Wim De Malsche

List of Publications by Year
in descending order

65	1,297	361413	395702
papers	citations	20 h-index	33 g-index

68	68	68	864
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pressure-Driven Reverse-Phase Liquid Chromatography Separations in Ordered Nonporous Pillar Array Columns. Analytical Chemistry, 2007, 79, 5915-5926.	6.5	149
2	Realization of 1 Ã— 10⁶ Theoretical Plates in Liquid Chromatography Using Very Long Pillar Array Columns. Analytical Chemistry, 2012, 84, 1214-1219.	6.5	79
3	Experimental Study of Porous Silicon Shell Pillars under Retentive Conditions. Analytical Chemistry, 2008, 80, 5391-5400.	6.5	76
4	Very High Efficiency Porous Silica Layer Open-Tubular Capillary Columns Produced via in-Column Solâ€“Gel Processing. Analytical Chemistry, 2016, 88, 10158-10166.	6.5	62
5	Integration of porous layers in ordered pillar arrays for liquid chromatography. Lab on A Chip, 2007, 7, 1705.	6.0	60
6	Design and evaluation of flow distributors for microfabricated pillar array columns. Lab on A Chip, 2010, 10, 349-356.	6.0	42
7	Fabrication and Chromatographic Performance of Porous-Shell Pillar-Array Columns. Analytical Chemistry, 2010, 82, 7208-7217.	6.5	41
8	Merging Open-Tubular and Packed Bed Liquid Chromatography. Analytical Chemistry, 2015, 87, 7382-7388.	6.5	39
9	Pillar-structured microchannels for on-chip liquid chromatography: Evaluation of the permeability and separation performance. Journal of Separation Science, 2007, 30, 1453-1460.	2.5	37
10	Integration of uniform porous shell layers in very long pillar array columns using electrochemical anodization for liquid chromatography. Analyst, The, 2014, 139, 618-625.	3.5	34
11	An array of ordered pillars with retentive properties for pressure-driven liquid chromatography fabricated directly from an unmodified cyclo olefin polymer. Lab on A Chip, 2009, 9, 1511.	6.0	31
12	On the Advantages of Radially Elongated Structures in Microchip-Based Liquid Chromatography. Analytical Chemistry, 2013, 85, 5207-5212.	6.5	30
13	Impact of the limitations of state-of-the-art micro-fabrication processes on the performance of pillar array columns for liquid chromatography. Journal of Chromatography A, 2012, 1239, 35-48.	3.7	29
14	Capillary liquid chromatography separations using non-porous pillar array columns. Journal of Chromatography A, 2012, 1230, 41-47.	3.7	27
15	Experimental investigation of the band broadening originating from the top and bottom walls in micromachined nonporous pillar array columns. Journal of Separation Science, 2007, 30, 2605-2613.	2.5	26
16	Assessment and numerical search for minimal Taylorâ€“Aris dispersion in micro-machined channels of nearly rectangular cross-section. Journal of Chromatography A, 2014, 1368, 70-81.	3.7	26
17	Chromatographic Properties of Minimal Aspect Ratio Monolithic Silica Columns. Analytical Chemistry, 2017, 89, 10948-10956.	6.5	25
18	Achieving a Peak Capacity of 1800 Using an 8 m Long Pillar Array Column. Analytical Chemistry, 2019, 91, 10932-10936.	6.5	23

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19	Ion-pair reversed-phase chromatography of short double-stranded deoxyribonucleic acid in silicon micro-pillar array columns: Retention model and applications. Journal of Chromatography A, 2013, 1294, 1-9.	3.7	20
20	Study on the mixing and migration behavior of micron-size particles in acoustofluidics. Chemical Engineering Journal, 2019, 369, 370-375.	12.7	20
21	Development of a Lab-on-a-Disk Platform with Digital Imaging for Identification and Counting of Parasite Eggs in Human and Animal Stool. Micromachines, 2019, 10, 852.	2.9	19
22	Detailed kinetic performance analysis of micromachined radially elongated pillar array columns for liquid chromatography. Journal of Chromatography A, 2016, 1433, 75-84.	3.7	18
23	Suppression of the sidewall effect in pillar array columns with radially elongated pillars. Journal of Chromatography A, 2014, 1367, 118-122.	3.7	17
24	Anisotropic Exclusion Effect between Photocatalytic Ag/AgCl Janus Particles and Passive Beads in a Dense Colloidal Matrix. Langmuir, 2020, 36, 7091-7099.	3.5	17
25	Breakthrough in a flat channel membrane microcontactor. Chemical Engineering Research and Design, 2015, 94, 98-104.	5.6	16
26	Strategies to integrate porous layers in microfluidic devices. Microelectronic Engineering, 2015, 132, 1-13.	2.4	16
27	Visualization and quantification of the onset and the extent of viscous fingering in micro-pillar array columns. Journal of Chromatography A, 2009, 1216, 5511-5517.	3.7	15
28	Hydrodynamic chromatography separations in microâ€•and nanopillar arrays produced using deepâ€‹<scp>UV</scp> lithography. Journal of Separation Science, 2012, 35, 1877-1883.	2.5	15
29	The rheological properties of hydrogenated castor oil crystals. Colloid and Polymer Science, 2014, 292, 2539-2547.	2.1	15
30	Separations using a porousâ€‹shell pillar array column on a capillary <scp>LC</scp> instrument. Journal of Separation Science, 2012, 35, 2010-2017.	2.5	14
31	Microfluidic Device for High-Throughput Production of Monodisperse Droplets. Industrial & Engineering Chemistry Research, 2020, 59, 12784-12791.	3.7	14
32	Performance Evaluation of Different Design Alternatives for Microfabricated Nonporous Fused Silica Pillar Columns for Capillary Electrochromatography. Analytical Chemistry, 2012, 84, 9996-10004.	6.5	13
33	Exploring the speed limits of liquid chromatography using shear-driven flows through 45 and 85 nm deep nano-channels. Analyst, The, 2013, 138, 6127.	3.5	13
34	Chip-Based Multicapillary Column with Maximal Interconnectivity to Combine Maximum Efficiency and Maximum Loadability. Analytical Chemistry, 2017, 89, 11605-11613.	6.5	13
35	Tracking the liquidâ€“liquid extraction performance in mesoflow reactors. Chemical Engineering Journal, 2015, 279, 9-17.	12.7	12
36	Reduction of Taylorâ€“Aris dispersion by lateral mixing for chromatographic applications. Lab on A Chip, 2020, 20, 3938-3947.	6.0	12

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37	A continuous flow reactor setup as a tool for rapid synthesis of micron sized NaA zeolite. Microporous and Mesoporous Materials, 2016, 226, 133-139.	4.4	11
38	Exploring the effect of mesopore size reduction on the column performance of silica-based open tubular capillary columns. Journal of Chromatography A, 2018, 1552, 87-91.	3.7	11
39	Simultaneous enantioseparation of nonsteroidal anti-inflammatory drugs by a one-dimensional liquid chromatography technique using a dynamically coated chiral porous silicon pillar array column. Journal of Chromatography A, 2020, 1615, 460752.	3.7	11
40	The emulsion crystallization of hydrogenated castor oil into long thin fibers. Journal of Crystal Growth, 2013, 383, 51-56.	1.5	10
41	Separation of Co(II)/Ni(II) with Cyanex 272 using a flat membrane microcontactor: Extraction kinetics study. Journal of Membrane Science, 2016, 499, 370-378.	8.2	10
42	Preparation and evaluation of mesoporous silica layers on radially elongated pillars. Journal of Chromatography A, 2017, 1523, 234-241.	3.7	10
43	Experimental study of the retention properties of a cyclo olefin polymer pillar array column in reversedâ€phase mode. Journal of Separation Science, 2010, 33, 3313-3318.	2.5	9
44	Micronâ€sized pillars for ionâ€pair reversedâ€phase DNA separations. Journal of Separation Science, 2010, 33, 3613-3618.	2.5	9
45	A robust multistage mesoflow reactor for liquidâ€“liquid extraction for the separation of Co/Ni with cyanex 272. Separation and Purification Technology, 2016, 168, 32-38.	7.9	9
46	Electrochemical characterisation of a microfluidic reactor for cogeneration of chemicals and electricity. Electrochimica Acta, 2016, 210, 337-345.	5.2	9
47	On the potential use of two-photon polymerization to 3D print chromatographic packed bed supports. Journal of Chromatography A, 2022, 1663, 462763.	3.7	9
48	Focusing of Microcrystals and Liquid Condensates in Acoustofluidics. Crystals, 2019, 9, 120.	2.2	7
49	Chromatographic study of the structural properties of mesoporous silica layers deposited on radially elongated pillars. Journal of Chromatography A, 2019, 1595, 58-65.	3.7	7
50	Reducing Taylor-Aris dispersion by exploiting lateral convection associated with acoustic streaming. Chemical Engineering Journal, 2021, 417, 128031.	12.7	7
51	Performance of laterally elongated pillar array columns in capillary electrochromatography mode. Electrophoresis, 2020, 41, 1287-1295.	2.4	6
52	Influence of Anodizing Parameters on the Electrochemical Characteristics and Morphology of Highly Doped P-type Porous Silicon. Silicon, 2021, 13, 819-829.	3.3	6
53	Chromatography as an inspiration for microreactors. Journal of Chemical Technology and Biotechnology, 2015, 90, 2122-2131.	3.2	5
54	Study of peak capacities generated by a porous layered radially elongated pillar array column coupled to a nano-LC system. Analyst, The, 2019, 144, 1809-1817.	3.5	5

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55	Inducing AC-electroosmotic flow using electric field manipulation with insulators. Lab on A Chip, 2021, 21, 3105-3111.	6.0	4
56	Application of generalized dispersion theory to vortex chromatography. Journal of Chromatography A, 2022, 1670, 462970.	3.7	4
57	Elution behavior of short ds<scp>DNA</scp> strands in silicon micropillar array columns in ion pair reversedâ€phase chromatography mode. Electrophoresis, 2012, 33, 3205-3212.	2.4	3
58	A membrane microcontactor as a tool for integrated sample preparation. Journal of Separation Science, 2012, 35, 2407-2413.	2.5	3
59	Fabrication, Boron Leaching, and Electrochemical Impedance Spectroscopy of Nanoporous P-Type Silicon. Silicon, 2022, 14, 5691-5701.	3.3	3
60	The Effect of Controlled Mixing on ROY Polymorphism. Crystals, 2022, 12, 577.	2.2	3
61	Performance study of a microfluidic reactor for cogeneration of chemicals and electricity. Chemical Engineering Research and Design, 2019, 142, 336-345.	5.6	2
62	Migration Behavior of Low-Density Particles in Lab-on-a-Disc Devices: Effect of Walls. Micromachines, 2021, 12, 1032.	2.9	2
63	Effect of walls on the motion of magnetically driven superparamagnetic microparticles. Microfluidics and Nanofluidics, 2022, 26, 1.	2.2	2
64	Improved Liquid Phase Chromatography Separation using Sub-micron Micromachining Technology. , 2007, , .		1
65	Overloading behavior of fenoprofen and naproxen as two model compounds on a non-porous silicon pillar array column. Journal of Chromatography A, 2021, 1651, 462332.	3.7	0