Sofiane EL-Kirat-Chatel

List of Publications by Year
in descending order

48 papers	1,952 citations	236612 25 h-index	253896 43 g-index
48 all docs	48 docs citations	48 times ranked	2210 citing authors

#	ARTICLE	IF	CITATIONS
1	Quantifying the forces guiding microbial cell adhesion using single-cell force spectroscopy. Nature Protocols, 2014, 9, 1049-1055.	5.5	171
2	Single-Cell Force Spectroscopy of Probiotic Bacteria. Biophysical Journal, 2013, 104, 1886-1892.	0.2	142
3	Nanoscale Adhesion Forces of <i>Pseudomonas aeruginosa</i> Type IV Pili. ACS Nano, 2014, 8, 10723-10733.	7.3	141
4	The binding force of the staphylococcal adhesin <scp>SdrG</scp> is remarkably strong. Molecular Microbiology, 2014, 93, 356-368.	1.2	106
5	Staphylococcus aureus Fibronectin-Binding Protein A Mediates Cell-Cell Adhesion through Low-Affinity Homophilic Bonds. MBio, 2015, 6, e00413-15.	1.8	103
6	Single-Molecule Imaging and Functional Analysis of Als Adhesins and Mannans during Candida albicans Morphogenesis. ACS Nano, 2012, 6, 10950-10964.	7.3	84
7	Structural Features of the Pseudomonas fluorescens Biofilm Adhesin LapA Required for LapG-Dependent Cleavage, Biofilm Formation, and Cell Surface Localization. Journal of Bacteriology, 2014, 196, 2775-2788.	1.0	83
8	Single-cell force spectroscopy of the medically important Staphylococcus epidermidisâ€“Candida albicans interaction. Nanoscale, 2013, 5, 10894.	2.8	82
9	Single-cell force spectroscopy of pili-mediated adhesion. Nanoscale, 2014, 6, 1134-1143.	2.8	78
10	Single-Cell and Single-Molecule Analysis Deciphers the Localization, Adhesion, and Mechanics of the Biofilm Adhesin LapA. ACS Chemical Biology, 2014, 9, 485-494.	1.6	60
11	Development of an In Vitro Model for the Multi-Parametric Quantification of the Cellular Interactions between Candida Yeasts and Phagocytes. PLoS ONE, 2012, 7, e32621.	1.1	59
12	Nanoscale Imaging of the <i>Candida</i>â€“Macrophage Interaction Using Correlated Fluorescence-Atomic Force Microscopy. ACS Nano, 2012, 6, 10792-10799.	7.3	53
13	Nanoscale analysis of caspofungin-induced cell surface remodelling in Candida albicans. Nanoscale, 2013, 5, 1105-1115.	2.8	49
14	Force Nanoscopy of Hydrophobic Interactions in the Fungal Pathogen <i>Candida glabrata</i>. ACS Nano, 2015, 9, 1648-1655.	7.3	48
15	Single-cell force spectroscopy of Als-mediated fungal adhesion. Analytical Methods, 2013, 5, 3657.	1.3	41
16	Atomic force microscopy â€“ looking at mechanosensors on the cell surface. Journal of Cell Science, 2012, 125, 4189-95.	1.2	39
17	Identification of a Supramolecular Functional Architecture of Streptococcus mutans Adhesin P1 on the Bacterial Cell Surface. Journal of Biological Chemistry, 2015, 290, 9002-9019.	1.6	37
18	Forces in yeast flocculation. Nanoscale, 2015, 7, 1760-1767.	2.8	37

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19	Atomic Force Microscopy: A New Look at Pathogens. PLoS Pathogens, 2013, 9, e1003516.	2.1	36
20	Force Nanoscopy as a Versatile Platform for Quantifying the Activity of Antiadhesion Compounds Targeting Bacterial Pathogens. Nano Letters, 2016, 16, 1299-1307.	4.5	35
21	Adhesive interactions between milk fat globule membrane and Lactobacillus rhamnosus GG inhibit bacterial attachment to Caco-2 TC7 intestinal cell. Colloids and Surfaces B: Biointerfaces, 2018, 167, 44-53.	2.5	34
22	Nanoscale biophysical properties of the cell surface galactosaminogalactan from the fungal pathogen Aspergillus fumigatus. Nanoscale, 2015, 7, 14996-15004.	2.8	33
23	Single-Molecule Analysis of <i>Pseudomonas fluorescens</i> Footprints. ACS Nano, 2014, 8, 1690-1698.	7.3	31
24	Nanoscale adhesion forces between the fungal pathogen Candida albicans and macrophages. Nanoscale Horizons, 2016, 1, 69-74.	4.1	31
25	Singleâ€molecule atomic force microscopy unravels the binding mechanism of a <scp><i>B</i></scp><i>urkholderia cenocepacia</i> trimeric autotransporter adhesin. Molecular Microbiology, 2013, 89, 649-659.	1.2	25
26	Supported lysozyme for improved antimicrobial surface protection. Journal of Colloid and Interface Science, 2021, 582, 764-772.	5.0	24
27	Force Sensitivity in Saccharomyces cerevisiae Flocculins. MSphere, 2016, 1, .	1.3	22
28	Adhesion of Lactobacillus rhamnosus GG surface biomolecules to milk proteins. Food Hydrocolloids, 2018, 82, 296-303.	5.6	22
29	Microbial adhesion and ultrastructure from the single-molecule to the single-cell levels by Atomic Force Microscopy. Cell Surface, 2019, 5, 100031.	1.5	21
30	Forces Driving the Attachment of Staphylococcus epidermidis to Fibrinogen-Coated Surfaces. Langmuir, 2013, 29, 13018-13022.	1.6	20
31	AFM combined to ATR-FTIR reveals Candida cell wall changes under caspofungin treatment. Nanoscale, 2017, 9, 13731-13738.	2.8	20
32	Single-molecule analysis of the major glycopolymers of pathogenic and non-pathogenic yeast cells. Nanoscale, 2013, 5, 4855.	2.8	19
33	Analysis of the effect of LRP-1 silencing on the invasive potential of cancer cells by nanomechanical probing and adhesion force measurements using atomic force microscopy. Nanoscale, 2016, 8, 7144-7154.	2.8	19
34	Phenotypic Heterogeneity in Attachment of Marine Bacteria toward Antifouling Copolymers Unraveled by AFM. Frontiers in Microbiology, 2017, 8, 1399.	1.5	18
35	Probing the Adhesion of the Common Freshwater Diatom <i>Nitzschia palea</i> at Nanoscale. ACS Applied Materials & Interfaces, 2019, 11, 48574-48582.	4.0	18
36	The Agrocybe aegerita mitochondrial genome contains two inverted repeats of the nad4 gene arisen by duplication on both sides of a linear plasmid integration site. Fungal Genetics and Biology, 2008, 45, 292-301.	0.9	17

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37	Binding Mechanism of the Peptidoglycan Hydrolase Acm2: Low Affinity, Broad Specificity. Biophysical Journal, 2013, 105, 620-629.	0.2	15
38	Adhesive Interactions Between Lactic Acid Bacteria and Î²-Lactoglobulin: Specificity and Impact on Bacterial Location in Whey Protein Isolate. Frontiers in Microbiology, 2019, 10, 1512.	1.5	12
39	A twoâ€step cloningâ€free PCRâ€based method for the deletion of genes in the opportunistic pathogenic yeast <i>Candida lusitaniae</i>. Yeast, 2011, 28, 321-330.	0.8	11
40	Deletion of the Uracil Permease Gene Confers Cross-Resistance to 5-Fluorouracil and Azoles in Candida lusitaniae and Highlights Antagonistic Interaction between Fluorinated Nucleotides and Fluconazole. Antimicrobial Agents and Chemotherapy, 2014, 58, 4476-4485.	1.4	11
41	The microbial adhesive arsenal deciphered by atomic force microscopy. Nanoscale, 2020, 12, 23885-23896.	2.8	11
42	The importance of force in microbial cell adhesion. Current Opinion in Colloid and Interface Science, 2020, 47, 111-117.	3.4	11
43	Understanding the role of surface interactions in the antibacterial activity of layered double hydroxide nanoparticles by atomic force microscopy. Nanoscale, 2022, 14, 10335-10348.	2.8	11
44	Probing Bacterial Adhesion at the Single-Molecule and Single-Cell Levels by AFM-Based Force Spectroscopy. Methods in Molecular Biology, 2018, 1814, 403-414.	0.4	6
45	A Fast, Efficient and Easy to Implement Method to Purify Bacterial Pili From Lacticaseibacillus rhamnosus GG Based on Multimodal Chromatography. Frontiers in Microbiology, 2020, 11, 609880.	1.5	5
46	Atomic Force Microscopy and Spectroscopy: A Versatile Toolbox to Decipher <I>Candida albicans</I> Pathogenicity. Journal of Bionanoscience, 2014, 8, 419-427.	0.4	1
47	Atomic Force Microscopy Tools to Characterize the Physicochemical and Mechanical Properties of Pathogens. NATO Science for Peace and Security Series A: Chemistry and Biology, 2015, , 1-15.	0.5	0
48	Deciphering the role of monosaccharides during phage infection of Staphylococcus aureus. Nano Research, 0, , .	5.8	0