Shengze Cai

List of Publications by Year
in descending order

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