematical Models and Methods in Applied Sciences, 2017, 27, 2229-2259.	3.3	28
76	The multi-level Monte Carlo finite element method for a stochastic Brinkman Problem. Numerische Mathematik, 2013, 125, 347-386.	1.9	27
77	Approximation on Simplices with Respect to Weighted Sobolev Norms. Journal of Approximation Theory, 2000, 103, 329-337.	0.8	26
78	HIGH-ORDER GALERKIN APPROXIMATIONS FOR PARAMETRIC SECOND-ORDER ELLIPTIC PARTIAL DIFFERENTIAL EQUATIONS. Mathematical Models and Methods in Applied Sciences, 2013, 23, 1729-1760.	3.3	26
79	hp-discontinuous Galerkin time-stepping for parabolic problems. Comptes Rendus Mathematique, 2001, 333, 1121-1126.	0.5	24
80	Multilevel Monte Carlo Methods for Stochastic Elliptic Multiscale PDEs. Multiscale Modeling and Simulation, 2013, 11, 1033-1070.	1.6	24
81	Fully Discrete Approximation of Parametric and Stochastic Elliptic PDEs. SIAM Journal on Numerical Analysis, 2017, 55, 2151-2186.	2.3	24
82	Quasi–Monte Carlo Integration for Affine-Parametric, Elliptic PDEs: Local Supports and Product Weights. SIAM Journal on Numerical Analysis, 2018, 56, 111-135.	2.3	24
83	Sparse Tensor Galerkin Discretization of Parametric and Random Parabolic PDEs---Analytic Regularity and Generalized Polynomial Chaos Approximation. SIAM Journal on Mathematical Analysis, 2013, 45, 3050-3083.	1.9	23
84	ANISOTROPIC STABLE LEVY COPULA PROCESSES â€" ANALYTICAL AND NUMERICAL ASPECTS. Mathematical Models and Methods in Applied Sciences, 2007, 17, 1405-1443.	3.3	22
85	Optimality of adaptive Galerkin methods for random parabolic partial differential equations. Journal of Computational and Applied Mathematics, 2014, 263, 189-201.	2.0	22
86	Scaling limits in computational Bayesian inversion. ESAIM: Mathematical Modelling and Numerical Analysis, 2016, 50, 1825-1856.	1.9	22
87	Shape Holomorphy of the Stationary Navier–Stokes Equations. SIAM Journal on Mathematical Analysis, 2018, 50, 1720-1752.	1.9	22
88	Analytic regularity and nonlinear approximation of a class of parametric semilinear elliptic PDEs. Mathematische Nachrichten, 2013, 286, 832-860.	0.8	20
89	A multilevel Monte Carlo finite difference method for random scalar degenerate convectionâ€"diffusion equations. Journal of Hyperbolic Differential Equations, 2017, 14, 415-454.	0.5	19
90	Quantized tensor-structured finite elements for second-order elliptic PDEs in two dimensions. Numerische Mathematik, 2018, 138, 133-190.	1.9	19

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91	REGULARITY AND GENERALIZED POLYNOMIAL CHAOS APPROXIMATION OF PARAMETRIC AND RANDOM SECOND-ORDER HYPERBOLIC PARTIAL DIFFERENTIAL EQUATIONS. Analysis and Applications, 2012, 10, 295-326.	2.2	18
92	Tensor Approximation of Stationary Distributions of Chemical Reaction Networks. SIAM Journal on Matrix Analysis and Applications, 2015, 36, 1221-1247.	1.4	18
93	Efficient Characterization of Parametric Uncertainty of Complex (Bio)chemical Networks. PLoS Computational Biology, 2015, 11, e1004457.	3.2	18
94	Multilevel approximation of parametric and stochastic PDES. Mathematical Models and Methods in Applied Sciences, 2019, 29, 1753-1817.	3.3	18
95	Sparse Tensor Approximation of Parametric Eigenvalue Problems. Lecture Notes in Computational Science and Engineering, 2012, , 203-241.	0.3	18
96	Finite Elements with mesh refinement for wave equations in polygons. Journal of Computational and Applied Mathematics, 2015, 283, 163-181.	2.0	17
97	Computational Higher Order Quasi-Monte Carlo Integration. Springer Proceedings in Mathematics and Statistics, 2016, , 271-288.	0.2	17
98	Convergence rates of high dimensional Smolyak quadrature. ESAIM: Mathematical Modelling and Numerical Analysis, 2020, 54, 1259-1307.	1.9	17
99	Multilevel approximation of Gaussian random fields: Fast simulation. Mathematical Models and Methods in Applied Sciences, 2020, 30, 181-223.	3.3	17
100	Deep neural network expression of posterior expectations in Bayesian PDE inversion. Inverse Problems, 2020, 36, 125011.	2.0	17
101	High order approximation of probabilistic shock profiles in hyperbolic conservation laws with uncertain initial data. ESAIM: Mathematical Modelling and Numerical Analysis, 2013, 47, 807-835.	1.9	16
102	QTT-finite-element approximation for multiscale problems I: model problems in one dimension. Advances in Computational Mathematics, 2017, 43, 411-442.	1.6	16
103	Sparse Adaptive Tensor Galerkin Approximations of Stochastic PDE-Constrained Control Problems. SIAM-ASA Journal on Uncertainty Quantification, 2016, 4, 1034-1059.	2.0	15
104	Exponential convergence for hp-version and spectral finite element methods for elliptic problems in polyhedra. Mathematical Models and Methods in Applied Sciences, 2015, 25, 1617-1661.	3.3	14
105	Fractional Space-Time Variational Formulations of (Navier--) Stokes Equations. SIAM Journal on Mathematical Analysis, 2017, 49, 2442-2467.	1.9	14
106	QMC integration for lognormal-parametric, elliptic PDEs: local supports and product weights. Numerische Mathematik, 2019, 141, 63-102.	1.9	14
107	Higher order Quasi-Monte Carlo integration for Bayesian PDE Inversion. Computers and Mathematics With Applications, 2019, 77, 144-172.	2.7	14
108	Sparse Discrete Ordinates Method in Radiative Transfer. Computational Methods in Applied Mathematics, 2011, 11, 305-326.	0.8	13

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109	hp-dGFEM for second-order mixed elliptic problems in polyhedra. Mathematics of Computation, 2015, 85, 1051-1083.	2.1	13
110	QMC Galerkin Discretization of Parametric Operator Equations. Springer Proceedings in Mathematics and Statistics, 2013, , 613-629.	0.2	13
111	Mixed HP-finite element approximations on geometric edge and boundary layer meshes in three dimensions. Numerische Mathematik, 2003, 94, 771-801.	1.9	12
112	Spaceâ€“time discontinuous Galerkin approximation of acoustic waves with point singularities. IMA Journal of Numerical Analysis, 2021, 41, 2056-2109.	2.9	12
113	Exponential Convergence of Gauss–Jacobi Quadratures for Singular Integrals over Simplices in Arbitrary Dimension. SIAM Journal on Numerical Analysis, 2012, 50, 1433-1455.	2.3	11
114	Multilevel Monte Carlo Finite Element Methods for Stochastic Elliptic Variational Inequalities. SIAM Journal on Numerical Analysis, 2014, 52, 1243-1268.	2.3	11
115	Spaceâ€“time hp-approximation of parabolic equations. Calcolo, 2018, 55, 1.	1.1	11
116	Multi-level Monte Carlo Finite Volume Methods for Uncertainty Quantification in Nonlinear Systems of Balance Laws. Lecture Notes in Computational Science and Engineering, 2013, , 225-294.	0.3	11
117	A multiscale hp-FEM for 2D photonic crystal bands. Journal of Computational Physics, 2011, 230, 349-374.	3.8	10
118	Space-time variational saddle point formulations of Stokes and Navierâ€“Stokes equations. ESAIM: Mathematical Modelling and Numerical Analysis, 2014, 48, 875-894.	1.9	10
119	Intrinsic fault tolerance of multilevel Monte Carlo methods. Journal of Parallel and Distributed Computing, 2015, 84, 24-36.	4.1	10
120	Finite elements with mesh refinement for elastic wave propagation in polygons. Mathematical Methods in the Applied Sciences, 2016, 39, 5027-5042.	2.3	10
121	Sparse p-version BEM for first kind boundary integral equations with random loading. Applied Numerical Mathematics, 2009, 59, 2698-2712.	2.1	9
122	Fast QMC Matrix-Vector Multiplication. SIAM Journal of Scientific Computing, 2015, 37, A1436-A1450.	2.8	9
123	Wavelet Galerkin BEM on Unstructured Meshes by Aggregation. Lecture Notes in Computational Science and Engineering, 2002, , 359-378.	0.3	9
124	Sparse tensor finite elements for elliptic multiple scale problems. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 3100-3110.	6.6	8
125	Analytic Regularity for the Incompressible Navier–Stokes Equations in Polygons. SIAM Journal on Mathematical Analysis, 2020, 52, 2945-2968.	1.9	8
126	Domain Uncertainty Quantification in Computational Electromagnetics. SIAM-ASA Journal on Uncertainty Quantification, 2020, 8, 301-341.	2.0	8

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127	Fast evaluation of nonlinear functionals of tensor product wavelet expansions. Numerische Mathematik, 2011, 119, 765-786.	1.9	7
128	Covariance structure of parabolic stochastic partial differential equations. Stochastics and Partial Differential Equations: Analysis and Computations, 2013, 1, 351-364.	0.9	7
129	Adaptive anisotropic Petrovâ€“Galerkin methods for first order transport equations. Journal of Computational and Applied Mathematics, 2018, 340, 191-220.	2.0	7
130	Discontinuous Galerkin Methods for Acoustic Wave Propagation in Polygons. Journal of Scientific Computing, 2018, 77, 1909-1935.	2.3	7
131	Exponential Convergence of hp-FEM for Elliptic Problems in Polyhedra: Mixed Boundary Conditions and Anisotropic Polynomial Degrees. Foundations of Computational Mathematics, 2018, 18, 595-660.	2.5	7
132	Multilevel QMC with Product Weights for Affine-Parametric, Elliptic PDEs. , 2018, , 373-405.		7
133	Analysis of a multilevel Markov chain Monte Carlo finite element method for Bayesian inversion of log-normal diffusions. Inverse Problems, 2020, 36, 035021.	2.0	7
134	Deep ReLU network expression rates for option prices in high-dimensional, exponential LÃ©vy models. Finance and Stochastics, 2021, 25, 615-657.	1.1	7
135	Adaptive Sparse Grid Model Order Reduction for Fast Bayesian Estimation and Inversion. Lecture Notes in Computational Science and Engineering, 2016, , 1-27.	0.3	7
136	QMC Algorithms with Product Weights for Lognormal-Parametric, Elliptic PDEs. Springer Proceedings in Mathematics and Statistics, 2018, , 313-330.	0.2	7
137	Higher-Order Convex Approximations of Young Measures in Optimal Control. Advances in Computational Mathematics, 2003, 19, 73-97.	1.6	6
138	Sparse tensor edge elements. BIT Numerical Mathematics, 2013, 53, 925-939.	2.0	6
139	Numerical approximation of statistical solutions of planar, incompressible flows. Mathematical Models and Methods in Applied Sciences, 2016, 26, 2471-2523.	3.3	6
140	Compressed sensing Petrov-Galerkin approximations for parametric PDEs. , 2015, , .		5
141	Multilevel Monte Carlo Simulation of Statistical Solutions to the Navierâ€“Stokes Equations. Springer Proceedings in Mathematics and Statistics, 2016, , 209-227.	0.2	5
142	Symmetric Interior Penalty Discontinuous Galerkin Methods for Elliptic Problems in Polygons. SIAM Journal on Numerical Analysis, 2017, 55, 2490-2521.	2.3	5
143	Improved Efficiency of a Multi-Index FEM for Computational Uncertainty Quantification. SIAM Journal on Numerical Analysis, 2019, 57, 1744-1769.	2.3	5
144	Shape Holomorphy of the CalderÃ³n Projector for the Laplacian in $${mathbb {R}}^2$$. Integral Equations and Operator Theory, 2021, 93, 1.	0.8	5

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145	Higher-Order Quasi-Monte Carlo Training of Deep Neural Networks. SIAM Journal of Scientific Computing, 2021, 43, A3938-A3966.	2.8	5
146	Exponential ReLU Neural Network Approximation Rates for Point and Edge Singularities. Foundations of Computational Mathematics, 2023, 23, 1043-1127.	2.5	5
147	hp-DGFEM FOR KOLMOGOROVâ€“FOKKERâ€“PLANCK EQUATIONS OF MULTIVARIATE LÃ‰VY PROCESSES. Mathematical Models and Methods in Applied Sciences, 2012, 22, .	3.3	4
148	Adaptive Galerkin approximation algorithms for Kolmogorov equations in infinite dimensions. Stochastics and Partial Differential Equations: Analysis and Computations, 2013, 1, 204-239.	0.9	4
149	Approximation of Singularities by Quantized-Tensor FEM. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 743-746.	0.2	4
150	Quadrature algorithms for high dimensional singular integrands on simplices. Numerical Algorithms, 2015, 70, 847-874.	1.9	4
151	Multilevel Monte Carlo front-tracking for random scalar conservation laws. BIT Numerical Mathematics, 2016, 56, 263-292.	2.0	4
152	Efficient Resolution of Anisotropic Structures. Lecture Notes in Computational Science and Engineering, 2014, , 25-51.	0.3	4
153	hp-FEM for Fluid Flow Simulation. Lecture Notes in Computational Science and Engineering, 1999, , 325-438.	0.3	4
154	Constructive Deep ReLU Neural Network Approximation. Journal of Scientific Computing, 2022, 90, 1.	2.3	4
155	hp-FEM for second moments of elliptic PDEs with stochastic data. II: Exponential convergence for stationary singular covariance functions. Numerical Methods for Partial Differential Equations, 2012, 28, 1527-1557.	3.6	3
156	Wavelet Methods. Springer Finance, 2013, , 159-176.	0.0	3
157	Multilevel Markov Chain Monte Carlo for Bayesian Inversion of Parabolic Partial Differential Equations under Gaussian Prior. SIAM-ASA Journal on Uncertainty Quantification, 2021, 9, 384-419.	2.0	3
158	Exponential Convergence of hp-DGFEM for Elliptic Problems in Polyhedral Domains. Lecture Notes in Computational Science and Engineering, 2014, , 57-73.	0.3	3
159	Numerical Analysis of Additive, LÃ©vy and Feller Processes with Applications to Option Pricing. Lecture Notes in Mathematics, 2010, , 137-196.	0.2	3
160	Advanced Boundary Element Algorithms. , 2000, , 283-306.		3
161	hp-FEM for second moments of elliptic PDEs with stochastic data. I. Analytic regularity. Numerical Methods for Partial Differential Equations, 2012, 28, 1497-1526.	3.6	2
162	Model Order Reduction Methods in Computational Uncertainty Quantification. , 2015, , 1-53.		2

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163	Exponential convergence of mixed hp-DGFEM for the incompressible Navierâ€“Stokes equations in â„2. IMA Journal of Numerical Analysis, 2021, 41, 1966-1999.	2.9	2
164	Sparse Approximation Algorithms for High Dimensional Parametric Initial Value Problems. , 2014, , 63-81.		2
165	Exponential Convergence of Simplicial h p-FEM for H 1-Functions with Isotropic Singularities. Lecture Notes in Computational Science and Engineering, 2015, , 435-443.	0.3	2
166	Monte-Carlo Finite-Volume Methods in Uncertainty Quantification for Hyperbolic Conservation Laws. SEMA SIMAI Springer Series, 2017, , 231-277.	0.7	2
167	Model Order Reduction Methods in Computational Uncertainty Quantification. , 2017, , 937-990.		2
168	Multilevel Quasi-Monte Carlo Uncertainty Quantification for Advection-Diffusion-Reaction. Springer Proceedings in Mathematics and Statistics, 2020, , 31-67.	0.2	2
169	Electromagnetic wave scattering by random surfaces: uncertainty quantification via sparse tensor boundary elements. IMA Journal of Numerical Analysis, 0, , drw031.	2.9	1
170	Uncertainty Quantification for Spectral Fractional Diffusion: Sparsity Analysis of Parametric Solutions. SIAM-ASA Journal on Uncertainty Quantification, 2019, 7, 913-947.	2.0	1
171	Higher Order Quasi Monte-Carlo Integration in Uncertainty Quantification. Lecture Notes in Computational Science and Engineering, 2015, , 445-453.	0.3	1
172	Anisotropic Stable Levy Copula Processes - Analysis and Numerical Pricing Methods. SSRN Electronic Journal, 0, , .	0.4	1
173	Binned Multilevel Monte Carlo for Bayesian Inverse Problems with Large Data. Lecture Notes in Computational Science and Engineering, 2016, , 511-519.	0.3	1
174	Deep solution operators for variational inequalities via proximal neural networks. Research in Mathematical Sciences, 2022, 9, .	1.0	1
175	Numerical Simulation of Compressible Magnetohydrodynamic Plasma Flow in a Curcuit Breaker. , 2008, , .		0
176	Multidimensional LÃ©vy Models. Springer Finance, 2013, , 197-228.	0.0	0
177	Methods for High-Dimensional Parametric and Stochastic Elliptic PDEs. , 2015, , 903-913.		0
178	Extrapolated Polynomial Lattice Rule Integration in Computational Uncertainty Quantification. SIAM-ASA Journal on Uncertainty Quantification, 2022, 10, 651-686.	2.0	0