

Muhammad Qasim Mehmood

List of Publications by Year in descending order

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95
papers

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docs citations

99
times ranked

2551
citing authors

#	ARTICLE	IF	CITATIONS
1	Visible-Frequency Metasurface for Structuring and Spatially Multiplexing Optical Vortices. <i>Advanced Materials</i> , 2016, 28, 2533-2539.	21.0	387
2	Switchable Ultrathin Quarter-wave Plate in Terahertz Using Active Phase-change Metasurface. <i>Scientific Reports</i> , 2015, 5, 15020.	3.3	238
3	Longitudinal Multifoci Metalens for Circularly Polarized Light. <i>Advanced Optical Materials</i> , 2015, 3, 1201-1206.	7.3	203
4	A Compact, Low-Profile Fractal Antenna for Wearable On-Body WBAN Applications. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2019, 18, 981-985.	4.0	184
5	High Efficiency Ultrathin Transmissive Metasurfaces. <i>Advanced Optical Materials</i> , 2019, 7, 1801628.	7.3	176
6	Dielectric Meta-Holograms Enabled with Dual Magnetic Resonances in Visible Light. <i>ACS Nano</i> , 2017, 11, 9382-9389.	14.6	157
7	Holographic metasurface gas sensors for instantaneous visual alarms. <i>Science Advances</i> , 2021, 7, .	10.3	149
8	Stimuli-Responsive Dynamic Metaholographic Displays with Designer Liquid Crystal Modulators. <i>Advanced Materials</i> , 2020, 32, e2004664.	21.0	116
9	Full-space Cloud of Random Points with a Scrambling Metasurface. <i>Light: Science and Applications</i> , 2018, 7, 63.	16.6	112
10	Polarisation insensitive multifunctional metasurfaces based on all-dielectric nanowaveguides. <i>Nanoscale</i> , 2018, 10, 18323-18330.	5.6	98
11	Spiniform phase-encoded metagratings entangling arbitrary rational-order orbital angular momentum. <i>Light: Science and Applications</i> , 2018, 7, 17156-17156.	16.6	97
12	Tungsten-based Ultrathin Absorber for Visible Regime. <i>Scientific Reports</i> , 2018, 8, 2443.	3.3	96
13	A Spin-Encoded All-Dielectric Metahologram for Visible Light. <i>Laser and Photonics Reviews</i> , 2019, 13, 1900065.	8.7	95
14	Thermally robust ring-shaped chromium perfect absorber of visible light. <i>Nanophotonics</i> , 2018, 7, 1827-1833.	6.0	88
15	Optical spin-symmetry breaking for high-efficiency directional helicity-multiplexed metaholograms. <i>Microsystems and Nanoengineering</i> , 2021, 7, 5.	7.0	81
16	Highly efficient generation of Bessel beams with polarization insensitive metasurfaces. <i>Optics Express</i> , 2019, 27, 9467.	3.4	77
17	On-chip discrimination of orbital angular momentum of light with plasmonic nanoslits. <i>Nanoscale</i> , 2016, 8, 2227-2233.	5.6	76
18	A Low-Cost Multiple Complementary Split-Ring Resonator-Based Microwave Sensor for Contactless Dielectric Characterization of Liquids. <i>IEEE Sensors Journal</i> , 2020, 20, 11326-11334.	4.7	75

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19	Giant chiro-optical responses in multipolar-resonances-based single-layer dielectric metasurfaces. <i>Photonics Research</i> , 2021, 9, 1667.	7.0	71
20	Nanostructured chromium-based broadband absorbers and emitters to realize thermally stable solar thermophotovoltaic systems. <i>Nanoscale</i> , 2022, 14, 6425-6436.	5.6	69
21	Engineering spin and antiferromagnetic resonances to realize an efficient direction-multiplexed visible meta-hologram. <i>Nanoscale Horizons</i> , 2020, 5, 57-64.	8.0	68
22	Novel Spinâ€Decoupling Strategy in Liquid Crystalâ€Integrated Metasurfaces for Interactive Metadisplays. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	65
23	Flat Helical Nanosieves. <i>Advanced Functional Materials</i> , 2016, 26, 5255-5262.	14.9	64
24	Effect of temperature on the oxidation of Cu nanowires and development of an easy to produce, oxidation-resistant transparent conducting electrode using a PEDOT:PSS coating. <i>Scientific Reports</i> , 2018, 8, 10639.	3.3	59
25	Twisted non-diffracting beams through all dielectric meta-axicons. <i>Nanoscale</i> , 2019, 11, 20571-20578.	5.6	57
26	ISAR Cross-Range Scaling by Using Sharpness Maximization. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2015, 12, 165-169.	3.1	56
27	Single-Step Fabricable Flexible Metadisplays for Sensitive Chemical/Biomedical Packaging Security and Beyond. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 31194-31202.	8.0	52
28	Twisted Focusing of Optical Vortices with Broadband Flat Spiral Zone Plates. <i>Advanced Optical Materials</i> , 2014, 2, 1193-1198.	7.3	50
29	Dual field-of-view step-zoom metalens. <i>Optics Letters</i> , 2017, 42, 1261.	3.3	48
30	Chiroptical Metasurfaces: Principles, Classification, and Applications. <i>Sensors</i> , 2021, 21, 4381.	3.8	40
31	Revisiting tantalum based nanostructures for efficient harvesting of solar radiation in STPV systems. <i>Nano Energy</i> , 2021, 80, 105520.	16.0	39
32	Manifesting Simultaneous Optical Spin Conservation and Spin Isolation in Diatomic Metasurfaces. <i>Advanced Optical Materials</i> , 2021, 9, 2002002.	7.3	39
33	Planar Achiral Metasurfaces-Induced Anomalous Chiroptical Effect of Optical Spin Isolation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 48899-48909.	8.0	35
34	The Dawn of Metadevices: From Contemporary Designs to Exotic Applications. <i>Advanced Devices & Instrumentation</i> , 2022, 2022, .	6.5	32
35	Engineering the absorption spectra of thin film multilayer absorbers for enhanced color purity in CMY color filters. <i>Optical Materials Express</i> , 2020, 10, 268.	3.0	29
36	Single-layered meta-reflectarray for polarization retention and spin-encrypted phase-encoding. <i>Optics Express</i> , 2021, 29, 3230.	3.4	27

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37	Shaping 3D Path of Electromagnetic Waves Using Gradientâ€Refractiveâ€Index Metamaterials. Advanced Science, 2016, 3, 1600022.	11.2	26
38	Exploiting zirconium nitride for an efficient heat-resistant absorber and emitter pair for solar thermophotovoltaic systems. Optics Express, 2021, 29, 31537.	3.4	23
39	Engineering multimodal dielectric resonance of TiO ₂ based nanostructures for high-performance refractive index sensing applications. Optics Express, 2020, 28, 23509.	3.4	22
40	Evanescent vortex: Optical subwavelength spanner. Applied Physics Letters, 2016, 109, .	3.3	20
41	Pencil-on-Paper-Based Touchpad for Ecofriendly and Reusable Humanâ€Machine Interface. , 2021, 5, 1-4.		20
42	Engineering multimodal spectrum of Cayley tree fractal meta-resonator supercells for ultrabroadband terahertz light absorption. Nanophotonics, 2020, 9, 633-644.	6.0	19
43	Deep learning based hybrid sequence modeling for optical response retrieval in metasurfaces for STPV applications. Optical Materials Express, 2021, 11, 3178.	3.0	19
44	Broadband spinâ€controlled focusing via logarithmicâ€spiral nanoslits of varying width. Laser and Photonics Reviews, 2015, 9, 674-681.	8.7	17
45	A Novel Cesaro Fractal EBG-Based Sensing Platform for Dielectric Characterization of Liquids. IEEE Transactions on Antennas and Propagation, 2021, 69, 2887-2895.	5.1	17
46	Breaking polarisation-bandwidth trade-off in dielectric metasurface for unpolarised white light. Nanophotonics, 2020, 9, 963-971.	6.0	16
47	Diamond step-index nanowaveguide to structure light efficiently in near and deep ultraviolet regimes. Scientific Reports, 2020, 10, 18502.	3.3	14
48	Generalized Scaling Law for Exciton Binding Energy in Two-Dimensional Materials. Physical Review Applied, 2020, 13, .	3.8	14
49	Engineering tunability through electro-optic effects to manifest a multifunctional metadvice. RSC Advances, 2021, 11, 13220-13228.	3.6	14
50	Breaking planar symmetries by a single layered metasurface for realizing unique on-chip chiroptical effects. Optical Materials Express, 2020, 10, 3342.	3.0	14
51	Plasmonic Spherical Heterodimers: Reversal of Optical Binding Force Based on the Forced Breaking of Symmetry. Scientific Reports, 2018, 8, 3164.	3.3	13
52	Focusing of electromagnetic field by a circular reflector coated with chiral medium. International Journal of Applied Electromagnetics and Mechanics, 2012, 38, 181-193.	0.6	12
53	Highly Efficient Visible Hologram through Dielectric Metasurface. Journal of Physics: Conference Series, 2018, 1092, 012003.	0.4	9
54	A Pragmatic Metasurface with Asymmetric Spin Interactions. , 2020, , .		9

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55	Numerical modeling and performance optimization of carbon-based hole transport layer free perovskite solar cells. <i>Optical Materials</i> , 2022, 125, 112075.	3.6	9
56	Lorentz force and the optical pulling of multiple rayleigh particles outside the dielectric cylindrical waveguides. <i>Annalen Der Physik</i> , 2017, 529, 1600213.	2.4	8
57	Fabrication of high refractive index TiO ₂ films using electron beam evaporator for all dielectric metasurfaces. <i>Materials Research Express</i> , 2018, 5, 016410.	1.6	8
58	Tunable and foldable paper-based passive electronic components and filter circuits. <i>Cellulose</i> , 2021, 28, 9959-9970.	4.9	8
59	ANALYSIS OF FOCAL REGION FIELDS OF PEMC GREGORIAN SYSTEM EMBEDDED IN HOMOGENEOUS CHIRAL MEDIUM. <i>Progress in Electromagnetics Research Letters</i> , 2010, 18, 155-163.	0.7	7
60	Analysis of caustic region fields of a cassegrain system having PEMC reflectors embedded in homogeneous chiral medium. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2012, 38, 39-45.	0.6	7
61	High Refractive Index Ti ₃ O ₅ Films for Dielectric Metasurfaces. <i>Chinese Physics Letters</i> , 2017, 34, 088102.	3.3	7
62	Koch Fractal Based Wearable Antenna Backed with EBG Plane. , 2020, , .		7
63	FOCAL REGION FIELDS OF GREGORIAN SYSTEM PLACED IN HOMOGENEOUS CHIRAL MEDIUM. <i>Progress in Electromagnetics Research M</i> , 2010, 11, 241-256.	0.9	6
64	ANALYSIS OF THE FIELD FOCUSED BY HYPERBOLIC LENS EMBEDDED IN CHIRAL MEDIUM. <i>Progress in Electromagnetics Research M</i> , 2011, 20, 43-56.	0.9	6
65	Highly Efficient All-dielectric Metasurfaces for Airy Beam Generation in Visible Domain. , 2020, , .		6
66	Unraveling the vector nature of generalized space-fractional Bessel beams. <i>Physical Review A</i> , 2021, 104, .	2.5	6
67	A Low-cost Photopaper Based Wideband Wearable Antenna for WBAN Applications. , 2021, , .		5
68	Realizing Spin-Conserved and Spin-Encrypted Hologram using Multipolar-modulated Meta-platform. <i>Journal of Physics: Conference Series</i> , 2021, 2015, 012060.	0.4	5
69	Meta-Holographic Displays: Stimuli-Responsive Dynamic Metaholographic Displays with Designer Liquid Crystal Modulators (<i>Adv. Mater.</i> 50/2020). <i>Advanced Materials</i> , 2020, 32, 2070378.	21.0	4
70	Tungsten based optical absorber. , 2020, , .		4
71	Active-metasurfaces to realize tunable resonances and focusing. , 2021, , .		4
72	A Textile Based Wideband Wearable Antenna. , 2021, , .		4

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73	Atmospheric propagation of space-fractional Gaussian-beam waves in a FSO communication system. Optics Express, 2022, 30, 1570.	3.4	4
74	A compact high isolation wideband MIMO antenna for multi-band applications. Journal of Electromagnetic Waves and Applications, 2022, 36, 2041-2054.	1.6	4
75	Chiroptical effect induced by achiral structures for full-dimensional manipulation of optical waves. , 2021, , .		3
76	All-dielectric single-layered achiral structures for simultaneous conversion circular dichroism and wavefront engineering for visible light. , 2020, , .		3
77	Evaluating the most efficient 2D ZrN nanostructures for broadband metasurface absorbers. , 2022, , .		3
78	Ultra-black Pythagorean-tree metasurface antenna array based absorber and emitter for applications in solar thermophotovoltaics. , 2021, , .		3
79	Design of a Fractal Metasurface Based Terahertz Broadband Absorber. , 2019, , .		2
80	Asymmetric Transmission through Single-Layered All-Dielectric Metasurface. , 2020, , .		2
81	EBC-based Sensor for Dielectric Characterization in Liquids. , 2020, , .		2
82	Ultra-Broadband Tungsten Absorber. , 2018, , .		1
83	Space-Fractional Bessel Beams with Self-Healing and Diffraction-Free Propagation Characteristics. , 2020, , .		1
84	Facile and Cost Effective Paper Based Triboelectric Nanogenerators for Self Powered Environmental Sensing System. , 2020, , .		1
85	Optical Trapping of Nanoparticles Through Artificially-Engineered Flat Materials. , 2020, , .		1
86	Deep Learning based Sequence Modeling for Optical response retrieval of photonic nanostructures. , 2021, , .		1
87	Penciling a Flexible and Eco-friendly Touchpad on Paper for Disposable User Interface. , 2021, , .		1
88	Compact Non-Chiral Dielectric Metasurfaces to Manifest Enormous Chirality based Optical Responses. , 2021, , .		1
89	White-light Polarization-insensitive Metasurface through All-dielectric Anisotropic Nanoresonators. , 2021, , .		1
90	CAUSTIC REGION FIELDS OF A 3D CASSEGRAIN SYSTEM PLACED IN BI-ISOTROPIC HOMOGENEOUS CHIRAL MEDIUM. Progress in Electromagnetics Research M, 2011, 20, 191-205.	0.9	0

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91	Paper-based Electronics: Passive Components and Low Pass Filters Using Solvent-free Eco-friendly Fabrication. , 2021, , .		0
92	Biosensors for Identifying Hazardous Adulterants in Edibles. , 2019, , .		0
93	FOCAL REGION FIELDS OF CASSEGRAIN SYSTEM PLACED IN HOMOGENEOUS CHIRAL MEDIUM. Progress in Electromagnetics Research B, 2010, 21, 329-346.	1.0	0
94	Graphene-based Tunable Meta-absorber for Terahertz Applications. , 2021, , .		0
95	Wearable DIY Capacitive Touch Interface on Fabric Substrate for Digital Switch Control. , 2022, , .		0