

# Mohamed A K Othman

## List of Publications by Year in descending order

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42  
papers

1,023  
citations

430874

18  
h-index

552781

26  
g-index

43  
all docs

43  
docs citations

43  
times ranked

676  
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene-based tunable hyperbolic metamaterials and enhanced near-field absorption. Optics Express, 2013, 21, 7614.	3.4	246
2	Graphene-based dielectric composite metamaterials: evolution from elliptic to hyperbolic wavevector dispersion and the transverse epsilon-near-zero condition. Journal of Nanophotonics, 2013, 7, 073089.	1.0	88
3	Theory of coupled resonator optical waveguides exhibiting high-order exceptional points of degeneracy. Physical Review B, 2017, 96, .	3.2	73
4	Giant gain enhancement in photonic crystals with a degenerate band edge. Physical Review B, 2016, 93, .	3.2	55
5	Experimental demonstration of externally driven millimeter-wave particle accelerator structure. Applied Physics Letters, 2020, 117, .	3.3	53
6	Theory of Exceptional Points of Degeneracy in Uniform Coupled Waveguides and Balance of Gain and Loss. IEEE Transactions on Antennas and Propagation, 2017, 65, 5289-5302.	5.1	48
7	Theory and New Amplification Regime in Periodic Multimodal Slow Wave Structures With Degeneracy Interacting With an Electron Beam. IEEE Transactions on Plasma Science, 2016, 44, 594-611.	1.3	40
8	Exceptional Points of Degeneracy in Periodic Coupled Waveguides and the Interplay of Gain and Radiation Loss: Theoretical and Experimental Demonstration. IEEE Transactions on Antennas and Propagation, 2019, 67, 6909-6923.	5.1	37
9	Experimental Demonstration of Degenerate Band Edge in Metallic Periodically Loaded Circular Waveguide. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 4037-4045.	4.6	36
10	Giant amplification in degenerate band edge slow-wave structures interacting with an electron beam. Physics of Plasmas, 2016, 23, .	1.9	35
11	Low Starting Electron Beam Current in Degenerate Band Edge Oscillators. IEEE Transactions on Plasma Science, 2016, 44, 918-929.	1.3	35
12	Demonstration of a Degenerate Band Edge in Periodically-Loaded Circular Waveguides. IEEE Microwave and Wireless Components Letters, 2015, 25, 700-702.	3.2	34
13	Degenerate band edge laser. Physical Review B, 2018, 97, .	3.2	33
14	Exceptional points of degeneracy and symmetry in photonic coupled chains of scatterers. Physical Review B, 2017, 95, .	3.2	27
15	Giant Resonance and Anomalous Quality Factor Scaling in Degenerate Band Edge Coupled Resonator Optical Waveguides. Journal of Lightwave Technology, 2018, 36, 3030-3039.	4.6	24
16	Experimental Testing of a 3-D-Printed Metamaterial Slow Wave Structure for High-Power Microwave Generation. IEEE Transactions on Plasma Science, 2020, 48, 4356-4364.	1.3	23
17	Exceptional Points of Degeneracy and Branch Points for Coupled Transmission Lines: Linear-Algebra and Bifurcation Theory Perspectives. IEEE Transactions on Antennas and Propagation, 2019, 67, 1025-1034.	5.1	21
18	Theory of Double Ladder Lumped Circuits With Degenerate Band Edge. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 3-13.	5.4	19

#	ARTICLE	IF	CITATIONS
19	A New Amplification Regime for Traveling Wave Tubes With Third-Order Modal Degeneracy. IEEE Transactions on Plasma Science, 2018, 46, 43-56.	1.3	18
20	Electron-Beam-Driven Devices With Synchronous Multiple Degenerate Eigenmodes. IEEE Transactions on Plasma Science, 2018, 46, 3126-3138.	1.3	18
21	New oscillator concept based on band edge degeneracy in lumped double ladder circuits. IET Circuits, Devices and Systems, 2019, 13, 950-957.	1.4	16
22	Parallel-plate waveguides for terahertz-driven MeV electron bunch compression. Optics Express, 2019, 27, 23791.	3.4	14
23	Distributed Degenerate Band Edge Oscillator. IEEE Transactions on Antennas and Propagation, 2021, 69, 1821-1824.	5.1	13
24	Solution of cavity resonance and waveguide scattering problems using the eigenmode projection technique. Journal of Applied Physics, 2017, 121, .	2.5	5
25	Coupled transmission line array antennas with exceptional points of degeneracy. , 2017, , .		2
26	Low Phase Noise Oscillator Design Using Degenerate Band Edge Ladder Architectures. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 35-39.	3.0	2
27	High Gradient and rf Breakdown Measurements in a Millimeter-Wave Accelerating Cavity. , 2020, , .		2
28	Degenerate band edge electron beam oscillators: Low starting current. , 2016, , .		1
29	Third order modal degeneracy in waveguides: Features and application in amplifiers. , 2017, , .		1
30	Hyperbolic Metamaterials at Microwaves With Stacked Inductive Coiled-Wire Arrays. IEEE Transactions on Antennas and Propagation, 2019, 67, 6494-6507.	5.1	1
31	Ultrafast Dynamics of a Terahertz Dual-Fed Relativistic Electron Bunch Compressor. , 2020, , .		1
32	A 3D-Printed Metamaterial Slow Wave Structure for High-Power Microwave Generation. , 2020, , .		1
33	Terahertz Dual-Fed Relativistic Electron Bunch Compression. , 2020, , .		1
34	Graphene-based hyperbolic metamaterial. , 2013, , .		0
35	Gyrotropic effects in hyperbolic metamaterials. , 2014, , .		0
36	Theory and simulation of the interaction between periodic multi-transmission lines with a degenerate band edge and electron beams. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
37	Theory of coupled waveguides with modal degeneracies and gain. , 2016, , .		0
38	Super synchronous operation of traveling wave tubes based on band edge degeneracy. , 2016, , .		0
39	Parity-time symmetry in chain of scatterers. , 2016, , .		0
40	Efficient Generation of High Power Microwaves using the Degenerate Band Edge Oscillators. , 2017, , .		0
41	THz-driven Bunch Compression for Varying Electron Beam Energy. , 2020, , .		0
42	A THz-Driven Field Emission Electron Gun. , 2020, , .		0