Rasoul Alaee

List of Publications by Year
in descending order

47	2,355	331670 21	233421 45
papers	citations	h-index	g-index

47	47	47	2460
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Comprehensive Multipolar Theory for Periodic Metasurfaces. Advanced Optical Materials, 2022, 10, .	7.3	18
2	Fourier-Engineered Plasmonic Lattice Resonances. ACS Nano, 2022, 16, 5696-5703.	14.6	11
3	Superscattering, Superabsorption, and Nonreciprocity in Nonlinear Antennas. ACS Photonics, 2021, 8, 585-591.	6.6	17
4	Kelvin's chirality of optical beams. Physical Review A, 2021, 103, .	2.5	15
5	Selective excitation of subwavelength atomic clouds. Physical Review Research, 2021, 3, .	3.6	0
6	Colossal enhancement of the magnetic dipole moment by exploiting lattice coupling in metasurfaces. Journal of the Optical Society of America B: Optical Physics, 2021, 38, C217.	2.1	2
7	Giant Asymmetric Second-Harmonic Generation in Bianisotropic Metasurfaces Based on Bound States in the Continuum. ACS Photonics, 2021, 8, 3234-3240.	6.6	18
8	Highly Asymmetric Second-Harmonic Generation in a Bianisotropic Metasurface Assisted by Quasi-BICs. , 2021, , .		0
9	Beyond dipolar Huygensâ€™ metasurfaces for full-phase coverage and unity transmittance. Nanophotonics, 2020, 9, 75-82.	6.0	35
10	Ultrafast Topological Engineering in Metamaterials. Physical Review Letters, 2020, 125, 037403.	7.8	16
11	Quantum Metamaterials with Magnetic Response at Optical Frequencies. Physical Review Letters, 2020, 125, 063601.	7.8	27
12	Kerker effect, superscattering, and scattering dark states in atomic antennas. Physical Review Research, 2020, 2, .	3.6	12
13	Minimalist Mie coefficient model. Optics Express, 2020, 28, 16511.	3.4	14
14	Dynamic coherent perfect absorption in nonlinear metasurfaces. Optics Letters, 2020, 45, 6414.	3.3	18
15	Exact Multipolar Decompositions with Applications in Nanophotonics. Advanced Optical Materials, 2019, 7, 1800783.	7.3	86
16	Optical Pulling and Pushing Forces in Bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="script">P</mml:mi><mml:mi mathvariant="script">T</mml:mi></mml:mrow></mml:math> -Symmetric Structures. Physical Review Applied, 2018, 9, .	3.8	28
17	An electromagnetic multipole expansion beyond the long-wavelength approximation. Optics Communications, 2018, 407, 17-21.	2.1	266
18	Theory of optical forces on small particles by multiple plane waves. Journal of Applied Physics, 2018, 124, .	2.5	8

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19	Optical force rectifiers based on PT-symmetric metasurfaces. Physical Review B, 2018, 97, .	3.2	12
20	Fundamental limits of optical force and torque. Physical Review B, 2017, 95, .	3.2	30
21	Theory of metasurface based perfect absorbers. Journal Physics D: Applied Physics, 2017, 50, 503002.	2.8	138
22	Optical alignment of oval graphene flakes. Optics Letters, 2017, 42, 1039.	3.3	5
23	Experimental realisation of all-dielectric bianisotropic metasurfaces. Applied Physics Letters, 2016, 108, .	3.3	46
24	Purely bianisotropic scatterers. Physical Review B, 2016, 94, .	3.2	20
25	Optically assisted trapping with high-permittivity dielectric rings: Towards optical aerosol filtration. Applied Physics Letters, 2016, 109, .	3.3	5
26	Enhancement of second-harmonic generation in nonlinear nanolaminate metamaterials by nanophotonic resonances. Optics Express, 2016, 24, 9651.	3.4	12
27	Optical force and torque on dipolar dual chiral particles. Physical Review B, 2016, 94, .	3.2	22
28	Phase-change material-based nanoantennas with tunable radiation patterns. Optics Letters, 2016, 41, 4099.	3.3	45
29	Bottom-Up Fabrication of Hybrid Plasmonic Sensors: Gold-Capped Hydrogel Microspheres Embedded in Periodic Metal Hole Arrays. ACS Applied Materials & Interfaces, 2016, 8, 26392-26399.	8.0	13
30	Cavity-Enhanced and Ultrafast Superconducting Single-Photon Detectors. Nano Letters, 2016, 16, 7085-7092.	9.1	77
31	All-dielectric reciprocal bianisotropic nanoparticles. Physical Review B, 2015, 92, .	3.2	79
32	Revisiting substrate-induced bianisotropy in metasurfaces. Physical Review B, 2015, 91, .	3.2	24
33	Exact dipolar moments of a localized electric current distribution. Optics Express, 2015, 23, 33044.	3.4	44
34	Magnetoelectric coupling in nonidentical plasmonic nanoparticles: Theory and applications. Physical Review B, 2015, 91, .	3.2	83
35	Scattering Dark States in Multiresonant Concentric Plasmonic Nanorings. ACS Photonics, 2015, 2, 1085-1090.	6.6	16
36	A Bianisotropic Metasurface With Resonant Asymmetric Absorption. IEEE Transactions on Antennas and Propagation, 2015, 63, 3004-3015.	5.1	58

#	Article	IF	Citations
37	A generalized Kerker condition for highly directive nanoantennas. Optics Letters, 2015, 40, 2645.	3.3	201
38	Plasmonic nanoring fabrication tuned to pitch: Efficient, deterministic, and large scale realization of ultra-small gaps for next generation plasmonic devices. Applied Physics Letters, 2014, 105, .	3.3	18
39	Extreme coupling: A route towards local magnetic metamaterials. Physical Review B, 2014, 89, .	3.2	8
40	Manipulating the interaction between localized and delocalized surface plasmon-polaritons in graphene. Physical Review B, 2014, 90, .	3.2	49
41	Deep-Subwavelength Plasmonic Nanoresonators Exploiting Extreme Coupling. Nano Letters, 2013, 13, 3482-3486.	9.1	61
42	Propagation of electromagnetic fields in bulk terahertz metamaterials: A combined experimental and theoretical study. Physical Review B, 2013, 87, .	3.2	8
43	Exploiting extreme coupling to realize a metamaterial perfect absorber. Microelectronic Engineering, 2013, 111, 110-113.	2.4	15
44	Tunable graphene antennas for selective enhancement of THz-emission. Optics Express, 2013, 21, 3737.	3.4	104
45	Genuine effectively biaxial left-handed metamaterials due to extreme coupling. Optics Letters, 2012, 37, 596.	3.3	13
46	Perfect absorbers on curved surfaces and their potential applications. Optics Express, 2012, 20, 18370.	3.4	51
47	A perfect absorber made of a graphene micro-ribbon metamaterial. Optics Express, 2012, 20, 28017.	3.4	507