High-Speed Atomic Force Microscopy (HS-AFM)
List of Publications

Research Institute of Biomolecule Metrology Co., Ltd.

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Life Science

No.	Authors	Title	Journal	Vol.	Pages	Year
1	Saeko Yanaka,Hiroki Watanabe,Rina Yogo, Mesayamas Kongsema, Sachiko Kondo, Hirokazu Yagi, Takayuki Uchihashi, and Koichi Kato,	Quantitative Analysis of Therapeutic Antibody Interactions with Fcγ Receptors Using High-Speed Atomic Force Microscopy	Biol. Pharm. Bull.	47	334-338	2024
2	Tanaka, Yoshiko; Uchihashi, Takayuki; Nakamura, Akihiko	Product inhibition slow down the moving velocity of processive chitinase and sliding-intermediate state blocks re-binding of product	Archives of Biochemistry and Biophysics	752	e109854	2024
3	Krishnamurthy, Kirankumar; Rajendran, Arivazhagan; Nakata, Eiji; Morii, Takashi	Near Quantitative Ligation Results in Resistance of DNA Origami Against Nuc	Small Methods	8	e2300999	2024
4	Onoa, Bibiana; Daz-Celis, Csar; Caari-Chumpitaz, Cristhian; Lee, Antony; Bustamante, Carlos	Real-Time Multistep Asymmetrical Disassembly of Nucleosomes and Chromatosomes Visualized by High-Speed Atomic Force Microscopy	ACS Central Science	10	3c00735	2023
5	Takeda, Kazusa; Flechsig, Holger; Muro, Ikumi; Amyot, Romain ; Kobayashi, Fuminori; Kodera, Noriyuki; Ando, Toshio; Konno, Hiroki	Structural Dynamics of E6AP E3 Ligase HECT Domain and Involvement of a F	Nano Letters	23	11940--11948	2023
6	Noshiro, Daisuke; Noda, Nobuo N.	Immobilization of lipid nanorods onto two-dimensional crystals of protein tamavidin 2 for high-speed atomic force microscopy	STAR Protocols	4	102633	2023
7	Zhang, Shiwei; Nakata, Eiji; Lin, Peng; Morii, Takashi	An Artificial Liposome Compartment with Size Exclusion Molecular Transport	Chemistry - A European Journal	29	e202302093	2023
8	Pan, Yangang; Zhan, Jingyu; Jiang, Yining; Xia, Di; Scheuring, Simon	A concerted ATPase cycle of the protein transporter AAA-ATPase Bcs1	Nature Communications	14	6369	2023
9	Lansky, Shifra; Betancourt, John Michael; Zhang, Jingying; Jiang, Yining; Kim, Elizabeth D.; Paknejad, Navid; Nimigean, Crina M.; Yuan, Peng; Scheuring,Simon	A pentameric TRPV3 channel with a dilated pore	Nature	621	206-214	2023
10	Matsubara, Hitomi; Fukunaga, Hiroki; Saito, Takahiro; Ikezaki, Keigo; Iwaki, Mitsuhiro	A Programmable DNA Origami Nanospring That Reports Dynamics of Single Integrin Motion, Force Magnitude and Force Orientation in Living Cells	ACS Nano	17	13185-13194	2023
11	Shukla, Rhythm; Peoples, Aaron J.; Ludwig, Kevin C.; Maity, Sourav; Derks, Maik G. N.; Benedetti, Stefania De; Krueger, Annika M.; Vermeulen, Bram J. A.; Harbig, Theresa; Lavore, Francesca; Kumar, Raj; Honorato, Rodrigo V.; Grein, Fabian; Nieselt, Kay; Liu, Yangping; Bonvin, Alexandre M. J. J.; Baldus, Marc; Kubitscheck, Ulrich; Breukink, Eefjan; Achorn, Catherine; Nitti, Anthony; Schwalen, Christopher J.; Spoering, Amy L.; Ling, Losee Lucy; Hughes, Dallas; Lelli, Moreno; Roos, Wouter H.; Lewis, Kim; Schneider, Tanja; Weingarth, Markus	An antibiotic from an uncultured bacterium binds to an immutable target	Cell	186	4059-4073.e27	2023
12	Nishiguchi, Shigetaka; Kasai, Rinshi S.; Uchihashi, Takayuki	Antiparallel dimer structure of CELSR cadherin in solution revealed by high-speed-atomic force microscopy	Proceedings of the National Academy of Sciences	120	e2302047120	2023
13	Yue, Youfeng; Yokota, Yoshiko; Uchihashi, Takayuki	Biosynthesis of highly branched gold nanoparticles through structural engineering of fatty acids	iScience	26	105864	2023
14	Konishi, Hiroaki; Nakata, Eiji; Komatsubara, Futa; Morii, Takashi	Controlled Assembly of Fluorophores inside a Nanoliposome	Molecules	28	911	2023

15	Nakajo, Toshinobu; Kusaka, Shinpei; Hiraoka, Haruka; Nomura, Kohei; Matsubara, Noriaki; Baba, Rintaro; Yoshida, Yuki; Nakamoto, Kosuke; Honma, Masakazu; Iguchi, Hiroaki; Uchihashi, Takayuki; Abe, Hiroshi; Matsuda, Ryotaro	Creation of single molecular conjugates of metal-organic cages and DNA	Chemical Communications	59	4974-4977	2023
16	Matsuo, Yoshitaka; Uchihashi, Takayuki; Inada, Toshifumi	Decoding of the ubiquitin code for clearance of colliding ribosomes by the RQT complex	Nature Communications	14	79	2023
17	Fukunaga, Hiroki; Washio, Takumi; Fujita, Keisuke; Ohmachi, Masashi; Takagi, Hiroaki; Ikezaki, Keigo; Yanagida, Toshio; Iwaki, Mitsuhiro	Dynamic coordination of the lever-arm swing of human myosin II in thick filaments on actin	bioRxiv	--	1-51	2023
18	Kozai, Toshiya; Fernandez-Martinez, Javier; van Eeuwen, Trevor; Gallardo, Paola; Kapinos, E.; Mazur, Adam; Zhang, Wenzhu; Tempkin, Jeremy; Panatala, Radhakrishnan; Delgado-Izquierdo, Maria; Raveh, Barak; Sali, Andrej; Chait, Brian T.; Veenhoff, Liesbeth M.; Rout, Michael P.; Lim, Roderick Y. H.	Dynamic molecular mechanism of the nuclear pore complex permeability barrier 1	bioRxiv	--	1-75	2023
19	Chien, Yu Chun; Wang, Yong Sheng; Sridharan, Deepa; Kuo, Chu Wei; Chien, Chih Ta; Uchihashi, Takayuki; Kato, Koichi; Angata, Takashi; Meng, Tzu Ching; Hsu, Shang Te Danny; Khoo, Kay Hooi	High Density of N- and O-Glycosylation Shields and Defines the Structural Dynamicsof the Intrinsically Disordered Ectodomain of Receptor-type Protein Tyrosine Phosphatase Alpha	JACS Au	3	1864-1875	2023
20	Noom, Jacques; Smith, Carlas; Verbiest, Gerard J.; Katan, Allard J.; Soloviev, Oleg; Verhaegen, Michel	High-Speed Tapping Mode AFM Utilizing Recovery of Tip-Sample Interaction	IEEE Transactions on Nanotechnology	22	273-279	2023
21	Gari, Raghavendar R. Sanganna; Tagiltsev, Grigory; Pumroy, Ruth A.; Jiang, Yining; Blackledge, Martin; Moiseenkova-Bell, Vera Y.; Scheuring, Simon	Intrinsically disordered regions in TRPV2 mediate protein-protein interactions	Communications Biology	6	966	2023
22	Melcrov, Adla; Maity, Sourav; Melcr, Josef; de Kok, Niels A. W.; Gabler, Mariella; van der Eyden, Jonne; Stensen, Wenche; Svendsen, John S. M.; Driessen, Arnold J. M.; Marrink, Siewert J.; Roos, Wouter H.	Lateral membrane organization as target of an antimicrobial peptidomimetic compound	Nature Communications	14	4038	2023
23	Yagi-Utsumi, Maho; Miura, Haruko; Ganser, Christian; Watanabe, Hiroki; Hiranyakorn, Methanee; Satoh, Tadashi; Uchihashi, Takayuki; Kato, Koichi; Okazaki, Kei Ichi; Aoki, Kazuhiro	Molecular Design of FRET Probes Based on Domain Rearrangement of Protein Disulfide Isomerase for Monitoring Intracellular Redox Status	International Journal of Molecular Sciences	24	12865	2023
24	Watanabe, Kotaro; Kawamata, Ibuki; Murata, Satoshi; Suzuki, Yuki	Multi-Reconfigurable DNA Origami Nanolattice Driven by the Combination of Orthogonal Signals	JACS Au	3	1435-1442	2023
25	Takahashi, Kanji; Nishikino, Tatsuro; Kajino, Hiroki; Kojima, Seiji; Uchihashi, Takayuki; Homma, Michio	Ring formation by Vibrio fusion protein composed of FliF and FliG, MS-ring of bacterial flagellar motor in membrane	Biophysics and physicobiology	20	e200028	2023
26	Yu, Yiming; Yoshimura, Shige H.	Self-assembly of CIP4 drives actin-mediated asymmetric pit-closing in clathrin-mediated endocytosis	Nature Communications	14	4602	2023
27	Azad, Kimi; Guilligay, Delphine; Boscheron, Cecile; Maity, Sourav; Franceschi, Nicola De; Sulbaran, Guidenn; Effantin, Gregory; Wang, Haiyan; Kleman, Jean-Philippe; Schoehn, Guy; Roos, Wouter H.; Desfosses, Ambroise; Weissenhorn, Winfried	Structural basis of CHMP2A-CHMP3 ESCRT-III polymer assembly and membrane cleavage	bioRxiv	--	1-48	2022

28	Watanabe-Nakayama, Takahiro; Tsuji, Mayumi; Umeda, Kenichi; Oguchi, Tatsunori; Konno, Hiroki; Noguchi-Shinohara, Moeko; Kiuchi, Yuji; Kodera, Noriyuki; Teplow, David B.; Ono, Kenjiro	Structural Dynamics of Amyloid- Protofibrils and Actions of Anti-Amyloid- Antibodies as Observed by High-Speed Atomic Force Microscopy	Nano Letters	13	6259-6268	2023
29	Jukic, Nebojsa; Perrino, Alma P.; Redondo-Morata, Lorena; Scheuring, Simon	Structure and dynamics of ESCRT-III membrane remodeling proteins by high-speed atomic force microscopy	Journal of Biological Chemistry	299	104575	2023
30	Cho, Carol; Ganser, Christian; Uchihashi, Takayuki; Kato, Koichi; Song, Ji Joon	Structure of the human ATAD2 AAA+ histone chaperone reveals mechanism of regulation and inter-subunit communication	Communications Biology	6	993	2023
31	Tezuka, Takeaki; Ohnishi, Yasuo	Surface structure and nanomechanical properties of Actinoplanes missouriensis sporangia analyzed via atomic force microscopy	Bioscience, Biotechnology and Biochemistry	86	552-556	2022
32	Cisse, Aline; Desfosses, Ambroise; Stainer, Sarah; Kandiah, Eaazhisai; Traore, Daouda A. K.; Bezault, Armel; Schachner-Nedherer, Anna Laurence; Leitinger, Gerd; Hoerl, Gerd; Hinterdorfer, Peter; Gutsche, Irina; Prassl, Ruth; Peters, Judith; Kornmueller, Karin	Targeting structural flexibility in low density lipoprotein by integrating cryo-electron microscopy and high-speed atomic force microscopy	International Journal of Biological Macromolecule	252	126345	2023
33	Chen, Eric H. L.; Wang, Chun Hsiung; Liao, Yi Ting; Chan, Feng Yueh; Kanaoka, Yui; Uchihashi, Takayuki; Kato, Koichi; Lai, Longsheng; Chang, Yi Wei; Ho, Meng Chiao; Chen, Rita P. Y.	Visualizing the membrane disruption action of antimicrobial peptides by cryo-electron tomography	Nature Communications	14	5464	2023
34	Shotaro Tsujioka, Ayumi Sumino, Yutaro Nagasawa, Takashi Sumikama, Holger Flechsig, Leonardo Puppulin, Takuya Tomita, Yudai Baba, Takahiro Kakuta, Tomoki Ogoshi, Kenichi Umeda, Noriyuki Kodera, Hideji Murakoshi, Mikihiro Shibata	Evolutionarily acquired activity-dependent transformation of the CaMKII holoenzyme	bioRxiv	e523378	1--22	2023
35	Kenichi Umeda, Steven J. McArthur, and Noriyuki Kodera* Nano	Spatiotemporal resolution in high-speed atomic force microscopy for studying biological macromolecules in action	Oxford University Press	7028396	1--41	2023
36	Kosuke Kikuchi, Koki Date, and Takafumi Ueno	Design of a Hierarchical Assembly at a Solid−Liquid Interface Using an Asymmetric Protein Needle	Langmuir	39	2389-2397	2023
37	Leonardo Puppulin,Junichiro Ishikawa, Ayumi Sumino, Arin Marchesi, Holger Flechsig,Kenichi Umeda, Noriyuki Kodera, Hiroshi Nishimasu, and Mikihiro Shibata	Dynamics of Target DNA Binding and Cleavage by Staphylococcus aureus Cas9 as Revealed by High-Speed Atomic Force Microscopy	ACS Nano	17	4629-4641	2023
38	Konishi, Hiroaki; Nakata, Eiji; Komatsubara, Futa; Morii, Takashi	Controlled Assembly of Fluorophores inside a Nanoliposome	Molecules	28-911	1--11	2023
39	Matsuo, Yoshitaka; Uchihashi, Takayuki; Inada, Toshifumi	Decoding of the ubiquitin code for clearance of colliding ribosomes by the RQT complex	Nature Communications	14-79	1--12	2023
40	Lim, Keesiang; Nishide, Goro; Sajidah, Elma Sakinatus Yamano, Tomoyoshi; Qiu, Yujia; Yoshida, Takeshi; Kobayashi, Akiko; Hazawa, Masaharu; Ando, Toshio; Hanayama, Rikinari; Wong, Richard W.	Nanoscopic Assessment of Anti-SARS-CoV-2 Spike Neutralizing Antibody Using High-Speed AFM	Nano Letters	e2004270	1--10	2023

41	Jin, Xiaocen; Tanaka, Hikari; Jin, Meihua; Fujita, Kyota; Homma, Hidenori; Inotsume, Maiko; Yong, Huang; Umeda, Kenichi; Kodera, Noriyuki; Ando, Toshio; Okazawa, Hitoshi	PQBP5/NOL10 maintains and anchors the nucleolus under physiological and osmotic stress conditions	Nature Communications	14--9	1--20	2023
42	Jukic, Nebojsa; Perrino, Alma P.; Redondo-Morata, Lorena; Scheuring, Simon	Structure and dynamics of ESCRT-III membrane remodeling proteins by high-speed atomic force microscopy	Journal of Biological Chemistry	e104676	1--25	2023
43	Tomonori Ogane, Daisuke Noshiro, Toshio Ando, Atsuko Yamashita ,Yuji Sugita, Yasuhiro Matsunaga	Development of hidden Markov modeling method for molecular orientations and structure estimation from high-speed atomic force microscopy time-series images	PLOS Computational Biology	e1010384	1--23	2022
44	Yuichiro Nishizawa, Takumi Inui, Ryuji Namioka, Takayuki Uchihashi, Takumi Watanabe, and Daisuke Suzuki	Clarification of Surface Deswelling of Thermoresponsive Microgels by Electrophoresis	Langmuir	38	16084－16093	2022
45	Arivazhagan Rajendran,Kirankumar Krishnamurthy,Seojeong Park, Eiji Nakata, Youngjoo Kwon, and Takashi Morii	Topologically-Interlocked Minicircles as Probes of DNA Topology and DNA-Protein Interactions	Chem. Eur. J.	e202200108	1--11	2022
46	Ishimura, Ryosuke; El-Gowily, Afnan H.; Noshiro, Daisuke; Komatsu-Hirota, Satoko; Ono, Yasuko; Shindo, Mayumi; Hatta, Tomohisa; Abe, Manabu; Uemura, Takefumi; Lee-Okada, Hyeon Cheol; Mohamed, Tarek M.; Yokomizo, Takehiko; Ueno, Takashi; Sakimura, Kenji; Natsume, Tohru; Sorimachi, Hiroyuki; Inada, Toshifumi; Waguri, Satoshi; Noda, Nobuo N.; Komatsu, Masaaki	The UFM1 system regulates ER-phagy through the ufmylation of CYB5R3	Nature Communications	13-7857	1--16	2022
47	Ando, Toshio	Functional Implications of Dynamic Structures of Intrinsically Disordered Proteins Revealed by High-Speed AFM Imaging	Biomolecules	12-1876	1--19	2022
48	Radhakrishnan, Renjith M.; Kizhakkeduth, Safwa T.; Nair, Vishnu M.; Ayyappan, Shine; Lakshmi, R. Bhagya; Babu, Neethu; Prasannajith, Anjaly; Umeda, Kenichi; Vijayan, Vinesh; Kodera, Noriyuki; Manna, Tapas K.	Kinetochore-microtubule attachment in human cells is regulated by the interaction of a conserved motif of Ska1 with EB1	Journal of Biological Chemistry	299-102853	1--15	2022
49	Melcrov, Adla; Maity, Sourav; Melcr, Josef; Kok, Niels A. W. De; Gabler, Mariella; Eyden, Jonne Van Der; Stensen, Wenche; Svendsen, John S. M.; Driessen, Arnold J. M.; Marrink, Siewert J.; Roos, Wouter H.	Lateral membrane organization as target of an antimicrobial peptidomimetic compound	bioRxiv	e524350	1--22	2022
50	Jiang, Yining; Thienpont, Batiste; Sapuru, Vinay; Hite, Richard K.; Dittman, Jeremy S.; Sturgis, James N.; Scheuring, Simon	Membrane-mediated protein interactions drive membrane protein organizatio	Nature Communications	13-7373	1--14	2022
51	Dirscherl, Cindy; Lochte, Sara; Hein, Zeynep; Kopicki, Janine-Denise; Regina, Antonia; Linden, Noemi; Karner, Andreas; Preiner, Johannes; Weghuber, Julian; Uetrecht, Charlotte; Zacharias, Martin; Piehler, Jacob; Springer, Sebastian; Lanzerstorfer, Peter	Dissociation of β 2 m from MHC Class I Triggers Formation of Noncovalent, Transient Heavy Chain Dimers	bioRxiv	e450866	1-51	2022
52	Yiming Yu, Takuma Ozaki, and Shige H. Yoshimura	Self-assembly of CIP4 drives actin-mediated asymmetric pit-closing in clathrin-mediated endocytosis 1 2 Yiming	bioRxiv	e517438	1--42	2022
53	Azad, Kimi; Guilligay, Delphine; Boscheron, Cecile; Maity,Sourav; Franceschi, Nicola De; Sulbaran, Guidenn; Effantin, Gregory; Wang, Haiyan; Kleman, Jean-Philippe; Schoehn, Guy; Roos, Wouter H.; Desfosses, Ambroise; Weissenhorn, Winfried	Structural basis of CHMP2A-CHMP3 ESCRT-III polymer assembly and membrane cleavage	bioRxiv	e487901	1-48	2022

54	Krunoslav Ilic, Lucija Krce, Jorge Rodriguez-Ramos, Felix Rico, Nikolina Kalcec, Ivica Aviani,Petra Tur˘cic, Ivan Pavi˘ci c, Ivana Vinkovic Vrcek	Cytotoxicity of nanomixture: Combined action of silver and plastic nanoparticles on immortalized human lymphocytes	Journal of Trace Elements in Medicine and Biology	73	127004	2022
55	Kazuto Yoshimi, Kohei Takeshita, Noriyuki Kodera, Satomi Shibumura, Yuko Yamauchi, Mine Omatsu, Kenichi Umeda, Yayoi Kunihiro, Masaki Yamamoto & Tomoji Mashimo	Dynamic mechanisms of CRISPR interference by Escherichia coli CRISPR-Cas3	Nature Communications	13	4917	2022
56	Luisa Morett,MarkoUšaj ,OlegMatusovsky ,DilsonE.Rassier , Ran Friedman&AlfMånsson	Multistep orthophosphate release tunes actomyosin energy transduction	Nature Communications	13	4575	2022
57	Fang Jiao,François Dehez,TaoNi ,XiulianYu, Jeremy S. Dittman ,Robert Gilbert, Christophe Chipot & Simon Scheuring	Perforin-2 clockwise hand-over-hand pre-pore to pore transition mechanism	Nature Communications	13	5039	2022
58	Tsuji Akihiro ,Yamashita Hayato, Hisatomi Osamu & Abe Masayuki	Dimerization processes for light-regulated transcription factor Photozipper visualized by high-speed atomic force microscopy	bioRxiv	--	e485139	2022
59	Mohit Sharma,Mohit Sharma ,Artur P. Biela, Agnieszka Kowalczyk, Kinga Borzęcka-Solarz, Bernard M. A. G. Piette, Szymon Gaweł, Joshua Bishop, Philipp Kukura, Justin L. P. Benesch, Motonori Imamura, Simon Scheuring, and Jonathan G. Heddle	Shape-Morphing of an Artificial Protein Cage with Unusual Geometry Induced by a Single Amino Acid Change	ACS Nanoscience Au	--	2c00019	2022
60	Nebojsa Jukic, Alma P. Perrino , Frédéric Humbert, Aurélien Roux & Simon Scheuring	Snf7 spirals sense and alter membrane curvature	Nature Communications	13	2174	2022
61	Katja Pirc, Luke A. Clifton, Neval Yilmaz, Andrea Saltalamacchia, Mojca Mally, Tina Snoj, Nada Žnidaršič, Marija Srnko, Jure Borišek, Petteri Parkkila, Isabell Albert,Marjetka Podobnik, Keiji Numata, Thorsten Nürnberger, Tapani Viitala,Jure Derganc, Alessandra Magistrato, Jeremy H. Lakey, Gregor Anderluh	An oomycete NLP cytolysin forms transient small pores in lipid membranes	Sci. Adv	8	eabj9406	2022
62	Oleg S. Matusovsky, Alf Mansson,Dilson E. Rassier	Cooperativity of myosin II motors in the non-regulated and regulated thin filaments investigated with high-speed AFM	bioRxiv	--	e481751	2022
63	Sridhar Vemulapalli, Mohtadin Hashemi & Yuri L. Lyubchenko	Site-Search Process for Synaptic Protein-DNA Complexes	International Journal of Molecular sciences	23	212	2022

64	Chan, Jasper Fuk-Woo; Oh, Yoo Jin; Yuan, Shuofeng; Chu, Hin; Yeung, Man-Lung; Canena, Daniel; Chan, Chris Chung-Sing; Poon, Vincent Kwok-Man; Chan, Chris Chun-Yiu; Zhang, Anna Jinxia; Cai, Jian-Piao; Ye, Zi-Wei; Wen, Lei; Yuen, Terrence Tsz-Tai;Chik, Kenn Ka-Heng; Shuai, Huiping; Wang, Yixin; Hou, Yuxin; Luo, Cuiting;Chan, Wan-Mui; Qin, Zhenzhi; Sit, Ko-Yung; Au, Wing-Kuk; Legendre, Maureen; Zhu, Rong; Hain, Lisa; Seferovic, Hannah; Tamp, Robert; To, Kelvin Kai-Wang; Chan, Kwok-Hung; Thomas, Dafydd Gareth; Klausberger, Miriam; Xu, Cheng; Moon, James J.; Stadlmann, Johannes; Penninger, Josef M.; Oostenbrink, Chris; Hinterdorfer, Peter; Yuen, Kwok-Yung; Markovitz, David M.	A Molecularly Engineered, Broad-spectrum Anti-coronavirus Lectin Inhibits SARS-CoV-2 and MERS-CoV Infection In Vivo	Cell Reports Medicine	3	100774	2022
65	Kodera, Noriyuki; Ando, Toshio	Visualization of intrinsically disordered proteins by high-speed atomic force microscopy	Current Opinion in Structural Biology	72	260–266	2022
66	Shukla, Rhythm; Lavore, Francesca; Maity, Sourav; Derks, Maik G. N.; Jones, Chelsea R.; Vermeulen, Bram J. A.; Melcrov, Adla; Morris, Michael A.; Becker, Lea Marie; Wang, Xiaoqi; Kumar, Raj; Medeiros-Silva, Joo; van Beekveld, Roy A. M.; Bonvin, Alexandre M. J. J.; Lorent, Joseph H.; Lelli, Moreno; Nowick, James S.; MacGillavry, Harold D.; Peoples, Aaron J.; Spoering, Amy L.; Ling, Losee L.; Hughes, Dallas E.; Roos, Wouter H.; Breukink, Eefjan; Lewis, Kim; Weingarth, Markus	Teixobactin kills bacteria by a two-pronged attack on the cell envelope	Nature	608	390-396	2022
67	Alaoui, Fatima El; Casuso, Ignacio; Sanchez-Fuentes, David; Arpin-Andre, Charlotte;Rathar, Raissa; Baecker, Volker; Castro, Anna; Lorca, Thierry; Viaud, Julien; Vassilopoulos, Stphane; Carretero-Genevrier, Adrian; Picas, Laura	Structural organization and dynamics of FCHo2 docking on membranes	eLife	11	e73156	2022
68	Majsterkiewicz, Karolina; Biela, Artur P.; Maity, Sourav; Sharma, Mohit; Piette, Bernard M. A. G.; Kowalczyk, Agnieszka;Gawe・ Szymon; Chakraborti, Soumyananda; Roos, Wouter H.; Heddle, Jonathan G.	Artificial Protein Cage with Unusual Geometry and Regularly Embedded Gold Nanoparticles	Nano Letters	22	3187-3195	2022
69	Kodera, Noriyuki; Ando, Toshio	Guide to studying intrinsically disordered proteins by high-speed atomic force microscopy	Methods	207	44-56	2022
70	Mita, Mashu; Matsushima, Hisayoshi; Ueda, Mikito; Ito, Hiroshi	In-situ high-speed atomic force microscopy observation of dynamic nanobubbles during water electrolysis	Journal of Colloid and Interface Science	614	389-395	2022
71	Murata, Satoshi; Toyota, Taro; ichiro M. Nomura, Shin; Nakakuki, Takashi; Kuzuya, Akinori	Molecular Cybernetics: Challenges toward Cellular Chemical Artificial Intelligence	Advanced Functional Materials	32	2201866	2022

72	Shimizu, Masahiro; Okamoto, Chihiro; Umeda, Kenichi; Watanabe, Shinji; Ando, Toshio; Kodera, Noriyuki	An ultrafast piezoelectric Z-scanner with a resonance frequency above 1.1 MHz for high-speed atomic force microscopy	Review of Scientific Instruments	93	13701	2022
73	Nishiguchi, Shigetaka; Furuta, Tadaomi; Uchihashi, Takayuki	Multiple dimeric structures and strand-swap dimerization of E-cadherin in solution visualized by high-speed atomic force microscopy	Biophysics And Computational	119	e2208067119	2022
74	Miyamoto, Sho; Nakano, Masahiro; Morikawa, Takeshi; Hirabayashi, Ai; Tamura, Ryoma; Fujita-Fujiharu, Yoko; Hirose, Nanami; Muramoto, Yukiko; Noda, Takeshi	Migration of Influenza Virus Nucleoprotein into the Nucleolus Is Essential for Ribonucleoprotein Complex Formation	American Society For Microbiology	13	e03315-21	2022
75	Yanaka, Saeko; Nishiguchi, Shigetaka; Yogo, Rina; Watanabe, Hiroki; Shen, Jiana; Yagi, Hirokazu; Uchihashi, Takayuki;Kato, Koichi	Quantitative Visualization of the Interaction between Complement Component C1 and Immunoglobulin G: The Effect of CH 1 Domain Deletion	International Journal of Molecular Sciences	23	2090	2022
76	Wang, Dong; Sun, Linhao; Okuda, Satoru; Yamamoto, Daisuke; Nakayama, Mizuho;Oshima, Hiroko; Saito, Hideyuki; Kouyama, Yuta; Mimori, Koshi; Ando, Toshio; Watanabe, Shinji; Oshima, Masanobu	Nano-scale physical properties characteristic to metastatic intestinal cancer cells identified by high-speed scanning ion conductance microscope	Biomaterials	280	121256	2022
77	Amyot, Romain; Marchesi, Arin; Franz, Clemens M.; Casuso, Ignacio; Flechsig, Holger	Simulation atomic force microscopy for atomic reconstruction of biomolecular structures from resolution-limited experimental images	PLoS Computational Biology	16	e1009970	2022
78	Sharma, Mohit; Biela, Artur P.; Kowalczyk, Agnieszka; Borzà³cka-Solarz, Kinga; Piette, Bernard M. A. G.; Gaweł・ Szymon; Bishop, Joshua; Kukura, Philipp; Benesch, Justin L. P.; Imamura, Motonori; Scheuring, Simon; Heddle, Jonathan G.	Shape-Morphing of an Artificial Protein Cage with Unusual Geometry Induced by a Single Amino Acid Change	ACS Nanoscience Au	5	404-413	2022
79	Inoue, Yosuke; Hanazono, Yuya; Noi, Kentaro; Kawamoto, Akihiro; Kimatsuka, Masato; Harada, Ryuhei; Takeda, Kazuki; Kita, Ryoichi; Iwamasa, Natsuki; Shibata, Kyoka; Noguchi, Keiichi; Shigeta, Yasuteru; Namba, Keiichi; Ogura, Teru; Miki, Kunio; Shinohara, Kyosuke; Yohda, Masafumi	Split conformation of Chaetomium thermophilum Hsp104 disaggregase	Structure	29	721-730	2021
80	Rajendran, Arivazhagan; Krishnamurthy, Kirankumar; Giridasappa, Amulya; Nakata, Eiji; Morii, Takashi	Stabilization and structural changes of 2D DNA origami by enzymatic ligation	Nucleic Acids Research	49	7884-7900	2021
81	Buzn, Pedro; Maity, Sourav; Christodoulis, Panagiotis; Wiertsema, Monique J.; Dunkelbarger, Steven; Kim, Christine; Wuite, Gijs J. L.; Zlotnick, Adam; Roos, Wouter H.	Virus self-assembly proceeds through contact-rich energy minima	Sci. Adv	7	eabg0811	2021

82	Alqabandi, Maryam; de Franceschi, Nicola; Maity, Sourav; Miguet, Nolwenn; Bally, Marta; Roos, Wouter H.; Weissenhorn, Winfried; Bassereau, Patricia; Mangenot, Stphanie	The ESCRT-III isoforms CHMP2A and CHMP2B display different effects on membranes upon polymerization	BMC Biology	19	66	2021
83	Nakano, Masahiro; Sugita, Yukihiko; Kodera, Noriyuki; Miyamoto, Sho; Muramoto, Yukiko; Wolf, Matthias; Noda, Takeshi	Ultrastructure of influenza virus ribonucleoprotein complexes during viral RNA synthesis	Communications Biology	4	858	2021
84	Nakata, Eiji; Hirose, Hisaaki; Gerelbaatar, Khongorzul; Arafiles, Jan Vincent V.; Zhang, Zhengxiao; Futaki, Shiroh; Morii, Takashi	A facile combinatorial approach to construct a ratiometric fluorescent sensor:application for the real-time sensing of cellular pH changes	Chemical Science	12	8231-8240	2021
85	Marchesi, Arin; Umeda, Kenichi; Komekawa, Takumi; Matsubara, Takeru; Flechsig, Holger; Ando, Toshio; Watanabe, Shinji; Kodera, Noriyuki; Franz, Clemens M.	An ultra-wide scanner for large-area high-speed atomic force microscopy with megapixel resolution	Scientific Reports	11	13003	2021
86	Umeda, Kenichi; Okamoto, Chihiro; Shimizu, Masahiro; Watanabe, Shinji; Ando, Toshio; Kodera, Noriyuki	Architecture of zero-latency ultrafast amplitude detector for high-speed atomic force microscopy	Applied Physics Letters	119	181602	2021
87	Gari, Raghavendar Reddy Sanganna; Montalvocosta, Joel Jos; Heath, George R.; Jiang, Yining; Gao, Xiaolong; Nimigean, Crina M.; Chipot, Christophe; Scheuring, Simon	Correlation of membrane protein conformational and functional dynamics	Nature Communications	12	4363	2021
88	Bauer, Benedikt W.; Davidson, Iain F.; Canena, Daniel; Wutz, Gordana; Tang, Wen;Litos, Gabriele; Horn, Sabrina; Hinterdorfer, Peter; Peters, Jan Michael	Cohesin mediates DNA loop extrusion by a wing and clamp・mechanism	Cell	184	5448-5464	2021
89	Toyonaga, Takuma; Kato, Takayuki; Kawamoto, Akihiro; Kodera, Noriyuki; Hamaguchi, Tasuku; Tahara, Yuhei O.; Ando, Toshio; Namba, Keiichi; Miyata, Makoto	Chained Structure of Dimeric F1-like ATPase in Mycoplasma mobile Gliding Machinery	American Society For Microbiology	12	e01414-21	2021
90	Nasrin, Syeda Rubaiya; Ganser, Christian; Nishikawa, Seiji; Kabir, Arif Md Rashedul;Sada, Kazuki; Yamashita, Takefumi; Ikeguchi, Mitsunori; Uchihashi, Takayuki;Hess, Henry; Kakugo, Akira	Deformation of microtubules regulates translocation dynamics of kinesin	Sci. Adv	7	eabf2211	2021
91	Hirayama, Chihiro; Machida, Kodai; Noi, Kentaro; Murakawa, Tadayoshi; Okumura, Masaki; Ogura, Teru; Imataka, Hiroaki; Inaba, Kenji	Distinct roles and actions of protein disulfide isomerase family enzymes in catalysis of nascent-chain disulfide bond formation	iScience	24	102296	2021

92	Fujita, Junso; Sugiyama, Shogo; Terakado, Haruna; Miyazaki, Maho; Ozawa, Mayuki; Ueda, Nanami; Kuroda, Natsuko; Tanaka, Shun Ichi; Yoshizawa, Takuya; Uchihashi, Takayuki; Matsumura, Hiroyoshi	Dynamic assembly/disassembly of staphylococcus aureus ftsz visualized by high-speed atomic force microscopy	International Journal of Molecular Sciences	22	1697	2021
93	Lin, Peng; Dinh, Huyen; Nakata, Eiji; Morii, Takashi	Dynamic Shape Transformation of a DNA Scaffold Applied for an Enzyme Nanocarrier	Frontiers in Chemistry	9	697857	2021
94	Fukuda, Shingo; Ando, Toshio	Faster high-speed atomic force microscopy for imaging of biomolecular processes	Review of Scientific Instruments	92	33705	2021
95	Jiao, Fang; Ruan, Yi; Scheuring, Simon	High-speed atomic force microscopy to study pore-forming proteins	Methods in Enzymology	649	189-217	2021
96	Yoneda, Saki; Maruno, Takahiro; Mori, Asuka; Hioki, Ayana; Nishiumi, Haruka; Okada, Rio; Murakami, Makoto; Zekun, Wang; Fukuhara, Ayano; Itagaki, Nozomi; Harauchi, Yosuke; Adachi, Satoru; Okuyama, Kumi; Sawaguchi, Taichi; ,Tetsuo; Uchiyama, Susumu	Influence of Protein Adsorption on Aggregation in Prefilled Syringes	Journal of Pharmaceutical Sciences	110	3568-3579	2021
97	Piontek, Melissa C.; Lira, Rafael B.; Roos, Wouter H.	Active probing of the mechanical properties of biological and synthetic vesicles	Biochimica et Biophysica Acta - General Subjects	1865	129486	2021
98	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	Journal of Physical Chemistry Letters	12	3837-3846	2021
99	Hoffmann, David; Mereiter, Stefan; Oh, Yoo Jin; Monteil, Vanessa; Elder, Elizabeth; Zhu, Rong; Canena, Daniel; Hain, Lisa; Laurent, Elisabeth; Grnwaldruber, Clemens; Klausberger, Miriam; Jonsson, Gustav; Kellner, Max J.; Novatchkova, Maria; Ticevic, Melita; Chabloz, Antoine; Wirnsberger, Gerald; Hagelkruys, Astrid; Altmann, Friedrich; Mach, Lukas; Stadlmann, Johannes; Oostenbrink, Chris; Mirazimi, Ali; Hinterdorfer, Peter; Penninger, Josef M.	Identification of lectin receptors for conserved SARSoV・glycosylation sites	The EMBO Journal	40	e108375	2021
100	Yu, Yiming; Yoshimura, Shige H.	Investigating the morphological dynamics of the plasma membrane by high-speed atomic force microscopy	Journal of Cell Science	134	jcs243584	2021
101	Yilmaz, Neval; Kodama, Yutaka; Numata, Keiji	Lipid Membrane Interaction of Peptide/DNA Complexes Designed for Gene Delivery	Langmuir	37	1882-1893	2021
102	Saino, Ryota; Akamatsu, Masaaki; Sakai, Kenichi; Sakai, Hideki	Morphology of surfactant mixtures at solid/liquid interfaces: High-speed AFM observation	Colloids and Surfaces A: Physicochemical and Engineering Aspects	616	126297	2021

103	Sakane, Ayuko; aki Yano, Taka; Uchihashi, Takayuki; Horikawa, Kazuki; Hara, Yusuke; Imoto, Issei; Kurisu, Shusaku; Yamada, Hiroshi; Takei, Kohji; Sasaki, Takuya	JRAB/MICAL-L2 undergoes liquidiquid phase separation to form tubular recycling endosomes	Communications Biology	4	551	2021
104	Lim, Keesiang; Nishide, Goro; Yoshida, Takeshi; Watanabe-Nakayama, Takahiro; Kobayashi, Akiko; Hazawa, Masaharu; Hanayama, Rikinari; Ando, Toshio; Wong, Richard W.	Millisecond dynamic of SARS-CoV-2 spike and its interaction with ACE2 receptor and small extracellular vesicles	Journal of Extracellular Vesicles	10	e12170	2021
105	Yamashita, Satoshi; Kamatari, Yuji O.; Honda, Ryo; Niwa, Ayumi; Tomiata, Hiroyuki; Hara, Akira; Kuwata, Kazuo	Monomeric a-synuclein (aS) inhibits amyloidogenesis of human prion protein (hPrP) by forming a stable aS-hPrP hetero-dimer.	Prion	1	37-43	2021
106	Hirano, Rina; Arimura, Yasuhiro; Kujirai, Tomoya; Shibata, Mikihiro; Okuda, Aya; Morishima, Ken; Inoue, Rintaro; Sugiyama, Masaaki; Kurumizaka, Hitoshi	Histone variant H2A.B-H2B dimers are spontaneously exchanged with canonical H2A-H2B in the nucleosome	Communications Biology	4	191	2021
107	Sasaki, Yuma; Hiroshige, Seina; Takizawa, Masaya; Nishizawa, Yuichiro; Uchihashi, Takayuki; Minato, Haruka; Suzuki, Daisuke	Non-close-packed arrangement of soft elastomer microspheres on solid substrates	RSC Advances	11	14562-14567	2021
108	rajendran, Arivazhagan; Krishnamurthy, Kirankumar; Giridasappa, Amulya; Nakata, Eiji; Morii, Takashi	Nanostructure and thermoresponsiveness of poly(N-isopropyl methacrylamide)-based hydrogel microspheres preparedviaaqueous free radical precipitation polymerization	RSC Advances	11	13130-13137	2021
109	Kodera, Noriyuki; Abe, Hiroshi; Nguyen, Phuong Doan N.; Ono, Shoichiro	Native cyclase-associated protein and actin from Xenopus laevis oocytes form a unique 4:4 complex with a tripartite structure	Journal of Biological Chemistry	296	100649	2021
110	Koide, Hiroki; Kodera, Noriyuki; Bisht, Shveta; Takada, Shoji; Terakawa, Tsuyoshi	Modeling of DNA binding to the condensin hinge domain using molecular dynamics simulations guided by atomic force microscopy	PLoS Computational Biology	17	e1009265	2021
111	Bruinsma, Robijn F.; Wuite, Gijs J. L.; Roos, Wouter H.	Physics of viral dynamics	Nature Reviews Physics	3	76-91	2021
112	Kobayashi, Kohei; Kodera, Noriyuki; Kasai, Taishi; Tahara, Yuhei O.; Toyonaga, Takuma; Mizutani, Masaki; Fujiwara, Ikuko; Ando, Toshio; Miyata, Makoto	Movements of Mycoplasma mobile Gliding Machinery Detected by High-Speed Atomic Force Microscopy	American Society For Microbiology	12	e00040-21	2021
113	Perrino, Alma P.; Miyagi, Atsushi; Scheuring, Simon	Single molecule kinetics of bacteriorhodopsin by HS-AFM	Nature Communications	12	7225	2021
114	Heath, George R.; Kots, Ekaterina; Robertson, Janice L.; Lansky, Shifra; Khelashvili, George; Weinstein, Harel; Scheuring, Simon	Localization atomic force microscopy	Nature	594	385-404	2021

115	Alma P. Perrino, Miyagi Atsushi & Simon Scheuring	Single molecule kinetics of bacteriorhodopsin by HS-AFM	Nature Communications	12	7225	2021
116	Bikash R. Sahoo,Christopher L. Souders II,Magdalena Ivanova, Zhou Deng, Nakayama W.Takahiro , Saba Suladze, Bernd Reif, Ando Toshio, Christopher J. Martyniuk,Ayyalusamy Ramamoorthy	Conformational Tuning of Amylin by Charged SMA Copolymers	Journal of Molecular Biology	--	e057547	2021
117	Yamamura Hatsuo, Hagiwara **Tatsuya**, Hayashi Yuma, Osawa Kayo, Kato Hisato, Katsu Takashi ,Masuda Kazufumi,Sumino Ayumi,Yamashita Hayato ,Jinno Ryo , Abe Masayuki, & Miyagawa Atsushi	Antibacterial Activity of Membrane-Permeabilizing Bactericidal Cyclodextrin Derivatives	ACS omega	6	31831－31842	2021
118	Pedro Buzón, Sourav Maity, Panagiotis Christodoulis, Monique J. Wiertsema, Steven Dunkelbarger, Christine Kim, Gijs J.L. Wuite, Adam Zlotnick, Wouter H. Roos	Virus self-assembly proceeds through contact-rich energy minima	Buzón et al., Sci. Adv	7	811	2021
119	Syeda Rubaiya Nasrin, Christian Ganser, Nishikawa Seiji, Arif Md. Rashedul Kabir, Sada Kazuki,Yamashita Takefumi, Ikeguchi Mitsunori , Uchihashi Takayuki, Henry Hess, Kakugo Akira	Deformation of microtubules regulates translocation dynamics of kinesin	Nasrin et al., Sci. Adv.	7	eabf2211	2021
120	Nakano Masahiro , Sugita Yukihiko,Kodera Noriyuki, Miyamoto Sho, Muramoto Yukiko,Matthias Wolf & Noda Takeshi	Ultrastructure of influenza virus ribonucleoprotein complexes during viral RNA synthesis	Communications Biology	4	858	2021
121	Grigory Tagiltsev,, Christoph A. Haselwandter,, Simon Scheuring	Nanodissected elastically loaded clathrin lattices relax to increased curvature	Tagiltsev et al., Sci. Adv.	7	eabg9934	2021
122	Saki Yoneda, Takahiro Maruno , Asuka Mori , Ayana Hiokia , Haruka Nishiumi Rio Okada , Makoto Murakami , Wang Zekun , Ayano Fukuhara , Nozomi Itagaki, Yosuke Harauchi , Satoru Adachi , Kumi Okuyama , Taichi Sawaguchi, Tetsuo Torisu , Susumu Uchiyama	Influence of Protein Adsorption on Aggregation in Prefilled Syringes	Journal of Pharmaceutical Sciences	110	3568-3579	2021
123	Raghavendar Reddy Sanganna Gari, Joel José Montalvo - Acosta, George R. Heath, Yining Jiang,Xiaolong Gao , Crina M. Nimigean , Christophe Chipot & Simon Scheuring	Correlation of membrane protein conformational and functional dynamics	Nature Communications	12	4363	2021
124	Mari Takusagawa, Yusuke Kobayashi,, Yoichiro Fukao, Kumi Hidaka, Masayuki Endo,Hiroshi Sugiyama, Takashi Hamajia, Yoshinobu Kato, Isamu Miyakawa, Osami Misumi,Toshiharu Shikanai, and Yoshiki Nishimura,	HBD1 protein with a tandem repeat of two HMG-box domains is a DNA clip to organize chloroplast nucleoids in Chlamydomonas reinhardtii	PNAS	118	e2021053118	2021
125	Rio Okada, Makoto Murakamia, Wang Zekuna, Ayano Fukuhara, Nozomi Itagaki,	Structural variability and dynamics in the ectodomain of an ancestral-type classical cadherin revealed by AFM imaging	Journal of Cell Science	134	jcs258388	2021

126	Romain Amyot,Arin Marchesi, Clemens M Franz,Ignacio Casuso, and Holger Flechsig,	Atomic reconstruction of biomolecular structures from AFM images and quantitative validation of experimental data using simulated AFM scanning	bioRxiv	--	e450070	2021
127	Maho Yagi-Utsumi, Kazuhiro Aoki, Hiroki Watanabe, Chihong Song, Seiji Nishimura, Tadashi Satoh, Saeko Yanaka,Christian Ganser, Sae Tanaka, Vincent Schnapka, Ean Wai Goh, Yuji Furutani, Kazuyoshi Murata, Takayuki Uchihashi, Kazuharu Arakawa & Koichi Kato	Desiccation-induced fibrous condensation of CAHS protein from an anhydrobiotic tardigrade	bioRxiv	--	e449423	2021
128	George R. Heath, Ekaterina Kots, Janice L. Robertson, Shifra Lansky, George Khelashvili,Harel Weinstein & Simon Scheuring	Localization atomic force microscopy	Nature	594	385--404	2021
129	F. El Alaoui, I. Casuso, D. Sanchez-Fuentes, C. André-Arpin, R. Rathar, V. Baecker, A. Castro, T. Lorca, J. Viaud, S. Vassilopoulos, A. Carretero-Genevrier, L. Picas	Structure and dynamics of FCHo2 docking on membranes	bioRxiv	10	1101	2021
130	Yuichiro Nishizawa, Haruka Minato, Takumi Inui,Ikuma Saito, Takuma Kureha, Mitsuhiro Shibayama, Takayuki Uchihashi & Daisuke Suzuki	Nanostructure and thermoresponsiveness of poly(N-isopropyl methacrylamide)-based hydrogel microspheres prepared via aqueous free radical precipitation polymerization	RSC Adv.	11	13130-13137	2021
131	David Hoffmann, Stefan Mereiter , Yoo Jin Oh , Vanessa Monteil , Elizabeth Elder,Rong Zhu, Daniel Canena, Lisa Hain, Elisabeth Laurent , Clemens Grunwald-Gruber, Miriam Klausberger , Gustav Jonsson , Max J Kellner, Maria Novatchkova, Melita Ticevic,Antoine Chabloz, Gerald Wirnsberger, Astrid Hagelkruys, Friedrich Altmann, Lukas Mach ,Johannes Stadlmann, Chris Oostenbrink, Ali Mirazimi , Peter Hinterdorfer & Josef M Penninger	Identification of lectin receptors for conserved SARS-CoV-2 glycosylation sites	The EMBO Journal	40	e108375	2021
132	Christopher T. Evans, Sara J. Baldock , John G. Hardy , Oliver Payton, Loren Picco & Michael J. Allen	A Non-Destructive, Tuneable Method to Isolate Live Cells for High-Speed AFM Analysis	Microorganisms	9	680	2021
133	Hiroki Koide,Noriyuki Kodera,Shveta Bisht,Shoji Takada,Tsuyoshi Terakawa	Modeling of DNA binding to the condensin hinge domain using molecular dynamics simulations guided by atomic force microscopy	PLOS Computational Biology	30	17	2021
134	Hisashi Tatebe , Chew Theng Lim 1, Hiroki Konno, Kazuhiro Shiozaki , Akira Shinohara, Takayuki Uchihashi , & Asako Furukohri	Rad50 zinc hook functions as a constitutive dimerization module interchangeable with SMC hinge	Nature Communications	11	370	2020
135	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	118	21	2019

136	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
137	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
138	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	48	4041-4051	2019
139	Nakamura, Akihiko; Iino, Ryota	Visualization of functional structure and kinetic dynamics of cellulases	Advances in Experimental Medicine and Biology	24	21	2018
140	Yoshioka, Taiki; Matsushima, Hisayoshi; Ueda, Mikito	In situ observation of Cu electrodeposition and dissolution on Au(100) by high-speed atomic force microscopy	Electrochemistry Communications	21	1785-1794	2018
141	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
142	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
143	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	12913	2018
144	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

145	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
146	Ando, Toshio	High-speed atomic force microscopy and its future prospects	Biophysical Reviews	10	285--292	2018
147	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
148	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
149	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
150	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
151	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
152	Heath, George R. & Scheuring, Simon	High-speed AFM height spectroscopy reveals µs-dynamics of unlabeled biomolecules	Nature Communications	9	4983	2018
153	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
154	Kodera, Noriyuki & Ando, Toshio	Direct Imaging of Walking Myosin V by High-Speed Atomic Force Microscopy	Methods in Molecular Biology	1805	103--122	2018
155	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

156	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
157	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
158	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
159	Matsui, Shusuke; Nishizawa, Yuichiro; Uchihashi, Takayuki & Suzuki, Daisuke	Monitoring Thermoresponsive Morphological Changes in Individual Hydrogel Microspheres	ACS Omega	3	10836--10842	2018
160	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
161	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
162	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
163	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
164	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
165	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
166	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
167	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

168	Roos, Wouter H.	AFM nanoindentation of protein shells, expanding the approach beyond viruses	Seminars in Cell & Developmental Biology	73	145--152	2018
169	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
170	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
171	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
172	Takahashi, Hirohide; Rico, Felix; Chipot, Christophe & Scheuring, Simon	α-Helix Unwinding as Force Buffer in Spectrins	ACS Nano	12	2719--2727	2018
173	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
174	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
175	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
176	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
177	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
178	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
179	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

180	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
181	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
182	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
183	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
184	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
185	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
186	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
187	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
188	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
189	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

190	Ando, Toshio	Directly watching biomolecules in action by high-speed atomic force microscopy	Biophysical Reviews	9	421--429	2017
191	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
192	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
193	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
194	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
195	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
196	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
197	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
198	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
199	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
200	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

201	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
202	Rigato, Annafrancesca; Miyagi, Atsushi; Scheuring, Simon & Rico, Felix	High-frequency microrheology reveals cytoskeleton dynamics in living cells	Nature Physics	13	771--775	2017
203	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
204	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
205	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
206	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
207	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
208	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
209	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
210	Watanabe, Shinji & Ando, Toshio	High-speed XYZ-nanopositioner for scanning ion conductance microscopy	Applied Physics Letters	111	113106	2017
211	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
212	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

213	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
214	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
215	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
216	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
217	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
218	Gumi-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
219	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
220	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
221	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
222	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
223	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

224	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
225	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
226	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
227	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
228	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
229	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
230	Yamamoto, Daisuke & Ando, Toshio	Chaperonin GroEL–GroES Functions as both Alternating and Non-Alternating Engines	Journal of Molecular Biology	428	3090--3101	2016
231	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
232	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
233	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
234	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
235	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

236	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
237	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
238	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
239	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
240	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
241	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
242	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
243	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
244	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
245	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
246	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
247	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

248	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
249	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
250	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
251	Suzuki, Yuki; Endo, Masayuki & Sugiyama, Hiroshi	Lipid-bilayer-assisted two-dimensional self-assembly of DNA origami nanostructures	Nature Communications	6	8052	2015
252	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
253	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
254	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
255	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
256	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
257	Ando, Toshio; Uchihashi, Takayuki & Scheuring, Simon	Filming Biomolecular Processes by High-Speed Atomic Force Microscopy	Chemical Reviews	114	3120--3188	2014
258	Ando, Toshio	High-speed AFM imaging	Current Opinion in Structural Biology	28	63--68	2014
259	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
260	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

261	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
262	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
263	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
264	Kodera, Noriyuki & Ando, Toshio	The path to visualization of walking myosin V by high-speed atomic force microscopy	Biophysical Reviews	6	237--260	2014
265	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
266	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
267	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
268	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
269	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
270	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 Iα and IIII	Journal of Biological Chemistry	289	14056--14065	2014
271	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

272	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
273	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
274	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
275	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
276	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
277	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
278	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
279	Ando, Toshio	Molecular machines directly observed by high-speed atomic force microscopy	FEBS Letters	587	997--1007	2013
280	Ando, Toshio	High-speed atomic force microscopy.	Microscopy (Oxford, England)	62	81--93	2013
281	Ando, Toshio; Uchihashi, Takayuki & Kodera, Noriyuki	High-Speed AFM and Applications to Biomolecular Systems	Annual Review of Biophysics	42	393--414	2013
282	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
283	Endo, Masayuki; Yamamoto, Seigi; Tatsumi, Koichi; Emura, Tomoko; Hidaka, Kumi & Sugiyama, Hiroshi	RNA-templated DNA origami structures	Chemical Communications	49	2879--2881	2013
284	Endo, Masayuki; Yang, Yangyang & Sugiyama, Hiroshi	DNA origami technology for biomaterials applications	Biomaterials Science	1	347--360	2013

285	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
286	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
287	Liu, Lu Ning & Scheuring, Simon	Investigation of photosynthetic membrane structure using atomic force microscopy	Trends in Plant Science	18	277--286	2013
288	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
289	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
290	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
291	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
292	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
293	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
294	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
295	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
296	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

297	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
298	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
299	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
300	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
301	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
302	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
303	Ando, Toshio	High-speed atomic force microscopy coming of age	Nanotechnology	23	62001	2012
304	Ando, Toshio & Kodera, Noriyuki	Visualization of Mobility by Atomic Force Microscopy	Intrinsically Disordered Protein Analysis	896	57--69	2012
305	Ando, Toshio; Uchihashi, Takayuki & Kodera, Noriyuki	High-Speed Atomic Force Microscopy	Japanese Journal of Applied Physics	51	08KA02	2012
306	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
307	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
308	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

309	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
310	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
311	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
312	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
313	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
314	Jungmann, Ralf; Scheible, Max & Simmel, Friedrich C.	Nanoscale imaging in DNA nanotechnology	Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology	4	66--81	2012
315	Lyubchenko, Yuri L.	AFM Visualization of Protein–DNA Interactions	Single-molecule Studies of Proteins	-	97--117	2012
316	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
317	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
318	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
319	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
320	Rajendran, Arivazhagan; Endo, Masayuki & Sugiyama, Hiroshi	DNA Origami: Synthesis and Self-Assembly	Current Protocols in Nucleic Acid Chemistry	1	1291--12918	2012

321	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
322	Rajendran, Arivazhagan; Endo, Masayuki & Sugiyama, Hiroshi	Single-Molecule Analysis Using DNA Origami	Angewandte Chemie International Edition	51	874--890	2012
323	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
324	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
325	Uchihashi, Takayuki; Kodera, Noriyuki & Ando, Toshio	Nanovisualization of Proteins in Action Using High-Speed AFM	Single-molecule Studies of Proteins	58	119--147	2012
326	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
327	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
328	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
329	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
330	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
331	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
332	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
333	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

334	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
335	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
336	Katan, Allard J. & Dekker, Cees	High-speed AFM reveals the dynamics of single biomolecules at the nanometer scale	Cell	147	979--982	2011
337	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
338	Lyubchenko, Yuri L.	Preparation of DNA and nucleoprotein samples for AFM imaging	Micron	42	196--206	2011
339	Lyubchenko, Yuri L.; Shlyakhtenko, Luda S. & Ando, Toshio	Imaging of nucleic acids with atomic force microscopy	Methods	54	274--283	2011
340	Miyagi, Atsushi; Ando, Toshio & Lyubchenko, Yuri L.	Dynamics of nucleosomes assessed with time-lapse high-speed atomic force microscopy	Biochemistry	50	7901--7908	2011
341	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
342	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
343	Rico, Felix; Su, Chanmin & Scheuring, Simon	Mechanical mapping of single membrane proteins at submolecular resolution	Nano Letters	11	3983--3986	2011
344	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
345	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
346	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

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348	Uchihashi, Takayuki & Ando, Toshio	High-Speed Atomic Force Microscopy and Biomolecular Processes	Methods in molecular biology (Clifton, N.J.)	736	285--300	2011
349	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
350	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
351	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
352	Casuso, Ignacio; Sens, Pierre; Rico, Felix; Scheuring, Simon	Experimental Evidence for Membrane-Mediated Protein-Protein Interaction	Biophysical Journal	99	47--49	2010
353	Casuso, Ignacio; Sens, Pierre; Rico, Felix & Scheuring, Simon	Experimental evidence for membrane-mediated protein-protein interaction	Biophysical Journal	99	47--49	2010
354	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
355	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
356	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
357	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
358	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
359	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

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361	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
362	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
363	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
364	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
365	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
366	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
367	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
368	Endo, Masayuki & Sugiyama, Hiroshi	Three-dimensional DNA nanostructures constructed by folding of multiple rectangles	Nucleic Acids Symposium Series	53	81--82	2009
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Material Science

No.	Authors	Title	Journal	Vol.	Pages	Year
1	Takahashi, Masayoshi; Shirai, Yasuyuki; Sugawa, Shigetoshi	Nanoshell Formation at the Electrically Charged Gas-Water Interface of Collapsing Microbubbles: Insights from Atomic Force Microscopy Imaging	Journal of Physical Chemistry Letters	15	220-225	2024
2	Yang, Keishi; Chan, Feng-Yueh; Watanabe, Hiroki; Yoshioka, Shingo ; Verma, Prabhat; Umakoshi, Takayuki	In-situ real-time observation of photo-induced nanoscale azo-polymer motions using high-speed atomic force microscopy combined with an inverted optical microscope	arXiv	2312 07033	1--16	2023
3	Watanabe, Takumi; Minato, Haruka; Sasaki, Yuma; Hiroshige, Seina; Suzuki, Hayato	Closed-loop recycling of microparticle-based polymers	Green Chemistry	25	3418-3424	2023
4	Esaki R Yasuda Y Kotani N Matsushima H Ueda M	High Speed Atomic Force Microscope Observation of PolyethyleneGlycol Adsorption on Au(100)	Journal of The ElectrochemicalSociety	169	82512	2022
5	Konishi, Yuki; Minoshima, Masafumi; Fujihara, Kohei; Uchihashi, Takayuki; Kikuchi, Kazuya	Elastic Polymer Coated Nanoparticles with Fast Clearance for 19F MR Imaging	Angewandte Chemie International Edition ナノ粒子(Np)	62	e202308565	2023
6	Mita, Mashu; Matsushima, Hisayoshi; Ueda, Mikito; Ito, Hiroshi	In-situ high-speed atomic force microscopy observation of dynamic nanobubbles during water electrolysis	Journal of Colloid and Interface Science	614	389-395	2022
7	Yuichiro Nishizawa, Haruka Minato, Takumi Inui,Ikuma Saito, Takuma Kureha, Mitsuhiro Shibayama, Takayuki Uchihashi & Daisuke Suzuki	Nanostructure and thermoresponsiveness of poly(N-isopropyl methacrylamide)-based hydrogel microspheres prepared via aqueous free radical precipitation polymerization	RSC Adv.	11	13130-13137	2021
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
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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
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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

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No.	Authors	Title	Journal	Vol.	Pages	Year
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2	Umeda, Kenichi; Mcarthur, Steven J.; Kodera, Noriyuki	Spatiotemporal resolution in high-speed atomic force microscopy for studying biological macromolecules in action	Microscopy	72	151-161	2023
3	Kubo, Shintaroh; Umeda, Kenichi; Kodera, Noriyuki; Takada, Shoji	Removing the parachuting artifact using two-way scanning data in high-speed atomic force microscopy	Biophysics and physicobiology	20	1--12	2023
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5	Romain Amyot , Arin Marchesi, Clemens M. Franz, Ignacio Casuso, Holger Flechsig	Simulation atomic force microscopy for atomic reconstruction of biomolecular structures from resolution-limited experimental images	PLOS Computational Biology	10	137	2021
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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
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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

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14	Uchihashi, Takayuki; Ando, Toshio & Yamashita, Hayato	Fast phase imaging in liquids using a rapid scan atomic force microscope	Applied Physics Letters	89	213112	2005
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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	2003
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
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