Alexander V Gusakov

List of Publications by Year
in descending order

83 papers	3,363 citations	159358 30 h-index	149479 56 g-index
85 all docs	85 docs citations	85 times ranked	2732 citing authors

#	Article	IF	Citations
1	Purification and characterization of two forms of the homologously expressed lytic polysaccharide monooxygenase (PvLPMO9A) from Penicillium verruculosum. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2020, 1868, 140297.	1.1	20
2	Additional sequence and structural characterization of an endo-processive GH74 xyloglucanase from Myceliophthora thermophila and the revision of the EC 3.2.1.155 entry. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129511.	1.1	4
3	Molecular dynamics simulations of two GH74 endo-processive xyloglucanases and the mutated variants to understand better the mechanism of the enzyme action. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129721.	1.1	1
4	Critical effect of proline on thermostability of endoglucanase II from Penicillium verruculosum. Biochemical Engineering Journal, 2019, 152, 107395.	1.8	25
5	Enhancement of the enzymatic cellulose saccharification by Penicillium verruculosum multienzyme cocktails containing homologously overexpressed lytic polysaccharide monooxygenase. Molecular Biology Reports, 2019, 46, 2363-2370.	1.0	20
6	Disulfide Bond Engineering of an Endoglucanase from Penicillium verruculosum to Improve Its Thermostability. International Journal of Molecular Sciences, 2019, 20, 1602.	1.8	45
7	Protein engineering of GH10 family xylanases for gaining a resistance to cereal proteinaceous inhibitors. Biocatalysis and Agricultural Biotechnology, 2019, 17, 690-695.	1.5	13
8	Properties of a recombinant GH49 family dextranase heterologously expressed in two recipient strains of Penicillium species. Biochimie, 2019, 157, 123-130.	1.3	20
9	Complex effect of lignocellulosic biomass pretreatment with 1-butyl-3-methylimidazolium chloride ionic liquid on various aspects of ethanol and fumaric acid production by immobilized cells within SSF. Bioresource Technology, 2018, 250, 429-438.	4.8	44
10	Enzymatic hydrolysis of cellulosic materials using synthetic mixtures of purified cellulases bioengineered at N-glycosylation sites. 3 Biotech, 2018, 8, 396.	1.1	12
11	Properties of Chimeric Polysaccharide Monooxygenase with an Attached Cellulose Binding Module and Its Use in the Hydrolysis of Cellulose-Containing Materials in the Composition of Cellulase Complexes. Catalysis in Industry, 2018, 10, 152-158.	0.3	2
12	Conformational â€œFingerprintâ€•of the Angiotensin-Converting Enzyme. Russian Journal of Bioorganic Chemistry, 2018, 44, 52-63.	0.3	7
13	Enzymatic Hydrolysis of Cellulose Using Mixes of Mutant Forms of Cellulases from Penicillium verruculosum. Moscow University Chemistry Bulletin, 2018, 73, 58-62.	0.2	5
14	Structural investigation of endoglucanase 2 from the filamentous fungus Penicillium verruculosum. Crystallography Reports, 2017, 62, 254-259.	0.1	1
15	Site-directed mutagenesis of GH10 xylanase A from Penicillium canescens for determining factors affecting the enzyme thermostability. International Journal of Biological Macromolecules, 2017, 104, 665-671.	3.6	31
16	Monitoring of reactions catalyzed by lytic polysaccharide monooxygenases using highly-sensitive fluorimetric assay of the oxygen consumption rate. Carbohydrate Research, 2017, 452, 156-161.	1.1	19
17	Improving the efficiency of the bioconversion of plant raw materials with mutant cellulases of Penicillium verruculosum. Catalysis in Industry, 2017, 9, 71-76.	0.3	3
18	N-Linked glycans are an important component of the processive machinery of cellobiohydrolases. Biochimie, 2017, 132, 102-108.	1.3	23

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19	Using an Inducible Promoter of a Gene Encoding Penicillium verruculosum Glucoamylase for Production of Enzyme Preparations with Enhanced Cellulase Performance. PLoS ONE, 2017, 12, e0170404.	1.1	34
20	Effect of<i>N</i>-linked glycosylation on the activity and other properties of recombinant endoglucanase IIa (Cel5A) from<i>Penicillium verruculosum</i>. Protein Engineering, Design and Selection, 2016, 29, 495-502.	1.0	28
21	Isolation of homogeneous polysaccharide monooxygenases from fungal sources and investigation of their synergism with cellulases when acting on cellulose. Biochemistry (Moscow), 2016, 81, 530-537.	0.7	27
22	<i>N</i>â€linked glycosylation of recombinant cellobiohydrolase I (Cel7A) from <i>Penicillium verruculosum</i> and its effect on the enzyme activity. Biotechnology and Bioengineering, 2016, 113, 283-291.	1.7	54
23	Comparative characterization of xylanases XylA and XylE from Penicillium canescens fungi. Moscow University Chemistry Bulletin, 2015, 70, 278-282.	0.2	10
24	Properties and N-glycosylation of recombinant endoglucanase II from Penicillium verruculosum. Moscow University Chemistry Bulletin, 2015, 70, 283-286.	0.2	10
25	Tissue Specificity of Human Angiotensin I-Converting Enzyme. PLoS ONE, 2015, 10, e0143455.	1.1	22
26	Heterologous Î²-glucosidase in a fungal cellulase system: Comparison of different methods for development of multienzyme cocktails. Process Biochemistry, 2015, 50, 1258-1263.	1.8	37
27	Glucoamylases from Penicillium verruculosum and Myceliophthora thermophila: Analysis of differences in activity against polymeric substrates based on 3D model structures of the intact enzymes. Biochimie, 2015, 110, 45-51.	1.3	7
28	Comment on â€œRevealing Natureâ€™s Cellulase Diversity: The Digestion Mechanism of <i>Caldicellulosiruptor bescii</i> CelAâ€ Science, 2014, 344, 578-578.	6.0	6
29	Homologous cloning, purification and characterization of highly active cellobiohydrolase I (Cel7A) from Penicillium canescens. Protein Expression and Purification, 2014, 103, 1-7.	0.6	22
30	N-Glycosylation patterns in two Î±-l-arabinofuranosidases from Penicillium canescens belonging to the glycoside hydrolase families 51 and 54. Carbohydrate Research, 2013, 382, 71-76.	1.1	9
31	Engineering the pH-optimum of activity of the GH12 family endoglucanase by site-directed mutagenesis. Biochimie, 2013, 95, 1704-1710.	1.3	20
32	Cellulases and hemicellulases in the 21st century race for cellulosic ethanol. Biofuels, 2013, 4, 567-569.	1.4	42
33	Comparison of Three Protein Assays for Purified Cellulases and Hemicellulases from Fungi. Open Journal of Analytical Chemistry Research, 2013, 1, 1.	0.2	5
34	Cellulases from<i>Penicillium</i>species for producing fuels from biomass. Biofuels, 2012, 3, 463-477.	1.4	78
35	Isolation and properties of recombinant inulinases from Aspergillus sp.. Biochemistry (Moscow), 2012, 77, 492-501.	0.7	14
36	RESEARCH: Development of a mature fungal technology and production platform for industrial enzymes based on a <i>Myceliophthora thermophila</i> isolate, previously known as <i>Chrysosporium lucknowense</i> C1. Industrial Biotechnology, 2011, 7, 214-223.	0.5	140

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37	Alternatives to Trichoderma reesei in biofuel production. Trends in Biotechnology, 2011, 29, 419-425.	4.9	326
38	Comparison of Two Methods for Assaying Reducing Sugars in the Determination of Carbohydrase Activities. International Journal of Analytical Chemistry, 2011, 2011, 1-4.	0.4	176
39	Mass spectrometry in the study of extracellular enzymes produced by filamentous fungi. Journal of Analytical Chemistry, 2010, 65, 1446-1461.	0.4	21
40	Cellulases of <i>Penicillium verruculosum</i>. Biotechnology Journal, 2010, 5, 871-880.	1.8	89
41	Proteinaceous inhibitors of microbial xylanases. Biochemistry (Moscow), 2010, 75, 1185-1199.	0.7	26
42	Isolation and properties of extracellular Î²-xylosidases from fungi Aspergillus japonicus and Trichoderma reesei. Biochemistry (Moscow), 2009, 74, 1002-1008.	0.7	19
43	ORIGINAL RESEARCH: Assaying sensitivity of fungal xylanases to proteinaceous inhibitors from a rye extract: Two GH10 family xylanases resistant to XIP-like inhibitors. Industrial Biotechnology, 2009, 5, 104-109.	0.5	6
44	N-Glycosylation in Chrysosporium lucknowense enzymes. Carbohydrate Research, 2008, 343, 48-55.	1.1	18
45	Comparison of properties and mode of action of six secreted xylanases from Chrysosporium lucknowense. Enzyme and Microbial Technology, 2008, 43, 56-65.	1.6	55
46	Design of highly efficient cellulase mixtures for enzymatic hydrolysis of cellulose. Biotechnology and Bioengineering, 2007, 97, 1028-1038.	1.7	203
47	Isolation and characterization of extracellular pectin lyase from Penicillium canescens. Biochemistry (Moscow), 2007, 72, 565-571.	0.7	32
48	Properties of hemicellulases of the enzyme complex from Trichoderma longibrachiatum. Applied Biochemistry and Microbiology, 2006, 42, 573-583.	0.3	10
49	New cellulases efficiently hydrolyzing lignocellulose pulp. Applied Biochemistry and Microbiology, 2006, 42, 592-597.	0.3	21
50	Use of a preparation from fungal pectin lyase in the food industry. Applied Biochemistry and Microbiology, 2006, 42, 598-602.	0.3	42
51	Evaluation of Cellulase Preparations for Hydrolysis of Hardwood Substrates. Applied Biochemistry and Biotechnology, 2006, 130, 528-545.	1.4	62
52	A lichenase-like family 12 endo-(1â†’4)-Î²-glucanase from Aspergillus japonicus: study of the substrate specificity and mode of action on Î²-glucans in comparison with other glycoside hydrolases. Carbohydrate Research, 2006, 341, 218-229.	1.1	56
53	Evaluation of Cellulase Preparations for Hydrolysis of Hardwood Substrates. , 2006, , 528-545.		2
54	Purification, cloning and characterisation of two forms of thermostable and highly active cellobiohydrolase I (Cel7A) produced by the industrial strain of Chrysosporium lucknowense. Enzyme and Microbial Technology, 2005, 36, 57-69.	1.6	77

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55	Evaluation of novel fungal cellulase preparations for ability to hydrolyze softwood substrates â€“ evidence for the role of accessory enzymes. Enzyme and Microbial Technology, 2005, 37, 175-184.	1.6	184
56	Studies of hydrolytic activity of enzyme preparations of Penicillium and Trychoderma fungi. Applied Biochemistry and Microbiology, 2005, 41, 182-184.	0.3	22
57	New Effective Method for Analysis of the Component Composition of Enzyme Complexes from Trichoderma reesei. Biochemistry (Moscow), 2005, 70, 657-663.	0.7	29
58	Cellulase Complex of the Fungus Chrysosporium lucknowense: Isolation and Characterization of Endoglucanases and Cellobiohydrolases. Biochemistry (Moscow), 2004, 69, 542-551.	0.7	51
59	Specific xyloglucanases as a new class of polysaccharide-degrading enzymes. Biochimica Et Biophysica Acta - General Subjects, 2004, 1674, 268-281.	1.1	129
60	Isolation and properties of pectinases from the fungus Aspergillus japonicus. Biochemistry (Moscow), 2003, 68, 559-569.	0.7	54
61	Isolation and Properties of Major Components of Penicillium canescens Extracellular Enzyme Complex. Biochemistry (Moscow), 2003, 68, 1200-1209.	0.7	48
62	Recombinant Endo-Â-1,4-xylanase from Penicillium canescens. Biochemistry (Moscow), 2003, 68, 1313-1319.	0.7	13
63	Viscometric method for assaying of total endodepolymerase activity of pectinases. Biochemistry (Moscow), 2002, 67, 676-682.	0.7	7
64	Study of protein adsorption on indigo particles confirms the existence of enzymeâ€“indigo interaction sites in cellulase molecules. Journal of Biotechnology, 2001, 87, 83-90.	1.9	40
65	Application of microassays for investigation of cellulase abrasive activity and backstaining. Journal of Biotechnology, 2001, 89, 233-238.	1.9	21
66	Surface hydrophobic amino acid residues in cellulase molecules as a structural factor responsible for their high denim-washing performance. Enzyme and Microbial Technology, 2000, 27, 664-671.	1.6	71
67	A Comparative Study of Different Cellulase Preparations in the Enzymatic Treatment of Cotton Fabrics. Applied Biochemistry and Biotechnology, 2000, 88, 119-126.	1.4	25
68	Detection of Major Xylanase-Containing Cellulose-Binding Domain from Penicillium verruculosumby Combination of Chromatofocusing and Limited Proteolysis. Applied Biochemistry and Biotechnology, 2000, 88, 345-352.	1.4	6
69	Interaction between indigo and adsorbed protein as a major factor causing backstaining during cellulase treatment of cotton fabrics. Applied Biochemistry and Biotechnology, 1998, 75, 279-293.	1.4	18
70	Enhancement of enzymatic cellulose hydrolysis using a novel type of bioreactor with intensive stirring induced by electromagnetic field. Applied Biochemistry and Biotechnology, 1996, 56, 141-153.	1.4	17
71	A hyperefficient process for enzymatic cellulose hydrolysis in the intensive mass transfer reactor. Biotechnology Letters, 1993, 15, 283-288.	1.1	16
72	Enzymatic saccharification of industrial and agricultural lignocellulosic wastes. Applied Biochemistry and Biotechnology, 1992, 34-35, 625-637.	1.4	22

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73	A theoretical analysis of cellulase product inhibition: Effect of cellulase binding constant, enzyme/substrate ratio, and Î²-glucosidase activity on the inhibition pattern. Biotechnology and Bioengineering, 1992, 40, 663-671.	1.7	84
74	Transglycosylation activity of cellobiohydrolase I from Trichoderma longibrachiatum on synthetic and natural substrates. Biochimica Et Biophysica Acta - General Subjects, 1991, 1073, 481-485.	1.1	15
75	Effect of structural and physico-chemical features of cellulosic substrates on the efficiency of enzymatic hydrolysis. Applied Biochemistry and Biotechnology, 1991, 30, 43-59.	1.4	184
76	Decrease in reactivity and change of physico-chemical parameters of cellulose in the course of enzymatic hydrolysis. Carbohydrate Polymers, 1989, 10, 1-14.	5.1	26
77	A Fortran Program for Evaluation of the Effectiveness Factor of Biocatalysts in the Presence of External and Internal Diffusional Limitations. Biocatalysis, 1988, 1, 301-320.	0.9	4
78	A theoretical comparison of the reactors for the enzymatic hydrolysis of cellulose. Biotechnology and Bioengineering, 1987, 29, 898-900.	1.7	10
79	Factors affecting the enzymatic hydrolysis of cellulose in batch and continuous reactors: Computer simulation and experiment. Biotechnology and Bioengineering, 1987, 29, 906-910.	1.7	33
80	Kinetics of the enzymatic hydrolysis of cellulose: 2. A mathematical model for the process in a plug-flow column reactor. Enzyme and Microbial Technology, 1985, 7, 383-388.	1.6	20
81	Kinetics of the enzymatic hydrolysis of cellulose: 1. A mathematical model for a batch reactor process. Enzyme and Microbial Technology, 1985, 7, 346-352.	1.6	61
82	A product inhibition study of cellulases from Trichoderma longibrachiatum using dyed cellulose. Journal of Biotechnology, 1985, 3, 167-174.	1.9	25
83	Kinetics and mathematical model of hydrolysis and transglycosylation catalysed by cellobiase. Enzyme and Microbial Technology, 1984, 6, 275-282.	1.6	27