Amir Ghobadi

List of Publications by Year
in descending order

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69	1,593	236612	329751
papers	citations	25 h-index	37 g-index

74	74	74	1582
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Strong Lightâ€“Matter Interaction in Lithography-Free Planar Metamaterial Perfect Absorbers. ACS Photonics, 2018, 5, 4203-4221.	3.2	96
2	A Heterojunction Design of Single Layer Hole Tunneling ZnO Passivation Wrapping around TiO2Nanowires for Superior Photocatalytic Performance. Scientific Reports, 2016, 6, 30587.	1.6	95
3	Tuning the metal filling fraction in metal-insulator-metal ultra-broadband perfect absorbers to maximize the absorption bandwidth. Photonics Research, 2018, 6, 168.	3.4	78
4	Visible light nearly perfect absorber: an optimum unit cell arrangement for near absolute polarization insensitivity. Optics Express, 2017, 25, 27624.	1.7	76
5	Bismuth-based metamaterials: from narrowband reflective color filter to extremely broadband near perfect absorber. Nanophotonics, 2019, 8, 823-832.	2.9	60
6	Disordered and Densely Packed ITO Nanorods as an Excellent Lithography-Free Optical Solar Reflector Metasurface. ACS Photonics, 2019, 6, 1812-1822.	3.2	55
7	Ultra-Broadband, Lithography-Free, and Large-Scale Compatible Perfect Absorbers: The Optimum Choice of Metal layers in Metal-Insulator Multilayer Stacks. Scientific Reports, 2017, 7, 14872.	1.6	53
8	Surface engineered angstrom thick ZnO-sheathed TiO₂ nanowires as photoanodes for performance enhanced dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 16867-16876.	5.2	51
9	Strategies for Plasmonic Hotâ€Electronâ€Driven Photoelectrochemical Water Splitting. ChemPhotoChem, 2018, 2, 161-182.	1.5	51
10	Ultra-broadband, wide angle absorber utilizing metal insulator multilayers stack with a multi-thickness metal surface texture. Scientific Reports, 2017, 7, 4755.	1.6	50
11	All Ceramic-Based Metal-Free Ultra-broadband Perfect Absorber. Plasmonics, 2019, 14, 1801-1815.	1.8	47
12	Active metamaterial nearly perfect light absorbers: a review [Invited]. Journal of the Optical Society of America B: Optical Physics, 2019, 36, F131.	0.9	47
13	Tunable, omnidirectional, and nearly perfect resonant absorptions by a graphene-hBN-based hole array metamaterial. Optics Express, 2018, 26, 16940.	1.7	44
14	Lithography-Free Planar Band-Pass Reflective Color Filter Using A Series Connection of Cavities. Scientific Reports, 2019, 9, 290.	1.6	40
15	Hybrid plasmonâ€“phonon polariton bands in grapheneâ€“hexagonal boron nitride metamaterials [Invited]. Journal of the Optical Society of America B: Optical Physics, 2017, 34, D29.	0.9	39
16	Angstrom Thick ZnO Passivation Layer to Improve the Photoelectrochemical Water Splitting Performance of a TiO2 Nanowire Photoanode: The Role of Deposition Temperature. Scientific Reports, 2018, 8, 16322.	1.6	39
17	Colorimetric and Near-Absolute Polarization-Insensitive Refractive-Index Sensing in All-Dielectric Guided-Mode Resonance Based Metasurface. Journal of Physical Chemistry C, 2019, 123, 19125-19134.	1.5	39
18	97 percent light absorption in an ultrabroadband frequency range utilizing an ultrathin metal layer: randomly oriented, densely packed dielectric nanowires as an excellent light trapping scaffold. Nanoscale, 2017, 9, 16652-16660.	2.8	38

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19	Strong Lightâ€“Matter Interactions in Au Plasmonic Nanoantennas Coupled with Prussian Blue Catalyst on BiVO₄ for Photoelectrochemical Water Splitting. ChemSusChem, 2020, 13, 2577-2588.	3.6	34
20	Active Tuning from Narrowband to Broadband Absorbers Using a Sub-wavelength VO2 Embedded Layer. Plasmonics, 2021, 16, 1013-1021.	1.8	32
21	Mid-infrared adaptive thermal camouflage using a phase-change material coupled dielectric nanoantenna. Journal Physics D: Applied Physics, 2021, 54, 265105.	1.3	32
22	Disordered Nanohole Patterns in Metal-Insulator Multilayer for Ultra-broadband Light Absorption: Atomic Layer Deposition for Lithography Free Highly repeatable Large Scale Multilayer Growth. Scientific Reports, 2017, 7, 15079.	1.6	31
23	Emerging photoluminescence from defective vanadium diselenide nanosheets. Photonics Research, 2018, 6, 244.	3.4	31
24	A Robust, Preciousâ€Metalâ€Free Dyeâ€Sensitized Photoanode for Water Oxidation: A Nanosecondâ€Long Excitedâ€State Lifetime through a Prussian Blue Analogue. Angewandte Chemie - International Edition, 2020, 59, 4082-4090.	7.2	30
25	VO₂-hBN-graphene-based bi-functional metamaterial for mid-infrared bi-tunable asymmetric transmission and nearly perfect resonant absorption. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 1607.	0.9	29
26	Semiconductor Thin Film Based Metasurfaces and Metamaterials for Photovoltaic and Photoelectrochemical Water Splitting Applications. Advanced Optical Materials, 2019, 7, 1900028.	3.6	28
27	Lithographyâ€Free Random Bismuth Nanostructures for Full Solar Spectrum Harvesting and Midâ€Infrared Sensing. Advanced Optical Materials, 2020, 8, 1901203.	3.6	26
28	Nearly perfect resonant absorption and coherent thermal emission by hBN-based photonic crystals. Optics Express, 2017, 25, 31970.	1.7	25
29	Controlling luminescent silicon nanoparticle emission produced by nanosecond pulsed laser ablation: role of interface defect states and crystallinity phase. RSC Advances, 2016, 6, 112520-112526.	1.7	24
30	A spectrally selective gap surface-plasmon-based nanoantenna emitter compatible with multiple thermal infrared applications. Journal of Optics (United Kingdom), 2021, 23, 085001.	1.0	22
31	Near-absolute polarization insensitivity in graphene based ultra-narrowband perfect visible light absorber. Scientific Reports, 2018, 8, 15210.	1.6	21
32	Enhanced Performance of Nanowire-Based All-TiO2 Solar Cells using Subnanometer-Thick Atomic Layer Deposited ZnO Embedded Layer. Electrochimica Acta, 2015, 157, 23-30.	2.6	16
33	Diode like high-contrast asymmetric transmission of linearly polarized waves based on plasmon-tunneling effect coupling to electromagnetic radiation modes. Journal Physics D: Applied Physics, 2021, 54, 365102.	1.3	13
34	Ultra-broadband Asymmetric Light Transmission and Absorption Through The Use of Metal Free Multilayer Capped Dielectric Microsphere Resonator. Scientific Reports, 2017, 7, 14538.	1.6	12
35	A Robust, Preciousâ€Metalâ€Free Dyeâ€Sensitized Photoanode for Water Oxidation: A Nanosecondâ€Long Excitedâ€State Lifetime through a Prussian Blue Analogue. Angewandte Chemie, 2020, 132, 4111-4119.	1.6	12
36	Deep Subwavelength Light Confinement in Disordered Bismuth Nanorods as a Linearly Thermalâ€Tunable Metamaterial. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000066.	1.2	11

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37	Bismuth plasmonics for extraordinary light absorption in deep sub-wavelength geometries. Optics Letters, 2020, 45, 686.	1.7	11
38	Tunable infrared asymmetric light transmission and absorption via graphene-hBN metamaterials. Journal of Applied Physics, 2019, 126, .	1.1	10
39	Large scale compatible fabrication of gold capped titanium dioxide nanoantennas using a shadowing effect for photoelectrochemical water splitting. International Journal of Hydrogen Energy, 2020, 45, 1521-1531.	3.8	10
40	Unveiling the optical parameters of vanadium dioxide in the phase transition region: a hybrid modeling approach. RSC Advances, 2020, 10, 29945-29955.	1.7	10
41	Multi-spectral infrared camouflage through excitation of plasmon-phonon polaritons in a visible-transparent hBN-ITO nanoantenna emitter. Optics Letters, 2021, 46, 4996.	1.7	10
42	One-way and near-absolute polarization insensitive near-perfect absorption by using an all-dielectric metasurface. Optics Letters, 2020, 45, 2010.	1.7	10
43	Nanosecond pulsed laser ablated sub-10 nm silicon nanoparticles for improving photovoltaic conversion efficiency of commercial solar cells. Journal of Optics (United Kingdom), 2017, 19, 105902.	1.0	9
44	Building an Iron Chromophore Incorporating Prussian Blue Analogue for Photoelectrochemical Water Oxidation. Chemistry - A European Journal, 2021, 27, 8966-8976.	1.7	9
45	Adaptive visible and short-wave infrared camouflage using a dynamically tunable metasurface. Optics Letters, 2021, 46, 4777.	1.7	9
46	Pushing the limits in photosensitizer-catalyst interaction via a short cyanide bridge for water oxidation. Cell Reports Physical Science, 2021, 2, 100319.	2.8	7
47	Strong Interference in Planar, Multilayer Perfect Absorbers: Achieving High-Operational Performances in Visible and Near-Infrared Regimes. IEEE Nanotechnology Magazine, 2019, 13, 34-48.	0.9	6
48	Spectrally Selective Ultrathin Photodetectors Using Strong Interference in Nanocavity Design. IEEE Electron Device Letters, 2019, 40, 925-928.	2.2	6
49	An All-Dielectric Metasurface Coupled with Two-Dimensional Semiconductors for Thermally Tunable Ultra-narrowband Light Absorption. Plasmonics, 2021, 16, 687-694.	1.8	6
50	Strong light emission from a defective hexagonal boron nitride monolayer coupled to near-touching random plasmonic nanounits. Optics Letters, 2021, 46, 1664.	1.7	6
51	Numerical analysis of a thermally tunable spectrally selective absorber enabled by an all-dielectric metamirror. Optics Letters, 2020, 45, 6174.	1.7	6
52	Lithography-free metamaterial absorbers: opinion. Optical Materials Express, 2022, 12, 524.	1.6	6
53	Subwavelength Densely Packed Disordered Semiconductor Metasurface Units for Photoelectrochemical Hydrogen Generation. ACS Applied Energy Materials, 2022, 5, 2826-2837.	2.5	6
54	Generation of additive colors with near unity amplitude using a multilayer tandem Fabryâ€“Perot cavity. Optics Letters, 2021, 46, 3464.	1.7	5

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55	A performance-enhanced planar Schottky diode for Terahertz applications: an electromagnetic modeling approach. International Journal of Microwave and Wireless Technologies, 2017, 9, 1905-1913.	1.5	4
56	Strong Lightâ€“Matter Interactions in Au Plasmonic Nanoantennas Coupled with Prussian Blue Catalyst on BiVO 4 for Photoelectrochemical Water Splitting. ChemSusChem, 2020, 13, 2483-2483.	3.6	4
57	Highly Efficient Semiconductor-Based Metasurface for Photoelectrochemical Water Splitting: Broadband Light Perfect Absorption with Dimensions Smaller than the Diffusion Length. Plasmonics, 2020, 15, 829-839.	1.8	3
58	Lithography-free disordered metalâ€“insulatorâ€“metal nanoantennas for colorimetric sensing. Optics Letters, 2020, 45, 6719.	1.7	3
59	Growth of â^¼3-nm ZnO nano-islands using Atomic Layer Deposition. , 2016, , .		1
60	Seed Layer Assisted Hydrothermal Deposition of Low-resistivity ZnO Thin Films. MRS Advances, 2017, 2, 799-804.	0.5	1
61	Investigation of angstrom-thick aluminium oxide passivation layers to improve the gate lag performance of GaN HEMTs. Materials Research Express, 2019, 6, 095052.	0.8	1
62	InnenrÃ¼cktitelbild: A Robust, Preciousâ€Metalâ€Free Dyeâ€Sensitized Photoanode for Water Oxidation: A Nanosecondâ€Long Excitedâ€State Lifetime through a Prussian Blue Analogue (Angew. Chem. 10/2020). Angewandte Chemie, 2020, 132, 4211-4211.	1.6	1
63	Ultra-broadband Near-Unity Light Absorption by Disjunct Scattering Resonances of Disordered Nanounits Created with Atomic Scale Shadowing Effect. Plasmonics, 2021, 16, 83-90.	1.8	1
64	Wavelength Selectivity in a Polarization-Insensitive Metamaterial-Based Absorber Consistent With Atmospheric Absorption Windows. , 2021, , .		1
65	Notice of Withdrawal On-chip characterization of THz Schottky diodes using non-contact probes. , 2016, , .		0
66	Building an Iron Chromophore Incorporating Prussian Blue Analogue for Photoelectrochemical Water Oxidation. Chemistry - A European Journal, 2021, 27, 8890-8890.	1.7	0
67	Disordered and densely packed ITO nanorods as an excellent lithography-free optical solar reflector metasurface for the radiative cooling of spacecraft. , 2019, , .		0
68	Thermally Tunable from Narrowband to Broadband Metamaterial-Based Nanoantenna Emitter. , 2021, , .		0
69	Dual-Band Polarization Insensitive Metamaterial-Based Absorber Suitable for Sensing Applications. , 2021, , .		0