Ãngeles Heras Caballero

List of Publications by Year
in descending order

68	4,172	136740	110170
papers	citations	32 h-index	64 g-index

70	70	70	5214
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Functional Characterization of Chitin and Chitosan. Current Chemical Biology, 2009, 3, 203-230.	0.2	679
2	Chitosan: An Overview of Its Properties and Applications. Polymers, 2021, 13, 3256.	2.0	373
3	Cosmetics and Cosmeceutical Applications of Chitin, Chitosan and Their Derivatives. Polymers, 2018, 10, 213.	2.0	255
4	Chitosan Amphiphilic Derivatives. Chemistry and Applications. Current Organic Chemistry, 2010, 14, 308-330.	0.9	245
5	Functional Characterization of Chitin and Chitosan. Current Chemical Biology, 2009, 3, 203-230.	0.2	207
6	Tight junction modulation by chitosan nanoparticles: Comparison with chitosan solution. International Journal of Pharmaceutics, 2010, 400, 183-193.	2.6	197
7	N-methylene phosphonic chitosan: a novel soluble derivative. Carbohydrate Polymers, 2001, 44, 1-8.	5.1	168
8	New Drug Delivery Systems Based on Chitosan. Current Drug Discovery Technologies, 2008, 5, 333-341.	0.6	126
9	Chitosan nanoparticles and microspheres for the encapsulation of natural antioxidants extracted from Ilex paraguariensis. Carbohydrate Polymers, 2011, 84, 803-806.	5.1	122
10	Modified chitosan carrying phosphonic and alkyl groups. Carbohydrate Polymers, 2003, 51, 425-429.	5.1	100
11	Extraction and characterization of chitin from crustaceans. Biomass and Bioenergy, 1993, 5, 145-153.	2.9	91
12	N-methylene phosphonic chitosan. Effect of preparation methods on its properties. Carbohydrate Polymers, 2003, 52, 39-46.	5.1	88
13	-Deacetylation and depolymerization reactions of chitin/chitosan: Influence of the source of chitin. Carbohydrate Polymers, 2005, 62, 316-320.	5.1	88
14	The occurrence of a Maillard-type protein-polysaccharide reaction between Î²-lactoglobulin and chitosan. Food Chemistry, 2007, 100, 1071-1075.	4.2	67
15	Nano and microparticulate chitosan-based systems for antiviral topical delivery. European Journal of Pharmaceutical Sciences, 2013, 48, 216-222.	1.9	64
16	Influence of the physico-chemical characteristics of chito-oligosaccharides (COS) on antioxidant activity. Carbohydrate Polymers, 2013, 97, 776-782.	5.1	62
17	Chitosan-Genipin Microspheres for the Controlled Release of Drugs: Clarithromycin, Tramadol and Heparin. Marine Drugs, 2010, 8, 1750-1762.	2.2	60
18	Effect of Chemical Crosslinking on the Swelling and Shrinking Properties of Thermal and pH-Responsive Chitosan Hydrogels. Macromolecular Bioscience, 2003, 3, 612-619.	2.1	59

#	Article	IF	Citations
19	Controlled size green synthesis of bioactive silver nanoparticles assisted by chitosan and its derivatives and their application in biofilm preparation. Carbohydrate Polymers, 2020, 236, 116063.	5.1	58
20	Effect of chito-oligosaccharides over human faecal microbiota during fermentation in batch cultures. Carbohydrate Polymers, 2016, 137, 617-624.	5.1	54
21	Application of MRI to monitor the process of ripening and decay in citrus treated with chitosan solutions. Magnetic Resonance Imaging, 2004, 22, 127-137.	1.0	51
22	Films of chitosan and chitosan-oligosaccharide neutralized and thermally treated: Effects on its antibacterial and other activities. LWT - Food Science and Technology, 2016, 73, 368-374.	2.5	51
23	Poly-(styrene sulphonic acid): An acid catalyst from polystyrene waste for reactions of interest in biomass valorization. Catalysis Today, 2014, 234, 285-294.	2.2	49
24	Use of soluble chitosans in Maillard reaction products with Î²-lactoglobulin. Emulsifying and antioxidant properties. LWT - Food Science and Technology, 2017, 75, 440-446.	2.5	45
25	Chitosan Spray-Dried Microparticles for Controlled Delivery of Venlafaxine Hydrochloride. Molecules, 2017, 22, 1980.	1.7	43
26	Temperature and pH-sensitive chitosan hydrogels: DSC, rheological and swelling evidence of a volume phase transition. Polymer Bulletin, 2007, 58, 225-234.	1.7	41
27	Physical Stability Studies of Semi-Solid Formulations from Natural Compounds Loaded with Chitosan Microspheres. Marine Drugs, 2015, 13, 5901-5919.	2.2	41
28	Antibacterial activity of products of depolymerization of chitosans with lysozyme and chitosanase against Campylobacter jejuni. Carbohydrate Polymers, 2011, 84, 844-848.	5.1	38
29	Tramadol Release from a Delivery System Based on Alginate-Chitosan Microcapsules. Macromolecular Bioscience, 2003, 3, 546-551.	2.1	36
30	Chitosan derivatives-based films as pH-sensitive drug delivery systems with enhanced antioxidant and antibacterial properties. International Journal of Biological Macromolecules, 2021, 182, 730-742.	3.6	36
31	Poly(styrenesulphonic) acid: an active and reusable acid catalyst soluble in polar solvents. Green Chemistry, 2011, 13, 3203.	4.6	35
32	Magnetic chitosan beads for covalent immobilization of nucleoside 2â€²-deoxyribosyltransferase: application in nucleoside analogues synthesis. Journal of Industrial Microbiology and Biotechnology, 2013, 40, 955-966.	1.4	32
33	Preparation of a crude chitosanase from blue crab viscera as well as its application in the production of biologically active chito-oligosaccharides from shrimp shells chitosan. International Journal of Biological Macromolecules, 2019, 139, 558-569.	3.6	30
34	Self-assembled nanoparticles of glycol chitosan â€“ Ergocalciferol succinate conjugate, for controlled release. Carbohydrate Polymers, 2012, 88, 1373-1377.	5.1	28
35	Role of Physicochemical Properties of Chitin and Chitosan on their Functionality. Current Chemical Biology, 2014, 8, 27-42.	0.2	28
36	pHâ€•and Temperatureâ€Sensitive Chitosan Hydrogels: Swelling and MRI Studies. Macromolecular Chemistry and Physics, 2011, 212, 887-895.	1.1	26

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37	Synthesis, physicochemical characterization and biological evaluation of chitosan sulfate as heparan sulfate mimics. Carbohydrate Polymers, 2018, 191, 225-233.	5.1	26
38	Influence of Preparation Methods of Chitooligosaccharides on Their Physicochemical Properties and Their Anti-Inflammatory Effects in Mice and in RAW264.7 Macrophages. Marine Drugs, 2018, 16, 430.	2.2	25
39	Encapsulation of an Agrobacterium radiobacter extract containing d-hydantoinase and d-carbamoylase activities into alginateâ€“chitosan polyelectrolyte complexes. Journal of Molecular Catalysis B: Enzymatic, 2009, 58, 54-64.	1.8	24
40	Enzymatic production of low-Mw chitosan-derivatives: Characterization and biological activities evaluation. International Journal of Biological Macromolecules, 2020, 144, 279-288.	3.6	24
41	A contribution to the study of the electrochemical oxidation of p-aminophenol on a mercury electrode. Electrochimica Acta, 1984, 29, 541-545.	2.6	23
42	Self-assembled nanoparticles of modified-chitosan conjugates for the sustained release of dl-Î±-tocopherol. Carbohydrate Polymers, 2013, 92, 856-864.	5.1	23
43	Co-immobilization ofd-hydantoinase andd-carboamylase on Chitin: Application to the Synthesis of p-hydroxyphenylglycine. Biocatalysis and Biotransformation, 2003, 21, 349-356.	1.1	22
44	N,O6-partially acetylated chitosan nanoparticles hydrophobically-modified for controlled release of steroids and vitamin E. Carbohydrate Polymers, 2013, 91, 143-151.	5.1	22
45	Efficient conversion of chitosan into chitooligosaccharides by a chitosanolytic activity from Bacillus thuringiensis. Process Biochemistry, 2018, 73, 102-108.	1.8	22
46	Efficient reduction of Toluidine Blue O dye using silver nanoparticles synthesized by low molecular weight chitosans. International Journal of Biological Macromolecules, 2019, 131, 682-690.	3.6	17
47	An electrochemical study of the dimerization of mesityl oxide. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1985, 195, 321-334.	0.3	16
48	Oil Quality Control of Culinary Oils Subjected to Deep-Fat Frying Based on NMR and EPR Spectroscopy. Food Analytical Methods, 2017, 10, 2467-2480.	1.3	16
49	Fluorescent imino and secondary amino chitosans as potential sensing biomaterials. Carbohydrate Polymers, 2015, 123, 288-296.	5.1	15
50	Competitive homogeneous chemical reactions occurring between two electron transfers. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1988, 243, 293-307.	0.3	12
51	Use of iâ€“t polarographic curves for the calculation of the rate constant of the intermediate chemical reaction of an ECE mechanism. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1984, 172, 167-172.	0.3	11
52	Synthesis of p-hydroxyphenylglicine by cell extract from Agrobaterium radiobacter encapsulated in alginate capsules. Enzyme and Microbial Technology, 2006, 39, 215-221.	1.6	10
53	Influence of N-Deacetylation Conditions on Chitosan Production from Î±-Chitin. Natural Product Communications, 2008, 3, 1934578X0800300.	0.2	10
54	Suitability of a colorimetric method for the selective determination of chitosan in dietary supplements. Food Chemistry, 2011, 126, 1836-1839.	4.2	10

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55	On the Ability of Low Molecular Weight Chitosan Enzymatically Depolymerized to Produce and Stabilize Silver Nanoparticles. Biomimetics, 2018, 3, 21.	1.5	9
56	Normal pulse polarography: analytical expressions for the kinetic current and ireversible electrode reactions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1985, 182, 173-178.	0.3	8
57	Determination of the rate constants for a CECE reduction mechanism. Electrochimica Acta, 1987, 32, 1495-1497.	2.6	8
58	Influence of organic-aqueous media in the DNSAE activity of micrococcal endonuclease. Journal of Molecular Catalysis, 1989, 52, 323-336.	1.2	7
59	Î±-Chymotrypsin Immobilized on Chitin. Relationships Between the Enzyme Kinetic Constant and Support Structure. Biocatalysis, 1994, 11, 305-313.	0.9	7
60	Influence of the modification procedure of support materials on the microenvironment of immobilized Î±-chymotrypsin. Journal of Molecular Catalysis, 1993, 80, 127-136.	1.2	6
61	A contribution to the study of the electrochemical reduction of o-nitrophenol on a mercury electrode. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1984, 170, 353-356.	0.3	5
62	Unraveling the Structural Landscape of Chitosan-Based Heparan Sulfate Mimics Binding to Growth Factors: Deciphering Structural Determinants for Optimal Activity. ACS Applied Materials & Interfaces, 2020, 12, 25534-25545.	4.0	5
63	Effect of lyophilization and subsequent rehydration of immobilized Î±-chymotrypsin derivatives. Journal of Molecular Catalysis, 1994, 89, 397-405.	1.2	4
64	Diffusion intensity in normal pulse polarography. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1985, 182, 169-172.	0.3	3
65	Coimmobilization of enzymes and cells on chitosan and dervatives. Progress in Biotechnology, 1998, 15, 679-684.	0.2	3
66	Novel Self-Assembled Nanoparticles of Testosterone-Modified Glycol Chitosan and Fructose Chitosan for Controlled Release. Journal of Biomaterials and Tissue Engineering, 2013, 3, 164-172.	0.0	3
67	Physicochemical and biological properties of chitosan derivatives with varying molecular weight produced by chemical depolymerization. Biomass Conversion and Biorefinery, 2024, 14, 4111-4121.	2.9	2
68	Chitosan and inhalers: a bioadhesive polymer for pulmonary drug delivery. , 2013, , 77-93.		1