Martin A M Gijs

List of Publications by Year
in descending order

93 papers	4,030 citations	136740 32 h-index	118652 62 g-index
94 all docs	94 docs citations	94 times ranked	5702 citing authors

#	Article	IF	Citations
1	Optofluidic Devices for Bioanalytical Applications. , 2022, , 247-282.		0
2	Bubble-enhanced ultrasonic microfluidic chip for rapid DNA fragmentation. Lab on A Chip, 2022, 22, 560-572.	3.1	9
3	Antimicrobial susceptibility testing by measuring bacterial oxygen consumption on an integrated platform. Lab on A Chip, 2021, 21, 3520-3531.	3.1	8
4	An In Vivo Microfluidic Study of Bacterial Load Dynamics and Absorption in the C. elegans Intestine. Micromachines, 2021, 12, 832.	1.4	9
5	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
6	Ripening of two-dimensional colloidal CdSe nanocrystals into zero-dimensional nanodots. IScience, 2021, 24, 103457.	1.9	1
7	Microfluidic system forCaenorhabditis eleganscluture and oxygen consumption rate measurements. Lab on A Chip, 2020, 20, 126-135.	3.1	11
8	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
9	Anin vivomicrofluidic study of bacterial transit inC. elegansnematodes. Lab on A Chip, 2020, 20, 2696-2708.	3.1	10
10	Fast antimicrobial susceptibility testing on <i>Escherichia coli</i> by metabolic heat nanocalorimetry. Lab on A Chip, 2020, 20, 3144-3157.	3.1	9
11	Force microscopy of the Caenorhabditis elegans embryonic eggshell. Microsystems and Nanoengineering, 2020, 6, 29.	3.4	14
12	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
13	Automated phenotyping of Caenorhabditis elegans embryos with a high-throughput-screening microfluidic platform. Microsystems and Nanoengineering, 2020, 6, 24.	3.4	17
14	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
15	CMOS and 3D Printing for NMR Spectroscopy at the Single Embryo Scale. Chimia, 2019, 73, 635.	0.3	0
16	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
17	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
18	Spontaneous Formation of CdSe Photoluminescent Nanotubes with Visible-Light Photocatalytic Performance. ACS Central Science, 2019, 5, 1017-1023.	5.3	14

#	Article	IF	Citations
19	Studying the roundworm Caenorhabditis elegans using microfluidic chips. , 2019, , .		0
20	Paperâ€Based Polymer Electrodes for Bioanalysis and Electrochemistry of Neurotransmitters. ChemPhysChem, 2018, 19, 1164-1172.	1.0	11
21	Micro-optics for microfluidic analytical applications. Chemical Society Reviews, 2018, 47, 1391-1458.	18.7	118
22	Integrated Microfluidic Device for Drug Studies of Early <i>C. Elegans</i> Embryogenesis. Advanced Science, 2018, 5, 1700751.	5.6	12
23	Dimensional tailoring of hydrothermally grown zinc oxide nanostructures in a continuous flow micro reactor. Chemical Communications, 2018, 54, 13064-13067.	2.2	3
24	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
25	Dynamic microfluidic nanocalorimetry system for measuring<i>Caenorhabditis elegans</i>metabolic heat. Lab on A Chip, 2018, 18, 1641-1651.	3.1	17
26	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
27	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
28	Sensitive and inexpensive digital DNA analysis by microfluidic enrichment of rolling circle amplified single-molecules. Nucleic Acids Research, 2017, 45, gkw1324.	6.5	24
29	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
30	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
31	Deguelin exerts potent nematocidal activity via the mitochondrial respiratory chain. FASEB Journal, 2017, 31, 4515-4532.	0.2	25
32	Microsphere-based super-resolution scanning optical microscope. Optics Express, 2017, 25, 15079.	1.7	50
33	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
34	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
35	Understanding the mixing process in 3D microfluidic nozzle/diffuser systems: simulations and experiments. Journal of Micromechanics and Microengineering, 2016, 26, 115017.	1.5	11
36	Automated longitudinal monitoring of in vivo protein aggregation in neurodegenerative disease C. elegans models. Molecular Neurodegeneration, 2016, 11, 17.	4.4	42

#	Article	IF	Citations
37	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
38	Dynamic electrochemical quantitation of dopamine release from a cells-on-paper system. RSC Advances, 2016, 6, 31069-31073.	1.7	18
39	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
40	An automated microfluidic platform for C. elegans embryo arraying, phenotyping, and long-term live imaging. Scientific Reports, 2015, 5, 10192.	1.6	57
41	Photonic Nanojet Array for Fast Detection of Single Nanoparticles in a Flow. Nano Letters, 2015, 15, 1730-1735.	4.5	85
42	Nanocalorimetric platform for accurate thermochemical studies in microliter volumes. RSC Advances, 2015, 5, 97133-97142.	1.7	7
43	In vitro micro-physiological models for translational immunology. Lab on A Chip, 2015, 15, 614-636.	3.1	35
44	Separation of magnetic microparticles in segmented flow using asymmetric splitting regimes. Microfluidics and Nanofluidics, 2015, 18, 91-102.	1.0	21
45	Integrated Microfluidic Chip for Cell Culture and Stimulation and Magnetic Bead-Based Biomarker Detection. Micro and Nanosystems, 2014, 6, 61-68.	0.3	2
46	Superâ€Resolution Biological Microscopy Using Virtual Imaging by a Microsphere Nanoscope. Small, 2014, 10, 1712-1718.	5.2	144
47	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
48	Fluorescence Imaging: Superâ€Resolution Biological Microscopy Using Virtual Imaging by a Microsphere Nanoscope (Small 9/2014). Small, 2014, 10, 1876-1876.	5.2	7
49	Impact of milk processing on the generation of peptides during digestion. International Dairy Journal, 2014, 35, 130-138.	1.5	70
50	Programming and use of Parylene C fluorescence as a quantitative on-chip reference. RSC Advances, 2014, 4, 49367-49373.	1.7	0
51	Delayed voltammetric with respect to amperometric electrochemical detection of concentration changes in microchannels. Lab on A Chip, 2014, 14, 2929-2940.	3.1	9
52	Magnetic Particle-Scanning for Ultrasensitive Immunodetection On-Chip. Analytical Chemistry, 2014, 86, 8213-8223.	3.2	10
53	Ultrasensitive protein detection: a case for microfluidic magnetic bead-based assays. Lab on A Chip, 2013, 13, 4711.	3.1	147
54	NutriChip: nutrition analysis meets microfluidics. Lab on A Chip, 2013, 13, 196-203.	3.1	100

#	Article	IF	Citations
55	Attomolar protein detection using a magnetic bead surface coverage assay. Lab on A Chip, 2013, 13, 1053.	3.1	59
56	Exploring Living Multicellular Organisms, Organs, and Tissues Using Microfluidic Systems. Chemical Reviews, 2013, 113, 3214-3247.	23.0	65
57	Programmable parylene-C bonding layer fluorescence for storing information on microfluidic chips. Lab on A Chip, 2013, 13, 1482.	3.1	8
58	Microtextured Substrates and Microparticles Used as in Situ Lenses for On-Chip Immunofluorescence Amplification. Analytical Chemistry, 2013, 85, 2064-2071.	3.2	23
59	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
60	High Throughputâ€Perâ€Footprint Inertial Focusing. Small, 2013, 9, 2764-2773.	5.2	56
61	Microfluidics: High Throughputâ€Perâ€Footprint Inertial Focusing (Small 16/2013). Small, 2013, 9, 2828-2828.	5.2	1
62	Validation of an In Vitro Digestive System for Studying Macronutrient Decomposition in Humans3. Journal of Nutrition, 2012, 142, 245-250.	1.3	122
63	The NutriChip project â€" translating technology into nutritional knowledge. British Journal of Nutrition, 2012, 108, 762-768.	1.2	18
64	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
65	High-Angular-Range Electrostatic Rotary Stepper Micromotors Fabricated With SOI Technology. Journal of Microelectromechanical Systems, 2012, 21, 605-620.	1.7	16
66	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
67	Microfluidic applications of functionalized magnetic particles for environmental analysis: focus on waterborne pathogen detection. Microfluidics and Nanofluidics, 2012, 13, 529-542.	1.0	48
68	Controlled synthesis of fluorescent silica nanoparticles inside microfluidic droplets. Lab on A Chip, 2012, 12, 3111.	3.1	72
69	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
70	Anisotropic Magnetic Porous Assemblies of Oxide Nanoparticles Interconnected Via Silica Bridges for Catalytic Application. Langmuir, 2011, 27, 4380-4385.	1.6	8
71	Lighting-up Cancerous Cells and Tissues with Lanthanide Luminescence. Chimia, 2011, 65, 361-361.	0.3	3
72	Chaotic mixing using sourceâ€"sink microfluidic flows in a PDMS chip. Microfluidics and Nanofluidics, 2011, 10, 749-759.	1.0	19

#	Article	IF	Citations
73	Subnanometer Translation of Microelectromechanical Systems Measured by Discrete Fourier Analysis of CCD Images. Journal of Microelectromechanical Systems, 2010, 19, 1273-1275.	1.7	122
74	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
75	Monolithic Silicon Chip for Immunofluorescence Detection on Single Magnetic Beads. Analytical Chemistry, 2010, 82, 49-52.	3.2	20
76	Microfluidic Applications of Magnetic Particles for Biological Analysis and Catalysis. Chemical Reviews, 2010, 110, 1518-1563.	23.0	579
77	Bioconjugated lanthanide luminescent helicates as multilabels for lab-on-a-chip detection of cancer biomarkers. Analyst, The, 2010, 135, 42-52.	1.7	84
78	On-Chip Immunoassay Using Electrostatic Assembly of Streptavidin-Coated Bead Micropatterns. Analytical Chemistry, 2009, 81, 6509-6515.	3.2	50
79	Time-resolved lanthanide luminescence for lab-on-a-chip detection of biomarkers on cancerous tissues. Analyst, The, 2009, 134, 1991.	1.7	32
80	Borosilicate nanoparticles prepared by exothermic phase separation. Nature Nanotechnology, 2008, 3, 589-594.	15.6	21
81	Label-free detection of DNA with interdigitated micro-electrodes in a fluidic cell. Lab on A Chip, 2008, 8, 302-308.	3.1	69
82	Full On-Chip Nanoliter Immunoassay by Geometrical Magnetic Trapping of Nanoparticle Chains. Analytical Chemistry, 2008, 80, 2905-2910.	3.2	73
83	Ultra-thick micro-optical components using the PRISM photosensitive flexopolymer. Journal of Micromechanics and Microengineering, 2007, 17, 2118-2124.	1.5	1
84	Contactless Electrochemical Actuator for Microfluidic Dosing. Journal of Microelectromechanical Systems, 2007, 16, 885-892.	1.7	7
85	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
86	Miniaturized Flexible Temperature Sensor. Journal of Microelectromechanical Systems, 2007, 16, 1349-1354.	1.7	166
87	Will fluidic electronics take off?. Nature Nanotechnology, 2007, 2, 268-270.	15.6	28
88	Droplet-Based DNA Purification in a Magnetic Lab-on-a-Chip. Angewandte Chemie - International Edition, 2006, 45, 3062-3067.	7.2	182
89	Single potential electrophoresis microchip with reduced bias using pressure pulse injection. Electrophoresis, 2006, 27, 2924-2932.	1.3	14
90	Accurate masking technology for high-resolution powder blasting. Journal of Micromechanics and Microengineering, 2005, 15, S60-S64.	1.5	14

#	Article	IF	Citations
91	Pumping of mammalian cells with a nozzle-diffuser micropump. Lab on A Chip, 2005, 5, 1083.	3.1	33
92	Magnetic bead handling on-chip: new opportunities for analytical applications. Microfluidics and Nanofluidics, 2004, 1, 22.	1.0	256
93	Three-dimensional miniaturized power inductors realized in a batch-type hybrid technology. Journal of Micromechanics and Microengineering, 2002, 12, 470-474.	1.5	9