Guillaume Pierre

List of Publications by Citations

73 papers	1,646 citations	23 h-index	39 g-index
78 ext. papers	2,109 ext. citations	5.6 avg, IF	4.92 L-index

#	Paper	IF	Citations
73	Production, extraction and characterization of microalgal and cyanobacterial exopolysaccharides. *Biotechnology Advances*, **2016**, 34, 1159-1179	17.8	216
72	Chitosan as an adhesive. *European Polymer Journal*, **2014**, 60, 198-212	5.2	144
71	TEMPO-mediated oxidation of polysaccharides: An ongoing story. *Carbohydrate Polymers*, **2017**, 165, 71-85	10.3	88
70	Structural characterization and antioxidant activity of water-soluble polysaccharides from the Tunisian brown seaweed Cystoseira compressa. *Carbohydrate Polymers*, **2018**, 198, 589-600	10.3	73
69	Antibacterial activity of a sulfated galactan extracted from the marine alga Chaetomorpha aerea against Staphylococcus aureus. *Biotechnology and Bioprocess Engineering*, **2011**, 16, 937-945	3.1	68
68	Influence of culture medium recycling on the performance of Arthrospira platensis cultures. *Algal Research*, **2015**, 10, 48-54	5	55
67	Modification of Chitosan for the Generation of Functional Derivatives. *Applied Sciences (Switzerland)*, **2019**, 9, 1321	2.6	49
66	Seasonal dynamics of extracellular polymeric substances (EPS) in surface sediments of a diatom-dominated intertidal mudflat (Marennes□Oléron, France). *Journal of Sea Research*, **2014**, 92, 26-35	1.9	48
65	New horizons in culture and valorization of red microalgae. *Biotechnology Advances*, **2019**, 37, 193-222	17.8	48
64	Bioactive Polysaccharides from Seaweeds. *Molecules*, **2020**, 25,	4.8	45
63	Extraction, characterization and gelling behavior enhancement of pectins from the cladodes of Opuntia ficus indica. *International Journal of Biological Macromolecules*, **2016**, 82, 645-52	7.9	43
62	Harvesting carbohydrate-rich Arthrospira platensis by spontaneous settling. *Bioresource Technology* , **2015**, 180, 16-21	11	37
61	What Is in Store for EPS Microalgae in the Next Decade?. *Molecules*, **2019**, 24,	4.8	35
60	Biochemical composition and changes of extracellular polysaccharides (ECPS) produced during microphytobenthic biofilm development (Marennes-Oléron, France). *Microbial Ecology*, **2012**, 63, 157-69	4.4	33
59	Structural characterization and rheological behavior of a heteroxylan extracted from Plantago notata Lagasca (Plantaginaceae) seeds. *Carbohydrate Polymers*, **2017**, 175, 96-104	10.3	33
58	Marine Bacteria versus Microalgae: Who Is the Best for Biotechnological Production of Bioactive Compounds with Antioxidant Properties and Other Biological Applications?. *Marine Drugs*, **2019**, 18,	6	29
57	Characterization and rheological behaviour analysis of the succinoglycan produced by Rhizobium radiobacter strain CAS from curd sample. *Food Hydrocolloids*, **2017**, 64, 1-8	10.6	28

56	Valorization of carob waste: Definition of a second-generation bioethanol production process. *Bioresource Technology*, **2017**, 235, 25-34	11	25
55	Dextranase immobilization on epoxy CIM( ) disk for the production of isomaltooligosaccharides from dextran. *Carbohydrate Polymers*, **2014**, 111, 707-13	10.3	25
54	Enzymatic degradation and bioactivity evaluation of C-6 oxidized chitosan. *International Journal of Biological Macromolecules*, **2013**, 60, 383-92	7.9	24
53	High-performance hydrolysis of wheat straw using cellulase and thermomechanical pretreatment. *Process Biochemistry*, **2011**, 46, 2194-2200	4.8	24
52	Rheological investigations of water-soluble polysaccharides from the Tunisian brown seaweed Cystoseira compressa. *Food Hydrocolloids*, **2020**, 103, 105631	10.6	24
51	Structural characterization of water-soluble polysaccharides from Nitraria retusa fruits and their antioxidant and hypolipidemic activities. *International Journal of Biological Macromolecules*, **2019**, 129, 422-432	7.9	23
50	Use of Anionic Polysaccharides in the Development of 3D Bioprinting Technology. *Applied Sciences (Switzerland)*, **2019**, 9, 2596	2.6	23
49	Evaluation of thermomechanical pretreatment for enzymatic hydrolysis of pure microcrystalline cellulose and cellulose from Brewers spent grain. *Journal of Cereal Science*, **2011**, 54, 305-310	3.8	23
48	Use of Alginate Extracted from Moroccan Brown Algae to Stimulate Natural Defense in Date Palm Roots. *Molecules*, **2020**, 25,	4.8	22
47	Production, characterization and biological activities of exopolysaccharides from a new cold-adapted yeast: Rhodotorula mucilaginosa sp. GUMS16. *International Journal of Biological Macromolecules*, **2020**, 151, 268-277	7.9	21
46	Bioactivity of Chitosan and Its Derivatives. *Current Organic Chemistry*, **2018**, 22, 641-667	1.7	20
45	Mediterranean semi-arid plant Astragalus armatus as a source of bioactive galactomannan. *Bioactive Carbohydrates and Dietary Fibre*, **2015**, 5, 10-18	3.4	19
44	Exopolysaccharides from Cyanobacteria: Strategies for Bioprocess Development. *Applied Sciences (Switzerland)*, **2020**, 10, 3763	2.6	19
43	Marine diatom Navicula jeffreyi from biochemical composition and physico-chemical surface properties to understanding the first step of benthic biofilm formation. *Journal of Adhesion Science and Technology*, **2014**, 28, 1739-1753	2	19
42	Structural Characterization and Biological Activities of Polysaccharides from Olive Mill Wastewater. *Applied Biochemistry and Biotechnology*, **2015**, 177, 431-45	3.2	18
41	Structural characterization and thermal behavior of a gum extracted from Ferula assa foetida L. *Carbohydrate Polymers*, **2018**, 181, 426-432	10.3	18
40	Biochemical characterization of extracellular polymeric substances extracted from an intertidal mudflat using a cation exchange resin. *Biochemical Systematics and Ecology*, **2010**, 38, 917-923	1.4	17
39	Biosourced Polysaccharide-Based Superabsorbents. *Polysaccharides*, **2020**, 1, 51-79	3	16

38	Prebiotic Activity of Poly- and Oligosaccharides Obtained from Plantago major L. Leaves. *Applied Sciences (Switzerland)*, **2020**, 10, 2648	2.6	13
37	Induction of Natural Defenses in Tomato Seedlings by Using Alginate and Oligoalginates Derivatives Extracted from Moroccan Brown Algae. *Marine Drugs*, **2020**, 18,	6	13
36	Structural features and rheological behavior of a water-soluble polysaccharide extracted from the seeds of Plantago ciliata Desf. *International Journal of Biological Macromolecules*, **2020**, 155, 1333-1341	7.9	12
35	Edifying the strategy for the finest extraction of succinoglycan from Rhizobium radiobacter strain CAS. *Applied Biological Chemistry*, **2017**, 60, 339-348	2.9	11
34	Rheological and functional properties of asafoetida gum. *International Journal of Biological Macromolecules*, **2018**, 118, 1168-1173	7.9	11
33	Extraction, Characterization, and Applications of Pectins from Plant By-Products. *Applied Sciences (Switzerland)*, **2021**, 11, 6596	2.6	11
32	Emulsion properties of Asafoetida gum: Effect of oil concentration on stability and rheological properties. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2019**, 560, 114-121	5.1	11
31	Physical and functional characterization of succinoglycan exopolysaccharide produced by Rhizobium radiobacter CAS from curd sample. *International Journal of Biological Macromolecules*, **2019**, 134, 1013-1021	7.9	10
30	Novel Antioxidant, Anti-Amylase, Anti-Inflammatory and Antinociceptive Water-Soluble Polysaccharides from the Aerial Part of. *Foods*, **2019**, 9,	4.9	9
29	Optimized endodextranase-epoxy CIM disk reactor for the continuous production of molecular weight-controlled prebiotic isomalto-oligosaccharides. *Process Biochemistry*, **2017**, 58, 105-113	4.8	8
28	Structural Features and Rheological Properties of a Sulfated Xylogalactan-Rich Fraction Isolated from Tunisian Red Seaweed Jania adhaerens. *Applied Sciences (Switzerland)*, **2020**, 10, 1655	2.6	7
27	Applications of Algal Polysaccharides and Derivatives in Therapeutic and Agricultural Fields. *Current Pharmaceutical Design*, **2019**, 25, 1187-1199	3.3	7
26	Characterization and Prospective Applications of the Exopolysaccharides Produced by. *Advanced Pharmaceutical Bulletin*, **2020**, 10, 254-263	4.5	7
25	Radical Depolymerization of Alginate Extracted from Moroccan Brown Seaweed Bifurcaria bifurcata. *Applied Sciences (Switzerland)*, **2020**, 10, 4166	2.6	6
24	Bioactive polysaccharides from microalgae **2020**, 533-571		6
23	Quality Characteristics and Functional and Antioxidant Capacities of Algae-Fortified Fish Burgers Prepared from Common Barbel (). *BioMed Research International*, **2019**, 2019, 2907542	3	5
22	Development of phenol-grafted polyglucuronic acid and its application to extrusion-based bioprinting inks. *Carbohydrate Polymers*, **2022**, 277, 118820	10.3	4
21	+ Displays Variable Susceptibility to Chitosan Treatment in Wine. *Frontiers in Microbiology*, **2020**, 11, 571967	5.7	4

20	Influence of Physicochemical Characteristics of Neem Seeds (A. Juss) on Biodiesel Production. *Biomolecules*, **2020**, 10,	5.9	4
19	Biomolecules from Microalgae and Cyanobacteria: Applications and Market Survey. *Applied Sciences (Switzerland)*, **2022**, 12, 1924	2.6	4
18	Polysaccharides and Their Derivatives as Potential Antiviral Molecules.. *Viruses*, **2022**, 14,	6.2	4
17	Innovation in Tigernut (L.) Milk Production: In Situ Hydrolysis of Starch. *Polymers*, **2020**, 12,	4.5	3
16	Lipase hydration state in the gas phase: sorption isotherm measurements and inverse gas chromatography. *Biotechnology Journal*, **2010**, 5, 1216-25	5.6	3
15	Microalgal Biomass of Industrial Interest: Methods of Characterization **2020**, 537-639		3
14	Pharmacological Investigations in Traditional Utilization of Medik. in Saharan Algeria: In Vitro Study of Anti-Inflammatory and Antihyperglycemic Activities of Water-Soluble Polysaccharides Extracted from the Seeds.. *Plants*, **2021**, 10,	4.5	3
13	Inverse Gas Chromatography with Film Cell Unit: An Attractive Alternative Method to Characterize Surface Properties of Thin Films. *Journal of Chromatographic Science*, **2015**, 53, 1233-8	1.4	2
12	Fucoidans of Moroccan Brown Seaweed as Elicitors of Natural Defenses in Date Palm Roots. *Marine Drugs*, **2020**, 18,	6	2
11	Fabrication Methods of Sustainable Hydrogels **2019**, 355-386		2
10	Biochemical Characterization of a Bifunctional Enzyme Constructed by the Fusion of a Glucuronan Lyase and a Chitinase from sp. *Life*, **2020**, 10,	3	2
9	A Novel Sulfated Glycoprotein Elicitor Extracted from the Moroccan Green Seaweed Codium decorticatum Induces Natural Defenses in Tomato. *Applied Sciences (Switzerland)*, **2022**, 12, 3643	2.6	2
8	Induction of Defense Gene Expression and the Resistance of Date Palm to f. sp. in Response to Alginate Extracted from .. *Marine Drugs*, **2022**, 20,	6	1
7	Polysaccharides and Derivatives from Africa to Address and Advance Sustainable Development and Economic Growth in the Next Decade. *Applied Sciences (Switzerland)*, **2021**, 11, 5243	2.6	1
6	Spatiotemporal variation of extracellular polymeric substances (EPS) associated with the microphytobenthos of tidal flats in the Yellow Sea. *Marine Pollution Bulletin*, **2021**, 171, 112780	6.7	1
5	Galactans and Its Applications **2015**, 753-794		0
4	An alternative method for the determination of polysaccharide cleavage enzymes activities. *Journal of Molecular Catalysis B: Enzymatic*, **2015**, 116, 166-172		
3	Food biotechnology: Innovations and challenges **2022**, 697-719		

2	Beneficial Health Potential of Algerian Polysaccharides Extracted from Plantago ciliata Desf. (Septentrional Sahara) Leaves and Seeds. *Applied Sciences (Switzerland)*, **2021**, 11, 4299	2.6
1	Ethnobotanical utilization of Alhagi maurorum Medik. in traditional recipes of Algerian Sahara Illizi Wilaya. *Euro-Mediterranean Journal for Environmental Integration*, **2021**, 6, 1	1.7