Giovanni Filatrella

List of Publications by Year
in descending order

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129	1,988	331259	301761
papers	citations	21 h-index	39 g-index

131	131	131	1149
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The â€œsailing-ship effectâ€• as a technological principle. Industrial and Corporate Change, 2022, 30, 1459-1478.	1.7	6
2	Investigation of Resonant Activation in a Josephson Junction for Axion Search With Microwave Single Photon Detection. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	5
3	Josephson-junction-based axion detection through resonant activation. Physical Review D, 2022, 105, .	1.6	9
4	Coherence and Stochastic Resonances in a Noisy van der Pol-Type Circadian Pacemaker Model Driven by Light. Brazilian Journal of Physics, 2022, 52, 1.	0.7	2
5	Multi-rhythmic oscillations and correlated noise effects of a self-sustaining biological system. Nonlinear Dynamics, 2022, 108, 4315-4334.	2.7	3
6	The R&D stochastic component within the â€˜sailing-ship effectâ€™. Economics of Innovation and New Technology, 2021, 30, 731-749.	2.1	3
7	Analysis of Josephson junctions switching time distributions for the detection of single microwave photons. Chaos, Solitons and Fractals, 2021, 142, 110496.	2.5	16
8	Josephson Junctions as Single Microwave Photon Counters: Simulation and Characterization. Instruments, 2021, 5, 25.	0.8	10
9	Entrainment of a Van der Pol-Type Circadian Pacemaker to DaylightÂCycle. Brazilian Journal of Physics, 2021, 51, 1416-1427.	0.7	3
10	Analysis of Josephson Junction Lifetimes for the Detection of Single Photons in a Thermal Noise Background. , 2021, , .		3
11	Josephson-Based Scheme for the Detection of Microwave Photons. Physical Review Applied, 2021, 16, .	1.5	15
12	Predicting one type of technological motion? A nonlinear map to study the â€˜sailing-shipâ€™ effect. Soft Computing, 2020, 24, 13813-13822.	2.1	2
13	Can LÃ©vy noise induce coherence and stochastic resonances in a birhythmic van der Pol system?. European Physical Journal B, 2020, 93, 1.	0.6	4
14	Detection of signals in presence of noise through Josephson junction switching currents. Physical Review E, 2020, 101, 052205.	0.8	14
15	Development of a Josephson junction based single photon microwave detector for axion detection experiments. Journal of Physics: Conference Series, 2020, 1559, 012020.	0.3	10
16	Status of the SIMP Project: Toward the Single Microwave Photon Detection. Journal of Low Temperature Physics, 2020, 199, 348-354.	0.6	23
17	Voltage drop across Josephson junctions for LÃ©vy noise detection. Physical Review Research, 2020, 2, .	1.3	24
18	LÃ©vy noise induced transitions and enhanced stability in a birhythmic van der Pol system. European Physical Journal B, 2019, 92, 1.	0.6	8

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19	Effect of the fractional foundation on the response of beam structure submitted to moving and wind loads. Chaos, Solitons and Fractals, 2019, 127, 178-188.	2.5	4
20	Josephson-based Threshold Detector for LÃ©vy-Distributed Current Fluctuations. Physical Review Applied, 2019, 11, .	1.5	66
21	Noise and disorder effects in a series of birhythmic Josephson junctions coupled to a resonator. Physical Review E, 2019, 99, 032220.	0.8	11
22	Multiâ€walled carbon nanotube films for the measurement of the alcoholic concentration. Micro and Nano Letters, 2019, 14, 304-308.	0.6	19
23	Effects of noise correlation on the coherence of a forced van der Pol type birhythmic system. Communications in Nonlinear Science and Numerical Simulation, 2018, 62, 1-17.	1.7	20
24	Stochastic first passage time accelerated with CUDA. Journal of Computational Physics, 2018, 361, 136-149.	1.9	11
25	Desynchronization effects of a current-driven noisy Hindmarshâ€“Rose neural network. Chaos, Solitons and Fractals, 2018, 115, 204-211.	2.5	5
26	Parallel Simulation of Josephson Junctions With Multiplicative Noise. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.1	0
27	Anomalous transport effects on switching currents of graphene-based Josephson junctions. Nanotechnology, 2017, 28, 134001.	1.3	98
28	Amplitude stochastic response of Rayleigh beams to randomly moving loads. Nonlinear Dynamics, 2017, 89, 925-937.	2.7	12
29	Coherence and stochastic resonance in a birhythmic van der Pol system. European Physical Journal B, 2017, 90, 1.	0.6	13
30	Effects of a periodic drive and correlated noise on birhythmic van der Pol systems. Physica A: Statistical Mechanics and Its Applications, 2017, 466, 552-569.	1.2	20
31	Dependence of the maximal superconducting current on the resonance frequency in a shunted Josephson junction. Journal of Experimental and Theoretical Physics, 2017, 125, 781-788.	0.2	4
32	Interfaces between Boseâ€“Einstein and Tonksâ€“Girardeau atomic gases. New Journal of Physics, 2016, 18, 025005.	1.2	2
33	Dynamics of Disordered Network of Coupled Hindmarshâ€“Rose Neuronal Models. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1650048.	0.7	3
34	Accurate switching currents measurements in quantum washboard potential. , 2016, , .		0
35	Nonideal quantum measurement effects on the switching-current distribution of Josephson junctions. Physical Review A, 2016, 94, .	1.0	3
36	Pseudopotential of birhythmic van der Pol-type systems with correlated noise. Nonlinear Dynamics, 2016, 84, 627-639.	2.7	15

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37	Stochastic bifurcations induced by correlated noise in a birhythmic van der Pol system. Communications in Nonlinear Science and Numerical Simulation, 2016, 33, 70-84.	1.7	32
38	Interplay between detection strategies and stochastic resonance properties. Communications in Nonlinear Science and Numerical Simulation, 2016, 30, 15-31.	1.7	19
39	Fabryâ€“Perot filters with tunable Josephson junction defects. Physica C: Superconductivity and Its Applications, 2015, 517, 37-40.	0.6	8
40	Switching times in Fabry-Perot measurements. , 2015, , .		0
41	Stability of the synchronized network of Hindmarshâ€“Rose neuronal models with nearest and global couplings. Communications in Nonlinear Science and Numerical Simulation, 2015, 22, 545-563.	1.7	25
42	Modeling, Stability, Synchronization, and Chaos and Their Applications to Complex Systems. Abstract and Applied Analysis, 2014, 2014, 1-2.	0.3	4
43	Domain walls and bubble droplets in immiscible binary Bose gases. Physical Review A, 2014, 90, .	1.0	16
44	Negative differential resistance in Josephson junctions coupled to a cavity. Physica C: Superconductivity and Its Applications, 2014, 503, 178-182.	0.6	5
45	Negative Differential Resistance due to Nonlinearities in Single and Stacked Josephson Junctions. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-7.	1.1	6
46	Noise estimate of pendular Fabry-Perot through reflectivity change. , 2014, , .		1
47	How quiz-based tools can improve students' engagement and participation in the classroom. , 2014, , .		6
48	Noise effects on a birhythmic Josephson junction coupled to a resonator. Physical Review E, 2014, 89, 052905.	0.8	14
49	Escape time characterization of pendular Fabry-Perot. Europhysics Letters, 2013, 101, 20005.	0.7	11
50	Escape Time of Josephson Junctions for Signal Detection. Progress in Optical Science and Photonics, 2012, , 657-678.	0.3	1
51	Characterization of escape times of Josephson junctions for signal detection. Physical Review E, 2012, 85, 016708.	0.8	45
52	Effective Fokker-Planck equation for birhythmic modified van der Pol oscillator. Chaos, 2012, 22, 043114.	1.0	28
53	On delayed technological shifts. Economics of Innovation and New Technology, 2011, 20, 563-580.	2.1	9
54	Stability of the synchronization manifold in nearest neighbor nonidentical van der Pol-like oscillators. Nonlinear Dynamics, 2010, 61, 275-294.	2.7	21

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55	Global stability analysis of birhythmicity in a self-sustained oscillator. Chaos, 2010, 20, 013114.	1.0	33
56	Detection of noise-corrupted sinusoidal signals with Josephson junctions. Physical Review E, 2010, 82, 046712.	0.8	31
57	Application of the Feshbach-resonance management to a tightly confined Bose-Einstein condensate. Physical Review A, 2009, 79, .	1.0	8
58	Strange attractors and synchronization dynamics of coupled Van der Polâ€“Duffing oscillators. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 1121-1130.	1.7	29
59	Analysis of a power grid using a Kuramoto-like model. European Physical Journal B, 2008, 61, 485-491.	0.6	420
60	ON TECHNOLOGY COMPETITION: A FORMAL ANALYSIS OF THE â€˜SAILING-SHIP EFFECTâ€™. Economics of Innovation and New Technology, 2008, 17, 593-610.	2.1	26
61	Thermal expansion of granular superconductors based on elastic response of Josephson junction arrays. Journal of Physics: Conference Series, 2008, 97, 012235.	0.3	0
62	Thermal propagation of fluxons in two-dimensional Josephson junction arrays. Physical Review B, 2007, 75, .	1.1	3
63	Moving and colliding pulses in the subcritical Ginzburg-Landau model with a standing-wave drive. Physical Review E, 2007, 75, 036604.	0.8	2
64	Thermal expansion of Josephson junctions as an elastic response to an effective stress field. Physical Review B, 2007, 75, .	1.1	4
65	Vortex Interaction Energy in Planar Josephson Junction Arrays at High Density. IEEE Transactions on Applied Superconductivity, 2007, 17, 3537-3540.	1.1	1
66	Generalized coupling in the Kuramoto model. Physical Review E, 2007, 75, 017201.	0.8	57
67	Additional Non Equilibrium Processes in the Dynamic Interaction between Flux Quanta and Defects. AIP Conference Proceedings, 2006, , .	0.3	1
68	Synchronization of Josephson vortices in multi-junction systems. Physica C: Superconductivity and Its Applications, 2006, 437-438, 65-68.	0.6	6
69	A basic thermodynamic problem in the dynamic interaction between vortices and defects. Physica C: Superconductivity and Its Applications, 2006, 437-438, 258-261.	0.6	2
70	Double parametric resonance for matter-wave solitons in a time-modulated trap. Physical Review E, 2005, 71, 036619.	0.8	35
71	Interaction between a BSCCO-type intrinsic Josephson junction and a microwave cavity. European Physical Journal B, 2004, 40, 209-215.	0.6	18
72	Synchronization of intrinsic Josephson junctions to a cavity. Physica C: Superconductivity and Its Applications, 2004, 408-410, 560-561.	0.6	2

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73	Irreversible dynamics of Abrikosov vortices in type-two superconductors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 329, 379-384.	0.9	7
74	Synchronization of underdamped Josephson-junction arrays. European Physical Journal B, 2003, 34, 3-8.	0.6	22
75	Models of classical one- and two-dimensional Josephson junction arrays and high-Tcsuperconductors. Superconductor Science and Technology, 2002, 15, 1635-1640.	1.8	2
76	Noise-induced dephasing of an ac-driven Josephson junction. Physical Review E, 2002, 65, 051116.	0.8	8
77	Linear and nonlinear flux dynamics in multilayered Bi2Sr2CaCu2Ox single crystals. Physica C: Superconductivity and Its Applications, 2002, 369, 171-176.	0.6	1
78	The mechanism of synchronization of Josephson arrays coupled to a cavity. Physica C: Superconductivity and Its Applications, 2002, 372-376, 11-13.	0.6	5
79	Experimental realization of a relativistic fluxon ratchet. Physica C: Superconductivity and Its Applications, 2002, 382, 337-341.	0.6	21
80	Two-dimensional Josephson junction arrays coupled through a high-Q cavity. IEEE Transactions on Applied Superconductivity, 2001, 11, 1184-1187.	1.1	10
81	On endogenous growth and increasing returns: modeling learning-by-doing and the division of labor. Journal of Economic Behavior and Organization, 2001, 46, 39-55.	1.0	11
82	Emission of radiation from square arrays of stacked Josephson junctions. Journal of Applied Physics, 2001, 90, 5675-5679.	1.1	12
83	Increasing Returns, Learning-By-Doing And Neural Networksâˆ—. Economics of Innovation and New Technology, 2001, 10, 325-337.	2.1	0
84	Phase-locking of disordered two-dimensional Josephson junction arrays to microwave radiation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 270, 195-203.	0.9	2
85	PHASE LOCKING AND AC AMPLIFICATION OF SMALL JOSEPHSON JUNCTIONS. International Journal of Modern Physics B, 2000, 14, 3098-3103.	1.0	0
86	FLUXON DYNAMICS AND RESONANCES IN STACKED ARRAYS OF JOSEPHSON JUNCTIONS. International Journal of Modern Physics B, 2000, 14, 3026-3031.	1.0	0
87	Experimental critical current patterns in Josephson junction ladders. Physical Review B, 2000, 62, 8679-8682.	1.1	7
88	Linear and nonlinear excitations in two stacks of parallel arrays of long Josephson junctions. Physical Review B, 2000, 62, 9095-9109.	1.1	3
89	High-Qcavity-induced synchronization in oscillator arrays. Physical Review E, 2000, 61, 2513-2518.	0.8	66
90	The alternating-current-driven motion of dislocations in a weakly damped Frenkel - Kontorova lattice. Journal of Physics Condensed Matter, 1999, 11, 7103-7114.	0.7	10

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91	Phase locking of Josephson junction arrays achieved by a non-traditional bias scheme. IEEE Transactions on Applied Superconductivity, 1999, 9, 4546-4549.	1.1	0
92	Broken Symmetry of Row Switching in 2D Josephson Junction Arrays. Physical Review Letters, 1999, 83, 5354-5357.	2.9	22
93	Radio-frequency properties of stacked long Josephson junctions with nonuniform bias current distribution. Journal of Applied Physics, 1999, 85, 6904-6906.	1.1	1
94	Mutual inductance effects in rf driven planar Josephson junctions arrays. European Physical Journal B, 1999, 12, 23-30.	0.6	9
95	Effect of cross-type bias in a two-dimensional array of short Josephson junctions. Applied Physics Letters, 1998, 72, 1107-1109.	1.5	9
96	Mutual phase-locking of fluxons in stacked long Josephson junctions: simulations and experiments. IEEE Transactions on Applied Superconductivity, 1997, 7, 2411-2414.	1.1	3
97	Phase locking of fluxons in spatially inhomogeneous Josephson junctions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 228, 250-254.	0.9	5
98	Linewidth calculation for bare 2D Josephson arrays. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 233, 373-377.	0.9	10
99	Superconducting high-Tc electronic devices. Ceramics International, 1996, 22, 359-364.	2.3	0
100	Flux distribution and critical currents in a one-dimensional row of a Josephson junction square lattice. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 223, 463-469.	0.9	19
101	Self-field effects in Josephson junction arrays. Physical Review B, 1996, 53, 2732-2738.	1.1	16
102	Inverse ac Josephson effect for a fluxon in a long modulated junction. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 198, 43-50.	0.9	15
103	Constants of motion in the dynamics of a 2N-junction SQUID. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 205, 224-228.	0.9	0
104	Magneticâ€field effect in a twoâ€dimensional array of short Josephson junctions. Journal of Applied Physics, 1995, 78, 1878-1883.	1.1	35
105	Multiâ€fluxon zeroâ€field modes in long Josephson tunnel junctions. Journal of Applied Physics, 1995, 77, 2598-2606.	1.1	12
106	Long Josephson junctions driven by biharmonic signals. Physical Review B, 1994, 50, 12802-12810.	1.1	7
107	Flux pinning barriers in two-dimensional arrays of short Josephson junctions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 193, 491-497.	0.9	8
108	High-T c Josephson junctions for electronic applications. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 2095-2102.	0.4	0

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109	Suppression of chaos in the perturbed sine-Gordon system by weak periodic signals. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 178, 81-84.	0.9	28
110	Threshold analysis for the inverse ac Josephson effect. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 180, 346-349.	0.9	14
111	Subharmonic self-locking of a Josephson soliton oscillator coupled to a resonator. Physica D: Nonlinear Phenomena, 1993, 68, 35-37.	1.3	0
112	Temporal chaos of soliton dynamics in the PDE model of long Josephson junctions. Journal of Physics A, 1993, 26, 4937-4949.	1.6	2
113	Flux flow in highâ€Tc Josephson junctions. Applied Physics Letters, 1993, 63, 1420-1422.	1.5	9
114	Soliton dynamics in two-dimensional Josephson tunnel junctions. Physical Review B, 1993, 48, 16623-16629.	1.1	9
115	Josephson soliton oscillators in a superconducting thin film resonator. IEEE Transactions on Applied Superconductivity, 1993, 3, 2504-2507.	1.1	1
116	Fluxon Dynamics in Discrete Sine Gordon System. NATO ASI Series Series B: Physics, 1993, , 347-350.	0.2	4
117	Model studies of long Josephson junction arrays coupled to a highâ€Qresonator. Journal of Applied Physics, 1992, 72, 3179-3185.	1.1	17
118	Coupling of a Josephson soliton oscillator to coplanar and microstrip cavities. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 165, 241-244.	0.9	5
119	On the switching between soliton dynamic states in long Josephson junctions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 172, 127-130.	0.9	7
120	An analysis of the validity limits of the current approaches for superconducting granular systems. Physica C: Superconductivity and Its Applications, 1991, 185-189, 1885-1886.	0.6	0
121	Chaotic dynamics in the map model of fluxon propagation in long Josephson junctions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 156, 211-215.	0.9	9
122	Comparison between electric and magnetic rf drive in long Josephson junctions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 153, 446-450.	0.9	6
123	Chaotic motion of solitons in the PDE model of long Josephson junctions. , 1991, , 284-291.		1
124	Phase Locking Of Fluxon Oscillations In Long Josephson Junctions. , 1991, , 253-269.		2
125	Phase locking of fluxon oscillations in long Josephson tunnel junctions with surface losses. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 148, 122-126.	0.9	10
126	Microwave phase locking of Josephson-junction fluxon oscillators. Physical Review B, 1990, 41, 6641-6654.	1.1	66

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127	A simple map describing phase-locking of fluxon oscillations in long Josephson tunnel junctions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1989, 137, 75-78.	0.9	42
128	Cold numbers: Superconducting supercomputers and presumptive anomaly. Industrial and Corporate Change, 0, , .	1.7	1
129	Vibrations of an Elastic Beam Subjected by Two Kinds of Moving Loads and Positioned on a Foundation having Fractional Order Viscoelastic Physical Properties. , 0, , .		1