

Boris B Akhremitchev

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5109700/publications.pdf>

Version: 2024-02-01

47
papers

1,702
citations

257450

24
h-index

276875

41
g-index

47
all docs

47
docs citations

47
times ranked

1913
citing authors

#	ARTICLE	IF	CITATIONS
1	Single-Molecule Force Spectroscopy of the Aplysia Cell Adhesion Molecule Reveals Two Homophilic Bonds. <i>Biophysical Journal</i> , 2012, 103, 649-657.	0.5	39
2	On the Detection of Single Bond Ruptures in Dynamic Force Spectroscopy by AFM. <i>Langmuir</i> , 2011, 27, 11287-11291.	3.5	13
3	Apparent Dependence of Rupture Force on Loading Rate in Single-Molecule Force Spectroscopy. <i>ChemPhysChem</i> , 2010, 11, 2096-2098.	2.1	5
4	Distributions of Parameters and Features of Multiple Bond Ruptures in Force Spectroscopy by Atomic Force Microscopy. <i>Journal of Physical Chemistry C</i> , 2010, 114, 8755-8765.	3.1	14
5	Calcium Dependence of Fibrin Nanomechanics: The $\hat{1}^3$ Calcium Mediates the Unfolding of Fibrinogen Induced by Force Applied to the $\hat{a}\hat{c}\hat{e}\hat{A}\hat{a}\hat{c}\hat{e}$ -Bond. <i>Langmuir</i> , 2010, 26, 14716-14722.	3.5	10
6	Molecular Stress Relief through a Force-Induced Irreversible Extension in Polymer Contour Length. <i>Journal of the American Chemical Society</i> , 2010, 132, 15936-15938.	13.7	126
7	Kinetic Parameters from Detection Probability in Single Molecule Force Spectroscopy. <i>Langmuir</i> , 2010, 26, 11951-11957.	3.5	6
8	Mechanical Distortion of Protein Receptor Decreases the Lifetime of a Receptor-Ligand Bond. <i>Journal of the American Chemical Society</i> , 2010, 132, 9681-9687.	13.7	9
9	Association Kinetics from Single Molecule Force Spectroscopy Measurements. <i>Biophysical Journal</i> , 2009, 96, 3412-3422.	0.5	24
10	Kinetics of the Multistep Rupture of Fibrin $\hat{a}\hat{c}\hat{e}\hat{A}\hat{a}\hat{c}\hat{e}$ ™ Polymerization Interactions Measured Using Atomic Force Microscopy. <i>Biophysical Journal</i> , 2009, 97, 2820-2828.	0.5	20
11	Assembly, Tuning and Use of an Apertureless Near Field Infrared Microscope for Protein Imaging. <i>Journal of Visualized Experiments</i> , 2009, , .	0.3	3
12	Surface Elastic Properties of Human Retinal Pigment Epithelium Melanosomes ^{<sup>$\hat{a}\hat{c}\hat{e}\hat{A}\hat{a}\hat{c}\hat{e}$</sup>. <i>Photochemistry and Photobiology</i>, 2008, 84, 671-678.}	2.5	26
13	Effects of Multiple-Bond Ruptures on Kinetic Parameters Extracted from Force Spectroscopy Measurements: Revisiting Biotin-Streptavidin Interactions. <i>Biophysical Journal</i> , 2008, 95, 3964-3976.	0.5	66
14	Complexity of $\hat{a}\hat{c}\hat{e}\hat{A}\hat{a}\hat{c}\hat{e}$ -Knob-Hole Fibrin Interaction Revealed by Atomic Force Spectroscopy. <i>Langmuir</i> , 2008, 24, 4979-4988.	3.5	42
15	Anisotropy of Pairwise Interactions between Hexadecanes in Water Measured by AFM Force Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2008, 112, 18164-18172.	3.1	5
16	Effects of Multiple-Bond Ruptures in Force Spectroscopy Measurements of Interactions between Fullerene C ₆₀ Molecules in Water. <i>Journal of Physical Chemistry C</i> , 2008, 112, 5085-5092.	3.1	20
17	Pairwise Interactions between Linear Alkanes in Water Measured by AFM Force Spectroscopy. <i>Journal of the American Chemical Society</i> , 2008, 130, 10008-10018.	13.7	27
18	Investigation of Mechanical Properties of Insulin Crystals by Atomic Force Microscopy. <i>Langmuir</i> , 2008, 24, 880-887.	3.5	35

#	ARTICLE	IF	CITATIONS
19	Correction of Systematic Errors in Single-Molecule Force Spectroscopy with Polymeric Tethers by Atomic Force Microscopy. <i>Journal of Physical Chemistry B</i> , 2007, 111, 1963-1974.	2.6	95
20	Single-Molecule Force Spectroscopy Measurements of Interactions between C60 Fullerene Molecules. <i>Journal of Physical Chemistry C</i> , 2007, 111, 12898-12905.	3.1	21
21	Rupture Force Analysis and the Associated Systematic Errors in Force Spectroscopy by AFM. <i>Langmuir</i> , 2007, 23, 6076-6083.	3.5	36
22	Packing Density and Structural Heterogeneity of Insulin Amyloid Fibrils Measured by AFM Nanoindentation. <i>Biomacromolecules</i> , 2006, 7, 1630-1636.	5.4	143
23	Single-molecule Force Spectroscopy Measurements of "Hydrophobic Bond" between Tethered Hexadecane Molecules. <i>Journal of Physical Chemistry B</i> , 2006, 110, 17578-17583.	2.6	44
24	Apertureless Scanning Near-Field IR Microscopy for Chemical Imaging of Thin Films. <i>ACS Symposium Series</i> , 2005, , 51-64.	0.5	0
25	Single-Molecule AFM Study of Polystyrene Grafted at Gold Surfaces. <i>Journal of Adhesion</i> , 2005, 81, 999-1016.	3.0	14
26	Conformational Heterogeneity of Surface-Grafted Amyloidogenic Fragments of Alpha-Synuclein Dimers Detected by Atomic Force Microscopy. <i>Journal of the American Chemical Society</i> , 2005, 127, 14739-14744.	13.7	35
27	Using the Adhesive Interaction between Atomic Force Microscopy Tips and Polymer Surfaces to Measure the Elastic Modulus of Compliant Samples. <i>Langmuir</i> , 2004, 20, 5837-5845.	3.5	177
28	Adhesion Forces in Conducting Probe Atomic Force Microscopy. <i>Langmuir</i> , 2003, 19, 1929-1934.	3.5	30
29	Imaging of optical field confinement in ridge waveguides fabricated on very-small-aperture laser. <i>Applied Physics Letters</i> , 2003, 83, 3245-3247.	3.3	67
30	Enhancement of the weak scattered signal in apertureless near-field scanning infrared microscopy. <i>Review of Scientific Instruments</i> , 2003, 74, 3670-3674.	1.3	27
31	Application of Scanning Force and Near Field Microscopies to the Characterization of Minimally Adhesive Polymer Surfaces. <i>Biofouling</i> , 2003, 19, 99-104.	2.2	8
32	<title>Apertureless near field microscopy for chemical imaging of surfaces</title>. , 2003, 5223, 169.		0
33	Developing Vibrational Infrared Near Field Spectroscopy to Characterize Polymer Structures on Surfaces: Identification and Reduction of Topographic Coupling Artifacts. <i>Bulletin of the Chemical Society of Japan</i> , 2002, 75, 1011-1018.	3.2	1
34	Monolayer-Sensitive Infrared Imaging of DNA Stripes Using Apertureless Near-Field Microscopy. <i>Langmuir</i> , 2002, 18, 5325-5328.	3.5	42
35	Study of the Polydispersity of Grafted Poly(dimethylsiloxane) Surfaces Using Single-Molecule Atomic Force Microscopy. <i>Journal of Physical Chemistry B</i> , 2001, 105, 3965-3971.	2.6	68
36	Apertureless Scanning Near-Field Infrared Microscopy of a Rough Polymeric Surface. <i>Langmuir</i> , 2001, 17, 2774-2781.	3.5	48

#	ARTICLE	IF	CITATIONS
37	Force Modulation Elasticity Mapping of Plastic-embedded, Thin-sectioned Skeletal Muscle. <i>Microscopy and Microanalysis</i> , 2001, 7, 32-38.	0.4	5
38	Force Modulation Elasticity Mapping of Plastic-embedded, Thin-sectioned Skeletal Muscle. <i>Microscopy and Microanalysis</i> , 2001, 7, 32-38.	0.4	2
39	Ultrafast Infrared Spectroscopy of Vibrational States Prepared by Photoinduced Electron Transfer in (CN) ₅ FeCNRu(NH ₃) ₅ ⁻ . <i>Journal of Physical Chemistry A</i> , 2000, 104, 4314-4320.	2.5	48
40	Ultrafast Infrared and Visible Spectroscopy of Intermolecular Electron Transfer From Dimethyl Aniline to Coumarin 337. <i>Laser Chemistry</i> , 1999, 19, 403-405.	0.5	3
41	Vibrational Mode Coupling to Reverse Electron Transfer in (CN) ₅ FeCNRu(NH ₃) ₅ ⁻ in Solution. <i>Laser Chemistry</i> , 1999, 19, 385-387.	0.5	1
42	Finite Sample Thickness Effects on Elasticity Determination Using Atomic Force Microscopy. <i>Langmuir</i> , 1999, 15, 5630-5634.	3.5	74
43	Structural Characterization and Electron Tunneling at n-Si/SiO ₂ /SAM/Liquid Interface. <i>Journal of Physical Chemistry B</i> , 1999, 103, 5220-5226.	2.6	16
44	Single Polymer Chain Elongation by Atomic Force Microscopy. <i>Langmuir</i> , 1999, 15, 2799-2805.	3.5	123
45	Atomic Force Microscopy Studies of Hydration of Fluorinated Amide/Urethane Copolymer Film Surfaces. <i>Langmuir</i> , 1998, 14, 3976-3982.	3.5	33
46	Femtosecond Infrared and Visible Spectroscopy of Photoinduced Intermolecular Electron Transfer Dynamics and Solvent-Solute Reaction Geometries: Coumarin 337 in Dimethylaniline. <i>Journal of Physical Chemistry A</i> , 1997, 101, 2735-2738.	2.5	30
47	A femtosecond absorption spectrometer tunable from 5000 to 800 cm ⁻¹ : Nonlinear optics and pump/probe geometries. <i>Review of Scientific Instruments</i> , 1996, 67, 3799-3805.	1.3	21