Giulia Rusciano

List of Publications by Year
in descending order

76 papers	1,595 citations	279701 23 h-index	345118 36 g-index
77 all docs	77 docs citations	77 times ranked	2137 citing authors

#	Article	IF	Citations
1	Spectroscopical and mechanical characterization of normal and thalassemic red blood cells by Raman Tweezers. Optics Express, 2008, 16, 7943.	1.7	121
2	Work and heat probability distribution of an optically driven Brownian particle: Theory and experiments. Physical Review E, 2007, 76, 050101.	0.8	108
3	Investigating the origin of nuclei particles in GDI engine exhausts. Combustion and Flame, 2012, 159, 1687-1692.	2.8	72
4	Surface-enhanced Raman imaging of cell membrane by a highly homogeneous and isotropic silver nanostructure. Nanoscale, 2015, 7, 8593-8606.	2.8	66
5	Raman Tweezers as a Diagnostic Tool of Hemoglobin-Related Blood Disorders. Sensors, 2008, 8, 7818-7832.	2.1	63
6	Toward hyperuniform disordered plasmonic nanostructures for reproducible surface-enhanced Raman spectroscopy. Physical Chemistry Chemical Physics, 2015, 17, 8061-8069.	1.3	60
7	Label-Free Probing of G-Quadruplex Formation by Surface-Enhanced Raman Scattering. Analytical Chemistry, 2011, 83, 6849-6855.	3.2	56
8	Nanoscale Chemical Imaging of Bacillus subtilis Spores by Combining Tip-Enhanced Raman Scattering and Advanced Statistical Tools. ACS Nano, 2014, 8, 12300-12309.	7.3	55
9	Quantitative assessment of non-conservative radiation forces in an optical trap. Europhysics Letters, 2009, 86, 38002.	0.7	54
10	A New Method to Improve the Clinical Evaluation of Cystic Fibrosis Patients by Mucus Viscoelastic Properties. PLoS ONE, 2014, 9, e82297.	1.1	48
11	Microrheology of complex fluids using optical tweezers: a comparison with macrorheological measurements. Journal of Optics, 2009, 11, 034016.	1.5	43
12	An accurate comparison of lineshape models on H2O lines in the spectral region around 3Î¼m. Journal of Molecular Spectroscopy, 2004, 227, 162-171.	0.4	40
13	On the interaction of nano-sized organic carbon particles with model lipid membranes. Carbon, 2009, 47, 2950-2957.	5.4	34
14	Surface charge and hydrodynamic coefficient measurements of Bacillus subtilis spore by optical tweezers. Colloids and Surfaces B: Biointerfaces, 2014, 116, 568-575.	2.5	34
15	Nanoscale engineering of two-dimensional disordered hyperuniform block-copolymer assemblies. Physical Review E, 2015, 92, 050601.	0.8	33
16	Diffusion in Polymer Blends by Raman Microscopy. Macromolecules, 2008, 41, 5512-5514.	2.2	31
17	Experimental analysis of Hb oxyâ€“deoxy transition in single optically stretched red blood cells. Physica Medica, 2010, 26, 233-239.	0.4	31
18	Flexibility of the Programme of Spore Coat Formation in Bacillus subtilis: Bypass of CotE Requirement by Over-Production of CotH. PLoS ONE, 2013, 8, e74949.	1.1	30

#	Article	IF	Citations
19	Enhancing Raman Tweezers by Phase-Sensitive Detection. Analytical Chemistry, 2007, 79, 3708-3715.	3.2	28
20	Raman spectroscopy as a new tool for early detection of bacteria in patients with cystic fibrosis. Laser Physics Letters, 2013, 10, 075603.	0.6	27
21	Surface-enhanced Raman scattering study of nano-sized organic carbon particles produced in combustion processes. Carbon, 2008, 46, 335-341.	5.4	25
22	Surface enhanced Raman spectroscopy (SERS) of particles produced in premixed flame across soot threshold. Proceedings of the Combustion Institute, 2011, 33, 649-657.	2.4	25
23	Raman Microspectroscopy Analysis in the Treatment of Acanthamoeba Keratitis. PLoS ONE, 2013, 8, e72127.	1.1	25
24	Diffusive Mixing of Polymers Investigated by Raman Microspectroscopy and Microrheology. Langmuir, 2010, 26, 14223-14230.	1.6	23
25	Multiple-Particle-Tracking to investigate viscoelastic properties in living cells. Methods, 2010, 51, 20-26.	1.9	23
26	Raman-microscopy investigation of vitrification-induced structural damages in mature bovine oocytes. PLoS ONE, 2017, 12, e0177677.	1.1	22
27	Raman spectroscopy of Xenopus laevis oocytes. Methods, 2010, 51, 27-36.	1.9	19
28	Speed-dependent and correlation effects on the line shape of acetylene. Physical Review A, 2005, 72, .	1.0	18
29	Phase-sensitive detection in Raman tweezers. Applied Physics Letters, 2006, 89, 261116.	1.5	18
30	High frequency viscoelastic behaviour of low molecular weight hyaluronic acid water solutions. Biorheology, 2007, 44, 403-18.	1.2	18
31	Nanometal Skin of Plasmonic Heterostructures for Highly Efficient Near-Field Scattering Probes. Scientific Reports, 2016, 6, 31113.	1.6	17
32	Coral-like plasmonic probes for tip-enhanced Raman spectroscopy. Nanoscale, 2020, 12, 24376-24384.	2.8	17
33	Detection and spectroscopy of OH fundamental vibrational band based on a difference frequency generator at 3 Î¼m. Chemical Physics Letters, 2003, 374, 425-431.	1.2	16
34	Enhancement factor statistics of surface enhanced Raman scattering in multiscale heterostructures of nanoparticles. Journal of Chemical Physics, 2016, 145, 054708.	1.2	15
35	Self-, Nitrogen-, and Oxygen-Broadening Coefficient Measurements in the Î½1 Band of H2O Using a Difference Frequency Generation Spectrometer at 3 Î¼m. Journal of Molecular Spectroscopy, 2002, 215, 244-250.	0.4	14
36	A DFG spectrometer at for high resolution molecular spectroscopy and trace gas detection. Optics and Lasers in Engineering, 2002, 37, 481-493.	2.0	14

#	Article	IF	Citations
37	Real-time actin-cytoskeleton depolymerization detection in a single cell using optical tweezers. Optics Express, 2007, 15, 7922.	1.7	14
38	Simultaneous measurements of electrophoretic and dielectrophoretic forces using optical tweezers. Optics Express, 2015, 23, 9363.	1.7	14
39	Infrared analysis of nano organic particles produced in laminar flames. Applied Physics B: Lasers and Optics, 2006, 82, 155-160.	1.1	12
40	Blinking Optical Tweezers for microrheology measurements of weak elasticity complex fluids. Optics Express, 2010, 18, 2116.	1.7	12
41	Dark spots along slowly scaling chains of plasmonic nanoparticles. Optics Express, 2016, 24, 13584.	1.7	12
42	Detection of HCl and HF by TTFMS and WMS. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 63, 923-928.	2.0	11
43	Raman Analysis of Tear Fluid Alteration Following Contact Lense Use. Sensors, 2019, 19, 3392.	2.1	11
44	Sub-Doppler spectroscopy of H218O at 1.4ÂÎ¼m. Applied Physics B: Lasers and Optics, 2000, 70, 883-888.	1.1	10
45	Optical manipulation of charged microparticles in polar fluids. Electrophoresis, 2013, 34, 3141-3149.	1.3	10
46	Revealing membrane alteration in cells overexpressing CA IX and EGFR by Surface-Enhanced Raman Scattering. Scientific Reports, 2019, 9, 1832.	1.6	10
47	A simple and reliable approach for the fabrication of nanoporous silver patterns for surface-enhanced Raman spectroscopy applications. Scientific Reports, 2021, 11, 22295.	1.6	10
48	Difference-frequency-generatorï¿½??based spectrometer at 3 Î¼m for high-sensitivity C2H2 and H2O detection. Optics Express, 2003, 11, 3010.	1.7	9
49	Dissolution of a surfactant-water lamellar phase investigated by combining time-lapse polarized light microscopy and confocal Raman spectroscopy. Journal of Colloid and Interface Science, 2020, 561, 136-146.	5.0	9
50	Mechanical changes of living oocytes at maturation investigated by multiple particle tracking. Applied Physics Letters, 2009, 95, 093702.	1.5	8
51	Synthesis and label free characterization of a bimolecular PNA homo quadruplex. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 1222-1228.	1.1	8
52	Experimental study of the mechanisms leading to the formation of glistenings in intraocular lenses by Raman spectroscopy. Biomedical Optics Express, 2019, 10, 1870.	1.5	8
53	Detection and spectroscopy of the Î½1+Î½3 band of N2O by difference-frequency spectrometer at 3 Î¼m. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2002, 58, 2481-2488.	2.0	7
54	Optical and electrical characterizations of graphene nanoplatelet coatings on low density polyethylene. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, .	0.6	7

#	Article	IF	Citations
55	Feasibility of SERS-Active Porous Ag Substrates for the Effective Detection of Pyrene in Water. Sensors, 2022, 22, 2764.	2.1	7
56	Narrow H218O lines and new absolute frequency references in the near-IR. Journal of Optics, 2000, 2, 310-313.	1.5	6
57	Cell Imaging by Spontaneous and Amplified Raman Spectroscopies. Journal of Spectroscopy, 2017, 2017, 1-9.	0.6	6
58	Novosphingobium sp. PP1Y as a novel source of outer membrane vesicles. Journal of Microbiology, 2019, 57, 498-508.	1.3	6
59	Mapping electric fields generated by microelectrodes using optically trapped charged microspheres. Lab on A Chip, 2011, 11, 4113.	3.1	5
60	Assessment of conjunctival microvilli abnormality by microâ€Raman analysis â€“ by G. Rusciano et al. Journal of Biophotonics, 2016, 9, 551-559.	1.1	5
61	Insights into the interaction of the N-terminal amyloidogenic polypeptide of ApoA-I with model cellular membranes. Biochimica Et Biophysica Acta - General Subjects, 2016, 1860, 795-801.	1.1	5
62	Influence of rotational force fields on the determination of the work done on a driven Brownian particle. Journal of Optics (United Kingdom), 2011, 13, 044006.	1.0	4
63	Symmetry-Induced Light Confinement in a Photonic Quasicrystal-Based Mirrorless Cavity. Crystals, 2016, 6, 111.	1.0	4
64	Nematic liquid crystal reorientation around multi-walled carbon nanotubes mapped via Raman microscopy. Optics Express, 2016, 24, 15954.	1.7	4
65	Single-Cell Photothermal Analysis Induced by MoS2 Nanoparticles by Raman Spectroscopy. Frontiers in Bioengineering and Biotechnology, 2022, 10, 844011.	2.0	4
66	Highâ€•and lowâ€frequency mechanical properties of living starfish oocytes. Journal of Biophotonics, 2011, 4, 324-334.	1.1	3
67	Doppler-free spectroscopy of xenon in the mid-infrared using difference-frequency radiation. Optics Express, 2005, 13, 8357.	1.7	2
68	Selective Localization of Hierarchically Assembled Particles to Plasma Membranes of Living Cells. Small Methods, 2019, 3, 1800408.	4.6	2
69	High sensitivity spectrometer at 3 Î¼m based on difference frequency generation for N/sub 2/O detection. IEEE Sensors Journal, 2003, 3, 206-211.	2.4	1
70	Surface-enhanced Raman imaging of red blood cell membrane with highly uniform active substrates obtained using block copolymers self-assembly. , 2013, , .		1
71	Raman-spectroscopy-based biosensing for applications in ophthalmology. Proceedings of SPIE, 2013, , .	0.8	1
72	Characterization of surface properties of bacterial spores using Optical Tweezers. , 2015, , .		1

#	Article	IF	Citations
73	Measurements of the isotopic composition of water vapor using a DFG-based spectrometer at. Optics and Lasers in Engineering, 2006, 44, 711-721.	2.0	0
74	Optical Tweezers: from soft-matter Physics to biological applications. , 2009, , .		0
75	Correlative TERS imaging of B. subtilis spores. , 2015, , .		0
76	Fabrication of Silver Coral-like AFM Probes for Tip- Enhanced Raman Spectroscopy by ICP-based approach. , 2021, , .		0