

Hideyuki Arata

List of Publications by Year in descending order

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Version: 2024-02-01

30
papers

1,025
citations

623734

14
h-index

610901

24
g-index

31
all docs

31
docs citations

31
times ranked

1383
citing authors

#	ARTICLE	IF	CITATIONS
1	Microfabricated arrays of femtoliter chambers allow single molecule enzymology. <i>Nature Biotechnology</i> , 2005, 23, 361-365.	17.5	332
2	Live-Cell Imaging and Optical Manipulation of Arabidopsis Early Embryogenesis. <i>Developmental Cell</i> , 2015, 34, 242-251.	7.0	132
3	Rapid and Sensitive MicroRNA Detection with Laminar Flow-Assisted Dendritic Amplification on Power-Free Microfluidic Chip. <i>PLoS ONE</i> , 2012, 7, e48329.	2.5	63
4	Rapid microRNA detection using power-free microfluidic chip: coaxial stacking effect enhances the sandwich hybridization. <i>Analyst</i> , The, 2012, 137, 3234.	3.5	57
5	Temperature Alternation by an On-Chip Microheater To Reveal Enzymatic Activity of β -Galactosidase at High Temperatures. <i>Analytical Chemistry</i> , 2005, 77, 4810-4814.	6.5	54
6	Temperature distribution measurement on microfabricated thermodevice for single biomolecular observation using fluorescent dye. <i>Sensors and Actuators B: Chemical</i> , 2006, 117, 339-345.	7.8	51
7	Loop-mediated isothermal amplification of a single DNA molecule in polyacrylamide gel-based microchamber. <i>Biomedical Microdevices</i> , 2008, 10, 539-546.	2.8	45
8	Direct observation of twisting steps during Rad51 polymerization on DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 19239-19244.	7.1	40
9	Capability of tip-growing plant cells to penetrate into extremely narrow gaps. <i>Scientific Reports</i> , 2017, 7, 1403.	3.3	37
10	Thermally Responsive Supramolecular Nanomeshes for On/Off Switching of the Rotary Motion of F ₁ -ATPase at the Single-Molecule Level. <i>Chemistry - A European Journal</i> , 2008, 14, 1891-1896.	3.3	30
11	Rapid Sub-attomole MicroRNA Detection on a Portable Microfluidic Chip. <i>Analytical Sciences</i> , 2014, 30, 129-135.	1.6	25
12	Millisecond denaturation dynamics of fluorescent proteins revealed by femtoliter container on micro-thermodevice. <i>Lab on A Chip</i> , 2008, 8, 1436.	6.0	22
13	Chemotaxis assay of plant-parasitic nematodes on a gel-filled microchannel device. <i>Sensors and Actuators B: Chemical</i> , 2015, 221, 1483-1491.	7.8	19
14	Micrografting device for testing systemic signaling in Arabidopsis. <i>Plant Journal</i> , 2020, 103, 918-929.	5.7	19
15	Towards single biomolecule handling and characterization by MEMS. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 391, 2385-2393.	3.7	15
16	Fabrication of microcage arrays to fix plant ovules for long-term live imaging and observation. <i>Sensors and Actuators B: Chemical</i> , 2014, 191, 178-185.	7.8	15
17	On-chip thermal calibration with 8 CB liquid crystal of micro-thermal device. <i>Lab on A Chip</i> , 2007, 7, 1600.	6.0	14
18	Growth assay of individual pollen tubes arrayed by microchannel device. <i>Microelectronic Engineering</i> , 2014, 118, 25-28.	2.4	12

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19	Quantification of pollen tube attraction in response to guidance by female gametophyte tissue using artificial microscale pathway. <i>Journal of Bioscience and Bioengineering</i> , 2015, 120, 697-700.	2.2	10
20	Millisecond analysis of double stranded DNA with fluorescent intercalator by micro-thermocontrol-device. <i>Talanta</i> , 2009, 79, 963-966.	5.5	9
21	Intracellular localization of histone deacetylase HDA6 in plants. <i>Journal of Plant Research</i> , 2019, 132, 629-640.	2.4	7
22	Micro Device for Local Temperature Control under Microscope. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2004, 124, 284-288.	0.1	6
23	Poly(dimethylsiloxane)-based microdevices for studying plant reproduction. <i>Biochemical Society Transactions</i> , 2014, 42, 320-324.	3.4	5
24	Manufacturing process and thermal characterization of a fast temperature switching microdevice for real-time biological experiments. <i>Microsystem Technologies</i> , 2010, 16, 1821-1824.	2.0	2
25	Direct Observation of Twisting Steps During Rad51 Polymerization on DNA. <i>Biophysical Journal</i> , 2010, 98, 66a.	0.5	0
26	High-Speed Local Heating Microdevices Enable Analysis of Biomolecular Behavior on Millisecond Time Scale. <i>Bunseki Kagaku</i> , 2011, 60, 325-332.	0.2	0
27	Behavior analysis of plant-parasitic nematode in a microchannel. , 2013, , .		0
28	Enzymatic Activity Measurement at High Temperature by Pulse Heating of Micro Reactor with On-Chip Micro Heater. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2005, 125, 234-238.	0.1	0
29	Micromanipulation and analysis of biomolecules, cells, and tissues using microfabricated devices. <i>Plant Morphology</i> , 2013, 25, 61-66.	0.1	0
30	Point-of-Care Diagnosis by Portable Microchip. <i>Journal of the Institute of Electrical Engineers of Japan</i> , 2015, 135, 558-561.	0.0	0