Etienne Dague

List of Publications by Year
in descending order

96 papers	3,837 citations	87843 38 h-index	133188 59 g-index
99 all docs	99 docs citations	99 times ranked	4933 citing authors

#	Article	IF	Citations
1	Cell Wall Remodeling Enzymes Modulate Fungal Cell Wall Elasticity and Osmotic Stress Resistance. MBio, 2015, 6, e00986.	1.8	169
2	Imaging living cells surface and quantifying its properties at high resolution using AFM in QIâ„¢ mode. Micron, 2013, 48, 26-33.	1.1	166
3	High-Resolution Cell Surface Dynamics of Germinating Aspergillus fumigatus Conidia. Biophysical Journal, 2008, 94, 656-660.	0.2	163
4	Direct Measurement of Hydrophobic Forces on Cell Surfaces Using AFM. Langmuir, 2007, 23, 11977-11979.	1.6	156
5	Chemical Force Microscopy of Single Live Cells. Nano Letters, 2007, 7, 3026-3030.	4.5	150
6	Cell wall as a target for bacteria inactivation by pulsed electric fields. Scientific Reports, 2016, 6, 19778.	1.6	146
7	Surface Structure and Nanomechanical Properties of Shewanella putrefaciens Bacteria at Two pH values (4 and 10) Determined by Atomic Force Microscopy. Journal of Bacteriology, 2005, 187, 3864-3868.	1.0	116
8	Nanostructure and nanomechanics of live <i>Phaeodactylum tricornutum</i> morphotypes. Environmental Microbiology, 2008, 10, 1344-1356.	1.8	111
9	Deletion of the Î±-(1,3)-Glucan Synthase Genes Induces a Restructuring of the Conidial Cell Wall Responsible for the Avirulence of Aspergillus fumigatus. PLoS Pathogens, 2013, 9, e1003716.	2.1	110
10	Stress disrupts intestinal mucus barrier in rats via mucin <i>O</i>-glycosylation shift: prevention by a probiotic treatment. American Journal of Physiology - Renal Physiology, 2014, 307, G420-G429.	1.6	109
11	Rapid and Serial Quantification of Adhesion Forces of Yeast and Mammalian Cells. PLoS ONE, 2012, 7, e52712.	1.1	106
12	Organization of the mycobacterial cell wall: a nanoscale view. Pflugers Archiv European Journal of Physiology, 2008, 456, 117-125.	1.3	105
13	Nanomechanical Properties of Dead or Alive Single-Patterned Bacteria. Langmuir, 2009, 25, 5731-5736.	1.6	98
14	Nanoscale Effects of Caspofungin against Two Yeast Species, Saccharomyces cerevisiae and Candida albicans. Antimicrobial Agents and Chemotherapy, 2013, 57, 3498-3506.	1.4	71
15	Atomic Force Microscopy and pharmacology: From microbiology to cancerology. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 1028-1050.	1.1	70
16	An atomic force microscopy analysis of yeast mutants defective in cell wall architecture. Yeast, 2010, 27, 673-684.	0.8	69
17	High speed indentation measures by FV, QI and QNM introduce a new understanding of bionanomechanical experiments. Micron, 2016, 85, 8-14.	1.1	69
18	Nanoscale analysis of the effects of antibiotics and CX1 on a Pseudomonas aeruginosa multidrug-resistant strain. Scientific Reports, 2012, 2, 575.	1.6	66

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19	Nano-Encapsulation of Arsenic Trioxide Enhances Efficacy against Murine Lymphoma Model while Minimizing Its Impact on Ovarian Reserve In Vitro and In Vivo. PLoS ONE, 2013, 8, e58491.	1.1	63
20	Assembly of live micro-organisms on microstructured PDMS stamps by convective/capillary deposition for AFM bio-experiments. Nanotechnology, 2011, 22, 395102.	1.3	59
21	Bacteria transfer by deformation through microfiltration membrane. Journal of Membrane Science, 2017, 523, 446-455.	4.1	56
22	Generation of living cell arrays for atomic force microscopy studies. Nature Protocols, 2015, 10, 199-204.	5.5	55
23	Elasticity, Adhesion, and Tether Extrusion on Breast Cancer Cells Provide a Signature of Their Invasive Potential. ACS Applied Materials & Interfaces, 2016, 8, 27426-27431.	4.0	55
24	Methods of Micropatterning and Manipulation of Cells for Biomedical Applications. Micromachines, 2017, 8, 347.	1.4	55
25	Targeted Changes of the Cell Wall Proteome Influence Candida albicans Ability to Form Single- and Multi-strain Biofilms. PLoS Pathogens, 2014, 10, e1004542.	2.1	54
26	Measuring Kinetic Dissociation/Association Constants Between Lactococcus lactis Bacteria and Mucins Using Living Cell Probes. Biophysical Journal, 2011, 101, 2843-2853.	0.2	52
27	Unravelling of a mechanism of resistance to colistin in <i>Klebsiella pneumoniae</i> using atomic force microscopy. Journal of Antimicrobial Chemotherapy, 2015, 70, 2261-2270.	1.3	51
28	Nanoscale effects of antibiotics on P. aeruginosa. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 12-16.	1.7	50
29	Probing Surface Structures of Shewanella spp. by Microelectrophoresis. Biophysical Journal, 2006, 90, 2612-2621.	0.2	48
30	A combined chemical and enzymatic method to determine quantitatively the polysaccharide components in the cell wall of yeasts. FEMS Yeast Research, 2014, 14, 933-947.	1.1	47
31	The stress response protein Hsp12p increases the flexibility of the yeast Saccharomyces cerevisiae cell wall. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2007, 1774, 131-137.	1.1	45
32	Unraveling the Role of Surface Mucus-Binding Protein and Pili in Muco-Adhesion of Lactococcus lactis. PLoS ONE, 2013, 8, e79850.	1.1	45
33	Multiparametric imaging of adhesive nanodomains at the surface of Candida albicans by atomic force microscopy. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 57-65.	1.7	45
34	Evidence for a Role for the Plasma Membrane in the Nanomechanical Properties of the Cell Wall as Revealed by an Atomic Force Microscopy Study of the Response of Saccharomyces cerevisiae to Ethanol Stress. Applied and Environmental Microbiology, 2016, 82, 4789-4801.	1.4	45
35	Uncovering by Atomic Force Microscopy of an original circular structure at the yeast cell surface in response to heat shock. BMC Biology, 2014, 12, 6.	1.7	43
36	Multiscale dynamics of the cell envelope of Shewanella putrefaciens as a response to pH change. Colloids and Surfaces B: Biointerfaces, 2006, 52, 108-116.	2.5	41

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37	Combined Use of Atomic Force Microscopy, X-ray Photoelectron Spectroscopy, and Secondary Ion Mass Spectrometry for Cell Surface Analysis. Langmuir, 2008, 24, 2955-2959.	1.6	40
38	Use of atomic force microscopy (AFM) to explore cell wall properties and response to stress in the yeast Saccharomyces cerevisiae. Current Genetics, 2013, 59, 187-196.	0.8	40
39	Destabilization induced by electropermeabilization analyzed by atomic force microscopy. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 2223-2229.	1.4	40
40	Probing In Vitro Interactions between <i>Lactococcus lactis</i> and Mucins Using AFM. Langmuir, 2010, 26, 11010-11017.	1.6	38
41	Nanopatterning molecularly imprinted polymers by soft lithography: a hierarchical approach. Lab on A Chip, 2010, 10, 1316.	3.1	35
42	Live-Cell Dynamic Sensing of Cd2+ with a FRET-Based Indicator. PLoS ONE, 2013, 8, e65853.	1.1	35
43	The Role of Glycans in Bacterial Adhesion to Mucosal Surfaces: How Can Single-Molecule Techniques Advance Our Understanding?. Microorganisms, 2018, 6, 39.	1.6	34
44	The Terpolymer Produced by Azotobacter Chroococcum 7B: Effect of Surface Properties on Cell Attachment. PLoS ONE, 2013, 8, e57200.	1.1	32
45	Cell biology of microbes and pharmacology of antimicrobial drugs explored by Atomic Force Microscopy. Seminars in Cell and Developmental Biology, 2018, 73, 165-176.	2.3	31
46	Ephrin-B1 Is a Novel Specific Component of the Lateral Membrane of the Cardiomyocyte and Is Essential for the Stability of Cardiac Tissue Architecture Cohesion. Circulation Research, 2012, 110, 688-700.	2.0	30
47	Probing single molecule interactions by AFM using bio-functionalized dendritips. Sensors and Actuators B: Chemical, 2012, 168, 436-441.	4.0	30
48	Macromolecular crowding limits growth under pressure. Nature Physics, 2022, 18, 411-416.	6.5	29
49	Atomic force and electron microscopic-based study of sarcolemmal surface of living cardiomyocytes unveils unexpected mitochondrial shift in heart failure. Journal of Molecular and Cellular Cardiology, 2014, 74, 162-172.	0.9	27
50	Towards a nanoscale view of fungal surfaces. Yeast, 2007, 24, 229-237.	0.8	26
51	In-Situ Determination of the Mechanical Properties of Gliding or Non-Motile Bacteria by Atomic Force Microscopy under Physiological Conditions without Immobilization. PLoS ONE, 2013, 8, e61663.	1.1	26
52	Effects of the strain background and autolysis process on the composition and biophysical properties of the cell wall from two different industrial yeasts. FEMS Yeast Research, 2015, 15, .	1.1	25
53	Nanoscale Evidence Unravels Microalgae Flocculation Mechanism Induced by Chitosan. ACS Applied Bio Materials, 2020, 3, 8446-8459.	2.3	25
54	Changes in nanomechanical properties and adhesion dynamics of algal cells during their growth. Bioelectrochemistry, 2019, 127, 154-162.	2.4	23

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55	Nanoscale imaging of microbial pathogens using atomic force microscopy. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2009, 1, 168-180.	3.3	19
56	AFM sensing cortical actin cytoskeleton destabilization during plasma membrane electropermeabilization. Cytoskeleton, 2014, 71, 587-594.	1.0	19
57	Importance of endogenous extracellular matrix in biomechanical properties of human skin model. Biofabrication, 2017, 9, 025017.	3.7	17
58	Integration of Biochemical, Biophysical and Transcriptomics Data for Investigating the Structural and Nanomechanical Properties of the Yeast Cell Wall. Frontiers in Microbiology, 2017, 8, 1806.	1.5	17
59	Adhesion of Campylobacter jejuni and Mycobacterium avium onto polyethylene terephtalate (PET) used for bottled waters. Water Research, 2008, 42, 4751-4760.	5.3	16
60	Mapping HAâ€tagged protein at the surface of living cells by atomic force microscopy. Journal of Molecular Recognition, 2015, 28, 1-9.	1.1	16
61	Differential homotypic and heterotypic interactions of antigen 43 (Ag43) variants in autotransporter-mediated bacterial autoaggregation. Scientific Reports, 2019, 9, 11100.	1.6	16
62	Directed Assembly of Living <i>Pseudomonas aeruginosa</i> Bacteria on PEI Patterns Generated by Nanoxerography for Statistical AFM Bioexperiments. ACS Applied Materials & Interfaces, 2014, 6, 21230-21236.	4.0	15
63	Probing the interactions between air bubbles and (bio)interfaces at the nanoscale using FluidFM technology. Journal of Colloid and Interface Science, 2021, 604, 785-797.	5.0	14
64	Biophysical properties of cardiomyocyte surface explored by multiparametric AFM. Journal of Structural Biology, 2017, 198, 28-37.	1.3	13
65	Development of Polythiourethane/ZnO-Based Anti-Fouling Materials and Evaluation of the Adhesion of Staphylococcus aureus and Candida glabrata Using Single-Cell Force Spectroscopy. Nanomaterials, 2021, 11, 271.	1.9	12
66	Pili and other surface proteins influence the structure and the nanomechanical properties of Lactococcus lactis biofilms. Scientific Reports, 2021, 11, 4846.	1.6	11
67	Combining Convective/Capillary Deposition and AFM Oxidation Lithography for Close-Packed Directed Assembly of Colloids. Langmuir, 2008, 24, 13254-13257.	1.6	10
68	Beyond the paradigm of nanomechanical measurements on cells using AFM: an automated methodology to rapidly analyse thousands of cells. Nanoscale Horizons, 2020, 5, 131-138.	4.1	10
69	From the first touch to biofilm establishment by the human pathogen Candida glabrata: a genome-wide to nanoscale view. Communications Biology, 2021, 4, 886.	2.0	9
70	The dual role of amyloid-Î²-sheet sequences in the cell surface properties of FLO11-encoded flocculins in Saccharomyces cerevisiae. ELife, 2021, 10, .	2.8	8
71	Real-time investigation of the muco-adhesive properties of<i>Lactococcus lactis</i>using a quartz crystal microbalance with dissipation monitoring. Biofouling, 2012, 28, 479-490.	0.8	7
72	Structural evidence for a new elaborate 3D-organization of the cardiomyocyte lateral membrane in adult mammalian cardiac tissues. Cardiovascular Research, 2019, 115, 1078-1091.	1.8	7

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73	Analysis of Homotypic Interactions of <i>Lactococcus lactis</i> Pili Using Single-Cell Force Spectroscopy. ACS Applied Materials & Interfaces, 2020, 12, 21411-21423.	4.0	7
74	Porous silicon membrane, with an integrated aqueous supply, for two chamber AFM. Microelectronic Engineering, 2009, 86, 1393-1395.	1.1	6
75	Electrical discharges in water induce sporesâ€™ DNA damage. PLoS ONE, 2018, 13, e0201448.	1.1	6
76	A conserved fungal hub protein involved in adhesion and drug resistance in the human pathogen Candida albicans. Cell Surface, 2018, 4, 10-19.	1.5	6
77	AFM dendritips functionalized with molecular probes specific to cell wall polysaccharides as a tool to investigate cell surface structure and organization. Cell Surface, 2019, 5, 100027.	1.5	6
78	Metallization Process for Polydimethylsiloxane (PDMS) Rubber. Materials Research Society Symposia Proceedings, 2007, 1009, 1.	0.1	5
79	Atomic force microscopy-single-molecule force spectroscopy unveils GPCR cell surface architecture. Communications Biology, 2022, 5, 221.	2.0	5
80	Nanomicrobiology. Nanoscale Research Letters, 2007, 2, 365-372.	3.1	4
81	Nanoscale structural mapping as a measure of maturation in the murine frontal cortex. Brain Structure and Function, 2018, 223, 255-265.	1.2	3
82	Elucidating bacterial adhesion to mucosal surface by an original AFM approach. BMC Microbiology, 2021, 21, 244.	1.3	3
83	Imaging Living Yeast Cells and Quantifying Their Biophysical Properties by Atomic Force Microscopy. Fungal Biology, 2015, , 125-141.	0.3	3
84	Enhancing the Strength of an Optical Trap by Truncation. PLoS ONE, 2013, 8, e61310.	1.1	3
85	Imaging Chemical Groups and Molecular Recognition Sites on Live Cells Using AFM. Nanoscience and Technology, 2009, , 33-48.	1.5	2
86	Probing the modifications of polystyrene surface properties after incubation with theShewanella putrefaciens bacteria at two pH values (4, 10) by atomic force microscopy. Surface and Interface Analysis, 2007, 39, 648-652.	0.8	1
87	Nanobiomechanical behavior of Fe₃O₄@SiO₂ and Fe₃O₄@SiO₂â€“NH₂ nanoparticles over HeLa cells interfaces. Nanotechnology, 2021, 32, 385702.	1.3	1
88	Development and Use of a Monoclonal Antibody Specific for the Candida albicans Cell-Surface Protein Hwp1. Frontiers in Cellular and Infection Microbiology, 0, 12, .	1.8	1
89	R148: Le microscope Ã force atomique : un outil en biologie. Bulletin Du Cancer, 2010, 97, S74-S75.	0.6	0
90	Nanomechanics of Yeast Surfaces Revealed by AFM. Nanoscience and Technology, 2012, , 171-193.	1.5	0

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91	Atomic Force Microscopy to Explore Electroporation Effects on Cells. , 2017, , 1325-1337.		0
92	Automation of Bio-Atomic Force Microscope Measurements on Hundreds of C. albicans Cells. Journal of Visualized Experiments, 2021, , .	0.2	0
93	Towards a Nanoscale View of Microbial Surfaces Using the Atomic Force Microscope. , 2010, , 583-598.		0
94	Imaging Chemical Groups and Molecular Recognition Sites on Live Cells Using AFM. , 2010, , 463-478.		0
95	Atomic Force Microscopy to Explore Electroporation Effects on Cells. , 2016, , 1-13.		0
96	Towards a Nanoscale View of Microbial Surfaces Using the Atomic Force Microscope. , 2008, , 111-126.		0