

Jean-Guy Caputo

List of Publications by Year in descending order

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48
papers

536
citations

687363

13
h-index

677142

22
g-index

48
all docs

48
docs citations

48
times ranked

415
citing authors

#	ARTICLE	IF	CITATIONS
1	Vortex Polarity Switching by a Spin-Polarized Current. <i>Physical Review Letters</i> , 2007, 98, 056604.	7.8	77
2	Extremely short electromagnetic pulses in a resonant medium with a permanent dipole moment. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2003, 94, 245-250.	0.6	37
3	Unidirectional propagation of an ultra-short electromagnetic pulse in a resonant medium with high frequency Stark shift. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2002, 296, 34-42.	2.1	35
4	Nonlinear waves in networks: Model reduction for the sine-Gordon equation. <i>Physical Review E</i> , 2014, 90, 022912.	2.1	28
5	Nonlinear energy transmission in the gap. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2001, 283, 129-135.	2.1	27
6	EFFECT OF GEOMETRY ON FLUXON WIDTH IN A JOSEPHSON JUNCTION. <i>International Journal of Modern Physics C</i> , 1996, 07, 191-216.	1.7	20
7	A SEMI-LINEAR ELLIPTIC PDE MODEL FOR THE STATIC SOLUTION OF JOSEPHSON JUNCTIONS. <i>International Journal of Modern Physics C</i> , 1995, 06, 241-262.	1.7	18
8	Two-dimensional effects in Josephson junctions: Static properties. <i>Physical Review E</i> , 1996, 54, 2092-2101.	2.1	18
9	Front Solutions of Richards's Equation. <i>Transport in Porous Media</i> , 2008, 74, 1-20.	2.6	18
10	Stability analysis of static solutions in a Josephson junction. <i>Superconductor Science and Technology</i> , 2000, 13, 423-438.	3.5	17
11	Electromagnetically induced switching of ferroelectric thin films. <i>Physical Review B</i> , 2007, 75, .	3.2	16
12	Electrodynamics of a split-ring Josephson resonator in a microwave line. <i>Physical Review B</i> , 2012, 85, .	3.2	16
13	Polarization rotation by an rf-SQUID metasurface. <i>Physical Review B</i> , 2015, 91, .	3.2	14
14	Epidemic model on a network: Analysis and applications to COVID-19. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2021, 564, 125520.	2.6	14
15	Raman solitons in transient SRS. <i>Inverse Problems</i> , 2000, 16, 303-314.	2.0	13
16	Importance of the Internal Shape Mode in Magnetic Vortex Dynamics. <i>Physical Review Letters</i> , 2004, 93, 167201.	7.8	13
17	Spectral Graph Analysis of the Geometry of Power Flows in Transmission Networks. <i>IEEE Systems Journal</i> , 2020, 14, 2736-2747.	4.6	13
18	Radial sine-Gordon kinks as sources of fast breathers. <i>Physical Review E</i> , 2013, 88, 022915.	2.1	12

#	ARTICLE	IF	CITATIONS
19	Oscillations of networks: the role of soft nodes. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 035101.	2.1	12
20	Effective sine-Gordon model for the static properties of narrow window junctions. Journal of Applied Physics, 1999, 85, 7291-7301.	2.5	11
21	Dynamics of point Josephson junctions in a microstrip line. Physica C: Superconductivity and Its Applications, 2005, 425, 69-89.	1.2	11
22	Wave dynamics on networks: Method and application to the sine-Gordon equation. Applied Numerical Mathematics, 2018, 131, 54-71.	2.1	10
23	Planar and radial kinks in nonlinear Klein-Gordon models: Existence, stability, and dynamics. Physical Review E, 2018, 98, .	2.1	9
24	Breather stripes and radial breathers of the two-dimensional sine-Gordon equation. Communications in Nonlinear Science and Numerical Simulation, 2021, 94, 105596.	3.3	9
25	High-frequency polarization switching of a thin ferroelectric film. Physical Review B, 2010, 82, .	3.2	7
26	Interference filter properties of nonuniform Josephson junction arrays. Journal of Applied Physics, 2007, 102, .	2.5	6
27	Reaction-diffusion front crossing a local defect. Physical Review E, 2011, 84, 041108.	2.1	6
28	Screening magnetic fields by superconductors: A simple model. Journal of Applied Physics, 2013, 114, 233913.	2.5	6
29	Inverse source problem in a forced network. Inverse Problems, 2019, 35, 055006.	2.0	6
30	On graph Laplacian eigenvectors with components in \mathbb{R}^n . Discrete Applied Mathematics, 2019, 269, 120-129.	0.9	6
31	Two point Josephson junctions in a superconducting stripline: static case. Physica C: Superconductivity and Its Applications, 2004, 402, 160-173.	1.2	5
32	Propagation of extremely short pulses in nonresonant media: the total Maxwell-Duffing model. Physica D: Nonlinear Phenomena, 2004, 189, 107-114.	2.8	5
33	Bistable reaction-diffusion on a network. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 075102.	2.1	4
34	Analysis of trophic networks: an optimisation approach. Journal of Mathematical Biology, 2021, 83, 53.	1.9	4
35	Coupling Conditions for Water Waves at Forks. Symmetry, 2019, 11, 434.	2.2	3
36	High-order harmonic generation by double-photoionization accounting for the correlation between continuum electrons. Optik, 2011, 122, 247-255.	2.9	2

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37	Spectral solutions of PDEs on networks. Applied Numerical Mathematics, 2022, 172, 99-117.	2.1	2
38	Stimulated Raman scattering with strong damping: A simple theory of the spike phenomenon. Physical Review E, 2005, 71, 036601.	2.1	1
39	Cavity with an embedded polarized film: an adapted spectral approach. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 165204.	2.1	1
40	Fast electromagnetic response of a thin film of resonant atoms with permanent dipole. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 015206.	2.1	1
41	Scattering of a short electromagnetic pulse from a Lorentzian Duffing film: Theoretical and numerical analysis. Wave Motion, 2019, 89, 43-56.	2.0	1
42	Localized solutions of nonlinear network wave equations. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 035101.	2.1	1
43	Spectra of chains connected to complete graphs. Linear Algebra and Its Applications, 2020, 605, 29-62.	0.9	1
44	Inhomogeneous parallel arrays of Josephson junctions. Physica C: Superconductivity and Its Applications, 2011, 471, 344-356.	1.2	0
45	Fast control of the reflection of a ferroelectric by means of an extremely short pulse. Journal of Optics (United Kingdom), 2013, 15, 025203.	2.2	0
46	Spectral analysis of load flow equations for transmission networks. Engineering Research Express, 2019, 1, 025007.	1.6	0
47	Stopping a reaction-diffusion front. Physical Review E, 2021, 103, 032210.	2.1	0
48	The ϕ^4 Model in Higher Dimensions. Advances in Dynamics, Patterns, Cognition, 2019, , 235-252.	0.3	0