Citation Report
List of articles citing

Catalysis by hen egg-white lysozyme proceeds via a covalent intermediate

DOI: 10.1038/35090602
Nature, 2001, 412, 835-8.

#	Paper	IF	Citations
556	tRNA-guanine transglycosylase from Escherichia coli: molecular mechanism and role of aspartate 89. **2001**, 40, 14123-33		25
555	Retaining glucosyl transfer catalysed by trehalose phosphorylase from Schizophyllum commune: mechanistic evidence obtained from steady-state kinetic studies with substrate analogues and inhibitors. *Biochemical Journal*, **2001**, 360, 727-736	3.8	16
554	Model systems Artificial models of protein function. **2001**, 5, 623-625		1
553	Dissection of nucleophilic and acid-base catalysis in glycosidases. **2001**, 5, 643-9		135
552	Catalytic mechanisms and reaction intermediates along the hydrolytic pathway of a plant beta-D-glucan glucohydrolase. **2001**, 9, 1005-16		65
551	Glycoside hydrolases and glycosyltransferases: families and functional modules. **2001**, 11, 593-600		344
550	Atomic motion in enzymatic reaction coordinates. **2001**, 11, 657-65		57
549	Seed chitinases. **2002**, 12, 217-230		37
548	Aspartate 313 in the Streptomyces plicatus hexosaminidase plays a critical role in substrate-assisted catalysis by orienting the 2-acetamido group and stabilizing the transition state. **2002**, 277, 40055-65		108
547	Closed site complexes of adenine phosphoribosyltransferase from Giardia lamblia reveal a mechanism of ribosyl migration. **2002**, 277, 39981-8		31
546	Specific characterization of substrate and inhibitor binding sites of a glycosyl hydrolase family 11 xylanase from Aspergillus niger. **2002**, 277, 44035-43		65
545	Oligosaccharide and sucrose complexes of amylosucrase. Structural implications for the polymerase activity. **2002**, 277, 47741-7		77
544	Biochemistry and comparative genomics of SxxK superfamily acyltransferases offer a clue to the mycobacterial paradox: presence of penicillin-susceptible target proteins versus lack of efficiency of penicillin as therapeutic agent. **2002**, 66, 702-38, table of contents		158
543	High-resolution structures of a chitinase complexed with natural product cyclopentapeptide inhibitors: mimicry of carbohydrate substrate. **2002**, 99, 9127-32		83
542	The cyclic dipeptide CI-4 [cyclo-(l-Arg-d-Pro)] inhibits family 18 chitinases by structural mimicry of a reaction intermediate. *Biochemical Journal*, **2002**, 368, 23-7	3.8	53
541	Structural enzymology of carbohydrate-active enzymes: implications for the post-genomic era. **2002**, 30, 291-297		54
540	[Foundation of the bases for protein research and its application to the pharmaceutical science field]. **2002**, 122, 537-46		1

539	Characterization of soluble and membrane-bound family 3 lytic transglycosylases from Pseudomonas aeruginosa. **2002**, 41, 1001-13	43
538	Mechanism of Thermoanaerobacterium saccharolyticum beta-xylosidase: kinetic studies. **2002**, 41, 9727-35	40
537	A case for reverse protonation: identification of Glu160 as an acid/base catalyst in Thermoanaerobacterium saccharolyticum beta-xylosidase and detailed kinetic analysis of a site-directed mutant. **2002**, 41, 9736-46	47
536	Concerted general acid and nucleophilic catalysis of acetal hydrolysis. A simple model for the lysozyme mechanism. **2002**, 428-432	8
535	Ribosome structure and the mechanism of translation. **2002**, 108, 557-72	617
534	Crystal structure of the autocatalytic initiator of glycogen biosynthesis, glycogenin. **2002**, 319, 463-77	103
533	Combining conformational flexibility and continuum electrostatics for calculating pK(a)s in proteins. **2002**, 83, 1731-48	402
532	Anchimeric assistance in hexosaminidases. **2002**, 80, 1064-1074	20
531	Phylogenetic analysis of invertebrate lysozymes and the evolution of lysozyme function. **2002**, 54, 652-64	171
530	Substrate recognition by three family 13 yeast alpha-glucosidases. **2002**, 269, 728-34	15
529	Glycosidase mechanisms. **2002**, 6, 619-29	329
528	Catalytic mechanism and product specificity of cyclodextrin glycosyltransferase, a prototypical transglycosylase from the □amylase family. **2002**, 30, 295-304	36
527	Protein engineering 20 years on. **2002**, 3, 964-70	99
526	Insights into trehalose synthesis provided by the structure of the retaining glucosyltransferase OtsA. **2002**, 9, 1337-46	146
525	Calculating pKa values in enzyme active sites. **2003**, 12, 1894-901	130
524	Crystal structure and snapshots along the reaction pathway of a family 51 alpha-L-arabinofuranosidase. **2003**, 22, 4922-32	113
523	A charge-scaling method to treat solvent in QM/MM simulations. **2003**, 109, 118-124	34
522	Thermodynamic and extrathermodynamic requirements of enzyme catalysis. **2003**, 105, 559-72	70

521	Spectroscopic studies on poly(ethylene glycol)-lysozyme interactions. **2003**, 260, 175-86	15
520	Detailed kinetic analysis of a family 52 glycoside hydrolase: a beta-xylosidase from Geobacillus stearothermophilus. **2003**, 42, 10528-36	50
519	On the evaluation and optimization of protein X-ray structures for pKa calculations. **2003**, 12, 313-26	97
518	Electrostatic guidance of glycosyl cation migration along the reaction coordinate of uracil DNA glycosylase. **2003**, 42, 12455-60	58
517	A snapshot of enzyme catalysis using electrospray ionization mass spectrometry. **2003**, 125, 9938-9	60
516	Pressure-dependent changes in the solution structure of hen egg-white lysozyme. **2003**, 327, 857-65	130
515	Crystal structure of human beta-hexosaminidase B: understanding the molecular basis of Sandhoff and Tay-Sachs disease. **2003**, 327, 1093-109	186
514	Enzymatic transition state poise and transition state analogues. **2003**, 36, 588-96	98
513	Probing Single-Molecule T4 Lysozyme Conformational Dynamics by Intramolecular Fluorescence Energy Transfer. **2003**, 107, 7947-7956	87
512	Broadly distributed chemical reactivity of natural antibodies expressed in coordination with specific antigen binding activity. **2003**, 278, 20436-43	26
511	Crystal structures of allosamidin derivatives in complex with human macrophage chitinase. **2003**, 278, 20110-6	64
510	Discovery, Characterisation and Applications of Enzymes from the Wood-forming Tissues of Poplar: Glycosyl Transferases and Xyloglucan Endotransglycosylases. **2003**, 21, 173-179	3
509	Unusual Role of the 3-OH Group of Oligosaccharide Substrates in the Mechanism of Bacillus 1,3-1,4-β-glucanase. **2003**, 21, 223-231	2
508	Phosphoribosyltransferase mechanisms and roles in nucleic acid metabolism. **2004**, 78, 261-304	34
507	Structure and enzymology of ADP-ribosyl cyclases: conserved enzymes that produce multiple calcium mobilizing metabolites. **2004**, 4, 249-61	98
506	The primary structure of a novel goose-type lysozyme from rhea egg white. **2004**, 68, 159-69	21
505	Crystal structures of a poplar xyloglucan endotransglycosylase reveal details of transglycosylation acceptor binding. **2004**, 16, 874-86	141
504	The donor subsite of trehalose-6-phosphate synthase: binary complexes with UDP-glucose and UDP-2-deoxy-2-fluoro-glucose at 2 A resolution. **2004**, 279, 1950-5	90

503	Structural determinants of substrate specificity in family 1 beta-glucosidases: novel insights from the crystal structure of sorghum dhurrinase-1, a plant beta-glucosidase with strict specificity, in complex with its natural substrate. **2004**, 279, 31796-803	107
502	TRAF family proteins link PKR with NF-kappa B activation. **2004**, 24, 4502-12	121
501	Why are pathogenic staphylococci so lysozyme resistant? The peptidoglycan O-acetyltransferase OatA is the major determinant for lysozyme resistance of Staphylococcus aureus. **2005**, 55, 778-87	337
500	Parallel substrate binding sites in a beta-agarase suggest a novel mode of action on double-helical agarose. **2004**, 12, 623-32	59
499	Resuscitation-promoting factors possess a lysozyme-like domain. **2004**, 29, 7-10	57
498	Site-directed mutagenesis establishes aspartic acids-227 and -342 as essential for enzyme activity in an isomalto-dextranase from Arthrobacter globiformis. **2004**, 26, 659-64	3
497	Asparagine and glutamine side-chain conformation in solution and crystal: a comparison for hen egg-white lysozyme using residual dipolar couplings. **2004**, 30, 327-46	20
496	Mutational and computational analysis of the role of conserved residues in the active site of a family 18 chitinase. **2004**, 271, 253-62	152
495	A strategy for functional proteomic analysis of glycosidase activity from cell lysates. **2004**, 43, 5338-42	118
494	A Strategy for Functional Proteomic Analysis of Glycosidase Activity from Cell Lysates. **2004**, 116, 5452-5456	18
493	Determination of enzyme/substrate specificity constants using a multiple substrate ESI-MS assay. **2004**, 15, 233-43	45
492	Molecular modeling insights into the catalytic mechanism of the retaining galactosyltransferase LgtC. **2004**, 339, 1007-14	33
491	Probing the transition states of four glucoside hydrolyses with 13C kinetic isotope effects measured at natural abundance by NMR spectroscopy. **2004**, 126, 3769-76	61
490	Synthesis and high-throughput screening of N-acetyl-beta-hexosaminidase inhibitor libraries targeting osteoarthritis. **2004**, 69, 6273-83	71
489	Structural studies of the beta-glycosidase from Sulfolobus solfataricus in complex with covalently and noncovalently bound inhibitors. **2004**, 43, 6101-9	56
488	Crystal structure of the covalent intermediate of amylosucrase from Neisseria polysaccharea. **2004**, 43, 3104-10	64
487	Cyclic amidine sugars as transition-state analogue inhibitors of glycosidases: potent competitive inhibitors of mannosidases. **2004**, 126, 1971-9	51
486	Activation of crystalline cellulose surfaces through the chemoenzymatic modification of xyloglucan. **2004**, 126, 5715-21	109

485	Hidden localization motifs: naturally occurring peroxisomal targeting signals in non-peroxisomal proteins. **2004**, 5, R97	30
484	Inhibition of membrane-bound lytic transglycosylase B by NAG-thiazoline. **2004**, 574, 73-9	33
483	Crystal structure of beta-D-xylosidase from Thermoanaerobacterium saccharolyticum, a family 39 glycoside hydrolase. **2004**, 335, 155-65	59
482	Synergism between Biophysical Techniques. **2005**, 302-323	
481	Enzymatic properties of native and deglycosylated hybrid aspen (Populus tremulaxtremuloides) xyloglucan endotransglycosylase 16A expressed in Pichia pastoris. *Biochemical Journal*, **2005**, 390, 105-13 3.8	67
480	The chemistry and biology of mucin-type O-linked glycosylation. **2005**, 13, 5021-34	244
479	The chemical synthesis of 2-deoxy-2-fluorodisaccharide probes of the hen egg white lysozyme mechanism. **2005**, 340, 379-88	14
478	Determination of thioxylo-oligosaccharide binding to family 11 xylanases using electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry and X-ray crystallography. **2005**, 272, 2317-33	26
477	Recent structural insights into the expanding world of carbohydrate-active enzymes. **2005**, 15, 637-45	238
476	Dynamic combinatorial chemistry: lysozyme selects an aromatic motif that mimics a carbohydrate residue. **2005**, 44, 965-9	51
475	Dynamic Combinatorial Chemistry: Lysozyme Selects an Aromatic Motif That Mimics a Carbohydrate Residue. **2005**, 117, 987-991	19
474	Turbulent flow chromatography for the reduction of matrix effects in electrospray ionization mass spectrometry-based enzyme assays. **2005**, 28, 1658-65	15
473	Mass spectrometric approaches for the investigation of dynamic processes in condensed phase. **2005**, 24, 30-54	71
472	Antibodies as defensive enzymes. **2005**, 26, 485-503	26
471	Elucidation of the relationship between enzyme activity and internal motion using a lysozyme stabilized by cavity-filling mutations. **2005**, 62, 1047-55	10
470	A theoretical DFT investigation of the lysozyme mechanism: computational evidence for a covalent intermediate pathway. **2005**, 59, 118-30	36
469	Screening for proteolytic activities in snake venom by means of a multiplexing electrospray ionization mass spectrometry assay scheme. **2005**, 19, 2923-8	17
468	. **2005**,	71

467	O-GlcNAcase uses substrate-assisted catalysis: kinetic analysis and development of highly selective mechanism-inspired inhibitors. **2005**, 280, 25313-22		289
466	Molecular cloning and characterization of three novel lysozyme-like genes, predominantly expressed in the male reproductive system of humans, belonging to the c-type lysozyme/alpha-lactalbumin family. **2005**, 73, 1064-71		42
465	Application of Angle-Selected Electron Nuclear Double Resonance to Characterize Structured Solvent in Small Molecules and Macromolecules. **2005**, 89-144		2
464	Requirements for catalysis in mammalian glycogenin. **2005**, 280, 23892-9		28
463	Assessing protease activity pattern by means of multiple substrate ESI-MS assays. **2005**, 130, 850-4		13
462	Detailed comparative analysis of the catalytic mechanisms of beta-N-acetylglucosaminidases from families 3 and 20 of glycoside hydrolases. **2005**, 44, 12809-18		90
461	Crystal structure of MltA from Escherichia coli reveals a unique lytic transglycosylase fold. **2005**, 352, 1068-80		50
460	Corrigendum to [Crystal structure of trypsin–Turkey egg white inhibitor complex] [Biochem. Biophys. Res. Commun. 313 (2004) 8–16]. **2005**, 333, 283-286		
459	Probing the catalytically essential residues of the alpha-L-fucosidase from the hyperthermophilic archaeon Sulfolobus solfataricus. **2005**, 44, 6331-42		32
458	Enzymatic polymerization to novel polysaccharides having a glucose-N-acetylglucosamine repeating unit, a cellulose-chitin hybrid polysaccharide. *Biomacromolecules*, **2006**, 7, 1644-56	6.9	57
457	Xyloglucan and xyloglucan endo-transglycosylases (XET): Tools for ex vivo cellulose surface modification. **2006**, 24, 107-120		14
456	Identification of Asp174 and Asp175 as the key catalytic residues of human O-GlcNAcase by functional analysis of site-directed mutants. **2006**, 45, 3835-44		100
455	Mechanism-based profiling of enzyme families. *Chemical Reviews*, **2006**, 106, 3279-301	68.1	490
454	Toward a detailed understanding of base excision repair enzymes: transition state and mechanistic analyses of N-glycoside hydrolysis and N-glycoside transfer. *Chemical Reviews*, **2006**, 106, 506-55	68.1	220
453	Structural snapshots of beta-1,4-galactosyltransferase-I along the kinetic pathway. **2006**, 357, 1619-33		57
452	Crystal structures of the lytic transglycosylase MltA from N.gonorrhoeae and E.coli: insights into interdomain movements and substrate binding. **2006**, 359, 122-36		24
451	Testing electrostatic complementarity in enzyme catalysis: hydrogen bonding in the ketosteroid isomerase oxyanion hole. **2006**, 4, e99		110
450	Characterization of a beta-N-acetylhexosaminidase and a beta-N-acetylglucosaminidase/beta-glucosidase from Cellulomonas fimi. **2006**, 273, 2929-41		54

449	Properties of the endolytic transglycosylase encoded by gene 144 of Pseudomonas aeruginosa bacteriophage phiKZ. **2006**, 71, 300-5	22
448	Structure and mechanism of a bacterial beta-glucosaminidase having O-GlcNAcase activity. **2006**, 13, 365-71	164
447	Investigations into the role of oxacarbenium ions in glycosylation reactions by ab initio molecular dynamics. **2006**, 341, 2912-20	38
446	Polymeric hydrophobic membranes as a tool to control polymorphism and protein□gand interactions. **2006**, 283, 123-132	19
445	Transferase and hydrolytic activities of the laminarinase from Rhodothermus marinus and its M133A, M133C, and M133W mutants. **2006**, 23, 501-11	8
444	Bacterial resuscitation factors: revival of viable but non-culturable bacteria. **2006**, 63, 2555-9	36
443	Substrate distortion by a lichenase highlights the different conformational itineraries harnessed by related glycoside hydrolases. **2006**, 45, 5136-40	39
442	Substrate Distortion by a Lichenase Highlights the Different Conformational Itineraries Harnessed by Related Glycoside Hydrolases. **2006**, 118, 5260-5264	1
441	Construction of enzyme-substrate complexes between hen egg-white lysozyme and N-acetyl-D-glucosamine hexamer by systematic conformational search and molecular dynamics simulation. **2006**, 140, 221-7	3
440	Experimental verification of the crucial roles of Glu73 in the catalytic activity and structural stability of goose type lysozyme. **2006**, 140, 75-85	25
439	Insights into the serine protease mechanism from atomic resolution structures of trypsin reaction intermediates. **2006**, 103, 6835-40	99
438	Functional proteomic profiling of glycan-processing enzymes. **2006**, 415, 253-68	4
437	Structural evidence for the evolution of xyloglucanase activity from xyloglucan endo-transglycosylases: biological implications for cell wall metabolism. **2007**, 19, 1947-63	178
436	Investigation of Catalysis by Acids, Bases, Other Small Molecules and Enzymes. **2007**, 293-323	
435	Synthesis and Properties of Surfactants derived from N-Acetyl-D-Glucosamine. **2007**, 26, 395-409	4
434	Glycosidases: Functions, Families and Folds. **2007**,	2
433	Crystal structure of Tapes japonica Lysozyme with substrate analogue: structural basis of the catalytic mechanism and manifestation of its chitinase activity accompanied by quaternary structural change. **2007**, 282, 27459-27467	53
432	Convergent chemical synthesis and high-resolution x-ray structure of human lysozyme. **2007**, 104, 4846-51	148

431	The crystal structure of a lysozyme c from housefly Musca domestica, the first structure of a digestive lysozyme. **2007**, 160, 83-92		19
430	Crystal structures of Paenibacillus polymyxa beta-glucosidase B complexes reveal the molecular basis of substrate specificity and give new insights into the catalytic machinery of family I glycosidases. **2007**, 371, 1204-18		89
429	Aptamer-based biosensors for label-free voltammetric detection of lysozyme. **2007**, 79, 5158-64		230
428	Recognition of solvent exposed protein surfaces using anthracene derived receptors. **2007**, 5, 276-85		32
427	Structural basis for cyclophellitol inhibition of a beta-glucosidase. **2007**, 5, 444-6		38
426	Analysis of PUGNAc and NAG-thiazoline as transition state analogues for human O-GlcNAcase: mechanistic and structural insights into inhibitor selectivity and transition state poise. **2007**, 129, 635-44		142
425	Substrate flexibility of vicenisaminyltransferase VinC involved in the biosynthesis of vicenistatin. **2007**, 129, 5102-7		40
424	Catalytically Inactive Endoglycosidases as Microbial Diagnostic Reagents: Chitinases and Lysozymes as Fungal and Bacterial Capture/Label Agents. **2007**, 373-384		1
423	SAFCHIA IS A NEW CLASS OF DEFENCE CHITINASE FROM SAFFRON (CROCUS SATIVUS L.). **2007**, 195-202		3
422	From egg to crystal: A practical on purification, characterization, and crystallization of lysozyme for bachelor students. **2007**, 35, 280-6		7
421	Determination of steady-state kinetic parameters for a xylanase-catalyzed hydrolysis of neutral underivatized xylooligosaccharides by mass spectrometry. **2007**, 365, 165-73		8
420	Variation in relative substrate specificity of bifunctional beta-D-xylosidase/alpha-L-arabinofuranosidase by single-site mutations: roles of substrate distortion and recognition. **2007**, 1774, 1192-8		25
419	OMP decarboxylase--An enigma persists. *Bioorganic Chemistry*, **2007**, 35, 465-9	5.1	27
418	Chitin and Chitosan. **2007**, 449-475		14
417	Biochemical analysis of Thermotoga maritima GH36 alpha-galactosidase (TmGalA) confirms the mechanistic commonality of clan GH-D glycoside hydrolases. **2007**, 46, 3319-30		78
416	Sequence characterization of an unusual lysozyme gene expressed in the intestinal tract of the reduviid bug Triatoma infestans (Insecta). **2008**, 102, 229-32		18
415	N-acetylmuramic acid 6-phosphate lyases (MurNAc etherases): role in cell wall metabolism, distribution, structure, and mechanism. **2008**, 65, 928-39		30
414	The alpha-L-fucosidase from Sulfolobus solfataricus. **2008**, 12, 61-8		11

413	Acidic range titration of HEWL using a constant-pH molecular dynamics method. **2008**, 72, 289-98		66
412	Mechanistic studies on the formation of glycosidase-substrate and glycosidase-inhibitor covalent intermediates. **2008**, 29, 2565-74		35
411	Nucleophilic Additions to Cyclic Nitrones en Route to Iminocyclitols Total Syntheses of DMDP, 6-deoxy-DMDP, DAB-1, CYB-3, Nectrisine, and Radicamine B. **2008**, 2008, 2929-2947		114
410	Mechanistic insights into glycosidase chemistry. **2008**, 12, 539-55		328
409	Crystal structures of Melanocarpus albomyces cellobiohydrolase Cel7B in complex with cello-oligomers show high flexibility in the substrate binding. **2008**, 17, 1383-94		43
408	C-terminus of TRAP in Staphylococcus can enhance the activity of lysozyme and lysostaphin. **2008**, 40, 452-8		4
407	Structural variation in the glycan strands of bacterial peptidoglycan. **2008**, 32, 287-306		263
406	Structures of the human orotidine-5'-monophosphate decarboxylase support a covalent mechanism and provide a framework for drug design. **2008**, 16, 82-92		41
405	Sorting the diverse: the sequence-based classifications of carbohydrate-active enzymes. *Biochemical Journal*, **2008**, 382	3.8	19
404	Catalytic reaction mechanism of goose egg-white lysozyme by molecular modelling of enzyme-substrate complex. **2008**, 144, 753-61		17
403	QM/MM simulations predict a covalent intermediate in the hen egg white lysozyme reaction with its natural substrate. **2008**, 4425-7		62
402	Conformational changes and reaction of clostridial glycosylating toxins. **2008**, 377, 1346-56		53
401	Glycosyltransferases: structures, functions, and mechanisms. **2008**, 77, 521-55		1240
400	Biochemistry. How enzymes work. **2008**, 320, 1428-9		167
399	Synthesis and use of mechanism-based protein-profiling probes for retaining beta-D-glucosaminidases facilitate identification of Pseudomonas aeruginosa NagZ. **2008**, 130, 327-35		78
398	Synthesis and testing of 2-deoxy-2,2-dihaloglycosides as mechanism-based inhibitors of alpha-glycosidases. **2008**, 73, 3070-7		25
397	Covalent inhibitors of glycosidases and their applications in biochemistry and biology. **2008**, 18, 570-86		148
396	Mechanism-based labeling defines the free energy change for formation of the covalent glycosyl-enzyme intermediate in a xyloglucan endo-transglycosylase. **2008**, 283, 21864-72		18

395	Structural and enzymatic analysis of MshA from Corynebacterium glutamicum: substrate-assisted catalysis. **2008**, 283, 15834-44	93
394	The role of Arg114 at subsites E and F in reactions catalyzed by hen egg-white lysozyme. **2008**, 72, 823-32	7
393	Cloning, purification and comparative characterization of two digestive lysozymes from Musca domestica larvae. **2008**, 41, 969-77	20
392	Reaction kinetics. 281-325	
391	?????????????????????????????? ????????????????????????. **2008**, 46, 308-309	1
390	Enzymatic Cleavage of Glycosides: Mechanism, Inhibition and Synthetic Applications. **2009**, 253-284	2
389	Crystallographic snapshots of an entire reaction cycle for a retaining xylanase from Streptomyces olivaceoviridis E-86. **2009**, 146, 61-70	15
388	Characterization of an i-type lysozyme gene from the sea cucumber Stichopus japonicus, and enzymatic and nonenzymatic antimicrobial activities of its recombinant protein. **2009**, 107, 583-8	53
387	Allerlei vom Frühlingsei. Eine Oologisch-chemische Osterbetrachtung. **2009**, 43, 100-114	5
386	Crystal structures of g-type lysozyme from Atlantic cod shed new light on substrate binding and the catalytic mechanism. **2009**, 66, 2585-98	42
385	Enzymatic transition states and dynamic motion in barrier crossing. **2009**, 5, 551-8	204
384	Accessory active site residues of Streptomyces sp. N174 chitosanase: variations on a common theme in the lysozyme superfamily. **2009**, 276, 857-69	27
383	Cyclononitols: a flexible synthetic approach towards nine-membered carbasugar analogues. **2009**, 50, 4519-4522	8
382	Isolation of a new fungi and wound-induced chitinase class in corms of Crocus sativus. **2009**, 47, 426-34	26
381	Structures and mechanisms of the mycothiol biosynthetic enzymes. **2009**, 13, 451-9	40
380	Biomacromolecular affinity: interactions between lysozyme and regioselectively sulfated chitosan. **2009**, 73, 346-50	25
379	Characterization of a highly efficient heterodimeric xylosidase from Humicola insolens. **2009**, 45, 436-442	12
378	Diastereocontrolled electrophilic fluorinations of 2-deoxyribonolactone: syntheses of all corresponding 2-deoxy-2-fluorolactones and 2'-deoxy-2'-fluoro-NAD+s. **2009**, 74, 5779-89	24

377	Directed "in situ" inhibitor elongation as a strategy to structurally characterize the covalent glycosyl-enzyme intermediate of human pancreatic alpha-amylase. **2009**, 48, 10752-64		26
376	Mechanism of cellulose hydrolysis by inverting GH8 endoglucanases: a QM/MM metadynamics study. **2009**, 113, 7331-9		87
375	Lysozyme. **2009**,		2
374	Conjugated polyelectrolyte-sensitized fluorescent detection of thrombin in blood serum using aptamer-immobilized silica nanoparticles as the platform. **2009**, 25, 12787-93		96
373	Catalytic reaction mechanism based on alpha-secondary deuterium isotope effects in hydrolysis of trehalose by European honeybee trehalase. **2009**, 73, 2466-73		18
372	Importance of the hydrogen bonding network including Asp52 for catalysis, as revealed by Asn59 mutant hen egg-white lysozymes. **2009**, 146, 651-7		16
371	Enzymatic deconstruction of xylan for biofuel production. **2009**, 1, 2-17		234
370	Examples of Structure-Function Relationships in Enzymatic Systems. **2009**, 451-542		
369	The Chitopentaose Complex of a Mutant Hen Egg-White Lysozyme Displays No Distortion of the 1 Sugar Away from a 4C1 Chair Conformation. **2009**, 62, 528		3
368	Mechanism, Structure, and Inhibition of O-GlcNAc Processing Enzymes. **2010**, 5, 74-91		43
367	Molecular Probes for Protein Glycosylation. **2010**, 261-296		
366	Carbohydrases. **2010**,		1
365	??????????????. **2010**, 48, 571-576		1
364	beta-D-Xylosidase from Selenomonas ruminantium: role of glutamate 186 in catalysis revealed by site-directed mutagenesis, alternate substrates, and active-site inhibitor. *Applied Biochemistry and Biotechnology*, **2010**, 161, 395-410	3.2	8
363	Lysozymes in the animal kingdom. **2010**, 35, 127-60		476
362	Complete amino acid sequence of three reptile lysozymes. **2010**, 151, 75-83		3
361	Purine nucleoside phosphorylases as targets for transition-state analog design. 215-247		1
360	Crystal structures of Bacillus cereus NCTU2 chitinase complexes with chitooligomers reveal novel substrate binding for catalysis: a chitinase without chitin binding and insertion domains. **2010**, 285, 31603-15		40

359	Catalytic mechanism of human alpha-galactosidase. **2010**, 285, 3625-3632	89
358	Structural and kinetic analysis of Bacillus subtilis N-acetylglucosaminidase reveals a unique Asp-His dyad mechanism. **2010**, 285, 35675-84	92
357	1,2,3-Tri-O-acetyl-5-de-oxy-d-ribofuran-ose. **2010**, 66, o3107	1
356	Distribution of lysosome-associated membrane proteins-1 and -2, and cathepsin D in eosinophilic granular bodies: possible relationship to cyst development in pilocytic astrocytomas. **2010**, 38, 1354-64	9
355	Structure and reaction mechanism of human nicotinamide phosphoribosyltransferase. **2010**, 147, 95-107	24
354	Structure and function of enzymes acting on chitin and chitosan. **2010**, 27, 331-66	114
353	Enzymes that catalyse SN2 reaction mechanisms. **2010**, 27, 900-18	41
352	Computational simulation of the lifetime of the methoxymethyl cation in water. A simple model for a glycosyl cation: when is an intermediate an intermediate?. **2010**, 114, 5769-74	11
351	Anionic conjugated polymer with aptamer-functionalized silica nanoparticle for label-free naked-eye detection of lysozyme in protein mixtures. **2010**, 26, 10025-30	57
350	The analysis of enzymic free energy relationships using kinetic and computational models. **2010**, 39, 2272-301	18
349	Fluorosugars: synthesis of the 2,3,4-trideoxy-2,3,4-trifluoro hexose analogues of D-glucose and D-altrose and assessment of their erythrocyte transmembrane transport. **2010**, 46, 5434-6	41
348	Computational enzymology. **2010**, 46, 2354-72	90
347	Mechanisms of Enzymatic Glycosyl Transfer. **2010**, 385-422	8
346	Coupling Constant pH Molecular Dynamics with Accelerated Molecular Dynamics. **2010**, 6, 560-568	76
345	Production of chitooligosaccharides and their potential applications in medicine. **2010**, 8, 1482-517	431
344	References. **2010**, 807-843	
343	Investigations of enzyme-catalysed reactions with combined quantum mechanics/molecular mechanics (QM/MM) methods. **2010**, 29, 65-133	89
342	A demonstration of the inhomogeneity of the local dielectric response of proteins by molecular dynamics simulations. **2010**, 132, 235103	30

341	Free energy study of the catalytic mechanism of Trypanosoma cruzi trans-sialidase. From the Michaelis complex to the covalent intermediate. **2011**, 50, 10150-8	35
340	Metal-free and pH-controlled introduction of azides in proteins. **2011**, 2, 701	60
339	Self-assembly of trehalose molecules on a lysozyme surface: the broken glass hypothesis. **2011**, 13, 2294-9	45
338	Isotope-edited FTIR of alkaline phosphatase resolves paradoxical ligand binding properties and suggests a role for ground-state destabilization. **2011**, 133, 11621-31	22
337	Structural and functional analyses of a glycoside hydrolase family 5 enzyme with an unexpected β-fucosidase activity. **2011**, 50, 3369-75	7
336	Quantum mechanics/molecular mechanics modeling of substrate-assisted catalysis in family 18 chitinases: conformational changes and the role of Asp142 in catalysis in ChiB. **2011**, 50, 4697-711	49
335	Molecular dynamics simulations of a branched tetradecasaccharide substrate in the active site of a xyloglucan endo-transglycosylase. **2011**, 37, 1001-1013	9
334	Celebrating structural biology. **2011**, 18, 1304-16	8
333	Structural, mechanistic, and computational analysis of the effects of anomeric fluorines on anomeric fluoride departure in 5-fluoroxylosyl fluorides. **2011**, 133, 15826-9	20
332	A spectral deciphering of the binding interaction of an intramolecular charge transfer fluorescence probe with a cationic protein: thermodynamic analysis of the binding phenomenon combined with blind docking study. **2011**, 10, 980-91	88
331	Bioorthogonal chemistry: applications in activity-based protein profiling. **2011**, 44, 718-29	92
330	Proton transfer facilitated by ligand binding. An energetic analysis of the catalytic mechanism of Trypanosoma cruzi trans-sialidase. **2011**, 50, 836-42	32
329	Molecular characterization of a mollusk chicken-type lysozyme gene from Haliotis discus hannai Ino, and the antimicrobial activity of its recombinant protein. **2011**, 30, 163-72	33
328	The g-type lysozyme of Scophthalmus maximus has a broad substrate spectrum and is involved in the immune response against bacterial infection. **2011**, 30, 630-7	33
327	Opposing influences by subsite -1 and subsite +1 residues on relative xylopyranosidase/arabinofuranosidase activities of bifunctional β-D-xylosidase/α-L-arabinofuranosidase. **2011**, 1814, 1648-57	8
326	Bioconjugation via azide-Staudinger ligation: an overview. **2011**, 40, 4840-71	232
325	Ligand bound structures of a glycosyl hydrolase family 30 glucuronoxylan xylanohydrolase. **2011**, 407, 92-109	62
324	Effector glycosyltransferases in legionella. **2011**, 2, 76	18

323	The chemical nature of enzyme catalysis. **2011**, 189-221		1
322	Contribution of C-H π Interactions to the Affinity and Specificity of Carbohydrate Binding Sites. **2011**, 8, 222-228		9
321	Functional analysis of hyperthermophilic endocellulase from Pyrococcus horikoshii by crystallographic snapshots. *Biochemical Journal*, **2011**, 437, 223-30	3.8	27
320	Mechanistic evidence for a front-side, SNi-type reaction in a retaining glycosyltransferase. **2011**, 7, 631-8		117
319	Enzymatic glycosyl transfer: mechanisms and applications. **2011**, 29, 1-18		58
318	On the information expressed in enzyme structure: more lessons from ribonuclease A. **2011**, 15, 769-79		4
317	Multi-biocatalytic properties of layerby-layer assembled lysozyme/catalase multilayers. **2011**, 19, 635-638		4
316	Activity-based profiling of retaining β-glucosidases: a comparative study. **2011**, 12, 1263-9		29
315	The conformation of tetrafluorinated methyl galactoside anomers: crystallographic and NMR studies. **2011**, 346, 1129-39		28
314	Protein dynamics and enzyme catalysis: insights from simulations. **2011**, 1814, 1077-92		62
313	Temperature dependence of lysozyme hydration and the role of elastic energy. **2011**, 83, 031924		7
312	Amino acid sequence of Egyptian goose egg-white lysozyme and effects of amino acid substitution on the enzymatic activity. **2012**, 76, 691-8		3
311	Structural and mechanistic studies of pesticin, a bacterial homolog of phage lysozymes. **2012**, 287, 23381-96		39
310	Excision of thymine and 5-hydroxymethyluracil by the MBD4 DNA glycosylase domain: structural basis and implications for active DNA demethylation. **2012**, 40, 8276-84		77
309	Structural snapshots of the reaction coordinate for O-GlcNAc transferase. **2012**, 8, 966-8		104
308	Combining weak affinity chromatography, NMR spectroscopy and molecular simulations in carbohydrate-lysozyme interaction studies. **2012**, 10, 3019-32		10
307	Enhancing Conformation and Protonation State Sampling of Hen Egg White Lysozyme Using pH Replica Exchange Molecular Dynamics. **2012**, 8, 4393-404		71
306	Enzyme-catalyzed direct three-component aza-Diels-Alder reaction using hen egg white lysozyme. **2012**, 77, 200-7		34

305	Active site plasticity within the glycoside hydrolase NagZ underlies a dynamic mechanism of substrate distortion. **2012**, 19, 1471-82		58
304	Novel structural features of xylanase A1 from Paenibacillus sp. JDR-2. **2012**, 180, 303-11		9
303	Multidimensional free energy volumes offer unique insights into reaction mechanisms, molecular conformation and association. **2012**, 14, 9026-36		9
302	Development of inhibitors as research tools for carbohydrate-processing enzymes. **2012**, 40, 913-28		13
301	A historical perspective for the catalytic reaction mechanism of glycosidase; so as to bring about breakthrough in confusing situation. **2012**, 76, 215-31		15
300	Biochemical characterization of a novel cycloisomaltooligosaccharide glucanotransferase from Paenibacillus sp. 598K. **2012**, 1824, 919-24		19
299	Shrimp invertebrate lysozyme i-lyz: gene structure, molecular model and response of c and i lysozymes to lipopolysaccharide (LPS). **2012**, 32, 230-6		23
298	Molecular cloning and characterization of c-type lysozyme gene in orange-spotted grouper, Epinephelus coioides. **2012**, 33, 186-96		51
297	Rapid calculation of protein pKa values using Rosetta. **2012**, 103, 587-595		51
296	Conformational analyses of the reaction coordinate of glycosidases. **2012**, 45, 308-16		184
295	The crystallization and structural analysis of cellulases (and other glycoside hydrolases): strategies and tactics. **2012**, 510, 141-68		13
294	pKa modulation of the acid/base catalyst within GH32 and GH68: a role in substrate/inhibitor specificity?. *PLoS ONE*, **2012**, 7, e37453	3.7	16
293	Analysis of the native structure, stability and aggregation of biotinylated human lysozyme. *PLoS ONE*, **2012**, 7, e50192	3.7	20
292	The dynamical response of hen egg white lysozyme to the binding of a carbohydrate ligand. **2012**, 21, 1066-73		24
291	Probing the structure of lysozyme-carbon-nanotube hybrids with molecular dynamics. *Chemistry - A European Journal*, **2012**, 18, 4308-13	4.8	76
290	Biosorption behaviors of natural polymer microfibers synthesized by using cellulase-based enzyme reactions. **2012**, 20, 490-495		
289	Invertebrate lysozymes: diversity and distribution, molecular mechanism and in vivo function. **2012**, 37, 327-48		69
288	From anomalies in neat liquid to structure, dynamics and function in the biological world. **2012**, 529, 1-9		44

287	Engineering chitinases for the synthesis of chitin oligosaccharides: Catalytic amino acid mutations convert the GH-18 family glycoside hydrolases into transglycosylases. **2012**, 74, 89-96	36
286	Potential of mean force of water-proton bath and molecular dynamic simulation of proteins at constant pH. **2012**, 33, 832-42	14
285	Toward ab initio refinement of protein X-ray crystal structures: interpreting and correlating structural fluctuations. **2012**, 131, 1	7
284	Structural basis of bacterial defense against g-type lysozyme-based innate immunity. **2013**, 70, 1113-22	25
283	Lysozyme detection on aptamer functionalized graphene-coated SPR interfaces. **2013**, 50, 239-43	110
282	Identifying critical unrecognized sugar-protein interactions in GH10 xylanases from Geobacillus stearothermophilus using STD NMR. **2013**, 280, 4652-65	7
281	Molecular cloning, genomic structure, and tissue distribution of EW135, a novel chicken egg white protein with group B scavenger receptor cysteine-rich domains. **2013**, 65, 785-93	
280	The effect of concentration, temperature and stirring on hen egg white lysozyme amyloid formation. **2013**, 9, 9692-701	55
279	The chitinolytic machinery of Serratia marcescens--a model system for enzymatic degradation of recalcitrant polysaccharides. **2013**, 280, 3028-49	201
278	Insights into mucopolysaccharidosis I from the structure and action of α-L-iduronidase. **2013**, 9, 739-45	40
277	Substrate distortion contributes to the catalysis of orotidine 5'-monophosphate decarboxylase. **2013**, 135, 17432-43	21
276	Characterization of a c-type lysozyme of Scophthalmus maximus: expression, activity, and antibacterial effect. **2013**, 34, 46-54	43
275	Computational enzymology. **2013**, 924, 67-89	11
274	Binding structures of tri-N-acetyl-β-glucosamine in hen egg white lysozyme using molecular dynamics with a polarizable force field. **2013**, 34, 163-74	16
273	Coarse-graining of proteins based on elastic network models. **2013**, 422, 165-174	22
272	Combined Lewis acid and Brønsted acid-mediated reactivity of glycosyl trichloroacetimidate donors. **2013**, 382, 36-42	19
271	Antimicrobial Peptides: Their History, Evolution, and Functional Promiscuity. **2013**, 1-37	19
270	Engineering Escherichia coli for soluble expression and single step purification of active human lysozyme. **2013**, 164, 1-8	21

269	Encyclopedia of Biophysics. **2013**, 1236-1236		
268	A surprising role for conformational entropy in protein function. **2013**, 337, 69-94		26
267	Combined quantum mechanics/molecular mechanics (QM/MM) methods in computational enzymology. **2013**, 52, 2708-28		388
266	Encyclopedia of Biophysics. **2013**, 1286-1286		
265	Chemoselective esterification of □-hydroxyacids catalyzed by salicylaldehyde through induced intramolecularity. **2013**, 3, 1976-1986		10
264	Spectroscopic determination of lysozyme conformational changes in the presence of trehalose and guanidine. **2013**, 66, 297-307		5
263	Carbohydrate recognition by RpfB from Mycobacterium tuberculosis unveiled by crystallographic and molecular dynamics analyses. **2013**, 104, 2530-9		28
262	Encyclopedia of Biophysics. **2013**, 1225-1225		
261	Facile and direct synthesis of long-chain chitin from chitobiose via proton-assisted nonaqueous biocatalysis. **2013**, 87, 69-74		
260	Encyclopedia of Biophysics. **2013**, 1249-1250		0
259	A novel fluorescence assay and catalytic properties of Crh1 and Crh2 yeast cell wall transglycosylases. *Biochemical Journal*, **2013**, 455, 307-18	3.8	17
258	Egg white coagulum: a precisely tailorable membrane for biomimetic multilevel structured nanomaterials. **2013**, 3, 1464		2
257	Structural snapshots illustrate the catalytic cycle of □-galactocerebrosidase, the defective enzyme in Krabbe disease. **2013**, 110, 20479-84		30
256	Encyclopedia of Biophysics. **2013**, 1226-1233		
255	Lysozyme-encapsulated gold nanocluster-based affinity mass spectrometry for pathogenic bacteria. **2013**, 27, 2143-8		25
254	A novel transition-state analogue for lysozyme, 4-O-□-tri-N-acetylchitotriosyl moranoline, provided evidence supporting the covalent glycosyl-enzyme intermediate. **2013**, 288, 6072-82		21
253	Structure and function studies on enzymes with a catalytic carboxyl group(s): from ribonuclease T1 to carboxyl peptidases. **2013**, 89, 201-25		3
252	Graphical Processing Unit accelerated Poisson equation solver and its application for calculation of single ion potential in ion-channels. **2013**, 1, 151-163		1

251	Isolation and Characterization of a Novel Chicken Egg White Protein with Scavenger Receptor Cysteine-rich Domains. **2013**, 50, 159-163		4
250	Analysis of two lysozyme genes and antimicrobial functions of their recombinant proteins in Asian seabass. *PLoS ONE*, **2013**, 8, e79743	3.7	38
249	. **2014**,		1
248	Third party annotation gene data set of eutherian lysozyme genes. **2014**, 2, 258-60		4
247	The active site of hen egg-white lysozyme: flexibility and chemical bonding. **2014**, 70, 1136-46		24
246	Marvels of enzyme catalysis at true atomic resolution: distortions, bond elongations, hidden flips, protonation states and atom identities. **2014**, 29, 122-33		24
245	Glycosidases: Functions, Families and Folds. **2014**,		11
244	Weak protein-cationic co-ion interactions addressed by X-ray crystallography and mass spectrometry. **2014**, 70, 2217-31		6
243	Cloning and immune characterization of the c-type lysozyme gene in red-spotted grouper, Epinephelus akaara. **2014**, 36, 305-14		17
242	Kinetic study of a hen-egg white lysozyme-based oenological preparation. **2014**, 23, 151-155		7
241	Modified lysozymes as novel broad spectrum natural antimicrobial agents in foods. **2014**, 79, R1077-90		41
240	Cu(II) conjugation along the transformation of a vitamin K3 derivative to a dinaphthoquinone methide radical. **2014**, 38, 277-284		
239	Regenerative glycosylation under nucleophilic catalysis. **2014**, 136, 921-3		40
238	Binding of the iminium and alkanolamine forms of sanguinarine to lysozyme: spectroscopic analysis, thermodynamics, and molecular modeling studies. **2014**, 118, 13077-91		50
237	Lysozyme in Wine: An Overview of Current and Future Applications. **2014**, 13, 1062-1073		55
236	Structural studies suggest a peptidoglycan hydrolase function for the Mycobacterium tuberculosis Tat-secreted protein Rv2525c. **2014**, 188, 156-64		6
235	Ni(II)-Schiff base complex as an enzyme inhibitor of hen egg white lysozyme: a crystallographic and spectroscopic study. **2014**, 6, 1737-47		4
234	pKa cycling of the general acid/base in glycoside hydrolase families 33 and 34. **2014**, 16, 5785-92		10

233	From covalent glycosidase inhibitors to activity-based glycosidase probes. *Chemistry - A European Journal*, **2014**, 20, 10864-72	4.8	37
232	Challenges in computational studies of enzyme structure, function and dynamics. **2014**, 54, 62-79		40
231	The mechanism of cellulose hydrolysis by a two-step, retaining cellobiohydrolase elucidated by structural and transition path sampling studies. **2014**, 136, 321-9		134
230	Rational Design of Activity-Based Retaining Exoglucosidase Probes. **2014**, 191-206		
229	Diamond nanogel-embedded contact lenses mediate lysozyme-dependent therapeutic release. **2014**, 8, 2998-3005		151
228	QM/MM free-energy simulations of reaction in Serratia marcescens Chitinase B reveal the protonation state of Asp142 and the critical role of Tyr214. **2014**, 118, 4771-83		32
227	Evaluation of the efficiency of enological procedures on lysozyme depletion in wine by an indirect ELISA method. **2014**, 62, 6247-53		14
226	Catalytic mechanism of L,D-transpeptidase 2 from Mycobacterium tuberculosis described by a computational approach: insights for the design of new antibiotics drugs. **2014**, 54, 2402-10		22
225	Exploring functional cyclophellitol analogues as human retaining beta-glucosidase inhibitors. **2014**, 12, 7786-91		20
224	Control of scaffold degradation in tissue engineering: a review. **2014**, 20, 492-502		129
223	Production of LYZL6, a novel human c-type lysozyme, in recombinant Pichia pastoris employing high cell density fed-batch fermentation. **2014**, 118, 420-5		14
222	FTIR, ESI-MS, VT-NMR and SANS study of trehalose thermal stabilization of lysozyme. **2014**, 63, 225-32		18
221	Non-covalent conjugation of CdTe QDs with lysozyme binding DNA for fluorescent sensing of lysozyme in complex biological sample. **2014**, 129, 86-92		20
220	Interaction of di-N-acetylchitobiosyl moranoline with a family GH19 chitinase from moss, Bryum coronatum. **2014**, 24, 945-55		2
219	Comparing Cyclophellitol N-Alkyl and N-Acyl Cyclophellitol Aziridines as Activity-Based Glycosidase Probes. *Chemistry - A European Journal*, **2015**, 21, 10861-9	4.8	19
218	Synthesis and characterization of novel carboxymethyl chitosan grafted polylactide hydrogels for controlled drug delivery. **2015**, 26, 924-931		18
217	Reaction Mechanisms in Carbohydrate-Active Enzymes: Glycoside Hydrolases and Glycosyltransferases. Insights from ab Initio Quantum Mechanics/Molecular Mechanics Dynamic Simulations. **2015**, 137, 7528-47		145
216	Low Abundant N-linked Glycosylation in Hen Egg White Lysozyme Is Localized at Nonconsensus Sites. **2015**, 14, 2633-41		16

215	A simplified electrostatic model for hydrolase catalysis. **2015**, 78, 257-65		
214	Isolation, characterization, kinetics, and enzymatic and nonenzymatic microbicidal activities of a novel c-type lysozyme from plasma of Schistocerca gregaria (Orthoptera: Acrididae). **2015**, 15,		21
213	Structural and functional analysis of yeast Crh1 and Crh2 transglycosylases. **2015**, 282, 715-31		21
212	Differential profiles of gastrointestinal proteins interacting with peptidoglycans from Lactobacillus plantarum and Staphylococcus aureus. **2015**, 65, 77-85		14
211	A QM/MM free energy study of the oxidation mechanism of dihydroorotate dehydrogenase (class 1A) from Lactococcus lactis. **2015**, 119, 1468-73		8
210	Asp48 function in the hydrogen-bonding network involving Asp52 of hen egg-white lysozyme. **2015**, 79, 196-204		5
209	Stereoselective Synthesis of Boat-Locked Glycosides Designed as Glycosyl Hydrolase Conformational Probes. **2015**, 2015, 1472-1484		5
208	Fungal cellulases. *Chemical Reviews*, **2015**, 115, 1308-448	68.1	513
207	Peptidoglycan. **2015**, 105-124		2
206	Molecular characterization and expression pattern of c-type and g-type lysozyme isoforms in starry flounder Platichthys stellate infected with Streptococcus parauberis. **2015**, 81, 353-363		12
205	Enzymes for food-packaging applications. **2015**, 161-178		1
204	The synthesis of tetrafluorinated aminosugars. **2015**, 174, 95-101		7
203	Structural and biochemical characterization of the Ɛ-N-acetylglucosaminidase from Thermotoga maritima: toward rationalization of mechanistic knowledge in the GH73 family. **2015**, 25, 319-30		19
202	Cellulase biocatalysis: key influencing factors and mode of action. **2015**, 22, 2157-2182		21
201	High-pressure protein crystallography of hen egg-white lysozyme. **2015**, 71, 742-53		30
200	Experimental characterization of adsorbed protein orientation, conformation, and bioactivity. **2015**, 10, 019002		54
199	Structural analysis of a specialized type III secretion system peptidoglycan-cleaving enzyme. **2015**, 290, 10406-17		33
198	Understanding the Structure-Function Relationship of Lysozyme Resistance in Staphylococcus aureus by Peptidoglycan O-Acetylation Using Molecular Docking, Dynamics, and Lysis Assay. **2015**, 55, 760-70		45

197	Protecting Gram-negative bacterial cell envelopes from human lysozyme: Interactions with Ivy inhibitor proteins from Escherichia coli and Pseudomonas aeruginosa. **2015**, 1848, 3032-46	10
196	A product of RpfB and RipA joint enzymatic action promotes the resuscitation of dormant mycobacteria. **2015**, 282, 2500-11	31
195	An allolactose trapped at the lacZ β-galactosidase active site with its galactosyl moiety in a (4)H3 conformation provides insights into the formation, conformation, and stabilization of the transition state. **2015**, 93, 531-40	4
194	Investigation of a solvent-cast organogel to form a liquid-gel microinterface array for electrochemical detection of lysozyme. **2015**, 893, 34-40	15
193	Monobody-mediated alteration of enzyme specificity. **2015**, 11, 762-4	21
192	Hen egg-white lysozyme crystallisation: protein stacking and structure stability enhanced by a Tellurium(VI)-centred polyoxotungstate. **2015**, 16, 233-41	62
191	Chitinase biotechnology: Production, purification, and application. **2015**, 15, 30-38	55
190	One-pot synthesis of gold nanoclusters with bright red fluorescence and good biorecognition abilities for visualization fluorescence enhancement detection of E. coli. **2015**, 134, 54-59	52
189	Peptidoglycan Recognition Proteins and Lysozyme. **2016**, 389-403	8
188	Combinational Approaches for Antimicrobial Packaging: Lysozyme and Lactoferrin. **2016**, 589-597	1
187	Specific Electrochemiluminescence of Aptamer-Functionalized Quantum Dots with Lysozyme and Hemin as Co-Triggers. **2016**, 34, 331-336	1
186	Molecular cloning, inducible expression and antibacterial analysis of a novel i-type lysozyme (lyz-i2) in Pacific white shrimp, Litopenaeus vannamei. **2016**, 54, 197-203	20
185	The reaction mechanism of retaining glycosyltransferases. **2016**, 44, 51-60	34
184	New biological treatment targeting Mycobacterium tuberculosis in contaminated wastewater using lysing enzymes coupled to magnetic nanoparticles. **2016**, 5,	
183	Elucidating the pH-Dependent Structural Transition of T7 Bacteriophage Endolysin. **2016**, 55, 4614-25	22
182	The changes of secondary structures and properties of lysozyme along with the egg storage. **2016**, 92, 600-606	54
181	Antimicrobial peptides as natural bio-preservative to enhance the shelf-life of food. **2016**, 53, 3381-3394	85
180	Structural Snapshots for Mechanism-Based Inactivation of a Glycoside Hydrolase by Cyclopropyl Carbasugars. **2016**, 128, 15202-15206	5

179	A β-Mannanase with a Lysozyme-like Fold and a Novel Molecular Catalytic Mechanism. **2016**, 2, 896-903		33
178	Structural Snapshots for Mechanism-Based Inactivation of a Glycoside Hydrolase by Cyclopropyl Carbasugars. **2016**, 55, 14978-14982		24
177	Structural and rheological properties of xanthan gum/lysozyme system induced by in situ acidification. **2016**, 90, 85-90		15
176	Imidazole derivatives differentially destabilize the low pH conformation of lysozyme through weak electrostatic interactions. **2016**, 6, 101395-101403		0
175	Cloning and expression analysis of c-type and g-type lysozymes in yellow catfish (Pelteobagrus fulvidraco). **2016**, 38, 707-716		2
174	Modulation and Salt-Induced Reverse Modulation of the Excited-State Proton-Transfer Process of Lysozymized Pyranine: The Contrasting Scenario of the Ground-State Acid-Base Equilibrium of the Photoacid. **2016**, 120, 7076-87		6
173	Injectable insulin-lysozyme-loaded nanogels with enzymatically-controlled degradation and release for basal insulin treatment: In vitro characterization and in vivo observation. **2016**, 224, 33-42		43
172	A Variety of Saccharide Binding-Sites. **2016**, 27-37		
171	Substrate Distortion and the Catalytic Reaction Mechanism of 5-Carboxyvanillate Decarboxylase. **2016**, 138, 826-36		29
170	Molecular characterization and expressing analysis of the c-type and g-type lysozymes in Qihe crucian carp Carassius auratus. **2016**, 52, 210-20		20
169	A Trapped Covalent Intermediate of a Glycoside Hydrolase on the Pathway to Transglycosylation. Insights from Experiments and Quantum Mechanics/Molecular Mechanics Simulations. **2016**, 138, 3325-32		35
168	Observing cellulose biosynthesis and membrane translocation in crystallo. *Nature*, **2016**, 531, 329-34	50.4	90
167	The Discreet Charm of Protein Binding Sites. **2016**,		1
166	Recent advances for the production and recovery methods of lysozyme. **2016**, 36, 1078-1088		32
165	Computer Simulation Tools for X-ray Analysis. *Graduate Texts in Physics*, **2016**,	0.3	18
164	Fundamentals of X-Ray Physics. *Graduate Texts in Physics*, **2016**, 1-57	0.3	1
163	Determination of Lysozyme by Thiol-Terminated Aptamer-Based Surface Plasmon Resonance. **2017**, 50, 682-689		6
162	Enhancing the antimicrobial activity of Sus scrofa lysozyme by N-terminal fusion of a sextuple unique homologous peptide. **2017**, 243, 61-68		3

161	Analysis on the expression and function of a chicken-type and goose-type lysozymes in Chinese giant salamanders Andrias davidianus. **2017**, 72, 69-78		4
160	A Localized Complex of Two Protein Oligomers Controls the Orientation of Cell Polarity. **2017**, 8,		31
159	The mechanism behind the selection of two different cleavage sites in NAG-NAM polymers. *IUCrJ*, **2017**, 4, 185-198	4.7	10
158	Rapid insight into C60 influence on biological functions of proteins. **2017**, 28, 1775-1788		16
157	Computational Glycobiology: Mechanistic Studies of Carbohydrate-Active Enzymes and Implication for Inhibitor Design. **2017**, 109, 25-76		20
156	Bioinorganic antimicrobial strategies in the resistance era. **2017**, 351, 76-117		86
155	Using Neutron Reflectometry to Characterize Antimicrobial Protein Surface Coatings. **2017**, 121, 5908-5916		11
154	Molecular characterization and antibacterial activity of a phage-type lysozyme from the Manila clam, Ruditapes philippinarum. **2017**, 65, 17-24		8
153	A novel aptasensor for lysozyme based on electrogenerated chemiluminescence resonance energy transfer between luminol and silicon quantum dots. **2017**, 94, 530-535		44
152	Molecular characterization, expression and antimicrobial activities of two c-type lysozymes from manila clam Venerupis philippinarum. **2017**, 73, 109-118		16
151	Engineered N-acetylhexosamine-active enzymes in glycoscience. **2017**, 1861, 2070-2087		20
150	Long-term influence of cyanobacterial bloom on the immune system of Litopenaeus vannamei. **2017**, 61, 79-85		37
149	Peptidoglycan O-acetylation is functionally related to cell wall biosynthesis and cell division in Streptococcus pneumoniae. **2017**, 106, 832-846		14
148	Improved Accuracy for Constant pH-REMD Simulations through Modification of Carboxylate Effective Radii. **2017**, 13, 4624-4635		4
147	Counterpointing Scenarios on the Fate of Different Prototropic Forms of Norfloxacin Housed in the Pocket of Lysozyme: The Nonelectrostatic Interactions in the Protein Interior Are in the Controlling Role on the Prototropic Equilibria of the Guest. **2017**, 2, 5504-5517		7
146	Neutron structure of the T26H mutant of T4 phage lysozyme provides insight into the catalytic activity of the mutant enzyme and how it differs from that of wild type. **2017**, 26, 1953-1963		12
145	Changes in Enzyme Structural Dynamics Studied by Hydrogen Exchange-Mass Spectrometry: Ligand Binding Effects or Catalytically Relevant Motions?. **2017**, 89, 13326-13333		9
144	Modular endolysin of Burkholderia AP3 phage has the largest lysozyme-like catalytic subunit discovered to date and no catalytic aspartate residue. **2017**, 7, 14501		18

143	Lytic transglycosylases: concinnity in concision of the bacterial cell wall. **2017**, 52, 503-542		70
142	Catalytic Mechanism of Lysozyme Based on the Structures of Invertebrate-type Lysozyme and Chicken-type Lysozyme. **2017**, 57, 140-143		1
141	Effects of heat stress on somatostatin and some related immune factors in the small intestine of Wenchang chicks. **2017**, 62, 446-455		2
140	Probing Transition State Analogy in Glycoside Hydrolase Catalysis. **2017**, 99-127		4
139	Structural basis for the glycosyltransferase activity of the effector SseK3. **2018**, 293, 5064-5078		32
138	Predicting Catalytic Proton Donors and Nucleophiles in Enzymes: How Adding Dynamics Helps Elucidate the Structure-Function Relationships. *Journal of Physical Chemistry Letters*, **2018**, 9, 1179-1184	6.4	21
137	Point-of-Care Identification of Bacteria Using Protein-Encapsulated Gold Nanoclusters. **2018**, 7, e1701370		30
136	Decoding Surface Interaction of VO Metallodrug Candidates with Lysozyme. **2018**, 57, 4456-4469		22
135	A Water-Assisted Catalytic Mechanism in Glycoside Hydrolases Demonstrated on the Staphylococcus aureus Autolysin E. **2018**, 8, 4334-4345		11
134	A divergent synthesis to generate targeted libraries of inhibitors for endo-N-acetylglucosaminidases. **2018**, 96, 248-254		
133	A step-by-step guide to bond cleavage and 1,6-anhydro-sugar product synthesis by a peptidoglycan-degrading lytic transglycosylase. **2018**, 293, 6000-6010		11
132	Chemistry of Peptidoglycan in Mycobacterium tuberculosis Life Cycle: An off-the-wall Balance of Synthesis and Degradation. *Chemistry - A European Journal*, **2018**, 24, 2533-2546	4.8	26
131	The structure of DLP12 endolysin exhibiting alternate loop conformation and comparative analysis with other endolysins. **2018**, 86, 210-217		5
130	Synthesis and application of a highly branched, mechanism-based 2-deoxy-2-fluoro-oligosaccharide inhibitor of endo-xyloglucanases. **2018**, 16, 8732-8741		7
129	Gideon J. Davies. **2018**, 130, 12800-12800		
128	The pK values of the catalytic residues in the retaining glycoside hydrolase T26H mutant of T4 lysozyme. **2019**, 28, 620-632		2
127	Antibacterial activity of lysozyme-binding proteins from chicken egg white. **2018**, 154, 19-24		9
126	Hen Egg White Lysozyme Catalyzed Efficient Synthesis of 3-Indolyl-3-hydroxy Oxindole in Aqueous Ethanol. **2018**, 148, 3335-3341		5

125	Oxazoline or Oxazolinium Ion? The Protonation State and Conformation of the Reaction Intermediate of Chitinase Enzymes Revisited. *Chemistry - A European Journal*, **2018**, 24, 19258-19265	4.8	21
124	Distinguishing the differences in □glycosylceramidase folds, dynamics, and actions informs therapeutic uses. **2018**, 59, 2262-2276		6
123	Enzymatic Transition States and Drug Design. *Chemical Reviews*, **2018**, 118, 11194-11258	68.1	42
122	Contrasting Effects of Guanidinium Chloride and Urea on the Activity and Unfolding of Lysozyme. **2018**, 3, 14119-14126		13
121	Impact of Protein-Polymer Interactions in the Antimicrobial Activity of Lysozyme/Poly(3,4-ethylenedioxythiophene) Biocapacitors. **2018**, 3, 9714-9724		1
120	Orthorhombic lysozyme crystallization at acidic pH values driven by phosphate binding. *Acta Crystallographica Section D: Structural Biology*, **2018**, 74, 480-489	5.5	6
119	Identification and characterization of a novel goose-type and chicken-type lysozyme genes in Chinese rare minnow (Gobiocypris rarus) with potent antimicrobial activity. **2018**, 40, 569-577		6
118	The molecularly imprinted polymer essentials: curation of anticancer, ophthalmic, and projected gene therapy drug delivery systems. **2018**, 287, 24-34		40
117	Gideon J. Davies. **2018**, 57, 12620-12620		
116	Revealing the mechanism for covalent inhibition of glycoside hydrolases by carbasugars at an atomic level. **2018**, 9, 3243		14
115	Modulating the Nucleophile of a Glycoside Hydrolase through Site-Specific Incorporation of Fluoroglutamic Acids. **2018**, 140, 8268-8276		7
114	Newly identified C-type lysozyme in Chinese soft-shelled turtle (Pelodiscus sinensis) exhibits potent antimicrobial activity. **2019**, 50, 2826-2837		4
113	A label-free turn ON□OFF chemiluminescence strategy for lysozyme detection by target-triggered Cu2□Se aggregation. **2019**, 11, 4376-4381		3
112	Peptidoglycan O-Acetylation as a Virulence Factor: Its Effect on Lysozyme in the Innate Immune System. **2019**, 8,		18
111	A top-down chemo-enzymatic approach towards N-acetylglucosamine-N-acetylmuramic oligosaccharides: Chitosan as a reliable template. *Carbohydrate Polymers*, **2019**, 224, 115133	10.3	4
110	Study on Irradiation Effect of Mid-Infrared Free Electron Laser on Hen Egg-White Lysozyme by Using Terahertz-Time Domain Spectroscopy and Synchrotron-Radiation Vacuum-Ultraviolet Circular-Dichroism Spectroscopy. **2019**, 40, 998-1009		1
109	The C-Type Lysozyme from the upper Gastrointestinal Tract of the Stinkbird. **2019**, 20,		1
108	Activity-Based Probes for Profiling Protein Activities. **2019**, 101-125		1

107	Electrogenerated chemiluminescence of cucurbit[n]urils modified electrode and its sensing application. **2019**, 851, 113404		1
106	Enzymatic control of cycloadduct conformation ensures reversible 1,3-dipolar cycloaddition in a prFMN-dependent decarboxylase. **2019**, 11, 1049-1057		20
105	Suicide inactivation of the uracil DNA glycosylase UdgX by covalent complex formation. **2019**, 15, 615-622		11
104	Stereoselectivity in Glycosylation with Deoxofluorinated Glucosazide and Galactosazide Thiodonors. **2019**, 84, 6405-6431		7
103	Molecular characterization, expression and antimicrobial activities of a c-type lysozyme from the mud crab, Scylla paramamosain. **2019**, 98, 54-64		15
102	Role of Disulfide Bonds and Topological Frustration in the Kinetic Partitioning of Lysozyme Folding Pathways. **2019**, 123, 3232-3241		8
101	Unfolding Pathways of Hen Egg-White Lysozyme in Ethanol. **2019**, 123, 3267-3271		6
100	Quantum Mechanics/Molecular Mechanics Simulations Show Saccharide Distortion is Required for Reaction in Hen Egg-White Lysozyme. *Chemistry - A European Journal*, **2019**, 25, 764-768	4.8	5
99	Fluorosugars as inhibitors of bacterial enzymes. **2019**, 241-279		4
98	Antimicrobial Peptides: the Achilles' Heel of Antibiotic Resistance?. **2019**, 11, 370-381		68
97	Design and synthesis of glycomimetics: Recent advances. **2020**, 40, 495-531		42
96	Identifying pseudoenzymes using functional annotation: pitfalls of common practice. **2020**, 287, 4128-4140		8
95	The binding of precipitant ions in the tetragonal crystals of hen egg white lysozyme. **2020**, 38, 5159-5172		5
94	The Role of Protons and Hydrides in the Catalytic Hydrogenolysis of Guaiacol at the Ruthenium Nanoparticle□Water Interface. **2020**, 10, 12310-12332		11
93	Electrophoretic injection and reaction of dye-bound enzymes to protein and bacteria within gel. **2020**, 176, 106028		
92	Genetically Encoded Biosensor-Based Screening for Directed Bacteriophage T4 Lysozyme Evolution. **2020**, 21,		0
91	Assembly of Peptidoglycan Fragments-A Synthetic Challenge. **2020**, 13,		1
90	Insight into the Catalytic Mechanism of GH11 Xylanase: Computational Analysis of Substrate Distortion Based on a Neutron Structure. **2020**, 142, 17966-17980		5

89	A lysozyme with altered substrate specificity facilitates prey cell exit by the periplasmic predator Bdellovibrio bacteriovorus. **2020**, 11, 4817		12
88	Size-Tunable Metal-Organic Framework-Coated Magnetic Nanoparticles for Enzyme Encapsulation and Large-Substrate Biocatalysis. **2020**, 12, 41794-41801		24
87	Selective Stabilization of Aspartic Acid Protonation State within a Given Protein Conformation Occurs via Specific "Molecular Association". **2020**, 124, 5350-5361		5
86	Transcriptome Analysis of Gene Expression in HZAU 226 under Lysozyme Stress. **2020**, 8,		4
85	Computer simulations explain the anomalous temperature optimum in a cold-adapted enzyme. **2020**, 11, 2644		19
84	A Combinational Strategy for Effective Heterologous Production of Functional Human Lysozyme in. **2020**, 8, 118		4
83	Type III Secretion Effectors with Arginine N-Glycosyltransferase Activity. **2020**, 8,		9
82	Assembling patchy plasmonic nanoparticles with aggregation-dependent antibacterial activity. **2020**, 580, 419-428		8
81	A Colorimetric Assay to Enable High-Throughput Identification of Biofilm Exopolysaccharide-Hydrolyzing Enzymes. *Chemistry - A European Journal*, **2020**, 26, 10719-10723	4.8	3
80	The multifarious lysozyme arsenal of Dictyostelium discoideum. **2020**, 107, 103645		5
79	6-Deoxy-6-fluoro galactofuranosides: regioselective glycosylation, unexpected reactivity, and anti-leishmanial activity. **2020**, 18, 1462-1475		1
78	Two Distinct C-Type Lysozymes in Goldfish: Molecular Characterization, Antimicrobial Potential, and Transcriptional Regulation in Response to Opposing Effects of Bacteria/Lipopolysaccharide and Dexamethasone/Leptin. **2020**, 21,		2
77	High-resolution crystal structures of a "half sandwich"-type Ru(II) coordination compound bound to hen egg-white lysozyme and proteinase K. **2020**, 25, 635-645		4
76	Enzyme Immobilization on Graphite Oxide (GO) Surface via One-Pot Synthesis of GO/Metal-Organic Framework Composites for Large-Substrate Biocatalysis. **2020**, 12, 23119-23126		26
75	Gold Nanoclusters for Bacterial Detection and Infection Therapy. **2020**, 8, 181		12
74	Protein encapsulation by electrospinning and electrospraying. **2021**, 329, 1172-1197		24
73	One-pot synthesis of enzyme@metal-organic material (MOM) biocomposites for enzyme biocatalysis. **2021**, 23, 4466-4476		8
72	Functional design of glycan-conjugated molecules using a chemoenzymatic approach. **2021**, 85, 1046-1055		0

71	Recent structural insights into the mechanism of lysozyme hydrolysis. *Acta Crystallographica Section D: Structural Biology*, **2021**, 77, 288-292	5.5	2
70	Identification and Functional Analysis of a Lysozyme Gene from (Hemiptera: Dinidoridae). **2021**, 10,		1
69	A physicochemical, structural, microbiological and kinetic study of hen egg white lysozyme in complexes with alginate and chitosan. 1-14		2
68	Why chitosan could be apt candidate for glaucoma drug delivery - An overview. **2021**, 176, 47-65		13
67	Protein Dynamics and Time Resolved Protein Crystallography at Synchrotron Radiation Sources: Past, Present and Future. **2021**, 11, 521		6
66	Covalent Nucleophilic Catalysis: Structures of Enzyme Intermediates in Covalent Enzyme Catalysis. 2, 1-10		
65	Orthogonal Active-Site Labels for Mixed-Linkage endo-Glucanases. *ACS Chemical Biology*, **2021**, 16, 1968-1984	4.9	3
64	A general Ca-MOM platform with enhanced acid-base stability for enzyme biocatalysis. **2021**, 1, 146-161		8
63	Thermodynamic Analysis for Binding of 4--tri--acetylchitotriosyl Moranoline, a Transition State Analogue Inhibitor for Hen Egg White Lysozyme. **2021**, 8, 654706		
62	Intellective and stimuli-responsive drug delivery systems in eyes. **2021**, 602, 120591		7
61	The Mycobacteriophage Ms6 LysB -Terminus Displays Peptidoglycan Binding Affinity. **2021**, 13,		0
60	A GH13 glucosidase from Weissella cibaria uncommonly acts on short-chain maltooligosaccharides. *Acta Crystallographica Section D: Structural Biology*, **2021**, 77, 1064-1076	5.5	2
59	The Lysozyme Inhibitor Thionine Acetate Is Also an Inhibitor of the Soluble Lytic Transglycosylase Slt35 from. **2021**, 26,		
58	Defect Induced Charge Redistribution and Enhanced Adsorption of Lysozyme on Hydroxyapatite for Efficient Antibacterial Activity. **2021**, 37, 10786-10796		0
57	Protocol for resolving enzyme orientation and dynamics in advanced porous materials via SDSL-EPR. **2021**, 2, 100676		3
56	Self-Assembly Pathways and Antimicrobial Properties of Lysozyme in Different Aggregation States. *Biomacromolecules*, **2021**, 22, 4327-4336	6.9	5
55	Lysozyme. 1-6		1
54	Hydrolytic and Group Transfer Enzymes. 77-114		2

53	First Steps Towards Quantum Refinement of Protein X-Ray Structures. **2012**, 87-120		6
52	Alpha-retaining glucosyl transfer catalysed by trehalose phosphorylase from Schizophyllum commune: mechanistic evidence obtained from steady-state kinetic studies with substrate analogues and inhibitors. *Biochemical Journal*, **2001**, 360, 727-36	3.8	10
51	Mix-and-diffuse serial synchrotron crystallography. *IUCrJ*, **2017**, 4, 769-777	4.7	71
50	Crystal structures of the Bacillus subtilis prophage lytic cassette proteins XepA and YomS. *Acta Crystallographica Section D: Structural Biology*, **2019**, 75, 1028-1039	5.5	5
49	Nerve agent hydrolysis activity designed into a human drug metabolism enzyme. *PLoS ONE*, **2011**, 6, e17441	3.7	18
48	Mechanistic insights into validoxylamine A 7'-phosphate synthesis by VldE using the structure of the entire product complex. *PLoS ONE*, **2012**, 7, e44934	3.7	11
47	A novel C-type lysozyme from Mytilus galloprovincialis: insight into innate immunity and molecular evolution of invertebrate C-type lysozymes. *PLoS ONE*, **2013**, 8, e67469	3.7	16
46	Antibacterial activity of lysozyme in the desert locust, Schistocerca gregaria (Orthoptera: Acrididae). *European Journal of Entomology*, **2013**, 110, 559-565		9
45	Chemoenzymatic Synthesis and Function of Chitin Derivatives. *Current Pharmaceutical Design*, **2020**, 26, 3522-3529	3.3	2
44	Egg White Lysozyme Promoted Collagen Secreting of Dermal Fibroblasts in Mice. *Asian Journal of Animal and Veterinary Advances*, **2011**, 6, 667-677	0.1	6
43	Structure of a low-population intermediate state in the release of an enzyme product. *ELife*, **2015**, 4,	8.9	25
42	Mathematical Description of the Enzymatic Activity of Proteins with Ionizable Groups Exhibiting Deviations from the Henderson-Hasselbalch Equation. *Applied Biochemistry and Biotechnology*, **2021**, 194, 1221	3.2	
41	Size-Controlled Synthesis of (1-4)-GlcNAc Oligosaccharides Using an Endo-Glycosynthase. *Chemistry - A European Journal*, **2021**,	4.8	0
40	The Chameleon of Retaining Glycoside Hydrolases and Retaining Glycosyl Transferases: The Catalytic Nucleophile. **2002**, 191-204		
39	Bioenergetik und Enzymologie. *Springer-Lehrbuch*, **2003**, 103-139	0.4	
38	Details in the Reaction Mechanism of Chitinases. **2003**,		
37	Rational Redesign of Enzymes. **2003**,		
36	Chapter 4:Enzyme Models Classified by Reaction. **2009**, 61-194		

35	Enzyme Dynamics and Catalysis: Insights from Simulations. *Challenges and Advances in Computational Chemistry and Physics*, **2010**, 375-395	0.7	
34	Toward ab initio refinement of protein X-ray crystal structures: interpreting and correlating structural fluctuations. **2012**, 21-36		
33	Molecular Probes for Protein Glycosylation. **2013**,		
32	Effect of Temperature on the Expression of I-Type Lysozyme cDNA from Oyster (Crassostrea Hongkongensis). *International Journal of Bioscience, Biochemistry, Bioinformatics (IJBBB)*, **2016**, 6, 130-138	0.3	
31	Complex Systems. *Graduate Texts in Physics*, **2016**, 81-125	0.3	
30	Effect of chloride ions on the catalytic properties of human pancreatic □amylase isozyme produced in Pichia pastoris. *Korean Journal of Food Science and Technology*, **2016**, 48, 341-346		
29	Structure and Catalysis: Conformational Flexibility and Protein Motion. **2018**, 75-82		1
28	Which Enzyme Uses What Tricks?. **2018**, 71-74		
27	Role of Disulfide Bonds and Topological Frustration in the Kinetic Partitioning of Lysozyme Folding Pathways.		
26	Novel Biorecognition Elements against Pathogens in the Design of State-of-the-Art Diagnostics. *Biosensors*, **2021**, 11,	5.9	2
25	Kinetic and Structural Characterization of Sialidases (Kdnases) from Ascomycete Fungal Pathogens. *ACS Chemical Biology*, **2021**, 16, 2632-2640	4.9	
24	Introduction to Glycoside Hydrolases: Classification, Identification and Occurrence. **2020**, 3-84		1
23	Enzymes Involved in Chitin and Chitosan Decomposition and Synthesis. 81-112		
22	Bioenergetik und Enzymologie. **2007**, 99-139		
21	Multifunctional fluorescent probes for high-throughput characterization of hexosaminidase enzyme activity. *Bioorganic Chemistry*, **2021**, 119, 105532	5.1	2
20	Freeze□haw-, enzyme-, ultrasound- and pulsed electric field-assisted extractions of C-phycocyanin from Spirulina platensis dry biomass. *Journal of Food Measurement and Characterization*, **2022**, 16, 1625	2.8	0
19	Antibacterial Properties of TMA against and Effect of Temperature and Storage Duration on TMA Content, Lysozyme Activity and Content in Eggs.. *Foods*, **2022**, 11,	4.9	2
18	Novel chitosan - graphene quantum dots composite for therapeutic delivery and tracking through enzymatic stimuli response.. *Carbohydrate Polymers*, **2022**, 289, 119426	10.3	0

17	Quinolinate Synthase: An Example of the Roles of the Second and Outer Coordination Spheres in Enzyme Catalysis.. *Chemical Reviews*, **2022**,	68.1	1
16	[Review] Protein Engineering Studies on Chitinase/Chitosanase to Create a Novel Enzyme Function. *Bulletin of Applied Glycoscience*, **2018**, 8, 33-44	0.1	
15	Interplay Between Theory and Experiment: A Future Approach for Biomedical Research. **2022**, 41-67		
14	Protonation states of hen egg-white lysozyme observed using D/H contrast neutron crystallography. *Acta Crystallographica Section D: Structural Biology*, **2022**, 78,	5.5	0
13	A Single Hydrogen Bond Controls the Selectivity of Transglycosylation vs Hydrolysis in Family 13 Glycoside Hydrolases. *Journal of Physical Chemistry Letters*, **2022**, 13, 5626-5632	6.4	0
12	[Review] Study on Synthesis of Chitin Derivatives Using a Chemoenzymatic Approach. **2022**, 12, 84-91		
11	Dithiol Based on l-Cysteine and Cysteamine as a Disulfide-Reducing Agent. **2022**, 87, 10073-10079		1
10	Antimicrobial Proteins and Peptides in Avian Eggshell: Structural Diversity and Potential Roles in Biomineralization. 13,		
9	Current Advances in Nano-Based and Polymeric Stimuli-Responsive Drug Delivery Targeting the Ocular Microenvironment: A Review and Envisaged Future Perspectives. **2022**, 14, 3580		0
8	Lysozyme and Its Application as Antibacterial Agent in Food Industry. **2022**, 27, 6305		2
7	The retaining α-Kdo glycosyltransferase WbbB uses a double-displacement mechanism with an intermediate adduct rearrangement step. **2022**, 13,		0
6	Tunnel engineering enables multifaceted improvements in halogenase. **2022**, 2, 2432-2434		0
5	Expanding the Library of Metal–Organic Frameworks for Enzyme Biomineralization.		0
4	Access to Amide-linked Organic Cages by in situ Trapping of Metastable Imine Assemblies: Solution Phase Bisamine Recognition.		0
3	Structural snapshots of base excision by the cancer-associated variant MutY N146S reveal a retaining mechanism.		0
2	Capturing Covalent Catalytic Intermediates by Enzyme Mutants: Recent Advances in Methodologies and Applications.		0
1	Bacteriolytic activity in saliva of the hematophagous Triatoma infestans (Reduviidae) and novel characterization and expression site of a third lysozyme.		0