Georgios Theocharis

List of Publications by Citations

63 papers	2,691 citations	24 h-index	51 g-index
64 ext. papers	3,112 ext. citations	3.6 avg, IF	5.28 L-index

#	Paper	IF	Citations
63	Bifurcation-based acoustic switching and rectification. *Nature Materials*, **2011**, 10, 665-8	27	408
62	Feshbach resonance management for Bose-Einstein condensates. *Physical Review Letters*, **2003**, 90, 230401	7.4	222
61	Experimental observation of oscillating and interacting matter wave dark solitons. *Physical Review Letters*, **2008**, 101, 130401	7.4	215
60	Discrete breathers in one-dimensional diatomic granular crystals. *Physical Review Letters*, **2010**, 104, 244302	7.4	192
59	Perfect and broadband acoustic absorption by critically coupled sub-wavelength resonators. *Scientific Reports*, **2016**, 6, 19519	4.9	163
58	Ring dark solitons and vortex necklaces in Bose-Einstein condensates. *Physical Review Letters*, **2003**, 90, 120403	7.4	157
57	Control of acoustic absorption in one-dimensional scattering by resonant scatterers. *Applied Physics Letters*, **2015**, 107, 244102	3.4	113
56	Use of complex frequency plane to design broadband and sub-wavelength absorbers. *Journal of the Acoustical Society of America*, **2016**, 139, 3395	2.2	94
55	Multiple atomic dark solitons in cigar-shaped Bose-Einstein condensates. *Physical Review A*, **2010**, 81,	2.6	92
54	Localized breathing modes in granular crystals with defects. *Physical Review E*, **2009**, 80, 066601	2.4	76
53	Limits of slow sound propagation and transparency in lossy, locally resonant periodic structures. *New Journal of Physics*, **2014**, 16, 093017	2.9	74
52	Tunable vibrational band gaps in one-dimensional diatomic granular crystals with three-particle unit cells. *Journal of Applied Physics*, **2011**, 109, 074906	2.5	74
51	Intrinsic energy localization through discrete gap breathers in one-dimensional diatomic granular crystals. *Physical Review E*, **2010**, 82, 056604	2.4	71
50	Highly nonlinear wave propagation in elastic woodpile periodic structures. *Physical Review Letters*, **2015**, 114, 118002	7.4	64
49	Non-Hermitian acoustic metamaterials: Role of exceptional points in sound absorption. *Physical Review B*, **2017**, 95,	3.3	54
48	Nonlinear resonances and energy transfer in finite granular chains. *Physical Review E*, **2015**, 91, 023208	2.4	41
47	Tunable magneto-granular phononic crystals. *Applied Physics Letters*, **2016**, 108, 161903	3.4	37

46	Vortices in a Bose–Einstein condensate confined by an optical lattice. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2003**, 36, 3467-3476	1.3	33
45	Defect modes in one-dimensional granular crystals. *Physical Review E*, **2012**, 85, 037601	2.4	29
44	Wave propagation in a strongly nonlinear locally resonant granular crystal. *Physica D: Nonlinear Phenomena*, **2018**, 365, 27-41	3.3	27
43	Nonlinear Hysteretic Torsional Waves. *Physical Review Letters*, **2015**, 115, 054301	7.4	26
42	Observation of Edge Waves in a Two-Dimensional Su-Schrieffer-Heeger Acoustic Network. *Physical Review Applied*, **2019**, 12,	4.3	25
41	Quasitopological rotational waves in mechanical granular graphene. *Physical Review B*, **2018**, 97,	3.3	25
40	Coherent perfect absorption induced by the nonlinearity of a Helmholtz resonator. *Journal of the Acoustical Society of America*, **2016**, 140, EL94	2.2	25
39	Hysteresis loops and multi-stability: From periodic orbits to chaotic dynamics (and back) in diatomic granular crystals. *Europhysics Letters*, **2013**, 101, 44003	1.6	23
38	Nonlinear Periodic Phononic Structures and Granular Crystals. *Springer Series in Solid-state Sciences*, **2013**, 217-251	0.4	23
37	Dark breathers in granular crystals. *Physical Review E*, **2013**, 87, 042202	2.4	22
36	Energy transport in one-dimensional disordered granular solids. *Physical Review E*, **2016**, 93, 022903	2.4	21
35	Dark soliton dynamics in spatially inhomogeneous media: Application to Bose–Einstein condensates. *Mathematics and Computers in Simulation*, **2005**, 69, 537-552	3.3	20
34	Self-induced topological transition in phononic crystals by nonlinearity management. *Physical Review B*, **2019**, 100,	3.3	16
33	Transversal–rotational and zero group velocity modes in tunable magneto-granular phononic crystals. *Extreme Mechanics Letters*, **2017**, 12, 65-70	3.9	16
32	Guidance of matter waves through Y-junctions. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2003**, 317, 513-522	2.3	16
31	Dark solitons in cigar-shaped Bose-Einstein condensates in double-well potentials. *Physical Review A*, **2010**, 81,	2.6	15
30	Invariant currents in lossy acoustic waveguides with complete local symmetry. *Physical Review B*, **2015**, 92,	3.3	14
29	Discrete breathers at the interface between a diatomic and a monoatomic granular chain. *Physical Review E*, **2010**, 82, 061303	2.4	14

28	Perfect Absorption in Mirror-Symmetric Acoustic Metascreens. *Physical Review Applied*, **2020**, 14,	4.3	14
27	Generation of dark solitons in oscillating Bose-Einstein condensates. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2005**, 337, 441-448	2.3	13
26	Acoustic solitons in waveguides with Helmholtz resonators: transmission line approach. *Physical Review E*, **2015**, 91, 023204	2.4	12
25	Acoustic graphene network loaded with Helmholtz resonators: a first-principle modeling, Dirac cones, edge and interface waves. *New Journal of Physics*, **2020**, 22, 013029	2.9	12
24	Zero-frequency and slow elastic modes in phononic monolayer granular membranes. *Ultrasonics*, **2016**, 69, 201-14	3.5	11
23	Bright and gap solitons in membrane-type acoustic metamaterials. *Physical Review E*, **2017**, 96, 022214	2.4	10
22	Stability of topological edge states under strong nonlinear effects. *Physical Review B*, **2021**, 103,	3.3	10
21	Linear and Nonlinear Elastic Waves in Magnetogranular Chains. *Physical Review Applied*, **2020**, 13,	4.3	8
20	Subwavelength Interferometric Control of Absorption in Three-port Acoustic Network. *Scientific Reports*, **2018**, 8, 12328	4.9	8
19	Second-Harmonic Generation in Membrane-Type Nonlinear Acoustic Metamaterials. *Crystals*, **2016**, 6, 86	2.3	7
18	Robustness of topological corner modes against disorder with application to acoustic networks. *Physical Review B*, **2020**, 102,	3.3	6
17	Design of acoustic metamaterials made of Helmholtz resonators for perfect absorption by using the complex frequency plane. *Comptes Rendus Physique*, **2020**, 21, 713-749	1.4	6
16	Dark Solitons in Acoustic Transmission Line Metamaterials. *Applied Sciences (Switzerland)*, **2018**, 8, 1186	2.6	5
15	Granular graphene: Direct observation of edge states on zigzag and armchair boundaries. *Physical Review B*, **2019**, 99,	3.3	4
14	Fast, robust, and amplified transfer of topological edge modes on a time-varying mechanical chain. *Physical Review B*, **2020**, 102,	3.3	4
13	Multi-functional resonant acoustic wave router. *Journal Physics D: Applied Physics*, **2020**, 53, 235101	3	3
12	Tilted double Dirac cone and anisotropic quantum-spin-Hall topological insulator in mechanical granular graphene. *New Journal of Physics*, **2020**, 22, 103012	2.9	3
11	Wave propagation in a strongly disordered one-dimensional phononic lattice supporting rotational waves. *Physical Review B*, **2020**, 102,	3.3	3

List of Publications

10	Second-Harmonic Generation in Acoustic Waveguides Loaded with an Array of Side Holes. *Acta Acustica United With Acustica*, **2018**, 104, 235-242	1.5	2
9	Dynamics of interacting dark soliton stripes. *Physical Review A*, **2019**, 100,	2.6	2
8	Topological two-dimensional SuSchriefferHeeger analog acoustic networks: Total reflection at corners and corner induced modes. *Journal of Applied Physics*, **2021**, 129, 125108	2.5	2
7	High-amplitude sound propagation in acoustic transmission-line metamaterial. *Applied Physics Letters*, **2021**, 118, 104102	3.4	2
6	Acoustic Su-Schrieffer-Heeger lattice: Direct mapping of acoustic waveguides to the Su-Schrieffer-Heeger model. *Physical Review B*, **2021**, 103,	3.3	2
5	Disorder-induced topological phase transition in a one-dimensional mechanical system. *Physical Review Research*, **2021**, 3,	3.9	2
4	Testing a bead-rod contact with a nonlinear resonance method. *Journal of Sound and Vibration*, **2019**, 441, 84-95	3.9	2
3	Wave-packet spreading in disordered soft architected structures. *Chaos*, **2022**, 32, 053116	3.3	1
2	Direct observation of edge modes in zigzag granular chains. *Journal of Sound and Vibration*, **2022**, 526, 116761	3.9	0
1	Subwavelength Su-Schrieffer-Heeger topological modes in acoustic waveguides. *Journal of the Acoustical Society of America*, **2022**, 151, 3626-3632	2.2	