

# Marco A C Potenza

## List of Publications by Year in descending order

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Version: 2024-02-01

59  
papers

992  
citations

430874

18  
h-index

477307

29  
g-index

61  
all docs

61  
docs citations

61  
times ranked

1092  
citing authors

#	ARTICLE	IF	CITATIONS
1	X-ray-scattering information obtained from near-field speckle. <i>Nature Physics</i> , 2008, 4, 238-243.	16.7	105
2	Do protein crystals nucleate within dense liquid clusters?. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2015, 71, 815-822.	0.8	59
3	Heterodyne near-field scattering: A technique for complex fluids. <i>Physical Review E</i> , 2004, 70, 041405.	2.1	57
4	Shape and size constraints on dust optical properties from the Dome C ice core, Antarctica. <i>Scientific Reports</i> , 2016, 6, 28162.	3.3	54
5	Colloidal Aggregation in Microgravity by Critical Casimir Forces. <i>Physical Review Letters</i> , 2012, 109, 248302.	7.8	49
6	Probing the Transverse Coherence of an Undulator X-Ray Beam Using Brownian Particles. <i>Physical Review Letters</i> , 2009, 103, 194805.	7.8	44
7	Three dimensional imaging of short pulses. <i>Optics Communications</i> , 2004, 229, 381-390.	2.1	37
8	Measuring the complex field scattered by single submicron particles. <i>AIP Advances</i> , 2015, 5, .	1.3	33
9	Detecting the shape of anisotropic gold nanoparticles in dispersion with single particle extinction and scattering. <i>Nanoscale</i> , 2017, 9, 2778-2784.	5.6	28
10	How to Measure the Optical Thickness of Scattering Particles from the Phase Delay of Scattered Waves: Application to Turbid Samples. <i>Physical Review Letters</i> , 2010, 105, 193901.	7.8	27
11	EVIDENCE OF PHOTOEVAPORATION AND SPATIAL VARIATION OF GRAIN SIZES IN THE ORION 114-426 PROTOPLANETARY DISK. <i>Astrophysical Journal</i> , 2012, 757, 78.	4.5	26
12	Dynamic heterodyne near field scattering. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	25
13	SODI-COLLOID: A combination of static and dynamic light scattering on board the International Space Station. <i>Review of Scientific Instruments</i> , 2013, 84, 043704.	1.3	25
14	Real-time holograms generated by second-harmonic cross correlation of object and reference optical wave fields. <i>Optics Letters</i> , 2000, 25, 890.	3.3	23
15	Single particle optical extinction and scattering allows real time quantitative characterization of drug payload and degradation of polymeric nanoparticles. <i>Scientific Reports</i> , 2016, 5, 18228.	3.3	21
16	Particle shape accounts for instrumental discrepancy in ice core dust size distributions. <i>Climate of the Past</i> , 2018, 14, 601-608.	3.4	20
17	Free nanoparticle characterization by optical scattered field analysis: opportunities and perspectives. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	1.9	19
18	Measuring shape and size of micrometric particles from the analysis of the forward scattered field. <i>Journal of Applied Physics</i> , 2016, 119, 224901.	2.5	19

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19	Heterodyne speckle velocimetry. Applied Physics Letters, 2006, 88, 191101.	3.3	18
20	A simple scanning spectrometer based on a stretchable elastomeric reflective grating. Applied Physics Letters, 2014, 104, 061910.	3.3	18
21	Mapping the transverse coherence of the self amplified spontaneous emission of a free-electron laser with the heterodyne speckle method. Optics Express, 2014, 22, 30013.	3.4	18
22	Accurate sizing of ceria oxide nanoparticles in slurries by the analysis of the optical forward-scattered field. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	18
23	Asymmetric lateral coherence of betatron radiation emitted in laser-driven light sources. Europhysics Letters, 2015, 111, 44003.	2.0	17
24	Near field scattering. Physical Chemistry Chemical Physics, 2004, 6, 1547-1550.	2.8	15
25	Dynamics of colloidal aggregation in microgravity by critical Casimir forces. Europhysics Letters, 2014, 106, 68005.	2.0	15
26	Confocal zero-angle dynamic depolarized light scattering. European Physical Journal E, 2010, 31, 69-72.	1.6	13
27	Scattering from anisotropic particles: A challenge for the optical theorem?. European Physical Journal E, 2009, 29, 379-382.	1.6	11
28	Measurement of power spectral density of broad-spectrum visible light with heterodyne near field scattering and its scalability to betatron radiation. Optics Express, 2015, 23, 32888.	3.4	10
29	A modified two-slit interferometer for characterizing the asymmetric lateral coherence of undulator radiation. Europhysics Letters, 2016, 115, 14004.	2.0	10
30	Multiparametric optical characterization of airborne dust with single particle extinction and scattering. Aerosol Science and Technology, 2020, 54, 353-366.	3.1	10
31	Single-shot measurement of phase and topological properties of orbital angular momentum radiation through asymmetric lateral coherence. Physical Review Accelerators and Beams, 2019, 22, .	1.6	10
32	The local intrinsic curvature of wavefronts allows to detect optical vortices. Optics Express, 2019, 27, 17550.	3.4	10
33	Single Particle Extinction and Scattering allows novel optical characterization of aerosols. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	9
34	Hyperspectral imaging with deformable gratings fabricated with metal-elastomer nanocomposites. Review of Scientific Instruments, 2017, 88, 113105.	1.3	9
35	Asymmetric lateral coherence of OAM radiation reveals topological charge and local curvature. Journal of Optics (United Kingdom), 2018, 20, 075605.	2.2	9
36	Heterodyne speckle velocimetry of Poiseuille flow. Journal of Applied Physics, 2007, 102, 073113.	2.5	7

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37	Single particle extinction and scattering optical method unveils in real time the influence of the blood components on polymeric nanoparticles. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2017, 13, 2597-2603.	3.3	7
38	Single-Particle Extinction and Scattering Method Allows for Detection and Characterization of Aggregates of Aeolian Dust Grains in Ice Cores. <i>ACS Earth and Space Chemistry</i> , 2017, 1, 261-269.	2.7	7
39	Asymmetric lateral coherence allows precise wavefront characterization. <i>Europhysics Letters</i> , 2018, 122, 44001.	2.0	7
40	Optical Characterization of Mineral Dust from the EAIIST Project with Digital Holography. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 2855-2864.	2.7	7
41	Characterizing temporal coherence of visible synchrotron radiation with heterodyne near field speckles. <i>Physical Review Accelerators and Beams</i> , 2017, 20, .	1.6	7
42	Measuring the topological charge of orbital angular momentum radiation in single-shot by means of the wavefront intrinsic curvature. <i>Applied Optics</i> , 2020, 59, 5258.	1.8	7
43	A sensor for vector electric field measurements through a nonlinear anisotropic optical crystal. <i>Review of Scientific Instruments</i> , 2017, 88, 113114.	1.3	6
44	Web tools concerning performance analysis and planning support for solar energy plants starting from remotely sensed optical images. <i>Environmental Impact Assessment Review</i> , 2015, 52, 18-23.	9.2	5
45	Light extinction and scattering from aggregates composed of submicron particles. <i>Journal of Nanoparticle Research</i> , 2020, 22, 1.	1.9	5
46	The daylight sky and Avogadro's number. <i>European Journal of Physics</i> , 2015, 36, 065040.	0.6	4
47	Optical Characterization of Industrial Slurries. <i>KONA Powder and Particle Journal</i> , 2016, 33, 310-321.	1.7	4
48	Near field scattering for samples under forced flow. <i>Review of Scientific Instruments</i> , 2020, 91, 075108.	1.3	4
49	Dense-code free space transmission by local demultiplexing optical states of a composed vortex. <i>Optics Express</i> , 2021, 29, 14412.	3.4	4
50	Two-dimensional electron beam size measurements with x-ray heterodyne near field speckles. <i>Physical Review Accelerators and Beams</i> , 2022, 25, .	1.6	4
51	A method for characterizing the stability of light sources. <i>Optics Express</i> , 2013, 21, 24630.	3.4	3
52	Note: Nanosecond LED-based source for optical modeling of scintillators illuminated by partially coherent X-ray radiation. <i>Review of Scientific Instruments</i> , 2016, 87, 126104.	1.3	2
53	Metal-polymer nanocomposites for stretchable optics and plasmonics. , 2016, , .		2
54	Radiative Transfer in a Translucent Cloud Illuminated by an Extended Background Source. <i>Astrophysical Journal</i> , 2017, 840, 55.	4.5	2

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55	A very simple scheme for spectrally resolved imaging by means of curved polymeric gratings. Materials Research Express, 2019, 6, 065044.	1.6	2
56	Heterodyne Near Field Speckles: from laser light to X-rays. Advances in Physics: X, 2021, 6, .	4.1	2
57	On the quasi-universality of the forward light scattering lobe for micrometric objects. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 278, 108028.	2.3	2
58	An extremely simplified optics laboratory for teaching the fundamentals of Fourier analysis. European Journal of Physics, 2021, 42, 035304.	0.6	1
59	Innovative Instrumentation for the Study of Atmospheric Aerosol Optical Properties. , 2018, , 47-56.		0