

Recursive dynamic mode decomposition of transient an

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Citation Report

#	ARTICLE	IF	CITATIONS
1	The lowest Reynolds number of vortex-induced vibrations. <i>Physics of Fluids</i> , 2017, 29, .	1.6	56
2	Model order reduction using DMD modes and adjoint DMD modes. , 2017, , .		6
3	Randomized dynamic mode decomposition for nonintrusive reduced order modelling. <i>International Journal for Numerical Methods in Engineering</i> , 2017, 112, 3-25.	1.5	72
4	Modal Analysis of Fluid Flows: An Overview. <i>AIAA Journal</i> , 2017, 55, 4013-4041.	1.5	1,020
5	On the need of mode interpolation for data-driven Galerkin models of a transient flow around a sphere. <i>Theoretical and Computational Fluid Dynamics</i> , 2017, 31, 111-126.	0.9	6
6	Spatio-temporal flow structures in the three-dimensional wake of a circular cylinder. <i>Fluid Dynamics Research</i> , 2018, 50, 051406.	0.6	26
7	Constrained sparse Galerkin regression. <i>Journal of Fluid Mechanics</i> , 2018, 838, 42-67.	1.4	191
8	A reduced-order model for compressible flows with buffeting condition using higher order dynamic mode decomposition with a mode selection criterion. <i>Physics of Fluids</i> , 2018, 30, .	1.6	66
9	Model identification of reduced order fluid dynamics systems using deep learning. <i>International Journal for Numerical Methods in Fluids</i> , 2018, 86, 255-268.	0.9	147
10	Evolve Filter Stabilization Reduced-Order Model for Stochastic Burgers Equation. <i>Fluids</i> , 2018, 3, 84.	0.8	2
11	Relations of POD modes and Lyapunov exponents to the nonlinear dynamic states in flow over oscillating tandem cylinders. <i>Physics of Fluids</i> , 2018, 30, 123602.	1.6	10
12	The need for prediction in feedback control of a mixing layer. <i>Fluid Dynamics Research</i> , 2018, 50, 065514.	0.6	8
13	Circumferential Mode Analysis of Axial Compressor Tip Flow Using Fourier Transform and Proper Orthogonal Decomposition. , 2018, , .		1
14	Route to Chaos in the Fluidic Pinball. , 2018, , .		0
15	Efficiency of randomised dynamic mode decomposition for reduced order modelling. <i>International Journal of Computational Fluid Dynamics</i> , 2018, 32, 88-103.	0.5	14
16	Spectral proper orthogonal decomposition and its relationship to dynamic mode decomposition and resolvent analysis. <i>Journal of Fluid Mechanics</i> , 2018, 847, 821-867.	1.4	720
17	Data-Driven Sparse Sensor Placement for Reconstruction: Demonstrating the Benefits of Exploiting Known Patterns. <i>IEEE Control Systems</i> , 2018, 38, 63-86.	1.0	259
18	Model-based Adaptive Reduced Basis Methods for Unsteady Aerodynamics Studies. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
19	A deep learning enabler for nonintrusive reduced order modeling of fluid flows. <i>Physics of Fluids</i> , 2019, 31, .	1.6	117
20	Non-Intrusive Inference Reduced Order Model for Fluids Using Deep Multistep Neural Network. <i>Mathematics</i> , 2019, 7, 757.	1.1	22
21	Metric for attractor overlap. <i>Journal of Fluid Mechanics</i> , 2019, 874, 720-755.	1.4	14
22	Data-driven construction of a reduced-order model for supersonic boundary layer transition. <i>Journal of Fluid Mechanics</i> , 2019, 874, 1096-1114.	1.4	24
23	Processing epidemiological data using dynamic mode decomposition method. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	9
24	Dynamic Mode Decomposition of Stratified Wakes. , 2019, , .		2
25	Sparse feature map-based Markov models for nonlinear fluid flows. <i>Computers and Fluids</i> , 2019, 191, 104252.	1.3	6
26	A modified proper orthogonal decomposition method for flow dynamic analysis. <i>Computers and Fluids</i> , 2019, 182, 28-36.	1.3	8
27	Spatio-temporal dynamic mode decomposition in a shear layer flow. <i>Aerospace Science and Technology</i> , 2019, 91, 263-271.	2.5	14
28	Adaptive reduced basis method for the reconstruction of unsteady vortex-dominated flows. <i>Computers and Fluids</i> , 2019, 190, 382-397.	1.3	5
29	Dynamic mode decomposition with exogenous input for data-driven modeling of unsteady flows. <i>Physics of Fluids</i> , 2019, 31, .	1.6	46
30	A domain decomposition method for the non-intrusive reduced order modelling of fluid flow. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 354, 307-330.	3.4	27
31	Multi-scale proper orthogonal decomposition of complex fluid flows. <i>Journal of Fluid Mechanics</i> , 2019, 870, 988-1036.	1.4	93
32	Dynamic mode decomposition of gas-liquid flow in a rotodynamic multiphase pump. <i>Renewable Energy</i> , 2019, 139, 1159-1175.	4.3	55
33	A domain decomposition non-intrusive reduced order model for turbulent flows. <i>Computers and Fluids</i> , 2019, 182, 15-27.	1.3	39
34	Dynamic mode decomposition of cavitating flow around ALE 15 hydrofoil. <i>Renewable Energy</i> , 2019, 139, 214-227.	4.3	66
35	ON THE USE OF DYNAMIC MODE DECOMPOSITION FOR LIQUID INJECTION. <i>Atomization and Sprays</i> , 2019, 29, 965-985.	0.3	2
36	Randomized Dynamic Mode Decomposition. <i>SIAM Journal on Applied Dynamical Systems</i> , 2019, 18, 1867-1891.	0.7	63

#	ARTICLE	IF	CITATIONS
37	Non-intrusive reduced-order modeling for fluid problems: A brief review. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2019, 233, 5896-5912.	0.7	63
38	Stability analysis of the wake-induced vibration of tandem circular and square cylinders. Nonlinear Dynamics, 2019, 95, 13-28.	2.7	11
39	A parallel and streaming Dynamic Mode Decomposition algorithm with finite precision error analysis for large data. Journal of Computational Physics, 2019, 380, 355-377.	1.9	16
40	Detecting Regime Transitions in Time Series Using Dynamic Mode Decomposition. Journal of Statistical Physics, 2020, 179, 1028-1045.	0.5	4
41	Nonlinear mode decomposition with convolutional neural networks for fluid dynamics. Journal of Fluid Mechanics, 2020, 882, .	1.4	178
42	Low-order model for successive bifurcations of the fluidic pinball. Journal of Fluid Mechanics, 2020, 884, .	1.4	54
43	Reduced order modelling for turbomachinery shape design. International Journal of Computational Fluid Dynamics, 2020, 34, 127-138.	0.5	4
44	Analyses on flow structures behind a wavy square cylinder based on continuous wavelet transform and dynamic mode decomposition. Ocean Engineering, 2020, 216, 108117.	1.9	4
45	Experimental Analysis of Cooling Fan Noise by Wavelet-Based Beamforming and Proper Orthogonal Decomposition. IEEE Access, 2020, 8, 121197-121203.	2.6	2
46	Method of dynamic mode decomposition and reconstruction with application to a three-stage multiphase pump. Energy, 2020, 208, 118343.	4.5	44
47	Machine learning open-loop control of a mixing layer. Physics of Fluids, 2020, 32, .	1.6	13
48	The1-based sparsification of energy interactions in unsteady lid-driven cavity flow. Journal of Fluid Mechanics, 2020, 905, .	1.4	9
49	Basic Framework and Main Methods of Uncertainty Quantification. Mathematical Problems in Engineering, 2020, 2020, 1-18.	0.6	15
50	Spatial Covariance Modeling for Stochastic Subgrid-scale Parameterizations Using Dynamic Mode Decomposition. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002115.	1.3	5
51	Cluster-based Markov model to understand the transition dynamics of a supersonic mixing layer. Physics of Fluids, 2020, 32, .	1.6	10
52	Modeling of Wastewater Treatment Processes Using Dynamic Bayesian Networks Based on Fuzzy PLS. IEEE Access, 2020, , 1-1.	2.6	6
53	Characterizing magnetized plasmas with dynamic mode decomposition. Physics of Plasmas, 2020, 27, .	0.7	36
54	Data-based analysis of multimodal partial cavity shedding dynamics. Experiments in Fluids, 2020, 61, 1.	1.1	16

#	ARTICLE	IF	CITATIONS
55	Proper orthogonal decomposition and recurrence map for the identification of spatial-temporal patterns in a low-Re wake downstream of two cylinders. <i>AIP Advances</i> , 2020, 10, 035317.	0.6	2
56	Multiscale proper orthogonal decomposition (mPOD) of TR-PIV data—a case study on stationary and transient cylinder wake flows. <i>Measurement Science and Technology</i> , 2020, 31, 094014.	1.4	23
57	Data-driven modeling of the chaotic thermal convection in an annular thermosyphon. <i>Theoretical and Computational Fluid Dynamics</i> , 2020, 34, 339-365.	0.9	33
58	Sampling and resolution characteristics in reduced order models of shallow water equations: Intrusive vs nonintrusive. <i>International Journal for Numerical Methods in Fluids</i> , 2020, 92, 992-1036.	0.9	16
59	Time-resolved reconstruction of flow field around a circular cylinder by recurrent neural networks based on non-time-resolved particle image velocimetry measurements. <i>Experiments in Fluids</i> , 2020, 61, 1.	1.1	34
60	Closure Learning for Nonlinear Model Reduction Using Deep Residual Neural Network. <i>Fluids</i> , 2020, 5, 39.	0.8	15
61	Oscillation regimes and mechanisms in the vortex-induced vibrations of three circular cylinders with equilateral-triangular arrangements. <i>Physics of Fluids</i> , 2020, 32, .	1.6	20
62	Dynamic mode decomposition analysis of the flow characteristics in a centrifugal compressor with vaned diffuser. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2021, 235, 154-168.	0.8	3
63	Spectral and modal analysis of a cavitating flow through an orifice. <i>Experimental Thermal and Fluid Science</i> , 2021, 121, 110251.	1.5	13
64	Cluster-based network model. <i>Journal of Fluid Mechanics</i> , 2021, 906, .	1.4	32
65	Image-based flow decomposition using empirical wavelet transform. <i>Journal of Fluid Mechanics</i> , 2021, 906, .	1.4	6
66	Model-Based Adaptive MOR Framework for Unsteady Flows Around Lifting Bodies. <i>International Series of Numerical Mathematics</i> , 2021, , 283-305.	1.0	2
67	Oscillatory flow around a vertical wall-mounted cylinder: Dynamic mode decomposition. <i>Physics of Fluids</i> , 2021, 33, .	1.6	14
68	Dynamic mode decomposition based analysis of flow past a transversely oscillating cylinder. <i>Physics of Fluids</i> , 2021, 33, .	1.6	26
69	Modal extraction of spatiotemporal atomization data using a deep convolutional Koopman network. <i>Physics of Fluids</i> , 2021, 33, .	1.6	6
70	Stochastic modelling of a noise-driven global instability in a turbulent swirling jet. <i>Journal of Fluid Mechanics</i> , 2021, 916, .	1.4	14
71	Stabilization of the fluidic pinball with gradient-enriched machine learning control. <i>Journal of Fluid Mechanics</i> , 2021, 917, .	1.4	24
72	Physics-constrained, low-dimensional models for magnetohydrodynamics: First-principles and data-driven approaches. <i>Physical Review E</i> , 2021, 104, 015206.	0.8	44

#	ARTICLE	IF	CITATIONS
73	Exploring data-driven modeling and analysis of nonlinear pathological tremors. <i>Mechanical Systems and Signal Processing</i> , 2021, 156, 107659.	4.4	4
74	Data-driven modeling for unsteady aerodynamics and aeroelasticity. <i>Progress in Aerospace Sciences</i> , 2021, 125, 100725.	6.3	75
75	Spatial and temporal dynamics of a supersonic mixing layer with a blunt base. <i>AIP Advances</i> , 2021, 11, 085322.	0.6	0
76	The balanced mode decomposition algorithm for data-driven LPV low-order models of aeroservoelastic systems. <i>Aerospace Science and Technology</i> , 2021, 115, 106821.	2.5	11
77	Investigation of unsteady liquid nitrogen cavitating flows with special emphasis on the vortex structures using mode decomposition methods. <i>International Journal of Heat and Mass Transfer</i> , 2020, 157, 119880.	2.5	27
78	Robust principal component analysis for modal decomposition of corrupt fluid flows. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	71
79	Dynamic Mode Decomposition and Its Variants. <i>Annual Review of Fluid Mechanics</i> , 2022, 54, 225-254.	10.8	162
80	Dynamic Mode Decomposition: A Tool to Extract Structures Hidden in Massive Datasets. , 2020, , 157-176.		1
81	Near-wake dynamics of a vertical-axis turbine. <i>Journal of Fluid Mechanics</i> , 2022, 935, .	1.4	7
82	Cluster-based hierarchical network model of the fluidic pinball “cartographing transient and post-transient, multi-frequency, multi-attractor behaviour. <i>Journal of Fluid Mechanics</i> , 2022, 934, .	1.4	14
83	Coherent structures decomposition of the flow field in Francis turbine runner under different working conditions. <i>Renewable Energy</i> , 2022, 186, 717-729.	4.3	7
84	System Identification of Two-Dimensional Transonic Buffet. <i>AIAA Journal</i> , 2022, 60, 3090-3106.	1.5	5
85	Recursive Dynamic Mode Decomposition for the flow around two square cylinders in tandem configuration. <i>Journal of Fluids and Structures</i> , 2022, 110, 103515.	1.5	6
86	A parametric and feasibility study for data sampling of the dynamic mode decomposition: Spectral insights and further explorations. <i>Physics of Fluids</i> , 2022, 34, .	1.6	15
87	Analysis of the dynamic characteristics in the supersonic wake using dynamic mode decomposition. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2022, 44, 1.	0.8	1
88	On Numerical Approximations of the Koopman Operator. <i>Mathematics</i> , 2022, 10, 1180.	1.1	10
89	Adaptive Data-Driven Model Order Reduction for Unsteady Aerodynamics. <i>Fluids</i> , 2022, 7, 130.	0.8	3
90	Projection-tree reduced-order modeling for fast N-body computations. <i>Journal of Computational Physics</i> , 2022, 459, 111141.	1.9	2

#	ARTICLE	IF	CITATIONS
91	Large Eddy Simulation and Dynamic Mode Decomposition of Turbulent Mixing Layers. Applied Sciences (Switzerland), 2021, 11, 12127.	1.3	3
92	Challenges in dynamic mode decomposition. Journal of the Royal Society Interface, 2021, 18, 20210686.	1.5	21
93	Junction Flow About Cylindrical Group on Rigid Flat Surface. SSRN Electronic Journal, 0, , .	0.4	0
94	Modern Koopman Theory for Dynamical Systems. SIAM Review, 2022, 64, 229-340.	4.2	109
95	<i>A priori</i> sparsification of Galerkin models. Journal of Fluid Mechanics, 2022, 941, .	1.4	1
96	Wake stabilization behind a cylinder by secondary flow over the leeward surface. Physics of Fluids, 2022, 34, 055110.	1.6	6
97	Data-driven nonlinear reduced-order modeling of unsteady fluidâ€“structure interactions. Physics of Fluids, 2022, 34, .	1.6	23
98	Spectral Analysis of Flow around Single and Two Crossing Circular Cylinders Arranged at 60 and 90 Degrees. Journal of Marine Science and Engineering, 2022, 10, 811.	1.2	2
99	Trajectory-optimized cluster-based network model for the sphere wake. Physics of Fluids, 2022, 34, .	1.6	10
100	High-Fidelity Digital Twin Data Models by Randomized Dynamic Mode Decomposition and Deep Learning with Applications in Fluid Dynamics. Modelling, 2022, 3, 314-332.	0.8	0
101	A hybrid two-dimensional orthogonal wavelet multiresolution and proper orthogonal decomposition technique for the analysis of turbulent wake flow. Ocean Engineering, 2022, 264, 112547.	1.9	1
102	Mode vortex and turbulence in ventilated cavitation over hydrofoils. International Journal of Multiphase Flow, 2022, 157, 104252.	1.6	5
103	Estimation of Hydrodynamic Forces on Cylinders Undergoing Flow-Induced Vibrations Based on Modal Analysis. Journal of Offshore Mechanics and Arctic Engineering, 2022, 144, .	0.6	5
104	Improvement of mode selection criterion of dynamic mode decomposition in a hydrofoil cavitation multiphase flow case. Ocean Engineering, 2022, 265, 112579.	1.9	4
105	Dynamic mode decomposition of syngas (H ₂ /CO) flame during transition to high-frequency instability in turbulent combustor. Energy, 2023, 263, 125998.	4.5	1
106	Proper orthogonal decomposition of large-eddy simulation data over real urban morphology. Sustainable Cities and Society, 2023, 89, 104324.	5.1	9
107	The linear-time-invariance notion to the Koopman analysis: The architecture, pedagogical rendering, and fluidâ€“structure association. Physics of Fluids, 2022, 34, .	1.6	16
108	Vortex-induced vibration of a circular cylinder with nonlinear restoring forces at low-Reynolds number. Ocean Engineering, 2022, 266, 113197.	1.9	2

#	ARTICLE	IF	CITATIONS
109	Machine-learned control-oriented flow estimation for multi-actuator multi-sensor systems exemplified for the fluidic pinball. <i>Journal of Fluid Mechanics</i> , 2022, 952, .	1.4	3
110	Junction flow inside and around three-row cylindrical group on rigid flat surface. <i>Heliyon</i> , 2022, , e12595.	1.4	0
111	Kinematic tomography of oscillatory coherent structures through synchronized mode decomposition. <i>Journal of Visualization</i> , 0, , .	1.1	0
112	Residual dynamic mode decomposition: robust and verified Koopmanism. <i>Journal of Fluid Mechanics</i> , 2023, 955, .	1.4	18
113	Koopman analysis by the dynamic mode decomposition in wind engineering. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2023, 232, 105295.	1.7	11
114	Linear and nonlinear dimensionality reduction from fluid mechanics to machine learning. <i>Measurement Science and Technology</i> , 2023, 34, 042001.	1.4	7
115	Construction of a reduced-order model of an electro-osmotic micromixer and discovery of attractors for petal structure. <i>Physics of Fluids</i> , 2023, 35, .	1.6	7
116	Unsteady RANS-based DMD analysis of airfoil NACA0015 with Gurney flap. <i>International Journal of Heat and Fluid Flow</i> , 2023, 99, 109099.	1.1	1
117	A reduced order with data assimilation model: Theory and practice. <i>Computers and Fluids</i> , 2023, 257, 105862.	1.3	2
118	E-POD investigations of turbulent premixed flame dynamics approaching lean blow-out conditions. <i>International Journal of Spray and Combustion Dynamics</i> , 2023, 15, 51-69.	0.4	1
119	Physics-informed dynamic mode decomposition. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2023, 479, .	1.0	27
120	Effects of a nozzle on the propeller wake in an oblique flow using modal analysis. <i>Journal of Fluid Mechanics</i> , 2023, 959, .	1.4	3
121	Effect of pressure gradient on flow instability in the subsonicâ€“supersonic mixing layer. <i>Physics of Fluids</i> , 2023, 35, .	1.6	3
122	Reduced-Order Modeling of Hypersonic Turbulent Boundary Layers. , 2023, , .		0
130	Reduced Order Modeling. <i>Computational Methods in Engineering & the Sciences</i> , 2023, , 297-339.	0.3	0
140	A Reduced Order Modeling Approach to Blunt-Body Aerodynamic Modeling. , 2024, , .		0