

Luc Picton

List of Publications by Year in descending order

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117
papers

3,116
citations

117453

34
h-index

205818

48
g-index

117
all docs

117
docs citations

117
times ranked

3503
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of a complex polysaccharide (gum arabic) by multi-angle laser light scattering coupled on-line to size exclusion chromatography and flow field flow fractionation. <i>Carbohydrate Polymers</i> , 2000, 42, 23-31.	5.1	121
2	Comparison of polysaccharide degradations by dynamic high-pressure homogenization. <i>Food Hydrocolloids</i> , 2012, 27, 278-286.	5.6	109
3	Prickly pear nopals pectin from <i>Opuntia ficus-indica</i> physico-chemical study in dilute and semi-dilute solutions. <i>Carbohydrate Polymers</i> , 2001, 46, 69-79.	5.1	105
4	High-resolution nuclear magnetic resonance spectroscopy studies of polysaccharides crosslinked by sodium trimetaphosphate: a proposal for the reaction mechanism. <i>Carbohydrate Research</i> , 2007, 342, 943-953.	1.1	95
5	Structural investigations of the neutral polysaccharide of <i>Linum usitatissimum</i> L. seeds mucilage. <i>International Journal of Biological Macromolecules</i> , 2005, 35, 121-125.	3.6	94
6	New amphiphilic and pH-sensitive hydrogel for controlled release of a model poorly water-soluble drug. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2009, 73, 345-350.	2.0	76
7	Hydrogels Based on Pullulan Crosslinked with sodium trimetaphosphate (STMP): Rheological study. <i>Polymer Bulletin</i> , 2004, 52, 429-436.	1.7	74
8	Hyaluronan-based hydrogels particles prepared by crosslinking with trisodium trimetaphosphate. Synthesis and characterization. <i>Carbohydrate Polymers</i> , 2004, 57, 1-6.	5.1	74
9	Trisodium trimetaphosphate crosslinked xanthan networks: synthesis, swelling, loading and releasing behaviour. <i>Polymer Bulletin</i> , 2009, 62, 525-538.	1.7	70
10	Entrapment and release of sodium polystyrene sulfonate (SPS) from calcium alginate gel beads. <i>European Polymer Journal</i> , 2004, 40, 2709-2715.	2.6	61
11	Analysis of arabic gum: Study of degradation and water desorption processes. <i>Food Hydrocolloids</i> , 2009, 23, 1930-1934.	5.6	61
12	Purification of a Low Molecular Weight Fucoidan for SPECT Molecular Imaging of Myocardial Infarction. <i>Marine Drugs</i> , 2014, 12, 4851-4867.	2.2	56
13	Composition, structure and solution properties of polysaccharides extracted from leaves of <i>Mesembryanthemum crystallinum</i> . <i>European Polymer Journal</i> , 2006, 42, 786-795.	2.6	54
14	New amphiphilic modified polysaccharides with original solution behaviour in salt media. <i>Carbohydrate Polymers</i> , 2009, 75, 454-462.	5.1	54
15	Amphiphilic polysaccharides. Evidence for a competition between intra and intermolecular associations in dilute system. <i>Polymer</i> , 2003, 44, 7917-7924.	1.8	52
16	Different ways for grafting ester derivatives of poly(ethylene glycol) onto chitosan: related characteristics and potential properties. <i>Polymer</i> , 2005, 46, 639-651.	1.8	47
17	Aggregation of amphiphilic pullulan derivatives evidenced by on-line flow field flow fractionation/multi-angle laser light scattering. <i>Biomedical Applications</i> , 2001, 753, 115-122.	1.7	46
18	Aggregation of hydrophobically modified polysaccharides in solution and at the air-water interface. <i>Journal of Colloid and Interface Science</i> , 2005, 281, 316-324.	5.0	46

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19	Amphiphilic and thermosensitive copolymers based on pullulan and Jeffamine®: Synthesis, characterization and physicochemical properties. <i>Carbohydrate Polymers</i> , 2012, 87, 1522-1531.	5.1	46
20	Synthesis, photopolymerization and adhesive properties of new hydrolytically stable phosphonic acids for dental applications. <i>Journal of Polymer Science Part A</i> , 2008, 46, 7074-7090.	2.5	45
21	Highly sulphated galactan from <i>Halymenia durvillei</i> (Halymeniales, Rhodophyta), a red seaweed of Madagascar marine coasts. <i>International Journal of Biological Macromolecules</i> , 2009, 45, 140-145.	3.6	44
22	Rheological properties of hydrophobically modified carboxymethylcelluloses. <i>Carbohydrate Polymers</i> , 2005, 60, 87-94.	5.1	43
23	Synthesis and characterization of thermosensitive and pH-sensitive block copolymers based on polyetheramine and pullulan with different length. <i>Carbohydrate Polymers</i> , 2011, 86, 304-312.	5.1	43
24	Associative pullulan gels and their interaction with biological active substances. <i>Journal of Controlled Release</i> , 2002, 83, 41-51.	4.8	42
25	Production and characterization of new families of polyglucuronic acids from TEMPO- NaOCl oxidation of curdlan. <i>International Journal of Biological Macromolecules</i> , 2009, 45, 458-462.	3.6	40
26	Synthesis of new associative gel microspheres from carboxymethyl pullulan and their interactions with lysozyme. <i>European Polymer Journal</i> , 2004, 40, 283-289.	2.6	39
27	Glucose-sensitive polyelectrolyte microcapsules based on (alginate/chitosan) pair. <i>Carbohydrate Polymers</i> , 2018, 184, 144-153.	5.1	39
28	Dynamic mechanical properties of polyimide/poly(silsesquioxane)-like hybrid films. <i>Journal of Applied Polymer Science</i> , 2001, 81, 2500-2516.	1.3	38
29	Hypothesis: Hyperstructures regulate bacterial structure and the cell cycle. <i>Biochimie</i> , 1999, 81, 915-920.	1.3	37
30	Contributions of Intermolecular Interactions between Constitutive Arabinoxylans to the Flaxseeds Mucilage Properties. <i>Biomacromolecules</i> , 2005, 6, 1871-1876.	2.6	37
31	Carboxymethylpullulan hydrogels with a ionic and/or amphiphilic behavior: Swelling properties and entrapment of cationic and/or hydrophobic molecules. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 274, 163-169.	2.3	36
32	Preparation and characterization of anionic pullulan thermoassociative nanoparticles for drug delivery. <i>Carbohydrate Polymers</i> , 2014, 111, 892-900.	5.1	36
33	Adsorption of cellulose derivatives onto montmorillonite: a SEC-MALLS study of molar masses influence. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2002, 203, 77-86.	2.3	35
34	Enhancement of the Solubility and Efficacy of Poorly Water-Soluble Drugs by Hydrophobically-Modified Polysaccharide Derivatives. <i>Pharmaceutical Research</i> , 2007, 24, 2317-2326.	1.7	34
35	Effect of chitosan coating on the swelling and controlled release of a poorly water-soluble drug from an amphiphilic and pH-sensitive hydrogel. <i>International Journal of Biological Macromolecules</i> , 2010, 47, 120-125.	3.6	34
36	Pullulan-STMP hydrogels: a way to correlate crosslinking mechanism, structure and physicochemical properties. <i>Polymer Bulletin</i> , 2011, 67, 455-466.	1.7	34

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37	New anionic crosslinked multi-responsive pullulan hydrogels. <i>Carbohydrate Polymers</i> , 2012, 87, 1440-1446.	5.1	34
38	Solution Behavior of Hydrophobically Associating Cellulosic Derivatives. <i>International Journal of Polymer Analysis and Characterization</i> , 1996, 2, 103-113.	0.9	33
39	Flax (<i>Linum usitatissimum</i>) Seed Cake: A Potential Source of High Molecular Weight Arabinoxylans?. <i>Journal of Agricultural and Food Chemistry</i> , 2005, 53, 1449-1452.	2.4	33
40	Multi-responsive carboxymethyl polysaccharide crosslinked hydrogels containing Jeffamine side-chains. <i>Carbohydrate Polymers</i> , 2012, 89, 578-585.	5.1	32
41	Crosslinked hydrogels based on biological macromolecules with potential use in skin tissue engineering. <i>International Journal of Biological Macromolecules</i> , 2016, 84, 174-181.	3.6	32
42	Rheological study of in-situ crosslinkable hydrogels based on hyaluronan acid, collagen and sericin. <i>Materials Science and Engineering C</i> , 2016, 69, 388-397.	3.8	31
43	Thermo sensitive behavior of cellulose derivatives in dilute aqueous solutions: From macroscopic to mesoscopic scale. <i>Journal of Colloid and Interface Science</i> , 2011, 357, 372-378.	5.0	28
44	Antioxidant properties and bioactivity of Carboxymethylpullulan grafted with ferulic acid and of their hydrogels obtained by enzymatic reaction. <i>Food Chemistry</i> , 2018, 262, 21-29.	4.2	28
45	Conventional and Microwave-Assisted Extraction of Mucilage from <i>Opuntia ficus-indica</i> Cladodes: Physico-Chemical and Rheological Properties. <i>Food and Bioprocess Technology</i> , 2016, 9, 481-492.	2.6	27
46	Polysaccharide hydrolases are released with mucilages after water hydration of flax seeds. <i>Plant Physiology and Biochemistry</i> , 2013, 62, 54-62.	2.8	26
47	Potential of Exopolysaccharide from <i>Porphyridium marinum</i> to Contend with Bacterial Proliferation, Biofilm Formation, and Breast Cancer. <i>Marine Drugs</i> , 2021, 19, 66.	2.2	26
48	Stiffness xanthan hydrogels: synthesis, swelling characteristics and controlled release properties. <i>Polymer Bulletin</i> , 2008, 61, 631-641.	1.7	24
49	Chemically modified exopolysaccharide pullulans: physico-chemical characteristics of ionic derivatives. <i>Carbohydrate Polymers</i> , 1995, 28, 131-136.	5.1	23
50	New anionic amphiphilic thermosensitive pullulan derivatives. <i>Carbohydrate Polymers</i> , 2011, 84, 276-281.	5.1	23
51	The red microalga <i>Flintiella sanguinaria</i> as a new exopolysaccharide producer. <i>Journal of Applied Phycology</i> , 2018, 30, 2803-2814.	1.5	23
52	Influence of alkyl chains length on the conformation and solubilization properties of amphiphilic carboxymethylpullulans. <i>Colloid and Polymer Science</i> , 2008, 286, 1299-1305.	1.0	22
53	Adsorption of amphiphilic polysaccharides onto polystyrene latex particles. <i>Polymer</i> , 2005, 46, 3700-3707.	1.8	21
54	Unusual rheological properties of a new associative polysaccharide in salt media. <i>Carbohydrate Polymers</i> , 2009, 77, 743-749.	5.1	21

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55	Relationship between potato starch isolation methods and kinetic parameters of hydrolysis by free and immobilised α -amylase on alginate (from <i>Laminaria digitata</i> algae). <i>Journal of Food Composition and Analysis</i> , 2009, 22, 563-570.	1.9	20
56	Saccharide effect on the LCST property of a polyether: Influence of structure and length. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 428, 25-31.	2.3	20
57	Enzymatic cross-linking of carboxymethylpullulan grafted with ferulic acid. <i>Carbohydrate Polymers</i> , 2016, 151, 78-87.	5.1	20
58	Biomimetic hydrogel by enzymatic crosslinking of pullulan grafted with ferulic acid. <i>Carbohydrate Polymers</i> , 2020, 250, 116967.	5.1	20
59	Association states of multisensitive smart polysaccharide-block-polyetheramine copolymers. <i>Carbohydrate Polymers</i> , 2013, 95, 41-49.	5.1	19
60	Molecular Size Characterization and Kinetics Studies on Hydrolysis of Pullulan by Pullulanase in an Entangled Alginate Medium. <i>Biomacromolecules</i> , 2013, 14, 2234-2241.	2.6	19
61	Formation of polyelectrolyte complexes with diethylaminoethyl dextran: Charge ratio and molar mass effect. <i>Carbohydrate Polymers</i> , 2014, 113, 217-224.	5.1	19
62	Novel cationic and amphiphilic pullulan derivatives I: Synthesis and characterization. <i>European Polymer Journal</i> , 2007, 43, 4940-4950.	2.6	18
63	Curdlan microspheres. Synthesis, characterization and interaction with proteins (enzymes, vaccines). <i>International Journal of Biological Macromolecules</i> , 2009, 44, 215-221.	3.6	18
64	Water Retention Capacity of Polysaccharides from Prickly Pear Nopals of <i>Opuntia Ficus Indica</i> and <i>Opuntia Litoralis</i> : Physical-Chemical Approach. <i>Journal of Polymers and the Environment</i> , 2010, 18, 451-458.	2.4	18
65	Novel cationic and amphiphilic pullulan derivatives II: pH dependant physicochemical properties. <i>Carbohydrate Polymers</i> , 2010, 80, 123-129.	5.1	17
66	Anionic polysaccharide hydrogels with thermosensitive properties. <i>Carbohydrate Polymers</i> , 2011, 83, 52-59.	5.1	17
67	Contribution of flow field flow fractionation with on line static and dynamic light scattering to the study of hydrosoluble polyelectrolyte complexes. <i>Analytica Chimica Acta</i> , 2007, 604, 2-8.	2.6	16
68	Synthesis and physicochemical characterization of a novel ampholytic pullulan derivative with amphiphilic behavior in alkaline media. <i>Journal of Colloid and Interface Science</i> , 2007, 313, 108-116.	5.0	16
69	Effect of carboxymethyl groups on degradation of modified pullulan by pullulanase from <i>Klebsiella pneumoniae</i> . <i>Carbohydrate Polymers</i> , 2013, 93, 109-115.	5.1	15
70	Covalent immobilization of pullulanase on alginate and study of its hydrolysis of pullulan. <i>Biotechnology Progress</i> , 2015, 31, 883-889.	1.3	15
71	Carboxymethylpullulan Grafted with Aminoguaiacol: Synthesis, Characterization, and Assessment of Antibacterial and Antioxidant Properties. <i>Biomacromolecules</i> , 2017, 18, 3238-3251.	2.6	15
72	pH-dependent stability of scleroglucan borate gels. <i>Carbohydrate Polymers</i> , 2007, 69, 65-71.	5.1	14

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73	Acacia macracantha gum as a possible source of arabinogalactanâ€“protein. Carbohydrate Polymers, 2008, 72, 88-94.	5.1	14
74	Cyclodextrinâ€“anionic polysaccharide hydrogels: Synthesis, characterization, and interaction with some organic molecules (water pollutants, drugs, proteins). Journal of Applied Polymer Science, 2009, 112, 1175-1183.	1.3	13
75	Rheological Behavior and Non-enzymatic Degradation of a Sulfated Galactan from Halymenia durvillei (Halymeniales, Rhodophyta). Applied Biochemistry and Biotechnology, 2012, 167, 1303-1313.	1.4	13
76	Synthesis of lipid-b-poly(2-isopropyl-2-oxazoline) and successive study of pH- and thermo-sensitive mixed micelles by combination with lipid-b-poly(acrylic acid). Polymer Chemistry, 2014, 5, 4009.	1.9	13
77	Two Methods for One-Point Anchoring of a Linear Polysaccharide on a Gold Surface. Langmuir, 2015, 31, 254-261.	1.6	13
78	Thermo-controlled rheology of electro-assembled polyanionic polysaccharide (alginate) and polycationic thermo-sensitive polymers. Carbohydrate Polymers, 2016, 139, 67-74.	5.1	13
79	Rheological properties of modified cellulosic polymers in semi-dilute regime: Effect of salinity and temperature. , 1996, , 26-31.		12
80	Structure/rheological properties relations of crosslinked potato starch suspensions. Journal of Applied Polymer Science, 2001, 81, 2480-2489.	1.3	12
81	New Polysaccharide-based Microparticles Crosslinked with Siloxane: Interactions with Biologically Active Substances. Journal of Bioactive and Compatible Polymers, 2008, 23, 82-94.	0.8	12
82	Surfactants Synthesis Using Petroleum Fractions and Crude Oil: Application in Microemulsion Formulation. Journal of Dispersion Science and Technology, 2010, 31, 877-882.	1.3	12
83	Synthesis of pH-sensitive micelles from linseed oil using atom transfer radical polymerisation (ATRP). Polymer, 2012, 53, 4344-4352.	1.8	12
84	Alginate grafted with poly(Îµ-caprolactone): effect of enzymatic degradation on physicochemical properties. Polymer International, 2012, 61, 1456-1461.	1.6	12
85	Gd(DOTA)-grafted submicronic polysaccharide-based particles functionalized with fucoidan as potential MR contrast agent able to target human activated platelets. Carbohydrate Polymers, 2020, 245, 116457.	5.1	12
86	Fractionation and characterization of gum from . Effect of enzymatic and alkaline treatments. Carbohydrate Polymers, 2005, 62, 239-244.	5.1	11
87	New polysaccharide-based microparticles crosslinked with siloxanic units. I. Synthesis and characterization. Reactive and Functional Polymers, 2007, 67, 60-66.	2.0	11
88	Organization of â€œPullulanâ€“block-polyether copolymers at the aqueous solution/air interface. Journal of Colloid and Interface Science, 2013, 398, 134-141.	5.0	10
89	Collagen functionalized with unsaturated cyclic anhydridesâ€”interactions in solution and solid state. Biopolymers, 2014, 101, 228-236.	1.2	10
90	Thermoâ€“and pHâ€“sensitive triblock copolymers with tunable hydrophilic/hydrophobic properties. Journal of Polymer Science Part A, 2015, 53, 2606-2616.	2.5	10

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91	Synthesis of Dual-Responsive Core Cross-Linked Mixed Micelles through Thiol-Ene Addition and Subsequent Drug Release Behavior. <i>Macromolecular Chemistry and Physics</i> , 2017, 218, 1700016.	1.1	9
92	Self-assembled multifunctional core-shell highly porous metal-organic framework nanoparticles. <i>International Journal of Pharmaceutics</i> , 2020, 581, 119281.	2.6	9
93	A mild and straightforward one-pot hyaluronic acid functionalization through termination of poly(2-alkyl-2-oxazoline). <i>Polymer</i> , 2021, 230, 124059.	1.8	8
94	Polyelectrolyte complexes of hyaluronic acid and diethylaminoethyl dextran: Formation, stability and hydrophobicity. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 629, 127485.	2.3	7
95	Porous nanoparticles with engineered shells release their drug cargo in cancer cells. <i>International Journal of Pharmaceutics</i> , 2021, 610, 121230.	2.6	7
96	Thermoresponsive nanogels based on polyelectrolyte complexes between polycations and functionalized hyaluronic acid. <i>Carbohydrate Polymers</i> , 2022, 292, 119711.	5.1	6
97	Self-organization of Water Soluble and Amphiphile Crosslinked Carboxymethylpullulan. <i>Polymer Journal</i> , 2008, 40, 1132-1139.	1.3	5
98	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
99	Hyaluronic Acid Functionalization with Jeffamine® M2005: A Comparison of the Thermo-Responsiveness Properties of the Hydrogel Obtained through Two Different Synthesis Routes. <i>Gels</i> , 2021, 7, 88.	2.1	5
100	Synthesis of Chitosan Microspheres Containing Pendant Cyclodextrin Moieties and their Interaction with Biological Active Molecules. <i>Current Drug Delivery</i> , 2004, 1, 227-233.	0.8	4
101	Synthesis and evaluation of a tri-tyrosine decorated dextran MR contrast agent for vulnerable plaque detection. <i>Chemical Communications</i> , 2011, 47, 5506-5508.	2.2	4
102	Hydrolysis of pullulan by entrapped pullulanase in Ca/alginate beads. <i>Biopolymers</i> , 2014, 101, 938-944.	1.2	4
103	Thermosensitive behavior of amphiphilic triblock copolymers based on poly(acrylic acid) and poly(propylene oxide). <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 1507-1514.	2.4	4
104	Characterization of dextran particle size: How frit-inlet asymmetrical flow field-flow fractionation (FI-AF4) coupled online with dynamic light scattering (DLS) leads to enhanced size distribution. <i>Journal of Chromatography A</i> , 2021, 1653, 462404.	1.8	4
105	Thermo-responsive hydrogels from hyaluronic acid functionalized with poly(2-alkyl-2-oxazoline) copolymers with tuneable transition temperature. <i>Polymer</i> , 2022, 244, 124643.	1.8	4
106	Solvent-polymer interactions in associative polymer/aqueous media systems. <i>Macromolecular Symposia</i> , 1997, 114, 133-138.	0.4	3
107	Metastable Amphiphilic Hydrogels Based on Crosslinked Carboxymethylpullulan. <i>Polymer Journal</i> , 2008, 40, 233-240.	1.3	3
108	Scaffolds Based on Collagen, Hyaluronan and Sericin with Potential Applications as Controlled Drug Delivery System. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 1528-1533.	0.9	3

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109	Associative Polymers and Physical Gels Derived from Natural Biopolymers. Oil & Gas Science & Technology, 1997, 52, 232-234.	0.2	2
110	Impact of bio-based binders on rheological properties of aqueous alumina slurries for tape casting. Journal of the European Ceramic Society, 2021, 41, 5593-5601.	2.8	2
111	Pullulan-Based Polymer Surfactants for Vinyl Acetate Miniemulsion Polymerization: Kinetics and Colloidal Stability Investigations. Macromolecular Chemistry and Physics, 2015, 216, 1879-1887.	1.1	1
112	Effect of biopolymer addition on the formulation and properties of an oil-in-water microemulsion. Research on Chemical Intermediates, 2015, 41, 5665-5679.	1.3	1
113	Microgels Based on Carboxymethylpullulan Grafted with Ferulic Acid Obtained by Enzymatic Crosslinking in Emulsion for Drug Delivery Systems. Macromolecular Bioscience, 2021, 21, e2100165.	2.1	1
114	Metastable state of amphiphilic polysaccharide solutions. E-Polymers, 2004, 4, .	1.3	0
115	Hydrophobically controlled self-association of pH- and thermo-sensitive triblock copolymers based on poly(acrylic acid-co-tert-butyl acrylate) and poly(propylene oxide). Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1944-1949.	2.4	0
116	Functionalized polysaccharides with aminoguaiacol: a competition between associative behavior and antibacterial and antioxidant activities. Pure and Applied Chemistry, 2020, 92, 323-333.	0.9	0
117	Hydrogels Based on Polysaccharides Grafted Ferulic Acid: A Biomimetic Approach. , 2022, 7, .		0