Noriyuki Kodera

List of Publications by Year
in descending order

98 papers	5,345 citations	147801 31 h-index	88630 70 g-index
110 all docs	110 docs citations	110 times ranked	4454 citing authors

#	Article	IF	Citations
1	A high-speed atomic force microscope for studying biological macromolecules. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 12468-12472.	7.1	1,003
2	Video imaging of walking myosin V by high-speed atomic force microscopy. Nature, 2010, 468, 72-76.	27.8	773
3	Guide to video recording of structure dynamics and dynamic processes of proteins by high-speed atomic force microscopy. Nature Protocols, 2012, 7, 1193-1206.	12.0	246
4	High-Speed AFM and Applications to Biomolecular Systems. Annual Review of Biophysics, 2013, 42, 393-414.	10.0	241
5	High-speed AFM and nano-visualization of biomolecular processes. Pflugers Archiv European Journal of Physiology, 2008, 456, 211-225.	2.8	224
6	Real-space and real-time dynamics of CRISPR-Cas9 visualized by high-speed atomic force microscopy. Nature Communications, 2017, 8, 1430.	12.8	184
7	Dynamic proportional-integral-differential controller for high-speed atomic force microscopy. Review of Scientific Instruments, 2006, 77, 083704.	1.3	177
8	Active damping of the scanner for high-speed atomic force microscopy. Review of Scientific Instruments, 2005, 76, 053708.	1.3	166
9	A High-Speed Atomic Force Microscope for Studying Biological Macromolecules in Action. Japanese Journal of Applied Physics, 2002, 41, 4851-4856.	1.5	125
10	A High-speed Atomic Force Microscope for Studying Biological Macromolecules in Action. ChemPhysChem, 2003, 4, 1196-1202.	2.1	118
11	Cofilin-induced unidirectional cooperative conformational changes in actin filaments revealed by high-speed atomic force microscopy. ELife, 2015, 4, .	6.0	117
12	High-speed Atomic Force Microscopy for Capturing Dynamic Behavior of Protein Molecules at Work. E-Journal of Surface Science and Nanotechnology, 2005, 3, 384-392.	0.4	98
13	IgGs are made for walking on bacterial and viral surfaces. Nature Communications, 2014, 5, 4394.	12.8	97
14	Direct visualization of translational GTPase factor pool formed around the archaeal ribosomal P-stalk by high-speed AFM. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32386-32394.	7.1	90
15	Highâ€speed atomic force microscopy for observing dynamic biomolecular processes. Journal of Molecular Recognition, 2007, 20, 448-458.	2.1	74
16	High-Speed Atomic Force Microscopy for Studying the Dynamic Behavior of Protein Molecules at Work. Japanese Journal of Applied Physics, 2006, 45, 1897-1903.	1.5	72
17	Structural and dynamics analysis of intrinsically disordered proteins by high-speed atomic force microscopy. Nature Nanotechnology, 2021, 16, 181-189.	31.5	69
18	High-Speed Atomic Force Microscopy Techniques for Observing Dynamic Biomolecular Processes. Methods in Enzymology, 2010, 475, 541-564.	1.0	66

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19	Tip-sample distance control using photothermal actuation of a small cantilever for high-speed atomic force microscopy. Review of Scientific Instruments, 2007, 78, 083702.	1.3	65
20	High resonance frequency force microscope scanner using inertia balance support. Applied Physics Letters, 2008, 92, 243119.	3.3	65
21	Contact-Mode High-Resolution High-Speed Atomic Force Microscopy Movies of the Purple Membrane. Biophysical Journal, 2009, 97, 1354-1361.	0.5	58
22	Anisotropic diffusion of point defects in a two-dimensional crystal of streptavidin observed by high-speed atomic force microscopy. Nanotechnology, 2008, 19, 384009.	2.6	53
23	Insight into structural remodeling of the FlhA ring responsible for bacterial flagellar type III protein export. Science Advances, 2018, 4, eaao7054.	10.3	50
24	High-Speed Atomic Force Microscopy Reveals Loss of Nuclear Pore Resilience as a Dying Code in Colorectal Cancer Cells. ACS Nano, 2017, 11, 5567-5578.	14.6	46
25	Na ⁺ -induced structural transition of MotPS for stator assembly of the <i>Bacillus</i> flagellar motor. Science Advances, 2017, 3, eaao4119.	10.3	44
26	Structure of the UHRF1 Tandem Tudor Domain Bound to a Methylated Non-histone Protein, LIG1, Reveals Rules for Binding and Regulation. Structure, 2019, 27, 485-496.e7.	3.3	41
27	Allosteric regulation by cooperative conformational changes of actin filaments drives mutually exclusive binding with cofilin and myosin. Scientific Reports, 2016, 6, 35449.	3.3	40
28	Free Energy Landscape and Dynamics of Supercoiled DNA by High-Speed Atomic Force Microscopy. ACS Nano, 2018, 12, 11907-11916.	14.6	39
29	Structural Insights into the Substrate Specificity Switch Mechanism of the Type III Protein Export Apparatus. Structure, 2019, 27, 965-976.e6.	3.3	39
30	CYK4 Promotes Antiparallel Microtubule Bundling by Optimizing MKLP1 Neck Conformation. PLoS Biology, 2015, 13, e1002121.	5.6	37
31	Multiple Interactions of the Intrinsically Disordered Region between the Helicase and Nuclease Domains of the Archaeal Hef Protein. Journal of Biological Chemistry, 2014, 289, 21627-21639.	3.4	36
32	Dynamics of oligomer and amyloid fibril formation by yeast prion Sup35 observed by high-speed atomic force microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7831-7836.	7.1	36
33	Feed-Forward Compensation for High-Speed Atomic Force Microscopy Imaging of Biomolecules. Japanese Journal of Applied Physics, 2006, 45, 1904-1908.	1.5	33
34	The path to visualization of walking myosin V by high-speed atomic force microscopy. Biophysical Reviews, 2014, 6, 237-260.	3.2	29
35	Two-Ball Structure of the Flagellar Hook-Length Control Protein FliK as Revealed by High-Speed Atomic Force Microscopy. Journal of Molecular Biology, 2015, 427, 406-414.	4.2	29
36	Development of high-speed ion conductance microscopy. Review of Scientific Instruments, 2019, 90, 123704.	1.3	29

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37	Diversity of physical properties of bacterial extracellular membrane vesicles revealed through atomic force microscopy phase imaging. Nanoscale, 2020, 12, 7950-7959.	5.6	29
38	Self- and Cross-Seeding on Î±-Synuclein Fibril Growth Kinetics and Structure Observed by High-Speed Atomic Force Microscopy. ACS Nano, 2020, 14, 9979-9989.	14.6	28
39	Phosphorylation-Coupled Intramolecular Dynamics of Unstructured Regions in Chromatin Remodeler FACT. Biophysical Journal, 2013, 104, 2222-2234.	0.5	26
40	High-speed atomic force microscopy reveals strongly polarized movement of clostridial collagenase along collagen fibrils. Scientific Reports, 2016, 6, 28975.	3.3	26
41	High-Speed AFM Reveals Molecular Dynamics of Human Influenza A Hemagglutinin and Its Interaction with Exosomes. Nano Letters, 2020, 20, 6320-6328.	9.1	25
42	Real-Time Monitoring of Lipid Exchange via Fusion of Peptide Based Lipid-Nanodiscs. Chemistry of Materials, 2018, 30, 3204-3207.	6.7	23
43	Spatiotemporally tracking of nano-biofilaments inside the nuclear pore complex core. Biomaterials, 2020, 256, 120198.	11.4	23
44	High-Resolution Imaging of a Single Gliding Protofilament of Tubulins by HS-AFM. Scientific Reports, 2017, 7, 6166.	3.3	22
45	Visualizing dynamic actin crossâ€linking processes driven by the actinâ€binding protein anillin. FEBS Letters, 2020, 594, 1237-1247.	2.8	22
46	An ultra-wide scanner for large-area high-speed atomic force microscopy with megapixel resolution. Scientific Reports, 2021, 11, 13003.	3.3	22
47	Visualization of Mobility by Atomic Force Microscopy. , 2012, 896, 57-69.		20
48	High-Resolution Imaging of Myosin Motor in Action by a High-Speed Atomic Force Microscope. Advances in Experimental Medicine and Biology, 2003, 538, 119-127.	1.6	20
49	High-Speed Atomic Force Microscopy. Japanese Journal of Applied Physics, 2012, 51, 08KA02.	1.5	20
50	Single-Unit Imaging of Membrane Protein-Embedded Nanodiscs from Two Oriented Sides by High-Speed Atomic Force Microscopy. Structure, 2019, 27, 152-160.e3.	3.3	17
51	Singleâ€molecule imaging of photodegradation reaction in a chiral helical Ï€â€conjugated polymer chain. Journal of Polymer Science Part A, 2010, 48, 4103-4107.	2.3	16
52	Direct visualization of avian influenza H5N1 hemagglutinin precursor and its conformational change by high-speed atomic force microscopy. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129313.	2.4	16
53	Visualization of intrinsically disordered proteins by high-speed atomic force microscopy. Current Opinion in Structural Biology, 2022, 72, 260-266.	5.7	16
54	High-Speed Atomic Force Microscopy. Japanese Journal of Applied Physics, 2012, 51, 08KA02.	1.5	15

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55	Chained Structure of Dimeric F ₁ -like ATPase in Mycoplasma mobile Gliding Machinery. MBio, 2021, 12, e0141421.	4.1	15
56	An ultrafast piezoelectric Z-scanner with a resonance frequency above 1.1ÂMHz for high-speed atomic force microscopy. Review of Scientific Instruments, 2022, 93, 013701.	1.3	15
57	High-Speed Atomic Force Microscopy Reveals Spatiotemporal Dynamics of Histone Protein H2A Involution by DNA Inchworming. Journal of Physical Chemistry Letters, 2021, 12, 3837-3846.	4.6	14
58	Optimum Substrates for Imaging Biological Molecules with High-Speed Atomic Force Microscopy. Methods in Molecular Biology, 2018, 1814, 159-179.	0.9	14
59	Molecular and Functional Analysis of Pore-Forming Toxin Monalysin From Entomopathogenic Bacterium Pseudomonas entomophila. Frontiers in Immunology, 2020, 11, 520.	4.8	13
60	Millisecond Conformational Dynamics of Skeletal Myosin II Power Stroke Studied by High-Speed Atomic Force Microscopy. ACS Nano, 2021, 15, 2229-2239.	14.6	13
61	Ultrastructure of influenza virus ribonucleoprotein complexes during viral RNA synthesis. Communications Biology, 2021, 4, 858.	4.4	13
62	Nano-Scale Alignment of Proteins on a Flexible DNA Backbone. PLoS ONE, 2012, 7, e52534.	2.5	12
63	Novel DNA Aptamer for CYP24A1 Inhibition with Enhanced Antiproliferative Activity in Cancer Cells. ACS Applied Materials & Interfaces, 2022, 14, 18064-18078.	8.0	12
64	Negatively Charged Lipids Are Essential for Functional and Structural Switch of Human 2-Cys Peroxiredoxin II. Journal of Molecular Biology, 2018, 430, 602-610.	4.2	11
65	Movements of Mycoplasma mobile Gliding Machinery Detected by High-Speed Atomic Force Microscopy. MBio, 2021, 12, e0004021.	4.1	11
66	Single-Molecule Imaging of a Micro-Brownian Motion of a Chiral Helical Ï€-Conjugated Polymer as a Molecular Spring Driven by Thermal Fluctuations. Chemistry Letters, 2009, 38, 690-691.	1.3	9
67	Resolving the data asynchronicity in high-speed atomic force microscopy measurement via the Kalman Smoother. Scientific Reports, 2020, 10, 18393.	3.3	9
68	Native cyclase-associated protein and actin from Xenopus laevis oocytes form a unique 4:4 complex with a tripartite structure. Journal of Biological Chemistry, 2021, 296, 100649.	3.4	9
69	High-speed atomic force microscopy reveals a three-state elevator mechanism in the citrate transporter CitS. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	9
70	Architecture of zero-latency ultrafast amplitude detector for high-speed atomic force microscopy. Applied Physics Letters, 2021, 119, .	3.3	8
71	Single Molecular Imaging of a micro-Brownian Motion and a Bond Scission of a Supramolecular Chiral Ï€-Conjugated Polymer as a Molecular Bearing Driven by Thermal Fluctuations. Chemistry Letters, 2007, 36, 1378-1379.	1.3	7
72	Macrocyclic Peptide-Conjugated Tip for Fast and Selective Molecular Recognition Imaging by High-Speed Atomic Force Microscopy. ACS Applied Materials & Interfaces, 2021, 13, 54817-54829.	8.0	7

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73	Direct Imaging of Walking Myosin V by High-Speed Atomic Force Microscopy. Methods in Molecular Biology, 2018, 1805, 103-122.	0.9	5
74	Modeling of DNA binding to the condensin hinge domain using molecular dynamics simulations guided by atomic force microscopy. PLoS Computational Biology, 2021, 17, e1009265.	3.2	4
75	Unconventional Imaging Methods to Capture Transient Structures during Actomyosin Interaction. International Journal of Molecular Sciences, 2018, 19, 1402.	4.1	3
76	High-Speed Atomic Force Microscopy to Study Myosin Motility. Advances in Experimental Medicine and Biology, 2020, 1239, 127-152.	1.6	3
77	Extracellular Vesicles Contribute to the Metabolism of Transthyretin Amyloid in Hereditary Transthyretin Amyloidosis. Frontiers in Molecular Biosciences, 2022, 9, 839917.	3.5	2
78	Uni-directional Propagation of Structural Changes in Actin Filaments. , 2018, , 157-177.		1
79	Video Imaging of Protein Molecules in Action by High-speed Atomic Force Microscopy. Seibutsu Butsuri, 2011, 51, 022-025.	0.1	1
80	1P070 Single-molecule imaging of chaperonin GroEL-GroES dynamics using high-speed atomic force microscopy(2. Protein function (I),Poster Session,Abstract,Meeting Program of EABS & BSJ 2006). Seibutsu Butsuri, 2006, 46, S164.	0.1	0
81	2P534 Direct driving of the high-speed AFM cantilever by photo-thermal expansion toward vide-Rate imaging of Biomolecules(52. Bio-imaging,Poster Session,Abstract,Meeting Program of EABS & BSJ) Tj ETQq1 1 0.784314 rgBT /Ove	0.1	0
82	3P289 A high-speed scanner and its active damping for high-speed AFM(Bioimaging,Poster) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td	0.1	0
83	3P290 Improvement of high-speed AFM scanner(Bioimaging,Poster Presentations). Seibutsu Butsuri, 2007, 47, S275.	0.1	0
84	2P134 Structural dynamics of acto-myosin V revealed by high-speed AFM(Molecular motors,Oral) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	0.1	0
85	1P-045 High-speed AFM visualization of substrate-protein binding to and release from chaperonin GroEL(The 46th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2008, 48, S27-S28.	0.1	0
86	1P-136 Detailed analysis of actomyosin V motion visualized by high-speed atomic force microscopy(The) Tj ETQq0 0 0 rgBT /Overlock 10	0.1	0
87	1P-166 Association Manner of Actin-Myosin V Depending on the Chemical States(The 46th Annual) Tj ETQq1 1 0.784314 rgBT /Overlock	0.1	0
88	1P-316 Speeding up the high-speed AFM by improving the scanner(The 46th Annual Meeting of the) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.1	0
89	2P-025 Direct observation of GroEL-substrate complexes by high-speed atomic force microscopy(Protein:Structure & Function,The 47th Annual Meeting of the Biophysical Society of) Tj ETQq1 1 0.784314 rgBT /Overl	0.1	0
90	2P093 Observation of the phosphorylated intrinsically disordered region of FACT with high-speed AFM(The 48th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2010, 50, S98.	0.1	0

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91	2P094 Direct visualization of intrinsically disordered proteins PQBP-1 and FliK using high-speed atomic force microscopy(The 48th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2010, 50, S98.	0.1	0
92	Antibody Movement on Regular Antigen Clusters: Fab Arms are made for Walking. Biophysical Journal, 2013, 104, 381a.	0.5	0
93	Video Imaging of Cofilin-Induced Actin Filament Severing by High Speed AFM. Biophysical Journal, 2014, 106, 163a.	0.5	0
94	Video-rate High-speed Atomic Force Microscopy for Biological Sciences. Journal of the Vacuum Society of Japan, 2008, 51, 783-788.	0.3	0
95	Nanovisualization of Proteins in Action Using High-Speed AFM. , 2012, , 119-147.		0
96	10.1063/5.0067224.1. , 2021, , .		0
97	10.1063/5.0072722.1. , 2022, , .		0
98	High-speed Atomic Force Microscopy Observation of Internal Structure Movements in Living Mycoplasma. Bio-protocol, 2022, 12, e4344.	0.4	0