Xiao-Dong Gao

List of Publications by Year
in descending order

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94 papers	1,536 citations	331670 21 h-index	377865 34 g-index
100 all docs	100 docs citations	100 times ranked	1882 citing authors

#	Article	IF	Citations
1	Alg14 Recruits Alg13 to the Cytoplasmic Face of the Endoplasmic Reticulum to Form a Novel Bipartite UDP-N-acetylglucosamine Transferase Required for the Second Step of N-Linked Glycosylation. Journal of Biological Chemistry, 2005, 280, 36254-36262.	3.4	102
2	Chitosan-Functionalized Graphene Oxide as a Potential Immunoadjuvant. Nanomaterials, 2017, 7, 59.	4.1	73
3	Physical interactions between the Alg1, Alg2, and Alg11 mannosyltransferases of the endoplasmic reticulum. Glycobiology, 2004, 14, 559-570.	2.5	70
4	Particulate Alum via Pickering Emulsion for an Enhanced COVIDâ€19 Vaccine Adjuvant. Advanced Materials, 2020, 32, e2004210.	21.0	65
5	Graphene oxide-chitosan nanocomposites for intracellular delivery of immunostimulatory CpG oligodeoxynucleotides. Materials Science and Engineering C, 2017, 73, 144-151.	7.3	63
6	Nanodelivery systems for enhancing the immunostimulatory effect of CpG oligodeoxynucleotides. Materials Science and Engineering C, 2017, 70, 935-946.	7.3	60
7	Folate-conjugated boron nitride nanospheres for targeted delivery of anticancer drug. International Journal of Nanomedicine, 2016, Volume 11, 4573-4582.	6.7	52
8	N-Glycanâ€“dependent protein folding and endoplasmic reticulum retention regulate GPI-anchor processing. Journal of Cell Biology, 2018, 217, 585-599.	5.2	51
9	Bioconversion of <scp>d</scp>-glucose to <scp>d</scp>-psicose with immobilized <scp>d</scp>-xylose isomerase and <scp>d</scp>-psicose 3-epimerase on Saccharomyces cerevisiae spores. Journal of Industrial Microbiology and Biotechnology, 2015, 42, 1117-1128.	3.0	49
10	Global mapping of glycosylation pathways in human-derived cells. Developmental Cell, 2021, 56, 1195-1209.e7.	7.0	46
11	Alg14 organizes the formation of a multiglycosyltransferase complex involved in initiation of lipid-linked oligosaccharide biosynthesis. Glycobiology, 2012, 22, 504-516.	2.5	44
12	pH-responsive charge-reversal polymer-functionalized boron nitride nanospheres for intracellular doxorubicin delivery. International Journal of Nanomedicine, 2018, Volume 13, 641-652.	6.7	43
13	Interaction between the C Termini of Alg13 and Alg14 Mediates Formation of the Active UDP-N-acetylglucosamine Transferase Complex. Journal of Biological Chemistry, 2008, 283, 32534-32541.	3.4	42
14	Recent Progress in Chemo-Enzymatic Methods for the Synthesis of N-Glycans. Frontiers in Chemistry, 2020, 8, 513.	3.6	39
15	Polyethyleneimine-functionalized boron nitride nanospheres as efficient carriers for enhancing the immunostimulatory effect of CpG oligodeoxynucleotides. International Journal of Nanomedicine, 2015, 10, 5343.	6.7	30
16	Genetic disruption of multiple Î±1,2-mannosidases generates mammalian cells producing recombinant proteins with high-mannoseâ€“type N-glycans. Journal of Biological Chemistry, 2018, 293, 5572-5584.	3.4	30
17	Reconstitution of the lipid-linked oligosaccharide pathway for assembly of high-mannose N-glycans. Nature Communications, 2019, 10, 1813.	12.8	29
18	Folate-conjugated, mesoporous silica functionalized boron nitride nanospheres for targeted delivery of doxorubicin. Materials Science and Engineering C, 2019, 96, 552-560.	7.3	29

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19	Bovine milk lactoferrin induces synthesis of the angiogenic factors VEGF and FGF2 in osteoblasts via the p44/p42 MAP kinase pathway. BioMetals, 2011, 24, 847-856.	4.1	25
20	Recent advances in the synthesis of rare sugars using DHAP-dependent aldolases. Carbohydrate Research, 2017, 452, 108-115.	2.3	24
21	One-Pot Multienzyme Synthesis of Rare Ketoses from Glycerol. Journal of Agricultural and Food Chemistry, 2020, 68, 1347-1353.	5.2	24
22	Exploiting the Lymph-Node-Amplifying Effect for Potent Systemic and Gastrointestinal Immune Responses via Polymer/Lipid Nanoparticles. ACS Nano, 2019, 13, 13809-13817.	14.6	23
23	Applied Usage of Yeast Spores as Chitosan Beads. Applied and Environmental Microbiology, 2014, 80, 5098-5105.	3.1	20
24	A knockout cell library of GPI biosynthetic genes for functional studies of GPI-anchored proteins. Communications Biology, 2021, 4, 777.	4.4	20
25	Use of Yeast Spores for Microencapsulation of Enzymes. Applied and Environmental Microbiology, 2014, 80, 4502-4510.	3.1	19
26	Genome-Wide Screening of Genes Required for Glycosylphosphatidylinositol Biosynthesis. PLoS ONE, 2015, 10, e0138553.	2.5	19
27	Alg13p, the Catalytic Subunit of the Endoplasmic Reticulum UDP-GlcNAc Glycosyltransferase, Is a Target for Proteasomal Degradation. Molecular Biology of the Cell, 2008, 19, 2169-2178.	2.1	18
28	Glycoengineering of HEK293 cells to produce high-mannose-type N-glycan structures. Journal of Biochemistry, 2019, 166, 245-258.	1.7	18
29	Calnexin mediates the maturation of GPI-anchors through ER retention. Journal of Biological Chemistry, 2020, 295, 16393-16410.	3.4	18
30	Engineering mannosylated pickering emulsions for the targeted delivery of multicomponent vaccines. Biomaterials, 2022, 280, 121313.	11.4	18
31	Quantitative study of yeast Alg1 beta-1, 4 mannosyltransferase activity, a key enzyme involved in protein N-glycosylation. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 2934-2941.	2.4	17
32	Alternative routes for synthesis of Nâ€linked glycans by Alg2 mannosyltransferase. FASEB Journal, 2018, 32, 2492-2506.	0.5	15
33	Effects of Rho1, a small GTPase on the production of recombinant glycoproteins in Saccharomyces cerevisiae. Microbial Cell Factories, 2016, 15, 179.	4.0	14
34	MON2 Guides Wntless Transport to the Golgi through Recycling Endosomes. Cell Structure and Function, 2020, 45, 77-92.	1.1	13
35	Human SND2 mediates ER targeting of GPIâ€anchored proteins with low hydrophobic GPI attachment signals. FEBS Letters, 2021, 595, 1542-1558.	2.8	13
36	Î²â€1,6â€glucan synthesisâ€associated genes are required for proper spore wall formation in <scp>Saccharomyces cerevisiae</scp>. Yeast, 2017, 34, 431-446.	1.7	12

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37	Suppression of Vps13 adaptor protein mutants reveals a central role for PI4P in regulating prospore membrane extension. PLoS Genetics, 2021, 17, e1009727.	3.5	12
38	Protein Phosphatase Type 1-Interacting Protein Ysw1 Is Involved in Proper Septin Organization and Prospore Membrane Formation during Sporulation. Eukaryotic Cell, 2009, 8, 1027-1037.	3.4	11
39	Molecular switching system using glycosylphosphatidylinositol to select cells highly expressing recombinant proteins. Scientific Reports, 2017, 7, 4033.	3.3	11
40	Establishment of DHFR-deficient HEK293 cells for high yield of therapeutic glycoproteins. Journal of Bioscience and Bioengineering, 2019, 128, 487-494.	2.2	11
41	Synthesis of Rare Pentoses Using Microbial and Enzymatic Reactions. Current Organic Chemistry, 2016, 20, 1456-1464.	1.6	11
42	A Strategy for Neuraminidase Inhibitors Using Mechanismâ€Based Labeling Information. Chemistry - an Asian Journal, 2011, 6, 1048-1056.	3.3	10
43	Yeast cell-based analysis of human lactate dehydrogenase isoforms. Journal of Biochemistry, 2015, 158, mvv061.	1.7	10
44	Enzymatic synthesis of rare sugars with l-rhamnulose-1-phosphate aldolase from Thermotoga maritima MSB8. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 3980-3983.	2.2	10
45	The Dysferlin Domain-Only Protein, Spo73, Is Required for Prospore Membrane Extension in Saccharomyces cerevisiae. MSphere, 2016, 1, .	2.9	10
46	Yeast cells as an assay system for in vivo O -GlcNAc modification. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 1159-1167.	2.4	10
47	Structural and functional analysis of Alg1 beta-1,4 mannosyltransferase reveals the physiological importance of its membrane topology. Glycobiology, 2018, 28, 741-753.	2.5	10
48	Dynamic localization of a yeast developmentâ€“specific PP1 complex during prospore membrane formation is dependent on multiple localization signals and complex formation. Molecular Biology of the Cell, 2017, 28, 3881-3895.	2.1	9
49	Cascade synthesis of rare ketoses by whole cells based on L-rhamnulose-1-phosphate aldolase. Enzyme and Microbial Technology, 2020, 133, 109456.	3.2	9
50	Characterization of alditol oxidase from Streptomyces coelicolor and its application in the production of rare sugars. Bioorganic and Medicinal Chemistry, 2020, 28, 115464.	3.0	9
51	In vitro reconstitution of the yeast spore wall dityrosine layer discloses the mechanism of its assembly. Journal of Biological Chemistry, 2017, 292, 15880-15891.	3.4	8
52	Origin identification of Chinese Maca using electronic nose coupled with GC-MS. Scientific Reports, 2019, 9, 12216.	3.3	8
53	Recent Advances Regarding the Physiological Functions and Biosynthesis of D-Allulose. Frontiers in Microbiology, 2022, 13, 881037.	3.5	8
54	Cell engineering for the production of hybrid-type N-glycans in HEK293 cells. Journal of Biochemistry, 2021, 170, 139-151.	1.7	7

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55	Characterization of glycerol phosphate oxidase from Streptococcus pneumoniae and its application for ketose synthesis. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 504-507.	2.2	6
56	Construction of green fluorescence protein mutant to monitor STT 3Bâ€dependent N â€glycosylation. FEBS Journal, 2018, 285, 915-928.	4.7	6
57	Maca extracts regulate glucose and lipid metabolism in insulinâ€resistant HepG2 cells via the PI3K/AKT signalling pathway. Food Science and Nutrition, 2021, 9, 2894-2907.	3.4	6
58	Production of encapsulated creatinase using yeast spores. Bioengineered, 2017, 8, 411-419.	3.2	5
59	PER1, GUP1 and CWH43 of methylotrophic yeast Ogataea minuta are involved in cell wall integrity. Yeast, 2018, 35, 225-236.	1.7	5
60	Approaches towards the core pentasaccharide in N- linked glycans. Chinese Chemical Letters, 2018, 29, 35-39.	9.0	5
61	Efficient chiral synthesis by Saccharomyces cerevisiae spore encapsulation of Candida parapsilosis Glu228Ser/(S)-carbonyl reductase II and Bacillus sp. YX-1 glucose dehydrogenase in organic solvents. Microbial Cell Factories, 2019, 18, 87.	4.0	5
62	Production of <scp>l</scp>-Ribulose Using an Encapsulated <scp>l</scp>-Arabinose Isomerase in Yeast Spores. Journal of Agricultural and Food Chemistry, 2019, 67, 4868-4875.	5.2	5
63	Functional Analysis of the GPI Transamidase Complex by Screening for Amino Acid Mutations in Each Subunit. Molecules, 2021, 26, 5462.	3.8	5
64	Physical Interactions among Human Glycosyltransferases Involved in Dolichol-Linked Oligosaccharide Biosynthesis. Trends in Glycoscience and Glycotechnology, 2012, 24, 65-77.	0.1	5
65	Identification of a Novel Alditol Oxidase from Thermopolyspora flexuosa with Potential Application in d-Glyceric Acid Production. Molecular Biotechnology, 2022, 64, 804-813.	2.4	5
66	Spore-Encapsulating Glycosyltransferase Catalysis Tandem Reactions: Facile Chemoenzymatic Synthesis of Complex Human Glycans. ACS Catalysis, 2022, 12, 3181-3188.	11.2	5
67	Alg mannosyltransferases: From functional and structural analyses to the lipid-linked oligosaccharide pathway reconstitution. Biochimica Et Biophysica Acta - General Subjects, 2022, 1866, 130112.	2.4	5
68	Osw2 is required for proper assembly of glucan and/or mannan layers of the yeast spore wall. Journal of Biochemistry, 2018, 163, 293-304.	1.7	4
69	Yeast Dop1 is required for glycosyltransferase retrieval from the trans-Golgi network. Biochimica Et Biophysica Acta - General Subjects, 2019, 1863, 1147-1157.	2.4	4
70	Studies on the Properties of the Sporulation Specific Protein Dit1 and Its Product Formyl Tyrosine. Journal of Fungi (Basel, Switzerland), 2020, 6, 77.	3.5	4
71	Topological and enzymatic analysis of human Alg2 mannosyltransferase reveals its role in lipid-linked oligosaccharide biosynthetic pathway. Communications Biology, 2022, 5, 117.	4.4	4
72	Characteristics of SNARE proteins are defined by distinctive properties of SNARE motifs. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129658.	2.4	3

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73	Identification of novel <i>O</i>-GlcNAc transferase substrates using yeast cells expressing OGT. Journal of General and Applied Microbiology, 2021, 67, 33-41.	0.7	3
74	Regulation of alcohol oxidase gene expression in methylotrophic yeast Ogataea minuta. Journal of Bioscience and Bioengineering, 2021, 132, 437-444.	2.2	3
75	Consecutive hydrolysis of creatinine using creatininase and creatinase encapsulated in Saccharomyces cerevisiae spores. Biotechnology Letters, 2017, 39, 261-267.	2.2	2
76	Characterization of a yeast sporulation-specific P450 family protein, Dit2, using an in vitro assay to crosslink formyl tyrosine. Journal of Biochemistry, 2018, 163, 123-131.	1.7	2
77	Structural modeling and mutagenesis of endo-Î²- N -acetylglucosaminidase from Ogataea minuta identifies the importance of Trp295 for hydrolytic activity. Journal of Bioscience and Bioengineering, 2018, 125, 168-174.	2.2	2
78	PiggyBac-based screening identified BEM4 as a suppressor to rescue growth defects in och1-disrupted yeast cells. Bioscience, Biotechnology and Biochemistry, 2018, 82, 1497-1507.	1.3	2
79	Construction of functional chimeras of syntaxin-1A and its yeast orthologue, and their application to the yeast cell-based assay for botulinum neurotoxin serotype C. Biochimica Et Biophysica Acta - General Subjects, 2019, 1863, 129396.	2.4	2
80	Chemo-enzymatic synthesis of the ALG1-CDG biomarker and evaluation of its immunogenicity. Bioorganic and Medicinal Chemistry Letters, 2020, 30, 127614.	2.2	2
81	Encapsulation of Mannose-6-phosphate Isomerase in Yeast Spores and Its Application in <scp>l</scp>-Ribose Production. Journal of Agricultural and Food Chemistry, 2020, 68, 6892-6899.	5.2	2
82	Unique Properties of the S. cerevisiae Spore Wall and Its Applications. Trends in Glycoscience and Glycotechnology, 2020, 32, E189-E193.	0.1	2
83	Application of yeast spores as Î²-glucan particles. Particuology, 2022, 71, 34-40.	3.6	2
84	Identification and characterization of transcriptional control region of the human beta 1,4-mannosyltransferase gene. Cytotechnology, 2017, 69, 417-434.	1.6	1
85	Functional characteristics of Svl3 and Pam1 that are required for proper cell wall formation in yeast cells. Yeast, 2020, 37, 359-371.	1.7	1
86	Optimising the oil phases of aluminium hydrogel-stabilised emulsions for stable, safe and efficient vaccine adjuvant. Frontiers of Chemical Science and Engineering, 2022, , 1-12.	4.4	1
87	COVIDâ€19 Vaccines: Particulate Alum via Pickering Emulsion for an Enhanced COVIDâ€19 Vaccine Adjuvant (Adv. Mater. 40/2020). Advanced Materials, 2020, 32, 2070303.	21.0	0
88	Selecting cells expressing high levels of recombinant proteins using the GPI-anchored protein with selenocysteine system. Journal of Bioscience and Bioengineering, 2021, 131, 225-233.	2.2	0
89	Sulfation of a FLAG tag mediated by SLC35B2 and TPST2 affects antibody recognition. PLoS ONE, 2021, 16, e0250805.	2.5	0
90	Heterodimeric Alg13/Alg14 UDP-GlcNAc Transferase (ALG13,14). , 2014, , 1231-1238.		0

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91	Glycan-Mediated Protein Transport from the Endoplasmic Reticulum. , 2015, , 21-34.		0
92	Dolichyl-Phosphate (UDP-N-Acetylglucosamine) N-Acetylglucosaminephospho transferase 1 (GlcNAc-1-P) Tj ETQq0 0 0 rgBT /Overlock 10		0
93	Unique Properties of the <i>S. cerevisiae</i> Spore Wall and Its Applications. Trends in Glycoscience and Glycotechnology, 2020, 32, J165-J169.	0.1	0
94	Establishment of a Novel Cell Surface Display Platform Based on Natural â€œChitosan Beadsâ€•of Yeast Spores. Journal of Agricultural and Food Chemistry, 2022, 70, 7479-7489.	5.2	0