

# Mauro Antezza

## List of Publications by Year in descending order

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90  
papers

3,566  
citations

136950

32  
h-index

144013

57  
g-index

91  
all docs

91  
docs citations

91  
times ranked

1512  
citing authors

#	ARTICLE	IF	CITATIONS
1	Measurement of the Temperature Dependence of the Casimir-Polder Force. <i>Physical Review Letters</i> , 2007, 98, 063201.	7.8	374
2	New Asymptotic Behavior of the Surface-Atom Force out of Thermal Equilibrium. <i>Physical Review Letters</i> , 2005, 95, 113202.	7.8	178
3	Reconciliation of quantum local master equations with thermodynamics. <i>New Journal of Physics</i> , 2018, 20, 113024.	2.9	166
4	Near-field heat transfer between graphene/hBN multilayers. <i>Physical Review B</i> , 2017, 95, .	3.2	155
5	Effect of the Casimir-Polder force on the collective oscillations of a trapped Bose-Einstein condensate. <i>Physical Review A</i> , 2004, 70, .	2.5	139
6	Scattering-matrix approach to Casimir-Lifshitz force and heat transfer out of thermal equilibrium between arbitrary bodies. <i>Physical Review A</i> , 2011, 84, .	2.5	136
7	Casimir-Lifshitz force out of thermal equilibrium. <i>Physical Review A</i> , 2008, 77, .	2.5	134
8	Three-Body Amplification of Photon Heat Tunneling. <i>Physical Review Letters</i> , 2012, 109, 244302.	7.8	109
9	Three-body radiative heat transfer and Casimir-Lifshitz force out of thermal equilibrium for arbitrary bodies. <i>Physical Review A</i> , 2014, 89, .	2.5	83
10	Casimir-Lifshitz force out of thermal equilibrium and heat transfer between arbitrary bodies. <i>Europhysics Letters</i> , 2011, 95, 61002.	2.0	81
11	Dark solitons in a superfluid Fermi gas. <i>Physical Review A</i> , 2007, 76, .	2.5	75
12	Casimir-Lifshitz Force Out of Thermal Equilibrium and Asymptotic Nonadditivity. <i>Physical Review Letters</i> , 2006, 97, 223203.	7.8	70
13	Magnetoplasmonic manipulation of nanoscale thermal radiation using twisted graphene gratings. <i>International Journal of Heat and Mass Transfer</i> , 2020, 150, 119305.	4.8	64
14	Radiative heat transfer and nonequilibrium Casimir-Lifshitz force in many-body systems with planar geometry. <i>Physical Review B</i> , 2017, 95, .	3.2	59
15	Surface-atom force out of thermal equilibrium and its effect on ultra-cold atoms. <i>Journal of Physics A</i> , 2006, 39, 6117-6126.	1.6	55
16	Hyperbolic waveguide for long-distance transport of near-field heat flux. <i>Physical Review B</i> , 2016, 94, .	3.2	55
17	Quantum thermal machines with single nonequilibrium environments. <i>Physical Review A</i> , 2015, 91, .	2.5	53
18	Fluctuation-induced forces on an atom near a photonic topological material. <i>Physical Review A</i> , 2018, 97, .	2.5	49

#	ARTICLE	IF	CITATIONS
19	Active control of near-field radiative heat transfer by a graphene-gratings coating-twisting method. <i>Optics Letters</i> , 2020, 45, 2914.	3.3	49
20	Graphene-based amplification and tuning of near-field radiative heat transfer between dissimilar polar materials. <i>Physical Review B</i> , 2017, 96, .	3.2	44
21	Metasurface-mediated anisotropic radiative heat transfer between nanoparticles. <i>Physical Review B</i> , 2019, 100, .	3.2	44
22	Dual-band nonreciprocal thermal radiation by coupling optical Tamm states in magnetophotonic multilayers. <i>International Journal of Thermal Sciences</i> , 2022, 175, 107457.	4.9	43
23	Creation and protection of entanglement in systems out of thermal equilibrium. <i>New Journal of Physics</i> , 2013, 15, 113052.	2.9	41
24	Radiative heat transfer between metallic gratings using Fourier modal method with adaptive spatial resolution. <i>Physical Review B</i> , 2017, 95, .	3.2	41
25	Many-body heat radiation and heat transfer in the presence of a nonabsorbing background medium. <i>Physical Review B</i> , 2017, 95, .	3.2	41
26	Unidirectional and diffractionless surface plasmon polaritons on three-dimensional nonreciprocal plasmonic platforms. <i>Physical Review B</i> , 2019, 99, .	3.2	41
27	Graphene-based thermal repeater. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	40
28	Fano-Hopfield model and photonic band gaps for an arbitrary atomic lattice. <i>Physical Review A</i> , 2009, 80, .	2.5	38
29	Optical properties of atomic Mott insulators: From slow light to dynamical Casimir effects. <i>Physical Review A</i> , 2008, 77, .	2.5	36
30	Otto engine beyond its standard quantum limit. <i>Physical Review E</i> , 2016, 93, 022122.	2.1	34
31	Radiation induced force between two planar waveguides. <i>European Physical Journal D</i> , 2008, 46, 157-164.	1.3	33
32	Robust entanglement with three-dimensional nonreciprocal photonic topological insulators. <i>Physical Review A</i> , 2017, 95, .	2.5	33
33	Spectrum of Light in a Quantum Fluctuating Periodic Structure. <i>Physical Review Letters</i> , 2009, 103, 123903.	7.8	31
34	Quantum systems in a stationary environment out of thermal equilibrium. <i>Physical Review A</i> , 2013, 87, .	2.5	31
35	Steady entanglement out of thermal equilibrium. <i>Europhysics Letters</i> , 2013, 104, 10006.	2.0	31
36	Optomechanical Rydberg-Atom Excitation via Dynamic Casimir-Polder Coupling. <i>Physical Review Letters</i> , 2014, 113, 023601.	7.8	31

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37	Quantum thermal machine acting on a many-body quantum system: Role of correlations in thermodynamic tasks. <i>Physical Review E</i> , 2016, 93, 022134.	2.1	30
38	Strong Thermal and Electrostatic Manipulation of the Casimir Force in Graphene Multilayers. <i>Physical Review Letters</i> , 2017, 118, 126101.	7.8	30
39	Continuously variable emission for mechanical deformation induced radiative cooling. <i>Communications Materials</i> , 2020, 1, .	6.9	30
40	Spontaneous lateral atomic recoil force close to a photonic topological material. <i>Physical Review B</i> , 2018, 97, .	3.2	29
41	Radiative heat transfer between metallic nanoparticle clusters in both near field and far field. <i>Physical Review B</i> , 2019, 99, .	3.2	28
42	Radiative heat transfer and radiative thermal energy for two-dimensional nanoparticle ensembles. <i>Physical Review B</i> , 2020, 102, .	3.2	28
43	Quantum machines powered by correlated baths. <i>Physical Review Research</i> , 2020, 2, .	3.6	28
44	Photonic band gap in an imperfect atomic diamond lattice: Penetration depth and effects of finite size and vacancies. <i>Physical Review A</i> , 2013, 88, .	2.5	27
45	Giant resonant radiative heat transfer between nanoparticles. <i>Physical Review B</i> , 2019, 100, .	3.2	27
46	Strong geometry dependence of the Casimir force between interpenetrated rectangular gratings. <i>Nature Communications</i> , 2021, 12, 600.	12.8	27
47	Giant Interatomic Energy-Transport Amplification with Nonreciprocal Photonic Topological Insulators. <i>Physical Review Letters</i> , 2017, 119, 173901.	7.8	25
48	Casimir interaction between a sphere and a grating. <i>Physical Review A</i> , 2015, 92, .	2.5	24
49	A self-contained quantum harmonic engine. <i>Europhysics Letters</i> , 2017, 120, 60006.	2.0	24
50	Non-Reciprocal, Robust Surface Plasmon Polaritons on Gyrotropic Interfaces. <i>IEEE Transactions on Antennas and Propagation</i> , 2020, 68, 3718-3729.	5.1	24
51	Giant Casimir Torque between Rotated Gratings and the $\langle \hat{I} \rangle$ Anomaly. <i>Physical Review Letters</i> , 2020, 124, 013903.	7.8	24
52	Many-body effective thermal conductivity in phase-change nanoparticle chains due to near-field radiative heat transfer. <i>International Journal of Heat and Mass Transfer</i> , 2021, 166, 120793.	4.8	24
53	Casimir-Lifshitz force out of thermal equilibrium between dielectric gratings. <i>Physical Review A</i> , 2014, 90, .	2.5	23
54	Dynamical polarizability of graphene with spatial dispersion. <i>Physical Review B</i> , 2021, 103, .	3.2	23

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55	Radiative thermal switch driven by anisotropic black phosphorus plasmons. Optics Express, 2020, 28, 26922.	3.4	22
56	Near-field radiative heat transfer between twisted nanoparticle gratings. Applied Physics Letters, 2020, 117, .	3.3	19
57	Thermally activated nonlocal amplification in quantum energy transport. Europhysics Letters, 2015, 110, 40002.	2.0	18
58	Casimir-Lifshitz force for nonreciprocal media and applications to photonic topological insulators. Physical Review A, 2017, 96, .	2.5	18
59	Optical torque on a two-level system near a strongly nonreciprocal medium. Physical Review B, 2018, 98, .	3.2	18
60	Fluctuation-Induced Forces Between Atoms and Surfaces: The Casimir-Polder Interaction. Lecture Notes in Physics, 2011, , 345-391.	0.7	18
61	Nonequilibrium dissipation-driven steady many-body entanglement. Physical Review A, 2015, 91, .	2.5	17
62	Dissipative Topological Phase Transition with Strong System-Environment Coupling. Physical Review Letters, 2021, 127, 250402.	7.8	17
63	Giant thermal magnetoresistance driven by graphene magnetoplasmon. Applied Physics Letters, 2020, 117, .	3.3	16
64	Polariton topological transition effects on radiative heat transfer. Physical Review B, 2021, 103, .	3.2	16
65	Dynamics of an elementary quantum system in environments out of thermal equilibrium. Europhysics Letters, 2012, 100, 20006.	2.0	15
66	Casimir-Polder force and torque for anisotropic molecules close to conducting planes and their effect on $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{CO} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle$ Physical Review B, 2020, 102, .	3.2	14
67	Ultrahigh-rectification near-field radiative thermal diode using infrared-transparent film backside phase-transition metasurface. Applied Physics Letters, 2021, 119, .	3.3	14
68	Quantum metamaterials: a brave new world. SPIE Newsroom, 0, , .	0.1	14
69	Magnetoplasmon-surface phonon polaritons <sup>TM</sup> coupling effects in radiative heat transfer. Optics Letters, 2020, 45, 5148.	3.3	14
70	Quantitative study of two- and three-dimensional strong localization of matter waves by atomic scatterers. Physical Review A, 2010, 82, .	2.5	13
71	Controllable thermal radiation from twisted bilayer graphene. International Journal of Heat and Mass Transfer, 2022, 194, 123076.	4.8	13
72	Breathing modes of a fast rotating Fermi gas. Physical Review A, 2007, 75, .	2.5	11

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73	Inducing and controlling rotation on small objects using photonic topological materials. Physical Review B, 2018, 98, .	3.2	11
74	Excitation injector in an atomic chain: Long-range transport and efficiency amplification. Physical Review A, 2017, 95, .	2.5	10
75	Magnetic field-induced emissivity tuning of InSb-based metamaterials in the terahertz frequency regime. Optical Materials Express, 2021, 11, 3141.	3.0	10
76	Disorder-induced phase transition in Dirac systems beyond the linear approximation. Physical Review B, 2020, 101, .	3.2	10
77	Light-induced optomechanical forces in graphene waveguides. Physical Review B, 2016, 93, .	3.2	8
78	Hybrid thermal Yagi-Uda nanoantennas for directional and narrow band long-wavelength IR radiation sources. Optics Express, 2020, 28, 19334.	3.4	8
79	Hybridization of topological surface states with a flat band. Journal of Physics Condensed Matter, 2020, 32, 165501.	1.8	6
80	Photothermal behavior for two-dimensional nanoparticle ensembles: Multiple scattering and thermal accumulation effects. Physical Review B, 2022, 105, .	3.2	6
81	Distributed thermal tasks on many-body systems through a single quantum machine. Europhysics Letters, 2015, 112, 40004.	2.0	4
82	Coupling between subwavelength nano-slit lattice modes and metal-insulator-graphene cavity modes: a semi-analytical model. OSA Continuum, 2019, 2, 1296.	1.8	4
83	Matter waves in two-dimensional arbitrary atomic crystals. Physical Review A, 2014, 90, .	2.5	3
84	Matter waves in atomic artificial graphene. Europhysics Letters, 2014, 107, 30006.	2.0	3
85	Non-Markovian transient Casimir-Polder force and population dynamics on excited- and ground-state atoms: Weak- and strong-coupling regimes in generally nonreciprocal environments. Physical Review A, 2019, 99, .	2.5	2
86	Publisher's Note: Effect of the Casimir-Polder force on the collective oscillations of a trapped Bose-Einstein condensate [Phys. Rev. A70, 053619 (2004)]. Physical Review A, 2004, 70, .	2.5	1
87	Inverse design of a 1D dielectric metasurface by topology optimization: fluctuations-trend analysis assisted by a diamond-square algorithm. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 3721.	2.1	1
88	Plasmon amplification by strong coupling in a layered structure. Proceedings of SPIE, 2013, , .	0.8	0
89	Hyperbolic waveguide for long distance transport of near-field heat flux. , 2016, , .		0
90	Manipulating Surface Waves and Nanoscale Forces/Torques with Nonreciprocal Platforms. , 2019, , .		0