

Bernard Haasdonk

List of Publications by Year in descending order

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38
papers

1,106
citations

687363

13
h-index

414414

32
g-index

39
all docs

39
docs citations

39
times ranked

715
citing authors

#	ARTICLE	IF	CITATIONS
1	Reduced basis method for finite volume approximations of parametrized linear evolution equations. ESAIM: Mathematical Modelling and Numerical Analysis, 2008, 42, 277-302.	1.9	266
2	Reduced Basis Approximation for Nonlinear Parametrized Evolution Equations based on Empirical Operator Interpolation. SIAM Journal of Scientific Computing, 2012, 34, A937-A969.	2.8	138
3	A training set and multiple bases generation approach for parameterized model reduction based on adaptive grids in parameter space. Mathematical and Computer Modelling of Dynamical Systems, 2011, 17, 423-442.	2.2	108
4	Kernel Discriminant Analysis for Positive Definite and Indefinite Kernels. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2009, 31, 1017-1032.	13.9	91
5	Efficient reduced models and a posteriori error estimation for parametrized dynamical systems by offline/online decomposition. Mathematical and Computer Modelling of Dynamical Systems, 2011, 17, 145-161.	2.2	87
6	Convergence Rates of the POD-Greedy Method. ESAIM: Mathematical Modelling and Numerical Analysis, 2013, 47, 859-873.	1.9	79
7	Chapter 2: Reduced Basis Methods for Parametrized PDEs – A Tutorial Introduction for Stationary and Instationary Problems. , 2017, , 65-136.		56
8	Invariant kernel functions for pattern analysis and machine learning. Machine Learning, 2007, 68, 35-61.	5.4	50
9	Reduced basis approximation and a-posteriori error estimation for the coupled Stokes-Darcy system. Advances in Computational Mathematics, 2015, 41, 1131-1157.	1.6	30
10	Certified PDE-constrained parameter optimization using reduced basis surrogate models for evolution problems. Computational Optimization and Applications, 2015, 60, 753-787.	1.6	25
11	PEBL-ROM: Projection-error based local reduced-order models. Advanced Modeling and Simulation in Engineering Sciences, 2016, 3, .	1.7	24
12	Numerical modelling of a peripheral arterial stenosis using dimensionally reduced models and kernel methods. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e3095.	2.1	20
13	A reduced basis Landweber method for nonlinear inverse problems. Inverse Problems, 2016, 32, 035001.	2.0	14
14	Certified Nonlinear Parameter Optimization with Reduced Basis Surrogate Models. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 3-6.	0.2	13
15	A POD-EIM reduced two-scale model for crystal growth. Advances in Computational Mathematics, 2015, 41, 987-1013.	1.6	13
16	Model order reduction and error estimation with an application to the parameter-dependent eddy current equation. Mathematical and Computer Modelling of Dynamical Systems, 2011, 17, 561-582.	2.2	8
17	Special Issue on Model Reduction. International Journal for Numerical Methods in Engineering, 2015, 102, 931-932.	2.8	8
18	Server-assisted interactive mobile simulations for pervasive applications. , 2017, , .		8

#	ARTICLE	IF	CITATIONS
19	Reduced basis approximation of large scale parametric algebraic Riccati equations. ESAIM - Control, Optimisation and Calculus of Variations, 2018, 24, 129-151.	1.3	8
20	Symplectic Model Order Reduction with Non-Orthonormal Bases. Mathematical and Computational Applications, 2019, 24, 43.	1.3	7
21	A-posteriori error estimation for second order mechanical systems. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 854-862.	3.4	6
22	An Algorithmic Comparison of the Hyper-Reduction and the Discrete Empirical Interpolation Method for a Nonlinear Thermal Problem. Mathematical and Computational Applications, 2018, 23, 8.	1.3	6
23	Efficient parametric analysis of the chemical master equation through model order reduction. BMC Systems Biology, 2012, 6, 81.	3.0	5
24	Data-Driven Time Parallelism via Forecasting. SIAM Journal of Scientific Computing, 2019, 41, B466-B496.	2.8	4
25	Feedback control of parametrized PDEs via model order reduction and dynamic programming principle. Advances in Computational Mathematics, 2020, 46, 1.	1.6	4
26	Sampling based approximation of linear functionals in reproducing kernel Hilbert spaces. BIT Numerical Mathematics, 0, , 1.	2.0	4
27	Model Order Reduction Approaches for Infinite Horizon Optimal Control Problems via the HJB Equation. Modeling, Simulation and Applications, 2017, , 333-347.	1.3	4
28	A Software Framework for Reduced Basis Methods Using Dune-RB and RBmatlab. , 2012, , 77-88.		4
29	Online Reduced Basis Construction Procedure for Model Reduction of Parametrized Evolution Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 112-117.	0.4	3
30	Certified Reduced Basis Approximation for the Coupling of Viscous and Inviscid Parametrized Flow Models. Journal of Scientific Computing, 2018, 74, 197-219.	2.3	3
31	Reduced Basis Model Reduction of Parametrized Two-Phase Flow in Porous Media. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 722-727.	0.4	2
32	Enabling interactive mobile simulations through distributed reduced models. Pervasive and Mobile Computing, 2018, 45, 19-34.	3.3	2
33	Error Estimation for the Simulation of Elastic Multibody Systems. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800275.	0.2	2
34	Special Issue on "Model Order Reduction of Parameterized Problems". Mathematical and Computer Modelling of Dynamical Systems, 2011, 17, 295-296.	2.2	1
35	A-Posteriori Error Estimation for Parameterized Kernel-Based Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 763-768.	0.4	1
36	A Sensitivity Study of Error Estimation in Reduced Elastic Multibody Systems – The authors would like to thank the German Research Foundation (DFG) for financial support FE 1583/2-1 and HA 5821/5-1 of the project at the University of Stuttgart. IFAC-PapersOnLine, 2018, 51, 202-207.	0.9	1

#	ARTICLE	IF	CITATIONS
37	Well-scaled, a-posteriori error estimation for model order reduction of large second-order mechanical systems. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2020, 100, e201900186.	1.6	1
38	Classification with Invariant Distance Substitution Kernels. Studies in Classification, Data Analysis, and Knowledge Organization, 2008, , 37-44.	0.2	0