

# Ihab El-Kady

## List of Publications by Year in descending order

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40  
papers

2,365  
citations

394421

19  
h-index

361022

35  
g-index

40  
all docs

40  
docs citations

40  
times ranked

2202  
citing authors

#	ARTICLE	IF	CITATIONS
1	Machined phononic crystals to block high-order Lamb waves and crosstalk in through-metal ultrasonic communication systems. Applied Physics Letters, 2022, 120, 191705.	3.3	2
2	Phonon-based scalable platform for chip-scale quantum computing. AIP Advances, 2016, 6, .	1.3	10
3	Thermal transport in phononic crystals and the observation of coherent phonon scattering at room temperature. Nature Communications, 2015, 6, 7228.	12.8	135
4	Preface to Special Topic: Selected Articles from Phononics 2013: The Second International Conference on Phononic Crystals/Metamaterials, Phonon Transport and Optomechanics, 2-7 June 2013, Sharm El-Sheikh, Egypt. AIP Advances, 2014, 4, .	1.3	3
5	Microfabricated suspended island platform for the measurement of in-plane thermal conductivity of thin films and nanostructured materials with consideration of contact resistance. Review of Scientific Instruments, 2013, 84, 105003.	1.3	11
6	Effects of flexural and extensional excitation modes on the transmission spectrum of phononic crystals operating at gigahertz frequencies. Journal of Applied Physics, 2013, 113, .	2.5	14
7	Thermal conductivity manipulation in single crystal silicon via lithographically defined phononic crystals. , 2012, , .		6
8	Stimulated Mach-wave phonon emission: Towards broadband phonon emitters and receivers. , 2012, , .		0
9	Reduction in the Thermal Conductivity of Single Crystalline Silicon by Phononic Crystal Patterning. Nano Letters, 2011, 11, 107-112.	9.1	429
10	Micro and nano fabricated phononic crystals: technology and applications. , 2011, , .		4
11	Realization of a 33 GHz phononic crystal fabricated in a freestanding membrane. AIP Advances, 2011, 1, .	1.3	18
12	Thermal conductivity prediction of nanoscale phononic crystal slabs using a hybrid lattice dynamics-continuum mechanics technique. AIP Advances, 2011, 1, .	1.3	21
13	Phonon considerations in the reduction of thermal conductivity in phononic crystals. Applied Physics A: Materials Science and Processing, 2011, 103, 575-579.	2.3	28
14	Manipulation of thermal phonons: a phononic crystal route to High-ZT thermoelectrics. Proceedings of SPIE, 2011, , .	0.8	2
15	Thermal conductivity manipulation in lithographically patterned single crystal silicon phononic crystal structures. , 2011, , .		2
16	Group-theory approach to tailored electromagnetic properties of metamaterials: An inverse-problem solution. Physical Review E, 2011, 83, 066603.	2.1	13
17	Preface to Special Topic: Selected Articles from Phononics 2011: The First International Conference on Phononic Crystals, Metamaterials and Optomechanics, 29 May-2 June 2011, Santa Fe, New Mexico, USA. AIP Advances, 2011, 1, .	1.3	10
18	Realizing the frequency quality factor product limit in silicon via compact phononic crystal resonators. Journal of Applied Physics, 2010, 108, .	2.5	27

#	ARTICLE	IF	CITATIONS
19	Phononic crystals operating in the gigahertz range with extremely wide band gaps. Applied Physics Letters, 2010, 97, .	3.3	59
20	Hybrid genetic optimization for design of photonic crystal emitters. Engineering Optimization, 2010, 42, 791-809.	2.6	3
21	Origin of reduction in phonon thermal conductivity of microporous solids. Applied Physics Letters, 2009, 95, .	3.3	64
22	Photonic sensors for micro-damage detection: A proof of concept using numerical simulation. Smart Structures and Systems, 2009, 5, 483-494.	1.9	1
23	Micro-indentation of metallic photonic crystals: experimental and numerical investigations. International Journal of Mechanics and Materials in Design, 2008, 4, 407-418.	3.0	2
24	Fuzzy Learning of Talbot Effect Guides Optimal Mask Design for Proximity Field Nanopatterning Lithography. IEEE Photonics Technology Letters, 2008, 20, 761-763.	2.5	4
25	Phononic band-gap crystals for radio frequency communications. Applied Physics Letters, 2008, 92, 233504.	3.3	81
26	Photonic crystal high-efficiency multispectral thermal emitters. Applied Physics Letters, 2008, 93, 153501.	3.3	16
27	Molded transparent photopolymers and phase shift optics for fabricating three dimensional nanostructures. Optics Express, 2007, 15, 6358.	3.4	37
28	Three-Dimensional Nanofabrication with Elastomeric Phase Masks. Journal of Physical Chemistry B, 2007, 111, 12945-12958.	2.6	58
29	An Integrated Simulation Environment Realizing the Ability of Nano-Photonic Crystals to Detect and Quantify Submicron and Microdamage in Materials. Journal of Computational and Theoretical Nanoscience, 2007, 4, 494-503.	0.4	1
30	Application of photonic crystals in submicron damage detection and quantification. Applied Physics Letters, 2006, 88, 253109.	3.3	26
31	Highly efficient light emission at $\lambda = 15 \lambda/4m$ by a three-dimensional tungsten photonic crystal. Optics Letters, 2003, 28, 1683.	3.3	52
32	Three-dimensional photonic-crystal emission through thermal excitation. Optics Letters, 2003, 28, 1909.	3.3	85
33	Photonic band gap effect in layer-by-layer metallic photonic crystals. Journal of Applied Physics, 2003, 93, 38-42.	2.5	49
34	Experimental observation of photonic-crystal emission near a photonic band edge. Applied Physics Letters, 2003, 83, 593-595.	3.3	76
35	Frequency Selective Surfaces Enable Mems Gas Sensor. Materials Research Society Symposia Proceedings, 2002, 722, 341.	0.1	2
36	<title>Photonic crystals for narrow-band infrared emission</title>. , 2002, 4574, 193.		1

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37	Photonic crystal enhanced narrow-band infrared emitters. Applied Physics Letters, 2002, 81, 4685-4687.	3.3	237
38	All-metallic three-dimensional photonic crystals with a large infrared bandgap. Nature, 2002, 417, 52-55.	27.8	582
39	Metallic photonic crystals at optical wavelengths. Physical Review B, 2000, 62, 15299-15302.	3.2	168
40	Dielectric waveguides in two-dimensional photonic bandgap materials. Journal of Lightwave Technology, 1999, 17, 2042-2049.	4.6	26