高速原子間力顕微鏡
論文リスト

株式会社 生体分子計測研究所

updated 27-Apr-21

Life Science

No.	Authors	Title	Journal	Vol.	Pages	Year
1	Akagi, Junya; Yamada, Takahiro; Hidaka, Kumi; Fujita, Yoshihiko; Saito, Hirohide; Sugiyama, Hiroshi; Endo, Masayuki; Matsumura, Shigeyoshi; Ikawa, Yoshiya	An RNA Triangle with Six Ribozyme Units Can Promote a Trans-Splicing Reaction through Trimerization of Unit Ribozyme Dimers	Applied Sciences	11	2583	2021
2	Fukuda, Shingo; Ando, Toshio	Faster high-speed atomic force microscopy for imaging of biomolecular processes Review of Scientific Instruments ARTICLE scitation.org/journal/rsi Faster high-speed atomic force microscopy for imaging of biomolecular processes	Rev. Sci. Instrum	92	33705	2021
3	Hoffmann, David; Mereiter, Stefan; Jin Oh, Yoo; Monteil, Vanessa; Zhu, Rong; Canena, Daniel; Hain, Lisa; Laurent, Elisabeth; Grünwald, Clemens; Novatchkova, Maria; Ticevic, Melita; Chabloz, Antoine; Hagelkruys, Astrid; Altmann, Friedrich; Mach, Lukas; Oostenbrink, Chris; Mirazimi, Ali; Hinterdorfer, Peter	Title: Identification of lectin receptors for conserved SARS-CoV-2 glycosylation sites	bioRxiv	-	2021040143808 7	2021
4	Kodera, Noriyuki; Noshiro, Daisuke; Dora, Sujit K.; Mori, Tetsuya; Habchi, Johnny; Blocquel, David; Gruet, Antoine; Dosnon, Marion; Salladini, Edoardo; Bignon, Christophe; Fujioka, Yuko; Oda, Takashi; Noda, Nobuo N.; Sato, Mamoru; Lotti, Marina; Mizuguchi, Mineyuki; Longhi, Sonia; Ando, Toshio	Structural and dynamics analysis of intrinsically disordered proteins by high-speed atomic force microscopy	Nature Nanotechnology	16	181--189	2021
5	Matusovsky, Oleg S.; Kodera, Noriyuki; Maceachen, Caitlin; Ando, Toshio; Cheng, Yu Shu; Rassier, Dilson E.	Millisecond Conformational Dynamics of Skeletal Myosin II Power Stroke Studied by High-Speed Atomic Force Microscopy	ACS Nano	15	2229--2239	2021
6	Nishide, Goro; Lim, Keesiang; Mohamed, Mahmoud Shaaban; Kobayashi, Akiko; Hazawa, Masaharu; Watanabe-Nakayama, Takahiro; Kodera, Noriyuki; Ando, Toshio; Wong, Richard W.	High-Speed Atomic Force Microscopy Reveals Spatiotemporal Dynamics of Histone Protein H2A Involution by DNA Inchworming	The Journal of Physical Chemistry Letters	12	3837--3846	2021
7	Nishizawa, Yuichiro; Minato, Haruka; Inui, Takumi; Uchihashi, Takayuki; Suzuki, Daisuke	Nanostructures, Thermoresponsiveness, and Assembly Mechanism of Hydrogel Microspheres during Aqueous Free-Radical Precipitation Polymerization	Langmuir	37	151--159	2021
8	Toyonaga, Takuma; Kato, Takayuki; Kawamoto, Akihiro; Kodera, Noriyuki; Tahara, Yuhei O.; Ando, Toshio; Namba, Keiichi	Chained structure of dimeric F 1-like ATPase in Mycoplasma mobile gliding machinery 4	bioRxiv	-	2021040643875 0	2021

9	Yilmaz, Neval; Kodama, Yutaka; Numata, Keiji	Lipid Membrane Interaction of Peptide/DNA Complexes Designed for Gene Delivery	Langmuir	37	1882--1893	2021
10	Casuso, Ignacio; Redondo-Morata, Lorena; Rico, Felix	Biological physics by high-speed atomic force microscopy	Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences	378	20190604	2020
11	Duic, Ivana; Tadakuma, Hisashi; Harada, Yoshie; Yamaue, Ryo; Deguchi, Katashi; Suzuki, Yuki; Yoshimura, Shige H.; Kato, Hiroki; Takeyasu, Kunio; Fujita, Takashi	Viral RNA recognition by LGP2 and MDA5, and activation of signaling through step-by-step conformational changes	Nucleic Acids Research	48	11664--11674	2020
12	Feng, Lei; Watanabe, Hiroki; Molino, Paul J.; Wallace, Gordon G.; Phung, Son L.; Uchihashi, Takayuki; Higgins, Michael J.; Higgins, Michael	Key Nucleation Stages and Associated Molecular Determinants and Processes in pH-Induced Formation of Amyloid Beta Oligomers as Revealed by High-Speed AFM	bioRxiv	-	2020101734383 0	2020
13	Hakimi, Hassan; Templeton, Thomas J.; Sakaguchi, Miako; Yamagishi, Junya; Miyazaki, Shinya; Yahata, Kazuhide; Uchihashi, Takayuki; Kawazu, Shin Ichiro; Kaneko, Osamu; Asada, Masahito	Novel Babesia bovis exported proteins that modify properties of infected red blood cells	PLoS Pathogens	16	-	2020
14	Hellmeier, Joschka; Platzer, Rene; Eklund, Alexandra; Schlichthärle, Thomas; Karner, Andreas; Motsch, Viktoria; Kurz, Elke; Bamieh, Victor; Brameshuber, Mario; Preiner, Johannes; Jungmann, Ralf; Stockinger, Hannes; Schütz, Gerhard; Huppa, Johannes; Sevcsik, Eva	DNA origami demonstrate the unique stimulatory power of single pMHCs as T-cell antigens	Proceedings of the National Academy of Sciences	118	e2016857118	2020
15	Ikuta, Tatsuya; Shihoya, Wataru; Sugiura, Masahiro; Yoshida, Kazuho; Watari, Masahito; Tokano, Takaya; Yamashita, Keitaro; Katayama, Kota; Tsunoda, Satoshi P.; Uchihashi, Takayuki; Kandori, Hideki; Nureki, Osamu	Structural insights into the mechanism of rhodopsin phosphodiesterase	Nature Communications	11	5605	2020
16	Ikuta, Tatsuya; Shihoya, Wataru; Sugiura, Masahiro; Yoshida, Kazuho; Watari, Masahito; Tokano, Takaya; Yamashita, Keitaro; Katayama, Kota; Tsunoda, Satoshi P.; Uchihashi, Takayuki; Kandori, Hideki; Nureki, Osamu	Structural insights into the mechanism of rhodopsin phosphodiesterase	Nature Communications	11	-	2020

17	Lim, Keesiang; Kodera, Noriyuki; Wang, Hanbo; Mohamed, Mahmoud Shaaban; Hazawa, Masaharu; Kobayashi, Akiko; Yoshida, Takeshi; Hanayama, Rikinari; Yano, Seiji; Ando, Toshio; Wong, Richard W.	High-Speed AFM Reveals Molecular Dynamics of Human Influenza A Hemagglutinin and Its Interaction with Exosomes	Nano Letters	20	6320--6328	2020
18	Liu, Shiyun; Murata, Satoshi; Kawamata, Ibuki	DNA Ring Motif with Flexible Joints	Micromachines	11	987	2020
19	Schmid, Sonja; Dekker, Cees	Nanopores: a versatile tool to study protein dynamics	Essays in Biochemistry	-	-	2020
20	Shigyou, Kazuki; Sun, Linhao; Yajima, Riku; Takigaura, Shohei; Tajima, Masashi; Furusho, Hirotoshi; Kikuchi, Yousuke; Miyazawa, Keisuke; Fukuma, Takeshi; Taoka, Azuma; Ando, Toshio; Watanabe, Shinji	Geometrical Characterization of Glass Nanopipettes with Sub-10 nm Pore Diameter by Transmission Electron Microscopy	Analytical Chemistry	92	15388--15393	2020
21	Sullivan, Kylee; Zhang, Yuliang; Lopez, Joseph; Lowe, Mary; Noy, Aleksandr	Carbon nanotube porin diffusion in mixed composition supported lipid bilayers	Scientific Reports	10	11908	2020
22	Sumbul, Fidan; Hassanpour, Nahid; Rodriguez-Ramos, Jorge; Rico, Felix	One-Step Calibration of AFM in Liquid	Frontiers in Physics	8	301	2020
23	Sun, Zhiqiang; Wang, Yaqing; Bianco, Piero R.; Lyubchenko, Yuri L.	Nanoscale interaction of RecG with mobile fork DNA	Nanoscale Advances	2	1318--1324	2020
24	Uchiyama, Taku; Uchihashi, Takayuki; Nakamura, Akihiko; Watanabe, Hiroki; Kaneko, Satoshi; Samejima, Masahiro; Igarashi, Kiyohiko	Convergent evolution of processivity in bacterial and fungal cellulases	Proceedings of the National Academy of Sciences	117	19896--19903	2020
25	Uchiyama, Taku; Uchihashi, Takayuki; Nakamura, Akihiko; Watanabe, Hiroki; Kaneko, Satoshi; Samejima, Masahiro; Igarashi, Kiyohiko	Convergent evolution of processivity in bacterial and fungal cellulases	Proceedings of the National Academy of Sciences of the United States of America	117	19896--19903	2020
26	Winkler, Klemens; Karner, Andreas; Horner, Andreas; Hannesschlaeger, Christof; Knyazev, Denis; Siligan, Christine; Zimmermann, Mirjam; Kuttner, Roland; Pohl, Peter; Preiner, Johannes	Interaction of the motor protein SecA and the bacterial protein translocation channel SecYEG in the absence of ATP	Nanoscale Advances	2	3431--3443	2020

27	Yaari, Zvi; Cheung, Justin M.; Baker, Hanan A.; Frederiksen, Rune S.; Jena, Prakrit V.; Horoszko, Christopher P.; Jiao, Fang; Scheuring, Simon; Luo, Minkui; Heller, Daniel A.	Nanoreporter of an Enzymatic Suicide Inactivation Pathway	Nano Letters	20	7819-7827	2020
28	Zuttion, Francesca; Colom, Adai; Matile, Stefan; Farago, Denes; Pompeo, Frédérique; Kokavecz, Janos; Galinier, Anne; Sturgis, James; Casuso, Ignacio	High-speed atomic force microscopy highlights new molecular mechanism of daptomycin action	Nature Communications	11	6312	2020
29	Hamad, Nesreen; Watanabe, Hiroki; Uchihashi, Takayuki; Kurokawa, Riki; Nagata, Takashi; Katahira, Masato	Direct visualization of the conformational change of FUS/TLS upon binding to promoter-associated non-coding RNA	Chemical Communications	56	9134--9137	2020
30	Hirayama, Shota; Oohora, Koji; Uchihashi, Takayuki; Hayashi, Takashi	Thermoresponsive Micellar Assembly Constructed from a Hexameric Hemoprotein Modified with Poly(N-isopropylacrylamide) toward an Artificial Light-Harvesting System	Journal of the American Chemical Society	142	1822--1831	2020
31	Inoue, Keiichi; Tsunoda, Satoshi P.; Singh, Manish; Tomida, Sahoko; Hososhima, Shoko; Konno, Masae; Nakamura, Ryoko; Watanabe, Hiroki; Bulzu, Paul-Adrian; Banciu, Horia L.; Andrei, Adrian-Ştefan; Uchihashi, Takayuki; Ghai, Rohit; Béjà, Oded; Kandori, Hideki	Schizorhodopsins: A family of rhodopsins from Asgard archaea that function as light-driven inward H + pumps	Science Advances	6	eaaz2441	2020
32	Kawasaki, Yuki; Ariyama, Hirotaka; Motomura, Hajime; Fujinami, Daisuke; Noshiro, Daisuke; Ando, Toshio; Kohda, Daisuke	Two-State Exchange Dynamics in Membrane-Embedded Oligosaccharyltransferase Observed in Real-Time by High-Speed AFM	Journal of Molecular Biology	432	5951--5965	2020
33	Minato, Haruka; Nishizawa, Yuichiro; Uchihashi, Takayuki; Suzuki, Daisuke	Thermoresponsive structural changes of single poly(N-isopropyl acrylamide) hydrogel microspheres under densely packed conditions on a solid substrate	Polymer Journal	52	1137--1141	2020
34	Qu, Mingbo; Watanabe-Nakayama, Takahiro; Sun, Shaopeng; Umeda, Kenichi; Guo, Xiaoxi; Liu, Yuansheng; Ando, Toshio; Yang, Qing	High-Speed Atomic Force Microscopy Reveals Factors Affecting the Processivity of Chitinases during Interfacial Enzymatic Hydrolysis of Crystalline Chitin	ACS Catalysis	-	13606--13615	2020
35	Tatebe, Hisashi; Lim, Chew Theng; Konno, Hiroki; Shiozaki, Kazuhiro; Shinohara, Akira; Uchihashi, Takayuki; Furukohri, Asako	Rad50 zinc hook functions as a constitutive dimerization module interchangeable with SMC hinge	Nature Communications	11	1--11	2020

36	Terashima, Hiroyuki; Hirano, Keiichi; Inoue, Yuna; Tokano, Takaya; Kawamoto, Akihiro; Kato, Takayuki; Yamaguchi, Erika; Namba, Keiichi; Uchihashi, Takayuki; Kojima, Seiji; Homma, Michio	Assembly mechanism of a supramolecular MS-ring complex to initiate bacterial flagellar biogenesis in vibrio species	Journal of Bacteriology	202	-	2020
37	Tokano, Takaya; Kato, Yuki; Sugiyama, Shogo; Uchihashi, Takayuki; Noguchi, Takumi	Structural Dynamics of a Protein Domain Relevant to the Water-Oxidizing Complex in Photosystem II as Visualized by High-Speed Atomic Force Microscopy	Journal of Physical Chemistry B	124	5847--5857	2020
38	Uchihashi, Takayuki; Ganser, Christian	Recent advances in bioimaging with high-speed atomic force microscopy	Biophysical Reviews	12	363--369	2020
39	Ueno, Takafumi; Niwase, Kento; Tsubokawa, Daisho; Kikuchi, Kosuke; Takai, Natsumi; Furuta, Tadaomi; Kawano, Ryuji; Uchihashi, Takayuki	Dynamic behavior of an artificial protein needle contacting a membrane observed by high-speed atomic force microscopy	Nanoscale	12	8166--8173	2020
40	Dinh, Huyen; Nakata, Eiji; Mutsuda-Zapater, Kaori; Saimura, Masayuki; Kinoshita, Masahiro; Morii, Takashi	Enhanced enzymatic activity exerted by a packed assembly of a single type of enzyme	Chemical Science	11	9088--9100	2020
41	Feuillie, Cecile; Lambert, Eleonore; Ewald, Maxime; Azouz, Mehdi; Henry, Sarah; Marsaudon, Sophie; Cullin, Christophe; Lecomte, Sophie; Molinari, Michael	High Speed AFM and NanoInfrared Spectroscopy Investigation of A β1–42 Peptide Variants and Their Interaction With POPC/SM/Chol/GM1 Model Membranes	Frontiers in Molecular Biosciences	7	-	2020
42	Jiao, Fang; Cannon, Kevin S.; Lin, Yi Chih; Gladfelter, Amy S.; Scheuring, Simon	The hierarchical assembly of septins revealed by high-speed AFM	Nature Communications	11	1--13	2020
43	Matin, Tina R.; Heath, George R.; Huysmans, Gerard H. M.; Boudker, Olga; Scheuring, Simon	Millisecond dynamics of an unlabeled amino acid transporter	Nature Communications	11	5016	2020
44	Matoba, Kazuaki; Kotani, Tetsuya; Tsutsumi, Akihisa; Tsuji, Takuma; Mori, Takaharu; Noshiro, Daisuke; Sugita, Yuji; Nomura, Norimichi; Iwata, So; Ohsumi, Yoshinori; Fujimoto, Toyoshi; Nakatogawa, Hitoshi; Kikkawa, Masahide; Noda, Nobuo N.	Atg9 is a lipid scramblase that mediates autophagosomal membrane expansion	Nature Structural & Molecular Biology	-	-	2020

45	Matsuya, Yusuke; Nakano, Toshiaki; Kai, Takeshi; Shikazono, Naoya; Akamatsu, Ken; Yoshii, Yuji; Sato, Tatsuhiko	A Simplified Cluster Analysis of Electron Track Structure for Estimating Complex DNA Damage Yields	International Journal of Molecular Sciences	21	1701	2020
46	Yagi-Utsumi, Maho; Sikdar, Arunima; Song, Chihong; Park, Jimin; Inoue, Rintaro; Watanabe, Hiroki; Burton-Smith, Raymond N.; Kozai, Toshiya; Suzuki, Tatsuya; Kodama, Atsuji; Ishii, Kentaro; Yagi, Hirokazu; Satoh, Tadashi; Uchiyama, Susumu; Uchihashi, Takayuki; Joo, Keehyoung; Lee, Jooyoung; Sugiyama, Masaaki; Murata, Kazuyoshi; Kato, Koichi	Supramolecular tholos-like architecture constituted by archaeal proteins without functional annotation	Scientific Reports	10	1--10	2020
47	Ando, Toshio	Studies on the impellers generating force in muscle	Biophysical Reviews	12	767--769	2020
48	Kikuchi, Yousuke; Obana, Nozomu; Toyofuku, Masanori; Kodera, Noriyuki; Soma, Takamitsu; Ando, Toshio; Fukumori, Yoshihiro; Nomura, Nobuhiko; Taoka, Azuma	Diversity of physical properties of bacterial extracellular membrane vesicles revealed through atomic force microscopy phase imaging	Nanoscale	12	7950--7959	2020
49	Lim, Keesiang; Kodera, Noriyuki; Wang, Hanbo; Mohamed, Mahmoud Shaaban; Hazawa, Masaharu; Kobayashi, Akiko; Yoshida, Takeshi; Hanayama, Rikinari; Yano, Seiji; Ando, Toshio; Wong, Richard W.	High-Speed AFM Reveals Molecular Dynamics of Human Influenza A Hemagglutinin and Its Interaction with Exosomes	Nano Letters	-	-	2020
50	Maezawa, Tatsuoki; Ohtsuki, Shozo; Hidaka, Kumi; Sugiyama, Hiroshi; Endo, Masayuki; Takahashi, Yuki; Takakura, Yoshinobu; Nishikawa, Makiya	DNA density-dependent uptake of DNA origami-based two-or three-dimensional nanostructures by immune cells	Nanoscale	12	14818--14824	2020
51	Mohamed, Mahmoud Shaaban; Hazawa, Masaharu; Kobayashi, Akiko; Guillaud, Laurent; Watanabe-Nakayama, Takahiro; Nakayama, Mizuho; Wang, Hanbo; Kodera, Noriyuki; Oshima, Masanobu; Ando, Toshio; Wong, Richard W.	Spatiotemporally tracking of nano-biofilaments inside the nuclear pore complex core	Biomaterials	256	120198	2020
52	Pan, Yangang; Shlyakhtenko, Luda S.; Lyubchenko, Yuri L.	High-speed atomic force microscopy directly visualizes conformational dynamics of the HIV Vif protein in complex with three host proteins	Journal of Biological Chemistry	295	11995--12001	2020
53	Watanabe-Nakayama, Takahiro; Nawa, Maika; Konno, Hiroki; Kodera, Noriyuki; Ando, Toshio; Teplow, David B.; Ono, Kenjiro	Self- and Cross-Seeding on α-Synuclein Fibril Growth Kinetics and Structure Observed by High-Speed Atomic Force Microscopy	ACS Nano	-	-	2020

54	Yamasaki, Akinori; Alam, Jahangir Md; Noshiro, Daisuke; Hirata, Eri; Fujioka, Yuko; Suzuki, Kuninori; Ohsumi, Yoshinori; Noda, Nobuo N.	Liquidity Is a Critical Determinant for Selective Autophagy of Protein Condensates	Molecular Cell	77	1163--1175.e9	2020
55	Zhang, Ping; Liu, Xiaoguo; Liu, Pi; Wang, Fei; Ariyama, Hirotaka; Ando, Toshio; Lin, Jianping; Wang, Lihua; Hu, Jun; Li, Bin; Fan, Chunhai	Capturing transient antibody conformations with DNA origami epitopes	Nature Communications	11	1--9	2020
56	Ando, Toshio	Biophysics in Kanazawa University	Biophysical Reviews	-	1--3	2020
57	Konno, Hiroki; Watanabe-Nakayama, Takahiro; Uchihashi, Takayuki; Okuda, Momoko; Zhu, Liwen; Kodera, Noriyuki; Kikuchi, Yousuke; Ando, Toshio; Taguchi, Hideki	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	117	201916452	2020
58	Lin, Yi Chih; Chipot, Christophe; Scheuring, Simon	Annexin-V stabilizes membrane defects by inducing lipid phase transition	Nature Communications	11	-	2020
59	Ni, Tao; Jiao, Fang; Yu, Xiulian; Aden, Saša; Ginger, Lucy; Williams, Sophie I.; Bai, Fangfang; Pražák, Vojtěch; Karia, Dimple; Stansfeld, Phillip; Zhang, Peijun; Munson, George; Anderluh, Gregor; Scheuring, Simon; Gilbert, Robert J. C.	Structure and mechanism of bactericidal mammalian perforin-2, an ancient agent of innate immunity	Science Advances	6	eaax8286	2020
60	Onoa, Bibiana; Fukuda, Shingo; Iwai, Masakazu; Bustamante, Carlos; Niyogi, Krishna K.	Atomic Force Microscopy Visualizes Mobility of Photosynthetic Proteins in Grana Thylakoid Membranes	Biophysical Journal	-	-	2020
61	Oohora, Koji; Hirayama, Shota; Uchihashi, Takayuki; Hayashi, Takashi	Construction of a Hexameric Hemoprotein Sheet and Direct Observation of Dynamic Processes of Its Formation	Chemistry Letters	49	186--190	2020
62	Visootsat, Akasit; Nakamura, Akihiko; Vignon, Paul; Watanabe, Hiroki; Uchihashi, Takayuki; Iino, Ryota	Single-molecule imaging analysis reveals the mechanism of a high-catalytic-activity mutant of chitinase A from Serratia marcescens	Journal of Biological Chemistry	295	1915--1925	2020
63	Xing, Xiwen; Sato, Shinsuke; Wong, Nai-Kei; Hidaka, Kumi; Sugiyama, Hiroshi; Endo, Masayuki	Direct observation and analysis of TET-mediated oxidation processes in a DNA origami nanochip	Nucleic Acids Research	-	-	2020

64	Yanaka, Saeko; Yogo, Rina; Watanabe, Hiroki; Taniguchi, Yuki; Satoh, Tadashi; Komura, Naoko; Ando, Hiromune; Yagi, Hirokazu; Yuki, Nobuhiro; Uchihashi, Takayuki; Kato, Koichi	On-membrane dynamic interplay between anti-GM1 IgG antibodies and complement component C1q	International Journal of Molecular Sciences	21	-	2020
65	Tsuchiya, Kousuke; Yilmaz, Neval; Miyamoto, Takaaki; Masunaga, Hiroyasu; Numata, Keiji	Zwitterionic Polypeptides: Chemoenzymatic Synthesis and Loosening Function for Cellulose Crystals	Biomacromolecules	-	-	2020
66	Yilmaz, Neval; Kodama, Yutaka; Numata, Keiji	Revealing the Architecture of the Cell Wall in Living Plant Cells by Bioimaging and Enzymatic Degradation	Biomacromolecules	21	95--103	2020
67	Fujioka, Yuko; Alam, Jahangir Md; Noshiro, Daisuke; Mouri, Kazunari; Ando, Toshio; Okada, Yasushi; May, Alexander I.; Knorr, Roland L.; Suzuki, Kuninori; Ohsumi, Yoshinori; Noda, Nobuo N.	Phase separation organizes the site of autophagosome formation	Nature	578	301--305	2020
68	Lim, Kee Siang; Mohamed, Mahmoud Shaaban; Wang, Hanbo; Hartono; Hazawa, Masaharu; Kobayashi, Akiko; Voon, Dominic Chih-Cheng; Kodera, Noriyuki; Ando, Toshio & Wong, Richard W.	Direct visualization of avian influenza H5N1 hemagglutinin precursor and its conformational change by high-speed atomic force microscopy	Biochimica et Biophysica Acta - General Subjects	1864	-	2020
69	Kadosh, Avihay; Colom, Adai; Yellin, Ben; Roux, Aurélien; Shemesh, Tom	The tilted helix model of dynamin oligomers	Proceedings of the National Academy of Sciences	116	12845--12850	2019
70	Lin, Yi-Chih; Guo, Yusong R.; Miyagi, Atsushi; Levring, Jesper; MacKinnon, Roderick; Scheuring, Simon	Force-induced conformational changes in PIEZO1	Nature	573	230--234	2019
71	Nasrallah, Hussein; Vial, Anthony; Pocholle, Nicolas; Soulier, Jérémy; Costa, Luca; Godefroy, Cédric; Bourillot, Eric; Lesniewska, Eric; Milhiet, Pierre Emmanuel	Imaging artificial membranes using high-speed atomic force microscopy	Methods in Molecular Biology	1886	45--59	2019
72	Wakamori, Masatoshi; Okabe, Kohki; Ura, Kiyoe; Funatsu, Takashi; Takinoue, Masahiro; Umehara, Takashi	Quantification of the effect of site-specific histone acetylation on chromatin remodeling rate	bioRxiv	-	12648–12659	2019

73	Krayukhina, Elena; Yokoyama, Masami; Hayashihara, Kayoko Kakuhou; Maruno, Takahiro; Noda, Masanori; Watanabe, Hiroki; Uchihashi, Takayuki; Uchiyama, Susumu	An Assessment of the Ability of Submicron- and Micron-Size Silicone Oil Droplets in Dropped Prefillable Syringes to Invoke Early- and Late-Stage Immune Responses	Journal of Pharmaceutical Sciences	108	2278--2287	2019
74	Matusovsky, Oleg S.; Mansson, Alf; Persson, Malin; Cheng, Yu-Shu; Rassier, Dilson E.	High-speed AFM reveals subsecond dynamics of cardiac thin filaments upon Ca 2+ activation and heavy meromyosin binding	Proceedings of the National Academy of Sciences	116	16384--16393	2019
75	Umakoshi, Takayuki; Fukuda, Shingo; Iino, Ryota; Uchihashi, Takayuki; Ando, Toshio	High-speed near-field fluorescence microscopy combined with high-speed atomic force microscopy for biological studies	Biochimica et Biophysica Acta (BBA) - General Subjects	-	-	2019
76	Cho, Carol; Jang, Juwon; Kang, Yujin; Watanabe, Hiroki; Uchihashi, Takayuki; Kim, Seung Joong; Kato, Koichi; Lee, Ja Yil; Song, Ji Joon	Structural basis of nucleosome assembly by the Abo1 AAA+ ATPase histone chaperone	Nature Communications	10	-	2019
77	Fujita, Keisuke; Ohmachi, Masashi; Ikezaki, Keigo; Yanagida, Toshio; Iwaki, Mitsuhiro	Direct visualization of human myosin II force generation using DNA origami-based thick filaments	Communications Biology	2	1--11	2019
78	Ohtsuki, Shozo; Shiba, Yukako; Maezawa, Tatsuoki; Hidaka, Kumi; Sugiyama, Hiroshi; Endo, Masayuki; Takahashi, Yuki; Takakura, Yoshinobu; Nishikawa, Makiya	Folding of single-stranded circular DNA into rigid rectangular DNA accelerates its cellular uptake	Nanoscale	11	23416--23422	2019
79	Rangl, Martina; Schmandt, Nicolaus; Perozo, Eduardo; Scheuring, Simon	Real time dynamics of gating-related conformational changes in CorA	eLife	8	-	2019
80	Sukhanova, Alyona; Poly, Simon; Bozrova, Svetlana; Lambert, Éléonore; Ewald, Maxime; Karaulov, Alexander; Molinari, Michael; Nabiev, Igor	Nanoparticles With a Specific Size and Surface Charge Promote Disruption of the Secondary Structure and Amyloid-Like Fibrillation of Human Insulin Under Physiological Conditions	Frontiers in Chemistry	7	480	2019
81	Watanabe, Taiki; Sato, Yusuke; Otaka, Hayato; Kawamata, Ibuki; Murata, Satoshi; Nomura, Shin-Ichiro M.	DNA Origami “Quick” Refolding inside of a Micron-Sized Compartment	Molecules	25	8	2019

82	Yamauchi, Soichiro; Kobashigawa, Yoshihiro; Fukuda, Natsuki; Teramoto, Manaka; Toyota, Yuya; Liu, Chenjiang; Ikeguchi, Yuka; Sato, Takashi; Sato, Yuko; Kimura, Hiroshi; Masuda, Takeshi; Ohtsuki, Sumio; Noi, Kentaro; Ogura, Teru; Morioka, Hiroshi	Cyclization of single-chain Fv antibodies markedly suppressed their characteristic aggregation mediated by inter-chain VH-VL interactions	Molecules	24	-	2019
83	Nguyen, Thang Minh; Nakata, Eiji; Zhang, Zhengxiao; Saimura, Masayuki; Dinh, Huyen; Morii, Takashi	Rational design of a DNA sequence-specific modular protein tag by tuning the alkylation kinetics	Chemical Science	10	9315--9325	2019
84	Xu, Xu; Nakano, Toshiaki; Tsuda, Masataka; Kanamoto, Ryota; Hirayama, Ryoichi; Uzawa, Akiko; Ide, Hiroshi	Direct observation of damage clustering in irradiated DNA with atomic force microscopy	Nucleic Acids Research	48	1--10	2019
85	Ando, Toshio	High-speed atomic force microscopy	Current Opinion in Chemical Biology	51	105--112	2019
86	Araiso, Yuhei; Tsutsumi, Akihisa; Qiu, Jian; Imai, Kenichiro; Shiota, Takuya; Song, Jiyao; Lindau, Caroline; Wenz, Lena Sophie; Sakaue, Haruka; Yunoki, Kaori; Kawano, Shin; Suzuki, Junko; Wischnewski, Marilena; Schütze, Conny; Ariyama, Hirotaka; Ando, Toshio; Becker, Thomas; Lithgow, Trevor; Wiedemann, Nils; Pfanner, Nikolaus; Kikkawa, Masahide & Endo, Toshiya	Structure of the mitochondrial import gate reveals distinct preprotein paths	Nature	575	395--401	2019
87	Feng, Lei; Watanabe, Hiroki; Molino, Paul; Wallace, Gordon G.; Phung, Son L.; Uchihashi, Takayuki & Higgins, Michael J.	Dynamics of Inter-Molecular Interactions Between Single Ab42 Oligomeric and Aggregate Species by High-Speed Atomic Force Microscopy	Journal of Molecular Biology	431	2687--2699	2019
88	Ganser, Christian & Uchihashi, Takayuki	Microtubule self-healing and defect creation investigated by in-line force measurements during high-speed atomic force microscopy imaging	Nanoscale	11	125--135	2019
89	Honda, Kenshiro; Sazuka, Yuka; Iizuka, Kojiro; Matsui, Shusuke; Uchihashi, Takayuki; Kureha, Takuma; Shibayama, Mitsuhiro; Watanabe, Takumi & Suzuki, Daisuke	Hydrogel Microellipsoids that Form Robust String-Like Assemblies at the Air/Water Interface	Angewandte Chemie International Edition	58	7294--7298	2019

90	Inoue, Yumi; Ogawa, Yuya; Kinoshita, Miki; Terahara, Naoya; Shimada, Masafumi; Kodera, Noriyuki; Ando, Toshio; Namba, Keiichi; Kitao, Akio; Imada, Katsumi & Minamino, Tohru	Structural Insights into the Substrate Specificity Switch Mechanism of the Type III Protein Export Apparatus	Structure	27	965--976.e6	2019
91	Kori, Satomi; Ferry, Laure; Matano, Shohei; Shinkai, Yoichi; Defossez, Pierre-Antoine & Arita, Kyohei	Structure of the UHRF1 Tandem Tudor Domain Bound to a Methylated Non-histone Protein, LIG1, Reveals Rules for Binding and Regulation	Structure/Folding and Design	27	485--496.e7	2019
92	Matsui, Shusuke; Hosho, Kensuke; Minato, Haruka; Uchihashi, Takayuki & Suzuki, Daisuke	Protein uptake into individual hydrogel microspheres visualized by high-speed atomic force microscopy	Chemical Communications	55	10064--10067	2019
93	Mino, Takashi; Iwai, Noriki; Endo, Masayuki; Inoue, Kentaro; Akaki, Kotaro; Hia, Fabian; Uehata, Takuya; Emura, Tomoko; Hidaka, Kumi; Suzuki, Yutaka; Standley, Daron M.; Okada-Hatakeyama, Mariko; Ohno, Shigeo; Sugiyama, Hiroshi; Yamashita, Akio & Takeuchi, Osamu	Translation-dependent unwinding of stem–loops by UPF1 licenses Regnase-1 to degrade inflammatory mRNAs	Nucleic Acids Research	47	8838--8859	2019
94	Miyamoto, Takaaki; Hayashi, Yugo; Yoshida, Keito; Watanabe, Hiroki; Uchihashi, Takayuki; Yonezawa, Kento; Shimizu, Nobutaka; Kamikubo, Hironari & Hirota, Shun	Construction of a Quadrangular Tetramer and a Cage-Like Hexamer from Three-Helix Bundle-Linked Fusion Proteins	ACS Synthetic Biology	8	1112--1120	2019
95	Nishizawa, Yuichiro; Matsui, Shusuke; Urayama, Kenji; Kureha, Takuma; Shibayama, Mitsuhiro; Uchihashi, Takayuki & Suzuki, Daisuke	Non-Thermoresponsive Decanano-sized Domains in Thermoresponsive Hydrogel Microspheres Revealed by Temperature-Controlled High-Speed Atomic Force Microscopy	Angewandte Chemie International Edition	58	8809--8813	2019
96	Rico, Felix; Russek, Andreas; González, Laura; Grubmüller, Helmut & Scheuring, Simon	Heterogeneous and rate-dependent streptavidin–biotin unbinding revealed by high-speed force spectroscopy and atomistic simulations	Proceedings of the National Academy of Sciences of the United States of America	116	6594--6601	2019
97	Sahoo, Bikash R.; Genjo, Takuya; Nakayama, Takahiro W.; Stoddard, Andrea K.; Ando, Toshio; Yasuhara, Kazuma; Fierke, Carol A. & Ramamoorthy, Ayyalusamy	A cationic polymethacrylate-copolymer acts as an agonist for β-amyloid and an antagonist for amylin fibrillation.	Chemical science	10	3976--3986	2019
98	Sekiguchi, Taichiro; Satoh, Tadashi; Kurimoto, Eiji; Song, Chihong; Kozai, Toshiya; Watanabe, Hiroki; Ishii, Kentaro; Yagi, Hirokazu; Yanaka, Saeko; Uchiyama, Susumu; Uchihashi, Takayuki; Murata, Kazuyoshi & Kato, Koichi	Mutational and Combinatorial Control of Self-Assembling and Disassembling of Human Proteasome α Subunits	International Journal of Molecular Sciences	20	2308	2019

99	Shihoya, Wataru; Inoue, Keiichi; Singh, Manish; Konno, Masae; Hososhima, Shoko; Yamashita, Keitaro; Ikeda, Kento; Higuchi, Akimitsu; Izume, Tamaki; Okazaki, Sae; Hashimoto, Masanori; Mizutori, Ritsu; Tomida, Sahoko; Yamauchi, Yumeka; Abe-Yoshizumi, Rei; Katayama, Kota; Tsunoda, Satoshi P.; Shibata, Mikihiro; Furutani, Yuji; Pushkarev, Alina; Béjà, Oded; Uchihashi, Takayuki; Kandori, Hideki & Nureki, Osamu	Crystal structure of heliorhodopsin	Nature	574	132--136	2019
100	Sone, Eri; Noshiro, Daisuke; Ikebuchi, Yuki; Nakagawa, Mami; Khan, Masud; Tamura, Yukihiko; Ikeda, Masaomi; Oki, Meiko; Murali, Ramachandran; Fujimori, Toshihiko; Yoda, Tetsuya; Honma, Masashi; Suzuki, Hiroshi; Ando, Toshio & Aoki, Kazuhiro	The induction of RANKL molecule clustering could stimulate early osteoblast differentiation	Biochemical and Biophysical Research Communications	509	435--440	2019
101	Sumino, A.; Sumikama, T.; Uchihashi, T. & Oiki, S.	High-speed AFM reveals accelerated binding of agitoxin-2 to a K + channel by induced fit	Science Advances	5	eaax0495	2019
102	Yogo, Rina; Yamaguchi, Yuki; Watanabe, Hiroki; Yagi, Hirokazu; Satoh, Tadashi; Nakanishi, Mahito; Onitsuka, Masayoshi; Omasa, Takeshi; Shimada, Mari; Maruno, Takahiro; Torisu, Tetsuo; Watanabe, Shio; Higo, Daisuke; Uchihashi, Takayuki; Yanaka, Saeko; Uchiyama, Susumu & Kato, Koichi	The Fab portion of immunoglobulin G contributes to its binding to Fc γ receptor III	Scientific Reports	9	11957	2019
103	Marchesi, Arin; Gao, Xiaolong; Adaixo, Ricardo; Rheinberger, Jan; Stahlberg, Henning; Nimigean, Crina; Scheuring, Simon	An iris diaphragm mechanism to gate a cyclic nucleotide-gated ion channel	Nature Communications	9	3978	2018
104	Morita, Kento; Yamamoto, Yohei Y.; Hori, Ayaka; Obata, Tomohiro; Uno, Yuko; Shinohara, Kyosuke; Noguchi, Keiichi; Noi, Kentaro; Ogura, Teru; Ishii, Kentaro; Kato, Koichi; Kikumoto, Mahito; Arranz, Rocio; Valpuesta, Jose M.; Yohda, Masafumi	Expression, functional characterization, and preliminary crystallization of the cochaperone prefoldin from the thermophilic fungus chaetomium thermophilum	International Journal of Molecular Sciences	19	-	2018
105	Niwa, Hajime; Miyauchi-Nanri, Yasuhiro; Okumoto, Kanji; Mukai, Satoru; Noi, Kentaro; Ogura, Teru; Fujiki, Yukio	A newly isolated Pex7-binding, atypical PTS2 protein P7BP2 is a novel dynein-type AAA+ protein	Journal of biochemistry	164	437--447	2018
106	Sanborn, Jeremy R.; Chen, Xi; Yao, Yun Chiao; Hammons, Joshua A.; Tunuguntla, Ramya H.; Zhang, Yuliang; Newcomb, Christina C.; Soltis, Jennifer A.; De Yoreo, James J.; Van Buuren, Anthony; Parikh, Atul N.; Noy, Aleksandr	Carbon nanotube porins in amphiphilic block copolymers as fully synthetic mimics of biological membranes	Advanced Materials	30	-	2018

107	Ando, Toshio; Bhamidimarri, Satya Prathyusha; Brending, Niklas; Colin-York, H.; Collinson, Lucy; De Jonge, Niels; de Pablo, P. J.; Debroye, Elke; Eggeling, Christian; Franck, Christian; Fritzsche, Marco; Gerritsen, Hans; Giepmans, Ben N. G.; Grunewald, Kay; Hofkens, Johan; Hoogenboom, Jacob P.; Janssen, Kris P. F.; Kaufmann, Rainer; Klumperman, Judith; Kurniawan, Nyoman; Kusch, Jana; Liv, Nalan; Parekh, Viha; Peckys, Diana B.; Rehfeldt, Florian; Reutens, David C.; Roeffaers, Maarten B. J.; Salditt, Tim; Schaap, Iwan A. T.; Schwarz, Ulrich S.; Verkade, Paul; Vogel, Michael W.; Wagner, Richard; Winterhalter, Mathias; Yuan, Haifeng & Zifarelli, Giovanni	The 2018 correlative microscopy techniques roadmap	Journal of Physics D: Applied Physics	51	443001	2018
108	Ando, Toshio	High-speed atomic force microscopy and its future prospects	Biophysical Reviews	10	285--292	2018
109	Azéma, Laurent; Azéma, Az ´ ; Bonnet-Salomon, Servane; Endo, Masayuki; Takeuchi, Yosuke; Durand, Guillaume; Emura, Tomoko; Hidaka, Kumi; Dausse, Eric; Sugiyama, Hiroshi; Toulmé, Jean-Jacques & Toulmé, Toulm ´	Triggering nucleic acid nanostructure assembly by conditional kissing interactions	Nucleic Acids Research	46	1052--1058	2018
110	Brouns, Tine; De Keersmaecker, Herlinde; Konrad, Sebastian F.; Kodera, Noriyuki; Ando, Toshio; Lipfert, Jan; De Feyter, Steven & Vanderlinden, Willem	Free Energy Landscape and Dynamics of Supercoiled DNA by High-Speed Atomic Force Microscopy	ACS Nano	12	11907--11916	2018
111	Fukui, Tomoya; Uchihashi, Takayuki; Sasaki, Norihiko; Watanabe, Hiroki; Takeuchi, Masayuki & Sugiyasu, Kazunori	Direct Observation and Manipulation of Supramolecular Polymerization by High-Speed Atomic Force Microscopy	Angewandte Chemie International Edition	57	15465--15470	2018
112	Harcombe, David M.; Ruppert, Michael G.; Ragazzon, Michael R. P. & Fleming, Andrew J.	Lyapunov estimation for high-speed demodulation in multifrequency atomic force microscopy	Beilstein Journal of Nanotechnology	9	490--498	2018
113	Haruyama, Takamitsu; Uchihashi, Takayuki; Yamada, Yutaro; Kodera, Noriyuki; Ando, Toshio & Konno, Hiroki	Negatively Charged Lipids Are Essential for Functional and Structural Switch of Human 2-Cys Peroxiredoxin II	Journal of Molecular Biology	430	602--610	2018
114	Heath, George R. & Scheuring, Simon	High-speed AFM height spectroscopy reveals µs-dynamics of unlabeled biomolecules	Nature Communications	9	4983	2018
115	Hosoyamada, Masanori; Yanai, Nobuhiro; Okumura, Keisuke; Uchihashi, Takayuki & Kimizuka, Nobuo	Translating MOF chemistry into supramolecular chemistry: Soluble coordination nanofibers showing efficient photon upconversion	Chemical Communications	54	6828--6831	2018

116	Kodera, Noriyuki & Ando, Toshio	Direct Imaging of Walking Myosin V by High-Speed Atomic Force Microscopy	Methods in Molecular Biology	1805	103--122	2018
117	Kurokawa, Tatsuki; Kiyonaka, Shigeki; Nakata, Eiji; Endo, Masayuki; Koyama, Shohei; Mori, Emiko; Tran, Nam Ha; Dinh, Huyen; Suzuki, Yuki; Hidaka, Kumi; Kawata, Masaaki; Sato, Chikara; Sugiyama, Hiroshi; Morii, Takashi & Mori, Yasuo	DNA Origami Scaffolds as Templates for Functional Tetrameric Kir3 K+ Channels	Angewandte Chemie - International Edition	57	2586--2591	2018
118	Lee, Andrew J.; Endo, Masayuki; Hobbs, Jamie K. & Wälti, Christoph	Direct Single-Molecule Observation of Mode and Geometry of RecA-Mediated Homology Search	ACS Nano	12	272--278	2018
119	Maruno, Takahiro; Watanabe, Hiroki; Yoneda, Saki; Uchihashi, Takayuki; Adachi, Satoru; Arai, Kunihito; Sawaguchi, Taichi & Uchiyama, Susumu	Sweeping of Adsorbed Therapeutic Protein on Prefillable Syringes Promotes Micron Aggregate Generation	Journal of Pharmaceutical Sciences	107	1521--1529	2018
120	Masubuchi, Takeya; Endo, Masayuki; Iizuka, Ryo; Iguchi, Ayaka; Yoon, Dong Hyun; Sekiguchi, Tetsushi; Qi, Hao; Iinuma, Ryosuke; Miyazono, Yuya; Shoji, Shuichi; Funatsu, Takashi; Sugiyama, Hiroshi; Harada, Yoshie; Ueda, Takuya & Tadakuma, Hisashi	Construction of integrated gene logic-chip	Nature Nanotechnology	13	933--940	2018
121	Matsui, Shusuke; Nishizawa, Yuichiro; Uchihashi, Takayuki & Suzuki, Daisuke	Monitoring Thermoresponsive Morphological Changes in Individual Hydrogel Microspheres	ACS Omega	3	10836--10842	2018
122	Miyagi, Atsushi; Ramm, Beatrice; Schwille, Petra & Scheuring, Simon	High-Speed Atomic Force Microscopy Reveals the Inner Workings of the MinDE Protein Oscillator	Nano Letters	18	288--296	2018
123	Mori, Tetsuya; Sugiyama, Shogo; Byrne, Mark; Johnson, Carl Hirschie; Uchihashi, Takayuki & Ando, Toshio	Revealing circadian mechanisms of integration and resilience by visualizing clock proteins working in real time	Nature Communications	9	3245	2018
124	Nakamura, Akihiko; Tasaki, Tomoyuki; Okuni, Yasuko; Song, Chihong; Murata, Kazuyoshi; Kozai, Toshiya; Hara, Mayu; Sugimoto, Hayuki; Suzuki, Kazushi; Watanabe, Takeshi; Uchihashi, Takayuki; Noji, Hiroyuki & Iino, Ryota	Rate constants, processivity, and productive binding ratio of chitinase A revealed by single-molecule analysis	Physical Chemistry Chemical Physics	20	3010--3018	2018

125	Noshiro, Daisuke & Ando, Toshio	Substrate protein dependence of GroEL–GroES interaction cycle revealed by high-speed atomic force microscopy imaging	Philosophical Transactions of the Royal Society B: Biological Sciences	373	20170180	2018
126	Oda, Akiya; Nagao, Satoshi; Yamanaka, Masaru; Ueda, Ikki; Watanabe, Hiroki; Uchihashi, Takayuki; Shibata, Naoki; Higuchi, Yoshiki & Hirota, Shun	Construction of a Triangle-Shaped Trimer and a Tetrahedron Using an a-Helix-Inserted Circular Permutant of Cytochrome c 555	Chemistry - An Asian Journal	13	964--967	2018
127	Onoa, Bibiana; Fukuda, Shingo; Iwai, Masakazu; Bustamante, Carlos & Niyogi, Krishna K.	High-speed atomic force microscopy visualizes mobility of photosynthetic proteins in grana thylakoid membranes	bioRxiv	Online	426759	2018
128	Oohora, Koji; Fujimaki, Nishiki; Kajihara, Ryota; Watanabe, Hiroki; Uchihashi, Takayuki & Hayashi, Takashi	Supramolecular Hemoprotein Assembly with a Periodic Structure Showing Heme-Heme Exciton Coupling	Journal of the American Chemical Society	140	10145--10148	2018
129	Ravula, Thirupathi; Ishikuro, Daiki; Kodera, Noriyuki; Ando, Toshio; Anantharamaiah, G. M. & Ramamoorthy, Ayyalusamy	Real-Time Monitoring of Lipid Exchange via Fusion of Peptide Based Lipid-Nanodiscs	Chemistry of Materials	30	3204--3207	2018
130	Roos, Wouter H.	AFM nanoindentation of protein shells, expanding the approach beyond viruses	Seminars in Cell & Developmental Biology	73	145--152	2018
131	Ruan, Yi; Kao, Kevin; Lefebvre, Solène; Marchesi, Arin; Corringer, Pierre Jean; Hite, Richard K. & Scheuring, Simon	Structural titration of receptor ion channel GLIC gating by HS-AFM	Proceedings of the National Academy of Sciences of the United States of America	115	10333--10338	2018
132	Shibata, Mikihiro; Inoue, Keiichi; Ikeda, Kento; Konno, Masae; Singh, Manish; Kataoka, Chihiro; Abe-Yoshizumi, Rei; Kandori, Hideki & Uchihashi, Takayuki	Oligomeric states of microbial rhodopsins determined by high-speed atomic force microscopy and circular dichroic spectroscopy	Scientific Reports	8	8262	2018
133	Sumbul, Fidan; Marchesi, Arin; Takahashi, Hirohide; Scheuring, Simon & Rico, Felix	High-Speed Force Spectroscopy for Single Protein Unfolding	Methods in Molecular Biology	1814	243--264	2018
134	Takahashi, Hirohide; Rico, Felix; Chipot, Christophe & Scheuring, Simon	α-Helix Unwinding as Force Buffer in Spectrins	ACS Nano	12	2719--2727	2018

135	Takeda, Tetsuya; Kozai, Toshiya; Yang, Huiran; Ishikuro, Daiki; Seyama, Kaho; Kumagai, Yusuke; Abe, Tadashi; Yamada, Hiroshi; Uchihashi, Takayuki; Ando, Toshio & Takei, Kohji	Dynamic clustering of dynamin-amphiphysin helices regulates membrane constriction and fission coupled with GTP hydrolysis	eLife	7	1--19	2018
136	Terahara, Naoya; Inoue, Yumi; Kodera, Noriyuki; Morimoto, Yusuke V.; Uchihashi, Takayuki; Imada, Katsumi; Ando, Toshio; Namba, Keiichi & Minamino, Tohru	Insight into structural remodeling of the FlhA ring responsible for bacterial flagellar type III protein export	Science Advances	4	eaao7054	2018
137	Tsukamoto, Hisao; Higashi, Masahiro; Motoki, Hideyoshi; Watanabe, Hiroki; Ganser, Christian; Nakajo, Koichi; Kubo, Yoshihiro; Uchihashi, Takayuki & Furutani, Yuji	Structural properties determining low K+ affinity of the selectivity filter in the TWIK1 K+ channel.	The Journal of biological chemistry	293	6969--6984	2018
138	Uchihashi, Takayuki & Scheuring, Simon	Applications of high-speed atomic force microscopy to real-time visualization of dynamic biomolecular processes	Biochimica et Biophysica Acta (BBA) - General Subjects	1862	229--240	2018
139	Uchihashi, Takayuki; Watanabe, Yo-hei; Nakazaki, Yosuke; Yamasaki, Takashi; Watanabe, Hiroki; Maruno, Takahiro; Ishii, Kentaro; Uchiyama, Susumu; Song, Chihong; Murata, Kazuyoshi; Iino, Ryota & Ando, Toshio	Dynamic structural states of ClpB involved in its disaggregation function	Nature Communications	9	2147	2018
140	Uchihashi, Takayuki; Watanabe, Hiroki & Kodera, Noriyuki	Optimum substrates for imaging biological molecules with high-speed atomic force microscopy	Methods in Molecular Biology	1814	159--179	2018
141	Umakoshi, Takayuki; Udaka, Hikari; Uchihashi, Takayuki; Ando, Toshio; Suzuki, Miho & Fukuda, Takeshi	Quantum-dot antibody conjugation visualized at the single-molecule scale with high-speed atomic force microscopy	Colloids and Surfaces B: Biointerfaces	167	267--274	2018
142	Yagi-Utsumi, Maho; Sikdar, Arunima; Kozai, Toshiya; Inoue, Rintaro; Sugiyama, Masaaki; Uchihashi, Takayuki; Yagi, Hirokazu; Satoh, Tadashi & Kato, Koichi	Conversion of functionally undefined homopentameric protein PbaA into a proteasome activator by mutational modification of its C-terminal segment conformation	Protein Engineering, Design and Selection	31	29--36	2018
143	Kisovec, Matic; Rezelj, Saša; Knap, Primož; Cajnko, Miša Mojca; Caserman, Simon; Flašker, Ajda; Žnidaršič, Nada; Repič, Matej; Mavri, Janez; Ruan, Yi; Scheuring, Simon; Podobnik, Marjetka; Anderluh, Gregor	Engineering a pH responsive pore forming protein	Scientific Reports	7	1--13	2017

144	Mierzwa, Beata E.; Chiaruttini, Nicolas; Redondo-Morata, Lorena; Moser Von Filseck, Joachim; König, Julia; Larios, Jorge; Poser, Ina; Müller-Reichert, Thomas; Scheuring, Simon; Roux, Aurélien; Gerlich, Daniel W.	Dynamic subunit turnover in ESCRT-III assemblies is regulated by Vps4 to mediate membrane remodelling during cytokinesis	Nature Cell Biology	19	787--798	2017
145	Munguira, Ignacio L. B.; Takahashi, Hirohide; Casuso, Ignacio; Scheuring, Simon	Lysenin Toxin Membrane Insertion Is pH-Dependent but Independent of Neighboring Lysenins	Biophysical Journal	113	2029--2036	2017
146	Rangl, Martina; Rima, Luca; Klement, Jessica; Miyagi, Atsushi; Keller, Sandro; Scheuring, Simon	Real-time Visualization of Phospholipid Degradation by Outer Membrane Phospholipase A using High-Speed Atomic Force Microscopy	Journal of Molecular Biology	429	977--986	2017
147	Ruan, Yi; Miyagi, Atsushi; Wang, Xiaoyu; Chami, Mohamed; Boudker, Olga; Scheuring, Simon	Direct visualization of glutamate transporter elevator mechanism by high-speed AFM	Proceedings of the National Academy of Sciences of the United States of America	114	1584--1588	2017
148	Fukuda, Natsuki; Noi, Kentaro; Weng, Lidong; Kobashigawa, Yoshihiro; Miyazaki, Hiromi; Wakeyama, Yukari; Takaki, Michiyo; Nakahara, Yusuke; Tatsuno, Yuka; Uchida-Kamekura, Makiyo; Suwa, Yoshiaki; Sato, Takashi; Ichikawa-Tomikawa, Naoki; Nomizu, Motoyoshi; Fujiwara, Yukio; Ohsaka, Fumina; Saito, Takashi; Maenaka, Katsumi; Kumeta, Hiroyuki; Shinya, Shoko; Kojima, Chojiro; Ogura, Teru; Morioka, Hiroshi	Production of single-chain Fv antibodies specific for ga-pyridine, an advanced glycation end-product (AGE), with reduced inter-domain motion	Molecules	22	-	2017
149	ichi Maegawa, Ken; Watanabe, Satoshi; Noi, Kentaro; Okumura, Masaki; Amagai, Yuta; Inoue, Michio; Ushioda, Ryo; Nagata, Kazuhiro; Ogura, Teru; Inaba, Kenji	The Highly Dynamic Nature of ERdj5 Is Key to Efficient Elimination of Aberrant Protein Oligomers through ER-Associated Degradation	Structure	25	846--857.e4	2017
150	Plochberger, Birgit; Röhrl, Clemens; Preiner, Johannes; Rankl, Christian; Brameshuber, Mario; Madl, Josef; Bittman, Robert; Ros, Robert; Sezgin, Erdinc; Eggeling, Christian; Hinterdorfer, Peter; Stangl, Herbert; Schütz, Gerhard J.	HDL particles incorporate into lipid bilayers-a combined AFM and single molecule fluorescence microscopy study	Scientific Reports	7	-	2017
151	Zhang, Yuliang; Tunuguntla, Ramya H.; Choi, Pyung-On; Noy, Aleksandr	Real-time dynamics of carbon nanotube porins in supported lipid membranes visualized by high-speed atomic force microscopy	Philosophical Transactions of the Royal Society B: Biological Sciences	372	20160226	2017

152	Ando, Toshio	Directly watching biomolecules in action by high-speed atomic force microscopy	Biophysical Reviews	9	421--429	2017
153	Arai, Naoki; Furuta, Tadaomi & Sakurai, Minoru	Analysis of an ATP-induced conformational transition of ABC transporter MsbA using a coarse-grained model	Biophysics and Physicobiology	14	161--171	2017
154	Banerjee, Siddhartha; Sun, Zhiqiang; Hayden, Eric Y.; Teplow, David B. & Lyubchenko, Yuri L.	Nanoscale Dynamics of Amyloid β-42 Oligomers As Revealed by High-Speed Atomic Force Microscopy	ACS Nano	11	12202--12209	2017
155	Colom, Adai; Redondo-Morata, Lorena; Chiaruttini, Nicolas; Roux, Aurélien & Scheuring, Simon	Dynamic remodeling of the dynamin helix during membrane constriction	Proceedings of the National Academy of Sciences	114	5449--5454	2017
156	Dufrêne, Yves F.; Ando, Toshio; Garcia, Ricardo; Alsteens, David; Martinez-Martin, David; Engel, Andreas; Gerber, Christoph & Müller, Daniel J.	Imaging modes of atomic force microscopy for application in molecular and cell biology	Nature Nanotechnology	12	295--307	2017
157	Gorle, Suresh; Pan, Yangang; Sun, Zhiqiang; Shlyakhtenko, Luda S.; Harris, Reuben S.; Lyubchenko, Yuri L. & Vuković, Lela	Computational Model and Dynamics of Monomeric Full-Length APOBEC3G	ACS Central Science	3	1180--1188	2017
158	Harada, Hirofumi; Onoda, Akira; Uchihashi, Takayuki; Watanabe, Hiroki; Sunagawa, Naoki; Samejima, Masahiro; Igarashi, Kiyohiko & Hayashi, Takashi	Interdomain flip-flop motion visualized in flavocytochrome cellobiose dehydrogenase using high-speed atomic force microscopy during catalysis	Chemical Science	8	6561--6565	2017
159	Keya, Jakia Jannat; Inoue, Daisuke; Suzuki, Yuki; Kozai, Toshiya; Ishikuro, Daiki; Kodera, Noriyuki; Uchihashi, Takayuki; Kabir, Arif Md. Rashedul; Endo, Masayuki; Sada, Kazuki & Kakugo, Akira	High-Resolution Imaging of a Single Gliding Protofilament of Tubulins by HS-AFM	Scientific Reports	7	6166	2017
160	Kobayashi, Yusuke; Misumi, Osami; Odahara, Masaki; Ishibashi, Kota; Hirono, Masafumi; Hidaka, Kumi; Endo, Masayuki; Sugiyama, Hiroshi; Iwasaki, Hiroshi; Kuroiwa, Tsuneyoshi; Shikanai, Toshiharu & Nishimura, Yoshiki	Holliday junction resolvases mediate chloroplast nucleoid segregation	Science	356	631--634	2017

161	Kozai, Toshiya; Sekiguchi, Taichiro; Satoh, Tadashi; Yagi, Hirokazu; Kato, Koichi & Uchihashi, Takayuki	Two-step process for disassembly mechanism of proteasome α7 homo-tetradecamer by α6 revealed by high-speed atomic force microscopy	Scientific Reports	7	15373	2017
162	Matsui, Shusuke; Kureha, Takuma; Hiroshige, Seina; Shibata, Mikihiro; Uchihashi, Takayuki & Suzuki, Daisuke	Fast Adsorption of Soft Hydrogel Microspheres on Solid Surfaces in Aqueous Solution	Angewandte Chemie International Edition	56	12146--12149	2017
163	Mohamed, Mahmoud Shaaban; Kobayashi, Akiko; Taoka, Azuma; Watanabe-Nakayama, Takahiro; Kikuchi, Yosuke; Hazawa, Masaharu; Minamoto, Toshinari; Fukumori, Yoshihiro; Kodera, Noriyuki; Uchihashi, Takayuki; Ando, Toshio & Wong, Richard W.	High-Speed Atomic Force Microscopy Reveals Loss of Nuclear Pore Resilience as a Dying Code in Colorectal Cancer Cells	ACS Nano	11	5567--5578	2017
164	Rigato, Annafrancesca; Miyagi, Atsushi; Scheuring, Simon & Rico, Felix	High-frequency microrheology reveals cytoskeleton dynamics in living cells	Nature Physics	13	771--775	2017
165	Satoh, Tadashi; Song, Chihong; Zhu, Tong; Toshimori, Takayasu; Murata, Kazuyoshi; Hayashi, Yugo; Kamikubo, Hironari; Uchihashi, Takayuki & Kato, Koichi	Visualisation of a flexible modular structure of the ER folding-sensor enzyme UGGT	Scientific Reports	7	12142	2017
166	Shibata, Mikihiro; Watanabe, Hiroki; Uchihashi, Takayuki; Ando, Toshio & Yasuda, Ryohei	High-speed atomic force microscopy imaging of live mammalian cells	Biophysics and Physicobiology	14	127--135	2017
167	Shibata, Mikihiro; Nishimasu, Hiroshi; Kodera, Noriyuki; Hirano, Seiichi; Ando, Toshio; Uchihashi, Takayuki & Nureki, Osamu	Real-space and real-Time dynamics of CRISPR-Cas9 visualized by high-speed atomic force microscopy	Nature Communications	8	1--9	2017
168	Shibata, Tomonori; Fujita, Yoshihiko; Ohno, Hirohisa; Suzuki, Yuki; Hayashi, Karin; Komatsu, Kaoru R.; Kawasaki, Shunsuke; Hidaka, Kumi; Yonehara, Shin; Sugiyama, Hiroshi; Endo, Masayuki & Saito, Hirohide	Protein-driven RNA nanostructured devices that function in vitro and control mammalian cell fate	Nature Communications	8	540	2017
169	Shrestha, Prakash; Jonchhe, Sagun; Emura, Tomoko; Hidaka, Kumi; Endo, Masayuki; Sugiyama, Hiroshi & Mao, Hanbin	Confined space facilitates G-quadruplex formation	Nature Nanotechnology	12	582--588	2017

170	Sumino, Ayumi; Uchihashi, Takayuki & Oiki, Shigetoshi	Oriented Reconstitution of the Full-Length KcsA Potassium Channel in a Lipid Bilayer for AFM Imaging	Journal of Physical Chemistry Letters	8	785--793	2017
171	Terahara, Naoya; Kodera, Noriyuki; Uchihashi, Takayuki; Ando, Toshio; Namba, Keiichi & Minamino, Tohru	Na+-induced structural transition of MotPS for stator assembly of the Bacillus flagellar motor.	Science advances	3	eaao4119	2017
172	Watanabe, Shinji & Ando, Toshio	High-speed XYZ-nanopositioner for scanning ion conductance microscopy	Applied Physics Letters	111	113106	2017
173	Willner, Elena M.; Kamada, Yuu; Suzuki, Yuki; Emura, Tomoko; Hidaka, Kumi; Dietz, Hendrik; Sugiyama, Hiroshi & Endo, Masayuki	Single-Molecule Observation of the Photoregulated Conformational Dynamics of DNA Origami Nanoscissors	Angewandte Chemie - International Edition	56	15324--15328	2017
174	Morante, Koldo; Bellomio, Augusto; Gil-Cartón, David; Redondo-Morata, Lorena; Sot, Jesús; Scheuring, Simon; Valle, Mikel; González-Mañas, Juan Manuel; Tsumoto, Kouhei; Caaveiro, Jose M. M.	Identification of a membrane-bound prepore species clarifies the lytic mechanism of actinoporins	Journal of Biological Chemistry	291	19210--19219	2016
175	Munguira, Ignacio; Casuso, Ignacio; Takahashi, Hirohide; Rico, Felix; Miyagi, Atsushi; Chami, Mohamed; Scheuring, Simon	Glasslike Membrane Protein Diffusion in a Crowded Membrane	ACS Nano	10	2584--2590	2016
176	Ruan, Yi; Rezelj, Saša; Bedina Zavec, Apolonija; Anderluh, Gregor; Scheuring, Simon	Listeriolysin O Membrane Damaging Activity Involves Arc Formation and Lineaction -- Implication for Listeria monocytogenes Escape from Phagocytic Vacuole	PLOS Pathogens	12	e1005597	2016
177	Takahashi, Hirohide; Miyagi, Atsushi; Redondo-Morata, Lorena; Scheuring, Simon	Temperature-Controlled High-Speed AFM: Real-Time Observation of Ripple Phase Transitions	Small	12	6106--6113	2016
178	Eeftens, Jorine M.; Katan, Allard J.; Kschonsak, Marc; Hassler, Markus; de Wilde, Liza; Dief, Essam M.; Haering, Christian H.; Dekker, Cees	Condensin Smc2-Smc4 Dimers Are Flexible and Dynamic	Cell Reports	14	1813--1818	2016
179	Godonoga, Maia; Lin, Ting Yu; Oshima, Azusa; Sumitomo, Koji; Tang, Marco S. L.; Cheung, Yee Wai; Kinghorn, Andrew B.; Dirkzwager, Roderick M.; Zhou, Cunshan; Kuzuya, Akinori; Tanner, Julian A.; Heddle, Jonathan G.	A DNA aptamer recognising a malaria protein biomarker can function as part of a DNA origami assembly	Scientific Reports	6	1--12	2016

180	Gumí-Audenis, Berta; Costa, Luca; Carlá, Francesco; Comin, Fabio; Sanz, Fausto; Giannotti, Marina I.	Structure and nanomechanics of model membranes by atomic force microscopy and spectroscopy: Insights into the role of cholesterol and sphingolipids	Membranes	6	-	2016
181	Inoue, Keiichi; Ito, Shota; Kato, Yoshitaka; Nomura, Yurika; Shibata, Mikihiro; Uchihashi, Takayuki; Tsunoda, Satoshi P. & Kandori, Hideki	A natural light-driven inward proton pump	Nature Communications	7	13415	2016
182	Kizaki, Seiichiro; Zou, Tingting; Li, Yue; Han, Yong Woon; Suzuki, Yuki; Harada, Yoshie & Sugiyama, Hiroshi	Preferential 5-Methylcytosine Oxidation in the Linker Region of Reconstituted Positioned Nucleosomes by Tet1 Protein	Chemistry - A European Journal	22	16598--16601	2016
183	Miyagi, Atsushi; Chipot, Christophe; Rangl, Martina & Scheuring, Simon	High-speed atomic force microscopy shows that annexin V stabilizes membranes on the second timescale	Nature Nanotechnology	11	783--790	2016
184	Nishida, Yu; Ohtsuki, Shozo; Araie, Yuki; Umeki, Yuka; Endo, Masayuki; Emura, Tomoko; Hidaka, Kumi; Sugiyama, Hiroshi; Takahashi, Yuki; Takakura, Yoshinobu & Nishikawa, Makiya	Self-assembling DNA hydrogel-based delivery of immunoinhibitory nucleic acids to immune cells	Nanomedicine: Nanotechnology, Biology, and Medicine	12	123--130	2016
185	Rangl, Martina; Miyagi, Atsushi; Kowal, Julia; Stahlberg, Henning; Nimigean, Crina M. & Scheuring, Simon	Real-time visualization of conformational changes within single MloK1 cyclic nucleotide-modulated channels	Nature Communications	7	12789	2016
186	Räz, Michael H.; Hidaka, Kumi; Sturla, Shana J.; Sugiyama, Hiroshi & Endo, Masayuki	Torsional Constraints of DNA Substrates Impact Cas9 Cleavage	Journal of the American Chemical Society	138	13842--13845	2016
187	Sakiyama, Yusuke; Mazur, Adam; Kapinos, Larisa E. & Lim, Roderick Y. H.	Spatiotemporal dynamics of the nuclear pore complex transport barrier resolved by high-speed atomic force microscopy	Nature Nanotechnology	11	719--723	2016
188	Shrestha, Prakash; Emura, Tomoko; Koirala, Deepak; Cui, Yunxi; Hidaka, Kumi; Maximuck, William J.; Endo, Masayuki; Sugiyama, Hiroshi & Mao, Hanbin	Mechanical properties of DNA origami nanoassemblies are determined by Holliday junction mechanophores	Nucleic Acids Research	44	6574--6582	2016
189	Takeuchi, Yosuke; Endo, Masayuki; Suzuki, Yuki; Hidaka, Kumi; Durand, Guillaume; Dausse, Eric; Toulmé, Jean Jacques & Sugiyama, Hiroshi	Single-molecule observations of RNA-RNA kissing interactions in a DNA nanostructure	Biomaterials Science	4	130--135	2016

190	Uchihashi, Takayuki; Watanabe, Hiroki; Fukuda, Shingo; Shibata, Mikihiro & Ando, Toshio	Functional extension of high-speed AFM for wider biological applications	Ultramicroscopy	160	182--196	2016
191	Yamagata, Yutaro; Emura, Tomoko; Hidaka, Kumi; Sugiyama, Hiroshi & Endo, Masayuki	Triple Helix Formation in a Topologically Controlled DNA Nanosystem	Chemistry - A European Journal	22	5494--5498	2016
192	Yamamoto, Daisuke & Ando, Toshio	Chaperonin GroEL–GroES Functions as both Alternating and Non-Alternating Engines	Journal of Molecular Biology	428	3090--3101	2016
193	Yamamoto, Hayashi; Fujioka, Yuko; Suzuki, Sho W.; Noshiro, Daisuke; Suzuki, Hironori; Kondo-Kakuta, Chika; Kimura, Yayoi; Hirano, Hisashi; Ando, Toshio; Noda, Nobuo N. & Ohsumi, Yoshinori	The Intrinsically Disordered Protein Atg13 Mediates Supramolecular Assembly of Autophagy Initiation Complexes	Developmental Cell	38	86--99	2016
194	Chiaruttini, Nicolas; Redondo-Morata, Lorena; Colom, Adai; Humbert, Frédéric; Lenz, Martin; Scheuring, Simon; Roux, Aurélien	Relaxation of Loaded ESCRT-III Spiral Springs Drives Membrane Deformation	Cell	163	866--879	2015
195	Davies, Tim; Kodera, Noriyuki; Kaminski Schierle, Gabriele S.; Rees, Eric; Erdelyi, Miklos; Kaminski, Clemens F.; Ando, Toshio & Mishima, Masanori	CYK4 Promotes Antiparallel Microtubule Bundling by Optimizing MKLP1 Neck Conformation	PLoS Biology	13	e1002121	2015
196	Endo, Masayuki; Takeuchi, Yosuke; Suzuki, Yuki; Emura, Tomoko; Hidaka, Kumi; Wang, Fuan; Willner, Itamar & Sugiyama, Hiroshi	Single-Molecule Visualization of the Activity of a Zn^{2+}-Dependent DNAzyme	Angewandte Chemie - International Edition	54	10550--10554	2015
197	Endo, Masayuki; Xing, Xiwen; Zhou, Xiang; Emura, Tomoko; Hidaka, Kumi; Tuesuwan, Bodin & Sugiyama, Hiroshi	Single-Molecule Manipulation of the Duplex Formation and Dissociation at the G-Quadruplex/i-Motif Site in the DNA Nanostructure	ACS Nano	9	9922--9929	2015
198	Fujita, Yoshihiko; Furushima, Rie; Ohno, Hirohisa; Sagawa, Fumihiko & Inoue, Tan	Cell-surface receptor control that depends on the size of a synthetic equilateral-triangular RNA-protein complex	Scientific Reports	4	6422	2015
199	Fukuda, Shingo; Uchihashi, Takayuki & Ando, Toshio	Method of mechanical holding of cantilever chip for tip-scan high-speed atomic force microscope	Review of Scientific Instruments	86	63703	2015

200	Imamura, Motonori; Uchihashi, Takayuki; Ando, Toshio; Leifert, Annika; Simon, Ulrich; Malay, Ali D. & Heddle, Jonathan G.	Probing structural dynamics of an artificial protein cage using high-speed atomic force microscopy	Nano Letters	15	1331--1335	2015
201	Katan, Allard J.; Vlijm, Rifka; Lusser, Alexandra & Dekker, Cees	Dynamics of nucleosomal structures measured by high-speed atomic force microscopy	Small	11	976--984	2015
202	Kodera, Noriyuki; Uchida, Kaoru; Ando, Toshio & Aizawa, Shin Ichi	Two-ball structure of the flagellar hook-length control protein flik as revealed by high-speed atomic force microscopy	Journal of Molecular Biology	427	406--414	2015
203	Lyubchenko, Yuri L. & Shlyakhtenko, Luda S.	Chromatin Imaging with Time-Lapse Atomic Force Microscopy	Methods in molecular biology (Clifton, N.J.)	1288	27--42	2015
204	Matsumoto, Rena; Uemura, Toshimasa; Xu, Zhefeng; Yamaguchi, Isamu; Ikoma, Toshiyuki & Tanaka, Junzo	Rapid oriented fibril formation of fish scale collagen facilitates early osteoblastic differentiation of human mesenchymal stem cells	Journal of Biomedical Materials Research Part A	103	2531--2539	2015
205	Mohri, Kohta; Kusuki, Eri; Ohtsuki, Shozo; Takahashi, Natsuki; Endo, Masayuki; Hidaka, Kumi; Sugiyama, Hiroshi; Takahashi, Yuki; Takakura, Yoshinobu & Nishikawa, Makiya	Self-Assembling DNA Dendrimer for Effective Delivery of Immunostimulatory CpG DNA to Immune Cells	Biomacromolecules	16	1095--1101	2015
206	Oestreicher, Zachery; Taoka, Azuma & Fukumori, Yoshihiro	A comparison of the surface nanostructure from two different types of gram-negative cells: Escherichia coli and Rhodobacter sphaeroides	Micron	72	8--14	2015
207	Ohtsuki, Shozo; Matsuzaki, Noriyuki; Mohri, Kohta; Endo, Masayuki; Emura, Tomoko; Hidaka, Kumi; Sugiyama, Hiroshi; Takahashi, Yuki; Ishiyama, Kenichi; Kadowaki, Norimitsu; Takakura, Yoshinobu & Nishikawa, Makiya	Optimal Arrangement of Four Short DNA Strands for Delivery of Immunostimulatory Nucleic Acids to Immune Cells	Nucleic Acid Therapeutics	25	245--253	2015
208	Preiner, Johannes; Horner, Andreas; Karner, Andreas; Ollinger, Nicole; Siligan, Christine; Pohl, Peter & Hinterdorfer, Peter	High-speed AFM images of thermal motion provide stiffness map of interfacial membrane protein moieties	Nano Letters	15	759--763	2015
209	Rajendran, Arivazhagan; Endo, Masayuki; Hidaka, Kumi; Teulade-Fichou, Marie Paule; Mergny, Jean Louis & Sugiyama, Hiroshi	Small molecule binding to a G-hairpin and a G-triplex: A new insight into anticancer drug design targeting G-rich regions	Chemical Communications	51	9181--9184	2015

210	Shibata, Mikihiro; Uchihashi, Takayuki; Ando, Toshio & Yasuda, Ryohei	Long-tip high-speed atomic force microscopy for nanometer-scale imaging in live cells	Scientific Reports	5	8724	2015
211	Sriwimol, Wilaiwan; Aroonkesorn, Aratee; Sakdee, Somsri; Kanchanawarin, Chalermpol; Uchihashi, Takayuki; Ando, Toshio & Angsuthanasombat, Chanan	Potential prepore trimer formation by the Bacillus thuringiensis mosquito-specific toxin: Molecular insights into a critical prerequisite of membrane-bound monomers	Journal of Biological Chemistry	290	20793--20803	2015
212	Suzuki, Tadaki; Kawaguchi, Akira; Ainai, Akira; Tamura, Shin-ichi; Ito, Ryo; Multihartina, Pretty; Setiawaty, Vivi; Pangesti, Krisna Nur Andriana; Odagiri, Takato; Tashiro, Masato & Hasegawa, Hideki	Relationship of the quaternary structure of human secretory IgA to neutralization of influenza virus	Proceedings of the National Academy of Sciences	112	7809--7814	2015
213	Suzuki, Yuki; Endo, Masayuki & Sugiyama, Hiroshi	Lipid-bilayer-assisted two-dimensional self-assembly of DNA origami nanostructures	Nature Communications	6	8052	2015
214	Takeda, Kouta; Uchihashi, Takayuki; Watanabe, Hiroki; Ishida, Takuya; Igarashi, Kiyohiko; Nakamura, Nobuhumi & Ohno, Hiroyuki	Real-Time Dynamic Adsorption Processes of Cytochrome c on an Electrode Observed through Electrochemical High-Speed Atomic Force Microscopy	PLOS ONE	10	e0116685	2015
215	Tashiro, Ryu; Iwamoto, Masahiro; Morinaga, Hironobu; Emura, Tomoko; Hidaka, Kumi; Endo, Masayuki & Sugiyama, Hiroshi	Linking two DNA duplexes with a rigid linker for DNA nanotechnology	Nucleic Acids Research	43	6692--6700	2015
216	Ngo, Kien Xuan; Kodera, Noriyuki; Katayama, Eisaku; Ando, Toshio & Uyeda, Taro Q. P.	Cofilin-induced unidirectional cooperative conformational changes in actin filaments revealed by high-speed atomic force microscopy	eLife	4	4806	2015
217	Yang, Yangyang; Goetzfried, Marisa A.; Hidaka, Kumi; You, Mingxu; Tan, Weihong; Sugiyama, Hiroshi & Endo, Masayuki	Direct Visualization of Walking Motions of Photocontrolled Nanomachine on the DNA Nanostructure	Nano Letters	15	6672--6676	2015
218	Yata, Tomoya; Takahashi, Yuki; Tan, Mengmeng; Hidaka, Kumi; Sugiyama, Hiroshi; Endo, Masayuki; Takakura, Yoshinobu & Nishikawa, Makiya	Efficient amplification of self-gelling polypod-like structured DNA by rolling circle amplification and enzymatic digestion	Scientific Reports	5	14979	2015
219	Ando, Toshio; Uchihashi, Takayuki & Scheuring, Simon	Filming Biomolecular Processes by High-Speed Atomic Force Microscopy	Chemical Reviews	114	3120--3188	2014

220	Ando, Toshio	High-speed AFM imaging	Current Opinion in Structural Biology	28	63--68	2014
221	Braunsmann, Christoph; Seifert, Jan; Rheinlaender, Johannes & Schäffer, Tilman E.	High-speed force mapping on living cells with a small cantilever atomic force microscope	Review of Scientific Instruments	85	73703	2014
222	Eghiaian, Frédéric; Rico, Felix; Colom, Adai; Casuso, Ignacio & Scheuring, Simon	High-speed atomic force microscopy: Imaging and force spectroscopy	FEBS Letters	588	3631--3638	2014
223	Endo, Masayuki & Sugiyama, Hiroshi	Single-Molecule Imaging of Dynamic Motions of Biomolecules in DNA Origami Nanostructures Using High-Speed Atomic Force Microscopy	Accounts of Chemical Research	47	1645--1653	2014
224	Igarashi, Kiyohiko; Uchihashi, Takayuki; Uchiyama, Taku; Sugimoto, Hayuki; Wada, Masahisa; Suzuki, Kazushi; Sakuda, Shohei; Ando, Toshio; Watanabe, Takeshi & Samejima, Masahiro	Two-way traffic of glycoside hydrolase family 18 processive chitinases on crystalline chitin	Nature Communications	5	3975	2014
225	Ishino, Sonoko; Yamagami, Takeshi; Kitamura, Makoto; Kodera, Noriyuki; Mori, Tetsuya; Sugiyama, Shyogo; Ando, Toshio; Goda, Natsuko; Tenno, Takeshi; Hiroaki, Hidekazu & Ishino, Yoshizumi	Multiple interactions of the intrinsically disordered region between the helicase and nuclease domains of the archaeal Hef protein	Journal of Biological Chemistry	289	21627--21639	2014
226	Kodera, Noriyuki & Ando, Toshio	The path to visualization of walking myosin V by high-speed atomic force microscopy	Biophysical Reviews	6	237--260	2014
227	Nakamura, Akihiko; Watanabe, Hiroki; Ishida, Takuya; Uchihashi, Takayuki; Wada, Masahisa; Ando, Toshio; Igarashi, Kiyohiko & Samejima, Masahiro	Trade-off between processivity and hydrolytic velocity of cellobiohydrolases at the surface of crystalline cellulose	Journal of the American Chemical Society	136	4584--4592	2014
228	Preiner, Johannes; Kodera, Noriyuki; Tang, Jilin; Ebner, Andreas; Brameshuber, Mario; Blaas, Dieter; Gelbmann, Nicola; Gruber, Hermann J.; Ando, Toshio & Hinterdorfer, Peter	IgGs are made for walking on bacterial and viral surfaces	Nature Communications	5	4394	2014
229	Rajendran, Arivazhagan; Endo, Masayuki & Sugiyama, Hiroshi	State-of-the-art high-speed atomic force microscopy for investigation of single-molecular dynamics of proteins	Chemical Reviews	114	1493--1520	2014

230	Rajendran, Arivazhagan; Endo, Masayuki; Hidaka, Kumi & Sugiyama, Hiroshi	Direct and Single-Molecule Visualization of the Solution-State Structures of G-Hairpin and G-Triplex Intermediates	Angewandte Chemie International Edition	53	4107--4112	2014
231	Rajendran, Arivazhagan; Endo, Masayuki; Hidaka, Kumi; Tran, Phong Lan Thao; Teulade-Fichou, Marie Paule; Mergny, Jean Louis & Sugiyama, Hiroshi	G-quadruplex-binding ligand-induced DNA synapsis inside a DNA origami frame	RSC Advances	4	6346--6355	2014
232	Shibafuji, Yusuke; Nakamura, Akihiko; Uchihashi, Takayuki; Sugimoto, Naohisa; Fukuda, Shingo; Watanabe, Hiroki; Samejima, Masahiro; Ando, Toshio; Noji, Hiroyuki; Koivula, Anu; Igarashi, Kiyohiko & Iino, Ryota	Single-molecule imaging analysis of elementary reaction steps of trichoderma reesei cellobiohydrolase i (Cel7A) hydrolyzing crystalline cellulose I α and IIII	Journal of Biological Chemistry	289	14056--14065	2014
233	Suzuki, Yuki; Endo, Masayuki; Katsuda, Yousuke; Ou, Keiyu; Hidaka, Kumi & Sugiyama, Hiroshi	DNA Origami Based Visualization System for Studying Site-Specific Recombination Events	Journal of the American Chemical Society	136	211--218	2014
234	Suzuki, Yuki; Endo, Masayuki; Yang, Yangyang & Sugiyama, Hiroshi	Dynamic Assembly/Disassembly Processes of Photoresponsive DNA Origami Nanostructures Directly Visualized on a Lipid Membrane Surface	Journal of the American Chemical Society	136	1714--1717	2014
235	Takenaka, Tomohiro; Endo, Masayuki; Suzuki, Yuki; Yang, Yangyang; Emura, Tomoko; Hidaka, Kumi; Kato, Takayuki; Miyata, Tomoko; Namba, Keiichi & Sugiyama, Hiroshi	Photoresponsive DNA nanocapsule having an open/close system for capture and release of nanomaterials	Chemistry - A European Journal	20	14951--14954	2014
236	Yang, Yangyang; Endo, Masayuki; Suzuki, Yuki; Hidaka, Kumi & Sugiyama, Hiroshi	Direct observation of the dual-switching behaviors corresponding to the state transition in a DNA nanoframe	Chemical Communications	50	4211--4213	2014
237	Colom, Adai; Casuso, Ignacio; Rico, Felix; Scheuring, Simon	A hybrid high-speed atomic force-optical microscope for visualizing single membrane proteins on eukaryotic cells	Nature Communications	4	1--8	2013
238	Rico, Felix; Gonzalez, Laura; Casuso, Ignacio; Puig-Vidal, Manel; Scheuring, Simon	High-speed force spectroscopy unfolds titin at the velocity of molecular dynamics simulations	Science	342	741--743	2013
239	Tunuguntla, Ramya H.; Hu, Andrew Y.; Zhang, Yuliang; Noy, Aleksand	Impact of PEG additives and pore rim functionalization on water transport through sub-1-nm carbon nanotube porins	J. Name	0	1--3	2013

240	Ando, Toshio	High-speed atomic force microscopy of protein dynamics : myosin on actin and rotary enzyme F 1 -ATPase	Microscopy and Analysis	-	10--13	2013
241	Ando, Toshio	Molecular machines directly observed by high-speed atomic force microscopy	FEBS Letters	587	997--1007	2013
242	Ando, Toshio	High-speed atomic force microscopy.	Microscopy (Oxford, England)	62	81--93	2013
243	Ando, Toshio; Uchihashi, Takayuki & Kodera, Noriyuki	High-Speed AFM and Applications to Biomolecular Systems	Annual Review of Biophysics	42	393--414	2013
244	Colom, Adai; Casuso, Ignacio; Rico, Felix & Scheuring, Simon	A hybrid high-speed atomic force–optical microscope for visualizing single membrane proteins on eukaryotic cells	Nature Communications	4	2155	2013
245	Endo, Masayuki; Yamamoto, Seigi; Tatsumi, Koichi; Emura, Tomoko; Hidaka, Kumi & Sugiyama, Hiroshi	RNA-templated DNA origami structures	Chemical Communications	49	2879--2881	2013
246	Endo, Masayuki; Yang, Yangyang & Sugiyama, Hiroshi	DNA origami technology for biomaterials applications	Biomaterials Science	1	347--360	2013
247	Endo, Masayuki; Inoue, Masahiro; Suzuki, Yuki; Masui, Chigusa; Morinaga, Hironobu; Hidaka, Kumi & Sugiyama, Hiroshi	Regulation of B-Z conformational transition and complex formation with a z-form binding protein by introduction of constraint to double-stranded DNA by using a DNA nanoscaffold	Chemistry - A European Journal	19	16887--16890	2013
248	Hashimoto, Manami; Kodera, Noriyuki; Tsunaka, Yasuo; Oda, Masayuki; Tanimoto, Mitsuru; Ando, Toshio; Morikawa, Kosuke & Tate, Shin Ichi	Phosphorylation-coupled intramolecular dynamics of unstructured regions in chromatin remodeler FACT	Biophysical Journal	104	2222--2234	2013
249	Liu, Lu Ning & Scheuring, Simon	Investigation of photosynthetic membrane structure using atomic force microscopy	Trends in Plant Science	18	277--286	2013
250	Noi, Kentaro; Yamamoto, Daisuke; Nishikori, Shingo; Arita-Morioka, Ken-ichi; Kato, Takayuki; Ando, Toshio & Ogura, Teru	High-speed atomic force microscopic observation of ATP-dependent rotation of the AAA+ chaperone p97.	Structure (London, England : 1993)	21	1992--2002	2013

251	Picas, Laura; Rico, Félix; Deforet, Maxime & Scheuring, Simon	Structural and mechanical heterogeneity of the erythrocyte membrane reveals hallmarks of membrane stability	ACS Nano	7	1054--1063	2013
252	Rajendran, Arivazhagan; Endo, Masayuki; Hidaka, Kumi & Sugiyama, Hiroshi	Direct and real-time observation of rotary movement of a DNA nanomechanical device	Journal of the American Chemical Society	135	1117--1123	2013
253	Rajendran, Arivazhagan; Endo, Masayuki; Hidaka, Kumi; Tran, Phong Lan Thao; Mergny, Jean-louis; Gorelick, Robert J. & Sugiyama, Hiroshi	HIV-1 Nucleocapsid Proteins as Molecular Chaperones for Tetramolecular Antiparallel G-Quadruplex Formation	Journal of the American Chemical Society	135	18575--18585	2013
254	Rajendran, Arivazhagan; Endo, Masayuki; Hidaka, Kumi & Sugiyama, Hiroshi	Control of the two-dimensional crystallization of DNA origami with various loop arrangements	Chemical Communications	49	686--688	2013
255	Rajendran, Arivazhagan; Endo, Masayuki; Hidaka, Kumi; Lan Thao Tran, Phong; Mergny, Jean Louis & Sugiyama, Hiroshi	Controlling the stoichiometry and strand polarity of a tetramolecular G-quadruplex structure by using a DNA origami frame	Nucleic Acids Research	41	8738--8747	2013
256	Rico, Felix; Gonzalez, Laura; Casuso, Ignacio; Puig-Vidal, Manel & Scheuring, Simon	High-speed force spectroscopy unfolds titin at the velocity of molecular dynamics simulations	Science	342	741--743	2013
257	Shlyakhtenko, Luda S.; Lushnikov, Alexander Y.; Miyagi, Atsushi; Li, Ming; Harris, Reuben S. & Lyubchenko, Yuri L.	Atomic force microscopy studies of APOBEC3G oligomerization and dynamics	Journal of Structural Biology	184	217--225	2013
258	Suzuki, Yuki; Sakai, Nobuaki; Yoshida, Aiko; Uekusa, Yoshitsugu; Yagi, Akira; Imaoka, Yuka; Ito, Shuichi; Karaki, Koichi & Takeyasu, Kunio	High-speed atomic force microscopy combined with inverted optical microscopy for studying cellular events	Scientific Reports	3	2131	2013
259	Suzuki, Yuki; Goetze, Tom A.; Stroebel, David; Balasuriya, Dilshan; Yoshimura, Shige H.; Henderson, Robert M.; Paoletti, Pierre; Takeyasu, Kunio & Edwardson, J. Michael	Visualization of structural changes accompanying activation of N-methyl-D-aspartate (NMDA) receptors using fast-scan atomic force microscopy imaging	Journal of Biological Chemistry	288	778--784	2013
260	Yamashita, Hayato; Inoue, Keiichi; Shibata, Mikihiro; Uchihashi, Takayuki; Sasaki, Jun; Kandori, Hideki & Ando, Toshio	Role of trimer-trimer interaction of bacteriorhodopsin studied by optical spectroscopy and high-speed atomic force microscopy	Journal of Structural Biology	184	2--11	2013

261	Yilmaz, Neval; Yamada, Taro; Greimel, Peter; Uchihashi, Takayuki; Ando, Toshio & Kobayashi, Toshihide	Real-time visualization of assembling of a sphingomyelin-specific toxin on planar lipid membranes	Biophysical Journal	105	1397--1405	2013
262	Casuso, Ignacio; Khao, Jonathan; Chami, Mohamed; Paul-Gilloteaux, Perrine; Husain, Mohamed; Duneau, Jean-Pierre; Stahlberg, Henning; Sturgis, James N.; Scheuring, Simon	Characterization of the motion of membrane proteins using high-speed atomic force microscopy	Nature Nanotechnology	7	525--529	2012
263	Colom, Adai; Casuso, Ignacio; Boudier, Thomas; Scheuring, Simon	High-Speed Atomic Force Microscopy: Cooperative Adhesion and Dynamic Equilibrium of Junctional Microdomain Membrane Proteins	Journal of Molecular Biology	423	249--256	2012
264	Husain, Mohamed; Boudier, Thomas; Paul-Gilloteaux, Perrine; Casuso, Ignacio; Scheuring, Simon	Software for drift compensation, particle tracking and particle analysis of high-speed atomic force microscopy image series	Journal of Molecular Recognition	25	292--298	2012
265	Ando, Toshio	High-speed atomic force microscopy coming of age	Nanotechnology	23	62001	2012
266	Ando, Toshio & Kodera, Noriyuki	Visualization of Mobility by Atomic Force Microscopy	Intrinsically Disordered Protein Analysis	896	57--69	2012
267	Ando, Toshio; Uchihashi, Takayuki & Kodera, Noriyuki	High-Speed Atomic Force Microscopy	Japanese Journal of Applied Physics	51	08KA02	2012
268	Ando, Toshio; Uchihashi, Takayuki; Kodera, Noriyuki; Shibata, Mikihiro; Yamamoto, Daisuke & Yamashita, Hayato	High-Speed AFM for Observing Dynamic Processes in Liquid	Atomic Force Microscopy in Liquid	-	189--209	2012
269	Casuso, Ignacio; Khao, Jonathan; Chami, Mohamed; Paul-Gilloteaux, Perrine; Husain, Mohamed; Duneau, Jean Pierre; Stahlberg, Henning; Sturgis, James N. & Scheuring, Simon	Characterization of the motion of membrane proteins using high-speed atomic force microscopy	Nature Nanotechnology	7	525--529	2012
270	Colom, Adai; Casuso, Ignacio; Boudier, Thomas & Scheuring, Simon	High-Speed Atomic Force Microscopy: Cooperative Adhesion and Dynamic Equilibrium of Junctional Microdomain Membrane Proteins	Journal of Molecular Biology	423	249--256	2012

271	Endo, Masayuki; Tatsumi, Koichi; Terushima, Kosuke; Katsuda, Yousuke; Hidaka, Kumi; Harada, Yoshie & Sugiyama, Hiroshi	Direct Visualization of the Movement of a Single T7 RNA Polymerase and Transcription on a DNA Nanostructure	Angewandte Chemie International Edition	51	8778--8782	2012
272	Endo, Masayuki; Yang, Yangyang; Suzuki, Yuki; Hidaka, Kumi & Sugiyama, Hiroshi	Single-Molecule Visualization of the Hybridization and Dissociation of Photoresponsive Oligonucleotides and Their Reversible Switching Behavior in a DNA Nanostructure	Angewandte Chemie International Edition	51	10518--10522	2012
273	Endo, Masayuki; Miyazaki, Ryoji; Emura, Tomoko; Hidaka, Kumi & Sugiyama, Hiroshi	Transcription Regulation System Mediated by Mechanical Operation of a DNA Nanostructure	Journal of the American Chemical Society	134	2852--2855	2012
274	Igarashi, Kiyohiko; Uchihashi, Takayuki; Koivula, Anu; Wada, Masahisa; Kimura, Satoshi; Penttilä, Merja; Ando, Toshio & Samejima, Masahiro	Visualization of Cellobiohydrolase I from Trichoderma reesei Moving on Crystalline Cellulose Using High-Speed Atomic Force Microscopy	Methods in enzymology	510	169--182	2012
275	Iijima, Masumi; Somiya, Masaharu; Yoshimoto, Nobuo; Niimi, Tomoaki & Kuroda, Shun'Ichi	Nano-visualization of oriented-immobilized IgGs on immunosensors by high-speed atomic force microscopy	Scientific Reports	2	790	2012
276	Jungmann, Ralf; Scheible, Max & Simmel, Friedrich C.	Nanoscale imaging in DNA nanotechnology	Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology	4	66--81	2012
277	Lyubchenko, Yuri L.	AFM Visualization of Protein–DNA Interactions	Single-molecule Studies of Proteins	-	97--117	2012
278	Mohri, Kohta; Nishikawa, Makiya; Takahashi, Natsuki; Shiomi, Tomoki; Matsuoka, Nao; Ogawa, Kohei; Endo, Masayuki; Hidaka, Kumi; Sugiyama, Hiroshi; Takahashi, Yuki & Takakura, Yoshinobu	Design and development of nanosized DNA assemblies in polypod-like structures as efficient vehicles for immunostimulatory cpg motifs to immune cells	ACS Nano	6	5931--5940	2012
279	Mori, Toshiaki; Hirose, Atsushi; Hagiwara, Tatsuya; Ohtsuka, Masanori; Kakuta, Yoshimitsu; Kimata, Koji & Okahata, Yoshio	Single-molecular enzymatic elongation of hyaluronan polymers visualized by high-speed atomic force microscopy	Journal of the American Chemical Society	134	20254--20257	2012
280	Nakata, Eiji; Liew, Fong Fong; Uwatoko, Chisana; Kiyonaka, Shigeki; Mori, Yasuo; Katsuda, Yousuke; Endo, Masayuki; Sugiyama, Hiroshi & Morii, Takashi	Zinc-Finger Proteins for Site-Specific Protein Positioning on DNA-Origami Structures	Angewandte Chemie International Edition	51	2421--2424	2012

281	Nojima, Tatsuya; Konno, Hiroki; Kodera, Noriyuki; Seio, Kohji; Taguchi, Hideki & Yoshida, Masasuke	Nano-Scale Alignment of Proteins on a Flexible DNA Backbone	PLoS ONE	7	e52534	2012
282	Rajendran, Arivazhagan; Endo, Masayuki & Sugiyama, Hiroshi	DNA Origami: Synthesis and Self-Assembly	Current Protocols in Nucleic Acid Chemistry	1	1291--12918	2012
283	Rajendran, Arivazhagan; Endo, Masayuki & Sugiyama, Hiroshi	Structural and functional analysis of proteins by high-speed atomic force microscopy	Advances in Protein Chemistry and Structural Biology	87	5--55	2012
284	Rajendran, Arivazhagan; Endo, Masayuki & Sugiyama, Hiroshi	Single-Molecule Analysis Using DNA Origami	Angewandte Chemie International Edition	51	874--890	2012
285	Shlyakhtenko, Luda S.; Lushnikov, Alexander Y.; Miyagi, Atsushi; Li, Ming; Harris, Reuben S. & Lyubchenko, Yuri L.	Nanoscale structure and dynamics of ABOBEC3G complexes with single-stranded DNA	Biochemistry	51	6432--6440	2012
286	Suzuki, Yuki; Shin, Minsang; Yoshida, Aiko; Yoshimura, Shige H. & Takeyasu, Kunio	Fast microscopical dissection of action scenes played by Escherichia coli RNA polymerase	FEBS Letters	586	3187--3192	2012
287	Uchihashi, Takayuki; Kodera, Noriyuki & Ando, Toshio	Nanovisualization of Proteins in Action Using High-Speed AFM	Single-molecule Studies of Proteins	58	119--147	2012
288	Uchihashi, Takayuki; Kodera, Noriyuki & Ando, Toshio	Guide to video recording of structure dynamics and dynamic processes of proteins by high-speed atomic force microscopy	Nature Protocols	7	1193--1206	2012
289	Wickham, Shelley F. J.; Bath, Jonathan; Katsuda, Yousuke; Endo, Masayuki; Hidaka, Kumi; Sugiyama, Hiroshi & Turberfield, Andrew J.	A DNA-based molecular motor that can navigate a network of tracks	Nature Nanotechnology	7	169--173	2012
290	Yamashita, Hayato; Taoka, Azuma; Uchihashi, Takayuki; Asano, Tomoya; Ando, Toshio & Fukumori, Yoshihiro	Single-molecule imaging on living bacterial cell surface by high-speed AFM	Journal of Molecular Biology	422	300--309	2012

291	Yang, Yangyang; Endo, Masayuki; Hidaka, Kumi & Sugiyama, Hiroshi	Photo-controllable DNA origami nanostructures assembling into predesigned multiorientational patterns	Journal of the American Chemical Society	134	20645--20653	2012
292	Yoshidome, Tomofumi; Endo, Masayuki; Kashiwazaki, Gengo; Hidaka, Kumi; Bando, Toshikazu & Sugiyama, Hiroshi	Sequence-Selective Single-Molecule Alkylation with a Pyrrole–Imidazole Polyamide Visualized in a DNA Nanoscaffold	Journal of the American Chemical Society	134	4654--4660	2012
293	Casuso, Ignacio; Rico, Felix & Scheuring, Simon	Biological AFM: Where we come from - Where we are - Where we may go	Journal of Molecular Recognition	24	406--413	2011
294	Casuso, Ignacio; Rico, Felix & Scheuring, Simon	High-speed atomic force microscopy: Structure and dynamics of single proteins	Current Opinion in Chemical Biology	15	704--709	2011
295	Endo, Masayuki; Sugita, Tsutomu; Rajendran, Arivazhagan; Katsuda, Yousuke; Emura, Tomoko; Hidaka, Kumi & Sugiyama, Hiroshi	Two-dimensional DNA origami assemblies using a four-way connector	Chemical Communications	47	3213--3215	2011
296	Endo, Masayuki; Hidaka, Kumi & Sugiyama, Hiroshi	Direct AFM observation of an opening event of a DNA cuboid constructed via a prism structure	Organic & Biomolecular Chemistry	9	2075	2011
297	Igarashi, Kiyohiko; Uchihashi, Takayuki; Koivula, Anu; Wada, Masahisa; Kimura, Satoshi; Okamoto, Tetsuaki; Penttilä, Merja; Ando, Toshio & Samejima, Masahiro	Traffic jams reduce hydrolytic efficiency of cellulase on cellulose surface	Science	333	1279--1282	2011
298	Katan, Allard J. & Dekker, Cees	High-speed AFM reveals the dynamics of single biomolecules at the nanometer scale	Cell	147	979--982	2011
299	Laisne, Aude; Ewald, Maxime; Ando, Toshio; Lesniewska, Eric & Pompon, Denis	Self-assembly properties and dynamics of synthetic proteo-nucleic building blocks in solution and on surfaces	Bioconjugate Chemistry	22	1824--1834	2011
300	Lyubchenko, Yuri L.	Preparation of DNA and nucleoprotein samples for AFM imaging	Micron	42	196--206	2011
301	Lyubchenko, Yuri L.; Shlyakhtenko, Luda S. & Ando, Toshio	Imaging of nucleic acids with atomic force microscopy	Methods	54	274--283	2011

302	Miyagi, Atsushi; Ando, Toshio & Lyubchenko, Yuri L.	Dynamics of nucleosomes assessed with time-lapse high-speed atomic force microscopy	Biochemistry	50	7901--7908	2011
303	Rajendran, Arivazhagan; Endo, Masayuki; Katsuda, Yousuke; Hidaka, Kumi & Sugiyama, Hiroshi	Photo-Cross-Linking-Assisted Thermal Stability of DNA Origami Structures and Its Application for Higher-Temperature Self-Assembly	Journal of the American Chemical Society	133	14488--14491	2011
304	Rajendran, Arivazhagan; Endo, Masayuki; Katsuda, Yousuke; Hidaka, Kumi & Sugiyama, Hiroshi	Programmed Two-Dimensional Self-Assembly of Multiple DNA Origami Jigsaw Pieces	ACS Nano	5	665--671	2011
305	Rico, Felix; Su, Chanmin & Scheuring, Simon	Mechanical mapping of single membrane proteins at submolecular resolution	Nano Letters	11	3983--3986	2011
306	Sanchez, Humberto; Suzuki, Yuki; Yokokawa, Masatoshi; Takeyasu, Kunio & Wyman, Claire	Protein-DNA interactions in high speed AFM: Single molecule diffusion analysis of human RAD54	Integrative Biology	3	1127--1134	2011
307	Shibata, Mikihiro; Uchihashi, Takayuki; Yamashita, Hayato; Kandori, Hideki & Ando, Toshio	Structural Changes in Bacteriorhodopsin in Response to Alternate Illumination Observed by High-Speed Atomic Force Microscopy	Angewandte Chemie International Edition	50	4410--4413	2011
308	Suzuki, Yuki; Yoshikawa, Yuko; Yoshimura, Shige H.; Yoshikawa, Kenichi & Takeyasu, Kunio	Unraveling DNA dynamics using atomic force microscopy	Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology	3	574--588	2011
309	Suzuki, Yuki; Gilmore, Jamie L.; Yoshimura, Shige H.; Henderson, Robert M.; Lyubchenko, Yuri L. & Takeyasu, Kunio	Visual analysis of concerted cleavage by type IIF restriction enzyme Sfil in subsecond time region	Biophysical Journal	101	2992--2998	2011
310	Uchihashi, Takayuki & Ando, Toshio	High-Speed Atomic Force Microscopy and Biomolecular Processes	Methods in molecular biology (Clifton, N.J.)	736	285--300	2011
311	Uchihashi, Takayuki; Iino, Ryota; Ando, Toshio & Noji, Hiroyuki	High-speed atomic force microscopy reveals rotary catalysis of rotorless F 1-ATPase	Science	333	755--758	2011

312	Wickham, Shelley F. J.; Endo, Masayuki; Katsuda, Yousuke; Hidaka, Kumi; Bath, Jonathan; Sugiyama, Hiroshi & Turberfield, Andrew J.	Direct observation of stepwise movement of a synthetic molecular transporter	Nature Nanotechnology	6	166--169	2011
313	Yamamoto, S. I.; Okada, T.; Uraoka, Y.; Yamashita, I. & Hasegawa, S.	Static and dynamic observation of supermolecular protein, ferritin, using high-speed atomic force microscope	Journal of Applied Physics	109	3--7	2011
314	Casuso, Ignacio; Sens, Pierre; Rico, Felix; Scheuring, Simon	Experimental Evidence for Membrane-Mediated Protein-Protein Interaction	Biophysical Journal	99	47--49	2010
315	Casuso, Ignacio; Sens, Pierre; Rico, Felix & Scheuring, Simon	Experimental evidence for membrane-mediated protein-protein interaction	Biophysical Journal	99	47--49	2010
316	Endo, Masayuki; Sugita, Tsutomu; Katsuda, Yousuke; Hidaka, Kumi & Sugiyama, Hiroshi	Programmed-assembly system using DNA jigsaw pieces	Chemistry - A European Journal	16	5362--5368	2010
317	Endo, Masayuki; Katsuda, Yousuke; Hidaka, Kumi & Sugiyama, Hiroshi	Regulation of DNA methylation using different tensions of double strands constructed in a defined DNA nanostructure	Journal of the American Chemical Society	132	1592--1597	2010
318	Giocondi, Marie Cécile; Yamamoto, Daisuke; Lesniewska, Eric; Milhiet, Pierre Emmanuel; Ando, Toshio & Le Grimellec, Christian	Surface topography of membrane domains	Biochimica et Biophysica Acta - Biomembranes	1798	703--718	2010
319	Kodera, Noriyuki; Yamamoto, Daisuke; Ishikawa, Ryoki & Ando, Toshio	Video imaging of walking myosin V by high-speed atomic force microscopy.	Nature	468	72--6	2010
320	Milhiet, Pierre-Emmanuel; Yamamoto, Daisuke; Berthoumieu, Olivia; Dosset, Patrice; Le Grimellec, Christian; Verdier, Jean-Michel; Marchal, Stéphane & Ando, Toshio	Deciphering the Structure, Growth and Assembly of Amyloid-Like Fibrils Using High-Speed Atomic Force Microscopy	PLoS ONE	5	e13240	2010
321	Sannohe, Yuta; Endo, Masayuki; Katsuda, Yousuke; Hidaka, Kumi & Sugiyama, Hiroshi	Visualization of dynamic conformational switching of the G-quadruplex in a DNA nanostructure	Journal of the American Chemical Society	132	16311--16313	2010

322	Shibata, Mikihiro; Yamashita, Hayato; Uchihashi, Takayuki; Kandori, Hideki & Ando, Toshio	High-speed atomic force microscopy shows dynamic molecular processes in photoactivated bacteriorhodopsin	Nature Nanotechnology	5	208--212	2010
323	Shinozaki, Youichi; Sumitomo, Koji; Furukawa, Kazuaki; Miyashita, Hidetoshi; Tamba, Yukihiro; Kasai, Nahoko; Nakashima, Hiroshi & Torimitsu, Keiichi	Visualization of Single Membrane Protein Structure in Stretched Lipid Bilayer Suspended over Nanowells	Applied Physics Express	3	27002	2010
324	Sugimoto, Shinya; Yamanaka, Kunitoshi; Nishikori, Shingo; Miyagi, Atsushi; Ando, Toshio & Ogura, Teru	AAA+chaperone ClpX regulates dynamics of prokaryotic cytoskeletal protein FtsZ	Journal of Biological Chemistry	285	6648--6657	2010
325	Suzuki, Yuki; Higuchi, Yuji; Hizume, Kohji; Yokokawa, Masatoshi; Yoshimura, Shige H.; Yoshikawa, Kenichi & Takeyasu, Kunio	Molecular dynamics of DNA and nucleosomes in solution studied by fast-scanning atomic force microscopy	Ultramicroscopy	110	682--688	2010
326	Tanaka, Fumiaki; Mochizuki, Toshio; Liang, Xingguo; Asanuma, Hiroyuki; Tanaka, Shukichi; Suzuki, Katsuyuki; Kitamura, Shin Ichi; Nishikawa, Akio; Ui-Tei, Kumiko & Hagiya, Masami	Robust and photocontrollable DNA capsules using azobenzenes	Nano Letters	10	3560--3565	2010
327	Yamamoto, Daisuke; Uchihashi, Takayuki; Kodera, Noriyuki; Yamashita, Hayato; Nishikori, Shingo; Ogura, Teru; Shibata, Mikihiro & Ando, Toshio	High-Speed Atomic Force Microscopy Techniques for Observing Dynamic Biomolecular Processes	Methods in Enzymology	475	541--564	2010
328	Casuso, Ignacio; Kodera, Noriyuki; Le Grimellec, Christian; Ando, Toshio; Scheuring, Simon	Contact-mode high-resolution high-speed atomic force microscopy movies of the purple membrane	Biophysical Journal	97	1354--1361	2009
329	Casuso, Ignacio; Kodera, Noriyuki; Le Grimellec, Christian; Ando, Toshio & Scheuring, Simon	Contact-mode high-resolution high-speed atomic force microscopy movies of the purple membrane	Biophysical Journal	97	1354--1361	2009
330	Endo, Masayuki & Sugiyama, Hiroshi	Three-dimensional DNA nanostructures constructed by folding of multiple rectangles	Nucleic Acids Symposium Series	53	81--82	2009
331	Endo, Masayuki & Sugiyama, Hiroshi	Chemical Approaches to DNA Nanotechnology	ChemBioChem	10	2420--2443	2009

332	Gilmore, Jamie L.; Suzuki, Yuki; Tamulaitis, Gintautas; Siksnys, Virginijus; Takeyasu, Kunio & Lyubchenko, Yuri L.	Single-molecule dynamics of the DNA-EcoRII protein complexes revealed with high-speed atomic force microscopy	Biochemistry	48	10492--10498	2009
333	Igarashi, Kiyohiko; Koivula, Anu; Wada, Masahisa; Kimura, Satoshi; Penttilä, Merja & Samejima, Masahiro	High speed atomic force microscopy visualizes processive movement of Trichoderma reesei cellobiohydrolase I on crystalline cellulose	Journal of Biological Chemistry	284	36186--36190	2009
334	Lyubchenko, Yuri L.; Shlyakhtenko, Luda S. & Gall, Alexander A.	Atomic Force Microscopy Imaging and Probing of DNA, Proteins, and Protein-DNA Complexes: Silatrane Surface Chemistry	Methods in molecular biology (Clifton, N.J.)	543	337--351	2009
335	Lyubchenko, Yuri L. & Shlyakhtenko, Luda S.	AFM for analysis of structure and dynamics of DNA and protein–DNA complexes	Methods	47	206--213	2009
336	Shinozaki, Youichi; Sumitomo, Koji; Tsuda, Makoto; Koizumi, Schuichi; Inoue, Kazuhide & Torimitsu, Keiichi	Direct Observation of ATP-Induced Conformational Changes in Single P2X4 Receptors	PLoS Biology	7	e1000103	2009
337	Shlyakhtenko, Luda S.; Lushnikov, Alexander Y. & Lyubchenko, Yuri L.	Dynamics of nucleosomes revealed by time-lapse atomic force microscopy	Biochemistry	48	7842--7848	2009
338	Yamamoto, Daisuke; Nagura, Naoki; Omote, Saeko; Taniguchi, Masaaki & Ando, Toshio	Streptavidin 2D crystal substrates for visualizing biomolecular processes by atomic force microscopy	Biophysical Journal	97	2358--2367	2009
339	Yamashita, Hayato; Voïtchovsky, Kislon; Uchihashi, Takayuki; Contera, Sonia Antoranz; Ryan, John F. & Ando, Toshio	Dynamics of bacteriorhodopsin 2D crystal observed by high-speed atomic force microscopy	Journal of Structural Biology	167	153--158	2009
340	Ando, Toshio; Uchihashi, Takayuki; Kodera, Noriyuki; Yamamoto, Daisuke; Miyagi, Atsushi; Taniguchi, Masaaki & Yamashita, Hayato	High-speed AFM and nano-visualization of biomolecular processes	Pflugers Archiv European Journal of Physiology	456	211--225	2008
341	Shinozaki, Youichi; Sittonen, Ari M.; Sumitomo, Koji; Furukawa, Kazuaki & Torimitsu, Keiichi	Effect of Ca2+ on vesicle fusion on solid surface: An in vitro model of protein-accelerated vesicle fusion	Japanese Journal of Applied Physics	47	6164--6167	2008

342	Sugasawa, Hiroaki; Sugiyama, Yukihiro; Morii, Takashi & Okada, Takao	Dynamic Observation of 2686 bp DNA–BAL 31 Nuclease Interaction with Single Molecule Level Using High-Speed Atomic Force Microscopy	Japanese Journal of Applied Physics	47	6168--6172	2008
343	Yamamoto, Daisuke; Uchihashi, Takayuki; Kodera, Noriyuki & Ando, Toshio	Anisotropic diffusion of point defects in a two-dimensional crystal of streptavidin observed by high-speed atomic force microscopy	Nanotechnology	19	384009	2008
344	Crampton, N.; Yokokawa, M.; Dryden, D. T. F.; Edwardson, J. M.; Rao, D. N.; Takeyasu, K.; Yoshimura, S. H. & Henderson, R. M.	Fast-scan atomic force microscopy reveals that the type III restriction enzyme EcoP15I is capable of DNA translocation and looping	Proceedings of the National Academy of Sciences	104	12755--12760	2007
345	Kobayashi, Mime; Sumitomo, Koji & Torimitsu, Keiichi	Real-time imaging of DNA-streptavidin complex formation in solution using a high-speed atomic force microscope	Ultramicroscopy	107	184--190	2007
346	Morita, Seizo; Yamada, Hirofumi & Ando, Toshio	Japan AFM roadmap 2006	Nanotechnology	18	84001	2007
347	Ando, Toshio; Uchihashi, Takayuki; Kodera, Noriyuki; Miyagi, Atsushi; Nakakita, Ryo; Yamashita, Hayato & Sakashita, Mitsuru	High-Speed Atomic Force Microscopy for Studying the Dynamic Behavior of Protein Molecules at Work	Japanese Journal of Applied Physics	45	1897--1903	2006
348	Koide, Hiroshi; Kinoshita, Tatsuya; Tanaka, Yusuke; Tanaka, Shin'ichiro; Nagura, Naoki; Meyer Zu Hörste, Gabriele; Miyagi, Atsushi & Ando, Toshio	Identification of the single specific IQ motif of myosin V from which calmodulin dissociates in the presence of Ca2+	Biochemistry	45	11598--11604	2006
349	Yokokawa, Masatoshi; Wada, Chieko; Ando, Toshio; Sakai, Nobuaki; Yagi, Akira; Yoshimura, Shige H. & Takeyasu, Kunio	Fast-scanning atomic force microscopy reveals the ATP/ADP-dependent conformational changes of GroEL	EMBO Journal	25	4567--4576	2006

updated 27-Apr-21

Material Science

No.	Authors	Title	Journal	Vol.	Pages	Year
1	Nakajima, Daiki; Kikuchi, Tatsuya; Yoshioka, Taiki; Matsushima, Hisayoshi; Ueda, Mikito; Suzuki, Ryosuke O.; Natsui, Shungo	A superhydrophilic aluminum surface with fast water evaporation based on anodic alumina bundle structures via anodizing in pyrophosphoric acid	Materials	12	-	2019
2	Santillan, Julius Joseph; Itani, Toshiro	Characterization Studies on Metal-based EUV Resist Film Properties	Journal of Photopolymer Science and Technology	31	663--667	2018
3	Tanabe, Junichi; Nakano, Koji; Hirata, Ryutaro; Himeno, Toshiki; Ishimatsu, Ryoichi; Imato, Toshihiko; Okabe, Hirotaka; Matsuda, Naoki	Totally synthetic microperoxidase-11	Royal Society Open Science	5	172311	2018
4	Ma, Xiang; Zhang, Shuai; Jiao, Fang; Newcomb, Christina J.; Zhang, Yuliang; Prakash, Arushi; Liao, Zhihao; Baer, Marcel D.; Mundy, Christopher J.; Pfaendtner, James; Noy, Aleksandr; Chen, Chun Long; De Yoreo, James J.	Tuning crystallization pathways through sequence engineering of biomimetic polymers	Nature Materials	16	767--774	2017
5	Hoshi, Nagahiro; Nakamura, Masashi; Yoshida, Chikara; Yamada, Yuta; Kameyama, Masayoshi; Mizumoto, Yohei	In-situ high-speed AFM of shape-controlled Pt nanoparticles in electrochemical environments: Structural effects on the dissolution mechanism	Electrochemistry Communications	72	5--9	2016
6	Santillan, Julius Joseph; Shichiri, Motoharu & Itani, Toshiro	The effect of resist dissolution process on pattern formation variability: an in situ analysis using high-speed atomic force microscopy	Proceedings of SPIE	9425	942506	2015
7	Minegishi, Shinya & Itani, Toshiro	The effect of resist material composition on development behavior	Proceedings of SPIE	9425	94251I	2015
8	Santillan, Julius Joseph; Shichiri, Motoharu & Itani, Toshiro	In situ characterization of nano-scale pattern roughness during resist dissolution process	Microelectronic Engineering	143	64--68	2015
9	Santillan, Julius Joseph; Shichiri, Motoharu & Itani, Toshiro	An in situ analysis of resist dissolution in alkali-based and organic solvent-based developers using high speed atomic force microscopy	Proceedings of SPIE	9051	90510O	2014

10	Santillan, Julius Joseph; Yamada, Keisaku & Itani, Toshiro	In situ analysis of negative-tone resist pattern formation using organic-solvent-based developer process	Applied Physics Express	7	16501	2014
11	Santillan, Julius Joseph & Itani, Toshiro	In situ dissolution analysis of half-pitch line and space patterns at various resist platforms using high speed atomic force microscopy	Proceedings of SPIE	8682	86820I	2013
12	Shiobara, Eishi; Kikuchi, Yukiko & Itani, Toshiro	Study of LWR reduction and pattern collapse suppression for 16nm node EUV resists	Proceedings of SPIE	8679	86792B	2013
13	Brown, Benjamin P.; Picco, Loren; Miles, Mervyn J. & Faul, Charl F. J.	Opportunities in High-Speed Atomic Force Microscopy	Small	9	3201--3211	2013
14	Santillan, Jullius Joseph & Itani, Toshiro	In situ Analysis of the EUV Resist Pattern Formation during the Resist Dissolution Process	Journal of Photopolymer Science and Technology	26	611--616	2013
15	Itani, Toshiro & Kozawa, Takahiro	Resist Materials and Processes for Extreme Ultraviolet Lithography	Japanese Journal of Applied Physics	52	10002	2013
16	Santillan, Julius Joseph & Itani, Toshiro	An in situ analysis of the resist pattern formation process	Proceedings of SPIE	8325	83250P	2012
17	Santillan, Julius Joseph & Itani, Toshiro	Dissolution Characteristics of EUV Resist by High Speed AFM	Journal of Photopolymer Science and Technology	25	95--100	2012
18	Itani, Toshiro & Santillan, Julius Joseph	In situ dissolution analysis of EUV resists	Proceedings of SPIE	7972	79720H	2011
19	Inoue, Shigeto; Uchihashi, Takayuki; Yamamoto, Daisuke & Ando, Toshio	Direct observation of surfactant aggregate behavior on a mica surface using high-speed atomic force microscopy	Chemical Communications	47	4974--4976	2011
20	Itani, T. & Santillan, J.	Dissolution Behavior of Photoresists: An In-situ Analysis	Journal of Photopolymer Science and Technology	23	639--642	2010

21	Itani, Toshiro & Santillan, Julius Joseph	In situ characterization of photoresist dissolution	Applied Physics Express	3	23--25	2010
22	Shinohara, Ken-ichi; Kodera, Noriyuki & Oohashi, Takashi	Single-molecule imaging of photodegradation reaction in a chiral helical pi-conjugated polymer chain	Journal of Polymer Science Part A: Polymer Chemistry	48	4103--4107	2010
23	Shinohara, Ken-ichi; Kodera, Noriyuki & Ando, Toshio	Single Molecular Imaging of a micro-Brownian Motion and a Bond Scission of a Supramolecular Chiral pi-Conjugated Polymer as a Molecular Bearing Driven by Thermal Fluctuations	Chemistry Letters	36	1378--1379	2007

updated 27-Apr-21

AFM Development

No.	Authors	Title	Journal	Vol.	Pages	Year
1	Miyagi, Atsushi; Scheuring, Simon	A novel phase-shift-based amplitude detector for a high-speed atomic force microscope	Review of Scientific Instruments	89	83704	2018
2	Miyagi, Atsushi; Scheuring, Simon	Automated force controller for amplitude modulation atomic force microscopy	Review of Scientific Instruments	87	053705	2016
3	Watanabe, Hiroki; Uchihashi, Takayuki; Kobashi, Toshihide; Shibata, Mikihiro; Nishiyama, Jun; Yasuda, Ryohei & Ando, Toshio	Wide-area scanner for high-speed atomic force microscopy	Review of Scientific Instruments	84	53702	2013
4	Miyata, Kazuki; Usho, Satoshi; Yamada, Satoshi; Furuya, Shoji; Yoshida, Kiyonori; Asakawa, Hitoshi & Fukuma, Takeshi	Separate-type scanner and wideband high-voltage amplifier for atomic-resolution and high-speed atomic force microscopy	Review of Scientific Instruments	84	43705	2013
5	Fukuda, Shingo; Uchihashi, Takayuki; Iino, Ryota; Okazaki, Yasutaka; Yoshida, Masato; Igarashi, Kiyohiko & Ando, Toshio	High-speed atomic force microscope combined with single-molecule fluorescence microscope	Review of Scientific Instruments	84	73706	2013
6	Husain, Mohamed; Boudier, Thomas; Paul-Gilloteaux, Perrine; Casuso, Ignacio & Scheuring, Simon	Software for drift compensation, particle tracking and particle analysis of high-speed atomic force microscopy image series	Journal of Molecular Recognition	25	292--298	2012
7	Payton, O. D.; Picco, L.; Miles, M. J.; Homer, M. E. & Champneys, A. R.	Modelling oscillatory flexure modes of an atomic force microscope cantilever in contact mode whilst imaging at high speed	Nanotechnology	23	265702	2012
8	Fukuma, Takeshi; Okazaki, Yasutaka; Kodera, Noriyuki; Uchihashi, Takayuki & Ando, Toshio	High resonance frequency force microscope scanner using inertia balance support	Applied Physics Letters	92	243119	2008
9	Ando, Toshio; Uchihashi, Takayuki & Fukuma, Takeshi	High-speed atomic force microscopy for nano-visualization of dynamic biomolecular processes	Progress in Surface Science	83	337--437	2008
10	Yamashita, Hayato; Kodera, Noriyuki; Miyagi, Atsushi; Uchihashi, Takayuki; Yamamoto, Daisuke & Ando, Toshio	Tip-sample distance control using photothermal actuation of a small cantilever for high-speed atomic force microscopy	Review of Scientific Instruments	78	83702	2007

11	Ando, Toshio; Uchihashi, Takayuki; Kodera, Noriyuki; Yamamoto, Daisuke; Taniguchi, Masaaki; Miyagi, Atsushi & Yamashita, Hayato	High-speed atomic force microscopy for observing dynamic biomolecular processes	Journal of Molecular Recognition	20	448--458	2007
12	Uchihashi, Takayuki; Kodera, Noriyuki; Itoh, Hisanori; Yamashita, Hayato & Ando, Toshio	Feed-forward compensation for high-speed atomic force microscopy imaging of biomolecules	Japanese Journal of Applied Physics, Part 1: Regular Papers and Short Notes and Review Papers	45	1904--1908	2006
13	Kodera, Noriyuki; Sakashita, Mitsuru & Ando, Toshio	Dynamic proportional-integral-differential controller for high-speed atomic force microscopy	Review of Scientific Instruments	77	83704	2006
14	Uchihashi, Takayuki; Ando, Toshio & Yamashita, Hayato	Fast phase imaging in liquids using a rapid scan atomic force microscope	Applied Physics Letters	89	213112	2006
15	Kodera, Noriyuki; Yamashita, Hayato & Ando, Toshio	Active damping of the scanner for high-speed atomic force microscopy	Review of Scientific Instruments	76	53708	2005
16	Ando, Toshio; Kodera, Noriyuki; Uchihashi, Takayuki; Miyagi, Atsushi; Nakakita, Ryo; Yamashita, Hayato & Matada, Keiko	Conference - ISSS - 4 - High - speed Atomic Force Microscopy for Capturing Dynamic Behavior of Protein Molecules at Work *	Surf . Sci . Nanotech	3	384--392	2005
17	Kodera, Noriyuki; Kinoshita, Tatsuya; Ito, Takahiro & Ando, Toshio	High-resolution imaging of myosin motor in action by a high-speed atomic force microscope.	Advances in experimental medicine and biology	538	119--27	2003
18	Ando, Toshio; Kodera, Noriyuki; Naito, Yasuyuki; Kinoshita, Tatsuya; Furuta, Ken'ya & Toyoshima, Yoko Y.	A High-speed Atomic Force Microscope for Studying Biological Macromolecules in Action	ChemPhysChem	4	1196--1202	2003
19	Ando, Toshio; Kodera, Noriyuki; Takai, E.; Maruyama, D.; Saito, K. & Toda, A.	A high-speed atomic force microscope for studying biological macromolecules.	Proceedings of the National Academy of Sciences	98	12468--12472	2002
20	Ando, Toshio; Kodera, Noriyuki; Maruyama, Daisuke; Takai, Eisuke; Saito, Kiwamu & Toda, Akitoshi	A High-Speed Atomic Force Microscope for Studying Biological Macromolecules in Action	Japanese Journal of Applied Physics	41	4851--4856	2002

RIBM

株式会社 生体分子計測研究所

Research Institute of Biomolecule Metrology Co., Ltd.

精密機器事業部　アプリケーションチーム

〒305-0047　茨城県つくば市千現1丁目17-1

TEL： 029-896-6500

FAX： 029-896-6501

URL： https://www.ribm.co.jp

E-mail： insts-sales@ribm.co.jp