

# Osama R. Bilal

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9001887/publications.pdf>

Version: 2024-02-01

23  
papers

2,139  
citations

567281

15  
h-index

713466

21  
g-index

24  
all docs

24  
docs citations

24  
times ranked

2148  
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of a phononic quadrupole topological insulator. <i>Nature</i> , 2018, 555, 342-345.	27.8	684
2	Harnessing bistability for directional propulsion of soft, untethered robots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5698-5702.	7.1	276
3	Ultrawide phononic band gap for combined in-plane and out-of-plane waves. <i>Physical Review E</i> , 2011, 84, 065701.	2.1	166
4	Trampoline metamaterial: Local resonance enhancement by springboards. <i>Applied Physics Letters</i> , 2013, 103, 111901.	3.3	144
5	Bistable metamaterial for switching and cascading elastic vibrations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4603-4606.	7.1	144
6	Inertial amplification of continuous structures: Large band gaps from small masses. <i>Journal of Applied Physics</i> , 2016, 119, .	2.5	126
7	Reprogrammable Phononic Metasurfaces. <i>Advanced Materials</i> , 2017, 29, 1700628.	21.0	100
8	Autonomous Deployment of a Solar Panel Using Elastic Origami and Distributed Shape-Memory-Polymer Actuators. <i>Physical Review Applied</i> , 2019, 11, .	3.8	90
9	Spiral-Based Phononic Plates: From Wave Beaming to Topological Insulators. <i>Physical Review Letters</i> , 2018, 120, 205501.	7.8	82
10	Harnessing Photochemical Shrinkage in Direct Laser Writing for Shape Morphing of Polymer Sheets. <i>Advanced Materials</i> , 2017, 29, 1703024.	21.0	66
11	Intrinsically Polar Elastic Metamaterials. <i>Advanced Materials</i> , 2017, 29, 1700540.	21.0	54
12	Architected Lattices for Simultaneous Broadband Attenuation of Airborne Sound and Mechanical Vibrations in All Directions. <i>Physical Review Applied</i> , 2018, 10, .	3.8	53
13	Observation of trampoline phenomena in 3D-printed metamaterial plates. <i>Extreme Mechanics Letters</i> , 2017, 15, 103-107.	4.1	49
14	Flow stabilization by subsurface phonons. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015, 471, 20140928.	2.1	35
15	A Flexible Spiraling Metasurface as a Versatile Haptic Interface. <i>Advanced Materials Technologies</i> , 2020, 5, 2000181.	5.8	19
16	Topologically evolved phononic material: breaking the world record in band gap size. , 2012, , .		10
17	Exploiting localized transition waves to tune sound propagation in soft materials. <i>Physical Review B</i> , 2021, 104, .	3.2	10
18	Experimental realization of phonon demultiplexing in three-dimensions. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	8

#	ARTICLE	IF	CITATIONS
19	Programmability of ultrathin metasurfaces through curvature. Extreme Mechanics Letters, 2022, 52, 101620.	4.1	6
20	Classification of emerging patterns in self-assembled two-dimensional magnetic lattices. Physical Review E, 2021, 104, 044902.	2.1	5
21	Harnessing Reprogrammable Phase Transitions to Control the Propagation of Sound Waves. Physical Review Applied, 2022, 17, .	3.8	5
22	Topologically evolved photonic crystals: breaking the world record in band gap size. , 2012, , .		3
23	Optimal Design of Periodic Timoshenko Beams using Genetic Algorithms. , 2011, , .		2