

# Mohamed Farhat

## List of Publications by Year in descending order

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105  
papers

4,140  
citations

126907

33  
h-index

114465

63  
g-index

109  
all docs

109  
docs citations

109  
times ranked

3112  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cascaded PT-symmetric artificial sheets: multimodal manipulation of self-dual emitter-absorber singularities, and unidirectional and bidirectional reflectionless transparencies. Journal Physics D: Applied Physics, 2022, 55, 085301.	2.8	5
2	In-Vitro Demonstration of Ultra-Reliable, Wireless and Batteryless Implanted Intracranial Sensors Operated on Loci of Exceptional Points. IEEE Transactions on Biomedical Circuits and Systems, 2022, 16, 287-295.	4.0	10
3	Generalized Theory of PT-Symmetric Radio-Frequency Systems With Divergent Exceptional Points. IEEE Transactions on Antennas and Propagation, 2022, 70, 9396-9405.	5.1	6
4	Polarization-State Modulation in Fano Resonant Graphene Metasurface Reflector. Journal of Lightwave Technology, 2021, 39, 7869-7875.	4.6	10
5	Enhanced Radio-Frequency Sensors Based on a Self-Dual Emitter-Absorber. Physical Review Applied, 2021, 15, .	3.8	18
6	Ultrarobust Wireless Interrogation for Sensors and Transducers: A Non-Hermitian Telemetry Technique. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	13
7	Deterministic and probabilistic deep learning models for inverse design of broadband acoustic cloak. Physical Review Research, 2021, 3, .	3.6	47
8	On Coding and Decoding Reconfigurable Radiation Pattern Modulation Symbols. Electronics (Switzerland), 2021, 10, 614.	3.1	1
9	Enhanced acoustic pressure sensors based on coherent perfect absorber-laser effect. Journal of Applied Physics, 2021, 129, .	2.5	8
10	Self-dual singularity through lasing and antilasing in thin elastic plates. Physical Review B, 2021, 103, .	3.2	20
11	Reply to "Comment on "Scattering Cancellation-Based Cloaking for the Maxwell-Cattaneo Heat Waves". Physical Review Applied, 2021, 15, .	3.8	1
12	A THz graphene metasurface for polarization selective virus sensing. Carbon, 2021, 176, 580-591.	10.3	74
13	Spacetime modulation in floating thin elastic plates. Physical Review B, 2021, 104, .	3.2	3
14	Transverse acoustic spin and torque from pure spinning of objects. Physical Review B, 2021, 104, .	3.2	3
15	Non-Hermitian electromagnetic double-near-zero index medium in a two-dimensional photonic crystal. Applied Physics Letters, 2021, 119, .	3.3	11
16	Tunability and switching of Fano and Lorentz resonances in PTX-symmetric electronic systems. Applied Physics Letters, 2020, 117, .	3.3	19
17	Parity-Time Symmetry and Exceptional Points for Flexural-Gravity Waves in Buoyant Thin-Plates. Crystals, 2020, 10, 1039.	2.2	3
18	Numerical modeling for terahertz testing of non-metallic pipes. AIP Advances, 2020, 10, .	1.3	3

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19	Scattering cancellation technique for acoustic spinning objects. <i>Physical Review B</i> , 2020, 101, .	3.2	19
20	A Compact, Passive Frequency-Hopping Harmonic Sensor Based on a Microfluidic Reconfigurable Dual-Band Antenna. <i>IEEE Sensors Journal</i> , 2020, 20, 12495-12503.	4.7	16
21	Two-dimensional materials-based radio frequency wireless communication and sensing systems for Internet-of-things applications. , 2020, , 29-57.		9
22	Metasurface supporting broadband circular dichroism for reflected and transmitted fields simultaneously. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 435106.	2.8	14
23	Simplified Modal-Cancellation Approach for Substrate-Integrated-Waveguide Narrow-Band Filter Design. <i>Electronics (Switzerland)</i> , 2020, 9, 962.	3.1	3
24	PT-Symmetric Absorber-Laser Enables Electromagnetic Sensors with Unprecedented Sensitivity. <i>ACS Photonics</i> , 2020, 7, 2080-2088.	6.6	60
25	Scattering theory and cancellation of gravity-flexural waves of floating plates. <i>Physical Review B</i> , 2020, 101, .	3.2	5
26	Linear and Circular Dichroism in Graphene-Based Reflectors for Polarization Control. <i>Physical Review Applied</i> , 2020, 13, .	3.8	44
27	Bifacial Schottkyâ€junction Plasmonicâ€Based Solar Cell. <i>Energy Technology</i> , 2020, 8, 1901280.	3.8	3
28	Spectrometer-Free Graphene Plasmonics Based Refractive Index Sensor. <i>Sensors</i> , 2020, 20, 2347.	3.8	12
29	Graphene nanoelectromagnetics: From radio frequency, terahertz to mid-infrared. , 2019, , 31-59.		1
30	The influence of building interactions on seismic and elastic body waves. <i>EPJ Applied Metamaterials</i> , 2019, 6, 18.	1.5	13
31	Synthesis and Optimization of Fractional-Order Elements Using a Genetic Algorithm. <i>IEEE Access</i> , 2019, 7, 80233-80246.	4.2	56
32	Scattering Cancellation-Based Cloaking for the Maxwell-Cattaneo Heat Waves. <i>Physical Review Applied</i> , 2019, 11, .	3.8	36
33	Ultrasensitive optical sensing based on non-Hermitian metasurfaces. , 2019, , .		0
34	A perfect Fresnel acoustic reflector implemented by a Fano-resonant metascreen. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	27
35	Towards fractional-order capacitors with broad tunable constant phase angles: multi-walled carbon nanotube-polymer composite as a case study. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 065602.	2.8	25
36	Plasmonically Enhanced Schottky Solar Cell. , 2018, , .		0

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37	Resonant Beam Steering and Carpet Cloaking Using an Acoustic Transformational Metascreen. <i>Physical Review Applied</i> , 2018, 10, .	3.8	21
38	Frequency domain transformation optics for diffusive photon density wavesâ€™™ cloaking. <i>Optics Express</i> , 2018, 26, 24792.	3.4	2
39	An ultra-broadband single-component fractional-order capacitor using MoS2-ferroelectric polymer composite. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	46
40	Flatland plasmonics and nanophotonics based on graphene and beyond. <i>Nanophotonics</i> , 2017, 6, 1239-1262.	6.0	71
41	PT-symmetric metasurfaces: wave manipulation and sensing using singular points. <i>New Journal of Physics</i> , 2017, 19, 065002.	2.9	67
42	Plasmonically Enhanced Schottky Photovoltaic Devices. <i>Scientific Reports</i> , 2017, 7, 14253.	3.3	11
43	Subwavelength sound screening by coupling space-coiled Fabry-Perot resonators. <i>Europhysics Letters</i> , 2017, 119, 36001.	2.0	1
44	Ferroelectric Fractionalâ€™Order Capacitors. <i>ChemElectroChem</i> , 2017, 4, 2807-2813.	3.4	31
45	Localized surface plate modes via flexural Mie resonances. <i>Physical Review B</i> , 2017, 95, .	3.2	10
46	Generation of high-power terahertz radiation by nonlinear photon-assisted tunneling transport in plasmonic metamaterials. <i>Journal of Optics (United Kingdom)</i> , 2017, 19, 124012.	2.2	5
47	Effect of Time-Delayed Feedback on the Interaction of a Dimer System with its Environment. <i>Scientific Reports</i> , 2017, 7, 15468.	3.3	1
48	Cloaking and anamorphism for light and mass diffusion. <i>Journal of Optics (United Kingdom)</i> , 2017, 19, 103002.	2.2	6
49	Metallic nanoparticles in dielectrics: A comparative study. , 2017, , .		0
50	PT-symmetric Terahertz Sensors Using Optically Pumped Graphene Metasurfaces. , 2016, , .		0
51	Chapter 8 Experiments on Cloaking for Surface Water Waves. , 2016, , 287-312.		0
52	Density-near-zero using the acoustically induced transparency of a Fano acoustic resonator. <i>Europhysics Letters</i> , 2016, 116, 46004.	2.0	9
53	Efficient, broadband and wide-angle hot-electron transduction using metal-semiconductor hyperbolic metamaterials. <i>Nano Energy</i> , 2016, 26, 371-381.	16.0	44
54	Cloaking through cancellation of diffusive wave scattering. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016, 472, 20160276.	2.1	12

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55	Mirror-backed Dark Alumina: A Nearly Perfect Absorber for Thermoelectronics and Thermophotovoltaics. Scientific Reports, 2016, 6, 19984.	3.3	44
56	Localized acoustic surface modes. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	5
57	Integrated Hyperbolic Metamaterial Devices for Efficient Rectification of Infrared Radiation. , 2016, , .		0
58	Acoustically induced transparency using Fano resonant periodic arrays. Journal of Applied Physics, 2015, 118, .	2.5	43
59	Modulatable optical radiators and metasurfaces based on quantum nanoantennas. Physical Review B, 2015, 91, .	3.2	12
60	Molding acoustic, electromagnetic and water waves with a single cloak. Scientific Reports, 2015, 5, 10678.	3.3	31
61	Thermal invisibility based on scattering cancellation and mantle cloaking. Scientific Reports, 2015, 5, 9876.	3.3	72
62	Graphene metascreen for designing compact infrared absorbers with enhanced bandwidth. Nanotechnology, 2015, 26, 164002.	2.6	52
63	Nanoantenna harmonic sensor: theoretical analysis of contactless detection of molecules with light. Nanotechnology, 2015, 26, 415201.	2.6	7
64	Generation of Graphene Surface Plasmons and Their Applications in Beam Steering. , 2015, , .		0
65	Quantum Nanoantennas for Making Nonlinear and Self-Modulatable Metasurface. , 2015, , .		0
66	Biharmonic split ring resonator metamaterial: Artificially dispersive effective density in thin periodically perforated plates. Europhysics Letters, 2014, 107, 44002.	2.0	7
67	Acoustic Fano resonators. , 2014, , .		2
68	A nonlinear plasmonic resonator for three-state all-optical switching. Optics Express, 2014, 22, 6966.	3.4	30
69	Infrared beam-steering using acoustically modulated surface plasmons over a graphene monolayer. Journal of Optics (United Kingdom), 2014, 16, 094008.	2.2	40
70	Platonic Scattering Cancellation for Bending Waves in a Thin Plate. Scientific Reports, 2014, 4, 4644.	3.3	27
71	A self-assembled three-dimensional cloak in the visible. Scientific Reports, 2013, 3, 2328.	3.3	51
72	Exciting Graphene Surface Plasmon Polaritons through Light and Sound Interplay. Physical Review Letters, 2013, 111, 237404.	7.8	103

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73	Flat lens for pulse focusing of elastic waves in thin plates. Applied Physics Letters, 2013, 103, .	3.3	82
74	Tunable graphene antennas for selective enhancement of THz-emission. Optics Express, 2013, 21, 3737.	3.4	104
75	A dynamically-tunable graphene-based fano metasurface. , 2013, , .		1
76	Multi-bi- and tri-stability using nonlinear plasmonic Fano resonators. , 2013, , .		2
77	A 3D tunable and multi-frequency graphene plasmonic cloak. Optics Express, 2013, 21, 12592.	3.4	83
78	An ultra-broadband multilayered graphene absorber. Optics Express, 2013, 21, 29938.	3.4	254
79	A dynamically reconfigurable Fano metamaterial through graphene tuning for switching and sensing applications. Scientific Reports, 2013, 3, 2105.	3.3	180
80	Scattering cancellation of the magnetic dipole field from macroscopic spheres. Optics Express, 2012, 20, 13896.	3.4	19
81	Broadband cloaking of bending waves via homogenization of multiply perforated radially symmetric and isotropic thin elastic plates. Physical Review B, 2012, 85, .	3.2	58
82	Nanoprojection Lithography Using Self-Assembled Interference Modules for Manufacturing Plasmonic Gratings. IEEE Photonics Technology Letters, 2012, 24, 1273-1275.	2.5	2
83	Cloaking dielectric spheres by a shell of plasmonic and polaritonic nanoparticles. Proceedings of SPIE, 2012, , .	0.8	0
84	A perfect absorber made of a graphene micro-ribbon metamaterial. Optics Express, 2012, 20, 28017.	3.4	507
85	Frequency-selective surface acoustic invisibility for three-dimensional immersed objects. Physical Review B, 2012, 86, .	3.2	19
86	The colours of cloaks. Journal of Optics (United Kingdom), 2011, 13, 024014.	2.2	53
87	Understanding the functionality of an array of invisibility cloaks. Physical Review B, 2011, 84, .	3.2	17
88	Bistable and Self-Tunable Negative-Index Metamaterial at Optical Frequencies. Physical Review Letters, 2011, 106, 105503.	7.8	77
89	Finite elements modelling of scattering problems for flexural waves in thin plates: Application to elliptic invisibility cloaks, rotators and the mirage effect. Journal of Computational Physics, 2011, 230, 2237-2245.	3.8	8
90	Numerical analysis of three-dimensional acoustic cloaks and carpets. Wave Motion, 2011, 48, 483-496.	2.0	29

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91	Acoustic scattering cancellation via ultrathin pseudo-surface. Applied Physics Letters, 2011, 99, .	3.3	27
92	Cloaking dielectric spherical objects by a shell of metallic nanoparticles. Physical Review B, 2011, 83, .	3.2	46
93	On the Isotropic Magnetic Response of Fabricated Core-Shell Clusters and its Ability to Cloak. , 2011, , .		0
94	Perfect lenses and corners for flexural waves. Physica B: Condensed Matter, 2010, 405, 2947-2949.	2.7	2
95	All-angle-negative-refraction and ultra-refraction for liquid surface waves in 2D phononic crystals. Journal of Computational and Applied Mathematics, 2010, 234, 2011-2019.	2.0	29
96	Focussing bending waves via negative refraction in perforated thin plates. Applied Physics Letters, 2010, 96, .	3.3	71
97	High directivity and confinement of flexural waves through ultra-refraction in thin perforated plates. Europhysics Letters, 2010, 91, 54003.	2.0	31
98	Negative refraction, surface modes, and superlensing effect via homogenization near resonances for a finite array of split-ring resonators. Physical Review E, 2009, 80, 046309.	2.1	27
99	Ultrabroadband Elastic Cloaking in Thin Plates. Physical Review Letters, 2009, 103, 024301.	7.8	384
100	Cloaking bending waves propagating in thin elastic plates. Physical Review B, 2009, 79, .	3.2	126
101	Achieving invisibility over a finite range of frequencies. Optics Express, 2008, 16, 5656.	3.4	51
102	A homogenization route towards square cylindrical acoustic cloaks. New Journal of Physics, 2008, 10, 115030.	2.9	46
103	Analytical and numerical analysis of lensing effect for linear surface water waves through a square array of nearly touching rigid square cylinders. Physical Review E, 2008, 77, 046308.	2.1	27
104	Broadband Cylindrical Acoustic Cloak for Linear Surface Waves in a Fluid. Physical Review Letters, 2008, 101, 134501.	7.8	314
105	Artificial Surfaces and Media for Electromagnetic Absorption and Interference Shielding. , 0, , .		0