VÃ-tor M Geraldes

List of Publications by Year
in descending order

59 papers	1,757 citations	257357 24 h-index	276775 41 g-index
60 all docs	60 docs citations	60 times ranked	1282 citing authors

#	Article	IF	Citations
1	Evaluation of Two Novel Scale-Down Devices for Testing Monoclonal Antibody Aggregation During Large-Scale Freezing. Journal of Pharmaceutical Sciences, 2022, , .	1.6	2
2	Computational fluid dynamic simulations of temperature, cryoconcentration, and stress time during large-scale freezing and thawing of monoclonal antibody solutions. European Journal of Pharmaceutics and Biopharmaceutics, 2022, 177, 107-112.	2.0	2
3	Mannitol Crystallization at Sub-Zero Temperatures: Time/Temperature-Resolved Synchrotron X-ray Diffraction Study and the Phase Diagram. Journal of Physical Chemistry Letters, 2021, 12, 1453-1460.	2.1	8
4	Mutual diffusion of proteins in cold concentration gradients measured by holographic interferometry. Chemical Engineering Science, 2021, 236, 116478.	1.9	3
5	Stability of Protein Formulations at Subzero Temperatures by Isochoric Cooling. Journal of Pharmaceutical Sciences, 2020, 109, 316-322.	1.6	15
6	Cryoconcentration and 3D Temperature Profiles During Freezing of mAb Solutions in Large-Scale PET Bottles and a Novel Scale-Down Device. Pharmaceutical Research, 2020, 37, 179.	1.7	8
7	Interfacial Stress and Container Failure During Freezing of Bulk Protein Solutions Can Be Prevented by Local Heating. AAPS PharmSciTech, 2020, 21, 251.	1.5	6
8	Copper foam coated with CPO-27(Ni) metalâ€"organic framework for adsorption heat pump: Simulation study using OpenFOAM. Applied Thermal Engineering, 2020, 178, 115498.	3.0	15
9	A New Perspective on Scale-Down Strategies for Freezing of Biopharmaceutics by Means of Computational Fluid Dynamics. Journal of Pharmaceutical Sciences, 2020, 109, 1978-1989.	1.6	10
10	Comparison between microfluidic tangential flow nanofiltration and centrifugal nanofiltration for the concentration of small-volume samples. Journal of Membrane Science, 2019, 578, 27-35.	4.1	11
11	Controlled freeze-thawing test to determine the degree of deionization required for tartaric stabilization of wines by electrodialysis. Food Chemistry, 2019, 278, 84-91.	4.2	4
12	Centrifugal nanofiltration for small-volume samples. Journal of Membrane Science, 2017, 540, 411-421.	4.1	3
13	CAPE in the Chemical Engineering Masterâ€™s Integrated Programme at IST-ULisboa. Computer Aided Chemical Engineering, 2017, , 2959-2964.	0.3	0
14	Polymorphism in Pharmaceutical Drugs by Supercritical CO2 Processing: Clarifying the Role of the Antisolvent Effect and Atomization Enhancement. Crystal Growth and Design, 2016, 16, 6222-6229.	1.4	24
15	Computational fluid dynamics (CFD) assisted analysis of profiled membranes performance in reverse electrodialysis. Journal of Membrane Science, 2016, 502, 179-190.	4.1	69
16	Efficient CFD-based method for designing cross-flow nanofiltration small devices. Journal of Membrane Science, 2016, 500, 190-202.	4.1	14
17	Improving Heat Transfer at the Bottom of Vials for Consistent Freeze Drying with Unidirectional Structured Ice. AAPS PharmSciTech, 2016, 17, 1049-1059.	1.5	6
18	Enhancement of mass transfer in spacer-filled channels under laminar regime by pulsatile flow. Chemical Engineering Science, 2015, 123, 536-541.	1.9	19

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19	Rheological and dynamical characterization of blood analogue flows in a slit. International Journal of Heat and Fluid Flow, 2014, 46, 17-28.	1.1	17
20	Concentration boundary layer visualization in nanofiltration by holographic interferometry with light deflection correction. Journal of Membrane Science, 2013, 447, 306-314.	4.1	8
21	Separation and Purification by Ultrafiltration of White Wine High Molecular Weight Polysaccharides. Industrial & Engineering Chemistry Research, 2013, 52, 8875-8879.	1.8	20
22	Measuring and Modeling Hemoglobin Aggregation below the Freezing Temperature. Journal of Physical Chemistry B, 2013, 117, 8939-8946.	1.2	27
23	The importance of heat flow direction for reproducible and homogeneous freezing of bulk protein solutions. Biotechnology Progress, 2013, 29, 1212-1221.	1.3	23
24	Surface Characterization of Asymmetric Bi-Soft Segment Poly(ester urethane urea) Membranes for Blood-Oxygenation Medical Devices. International Journal of Biomaterials, 2012, 2012, 1-9.	1.1	12
25	Separation and Concentration of High Molecular Weight Polysaccharides from White Wine by Ultrafiltration with Diafiltration. Procedia Engineering, 2012, 44, 22-23.	1.2	1
26	Mass-transfer entrance effects in narrow rectangular channels with ribbed walls or mesh-type spacers. Chemical Engineering Science, 2012, 78, 38-45.	1.9	22
27	Multi-ionic nanofiltration of highly concentrated salt mixtures in the seawater range. Desalination, 2011, 277, 29-39.	4.0	51
28	Theophylline polymorphs by atomization of supercritical antisolvent induced suspensions. Journal of Supercritical Fluids, 2011, 58, 303-312.	1.6	33
29	Characterization of fluid dynamics and mass-transfer in an electrochemical oxidation cell by experimental and CFD studies. Chemical Engineering Journal, 2010, 157, 379-392.	6.6	57
30	On the prediction of permeate flux for nanofiltration of concentrated aqueous solutions with thin-film composite polyamide membranes. Journal of Membrane Science, 2010, 346, 1-7.	4.1	21
31	Limiting current density in the electrodialysis of multi-ionic solutions. Journal of Membrane Science, 2010, 360, 499-508.	4.1	59
32	Microflow hydrodynamics in slits: Effects of the walls relative roughness and spacer inter-filaments distance. Chemical Engineering Science, 2010, 65, 3660-3670.	1.9	13
33	Electric-field-driven transport of valence-asymmetric salts within stagnant fluid films. Desalination and Water Treatment, 2009, 8, 221-224.	1.0	1
34	Concentration polarization in a reverse osmosis/nanofiltration plate-and-frame membrane module. Journal of Membrane Science, 2008, 325, 580-591.	4.1	26
35	Computer program for simulation of mass transport in nanofiltration membranes. Journal of Membrane Science, 2008, 321, 172-182.	4.1	67
36	Dissolved air flotation of surface water for spiral-wound module nanofiltration pre-treatment. Desalination, 2008, 228, 191-199.	4.0	12

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37	Characterization of minocycline powder micronized by a supercritical antisolvent (SAS) process. Journal of Supercritical Fluids, 2008, 46, 71-76.	1.6	15
38	CFD analysis of supercritical antisolvent (SAS) micronization of minocycline hydrochloride. Journal of Supercritical Fluids, 2008, 47, 247-258.	1.6	25
39	Investigation of flow patterns and mass transfer in membrane module channels filled with flow-aligned spacers using computational fluid dynamics (CFD). Journal of Membrane Science, 2007, 305, 103-117.	4.1	129
40	Prediction of the concentration polarization in the nanofiltration/reverse osmosis of dilute multi-ionic solutions. Journal of Membrane Science, 2007, 300, 20-27.	4.1	50
41	Mass transfer coefficient determination method for high-recovery pressure-driven membrane modules. Desalination, 2006, 195, 69-77.	4.0	6
42	Modelling of flow and concentration patterns in spiral wound membrane modules with ladder-type spacers. Desalination, 2006, 200, 395-396.	4.0	4
43	Generalized mass-transfer correction factor for nanofiltration and reverse osmosis. AICHE Journal, 2006, 52, 3353-3362.	1.8	59
44	Simulation and Optimization of Medium-Sized Seawater Reverse Osmosis Processes with Spiral-Wound Modules. Industrial & Engineering Chemistry Research, 2005, 44, 1897-1905.	1.8	87
45	Optimization of ladder-type spacers for nanofiltration and reverse osmosis spiral-wound modules by computational fluid dynamics. Computer Aided Chemical Engineering, 2004, , 187-192.	0.3	2
46	Concentration polarisation and flow structure within nanofiltration spiral-wound modules with ladder-type spacers. Computers and Structures, 2004, 82, 1561-1568.	2.4	37
47	Hydrodynamics and concentration polarization in NF/RO spiral-wound modules with ladder-type spacers. Desalination, 2003, 157, 395-402.	4.0	61
48	Flow management in nanofiltration spiral wound modules with ladder-type spacers. Journal of Membrane Science, 2002, 203, 87-102.	4.1	111
49	Integrated modeling of transport processes in fluid/nanofiltration membrane systems. Journal of Membrane Science, 2002, 206, 189-200.	4.1	56
50	Numerical and experimental study of mass transfer in lysozyme ultrafiltration. Desalination, 2002, 145, 193-199.	4.0	9
51	The effect of the ladder-type spacers configuration in NF spiral-wound modules on the concentration boundary layers disruption. Desalination, 2002, 146, 187-194.	4.0	74
52	The effect on mass transfer of momentum and concentration boundary layers at the entrance region of a slit with a nanofiltration membrane wall. Chemical Engineering Science, 2002, 57, 735-748.	1.9	55
53	Flow and mass transfer modelling of nanofiltration. Journal of Membrane Science, 2001, 191, 109-128.	4.1	134
54	Numerical Simulation of the Momentum and Concentration Boundary Layers at the Entrance Region of a Slit with a Nanofiltration Membrane Wall. Chemie-Ingenieur-Technik, 2001, 73, 711-712.	0.4	2

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55	Numerical modelling of mass transfer in slits with semiâ€permeable membrane walls. Engineering Computations, 2000, 17, 192-218.	0.7	52
56	Nanofiltration Mass Transfer at the Entrance Region of a Slit Laminar Flow. Industrial & Engineering Chemistry Research, 1998, 37, 4792-4800.	1.8	33
57	Process water recovery from pulp bleaching effluents by an NF/ED hybrid process. Journal of Membrane Science, 1995, 102, 209-221.	4.1	31
58	Nanofiltration removal of chlorinated organic compounds from alkaline bleaching effluents in a pulp and paper plant. Water Research, 1992, 26, 1639-1643.	5.3	33
59	Membrane separation processes for the clean production of xanthates. Journal of Membrane Science, 1991, 62, 103-112.	4.1	2