Paolo Vinai

List of Publications by Year
in descending order

15 papers	196 citations	1163117 8 h-index	1125743 13 g-index
15 all docs	15 docs citations	15 times ranked	139 citing authors

#	Article	IF	Citations
1	A Deep Learning Approach to Anomaly Detection in Nuclear Reactors. , 2018, , .		38
2	Criteria for Onset of Flow Instability in heated vertical narrow rectangular channels at low pressure: An assessment study. International Journal of Heat and Mass Transfer, 2017, 105, 464-478.	4.8	29
3	Assessment of thermal–hydraulic correlations for narrow rectangular channels with high heat flux and coolant velocity. International Journal of Heat and Mass Transfer, 2016, 99, 344-356.	4.8	18
4	Fine-mesh deterministic modeling of PWR fuel assemblies: Proof-of-principle of coupled neutronic/thermal–hydraulic calculations. Annals of Nuclear Energy, 2014, 68, 247-256.	1.8	16
5	Coupled fine-mesh neutronics and thermal-hydraulics – Modeling and implementation for PWR fuel assemblies. Annals of Nuclear Energy, 2015, 84, 244-257.	1.8	15
6	Uncertainty and sensitivity analysis for the simulation of a station blackout scenario in the Jules Horowitz Reactor. Annals of Nuclear Energy, 2017, 104, 28-41.	1.8	15
7	CORE SIM+: A flexible diffusion-based solver for neutron noise simulations. Annals of Nuclear Energy, 2021, 155, 108149.	1.8	15
8	Numerical solution of two-energy-group neutron noise diffusion problems with fine spatial meshes. Annals of Nuclear Energy, 2020, 140, 107093.	1.8	10
9	A statistical methodology for quantification of uncertainty in best estimate code physical models. Annals of Nuclear Energy, 2007, 34, 628-640.	1.8	9
10	Analysis of the neutron noise induced by fuel assembly vibrations. Annals of Nuclear Energy, 2021, 154, 108061.	1.8	8
11	On the simulation of neutron noise using a discrete ordinates method. Annals of Nuclear Energy, 2021, 164, 108570.	1.8	8
12	A numerical framework for bubble transport in a subcooled fluid flow. Journal of Computational Physics, 2017, 345, 373-403.	3.8	7
13	Modelling of a self-sustained density wave oscillation and its neutronic response in a three-dimensional heterogeneous system. Annals of Nuclear Energy, 2014, 67, 41-48.	1.8	5
14	Machine learning for analysis of real nuclear plant data in the frequency domain. Annals of Nuclear Energy, 2022, 177, 109293.	1.8	3
15	Propagation of void fraction uncertainty measures in the RETRAN-3D simulation of the Peach Bottom turbine trip. Annals of Nuclear Energy, 2011, 38, 358-370.	1.8	0