Jose Pontes

List of Publications by Year
in descending order

32	267	1163117 8	940533 16
papers	citations	h-index	g-index

33	33	33	199
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On dislocation patterning: Multiple slip effects in the rate equation approach. International Journal of Plasticity, 2006, 22, 1486-1505.	8.8	55
2	Stability analysis of natural convection in porous cavities through integral transforms. International Journal of Heat and Mass Transfer, 2002, 45, 1185-1195.	4.8	38
3	Implicit time splitting for fourth-order parabolic equations. Computer Methods in Applied Mechanics and Engineering, 1997, 148, 209-224.	6.6	34
4	Numerical scheme for Swift-Hohenberg equation with strict implementation of lyapunov functional. Mathematical and Computer Modelling, 2002, 35, 87-99.	2.0	33
5	Modeling spiral Ca2+ waves in single cardiac cells: role of the spatial heterogeneity created by the nucleus. American Journal of Physiology - Cell Physiology, 1996, 271, C1390-C1399.	4.6	30
6	Gradient pattern analysis of Swiftâ€“Hohenberg dynamics: phase disorder characterization. Physica A: Statistical Mechanics and Its Applications, 2000, 283, 156-159.	2.6	24
7	Rotating disk flow stability in electrochemical cells: Effect of viscosity stratification. Physics of Fluids, 2004, 16, 707-716.	4.0	9
8	NUMERICAL STUDY OF PATTERNS AND THEIR EVOLUTION IN FINITE GEOMETRIES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1996, 06, 1883-1890.	1.7	8
9	Rotating Disk Flow in Electrochemical Cells: A Coupled Solution for Hydrodynamic and Mass Equations. Journal of the Electrochemical Society, 2008, 155, D424.	2.9	7
10	Rotating disk flow stability in electrochemical cells: Effect of the transport of a chemical species. Physics of Fluids, 2007, 19, 114109.	4.0	6
11	Nano-patterning of surfaces by ion sputtering: Numerical study of the anisotropic damped Kuramoto-Sivashinsky equation. Computational Materials Science, 2018, 146, 193-203.	3.0	6
12	PATTERNS, DEFECTS, AND EVOLUTION OF BÃ‰NARDâ€“MARANGONI CELLS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1996, 06, 1665-1671.	1.7	4
13	Structural complexity of disordered surfaces: Analyzing the porous silicon SFM patterns. Physica A: Statistical Mechanics and Its Applications, 2007, 386, 666-673.	2.6	3
14	Three-dimensional finite element method for rotating disk flows. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2014, 36, 709-724.	1.6	3
15	Stripe patterns orientation resulting from nonuniform forcings and other competitive effects in the Swiftâ€“Hohenberg dynamics. Physica D: Nonlinear Phenomena, 2021, 427, 133000.	2.8	2
16	A Splitting Scheme for Solving Reaction-Diffusion Equations Modeling Dislocation Dynamics in Materials Subjected to Cyclic Loading. , 2010, , .		1
17	ALE/finite element modeling of an unconfined bubble plume in periodic domain: bubble shape and oscillation analysis. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2015, 37, 1647-1664.	1.6	1
18	Determinism, chaos, self-organization and entropy. Anais Da Academia Brasileira De Ciencias, 2016, 88, 1151-1164.	0.8	1

#	Article	IF	Citations
19	On the transport through polymer layer and porous arterial wall in drug-eluting stents. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	1
20	Numerical scheme for solving the nonuniformly forced cubic and quintic Swiftâ€“Hohenberg equations strictly respecting the Lyapunov functional. Journal of Computational and Applied Mathematics, 2022, 407, 114005.	2.0	1
21	Numerical modelling of the hydrodynamic field coupled to the transport of chemical species through the finite-element method. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 2100013-2100014.	0.2	0
22	Finite-element method simulation of rotating disk flow: effect of the transport of a chemical species. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 2100041-2100042.	0.2	0
23	Modelling Hydrodynamic Stability in Electrochemical Cells. , 2008, , .		0
24	ALE-FEM for Two-Phase Flows With Heat and Mass Transfer in Microchannels. , 2015, , .		0
25	Arbitrary Lagrangianâ€“Eulerian Method for Two-Phase Flows. , 2015, , 75-110.		0
26	Simulation of species concentration distribution in reactive flows with unsteady boundary conditions. Brazilian Journal of Chemical Engineering, 2017, 34, 1133-1148.	1.3	0
27	Instabilities in electrochemical systems with a rotating disc electrode. Revista Brasileira De Ciencias Mecanicas/Journal of the Brazilian Society of Mechanical Sciences, 2002, 24, 139-148.	0.1	0
28	Numerical Solution of the Walgraef-Aifantis Model for Simulation of Dislocation Dynamics in Materials Subjected to Cyclic Loading. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 97-107.	0.5	0
29	Uniform Flows with Small Perturbations. SpringerBriefs in Mathematics, 2019, , 103-113.	0.3	0
30	One-Dimensional Compressible Flows. SpringerBriefs in Mathematics, 2019, , 27-77.	0.3	0
31	Oblique Shocks. SpringerBriefs in Mathematics, 2019, , 79-101.	0.3	0
32	Compressible Potential Flows. SpringerBriefs in Mathematics, 2019, , 1-26.	0.3	0