Giorgio Volpe

List of Publications by Year
in descending order

59 papers	5,895 citations	159585 30 h-index	289244 40 g-index
60 all docs	60 docs citations	60 times ranked	6106 citing authors

#	Article	IF	Citations
1	Active Particles in Complex and Crowded Environments. Reviews of Modern Physics, 2016, 88, .	45.6	1,875
2	Unidirectional Emission of a Quantum Dot Coupled to a Nanoantenna. Science, 2010, 329, 930-933.	12.6	1,262
3	Active Brownian motion tunable by light. Journal of Physics Condensed Matter, 2012, 24, 284129.	1.8	251
4	Chemotactic synthetic vesicles: Design and applications in blood-brain barrier crossing. Science Advances, 2017, 3, e1700362.	10.3	215
5	Simulation of a Brownian particle in an optical trap. American Journal of Physics, 2013, 81, 224-230.	0.7	201
6	Enhancing the Nonlinear Optical Response Using Multifrequency Gold-Nanowire Antennas. Physical Review Letters, 2012, 108, 217403.	7.8	154
7	Multipolar radiation of quantum emitters with nanowire optical antennas. Nature Communications, 2013, 4, 1750.	12.8	148
8	Simulation of the active Brownian motion of a microswimmer. American Journal of Physics, 2014, 82, 659-664.	0.7	147
9	Spatiotemporal Coherent Control of Light through a Multiple Scattering Medium with the Multispectral Transmission Matrix. Physical Review Letters, 2016, 116, 253901.	7.8	114
10	Objective comparison of methods to decode anomalous diffusion. Nature Communications, 2021, 12, 6253.	12.8	109
11	Controlling the Optical Near Field of Nanoantennas with Spatial Phase-Shaped Beams. Nano Letters, 2009, 9, 3608-3611.	9.1	95
12	Perspective on light-induced transport of particles: from optical forces to phoretic motion. Advances in Optics and Photonics, 2019, 11, 577.	25.5	91
13	Fractal plasmonics: subdiffraction focusing and broadband spectral response by a Sierpinski nanocarpet. Optics Express, 2011, 19, 3612.	3.4	87
14	Advances towards programmable droplet transport on solid surfaces and its applications. Chemical Society Reviews, 2020, 49, 7879-7892.	38.1	86
15	Deterministic control of broadband light through a multiply scattering medium via the multispectral transmission matrix. Scientific Reports, 2015, 5, 10347.	3.3	79
16	Brownian Motion in a Speckle Light Field: Tunable Anomalous Diffusion and Selective Optical Manipulation. Scientific Reports, 2014, 4, 3936.	3.3	79
17	Speckle optical tweezers: micromanipulation with random light fields. Optics Express, 2014, 22, 18159.	3.4	75
18	The topography of the environment alters the optimal search strategy for active particles. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11350-11355.	7.1	66

#	Article	IF	Citations
19	Brownian motion in a nonhomogeneous force field and photonic force microscope. Physical Review E, 2007, 76, 061118.	2.1	64
20	Step-by-step guide to the realization of advanced optical tweezers. Journal of the Optical Society of America B: Optical Physics, 2015, 32, B84.	2.1	64
21	Disorder-mediated crowd control in an active matter system. Nature Communications, 2016, 7, 10907.	12.8	64
22	Dynamic Control of Particle Deposition in Evaporating Droplets by an External Point Source of Vapor. Journal of Physical Chemistry Letters, 2018, 9, 659-664.	4.6	58
23	Quantitative assessment of non-conservative radiation forces in an optical trap. Europhysics Letters, 2009, 86, 38002.	2.0	54
24	Plasmon-Assisted Delivery of Single Nano-Objects in an Optical Hot Spot. Nano Letters, 2013, 13, 4299-4304.	9.1	52
25	Microscale Marangoni Surfers. Physical Review Letters, 2020, 125, 098001.	7.8	48
26	Deterministic Subwavelength Control of Light Confinement in Nanostructures. Physical Review Letters, 2010, 105, 216802.	7.8	44
27	Near-Field Mapping of Plasmonic Antennas by Multiphoton Absorption in Poly(methyl methacrylate). Nano Letters, 2012, 12, 4864-4868.	9.1	42
28	High-performance reconstruction of microscopic force fields from Brownian trajectories. Nature Communications, 2018, 9, 5166.	12.8	41
29	Enhanced propagation of motile bacteria on surfaces due to forward scattering. Nature Communications, 2019, 10, 4110.	12.8	36
30	Active matter alters the growth dynamics of coffee rings. Soft Matter, 2019, 15, 1488-1496.	2.7	33
31	Self-organized lasers from reconfigurable colloidal assemblies. Nature Physics, 2022, 18, 939-944.	16.7	29
32	Direct Growth of Optical Antennas Using E-Beam-Induced Gold Deposition. Plasmonics, 2010, 5, 135-139.	3.4	24
33	Characterization of anomalous diffusion classical statistics powered by deep learning (CONDOR). Journal of Physics A: Mathematical and Theoretical, 2021, 54, 314003.	2.1	21
34	Nonmonotonic contactless manipulation of binary droplets via sensing of localized vapor sources on pristine substrates. Science Advances, 2020, 6, .	10.3	19
35	Singular-point characterization in microscopic flows. Physical Review E, 2008, 77, 037301.	2.1	16
36	Long-term influence of fluid inertia on the diffusion of a Brownian particle. Physical Review E, 2014, 90, 042309.	2.1	12

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37	Far-Field Wavefront Control of Nonlinear Luminescence in Disordered Gold Metasurfaces. Nano Letters, 2020, 20, 3291-3298.	9.1	12
38	Visualization of Directional Beaming of Weakly Localized Raman from a Random Network of Silicon Nanowires. Advanced Science, 2021, 8, 2100139.	11.2	9
39	Probing Extended Modes on Disordered Plasmonic Networks by Wavefront Shaping. ACS Photonics, 2015, 2, 1658-1662.	6.6	8
40	Ordering of binary colloidal crystals by random potentials. Soft Matter, 2020, 16, 4267-4273.	2.7	8
41	Engineering particle trajectories in microfluidic flows using speckle light fields. , 2014, , .		1
42	Numerical simulation of optically trapped particles. , 2014, , .		1
43	Photonic Torque Microscope. , 2007, , .		0
44	Photonic torque microscope. , 2007, , .		0
45	El DÃa de la Luz II (The Day of Light II): optics demonstration for high school students. , 2009, , .		0
46	The Photonic Torque Microscope: Measuring Non-Conservative Force-Fields. , 0, , .		0
47	Multipolar and Unidirectional Emission of Quantum Emitters Coupled to Optical Antennas. , 2012, , .		0
48	Numerical simulation of Brownian particles in optical force fields. , 2013, , .		0
49	Pick it up with light! An advanced summer program for secondary school students. Proceedings of SPIE, 2014, , .	0.8	0
50	Simulation of active Brownian particles in optical potentials. Proceedings of SPIE, 2014, , .	0.8	0
51	Study of microparticles' anomalous diffusion in active bath using speckle light fields (Presentation) Tj ETQq1 1 0.784314 rgBT /Overlo	0.8	0
52	Optical Manipulation with Random Light Fields: From Fundamental Physics to Applications. , 2015, , .		0
53	Coherent spatio-temporal control of pulsed light through multiple scattering media. , 2017, , .		0
54	Nonlinear Optical Response of Nanoantennas. , 2011, , .		0

#	Article	IF	Citations
55	Coherent spatiotemporal control of light through a multiply scattering medium. , 2016, , .		0
56	Controlling Active Brownian Particles in Complex Settings. , 2017, , .		0
57	Active Matter Alters the Growth Dynamics of Coffee Rings. , 2018, , .		0
58	FORMA: Force Reconstruction via Maximum-likelihood-estimator Analysis. , 2019, , .		0
59	FORMA and BEFORE: expanding applications of optical tweezers. , 2021, , .		0