

# George Georgiou

## List of Publications by Citations

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196  
papers

15,522  
citations

68  
h-index

120  
g-index

204  
ext. papers

18,461  
ext. citations

13.5  
avg, IF

6.39  
L-index

#	Paper	IF	Citations
196	Virus-based toolkit for the directed synthesis of magnetic and semiconducting nanowires. <i>Science</i> , <b>2004</b> , 303, 213-7	33.3	871
195	CD8 T cells regulate tumour ferroptosis during cancer immunotherapy. <i>Nature</i> , <b>2019</b> , 569, 270-274	50.4	632
194	Developmental pathway for potent V1V2-directed HIV-neutralizing antibodies. <i>Nature</i> , <b>2014</b> , 509, 55-62	50.4	537
193	The promise and challenge of high-throughput sequencing of the antibody repertoire. <i>Nature Biotechnology</i> , <b>2014</b> , 32, 158-68	44.5	463
192	Display of heterologous proteins on the surface of microorganisms: from the screening of combinatorial libraries to live recombinant vaccines. <i>Nature Biotechnology</i> , <b>1997</b> , 15, 29-34	44.5	434
191	Viral assembly of oriented quantum dot nanowires. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 6946-51	11.5	415
190	Adhesion Forces between E. coli Bacteria and Biomaterial Surfaces. <i>Langmuir</i> , <b>1999</b> , 15, 2719-2725	4	369
189	High-throughput sequencing of the paired human immunoglobulin heavy and light chain repertoire. <i>Nature Biotechnology</i> , <b>2013</b> , 31, 166-9	44.5	325
188	The many faces of glutathione in bacteria. <i>Antioxidants and Redox Signaling</i> , <b>2006</b> , 8, 753-62	8.4	310
187	Folding quality control in the export of proteins by the bacterial twin-arginine translocation pathway. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 6115-20	11.5	270
186	Cysteine depletion induces pancreatic tumor ferroptosis in mice. <i>Science</i> , <b>2020</b> , 368, 85-89	33.3	269
185	The bacterial twin-arginine translocation pathway. <i>Annual Review of Microbiology</i> , <b>2006</b> , 60, 373-95	17.5	266
184	In-depth determination and analysis of the human paired heavy- and light-chain antibody repertoire. <i>Nature Medicine</i> , <b>2015</b> , 21, 86-91	50.5	259
183	Systemic depletion of L-cyst(e)ine with cyst(e)inase increases reactive oxygen species and suppresses tumor growth. <i>Nature Medicine</i> , <b>2017</b> , 23, 120-127	50.5	258
182	Radiotherapy and Immunotherapy Promote Tumoral Lipid Oxidation and Ferroptosis via Synergistic Repression of SLC7A11. <i>Cancer Discovery</i> , <b>2019</b> , 9, 1673-1685	24.4	252
181	Monoclonal antibodies isolated without screening by analyzing the variable-gene repertoire of plasma cells. <i>Nature Biotechnology</i> , <b>2010</b> , 28, 965-9	44.5	235
180	Influenza Infection in Humans Induces Broadly Cross-Reactive and Protective Neuraminidase-Reactive Antibodies. <i>Cell</i> , <b>2018</b> , 173, 417-429.e10	56.2	199

179	Molecular-level analysis of the serum antibody repertoire in young adults before and after seasonal influenza vaccination. <i>Nature Medicine</i> , <b>2016</b> , 22, 1456-1464	50.5	186
178	Antibody engineering. <i>Annual Review of Biomedical Engineering</i> , <b>2000</b> , 2, 339-76	12	184
177	Anchored periplasmic expression, a versatile technology for the isolation of high-affinity antibodies from <i>Escherichia coli</i> -expressed libraries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 9193-8	11.5	180
176	Identification and characterization of the constituent human serum antibodies elicited by vaccination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 2259-64	11.5	176
175	Surface-active compounds from microorganisms. <i>Nature Biotechnology</i> , <b>1992</b> , 10, 60-5	44.5	176
174	Isolation of engineered, full-length antibodies from libraries expressed in <i>Escherichia coli</i> . <i>Nature Biotechnology</i> , <b>2007</b> , 25, 563-5	44.5	163
173	Preparative expression of secreted proteins in bacteria: status report and future prospects. <i>Current Opinion in Biotechnology</i> , <b>2005</b> , 16, 538-45	11.4	163
172	Production of correctly folded Fab antibody fragment in the cytoplasm of <i>Escherichia coli</i> <i>trxB</i> <i>gor</i> mutants via the coexpression of molecular chaperones. <i>Protein Expression and Purification</i> , <b>2001</b> , 23, 338-47	2	158
171	Synthesis and organization of nanoscale III-V semiconductor materials using evolved peptide specificity and viral capsid assembly. <i>Journal of Materials Chemistry</i> , <b>2003</b> , 13, 2414-2421		155
170	Identification of OmpT as the protease that hydrolyzes the antimicrobial peptide protamine before it enters growing cells of <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , <b>1998</b> , 180, 4002-6	3.5	151
169	Function-based isolation of novel enzymes from a large library. <i>Nature Biotechnology</i> , <b>2000</b> , 18, 1071-4	44.5	149
168	Structure and morphology of protein inclusion bodies in <i>Escherichia coli</i> . <i>Nature Biotechnology</i> , <b>1991</b> , 9, 725-30	44.5	143
167	How to flip the (redox) switch. <i>Cell</i> , <b>2002</b> , 111, 607-10	56.2	138
166	Phage shock protein PspA of <i>Escherichia coli</i> relieves saturation of protein export via the Tat pathway. <i>Journal of Bacteriology</i> , <b>2004</b> , 186, 366-73	3.5	136
165	Structures of HIV-1 Env V1V2 with broadly neutralizing antibodies reveal commonalities that enable vaccine design. <i>Nature Structural and Molecular Biology</i> , <b>2016</b> , 23, 81-90	17.6	126
164	Systematic Analysis of Monoclonal Antibodies against Ebola Virus GP Defines Features that Contribute to Protection. <i>Cell</i> , <b>2018</b> , 174, 938-952.e13	56.2	126
163	Aglycosylated IgG variants expressed in bacteria that selectively bind FcγRI potentiate tumor cell killing by monocyte-dendritic cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 604-9	11.5	125
162	Engineering of protease variants exhibiting high catalytic activity and exquisite substrate selectivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 6855-60	11.5	122

161	Isolation and expression of recombinant antibody fragments to the biological warfare pathogen <i>Brucella melitensis</i> . <i>Journal of Immunological Methods</i> , <b>2003</b> , 276, 185-96	2.5	122
160	Strain engineering for improved expression of recombinant proteins in bacteria. <i>Microbial Cell Factories</i> , <b>2011</b> , 10, 32	6.4	121
159	Low CD21 expression defines a population of recent germinal center graduates primed for plasma cell differentiation. <i>Science Immunology</i> , <b>2017</b> , 2,	28	119
158	Large-scale sequence and structural comparisons of human naive and antigen-experienced antibody repertoires. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E2636-45	11.5	118
157	Why high-error-rate random mutagenesis libraries are enriched in functional and improved proteins. <i>Journal of Molecular Biology</i> , <b>2005</b> , 350, 806-16	6.5	117
156	Genetic analysis of the twin arginine translocator secretion pathway in bacteria. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 29825-31	5.4	116
155	Force Measurements between Bacteria and Poly(ethylene glycol)-Coated Surfaces. <i>Langmuir</i> , <b>2000</b> , 16, 9155-9158	4	110
154	Isolation of high-affinity ligand-binding proteins by periplasmic expression with cytometric screening (PECS). <i>Nature Biotechnology</i> , <b>2001</b> , 19, 537-42	44.5	109
153	Reversal of indoleamine 2,3-dioxygenase-mediated cancer immune suppression by systemic kynurenine depletion with a therapeutic enzyme. <i>Nature Biotechnology</i> , <b>2018</b> , 36, 758-764	44.5	107
152	Molecular deconvolution of the monoclonal antibodies that comprise the polyclonal serum response. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 2993-8	11.5	107
151	Biochemistry. An overoxidation journey with a return ticket. <i>Science</i> , <b>2003</b> , 300, 592-4	33.3	106
150	Development of an optimized expression system for the screening of antibody libraries displayed on the <i>Escherichia coli</i> surface. <i>Protein Engineering, Design and Selection</i> , <b>1999</b> , 12, 613-21	1.9	105
149	Export pathway selectivity of <i>Escherichia coli</i> twin arginine translocation signal peptides. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 8309-16	5.4	104
148	Ultra-high-throughput sequencing of the immune receptor repertoire from millions of lymphocytes. <i>Nature Protocols</i> , <b>2016</b> , 11, 429-42	18.8	103
147	Revisiting the role of glycosylation in the structure of human IgG Fc. <i>ACS Chemical Biology</i> , <b>2012</b> , 7, 1596-602	4.9	102
146	Therapeutic enzyme deimmunization by combinatorial T-cell epitope removal using neutral drift. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 1272-7	11.5	102
145	Prevalent, protective, and convergent IgG recognition of SARS-CoV-2 non-RBD spike epitopes. <i>Science</i> , <b>2021</b> , 372, 1108-1112	33.3	100
144	Flow cytometric screening of cell-based libraries. <i>Journal of Immunological Methods</i> , <b>2000</b> , 243, 211-27	2.5	96

143	Cell-Surface display of heterologous proteins: From high-throughput screening to environmental applications. <i>Biotechnology and Bioengineering</i> , <b>2002</b> , 79, 496-503	4.9	94
142	Potent and broad HIV-neutralizing antibodies in memory B cells and plasma. <i>Science Immunology</i> , <b>2017</b> , 2,	2.8	86
141	IgG Fc domains that bind C1q but not effector Fc receptors delineate the importance of complement-mediated effector functions. <i>Nature Immunology</i> , <b>2017</b> , 18, 889-898	19.1	85
140	Replacing Mn(2+) with Co(2+) in human arginase i enhances cytotoxicity toward l-arginine auxotrophic cancer cell lines. <i>ACS Chemical Biology</i> , <b>2010</b> , 5, 333-42	4.9	85
139	Effects of codon usage versus putative 5SmRNA structure on the expression of Fusarium solani cutinase in the Escherichia coli cytoplasm. <i>Protein Expression and Purification</i> , <b>2003</b> , 27, 134-42	2	81
138	Functional interrogation and mining of natively paired human V:V antibody repertoires. <i>Nature Biotechnology</i> , <b>2018</b> , 36, 152-155	44.5	80
137	Bypassing glycosylation: engineering aglycosylated full-length IgG antibodies for human therapy. <i>Current Opinion in Biotechnology</i> , <b>2011</b> , 22, 858-67	11.4	80
136	Mineralization of biphenyl and PCBs by the white rot fungus Phanerochaete chrysosporium. <i>Biotechnology and Bioengineering</i> , <b>1992</b> , 40, 1395-402	4.9	76
135	Engineering of TEV protease variants by yeast ER sequestration screening (YESS) of combinatorial libraries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 7229-34	11.5	74
134	Directed Enzyme Evolution <b>2003</b> ,		74
133	Influenza immunization elicits antibodies specific for an egg-adapted vaccine strain. <i>Nature Medicine</i> , <b>2016</b> , 22, 1465-1469	50.5	73
132	Display of beta-lactamase on the Escherichia coli surface: outer membrane phenotypes conferred by LppSOMPASbeta-lactamase fusions. <i>Protein Engineering, Design and Selection</i> , <b>1996</b> , 9, 239-47	1.9	72
131	Antibody Fc engineering improves frequency and promotes kinetic boosting of serial killing mediated by NK cells. <i>Blood</i> , <b>2014</b> , 124, 3241-9	2.2	70
130	Highly active and selective endopeptidases with programmed substrate specificities. <i>Nature Chemical Biology</i> , <b>2008</b> , 4, 290-4	11.7	70
129	Molecular characterization of beta-lactamase inclusion bodies produced in Escherichia coli. 1. Composition. <i>Biotechnology Progress</i> , <b>1993</b> , 9, 539-47	2.8	68
128	Optimizing the production of recombinant proteins in microorganisms. <i>AIChE Journal</i> , <b>1988</b> , 34, 1233-1248	3.8	68
127	Antibody repertoires in humanized NOD-scid-IL2R(hull) mice and human B cells reveals human-like diversification and tolerance checkpoints in the mouse. <i>PLoS ONE</i> , <b>2012</b> , 7, e35497	3.7	66
126	Folding and aggregation of TEM beta-lactamase: analogies with the formation of inclusion bodies in Escherichia coli. <i>Protein Science</i> , <b>1994</b> , 3, 1953-60	6.3	66

125	Substrate specificity of the Escherichia coli outer membrane protease OmpT. <i>Journal of Bacteriology</i> , <b>2004</b> , 186, 5919-25	3.5	64
124	Specific adhesion and hydrolysis of cellulose by intact Escherichia coli expressing surface anchored cellulase or cellulose binding domains. <i>Nature Biotechnology</i> , <b>1993</b> , 11, 491-5	44.5	62
123	Comprehensive engineering of Escherichia coli for enhanced expression of IgG antibodies. <i>Metabolic Engineering</i> , <b>2011</b> , 13, 241-51	9.7	60
122	Efficient production of membrane-integrated and detergent-soluble G protein-coupled receptors in Escherichia coli. <i>Protein Science</i> , <b>2008</b> , 17, 1857-63	6.3	58
121	Evaluating the interaction of bacteria with biomaterials using atomic force microscopy. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>1998</b> , 9, 1361-73	3.5	58
120	Next-generation sequencing and protein mass spectrometry for the comprehensive analysis of human cellular and serum antibody repertoires. <i>Current Opinion in Chemical Biology</i> , <b>2015</b> , 24, 112-20	9.7	57
119	Effective phagocytosis of low Her2 tumor cell lines with engineered, aglycosylated IgG displaying high Fc $\gamma$ RIIa affinity and selectivity. <i>ACS Chemical Biology</i> , <b>2013</b> , 8, 368-75	4.9	54
118	High-throughput antibody isolation. <i>Current Opinion in Chemical Biology</i> , <b>2001</b> , 5, 683-9	9.7	53
117	In vitro scanning saturation mutagenesis of all the specificity determining residues in an antibody binding site. <i>Protein Engineering, Design and Selection</i> , <b>1999</b> , 12, 349-56	1.9	52
116	Effect of sequences of the active-site dipeptides of DsbA and DsbC on in vivo folding of multidisulfide proteins in Escherichia coli. <i>Journal of Bacteriology</i> , <b>2001</b> , 183, 980-8	3.5	51
115	Serology in the 21st century: the molecular-level analysis of the serum antibody repertoire. <i>Current Opinion in Immunology</i> , <b>2015</b> , 35, 89-97	7.8	50
114	Proteomic identification of monoclonal antibodies from serum. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 4758-66	7.8	48
113	Increased cathepsin S in Prdm1 dendritic cells alters the T cell repertoire and contributes to lupus. <i>Nature Immunology</i> , <b>2017</b> , 18, 1016-1024	19.1	48
112	Evolution of highly active enzymes by homology-independent recombination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 10082-7	11.5	48
111	Fine-tuning citrate synthase flux potentiates and refines metabolic innovation in the Lenski evolution experiment. <i>ELife</i> , <b>2015</b> , 4,	8.9	48
110	Synthetic antibody libraries focused towards peptide ligands. <i>Journal of Molecular Biology</i> , <b>2008</b> , 378, 622-33	6.5	47
109	Enhanced crossover SCRATCHY: construction and high-throughput screening of a combinatorial library containing multiple non-homologous crossovers. <i>Nucleic Acids Research</i> , <b>2003</b> , 31, e126	20.1	47
108	Persistent Antibody Clonotypes Dominate the Serum Response to Influenza over Multiple Years and Repeated Vaccinations. <i>Cell Host and Microbe</i> , <b>2019</b> , 25, 367-376.e5	23.4	47

107	Immunoglobulin isotype knowledge and application to Fc engineering. <i>Current Opinion in Immunology</i> , <b>2016</b> , 40, 62-9	7.8	46
106	Sera Antibody Repertoire Analyses Reveal Mechanisms of Broad and Pandemic Strain Neutralizing Responses after Human Norovirus Vaccination. <i>Immunity</i> , <b>2019</b> , 50, 1530-1541.e8	32.3	45
105	Systematic characterization and comparative analysis of the rabbit immunoglobulin repertoire. <i>PLoS ONE</i> , <b>2014</b> , 9, e101322	3.7	44
104	Differences in the composition of the human antibody repertoire by B cell subsets in the blood. <i>Frontiers in Immunology</i> , <b>2014</b> , 5, 96	8.4	44
103	SCHEMA-designed variants of human Arginase I and II reveal sequence elements important to stability and catalysis. <i>ACS Synthetic Biology</i> , <b>2012</b> , 1, 221-8	5.7	44
102	APEX 2-hybrid, a quantitative protein-protein interaction assay for antibody discovery and engineering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 8247-52	11.5	44
101	Engineered DsbC chimeras catalyze both protein oxidation and disulfide-bond isomerization in Escherichia coli: Reconciling two competing pathways. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 10018-23	11.5	44
100	Escherichia coli tatC mutations that suppress defective twin-arginine transporter signal peptides. <i>Journal of Molecular Biology</i> , <b>2007</b> , 374, 283-91	6.5	43
99	Production and Deactivation of Biosurfactant by Bacillus licheniformis JF-2. <i>Biotechnology Progress</i> , <b>1993</b> , 9, 138-145	2.8	43
98	IgGA: a "cross-isotype" engineered human Fc antibody domain that displays both IgG-like and IgA-like effector functions. <i>Chemistry and Biology</i> , <b>2014</b> , 21, 1603-9		42
97	Plasmacytoid Dendritic Cells and Type I Interferon Promote Extrafollicular B Cell Responses to Extracellular Self-DNA. <i>Immunity</i> , <b>2020</b> , 52, 1022-1038.e7	32.3	41
96	E-clonal antibodies: selection of full-length IgG antibodies using bacterial periplasmic display. <i>Nature Protocols</i> , <b>2008</b> , 3, 1766-77	18.8	40
95	Analysis of large libraries of protein mutants using flow cytometry. <i>Advances in Protein Chemistry</i> , <b>2000</b> , 55, 293-315		40
94	Rapid amperometric verification of PCR amplification of DNA. <i>Analytical Chemistry</i> , <b>1999</b> , 71, 535-8	7.8	40
93	Genetic analysis of G protein-coupled receptor expression in Escherichia coli: inhibitory role of DnaJ on the membrane integration of the human central cannabinoid receptor. <i>Biotechnology and Bioengineering</i> , <b>2009</b> , 102, 357-67	4.9	39
92	Functional plasticity of a peroxidase allows evolution of diverse disulfide-reducing pathways. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 6735-40	11.5	39
91	Beyond toothpicks: new methods for isolating mutant bacteria. <i>Nature Reviews Microbiology</i> , <b>2007</b> , 5, 680-8	22.2	39
90	Longitudinal Analysis Reveals Early Development of Three MPER-Directed Neutralizing Antibody Lineages from an HIV-1-Infected Individual. <i>Immunity</i> , <b>2019</b> , 50, 677-691.e13	32.3	38

89	Facile Discovery of a Diverse Panel of Anti-Ebola Virus Antibodies by Immune Repertoire Mining. <i>Scientific Reports</i> , <b>2015</b> , 5, 13926	4.9	38
88	Engineering next generation proteases. <i>Current Opinion in Biotechnology</i> , <b>2009</b> , 20, 390-7	11.4	36
87	A periplasmic fluorescent reporter protein and its application in high-throughput membrane protein topology analysis. <i>Journal of Molecular Biology</i> , <b>2004</b> , 341, 901-9	6.5	36
86	The Effect of Sugars on $\beta$ -Lactamase Aggregation in Escherichia coli. <i>Biotechnology Progress</i> , <b>1988</b> , 4, 97-101	2.8	36
85	A scFv antibody mutant isolated in a genetic screen for improved export via the twin arginine transporter pathway exhibits faster folding. <i>Journal of Molecular Biology</i> , <b>2007</b> , 369, 631-9	6.5	34
84	Binding and enrichment of Escherichia coli spheroplasts expressing inner membrane tethered scFv antibodies on surface immobilized antigens. <i>Biotechnology and Bioengineering</i> , <b>2007</b> , 98, 39-47	4.9	33
83	Substrate specificity of the Escherichia coli outer membrane protease OmpP. <i>Journal of Bacteriology</i> , <b>2007</b> , 189, 522-30	3.5	32
82	Transport of bacteria in porous media: I. An experimental investigation. <i>Biotechnology and Bioengineering</i> , <b>1994</b> , 44, 489-97	4.9	31
81	Selection of full-length IgGs by tandem display on filamentous phage particles and Escherichia coli fluorescence-activated cell sorting screening. <i>FEBS Journal</i> , <b>2010</b> , 277, 2291-303	5.7	30
80	Simple genetic selection protocol for isolation of overexpressed genes that enhance accumulation of membrane-integrated human G protein-coupled receptors in Escherichia coli. <i>Applied and Environmental Microbiology</i> , <b>2010</b> , 76, 5852-9	4.8	30
79	Substrate specificity of human kallikreins 1 and 6 determined by phage display. <i>Protein Science</i> , <b>2008</b> , 17, 664-72	6.3	30
78	Optimization of growth conditions for the production of proteolytically-sensitive proteins in the periplasmic space of Escherichia coli. <i>Applied Microbiology and Biotechnology</i> , <b>1991</b> , 36, 14-20	5.7	30
77	Prevalent, protective, and convergent IgG recognition of SARS-CoV-2 non-RBD spike epitopes in COVID-19 convalescent plasma <b>2020</b> ,		29
76	Human recombinant arginase enzyme reduces plasma arginine in mouse models of arginase deficiency. <i>Human Molecular Genetics</i> , <b>2015</b> , 24, 6417-27	5.6	28
75	Rapid construction and characterization of synthetic antibody libraries without DNA amplification. <i>Biotechnology and Bioengineering</i> , <b>2010</b> , 106, 347-57	4.9	27
74	Inclusion Bodies and Recovery of Proteins from the Aggregated State. <i>ACS Symposium Series</i> , <b>1991</b> , 1-200.4		26
73	Discovery of high affinity anti-ricin antibodies by B cell receptor sequencing and by yeast display of combinatorial VH:VL libraries from immunized animals. <i>MAbs</i> , <b>2016</b> , 8, 1035-44	6.6	26
72	An engineered human Fc domain that behaves like a pH-toggle switch for ultra-long circulation persistence. <i>Nature Communications</i> , <b>2019</b> , 10, 5031	17.4	25



71	Directed evolution of highly selective proteases by using a novel FACS-based screen that capitalizes on the p53 regulator MDM2. <i>ChemBioChem</i> , <b>2012</b> , 13, 649-53	3.8	25
70	Facilitating the formation of disulfide bonds in the Escherichia coli periplasm via coexpression of yeast protein disulfide isomerase. <i>Biotechnology Progress</i> , <b>1999</b> , 15, 1033-8	2.8	25
69	Demonstration of efficient trichloroethylene biodegradation in a hollow-fiber membrane bioreactor. <i>Biotechnology and Bioengineering</i> , <b>1999</b> , 62, 681-92	4.9	25
68	Transport of bacteria in porous media: II. A model for convective Transport and growth. <i>Biotechnology and Bioengineering</i> , <b>1994</b> , 44, 499-508	4.9	25
67	Identification of tumor-reactive B cells and systemic IgG in breast cancer based on clonal frequency in the sentinel lymph node. <i>Cancer Immunology, Immunotherapy</i> , <b>2018</b> , 67, 729-738	7.4	24
66	Subtype-specific addiction of the activated B-cell subset of diffuse large B-cell lymphoma to FOXP1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E577-86	11.5	24
65	Engineering antibody fragments to fold in the absence of disulfide bonds. <i>Protein Science</i> , <b>2009</b> , 18, 2594-7	6.7	23
64	Engineering of recombinant antibody fragments to methamphetamine by anchored periplasmic expression. <i>Journal of Immunological Methods</i> , <b>2006</b> , 308, 43-52	2.5	23
63	Secretory production of recombinant protein by a high cell density culture of a protease negative mutant Escherichia coli strain. <i>Biotechnology Progress</i> , <b>1999</b> , 15, 164-7	2.8	23
62	Multi-copy genes that enhance the yield of mammalian G protein-coupled receptors in Escherichia coli. <i>Metabolic Engineering</i> , <b>2012</b> , 14, 591-602	9.7	22
61	Expression of active human sialyltransferase ST6GalNAc in Escherichia coli. <i>Microbial Cell Factories</i> , <b>2009</b> , 8, 50	6.4	22
60	A bacterial two-hybrid system based on the twin-arginine transporter pathway of E. coli. <i>Protein Science</i> , <b>2007</b> , 16, 1001-8	6.3	22
59	A hollow-fiber membrane bioreactor for the removal of trichloroethylene from the vapor phase. <i>Biotechnology and Bioengineering</i> , <b>2000</b> , 68, 548-56	4.9	22
58	Determinants governing T cell receptor $\alpha$ chain pairing in repertoire formation of identical twins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 532-540	11.5	22
57	Strategies for optimizing the serum persistence of engineered human arginase I for cancer therapy. <i>Journal of Controlled Release</i> , <b>2012</b> , 158, 171-9	11.7	21
56	Systems analysis of adaptive immunity by utilization of high-throughput technologies. <i>Current Opinion in Biotechnology</i> , <b>2011</b> , 22, 584-9	11.4	21
55	Construction and flow cytometric screening of targeted enzyme libraries. <i>Nature Protocols</i> , <b>2009</b> , 4, 893-908	8.8	21
54	An engineered protease that cleaves specifically after sulfated tyrosine. <i>Angewandte Chemie - International Edition</i> , <b>2008</b> , 47, 7861-3	16.4	20

53	Enzyme-mediated depletion of l-cyst(e)ine synergizes with thioredoxin reductase inhibition for suppression of pancreatic tumor growth. <i>Npj Precision Oncology</i> , <b>2019</b> , 3, 16	9.8	18
52	Assembly of multimeric phage nanostructures through leucine zipper interactions. <i>Biotechnology and Bioengineering</i> , <b>2006</b> , 95, 539-45	4.9	16
51	Profiling Protease Specificity: Combining Yeast ER Sequestration Screening (YESS) with Next Generation Sequencing. <i>ACS Chemical Biology</i> , <b>2017</b> , 12, 510-518	4.9	15
50	An alternate pathway of arsenate resistance in E. coli mediated by the glutathione S-transferase GstB. <i>ACS Chemical Biology</i> , <b>2015</b> , 10, 875-82	4.9	15
49	De novo design and evolution of artificial disulfide isomerase enzymes analogous to the bacterial DsbC. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 31469-76	5.4	15
48	A quantitative immunoassay utilizing Escherichia coli cells possessing surface-expressed single chain Fv molecules. <i>Biotechnology Progress</i> , <b>1996</b> , 12, 572-4	2.8	15
47	Efficient expression and purification of human aglycosylated Fcγ receptors in Escherichia coli. <i>Biotechnology and Bioengineering</i> , <b>2010</b> , 107, 21-30	4.9	14
46	Advances and challenges in membrane protein expression. <i>AIChE Journal</i> , <b>2007</b> , 53, 752-756	3.6	14
45	Middle-Down 193-nm Ultraviolet Photodissociation for Unambiguous Antibody Identification and its Implications for Immunoproteomic Analysis. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 6498-6504	7.8	13
44	Proteases that can distinguish among different post-translational forms of tyrosine engineered using multicolor flow cytometry. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 18186-90	16.4	13
43	Laboratory evolution of Escherichia coli thioredoxin for enhanced catalysis of protein oxidation in the periplasm reveals a phylogenetically conserved substrate specificity determinant. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 840-8	5.4	13
42	Degradation of secreted proteins in Escherichia coli. <i>Annals of the New York Academy of Sciences</i> , <b>1992</b> , 665, 301-8	6.5	13
41	Computational and Functional Analysis of the Virus-Receptor Interface Reveals Host Range Trade-Offs in New World Arenaviruses. <i>Journal of Virology</i> , <b>2015</b> , 89, 11643-53	6.6	12
40	A facile technology for the high-throughput sequencing of the paired VH:VL and TCR $\alpha$ :TCR $\beta$ repertoires. <i>Science Advances</i> , <b>2020</b> , 6, eaay9093	14.3	12
39	Genetic analysis of disulfide isomerization in Escherichia coli: expression of DsbC is modulated by RNase E-dependent mRNA processing. <i>Journal of Bacteriology</i> , <b>2004</b> , 186, 654-60	3.5	12
38	Effect of alkaline medium on the production and excretion of B-lactamase by Escherichia coli. <i>Biotechnology Letters</i> , <b>1988</b> , 10, 377-382	3	12
37	Enzyme-mediated depletion of serum l-Met abrogates prostate cancer growth via multiple mechanisms without evidence of systemic toxicity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 13000-13011	11.5	12
36	A missense mutation in ASRGL1 is involved in causing autosomal recessive retinal degeneration. <i>Human Molecular Genetics</i> , <b>2016</b> , 25, 2483-2497	5.6	12

35	Screening of large protein libraries by the cell immobilized on adsorbed bead approach. <i>Biotechnology and Bioengineering</i> , <b>2004</b> , 86, 196-200	4.9	11
34	Fixation and stabilization of Escherichia coli cells displaying genetically engineered cell surface proteins. <i>Biotechnology and Bioengineering</i> , <b>1996</b> , 52, 625-30	4.9	10
33	Fixation and stabilization of Escherichia coli cells displaying genetically engineered cell surface proteins <b>1996</b> , 52, 625		10
32	Enrichment of Escherichia coli spheroplasts displaying scFv antibodies specific for antigens expressed on the human cell surface. <i>Applied Microbiology and Biotechnology</i> , <b>2010</b> , 88, 1385-91	5.7	9
31	Temporal stability and molecular persistence of the bone marrow plasma cell antibody repertoire. <i>Nature Communications</i> , <b>2016</b> , 7, 13838	17.4	9
30	An Engineered Human Fc variant With Exquisite Selectivity for FcγRIIIa Reveals That Ligation of FcγRIIIa Mediates Potent Antibody Dependent Cellular Phagocytosis With GM-CSF-Differentiated Macrophages. <i>Frontiers in Immunology</i> , <b>2019</b> , 10, 562	8.4	8
29	Tumor-associated myeloid cells provide critical support for T-ALL. <i>Blood</i> , <b>2020</b> , 136, 1837-1850	2.2	8
28	Folding and Aggregation of RTEM Lactamase. <i>ACS Symposium Series</i> , <b>1991</b> , 97-109	0.4	7
27	Yeast Endoplasmic Reticulum Sequestration Screening for the Engineering of Proteases from Libraries Expressed in Yeast. <i>Methods in Molecular Biology</i> , <b>2015</b> , 1319, 81-93	1.4	6
26	Site-protected fixation and immobilization of Escherichia coli cells displaying surface-anchored beta-lactamase. <i>Biotechnology and Bioengineering</i> , <b>1999</b> , 62, 155-9	4.9	6
25	Sequencing HIV-neutralizing antibody exons and introns reveals detailed aspects of lineage maturation. <i>Nature Communications</i> , <b>2018</b> , 9, 4136	17.4	6
24	A biocatalyst for the removal of sulfite from alcoholic beverages. <i>Biotechnology and Bioengineering</i> , <b>2005</b> , 89, 123-7	4.9	5
23	Antibody-mediated inhibition of human C1s and the classical complement pathway. <i>Immunobiology</i> , <b>2013</b> , 218, 1041-8	3.4	4
22	Proteins from PHB granules. <i>Protein Science</i> , <b>2005</b> , 14, 1385-6	6.3	4
21	Computer-based Engineering of Thermostabilized Antibody Fragments. <i>AICHE Journal</i> , <b>2020</b> , 66, e16864	3.6	4
20	YESS 2.0, a Tunable Platform for Enzyme Evolution, Yields Highly Active TEV Protease Variants. <i>ACS Synthetic Biology</i> , <b>2021</b> , 10, 63-71	5.7	4
19	Rapid Screen for Tyrosine Kinase Inhibitor Resistance Mutations and Substrate Specificity. <i>ACS Chemical Biology</i> , <b>2019</b> , 14, 1888-1895	4.9	3
18	Mapping the secrets of the antibody pool. <i>Nature Biotechnology</i> , <b>2017</b> , 35, 921-922	44.5	3

17	An Engineered Protease that Cleaves Specifically after Sulfated Tyrosine. <i>Angewandte Chemie</i> , <b>2008</b> , 120, 7979-7981	3.6	3
16	Characterization and Refolding of $\beta$ -Lactamase Inclusion Bodies in Escherichia coli. <i>ACS Symposium Series</i> , <b>1993</b> , 126-139	0.4	3
15	Influenza vaccination in the elderly boosts antibodies against conserved viral proteins and egg-produced glycans. <i>Journal of Clinical Investigation</i> , <b>2021</b> , 131,	15.9	3
14	Tryptophan depletion results in tryptophan-to-phenylalanine substituents.. <i>Nature</i> , <b>2022</b> ,	50.4	3
13	Handmade microfluidic device for biochemical applications in emulsion. <i>Journal of Bioscience and Bioengineering</i> , <b>2016</b> , 121, 471-6	3.3	2
12	Demonstration of efficient trichloroethylene biodegradation in a hollow-fiber membrane bioreactor. <i>Biotechnology and Bioengineering</i> , <b>1999</b> , 64, 630	4.9	2
11	Engineering Anti-AML Antibodies for Improved NK Cell ADCC. <i>Blood</i> , <b>2012</b> , 120, 3629-3629	2.2	2
10	Conformational Dynamics Contribute to Substrate Selectivity and Catalysis in Human Kynureninase. <i>ACS Chemical Biology</i> , <b>2020</b> , 15, 3159-3166	4.9	2
9	A Prevalent Focused Human Antibody Response to the Influenza Virus Hemagglutinin Head Interface. <i>MBio</i> , <b>2021</b> , 12, e0114421	7.8	2
8	Disulfide stabilization of human norovirus GI.1 virus-like particles focuses immune response toward blockade epitopes. <i>Npj Vaccines</i> , <b>2020</b> , 5, 110	9.5	1
7	GFP reporter screens for the engineering of amino acid degrading enzymes from libraries expressed in bacteria. <i>Methods in Molecular Biology</i> , <b>2013</b> , 978, 31-44	1.4	1
6	Mechanistic Challenges and Engineering Applications of Protein Export in E. coli <b>2009</b> , 327-349		1
5	High-affinity IgA against microbial glycans. <i>Nature Immunology</i> , <b>2018</b> , 19, 514-515	19.1	1
4	IgG Immune Complexes Inhibit Naïve T Cell Proliferation and Suppress Effector Function in Cytotoxic T Cells. <i>Frontiers in Immunology</i> , <b>2021</b> , 12, 713704	8.4	1
3	Combinatorial Approaches to Enhance DNA Damage following Enzyme-Mediated Depletion of L-Cys for Treatment of Pancreatic Cancer. <i>Molecular Therapy</i> , <b>2021</b> , 29, 775-787	11.7	0
2	The Problem of Expression of Multidisulfide Bonded Recombinant Proteins in E. coli <b>2011</b> , 183-215		
1	Dynamics of L-Kynureninase Orthologs during Catalysis. <i>FASEB Journal</i> , <b>2018</b> , 32, 527.13	0.9	