

Martin A M Gijs

List of Publications by Year in descending order

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93
papers

4,030
citations

136950

32
h-index

118850

62
g-index

94
all docs

94
docs citations

94
times ranked

5702
citing authors

#	ARTICLE	IF	CITATIONS
1	Microfluidic Applications of Magnetic Particles for Biological Analysis and Catalysis. <i>Chemical Reviews</i> , 2010, 110, 1518-1563.	47.7	579
2	Magnetic bead handling on-chip: new opportunities for analytical applications. <i>Microfluidics and Nanofluidics</i> , 2004, 1, 22.	2.2	256
3	Droplet-Based DNA Purification in a Magnetic Lab-on-a-Chip. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 3062-3067.	13.8	182
4	Super-Resolution Imaging of a Dielectric Microsphere Is Governed by the Waist of Its Photonic Nanojet. <i>Nano Letters</i> , 2016, 16, 4862-4870.	9.1	180
5	Miniaturized Flexible Temperature Sensor. <i>Journal of Microelectromechanical Systems</i> , 2007, 16, 1349-1354.	2.5	166
6	Ultrasensitive protein detection: a case for microfluidic magnetic bead-based assays. <i>Lab on A Chip</i> , 2013, 13, 4711.	6.0	147
7	Super-Resolution Biological Microscopy Using Virtual Imaging by a Microsphere Nanoscope. <i>Small</i> , 2014, 10, 1712-1718.	10.0	144
8	Subnanometer Translation of Microelectromechanical Systems Measured by Discrete Fourier Analysis of CCD Images. <i>Journal of Microelectromechanical Systems</i> , 2010, 19, 1273-1275.	2.5	122
9	Validation of an In Vitro Digestive System for Studying Macronutrient Decomposition in Humans ³ . <i>Journal of Nutrition</i> , 2012, 142, 245-250.	2.9	122
10	Micro-optics for microfluidic analytical applications. <i>Chemical Society Reviews</i> , 2018, 47, 1391-1458.	38.1	118
11	NutriChip: nutrition analysis meets microfluidics. <i>Lab on A Chip</i> , 2013, 13, 196-203.	6.0	100
12	Photonic Nanojet Array for Fast Detection of Single Nanoparticles in a Flow. <i>Nano Letters</i> , 2015, 15, 1730-1735.	9.1	85
13	Bioconjugated lanthanide luminescent helicates as multilabels for lab-on-a-chip detection of cancer biomarkers. <i>Analyst</i> , 2010, 135, 42-52.	3.5	84
14	Full On-Chip Nanoliter Immunoassay by Geometrical Magnetic Trapping of Nanoparticle Chains. <i>Analytical Chemistry</i> , 2008, 80, 2905-2910.	6.5	73
15	Controlled synthesis of fluorescent silica nanoparticles inside microfluidic droplets. <i>Lab on A Chip</i> , 2012, 12, 3111.	6.0	72
16	Impact of milk processing on the generation of peptides during digestion. <i>International Dairy Journal</i> , 2014, 35, 130-138.	3.0	70
17	Label-free detection of DNA with interdigitated micro-electrodes in a fluidic cell. <i>Lab on A Chip</i> , 2008, 8, 302-308.	6.0	69
18	Exploring Living Multicellular Organisms, Organs, and Tissues Using Microfluidic Systems. <i>Chemical Reviews</i> , 2013, 113, 3214-3247.	47.7	65

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19	Attomolar protein detection using a magnetic bead surface coverage assay. <i>Lab on A Chip</i> , 2013, 13, 1053.	6.0	59
20	Microfluidic processor allows rapid HER2 immunohistochemistry of breast carcinomas and significantly reduces ambiguous (2+) read-outs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 5363-5368.	7.1	59
21	An automated microfluidic platform for <i>C. elegans</i> embryo arraying, phenotyping, and long-term live imaging. <i>Scientific Reports</i> , 2015, 5, 10192.	3.3	57
22	High Throughput Perâ€Footprint Inertial Focusing. <i>Small</i> , 2013, 9, 2764-2773.	10.0	56
23	Microfluidic systems for high-throughput and high-content screening using the nematode <i>Caenorhabditis elegans</i> . <i>Lab on A Chip</i> , 2017, 17, 3736-3759.	6.0	53
24	On-Chip Immunoassay Using Electrostatic Assembly of Streptavidin-Coated Bead Micropatterns. <i>Analytical Chemistry</i> , 2009, 81, 6509-6515.	6.5	50
25	Microsphere-based super-resolution scanning optical microscope. <i>Optics Express</i> , 2017, 25, 15079.	3.4	50
26	Microfluidic applications of functionalized magnetic particles for environmental analysis: focus on waterborne pathogen detection. <i>Microfluidics and Nanofluidics</i> , 2012, 13, 529-542.	2.2	48
27	Selective Breast Cancer Cell Capture, Culture, and Immunocytochemical Analysis Using Self-Assembled Magnetic Bead Patterns in a Microfluidic Chip. <i>Langmuir</i> , 2010, 26, 6091-6096.	3.5	46
28	Automated longitudinal monitoring of in vivo protein aggregation in neurodegenerative disease <i>C. elegans</i> models. <i>Molecular Neurodegeneration</i> , 2016, 11, 17.	10.8	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. <i>Journal of Nutrition</i> , 2014, 144, 1517-1523.	2.9	38
30	Inflammatory and metabolic responses to high-fat meals with and without dairy products in men. <i>British Journal of Nutrition</i> , 2015, 113, 1853-1861.	2.3	38
31	In vitro micro-physiological models for translational immunology. <i>Lab on A Chip</i> , 2015, 15, 614-636.	6.0	35
32	Pumping of mammalian cells with a nozzle-diffuser micropump. <i>Lab on A Chip</i> , 2005, 5, 1083.	6.0	33
33	Versatile size-dependent sorting of <i>C. elegans</i> nematodes and embryos using a tunable microfluidic filter structure. <i>Lab on A Chip</i> , 2016, 16, 574-585.	6.0	33
34	Time-resolved lanthanide luminescence for lab-on-a-chip detection of biomarkers on cancerous tissues. <i>Analyst</i> , 2009, 134, 1991.	3.5	32
35	Parylene to silicon nitride bonding for post-integration of high pressure microfluidics to CMOS devices. <i>Lab on A Chip</i> , 2012, 12, 396-400.	6.0	31
36	Will fluidic electronics take off?. <i>Nature Nanotechnology</i> , 2007, 2, 268-270.	31.5	28

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37	Microfluidics-enabled phenotyping of a whole population of <i>C. elegans</i> worms over their embryonic and post-embryonic development at single-organism resolution. <i>Microsystems and Nanoengineering</i> , 2018, 4, 6.	7.0	26
38	Deguelin exerts potent nematocidal activity via the mitochondrial respiratory chain. <i>FASEB Journal</i> , 2017, 31, 4515-4532.	0.5	25
39	Reversible and long-term immobilization in a hydrogel-microbead matrix for high-resolution imaging of <i>Caenorhabditis elegans</i> and other small organisms. <i>PLoS ONE</i> , 2018, 13, e0193989.	2.5	25
40	Sensitive and inexpensive digital DNA analysis by microfluidic enrichment of rolling circle amplified single-molecules. <i>Nucleic Acids Research</i> , 2017, 45, gkw1324.	14.5	24
41	Simultaneous sample washing and concentration using a "trapping-and-releasing" mechanism of magnetic beads on a microfluidic chip. <i>Analyst</i> , The, 2011, 136, 1157.	3.5	23
42	Microtextured Substrates and Microparticles Used as in Situ Lenses for On-Chip Immunofluorescence Amplification. <i>Analytical Chemistry</i> , 2013, 85, 2064-2071.	6.5	23
43	Borosilicate nanoparticles prepared by exothermic phase separation. <i>Nature Nanotechnology</i> , 2008, 3, 589-594.	31.5	21
44	Separation of magnetic microparticles in segmented flow using asymmetric splitting regimes. <i>Microfluidics and Nanofluidics</i> , 2015, 18, 91-102.	2.2	21
45	Monolithic Silicon Chip for Immunofluorescence Detection on Single Magnetic Beads. <i>Analytical Chemistry</i> , 2010, 82, 49-52.	6.5	20
46	Chaotic mixing using source-sink microfluidic flows in a PDMS chip. <i>Microfluidics and Nanofluidics</i> , 2011, 10, 749-759.	2.2	19
47	The NutriChip project "translating technology into nutritional knowledge. <i>British Journal of Nutrition</i> , 2012, 108, 762-768.	2.3	18
48	Dynamic electrochemical quantitation of dopamine release from a cells-on-paper system. <i>RSC Advances</i> , 2016, 6, 31069-31073.	3.6	18
49	Dynamic microfluidic nanocalorimetry system for measuring <i>Caenorhabditis elegans</i> metabolic heat. <i>Lab on A Chip</i> , 2018, 18, 1641-1651.	6.0	17
50	Automated phenotyping of <i>Caenorhabditis elegans</i> embryos with a high-throughput-screening microfluidic platform. <i>Microsystems and Nanoengineering</i> , 2020, 6, 24.	7.0	17
51	High-Angular-Range Electrostatic Rotary Stepper Micromotors Fabricated With SOI Technology. <i>Journal of Microelectromechanical Systems</i> , 2012, 21, 605-620.	2.5	16
52	Automated high-content phenotyping from the first larval stage till the onset of adulthood of the nematode <i>Caenorhabditis elegans</i> . <i>Lab on A Chip</i> , 2019, 19, 120-135.	6.0	16
53	Accurate masking technology for high-resolution powder blasting. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, S60-S64.	2.6	14
54	Single potential electrophoresis microchip with reduced bias using pressure pulse injection. <i>Electrophoresis</i> , 2006, 27, 2924-2932.	2.4	14

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55	Spontaneous Formation of CdSe Photoluminescent Nanotubes with Visible-Light Photocatalytic Performance. ACS Central Science, 2019, 5, 1017-1023.	11.3	14
56	PDMS filter structures for size-dependent larval sorting and on-chip egg extraction of <i>C. elegans</i> . Lab on A Chip, 2020, 20, 155-167.	6.0	14
57	Force microscopy of the <i>Caenorhabditis elegans</i> embryonic eggshell. Microsystems and Nanoengineering, 2020, 6, 29.	7.0	14
58	Integrated Microfluidic Device for Drug Studies of Early <i>C. Elegans</i> Embryogenesis. Advanced Science, 2018, 5, 1700751.	11.2	12
59	Understanding the mixing process in 3D microfluidic nozzle/diffuser systems: simulations and experiments. Journal of Micromechanics and Microengineering, 2016, 26, 115017.	2.6	11
60	Paper-Based Polymer Electrodes for Bioanalysis and Electrochemistry of Neurotransmitters. ChemPhysChem, 2018, 19, 1164-1172.	2.1	11
61	Microfluidic system for <i>Caenorhabditis elegans</i> culture and oxygen consumption rate measurements. Lab on A Chip, 2020, 20, 126-135.	6.0	11
62	Magnetic Particle-Scanning for Ultrasensitive Immunodetection On-Chip. Analytical Chemistry, 2014, 86, 8213-8223.	6.5	10
63	An in vivo microfluidic study of bacterial transit in <i>C. elegans</i> nematodes. Lab on A Chip, 2020, 20, 2696-2708.	6.0	10
64	Three-dimensional miniaturized power inductors realized in a batch-type hybrid technology. Journal of Micromechanics and Microengineering, 2002, 12, 470-474.	2.6	9
65	Delayed voltammetric with respect to amperometric electrochemical detection of concentration changes in microchannels. Lab on A Chip, 2014, 14, 2929-2940.	6.0	9
66	On-chip microfluidic biocommunication assay for studying male-induced demise in <i>C. elegans</i> hermaphrodites. Lab on A Chip, 2016, 16, 4534-4545.	6.0	9
67	Fast antimicrobial susceptibility testing on <i>Escherichia coli</i> by metabolic heat nanocalorimetry. Lab on A Chip, 2020, 20, 3144-3157.	6.0	9
68	An In Vivo Microfluidic Study of Bacterial Load Dynamics and Absorption in the <i>C. elegans</i> Intestine. Micromachines, 2021, 12, 832.	2.9	9
69	Bubble-enhanced ultrasonic microfluidic chip for rapid DNA fragmentation. Lab on A Chip, 2022, 22, 560-572.	6.0	9
70	Anisotropic Magnetic Porous Assemblies of Oxide Nanoparticles Interconnected Via Silica Bridges for Catalytic Application. Langmuir, 2011, 27, 4380-4385.	3.5	8
71	Programmable parylene-C bonding layer fluorescence for storing information on microfluidic chips. Lab on A Chip, 2013, 13, 1482.	6.0	8
72	Antimicrobial susceptibility testing by measuring bacterial oxygen consumption on an integrated platform. Lab on A Chip, 2021, 21, 3520-3531.	6.0	8

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73	Contactless Electrochemical Actuator for Microfluidic Dosing. <i>Journal of Microelectromechanical Systems</i> , 2007, 16, 885-892.	2.5	7
74	Fluorescence Imaging: Super-Resolution Biological Microscopy Using Virtual Imaging by a Microsphere Nanoscope (Small 9/2014). <i>Small</i> , 2014, 10, 1876-1876.	10.0	7
75	Nanocalorimetric platform for accurate thermochemical studies in microliter volumes. <i>RSC Advances</i> , 2015, 5, 97133-97142.	3.6	7
76	A multiscale study of the role of dynamin in the regulation of glucose uptake. <i>Integrative Biology (United Kingdom)</i> , 2017, 9, 810-819.	1.3	7
77	LF55GN Photosensitive Flexopolymer: A New Material for Ultrathick and High-Aspect-Ratio MEMS Fabrication. <i>Journal of Microelectromechanical Systems</i> , 2007, 16, 564-570.	2.5	6
78	High-content, cell-by-cell assessment of HER2 overexpression and amplification: a tool for intratumoral heterogeneity detection in breast cancer. <i>Laboratory Investigation</i> , 2019, 99, 722-732.	3.7	6
79	Temporally Aliased Video Microscopy: An Undersampling Method for In-Plane Modal Analysis of Microelectromechanical Systems. <i>Journal of Microelectromechanical Systems</i> , 2012, 21, 934-944.	2.5	5
80	Microfluidic-based immunohistochemistry for breast cancer diagnosis: a comparative clinical study. <i>Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin</i> , 2019, 475, 313-323.	2.8	5
81	Lighting-up Cancerous Cells and Tissues with Lanthanide Luminescence. <i>Chimia</i> , 2011, 65, 361-361.	0.6	3
82	Dimensional tailoring of hydrothermally grown zinc oxide nanostructures in a continuous flow micro reactor. <i>Chemical Communications</i> , 2018, 54, 13064-13067.	4.1	3
83	Effect of inoculum size and antibiotics on bacterial traveling bands in a thin microchannel defined by optical adhesive. <i>Microsystems and Nanoengineering</i> , 2021, 7, 86.	7.0	3
84	Integrated Microfluidic Chip for Cell Culture and Stimulation and Magnetic Bead-Based Biomarker Detection. <i>Micro and Nanosystems</i> , 2014, 6, 61-68.	0.6	2
85	Insight into the Growth of Anisotropic CdSe Nanocrystals: Attachment of Intrinsically Different Building Blocks. <i>Journal of Physical Chemistry C</i> , 2020, 124, 27754-27762.	3.1	2
86	Ultra-thick micro-optical components using the PRISM photosensitive flexopolymer. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 2118-2124.	2.6	1
87	Microfluidics: High Throughput-Footprint Inertial Focusing (Small 16/2013). <i>Small</i> , 2013, 9, 2828-2828.	10.0	1
88	Ripening of two-dimensional colloidal CdSe nanocrystals into zero-dimensional nanodots. <i>IScience</i> , 2021, 24, 103457.	4.1	1
89	Programming and use of Parylene C fluorescence as a quantitative on-chip reference. <i>RSC Advances</i> , 2014, 4, 49367-49373.	3.6	0
90	Microfluidic Devices: Integrated Microfluidic Device for Drug Studies of Early C. Elegans Embryogenesis (Adv. Sci. 5/2018). <i>Advanced Science</i> , 2018, 5, 1870032.	11.2	0

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91	CMOS and 3D Printing for NMR Spectroscopy at the Single Embryo Scale. <i>Chimia</i> , 2019, 73, 635.	0.6	0
92	Optofluidic Devices for Bioanalytical Applications. , 2022, , 247-282.		0
93	Studying the roundworm <i>Caenorhabditis elegans</i> using microfluidic chips. , 2019, , .		0