# Pierre BÃ©guin

List of Publications by Year
in descending order



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|---|---|---|---|
| 91 papers | 7,330 citations | 53794 45 h-index | 54911 84 g-index |
| 91 all docs | 91 docs citations | 91 times ranked | 3647 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The biological degradation of cellulose. FEMS Microbiology Reviews, 1994, 13, 25-58. | 8.6 | 1,137 |
| 2 | Molecular Biology of Cellulose Degradation. Annual Review of Microbiology, 1990, 44, 219-248. | 7.3 | 522 |
| 3 | Detection of cellulase activity in polyacrylamide gels using Congo red-stained agar replicas. Analytical Biochemistry, 1983, 131, 333-336. | 2.4 | 279 |
| 4 | Three-dimensional structure of a thermostable bacterial cellulase. Nature, 1992, 357, 89-91. | 27.8 | 245 |
| 5 | Nucleotide sequence and deletion analysis of the xylanase gene (xynZ) of Clostridium thermocellum. Journal of Bacteriology, 1988, 170, 4582-4588. | 2.2 | 202 |
| 6 | The Cellulosome: An Exocellular, Multiprotein Complex Specialized in Cellulose Degradation. Critical Reviews in Biochemistry and Molecular Biology, 1996, 31, 201-236. | 5.2 | 193 |
| 7 | Stereoselective hydrolysis catalyzed by related beta-1,4-glucanases and beta-1,4-xylanases.. Journal of Biological Chemistry, 1992, 267, 12559-12561. | 3.4 | 193 |
| 8 | Sequence of a cellulase gene of the thermophilic bacterium Clostridium thermocellum. Journal of Bacteriology, 1985, 162, 102-105. | 2.2 | 187 |
| 9 | OlpB, a new outer layer protein of Clostridium thermocellum, and binding of its S-layer-like domains to components of the cell envelope. Journal of Bacteriology, 1995, 177, 2451-2459. | 2.2 | 164 |
| 10 | Interaction of the duplicated segment carried byClostridium thermocellumcellulases with cellulosome components. FEBS Letters, 1991, 291, 185-188. | 2.8 | 152 |
| 11 | Organization of a Clostridium thermocellum gene cluster encoding the cellulosomal scaffolding protein CipA and a protein possibly involved in attachment of the cellulosome to the cell surface. Journal of Bacteriology, 1993, 175, 1891-1899. | 2.2 | 152 |
| 12 | A common protein fold and similar active site in two distinct families of Î²-glycanases. Nature Structural Biology, 1995, 2, 569-576. | 9.7 | 149 |
| 13 | Nucleotide sequence of the cellulase genecelDencoding endoglucanase D ofClostridium thermocellum. Nucleic Acids Research, 1986, 14, 8605-8612. | 14.5 | 142 |
| 14 | A new type of cohesin domain that specifically binds the dockerin domain of the Clostridium thermocellum cellulosome-integrating protein CipA. Journal of Bacteriology, 1996, 178, 3077-3084. | 2.2 | 137 |
| 15 | Atomic (0.94 Ã…) resolution structure of an inverting glycosidase in complex with substrate. Journal of Molecular Biology, 2002, 316, 1061-1069. | 4.2 | 132 |
| 16 | Calcium-binding affinity and calcium-enhanced activity of Clostridium thermocellum endoglucanase D. Biochemical Journal, 1990, 265, 261-265. | 3.7 | 117 |
| 17 | Sequence of the cellulase gene ofClostridium thermoceltumcoding for endoglucanase B. Nucleic Acids Research, 1986, 14, 1791-1799. | 14.5 | 111 |
| 18 | Recognition specificity of the duplicated segments present in Clostridium thermocellum endoglucanase CelD and in the cellulosome-integrating protein CipA. Journal of Bacteriology, 1994, 176, 2822-2827. | 2.2 | 111 |

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| 19 | High activity of inclusion bodies formed in Escherichia coli overproducing Clostridium thermocellum endoglucanase D. FEBS Letters, 1991, 282, 205-208. | 2.8 | 102 |
| 20 | V. Functions of S-layers. FEMS Microbiology Reviews, 1997, 20, 99-149. | 8.6 | 102 |
| 21 | A catalogue of Clostridium thermocellum endoglucanase, Î²-glucosidase and xylanase genes cloned in Escherichia coli. FEMS Microbiology Letters, 1988, 51, 231-236. | 1.8 | 100 |
| 22 | Purification of Clostridium thermocellum xylanase Z expressed in Escherichia coli and identification of the corresponding product in the culture medium of C. thermocellum. Journal of Bacteriology, 1988, 170, 4576-4581. | 2.2 | 95 |
| 23 | The crystal structure of a type I cohesin domain at 1.7 Ã... resolution 1 1Edited by D. Rees. Journal of Molecular Biology, 1997, 273, 701-713. | 4.2 | 92 |
| 24 | Cloning of a Genetically Unstable Cytochrome P-450 Gene Cluster Involved in Degradation of the Pollutant Ethyl tert -Butyl Ether by Rhodococcus ruber. Journal of Bacteriology, 2001, 183, 6551-6557. | 2.2 | 91 |
| 25 | Characterization and subcellular localization of the Clostridium thermocellum scaffoldin dockerin binding protein SdbA. Journal of Bacteriology, 1997, 179, 2519-2523. | 2.2 | 87 |
| 26 | Nucleotide sequence and deletion analysis of the cellulase-encoding gene celH of Clostridium thermocellum. Gene, 1990, 89, 61-67. | 2.2 | 85 |
| 27 | Subcellular localization of Clostridium thermocellum ORF3p, a protein carrying a receptor for the docking sequence borne by the catalytic components of the cellulosome. Journal of Bacteriology, 1994, 176, 2828-2834. | 2.2 | 83 |
| 28 | Enhanced Cellulose Fermentation by an Asporogenous and Ethanol-Tolerant Mutant of Clostridium thermocellum. Applied and Environmental Microbiology, 1989, 55, 207-211. | 3.1 | 81 |
| 29 | Characterization of Two Cel (Cellulose Degradation) Genes of Clostridium Thermocellum Coding for Endoglucanases. Nature Biotechnology, 1983, 1, 589-594. | 17.5 | 80 |
| 30 | Purification and properties of the endoglucanase C of Clostridium thermocellum produced in Escherichia coli. Biochimie, 1986, 68, 687-695. | 2.6 | 74 |
| 31 | Properties conferred on Clostridium thermocellum endoglucanase CelC by grafting the duplicated segment of endoglucanase CelD. Protein Engineering, Design and Selection, 1993, 6, 947-952. | 2.1 | 73 |
| 32 | Distinct Affinity of Binding Sites for S-Layer Homologous Domains in Clostridium thermocellum and Bacillus anthracis Cell Envelopes. Journal of Bacteriology, 1999, 181, 2455-2458. | 2.2 | 73 |
| 33 | Involvement of separate domains of the cellulosomal protein S1 ofClostridium thermocellumin binding to cellulose and in anchoring of catalytic subunits to the cellulosome. FEBS Letters, 1992, 304, 89-92. | 2.8 | 71 |
| 34 | Duplicated Dockerin Subdomains ofClostridium thermocellumEndoglucanase CelD Bind to a Cohesin Domain of the Scaffolding Protein CipA with Distinct Thermodynamic Parameters and a Negative Cooperativityâ€. Biochemistry, 2002, 41, 2106-2114. | 2.5 | 70 |
| 35 | Identification of the endoglucanase encoded by the celB gene of Clostridium thermocellum. Biochimie, 1983, 65, 495-500. | 2.6 | 69 |
| 36 | Site-directed mutagenesis of essential carboxylic residues in Clostridium thermocellum endoglucanase CelD.. Journal of Biological Chemistry, 1992, 267, 4472-4478. | 3.4 | 65 |

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| 37 | Transcription of Clostridium thermocellum endoglucanase genes celF and celD. Journal of Bacteriology, 1991, 173, 80-85. | 2.2 | 62 |
| 38 | The cellulosome of Clostridium thermocellum. Biochemical Society Transactions, 1998, 26, 178-184. | 3.4 | 59 |
| 39 | Purification and Partial Characterization of Three Extracellular from Cellulomunas sp.. FEBS Journal, 1978, 87, 525-531. | 0.2 | 58 |
| 40 | Site-directed mutagenesis of essential carboxylic residues in Clostridium thermocellum endoglucanase CelD. Journal of Biological Chemistry, 1992, 267, 4472-8. | 3.4 | 52 |
| 41 | Crystal structure and functional mapping of human ASMT, the last enzyme of the melatonin synthesis pathway. Journal of Pineal Research, 2013, 54, 46-57. | 7.4 | 51 |
| 42 | Isolation, Crystallization and Properties of a New Cellulase of Clostridium thermocellum Overproduced in Escherichia coli. Nature Biotechnology, 1986, 4, 896-900. | 17.5 | 50 |
| 43 | Nucleotide sequence of the cellulase gene celF of Clostridium thermocellum. Research in Microbiology, 1991, 142, 927-936. | 2.1 | 50 |
| 44 | Interaction between Clostridium thermocellum endoglucanase CelD and polypeptides derived from the cellulosome-integrating protein CipA: stoichiometry and cellulolytic activity of the complexes. Biochemical Journal, 1997, 326, 617-624. | 3.7 | 49 |
| 45 | Cohesin-Dockerin Interactions within and between Clostridium josui and Clostridium thermocellum. Journal of Biological Chemistry, 2004, 279, 9867-9874. | 3.4 | 49 |
| 46 | Free and Cellulose-bound Cellulases in a Cellulomonas Species. Journal of General Microbiology, 1977, 101, 191-196. | 2.3 | 48 |
| 47 | Identification of a histidyl residue in the active center of endoglucanase D from Clostridium thermocellum. Journal of Biological Chemistry, 1991, 266, 10313-10318. | 3.4 | 46 |
| 48 | Structural and Functional Analysis of the Metal-binding Sites of Clostridium thermocellum Endoglucanase CelD. Journal of Biological Chemistry, 1995, 270, 9757-9762. | 3.4 | 45 |
| 49 | Expression in Escherichia coli of the Cellulomonas fimi Structural Gene for Endoglucanase B. Applied and Environmental Microbiology, 1988, 54, 518-523. | 3.1 | 44 |
| 50 | Identification of a histidyl residue in the active center of endoglucanase D from Clostridium thermocellum. Journal of Biological Chemistry, 1991, 266, 10313-8. | 3.4 | 44 |
| 51 | Site-induced mutagenesis of conserved residues of Clostridium Thermocellum endoglucanase celc. Biochemical and Biophysical Research Communications, 1992, 189, 807-812. | 2.1 | 42 |
| 52 | Mapping by Site-Directed Mutagenesis of the Region Responsible for Cohesinâ"Dockerin Interaction on the Surface of the Seventh Cohesin Domain ofClostridium thermocellumCipAâ€. Biochemistry, 2002, 41, 2115-2119. | 2.5 | 42 |
| 53 | Nucleotide sequence of the celG gene of Clostridium thermocellum and characterization of its product, endoglucanase CelG. Journal of Bacteriology, 1993, 175, 3353-3360. | 2.2 | 41 |
| 54 | Structures of Intermediates along the Catalytic Cycle of Terminal Deoxynucleotidyltransferase: Dynamical Aspects of the Two-Metal Ion Mechanism. Journal of Molecular Biology, 2013, 425, 4334-4352. | 4.2 | 41 |

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| 55 | Mapping of mRNA encoding endoglucanase A from Clostridium thermocellum. Molecular Genetics and Genomics, 1986, 202, 251-254. | 2.4 | 39 |
| 56 | Cloning of Cellulase Genes. Critical Reviews in Biotechnology, 1987, 6, 129-162. | 9.0 | 37 |
| 57 | The Mr 80,000 common forms of neurophysin and vasopressin from bovine neurohypophysis have corticotropin- and Â-endorphin-like sequences and liberate by proteolysis biologically active corticotropin. Proceedings of the National Academy of Sciences of the United States of America, 1981, 78, 6086-6090. | 7.1 | 36 |
| 58 | Cellulase and hemicellulase genes ofClostridium thermocellumfrom five independent collections contain few overlaps and are widely scattered across the chromosome. FEMS Microbiology Letters, 1998, 161, 209-215. | 1.8 | 35 |
| 59 | Cellulose degradation byClostridium thermocellum: From manure to molecular biology. FEMS Microbiology Letters, 1992, 100, 523-528. | 1.8 | 34 |
| 60 | The biological degradation of cellulose. FEMS Microbiology Reviews, 1994, 13, 25-58. | 8.6 | 33 |
| 61 | Hybrid enzymes. Current Opinion in Biotechnology, 1999, 10, 336-340. | 6.6 | 32 |
| 62 | Cloning of a Clostridium thermocellum DNA fragment encoding polypeptides that bind the catalytic components of the cellulosome. FEMS Microbiology Letters, 1992, 94, 165-170. | 1.8 | 31 |
| 63 | Cellulose degradation by Clostridium thermocellum: From manure to molecular biology. FEMS Microbiology Letters, 1992, 100, 523-528. | 1.8 | 29 |
| 64 | A highly divergent archaeo-eukaryotic primase from the Thermococcus nautilus plasmid, pTN2. Nucleic Acids Research, 2014, 42, 3707-3719. | 14.5 | 25 |
| 65 | Molecular cloning of a gene for a thermostable Î²-glucosidase from Clostridium thermocellum into Escherichia coli. Enzyme and Microbial Technology, 1988, 10, 9-13. | 3.2 | 24 |
| 66 | Enhanced Basophil Reactivities during Severe Malaria and Their Relationship with the Plasmodium falciparum Histamine-Releasing Factor Translationally Controlled Tumor Protein. Infection and Immunity, 2012, 80, 2963-2970. | 2.2 | 23 |
| 67 | Crystallization and preliminary X-ray diffraction study of an endoglucanase from Clostridium thermocellum. Journal of Molecular Biology, 1986, 189, 249-250. | 4.2 | 22 |
| 68 | Genes Involved in the Degradation of Ether Fuels by Bacteria of the Mycobacterium/Rhodococcus Group. Oil and Gas Science and Technology, 2003, 58, 489-495. | 1.4 | 22 |
| 69 | Interaction between a Type-II Dockerin Domain and a Type-II Cohesin Domain fromClostridium thermocellumCellulosome. Bioscience, Biotechnology and Biochemistry, 2004, 68, 924-926. | 1.3 | 22 |
| 70 | Structural basis for a novel mechanism of <scp>DNA</scp> bridging and alignment in eukaryotic <scp>DSB DNA</scp> repair. EMBO Journal, 2015, 34, 1126-1142. | 7.8 | 21 |
| 71 | Cell-free synthesis of glial fibrillary acidic protein. Neurochemical Research, 1980, 5, 513-521. | 3.3 | 19 |
| 72 | Characterization of the 80,000 molecular weight form of neurophysin isolated from bovine neurohypophysis. Journal of Biological Chemistry, 1981, 256, 9289-94. | 3.4 | 19 |

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| 73 | Identification of Conserved Amino Acid Residues of the Salmonella Ïƒ S Chaperone Crl Involved in Crl-Ïƒ S Interactions. Journal of Bacteriology, 2010, 192, 1075-1087. | 2.2 | 16 |
| 74 | Synergism between the cellulosome-integrating protein CipA and endoglucanase CelD of Clostridium thermocellum. Journal of Biotechnology, 1997, 57, 39-47. | 3.8 | 15 |
| 75 | Production of soluble, active acetyl serotonin methyl transferase in Leishmania tarentolae. Protein Expression and Purification, 2011, 75, 114-118. | 1.3 | 13 |
| 76 | 1H, 13C, 15N NMR sequence-specific resonance assignment of a Clostridium thermocellum type II cohesin module. Journal of Biomolecular NMR, 2002, 23, 73-74. | 2.8 | 12 |
| 77 | Time- and temperature-dependent acetylation of the chemokine RANTES produced in recombinant Escherichia coli. Protein Expression and Purification, 2007, 55, 9-16. | 1.3 | 12 |
| 78 | Crystallization and Preliminary Diffraction Analysis of the Catalytic Domain of Xylanase Z from Clostridium thermocellum. Journal of Molecular Biology, 1994, 235, 1348-1350. | 4.2 | 11 |
| 79 | Synergistic template-free synthesis of dsDNA by Thermococcus nautili primase PolpTN2, DNA polymerase PolB, and pTN2 helicase. Extremophiles, 2015, 19, 69-76. | 2.3 | 10 |
| 80 | Crystalline endoglucanase D of Clostridium thermocellum overproduced in Escherichia coli. Methods in Enzymology, 1988, 160, 355-362. | 1.0 | 8 |
| 81 | Multiple crystal forms of endoglucanase CelD: Signal peptide residues modulate lattice formation. Journal of Molecular Biology, 1995, 248, 225-232. | 4.2 | 7 |
| 82 | Heterologous hybridization of bacterial DNA to the endoglucanases A and B structural genes celA and celB of Clostridium thermocellum. Annales De L'Institut Pasteur Microbiologie, 1985, 136, 113-124. | 0.6 | 6 |
| 83 | Subcloning of a dna fragment encoding a single cohesin domain of the clostridium thermocellum cellulosomeâ€integrating protein cipA: Purification, crystallization, and preliminary diffraction analysis of the encoded polypeptide. Protein Science, 1996, 5, 1192-1194. | 7.6 | 6 |
| 84 | Comparison of two scaffolding polypeptides for the integration of different proteins in synthetic complexes derived from the Clostridium thermocellum cellulosome. Enzyme and Microbial Technology, 1998, 22, 588-593. | 3.2 | 5 |
| 85 | Crystallization of a family 8 cellulase from Clostridium thermocellum. Proteins: Structure, Function and Bioinformatics, 1996, 25, 134-136. | 2.6 | 5 |
| 86 | The SF1 helicase encoded by the archaeal plasmid pTN2 of Thermococcus nautili. Extremophiles, 2014, 18, 779-787. | 2.3 | 3 |
| 87 | Cellulase and hemicellulase genes of Clostridium thermocellum from five independent collections contain few overlaps and are widely scattered across the chromosome. FEMS Microbiology Letters, 1998, 161, 209-215. | 1.8 | 3 |
| 88 | Genes and Proteins Involved in Cellulose and Xylan Degradation by Clostridium thermocellum. Brock/Springer Series in Contemporary Bioscience, 1993, , 412-422. | 0.3 | 2 |
| 89 | Identification of N - and C -terminal corticotropin peptides in the M r 80 000 form of neurophysin. FEBS Letters, 1982, 147, 120-124. | 2.8 | 1 |
| 90 | Crystallization of a family 8 cellulase from Clostridium thermocellum. Proteins: Structure, Function and Bioinformatics, 1996, 25, 134-136. | 2.6 | 1 |

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| 91 | Cloning and expression of twoClostridium thermocellum endoglucanase genes inEscherichia coli. Applied Biochemistry and Biotechnology, 1984, 9, 349-350. | 2.9 | 0 |