# Guillaume Pierre

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 76 papers | 2,687 citations | 185998 28 h-index | 197535 49 g-index |
| 78 all docs | 78 docs citations | 78 times ranked | 3273 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Production, extraction and characterization of microalgal and cyanobacterial exopolysaccharides. Biotechnology Advances, 2016, 34, 1159-1179. | 6.0 | 310 |
| 2 | Chitosan as an adhesive. European Polymer Journal, 2014, 60, 198-212. | 2.6 | 193 |
| 3 | TEMPO-mediated oxidation of polysaccharides: An ongoing story. Carbohydrate Polymers, 2017, 165, 71-85. | 5.1 | 122 |
| 4 | Bioactive Polysaccharides from Seaweeds. Molecules, 2020, 25, 3152. | 1.7 | 106 |
| 5 | Structural characterization and antioxidant activity of water-soluble polysaccharides from the Tunisian brown seaweed Cystoseira compressa. Carbohydrate Polymers, 2018, 198, 589-600. | 5.1 | 105 |
| 6 | Modification of Chitosan for the Generation of Functional Derivatives. Applied Sciences (Switzerland), 2019, 9, 1321. | 1.3 | 102 |
| 7 | New horizons in culture and valorization of red microalgae. Biotechnology Advances, 2019, 37, 193-222. | 6.0 | 85 |
| 8 | Antibacterial activity of a sulfated galactan extracted from the marine alga Chaetomorpha aerea against Staphylococcus aureus. Biotechnology and Bioprocess Engineering, 2011, 16, 937-945. | 1.4 | 77 |
| 9 | Influence of culture medium recycling on the performance of Arthrospira platensis cultures. Algal Research, 2015, 10, 48-54. | 2.4 | 74 |
| 10 | Seasonal dynamics of extracellular polymeric substances (EPS) in surface sediments of a diatom-dominated intertidal mudflat (Marennesâ€“OlÃ©ron, France). Journal of Sea Research, 2014, 92, 26-35. | 0.6 | 64 |
| 11 | What Is in Store for EPS Microalgae in the Next Decade?. Molecules, 2019, 24, 4296. | 1.7 | 64 |
| 12 | Extraction, characterization and gelling behavior enhancement of pectins from the cladodes of Opuntia ficus indica. International Journal of Biological Macromolecules, 2016, 82, 645-652. | 3.6 | 57 |
| 13 | Extraction, Characterization, and Applications of Pectins from Plant By-Products. Applied Sciences (Switzerland), 2021, 11, 6596. | 1.3 | 57 |
| 14 | Biomolecules from Microalgae and Cyanobacteria: Applications and Market Survey. Applied Sciences (Switzerland), 2022, 12, 1924. | 1.3 | 56 |
| 15 | Marine Bacteria versus Microalgae: Who Is the Best for Biotechnological Production of Bioactive Compounds with Antioxidant Properties and Other Biological Applications?. Marine Drugs, 2020, 18, 28. | 2.2 | 54 |
| 16 | Exopolysaccharides from Cyanobacteria: Strategies for Bioprocess Development. Applied Sciences (Switzerland), 2020, 10, 3763. | 1.3 | 52 |
| 17 | Rheological investigations of water-soluble polysaccharides from the Tunisian brown seaweed Cystoseira compressa. Food Hydrocolloids, 2020, 103, 105631. | 5.6 | 47 |
| 18 | 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. | 3.6 | 46 |

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|---|---|---|---|
| 19 | Biochemical Composition and Changes of Extracellular Polysaccharides (ECPS) Produced during Microphytobenthic Biofilm Development (Marennes-OlÃ©ron, France). Microbial Ecology, 2012, 63, 157-169. | 1.4 | 43 |
| 20 | Structural characterization and rheological behavior of a heteroxylan extracted from Plantago notata Lagasca (Plantaginaceae) seeds. Carbohydrate Polymers, 2017, 175, 96-104. | 5.1 | 43 |
| 21 | Harvesting carbohydrate-rich Arthrospira platensis by spontaneous settling. Bioresource Technology, 2015, 180, 16-21. | 4.8 | 42 |
| 22 | Characterization and rheological behaviour analysis of the succinoglycan produced by Rhizobium radiobacter strain CAS from curd sample. Food Hydrocolloids, 2017, 64, 1-8. | 5.6 | 40 |
| 23 | Biosourced Polysaccharide-Based Superabsorbents. Polysaccharides, 2020, 1, 51-79. | 2.1 | 40 |
| 24 | 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. | 3.6 | 39 |
| 25 | Use of Alginate Extracted from Moroccan Brown Algae to Stimulate Natural Defense in Date Palm Roots. Molecules, 2020, 25, 720. | 1.7 | 39 |
| 26 | Valorization of carob waste: Definition of a second-generation bioethanol production process. Bioresource Technology, 2017, 235, 25-34. | 4.8 | 36 |
| 27 | Enzymatic degradation and bioactivity evaluation of C-6 oxidized chitosan. International Journal of Biological Macromolecules, 2013, 60, 383-392. | 3.6 | 31 |
| 28 | Dextranase immobilization on epoxy CIMÂ® disk for the production of isomaltooligosaccharides from dextran. Carbohydrate Polymers, 2014, 111, 707-713. | 5.1 | 31 |
| 29 | High-performance hydrolysis of wheat straw using cellulase and thermomechanical pretreatment. Process Biochemistry, 2011, 46, 2194-2200. | 1.8 | 29 |
| 30 | Marine diatomNavicula jeffreyifrom 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. | 1.4 | 28 |
| 31 | Polysaccharides and Their Derivatives as Potential Antiviral Molecules. Viruses, 2022, 14, 426. | 1.5 | 27 |
| 32 | Mediterranean semi-arid plant Astragalus armatus as a source of bioactive galactomannan. Bioactive Carbohydrates and Dietary Fibre, 2015, 5, 10-18. | 1.5 | 25 |
| 33 | Structural characterization and thermal behavior of a gum extracted from Ferula assa foetida L.. Carbohydrate Polymers, 2018, 181, 426-432. | 5.1 | 25 |
| 34 | Use of Anionic Polysaccharides in the Development of 3D Bioprinting Technology. Applied Sciences (Switzerland), 2019, 9, 2596. | 1.3 | 25 |
| 35 | Induction of Natural Defenses in Tomato Seedlings by Using Alginate and Oligoalginates Derivatives Extracted from Moroccan Brown Algae. Marine Drugs, 2020, 18, 521. | 2.2 | 25 |
| 36 | Evaluation of thermomechanical pretreatment for enzymatic hydrolysis of pure microcrystalline cellulose and cellulose from Brewersâ€™ spent grain. Journal of Cereal Science, 2011, 54, 305-310. | 1.8 | 24 |

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|---|---|---|---|
| 37 | Structural Characterization and Biological Activities of Polysaccharides from Olive Mill Wastewater. Applied Biochemistry and Biotechnology, 2015, 177, 431-445. | 1.4 | 24 |
| 38 | Physical and functional characterization of succinoglycan exopolysaccharide produced by Rhizobium radiobacter CAS from curd sample. International Journal of Biological Macromolecules, 2019, 134, 1013-1021. | 3.6 | 23 |
| 39 | Bioactivity of Chitosan and Its Derivatives. Current Organic Chemistry, 2018, 22, 641-667. | 0.9 | 22 |
| 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. | 0.6 | 21 |
| 41 | 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. | 3.6 | 20 |
| 42 | 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. | 2.3 | 17 |
| 43 | Fucoidans of Moroccan Brown Seaweed as Elicitors of Natural Defenses in Date Palm Roots. Marine Drugs, 2020, 18, 596. | 2.2 | 17 |
| 44 | Radical Depolymerization of Alginate Extracted from Moroccan Brown Seaweed Bifurcaria bifurcata. Applied Sciences (Switzerland), 2020, 10, 4166. | 1.3 | 17 |
| 45 | Edifying the strategy for the finest extraction of succinoglycan from Rhizobium radiobacter strain CAS. Applied Biological Chemistry, 2017, 60, 339-348. | 0.7 | 15 |
| 46 | Rheological and functional properties of asafoetida gum. International Journal of Biological Macromolecules, 2018, 118, 1168-1173. | 3.6 | 15 |
| 47 | Quality Characteristics and Functional and Antioxidant Capacities of Algae-Fortified Fish Burgers Prepared from Common Barbel (Barbus barbus). BioMed Research International, 2019, 2019, 1-14. | 0.9 | 15 |
| 48 | Prebiotic Activity of Poly- and Oligosaccharides Obtained from Plantago major L. Leaves. Applied Sciences (Switzerland), 2020, 10, 2648. | 1.3 | 15 |
| 49 | Applications of Algal Polysaccharides and Derivatives in Therapeutic and Agricultural Fields. Current Pharmaceutical Design, 2019, 25, 1187-1199. | 0.9 | 15 |
| 50 | Structural Features and Rheological Properties of a Sulfated Xylogalactan-Rich Fraction Isolated from Tunisian Red Seaweed Jania adhaerens. Applied Sciences (Switzerland), 2020, 10, 1655. | 1.3 | 14 |
| 51 | Influence of Physicochemical Characteristics of Neem Seeds (Azadirachta indica A. Juss) on Biodiesel Production. Biomolecules, 2020, 10, 616. | 1.8 | 13 |
| 52 | Characterization and Prospective Applications of the Exopolysaccharides Produced by Rhodosporidium babjevae. Advanced Pharmaceutical Bulletin, 2020, 10, 254-263. | 0.6 | 13 |
| 53 | Novel Antioxidant, Anti-Î±-Amylase, Anti-Inflammatory and Antinociceptive Water-Soluble Polysaccharides from the Aerial Part of Nitraria retusa. Foods, 2020, 9, 28. | 1.9 | 12 |
| 54 | Bioactive polysaccharides from microalgae. , 2020, , 533-571. | | 12 |

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|---|---|---|---|
| 55 | Innovation in Tigernut (Cyperus Esculentus L.) Milk Production: In Situ Hydrolysis of Starch. Polymers, 2020, 12, 1404. | 2.0 | 12 |
| 56 | Optimized endodextranase-epoxy CIM Â® disk reactor for the continuous production of molecular weight-controlled prebiotic isomalto-oligosaccharides. Process Biochemistry, 2017, 58, 105-113. | 1.8 | 11 |
| 57 | +Brettanomyces bruxellensis Displays Variable Susceptibility to Chitosan Treatment in Wine. Frontiers in Microbiology, 2020, 11, 571067. | 1.5 | 11 |
| 58 | Development of phenol-grafted polyglucuronic acid and its application to extrusion-based bioprinting inks. Carbohydrate Polymers, 2022, 277, 118820. | 5.1 | 10 |
| 59 | Exopolysaccharide from the yeast Papiliotrema terrestris PT22AV for skin wound healing. Journal of Advanced Research, 2023, 46, 61-74. | 4.4 | 10 |
| 60 | A Novel Sulfated Glycoprotein Elicitor Extracted from the Moroccan Green Seaweed Codium decorticatum Induces Natural Defenses in Tomato. Applied Sciences (Switzerland), 2022, 12, 3643. | 1.3 | 9 |
| 61 | Biochemical Characterization of a Bifunctional Enzyme Constructed by the Fusion of a Glucuronan Lyase and a Chitinase from Trichoderma sp.. Life, 2020, 10, 234. | 1.1 | 7 |
| 62 | Inverse Gas Chromatography with Film Cell Unit: An Attractive Alternative Method to Characterize Surface Properties of Thin Films. Journal of Chromatographic Science, 2015, 53, 1233-1238. | 0.7 | 6 |
| 63 | Induction of Defense Gene Expression and the Resistance of Date Palm to Fusarium oxysporum f. sp. Albedinis in Response to Alginate Extracted from Bifurcaria bifurcata. Marine Drugs, 2022, 20, 88. | 2.2 | 6 |
| 64 | Pharmacological Investigations in Traditional Utilization of Alhagi maurorum Medik. in Saharan Algeria: In Vitro Study of Anti-Inflammatory and Antihyperglycemic Activities of Water-Soluble Polysaccharides Extracted from the Seeds. Plants, 2021, 10, 2658. | 1.6 | 6 |
| 65 | Spatiotemporal variation of extracellular polymeric substances (EPS) associated with the microphytobenthos of tidal flats in the Yellow Sea. Marine Pollution Bulletin, 2021, 171, 112780. | 2.3 | 5 |
| 66 | Fabrication Methods of Sustainable Hydrogels. , 2019, , 355-386. | | 5 |
| 67 | Microalgal Biomass of Industrial Interest: Methods of Characterization. , 2020, , 537-639. | | 4 |
| 68 | Food biotechnology: Innovations and challenges. , 2022, , 697-719. | | 4 |
| 69 | Influence of the sulfate content of the exopolysaccharides from Porphyridium sordidum on their elicitor activities on date palm vitroplants. Plant Physiology and Biochemistry, 2022, 186, 99-106. | 2.8 | 4 |
| 70 | Lipase hydration state in the gas phase: Sorption isotherm measurements and inverse gas chromatography. Biotechnology Journal, 2010, 5, 1216-1225. | 1.8 | 3 |
| 71 | Polysaccharides and Derivatives from Africa to Address and Advance Sustainable Development and Economic Growth in the Next Decade. Applied Sciences (Switzerland), 2021, 11, 5243. | 1.3 | 3 |
| 72 | Bioconversion of the Brown Tunisian Seaweed Halopteris scoparia: Application to Energy. Energies, 2022, 15, 4342. | 1.6 | 3 |

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|---|---|---|---|
| 73 | Beneficial Health Potential of Algerian Polysaccharides Extracted from Plantago ciliata Desf. (Septentrional Sahara) Leaves and Seeds. Applied Sciences (Switzerland), 2021, 11, 4299. | 1.3 | 2 |
| 74 | Galactans and Its Applications. , 2015, , 753-794. | | 2 |
| 75 | Ethnobotanical utilization of Alhagi maurorum Medik. in traditional recipes of Algerian Sahara Illizi Wilaya. Euro-Mediterranean Journal for Environmental Integration, 2021, 6, 1. | 0.6 | 1 |
| 76 | An alternative method for the determination of polysaccharide cleavage enzymes activities. Journal of Molecular Catalysis B: Enzymatic, 2015, 116, 166-172. | 1.8 | 0 |