

CITATION REPORT

List of articles citing

Imaging modes of atomic force microscopy for application in molecular and cell biology

DOI: 10.1038/nnano.2017.45

Nature Nanotechnology, 2017, 12, 295-307.

Source: <https://exaly.com/paper-pdf/66615498/citation-report.pdf>

Version: 2024-04-23

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
619	High-Resolution Imaging of Maltoporin LamB while Quantifying the Free-Energy Landscape and Asymmetry of Sugar Binding.		
618	Atomic Force Microscopy in Characterizing Cell Mechanics for Biomedical Applications: A Review. 2017 , 16, 523-540		52
617	Solid surface vs. liquid surface: nanoarchitectonics, molecular machines, and DNA origami. 2017 , 19, 23658-23675		35
616	Atomic force microscopy-based characterization and design of biointerfaces. 2017 , 2,		95
615	Nanoscale imaging and force probing of biomolecular systems using atomic force microscopy: from single molecules to living cells. 2017 , 9, 17643-17666		25
614	High-speed XYZ-nanopositioner for scanning ion conductance microscopy. 2017 , 111, 113106		46
613	Single-cell study of the extracellular matrix effect on cell growth by imaging of gene expression. 2017 , 8, 8019-8024		7
612	Recent advances in hybrid measurement methods based on atomic force microscopy and surface sensitive measurement techniques. 2017 , 7, 47464-47499		11
611	Force Measurement for the Interaction between Cucurbit[7]uril and Mica and Self-Assembled Monolayer in the Presence of Zn Studied with Atomic Force Microscopy. 2017 , 33, 11884-11892		4
610	Combining confocal and atomic force microscopy to quantify single-virus binding to mammalian cell surfaces. 2017 , 12, 2275-2292		39
609	AFM-Nanomechanical Test: An Interdisciplinary Tool That Links the Understanding of Cartilage and Meniscus Biomechanics, Osteoarthritis Degeneration, and Tissue Engineering. 2017 , 3, 2033-2049		26
608	High-Resolution Imaging and Multiparametric Characterization of Native Membranes by Combining Confocal Microscopy and an Atomic Force Microscopy-Based Toolbox. 2017 , 11, 8292-8301		18
607	Mapping Elastic Properties of Heterogeneous Materials in Liquid with Angstrom-Scale Resolution. 2017 , 11, 8650-8659		48
606	Accurate nanoscale flexibility measurement of DNA and DNA-protein complexes by atomic force microscopy in liquid. 2017 , 9, 11327-11337		29
605	Tetrahymena Cilia Cap is Built in a Multi-step Process: A Study by Atomic Force Microscopy. 2017 , 168, 697-717		3
604	In Situ Atomic Force Microscopy Studies on Nucleation and Self-Assembly of Biogenic and Bio-Inspired Materials. 2017 , 7, 158		7
603	Scanning resonator microscopy integrating phase sensitive detection. 2017 , 56, 9716-9723		

602	(Multi)functional Atomic Force Microscopy Imaging. 2018 , 11, 329-350	17
601	Characterization of Hepatitis C Virus Core Protein Dimerization by Atomic Force Microscopy. 2018 , 90, 4596-4602	7
600	3D depth profiling of the interaction between an AFM tip and fluid polymer solutions. 2018 , 10, 5695-5707	6
599	Bacterial Regulatory RNA. 2018 ,	
598	Techniques to Analyze sRNA Protein Cofactor Self-Assembly In Vitro. 2018 , 1737, 321-340	3
597	Nanoscale membrane architecture of healthy and pathological red blood cells. 2018 , 3, 293-304	28
596	Nanoscale kinetic segregation of TCR and CD45 in engaged microvilli facilitates early T cell activation. 2018 , 9, 732	50
595	Nano Trek Beyond: Driving Nanocars/Molecular Machines at Interfaces. 2018 , 13, 1266-1278	38
594	Receptor-mediated endocytosis generates nanomechanical force reflective of ligand identity and cellular property. 2018 , 233, 5908-5919	7
593	NPCs in Mitosis and Chromosome Segregation. 2018 , 219-240	1
592	Multi-frequency Atomic Force Microscopy based on enhanced internal resonance of an inner-paddled cantilever. 2018 , 273, 206-220	23
591	Ascent of atomic force microscopy as a nanoanalytical tool for exosomes and other extracellular vesicles. 2018 , 29, 132001	53
590	High-Resolution Label-Free Detection of Biocompatible Polymeric Nanoparticles in Cells. 2018 , 35, 1700457	18
589	Nuclear Pore Complexes in Genome Organization, Function and Maintenance. 2018 ,	2
588	Layered Structure and Complex Mechanochemistry Underlie Strength and Versatility in a Bacterial Adhesive. 2018 , 9,	16
587	Nanomaterials for in vivo imaging of mechanical forces and electrical fields. 2018 , 3,	32
586	Real-time imaging reveals that lytic polysaccharide monooxygenase promotes cellulase activity by increasing cellulose accessibility. 2018 , 11, 41	49
585	The Insertion Mechanism of a Living Cell Determined by the Stress Segmentation Effect of the Cell Membrane during the Tip-Cell Interaction. 2018 , 14, e1703868	9

584	Review: Isolation and Detection of Tumor-Derived Extracellular Vesicles. 2018 , 1, 2004-2020	29
583	Thermomechanically and electromagnetically actuated piezoresistive cantilevers for fast-scanning probe microscopy investigations. 2018 , 276, 237-245	7
582	Molecular imaging of glycan chains couples cell-wall polysaccharide architecture to bacterial cell morphology. 2018 , 9, 1263	51
581	Nanoscale characterization of dynamic cellular viscoelasticity by atomic force microscopy with varying measurement parameters. 2018 , 82, 193-201	16
580	A Review of Nanoscale Characterizing Individual DNA Behaviors Using Atomic Force Microscopy. 2018 , 17, 920-933	7
579	In Situ Quantification the Complex Poisson's Ratio of Single Cells Using a Magnetic-Drive Dynamic Atomic Force Microscopy Approach. 2018 , 17, 680-683	2
578	Specific Interactions Measured by AFM on Living Cells between Peroxiredoxin-5 and TLR4: Relevance for Mechanisms of Innate Immunity. 2018 , 25, 550-559.e3	25
577	Foreword to the special issue on applications of atomic force microscopy in cell biology. 2018 , 73, 1-3	4
576	Cell biology of microbes and pharmacology of antimicrobial drugs explored by Atomic Force Microscopy. 2018 , 73, 165-176	25
575	Studying protein-DNA interactions using atomic force microscopy. 2018 , 73, 220-230	30
574	Advances in Atomic Force Microscopy for Probing Polymer Structure and Properties. 2018 , 51, 3-24	77
573	Scanning ion conductance microscopy for visualizing the three-dimensional surface topography of cells and tissues. 2018 , 73, 125-131	21
572	Introduction to Atomic Force Microscopy-Based Nanorobotics for Biomedical Applications. 2018 , 1-20	1
571	Imaging Membranes by High-Resolution Atomic Force Microscopy. 2018 , 45-89	
570	The Role of Nanomechanics in Healthcare. 2018 , 7, 1700793	12
569	Membrane Biophysics. 2018 ,	
568	AFM nanoindentation of protein shells, expanding the approach beyond viruses. 2018 , 73, 145-152	11
567	Necessity of two-dimensional visualization of validity in the nanomechanical mapping of atomic force microscopy for sulphur cross-linked rubber.. 2018 , 8, 32930-32941	13

566	Determination of the viscoelastic properties of a single cell cultured on a rigid support by force microscopy. 2018 , 10, 19799-19809	28
565	Insights into the structure and nanomechanics of a quatsome membrane by force spectroscopy measurements and molecular simulations. 2018 , 10, 23001-23011	6
564	Atomic Force Microscopy-Based Nanoscopy of Chondrogenically Differentiating Human Adipose-Derived Stem Cells: Nanostructure and Integrin α Expression. 2018 , 13, 333	1
563	Applications of atomic force microscope manipulator operating in hybrid mode. 2018 , 443, 012039	
562	Algal Viruses: The (Atomic) Shape of Things to Come. 2018 , 10,	2
561	Can a new microscopy platform help to improve clinical outcomes?. 2018 , 65, 250-251	1
560	Fast and high-resolution mapping of elastic properties of biomolecules and polymers with bimodal AFM. 2018 , 13, 2890-2907	44
559	Preparing multiparticle entangled states of nitrogen-vacancy centers via adiabatic ground-state transitions. 2018 , 98,	18
558	A Polymerizable Photoswitchable Fluorophore for Super-Resolution Imaging of Polymer Self-Assembly and Dynamics. 2018 , 7, 1432-1437	19
557	Atomic Force Microscopy in Molecular and Cell Biology. 2018 ,	6
556	Atomic- and Molecular-Resolution Mapping of Solid-Liquid Interfaces by 3D Atomic Force Microscopy. 2018 , 12, 11785-11797	71
555	Practical guide to characterize biomolecule adsorption on solid surfaces (Review). 2018 , 13, 06D303	30
554	In Situ Measuring Mechanical Properties of Normal and Disease Cells. 2018 , 161-178	0
553	Atomic Force Microscopy: A Nanoscopic Application in Molecular and Cell Biology. 2018 , 77-103	1
552	Application of atomic force microscopy in cancer research. 2018 , 16, 102	65
551	Cell wall traits that influence plant development, immunity, and bioconversion. 2019 , 97, 134-147	33
550	Direct Observation and Manipulation of Supramolecular Polymerization by High-Speed Atomic Force Microscopy. 2018 , 57, 15465-15470	27
549	Photothermal Off-Resonance Tapping for Rapid and Gentle Atomic Force Imaging of Live Cells. 2018 , 19,	14

548	Microfluidic deposition for resolving single-molecule protein architecture and heterogeneity. 2018 , 9, 3890	19
547	Recent development of PeakForce Tapping mode atomic force microscopy and its applications on nanoscience. 2018 , 7, 605-621	35
546	Direct Observation and Manipulation of Supramolecular Polymerization by High-Speed Atomic Force Microscopy. 2018 , 130, 15691-15696	9
545	High Resolution AFM and Its Applications. 2018 , 179-235	0
544	Cryopreserved Cells Regeneration Monitored by Atomic Force Microscopy and Correlated With State of Cytoskeleton and Nuclear Membrane. 2018 , 17, 485-497	4
543	Nanobeams and AFM Subject to Piezoelectric and Surface Scale Effects. 2018 , 2018, 1-24	
542	Dynamics of breaking intermolecular bonds in high-speed force spectroscopy. 2018 , 10, 17112-17116	14
541	Contact Resonance Force Microscopy for Viscoelastic Property Measurements: From Fundamentals to State-of-the-Art Applications. 2018 , 51, 6977-6996	23
540	Visualization of internal in situ cell structure by atomic force microscopy. 2018 , 150, 521-527	1
539	Mapping heterogeneity of cellular mechanics by multi-harmonic atomic force microscopy. 2018 , 13, 2200-2216	34
538	Atomic Force Microscopy for Protein Detection and Their PhysicoChemical Characterization. 2018 , 19,	27
537	Combined Ion Conductance and Atomic Force Microscope for Fast Simultaneous Topographical and Surface Charge Imaging. 2018 , 90, 11453-11460	15
536	Immunoactivity of self-assembled antibodies investigated by atomic force microscopy.. 2018 , 8, 29378-29384	8
535	clumping factor A is a force-sensitive molecular switch that activates bacterial adhesion. 2018 , 115, 5564-5569	64
534	Theory of Single-Impact Atomic Force Spectroscopy in liquids with material contrast. 2018 , 8, 7534	11
533	Changes in nano-mechanical properties of human epidermal cornified cells depending on their proximity to the skin surface. 2018 , 31, e2722	9
532	Cells Stiffen for Cytokines. 2018 , 25, 495-496	1
531	Imaging in Biologically-Relevant Environments with AFM Using Stiff qPlus Sensors. 2018 , 8, 9330	20

530	Time-frequency analysis of the tip motion in liquids using the wavelet transform in dynamic atomic force microscopy. 2018 , 29, 385702	5
529	Probing Single Virus Binding Sites on Living Mammalian Cells Using AFM. 2018 , 1814, 483-514	1
528	A position-controllable external stage for critical dimension measurements via low-noise atomic force microscopy. 2018 , 194, 48-56	2
527	Advances in AFM: Seeing Atoms in Ambient Conditions. 2018 , 16, 351-355	1
526	The Role of Glycans in Bacterial Adhesion to Mucosal Surfaces: How Can Single-Molecule Techniques Advance Our Understanding?. 2018 , 6,	23
525	Subunit Exchange in Protein Complexes. 2018 , 430, 4557-4579	14
524	Compressive Force Spectroscopy: From Living Cells to Single Proteins. 2018 , 19,	3
523	Advances in applications of time-domain Brillouin scattering for nanoscale imaging. 2018 , 5, 031101	50
522	Theoretical and experimental study on dynamic characteristics of V-shaped beams immersed in viscous fluids: From small to finite amplitude. 2018 , 82, 215-244	5
521	Direct AFM Visualization of the Nanoscale Dynamics of Biomolecular Complexes. 2018 , 51,	16
520	A Review of PZT Patches Applications in Submerged Systems. 2018 , 18,	20
519	Functional Scanning Force Microscopy for Energy Nanodevices. 2018 , 30, e1802490	22
518	Single-cell membrane drug delivery using porous pen nanodeposition. 2018 , 10, 12704-12712	3
517	Mechanism of membrane pore formation by human gasdermin-D. 2018 , 37,	114
516	Single-Molecule Force Spectroscopy of Transmembrane β Barrel Proteins. 2018 , 11, 375-395	15
515	MicroMegascope. 2018 , 29, 355501	5
514	Determination of the Elastic Moduli of a Single Cell Cultured on a Rigid Support by Force Microscopy. 2018 , 114, 2923-2932	51
513	Imaging the Microprocesses in Biofilm Matrices. 2019 , 37, 214-226	23

512	Model-Based Identification of Nanomechanical Properties in Atomic Force Microscopy: Theory and Experiments. 2019 , 27, 2045-2057	3
511	High-Resolution Imaging of Maltoporin LamB while Quantifying the Free-Energy Landscape and Asymmetry of Sugar Binding. 2019 , 19, 6442-6453	6
510	Conformational Plasticity of Human Protease-Activated Receptor 1 upon Antagonist- and Agonist-Binding. 2019 , 27, 1517-1526.e3	6
509	Probing ligand-receptor bonds in physiologically relevant conditions using AFM. 2019 , 411, 6549-6559	13
508	The idiosyncratic self-cleaning cycle of bacteria on regularly arrayed mechano-bactericidal nanostructures. 2019 , 11, 16455-16462	15
507	Atomic Force Spectroscopy on Ionic Liquids. 2019 , 9, 2207	12
506	Lateral Size of Graphene Characterized by Atomic Force Microscope. 2019 , 252, 022022	3
505	Acute Cytotoxic Effects on Morphology and Mechanical Behavior in MCF-7 Induced by TiONPs Exposure. 2019 , 20,	4
504	Subsurface Imaging of Cell Organelles by Force Microscopy. 2019 , 13, 9629-9637	27
503	High-speed atomic force microscope with a combined tip-sample scanning architecture. 2019 , 90, 063707	5
502	Imaging and Force Spectroscopy of Single Transmembrane Proteins with the Atomic Force Microscope. 2019 , 2003, 107-144	
501	Vibrational modes in MEMS resonators. 2019 , 29, 123001	8
500	DLITE Uses Cell-Cell Interface Movement to Better Infer Cell-Cell Tensions. 2019 , 117, 1714-1727	8
499	GaN nanowires as probes for high resolution atomic force and scanning tunneling microscopy. 2019 , 90, 103703	4
498	Influence of pixelization on height measurement in atomic force microscopy. 2019 , 207, 112846	2
497	Jingmen City's practical research on leading high-quality economic development with scientific and technological innovation. 2019 , 310, 052077	
496	Enhancing multiple harmonics in tapping mode atomic force microscopy by added mass with finite size. 2019 , 12, 126505	2
495	Deoxyribonucleic acid and chromatin imaging of endometriosis and endometrial carcinoma using atomic force microscopy. 2019 , 52, 510-519	1

494	Nanotopographical Surfaces for Regulating Cellular Mechanical Behaviors Investigated by Atomic Force Microscopy. 2019 , 5, 5036-5050	11
493	Building an artificial neural network with neurons. 2019 , 9, 075009	4
492	Intracellular forces from stiffness. 2019 , 18, 1037-1038	3
491	Quality Analysis of Minerals Formed by Jaw Periosteal Cells under Different Culture Conditions. 2019 , 20,	3
490	Microbial adhesion and ultrastructure from the single-molecule to the single-cell levels by Atomic Force Microscopy. 2019 , 5, 100031	7
489	Atomic force microscopy-based single-molecule force spectroscopy detects DNA base mismatches. 2019 , 11, 17206-17210	9
488	Micromechanical heterogeneity of the rat pia-arachnoid complex. 2019 , 100, 29-37	13
487	Rationally Engineered Nucleic Acid Architectures for Biosensing Applications. 2019 , 119, 11631-11717	114
486	High-Resolution Episcopic Microscopy (HREM): Looking Back on 13 Years of Successful Generation of Digital Volume Data of Organic Material for 3D Visualisation and 3D Display. 2019 , 9, 3826	4
485	Modified Repetitive Control Based Cross-Coupling Compensation Approach for the Piezoelectric Tube Scanner of Atomic Force Microscopes. 2019 , 24, 666-676	24
484	Shining a Spotlight on DNA: Single-Molecule Methods to Visualise DNA. 2019 , 24,	17
483	Development of a novel multiphysical approach for the characterization of mechanical properties of musculotendinous tissues. 2019 , 9, 7733	8
482	Fractional repetitive control of nanopositioning stages for tracking high-frequency periodic inputs with nonsynchronized sampling. 2019 , 90, 055108	4
481	Single-molecule force spectroscopy to decipher the early signalling step in membrane-bound penicillin receptors embedded into a lipid bilayer. 2019 , 11, 12275-12284	5
480	Tunable Hybrid Biopolymeric Hydrogel Scaffolds Based on Atomic Force Microscopy Characterizations for Tissue Engineering. 2019 , 18, 597-610	5
479	Quantification of Biomolecular Dynamics Inside Real and Synthetic Nuclear Pore Complexes Using Time-Resolved Atomic Force Microscopy. 2019 , 13, 7949-7956	4
478	Structure and molecular morphology of a novel moisturizing exopolysaccharide produced by <i>Phyllobacterium</i> sp. 921F. 2019 , 135, 998-1005	8
477	Pharmaceutical Nanotechnology. 2019 ,	3

- 476 Atomic Force Microscopy for Cell Membrane Investigation. **2019**, 2000, 361-372 1
- 475 Contributions to Advanced Dynamics and Continuum Mechanics. **2019**,
- 474 Supramolecular Self-Assembly and Organization of Collagen at Solid/Liquid Interface: Effect of Spheroid- and Rod-Shaped TiO₂ Nanocrystals. **2019**, 6, 1900195 5
- 473 Inner-Paddled Microcantilever for Multi-modal and Nonlinear Atomic Force Microscopy. **2019**, 27-52
- 472 Direct visualization of the Sec translocase engaging precursor proteins in lipid bilayers. **2019**, 5, eaav9404 13
- 471 Molecular Recognition and Cell Surface Biochemical Response of *Bacillus thuringiensis* on Triphenyltin. **2019**, 7, 358
- 470 Stiffness tomography of eukaryotic intracellular compartments by atomic force microscopy. **2019**, 11, 10320-10328 12
- 469 Direct observation of the cell-wall remodeling in adhering : An AFM study supported by SEM and TEM. **2019**, 5, 100018 4
- 468 Metasurface-enhanced optical lever sensitivity for atomic force microscopy. **2019**, 30, 365501 2
- 467 Differentiating between Inactive and Active States of Rhodopsin by Atomic Force Microscopy in Native Membranes. **2019**, 91, 7226-7235 19
- 466 Starvation effect on the morphology of microvilli in HeLa cells. **2019**, 514, 1238-1243 4
- 465 Functionalization of atomic force microscopy cantilevers and tips by activated vapour silanization. **2019**, 484, 1141-1148 3
- 464 Atomic Force Microscopy Applied to Biological Systems: Novel Applications and Advanced Experimental Methods. **2019**, 83-104
- 463 Structural and Mechanical Characterization of Supported Model Membranes by AFM. **2019**, 1-27
- 462 Nanoscale imaging reveals miRNA-mediated control of functional states of dendritic spines. **2019**, 116, 9616-9621 16
- 461 Analysis of the Frequency Shift versus Force Gradient of a Dynamic AFM Quartz Tuning Fork Subject to Lennard-Jones Potential Force. **2019**, 19,
- 460 Composite Nanostructures and Adhesion Analysis of Natural Plant Hydrogels Investigated by Atomic Force Microscopy. **2019**, 18, 448-455 5
- 459 Nanoscale Multiparametric Imaging of Peptide-Assembled Nanofibrillar Hydrogels by Atomic Force Microscopy. **2019**, 18, 315-328 7

458	Biomaterials to Mimic and Heal Connective Tissues. 2019 , 31, e1806695	79
457	Bacterial-nanostructure interactions: The role of cell elasticity and adhesion forces. 2019 , 546, 192-210	69
456	Quantification of Adhesion Force of Bacteria on the Surface of Biomaterials: Techniques and Assays. 2019 , 5, 2093-2110	20
455	Probing and pressing surfaces of hepatitis C virus-like particles. 2019 , 545, 259-268	13
454	Nanoscale organization of tetraspanins during HIV-1 budding by correlative dSTORM/AFM. 2019 , 11, 6036-6044	18
453	Comparison of cell mechanical measurements provided by Atomic Force Microscopy (AFM) and Micropipette Aspiration (MPA). 2019 , 95, 103-115	10
452	Power transfer in bimodal amplitude modulation atomic force microscopy in liquids: A numerical investigation. 2019 , 9, 025305	1
451	High-speed scanning ion conductance microscopy for sub-second topography imaging of live cells. 2019 , 11, 8579-8587	28
450	Toward Precision Measurement and Manipulation of Single-Molecule Reactions by a Confined Space. 2019 , 15, e1805426	10
449	The structural characteristics of mononuclear-macrophage membrane observed by atomic force microscopy. 2019 , 206, 314-321	2
448	In situ characterizations for EPS-involved microprocesses in biological wastewater treatment systems. 2019 , 49, 917-946	10
447	Tip-Enhanced Infrared Difference-Nanospectroscopy of the Proton Pump Activity of Bacteriorhodopsin in Single Purple Membrane Patches. 2019 , 19, 3104-3114	16
446	Nanoscale 3D characterisation of soft organic material using conductive scanning probe tomography. 2019 , 9, 025105	3
445	Force Spectroscopy Shows Dynamic Binding of Influenza Hemagglutinin and Neuraminidase to Sialic Acid. 2019 , 116, 1037-1048	15
444	Frontiers of magnetic force microscopy. 2019 , 125, 060901	85
443	Quantitative study on coal and shale pore structure and surface roughness based on atomic force microscopy and image processing. 2019 , 244, 78-90	51
442	Long-Range AFM Imaging with Modified Cycloid Trajectory. 2019 ,	
441	Imaging Quality Assessment of Different AFM Working Modes on Living Cancer Cells. 2019 ,	

440	Recurrent-Neural-Network-Based Predictive Control of Piezo Actuators for Trajectory Tracking. 2019 , 24, 2885-2896	11
439	Generalized Lyapunov Demodulator for Amplitude and Phase Estimation by the Internal Model Principle. 2019 , 52, 247-252	0
438	Force spectroscopy-based simultaneous topographical and mechanical characterization to study polymer-to-polymer interactions in coated alginate microspheres. 2019 , 9, 20112	7
437	pH-dependent protein shell dis- and reassembly of ferritin nanoparticles revealed by atomic force microscopy. 2019 , 9, 17755	11
436	The membrane effects of melittin on gastric and colorectal cancer. 2019 , 14, e0224028	20
435	Regional biomechanical imaging of liver cancer cells. 2019 , 10, 4481-4487	3
434	Biological Material Interfaces as Inspiration for Mechanical and Optical Material Designs. 2019 , 119, 12279-12336	7
433	Combining molecular dynamics simulations and experimental analyses in protein misfolding. 2019 , 118, 33-110	6
432	Directly observing alterations of morphology and mechanical properties of living cancer cells with atomic force microscopy. 2019 , 191, 461-468	13
431	Wavelet analysis of higher harmonics in tapping mode atomic force microscopy. 2019 , 118, 58-64	4
430	Ultra-Sensitive and Label-Free Probing of Binding Affinity Using Recognition Imaging. 2019 , 19, 612-617	11
429	Three-dimensional atomic force microscopy for ultra-high-aspect-ratio imaging. 2019 , 469, 582-592	4
428	Seeing and sensing single G protein-coupled receptors by atomic force microscopy. 2019 , 57, 25-32	12
427	In Situ Investigation of Interrelationships Between Morphology and Biomechanics of Endothelial and Glial Cells and their Nuclei. 2019 , 6, 1801638	14
426	Imaging the air-water interface: Characterising biomimetic and natural hydrophobic surfaces using in situ atomic force microscopy. 2019 , 536, 363-371	15
425	Atomic force microscopy-based mechanobiology. 2019 , 1, 41-57	274
424	Real Time and Quantitative Imaging of Lignocellulosic Films Hydrolysis by Atomic Force Microscopy Reveals Lignin Recalcitrance at Nanoscale. 2019 , 20, 515-527	5
423	Advances in atomic force microscopy for single-cell analysis. 2019 , 12, 703-718	37

422	Atomic Force Microscopy in Probing Tumor Physics for Nanomedicine. 2019 , 18, 83-113	10
421	Visualization of perforin/gasdermin/complement-formed pores in real cell membranes using atomic force microscopy. 2019 , 16, 611-620	25
420	Multimodal atomic force microscopy with optimized higher eigenmode sensitivity using on-chip piezoelectric actuation and sensing. 2019 , 30, 085503	21
419	Application of atomic force microscopy in microscopic analysis of polysaccharide. 2019 , 87, 35-46	35
418	Imaging: Gear up for mechano-immunology. 2020 , 350, 103926	2
417	Advanced technological tools to study multidrug resistance in cancer. 2020 , 48, 100658	32
416	Spatial high resolution of actin filament organization by PeakForce atomic force microscopy. 2020 , 53, e12670	5
415	Modelling and nanoscale force spectroscopy of frequency modulation atomic force microscopy. 2020 , 79, 544-554	1
414	Structural conformation and self-assembly process of p31-43 gliadin peptide in aqueous solution. Implications for celiac disease. 2020 , 287, 2134-2149	12
413	Measuring nanoscale friction at graphene step edges. 2020 , 8, 802-811	4
412	Probing the frictional properties of soft materials at the nanoscale. 2020 , 12, 2292-2308	12
411	Nonspecific interactions in biomedical applications. 2020 , 47, 70-83	6
410	Anti-degranulation response of herbal formula in RBL-2H3 cells. 2020 , 130, 102819	1
409	Using Atomic Force Microscopy To Illuminate the Biophysical Properties of Microbes. 2020 , 3, 143-155	4
408	Relationship between the Nano-Biomechanical Properties of Streptococcal Polysaccharide Capsules and Virulence Phenotype. 2020 , 14, 1070-1083	5
407	Probing Multidimensional Mechanical Phenotyping of Intracellular Structures by Viscoelastic Spectroscopy. 2020 , 12, 1913-1923	3
406	Atomic force microscopy - Scanning electrochemical microscopy (AFM-SECM) for nanoscale topographical and electrochemical characterization: Principles, applications and perspectives. 2020 , 332, 135472	24
405	Atomic Force Microscopy as a Powerful Multifunctional Tool for Probing the Behaviors of Single Proteins. 2020 , 19, 78-99	7

404	Spatial mapping of the collagen distribution in human and mouse tissues by force volume atomic force microscopy. 2020 , 10, 15664	4
403	Mechanical properties of single cells: Measurement methods and applications. 2020 , 45, 107648	14
402	Nanomechanical mapping of soft materials with the atomic force microscope: methods, theory and applications. 2020 ,	121
401	Nanoelectromechanical Position-Sensitive Detector with Picometer Resolution. 2020 , 7, 2197-2203	6
400	Nanoscale Organization and Functional Analysis of Carnivorous Plant Mucilage by Atomic Force Microscopy. 2020 , 19, 579-593	2
399	Design and use of model membranes to study biomolecular interactions using complementary surface-sensitive techniques. 2020 , 277, 102118	32
398	Multi-technique analysis of extracellular vesicles: not only size matters. 2020 , 32, 157-177	4
397	AFM Analysis Enables Differentiation between Apoptosis, Necroptosis, and Ferroptosis in Murine Cancer Cells. 2020 , 23, 101816	16
396	An insight on Drosophila myogenesis and its assessment techniques. 2020 , 47, 9849-9863	
395	Atomic Force Microscopy-Based Force Spectroscopy and Multiparametric Imaging of Biomolecular and Cellular Systems. 2021 , 121, 11701-11725	24
394	Digital Polymerase Chain Reaction Paired with High-Speed Atomic Force Microscopy for Quantitation and Length Analysis of DNA Length Polymorphisms. 2020 , 14, 15385-15393	0
393	Lipid bilayers: Phase behavior and nanomechanics. 2020 , 86, 1-55	6
392	3D-printed cellular tips for tuning fork atomic force microscopy in shear mode. 2020 , 11, 5732	2
391	Expanding exploration of dynamic microplastic surface characteristics and interactions. 2020 , 130, 115993	18
390	"Caught in the net": the extracellular matrix of the bone marrow in normal hematopoiesis and leukemia. 2020 , 89, 13-25	7
389	Nanosopic Approach to Study the Early Stages of Epithelial to Mesenchymal Transition (EMT) of Human Retinal Pigment Epithelial (RPE) Cells In Vitro. 2020 , 10,	2
388	Calibration of T-shaped atomic force microscope cantilevers using the thermal noise method. 2020 , 91, 083703	1
387	Investigation of the Influence of Liquid Motion in a Flow-based System on an Enzyme Aggregation State with an Atomic Force Microscopy Sensor: The Effect of Water Flow. 2020 , 10, 4560	7

386	A new-designed non-raster scan and precision control for increasing AFM imaging speed. 2020,	1
385	Review: Dielectrophoresis in cell characterization. 2020, 41, 1915-1930	11
384	Loss of Caveolin-1 and caveolae leads to increased cardiac cell stiffness and functional decline of the adult zebrafish heart. 2020, 10, 12816	3
383	A bird's-eye view of deep learning in bioimage analysis. 2020, 18, 2312-2325	41
382	An Improved Substrate for Superior Imaging of Individual Biomacromolecules with Atomic Force Microscopy. 2020, 196, 111321	4
381	Mechanistic Investigation of a Self-Assembling Peptide against. 2020, 36, 9800-9809	3
380	A piezoelectric sticklip drive nanopositioner with large velocity under high load. 2020, 10, 105027	2
379	Resolving the data asynchronicity in high-speed atomic force microscopy measurement via the Kalman Smoother. 2020, 10, 18393	2
378	C22 podovirus infectivity is associated with intermediate stiffness. 2020, 10, 12604	1
377	Geometry and thickness dependant anomalous mechanical behavior of fabricated SU-8 thin film micro-cantilevers. 2020, 3, 113-120	3
376	Recent advances in AFM-based biological characterization and applications at multiple levels. 2020,	10
375	Multiprobe scanning probe microscope using a probe-array head. 2020, 91, 123702	
374	An Atomic Force Acoustic Microscopy Image Fusion Method Based on Grayscale Inversion and Selection of Best-Fit Intensity. 2020, 10, 8645	1
373	The microbial adhesive arsenal deciphered by atomic force microscopy. 2020, 12, 23885-23896	2
372	Evidence of (anti)metamorphic properties of modified graphitic surfaces obtained in real time at a single-molecule level. 2020, 193, 111077	3
371	Synchronous, Crosstalk-free Correlative AFM and Confocal Microscopies/Spectroscopies. 2020, 10, 7098	6
370	Photocatalytic Nanofabrication and Intracellular Raman Imaging of Living Cells with Functionalized AFM Probes. 2020, 11,	1
369	Surface analysis tools for characterizing biological materials. 2020, 49, 3278-3296	4

368	Direct Measurement of Plant Cellulose Microfibril and Bundles in Native Cell Walls. 2020 , 11, 479	15
367	The Antimicrobial Peptide Human Beta-Defensin 2 Inhibits Biofilm Production of Without Compromising Metabolic Activity. 2020 , 11, 805	10
366	Quantitative Assessment of Tip Effects in Single-Molecule High-Speed Atomic Force Microscopy Using DNA Origami Substrates. 2020 , 59, 14336-14341	3
365	A Biological Nanomachine at Work: Watching the Cellulosome Degrade Crystalline Cellulose. 2020 , 6, 739-746	10
364	Molecular Mechanisms, Characterization Methods, and Utilities of Nanoparticle Biotransformation in Nanosafety Assessments. 2020 , 16, e1907663	28
363	Determination of Dielectric Properties of Cells using AC Electrokinetic-based Microfluidic Platform: A Review of Recent Advances. 2020 , 11,	6
362	Biophysical nanocharacterization of liver sinusoidal endothelial cells through atomic force microscopy. 2020 , 12, 625-636	3
361	Live-cell imaging in the era of too many microscopes. 2020 , 66, 34-42	17
360	AFM Imaging of Protein Aggregation in Studying the Impact of Knotted Electromagnetic Field on A Peroxidase. 2020 , 10, 9022	10
359	Quantitative Assessment of Tip Effects in Single-Molecule High-Speed Atomic Force Microscopy Using DNA Origami Substrates. 2020 , 132, 14442-14447	1
358	Active fault tolerant control for high-precision positioning of a non-contact mode uncertain atomic force microscopy. 2020 , 42, 2632-2644	1
357	Opportunities and Challenges for Biosensors and Nanoscale Analytical Tools for Pandemics: COVID-19. 2020 , 14, 7783-7807	179
356	Capturing transient antibody conformations with DNA origami epitopes. 2020 , 11, 3114	26
355	Scratching the Surface: Bacterial Cell Envelopes at the Nanoscale. 2020 , 11,	14
354	Polymer single chain imaging, molecular forces, and nanoscale processes by Atomic Force Microscopy: The ultimate proof of the macromolecular hypothesis. 2020 , 104, 101232	14
353	Improving the Image Acquisition Rate of an Atomic Force Microscope Through Spatial Subsampling and Reconstruction. 2020 , 25, 570-580	5
352	Artificial-intelligence-driven scanning probe microscopy. 2020 , 3,	37
351	In Situ High-Resolution AFM Imaging and Force Probing of Cell Culture Medium-Forming Nanogranular Surfaces for Cell Growth. 2020 , 19, 385-393	6

350	A perspective view on the nanomotion detection of living organisms and its features. 2020 , 33, e2849	6
349	Diversity of physical properties of bacterial extracellular membrane vesicles revealed through atomic force microscopy phase imaging. 2020 , 12, 7950-7959	12
348	Multimodal Characterization of Resin Embedded and Sliced Polymer Nanoparticles by Means of Tip-Enhanced Raman Spectroscopy and Force-Distance Curve Based Atomic Force Microscopy. 2020 , 16, e1907418	5
347	Together We Are Stronger: Protein Clustering at the Nanoscale. 2020 , 14, 2561-2564	0
346	Biologically interfaced nanoplasmonic sensors. 2020 , 2, 3103-3114	5
345	Synthetic Advances in the C ₆₀ Activation of Rigid Scaffold Molecules. 2020 , 52, 3295-3325	11
344	Closed-loop atomic force microscopy-infrared spectroscopic imaging for nanoscale molecular characterization. 2020 , 11, 3225	17
343	Vanishing Cantilever Calibration Error with Magic Ratio Atomic Force Microscopy. 2020 , 3, 2000090	1
342	Surface Properties and Surface Characterization of Biomaterials. 2020 , 53-75	0
341	Atomic Force Microscopy Imaging in Turbid Liquids: A Promising Tool in Nanomedicine. 2020 , 20,	2
340	Reconstruction of multi-frame semi-sparse scanning probe microscopy images using dependent Gaussian process. 2020 , 31, 045013	1
339	The Chemistry of Reticular Framework Nanoparticles: MOF, ZIF, and COF Materials. 2020 , 30, 1909062	79
338	Automated structure discovery in atomic force microscopy. 2020 , 6, eaay6913	28
337	Flexible Fitting of Biomolecular Structures to Atomic Force Microscopy Images via Biased Molecular Simulations. 2020 , 16, 1349-1358	18
336	Force Measurement of Living Professional Phagocytes of the Immune System. 2020 , 73, 104	0
335	An Optimized Scanning-Based AFM Fast Imaging Method. 2020 , 25, 535-546	1
334	Euler-Bernoulli theory accurately predicts atomic force microscope cantilever shape during non-equilibrium snap-to-contact motion. 2020 , 31, 185702	0
333	Morphology and microstructural analysis of bioactive-loaded micro/nanocarriers via microscopy techniques; CLSM/SEM/TEM/AFM. 2020 , 280, 102166	37

332	Determining the Cytotoxicity of Oxidized Lipids in Cultured Caco-2 Cells Using Bioimaging Techniques. 2020 , 25,	1
331	How Microbes Use Force To Control Adhesion. 2020 , 202,	8
330	Multiparametric characterization of heterogeneous soft materials using contact point detection-based atomic force microscopy. 2020 , 522, 146423	5
329	Control of Ligand-Binding Specificity Using Photocleavable Linkers in AFM Force Spectroscopy. 2020 , 20, 4038-4042	9
328	Nanorheology of living cells measured by AFM-based force-distance curves. 2020 , 12, 9133-9143	32
327	A High Dynamic Range AFM Probe with Collocated Piezoelectric Transducer Pairs. 2020 ,	3
326	Progress in Nanorobotics for Advancing Biomedicine. 2021 , 68, 130-147	15
325	Enhanced Odd-Harmonic Repetitive Control of Nanopositioning Stages Using Spectrum-Selection Filtering Scheme for High-Speed Raster Scanning. 2021 , 18, 1087-1096	2
324	Engineering Biomolecular Self-Assembly at Solid-Liquid Interfaces. 2021 , 33, e1905784	11
323	Cytoskeleton induced the changes of microvilli and mechanical properties in living cells by atomic force microscopy. 2021 , 236, 3725-3733	0
322	Modulatory Effect of Glycated Collagen on Oral Streptococcal Nanoadhesion. 2021 , 100, 82-89	5
321	Atomic force microscopy to elucidate how peptides disrupt membranes. 2021 , 1863, 183447	18
320	Local probe investigation of electrocatalytic activity. 2020 , 12, 71-98	6
319	Revealing the elasticity of an individual aortic fiber during ageing at nanoscale by in situ atomic force microscopy. 2021 , 13, 1124-1133	4
318	How did correlative atomic force microscopy and super-resolution microscopy evolve in the quest for unravelling enigmas in biology?. 2021 , 13, 2082-2099	7
317	An Effective Correction Method for AFM Image Distortion due to Hysteresis and Thermal Drift. 2021 , 70, 1-12	2
316	Micro- and Nano-Devices for Studying Subcellular Biology. 2021 , 17, e2005793	6
315	Grain analysis of atomic force microscopy images via persistent homology. 2021 , 220, 113176	1

314	A review of the biomechanical properties of single extracellular vesicles. 2021 , 2, 1-15	20
313	Atomic force microscopy for revealing micro/nanoscale mechanics in tumor metastasis: from single cells to microenvironmental cues. 2021 , 42, 323-339	12
312	Data acquisition and imaging using wavelet transform: a new path for high speed transient force microscopy. 2021 , 3, 383-398	2
311	Peak force tapping atomic force microscopy for advancing cell and molecular biology. 2021 , 13, 8358-8375	5
310	Single-Molecule Tethered Particle Motion Studies on the DNA Recombinase Filament Assembly and Disassembly. 2021 , 2281, 135-149	
309	Measuring interactions of DNA with nanoporous protein crystals by atomic force microscopy. 2021 , 13, 10871-10881	1
308	Practical Guide to Single-Protein AFM Nanomechanical Spectroscopy Mapping: Insights and Pitfalls As Unraveled by All-Atom MD Simulations on Immunoglobulin G. 2021 , 6, 553-564	1
307	Characterization techniques for morphological and physicochemical evaluation of nanomaterials. 2021 , 21-50	
306	The viscoelasticity of adherent cells follows a single power-law with distinct local variations within a single cell and across cell lines. 2021 , 13, 16339-16348	2
305	Understanding nanoparticle endocytosis to improve targeting strategies in nanomedicine. 2021 , 50, 5397-5434	89
304	Mechanobiology in cardiology: Micro- and nanotechnologies to probe mechanosignaling. 2021 , 2, 20200080	3
303	Single-Molecule Methods Applied to Circadian Proteins with Special Emphasis on Atomic Force Microscopy. 2021 , 147-178	
302	Cell-imprinted substrates: in search of nanotopographical fingerprints that guide stem cell differentiation. 2021 , 3, 333-338	1
301	A High-throughput Pipeline to Determine DNA and Nucleosome Conformations by AFM Imaging. 2021 , 11, e4180	
300	High-Speed Nanomechanical Mapping of the Early Stages of Collagen Growth by Bimodal Force Microscopy. 2021 , 15, 1850-1857	9
299	Atomic Force Microscopy Reveals Membrane Protein Activity at the Single Molecule Level. 2021 , 2302, 81-99	0
298	Covalent Immobilization of Proteases on Polylactic Acid for Proteins Hydrolysis and Waste Biomass Protein Content Valorization. 2021 , 11, 167	4
297	Predicting hydration layers on surfaces using deep learning. 2021 , 3, 3447-3453	1

296	Structural and mechanical characteristics of exosomes from osteosarcoma cells explored by 3D-atomic force microscopy. 2021 , 13, 6661-6677	8
295	The Observation of Interface Effects Presented on Micrometer-Scale Sphere Tips of Fiber Bragg Grating-Based Probes. 2021 , 70, 1-11	0
294	Growth Phase- and Desiccation-Dependent Morphology: An Atomic Force Microscopy Investigation. 2021 , 37, 1110-1119	2
293	Is It Possible to Detect Less Than One Bacterial Cell?. 2021 , 57-71	
292	Characterization of the nanomechanical properties of the fission yeast (<i>Schizosaccharomyces pombe</i>) cell surface by atomic force microscopy.	0
291	Quantitative mapping of magnetic properties at the nanoscale with bimodal AFM. 2021 , 13, 2026-2033	4
290	Multiparametric atomic force microscopy imaging of single native exosomes. 2021 , 53, 385-388	7
289	Surface and biological characterization of biomaterials. 2021 , 33-66	1
288	Atomic force microscopy in food preservation research: New insights to overcome spoilage issues. 2021 , 140, 110043	1
287	Bionanotechnology: Concepts and Applications. 2021 , 187-251	
286	Mutation N501Y in RBD of Spike Protein Strengthens the Interaction between COVID-19 and its Receptor ACE2.	43
285	Mode Coupling in Dynamic Atomic Force Microscopy. 2021 , 15,	2
284	Carbon Ion Irradiation Enhances the Anti-tumor Efficiency in Tongue Squamous Cell Carcinoma via Modulating the FAK Signaling. 2021 , 9, 631118	
283	AFM Study of the Influence of Glycerol Flow on Horseradish Peroxidase near the in/out Linear Sections of a Coil. 2021 , 11, 1723	1
282	3D structure-property correlations of electronic and energy materials by tomographic atomic force microscopy. 2021 , 118, 080501	4
281	High-bandwidth nanopositioning via active control of system resonance. 2021 , 16, 331-339	3
280	A Non-Destructive, Tuneable Method to Isolate Live Cells for High-Speed AFM Analysis. 2021 , 9,	1
279	DNA building blocks for AFM tip functionalization: An easy, fast and stable strategy. 2021 ,	2

278	Clustering of Major Histocompatibility Complex-Class I Molecules in Healthy and Cancer Colon Cells Revealed from Their Nanomechanical Properties. 2021 , 15, 7500-7512	1
277	AFM in cellular and molecular microbiology. 2021 , 23, e13324	10
276	Nanoindentation for Monitoring the Time-Variant Mechanical Strength of Drug-Loaded Collagen Hydrogel Regulated by Hydroxyapatite Nanoparticles. 2021 , 6, 9269-9278	5
275	Nanoarchitectonics at Interfaces for Regulations of Biorelated Phenomena: Small Structures with Big Effects. 2021 , 2, 2100006	4
274	Case Report: Bayesian Statistical Inference of Experimental Parameters via Biomolecular Simulations: Atomic Force Microscopy. 2021 , 8, 636940	6
273	High-Speed Scanning Probe Microscopy in Biomedicine. 2021 , 54, 434-437	0
272	Phonon imaging in 3D with a fibre probe. 2021 , 10, 91	1
271	Towards a Fully Automated Scanning Probe Microscope for Biomedical Applications. 2021 , 21,	1
270	Extracellular Polymeric Substance Protects Some Cells in an Biofilm from the Biomechanical Consequences of Treatment with Magainin 2. 2021 , 9,	0
269	Scanning Probe Microscopies: Imaging and Biomechanics in Reproductive Medicine Research. 2021 , 22,	1
268	Correlative imaging for polymer science. 2021 , 59, 1232-1240	1
267	Quantum Topological Photonics. 2021 , 9, 2001739	4
266	Synthesis of Wafer-Scale Graphene with Chemical Vapor Deposition for Electronic Device Applications. 2021 , 6, 2000744	16
265	Seeing and Touching the Mycomembrane at the Nanoscale. 2021 , 203,	0
264	Emerging Trends in Immunomodulatory Nanomaterials Toward Cancer Therapy. 2021 , 16, i-84	
263	Effects of Retracting Velocities on the Vibration of Atomic Force Microscope Probe on Different Surfaces. 2021 , 9, 1305	1
262	CD47-mediated DTIC-loaded chitosan oligosaccharide-grafted nGO for synergistic chemo-photothermal therapy against malignant melanoma. 2021 , 123, 112014	11
261	Microfluidic encapsulation of nanoparticles in alginate microgels gelled via competitive ligand exchange crosslinking. 2021 , 112, e23432	2

260	Perspectives of Microscopy Methods for Morphology Characterisation of Extracellular Vesicles from Human Biofluids. 2021 , 9,	14
259	AFM-Based Correlative Microscopy Illuminates Human Pathogens. 2021 , 11, 655501	1
258	Scanning probe microscopy. 2021 , 1,	31
257	Microscopic Imaging Techniques for Molecular Assemblies: Electron, Atomic Force, and Confocal Microscopies. 2021 , 121, 14281-14347	6
256	Anomalous Laterally Stressed Kinetically Trapped DNA Surface Conformations. 2021 , 13, 130	1
255	Hybrid fluorescence-AFM explores articular surface degeneration in early osteoarthritis across length scales. 2021 , 126, 315-325	3
254	Characterization of the nanomechanical properties of the fission yeast (<i>Schizosaccharomyces pombe</i>) cell surface by atomic force microscopy. 2021 , 38, 480-492	2
253	In situ and operando force-based atomic force microscopy for probing local functionality in energy storage materials. e2100038	3
252	FluidFM for single-cell biophysics. 1	4
251	Dynamic cellular biomechanics in responses to chemotherapeutic drug in hypoxia probed by atomic force spectroscopy. 2021 , 12, 1165-1177	3
250	Self-Assembly of DNA molecules in magnetic Fields. 2021 , 33,	1
249	Adeno-associated Virus Virus-like Particle Characterization via Orthogonal Methods: Nanoelectrospray Differential Mobility Analysis, Asymmetric Flow Field-Flow Fractionation, and Atomic Force Microscopy. 2021 , 6, 16428-16437	1
248	Quantitative analysis of nano-scale pore structures of broad sense shale oil reservoirs using atomic force microscopy. 014459872110225	1
247	Investigating virus-host cell interactions: Comparative binding forces between hepatitis C virus-like particles and host cell receptors in 2D and 3D cell culture models. 2021 , 592, 371-384	3
246	Correlating polymer structure, dynamics, and function with atomic force microscopy.	
245	Modern biotechnology and nanotechnology in competitive sports. 2021 , 578, 179-193	
244	Application of Nanotechnologies in Studying Yeast Structure in <i>Candida</i> . 2021 , 16, 450-472	0
243	High-reliability graphene-wrapped nanoprobe for scanning probe microscopy. 2021 , 33,	

242	Probing the Nature of Chemical Bonds by Atomic Force Microscopy. 2021 , 26,	2
241	Biophysical reviews top five: atomic force microscopy in biophysics. 2021 , 13, 455-458	0
240	Stretching the resolution limit of atomic force microscopy. 2021 , 28, 629-630	6
239	Fitting of Atomic Force Microscopy Force Curves with a Sparse Representation Model. 2021 , 2021, 1-7	
238	Deciphering the Structure and Chemical Composition of Drug Nanocarriers: From Bulk Approaches to Individual Nanoparticle Characterization. 2021 , 38, 2100022	2
237	Best practices and recommendations for accurate nanomechanical characterization of heterogeneous polymer systems with atomic force microscopy. 2021 , 119, 101420	4
236	Light-sheet photonic force optical coherence elastography for high-throughput quantitative 3D micromechanical imaging.	
235	Atomic Force Microscopy Applied to Atopic Dermatitis Study. 2021 , 18, 21-28	
234	Recent advances in techniques for fabrication and characterization of nanogap biosensors: A review. 2021 ,	1
233	Characterizing Batteries by In Situ Electrochemical Atomic Force Microscopy: A Critical Review. 2021 , 11, 2101518	8
232	Atomic force microscopy-A tool for structural and translational DNA research. 2021 , 5, 031504	7
231	Force spectroscopy of single cells using atomic force microscopy. 2021 , 1,	11
230	Mechanical Deconvolution of Elastic Moduli by Indentation of Mechanically Heterogeneous Materials. 9,	0
229	Advances in Atomic Force Microscopy: Imaging of Two- and Three-Dimensional Interfacial Water. 2021 , 9, 745446	1
228	Unlocking the secret of lignin-enzyme interactions: Recent advances in developing state-of-the-art analytical techniques. 2021 , 107830	13
227	Error Analysis of the Combined-Scan High-Speed Atomic Force Microscopy. 2021 , 21,	
226	Quantifying molecular- to cellular-level forces in living cells. 2021 , 54,	1
225	Development of a force measurement system with a large punctual measurement range. 2021 , 32, 127001	

224	Hierarchical Micro-/Nanotopography for Tuning Structures and Mechanics of Cells Probed by Atomic Force Microscopy. 2021 , 20, 543-553	1
223	Effect of calcium ion on the morphology structure and compression elasticity of muscle fibers from honeybee abdomen. 2021 , 127, 110652	0
222	Morphological characterization of Etv2 vascular explants using fractal analysis and atomic force microscopy. 2021 , 138, 104205	1
221	Advancing the application of atomic force microscopy (AFM) to the characterization and quantification of geological material properties. 2021 , 247, 103852	6
220	The biophysics of bacterial infections: Adhesion events in the light of force spectroscopy. 2021 , 7, 100048	2
219	Cell guidance on peptide micropatterned silk fibroin scaffolds. 2021 , 603, 380-390	3
218	The contribution of Atomic Force Microscopy (AFM) in microalgae studies: A review. 2021 , 60, 102506	2
217	Endometrial Gap Junction Expression - Early Indicators of Endometriosis and Integral to Invasiveness.	
216	Chapter 3:Characterizations of Hydrogels. 2021 , 48-76	
215	Basic concepts and fundamental insights into electrospinning. 2021 , 3-43	1
214	RNA Nanostructure Molecular Imaging. 2020 , 2113, 319-327	1
213	High-Speed Atomic Force Microscopy to Study Myosin Motility. 2020 , 1239, 127-152	2
212	Atomic force microscopy of food assembly: Structural and mechanical insights at the nanoscale and potential opportunities from other fields. 2020 , 36, 100654	3
211	Genome-in-a-Box: Building a Chromosome from the Bottom Up. 2021 , 15, 111-124	4
210	Multiparametric Atomic Force Microscopy Identifies Multiple Structural and Physical Heterogeneities on the Surface of. 2020 , 5, 20953-20959	2
209	Cortical cell stiffness is independent of substrate mechanics. 2020 , 19, 1019-1025	39
208	Self-repair behaviour of the neuronal cell membrane by conductive atomic force indentation. 2019 , 13, 891-895	1
207	High-resolution measurement of atomic force microscope cantilever resonance frequency. 2020 , 91, 123705	1

206	Atomic-level characterization of liquid/solid interface. 2020 , 29, 116803	2
205	ActuAtoR, a molecular tool for generating force in living cells: Controlled deformation of intracellular structures.	3
204	AFM based elasticity of intestinal epithelium correlate with barrier function under drug action.	0
203	. 2020 , 1-1	6
202	Of numbers and movement - understanding transcription factor pathogenesis by advanced microscopy. 2020 , 13,	2
201	Multimode-interference-effect-based all-fiber displacement sensing system for an orthopedic Ilizarov apparatus device. 2019 , 58, 3209-3213	2
200	Advances in stimulated Raman scattering imaging for tissues and animals. 2021 , 11, 1078-1101	8
199	Membrane curvature sensing of the lipid-anchored K-Ras small GTPase. 2019 , 2,	17
198	Fake It 'Till You Make It-The Pursuit of Suitable Membrane Mimetics for Membrane Protein Biophysics. 2020 , 22,	6
197	Unique insight into protein-DNA interactions from single molecule atomic force microscopy. 2018 , 5, 194-216	4
196	A method of measuring micro-displacement based on spin magnetic resonance effect of diamond color center. 2018 , 67, 047601	1
195	Controlled growth of a single carbon nanotube on an AFM probe. 2021 , 7, 80	2
194	Processive Enzymes Kept on a Leash: How Cellulase Activity in Multienzyme Complexes Directs Nanoscale Deconstruction of Cellulose. 2021 , 11, 13530-13542	1
193	Design, Fabrication and Implementation of a High-Performance Compliant Nanopositioner via 3D Printing with Continuous Fiber-Reinforced Composite.	0
192	High resolution imaging of soft alginate hydrogels by atomic force microscopy. 2022 , 276, 118804	2
191	Photonic techniques for brain imaging. 2018 ,	
190	Quantification of biomolecular dynamics inside real and synthetic nuclear pore complexes using time-resolved atomic force microscopy.	
189	Evaluation Method of Mechanical Properties of Living NSCLC Cells Based on Nano-indentation. 2019 , >15, 541-546	

- 188 Investigating the biomechanical properties of streptococcal polysaccharide capsules using atomic force microscopy.
- 187 Flexible Fitting of Biomolecular Structures to Atomic Force Microscopy Images via Biased Molecular Simulations. 0
- 186 Cortical cell stiffness is independent of substrate mechanics.
- 185 Depletion of glycosaminoglycans decreases contact stiffness of single collagen I fibrils in aqueous solution.
- 184 Atomic Force Microscopy: A New Look at Microbes. **2020**, 1, 1-111
- 183 Subnanometer-scale imaging of nanobio-interfaces by frequency modulation atomic force microscopy. **2020**, 48, 1675-1682 2
- 182 Resolving the data asynchronicity in high-speed atomic force microscopy measurement via the Kalman Smoother.
- 181 Long-range hydrodynamic forces in liquid FM-AFM. **2020**, 31, 455501 1
- 180 SARS-CoV-2 protein Nsp1 alters actomyosin cytoskeleton and phenocopies arrhythmogenic cardiomyopathy-related PKP2 mutant.
- 179 Tip Charge Dependence of Three-Dimensional AFM Mapping of Concentrated Ionic Solutions. **2021**, 127, 196101 6
- 178 Experimental validation of the simultaneous damping and tracking controller design strategy for high-bandwidth nanopositioning via PAVPF approach. **2020**, 14, 3506-3514 4
- 177 Atomic Force Microscopy Reveals Distinct Protofilament-scale Structural Dynamics in Depolymerizing Microtubule Arrays.
- 176 Single-molecule force spectroscopy: A facile technique for studying the interactions between biomolecules and materials interfaces. **2020**, 39, 116-129 1
- 175 Loss of Caveolin-1 and caveolae leads to increased cardiac cell stiffness and functional decline of the adult zebrafish heart.
- 174 All-fiber optic displacement sensing system for an Ilizarov transverse tibial bone transport device. **2020**, 59, 2077-2084
- 173 Predicting metastasis with a novel biophysical cell-adhesion force technique.
- 172 Towards a fast detection of microbial resistance to antibiotics. **2020**, 6, 010-013 0
- 171 Measurement methods of single cell drug response. **2021**, 239, 123035

170	Accurate Morphology Characterization Using Atomic Force Microscopy via Vertical Drift Correction and Illusory Slope Elimination. 1-9	
169	Measuring the Blind Holes: Three-Dimensional Imaging of through Silicon via Using High Aspect Ratio AFM Probe.	
168	Direct visualization of native infectious SARS-CoV-2 and its inactivation forms using high resolution Atomic Force Microscopy.	
167	Soft sample deformation, damage and induced electromechanical property changes in contact- and tapping-mode atomic force microscopy. 2020 , 8, 045004	3
166	Tapping atomic force microscopy imaging at phase resonance. 2021 ,	0
165	Nanoporous Block Copolymer Membranes with Enhanced Solvent Resistance Via UV-Mediated Cross-Linking Strategies. 2021 , e2100632	3
164	Electrostatic Discovery Atomic Force Microscopy. 2021 ,	1
163	Macrocyclic Peptide-Conjugated Tip for Fast and Selective Molecular Recognition Imaging by High-Speed Atomic Force Microscopy. 2021 , 13, 54817-54829	2
162	Accelerating AFM Characterization via Deep-Learning-Based Image Super-Resolution. 2021 , e2103779	4
161	The biophysics of cancer: emerging insights from micro- and nanoscale tools.. 2022 , 2, 2100056	5
160	Imaging and quantifying analysis the binding behavior of PD-L1 at molecular resolution by atomic force microscopy.. 2022 , 1191, 339281	0
159	Nano-scale physical properties characteristic to metastatic intestinal cancer cells identified by high-speed scanning ion conductance microscope. 2021 , 121256	5
158	Visualizing Neurodegeneration Using Atomic Force Microscopy. 2021 , 1-21	
157	Methods to determine the oligomeric structure of proteins. 2022 , 49-76	1
156	Biocompatible micro tweezers for 3D hydrogel organoid array mechanical characterization.. 2022 , 17, e0262950	
155	Biosensing, Characterization of Biosensors, and Improved Drug Delivery Approaches Using Atomic Force Microscopy: A Review. 2022 , 3,	0
154	Theoretical and Experimental Study of the Phase Optimization of Tapping Mode Atomic Force Microscope.	
153	Electrical characterization of tumor-derived exosomes by conductive atomic force microscopy.. 2022 ,	0

152	Atomic force microscopy reveals distinct protofilament-scale structural dynamics in depolymerizing microtubule arrays.. 2022 , 119,	0
151	Interactions between Liquid Metal Droplets and Bacterial, Fungal, and Mammalian Cells. 2102113	2
150	Distinctive Adsorption Mechanism and Kinetics of Immunoglobulin G on a Nanoscale Polymer Surface.. 2022 ,	
149	Computational Methods for Single-Cell Imaging and Omics Data Integration.. 2021 , 8, 768106	1
148	Photothermal AFM-IR spectroscopy and imaging: Status, challenges, and trends. 2022 , 131, 010901	5
147	Nonlinear atomic force microscopy: Squeezing and skewness of micromechanical oscillators interacting with a surface. 2022 , 105,	0
146	Probing the mechanism of the peroxiredoxin decamer interaction with its reductase sulfiredoxin from the single molecule to the solution scale.. 2022 ,	
145	Characterization Techniques for Topography Analysis. 2022 , 71-91	
144	Nanotechnology and food safety. 2022 , 325-340	1
143	The biogeography of infection revisited.. 2022 ,	1
142	Revealing local molecular distribution, orientation, phase separation, and formation of domains in artificial lipid layers: Towards comprehensive characterization of biological membranes.. 2022 , 301, 102614	2
141	Simulation and experimental analysis of tip response of tapping mode atomic force microscope. 2022 , 40, 50-56	0
140	Single-Molecule Force Probing of RGD-Binding Integrins on Pancreatic Cancer Cells.. 2022 ,	2
139	Chemical bond imaging using torsional and flexural higher eigenmodes of qPlus sensors.. 2022 ,	0
138	The functional role of soluble proteins acquired by extracellular vesicles. 2022 , 1,	0
137	Atomic force microscopy as multifunctional microbial imaging and characterization platform. 2022 , 479-515	
136	Quantifying nanoscale forces using machine learning in dynamic atomic force microscopy.	1
135	Atomic force microscopy applied to interrogate nanoscale cellular chemistry and supramolecular bond dynamics for biomedical applications.. 2022 ,	1

134	Insight into prognostics, diagnostics, and management strategies for SARS CoV-2.. 2022 , 12, 8059-8094	4
133	Atomic force microscopy: A nanobiotechnology for cellular research. 2022 , 9130004	0
132	Atomic Force Microscopy for Tumor Research at Cell and Molecule Levels.. 2022 , 1-18	0
131	Characterising the biosensing interface. 2022 , 339759	1
130	Binary-state scanning probe microscopy for parallel imaging.. 2022 , 13, 1438	0
129	A paradigm shift: Bioengineering meets mechanobiology towards overcoming remyelination failure.. 2022 , 283, 121427	1
128	Atomic Force Microscopy of Biopolymers on Graphite Surfaces. 2021 , 63, 601-622	1
127	Alteration of nanomechanical properties of pancreatic cancer cells through anticancer drug treatment revealed by atomic force microscopy.. 2021 , 12, 1372-1379	0
126	Visualizing intracellular nanostructures of living cells by nanoendoscopy-AFM.. 2021 , 7, eabj4990	2
125	The Impact of Fast-Rise-Time Electromagnetic Field and Pressure on the Aggregation of Peroxidase upon Its Adsorption onto Mica. 2021 , 11, 11677	0
124	Rasterkraftmikroskopie. 2022 , 601-610	
123	An integrated optical waveguide micro-cantilever system for chip-based AFM. 2021 ,	
122	Long DNA constructs to study helicases and nucleic acid translocases using optical tweezers. 2022 ,	
121	Atomic Force Microscopy for Structural and Biophysical Investigations on Nuclear Pore Complexes.. 2022 , 2502, 299-310	
120	Experimental Methods in Chemical Engineering: Atomic force microscopyAFM.	
119	The effects of measurement parameters on the cancerous cell nucleus characterization by atomic force microscopy in vitro.. 2022 ,	
118	Manipulation and Mechanical Deformation of Leukemia Cells by High-frequency Ultrasound Single Beam.. 2022 , PP,	1
117	nanoscale imaging reveals self-concentrating nanomolar antimicrobial pores.. 2022 ,	

- 116 Visualizing Neurodegeneration Using Atomic Force Microscopy. **2022**, 1-21
- 115 Mapping DNA Molecules at the Single-Molecule Level. **2022**, 95-124
- 114 Atomic Force Microscopy and Detecting a DNA Biomarker of a Few Copies without Amplification. **2022**, 111-124
- 113 Two-dimensional displacement sensors with angstrom-scale resolution based on optical slot antenna arrays. **2022**, 7, 056103
- 112 Gasdermin-A3 pore formation propagates along variable pathways.. **2022**, 13, 2609 1
- 111 Super-Resolution Microscopy and Molecular Imaging Techniques to Probe Biology. **2022**, 1-64
- 110 Introduction on Single-Molecule Science. **2022**, 3-19
- 109 Atomic force microscopy indentation for nanomechanical characterization of live pathological cardiovascular/heart tissue and cells.. **2022**, 158, 103287 0
- 108 Roles of DKK3 in cellular adhesion, motility, and invasion through extracellular interaction with TGFBI.. **2022**, 1
- 107 Direct Visualization and Identification of Membrane Voltage-Gated Sodium Channels from Human iPSC-Derived Neurons by Multiple Imaging and Light Enhanced Spectroscopy. 2200402
- 106 Chemical fixation creates nanoscale clusters on the cell surface by aggregating membrane proteins. **2022**, 5, 0
- 105 Electrostatic Contribution to the Photo-Assisted Piezoresponse Force Microscopy by Photo-Induced Surface Charge. 1-5
- 104 Unusual dimeric flavonoids (brachydins) induce ultrastructural membrane alterations associated with antitumor activity in cancer cell lines. 1-12
- 103 Local ultra-densification of single-walled carbon nanotube films: Experiment and mesoscopic modeling. **2022**, 2
- 102 Immunomodulatory Organic and Polymer Nanomedicine in Cancer Therapy. **2021**, 37-49
- 101 Light-sheet photonic force optical coherence elastography for high-throughput quantitative 3D micromechanical imaging. **2022**, 13, 1
- 100 Integrated optical waveguide atomic force microscopy system with a differential splitter readout. **2022**, 16,
- 99 Conformation Dynamics of Single Polymer Strands in Solution. 2202353 1

- 98 Contactless Rheology of Soft Gels Over a Broad Frequency Range. **2022**, 17, 1
- 97 In-situ imaging techniques for advanced battery development. **2022**, 1
- 96 Predicting sample heating induced by cantilevers illuminated by intense light beams. **2022**, 39, 105718
- 95 Atomic Force Microscopy: An Advanced Imaging Technique From Molecules to Morphologies. **2022**, 115-136
- 94 Effects of substrate stiffness on the viscoelasticity and migration of prostate cancer cells examined by atomic force microscopy. 13, 560-569
- 93 Approaches to visualize microtubule dynamics in vitro. **2022**, 1, 1-16
- 92 Investigating the Effect of Tyrosine Kinase Inhibitors on the Interaction between Human Serum Albumin by Atomic Force Microscopy. **2022**, 12, 819 0
- 91 Advances in tissues and cells characterization by Raman micro-spectroscopy, Atomic Force Microscopy and Tip-Enhanced Raman Spectroscopy.
- 90 Polarization-Dependent Heterodyne-Detected Sum-Frequency Generation Spectroscopy as a Tool to Explore Surface Molecular Orientation and Ångström-Scale Depth Profiling. 0
- 89 The giant staphylococcal protein Embp facilitates colonization of surfaces through Velcro-like attachment to fibrillated fibronectin. 11, 0
- 88 3D Generation of Multipurpose Atomic Force Microscopy Tips. 2201489 0
- 87 Thermoresponsive C22 phage stiffness modulates the phage infectivity. **2022**, 12,
- 86 Nanoscale Features of Gambogic Acid Induced ROS-Dependent Apoptosis in Esophageal Cancer Cells Imaged by Atomic Force Microscopy. **2022**, 2022, 1-14
- 85 Health Screening and Promotion System Based on Disease Prevention. **2022**, 2022, 1-13
- 84 In Situ Visualization of Dynamic Cellular Effects of Phospholipid Nanoparticles via High-Speed Scanning Ion Conductance Microscopy. 2203285 1
- 83 Quartz crystal microbalance and atomic force microscopy to characterize mimetic systems based on supported lipids bilayer. 9, 0
- 82 The conformations and basal conformational dynamics of translocation factor SecDF vary with translocon SecYEG interaction. **2022**, 102412 0
- 81 Bacteria Mechanics at the Nanoscale. **2020**, 75-96 0

80	Nanoscale biophysical properties of small extracellular vesicles from senescent cells using atomic force microscopy, surface potential microscopy, and Raman spectroscopy.	1
79	Study of Amyloid Fibers Using Atomic Force Microscopy. 2022 , 1-11	0
78	Scanning Ion Conductance Microscopy and Atomic Force Microscopy: A Comparison of Strengths and Limitations for Biological Investigations. 2022 , 23-71	0
77	An introduction. 2023 , 3-11	0
76	Current and potential combination of atomic force microscopy with other techniques for food science. 2023 , 307-361	0
75	A designed cyclic analogue of gomesin has potent activity against Staphylococcus aureus biofilms.	1
74	Sensing red blood cell nano-mechanics: Toward a novel blood biomarker for Alzheimer's disease. 14,	1
73	The Candida albicans virulence factor candidalysin polymerizes in solution to form membrane pores and damage epithelial cells. 11,	0
72	High-precision multiparameter estimation of mechanical force by quantum optomechanics. 2022 , 12,	0
71	Synthetic Biology: Bottom-Up Assembly of Molecular Systems.	2
70	AFM advanced modes for dental and biomedical applications. 2022 , 136, 105475	1
69	Novel Perspective for Protein-Drug Interaction Analysis: Atomic Force Microscope.	0
68	How lignin sticks to cellulose: Insights from atomic force microscopy enhanced by machine-learning analysis and molecular dynamics simulations.	0
67	Inferring the shape of data: a probabilistic framework for analysing experiments in the natural sciences. 2022 , 478,	1
66	Principles and Applications of Liquid-Environment Atomic Force Microscopy. 2201864	0
65	Photoresponsive Supramolecular Polymers: From Light-controlled Small Molecules to Smart Materials. 2204413	1
64	Seeing the unseen: High-resolution AFM imaging captures antibiotic action in bacterial membranes. 2022 , 13,	0
63	Antibiotic polymyxin arranges lipopolysaccharide into crystalline structures to solidify the bacterial membrane. 2022 , 13,	0

62	Bioaffinity ultrafiltration coupled with HPLC-ESI-MS/MS for screening potential α -glucosidase inhibitors from pomegranate peel. 9,	0
61	Reciprocal regulation of actin filaments and cellular metabolism. 2022, 151281	0
60	AC Kelvin Probe Force Microscopy Enables Charge Mapping in Water.	1
59	High-Resolution Atomic Force Microscopy Imaging of RNA Molecules in Solution. 2023, 133-145	0
58	Structure and mechanics of the human Nuclear Pore Complex basket.	0
57	Spatiotemporal tracking of small extracellular vesicle nanotopology in response to physicochemical stresses revealed by HS-AFM. 2022, 11, 12275	0
56	Generalised deep-learning workflow for the prediction of hydration layers over surfaces. 2022, 367, 120571	0
55	The impact of lipid polyunsaturation on the physical and mechanical properties of lipid membranes. 2023, 1865, 184084	1
54	Effects of Buffer Solution and Concentration on AFM Imaging of DNA Molecules. 2022,	0
53	Atomic Force Microscopy Study of the Effect of an Electric Field, Applied to a Pyramidal Structure, on Enzyme Biomolecules. 2022, 13, 234	0
52	The Effect of a Rotating Cone on Horseradish Peroxidase Aggregation on Mica Revealed by Atomic Force Microscopy. 2022, 13, 1947	0
51	Probing the effect of glycosaminoglycan depletion on integrin interactions with collagen I fibrils in the native ECM environment..	0
50	Rosemary essential oil and its components 1,8-cineole and α -pinene induce ROS-dependent lethality and ROS-independent virulence inhibition in <i>Candida albicans</i> . 2022, 17, e0277097	0
49	Physical Properties and Shifting of the Extracellular Membrane Vesicles Attached to Living Bacterial Cell Surfaces.	0
48	A Single Shot of Vesicles. 2022, 37, n/a	0
47	Direct observation of surface charge and stiffness of human metaphase chromosomes.	1
46	Cellulose Nanocrystals Examined by Atomic Force Microscopy: Applications and Fundamentals. 2022, 2, 1789-1818	2
45	Acousto-holographic reconstruction of whole-cell stiffness maps. 2022, 13,	0

44	Comparison of the effects of AgNPs on the morphological and mechanical characteristics of cancerous cells.	0
43	Extracting and characterizing protein-free megabase-pair DNA for in vitro experiments. 2022 , 2, 100366	0
42	Microfluidic technologies for cell deformability cytometry.	1
41	Methods for Surface Imaging and Combined Structural and Chemical Surface Analysis: Atomic Force Microscopy. 2023 , 119-157	0
40	Emerging 2D Copper-Based Materials for Energy Storage and Conversion: A Review and Perspective. 2204121	0
39	Cuticle architecture and mechanical properties: a functional relationship delineated through correlated multimodal imaging.	0
38	Atomic Force Microscopy Reveals Complexity Underlying General Secretory System Activity. 2023 , 24, 55	0
37	Review: Advanced Atomic Force Microscopy Modes for Biomedical Research. 2022 , 12, 1116	1
36	AtomAI framework for deep learning analysis of image and spectroscopy data in electron and scanning probe microscopy. 2022 , 4, 1101-1112	2
35	Recent advances in optical elastography and emerging opportunities in the basic sciences and translational medicine [Invited]. 2023 , 14, 208	0
34	Investigation of the Effects of Pulse-Atomic Force Nanolithography Parameters on 2.5D Nanostructures Morphology. 2022 , 12, 4421	0
33	Interplay of Fluid Mechanics and Matrix Stiffness in Tuning the Mechanical Behaviors of Single Cells Probed by Atomic Force Microscopy.	0
32	In Situ Measurements of Cell Mechanical Properties Using Force Spectroscopy. 2023 , 25-43	0
31	Trends in digital image processing of isolated microalgae by incorporating classification algorithm. 2023 , 63, 108095	0
30	Synthesis and Functionalization of Graphene Materials for Biomedical Applications: Recent Advances, Challenges, and Perspectives. 2205292	0
29	Emerging multi-frequency surface strain force microscopy. 2023 , 133, 040901	0
28	In situ visualization of Braun lipoprotein on E. coli sacculi. 2023 , 9,	0
27	Structure and mechanics of the human Nuclear Pore Complex basket using correlative AFM-Fluorescence Superresolution Microscopy.	0

- 26 Plant cell wall polysaccharides: Methodologies for compositional, structural, and physicochemical characterization. **2023**, 1-37 ○
- 25 Recent advances in sensing the inter-biomolecular interactions at the nanoscale A comprehensive review of AFM-based force spectroscopy. **2023**, 238, 124089 1
- 24 Nanomechanical Signatures of Extracellular Vesicles from Hematologic Cancer Patients Unraveled by Atomic Force Microscopy for Liquid Biopsy. **2023**, 23, 1591-1599 ○
- 23 Characterization of structures and molecular interactions of RNA and lipid carriers using atomic force microscopy. **2023**, 313, 102855 ○
- 22 In Situ Atomic Force Microscopy and X-ray Computed Tomography Characterization of All-Solid-State Lithium Batteries: Both Local and Overall. **2023**, 11, ○
- 21 Single-Molecule Analysis of SARS-CoV-2 Binding to C-Type Lectin Receptors. **2023**, 23, 1496-1504 ○
- 20 Microscopic Insights into the Effects of Anti-Agglomerant Surfactants on Surface Characteristics of Tetrahydrofuran Hydrate. **2023**, 37, 3741-3751 ○
- 19 Inside Block Copolymer Micelles Tracing Interfacial Influences on Crosslinking Efficiency in Nanoscale Confined Spaces. 2206451 ○
- 18 Investigating the structures and mechanics of single animal cells by atomic force microscopy. **2023**, 219-267 ○
- 17 Fundamentals and methods of atomic force microscopy for biophysics. **2023**, 1-42 ○
- 16 Combining atomic force microscopy with complementary techniques for multidimensional single-cell analysis. ○
- 15 Advanced characterization techniques for nanostructured materials in biomedical applications. **2023**, ○
- 14 Characterization of Laser-Induced Photothermal Vibration for Young Modulus Imaging toward Computer-Aided Detection. **2023**, 13, 3639 ○
- 13 Stabilizing High-Frequency Magnetic Properties of Stretchable CoFeB Films by Ribbon-Patterned Periodic Wrinkles. ○
- 12 Investigation of ultrafast excited-state dynamics at the nanoscale with terahertz field-induced electron tunneling and photon emission. **2023**, 133, 110903 ○
- 11 Non-Invasive and Minute-Frequency 3D Tomographic Imaging Enabling Long-Term Spatiotemporal Observation of Single Cell Fate. 2201492 ○
- 10 High-throughput mechano-cytometry as a method to detect apoptosis, necroptosis, and ferroptosis. ○
- 9 Analytical device miniaturization for the detection of circulating biomarkers. ○

- 8 Risks and ethics of nanotechnology: an overview. **2023**, 35-68
- 7 Insights in Cell Biomechanics through Atomic Force Microscopy. **2023**, 16, 2980
- 6 Recent advances in the application of atomic force microscopy to structural biology. **2023**, 215, 107963
- 5  **2023**, 16, 106-113
- 4 Uncovering the cytotoxic effects of air pollution with multi-modal imaging of in vitro respiratory models. **2023**, 10,
- 3 Large Range Atomic Force Microscopy with High Aspect Ratio Micropipette Probe for Deep Trench Imaging.
- 2 Atomic Force Microscopy and Its Spectroscopic Combinations for Studying Self-Assembled Nanostructures. **2023**, 823-844
- 1 Magnetic Bucket Brigade Transport Networks for Cell Transport.