

J-P Groby

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

86
papers

1,891
citations

24
h-index

40
g-index

88
ext. papers

2,293
ext. citations

2.9
avg, IF

5.2
L-index

#	Paper	IF	Citations
86	Ultra-thin metamaterial for perfect and quasi-omnidirectional sound absorption. <i>Applied Physics Letters</i> , 2016 , 109, 121902	3.4	203
85	Rainbow-trapping absorbers: Broadband, perfect and asymmetric sound absorption by subwavelength panels for transmission problems. <i>Scientific Reports</i> , 2017 , 7, 13595	4.9	164
84	Enhancing the absorption properties of acoustic porous plates by periodically embedding Helmholtz resonators. <i>Journal of the Acoustical Society of America</i> , 2015 , 137, 273-80	2.2	101
83	Absorption of sound by porous layers with embedded periodic arrays of resonant inclusions. <i>Journal of the Acoustical Society of America</i> , 2013 , 134, 4670	2.2	97
82	Quasiperfect absorption by subwavelength acoustic panels in transmission using accumulation of resonances due to slow sound. <i>Physical Review B</i> , 2017 , 95,	3.3	94
81	The use of slow waves to design simple sound absorbing materials. <i>Journal of Applied Physics</i> , 2015 , 117, 124903	2.5	65
80	Using simple shape three-dimensional rigid inclusions to enhance porous layer absorption. <i>Journal of the Acoustical Society of America</i> , 2014 , 136, 1139	2.2	57
79	Use of slow sound to design perfect and broadband passive sound absorbing materials. <i>Journal of the Acoustical Society of America</i> , 2016 , 139, 1660	2.2	57
78	Enhancing the absorption coefficient of a backed rigid frame porous layer by embedding circular periodic inclusions. <i>Journal of the Acoustical Society of America</i> , 2011 , 130, 3771-80	2.2	49
77	Sustainable sonic crystal made of resonating bamboo rods. <i>Journal of the Acoustical Society of America</i> , 2013 , 133, 247-54	2.2	44
76	Design of metaporous supercells by genetic algorithm for absorption optimization on a wide frequency band. <i>Applied Acoustics</i> , 2016 , 102, 49-54	3.1	41
75	Unidirectional zero sonic reflection in passive PT-symmetric Willis media. <i>Physical Review B</i> , 2018 , 98,	3.3	39
74	Acoustic response of a rigid-frame porous medium plate with a periodic set of inclusions. <i>Journal of the Acoustical Society of America</i> , 2009 , 126, 685-93	2.2	38
73	Metadiffusers: Deep-subwavelength sound diffusers. <i>Scientific Reports</i> , 2017 , 7, 5389	4.9	36
72	Deterministic and statistical characterization of rigid frame porous materials from impedance tube measurements. <i>Journal of the Acoustical Society of America</i> , 2017 , 142, 2407	2.2	35
71	Analytical method for the ultrasonic characterization of homogeneous rigid porous materials from transmitted and reflected coefficients. <i>Journal of the Acoustical Society of America</i> , 2010 , 127, 764-72	2.2	32
70	Acoustic behavior of a rigidly backed poroelastic layer with periodic resonant inclusions by a multiple scattering approach. <i>Journal of the Acoustical Society of America</i> , 2016 , 139, 617-29	2.2	32

69	Acoustic wave propagation in a macroscopically inhomogeneous porous medium saturated by a fluid. <i>Applied Physics Letters</i> , 2007 , 90, 181901	3.4	30
68	Tunable acoustic waveguides in periodic arrays made of rigid square-rod scatterers: theory and experimental realization. <i>Journal Physics D: Applied Physics</i> , 2013 , 46, 305108	3	27
67	Absorption of a rigid frame porous layer with periodic circular inclusions backed by a periodic grating. <i>Journal of the Acoustical Society of America</i> , 2011 , 129, 3035-46	2.2	27
66	Total absorption peak by use of a rigid frame porous layer backed by a rigid multi-irregularities grating. <i>Journal of the Acoustical Society of America</i> , 2010 , 127, 2865-74	2.2	26
65	Complex dispersion relation of surface acoustic waves at a lossy metasurface. <i>Applied Physics Letters</i> , 2017 , 110, 051902	3.4	25
64	Optimally graded porous material for broadband perfect absorption of sound. <i>Journal of Applied Physics</i> , 2019 , 126, 175101	2.5	24
63	Non-ambiguous recovery of Biot poroelastic parameters of cellular panels using ultrasonic waves. <i>Journal of Sound and Vibration</i> , 2011 , 330, 1074-1090	3.9	24
62	A mode matching approach for modeling two dimensional porous grating with infinitely rigid or soft inclusions. <i>Journal of the Acoustical Society of America</i> , 2012 , 131, 3841-52	2.2	24
61	Low frequency sound attenuation in a flow duct using a thin slow sound material. <i>Journal of the Acoustical Society of America</i> , 2016 , 139, EL149	2.2	23
60	Propagation of acoustic waves in a one-dimensional macroscopically inhomogeneous poroelastic material. <i>Journal of the Acoustical Society of America</i> , 2011 , 130, 1390-8	2.2	22
59	Asymptotic limits of some models for sound propagation in porous media and the assignment of the pore characteristic lengths. <i>Journal of the Acoustical Society of America</i> , 2016 , 139, 2463	2.2	22
58	Localization and characterization of simple defects in finite-sized photonic crystals. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2008 , 25, 146-52	1.8	19
57	Acoustic modeling of micro-lattices obtained by additive manufacturing. <i>Applied Acoustics</i> , 2020 , 164, 107244	3.1	18
56	Acoustic response of a periodic distribution of macroscopic inclusions within a rigid frame porous plate. <i>Waves in Random and Complex Media</i> , 2008 , 18, 409-433	1.9	17
55	Perfect Absorption of Sound by Rigidly-Backed High-Porous Materials. <i>Acta Acustica United With Acustica</i> , 2018 , 104, 396-409	1.5	17
54	How reproducible are methods to measure the dynamic viscoelastic properties of poroelastic media?. <i>Journal of Sound and Vibration</i> , 2018 , 428, 26-43	3.9	16
53	Seismic motion in urban sites consisting of blocks in welded contact with a soft layer overlying a hard half-space. <i>Geophysical Journal International</i> , 2008 , 172, 725-758	2.6	16
52	A TIME DOMAIN METHOD FOR MODELING VISCOACOUSTIC WAVE PROPAGATION. <i>Journal of Computational Acoustics</i> , 2006 , 14, 201-236		16

51	Aerogel-based metasurfaces for perfect acoustic energy absorption. <i>Applied Physics Letters</i> , 2019 , 115, 061901	3.4	15
50	An application of the Peano series expansion to predict sound propagation in materials with continuous pore stratification. <i>Journal of the Acoustical Society of America</i> , 2012 , 132, 208-15	2.2	15
49	Limits of flexural wave absorption by open lossy resonators: reflection and transmission problems. <i>New Journal of Physics</i> , 2019 , 21, 053003	2.9	14
48	Perfect Absorption in Mirror-Symmetric Acoustic Metascreens. <i>Physical Review Applied</i> , 2020 , 14,	4.3	14
47	Spatial Laplace transform for complex wavenumber recovery and its application to the analysis of attenuation in acoustic systems. <i>Journal of Applied Physics</i> , 2016 , 120, 135107	2.5	14
46	Reproducibility of sound-absorbing periodic porous materials using additive manufacturing technologies: Round robin study. <i>Additive Manufacturing</i> , 2020 , 36, 101564	6.1	13
45	Iridescent Perfect Absorption in Critically-Coupled Acoustic Metamaterials Using the Transfer Matrix Method. <i>Applied Sciences (Switzerland)</i> , 2017 , 7, 618	2.6	12
44	Acoustic wave propagation and internal fields in rigid frame macroscopically inhomogeneous porous media. <i>Journal of Applied Physics</i> , 2007 , 102, 024910	2.5	12
43	Enhancing rigid frame porous layer absorption with three-dimensional periodic irregularities. <i>Journal of the Acoustical Society of America</i> , 2013 , 133, 821-31	2.2	11
42	Use of specific Green's functions for solving direct problems involving a heterogeneous rigid frame porous medium slab solicited by acoustic waves. <i>Mathematical Methods in the Applied Sciences</i> , 2007 , 30, 91-122	2.3	11
41	General method to retrieve all effective acoustic properties of fully-anisotropic fluid materials in three dimensional space. <i>Journal of Applied Physics</i> , 2019 , 125, 025114	2.5	10
40	A wave based method to predict the absorption, reflection and transmission coefficient of two-dimensional rigid frame porous structures with periodic inclusions. <i>Journal of Computational Physics</i> , 2016 , 312, 115-138	4.1	10
39	Experimental validation of deep-subwavelength diffusion by acoustic metadiffusers. <i>Applied Physics Letters</i> , 2019 , 115, 081901	3.4	10
38	Reconstruction of material properties profiles in one-dimensional macroscopically inhomogeneous rigid frame porous media in the frequency domain. <i>Journal of the Acoustical Society of America</i> , 2008 , 124, 1591-606	2.2	10
37	Folded metaporous material for sub-wavelength and broadband perfect sound absorption. <i>Applied Physics Letters</i> , 2020 , 117, 251902	3.4	10
36	3D-printed sound absorbing metafluid inspired by cereal straws. <i>Scientific Reports</i> , 2019 , 9, 8496	4.9	9
35	Nonlocal boundary conditions for corrugated acoustic metasurface with strong near-field interactions. <i>Journal of Applied Physics</i> , 2018 , 123, 091712	2.5	9
34	Acoustic wave propagation in effective graded fully anisotropic fluid layers. <i>Journal of the Acoustical Society of America</i> , 2019 , 146, 3400	2.2	9

33	Acoustic characterization of silica aerogel clamped plates for perfect absorption. <i>Journal of Non-Crystalline Solids</i> , 2018 , 499, 283-288	3.9	8
32	Prediction of sound reflection by corrugated porous surfaces. <i>Journal of the Acoustical Society of America</i> , 2011 , 129, 1696-706	2.2	8
31	Two-dimensional ground motion at a soft viscoelastic layer/hard substratum site in response to SH cylindrical seismic waves radiated by deep and shallow line sources-II. Numerical results. <i>Geophysical Journal International</i> , 2005 , 163, 192-224	2.6	8
30	Graded and Anisotropic Porous Materials for Broadband and Angular Maximal Acoustic Absorption. <i>Materials</i> , 2020 , 13,	3.5	7
29	Analytical modeling of one-dimensional resonant asymmetric and reciprocal acoustic structures as Willis materials. <i>New Journal of Physics</i> , 2021 , 23, 053020	2.9	7
28	Zero-phase propagation in realistic plate-type acoustic metamaterials. <i>Applied Physics Letters</i> , 2019 , 115, 134101	3.4	6
27	Characterising poroelastic materials in the ultrasonic range - A Bayesian approach. <i>Journal of Sound and Vibration</i> , 2019 , 456, 30-48	3.9	6
26	Design of acoustic metamaterials made of Helmholtz resonators for perfect absorption by using the complex frequency plane. <i>Comptes Rendus Physique</i> , 2020 , 21, 713-749	1.4	6
25	Natural sonic crystal absorber constituted of seagrass (<i>Posidonia Oceanica</i>) fibrous spheres. <i>Scientific Reports</i> , 2021 , 11, 711	4.9	5
24	Underwater metamaterial absorber with impedance-matched composite.. <i>Science Advances</i> , 2022 , 8, eabm4206	14.3	5
23	Scattering of acoustic waves by macroscopically inhomogeneous poroelastic tubes. <i>Journal of the Acoustical Society of America</i> , 2012 , 132, 477-86	2.2	4
22	Characterization on Polyester Fibrous Panels and Their Homogeneity Assessment. <i>Polymers</i> , 2020 , 12,	4.5	4
21	Doping of a plate-type acoustic metamaterial. <i>Physical Review B</i> , 2020 , 102,	3.3	4
20	Rapid additive manufacturing of optimized anisotropic metaporous surfaces for broadband absorption. <i>Journal of Applied Physics</i> , 2021 , 129, 115102	2.5	4
19	Introduction to Multiple Scattering Theory 2019 , 143-182		3
18	Stealth and equiluminous materials for scattering cancellation and wave diffusion. <i>Waves in Random and Complex Media</i> , 1-19	1.9	3
17	Nonreciprocal and even Willis couplings in periodic thermoacoustic amplifiers. <i>Physical Review B</i> , 2021 , 104,	3.3	2
16	Perfect, broadband, and sub-wavelength absorption with asymmetric absorbers: Realization for duct acoustics with 3D printed porous resonators. <i>Journal of Sound and Vibration</i> , 2022 , 523, 116687	3.9	2

15	Experimental evidence of a hiding zone in a density-near-zero acoustic metamaterial. <i>Journal of Applied Physics</i> , 2021 , 129, 145101	2.5	2
14	Localized interface modes in one-dimensional hyperuniform acoustic materials. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 315303	3	2
13	Spiral sound-diffusing metasurfaces based on holographic vortices. <i>Scientific Reports</i> , 2021 , 11, 10217	4.9	2
12	Optimal absorption of flexural energy in thin plates by critically coupling a locally resonant grating. <i>Waves in Random and Complex Media</i> , 1-23	1.9	2
11	Metadiffusers for quasi-perfect and broadband sound diffusion. <i>Applied Physics Letters</i> , 2021 , 119, 044101	10.4	2
10	Asymmetric Metaporous Treatment: Optimization for Perfect Sound Absorption, 3D Printing, and Characterization with Air Flow 2021 ,		1
9	Estimation via Laser Ultrasonics of the Ultrasonic Attenuation in a Polycrystalline Aluminum Thin Plate Using Complex Wavenumber Recovery in the Vicinity of a Zero-Group-Velocity Lamb Mode. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 6924	2.6	1
8	High broadband absorption of acoustic waves by elastic-framed metaporous layer 2016 ,		1
7	Control of bending wave reflection at beam terminations by thermally tunable subwavelength resonators. <i>Journal of Sound and Vibration</i> , 2022 , 116918	3.9	1
6	The Transfer Matrix Method in Acoustics. <i>Topics in Applied Physics</i> , 2021 , 103-164	0.5	0
5	Wave transport in 1D stealthy hyperuniform phononic materials made of non-resonant and resonant scatterers. <i>APL Materials</i> , 2021 , 9, 101101	5.7	0
4	Non-locality of the Willis coupling in fluid laminates. <i>Wave Motion</i> , 2022 , 102892	1.8	
3	Acoustic Metamaterial Absorbers. <i>Topics in Applied Physics</i> , 2021 , 167-204	0.5	
2	Scattering Evaluation of Equivalent Surface Impedances of Acoustic Metamaterials in Large FDTD Volumes Using RLC Circuit Modelling. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 8084	2.6	
1	Experimental demonstration of Willis coupling for elastic torsional waves. <i>Wave Motion</i> , 2022 , 102931	1.8	