

# VÃ-ctor JosÃ© SÃ;nchez-MorcillÃ³

## List of Publications by Year in descending order

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97  
papers

1,888  
citations

257450

24  
h-index

276875

41  
g-index

100  
all docs

100  
docs citations

100  
times ranked

1122  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sound Absorption and Diffusion by 2D Arrays of Helmholtz Resonators. Applied Sciences (Switzerland), 2020, 10, 1690.	2.5	26
2	Sound Absorption Properties of Perforated Recycled Polyurethane Foams Reinforced with Woven Fabric. Polymers, 2020, 12, 401.	4.5	8
3	The finite-element time-domain method for elastic band-structure calculations. Computer Physics Communications, 2019, 238, 77-87.	7.5	8
4	Kinks in a Lattice of Repelling Particles. Understanding Complex Systems, 2018, , 261-282.	0.6	4
5	Broadband reduction of the specular reflections by using sonic crystals: A proof of concept for noise mitigation in aerospace applications. Aerospace Science and Technology, 2018, 73, 300-308.	4.8	15
6	Nonlinear waves in a chain of magnetically coupled pendula. Proceedings of Meetings on Acoustics, 2018, , .	0.3	0
7	Modulated-nonlinearity in phononic crystals: From extremely linear to effective cubic nonlinear media. Proceedings of Meetings on Acoustics, 2018, , .	0.3	0
8	Nonlinear dispersive waves in repulsive lattices. Physical Review E, 2017, 96, 012208.	2.1	27
9	Broadband quasi perfect absorption using chirped multi-layer porous materials. AIP Advances, 2016, 6, 121605.	1.3	24
10	Localized nonlinear modes in microbubbles under the action of ultrasound. , 2016, , .		1
11	Asymmetric propagation using enhanced self-demodulation in a chirped phononic crystal. AIP Advances, 2016, 6, .	1.3	6
12	Formation of high-order acoustic Bessel beams by spiral diffraction gratings. Physical Review E, 2016, 94, 053004.	2.1	88
13	Energy localization and shape transformations in semiflexible polymer rings. Physical Review E, 2016, 93, 062227.	2.1	2
14	Nonlinear propagation and control of acoustic waves in phononic superlattices. Comptes Rendus Physique, 2016, 17, 543-554.	0.9	17
15	Time-Domain Simulation of Ultrasound Propagation in a Tissue-Like Medium Based on the Resolution of the Nonlinear Acoustic Constitutive Relations. Acta Acustica United With Acustica, 2016, 102, 876-892.	0.8	22
16	High-order Acoustic Bessel Beam Generation by Spiral Gratings. Physics Procedia, 2015, 70, 245-248.	1.2	17
17	Nonlinear self-collimated sound beams in sonic crystals. Physical Review B, 2015, 92, .	3.2	5
18	Macroscopic acousto-mechanical analogy of a microbubble. Journal of the Acoustical Society of America, 2015, 138, 3600-3606.	1.1	7

#	ARTICLE	IF	CITATIONS
19	Time-domain simulation of constitutive relations for nonlinear acoustics including relaxation for frequency power law attenuation media modeling. AIP Conference Proceedings, 2015, , .	0.4	0
20	Ultradiscrete kinks with supersonic speed in a layered crystal with realistic potentials. Physical Review E, 2015, 91, 022912.	2.1	42
21	A Supersonic Crowdion in Mica. Springer Series in Materials Science, 2015, , 69-96.	0.6	12
22	On the Nonlinear Effects in Focused Ultrasound Beams with Frequency Power Law Attenuation. Physics Procedia, 2015, 63, 47-53.	1.2	1
23	Nonlinear Ultrasound Simulations Including Complex Frequency Dependent Attenuation. Physics Procedia, 2015, 63, 108-113.	1.2	1
24	Acoustically penetrable sonic crystals based on fluid-like scatterers. Journal Physics D: Applied Physics, 2015, 48, 025501.	2.8	6
25	Extraordinary absorption of sound in porous lamella-crystals. Scientific Reports, 2015, 4, 4674.	3.3	50
26	Propagation of Intense Acoustic Waves in Sonic Crystals. Physics Procedia, 2015, 70, 271-274.	1.2	1
27	Acoustic Bessel-like beam formation by an axisymmetric grating. Europhysics Letters, 2014, 106, 24005.	2.0	36
28	Lattice of nonlinear coupled oscillators: An acousto-mechanical analogy of gas microbubble. , 2014, , .		1
29	Enhancement of sound by soft reflections in exponentially chirped crystals. AIP Advances, 2014, 4, .	1.3	28
30	Enhanced transmission band in periodic media with loss modulation. Applied Physics Letters, 2014, 105, .	3.3	10
31	Angular Band Gaps in Sonic Crystals: Evanescent Waves and Spatial Complex Dispersion Relation. Journal of Vibration and Acoustics, Transactions of the ASME, 2013, 135, .	1.6	6
32	Sound diffusers based on sonic crystals. Journal of the Acoustical Society of America, 2013, 134, 4412-4417.	1.1	19
33	Enhancement of sound in chirped sonic crystals. Applied Physics Letters, 2013, 102, .	3.3	70
34	Evidences of spatial (angular) filtering of sound beams by sonic crystals. Applied Acoustics, 2013, 74, 945-948.	3.3	22
35	Unlocked evanescent waves in periodic structures. Optics Letters, 2013, 38, 1890.	3.3	8
36	Nonlinear focal shift beyond the geometrical focus in moderately focused acoustic beams. Journal of the Acoustical Society of America, 2013, 134, 1463-1472.	1.1	11

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37	Second-harmonic generation for dispersive elastic waves in a discrete granular chain. Physical Review E, 2013, 88, 043203.	2.1	43
38	Vibration modes in a pendulums ring: Analogy with gas microbubbles surface modes. , 2013, , .		1
39	Wave focusing using symmetry matching in axisymmetric acoustic gradient index lenses. Applied Physics Letters, 2013, 103, .	3.3	33
40	Moving Excitations in Cation Lattices. Ukrainian Journal of Physics, 2013, 58, 646-656.	0.2	13
41	Modulational instability of microbubbles surface modes. AIP Conference Proceedings, 2012, , .	0.4	2
42	Nonlinear effects in the radiation force generated by amplitude-modulated focused beams. AIP Conference Proceedings, 2012, , .	0.4	1
43	Focalization of evanescent beams. , 2012, , .		0
44	Formation of collimated sound beams by three-dimensional sonic crystals. Journal of Applied Physics, 2012, 111, .	2.5	17
45	Focusing Properties of Axisymmetric Acoustic Metamaterials Made of Toroidal Scatterers. , 2012, , .		0
46	Spatial filtering of sound beams by sonic crystals. Applied Acoustics, 2012, 73, 302-306.	3.3	31
47	Modulational Instability and localized modes for ultrasound contrast microbubbles surface oscillations. , 2011, , .		5
48	The Potential for Phononic Sound Diffusers (PSD). Building Acoustics, 2011, 18, 37-46.	1.9	6
49	Elastic waves in phononic monolayer granular membranes. New Journal of Physics, 2011, 13, 073042.	2.9	27
50	Simultaneous self-collimation of fundamental and second-harmonic in sonic crystals. Applied Physics Letters, 2011, 99, .	3.3	11
51	Self-organization of ultrasound in viscous fluids. Europhysics Letters, 2010, 92, 10003.	2.0	2
52	Nonlinear focal shift in medium Fresnel-number focused acoustic beams. , 2010, , .		0
53	A GPU Approach to the Simulation of Spatioâ€temporal Dynamics in Ultrasonic Resonators. Lecture Notes in Computer Science, 2010, , 379-386.	1.3	0
54	Self collimation of ultrasound in a three-dimensional sonic crystal. Applied Physics Letters, 2009, 94, .	3.3	38

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55	Bistable and dynamic states of parametrically excited ultrasound in a fluid-filled interferometer. Journal of the Acoustical Society of America, 2009, 125, 3555-3560.	1.1	3
56	Diffusion stabilizes cavity solitons in bidirectional lasers. , 2009, , .		0
57	Spatial filtering of light by chirped photonic crystals. Physical Review A, 2009, 79, .	2.5	65
58	Diffusion stabilizes cavity solitons in bidirectional lasers. Optics Express, 2009, 17, 4897.	3.4	5
59	Propagation of sound beams behind sonic crystals. Physical Review B, 2009, 80, .	3.2	21
60	Nonlinear change of on-axis pressure and intensity maxima positions and its relation with the linear focal shift effect. Ultrasonics, 2008, 48, 678-686.	3.9	14
61	Nonlinear Change Of On-Axis Pressure And Intensity Maxima Position In Focused Ultrasonic Beams. AIP Conference Proceedings, 2008, , .	0.4	0
62	Pattern Formation And Localized Structures In Acoustic Resonators Containing A Viscous Fluid. AIP Conference Proceedings, 2008, , .	0.4	0
63	Spatio-Temporal Dynamics in Parametric Sound Generation. AIP Conference Proceedings, 2008, , .	0.4	0
64	Ultrasonic cavity solitons. Europhysics Letters, 2008, 82, 10002.	2.0	6
65	Bidirectional laser cavity solitons. , 2007, , .		0
66	Excitability in a nonlinear magnetoacoustic resonator. Physical Review E, 2007, 75, 015602.	2.1	2
67	Cavity solitons in bidirectional lasers. Optics Letters, 2007, 32, 3221.	3.3	10
68	Theoretical prediction of the nondiffractive propagation of sonic waves through periodic acoustic media. Physical Review B, 2007, 75, .	3.2	89
69	Subdiffractive propagation of ultrasound in sonic crystals. Physical Review B, 2007, 76, .	3.2	70
70	Strong on-axis focal shift and its nonlinear variation in low-Fresnel-number ultrasound beams. Journal of the Acoustical Society of America, 2006, 119, 3618-3624.	1.1	9
71	Excitable behavior of ultrasound in a magnetoacoustic resonator. AIP Conference Proceedings, 2006, , .	0.4	0
72	The Strong Effects Of On-Axis Focal Shift And Its Nonlinear Variation In Ultrasound Beams Radiated By Low Fresnel Number Transducers. AIP Conference Proceedings, 2006, , .	0.4	0

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73	Localization of Ultrasound in Acoustic Interferometers. AIP Conference Proceedings, 2006, , .	0.4	0
74	FIRST ACTIVITIES IN ACOUSTIC DETECTION OF PARTICLES IN UPV. International Journal of Modern Physics A, 2006, 21, 137-141.	1.5	5
75	Self-pulsing dynamics of ultrasound in a magnetoacoustic resonator. Physical Review E, 2005, 72, 036611.	2.1	2
76	Pattern formation in parametric sound generation. Physical Review E, 2005, 72, 066202.	2.1	2
77	Domain wall dynamics in an optical Kerr cavity. Physical Review E, 2005, 71, 066209.	2.1	6
78	Ising-Bloch transition for spatially extended patterns. Physical Review E, 2005, 72, 016203.	2.1	7
79	The Ising-Bloch transition in degenerate optical parametric oscillators. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, S361-S368.	1.4	5
80	Spontaneous pattern formation in an acoustical resonator. Journal of the Acoustical Society of America, 2004, 115, 111-119.	1.1	4
81	Improvement of the prediction of transmission loss of double partitions with cavity absorption by minimization techniques. Journal of Sound and Vibration, 2004, 273, 793-804.	3.9	15
82	Bright cavity solitons in anisotropic vectorial Kerr cavities. Journal of Optics B: Quantum and Semiclassical Optics, 2001, 3, S118-S123.	1.4	3
83	Turing patterns in nonlinear optics. Optics Communications, 2000, 177, 389-395.	2.1	24
84	Polarization instability in anisotropic-cavity degenerate four-wave mixing. Optics Communications, 2000, 173, 381-387.	2.1	6
85	Role of pump diffraction on the stability of localized structures in degenerate optical parametric oscillators. Physical Review E, 2000, 61, 7076-7080.	2.1	5
86	Vectorial Kerr-cavity solitons. Optics Letters, 2000, 25, 957.	3.3	37
87	Stability of localized structures in the Swift-Hohenberg equation. Physical Review E, 1999, 60, 6153-6156.	2.1	16
88	Dynamics of phase domains in the Swift-Hohenberg equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 241, 28-34.	2.1	65
89	Closed Busse balloon for rolls and skew-varicose instability in a Swift-Hohenberg model with nonlinear resonance. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 246, 293-298.	2.1	3
90	Spatial-localized structures in degenerate optical parametric oscillators. Physical Review A, 1998, 57, 1454-1457.	2.5	113

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91	Traveling-wave“standing-wave competition in a generalized complex Swift-Hohenberg equation. Physical Review E, 1998, 57, R4911-R4914.	2.1	9
92	Generalized complex Swift-Hohenberg equation for optical parametric oscillators. Physical Review A, 1997, 56, 3237-3244.	2.5	54
93	Localized structures in degenerate optical parametric oscillators. Optics Communications, 1997, 139, 306-312.	2.1	107
94	Transverse patterns in degenerate optical parametric oscillation and degenerate four-wave mixing. Physical Review A, 1996, 54, 1609-1624.	2.5	112
95	Swift - Hohenberg-type equation for nascent two-photon optical bistability in the weakly dispersive limit. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1996, 8, 919-929.	0.9	10
96	Lasing without inversion via a self-pulsing instability. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1995, 7, 889-899.	0.9	16
97	Modeling Acoustically Driven Microbubbles by Macroscopic Discrete-Mechanical Analogues. Modelling in Science Education and Learning, 0, 6, 75.	0.2	5