Sander Deridder

List of Publications by Year
in descending order

27 papers	392 citations	840776 11 h-index	752698 20 g-index
27 all docs	27 docs citations	27 times ranked	246 citing authors

#	Article	IF	Citations
1	Effective medium theory expressions for the effective diffusion in chromatographic beds filled with porous, non-porous and porous-shell particles and cylinders. Part I: Theory. Journal of Chromatography A, 2011, 1218, 32-45.	3.7	69
2	Effective medium theory expressions for the effective diffusion in chromatographic beds filled with porous, non-porous and porous-shell particles and cylinders. Part II: Numerical verification and quantitative effect of solid core on expected B-term band broadening. Journal of Chromatography A, 2011, 1218, 46-56.	3.7	48
3	Detailed characterization of the kinetic performance of first and second generation silica monolithic columns for reversed-phase chromatography separations. Journal of Chromatography A, 2014, 1325, 72-82.	3.7	37
4	A theoretical study on the advantage of core-shell particles with radially-oriented mesopores. Journal of Chromatography A, 2016, 1456, 137-144.	3.7	26
5	New insights in the velocity dependency of the external mass transfer coefficient in 2D and 3D porous media for liquid chromatography. Journal of Chromatography A, 2012, 1227, 194-202.	3.7	20
6	Design and evaluation of microfluidic devices for two-dimensional spatial separations. Journal of Chromatography A, 2016, 1434, 127-135.	3.7	20
7	Two-dimensional insertable separation tool (TWIST) for flow confinement in spatial separations. Journal of Chromatography A, 2018, 1577, 120-123.	3.7	18
8	Calculation of the geometrical three-point parameter constant appearing in the second order accurate effective medium theory expression for the B-term diffusion coefficient in fully porous and porous-shell random sphere packings. Journal of Chromatography A, 2012, 1223, 35-40.	3.7	16
9	The impact of flow distribution on column performance: A computational fluid dynamics study. Journal of Chromatography A, 2014, 1369, 125-130.	3.7	15
10	In Situ Measurement of the Transversal Dispersion in Ordered and Disordered Two-Dimensional Pillar Beds for Liquid Chromatography. Analytical Chemistry, 2014, 86, 2947-2954.	6.5	12
11	Experimental and numerical study of band-broadening effects associated with analyte transfer in microfluidic devices for spatial two-dimensional liquid chromatography created by additive manufacturing. Journal of Chromatography A, 2019, 1598, 77-84.	3.7	12
12	Experimental and numerical validation of the effective medium theory for the B-term band broadening in 1st and 2nd generation monolithic silica columns. Journal of Chromatography A, 2014, 1351, 46-55.	3.7	11
13	Numerical investigation of band spreading generated by flow-through needle and fixed loop sample injectors. Journal of Chromatography A, 2018, 1552, 29-42.	3.7	11
14	A microfluidic distributor combining minimal volume, minimal dispersion and minimal sensitivity to clogging. Journal of Chromatography A, 2018, 1537, 75-82.	3.7	11
15	An explicit expression for the retention factor and velocity dependency of the mobile zone mass transfer band broadening in packed spheres beds used in liquid chromatography. Journal of Chromatography A, 2020, 1634, 461710.	3.7	9
16	Optimizing design and employing permeability differences to achieve flow confinement in devices for spatial multidimensional liquid chromatography. Journal of Chromatography A, 2020, 1612, 460665.	3.7	8
17	Review of recent insights in the measurement and modelling of the B-term dispersion and related mass transfer properties in liquid chromatography. Analytica Chimica Acta, 2022, 1214, 339955.	5.4	8
18	The stability of blood eosinophils in stable chronic obstructive pulmonary disease: a retrospective study in Belgian primary care. BMC Pulmonary Medicine, 2020, 20, 200.	2.0	7

#	Article	IF	Citations
19	Computational study of the relationship between the flow resistance and the microscopic structure of polymer monoliths. Journal of Separation Science, 2011, 34, 2038-2046.	2.5	6
20	Numerical and analytical investigation of the possibilities to enhance the thermal conductivity of core-shell particle packed beds. Journal of Chromatography A, 2018, 1575, 26-33.	3.7	6
21	A multiscale modelling study on the sense and nonsense of thermal conductivity enhancement of liquid chromatography packings and other potential solutions for viscous heating effects. Journal of Chromatography A, 2020, 1620, 461022.	3.7	5
22	Theoretical study on the impact of slip flow on chromatographic performance. Journal of Chromatography A, 2014, 1366, 120-125.	3.7	4
23	Detailed computational fluid dynamics study of the parameters contributing to the viscous heating band broadening in liquid chromatography at pressures up to 2500Âbar in 2.1 mm columns. Journal of Chromatography A, 2022, 1661, 462683.	3.7	4
24	Computational fluid dynamics study of potential solutions to alleviate viscous heating band broadening in 2.1 millimeter liquid chromatography columns. Journal of Chromatography A, 2021, 1654, 462452.	3.7	3
25	The checkerboard model for the eddy-dispersion in laminar flows through porous media. Part I: Theory and velocity field properties. Journal of Chromatography A, 2020, 1624, 461195.	3.7	3
26	A Training Game for Students Considering Family Medicine: an Educational Project Report. Journal of Medicine and Life, 2019, 12, 411-418.	1.3	2
27	The checkerboard model for the Eddy-dispersion in Laminar flows through porous media. Part II: Application to ordered and disordered 2-D flow systems. Journal of Chromatography A, 2020, 1624, 461196.	3.7	1