

# Jacques Desbrières

## List of Publications by Year in descending order

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78  
papers

4,288  
citations

172386

29  
h-index

106281

65  
g-index

80  
all docs

80  
docs citations

80  
times ranked

4777  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrophobic derivatives of chitosan: Characterization and rheological behaviour. International Journal of Biological Macromolecules, 1996, 19, 21-28.	3.6	291
2	Solid State NMR for Determination of Degree of Acetylation of Chitin and Chitosan. Biomacromolecules, 2000, 1, 746-751.	2.6	290
3	On the influence of deacetylation process on the physicochemical characteristics of chitosan from squid chitin. Polymer, 2000, 41, 2463-2469.	1.8	262
4	Influence of the nature of the metal ions on the complexation with chitosan.. European Polymer Journal, 2002, 38, 1523-1530.	2.6	255
5	Contribution to the preparation of chitins and chitosans with controlled physico-chemical properties. Polymer, 2003, 44, 7939-7952.	1.8	246
6	Thermogelation of methylcelluloses: new evidence for understanding the gelation mechanism. Polymer, 1998, 39, 6251-6259.	1.8	222
7	Water soluble derivatives obtained by controlled chemical modifications of chitosan. Carbohydrate Polymers, 1994, 24, 209-214.	5.1	211
8	Two Types of Hydrophobic Aggregates in Aqueous Solutions of Chitosan and Its Hydrophobic Derivative. Biomacromolecules, 2001, 2, 483-490.	2.6	211
9	Contribution to the study of the complexation of copper by chitosan and oligomers. Polymer, 2002, 43, 1267-1276.	1.8	195
10	Characterization of chitosan by steric exclusion chromatography. Polymer, 2001, 42, 09921-09927.	1.8	154
11	Chitosan for wastewater treatment. Polymer International, 2018, 67, 7-14.	1.6	145
12	Structural characterization and antioxidant activity of water-soluble polysaccharides from the Tunisian brown seaweed <i>Cystoseira compressa</i> . Carbohydrate Polymers, 2018, 198, 589-600.	5.1	105
13	Investigation of different natural sources of chitin: influence of the source and deacetylation process on the physicochemical characteristics of chitosan. Polymer International, 2000, 49, 337-344.	1.6	104
14	New unsaturated derivatives of Xanthan gum: Synthesis and characterization. Polymer, 2007, 48, 1921-1929.	1.8	90
15	Dynamic surface tension and dilational viscoelasticity of adsorption layers of a hydrophobically modified chitosan. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 255, 119-130.	2.3	87
16	Synthesis and characterization of new unsaturated esters of Gellan Gum. Carbohydrate Polymers, 2008, 71, 92-100.	5.1	72
17	Interfacial properties of dynamic association between chitin derivatives and surfactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 147, 139-148.	2.3	68
18	Autoassociative natural polymer derivatives: the alkylchitosans. Rheological behaviour and temperature stability. Polymer, 2004, 45, 3285-3295.	1.8	64

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19	Synthesis and Biological Activity of Some New 1,3,4-Thiadiazole and 1,2,4-Triazole Compounds Containing a Phenylalanine Moiety. <i>Molecules</i> , 2009, 14, 2621-2631.	1.7	57
20	Stimuli-Sensitive Xanthan Derivatives/N-Isopropylacrylamide Hydrogels: Influence of Cross-Linking Agent on Interpenetrating Polymer Network Properties. <i>Biomacromolecules</i> , 2009, 10, 1911-1922.	2.6	56
21	Formation of an ordered nanostructure in surfactant-polyelectrolyte complexes formed by interfacial diffusion. <i>Polymer Bulletin</i> , 2000, 45, 77-81.	1.7	55
22	Modulated release from liposomes entrapped in chitosan/gelatin hydrogels. <i>Materials Science and Engineering C</i> , 2014, 43, 383-391.	3.8	51
23	Dynamic surface tension and dilational viscoelasticity of adsorption layers of alkylated chitosans and surfactant-chitosan complexes. <i>Colloid and Polymer Science</i> , 2006, 284, 745-754.	1.0	49
24	Low Molecular Weight Chitosan (LMWC)-based Polyplexes for pDNA Delivery: From Bench to Bedside. <i>Polymers</i> , 2014, 6, 1727-1755.	2.0	46
25	Physicochemical characterization of the layer-by-layer self-assembly of polyphenol oxidase and chitosan on glassy carbon electrode. <i>Electrochimica Acta</i> , 2005, 50, 2865-2877.	2.6	40
26	Interfacial properties of chitin and chitosan based systems. <i>Soft Matter</i> , 2010, 6, 2358.	1.2	35
27	The Benefits of Smart Nanoparticles in Dental Applications. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2585.	1.8	35
28	Interactions between quaternized chitosan and surfactant studied by diffusion NMR and conductivity. <i>Carbohydrate Polymers</i> , 2017, 156, 182-192.	5.1	33
29	Surface activity of water soluble amphiphilic chitin derivatives. <i>Polymer Bulletin</i> , 1997, 39, 209-215.	1.7	32
30	Dynamic surface tension of hydrophobically modified chitosans. <i>Mendeleev Communications</i> , 2004, 14, 66-68.	0.6	29
31	Amphiphilic derivatives of chitosan using microwave irradiation. Toward an eco-friendly process to chitosan derivatives. <i>Carbohydrate Polymers</i> , 2015, 116, 26-33.	5.1	29
32	The extracellular matrix of the oleolytic biofilms of <i>Marinobacter hydrocarbonoclasticus</i> comprises cytoplasmic proteins and T2SS effectors that promote growth on hydrocarbons and lipids. <i>Environmental Microbiology</i> , 2017, 19, 159-173.	1.8	29
33	New highly-percolating alginate-PEI membranes for efficient recovery of chromium from aqueous solutions. <i>Carbohydrate Polymers</i> , 2019, 225, 115177.	5.1	29
34	Dilational viscoelasticity and relaxation properties of interfacial electrostatic complexes between oppositely charged hydrophobic and hydrophilic polyelectrolytes. <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 65, 43-49.	2.5	28
35	Surface characterization and drug release from porous microparticles based on methacrylic monomers and xanthan. <i>Carbohydrate Polymers</i> , 2015, 125, 323-333.	5.1	27
36	The effect of alkyl chain length of a polysoap on the surface activity of its complexes with cationic surfactants. <i>Mendeleev Communications</i> , 1997, 7, 149-151.	0.6	26

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37	Surfactant-polysaccharide complexes based on quaternized chitosan. Characterization and application to emulsion stability. <i>European Polymer Journal</i> , 2018, 104, 128-135.	2.6	26
38	On the stiffness of chitosan hydrochloride in acid-free aqueous solutions. <i>Carbohydrate Polymers</i> , 2000, 43, 351-357.	5.1	25
39	Alkyl-Chitosan-Based Adhesive: Water Resistance Improvement. <i>Molecules</i> , 2019, 24, 1987.	1.7	25
40	Original stimuli-sensitive polysaccharide derivatives/N-isopropylacrylamide hydrogels. Role of polysaccharide backbone. <i>Carbohydrate Polymers</i> , 2012, 89, 438-447.	5.1	24
41	Formulation and evaluation of cefuroxim loaded submicron particles for ophthalmic delivery. <i>International Journal of Pharmaceutics</i> , 2015, 493, 16-29.	2.6	24
42	Interfacial properties of amphiphilic natural polymer systems based on derivatives of chitin. <i>Polymer International</i> , 2006, 55, 1177-1183.	1.6	23
43	Microwave synthesis: An alternative approach to synthesize conducting end-capped polymers. <i>Polymer</i> , 2011, 52, 33-39.	1.8	21
44	Formation of polyelectrolyte complexes in an organic solvent. <i>European Polymer Journal</i> , 1981, 17, 1265-1269.	2.6	20
45	Magnetic microparticles based on natural polymers. <i>International Journal of Pharmaceutics</i> , 2011, 404, 83-93.	2.6	19
46	Thermodynamic investigation of thermoresponsive xanthan-poly (N-isopropylacrylamide) hydrogels. <i>Polymer International</i> , 2011, 60, 1527-1534.	1.6	18
47	Oil removal from crude oil-in-saline water emulsions using chitosan as biosorbent. <i>Separation Science and Technology</i> , 2020, 55, 835-847.	1.3	18
48	Reversible thermothickening of aqueous solutions of polycations from natural origin. <i>Macromolecular Symposia</i> , 1997, 113, 135-149.	0.4	17
49	Dilational viscoelasticity of the adsorption layers of hydrophobically modified chitosans. <i>Mendeleev Communications</i> , 2005, 15, 35-38.	0.6	17
50	Thermo-sensitive gellan maleate/N-isopropylacrylamide hydrogels: initial <i>in vitro</i> and <i>in vivo</i> evaluation as ocular inserts. <i>Polymer Bulletin</i> , 2020, 77, 741-755.	1.7	17
51	Removal of copper ions from water of boilers by a modified natural based, corncobs. <i>Journal of Applied Polymer Science</i> , 2006, 102, 4637-4645.	1.3	15
52	Viscosimetric behaviour of hydrolyzed polyacrylamide-poly(4-vinylpyridine) [AD37-P4VP] mixture in aqueous solution. <i>European Polymer Journal</i> , 2007, 43, 540-549.	2.6	15
53	Complex microparticulate systems based on glycidyl methacrylate and xanthan. <i>Carbohydrate Polymers</i> , 2014, 104, 213-222.	5.1	15
54	Valorization of chitins extracted from North Morocco shrimps: Comparison of chitin reactivity and characteristics. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47804.	1.3	15

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55	Structural Features and Rheological Properties of a Sulfated Xylogalactan-Rich Fraction Isolated from Tunisian Red Seaweed <i>Jania adhaerens</i> . <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1655.	1.3	14
56	Synthesis and Antimicrobial Activity of New Derivatives of 1,3,4-Thiadiazoles and 1,2,4-Triazoles with 5-Nitroindazole as Support. <i>Journal of Heterocyclic Chemistry</i> , 2013, 50, 366-372.	1.4	13
57	Dilational rheology of air/water interfaces covered by nonionic amphiphilic polysaccharides. Correlation with stability of oil-in-water emulsions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 441, 312-318.	2.3	13
58	Microwave-assisted modifications of polysaccharides. <i>Pure and Applied Chemistry</i> , 2014, 86, 1695-1706.	0.9	12
59	Interfacial properties of amphiphilic systems on the basis of natural polymers' chitin derivatives. <i>Russian Journal of General Chemistry</i> , 2008, 78, 2230-2238.	0.3	11
60	Extensive N-methylation of chitosan: evaluating the effects of the reaction conditions by using response surface methodology. <i>Polymer International</i> , 2015, 64, 1617-1626.	1.6	11
61	Organization of Pullulan-block-polyether copolymers at the aqueous solution/air interface. <i>Journal of Colloid and Interface Science</i> , 2013, 398, 134-141.	5.0	10
62	Thermosensitive Microparticles Based on Unsaturated Esters of some Poly- and Oligosaccharides: Preparation, Characterization, Drug Inclusion and Release. <i>Macromolecular Symposia</i> , 2010, 297, 114-125.	0.4	9
63	Chemically Modified Polysaccharides With Applications in Nanomedicine. , 2018, , 351-399.		9
64	New Grafted Copolymers Carrying Betaine Units Based on Gellan and N-Vinylimidazole as Precursors for Design of Drug Delivery Systems. <i>Molecules</i> , 2020, 25, 5451.	1.7	8
65	Deborah number for the viscoelasticity of adsorption layers of amphiphilic polyelectrolytes. <i>Mendeleev Communications</i> , 2005, 15, 190-191.	0.6	7
66	Polyelectrolyte complex-surfactant interactions: effect of neutralization degree on viscometric behaviour in aqueous solution. <i>Polymer Bulletin</i> , 2013, 70, 97-103.	1.7	7
67	Wood Protective Fungicidal Treatment: Quaternary Ammonium Molecules Grafting on Cellulose Assisted by Afterglows at Atmospheric Pressure. <i>Plasma Processes and Polymers</i> , 2013, 10, 150-160.	1.6	7
68	Neutralization degree effect on viscosimetric behaviour of hydrolyzed polyacrylamide-poly(4-vinylpyridine) [AD37-P4VP] mixture in aqueous solution. <i>Polymer Bulletin</i> , 2008, 61, 771-777.	1.7	6
69	Dilational rheology and relaxation properties of the adsorption layers of electrostatic complexes between Eudragit RS and chitosan sulfate at the methylene chloride-water interface. <i>Mendeleev Communications</i> , 2008, 18, 35-37.	0.6	5
70	Evolution of the water-monomer dynamic interfacial properties during methyl methacrylate radical polymerization in a single monomer droplet: dependence on the chemical structure of the surfactant. <i>Polymer International</i> , 2013, 62, n/a-n/a.	1.6	5
71	Sulfonic Derivatives of 2-Mercaptobenzoxazole and Its Conjugates with Poly(Maleic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 <i>Polymeric Materials and Polymeric Biomaterials</i> , 2014, 63, 268-276.	1.8	5
72	Using full-factorial design analysis and response surface methodology to better understand the production of cationized chitosan from epoxides. <i>Polymer International</i> , 2016, 65, 811-819.	1.6	5

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73	Investigation of $\hat{I}^2$ -chitin extracted from cuttlefish: comparison with squid $\hat{I}^2$ -chitin. Polymer Bulletin, 2020, , 1.	1.7	5
74	Chemically modified xanthan and gellan for preparation of biomaterials for ophthalmic applications. Polymer International, 2020, 69, 1051-1057.	1.6	4
75	Coupling Raman spectroscopy and drop tensiometry for in situ monitoring of radical polymerization in a single monomer droplet. Journal of Raman Spectroscopy, 2018, 49, 2046-2049.	1.2	3
76	Application of Chitosan-Based Formulations in Controlled Drug Delivery. Sustainable Agriculture Reviews, 2019, , 241-314.	0.6	3
77	Amphiphilic Systems as Biomaterials Based on Chitin, Chitosan, and Their Derivatives. , 2013, , 243-270.		2
78	Immobilization and Release Studies of Triazole Derivatives from Grafted Copolymer Based on Gellan-Carrying Betaine Units. Molecules, 2021, 26, 3330.	1.7	2