

Eva MarÃ- a MartÃ- n del Valle

List of Publications by Year in descending order

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83
papers

4,326
citations

361413

20
h-index

106344

65
g-index

85
all docs

85
docs citations

85
times ranked

6047
citing authors

#	ARTICLE	IF	CITATIONS
1	Cyclodextrins and their uses: a review. <i>Process Biochemistry</i> , 2004, 39, 1033-1046.	3.7	2,792
2	Supercritical fluids for pharmaceutical particle engineering: Methods, basic fundamentals and modelling. <i>Chemical Engineering and Processing: Process Intensification</i> , 2012, 60, 9-25.	3.6	145
3	Immobilized Metal Ion Affinity Chromatography: Status and Trends. <i>Separation and Purification Reviews</i> , 2007, 36, 71-111.	5.5	121
4	Drug Delivery Technologies: The Way Forward in the New Decade. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 2475-2486.	3.7	114
5	Evaluating the industrial potential of biodiesel from a microalgae heterotrophic culture: Scale-up and economics. <i>Biochemical Engineering Journal</i> , 2012, 63, 104-115.	3.6	82
6	Development of a new technology for the production of microcapsules based in atomization processes. <i>Chemical Engineering Journal</i> , 2006, 117, 137-142.	12.7	66
7	A comparison between semiempirical equations to predict the solubility of pharmaceutical compounds in supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2010, 52, 161-174.	3.2	61
8	Polydopamine nanoparticles kill cancer cells. <i>RSC Advances</i> , 2018, 8, 36201-36208.	3.6	41
9	Development of a nanoparticle system based on a fructose polymer: Stability and drug release studies. <i>Carbohydrate Polymers</i> , 2017, 160, 26-33.	10.2	40
10	Precipitation of tretinoin and acetaminophen with solution enhanced dispersion by supercritical fluids (SEDS). Role of phase equilibria to optimize particle diameter. <i>Powder Technology</i> , 2012, 217, 177-188.	4.2	38
11	Effect of nitrogen source on growth and lipid accumulation in <i>Scenedesmus abundans</i> and <i>Chlorella ellipsoidea</i> . <i>Bioresource Technology</i> , 2014, 173, 334-341.	9.6	35
12	Rheological characterization of commercial highly viscous alginate solutions in shear and extensional flows. <i>Rheologica Acta</i> , 2014, 53, 559-570.	2.4	35
13	Effect of bacteria type and sucrose concentration on levan yield and its molecular weight. <i>Microbial Cell Factories</i> , 2017, 16, 91.	4.0	33
14	Levan and levansucrases: Polymer, enzyme, micro-organisms and biomedical applications. <i>Biocatalysis and Biotransformation</i> , 2018, 36, 233-244.	2.0	32
15	Size Matters in the Cytotoxicity of Polydopamine Nanoparticles in Different Types of Tumors. <i>Cancers</i> , 2019, 11, 1679.	3.7	30
16	Understanding and optimizing the addition of phytohormones in the culture of microalgae for lipid production. <i>Biotechnology Progress</i> , 2016, 32, 1203-1211.	2.6	29
17	Molecular Approach to the Synergistic Effect on Astringency Elicited by Mixtures of Flavanols. <i>Journal of Agricultural and Food Chemistry</i> , 2017, 65, 6425-6433.	5.2	26
18	Role of rheological properties on physical chitosan aerogels obtained by supercritical drying. <i>Carbohydrate Polymers</i> , 2020, 233, 115850.	10.2	26

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19	Protein Imprinting by Means of Alginate-Based Polymer Microcapsules. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 9811-9814.	3.7	24
20	Trastuzumab: More than a Guide in HER2-Positive Cancer Nanomedicine. <i>Nanomaterials</i> , 2020, 10, 1674.	4.1	23
21	Levan-Capped Silver Nanoparticles for Bactericidal Formulations: Release and Activity Modelling. <i>International Journal of Molecular Sciences</i> , 2019, 20, 1502.	4.1	22
22	Use of Ceramic Monoliths as StationaryPhase in Affinity Chromatography. <i>Biotechnology Progress</i> , 2003, 19, 921-927.	2.6	19
23	Instability study of a swirling annular liquid sheet of polymer produced by air-blast atomization. <i>Chemical Engineering Journal</i> , 2007, 133, 69-77.	12.7	19
24	Differences in levan nanoparticles depending on their synthesis route: Microbial vs cell-free systems. <i>International Journal of Biological Macromolecules</i> , 2019, 137, 62-68.	7.5	19
25	Preparation and preliminary evaluation of alginate crosslinked microcapsules as potential drug delivery system (DDS) for human lung cancer therapy. <i>Biomedical Physics and Engineering Express</i> , 2016, 2, 035015.	1.2	18
26	Solubility of Gases in Polymeric Membranes. , 2005, , 41-61.		17
27	Modelling prediction of the microcapsule size of polyelectrolyte complexes produced by atomization. <i>Chemical Engineering Journal</i> , 2006, 121, 1-8.	12.7	16
28	Tailored-Made Polydopamine Nanoparticles to Induce Ferroptosis in Breast Cancer Cells in Combination with Chemotherapy. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3161.	4.1	16
29	Modelling solubility of solid active principle ingredients in sc-CO ₂ with and without cosolvents: A comparative assessment of semiempirical models based on Chrastil's equation and its modifications. <i>Journal of Supercritical Fluids</i> , 2014, 93, 91-102.	3.2	15
30	Cytotoxicity of paramagnetic cationsâ€”Loaded polydopamine nanoparticles. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 167, 284-290.	5.0	15
31	Supercritical CO ₂ assisted formation of composite membranes containing an amphiphilic fructose-based polymer. <i>Journal of CO₂ Utilization</i> , 2019, 34, 274-281.	6.8	15
32	Estimation of sublimation enthalpies of solids constituted by aromatic and/or polycyclic aliphatic rings by using a group contribution method. <i>AIChE Journal</i> , 2012, 58, 2875-2884.	3.6	14
33	Color Engineering of Silicon Nitride Surfaces to Characterize the Polydopamine Refractive Index. <i>ChemPhysChem</i> , 2018, 19, 3418-3424.	2.1	14
34	Biodegradable gellan gum hydrogels loaded with paclitaxel for HER2+ breast cancer local therapy. <i>Carbohydrate Polymers</i> , 2022, 294, 119732.	10.2	14
35	Effect of the Spacer Arm in Affinity Chromatography:Â Determination of Adsorption Characteristics and Flow Rate Effect. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 2296-2304.	3.7	13
36	On the use of semiempirical models of (solid+supercritical fluid) systems to determine solid sublimation properties. <i>Journal of Chemical Thermodynamics</i> , 2011, 43, 711-718.	2.0	13

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37	Development of a technology to produce monodispersed microparticles based on the formation of drops from viscous non-Newtonian liquids sprayed through a fan jet nozzle. <i>Chemical Engineering Journal</i> , 2011, 174, 699-708.	12.7	12
38	Paclitaxel-Trastuzumab Mixed Nanovehicle to Target HER2-Overexpressing Tumors. <i>Nanomaterials</i> , 2019, 9, 948.	4.1	12
39	Antineoplastic behavior of polydopamine nanoparticles prepared in different water/alcohol media. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 199, 111506.	5.0	12
40	Survey of supercritical fluid techniques for producing drug delivery systems for a potential use in cancer therapy. <i>Reviews in Chemical Engineering</i> , 2016, 32, 507-532.	4.4	11
41	A Phenomenological Approach to Study Mechanical Properties of Polymeric Porous Structures Processed Using Supercritical CO ₂ . <i>Polymers</i> , 2019, 11, 485.	4.5	11
42	Preparation and characterization of cellulose acetate-Laponite® composite membranes produced by supercritical phase inversion. <i>Journal of Supercritical Fluids</i> , 2020, 155, 104651.	3.2	11
43	A comprehensive study on levan nanoparticles formation: Kinetics and self-assembly modeling. <i>International Journal of Biological Macromolecules</i> , 2020, 147, 1089-1098.	7.5	11
44	Immobilization of Mesenchymal Stem Cells and Monocytes in Biocompatible Microcapsules to Cell Therapy. <i>Biotechnology Progress</i> , 2007, 23, 940-945.	2.6	11
45	Supercritical carbon dioxide and biomedicine: Opening the doors towards biocompatibility. <i>Chemical Engineering Journal</i> , 2022, 444, 136615.	12.7	10
46	Development of a new technique to generate microcapsules from the breakup of non-Newtonian highly viscous fluid jets. <i>AIChE Journal</i> , 2011, 57, 3436-3447.	3.6	9
47	Specific and Nonspecific Adsorption in Affinity Chromatography. Part II. Kinetic and Mass Transfer Studies. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 377-383.	3.7	8
48	Microalgae Technology: A Patent Survey. <i>International Journal of Chemical Reactor Engineering</i> , 2013, 11, 733-763.	1.1	8
49	Synthesis of a new nanoparticle system based on electrostatic alginate-piperazine interactions. <i>Polymers for Advanced Technologies</i> , 2016, 27, 623-629.	3.2	8
50	Biotechnological strategies to produce levan: Mass transfer and techno-economical evaluation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 141, 107529.	3.6	8
51	Production of fungistatic porous structures of cellulose acetate loaded with quercetin, using supercritical CO ₂ . <i>Journal of Supercritical Fluids</i> , 2021, 169, 105129.	3.2	8
52	Modeling of Monolith-Supported Affinity Chromatography. <i>Biotechnology Progress</i> , 2004, 20, 811-817.	2.6	7
53	Adsorption and mass transfer studies of Catalase in IMAC chromatography by dynamics methods. <i>Process Biochemistry</i> , 2006, 41, 142-151.	3.7	7
54	Characterization of mass transport processes in IMAC chromatography by dynamics methods. <i>Biochemical Engineering Journal</i> , 2007, 35, 264-272.	3.6	7

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55	An Empirical Analysis of the Solubility of Pharmaceuticals in Supercritical Carbon Dioxide Using Sublimation Enthalpies. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 18447-18457.	3.7	7
56	Preparation and characterization of a macroporous agarose monolith as a stationary phase in IMAC chromatography. <i>Chemical Engineering Communications</i> , 2019, 206, 268-277.	2.6	7
57	Specific and Nonspecific Adsorption in Affinity Chromatography. Part I. Preliminary and Equilibrium Studies. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 369-376.	3.7	6
58	Nature-Inspired Nanoparticles as Paclitaxel Targeted Carrier for the Treatment of HER2-Positive Breast Cancer. <i>Cancers</i> , 2021, 13, 2526.	3.7	6
59	Insight into the influence of the polymerization time of polydopamine nanoparticles on their size, surface properties and nanomedical applications. <i>Polymer Chemistry</i> , 2022, 13, 235-244.	3.9	6
60	Advances in Logic-Based Optimization Approaches to Process Integration and Supply Chain Management. , 2005, , 299-322.		5
61	CFD modeling and its validation of non-Newtonian fluid flow in a microparticle production process using fan jet nozzles. <i>Powder Technology</i> , 2013, 246, 617-624.	4.2	5
62	Experimental and Theoretical Analysis of the Operating Parameters for Precipitating Acetaminophen and Tretinoin with Solution Enhanced Dispersion by Supercritical Fluids. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 8745-8754.	3.7	5
63	Productivity Model for Separation of Proteins Using Ceramic Monoliths As a Stationary Phase. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 15456-15466.	3.7	5
64	Experimental and linear analysis for the instability of non-Newtonian liquid jets issuing from a pressurized vibrating nozzle. <i>AIChE Journal</i> , 2015, 61, 2070-2078.	3.6	5
65	Steady and Oscillatory Shear Flow Behavior of Different Polysaccharides with Laponite®. <i>Polymers</i> , 2021, 13, 966.	4.5	5
66	The viscoelastic behavior of the precursor hydrogels can modify aerogel properties. <i>Journal of Supercritical Fluids</i> , 2022, 184, 105563.	3.2	5
67	Development of Nano-Structured Micro-Porous Materials and their Application in Bioprocess-Chemical Process Intensification and Tissue Engineering. , 2005, , 171-197.		4
68	CFD study of capillary jets under superimposed destabilizing conditions for microdroplet formation. <i>Engineering Applications of Computational Fluid Mechanics</i> , 2015, 9, 419-431.	3.1	4
69	The Art and Science of Upscaling. , 2005, , 1-39.		3
70	Integration of Process Systems Engineering and Business Decision Making Tools: Financial Risk Management and Other Emerging Procedures. , 2005, , 323-377.		3
71	Design and Analysis of Homogeneous and Heterogeneous Photoreactors. , 2005, , 125-169.		3
72	Theoretical Model To Predict the Diffusion Coefficients of Enzymes on Adsorption Processes Based on Hard-Core Two-Yukawa Potential. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 7410-7416.	3.7	3

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73	Immobilisation of Cells in Biocompatible Films to Cell Therapy. The Open Tissue Engineering and Regenerative Medicine Journal, 2009, 2, 14-19.	2.6	3
74	Tuning Alginate Microparticle Size via Atomization of Non-Newtonian Fluids. Materials, 2021, 14, 7601.	2.9	3
75	An Approach to Minimize Tumour Proliferation by Reducing the Formation of Components for Cell Membrane. Molecules, 2022, 27, 2735.	3.8	3
76	Small Peptide Ligands for Affinity Separations of Biological Molecules. , 2005, , 63-83.		2
77	Fine-Structured Materials by Continuous Coating and Drying or Curing of Liquid Precursors. , 2005, , 229-266.		2
78	Bioprocess Scale-up: SMB as a Promising Technique for Industrial Separations Using IMAC. , 2005, , 85-102.		1
79	Kinetic and Mass Transfer Model for Separation of Protein Using Ceramic Monoliths as a Stationary Phase. Chemical Engineering Communications, 2017, 204, 750-760.	2.6	1
80	The Encapsulation Art: Scale-up and Applications. , 2005, , 199-228.		0
81	Opportunities in Catalytic Reaction Engineering. Examples of Heterogeneous Catalysis in Water Remediation and Preferential CO Oxidation. , 2005, , 103-124.		0
82	Langmuir-Blodgett Films: A Window to Nanotechnology. , 2005, , 267-297.		0
83	ICOPE-15-1065 Research on Simulation and Experiment of Fin and Tube Type Heat Exchanger. The Proceedings of the International Conference on Power Engineering (ICOPE), 2015, 2015.12, _ICOPE-15--_ICOPE-15-.	0.0	0