RamÃ³n Hurtado-Guerrero

List of Publications by Year
in descending order

97 papers	2,855 citations	136885 32 h-index	223716 46 g-index
107 all docs	107 docs citations	107 times ranked	3784 citing authors

#	Article	IF	Citations
1	The Vibrio cholerae Colonization Factor GbpA Possesses a Modular Structure that Governs Binding to Different Host Surfaces. PLoS Pathogens, 2012, 8, e1002373.	2.1	150
2	Structural insights into mechanism and specificity of O-GlcNAc transferase. EMBO Journal, 2008, 27, 2780-2788.	3.5	102
3	Structural Insights into the Mechanism of Protein O-Fucosylation. PLoS ONE, 2011, 6, e25365.	1.1	85
4	Substrateâ€Guided Frontâ€Face Reaction Revealed by Combined Structural Snapshots and Metadynamics for the Polypeptide Nâ€Acetylgalactosaminyltransferaseâ€…2. Angewandte Chemie - International Edition, 2014, 53, 8206-8210.	7.2	80
5	Design, Synthesis, and Evaluation of Inhibitors of Trypanosomal and Leishmanial Dihydrofolate Reductase. Journal of Medicinal Chemistry, 1999, 42, 4300-4312.	2.9	79
6	Dynamic interplay between catalytic and lectin domains of GalNAc-transferases modulates protein O-glycosylation. Nature Communications, 2015, 6, 6937.	5.8	77
7	Polypeptide GalNAc-Ts: from redundancy to specificity. Current Opinion in Structural Biology, 2019, 56, 87-96.	2.6	73
8	Structure of Saccharomyces cerevisiae Chitinase 1 and Screening-Based Discovery of Potent Inhibitors. Chemistry and Biology, 2007, 14, 589-599.	6.2	72
9	Molecular Mechanisms of Yeast Cell Wall Glucan Remodeling. Journal of Biological Chemistry, 2009, 284, 8461-8469.	1.6	67
10	Deciphering the Nonâ€Equivalence of Serine and Threonine Oâ€Glycosylation Points: Implications for Molecular Recognition of the Tn Antigen by an antiâ€MUC1 Antibody. Angewandte Chemie - International Edition, 2015, 54, 9830-9834.	7.2	65
11	A proactive role of water molecules in acceptor recognition by protein O-fucosyltransferase 2. Nature Chemical Biology, 2016, 12, 240-246.	3.9	58
12	Serological evidence of SARSâ€CoVâ€2 and coâ€infections in stray cats in Spain. Transboundary and Emerging Diseases, 2022, 69, 1056-1064.	1.3	58
13	Site-specific O-glycosylation of members of the low-density lipoprotein receptor superfamily enhances ligand interactions. Journal of Biological Chemistry, 2018, 293, 7408-7422.	1.6	57
14	NleB/SseK effectors from Citrobacter rodentium, Escherichia coli, and Salmonella enterica display distinct differences in host substrate specificity. Journal of Biological Chemistry, 2017, 292, 11423-11430.	1.6	56
15	Molecular mechanisms of O-GlcNAcylation. Current Opinion in Structural Biology, 2008, 18, 551-557.	2.6	53
16	Structural basis for arginine glycosylation of host substrates by bacterial effector proteins. Nature Communications, 2018, 9, 4283.	5.8	52
17	Molecular basis for fibroblast growth factor 23 O-glycosylation by GalNAc-T3. Nature Chemical Biology, 2020, 16, 351-360.	3.9	52
18	Structure-Based Design of Potent Tumor-Associated Antigens: Modulation of Peptide Presentation by Single-Atom O/S or O/Se Substitutions at the Glycosidic Linkage. Journal of the American Chemical Society, 2019, 141, 4063-4072.	6.6	51

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19	Cross-Link Formation of the Cysteine 228â^'Tyrosine 272 Catalytic Cofactor of Galactose Oxidase Does Not Require Dioxygen. Biochemistry, 2008, 47, 10428-10439.	1.2	47
20	A Trapped Covalent Intermediate of a Glycoside Hydrolase on the Pathway to Transglycosylation. Insights from Experiments and Quantum Mechanics/Molecular Mechanics Simulations. Journal of the American Chemical Society, 2016, 138, 3325-3332.	6.6	47
21	Dynamic Acetylation of Phosphoenolpyruvate Carboxykinase Toggles Enzyme Activity between Gluconeogenic and Anaplerotic Reactions. Molecular Cell, 2018, 71, 718-732.e9.	4.5	45
22	Structural basis for substrate specificity and catalysis of Î±1,6-fucosyltransferase. Nature Communications, 2020, 11, 973.	5.8	45
23	Novel inhibitors of leishmanial dihydrofolate reductase. Bioorganic and Medicinal Chemistry Letters, 2001, 11, 977-980.	1.0	44
24	SARS-CoV-2 Seroprevalence in Household Domestic Ferrets (Mustela putorius furo). Animals, 2021, 11, 667.	1.0	44
25	Mitochondrial Localization of the Mevalonate Pathway Enzyme 3-Hydroxy-3-methyl-glutaryl-CoA Reductase in the Trypanosomatidae. Molecular Biology of the Cell, 2004, 15, 1356-1363.	0.9	43
26	Natural Productâ€"Guided Discovery of a Fungal Chitinase Inhibitor. Chemistry and Biology, 2010, 17, 1275-1281.	6.2	41
27	Detection of Tumor-Associated Glycopeptides by Lectins: The Peptide Context Modulates Carbohydrate Recognition. ACS Chemical Biology, 2015, 10, 747-756.	1.6	39
28	Plasmodium falciparum Choline Kinase Inhibition Leads to a Major Decrease in Phosphatidylethanolamine Causing Parasite Death. Scientific Reports, 2016, 6, 33189.	1.6	39
29	The small molecule luteolin inhibits N-acetyl-Î±-galactosaminyltransferases and reduces mucin-type O-glycosylation of amyloid precursor protein. Journal of Biological Chemistry, 2017, 292, 21304-21319.	1.6	38
30	The interdomain flexible linker of the polypeptide GalNAc transferases dictates their long-range glycosylation preferences. Nature Communications, 2017, 8, 1959.	5.8	37
31	The Mechanism of Allosteric Coupling in Choline Kinaseâ€…Î±1 Revealed by the Action of a Rationally Designed Inhibitor. Angewandte Chemie - International Edition, 2013, 52, 4582-4586.	7.2	36
32	Serine versus Threonine Glycosylation with Î±â€‹i>O</i>â€GalNAc: Unexpected Selectivity in Their Molecular Recognition with Lectins. Chemistry - A European Journal, 2014, 20, 12616-12627.	1.7	36
33	Mucin architecture behind the immune response: design, evaluation and conformational analysis of an antitumor vaccine derived from an unnatural MUC1 fragment. Chemical Science, 2016, 7, 2294-2301.	3.7	35
34	Structural and Mechanistic Insights into the Catalytic-Domain-Mediated Short-Range Glycosylation Preferences of GalNAc-T4. ACS Central Science, 2018, 4, 1274-1290.	5.3	35
35	Molecular mechanism of elongation factor 1A inhibition by a Legionella pneumophila glycosyltransferase. Biochemical Journal, 2010, 426, 281-292.	1.7	33
36	The Use of Fluoroproline in MUC1 Antigen Enables Efficient Detection of Antibodies in Patients with Prostate Cancer. Journal of the American Chemical Society, 2017, 139, 18255-18261.	6.6	33

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37	Water Sculpts the Distinctive Shapes and Dynamics of the Tumor-Associated Carbohydrate Tn Antigens: Implications for Their Molecular Recognition. Journal of the American Chemical Society, 2018, 140, 9952-9960.	6.6	33
38	Structural and kinetic studies of a series of mutants of galactose oxidase identified by directed evolution. Protein Engineering, Design and Selection, 2004, 17, 141-148.	1.0	29
39	Genetic and structural validation of <scp>A</scp>spergillus fumigatusâ€...<scp>UDP</scp>â€<scp>N</scp>â€acetylglucosamine pyrophosphorylase as an antifungal target. Molecular Microbiology, 2013, 89, 479-493.	1.2	29
40	Discovery of inhibitors of the pentein superfamily protein dimethylarginine dimethylaminohydrolase (DDAH), by virtual screening and hit analysis. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 3953-3956.	1.0	27
41	Structural and functional characterization of a putative polysaccharide deacetylase of the human parasite Encephalitozoon cuniculi. Protein Science, 2009, 18, 1197-1209.	3.1	27
42	Structural and kinetic differences between human and Aspergillus fumigatus <scp>D</scp>-glucosamine-6-phosphate N-acetyltransferase. Biochemical Journal, 2008, 415, 217-223.	1.7	26
43	Recent structural and mechanistic insights into post-translational enzymatic glycosylation. Current Opinion in Chemical Biology, 2012, 16, 479-487.	2.8	26
44	Ser and Thr acceptor preferences of the GalNAc-Ts vary among isoenzymes to modulate mucin-type O-glycosylation. Glycobiology, 2020, 30, 910-922.	1.3	25
45	FUT8-Directed Core Fucosylation of N-glycans Is Regulated by the Glycan Structure and Protein Environment. ACS Catalysis, 2021, 11, 9052-9065.	5.5	25
46	Structural and functional analysis of yeast Crh1 and Crh2 transglycosylases. FEBS Journal, 2015, 282, 715-731.	2.2	24
47	Synthesis, conformational analysis and in vivo assays of an anti-cancer vaccine that features an unnatural antigen based on an sp²-iminosugar fragment. Chemical Science, 2020, 11, 3996-4006.	3.7	24
48	Inhibition of dimethylarginine dimethylaminohydrolase (DDAH) and arginine deiminase (ADI) by pentafluorophenyl (PFP) sulfonates. Chemical Communications, 2005, , 5563.	2.2	22
49	Genetic and structural validation of Aspergillus fumigatus N-acetylphosphoglucosamine mutase as an antifungal target. Bioscience Reports, 2013, 33, .	1.1	22
50	Discovery of a New Binding Site on Human Choline Kinase Î±1: Design, Synthesis, Crystallographic Studies, and Biological Evaluation of Asymmetrical Bispyridinium Derivatives. Journal of Medicinal Chemistry, 2014, 57, 507-515.	2.9	21
51	Design, synthesis, crystallization and biological evaluation of new symmetrical biscationic compounds as selective inhibitors of human Choline Kinase Î±1 (ChoKÎ±1). Scientific Reports, 2016, 6, 23793.	1.6	21
52	Recent structural and mechanistic insights into protein O-GalNAc glycosylation. Biochemical Society Transactions, 2016, 44, 61-67.	1.6	20
53	Design of Î±-S-Neoglycopeptides Derived from MUC1 with a Flexible and Solvent-Exposed Sugar Moiety. Journal of Organic Chemistry, 2016, 81, 5929-5941.	1.7	20
54	A mechanism-inspired UDP-N-acetylglucosamine pyrophosphorylase inhibitor. RSC Chemical Biology, 2020, 1, 13-25.	2.0	20

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55	Glycomimetics Targeting Glycosyltransferases: Synthetic, Computational and Structural Studies of Lessâ€Polar Conjugates. Chemistry - A European Journal, 2016, 22, 7215-7224.	1.7	19
56	Mechanisms of redundancy and specificity of the Aspergillus fumigatus Crh transglycosylases. Nature Communications, 2019, 10, 1669.	5.8	18
57	A hydrogen bond network in the active site of Anabaena ferredoxin-NADP+ reductase modulates its catalytic efficiency. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 251-263.	0.5	16
58	Structural Analysis of a GalNAcâ€T2 Mutant Reveals an Inducedâ€Fit Catalytic Mechanism for GalNAcâ€Ts. Chemistry - A European Journal, 2018, 24, 8382-8392.	1.7	16
59	Determination of the Concentration of IgG against the Spike Receptor-Binding Domain That Predicts the Viral Neutralizing Activity of Convalescent Plasma and Serum against SARS-CoV-2. Biology, 2021, 10, 208.	1.3	16
60	Glucoseâ€6â€phosphate as a probe for the glucosamineâ€6â€phosphate Nâ€acetyltransferase Michaelis complex. FEBS Letters, 2007, 581, 5597-5600.	1.3	15
61	Determination of Potential Scaffolds for Human Choline Kinase Î±1 by Chemical Deconvolution Studies. ChemBioChem, 2013, 14, 1291-1295.	1.3	15
62	Citrobacter rodentium NleB Protein Inhibits Tumor Necrosis Factor (TNF) Receptor-associated Factor 3 (TRAF3) Ubiquitination to Reduce Host Type I Interferon Production. Journal of Biological Chemistry, 2016, 291, 18232-18238.	1.6	15
63	A perspective on structural and mechanistic aspects of proteinO-fucosylation. Acta Crystallographica Section F, Structural Biology Communications, 2018, 74, 443-450.	0.4	15
64	Structural and Mechanistic Basis of the Interaction between a Pharmacological Chaperone and Human Phenylalanine Hydroxylase. ChemBioChem, 2012, 13, 1266-1269.	1.3	14
65	Recent advances in the design of choline kinase Î± inhibitors and the molecular basis of their inhibition. Medicinal Research Reviews, 2021, 41, 902-927.	5.0	13
66	Streptococcus pneumoniae TIGR4 Flavodoxin: Structural and Biophysical Characterization of a Novel Drug Target. PLoS ONE, 2016, 11, e0161020.	1.1	13
67	Recent Progress on Fucosyltransferase Inhibitors. Mini-Reviews in Medicinal Chemistry, 2012, 12, 1455-1464.	1.1	12
68	Kinetic and functional properties of human mitochondrial phosphoenolpyruvate carboxykinase. Biochemistry and Biophysics Reports, 2016, 7, 124-129.	0.7	12
69	Anti-tumoral potential of a human granulysin-based, CEA-targeted cytolytic immunotoxin. OncoImmunology, 2019, 8, 1641392.	2.1	12
70	Asparagine Tautomerization in Glycosyltransferase Catalysis. The Molecular Mechanism of Protein O-Fucosyltransferase 1. ACS Catalysis, 2021, 11, 9926-9932.	5.5	12
71	Atomic and Specificity Details of Mucin 1 O-Glycosylation Process by Multiple Polypeptide GalNAc-Transferase Isoforms Unveiled by NMR and Molecular Modeling. Jacs Au, 2022, 2, 631-645.	3.6	12
72	Stereoselective 1,3-dipolar cycloadditions of nitrones derived from amino acids. Asymmetric synthesis of N-(alkoxycarbonylmethyl)-3-hydroxypyrrolidin-2-ones. Tetrahedron, 2013, 69, 9381-9390.	1.0	11

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73	Choline Kinase Active Site Provides Features for Designing Versatile Inhibitors. Current Topics in Medicinal Chemistry, 2015, 14, 2684-2693.	1.0	11
74	Structural characterization of an unprecedented lectin-like antitumoral anti-MUC1 antibody. Chemical Communications, 2020, 56, 15137-15140.	2.2	10
75	Absence of SARS-CoV-2 Antibodies in Natural Environment Exposure in Sheep in Close Contact with Humans. Animals, 2021, 11, 1984.	1.0	9
76	Pharmacophoreâ€Based Virtual Screening to Discover New Active Compounds for Human Choline Kinase Î±1. Molecular Informatics, 2015, 34, 458-466.	1.4	8
77	Structural basis for the synthesis of the core 1 structure by C1GalT1. Nature Communications, 2022, 13, 2398.	5.8	8
78	Characterization of the cDNA and in vitro expression of the ram seminal plasma protein RSVP14. Gene, 2013, 519, 271-278.	1.0	7
79	Inhibitors against Fungal Cell Wall Remodeling Enzymes. ChemMedChem, 2018, 13, 128-132.	1.6	7
80	Evidence for substrate-assisted catalysis in N-acetylphosphoglucosamine mutase. Biochemical Journal, 2018, 475, 2547-2557.	1.7	7
81	Cofactor processing in galactose oxidase. Biochemical Society Transactions, 2003, 31, 506-9.	1.6	7
82	Crystal Structure of the FAD-Containing Ferredoxin-NADP⁺Reductase from the Plant PathogenXanthomonas axonopodispv. citri. BioMed Research International, 2013, 2013, 1-6.	0.9	6
83	Plasmodium falciparum Apicomplexan-Specific Glucosamine-6-Phosphate N -Acetyltransferase Is Key for Amino Sugar Metabolism and Asexual Blood Stage Development. MBio, 2020, 11, .	1.8	6
84	Synthesis of O- and C-glycosides derived from Î²-(1,3)-d-glucans. Carbohydrate Research, 2013, 382, 9-18.	1.1	5
85	The closed conformation of the LDL receptor is destabilized by the low Ca⁺⁺ concentration but favored by the high Mg⁺⁺ concentration in the endosome. FEBS Letters, 2015, 589, 3534-3540.	1.3	5
86	Production of a Granulysin-Based, Tn-Targeted Cytolytic Immunotoxin Using Pulsed Electric Field Technology. International Journal of Molecular Sciences, 2020, 21, 6165.	1.8	5
87	Self-acetylation at the active site of phosphoenolpyruvate carboxykinase (PCK1) controls enzyme activity. Journal of Biological Chemistry, 2021, 296, 100205.	1.6	5
88	Protein O-Fucosyltransferase 1 Undergoes Interdomain Flexibility in Solution. Molecules, 2021, 26, 2105.	1.7	5
89	Synthesis, biological evaluation, in silico modeling and crystallization of novel small monocationic molecules with potent antiproliferative activity by dual mechanism. European Journal of Medicinal Chemistry, 2020, 207, 112797.	2.6	4
90	Fucosyltransferase-specific inhibition via next generation of fucose mimetics. Chemical Communications, 2021, 57, 1145-1148.	2.2	3

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91	Anticancer and Structure Activity Relationship of Non-Symmetrical Choline Kinase Inhibitors. Pharmaceutics, 2021, 13, 1360.	2.0	3
92	NleB/SseK-catalyzed arginine-glycosylation and enteropathogen virulence are finely tuned by a single variable position contiguous to the catalytic machinery. Chemical Science, 2021, 12, 12181-12191.	3.7	3
93	O-fucosylation stabilizes the TSR3 motif in thrombospondin-1 by interacting with nearby amino acids and protecting a disulfide bond. Journal of Biological Chemistry, 2022, 298, 102047.	1.6	3
94	Rational Design of Glycomimetic Compounds Targeting theSaccharomyces cerevisiaeTransglycosylase Gas2. Chemical Biology and Drug Design, 2016, 87, 163-170.	1.5	2
95	Choline kinase inhibition and docking studies of a series of 6-(benzylthio)-9H-purin-9-yl-pyridinium derivatives. Medicinal Chemistry Research, 2017, 26, 2809-2815.	1.1	2
96	Preclinical Studies of Granulysin-Based Anti-MUC1-Tn Immunotoxins as a New Antitumoral Treatment. Biomedicines, 2022, 10, 1223.	1.4	2
97	A Bump-and-Hole Approach to Dissect Regulation of Protein O-Glycosylation. Molecular Cell, 2020, 78, 803-805.	4.5	1