Maziar Raissi

List of Publications by Year
in descending order

15 papers	**8,094** citations	759055 **12** h-index	1058333 **14** g-index
15 all docs	**15** docs citations	**15** times ranked	**3728** citing authors

#	Article	IF	Citations
1	Physics-informed neural networks: A deep learning framework for solving forward and inverse problems involving nonlinear partial differential equations. Journal of Computational Physics, 2019, 378, 686-707.	1.9	4,963
2	Hidden fluid mechanics: Learning velocity and pressure fields from flow visualizations. Science, 2020, 367, 1026-1030.	6.0	846
3	Hidden physics models: Machine learning of nonlinear partial differential equations. Journal of Computational Physics, 2018, 357, 125-141.	1.9	739
4	Machine learning of linear differential equations using Gaussian processes. Journal of Computational Physics, 2017, 348, 683-693.	1.9	343
5	A physics-informed deep learning framework for inversion and surrogate modeling in solid mechanics. Computer Methods in Applied Mechanics and Engineering, 2021, 379, 113741.	3.4	340
6	Deep learning of vortex-induced vibrations. Journal of Fluid Mechanics, 2019, 861, 119-137.	1.4	256
7	Inferring solutions of differential equations using noisy multi-fidelity data. Journal of Computational Physics, 2017, 335, 736-746.	1.9	202
8	Numerical Gaussian Processes for Time-Dependent and Nonlinear Partial Differential Equations. SIAM Journal of Scientific Computing, 2018, 40, A172-A198.	1.3	162
9	Systems biology informed deep learning for inferring parameters and hidden dynamics. PLoS Computational Biology, 2020, 16, e1007575.	1.5	133
10	Deep learning of turbulent scalar mixing. Physical Review Fluids, 2019, 4, .	1.0	39
11	Machine Learning of Space-Fractional Differential Equations. SIAM Journal of Scientific Computing, 2019, 41, A2485-A2509.	1.3	32
12	Parametric Gaussian process regression for big data. Computational Mechanics, 2019, 64, 409-416.	2.2	22
13	Modeling, Analysis and Physics Informed Neural Network approaches for studying the dynamics of COVID-19 involving human-human and human-pathogen interaction. Computational and Mathematical Biophysics, 2022, 10, 1-17.	0.6	10
14	On parameter estimation approaches for predicting disease transmission through optimization, deep learning and statistical inference methods. Letters in Biomathematics, 0, , 1-26.	0.3	6
15	Efficient Physics Informed Neural Networks Coupled withÂDomain Decomposition Methods forÂSolving Coupled Multi-physics Problems. Lecture Notes in Mechanical Engineering, 2022, , 41-53.	0.3	1