Martin A M Gijs

List of Publications by Year in descending order

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Version: 2024-02-01

		136740	118652
93	4,030	32	62
papers	citations	h-index	g-index

94	94	94	5702
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microfluidic Applications of Magnetic Particles for Biological Analysis and Catalysis. Chemical Reviews, 2010, 110, 1518-1563.	23.0	579
2	Magnetic bead handling on-chip: new opportunities for analytical applications. Microfluidics and Nanofluidics, 2004, 1, 22.	1.0	256
3	Droplet-Based DNA Purification in a Magnetic Lab-on-a-Chip. Angewandte Chemie - International Edition, 2006, 45, 3062-3067.	7.2	182
4	Super-Resolution Imaging of a Dielectric Microsphere Is Governed by the Waist of Its Photonic Nanojet. Nano Letters, 2016, 16, 4862-4870.	4.5	180
5	Miniaturized Flexible Temperature Sensor. Journal of Microelectromechanical Systems, 2007, 16, 1349-1354.	1.7	166
6	Ultrasensitive protein detection: a case for microfluidic magnetic bead-based assays. Lab on A Chip, 2013, 13, 4711.	3.1	147
7	Superâ€Resolution Biological Microscopy Using Virtual Imaging by a Microsphere Nanoscope. Small, 2014, 10, 1712-1718.	5.2	144
8	Subnanometer Translation of Microelectromechanical Systems Measured by Discrete Fourier Analysis of CCD Images. Journal of Microelectromechanical Systems, 2010, 19, 1273-1275.	1.7	122
9	Validation of an In Vitro Digestive System for Studying Macronutrient Decomposition in Humans3. Journal of Nutrition, 2012, 142, 245-250.	1.3	122
10	Micro-optics for microfluidic analytical applications. Chemical Society Reviews, 2018, 47, 1391-1458.	18.7	118
11	NutriChip: nutrition analysis meets microfluidics. Lab on A Chip, 2013, 13, 196-203.	3.1	100
12	Photonic Nanojet Array for Fast Detection of Single Nanoparticles in a Flow. Nano Letters, 2015, 15, 1730-1735.	4.5	85
13	Bioconjugated lanthanide luminescent helicates as multilabels for lab-on-a-chip detection of cancer biomarkers. Analyst, The, 2010, 135, 42-52.	1.7	84
14	Full On-Chip Nanoliter Immunoassay by Geometrical Magnetic Trapping of Nanoparticle Chains. Analytical Chemistry, 2008, 80, 2905-2910.	3.2	73
15	Controlled synthesis of fluorescent silica nanoparticles inside microfluidic droplets. Lab on A Chip, 2012, 12, 3111.	3.1	72
16	Impact of milk processing on the generation of peptides during digestion. International Dairy Journal, 2014, 35, 130-138.	1.5	70
17	Label-free detection of DNA with interdigitated micro-electrodes in a fluidic cell. Lab on A Chip, 2008, 8, 302-308.	3.1	69
18	Exploring Living Multicellular Organisms, Organs, and Tissues Using Microfluidic Systems. Chemical Reviews, 2013, 113, 3214-3247.	23.0	65

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19	Attomolar protein detection using a magnetic bead surface coverage assay. Lab on A Chip, 2013, 13, 1053.	3.1	59
20	Microfluidic processor allows rapid HER2 immunohistochemistry of breast carcinomas and significantly reduces ambiguous (2+) read-outs. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5363-5368.	3.3	59
21	An automated microfluidic platform for C. elegans embryo arraying, phenotyping, and long-term live imaging. Scientific Reports, 2015, 5, 10192.	1.6	57
22	High Throughputâ€Perâ€Footprint Inertial Focusing. Small, 2013, 9, 2764-2773.	5.2	56
23	Microfluidic systems for high-throughput and high-content screening using the nematode Caenorhabditis elegans. Lab on A Chip, 2017, 17, 3736-3759.	3.1	53
24	On-Chip Immunoassay Using Electrostatic Assembly of Streptavidin-Coated Bead Micropatterns. Analytical Chemistry, 2009, 81, 6509-6515.	3.2	50
25	Microsphere-based super-resolution scanning optical microscope. Optics Express, 2017, 25, 15079.	1.7	50
26	Microfluidic applications of functionalized magnetic particles for environmental analysis: focus on waterborne pathogen detection. Microfluidics and Nanofluidics, 2012, 13, 529-542.	1.0	48
27	Selective Breast Cancer Cell Capture, Culture, and Immunocytochemical Analysis Using Self-Assembled Magnetic Bead Patterns in a Microfluidic Chip. Langmuir, 2010, 26, 6091-6096.	1.6	46
28	Automated longitudinal monitoring of in vivo protein aggregation in neurodegenerative disease C. elegans models. Molecular Neurodegeneration, 2016, 11, 17.	4.4	42
29	A Dose-Response Strategy Reveals Differences between Normal-Weight and Obese Men in Their Metabolic and Inflammatory Responses to a High-Fat Meal. Journal of Nutrition, 2014, 144, 1517-1523.	1.3	38
30	Inflammatory and metabolic responses to high-fat meals with and without dairy products in men. British Journal of Nutrition, 2015, 113, 1853-1861.	1.2	38
31	In vitro micro-physiological models for translational immunology. Lab on A Chip, 2015, 15, 614-636.	3.1	35
32	Pumping of mammalian cells with a nozzle-diffuser micropump. Lab on A Chip, 2005, 5, 1083.	3.1	33
33	Versatile size-dependent sorting of C. elegans nematodes and embryos using a tunable microfluidic filter structure. Lab on A Chip, 2016, 16, 574-585.	3.1	33
34	Time-resolved lanthanide luminescence for lab-on-a-chip detection of biomarkers on cancerous tissues. Analyst, The, 2009, 134, 1991.	1.7	32
35	Parylene to silicon nitride bonding for post-integration of high pressure microfluidics to CMOS devices. Lab on A Chip, 2012, 12, 396-400.	3.1	31
36	Will fluidic electronics take off?. Nature Nanotechnology, 2007, 2, 268-270.	15.6	28

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37	Microfluidics-enabled phenotyping of a whole population of C. elegans worms over their embryonic and post-embryonic development at single-organism resolution. Microsystems and Nanoengineering, 2018, 4, 6.	3.4	26
38	Deguelin exerts potent nematocidal activity via the mitochondrial respiratory chain. FASEB Journal, 2017, 31, 4515-4532.	0.2	25
39	Reversible and long-term immobilization in a hydrogel-microbead matrix for high-resolution imaging of Caenorhabditis elegans and other small organisms. PLoS ONE, 2018, 13, e0193989.	1.1	25
40	Sensitive and inexpensive digital DNA analysis by microfluidic enrichment of rolling circle amplified single-molecules. Nucleic Acids Research, 2017, 45, gkw1324.	6.5	24
41	Simultaneous sample washing and concentration using a â€œtrapping-and-releasingâ€•mechanism of magnetic beads on a microfluidic chip. Analyst, The, 2011, 136, 1157.	1.7	23
42	Microtextured Substrates and Microparticles Used as in Situ Lenses for On-Chip Immunofluorescence Amplification. Analytical Chemistry, 2013, 85, 2064-2071.	3.2	23
43	Borosilicate nanoparticles prepared by exothermic phase separation. Nature Nanotechnology, 2008, 3, 589-594.	15.6	21
44	Separation of magnetic microparticles in segmented flow using asymmetric splitting regimes. Microfluidics and Nanofluidics, 2015, 18, 91-102.	1.0	21
45	Monolithic Silicon Chip for Immunofluorescence Detection on Single Magnetic Beads. Analytical Chemistry, 2010, 82, 49-52.	3.2	20
46	Chaotic mixing using sourceâ€“sink microfluidic flows in a PDMS chip. Microfluidics and Nanofluidics, 2011, 10, 749-759.	1.0	19
47	The NutriChip project â€“ translating technology into nutritional knowledge. British Journal of Nutrition, 2012, 108, 762-768.	1.2	18
48	Dynamic electrochemical quantitation of dopamine release from a cells-on-paper system. RSC Advances, 2016, 6, 31069-31073.	1.7	18
49	Dynamic microfluidic nanocalorimetry system for measuringCaenorhabditis elegansmetabolic heat. Lab on A Chip, 2018, 18, 1641-1651.	3.1	17
50	Automated phenotyping of Caenorhabditis elegans embryos with a high-throughput-screening microfluidic platform. Microsystems and Nanoengineering, 2020, 6, 24.	3.4	17
51	High-Angular-Range Electrostatic Rotary Stepper Micromotors Fabricated With SOI Technology. Journal of Microelectromechanical Systems, 2012, 21, 605-620.	1.7	16
52	Automated high-content phenotyping from the first larval stage till the onset of adulthood of the nematode Caenorhabditis elegans. Lab on A Chip, 2019, 19, 120-135.	3.1	16
53	Accurate masking technology for high-resolution powder blasting. Journal of Micromechanics and Microengineering, 2005, 15, S60-S64.	1.5	14
54	Single potential electrophoresis microchip with reduced bias using pressure pulse injection. Electrophoresis, 2006, 27, 2924-2932.	1.3	14

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55	Spontaneous Formation of CdSe Photoluminescent Nanotubes with Visible-Light Photocatalytic Performance. ACS Central Science, 2019, 5, 1017-1023.	5.3	14
56	PDMS filter structures for size-dependent larval sorting and on-chip egg extraction ofC. elegans. Lab on A Chip, 2020, 20, 155-167.	3.1	14
57	Force microscopy of the Caenorhabditis elegans embryonic eggshell. Microsystems and Nanoengineering, 2020, 6, 29.	3.4	14
58	Integrated Microfluidic Device for Drug Studies of Early C. Elegans Embryogenesis. Advanced Science, 2018, 5, 1700751.	5.6	12
59	Understanding the mixing process in 3D microfluidic nozzle/diffuser systems: simulations and experiments. Journal of Micromechanics and Microengineering, 2016, 26, 115017.	1.5	11
60	Paperâ€Based Polymer Electrodes for Bioanalysis and Electrochemistry of Neurotransmitters. ChemPhysChem, 2018, 19, 1164-1172.	1.0	11
61	Microfluidic system forCaenorhabditis elegansculture and oxygen consumption rate measurements. Lab on A Chip, 2020, 20, 126-135.	3.1	11
62	Magnetic Particle-Scanning for Ultrasensitive Immunodetection On-Chip. Analytical Chemistry, 2014, 86, 8213-8223.	3.2	10
63	Anin vivomicrofluidic study of bacterial transit inC. elegansnematodes. Lab on A Chip, 2020, 20, 2696-2708.	3.1	10
64	Three-dimensional miniaturized power inductors realized in a batch-type hybrid technology. Journal of Micromechanics and Microengineering, 2002, 12, 470-474.	1.5	9
65	Delayed voltammetric with respect to amperometric electrochemical detection of concentration changes in microchannels. Lab on A Chip, 2014, 14, 2929-2940.	3.1	9
66	On-chip microfluidic biocommunication assay for studying male-induced demise in C. elegans hermaphrodites. Lab on A Chip, 2016, 16, 4534-4545.	3.1	9
67	Fast antimicrobial susceptibility testing on Escherichia coli by metabolic heat nanocalorimetry. Lab on A Chip, 2020, 20, 3144-3157.	3.1	9
68	An In Vivo Microfluidic Study of Bacterial Load Dynamics and Absorption in the C. elegans Intestine. Micromachines, 2021, 12, 832.	1.4	9
69	Bubble-enhanced ultrasonic microfluidic chip for rapid DNA fragmentation. Lab on A Chip, 2022, 22, 560-572.	3.1	9
70	Anisotropic Magnetic Porous Assemblies of Oxide Nanoparticles Interconnected Via Silica Bridges for Catalytic Application. Langmuir, 2011, 27, 4380-4385.	1.6	8
71	Programmable parylene-C bonding layer fluorescence for storing information on microfluidic chips. Lab on A Chip, 2013, 13, 1482.	3.1	8
72	Antimicrobial susceptibility testing by measuring bacterial oxygen consumption on an integrated platform. Lab on A Chip, 2021, 21, 3520-3531.	3.1	8

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73	Contactless Electrochemical Actuator for Microfluidic Dosing. Journal of Microelectromechanical Systems, 2007, 16, 885-892.	1.7	7
74	Fluorescence Imaging: Superâ€Resolution Biological Microscopy Using Virtual Imaging by a Microsphere Nanoscope (Small 9/2014). Small, 2014, 10, 1876-1876.	5.2	7
75	Nanocalorimetric platform for accurate thermochemical studies in microliter volumes. RSC Advances, 2015, 5, 97133-97142.	1.7	7
76	A multiscale study of the role of dynamin in the regulation of glucose uptake. Integrative Biology (United Kingdom), 2017, 9, 810-819.	0.6	7
77	LF55GN Photosensitive Flexopolymer: A New Material for Ultrathick and High-Aspect-Ratio MEMS Fabrication. Journal of Microelectromechanical Systems, 2007, 16, 564-570.	1.7	6
78	High-content, cell-by-cell assessment of HER2 overexpression and amplification: a tool for intratumoral heterogeneity detection in breast cancer. Laboratory Investigation, 2019, 99, 722-732.	1.7	6
79	Temporally Aliased Video Microscopy: An Undersampling Method for In-Plane Modal Analysis of Microelectromechanical Systems. Journal of Microelectromechanical Systems, 2012, 21, 934-944.	1.7	5
80	Microfluidic-based immunohistochemistry for breast cancer diagnosis: a comparative clinical study. Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin, 2019, 475, 313-323.	1.4	5
81	Lighting-up Cancerous Cells and Tissues with Lanthanide Luminescence. Chimia, 2011, 65, 361-361.	0.3	3
82	Dimensional tailoring of hydrothermally grown zinc oxide nanostructures in a continuous flow micro reactor. Chemical Communications, 2018, 54, 13064-13067.	2.2	3
83	Effect of inoculum size and antibiotics on bacterial traveling bands in a thin microchannel defined by optical adhesive. Microsystems and Nanoengineering, 2021, 7, 86.	3.4	3
84	Integrated Microfluidic Chip for Cell Culture and Stimulation and Magnetic Bead-Based Biomarker Detection. Micro and Nanosystems, 2014, 6, 61-68.	0.3	2
85	Insight into the Growth of Anisotropic CdSe Nanocrystals: Attachment of Intrinsically Different Building Blocks. Journal of Physical Chemistry C, 2020, 124, 27754-27762.	1.5	2
86	Ultra-thick micro-optical components using the PRISM photosensitive flexopolymer. Journal of Micromechanics and Microengineering, 2007, 17, 2118-2124.	1.5	1
87	Microfluidics: High Throughputâ€Perâ€Footprint Inertial Focusing (Small 16/2013). Small, 2013, 9, 2828-2828.	5.2	1
88	Ripening of two-dimensional colloidal CdSe nanocrystals into zero-dimensional nanodots. IScience, 2021, 24, 103457.	1.9	1
89	Programming and use of Parylene C fluorescence as a quantitative on-chip reference. RSC Advances, 2014, 4, 49367-49373.	1.7	0
90	Microfluidic Devices: Integrated Microfluidic Device for Drug Studies of Early C. Elegans Embryogenesis (Adv. Sci. 5/2018). Advanced Science, 2018, 5, 1870032.	5.6	0

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91	CMOS and 3D Printing for NMR Spectroscopy at the Single Embryo Scale. Chimia, 2019, 73, 635.	0.3	0
92	Optofluidic Devices for Bioanalytical Applications. , 2022, , 247-282.		0
93	Studying the roundworm Caenorhabditis elegans using microfluidic chips. , 2019, , .		0