

CITATION REPORT

List of articles citing

Nonlinear Model Reduction via Discrete Empirical Interpolat

DOI: 10.1137/090766498

SIAM Journal of Scientific Computing, 2010, 32, 2737-2764.

Source: <https://exaly.com/paper-pdf/49595258/citation-report.pdf>

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
1079	Passivity preserving parametric model-order reduction for non-affine parameters. 2011 , 17, 279-294		11
1078	ModSpec: An open, flexible specification framework for multi-domain device modelling. 2011 ,		6
1077	A stabilized discrete empirical interpolation method for model reduction of electrical, thermal, and microelectromechanical systems. 2011 ,		9
1076	Structure-preserving model reduction for nonlinear port-Hamiltonian systems. 2011 ,		9
1075	Efficient structure-preserving model reduction for nonlinear mechanical systems with application to structural dynamics. 2012 ,		5
1074	Nonlinear Model Reduction for CFD Problems Using Local Reduced-Order Bases. 2012 ,		17
1073	Model Reduction Using Iterative Solver for Burgers Equation. 2012 ,		0
1072	Affine Decompositions of Parametric Stochastic Processes for Application within Reduced Basis Methods. 2012 , 45, 716-721		5
1071	Residual Minimizing Model Interpolation for Parameterized Nonlinear Dynamical Systems. <i>SIAM Journal of Scientific Computing</i> , 2012 , 34, A2118-A2144	2.6	14
1070	Reduced Basis Approximation for Nonlinear Parametrized Evolution Equations based on Empirical Operator Interpolation. <i>SIAM Journal of Scientific Computing</i> , 2012 , 34, A937-A969	2.6	109
1069	A State Space Error Estimate for POD-DEIM Nonlinear Model Reduction. 2012 , 50, 46-63		101
1068	Residual based sampling in POD model order reduction of drift-diffusion equations in parametrized electrical networks. 2012 , 92, 91-104		10
1067	Model order reduction of coupled circuit-device systems. 2012 , 25, 362-377		7
1066	Hybrid reduced order modeling applied to nonlinear models. 2012 , 91, 929-949		34
1065	Nonlinear model order reduction based on local reduced-order bases. 2012 , 92, 891-916		198
1064	Reduced-order modeling for cardiac electrophysiology. Application to parameter identification. 2012 , 28, 727-44		36
1063	Proper orthogonal decomposition closure models for turbulent flows: A numerical comparison. 2012 , 237-240, 10-26		157

1062	Model order reduction of parametrized nonlinear reaction-diffusion systems. 2012 , 43, 33-44		9
1061	A mathematical biography of Danny C. Sorensen. 2012 , 436, 2717-2724		
1060	A dual-weighted trust-region adaptive POD 4-D Var applied to a finite-volume shallow water equations model on the sphere. 2012 , 68, 377-402		22
1059	Parameter multi-domain hp-empirical interpolation. 2012 , 90, 412-428		45
1058	Hessian-based model reduction: large-scale inversion and prediction. 2013 , 71, 135-150		14
1057	Two-Step Greedy Algorithm for Reduced Order Quadratures. 2013 , 57, 604-637		28
1056	On the optimal control of the Schlögl-model. 2013 , 56, 153-185		41
1055	A model reduction technique based on the PGD for elastic-viscoplastic computational analysis. 2013 , 51, 83-92		33
1054	PGD-Based Computational Vademecum for Efficient Design, Optimization and Control. 2013 , 20, 31-59		210
1053	Non-linear Petrov-Galerkin methods for reduced order modelling of the Navier-Stokes equations using a mixed finite element pair. 2013 , 255, 147-157		56
1052	Nonlinearity-aware sub-model combination in trajectory based methods for nonlinear Mor. 2013 , 94, 127-144		3
1051	Model order reduction in hyperelasticity: a proper generalized decomposition approach. 2013 , 96, 129-149		33
1050	POD Galerkin Schemes for Nonlinear Elliptic-Parabolic Systems. <i>SIAM Journal of Scientific Computing</i> , 2013 , 35, A1271-A1298	2.6	21
1049	Derivative-Extended POD Reduced-Order Modeling for Parameter Estimation. <i>SIAM Journal of Scientific Computing</i> , 2013 , 35, A2696-A2717	2.6	9
1048	Reduced Basis Collocation Methods for Partial Differential Equations with Random Coefficients. 2013 , 1, 192-217		35
1047	Nonlinear manifold learning for model reduction in finite elastodynamics. 2013 , 261-262, 118-131		20
1046	The GNAT method for nonlinear model reduction: Effective implementation and application to computational fluid dynamics and turbulent flows. 2013 , 242, 623-647		305
1045	POD/DEIM nonlinear model order reduction of an ADI implicit shallow water equations model. 2013 , 237, 95-114		90

1044	Projection-Based Nonlinear Model Order Reduction. 2013 , 237-262		3
1043	A partitioned model order reduction approach to rationalise computational expenses in nonlinear fracture mechanics. 2013 , 256, 169-188		76
1042	POD reduced-order unstructured mesh modeling applied to 2D and 3D fluid flow. 2013 , 65, 362-379		42
1041	Gradient-enhanced surrogate modeling based on proper orthogonal decomposition. 2013 , 237, 403-418		28
1040	Nonlinear Dimensionality Reduction for Parameterized Partial Differential Equation. 2013 ,		2
1039	The reduced basis method applied to transport equations of a lithium-ion battery. 2013 , 32, 1760-1772		5
1038	Towards Online Control of Forming Processes Involving Residual Stresses: Defining Multi-Parametric Computational vademecums. 2013 , 554-557, 699-705		
1037	Application of nonlinear model-order reduction to 3D eddy current problems. 2013 ,		
1036	Efficient Response Surface Methods Based on Generic Surrogate Models. <i>SIAM Journal of Scientific Computing</i> , 2013 , 35, B529-B550	2.6	3
1035	Gravitational wave parameter estimation with compressed likelihood evaluations. 2013 , 87,		41
1034	Proper orthogonal decomposition-based model order reduction via radial basis functions for molecular dynamics systems. 2013 , 96, 599-627		8
1033	REDUCED ORDER MODELS BASED ON POD METHOD FOR SCHRÖDINGER EQUATIONS. 2013 , 18, 694-707		4
1032	Magnetic resonance specific integral equation solver based on precomputed numerical Green functions. 2013 ,		1
1031	Reduced-order modeling of thermally induced deformations on reticles for extreme ultraviolet lithography. 2013 ,		1
1030	Optimum Decision-Making in Reservoir Management Using Reduced-Order Models. 2013 ,		5
1029	Nonlinear Complexity Reduction for Fast Simulation of Flow in Heterogeneous Porous Media. 2013 ,		28
1028	Construction of Parametrically-Robust CFD-Based Reduced-Order Models for PDE-Constrained Optimization. 2013 ,		6
1027	Reduced-Order Modeling for Compositional Simulation Using Trajectory Piecewise Linearization. 2013 ,		8

1026	Complexity Reduction of Multi-Phase Flows in Heterogeneous Porous Media. 2013,		3
1025	An Iterative Model Reduction of Navier-Stokes Equation. 2013,		
1024	Model Order Reduction for Linear and Nonlinear Systems: A System-Theoretic Perspective. 2014, 21, 331-358		159
1023	Enforcing Boundary Conditions for Discrete Nonlinear Aerodynamic Reduced-Order Models. 2014,		
1022	Optimal flow control based on POD and MPC and an application to the cancellation of Tollmien-Schlichting waves. 2014, 29, 1042-1074		8
1021	Virtual charts of solutions for parametrized nonlinear equations. 2014, 54, 1529-1539		18
1020	Accelerated domain decomposition FEM-BEM solver for magnetic resonance imaging (MRI) via discrete empirical interpolation method. 2014,		1
1019	POD-DEIM Based Model Order Reduction for the Spherical Shallow Water Equations with Turkel-Zwas Finite Difference Discretization. 2014, 2014, 1-10		3
1018	Enabling technologies for system-level simulation of MEMS. 2014,		1
1017	Certification of projection-based reduced order modelling in computational homogenisation by the constitutive relation error. 2014, 97, 395-422		28
1016	A Posteriori Error Estimation for DEIM Reduced Nonlinear Dynamical Systems. <i>SIAM Journal of Scientific Computing,</i> 2014, 36, A311-A338	2.6	54
1015	Fast Prediction and Evaluation of Gravitational Waveforms Using Surrogate Models. 2014, 4,		98
1014	Efficient Characterization of Uncertain Model Parameters with a Reduced-Order Ensemble Kalman Filter. <i>SIAM Journal of Scientific Computing,</i> 2014, 36, B198-B224	2.6	6
1013	An Online Manifold Learning Approach for Model Reduction of Dynamical Systems. 2014, 52, 1928-1952		10
1012	Comparison of POD reduced order strategies for the nonlinear 2D shallow water equations. 2014, 76, 497-521		64
1011	Rapidly evaluating the compact-binary likelihood function via interpolation. 2014, 90,		6
1010	Localized Discrete Empirical Interpolation Method. <i>SIAM Journal of Scientific Computing,</i> 2014, 36, A168-A192		122
1009	Dimensionality Reduction of Dynamical Systems with Parameters: A Geometric Approach. 2014, 13, 493-517		

1008	Real-Time Ensemble Control with Reduced-Order Modeling. <i>SIAM Journal of Scientific Computing</i> , 2014 , 36, B749-B775	2.6	2
1007	Are the Snapshot Difference Quotients Needed in the Proper Orthogonal Decomposition?. <i>SIAM Journal of Scientific Computing</i> , 2014 , 36, A1221-A1250	2.6	23
1006	Model Reduction for Cold Rolling Processes. 2014 , 85, 1334-1339		2
1005	Thermal Deformation Prediction in Reticles for Extreme Ultraviolet Lithography Based on a Measurement-Dependent Low-Order Model. 2014 , 27, 104-117		10
1004	Nonlinear frequency response analysis of structural vibrations. 2014 , 54, 1477-1495		20
1003	Interpolation-based reduced-order modelling for steady transonic flows via manifold learning. 2014 , 28, 106-121		33
1002	Reduced order borehole induction modelling. 2014 , 28, 140-157		3
1001	Scientific workshop "Advanced stability analysis for nuclear reactors" (Workshop in fall 2012 in Dresden, Germany). 2014 , 67, 1-3		0
1000	. 2014 , 62, 3150-3162		29
999	Non-linear model reduction for the Navier-Stokes equations using residual DEIM method. 2014 , 263, 1-18		95
998	Model Order Reduction of Non-Linear Magnetostatic Problems Based on POD and DEI Methods. 2014 , 50, 33-36		49
997	On Rosenbrock methods for the time integration of nearly incompressible materials and their usage for nonlinear model reduction. 2014 , 262, 333-345		3
996	Reduced-Order Modeling of Steady Flows Subject to Aerodynamic Constraints. 2014 , 52, 255-266		17
995	Nonlinear, Proper-Orthogonal-Decomposition-Based Model of Forced Convection Heat Transfer in Pulsating Flow. 2014 , 52, 131-145		18
994	Dynamic Data Driven Application System for Plume Estimation Using UAVs. 2014 , 74, 421-436		23
993	A numerical investigation of velocity-pressure reduced order models for incompressible flows. 2014 , 259, 598-616		69
992	Model reduction of linear time-varying systems over finite horizons. 2014 , 77, 72-81		5
991	Model order reduction for steady aerodynamics of high-lift configurations. 2014 , 5, 487-500		2

990	Multiscale empirical interpolation for solving nonlinear PDEs. 2014 , 278, 204-220	20
989	Reduction of nonlinear embedded boundary models for problems with evolving interfaces. 2014 , 274, 489-504	13
988	Model reduction for reacting flow applications. 2014 , 28, 91-105	6
987	Real-time in silico experiments on gene regulatory networks and surgery simulation on handheld devices. 2014 , 1, 1	7
986	Real time simulation for computational surgery: a review. 2014 , 1, 11	23
985	Approximate Snapshot-ensemble Generation for Basis Extraction in Proper Orthogonal Decomposition. 2014 , 47, 917-921	6
984	Model reduction and dynamic iteration for coupled nonlinear systems. 2014 , 14, 527-528	
983	REDUCED-ORDER MODELS FOR THE IMPLIED VARIANCE UNDER LOCAL VOLATILITY. 2014 , 17, 1450053	
982	Development of Reduced-order Oil Reservoir Models using Localized DEIM. 2014 ,	2
981	Model Order Reduction for Magneto-Quasistatic Equations. 2015 , 48, 240-241	1
980	Hybrid Optimization for Closed-Loop Reservoir Management. 2015 ,	5
979	Model reduction for parametric and nonlinear PDEs by matrix interpolation. 2015 ,	1
978	Application and modification of the POD method and the POD-DEIM for model reduction in porous-media simulations. 2015 , 15, 385-386	1
977	Nonlinear model reduction for dynamical systems using sparse sensor locations from learned libraries. 2015 , 92, 033304	39
976	Model Order Reduction Methods in Computational Uncertainty Quantification. 2015 , 1-53	1
975	Localized Model Reduction in Porous Media Flow*1The authors would like to thanks the US DoD - Army Research Once and Foundation CMG for supporting this project.. 2015 , 48, 242-247	7
974	Reduced-order multiscale modeling of nonlinear p-Laplacian flows in high-contrast media. 2015 , 19, 921-932	2
973	A joint IMEX-MOR approach for Water Networks. 2015 , 48, 260-261	1

972	Exact-to-precision generalized perturbation theory for neutron transport calculation. 2015 , 295, 651-660	1
971	Nonlinear Model-order Reduction for Oscillator Flows Using POD-DEIM. 2015 , 14, 329-336	
970	Adaptive training of local reduced bases for unsteady incompressible Navier-Stokes flows. 2015 , 103, 183-204	5
969	Time-space PGD for the rapid solution of 3D nonlinear parametrized problems in the many-query context. 2015 , 103, 275-292	27
968	Nonlinear model reduction based on the finite element method with interpolated coefficients: Semilinear parabolic equations. 2015 , 31, 1713-1741	13
967	Constraint reduction procedures for reduced-order subsurface flow models based on POD-PWL. 2015 , 103, 1-30	24
966	Non-intrusive reduced-order modelling of the Navier-Stokes equations based on RBF interpolation. 2015 , 79, 580-595	85
965	A stabilized proper orthogonal decomposition reduced-order model for large scale quasigeostrophic ocean circulation. 2015 , 41, 1289-1319	34
964	Model-Order Reduction of Multiple-Input Non-Linear Systems Based on POD and DEI Methods. 2015 , 51, 1-4	20
963	Asymptotic stability of POD based model predictive control for a semilinear parabolic PDE. 2015 , 41, 1073-1102	10
962	Model Order Reduction and domain decomposition strategies for the solution of the dynamic elastic-plastic structural problem. 2015 , 290, 127-155	42
961	Sensitivity analysis and model order reduction for random linear dynamical systems. 2015 , 111, 80-95	19
960	Projection-Based Reduced-Order Modeling for Spacecraft Thermal Analysis. 2015 , 52, 978-989	12
959	Model reduction of linear and nonlinear systems in the Loewner framework: A summary. 2015 ,	1
958	Frequency interpolation in the method of moments using the Discrete Empirical Interpolation Method. 2015 ,	
957	Parametric interpolation using physics-based basis functions. 2015 ,	
956	Model reduction of quadratic-bilinear descriptor systems via Carleman bilinearization. 2015 ,	2
955	Model reduction and clustering techniques for crash simulations. 2015 , 15, 125-126	3

954	Efficient simulation of transient gas networks using IMEX integration schemes and MOR methods. 2015 ,		4
953	A flexible symmetry-preserving Galerkin/POD reduced order model applied to a convective instability problem. 2015 , 119, 162-175		9
952	An Efficient Output Error Estimation for Model Order Reduction of Parametrized Evolution Equations. <i>SIAM Journal of Scientific Computing</i> , 2015 , 37, B910-B936	2.6	20
951	A Survey of Projection-Based Model Reduction Methods for Parametric Dynamical Systems. 2015 , 57, 483-531		631
950	Online Adaptive Model Reduction for Nonlinear Systems via Low-Rank Updates. <i>SIAM Journal of Scientific Computing</i> , 2015 , 37, A2123-A2150	2.6	94
949	A POD-EIM reduced two-scale model for crystal growth. 2015 , 41, 987-1013		10
948	Encyclopedia of Applied and Computational Mathematics. 2015 , 923-925		
947	Closed-Loop Turbulence Control: Progress and Challenges. 2015 , 67,		241
946	Adjoint-based surrogate optimization of oil reservoir water flooding. 2015 , 16, 441-481		7
945	Accelerated gravitational wave parameter estimation with reduced order modeling. 2015 , 114, 071104		54
944	Nonlinear model reduction of a continuous fluidized bed crystallizer. 2015 , 289, 253-266		13
943	The ROMES Method for Statistical Modeling of Reduced-Order-Model Error. 2015 , 3, 116-145		42
942	Fast local reduced basis updates for the efficient reduction of nonlinear systems with hyper-reduction. 2015 , 41, 1187-1230		51
941	Practical implementation aspects of Galerkin reduced order models based on proper orthogonal decomposition for computational fluid dynamics. 2015 , 37, 1309-1327		0
940	Structure-preserving, stability, and accuracy properties of the energy-conserving sampling and weighting method for the hyper reduction of nonlinear finite element dynamic models. 2015 , 102, 1077-1110		107
939	Application of multilevel scheme and two level discretization for POD based model order reduction of nonlinear transient heat transfer problems. 2015 , 55, 179-191		7
938	Progressive construction of a parametric reduced-order model for PDE-constrained optimization. 2015 , 102, 1111-1135		73
937	Un m3odo de descomposici3n propia generalizada para operadores diferenciales de alto orden. 2015 , 31, 188-197		2

936	A POD reduced order model for resolving angular direction in neutron/photon transport problems. 2015 , 296, 138-157		46
935	A System Level Model Reduction Approach for Flexible Multibody Systems with Parametric Uncertainties.. 2015 , 13, 4-13		3
934	POD/DEIM reduced-order strategies for efficient four dimensional variational data assimilation. 2015 , 295, 569-595		61
933	Dynamic Reduced Order Models for Simulating Bubbling Fluidized Bed Adsorbers. 2015 , 54, 6959-6974		26
932	Efficient hyper reduced-order model (HROM) for parametric studies of the 3D thermo-elasto-plastic calculation. 2015 , 102-103, 37-51		14
931	Nonlinear Parametric Inversion Using Interpolatory Model Reduction. <i>SIAM Journal of Scientific Computing</i> , 2015 , 37, B495-B517	2.6	13
930	Preserving Lagrangian Structure in Nonlinear Model Reduction with Application to Structural Dynamics. <i>SIAM Journal of Scientific Computing</i> , 2015 , 37, B153-B184	2.6	46
929	Computational vademecums for the real-time simulation of haptic collision between nonlinear solids. 2015 , 283, 210-223		21
928	Decreasing the temporal complexity for nonlinear, implicit reduced-order models by forecasting. 2015 , 289, 79-103		13
927	Dynamic data-driven reduced-order models. 2015 , 291, 21-41		100
926	Adaptive h-refinement for reduced-order models. 2015 , 102, 1192-1210		71
925	Design optimization using hyper-reduced-order models. 2015 , 51, 919-940		76
924	Two-Sided Projection Methods for Nonlinear Model Order Reduction. <i>SIAM Journal of Scientific Computing</i> , 2015 , 37, B239-B260	2.6	59
923	A localized symplectic model reduction technique for parameterized Hamiltonian systems. 2015 ,		1
922	Preconditioning Techniques for Reduced Basis Methods for Parameterized Elliptic Partial Differential Equations. <i>SIAM Journal of Scientific Computing</i> , 2015 , 37, S177-S194	2.6	7
921	Real time parameter identification and solution reconstruction from experimental data using the Proper Generalized Decomposition. 2015 , 296, 113-128		15
920	Edge-Weighted Personalized PageRank. 2015 ,		18
919	Efficient model reduction of parametrized systems by matrix discrete empirical interpolation. 2015 , 303, 431-454		65

918	Reduced Basis Isogeometric Methods (RB-IGA) for the real-time simulation of potential flows about parametrized NACA airfoils. 2015 , 284, 1147-1180	34
917	Global/local nonlinear model reduction for flows in heterogeneous porous media. 2015 , 292, 122-137	39
916	An online coupled state/input/parameter estimation approach for structural dynamics. 2015 , 283, 1167-1188	75
915	Data-driven model reduction for the Bayesian solution of inverse problems. 2015 , 102, 966-990	88
914	Reduced order model in cardiac electrophysiology with approximated Lax pairs. 2015 , 41, 1103-1130	11
913	Model order reduction applied to heat conduction in photovoltaic modules. 2015 , 119, 477-486	12
912	POD Preprocessing of IR Thermal Data to Assess Heat Source Distributions. 2015 , 55, 725-739	16
911	POD-Based Constrained Sensor Placement and Field Reconstruction from Noisy Wind Measurements: A Perturbation Study. 2016 , 4, 26	8
910	Online Adaptive Local-Global Model Reduction for Flows in Heterogeneous Porous Media. 2016 , 4, 22	20
909	POD-based model reduction with empirical interpolation applied to nonlinear elasticity. 2016 , 107, 477-495	41
908	Krylov subspace methods for model reduction of quadratic-bilinear systems. 2016 , 10, 2010-2018	15
907	Complexity Reduction of Multiphase Flows in Heterogeneous Porous Media. 2016 , 21, 144-151	13
906	Nonlinear model reduction via a locally weighted POD method. 2016 , 106, 372-396	19
905	Sensitivity analysis approach for reduced-order approximations of optimal control problems governed by Burgers equation. 2016 , 37, 1175-1192	
904	2D Burgers equation with large Reynolds number using POD/DEIM and calibration. 2016 , 82, 909-931	44
903	Projection-based model reduction for contact problems. 2016 , 106, 644-663	24
902	A rapid simulation of nano-particle transport in a two-dimensional human airway using POD/Galerkin reduced-order models. 2016 , 105, 514-531	2
901	Fast simulation of Gaussian-mode scattering for precision interferometry. 2016 , 18, 025604	4

900	Linear Closed-Loop Control of Fluid Instabilities and Noise-Induced Perturbations: A Review of Approaches and Tools1. 2016 , 68,		30
899	pyMOR -- Generic Algorithms and Interfaces for Model Order Reduction. <i>SIAM Journal of Scientific Computing</i> , 2016 , 38, S194-S216	2.6	26
898	Structure preserving model reduction of low frequency electromagnetic problem based on POD and DEIM. 2016 ,		
897	Dimension reduction for systems with parametrized boundaries for Fisher's equation. 2016 ,		1
896	Model order reduction for non-linear quasi-electrostatic problems. 2016 ,		
895	An Accelerated Greedy Missing Point Estimation Procedure. <i>SIAM Journal of Scientific Computing</i> , 2016 , 38, A2827-A2850	2.6	29
894	Model order reduction of dynamic skeletal muscle models. 2016 , 16, 851-852		
893	Reduced basis ANOVA methods for partial differential equations with high-dimensional random inputs. 2016 , 317, 148-164		10
892	Scalable posterior approximations for large-scale Bayesian inverse problems via likelihood-informed parameter and state reduction. 2016 , 315, 363-387		23
891	Error Estimation for Model-Order Reduction of Finite-Element Parametric Problems. 2016 , 52, 1-10		5
890	Symplectic Model Reduction of Hamiltonian Systems. <i>SIAM Journal of Scientific Computing</i> , 2016 , 38, A1-A27	2.6	35
889	Energy Stable Model Reduction of Neurons by Nonnegative Discrete Empirical Interpolation. <i>SIAM Journal of Scientific Computing</i> , 2016 , 38, B297-B326	2.6	9
888	A nonlinear modeling approach using weighted piecewise series and its applications to predict unsteady flows. 2016 , 318, 58-84		5
887	Nonlinear model reduction of unconfined groundwater flow using POD and DEIM. 2016 , 97, 130-143		13
886	Real-time solution of linear computational problems using databases of parametric reduced-order models with arbitrary underlying meshes. 2016 , 326, 373-397		18
885	Trajectory piecewise quadratic reduced-order model for subsurface flow, with application to PDE-constrained optimization. 2016 , 326, 446-473		34
884	Localized model order reduction in porous media flow simulation. 2016 , 145, 689-703		2
883	HOID: Higher Order Interpolatory Decomposition for Tensors Based on Tucker Representation. 2016 , 37, 1223-1249		12

882	A Guided Pattern Search with a non-intrusive reduced order modeling for oil production optimization: Brugge field case study. 2016 , 147, 570-584		5
881	Nonlinear model-order reduction for compressible flow solvers using the Discrete Empirical Interpolation Method. 2016 , 324, 194-209		8
880	On reduced models in nonlinear solid mechanics. 2016 , 60, 227-237		17
879	Fast and accurate inference on gravitational waves from precessing compact binaries. 2016 , 94,		84
878	Displacement-based multiscale modeling of fiber-reinforced composites by means of proper orthogonal decomposition. 2016 , 3,		9
877	A DEIM Induced CUR Factorization. <i>SIAM Journal of Scientific Computing</i> , 2016 , 38, A1454-A1482	2.6	31
876	Model order reduction for a linearized robust PDE constrained optimization.. 2016 , 49, 321-326		1
875	Computational Homogenisation using Reduced-Order Modelling applied to Hyperelasticity. 2016 , 16, 551-552		
874	A New Selection Operator for the Discrete Empirical Interpolation Method--Improved A Priori Error Bound and Extensions. <i>SIAM Journal of Scientific Computing</i> , 2016 , 38, A631-A648	2.6	118
873	Reduced order modeling for clearance control in turbomachinery. 2016 ,		
872	Optimal Model Management for Multifidelity Monte Carlo Estimation. <i>SIAM Journal of Scientific Computing</i> , 2016 , 38, A3163-A3194	2.6	89
871	Structure-Preserving Model Reduction for Nonlinear Port-Hamiltonian Systems. <i>SIAM Journal of Scientific Computing</i> , 2016 , 38, B837-B865	2.6	40
870	Model reduction for multi-component porous-media models of biological materials using POD-DEIM. 2016 , 16, 441-442		1
869	Nonlinear reduced-order modeling with monotonicity property. 2016 ,		1
868	Dynamic data-driven model reduction: adapting reduced models from incomplete data. 2016 , 3,		16
867	Comparison of DEIM and BPIM to speed up a POD-based nonlinear magnetostatic model. 2016 ,		
866	Computational vademecums for real-time simulation of surgical cutting in haptic environments. 2016 , 108, 1230-1247		20
865	Hyper-reduction framework for model calibration in plasticity-induced fatigue. 2016 , 3,		2

864	Automatised selection of load paths to construct reduced-order models in computational damage micromechanics: from dissipation-driven random selection to Bayesian optimization. 2016 , 58, 213-234	42
863	Sparse-grid, reduced-basis Bayesian inversion: Nonaffine-parametric nonlinear equations. 2016 , 316, 470-503	28
862	An efficient optimization process for hydrocarbon production in presence of geological uncertainty using a clustering method: A case study on Brugge field. 2016 , 32, 476-490	3
861	PEBL-ROM: Projection-error based local reduced-order models. 2016 , 3,	14
860	Transient simulation of an electrical rotating machine achieved through model order reduction. 2016 , 3,	12
859	Efficient solvers for time-dependent problems: a review of IMEX, LATIN, PARAEXP and PARAREAL algorithms for heat-type problems with potential use of approximate exponential integrators and reduced-order models. 2016 , 3,	1
858	The finite element square reduced (FE2R) method with GPU acceleration: towards three-dimensional two-scale simulations. 2016 , 107, 853-881	32
857	On the use of modal derivatives for nonlinear model order reduction. 2016 , 108, 1579-1602	33
856	A harmonic balance technique for the reduced-order computation of vortex-induced vibration. 2016 , 65, 313-332	10
855	Fast Electromagnetic Analysis of MRI Transmit RF Coils Based on Accelerated Integral Equation Methods. 2016 , 63, 2250-2261	24
854	Empirical Dynamics Learning and Reduction of Motion-Primitive-Based Pattern Generators with Applications to Flapping Wings. 2016 ,	
853	Multifidelity importance sampling. 2016 , 300, 490-509	63
852	Application of the PGD and DEIM to Solve a 3-D Non-Linear Magnetostatic Problem Coupled With the Circuit Equations. 2016 , 52, 1-4	12
851	Non-intrusive reduced order modelling of fluid-structure interactions. 2016 , 303, 35-54	55
850	Adaptive Subdomain Model Order Reduction With Discrete Empirical Interpolation Method for Nonlinear Magneto-Quasi-Static Problems. 2016 , 52, 1-4	9
849	Model order reduction using singularly perturbed systems. 2016 , 103, 72-87	2
848	Fast high-resolution prediction of multi-phase flow in fractured formations. 2016 , 88, 80-85	2
847	Fast Solution of Induction Heating Problems by Structure-Preserving Nonlinear Model Order Reduction. 2016 , 52, 1-4	6

846	An efficient trajectory-based algorithm for model order reduction of nonlinear systems via localized projection and global interpolation. 2016,	
845	POD-based model reduction for stabilized finite element approximations of shallow water flows. 2016, 302, 50-70	11
844	Nonlinear Interpolation on Manifold of Reduced-Order Models in Magnetodynamic Problems. 2016, 52, 1-4	9
843	Real-time simulation techniques for augmented learning in science and engineering. 2016, 32, 1465-1479	5
842	On the Use of Discrete Nonlinear Reduced-Order Models for the Prediction of Steady-State Flows Past Parametrically Deformed Complex Geometries. 2016,	12
841	An hp-proper orthogonal decomposition moving least squares approach for molecular dynamics simulation. 2016, 298, 548-575	16
840	Model order reduction in porous media flow simulation using quadratic bilinear formulation. 2016, 20, 723-735	12
839	A reduced order method for Allen-Cahn equations. 2016, 292, 213-229	10
838	Isogeometric analysis and proper orthogonal decomposition for parabolic problems. 2017, 135, 333-370	15
837	Structure preserving integration and model order reduction of skew-gradient reaction-diffusion systems. 2017, 258, 79-106	6
836	Efficient approximation of Sparse Jacobians for time-implicit reduced order models. 2017, 83, 175-204	7
835	The reduced-order hybrid Monte Carlo sampling smoother. 2017, 83, 28-51	15
834	A nonparametric probabilistic approach for quantifying uncertainties in low-dimensional and high-dimensional nonlinear models. 2017, 109, 837-888	19
833	Non-intrusive reduced order modelling with least squares fitting on a sparse grid. 2017, 83, 291-306	17
832	Limited-memory adaptive snapshot selection for proper orthogonal decomposition. 2017, 109, 198-217	22
831	Nonlinear Aerodynamic and Aeroelastic Model Reduction Using a Discrete Empirical Interpolation Method. 2017, 55, 624-637	15
830	Assessment of a POD method for the dynamical analysis of a catalyst pellet with simultaneous chemical reaction, adsorption and diffusion: Uniform temperature case. 2017, 97, 259-270	6
829	Model reduction for linear and nonlinear magneto-quasistatic equations. 2017, 111, 1274-1299	9

828	An Efficient Multistep ROM Method for Prediction of Flows over Airfoils. 2017 ,	1
827	A parameterized non-intrusive reduced order model and error analysis for general time-dependent nonlinear partial differential equations and its applications. 2017 , 317, 868-889	45
826	LUPOD: Collocation in POD via LU decomposition. 2017 , 335, 1-20	7
825	Reduced order models for pricing European and American options under stochastic volatility and jump-diffusion models. 2017 , 20, 198-204	12
824	Nonlinear model order reduction for the fast solution of induction heating problems in time-domain. 2017 , 36, 469-475	2
823	State estimation for reactive Euler equation by Kalman Filtering. 2017 , 8, 261-270	1
822	On the Inclusion of Time Derivatives of State Variables for Parametric Model Order Reduction for a Beam on a Nonlinear Foundation. 2017 , 139,	4
821	Online Adaptive POD-DEIM Model Reduction for Fast Simulation of Flows in Heterogeneous Media. 2017 ,	3
820	Environment identification in flight using sparse approximation of wing strain. 2017 , 70, 162-180	28
819	A proposed Fast algorithm to construct the system matrices for a reduced-order groundwater model. 2017 , 102, 68-83	3
818	A multilevel projection-based model order reduction framework for nonlinear dynamic multiscale problems in structural and solid mechanics. 2017 , 112, 855-881	26
817	Trajectory-Based DEIM TDEIM Model Reduction Applied to Reservoir Simulation. 2017 ,	7
816	A Reduced Order Modeling Methodology for Steam Turbine Clearance Control Design. 2017 , 139,	0
815	POD-DEIM for efficient reduction of a dynamic 2D catalytic reactor model. 2017 , 106, 777-784	9
814	Evaluation of Galerkin and Petrov-Galerkin model reduction for finite element approximations of the shallow water equations. 2017 , 318, 537-571	9
813	Adaptive POD-DEIM basis construction and its application to a nonlinear population balance system. 2017 , 63, 3832-3844	5
812	Hyper-reduction of generalized continua. 2017 , 59, 753-778	2
811	Krylov-Schur-Type Restarts for the Two-Sided Arnoldi Method. 2017 , 38, 297-321	6

810	A quadratic manifold for model order reduction of nonlinear structural dynamics. 2017 , 188, 80-94	45
809	Reduced-order modelling of parameter-dependent, linear and nonlinear dynamic partial differential equation models. 2017 , 473, 20160809	5
808	Moment-matching based model reduction for Navier-Stokes type quadratic-bilinear descriptor systems. 2017 , 97, 1252-1267	9
807	Uncertainty Quantification in Computational Structural Dynamics and Vibroacoustics. 2017 , 155-216	1
806	Comparison of DEIM and BPIM to Speed Up a POD-Based Nonlinear Magnetostatic Model. 2017 , 53, 1-4	3
805	Structure Preserving Model Reduction of Low-Frequency Electromagnetic Problem Based on POD and DEIM. 2017 , 53, 1-4	5
804	Improving temperature predictions for Li-ion batteries: data assimilation with a stochastic extension of a physically-based, thermo-electrochemical model. 2017 , 12, 288-296	7
803	Data-Driven Model Reduction Based on Sparsity-Promoting Methods for Multiphase Flow in Porous Media. 2017 ,	10
802	A Methodology for Projection-Based Model Reduction with Black-Box High-Fidelity Models. 2017 ,	5
801	A matrix DEIM technique for model reduction of nonlinear parametrized problems in cardiac mechanics. 2017 , 324, 300-326	19
800	A numerical study of different projection-based model reduction techniques applied to computational homogenisation. 2017 , 60, 613-625	21
799	Reduced basis methods for structurally nonlinear Joined Wings. 2017 , 68, 486-495	4
798	Global-local model reduction for heterogeneous Forchheimer flow. 2017 , 321, 160-184	
797	Temporal localized nonlinear model reduction with a priori error estimate. 2017 , 119, 225-238	11
796	A Simulation App based on reduced order modeling for manufacturing optimization of composite outlet guide vanes. 2017 , 4,	18
795	POD-DEIM reduction of computational EMG models. 2017 , 19, 86-96	13
794	Galerkin v. least-squares Petrov-Galerkin projection in nonlinear model reduction. 2017 , 330, 693-734	114
793	POD-DEIM model order reduction for strain-softening viscoplasticity. 2017 , 317, 458-479	38

792	Randomized dynamic mode decomposition for nonintrusive reduced order modelling. 2017 , 112, 3-25		57
791	Numerical solution of the parameterized steady-state Navier-Stokes equations using empirical interpolation methods. 2017 , 317, 380-399		5
790	Structure-preserving Galerkin POD reduced-order modeling of Hamiltonian systems. 2017 , 315, 780-798		12
789	Error Analysis for POD Approximations of Infinite Horizon Problems via the Dynamic Programming Approach. 2017 , 55, 3091-3115		12
788	A computationally efficient implementation of a full and reduced-order electrochemistry-based model for Li-ion batteries. 2017 , 208, 1285-1296		19
787	Reduced Basis Methods for Uncertainty Quantification. 2017 , 5, 813-869		29
786	Dynamical Model Reduction Method for Solving Parameter-Dependent Dynamical Systems. <i>SIAM Journal of Scientific Computing</i> , 2017 , 39, A1766-A1792	2.6	10
785	Efficient State/Parameter Estimation in Nonlinear Unsteady PDEs by a Reduced Basis Ensemble Kalman Filter. 2017 , 5, 890-921		7
784	A nonlocal adaptive discrete empirical interpolation method combined with modified hp-refinement for order reduction of molecular dynamics systems. 2017 , 140, 189-208		5
783	Model Order Reduction of Nonlinear Eddy Current Problems Using Missing Point Estimation. 2017 , 439-454		
782	Efficient Reduction of PDEs Defined on Domains with Variable Shape. 2017 , 183-199		1
781	The use of proper orthogonal decomposition (POD) meshless RBF-FD technique to simulate the shallow water equations. 2017 , 351, 478-510		48
780	Nonlinear Model Order Reduction via Dynamic Mode Decomposition. <i>SIAM Journal of Scientific Computing</i> , 2017 , 39, B778-B796	2.6	37
779	Leveraging Sparsity and Compressive Sensing for Reduced Order Modeling. 2017 , 301-315		
778	Adaptive Dimensionality-Reduction for Time-Stepping in Differential and Partial Differential Equations. 2017 , 10, 872-894		2
777	Energy Stable Model Order Reduction for the Allen-Cahn Equation. 2017 , 403-419		3
776	Reduced-Order Modeling of Model Rocket Combustors. 2017 ,		4
775	On the treatment of high-frequency issues in numerical simulation for dynamic systems by model order reduction via the proper orthogonal decomposition. 2017 , 325, 139-154		7

774	Towards non-intrusive reduced order 3D free surface flow modelling. 2017 , 140, 155-168		6
773	Application of a high-order CFD harmonic balance method to nonlinear aeroelasticity. 2017 , 74, 427-444		16
772	POD models for positive fields in advection-diffusion-reaction equations. 2017 ,		0
771	Reduced-Order Modeling of Preloaded Bolted Structures in Multibody Systems by the Use of Trial Vector Derivatives. 2017 , 12,		16
770	Synthesis of Equation-Free Control Structures for Dissipative Distributed Parameter Systems Using Proper Orthogonal Decomposition and Discrete Empirical Interpolation Methods. 2017 , 56, 10110-10122		1
769	Design of Dynamic Systems Using Surrogate Models of Derivative Functions. 2017 , 139,		4
768	Effective-one-body waveforms for binary neutron stars using surrogate models. 2017 , 95,		40
767	Structure Preserving Model Reduction of Parametric Hamiltonian Systems. <i>SIAM Journal of Scientific Computing</i> , 2017 , 39, A2616-A2644	2.6	31
766	A lean and efficient snapshot generation technique for the Hyper-Reduction of nonlinear structural dynamics. 2017 , 325, 330-349		13
765	Data-driven model order reduction via Loewner approach for fast frequency sweep in hybrid BI-FEM solution in large finite frequency selective surfaces. 2017 ,		1
764	A non-intrusive reduced-order model for compressible fluid and fractured solid coupling and its application to blasting. 2017 , 330, 221-244		26
763	Accelerated mesh sampling for the hyper reduction of nonlinear computational models. 2017 , 109, 1623-1654		26
762	Model Reduction for Flow Analysis and Control. 2017 , 49, 387-417		281
761	Accelerating optimization and uncertainty quantification of nonlinear SMB chromatography using reduced-order models. 2017 , 96, 237-247		3
760	Comparative numerical analysis using reduced-order modeling strategies for nonlinear large-scale systems. 2017 , 310, 32-43		29
759	Model order reduction in power electronics: Issues and perspectives. 2017 ,		3
758	Order reduction for a signaling pathway model of neuronal synaptic plasticity. 2017 , 50, 7687-7692		2
757	The combination of POD model reduction with adaptive finite element methods in the context of phase field models. 2017 , 17, 47-50		2

756	MIP: Moment-based interpolation projection for parameterized reduced models of the DC operating point in nonlinear circuits. 2017 ,		1
755	Coupling dynamic electromagnetic finite element models to circuit simulators by using model order reduction. 2017 ,		0
754	Model Reduction Methods. 2017 , 1-36		12
753	Machine learning and air quality modeling. 2017 ,		4
752	Computational Vibroacoustics in Low- and Medium- Frequency Bands: Damping, ROM, and UQ Modeling. 2017 , 7, 586		8
751	Efficient Reduced Basis Methods for Saddle Point Problems with Applications in Groundwater Flow. 2017 , 5, 1248-1278		2
750	Efficient Simulation of Nonlinear Ring Oscillator via DEIM with Approximate Basis. 2017 ,		1
749	Design and Parametric Study of the Magnetic Sensor for Position Detection in Linear Motor Based on Nonlinear Parametric model order reduction. 2017 , 17,		4
748	On the design of equation-free controllers for dissipative PDEs via DEIM. 2017 ,		1
747	kPCA-Based Parametric Solutions Within the PGD Framework. 2018 , 25, 69-86		24
746	Fast Numerical Analysis of Electric Motor Using Nonlinear Model Order Reduction. 2018 , 54, 1-4		6
745	Adaptive sparse grid based HOPGD: Toward a nonintrusive strategy for constructing space-time welding computational vademecum. 2018 , 114, 1438-1461		11
744	Predicting shim gaps in aircraft assembly with machine learning and sparse sensing. 2018 , 48, 87-95		29
743	. 2018 , 65, 8072-8079		18
742	Multi Space Reduced Basis Preconditioners for Large-Scale Parametrized PDEs. <i>SIAM Journal of Scientific Computing</i> , 2018 , 40, A954-A983	2.6	3
741	Non-intrusive reduced order modeling of nonlinear problems using neural networks. 2018 , 363, 55-78		139
740	Geometric Subspace Updates with Applications to Online Adaptive Nonlinear Model Reduction. 2018 , 39, 234-261		26
739	Towards Real-time Vehicle Aerodynamic Design via Multi-fidelity Data-driven Reduced Order Modeling. 2018 ,		5

738	Energy preserving model order reduction of the nonlinear Schrödinger equation. 2018 , 44, 1769-1796		9
737	Reduced-order models for aerodynamic applications, loads and MDO. 2018 , 9, 171-193		16
736	A review on design of experiments and surrogate models in aircraft real-time and many-query aerodynamic analyses. 2018 , 96, 23-61		95
735	Orthogonal Interpolation Method for Order Reduction of a Synchronous Machine Model. 2018 , 54, 1-6		8
734	Model-order nonlinear subspace reduction of electric machines by means of POD and DEI methods for copper losses calculation. 2018 , 31, e2274		1
733	A harmonic balance method for nonlinear fluid structure interaction problems. 2018 , 201, 26-36		6
732	Online Interpolation Point Refinement for Reduced-Order Models using a Genetic Algorithm. <i>SIAM Journal of Scientific Computing</i> , 2018 , 40, B283-B304	2.6	2
731	Hybrid hyper-reduced modeling for contact mechanics problems. 2018 , 115, 117-139		12
730	A parametric and non-intrusive reduced order model of car crash simulation. 2018 , 338, 186-207		21
729	Algebraic and Parametric Solvers for the Power Flow Problem: Towards Real-Time and Accuracy-Guaranteed Simulation of Electric Systems. 2018 , 25, 1003-1026		3
728	POD/DEIM Reduced-Order Modeling of Time-Fractional Partial Differential Equations with Applications in Parameter Identification. 2018 , 74, 220-243		22
727	Parameter estimation with model order reduction for elliptic differential equations. 2018 , 26, 479-497		0
726	Model identification of reduced order fluid dynamics systems using deep learning. 2018 , 86, 255-268		89
725	Reduced Modeling of Unknown Trajectories. 2018 , 25, 87-101		1
724	Numerical computation of nonlinear normal modes in a modal derivative subspace. 2018 , 195, 34-46		33
723	A zonal Galerkin-free POD model for incompressible flows. 2018 , 352, 301-325		18
722	Sparsity enabled cluster reduced-order models for control. 2018 , 352, 388-409		16
721	Model reduction of dynamical systems by proper orthogonal decomposition: Error bounds and comparison of methods using snapshots from the solution and the time derivatives. 2018 , 330, 553-573		9

7 ²⁰	Application-driven model reduction for the simulation of therapeutic infusion processes in multi-component brain tissue. 2018 , 24, 101-115	10
7 ¹⁹	An indirect shooting method based on the POD/DEIM technique for distributed optimal control of the wave equation. 2018 , 86, 433-453	2
7 ¹⁸	Robust model order reduction of an electrical machine at startup through reduction error estimation. 2018 , 31, e2277	1
7 ¹⁷	Finding representative electrocardiogram beat morphologies with CUR. 2018 , 77, 97-110	7
7 ¹⁶	A combination of proper orthogonal decomposition–discrete empirical interpolation method (POD–DEIM) and meshless local RBF-DQ approach for prevention of groundwater contamination. 2018 , 75, 1390-1412	28
7 ¹⁵	A novel model order reduction framework via staggered reduced basis space-time finite elements in linear first order transient systems. 2018 , 117, 991-1005	4
7 ¹⁴	Reduced-order modeling of CO ₂ storage operations. 2018 , 68, 49-67	13
7 ¹³	Multi-parametric space-time computational vademecum for parametric studies: Application to real time welding simulations. 2018 , 139, 62-72	11
7 ¹²	Integration efficiency for model reduction in micro-mechanical analyses. 2018 , 62, 151-169	5
7 ¹¹	A Novel Krylov Method for Model Order Reduction of Quadratic Bilinear Systems. 2018 ,	2
7 ¹⁰	Parameterised non-intrusive reduced order methods for ensemble Kalman filter data assimilation. 2018 , 177, 69-77	14
7 ⁰⁹	Model reduction for convective problems: formulation and application. 2018 , 51, 186-189	1
7 ⁰⁸	Reduced Order Modeling of Ring Oscillator System with POD-DEIM. 2018 ,	
7 ⁰⁷	Vibration Frequency Optimization of Jointed Structures with Contact Nonlinearities using Hyper-Reduction. 2018 , 51, 843-848	2
7 ⁰⁶	Extreme Learning Machines as Encoders for Sparse Reconstruction. 2018 , 3, 88	7
7 ⁰⁵	Model Order Reduction of Nonlinear Transmission Lines Using Interpolatory Proper Orthogonal Decomposition. 2018 , 66, 5429-5438	4
7 ⁰⁴	Stabilized Reduced-Order Model of a Non-Linear Eddy Current Problem by a Gappy-POD Approach. 2018 , 54, 1-8	2
7 ⁰³	Improving the realism of mixed reality through physical simulation. 2018 ,	

702	Simulation-Free Hyper-Reduction for Geometrically Nonlinear Structural Dynamics: A Quadratic Manifold Lifting Approach. 2018 , 13,	8
701	Reduced Order Modeling for Cardiac Electrophysiology and Mechanics: New Methodologies, Challenges and Perspectives. 2018 , 115-166	2
700	Conditional-Value-at-Risk Estimation via Reduced-Order Models. 2018 , 6, 1395-1423	11
699	Efficient Simulation of Nonlinear Transmission Lines using Empirical Interpolation and Projection-Based Model Order Reduction. 2018 ,	2
698	. 2018 ,	
697	Multifidelity Monte Carlo Estimation of Variance and Sensitivity Indices. 2018 , 6, 683-706	21
696	Computing parametrized solutions for plasmonic nanogap structures. 2018 , 366, 89-106	7
695	Set-Oriented Multiobjective Optimal Control of PDEs Using Proper Orthogonal Decomposition. 2018 , 47-72	4
694	Conservative model reduction for finite-volume models. 2018 , 371, 280-314	35
693	Advanced Reduced-Order Models for Moisture Diffusion in Porous Media. 2018 , 124, 965-994	5
692	POD reduced-order modeling for evolution equations utilizing arbitrary finite element discretizations. 2018 , 44, 1941-1978	17
691	Numerical approximation of parametrized problems in cardiac electrophysiology by a local reduced basis method. 2018 , 340, 530-558	24
690	Solution of the Nonlinear High-Fidelity Generalized Method of Cells Micromechanics Relations via Order-Reduction Techniques. 2018 , 2018, 1-11	3
689	Goal-oriented error estimation for parameter-dependent nonlinear problems. 2018 , 52, 705-728	
688	emgrThe Empirical Gramian Framework. 2018 , 11, 91	12
687	Reduced Basis Modeling of Single-Element Subscale Rocket Combustors. 2018 ,	1
686	The Discrete Empirical Interpolation Method: Canonical Structure and Formulation in Weighted Inner Product Spaces. 2018 , 39, 1152-1180	14
685	Reduced-order model for the BGK equation based on POD and optimal transport. 2018 , 373, 545-570	4

684	Experimental Design for Nonparametric Correction of Misspecified Dynamical Models. 2018 , 6, 880-906		5
683	Reduced order modeling for nonlinear structural analysis using Gaussian process regression. 2018 , 341, 807-826		76
682	. 2018 , 20, 10-25		5
681	Data-driven model order reduction of quadratic-bilinear systems. 2018 , 25, e2200		29
680	Data Driven Modal Decompositions: Analysis and Enhancements. <i>SIAM Journal of Scientific Computing</i> , 2018 , 40, A2253-A2285	2.6	20
679	SpaceTime POD based computational vademecums for parametric studies: application to thermo-mechanical problems. 2018 , 5,		8
678	The Shifted Proper Orthogonal Decomposition: A Mode Decomposition for Multiple Transport Phenomena. <i>SIAM Journal of Scientific Computing</i> , 2018 , 40, A1322-A1344	2.6	49
677	Interpolatory model reduction of parameterized bilinear dynamical systems. 2018 , 44, 1887-1916		4
676	Calibration of reduced-order model for a coupled Burgers equations based on PC-EnKF. 2018 , 13, 21		4
675	Koopman-Based Approach to Nonintrusive Projection-Based Reduced-Order Modeling with Black-Box High-Fidelity Models. 2018 , 56, 4087-4111		12
674	Global and local POD models for the prediction of compressible flows with DG methods. 2018 , 116, 332		4
673	Survey of Multifidelity Methods in Uncertainty Propagation, Inference, and Optimization. 2018 , 60, 550-591		253
672	Hyper-reduced projective dynamics. 2018 , 37, 1-13		30
671	Dissipative distributed parameter systems on-line reduction and control using DEIM/APOD combination. 2018 ,		1
670	Data-Driven Sparse Sensor Placement for Reconstruction: Demonstrating the Benefits of Exploiting Known Patterns. 2018 , 38, 63-86		123
669	Data-Driven Filtered Reduced Order Modeling of Fluid Flows. <i>SIAM Journal of Scientific Computing</i> , 2018 , 40, B834-B857	2.6	61
668	Space-Time Galerkin POD with Application in Optimal Control of Semilinear Partial Differential Equations. <i>SIAM Journal of Scientific Computing</i> , 2018 , 40, A1611-A1641	2.6	6
667	Mathcal H ₂ -Quasi-Optimal Model Order Reduction for Quadratic-Bilinear Control Systems. 2018 , 39, 983-1032		33

666	Advanced parametric space-frequency separated representations in structural dynamics: A harmonic-modal hybrid approach. 2018 , 346, 590-602	7
665	Wavelet based reduced order models for microstructural analyses. 2019 , 63, 535-554	9
664	Low complexity approach for energy management in residential buildings. 2019 , 29, e2680	20
663	A Weighted POD Method for Elliptic PDEs with Random Inputs. 2019 , 81, 136-153	6
662	Structure-preserving model reduction for dynamical systems with a first integral. 2019 , 36, 1021-1037	4
661	A deep learning enabler for nonintrusive reduced order modeling of fluid flows. 2019 , 31, 085101	64
660	Model order reduction for random nonlinear dynamical systems and low-dimensional representations for their quantities of interest. 2019 , 166, 76-92	3
659	Adaptive non-intrusive reduced order modeling for compressible flows. 2019 , 397, 108855	7
658	Surrogate model for an aligned-spin effective-one-body waveform model of binary neutron star inspirals using Gaussian process regression. 2019 , 100,	33
657	Interplay of Sensor Quantity, Placement and System Dimension in POD-Based Sparse Reconstruction of Fluid Flows. 2019 , 4, 109	8
656	Error estimation of the parametric non-intrusive reduced order model using machine learning. 2019 , 355, 513-534	13
655	POD-based model order reduction with an adaptive snapshot selection for a discontinuous Galerkin approximation of the time-domain Maxwell's equations. 2019 , 396, 106-128	9
654	Machine learning for fast and reliable solution of time-dependent differential equations. 2019 , 397, 108852	28
653	Data-Driven Model Reduction for Coupled Flow and Geomechanics Based on DMD Methods. 2019 , 4, 138	6
652	POD-DEIM based model order reduction for speed-up of flow parametric studies. 2019 , 186, 106083	4
651	Nonintrusive approximation of parametrized limits of matrix power algorithms Application to matrix inverses and log-determinants. 2019 , 53, 219-248	
650	An augmented free-interface-based modal substructuring for nonlinear structural dynamics including interface reduction. 2019 , 462, 114915	4
649	An Evolve-Filter-Relax Stabilized Reduced Order Stochastic Collocation Method for the Time-Dependent Navier-Stokes Equations. 2019 , 7, 1162-1184	10

648	Model order reduction for the Krasnoselskii-Pokrovskii (KP) model. 2019 , 28, 095001	3
647	Processing epidemiological data using dynamic mode decomposition method. 2019 ,	3
646	Reduced-order surrogate models for scalar-tensor gravity in the strong field regime and applications to binary pulsars and GW170817. 2019 , 100,	14
645	An optimized Crank-Nicolson finite difference extrapolating model for the fractional-order parabolic-type sine-Gordon equation. 2019 , 2019,	93
644	Transform & Learn: A data-driven approach to nonlinear model reduction. 2019 ,	9
643	Failure Probability Estimation of Linear Time Varying Systems by Progressive Refinement of Reduced Order Models. 2019 , 7, 1007-1028	1
642	An offline/online procedure for dual norm calculations of parameterized functionals: empirical quadrature and empirical test spaces. 2019 , 45, 2429-2462	6
641	Data-Driven Time Parallelism via Forecasting. <i>SIAM Journal of Scientific Computing</i> , 2019 , 41, B466-B496 2.6	3
640	Sparse feature map-based Markov models for nonlinear fluid flows. 2019 , 191, 104252	6
639	Review for order reduction based on proper orthogonal decomposition and outlooks of applications in mechanical systems. 2019 , 123, 264-297	74
638	Machine-learning error models for approximate solutions to parameterized systems of nonlinear equations. 2019 , 348, 250-296	13
637	Model-Order Reduction of Coupled Flow and Geomechanics in Ultra-Low Permeability ULP Reservoirs. 2019 ,	5
636	Mesh-Based and Meshfree Reduced Order Phase-Field Models for Brittle Fracture: One Dimensional Problems. 2019 , 12,	6
635	Reduced Order Models for Fast Antenna Characterization. 2019 , 67, 5673-5677	4
634	Nonlinear model reduction of solute transport models. 2019 , 130, 157-171	
633	Model order reduction for large-scale structures with local nonlinearities. 2019 , 353, 491-515	8
632	A domain decomposition method for the non-intrusive reduced order modelling of fluid flow. 2019 , 354, 307-330	9
631	Application of a Priori Hyper-Reduction to the Nonlinear Dynamic Finite Element Simulation of a Rolling Car Tire. 2019 , 14,	1

630	Model order reduction in aerodynamics: Review and applications. 2019 , 233, 5816-5836	5
629	Randomized model order reduction. 2019 , 45, 1251-1271	11
628	Construction of reduced-order models for fluid flows using deep feedforward neural networks. 2019 , 872, 963-994	48
627	Weakly Intrusive Low-Rank Approximation Method for Nonlinear Parameter-Dependent Equations. <i>SIAM Journal of Scientific Computing</i> , 2019 , 41, A1777-A1792	2.6
626	Hyper-Reduction Over Nonlinear Manifolds for Large Nonlinear Mechanical Systems. 2019 , 14,	3
625	Parametric integration by magic point empirical interpolation. 2019 , 39, 315-341	1
624	A Taylor basis for kinematic nonlinear real-time simulations. Part I: The complete modal derivatives. 2019 , 48, 989-1006	
623	Challenges of order reduction techniques for problems involving polymorphic uncertainty. 2019 , 42, e201900011	4
622	Nonlinear Model Order Reduction via Lifting Transformations and Proper Orthogonal Decomposition. 2019 , 57, 2297-2307	54
621	Data Pruning of Tomographic Data for the Calibration of Strain Localization Models. 2019 , 24, 18	1
620	On the use of mesh morphing techniques in reduced order models for the structural dynamics of geometrically mistuned blisks. 2019 , 127, 262-275	3
619	Fixed-precision randomized low-rank approximation methods for nonlinear model order reduction of large systems. 2019 , 119, 687-711	4
618	Tensor Representation of Non-linear Models Using Cross Approximations. 2019 , 81, 22-47	3
617	Nonlinear Unsteady Reduced-Order Modeling for Gust-Load Predictions. 2019 , 57, 1839-1850	11
616	Multiple Tensor Train Approximation of Parametric Constitutive Equations in Elasto-Viscoplasticity. 2019 , 24, 17	3
615	A Reduced Generalized Multiscale Basis Method for Parametrized Groundwater Flow Problems in Heterogeneous Porous Media. 2019 , 55, 2390-2406	1
614	Reduced-Order Modeling of Coupled Flow-Geomechanics Problems. 2019 ,	2
613	Proper orthogonal decomposition with SUPG-stabilized isogeometric analysis for reduced order modelling of unsteady convection-dominated convection-diffusion-reaction problems. 2019 , 387, 280-302	4

612	Non-intrusive reduced order modeling of unsteady flows using artificial neural networks with application to a combustion problem. 2019 , 384, 289-307	88
611	Reduced-Order Modelling and Homogenisation in Magneto-Mechanics: A Numerical Comparison of Established Hyper-Reduction Methods. 2019 , 24, 20	1
610	Multi-expansion modal reduction: A pragmatic semi-priori model order reduction approach for nonlinear structural dynamics. 2019 , 118, 765-782	5
609	Data-Driven Dynamical Systems. 2019 , 229-275	1
608	Linear Control Theory. 2019 , 276-320	1
607	Balanced Models for Control. 2019 , 321-344	
606	Data-Driven Control. 2019 , 345-372	0
605	Reduced Order Models (ROMs). 2019 , 375-402	0
604	Interpolation for Parametric ROMs. 2019 , 403-435	
603	Glossary. 2019 , 436-442	
602	Bibliography. 2019 , 443-470	
601	Index. 2019 , 471-472	
600	Optimized Sampling for Multiscale Dynamics. 2019 , 17, 117-136	9
599	Bayesian Estimation for Stochastic Gene Expression Using Multifidelity Models. 2019 , 123, 2217-2234	2
598	A domain decomposition non-intrusive reduced order model for turbulent flows. 2019 , 182, 15-27	23
597	From linear to nonlinear PGD-based parametric structural dynamics. 2019 , 347, 445-454	6
596	Preface. 2019 , ix-xii	
595	Singular Value Decomposition (SVD). 2019 , 3-46	2

594	Fourier and Wavelet Transforms. 2019 , 47-83	0
593	Sparsity and Compressed Sensing. 2019 , 84-114	1
592	Regression and Model Selection. 2019 , 117-153	0
591	Clustering and Classification. 2019 , 154-194	
590	Neural Networks and Deep Learning. 2019 , 195-226	
589	System reduction using modified inverse distance measure and modified Caue continued fraction method. 2019 , 691, 012006	1
588	Model order reducibility of nonlinear electro-quasistatic problems. 2019 , 38, 1453-1464	
587	Numerical investigation of the POD reduced-order model for fast predictions of two-phase flows in porous media. 2019 , 29, 4167-4204	10
586	Simulating swing dynamics of a power system model using nonlinear model order reduction. 2019 , 38, 1918-1930	
585	Black-box modelling of gas turbine engine's electrohydraulic fuel metering system.. 2019 , 610, 012051	
584	Reduced Modelling of Transmission Line Circuits using a Novel Nonlinearity Aware TPWL with Adaptive Sampling. 2019 ,	0
583	Transonic Flutter Prediction Using Subspace Identification Based Reduced Order Method with Parametric Variation and Flowfield Reconstruction. 2019 ,	
582	A Comprehensive Scheme for Fast Simulation of Burgers's Equation. 2019 ,	4
581	Projection-based order reduction of a nonlinear biophysical neuronal network model. 2019 ,	1
580	Basis function method for numerical loop quantum cosmology: the Schwarzschild black hole interior. 2019 , 36, 234003	1
579	Combined Field/System Simulations of Low-Frequency Devices in Time Domain based on Adaptive Nonlinear Reduced Order Models. 2019 ,	
578	Application of multiphysics model order reduction to doppler/neutronic feedback. 2019 , 5, 17	10
577	Incremental dynamic mode decomposition: A reduced-model learner operating at the low-data limit. 2019 , 347, 780-792	5

576	Reduced Preisach Model: Beyond Discrete Empirical Interpolation Method. 2019 , 7, 155563-155573	2
575	Memory embedded non-intrusive reduced order modeling of non-ergodic flows. 2019 , 31, 126602	27
574	Reduced-Order Modeling of a Radiative Heating Process with Movable Radiators. 2019 , 52, 346-351	0
573	Application of model order reduction to a finite element model of cryogenic turning. 2019 , 19, e201900239	
572	Hyper-reduced order models for parametrized unsteady Navier-Stokes equations on domains with variable shape. 2019 , 45, 2463-2501	5
571	Non-intrusive reduced-order modeling for fluid problems: A brief review. 2019 , 233, 5896-5912	24
570	Multiobjective Optimal Control Methods for the Navier-Stokes Equations Using Reduced Order Modeling. 2019 , 161, 171-199	14
569	Implementation and detailed assessment of a GNAT reduced-order model for subsurface flow simulation. 2019 , 379, 192-213	13
568	Greedy Sensor Placement With Cost Constraints. 2019 , 19, 2642-2656	22
567	Inverse Compensator for A Simplified Discrete Preisach Model Using Model-Order Reduction Approach. 2019 , 66, 6170-6178	29
566	pyROM: A computational framework for reduced order modeling. 2019 , 30, 157-173	12
565	A decomposed subspace reduction for fracture mechanics based on the meshfree integrated singular basis function method. 2019 , 63, 593-614	4
564	Reduced-Order Modeling of Subsurface Multi-phase Flow Models Using Deep Residual Recurrent Neural Networks. 2019 , 126, 713-741	20
563	Machine learning-based rapid response tools for regional air pollution modelling. 2019 , 199, 463-473	21
562	Efficient micromechanical analysis of fiber-reinforced composites subjected to cyclic loading through time homogenization and reduced-order modeling. 2019 , 345, 644-670	7
561	A reduced order model for turbulent flows in the urban environment using machine learning. 2019 , 148, 323-337	29
560	Transported snapshot model order reduction approach for parametric, steady-state fluid flows containing parameter-dependent shocks. 2019 , 117, 1234-1262	21
559	Datadriven HOPGD based computational vademecum for welding parameter identification. 2019 , 64, 47-62	7

558	Dealing with a nonlinear material behavior and its variability through PGD models: Application to reinforced concrete structures. 2019 , 153, 22-37		8
557	Trajectory-based DEIM (TDEIM) model reduction applied to reservoir simulation. 2019 , 23, 35-53		9
556	Space--Time Least-Squares Petrov--Galerkin Projection for Nonlinear Model Reduction. <i>SIAM Journal of Scientific Computing</i> , 2019 , 41, A26-A58	2.6	26
555	Structure preserving reduced order modeling for gradient systems. 2019 , 347, 194-209		1
554	Emerging trends in numerical simulations of combustion systems. 2019 , 37, 2073-2089		30
553	Data-driven reduced order modeling for time-dependent problems. 2019 , 345, 75-99		76
552	An algebraic least squares reduced basis method for the solution of nonaffinely parametrized Stokes equations. 2019 , 344, 186-208		6
551	Randomized low-rank approximation methods for projection-based model order reduction of large nonlinear dynamical problems. 2019 , 118, 209-241		17
550	Multi space reduced basis preconditioners for parametrized Stokes equations. 2019 , 77, 1583-1604		1
549	Non-intrusive Sparse Subspace Learning for Parametrized Problems. 2019 , 26, 303-326		21
548	Structure-Preserving Model-Reduction of Dissipative Hamiltonian Systems. 2019 , 81, 3-21		8
547	Global/local model order reduction in coupled flow and linear thermal-poroelasticity. 2020 , 24, 709-735		1
546	Signal Interpolation Augmented Linear Nonintrusive Reduced-Order Model for Aeroelastic Applications. 2020 , 58, 426-444		6
545	Modal Analysis of Fluid Flows: Applications and Outlook. 2020 , 58, 998-1022		124
544	To the special issue: Nonlinear nuclear reactor stability analysis and special aspects of modelling of complex dynamical systems (principles of model order reduction). Special issue on nonlinear stability analysis. 2020 , 118, 103137		1
543	Model order reduction for temperature-dependent nonlinear mechanical systems: A multiple scales approach. 2020 , 465, 115022		6
542	Reduced order optimal control of the convective FitzHugh-Nagumo equations. 2020 , 79, 982-995		2
541	Error estimation in reduced basis method for systems with time-varying and nonlinear boundary conditions. 2020 , 360, 112688		4

540	An adaptive domain-based POD/ECM hyper-reduced modeling framework without offline training. 2020 , 358, 112650	8
539	Model Reduction Concepts and Substructuring Approaches for Nonlinear Systems. 2020 , 233-267	0
538	Reduced basis model order reduction for Navier-Stokes equations in domains with walls of varying curvature. 2020 , 34, 119-126	4
537	A Posteriori Error Estimation in Model Order Reduction of Elastic Multibody Systems with Large Rigid Motion. 2020 , 95-110	
536	Sparse Machine Learning Discovery of Dynamic Differential Equation of an Esophageal Swallowing Robot. 2020 , 67, 4711-4720	7
535	POD-DEIM model order reduction technique for model predictive control in continuous chemical processing. 2020 , 133, 106638	5
534	A comprehensive scheme for reduction of nonlinear dynamical systems. 2020 , 8, 361-369	7
533	Multi-dimensional wavelet reduction for the homogenisation of microstructures. 2020 , 359, 112652	2
532	Enhanced model-order reduction approach via online adaptation for parametrized nonlinear structural problems. 2020 , 65, 331-353	11
531	Non-Intrusive Parametric Reduced Order Modeling using Randomized Algorithms. 2020 ,	3
530	Data-driven reduced order model with temporal convolutional neural network. 2020 , 360, 112766	27
529	A proper orthogonal decomposition analysis method for transient nonlinear heat conduction problems. Part 2: Advanced algorithm. 2020 , 77, 116-137	2
528	Iterative-learning procedures for nonlinear-model-order reduction in discrete time. 2020 , 37, 953-986	1
527	Nonintrusive proper generalised decomposition for parametrised incompressible flow problems in OpenFOAM. 2020 , 249, 107013	13
526	Reduced order modelling for turbomachinery shape design. 2020 , 34, 127-138	1
525	A HJB-POD approach for the control of nonlinear PDEs on a tree structure. 2020 , 155, 192-207	5
524	Hyperreduction of CFD Models of Turbulent Flows using a Machine Learning Approach. 2020 ,	2
523	Resolving high frequency issues via proper orthogonal decomposition based dynamic isogeometric analysis for structures with dissimilar materials. 2020 , 359, 112753	9

522	Reduced-Order Modeling of Coupled Flow and Quasistatic Geomechanics. 2020 , 25, 326-346		4
521	Surrogate modeling for fluid flows based on physics-constrained deep learning without simulation data. 2020 , 361, 112732		145
520	Acceleration of the spectral stochastic FEM using POD and element based discrete empirical approximation for a micromechanical model of heterogeneous materials with random geometry. 2020 , 360, 112689		3
519	Information-based model reduction for nonlinear electro-quasistatic problems. 2020 , 404, 109118		1
518	Efficient structure crash topology optimization strategy using a model order reduction method combined with equivalent static loads. 2020 , 234, 1897-1911		5
517	Optimal Design of a Non-isothermal Hybrid Catalyst Pellet based on POD-DEIM Reduced-order Methodology. 2020 , 271-276		1
516	Model Reduction for Transport-Dominated Problems via Online Adaptive Bases and Adaptive Sampling. <i>SIAM Journal of Scientific Computing</i> , 2020 , 42, A2803-A2836	2.6	14
515	Entropy stable reduced order modeling of nonlinear conservation laws. 2020 , 423, 109789		9
514	A literature survey of matrix methods for data science. 2020 , 43, e202000013		7
513	Adaptive greedy algorithms based on parameter-domain decomposition and reconstruction for the reduced basis method. 2020 , 121, 5426-5445		3
512	Efficient reduced-order aerodynamic modeling for fast prediction of transonic flutter boundary. 2020 , 8, 1080-1088		2
511	On Data-Driven Sparse Sensing and Linear Estimation of Fluid Flows. 2020 , 20,		4
510	A Global Maximum Error Controller Based Nonlinearity Aware TPWL Method for Reducing Nonlinear Systems. 2020 , 51, 370-382		
509	Adaptive hyper reduction for additive manufacturing thermal fluid analysis. 2020 , 372, 113312		4
508	Projection-based model reduction with dynamically transformed modes. 2020 , 54, 2011-2043		9
507	The PODDEIM reduced-order method for stochastic Allen-Cahn equations with multiplicative noise. 2020 , 80, 2691-2706		1
506	Low-Rank Approximation in the Frobenius Norm by Column and Row Subset Selection. 2020 , 41, 1651-1673		4
505	Non-linearly stable reduced-order models for incompressible flow with energy-conserving finite volume methods. 2020 , 421, 109736		5

504	WSN Sampling Optimization for Signal Reconstruction Using Spatiotemporal Autoencoder. 2020 , 20, 14290-14301	6
503	Multi-Fidelity Sensor Selection: Greedy Algorithms to Place Cheap and Expensive Sensors With Cost Constraints. 2020 , 1-1	9
502	DC-Centric Parameterized Reduced-Order Model via Moment-Based Interpolation Projection (MIP) Algorithm. 2020 , 10, 1348-1357	1
501	A generalized DEIM technique for model order reduction of porous media simulations in reservoir optimizations. 2020 , 422, 109769	4
500	Fast solution of the linearized Poisson-Boltzmann equation with nonaffine parametrized boundary conditions using the reduced basis method. 2020 , 23, 1	1
499	An efficient multigrid-DEIM semi-reduced-order model for simulation of single-phase compressible flow in porous media. 2020 , 18, 923	
498	Stability of Discrete Empirical Interpolation and Gappy Proper Orthogonal Decomposition with Randomized and Deterministic Sampling Points. <i>SIAM Journal of Scientific Computing</i> , 2020 , 42, A2837-A2864	7 ²⁶
497	POD-(H)DG Method for Incompressible Flow Simulations. 2020 , 85, 1	0
496	A framework for parametric reduction in large-scale nonlinear dynamical systems. 2020 , 102, 1897-1908	7
495	Interpolatory Rational Model Order Reduction of Parametric Problems Lacking Uniform Inf-Sup Stability. 2020 , 58, 2265-2293	6
494	The use of POD-DEIM model order reduction for the simulation of nonlinear hygrothermal problems. 2020 , 172, 04002	2
493	Non-autoregressive time-series methods for stable parametric reduced-order models. 2020 , 32, 087115	13
492	. 2020 ,	1
491	Randomized Algorithms for Non-Intrusive Parametric Reduced Order Modeling. 2020 , 58, 5389-5407	5
490	POD-DEIM model order reduction for nonlinear heat and moisture transfer in building materials. 2020 , 13, 645-661	4
489	Deep Learning Based Reduced Order Model for Airfoil-Gust and Aeroelastic Interaction. 2020 , 58, 4304-4321	10
488	DEIM reduced order model constructed by hybrid snapshot simulation. 2020 , 2, 1	2
487	Parametric Nonlinear Model Reduction Using K-Means Clustering for Miscible Flow Simulation. 2020 , 2020, 1-12	1

486	Lagrangian Reduced Order Modeling Using Finite Time Lyapunov Exponents. 2020 , 5, 189	3
485	Operator inference for non-intrusive model reduction of systems with non-polynomial nonlinear terms. 2020 , 372, 113433	23
484	Towards model order reduction for fluid-thermal analysis. 2020 , 370, 110866	1
483	Surrogate model for gravitational wave signals from comparable and large-mass-ratio black hole binaries. 2020 , 101,	25
482	Real-time interaction of virtual and physical objects in mixed reality applications. 2020 , 121, 3849-3868	1
481	An efficient parameter estimation method for nonlinear high-order systems via surrogate modeling and cuckoo search. 2020 , 24, 17065-17079	1
480	An adaptive mesh refinement approach based on optimal sparse sensing. 2020 , 34, 457-482	0
479	Micromechanics-based surrogate models for the response of composites: A critical comparison between a classical mesoscale constitutive model, hyper-reduction and neural networks. 2020 , 82, 103995	20
478	Model reduction for nonlinear multiscale parabolic problems using dynamic mode decomposition. 2020 , 121, 3680-3701	2
477	Affine Approximation of Parametrized Kernels and Model Order Reduction for Nonlocal and Fractional Laplace Models. 2020 , 58, 1469-1494	5
476	Data driven approximation of parametrized PDEs by reduced basis and neural networks. 2020 , 416, 109550	13
475	Prediction Accuracy of Dynamic Mode Decomposition. <i>SIAM Journal of Scientific Computing</i> , 2020 , 42, A1639-A1662	2.6 10
474	Reduced-order models for radiative heat transfer of hypersonic vehicles. 2020 , 234, 1836-1848	0
473	POD-based surrogate modeling of transitional flows using an adaptive sampling in Gaussian process. 2020 , 84, 108596	5
472	Online adaptive basis refinement and compression for reduced-order models via vector-space sieving. 2020 , 364, 112931	11
471	Sensor Selection With Cost Constraints for Dynamically Relevant Bases. 2020 , 20, 11674-11687	6
470	Nonlinear model reduction: A comparison between POD-Galerkin and POD-DEIM methods. 2020 , 208, 104628	6
469	Shallow neural networks for fluid flow reconstruction with limited sensors. 2020 , 476, 20200097	29

468	Reduced order modeling-based discrete unified gas kinetic scheme for rarefied gas flows. 2020 , 32, 067108	12
467	Parametrized reduced order modeling for cracked solids. 2020 , 121, 4537	1
466	Accelerated Simulation of a Neuronal Population via Mathematical Model Order Reduction. 2020 ,	
465	A POD-DEIM reduced model for compressible gas reservoir flow based on the Peng-Robinson equation of state. 2020 , 79, 103367	2
464	Non-intrusive model reduction of large-scale, nonlinear dynamical systems using deep learning. 2020 , 412, 132614	9
463	Electric Field Integral Equation Fast Frequency Sweep for Scattering of Nonpenetrable Objects via the Reduced-Basis Method. 2020 , 68, 6232-6244	6
462	Sampling of Bayesian posteriors with a non-Gaussian probabilistic learning on manifolds from a small dataset. 2020 , 30, 1433-1457	6
461	Adaptive basis construction and improved error estimation for parametric nonlinear dynamical systems. 2020 , 121, 5320-5349	5
460	Assessment of reduced-order modeling strategies for convective heat transfer. 2020 , 77, 702-729	7
459	Model-order reduction technique for temperature prediction and sensor placement in cylindrical steam reformer for HTPEMFC. 2020 , 173, 115153	1
458	A non-intrusive multifidelity method for the reduced order modeling of nonlinear problems. 2020 , 364, 112947	18
457	A Variable-Separation Method for Nonlinear Partial Differential Equations With Random Inputs. <i>SIAM Journal of Scientific Computing</i> , 2020 , 42, A723-A750	2.6
456	Rigorous and effective a-posteriori error bounds for nonlinear problems—Application to RB methods. 2020 , 46, 1	4
455	Reduced order modeling of time-dependent incompressible Navier-Stokes equation with variable density based on a local radial basis functions-finite difference (LRBF-FD) technique and the POD/DEIM method. 2020 , 364, 112914	11
454	Comprehensive Chemometrics. 2020 , 333-359	3
453	Learning patient-specific parameters for a diffuse interface glioblastoma model from neuroimaging data. 2020 , 43, 8945-8979	2
452	A fast reduced-order model for radial integral boundary element method based on proper orthogonal decomposition in nonlinear transient heat conduction problems. 2020 , 368, 113190	11
451	Pocketing Design of Stamped Metal Sheet Using Reduced Order Modelling. 2020 , 47, 665-672	

450	Data-Driven Vector-Measurement-Sensor Selection Based on Greedy Algorithm. 2020 , 4, 1-4	15
449	Reduced Order Modeling of Large Power Grid Model with POD-DEIM. 2020 , 1478, 012003	1
448	An Application of a Modified Gappy Proper Orthogonal Decomposition on Complexity Reduction of Allen-Cahn Equation. 2020 , 13, 148	
447	Model Reduction for Kinetic Models of Biological Systems. 2020 , 12, 863	6
446	On the stability of projection-based model order reduction for convection-dominated laminar and turbulent flows. 2020 , 419, 109681	18
445	Randomized Discrete Empirical Interpolation Method for Nonlinear Model Reduction. <i>SIAM Journal of Scientific Computing</i> , 2020 , 42, A1582-A1608	2.6 2
444	Machine learning of multiscale active force generation models for the efficient simulation of cardiac electromechanics. 2020 , 370, 113268	21
443	A bi-fidelity surrogate modeling approach for uncertainty propagation in three-dimensional hemodynamic simulations. 2020 , 366, 113047	8
442	Hyper-reduced direct numerical simulation of voids in welded joints via image-based modeling. 2020 , 121, 2581-2599	3
441	Using parametric model order reduction for inverse analysis of large nonlinear cardiac simulations. 2020 , 36, e3320	6
440	Performance guarantees for a variational \mathbb{H} -multi-space decoder. 2020 , 46, 1	
439	Nonlinear Reduced Order Modeling for Large Eddy Simulation of Turbulent Reacting Flows. 2020 ,	
438	Breaking the Kolmogorov Barrier in Model Reduction of Fluid Flows. 2020 , 5, 26	10
437	Lift & Learn: Physics-informed machine learning for large-scale nonlinear dynamical systems. 2020 , 406, 132401	60
436	Component-level proper orthogonal decomposition for flexible multibody systems. 2020 , 361, 112690	7
435	Lagrangian dynamic mode decomposition for construction of reduced-order models of advection-dominated phenomena. 2020 , 407, 109229	11
434	Development of a combined Prandtl Ishlinskii-Breisach model. 2020 , 304, 111797	5
433	Digital Twin: Values, Challenges and Enablers From a Modeling Perspective. 2020 , 8, 21980-22012	264

432	Efficient geometrical parametrization for finite-volume-based reduced order methods. 2020 , 121, 2655-2682	10
431	Recurrent neural network closure of parametric POD-Galerkin reduced-order models based on the Mori-Zwanzig formalism. 2020 , 410, 109402	30
430	Deep-learning-based surrogate model for reservoir simulation with time-varying well controls. 2020 , 192, 107273	25
429	Estimating Preisach Density via Subset Selection. 2020 , 8, 61767-61774	1
428	An Evolve-Then-Correct Reduced Order Model for Hidden Fluid Dynamics. 2020 , 8, 570	8
427	Adaptive reduced order modeling for nonlinear dynamical systems through a new a posteriori error estimator: Application to uncertainty quantification. 2020 , 121, 3417-3441	3
426	The Adjoint Petrov-Galerkin method for non-linear model reduction. 2020 , 365, 112991	13
425	SNS: A Solution-Based Nonlinear Subspace Method for Time-Dependent Model Order Reduction. <i>SIAM Journal of Scientific Computing</i> , 2020 , 42, A1116-A1146	2.6 12
424	Efficient representation of turbulent flows using data-enriched finite elements. 2020 , 121, 3397-3416	
423	A long short-term memory embedding for hybrid uplifted reduced order models. 2020 , 409, 132471	22
422	Machine learning for nonintrusive model order reduction of the parametric inviscid transonic flow past an airfoil. 2020 , 32, 047110	32
421	Koopman-Based Approach to Nonintrusive Reduced Order Modeling: Application to Aerodynamic Shape Optimization and Uncertainty Propagation. 2020 , 58, 2221-2235	5
420	A Direct Inverse Model for Hysteresis Compensation. 2021 , 68, 4173-4181	9
419	Reduced-Order Modeling Based on Hybrid Snapshot Simulation. 2021 , 18, 2050029	3
418	Proper orthogonal decomposition-Galerkin projection method for quasi-two-dimensional laminar hydraulic transient flow. 2021 , 59, 224-234	0
417	Modeling transient fluid simulations with proper orthogonal decomposition and machine learning. 2021 , 93, 396-410	2
416	Coupling of model order reduction and multirate techniques for coupled dynamical systems. 2021 , 112, 106780	1
415	Projection-based and neural-net reduced order model for nonlinear Navier-Stokes equations. 2021 , 89, 1294-1315	1

414	Structure preserving model order reduction of shallow water equations. 2021 , 44, 476-492	6
413	References. 2021 , 291-298	
412	Feasibility of DEIM for retrieving the initial field via dimensionality reduction. 2021 , 429, 110005	1
411	Implicit higher-order moment matching technique for model reduction of quadratic-bilinear systems. 2021 , 358, 2015-2038	3
410	General introduction and scope of the book. 2021 , 1-28	0
409	Space-time reduced order model for large-scale linear dynamical systems with application to Boltzmann transport problems. 2021 , 424, 109845	16
408	Extended group finite element method. 2021 , 162, 1-19	2
407	Parametric reduced order modeling-based discrete velocity method for simulation of steady rarefied flows. 2021 , 430, 110037	2
406	High performance reduction technique for multiscale finite element modeling (HPR-FE2): Towards industrial multiscale FE software. 2021 , 375, 113580	7
405	Mesh sampling and weighting for the hyperreduction of nonlinear Petrov-Galerkin reduced-order models with local reduced-order bases. 2021 , 122, 1846-1874	5
404	Parameterized nonintrusive reduced-order model for general unsteady flow problems using artificial neural networks. 2021 , 93, 1309-1331	0
403	Nonlinear Model Order Reduction via Nonlinear Moment Matching with Dynamic Mode Decomposition. 2021 , 128, 103625	5
402	Non-intrusive aerodynamic shape optimisation with a discrete empirical interpolation method. 2021 ,	
401	Error Estimates for a POD Method for Solving Viscous G-Equations in Incompressible Cellular Flows. <i>SIAM Journal of Scientific Computing</i> , 2021 , 43, A636-A662	2.6 1
400	Data-Driven Determinant-Based Greedy Under/Oversampling Vector Sensor Placement. 2021 , 129, 1-30	3
399	. 2021 , 9, 46731-46743	12
398	Parameterized Periodic Steady-State Analysis via Reduced-Order Modeling. 2021 , 1-1	0
397	Stein Variational Reduced Basis Bayesian Inversion. <i>SIAM Journal of Scientific Computing</i> , 2021 , 43, A1163-A1193	

396	Data-Driven Sparse Sensor Selection Based on A-Optimal Design of Experiment With ADMM. 2021 , 1-1		9
395	Modal Analysis of Wake Behind Stationary and Vibrating Cylinders. 2021 , 143,		1
394	. 2021 , 1, 494-507		7
393	Model order reduction based on Runge-Kutta neural networks. 2021 , 2,		1
392	Assessment of projection-based reduced-order modeling strategies for unsteady flows. 2021 ,		0
391	Determinant-Based Fast Greedy Sensor Selection Algorithm. 2021 , 9, 68535-68551		12
390	Data-driven sparse reconstruction of flow over a stalled aerofoil using experimental data. 2021 , 2,		3
389	Nonlinear model order reduction of continuous-time image reconstruction systems. 2021 , 12, 512-525		
388	Optimal Sensor and Actuator Selection using Balanced Model Reduction. 2021 , 1-1		6
387	Optimization-Based Modal Decomposition for Systems with Multiple Transports. <i>SIAM Journal of Scientific Computing</i> , 2021 , 43, A2079-A2101	2.6	3
386	Data-driven reduced-order models via regularised Operator Inference for a single-injector combustion process. 2021 , 51, 194-211		10
385	Quantifying Truncation-Related Uncertainties in Unsteady Fluid Dynamics Reduced Order Models. 2021 , 9, 1152-1183		2
384	Reduced-Order Modeling for Flexible Spacecraft Deployment and Dynamics. 2021 ,		0
383	Parametric model order reduction based on parallel tensor compression. 2021 , 52, 2201-2216		3
382	Bifidelity Data-Assisted Neural Networks in Nonintrusive Reduced-Order Modeling. 2021 , 87, 1		2
381	Data-driven cardiovascular flow modelling: examples and opportunities. 2021 , 18, 20200802		11
380	A global eigenvalue reassignment method for the stabilization of nonlinear reduced-order models. 2021 , 122, 2393-2416		2
379	Reduced-order modeling of nonlinear structural dynamical systems via element-wise stiffness evaluation procedure combined with hyper-reduction. 2021 , 67, 523-540		2

378	Reduced order modelling for a rotor-stator cavity using proper orthogonal decomposition. 2021 , 216, 104818	0
377	L1-Based Reduced Over Collocation and Hyper Reduction for Steady State and Time-Dependent Nonlinear Equations. 2021 , 87, 1	2
376	Preserving general physical properties in model reduction of dynamical systems via constrained-optimization projection. 2021 , 122, 3368-3399	1
375	Eccentric binary black hole surrogate models for the gravitational waveform and remnant properties: Comparable mass, nonspinning case. 2021 , 103,	9
374	Two-Step Predict and Correct Non-Intrusive Parametric Model Order Reduction for Changing Well Locations Using a Machine Learning Framework. 2021 , 14, 1765	0
373	Constructing reduced model for complex physical systems via interpolation and neural networks*. 2021 , 30, 030204	
372	On ab initio-based, free and closed-form expressions for gravitational waves. 2021 , 11, 5832	3
371	An Extended DEIM Algorithm for Subset Selection and Class Identification. 2021 , 110, 621-650	1
370	An adaptive model order reduction method for nonlinear seismic analysis of civil structures based on the elastic-plastic states. 2021 , 122, 3985-4006	2
369	A Nonintrusive Parametrized Reduced-Order Model for Periodic Flows Based on Extended Proper Orthogonal Decomposition. 2150035	0
368	On the stability and accuracy of the Empirical Interpolation Method and Gravitational Wave Surrogates.	2
367	ROM-Based Inexact Subdivision Methods for PDE-Constrained Multiobjective Optimization. 2021 , 26, 32	1
366	Asymptotic Waveform Evaluation With Higher Order Poles. 2021 , 68, 1681-1692	1
365	Reduced-Order Modeling in a General Reservoir Simulation Setting. 2021 ,	
364	A Comprehensive Deep Learning-Based Approach to Reduced Order Modeling of Nonlinear Time-Dependent Parametrized PDEs. 2021 , 87, 1	30
363	Generalization of the Neville-Aitken interpolation algorithm on Grassmann manifolds: Applications to reduced order model. 2021 , 93, 2421-2442	4
362	Modeling synchronization in globally coupled oscillatory systems using model order reduction. 2021 , 31, 053127	0
361	Microstructure-informed reduced modes synthesized with Wang tiles and the Generalized Finite Element Method. 2021 , 68, 233-253	2

360	Reduced-Order Modeling of Deep Neural Networks. 2021 , 61, 774-785	2
359	Data-Driven Sparse Sampling for Reconstruction of Acoustic-Wave Characteristics Used in Aeroacoustic Beamforming. 2021 , 11, 4216	2
358	Enabling forward uncertainty quantification and sensitivity analysis in cardiac electrophysiology by reduced order modeling and machine learning. 2021 , 37, e3450	6
357	A higher-order parametric nonlinear reduced-order model for imperfect structures using Neumann expansion. 2021 , 104, 3039	2
356	Learning physics-based models from data: perspectives from inverse problems and model reduction. 2021 , 30, 445-554	9
355	Model order reduction of a reservoir simulation by SOD-DEIM. 2021 , 200, 108137	1
354	An autoencoder-based reduced-order model for eigenvalue problems with application to neutron diffusion. 2021 , 122, 3780-3811	10
353	A non-conforming dual approach for adaptive Trust-Region reduced basis approximation of PDE-constrained parameter optimization. 2021 , 55, 1239-1269	2
352	Calibration of projection-based reduced-order models for unsteady compressible flows. 2021 , 433, 110196	3
351	Adaptive POD-Galerkin Technique for Reservoir Simulation and Optimization. 1	
350	Model Order Reduction via Moment-Matching: A State of the Art Review. 1	3
349	A local basis approximation approach for nonlinear parametric model order reduction. 2021 , 502, 116055	6
348	Data-driven reduced order modeling based on tensor decompositions and its application to air-wall heat transfer in buildings. 2021 , 78, 213-232	1
347	Sensor Placement for Field Reconstruction in Rotating Electrical Machines. 2021 , 57, 1-4	0
346	Efficient Estimation of Electrical Machine Behavior by Model Order Reduction. 2021 , 57, 1-4	0
345	A hyper-reduction computational method for accelerated modeling of thermal cycling-induced plastic deformations. 2021 , 151, 104385	2
344	A two-stage variable-separation Kalman filter for data assimilation. 2021 , 434, 110244	
343	A general hyper-reduction strategy for finite element structures with nonlinear surface loads based on the calculus of variations and stress modes. 2021 , 379, 113744	2

342	Adaptive sampling and modal expansions in pattern-forming systems. 2021 , 47, 1	0
341	A non-intrusive space-time interpolation from compact Stiefel manifolds of parametrized rigid-viscoplastic FEM problems. 2021 , 68, 861-883	
340	System Approximation via Restructured Hankel Matrix. 1	1
339	Non-intrusive reduced order modeling for flowfield reconstruction based on residual neural network. 2021 , 183, 346-362	7
338	Optimal and fast field reconstruction with reduced basis and limited observations: Application to reactor core online monitoring. 2021 , 377, 111113	2
337	Data-Driven Sensor Placement for Fluid Flows. 2021 ,	
336	Numerical investigations on model order reduction to SEM based on POD-DEIM to linear/nonlinear heat transfer problems. 2021 , 80, 39-52	0
335	Two-stage Self-Updating Unsteady POD-ROM Based on Least Squares Residual Minimization. 2021 ,	1
334	Model order reduction for gas and energy networks. 2021 , 11,	1
333	Performance comparison of data-driven reduced models for a single-injector combustion process. 2021 ,	0
332	A-posteriori reduced basis error-estimates for a semi-discrete in space quasilinear parabolic PDE. 1	0
331	Data-driven Sparse Sampling for Reconstruction of Acoustic-wave Characteristics used in Aeroacoustic Beamforming. 2021 ,	
330	A hyper-reduction method using adaptivity to cut the assembly costs of reduced order models. 2021 , 380, 113723	3
329	Data-Driven Aerospace Engineering: Reframing the Industry with Machine Learning. 1-26	6
328	Fast Predictions of Aircraft Aerodynamics using Deep Learning Techniques. 2021 ,	2
327	Model order reduction of flow based on a modular geometrical approximation of blood vessels. 2021 , 380, 113762-113762	2
326	Data-Driven Reduced-Order Modeling of Convective Heat Transfer in Porous Media. 2021 , 6, 266	2
325	Index-Aware Model-Order Reduction for a Special Class of Nonlinear Differential-Algebraic Equations. 1	

324	A greedy non-intrusive reduced order model for shallow water equations. 2021 , 439, 110378	5
323	Balanced truncation for model reduction of biological oscillators. 2021 , 115, 383-395	
322	Data-driven modeling for unsteady aerodynamics and aeroelasticity. 2021 , 125, 100725	17
321	Efficient Wildland Fire Simulation via Nonlinear Model Order Reduction. 2021 , 6, 280	1
320	Data-driven sensor placement for fluid flows. 2021 , 35, 709-729	0
319	Deep Composition of Tensor-Trains Using Squared Inverse Rosenblatt Transports. 1	3
318	Fast greedy optimization of sensor selection in measurement with correlated noise. 2021 , 158, 107619	10
317	Neural Network-Based Model Reduction of Hydrodynamics Forces on an Airfoil. 2021 , 6, 332	1
316	On closures for reduced order models: A spectrum of first-principle to machine-learned avenues. 2021 , 33, 091301	17
315	Fast Optimization of Temperature Focusing in Hyperthermia Treatment of Sub-Superficial Tumors. 2021 , 5, 286-293	3
314	Proper Orthogonal Decomposition for Reduced Order Dynamic Modeling of Vapor Compression Systems. 2021 ,	0
313	A Data-Driven Space-Time-Parameter Reduced-Order Model with Manifold Learning for Coupled Problems: Application to Deformable Capsules Flowing in Microchannels. 2021 , 23,	0
312	Quantification of the uncertainty within a SAS-SST simulation caused by the unknown high-wavenumber damping factor. 2021 , 381, 111307	1
311	A greedy reduced basis algorithm for structural acoustic systems with parameter and implicit frequency dependence.	4
310	A pruning algorithm preserving modeling capabilities for polycrystalline data. 1	
309	A discretize-then-map approach for the treatment of parameterized geometries in model order reduction. 2021 , 384, 113956	3
308	Modeling of MEMS Electrothermal Microgripper employing POD-DEIM and POD method. 2021 , 125, 114338	1
307	Structure-preserving reduced-order modeling of Korteweg-de Vries equation. 2021 , 188, 193-211	1

306	Reduced order multirate schemes for coupled differential-algebraic systems. 2021 , 168, 104-114	0
305	Learning constitutive models from microstructural simulations via a non-intrusive reduced basis method. 2021 , 384, 113924	1
304	Domain-decomposition least-squares Petrov-Galerkin (DD-LSPG) nonlinear model reduction. 2021 , 384, 113997	3
303	Separated response surfaces for flows in parametrised domains: Comparison of a priori and a posteriori PGD algorithms. 2021 , 196, 103530	3
302	An EIM-degradation free reduced basis method via over collocation and residual hyper reduction-based error estimation. 2021 , 444, 110545	0
301	A Galerkin/hyper-reduction technique to reduce steady-state elasto-hydrodynamic line contact problems. 2021 , 386, 114132	2
300	Data-driven closure of projection-based reduced order models for unsteady compressible flows. 2021 , 386, 114120	0
299	Deep learning nonlinear multiscale dynamic problems using Koopman operator. 2021 , 446, 110660	2
298	Physics-informed machine learning for reduced-order modeling of nonlinear problems. 2021 , 446, 110666	15
297	Randomized Subspace Newton Convex Method Applied to Data-Driven Sensor Selection Problem. 2021 , 28, 284-288	8
296	Investigation of Sampling Strategies for Reduced-Order Models of Rocket Combustors. 2021 ,	
295	Structure-Preserving Reduced- Order Modeling of Non-Traditional Shallow Water Equation. 2021 , 327-345	
294	Optimization-Based Parametric Model Order Reduction for the Application to the Frequency-Domain Analysis of Complex Systems. 2021 , 165-189	
293	Interpolation-Based Model Order Reduction for Polynomial Systems. <i>SIAM Journal of Scientific Computing</i> , 2021 , 43, A84-A108	2.6 7
292	Functional Tucker Approximation Using Chebyshev Interpolation. <i>SIAM Journal of Scientific Computing</i> , 2021 , 43, A2190-A2210	2.6 1
291	Reduced basis method for managed pressure drilling based on a model with local nonlinearities. 2020 , 121, 5178-5199	2
290	Discrete Empirical Interpolation Method for Finite Element Structural Dynamics. 2013 , 203-212	12
289	Computing Surrogates for Gas Network Simulation Using Model Order Reduction. 2013 , 189-212	20

288	Morphological Reduction of Dendritic Neurons. 2014 , 483-506	1
287	Application of the Discrete Empirical Interpolation Method to Reduced Order Modeling of Nonlinear and Parametric Systems. 2014 , 101-136	10
286	On the Use of Reduced Basis Methods to Accelerate and Stabilize the Parareal Method. 2014 , 187-214	10
285	Model Order Reduction in Fluid Dynamics: Challenges and Perspectives. 2014 , 235-273	32
284	DEIM for the Efficient Computation of Contact Interface Stresses. 2014 , 435-445	3
283	Model Order Reduction of Integrated Circuits in Electrical Networks. 2017 , 1-37	1
282	Information-Driven Experimental Design in Materials Science. 2016 , 13-44	4
281	An Empirical Reduced Modeling Approach for Mobile, Distributed Sensor Platform Networks. 2015 , 195-204	1
280	Model Order Reduction for Reacting Flows: Laminar Gaussian Flame Applications. 2017 , 337-343	1
279	Model Order Reduction Approaches for Infinite Horizon Optimal Control Problems via the HJB Equation. 2017 , 333-347	3
278	Extended-PGD Model Reduction for Nonlinear Solid Mechanics Problems Involving Many Parameters. 2018 , 201-220	1
277	Model Order Reduction for Rotating Electrical Machines. 2018 , 121-140	2
276	POD for Optimal Control of the Cahn-Hilliard System Using Spatially Adapted Snapshots. 2019 , 703-711	4
275	Discrete Empirical Interpolation in POD Model Order Reduction of Drift-Diffusion Equations in Electrical Networks. 2012 , 423-431	13
274	Krylov-Subspace Based Model Reduction of Nonlinear Circuit Models Using Bilinear and Quadratic-Linear Approximations. 2012 , 153-159	9
273	Model Order Reduction for Networks of ODE and PDE Systems. 2013 , 92-101	1
272	Application of POD-DEIM Approach for Dimension Reduction of a Diffusive Predator-Prey System with Allee Effect. 2014 , 373-381	8
271	Model Order Reduction of Differential Algebraic Equations Arising from the Simulation of Gas Transport Networks. 2014 , 183-205	23

270	Advanced Topics in Model Order Reduction. 2015 , 361-432		4
269	Nonlinear Model Order Reduction for Catalytic Tubular Reactors. 2016 , 38, 2373-2378		1
268	Reactor power distribution detection and estimation via a stabilized gappy proper orthogonal decomposition method. 2020 , 370, 110833		4
267	Data-Driven Science and Engineering: Machine Learning, Dynamical Systems, and Control. 2019 ,		247
266	Data-based, reduced-order, dynamic estimator for reconstruction of nonlinear flows exhibiting limit-cycle oscillations. 2019 , 4,		3
265	Surrogate models for preprocessing binary black hole simulations with unequal masses. 2019 , 1,		103
264	A Reduced Order Modeling Technique to Study Bifurcating Phenomena: Application to the Gross-Pitaevskii Equation. <i>SIAM Journal of Scientific Computing</i> , 2020 , 42, B1115-B1135	2.6	2
263	A scheme for comprehensive computational cost reduction in proper orthogonal decomposition. 2018 , 69, 279-285		5
262	Uniform convergence of the POD method and applications to optimal control. 2015 , 35, 4477-4501		1
261	Validation of large eddy simulation of flow behind a circular cylinder. 2021 , 345, 00013		
260	Predictive Monitoring of Large-Scale Engineering Assets Using Machine Learning Techniques and Reduced-Order Modeling. 2022 , 185-205		
259	Model Order Reduction of Nonlinear Systems By Interpolating Input-Output Behavior. 2012 , 145-151		1
258	Advanced Topics. 2014 , 89-110		0
257	RBF-POD reduced-order modeling of DNA molecules under stretching and bending. 2013 , 6, 395-409		1
256	Encyclopedia of Computational Neuroscience. 2014 , 1-5		
255	Introduction. 2014 , 1-24		
254	The Empirical Interpolation Method. 2016 , 67-85		
253	HJB-POD Feedback Control for Navier-Stokes Equations. 2016 , 861-868		

- 252 Model Order Reduction for Pattern Formation in FitzHugh-Nagumo Equations. **2016**, 369-377 1
- 251 Time-periodic Eddy Current Analysis using Model Order Reduction and Time-periodic Explicit Error Correction Method. **2017**, 137, 202-207
- 250 Model Reduction for Coupled Near-Well and Reservoir Models Using Multiple Space-Time Discretizations. **2017**, 471-490
- 249 Model Order Reduction Methods in Computational Uncertainty Quantification. **2017**, 937-990 1
- 248 An Iterative Model Reduction Scheme for Quadratic-Bilinear Descriptor Systems with an Application to Navier-Stokes Equations. **2018**, 1-19 1
- 247 Bayesian estimation for stochastic gene expression using multifidelity models. 0
- 246 Parametric Model Reduction via Interpolating Orthonormal Bases. **2019**, 683-691
- 245 Development and investigation of the reduced mathematical model of the process of baking carbon products. **2019**, 1, 70-78
- 244 POD-DEIM Model Order Reduction for the Monodomain Reaction-Diffusion Sub-Model of the Neuro-Muscular System. **2020**, 177-190
- 243 Fully Online ROMs and Collocation Based on LUPOD. **2020**, 81-93
- 242 Leveraging Adapted Polynomial Chaos Metamodels for Real-Time Bayesian Updating. **2019**, 4,
- 241 Adaptive Multiscale Model Reduction for Nonlinear Parabolic Equations Using GMsFEM. **2020**, 116-132
- 240 A nonintrusive reduced order model for nonlinear transient thermal problems with nonparametrized variability. **2020**, 7, 1
- 239 Semihyper-Reduction for Finite Element Structures With Nonlinear Surface Loads on the Basis of Stress Modes. **2020**, 15, 3
- 238 Efficient grid deformation using deterministic sampling-based data reduction. **2020**, 121, 4028-4049 3
- 237 An Adaptive Model Order Reduction Method Based on the Damage Evolution for Nonlinear Seismic Analysis. **2020**, 2020, 1-15 0
- 236 Computationally Efficient Scheme for Simulation of Ring Oscillator Model. **2020**, 193-202
- 235 Model Order Reduction Algorithms in the Design of Electric Machines. **2020**, 140-147 1

234	Model reduction for multi-scale transport problems using model-form preserving least-squares projections with variable transformation. 2022 , 448, 110742	0
233	An efficient PODI method for real-time simulation of indenter contact problems using RBF interpolation and contact domain decomposition. 2022 , 388, 114215	0
232	Towards real time assessment of earthfill dams via Model Order Reduction. 2022 , 199, 103666	0
231	Loop Aggregation for Approximate Scientific Computing. 2020 , 141-155	
230	Error estimates for model order reduction of Burgers equation. 2020 , 53, 5609-5616	2
229	Cross Tensor Approximation Methods for Compression and Dimensionality Reduction. 2021 , 1-1	0
228	System-Level Modelling and Simulation of a Multiphysical Kick and Catch Actuator System. 2021 , 10, 279	0
227	A Training Set Subsampling Strategy for the Reduced Basis Method. 2021 , 89, 1	1
226	Adaptive parametric sampling scheme for nonlinear model order reduction. 2022 , 107, 813	1
225	Semi Hyper-Reduction for Nonlinear Surface Loads on Finite Element Structures by the Use of Stress Modes. 2021 , 9-13	
224	Reduced order models for Lagrangian hydrodynamics. 2022 , 388, 114259	2
223	A hybrid partitioned deep learning methodology for moving interface and fluid-structure interaction. 2022 , 233, 105239	3
222	A fast and accurate physics-informed neural network reduced order model with shallow masked autoencoder. 2021 , 451, 110841	8
221	Reduced order model for nonlinear multi-directional ocean wave propagation. 2021 , 33, 117115	0
220	Non-intrusive data-driven model reduction for differential-algebraic equations derived from lifting transformations. 2021 , 114296	1
219	Efficient reduced-order aerodynamic modeling in low-Reynolds-number incompressible flows. 2021 , 119, 107199	1
218	Projection-based model reduction of dynamical systems using space-time subspace and machine learning. 2021 , 389, 114341	0
217	Machine learning and reduced order computation of a friction stir welding model. 2021 , 110863	0

216	Multilinear POD-DEIM model reduction for 2D and 3D semilinear systems of differential equations. 2021,	2
215	A Hyper-Reduced MAC Scheme for the Parametric Stokes and Navier-Stokes Equations.	
214	A reduced-order model for the near wake dynamics of a wind turbine: Model development and uncertainty quantification. 2022, 14, 013303	0
213	Non-intrusive semi-analytical uncertainty quantification using Bayesian quadrature with application to CFD simulations. 2022, 93, 108917	1
212	Physics-informed deep learning model in wind turbine response prediction. 2022, 185, 932-944	3
211	Multi-fidelity regression using artificial neural networks: Efficient approximation of parameter-dependent output quantities. 2022, 389, 114378	3
210	A review of physics-based machine learning in civil engineering. 2022, 13, 100316	10
209	A reduced order method for nonlinear parameterized partial differential equations using dynamic mode decomposition coupled with k-nearest-neighbors regression. 2022, 452, 110907	2
208	Data-driven temperature estimation of non-contact solids using deep-learning reduced-order models. 2022, 185, 122383	0
207	Intrusive and data-driven reduced order modelling of the rotating thermal shallow water equation. 2022, 421, 126924	
206	Comparative Study of Model Order Reduction for Linear Parameter-Variant Thermal Systems. 2020,	
205	Discrete Empirical Interpolation Method based Dynamic Load Model Reduction. 2021,	
204	Local non-intrusive reduced order modeling based on soft clustering and classification algorithm.	0
203	Modified parareal method for solving the two-dimensional nonlinear shallow water equations using finite volumes. 7, 159-184	0
202	Dimensionality Reduction of Embedded Boundary Models for Problems with Large Shape Changes. 2022,	0
201	Model Reduction Using Interpolated Systems of Equations. 2022,	
200	Discrete Empirical Interpolation Based Hyper-Reduced Order Model for Steady Hypersonic Flows. 2022,	
199	Efficient semi-implicit coupling fluid-structure interaction analysis via model-order reduction of dynamic grids. 2022, 121, 107356	0

198	Rank-adaptive structure-preserving model order reduction of Hamiltonian systems.	0
197	Synergistic use of intrusive and non-intrusive model order reduction techniques for dynamical power grids. 2022 , 138, 107908	0
196	Reduced order modeling of nonlinear microstructures through Proper Orthogonal Decomposition. 2022 , 171, 108864	1
195	DEVELOPING A REDUCED-ORDER MODEL FOR FLOOD SIMULATION USING PROPER ORTHOGONAL DECOMPOSITION AND DISCRETE EMPIRICAL INTERPOLATION METHOD. 2021 , 77, I_937-I_942	
194	A Combination of Model Order Reduction and Multirate Techniques for Coupled Dynamical Systems. 2021 , 191-199	
193	Simulation and Control of a Nonsmooth Cahn-Hilliard Navier-Stokes System with Variable Fluid Densities. 2022 , 211-240	
192	Optimal control, numerics, and applications of fractional PDEs. 2022 , 87-114	0
191	Nonintrusive Model Order Reduction for Cross-Diffusion Systems.	
190	Consideration of Rotational Motion in the Proper Generalized Decomposition by a Sliding Interface Technique. 2022 , 1-1	0
189	Improved hyper-reduction approach for the forced vibration analysis of rotating components. 1	0
188	Discrete empirical interpolation and unfitted mesh FEMs: application in PDE-constrained optimization. 1-34	1
187	Sparse Data-Driven Quadrature Rules via \mathbb{L}_p -Quasi-Norm Minimization. 2022 , 22, 389-411	0
186	Optimal Planning of Air Quality-Monitoring Sites for Better Depiction of PM2.5 Pollution across China.	0
185	A Stochastic Discrete Empirical Interpolation Approach for Parameterized Systems. 2022 , 14, 556	
184	An adaptive projection-based model reduction method for nonlinear mechanics with internal variables: Application to thermo-hydro-mechanical systems.	0
183	Reconstruction of 3D surfaces from incomplete digitisations using statistical shape models for manufacturing processes. 1	0
182	Improved Nonlinear Analysis of a Propeller Blade Based on Hyper-Reduction. 2022 , 60, 1909-1922	2
181	Gravitational wave surrogates through automated machine learning. 2022 , 39, 085011	1

180	Three-dimensional deep learning-based reduced order model for unsteady flow dynamics with variable Reynolds number. 2022 , 34, 033612	3
179	Reduced-order model for efficient generation of a subsonic missile's aerodynamic database. 1-22	0
178	A Generalized CUR Decomposition for Matrix Pairs. 2022 , 4, 386-409	0
177	Engineering empowered by physics-based and data-driven hybrid models: A methodological overview. 2022 , 15, 1	0
176	Disciplinary Proper Orthogonal Decomposition and Interpolation for the resolution of parametrized Multidisciplinary Analysis.	0
175	GeN-ROM: An OpenFOAM-based multiphysics reduced-order modeling framework for the analysis of Molten Salt Reactors. 2022 , 146, 104148	1
174	A review of advances towards efficient reduced-order models (ROM) for predicting urban airflow and pollutant dispersion. 2022 , 216, 108966	0
173	Unsteady physics-based reduced order modeling for large-scale compressible aerodynamic applications. 2022 , 239, 105385	0
172	EnKF data-driven reduced order assimilation system. 2022 , 139, 46-55	3
171	Projection-tree reduced-order modeling for fast N-body computations. 2022 , 459, 111141	1
170	A reduced order modeling method based on GNAT-embedded hybrid snapshot simulation. 2022 , 199, 100-132	0
169	Development of an Efficient Nonlinear Structural Analysis Using Data-driven Model Order Reduction. 2021 , 31, 604-613	
168	Structure Preserving Nonlinear Reduced Order Modeling Technique for Power Systems. 2021 ,	0
167	Numerical study of POD-Galerkin-DEIM reduced order modeling of cardiac monodomain formulation. 2021 , 8,	
166	Non-intrusive nonlinear model reduction via machine learning approximations to low-dimensional operators. 2021 , 8,	0
165	On the stability of POD basis interpolation on Grassmann manifolds for parametric model order reduction. 1	1
164	Microrom: An efficient and accurate reduced order method to solve many-query problems in micro-motility	
163	Projection-based reduced order models for parameterized nonlinear time-dependent problems arising in cardiac mechanics. 2022 , 5, 1-38	0

162	A Polynomial Decentralized Controller Design for a Large-Scale Nonlinear System: SOS Approach. 2022 , 10, 44008-44022	0
161	A non-intrusive model order reduction approach for parameterized time-domain Maxwell's equations. 2022 ,	
160	Non-incremental response evaluation in geometrically nonlinear structural dynamics using a space-time stiffness operator. 1	0
159	Reduced order and surrogate models for gravitational waves. 2022 , 25,	1
158	Condition Number and Clustering-Based Efficiency Improvement of Reduced-Order Solvers for Contact Problems Using Lagrange Multipliers. 2022 , 10, 1495	1
157	Reduced Order Modeling Using Advection-Aware Autoencoders. 2022 , 27, 34	1
156	Energy preserving reduced-order modeling of the rotating thermal shallow water equation. 2022 , 34, 056603	0
155	Weakly-invasive LATIN-PGD for solving time-dependent non-linear parametrized problems in solid mechanics. 2022 , 396, 114999	1
154	Reduced basis method for the nonlinear Poisson-Boltzmann equation regularized by the range-separated canonical tensor format. 2022 ,	
153	Novel Numerical Basis Sets for Electromagnetic Field Expansion in Arbitrary Inhomogeneous Objects. 2022 , 1-1	
152	A Missing Data Reconstruction Method Using an Accelerated Least-Squares Approximation with Randomized SVD. 2022 , 15, 190	
151	Fast Predictions of Aircraft Aerodynamics Using Deep-Learning Techniques. 1-13	0
150	Gaussian Process Subspace Prediction for Model Reduction. <i>SIAM Journal of Scientific Computing</i> , 2022 , 44, A1428-A1449	2.6
149	Efficient Hyper-Reduced Small Sliding Tribomechanics. 1-35	
148	A Fast Time-Stepping Strategy for Dynamical Systems Equipped with a Surrogate Model. <i>SIAM Journal of Scientific Computing</i> , 2022 , 44, A1405-A1427	2.6
147	Interpolatory tensorial reduced order models for parametric dynamical systems. 2022 , 397, 115122	
146	Quadratic approximation manifold for mitigating the Kolmogorov barrier in nonlinear projection-based model order reduction. 2022 , 464, 111348	0
145	Reduced Order Model Based on Combined POD / LDEIM-Q for Nonlinear Thermoelectric Coupling. 2022 , 1-1	

144	Reduced Order Model Hessian Approximations in Newton Methods for Optimal Control. 2022 , 335-351	
143	Balanced Truncation Model Reduction for Lifted Nonlinear Systems. 2022 , 157-174	0
142	An Adaptive Sampling Approach for the Reduced Basis Method. 2022 , 137-155	
141	Large-eddy simulation and challenges for projection-based reduced-order modeling of a gas turbine model combustor. 2022 , 14, 153-175	0
140	Reduced basis methods for time-dependent problems. 2022 , 31, 265-345	1
139	Nonlinear parametric simulation by proper generalized decomposition on the example of a synchronous machine.	0
138	Perturbations of the Tcur Decomposition for Tensor Valued Data in the Tucker Format.	2
137	Trajectory Planning in Windy Urban Environment \square Gappy POD Approach for Wind Field Estimates with Sparse Sensors. 2022 ,	0
136	Data-Driven Aerodynamic Modeling Using the DLR SMARTy Toolbox. 2022 ,	1
135	Goal-Oriented Adaptive Sampling for Projection-Based Reduced-Order Models. 2022 ,	0
134	Optimizing Oblique Projections for Nonlinear Systems using Trajectories. <i>SIAM Journal of Scientific Computing</i> , 2022 , 44, A1681-A1702	2.6
133	Geometry aware physics informed neural network surrogate for solving Navier-Stokes equation (GAPINN). 2022 , 9,	1
132	Efficient hyperreduction of high-order discontinuous Galerkin methods: element-wise and point-wise reduced quadrature formulations. 2022 , 111399	0
131	Preconditioned Least-Squares Petrov-Galerkin Reduced Order Models.	
130	Embedded domain Reduced Basis Models for the shallow water hyperbolic equations with the Shifted Boundary Method. 2022 , 398, 115143	0
129	A non-intrusive neural network model order reduction algorithm for parameterized parabolic PDEs. 2022 , 119, 59-67	0
128	Mechanical model for the motion of RPV internals affecting neutron flux noise. 2022 , 176, 109243	0
127	Model-Order Reduction for Coupled Flow and Linear Thermal-Plasticity with Applications to Unconventional Reservoirs. 2022 , 387-407	

126 Neuronal Model Reduction. **2022**, 2387-2390

125 Approximation of the Jacobian in Solving Harmonic Balance Equations. **2022**, 604-609

124 Gappy Spectral Proper Orthogonal Decomposition.

0

123 Interpolation-Based Model Order Reduction for Quadratic-Bilinear Systems and \mathcal{H}_2 Optimal Approximation. **2022**, 117-135

122 Data-driven models for crashworthiness optimisation: intrusive and non-intrusive model order reduction techniques. **2022**, 65,

2

121 Multirate Partially Explicit Scheme for Multiscale Flow Problems. *SIAM Journal of Scientific Computing*, **2022**, 44, A1775-A1806

2.6

0

120 Deep learning-based reduced order models for the real-time simulation of the nonlinear dynamics of microstructures.

1

119 On Snapshot-Based Model Reduction Under Compatibility Conditions for a Nonlinear Flow Problem on Networks. **2022**, 92,

0

118 Non-Intrusive Reduced-Order Modeling Using Convolutional Autoencoders.

117 A Collection of Large-Scale Benchmark Models for Nonlinear Model Order Reduction.

116 Uncertainty Quantification for Numerical Solutions of the Nonlinear Partial Differential Equations by Using the Multi-Fidelity Monte Carlo Method. **2022**, 12, 7045

115 Reduced Operator Inference for Nonlinear Partial Differential Equations. *SIAM Journal of Scientific Computing*, **2022**, 44, A1934-A1959

2.6

0

114 An Ultraweak Variational Method for Parameterized Linear Differential-Algebraic Equations. 8,

113 A multi-fidelity ensemble Kalman filter with hyperreduced reduced-order models. **2022**, 398, 115282

112 Development of a reduced-order model for large-scale Eulerian-Lagrangian simulations. **2022**, 33, 103632

2

111 A hyper-reduced MAC scheme for the parametric Stokes and Navier-Stokes equations. **2022**, 466, 111412

110 A deep learning based reduced order modeling for stochastic underground flow problems. **2022**, 467, 111449

0

109 Model order reduction using hyperreduction methods (DEIM, ECSW) for magnetodynamic FEM problems. **2022**, 209, 103793

1

108	Partial Learning Using Partially Explicit Discretization for Multicontinuum/Multiscale Problems with Limited Observation: Dual Continuum Heterogeneous Poroelastic Media Simulation. 2022 , 10, 2629	0
107	Stabilized reduced-order models for unsteady incompressible flows in three-dimensional parametrized domains. 2022 , 105604	
106	A Review of Proxy Modeling Highlighting Applications for Reservoir Engineering. 2022 , 15, 5247	1
105	Model reduction methods for nuclear emulators.	0
104	Nonintrusive model order reduction for cross-diffusion systems. 2022 , 106734	
103	Model order reduction for compressible flows solved using the discontinuous Galerkin methods. 2022 , 468, 111452	
102	Model Reduction for Quadratic-Bilinear Systems Using Nonlinear Moments. 2022 ,	
101	Transfer Learning for Flow Reconstruction Based on Multifidelity Data. 1-22	0
100	Inadequacy of Linear Methods for Minimal Sensor Placement and Feature Selection in Nonlinear Systems: A New Approach Using Secants. 2022 , 32,	1
99	Deep learning-based surrogate model for three-dimensional patient-specific computational fluid dynamics. 2022 , 34, 081906	1
98	A DEIM driven reduced basis method for the diffuse Stokes/Darcy model coupled at parametric phase-field interfaces.	
97	Component-Based Reduced Order Modeling of Large-Scale Complex Systems. 10,	0
96	Proper Orthogonal Decomposition Based Reduced-Order Modeling of Flux-Limited Gray Thermal Radiation. 2022 , 108345	0
95	Reduced Order Model of Standard k- ϵ turbulence model. 2022 , 245, 105608	
94	Robust and globally efficient reduction of parametric, highly nonlinear computational models and real time online performance. 2022 , 399, 115392	0
93	Fast visualization of finite element analysis results using multiresolution meshes. 2022 , 36, 4625-4633	0
92	Parameter estimation and model reduction for model predictive control in retinal laser treatment. 2022 , 128, 105320	1
91	Time-efficient surrogate models of thermal modeling in laser powder bed fusion. 2022 , 59, 103122	0

90	Application of model-order reduction of non-linear time-dependent neutronics via POD-Galerkin projection and matrix discrete empirical interpolation. 2022 , 179, 109396	0
89	Radial basis function partition of unity procedure combined with the reduced-order method for solving Zakharov-Rubenchik equations. 2022 , 145, 93-116	0
88	Global energy preserving model reduction for multi-symplectic PDEs. 2023 , 436, 127483	0
87	A frequency-domain reduced order model for joints by hyper-reduction and model-driven sampling. 2023 , 185, 109744	0
86	Application of a Modified Parareal Method for Speeding Up the Numerical Resolution of the 2D Shallow Water Equations. 2022 , 85-108	0
85	DRIPS: A Framework for Dimension Reduction and Interpolation in Parameter Space.	0
84	Data-Driven Sensor Selection Method Based on Proximal Optimization for High-Dimensional Data With Correlated Measurement Noise. 2022 , 1-13	1
83	Retrieval of initial condition for Burgers' equation using reduced-order EnKF via POD-based sparse observations. 2022 , 0	1
82	An adaptive wavelet-based collocation method for solving multiscale problems in continuum mechanics.	0
81	Augmented reduced order models for turbulence. 10,	0
80	Online Multiscale Model Reduction for Nonlinear Stochastic PDEs with Multiplicative Noise. 2022 , 20, 1063-1092	0
79	Enhanced model reduction method via combined supervised and unsupervised learning for real-time solution of nonlinear structural dynamics.	0
78	An Efficient QSC Approximation of Variable-Order Time-Fractional Mobile-Immobile Diffusion Equations with Variably Diffusive Coefficients. 2022 , 93,	0
77	Symplectic model reduction methods for the Vlasov equation.	1
76	Physics-based manifold learning in scaffolds for tissue engineering: Application to inverse problems. 9,	0
75	A Simplified Newton Method to Generate Snapshots for POD Models of Semilinear Optimal Control Problems. 2022 , 60, 2807-2833	0
74	Error analysis of a stable reduced order model based on the proper orthogonal decomposition method for the Allen-Cahn-Navier-Stokes system. 2022 , 401, 115661	0
73	Learning constitutive models from microstructural simulations via a non-intrusive reduced basis method: Extension to geometrical parameterizations. 2022 , 401, 115636	0

- 72 Fast solution of elasto-plastic problems by reduced order finite element method with manifold learning. **2022**, 200, 104817 ○
- 71 A non-intrusive reduced order model with Transformer neural network and its application. ○
- 70 Deep-HyROMnet: A Deep Learning-Based Operator Approximation for Hyper-Reduction of Nonlinear Parametrized PDEs. **2022**, 93, ○
- 69 Interpolatory proper order decomposition of nonlinear transmission line circuits. ○
- 68 An Efficient Chorin-temam Projection Proper Orthogonal Decomposition Based Reduced-Order Model for Nonstationary Stokes Equations. **2022**, 93, ○
- 67 DEIM-embedded hybrid snapshot simulation for reduced order model generation. ○
- 66 Local Lagrangian reduced-order modeling for the Rayleigh-Taylor instability by solution manifold decomposition. **2023**, 472, 111655 ○
- 65 Parametric reduced-order modeling enhancement for a geometrically imperfect component via hyper-reduction. **2023**, 403, 115701 ○
- 64 Hyper-Reduced Computation of Nonlinear and Distributed Surface Loads on Finite Element Structures Based on Stress Trial Vectors. **2023**, 39-48 ○
- 63 A Digital Twin for MEMS and NEMS. **2023**, 1303-1334 ○
- 62 Reduced-Order Model Based on POD and Polynomial Fitting for Parametric Magnetostatic Field Problem. **2022**, ○
- 61 Model predictive control for retinal laser treatment at 1 kHz. **2022**, 70, 992-1002 ○
- 60 Fast L^2 Optimal Mass Transport via Reduced Basis Methods for the Monge-Ampère Equation. **2022**, 44, A3536-A3559 ○
- 59 Reprint of: Robust and globally efficient reduction of parametric, highly nonlinear computational models and real time online performance. **2022**, 115747 ○
- 58 Data-Driven Variational Multiscale Reduced Order Modeling of Vaginal Tissue Inflation. 1
- 57 Seismic Wavefield Reconstruction based on Compressed Sensing using Data-Driven Reduced-Order Model. 1
- 56 Surrogate model for gravitational wave signals from nonspinning, comparable-to large-mass-ratio black hole binaries built on black hole perturbation theory waveforms calibrated to numerical relativity. **2022**, 106, ○
- 55 Using Numerical Models to Accelerate Electrolyte Transport Parameter Identification. ○

54	Nondominated-Solution-Based Multi-Objective Greedy Sensor Selection for Optimal Design of Experiments. 2022 , 70, 5694-5707	○
53	Energetically consistent model reduction for metriplectic systems. 2023 , 404, 115709	○
52	Stabilization of Generalized Empirical Interpolation Method (GEIM) in presence of noise: A novel approach based on Tikhonov regularization. 2023 , 404, 115773	○
51	Physics-data combined machine learning for parametric reduced-order modelling of nonlinear dynamical systems in small-data regimes. 2023 , 404, 115771	○
50	Screening of waterflooding using smart proxy model coupled with deep convolutional neural network. 2023 , 221, 111300	○
49	Adaptive sparse interpolation for accelerating nonlinear stochastic reduced-order modeling with time-dependent bases. 2023 , 405, 115813	○
48	Approximation of optimal control problems for the Navier-Stokes equation via multilinear HJB-POD. 2023 , 442, 127722	○
47	Partial learning using partially explicit discretization for multicontinuum/multiscale problems. Fractured poroelastic media simulation. 2023 , 424, 115003	○
46	A Hybrid DEIM and Leverage Scores Based Method for CUR Index Selection. 2022 , 147-153	○
45	Order Reduction of a Nonlinear Convection-Dominated Model of Heart Valve Tissue Maturation. 2022 ,	○
44	A modelling framework for efficient reduced order simulations of parametrised lithium-ion battery cells. 1-38	○
43	Partial learning using partially explicit discretization for multicontinuum/multiscale problems with limited observation: Language interactions simulation. 2022 , 115034	○
42	DeepTRNet: Time-resolved reconstruction of flow around a circular cylinder via spatiotemporal deep neural networks.	○
41	Groundwater contamination source identification and high-dimensional parameter inversion Using Residual Dense Convolutional Neural Network. 2022 , 129013	1
40	Parametric Dynamic Mode Decomposition for Reduced Order Modeling. 2022 , 111852	○
39	Space-local reduced-order bases for accelerating reduced-order models through sparsity.	○
38	Generalized Multiscale Finite Element Method for Highly Heterogeneous Compressible Flow. 2022 , 20, 1437-1467	○
37	A Novel In Situ Machine Learning Framework for Intelligent Data Capture and Event Detection. 2023 , 53-87	○

- 36 State and Parameter Estimation for Retinal Laser Treatment. **2023**, 1-13 ○
- 35 Active-learning-based nonintrusive model order reduction. **2023**, 4, ○
- 34 Discrete empirical interpolation for hyper-reduction of hydro-mechanical problems in groundwater flow through soil. ○
- 33 A method for improving the accuracy of PODI-RBF solutions for the indentation of an elastic body by a rigid indenter. **2023**, 216, 103906 ○
- 32 Adaptive POD-DEIM correction for Turing pattern approximation in reaction-diffusion PDE systems. **2023**, ○
- 31 Fast homogenization through clustering-based reduced-order modeling. **2023**, 113-168 ○
- 30 Uncertainty Propagation of the Negative SpallartAllmaras Turbulence Model Coefficients using Projection-based Reduced-Order Models. **2023**, ○
- 29 Goal-Oriented Adaptive Sampling Procedure for Projection-Based Reduced-Order Models for Aerodynamic Flows. **2023**, ○
- 28 Mitigating the Kolmogorov Barrier for the Reduction of Aerodynamic Models using Neural-Network-Augmented Reduced-Order Models. **2023**, ○
- 27 Local Basis Approach for the Reduction of CFD-Based Embedded Boundary Models. **2023**, ○
- 26 Parametric Modeling of Multi-Injector Rocket Combustors using Component-based Reduced-Order Modeling Framework. **2023**, ○
- 25 An Adaptive, Training-Free Reduced-Order Model for Convection-Dominated Problems Based on Hybrid Snapshots. ○
- 24 An image-informed CahnHilliard KellerSegel multiphase field model for tumor growth with angiogenesis. **2023**, 445, 127834 ○
- 23 Nonintrusive Reduced Order Modelling of Convective Boussinesq Flows. **2022**, 36, 578-598 ○
- 22 Gappy spectral proper orthogonal decomposition. **2023**, 478, 111950 ○
- 21 A reduced order with data assimilation model: Theory and practice. **2023**, 257, 105862 ○
- 20 A localized reduced basis approach for unfitted domain methods on parameterized geometries. **2023**, 410, 115997 ○
- 19 Deep learning assisted surrogate modeling of large-scale power grids. **2023**, 34, 101031 ○

- 18 An EIM-based compression-extrapolation tool for efficient treatment of homogenized cross-section data. **2023**, 185, 109705
- 17 Efficient and certified solution of parametrized one-way coupled problems through DEIM-based data projection across non-conforming interfaces. **2023**, 49,
- 16 IMPROVING THE DATA-DRIVEN SPARSE SENSOR PLACEMENT METHOD FOR LARGE-DIMENSIONAL DYNAMICAL SYSTEMS. **2022**, 78, I_391-I_396
- 15 An artificial neural network approach to bifurcating phenomena in computational fluid dynamics. **2023**, 254, 105813
- 14 Reduced order modeling for compressible cake filtration processes using proper orthogonal decomposition. **2023**, 171, 108165
- 13 Input reduction for nonlinear thermal surface loads. **2023**, 93, 1863-1878
- 12 Non-linear Manifold Reduced-Order Models with Convolutional Autoencoders and Reduced Over-Collocation Method. **2023**, 94,
- 11 Nonlinear model order reduction and vibration control of a membrane antenna structure. **2023**,
- 10 BUQEYE guide to projection-based emulators in nuclear physics. 10,
- 9 Manifold Approximations via Transported Subspaces: Model Reduction for Transport-Dominated Problems. **2023**, 45, A170-A199
- 8 Numerical Simulation and Experimental Verification of Wind Field Reconstruction Based on PCA and QR Pivoting. **2023**, 13, 2927
- 7 An integrated enabling technology interfacing multiple space/time methods/algorithms/domains with model reduction for first-order systems.
- 6 Model Reduction for Quadratic-Bilinear Time-Delay Systems Using Nonlinear Moments. **2023**, 56, 91-95
- 5 Updating an uncertain and expensive computational model in structural dynamics based on one single target FRF using a probabilistic learning tool.
- 4 Reduced order modeling of modular parameter dependent structures based on proper orthogonal decomposition and mesh tying. **2023**, 22,
- 3 A non-linear non-intrusive reduced order model of fluid flow by auto-encoder and self-attention deep learning methods.
- 2 A Hybrid projection/data-driven Reduced Order Model for the Navier-Stokes equations with nonlinear filtering stabilization. **2023**, 112127
- 1 Where to place methane monitoring sites in China to better assist carbon management. **2023**, 6,

