

Shengze Cai

List of Publications by Year in descending order

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Version: 2024-02-01

11
papers

1,547
citations

933447

10
h-index

1281871

11
g-index

11
all docs

11
docs citations

11
times ranked

501
citing authors

#	ARTICLE	IF	CITATIONS
1	NSFnets (Navier-Stokes flow nets): Physics-informed neural networks for the incompressible Navier-Stokes equations. <i>Journal of Computational Physics</i> , 2021, 426, 109951.	3.8	386
2	Physics-informed neural networks (PINNs) for fluid mechanics: a review. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021, 37, 1727-1738.	3.4	308
3	Physics-Informed Neural Networks for Heat Transfer Problems. <i>Journal of Heat Transfer</i> , 2021, 143, .	2.1	304
4	Flow over an espresso cup: inferring 3-D velocity and pressure fields from tomographic background oriented Schlieren via physics-informed neural networks. <i>Journal of Fluid Mechanics</i> , 2021, 915, .	3.4	129
5	Dense motion estimation of particle images via a convolutional neural network. <i>Experiments in Fluids</i> , 2019, 60, 1.	2.4	101
6	DeepM&Mnet: Inferring the electroconvection multiphysics fields based on operator approximation by neural networks. <i>Journal of Computational Physics</i> , 2021, 436, 110296.	3.8	92
7	Particle Image Velocimetry Based on a Deep Learning Motion Estimator. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, 69, 3538-3554.	4.7	89
8	Operator learning for predicting multiscale bubble growth dynamics. <i>Journal of Chemical Physics</i> , 2021, 154, 104118.	3.0	71
9	Artificial intelligence velocimetry and microaneurysm-on-a-chip for three-dimensional analysis of blood flow in physiology and disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	50
10	Computational investigation of blood cell transport in retinal microaneurysms. <i>PLoS Computational Biology</i> , 2022, 18, e1009728.	3.2	13
11	DeepPTV: Particle Tracking Velocimetry for Complex Flow Motion via Deep Neural Networks. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-16.	4.7	4