Sonia Antoranz Contera

List of Publications by Year
in descending order

51 papers	1,356 citations	516710 16 h-index	345221 36 g-index
54 all docs	54 docs citations	54 times ranked	2184 citing authors

#	Article	IF	Citations
1	Mapping cellular nanoscale viscoelasticity and relaxation times relevant to growth of living Arabidopsis thaliana plants using multifrequency AFM. Acta Biomaterialia, 2021, 121, 371-382.	8.3	5
2	Communication is central to the mission of science. Nature Reviews Materials, 2021, 6, 377-378.	48.7	2
3	Polymeric microellipsoids with programmed magnetic anisotropy for controlled rotation using low (â‰ˆ10 mT) magnetic fields. Applied Materials Today, 2020, 18, 100511.	4.3	6
4	Reconfigurable Tâ€junction DNA Origami. Angewandte Chemie, 2020, 132, 16076-16080.	2.0	0
5	Reconfigurable Tâ€junction DNA Origami. Angewandte Chemie - International Edition, 2020, 59, 15942-15946.	13.8	1
6	Biotechnology, nanotechnology and medicine. Emerging Topics in Life Sciences, 2020, 4, 551-554.	2.6	39
7	Electrophysiological-mechanical coupling in the neuronal membrane and its role in ultrasound neuromodulation and general anaesthesia. Acta Biomaterialia, 2019, 97, 116-140.	8.3	50
8	Atomic force microscopy-indentation demonstrates that alginate beads are mechanically stable under cell culture conditions. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 93, 61-69.	3.1	18
9	A simple mathematical model of allometric exponential growth describes the early three-dimensional growth dynamics of secondary xylem in Arabidopsis roots. Royal Society Open Science, 2019, 6, 190126.	2.4	8
10	AFM nanoindentation reveals decrease of elastic modulus of lipid bilayers near freezing point of water. Scientific Reports, 2019, 9, 19473.	3.3	6
11	Multifrequency AFM reveals lipid membrane mechanical properties and the effect of cholesterol in modulating viscoelasticity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2658-2663.	7.1	82
12	How to probe the spin contribution to momentum relaxation in topological insulators. Nature Communications, 2018, 9, 56.	12.8	5
13	Amphiphilic DNA tiles for controlled insertion and 2D assembly on fluid lipid membranes: the effect on mechanical properties. Nanoscale, 2017, 9, 3051-3058.	5.6	19
14	Magneto-electrical orientation of lipid-coated graphitic micro-particles in solution. RSC Advances, 2016, 6, 46643-46653.	3.6	9
15	Designer cantilevers for even more accurate quantitative measurements of biological systems with multifrequency AFM. Nanotechnology, 2016, 27, 132501.	2.6	0
16	Developing a Single-Molecule Fluorescence Tool to Quantify DNA Damage. Biophysical Journal, 2016, 110, 164a.	0.5	0
17	Sub-nanoscale free volume and local elastic modulus of chitosanâ€“carbon nanotube biomimetic nanocomposite scaffold-materials. Journal of Materials Chemistry B, 2015, 3, 3169-3176.	5.8	8
18	Effect of intra-membrane C₆₀ fullerenes on the modulus of elasticity and the mechanical resistance of gel and fluid lipid bilayers. Nanoscale, 2015, 7, 17102-17108.	5.6	21

#	Article	IF	Citations
19	Three strategies to stabilise nearly monodispersed silver nanoparticles in aqueous solution. Nanoscale Research Letters, 2012, 7, 151.	5.7	56
20	Temperature-dependent phase transitions in zeptoliter volumes of a complex biological membrane. Nanotechnology, 2011, 22, 055709.	2.6	13
21	Bilayer-Mediated Clustering and Functional Interaction of MscL Channels. Biophysical Journal, 2011, 100, 1252-1260.	0.5	87
22	Mapping nanomechanical properties of live cells using multi-harmonic atomic force microscopy. Nature Nanotechnology, 2011, 6, 809-814.	31.5	287
23	Direct mapping of the solidâ€“liquid adhesion energy with subnanometre resolution. Nature Nanotechnology, 2010, 5, 401-405.	31.5	163
24	Clustering and Functional Interaction of MscL Channels. Biophysical Journal, 2010, 98, 324a.	0.5	0
25	Controlled ionic condensation at the surface of a native extremophilemembrane. Nanoscale, 2010, 2, 222-229.	5.6	18
26	Dynamics of bacteriorhodopsin 2D crystal observed by high-speed atomic force microscopy. Journal of Structural Biology, 2009, 167, 153-158.	2.8	93
27	Nanotubes As Drug Delivery Systems For Prokaryotic And Eukaryotic Cells. Biophysical Journal, 2009, 96, 51a.	0.5	1
28	DNA Conformation and Biomolecular Motors: New Nanomedicine Research Targets. Biophysical Journal, 2009, 96, 345a.	0.5	0
29	Lateral coupling and cooperative dynamics in the function of the native membrane protein bacteriorhodopsin. Soft Matter, 2009, 5, 4899.	2.7	8
30	Doping of carbon nanotubes with nitrogen improves protein coverage whilst retaining correct conformation. Nanotechnology, 2008, 19, 384001.	2.6	16
31	Effect of Acid Treatment on the Structure and Electrical Properties of Nitrogen-Doped Multiwalled Carbon Nanotubes. Journal of Physical Chemistry C, 2008, 112, 1908-1912.	3.1	13
32	Lipid-Modulated Assembly of Magnetized Iron-Filled Carbon Nanotubes in Millimeter-Scale Structures. Japanese Journal of Applied Physics, 2007, 46, 2799-2805.	1.5	3
33	Î²-Sheet Structured Î²-Amyloid(1-40) Perturbs Phosphatidylcholine Model Membranes. Journal of Molecular Biology, 2007, 368, 982-997.	4.2	75
34	Electrostatic and Steric Interactions Determine Bacteriorhodopsin Single-Molecule Biomechanics. Biophysical Journal, 2007, 93, 2024-2037.	0.5	8
35	Differential Stiffness and Lipid Mobility in the Leaflets of Purple Membranes. Biophysical Journal, 2006, 90, 2075-2085.	0.5	56
36	2P532 High-resolution dynamic imaging of membrane proteins by high-speed AFM(52. Bio-imaging,Poster) Tj ETQq0 0 0 rgBT /Overlock	0.1	0

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37	Electrical conductance and breakdown in individual CNx multiwalled nanotubes. Applied Physics Letters, 2006, 89, 143110.	3.3	33
38	Membranes as Self-Assembling Coating of Solid State Device Components: Integration of Submicron Electrical Circuitry with Biological Systems. , 2006, , .		0
39	Biosensing with CNx multi-wall carbon nanotubes. , 2006, , .		0
40	Unfolding and Extraction of a Transmembrane Î±-Helical Peptide: Dynamic Force Spectroscopy and Molecular Dynamics Simulations. Biophysical Journal, 2005, 89, 3129-3140.	0.5	27
41	Bionanotechnology with Membrane Proteins: Mechanics and Electronics. , 2005, , .		0
42	Role of the Trans-activation Response Element in Dimerization of HIV-1 RNA. Journal of Biological Chemistry, 2004, 279, 22243-22249.	3.4	76
43	Ambient STM and in situ AFM study of nitrite reductase proteins adsorbed on gold and graphite: influence of the substrate on protein interactions. Ultramicroscopy, 2003, 97, 65-72.	1.9	8
44	Scanning Tunnelling Microscopy Images of the Copper-Containing Amine Oxidase from Arthrobacter Globiformis in the Holo and Apo Forms Adsorbed on Gold under Ambient Conditions. Japanese Journal of Applied Physics, 2002, 41, 3916-3921.	1.5	3
45	Imaging the proteins pseudoazurin and apo-pseudoazurin on gold by STM in air: effect of the bias voltage. Ultramicroscopy, 2002, 91, 231-243.	1.9	9
46	Atomic surface characterisation and modification of the layered compounds Bi2Se3, Bi1.9Sb0.1Se3 and Bi1.6Sb0.4Se3. Ultramicroscopy, 2001, 86, 55-61.	1.9	0
47	Formation of nano-pyramids of layered materials with AFM. Ultramicroscopy, 2000, 82, 165-170.	1.9	2
48	Nanotribology of Clean and Oxide-Covered Silicon Surfaces Using Atomic Force Microscopy. Japanese Journal of Applied Physics, 2000, 39, 272-274.	1.5	12
49	Mesoscopic scanning tunneling and atomic force microscopy study of the misfit-layer compounds (LaSe)xNbSe2 and (PbSe)xNbSe2. Surface Science, 1999, 441, 384-390.	1.9	0
50	STM study of the reactivity of niobium diselenide in air and N2. Applied Surface Science, 1998, 130-132, 623-628.	6.1	6
51	Scanning Tunneling Microscopy Study of the Misfit Layer Compounds (LaSe)xNbSe2and (PbSe)xNbSe2. Japanese Journal of Applied Physics, 1998, 37, 6157-6160.	1.5	3