

# Wim De Malsche

## List of Publications by Year in descending order

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65  
papers

1,297  
citations

361413

20  
h-index

395702

33  
g-index

68  
all docs

68  
docs citations

68  
times ranked

864  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication, Boron Leaching, and Electrochemical Impedance Spectroscopy of Nanoporous P-Type Silicon. <i>Silicon</i> , 2022, 14, 5691-5701.	3.3	3
2	Effect of walls on the motion of magnetically driven superparamagnetic microparticles. <i>Microfluidics and Nanofluidics</i> , 2022, 26, 1.	2.2	2
3	On the potential use of two-photon polymerization to 3D print chromatographic packed bed supports. <i>Journal of Chromatography A</i> , 2022, 1663, 462763.	3.7	9
4	Application of generalized dispersion theory to vortex chromatography. <i>Journal of Chromatography A</i> , 2022, 1670, 462970.	3.7	4
5	The Effect of Controlled Mixing on ROY Polymorphism. <i>Crystals</i> , 2022, 12, 577.	2.2	3
6	Influence of Anodizing Parameters on the Electrochemical Characteristics and Morphology of Highly Doped P-type Porous Silicon. <i>Silicon</i> , 2021, 13, 819-829.	3.3	6
7	Reducing Taylor-Aris dispersion by exploiting lateral convection associated with acoustic streaming. <i>Chemical Engineering Journal</i> , 2021, 417, 128031.	12.7	7
8	Migration Behavior of Low-Density Particles in Lab-on-a-Disc Devices: Effect of Walls. <i>Micromachines</i> , 2021, 12, 1032.	2.9	2
9	Overloading behavior of fenoprofen and naproxen as two model compounds on a non-porous silicon pillar array column. <i>Journal of Chromatography A</i> , 2021, 1651, 462332.	3.7	0
10	Inducing AC-electroosmotic flow using electric field manipulation with insulators. <i>Lab on A Chip</i> , 2021, 21, 3105-3111.	6.0	4
11	Simultaneous enantioseparation of nonsteroidal anti-inflammatory drugs by a one-dimensional liquid chromatography technique using a dynamically coated chiral porous silicon pillar array column. <i>Journal of Chromatography A</i> , 2020, 1615, 460752.	3.7	11
12	Reduction of Taylor-Aris dispersion by lateral mixing for chromatographic applications. <i>Lab on A Chip</i> , 2020, 20, 3938-3947.	6.0	12
13	Performance of laterally elongated pillar array columns in capillary electrochromatography mode. <i>Electrophoresis</i> , 2020, 41, 1287-1295.	2.4	6
14	Microfluidic Device for High-Throughput Production of Monodisperse Droplets. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 12784-12791.	3.7	14
15	Anisotropic Exclusion Effect between Photocatalytic Ag/AgCl Janus Particles and Passive Beads in a Dense Colloidal Matrix. <i>Langmuir</i> , 2020, 36, 7091-7099.	3.5	17
16	Achieving a Peak Capacity of 1800 Using an 8 m Long Pillar Array Column. <i>Analytical Chemistry</i> , 2019, 91, 10932-10936.	6.5	23
17	Study of peak capacities generated by a porous layered radially elongated pillar array column coupled to a nano-LC system. <i>Analyst</i> , 2019, 144, 1809-1817.	3.5	5
18	Focusing of Microcrystals and Liquid Condensates in Acoustofluidics. <i>Crystals</i> , 2019, 9, 120.	2.2	7

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19	Study on the mixing and migration behavior of micron-size particles in acoustofluidics. <i>Chemical Engineering Journal</i> , 2019, 369, 370-375.	12.7	20
20	Chromatographic study of the structural properties of mesoporous silica layers deposited on radially elongated pillars. <i>Journal of Chromatography A</i> , 2019, 1595, 58-65.	3.7	7
21	Development of a Lab-on-a-Disk Platform with Digital Imaging for Identification and Counting of Parasite Eggs in Human and Animal Stool. <i>Micromachines</i> , 2019, 10, 852.	2.9	19
22	Performance study of a microfluidic reactor for cogeneration of chemicals and electricity. <i>Chemical Engineering Research and Design</i> , 2019, 142, 336-345.	5.6	2
23	Exploring the effect of mesopore size reduction on the column performance of silica-based open tubular capillary columns. <i>Journal of Chromatography A</i> , 2018, 1552, 87-91.	3.7	11
24	Chromatographic Properties of Minimal Aspect Ratio Monolithic Silica Columns. <i>Analytical Chemistry</i> , 2017, 89, 10948-10956.	6.5	25
25	Chip-Based Multicapillary Column with Maximal Interconnectivity to Combine Maximum Efficiency and Maximum Loadability. <i>Analytical Chemistry</i> , 2017, 89, 11605-11613.	6.5	13
26	Preparation and evaluation of mesoporous silica layers on radially elongated pillars. <i>Journal of Chromatography A</i> , 2017, 1523, 234-241.	3.7	10
27	A robust multistage mesoflow reactor for liquid-liquid extraction for the separation of Co/Ni with cyanex 272. <i>Separation and Purification Technology</i> , 2016, 168, 32-38.	7.9	9
28	Very High Efficiency Porous Silica Layer Open-Tubular Capillary Columns Produced via in-Column Sol-Gel Processing. <i>Analytical Chemistry</i> , 2016, 88, 10158-10166.	6.5	62
29	Electrochemical characterisation of a microfluidic reactor for cogeneration of chemicals and electricity. <i>Electrochimica Acta</i> , 2016, 210, 337-345.	5.2	9
30	Detailed kinetic performance analysis of micromachined radially elongated pillar array columns for liquid chromatography. <i>Journal of Chromatography A</i> , 2016, 1433, 75-84.	3.7	18
31	A continuous flow reactor setup as a tool for rapid synthesis of micron sized NaA zeolite. <i>Microporous and Mesoporous Materials</i> , 2016, 226, 133-139.	4.4	11
32	Separation of Co(II)/Ni(II) with Cyanex 272 using a flat membrane microcontactor: Extraction kinetics study. <i>Journal of Membrane Science</i> , 2016, 499, 370-378.	8.2	10
33	Chromatography as an inspiration for microreactors. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 2122-2131.	3.2	5
34	Breakthrough in a flat channel membrane microcontactor. <i>Chemical Engineering Research and Design</i> , 2015, 94, 98-104.	5.6	16
35	Merging Open-Tubular and Packed Bed Liquid Chromatography. <i>Analytical Chemistry</i> , 2015, 87, 7382-7388.	6.5	39
36	Tracking the liquid-liquid extraction performance in mesoflow reactors. <i>Chemical Engineering Journal</i> , 2015, 279, 9-17.	12.7	12

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37	Strategies to integrate porous layers in microfluidic devices. <i>Microelectronic Engineering</i> , 2015, 132, 1-13.	2.4	16
38	Assessment and numerical search for minimal Taylorâ€™s dispersion in micro-machined channels of nearly rectangular cross-section. <i>Journal of Chromatography A</i> , 2014, 1368, 70-81.	3.7	26
39	Suppression of the sidewall effect in pillar array columns with radially elongated pillars. <i>Journal of Chromatography A</i> , 2014, 1367, 118-122.	3.7	17
40	Integration of uniform porous shell layers in very long pillar array columns using electrochemical anodization for liquid chromatography. <i>Analyst, The</i> , 2014, 139, 618-625.	3.5	34
41	The rheological properties of hydrogenated castor oil crystals. <i>Colloid and Polymer Science</i> , 2014, 292, 2539-2547.	2.1	15
42	Exploring the speed limits of liquid chromatography using shear-driven flows through 45 and 85 nm deep nano-channels. <i>Analyst, The</i> , 2013, 138, 6127.	3.5	13
43	The emulsion crystallization of hydrogenated castor oil into long thin fibers. <i>Journal of Crystal Growth</i> , 2013, 383, 51-56.	1.5	10
44	On the Advantages of Radially Elongated Structures in Microchip-Based Liquid Chromatography. <i>Analytical Chemistry</i> , 2013, 85, 5207-5212.	6.5	30
45	Ion-pair reversed-phase chromatography of short double-stranded deoxyribonucleic acid in silicon micro-pillar array columns: Retention model and applications. <i>Journal of Chromatography A</i> , 2013, 1294, 1-9.	3.7	20
46	Performance Evaluation of Different Design Alternatives for Microfabricated Nonporous Fused Silica Pillar Columns for Capillary Electrochromatography. <i>Analytical Chemistry</i> , 2012, 84, 9996-10004.	6.5	13
47	Elution behavior of short dsDNA strands in silicon micropillar array columns in ion pair reversed-phase chromatography mode. <i>Electrophoresis</i> , 2012, 33, 3205-3212.	2.4	3
48	A membrane microcontactor as a tool for integrated sample preparation. <i>Journal of Separation Science</i> , 2012, 35, 2407-2413.	2.5	3
49	Hydrodynamic chromatography separations in micro- and nanopillar arrays produced using deep-UV lithography. <i>Journal of Separation Science</i> , 2012, 35, 1877-1883.	2.5	15
50	Separations using a porous-shell pillar array column on a capillary LC instrument. <i>Journal of Separation Science</i> , 2012, 35, 2010-2017.	2.5	14
51	Realization of $10^6$ Theoretical Plates in Liquid Chromatography Using Very Long Pillar Array Columns. <i>Analytical Chemistry</i> , 2012, 84, 1214-1219.	6.5	79
52	Capillary liquid chromatography separations using non-porous pillar array columns. <i>Journal of Chromatography A</i> , 2012, 1230, 41-47.	3.7	27
53	Impact of the limitations of state-of-the-art micro-fabrication processes on the performance of pillar array columns for liquid chromatography. <i>Journal of Chromatography A</i> , 2012, 1239, 35-48.	3.7	29
54	Design and evaluation of flow distributors for microfabricated pillar array columns. <i>Lab on A Chip</i> , 2010, 10, 349-356.	6.0	42

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55	Experimental study of the retention properties of a cyclo olefin polymer pillar array column in reversed-phase mode. <i>Journal of Separation Science</i> , 2010, 33, 3313-3318.	2.5	9
56	Micron-sized pillars for ion-pair reversed-phase DNA separations. <i>Journal of Separation Science</i> , 2010, 33, 3613-3618.	2.5	9
57	Fabrication and Chromatographic Performance of Porous-Shell Pillar-Array Columns. <i>Analytical Chemistry</i> , 2010, 82, 7208-7217.	6.5	41
58	Visualization and quantification of the onset and the extent of viscous fingering in micro-pillar array columns. <i>Journal of Chromatography A</i> , 2009, 1216, 5511-5517.	3.7	15
59	An array of ordered pillars with retentive properties for pressure-driven liquid chromatography fabricated directly from an unmodified cyclo olefin polymer. <i>Lab on A Chip</i> , 2009, 9, 1511.	6.0	31
60	Experimental Study of Porous Silicon Shell Pillars under Retentive Conditions. <i>Analytical Chemistry</i> , 2008, 80, 5391-5400.	6.5	76
61	Integration of porous layers in ordered pillar arrays for liquid chromatography. <i>Lab on A Chip</i> , 2007, 7, 1705.	6.0	60
62	Improved Liquid Phase Chromatography Separation using Sub-micron Micromachining Technology. , 2007, , .		1
63	Pressure-Driven Reverse-Phase Liquid Chromatography Separations in Ordered Nonporous Pillar Array Columns. <i>Analytical Chemistry</i> , 2007, 79, 5915-5926.	6.5	149
64	Pillar-structured microchannels for on-chip liquid chromatography: Evaluation of the permeability and separation performance. <i>Journal of Separation Science</i> , 2007, 30, 1453-1460.	2.5	37
65	Experimental investigation of the band broadening originating from the top and bottom walls in micromachined nonporous pillar array columns. <i>Journal of Separation Science</i> , 2007, 30, 2605-2613.	2.5	26