

Mohsen Rahmani

List of Publications by Year in descending order

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74
papers

4,181
citations

109137

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114278

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76
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docs citations

76
times ranked

4537
citing authors

#	ARTICLE	IF	CITATIONS
1	Resonant Dielectric Metagratings for Response Intensified Optical Sensing. <i>Advanced Functional Materials</i> , 2022, 32, 2103143.	7.8	8
2	Second order nonlinear frequency generation at the nanoscale in dielectric platforms. <i>Advances in Physics: X</i> , 2022, 7, .	1.5	1
3	Localized Nanopore Fabrication via Controlled Breakdown. <i>Nanomaterials</i> , 2022, 12, 2384.	1.9	2
4	Synthetic Plasmonic Nanocircuits and the Evolution of Their Correlated Spatial Arrangement and Resonance Spectrum. <i>ACS Photonics</i> , 2021, 8, 166-174.	3.2	6
5	Diffraction Metagrating Sensor: An Improved Technique for Response Intensification. , 2021, , .		0
6	Edge Detection with Mie-Resonant Dielectric Metasurfaces. <i>ACS Photonics</i> , 2021, 8, 864-871.	3.2	39
7	Metasurface Dichroic Mirrors: Application to Low Quantum Defect Lasers. , 2021, , .		0
8	Theory, Observation, and Ultrafast Response of the Hybrid Anapole Regime in Light Scattering. <i>Laser and Photonics Reviews</i> , 2021, 15, 2100114.	4.4	44
9	Tunable unidirectional nonlinear emission from transition-metal-dichalcogenide metasurfaces. <i>Nature Communications</i> , 2021, 12, 5597.	5.8	49
10	Highly Sensitive Resonant Dielectric Metagrating Sensors. , 2021, , .		1
11	Valley-selective directional emission enabled by a plasmonic nanoantenna. , 2021, , .		0
12	Forward and Backward Switching of Nonlinear Unidirectional Emission from GaAs Nanoantennas. <i>ACS Nano</i> , 2020, 14, 1379-1389.	7.3	53
13	Photonic Fractal Metamaterials: A Metal-Semiconductor Platform with Enhanced Volatile Compound Sensing Performance. <i>Advanced Materials</i> , 2020, 32, e2002471.	11.1	27
14	Complex-Birefringent Dielectric Metasurfaces for Arbitrary Polarization-Pair Transformations. <i>ACS Photonics</i> , 2020, 7, 3015-3022.	3.2	14
15	Photonic Metamaterials: Photonic Fractal Metamaterials: A Metal-Semiconductor Platform with Enhanced Volatile Compound Sensing Performance (Adv. Mater. 50/2020). <i>Advanced Materials</i> , 2020, 32, 2070376.	11.1	2
16	Plasmonic linear nanomotor using lateral optical forces. <i>Science Advances</i> , 2020, 6, .	4.7	41
17	Dual-Region Resonant Meander Metamaterial. <i>Advanced Optical Materials</i> , 2020, 8, 1901658.	3.6	6
18	Enhanced light-matter interactions in dielectric nanostructures via machine-learning approach. <i>Advanced Photonics</i> , 2020, 2, 1.	6.2	81

#	ARTICLE	IF	CITATIONS
19	Multiple-State Thermally Tunable Metasurfaces. , 2020, , .		0
20	Dielectric Huygens Metagrating-Based Refractive Index Sensor. , 2020, , .		0
21	Optimal Monitoring of Small Polarization Perturbations with Metasurfaces. , 2020, , .		0
22	Deeply Subwavelength Metasurface Resonators for Terahertz Wavefront Manipulation. Advanced Optical Materials, 2019, 7, 1900736.	3.6	25
23	Experimental Demonstration of Edge Detection by Dielectric Metasurfaces. , 2019, , .		0
24	Second-Harmonic Generation in (111) Gallium Arsenide Nanoantennas. , 2019, , .		0
25	High Fluence Chromium and Tungsten Bowtie Nano-antennas. Scientific Reports, 2019, 9, 13023.	1.6	4
26	Resonant harmonic generation in AlGaAs nanoantennas probed by cylindrical vector beams. Nanoscale, 2019, 11, 1745-1753.	2.8	26
27	Tailoring Second-Harmonic Emission from (111)-GaAs Nanoantennas. Nano Letters, 2019, 19, 3905-3911.	4.5	66
28	Dynamic Nonlinear Image Tuning through Magnetic Dipole Quasi-EBIC Ultrathin Resonators. Advanced Science, 2019, 6, 1802119.	5.6	174
29	High-Efficiency Visible Light Manipulation Using Dielectric Metasurfaces. Scientific Reports, 2019, 9, 6510.	1.6	51
30	Reversible Image Contrast Manipulation with Thermally Tunable Dielectric Metasurfaces. Small, 2019, 15, 1805142.	5.2	41
31	Ellipsometric detection of ferritin adsorption on gold after UV irradiation. AIP Conference Proceedings, 2019, , .	0.3	2
32	Complex-Birefringent and Chiral Waveplates with Metasurfaces. , 2019, , .		1
33	High-Temperature Large-Scale Self-Assembly of Highly Faceted Monocrystalline Au Metasurfaces. Advanced Functional Materials, 2019, 29, 1806387.	7.8	16
34	Spontaneous photon-pair generation from a dielectric nanoantenna. Optica, 2019, 6, 1416.	4.8	98
35	Surface that perceives depth: 3D imaging with metasurfaces. Advanced Photonics, 2019, 1, 1.	6.2	0
36	Third Harmonic Generation Enhanced by Multipolar Interference in Complementary Silicon Metasurfaces. ACS Photonics, 2018, 5, 1671-1675.	3.2	52

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37	Selective Third-Harmonic Generation by Structured Light in Mie-Resonant Nanoparticles. ACS Photonics, 2018, 5, 728-733.	3.2	87
38	Highly-Efficient Longitudinal Second-Harmonic Generation from Doubly-Resonant AlGaAs Nanoantennas. Photonics, 2018, 5, 29.	0.9	21
39	Light-Matter interactions on the nanoscale. Beilstein Journal of Nanotechnology, 2018, 9, 2125-2127.	1.5	6
40	Boosting third-harmonic generation by a mirror-enhanced anapole resonator. Light: Science and Applications, 2018, 7, 44.	7.7	127
41	Hybrid Metasurface Based Tunable Near-Perfect Absorber and Plasmonic Sensor. Materials, 2018, 11, 1091.	1.3	56
42	High-contrast and reversible scattering switching via hybrid metal-dielectric metasurfaces. Beilstein Journal of Nanotechnology, 2018, 9, 460-467.	1.5	7
43	Nanostructured Dielectric Fractals on Resonant Plasmonic Metasurfaces for Selective and Sensitive Optical Sensing of Volatile Compounds. Advanced Materials, 2018, 30, e1800931.	11.1	47
44	Nonlinear frequency conversion in optical nanoantennas and metasurfaces: materials evolution and fabrication. Opto-Electronic Advances, 2018, 1, 18002101-18002112.	6.4	65
45	Shaping the third-harmonic radiation from silicon nanodimers. Nanoscale, 2017, 9, 2201-2206.	2.8	50
46	Nonlinear Symmetry Breaking in Symmetric Oligomers. ACS Photonics, 2017, 4, 454-461.	3.2	32
47	Nonlinear Optical Magnetism Revealed by Second-Harmonic Generation in Nanoantennas. Nano Letters, 2017, 17, 3914-3918.	4.5	100
48	Reversible Thermal Tuning of All-Dielectric Metasurfaces. Advanced Functional Materials, 2017, 27, 1700580.	7.8	146
49	Nonlinear Anisotropic Dielectric Metasurfaces for Ultrafast Nanophotonics. ACS Photonics, 2017, 4, 2129-2136.	3.2	70
50	Mixing colors of light in nonlinear dielectric nanoantennas and metasurfaces. , 2017, , .		0
51	The Interplay of Symmetry and Scattering Phase in Second Harmonic Generation from Gold Nanoantennas. Nano Letters, 2016, 16, 5278-5285.	4.5	69
52	Nonlinear Generation of Vector Beams From AlGaAs Nanoantennas. Nano Letters, 2016, 16, 7191-7197.	4.5	237
53	Adiabatic Nanofocusing in Hybrid Gap Plasmon Waveguides on the Silicon-on-Insulator Platform. Nano Letters, 2016, 16, 1410-1414.	4.5	57
54	Tailored Hypersound Generation in Single Plasmonic Nanoantennas. Nano Letters, 2016, 16, 1428-1434.	4.5	40

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55	Polarisation-independent enhanced scattering by tailoring asymmetric plasmonic systems. <i>Nanoscale</i> , 2016, 8, 6021-6027.	2.8	7
56	Tuning Interior Nanogaps of Double-shelled Au/Ag Nanoboxes for Surface-Enhanced Raman Scattering. <i>Scientific Reports</i> , 2015, 5, 8382.	1.6	35
57	Non-plasmonic nanoantennas for surface enhanced spectroscopies with ultra-low heat conversion. <i>Nature Communications</i> , 2015, 6, 7915.	5.8	433
58	Unveiling the Origin of Third Harmonic Generation in Hybrid ITOâ€“Plasmonic Crystals. <i>Advanced Optical Materials</i> , 2015, 3, 1059-1065.	3.6	19
59	Nanoceramics: Synthesis, Characterization, and Applications. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-2.	1.5	20
60	Beyond the Hybridization Effects in Plasmonic Nanoclusters: Diffractionâ€“Induced Enhanced Absorption and Scattering. <i>Small</i> , 2014, 10, 576-583.	5.2	30
61	Third-harmonic-upconversion enhancement from a single semiconductor nanoparticle coupled to a plasmonic antenna. <i>Nature Nanotechnology</i> , 2014, 9, 290-294.	15.6	371
62	Split-ball resonator as a three-dimensional analogue of planar split-rings. <i>Nature Communications</i> , 2014, 5, 3104.	5.8	51
63	High-Efficiency Second Harmonic Generation from a Single Hybrid ZnO Nanowire/Au Plasmonic Nano-Oligomer. <i>Nano Letters</i> , 2014, 14, 6660-6665.	4.5	93
64	Unveiling the Correlation between Nanometer-Thick Molecular Monolayer Sensitivity and Near-Field Enhancement and Localization in Coupled Plasmonic Oligomers. <i>ACS Nano</i> , 2014, 8, 9188-9198.	7.3	50
65	Fano resonance in novel plasmonic nanostructures. <i>Laser and Photonics Reviews</i> , 2013, 7, 329-349.	4.4	261
66	Plasmonic Nanoantennas for Multispectral Surface-Enhanced Spectroscopies. <i>Journal of Physical Chemistry C</i> , 2013, 117, 18620-18626.	1.5	71
67	Plasmonic Nanoclusters with Rotational Symmetry: Polarization-Invariant Far-Field Response <i>vs</i> Changing Near-Field Distribution. <i>ACS Nano</i> , 2013, 7, 11138-11146.	7.3	53
68	Ultrasensitive Broadband Probing of Molecular Vibrational Modes with Multifrequency Optical Antennas. <i>ACS Nano</i> , 2013, 7, 669-675.	7.3	125
69	Probing the dielectric response of graphene via dual-band plasmonic nanoresonators. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 5395.	1.3	10
70	Use of a gold reflecting-layer in optical antenna substrates for increase of photoluminescence enhancement. <i>Optics Express</i> , 2013, 21, 12552.	1.7	23
71	Widely tuneable scattering-type scanning near-field optical microscopy using pulsed quantum cascade lasers. <i>Applied Physics Letters</i> , 2013, 103, 213110.	1.5	19
72	Subgroup Decomposition of Plasmonic Resonances in Hybrid Oligomers: Modeling the Resonance Lineshape. <i>Nano Letters</i> , 2012, 12, 2101-2106.	4.5	144

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73	Multiresonant Broadband Optical Antennas As Efficient Tunable Nanosources of Second Harmonic Light. Nano Letters, 2012, 12, 4997-5002.	4.5	184
74	Realization of Variable Threeâ€Dimensional Terahertz Metamaterial Tubes for Passive Resonance Tunability. Advanced Materials, 2012, 24, OP143-7.	11.1	34