Maria F Garcia-Parajo

List of Publications by Year in Descending Order

120 papers	6,001 citations	46 h-index	75 g-index
142 ext. papers	6,926 ext. citations	7.2 avg, IF	5.72 L-index

#	Paper	IF	Citations
120	Altered CXCR4 dynamics at the cell membrane impairs directed cell migration in WHIM syndrome patients.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2119483119	11.5	0
119	The ER cholesterol sensor SCAP promotes CARTS biogenesis at ER-Golgi membrane contact sites. *Journal of Cell Biology*, **2021**, 220,	7.3	13
118	Roadmap on bio-nano-photonics. *Journal of Optics (United Kingdom)*, **2021**, 23, 073001	1.7	0
117	Shear forces induce ICAM-1 nanoclustering on endothelial cells that impact on T-cell migration. *Biophysical Journal*, **2021**, 120, 2644-2656	2.9	4
116	Impact of Glycans on Lipid Membrane Dynamics at the Nanoscale Unveiled by Planar Plasmonic Nanogap Antennas and Atomic Force Spectroscopy. *Journal of Physical Chemistry Letters*, **2021**, 12, 1175-1181	6.4	1
115	Correlative nanophotonic approaches to enlighten the nanoscale dynamics of living cell membranes. *Biochemical Society Transactions*, **2021**, 49, 2357-2369	5.1	0
114	Nanoscale control of single molecule Förster resonance energy transfer by a scanning photonic nanoantenna. *Nanophotonics*, **2020**, 9, 4021-4031	6.3	5
113	Dynamic actin-mediated nano-scale clustering of CD44 regulates its meso-scale organization at the plasma membrane. *Molecular Biology of the Cell*, **2020**, 31, 561-579	3.5	14
112	Inhomogeneous membrane receptor diffusion explained by a fractional heteroscedastic time series model. *Physical Chemistry Chemical Physics*, **2019**, 21, 3114-3121	3.6	4
111	Separating Actin-Dependent Chemokine Receptor Nanoclustering from Dimerization Indicates a Role for Clustering in CXCR4 Signaling and Function. *Molecular Cell*, **2018**, 70, 106-119.e10	17.6	33
110	Enhancing Magnetic Light Emission with All-Dielectric Optical Nanoantennas. *Nano Letters*, **2018**, 18, 3481-3487	11.5	41
109	Frequency-Encoded Multicolor Fluorescence Imaging with Single-Photon-Counting Color-Blind Detection. *Biophysical Journal*, **2018**, 115, 725-736	2.9	11
108	Optical Antenna-Based Fluorescence Correlation Spectroscopy to Probe the Nanoscale Dynamics of Biological Membranes. *Journal of Physical Chemistry Letters*, **2018**, 9, 110-119	6.4	28
107	Excitation-multiplexed multicolor superresolution imaging with fm-STORM and fm-DNA-PAINT. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12991-12996	11.5	24
106	PLANT: A Method for Detecting Changes of Slope in Noisy Trajectories. *Biophysical Journal*, **2018**, 114, 2044-2051	2.9	3
105	In-Plane Plasmonic Antenna Arrays with Surface Nanogaps for Giant Fluorescence Enhancement. *Nano Letters*, **2017**, 17, 1703-1710	11.5	90
104	Up-regulation of EP and EP receptors in human tolerogenic dendritic cells boosts the immunosuppressive activity of PGE. *Journal of Leukocyte Biology*, **2017**, 102, 881-895	6.5	14

103	Planar Optical Nanoantennas Resolve Cholesterol-Dependent Nanoscale Heterogeneities in the Plasma Membrane of Living Cells. *Nano Letters*, **2017**, 17, 6295-6302	11.5	32
102	Transient Nanoscopic Phase Separation in Biological Lipid Membranes Resolved by Planar Plasmonic Antennas. *ACS Nano*, **2017**, 11, 7241-7250	16.7	28
101	A DNA origami platform for quantifying protein copy number in super-resolution. *Nature Methods*, **2017**, 14, 789-792	21.6	65
100	Sphingomyelin metabolism controls the shape and function of the Golgi cisternae. *ELife*, **2017**, 6,	8.9	19
99	Changes in membrane sphingolipid composition modulate dynamics and adhesion of integrin nanoclusters. *Scientific Reports*, **2016**, 6, 20693	4.9	41
98	Plasmonic Nanoantennas Enable Forbidden Förster Dipole-Dipole Energy Transfer and Enhance the FRET Efficiency. *Nano Letters*, **2016**, 16, 6222-6230	11.5	54
97	All-Dielectric Silicon Nanogap Antennas To Enhance the Fluorescence of Single Molecules. *Nano Letters*, **2016**, 16, 5143-51	11.5	147
96	The actin cytoskeleton modulates the activation of iNKT cells by segregating CD1d nanoclusters on antigen-presenting cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E772-81	11.5	26
95	Galactosidase-A Loaded-Nanoliposomes with Enhanced Enzymatic Activity and Intracellular Penetration. *Advanced Healthcare Materials*, **2016**, 5, 829-40	10.1	31
94	Uncovering homo-and hetero-interactions on the cell membrane using single particle tracking approaches. *Journal Physics D: Applied Physics*, **2016**, 49, 104002	3	7
93	Enhancement and Inhibition of Spontaneous Photon Emission by Resonant Silicon Nanoantennas. *Physical Review Applied*, **2016**, 6,	4.3	52
92	Roadmap on biosensing and photonics with advanced nano-optical methods. *Journal of Optics (United Kingdom)*, **2016**, 18, 063003	1.7	46
91	Highly Versatile Polyelectrolyte Complexes for Improving the Enzyme Replacement Therapy of Lysosomal Storage Disorders. *ACS Applied Materials & Interfaces*, **2016**, 8, 25741-25752	9.5	16
90	Lateral Mobility and Nanoscale Spatial Arrangement of Chemokine-activated 21 Integrins on T Cells. *Journal of Biological Chemistry*, **2016**, 291, 21053-21062	5.4	6
89	Weak Ergodicity Breaking of Receptor Motion in Living Cells Stemming from Random Diffusivity. *Physical Review X*, **2015**, 5,	9.1	87
88	Chromatin fibers are formed by heterogeneous groups of nucleosomes in vivo. *Cell*, **2015**, 160, 1145-58	56.2	396
87	Strong Modification of Magnetic Dipole Emission through Diabolo Nanoantennas. *ACS Photonics*, **2015**, 2, 1071-1076	6.3	41
86	Matching Nanoantenna Field Confinement to FRET Distances Enhances Förster Energy Transfer Rates. *Nano Letters*, **2015**, 15, 6193-201	11.5	63

85	Large-Scale Arrays of Bowtie Nanoaperture Antennas for Nanoscale Dynamics in Living Cell Membranes. *Nano Letters*, **2015**, 15, 4176-82	11.5	32
84	A review of progress in single particle tracking: from methods to biophysical insights. *Reports on Progress in Physics*, **2015**, 78, 124601	14.4	273
83	Nanophotonic approaches for nanoscale imaging and single-molecule detection at ultrahigh concentrations. *Microscopy Research and Technique*, **2014**, 77, 537-45	2.8	7
82	Hybrid photonic antennas for subnanometer multicolor localization and nanoimaging of single molecules. *Nano Letters*, **2014**, 14, 4895-900	11.5	28
81	Nonergodic subdiffusion from Brownian motion in an inhomogeneous medium. *Physical Review Letters*, **2014**, 112, 150603	7.4	121
80	Enhanced receptor-clathrin interactions induced by N-glycan-mediated membrane micropatterning. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 11037-42	11.5	50
79	PSF decomposition of nanoscopy images via Bayesian analysis unravels distinct molecular organization of the cell membrane. *Scientific Reports*, **2014**, 4, 4354	4.9	17
78	Nanoclustering as a dominant feature of plasma membrane organization. *Journal of Cell Science*, **2014**, 127, 4995-5005	5.3	167
77	Priming by chemokines restricts lateral mobility of the adhesion receptor LFA-1 and restores adhesion to ICAM-1 nano-aggregates on human mature dendritic cells. *PLoS ONE*, **2014**, 9, e99589	3.7	8
76	Biochemical and imaging methods to study receptor membrane organization and association with lipid rafts. *Methods in Cell Biology*, **2013**, 117, 105-22	1.8	7
75	Multifunctional nanovesicle-bioactive conjugates prepared by a one-step scalable method using CO2-expanded solvents. *Nano Letters*, **2013**, 13, 3766-74	11.5	31
74	A plasmonic 'antenna-in-box' platform for enhanced single-molecule analysis at micromolar concentrations. *Nature Nanotechnology*, **2013**, 8, 512-6	28.7	248
73	Meeting report--Visualizing signaling nanoplatforms at a higher spatiotemporal resolution. *Journal of Cell Science*, **2013**, 126, 3817-21	5.3	2
72	Recent progress in cell surface nanoscopy: Light and force in the near-field. *Nano Today*, **2012**, 7, 390-403	17.9	19
71	Ultrabright bowtie nanoaperture antenna probes studied by single molecule fluorescence. *Nano Letters*, **2012**, 12, 5972-8	11.5	64
70	Near-Field Optical Nanoscopy of Biological Membranes. *Springer Series on Fluorescence*, **2012**, 339-363	0.5	
69	Single-molecule imaging of cell surfaces using near-field nanoscopy. *Accounts of Chemical Research*, **2012**, 45, 327-36	24.3	73
68	The role of nanophotonics in regenerative medicine. *Methods in Molecular Biology*, **2012**, 811, 267-84	1.4	3

67	2.8 Super-Resolution Near-Field Optical Microscopy **2012**, 144-164		
66	Geometry sensing by dendritic cells dictates spatial organization and PGE(2)-induced dissolution of podosomes. *Cellular and Molecular Life Sciences*, **2012**, 69, 1889-901	10.3	55
65	The neck region of the C-type lectin DC-SIGN regulates its surface spatiotemporal organization and virus-binding capacity on antigen-presenting cells. *Journal of Biological Chemistry*, **2012**, 287, 38946-55	5.4	41
64	Lateral mobility of individual integrin nanoclusters orchestrates the onset for leukocyte adhesion. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 4869-74	11.5	74
63	pH-responsive polysaccharide-based polyelectrolyte complexes as nanocarriers for lysosomal delivery of therapeutic proteins. *Biomacromolecules*, **2011**, 12, 2524-33	6.9	49
62	Nanoscale fluorescence correlation spectroscopy on intact living cell membranes with NSOM probes. *Biophysical Journal*, **2011**, 100, L8-10	2.9	66
61	Dynamic imaging of cell-free and cell-associated viral capture in mature dendritic cells. *Traffic*, **2011**, 12, 1702-13	5.7	18
60	Near-Field Scanning Optical Microscopy of Biological Membranes **2011**, 185-207		
59	Direct mapping of nanoscale compositional connectivity on intact cell membranes. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 15437-42	11.5	81
58	A nanometer scale optical view on the compartmentalization of cell membranes. *Biochimica Et Biophysica Acta - Biomembranes*, **2010**, 1798, 777-87	3.8	43
57	Molecular recognition imaging using tuning fork-based transverse dynamic force microscopy. *Ultramicroscopy*, **2010**, 110, 605-11	3.1	17
56	Imaging individual proteins and nanodomains on intact cell membranes with a probe-based optical antenna. *Small*, **2010**, 6, 270-5	11	59
55	Hotspots of GPI-anchored proteins and integrin nanoclusters function as nucleation sites for cell adhesion. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 18557-62	11.5	187
54	Dynamic re-organization of individual adhesion nanoclusters in living cells by ligand-patterned surfaces. *Small*, **2009**, 5, 1258-63	11	9
53	Memory in Single Emitter Fluorescence Blinking Reveals the Dynamic Character of Nanoscale Charge Tunneling. *Journal of Physical Chemistry C*, **2008**, 112, 3417-3422	3.8	15
52	Nanometer-scale organization of the alpha subunits of the receptors for IL2 and IL15 in human T lymphoma cells. *Journal of Cell Science*, **2008**, 121, 627-33	5.3	56
51	Probing the local field of nanoantennas using single particle luminescence. *Journal of Physics: Conference Series*, **2008**, 100, 052038	0.3	2
50	Ultrafast single-molecule photonics: Excited state dynamics in coherently coupled complexes. *Journal of Luminescence*, **2008**, 128, 1050-1052	3.8	4

49	Power-law blinking in the fluorescence of single organic molecules. *ChemPhysChem*, **2007**, 8, 823-33	3.2	84
48	Nanoscale organization of the pathogen receptor DC-SIGN mapped by single-molecule high-resolution fluorescence microscopy. *ChemPhysChem*, **2007**, 8, 1473-80	3.2	79
47	Tailored interfaces for biosensors and cell-surface interaction studies via activation and derivatization of polystyrene-block-poly(tert-butyl acrylate) thin films. *European Polymer Journal*, **2007**, 43, 2177-2190	5.2	10
46	Ultrafast spectroscopy of single molecules. *Springer Series in Chemical Physics*, **2007**, 231-233	0.3	
45	Selective Immobilization of Protein Clusters on Polymeric Nanocraters. *Advanced Functional Materials*, **2006**, 16, 1242-1246	15.6	38
44	Effect of disorder on ultrafast exciton dynamics probed by single molecule spectroscopy. *Physical Review Letters*, **2006**, 97, 216403	7.4	35
43	DNA-based molecular wires: multiple emission pathways of individual constructs. *Journal of Physical Chemistry B*, **2006**, 110, 26349-53	3.4	43
42	Synthesis and characterization of long perylenediimide polymer fibers: from bulk to the single-molecule level. *Journal of Physical Chemistry B*, **2006**, 110, 7803-12	3.4	51
41	Near-field fluorescence microscopy. *Nanobiotechnology*, **2005**, 1, 113-120		19
40	Energy transfer in single-molecule photonic wires. *ChemPhysChem*, **2005**, 6, 819-27	3.2	55
39	Molecular printboards on silicon oxide: lithographic patterning of cyclodextrin monolayers with multivalent, fluorescent guest molecules. *Small*, **2005**, 1, 242-53	11	77
38	Single-molecule pump-probe detection resolves ultrafast pathways in individual and coupled quantum systems. *Physical Review Letters*, **2005**, 94, 078302	7.4	60
37	Power-law-distributed dark states are the main pathway for photobleaching of single organic molecules. *Physical Review Letters*, **2005**, 95, 097401	7.4	99
36	Single molecule photobleaching probes the exciton wave function in a multichromophoric system. *Physical Review Letters*, **2004**, 93, 236404	7.4	65
35	Investigation of perylene photonic wires by combined single-molecule fluorescence and atomic force microscopy. *Angewandte Chemie - International Edition*, **2004**, 43, 4045-9	16.4	105
34	Investigation of Perylene Photonic Wires by Combined Single-Molecule Fluorescence and Atomic Force Microscopy. *Angewandte Chemie*, **2004**, 116, 4137-4141	3.6	22
33	Photon antibunching proves emission from a single subunit in the autofluorescent protein DsRed. *ChemPhysChem*, **2004**, 5, 1782-5	3.2	23
32	Probing polymers with single fluorescent molecules. *European Polymer Journal*, **2004**, 40, 1001-1011	5.2	41

31	Multistep energy transfer in single molecular photonic wires. *Journal of the American Chemical Society*, **2004**, 126, 6514-5	16.4	179
30	A simple approach to sensor discovery and fabrication on self-assembled monolayers on glass. *Journal of the American Chemical Society*, **2004**, 126, 7293-9	16.4	155
29	Near-field scanning optical microscopy in liquid for high resolution single molecule detection on dendritic cells. *FEBS Letters*, **2004**, 573, 6-10	3.8	91
28	Excitonic Behavior of Rhodamine Dimers: A Single-Molecule Study. *Journal of Physical Chemistry A*, **2003**, 107, 43-52	2.8	86
27	Shear force imaging of soft samples in liquid using a diving bell concept. *Applied Physics Letters*, **2003**, 83, 5083-5085	3.4	53
26	Near-field effects in single molecule emission. *Journal of Microscopy*, **2001**, 202, 374-8	1.9	16
25	Moulded photoplastic probes for near-field optical applications. *Journal of Microscopy*, **2001**, 202, 16-21	1.9	19
24	Optical probing of single fluorescent molecules and proteins. *ChemPhysChem*, **2001**, 2, 347-60	3.2	36
23	The nature of fluorescence emission in the red fluorescent protein DsRed, revealed by single-molecule detection. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 14392-7	11.5	85
22	Looking at the photodynamics of individual fluorescent molecules and proteins. *Pure and Applied Chemistry*, **2001**, 73, 431-434	2.1	2
21	Real-time light-driven dynamics of the fluorescence emission in single green fluorescent protein molecules. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 7237-42	11.5	159
20	Influencing the angular emission of a single molecule. *Physical Review Letters*, **2000**, 85, 5312-5	7.4	111
19	Time-Varying Triplet State Lifetimes of Single Molecules. *Physical Review Letters*, **1999**, 83, 2155-2158	7.4	151
18	Single molecule mapping of the optical field distribution of probes for near-field microscopy. *Journal of Microscopy*, **1999**, 194, 477-82	1.9	95
17	Individual green fluorescent proteins (GFP) studied by near-field optical microscopy **1999**, 89-92		
16	DNA-protein interactions: single molecule spectroscopy and imaging **1999**, 273-274		
15	Visualising individual green fluorescent proteins with a near field optical microscope. *Cytometry*, **1999**, 36, 239-46		4
14	Near-field optical microscopy for DNA studies at the single molecular level. *Bioimaging*, **1998**, 6, 43-53		36

13	Near-field optical and shear-force microscopy of single fluorophores and DNA molecules. *Ultramicroscopy*, **1998**, 71, 311-9	3.1	18
12	Tuning fork shear-force feedback. *Ultramicroscopy*, **1998**, 71, 149-57	3.1	46
11	Nanotribological Properties of Octadecyltrichlorosilane Self-Assembled Ultrathin Films Studied by Atomic Force Microscopy: Contact and Tapping Modes. *Langmuir*, **1997**, 13, 2333-2339	4	49
10	Single Molecule Rotational and Translational Diffusion Observed by Near-Field Scanning Optical Microscopy. *Journal of Physical Chemistry A*, **1997**, 101, 7318-7323	2.8	92
9	Near-field fluorescence imaging of genetic material: toward the molecular limit. *Journal of Structural Biology*, **1997**, 119, 222-31	3.4	37
8	Gold-coated parabolic tapers for scanning near-field optical microscopy: fabrication and optimisation. *Ultramicroscopy*, **1995**, 61, 155-163	3.1	29
7	Design and implementation of a combined scanning tunneling and near-field optical microscope. *Ultramicroscopy*, **1995**, 61, 253-258	3.1	4
6	Simultaneous scanning tunneling microscope and collection mode scanning near-field optical microscope using gold coated optical fiber probes. *Applied Physics Letters*, **1994**, 65, 1498-1500	3.4	34
5	On the way to a multi-task near field optical microscope: Simultaneous STM/SNOM and PSTM imaging. *Microscopy Microanalysis Microstructures*, **1994**, 5, 399-407		5
4	Quantum pillar structures on n+ gallium arsenide fabricated using natural lithography. *Applied Physics Letters*, **1993**, 62, 264-266	3.4	24
3	Ion implantation effects in polycrystalline WO3 thin films. *Journal of Applied Physics*, **1991**, 70, 3509-3511	2.5	21
2	Phase separation of tunable biomolecular condensates predicted by an interacting particle model		3
1	Shear flow-driven actin re-organization induces ICAM-1 nanoclustering on endothelial cells that impact T-cell migration		1