Kai Fukami

List of Publications by Year
in descending order

21 papers	1,641 citations	516215 16 h-index	839053 18 g-index
21 all docs	21 docs citations	21 times ranked	538 citing authors

#	Article	IF	Citations
1	Super-resolution reconstruction of turbulent flows with machine learning. Journal of Fluid Mechanics, 2019, 870, 106-120.	1.4	356
2	Nonlinear mode decomposition with convolutional neural networks for fluidÂdynamics. Journal of Fluid Mechanics, 2020, 882, .	1.4	178
3	Machine-learning-based spatio-temporal super resolution reconstruction of turbulent flows. Journal of Fluid Mechanics, 2021, 909, .	1.4	126
4	Assessment of supervised machine learning methods for fluid flows. Theoretical and Computational Fluid Dynamics, 2020, 34, 497-519.	0.9	115
5	Convolutional neural network based hierarchical autoencoder for nonlinear mode decomposition of fluid field data. Physics of Fluids, 2020, 32, .	1.6	110
6	Convolutional neural network and long short-term memory based reduced order surrogate for minimal turbulent channel flow. Physics of Fluids, 2021, 33, .	1.6	104
7	Machine-learning-based reduced-order modeling for unsteady flows around bluff bodies of various shapes. Theoretical and Computational Fluid Dynamics, 2020, 34, 367-383.	0.9	102
8	Synthetic turbulent inflow generator using machine learning. Physical Review Fluids, 2019, 4, .	1.0	97
9	Global field reconstruction from sparse sensors with Voronoi tessellation-assisted deep learning. Nature Machine Intelligence, 2021, 3, 945-951.	8.3	79
10	CNN-LSTM based reduced order modeling of two-dimensional unsteady flows around a circular cylinder at different Reynolds numbers. Fluid Dynamics Research, 2020, 52, 065501.	0.6	75
11	Probabilistic neural networks for fluid flow surrogate modeling and data recovery. Physical Review Fluids, 2020, 5, .	1.0	68
12	Experimental velocity data estimation for imperfect particle images using machine learning. Physics of Fluids, 2021, 33, .	1.6	50
13	Convolutional neural networks for fluid flow analysis: toward effective metamodeling and low dimensionalization. Theoretical and Computational Fluid Dynamics, 2021, 35, 633-658.	0.9	48
14	Sparse identification of nonlinear dynamics with low-dimensionalized flow representations. Journal of Fluid Mechanics, 2021, 926, .	1.4	42
15	Generalization techniques of neural networks for fluid flow estimation. Neural Computing and Applications, 2022, 34, 3647-3669.	3.2	36
16	Model Order Reduction with Neural Networks: Application to Laminar and Turbulent Flows. SN Computer Science, 2021, 2, 1.	2.3	33
17	Identifying key differences between linear stochastic estimation and neural networks for fluid flow regressions. Scientific Reports, 2022, 12, 3726.	1.6	13
18	Data-Driven Reduced Order Modeling of Flows Around Two-Dimensional Bluff Bodies of Various Shapes. , 2019, , .		4

#	Article	IF	Citations
19	Machine-learned super-resolution analysis of three-dimensional turbulent channel flow. The Proceedings of the Fluids Engineering Conference, 2019, 2019, OS8-01.	0.0	4
20	Machine-learning-based reconstruction of transient vortex-airfoil wake interaction. , 2022, , .		1
21	CNN-SINDy Based Reduced Order Modeling of Unsteady Flow Fields. , 2019, , .		0