

George Georgiou

List of Publications by Year in descending order

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Version: 2024-02-01

196
papers

20,852
citations

9264

74
h-index

11607

135
g-index

204
all docs

204
docs citations

204
times ranked

22175
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | CD8+ T cells regulate tumour ferroptosis during cancer immunotherapy. <i>Nature</i> , 2019, 569, 270-274. | 27.8 | 1,528 |
| 2 | Virus-Based Toolkit for the Directed Synthesis of Magnetic and Semiconducting Nanowires. <i>Science</i> , 2004, 303, 213-217. | 12.6 | 946 |
| 3 | Cysteine depletion induces pancreatic tumor ferroptosis in mice. <i>Science</i> , 2020, 368, 85-89. | 12.6 | 692 |
| 4 | Developmental pathway for potent V1V2-directed HIV-neutralizing antibodies. <i>Nature</i> , 2014, 509, 55-62. | 27.8 | 681 |
| 5 | The promise and challenge of high-throughput sequencing of the antibody repertoire. <i>Nature Biotechnology</i> , 2014, 32, 158-168. | 17.5 | 633 |
| 6 | Radiotherapy and Immunotherapy Promote Tumoral Lipid Oxidation and Ferroptosis via Synergistic Repression of SLC7A11. <i>Cancer Discovery</i> , 2019, 9, 1673-1685. | 9.4 | 566 |
| 7 | Display of heterologous proteins on the surface of microorganisms: From the screening of combinatorial libraries to live recombinant vaccines. <i>Nature Biotechnology</i> , 1997, 15, 29-34. | 17.5 | 488 |
| 8 | Viral assembly of oriented quantum dot nanowires. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 6946-6951. | 7.1 | 468 |
| 9 | Systemic depletion of L-cyst(e)ine with cyst(e)inase increases reactive oxygen species and suppresses tumor growth. <i>Nature Medicine</i> , 2017, 23, 120-127. | 30.7 | 413 |
| 10 | Adhesion Forces between E. coli Bacteria and Biomaterial Surfaces. <i>Langmuir</i> , 1999, 15, 2719-2725. | 3.5 | 411 |
| 11 | High-throughput sequencing of the paired human immunoglobulin heavy and light chain repertoire. <i>Nature Biotechnology</i> , 2013, 31, 166-169. | 17.5 | 401 |
| 12 | The Many Faces of Glutathione in Bacteria. <i>Antioxidants and Redox Signaling</i> , 2006, 8, 753-762. | 5.4 | 385 |
| 13 | In-depth determination and analysis of the human paired heavy- and light-chain antibody repertoire. <i>Nature Medicine</i> , 2015, 21, 86-91. | 30.7 | 345 |
| 14 | Monoclonal antibodies isolated without screening by analyzing the variable-gene repertoire of plasma cells. <i>Nature Biotechnology</i> , 2010, 28, 965-969. | 17.5 | 299 |
| 15 | Influenza Infection in Humans Induces Broadly Cross-Reactive and Protective Neuraminidase-Reactive Antibodies. <i>Cell</i> , 2018, 173, 417-429.e10. | 28.9 | 295 |
| 16 | The Bacterial Twin-Arginine Translocation Pathway. <i>Annual Review of Microbiology</i> , 2006, 60, 373-395. | 7.3 | 294 |
| 17 | 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> , 2003, 100, 6115-6120. | 7.1 | 290 |
| 18 | Molecular-level analysis of the serum antibody repertoire in young adults before and after seasonal influenza vaccination. <i>Nature Medicine</i> , 2016, 22, 1456-1464. | 30.7 | 271 |

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|----|---|------|-----------|
| 19 | 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> , 2014, 111, 2259-2264. | 7.1 | 238 |
| 20 | Prevalent, protective, and convergent IgG recognition of SARS-CoV-2 non-RBD spike epitopes. <i>Science</i> , 2021, 372, 1108-1112. | 12.6 | 210 |
| 21 | Antibody Engineering. <i>Annual Review of Biomedical Engineering</i> , 2000, 2, 339-376. | 12.3 | 206 |
| 22 | Isolation of engineered, full-length antibodies from libraries expressed in <i>Escherichia coli</i> . <i>Nature Biotechnology</i> , 2007, 25, 563-565. | 17.5 | 206 |
| 23 | Low CD21 expression defines a population of recent germinal center graduates primed for plasma cell differentiation. <i>Science Immunology</i> , 2017, 2, . | 11.9 | 203 |
| 24 | Surface-Active Compounds from Microorganisms. <i>Nature Biotechnology</i> , 1992, 10, 60-65. | 17.5 | 202 |
| 25 | Reversal of indoleamine 2,3-dioxygenase-mediated cancer immune suppression by systemic kynurenine depletion with a therapeutic enzyme. <i>Nature Biotechnology</i> , 2018, 36, 758-764. | 17.5 | 201 |
| 26 | 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> , 2004, 101, 9193-9198. | 7.1 | 200 |
| 27 | Structure and Morphology of Protein Inclusion Bodies in <i>Escherichia Coli</i> . <i>Nature Biotechnology</i> , 1991, 9, 725-730. | 17.5 | 188 |
| 28 | Preparative expression of secreted proteins in bacteria: status report and future prospects. <i>Current Opinion in Biotechnology</i> , 2005, 16, 538-545. | 6.6 | 186 |
| 29 | 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> , 1998, 180, 4002-4006. | 2.2 | 184 |
| 30 | 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> , 2016, 113, E2636-45. | 7.1 | 179 |
| 31 | Synthesis and organization of nanoscale VI semiconductor materials using evolved peptide specificity and viral capsid assembly. <i>Journal of Materials Chemistry</i> , 2003, 13, 2414-2421. | 6.7 | 174 |
| 32 | Systematic Analysis of Monoclonal Antibodies against Ebola Virus GP Defines Features that Contribute to Protection. <i>Cell</i> , 2018, 174, 938-952.e13. | 28.9 | 173 |
| 33 | Production of Correctly Folded Fab Antibody Fragment in the Cytoplasm of <i>Escherichia coli</i> trxB gor Mutants via the Coexpression of Molecular Chaperones. <i>Protein Expression and Purification</i> , 2001, 23, 338-347. | 1.3 | 172 |
| 34 | Function-based isolation of novel enzymes from a large library. <i>Nature Biotechnology</i> , 2000, 18, 1071-1074. | 17.5 | 171 |
| 35 | Structures of HIV-1 Env V1V2 with broadly neutralizing antibodies reveal commonalities that enable vaccine design. <i>Nature Structural and Molecular Biology</i> , 2016, 23, 81-90. | 8.2 | 162 |
| 36 | Strain engineering for improved expression of recombinant proteins in bacteria. <i>Microbial Cell Factories</i> , 2011, 10, 32. | 4.0 | 160 |

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|----|---|------|-----------|
| 37 | How to Flip the (Redox) Switch. <i>Cell</i> , 2002, 111, 607-610. | 28.9 | 150 |
| 38 | Aglycosylated IgG variants expressed in bacteria that selectively bind Fc γ RI potentiate tumor cell killing by monocyte-dendritic cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 604-609. | 7.1 | 146 |
| 39 | Phage Shock Protein PspA of <i>Escherichia coli</i> Relieves Saturation of Protein Export via the Tat Pathway. <i>Journal of Bacteriology</i> , 2004, 186, 366-373. | 2.2 | 144 |
| 40 | 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> , 2005, 102, 6855-6860. | 7.1 | 140 |
| 41 | Ultra-high-throughput sequencing of the immune receptor repertoire from millions of lymphocytes. <i>Nature Protocols</i> , 2016, 11, 429-442. | 12.0 | 140 |
| 42 | Genetic Analysis of the Twin Arginine Translocator Secretion Pathway in Bacteria. <i>Journal of Biological Chemistry</i> , 2002, 277, 29825-29831. | 3.4 | 133 |
| 43 | Isolation and expression of recombinant antibody fragments to the biological warfare pathogen <i>Brucella melitensis</i> . <i>Journal of Immunological Methods</i> , 2003, 276, 185-196. | 1.4 | 133 |
| 44 | Why High-error-rate Random Mutagenesis Libraries are Enriched in Functional and Improved Proteins. <i>Journal of Molecular Biology</i> , 2005, 350, 806-816. | 4.2 | 130 |
| 45 | Revisiting the Role of Glycosylation in the Structure of Human IgG Fc. <i>ACS Chemical Biology</i> , 2012, 7, 1596-1602. | 3.4 | 128 |
| 46 | 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> , 2013, 110, 2993-2998. | 7.1 | 127 |
| 47 | Isolation of high-affinity ligand-binding proteins by periplasmic expression with cytometric screening (PECS). <i>Nature Biotechnology</i> , 2001, 19, 537-542. | 17.5 | 125 |
| 48 | IgG Fc domains that bind C1q but not effector Fc γ receptors delineate the importance of complement-mediated effector functions. <i>Nature Immunology</i> , 2017, 18, 889-898. | 14.5 | 122 |
| 49 | Export Pathway Selectivity of <i>Escherichia coli</i> Twin Arginine Translocation Signal Peptides. <i>Journal of Biological Chemistry</i> , 2007, 282, 8309-8316. | 3.4 | 120 |
| 50 | Force Measurements between Bacteria and Poly(ethylene glycol)-Coated Surfaces. <i>Langmuir</i> , 2000, 16, 9155-9158. | 3.5 | 119 |
| 51 | Potent and broad HIV-neutralizing antibodies in memory B cells and plasma. <i>Science Immunology</i> , 2017, 2, . | 11.9 | 119 |
| 52 | 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> , 1999, 12, 613-621. | 2.1 | 117 |
| 53 | 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> , 2011, 108, 1272-1277. | 7.1 | 114 |
| 54 | BIOCHEMISTRY: An Overoxidation Journey with a Return Ticket. <i>Science</i> , 2003, 300, 592-594. | 12.6 | 113 |

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|----|--|------|-----------|
| 55 | Functional interrogation and mining of natively paired human VH:VL antibody repertoires. <i>Nature Biotechnology</i> , 2018, 36, 152-155. | 17.5 | 109 |
| 56 | Plasmacytoid Dendritic Cells and Type I Interferon Promote Extrafollicular B Cell Responses to Extracellular Self-DNA. <i>Immunity</i> , 2020, 52, 1022-1038.e7. | 14.3 | 109 |
| 57 | Flow cytometric screening of cell-based libraries. <i>Journal of Immunological Methods</i> , 2000, 243, 211-227. | 1.4 | 106 |
| 58 | Replacing Mn ²⁺ with Co ²⁺ in Human Arginase I Enhances Cytotoxicity toward <i>scpl</i> -Arginine Auxotrophic Cancer Cell Lines. <i>ACS Chemical Biology</i> , 2010, 5, 333-342. | 3.4 | 105 |
| 59 | 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> , 2013, 110, 7229-7234. | 7.1 | 105 |
| 60 | Cell-Surface display of heterologous proteins: From high-throughput screening to environmental applications. <i>Biotechnology and Bioengineering</i> , 2002, 79, 496-503. | 3.3 | 104 |
| 61 | Influenza immunization elicits antibodies specific for an egg-adapted vaccine strain. <i>Nature Medicine</i> , 2016, 22, 1465-1469. | 30.7 | 104 |
| 62 | Effects of codon usage versus putative 5' mRNA structure on the expression of <i>Fusarium solani</i> cutinase in the <i>Escherichia coli</i> cytoplasm. <i>Protein Expression and Purification</i> , 2003, 27, 134-142. | 1.3 | 94 |
| 63 | Persistent Antibody Clonotypes Dominate the Serum Response to Influenza over Multiple Years and Repeated Vaccinations. <i>Cell Host and Microbe</i> , 2019, 25, 367-376.e5. | 11.0 | 93 |
| 64 | Display of Î²-lactamase on the <i>Escherichia coli</i> surface: outer membrane phenotypes conferred by Lpp-OmpA-Î²-lactamase fusions. <i>Protein Engineering, Design and Selection</i> , 1996, 9, 239-247. | 2.1 | 92 |
| 65 | Bypassing glycosylation: engineering aglycosylated full-length IgG antibodies for human therapy. <i>Current Opinion in Biotechnology</i> , 2011, 22, 858-867. | 6.6 | 88 |
| 66 | Mineralization of biphenyl and PCBs by the white rot fungus <i>Phanerochaete chrysosporium</i> . <i>Biotechnology and Bioengineering</i> , 1992, 40, 1395-1402. | 3.3 | 86 |
| 67 | Increased cathepsin S in Prdm1 ^{hi} dendritic cells alters the TFH cell repertoire and contributes to lupus. <i>Nature Immunology</i> , 2017, 18, 1016-1024. | 14.5 | 86 |
| 68 | Substrate Specificity of the <i>Escherichia coli</i> Outer Membrane Protease OmpT. <i>Journal of Bacteriology</i> , 2004, 186, 5919-5925. | 2.2 | 85 |
| 69 | Antibody Fc engineering improves frequency and promotes kinetic boosting of serial killing mediated by NK cells. <i>Blood</i> , 2014, 124, 3241-3249. | 1.4 | 85 |
| 70 | Highly active and selective endopeptidases with programmed substrate specificities. <i>Nature Chemical Biology</i> , 2008, 4, 290-294. | 8.0 | 82 |
| 71 | Optimizing the production of recombinant proteins in microorganisms. <i>AIChE Journal</i> , 1988, 34, 1233-1248. | 3.6 | 81 |
| 72 | Serology in the 21st century: the molecular-level analysis of the serum antibody repertoire. <i>Current Opinion in Immunology</i> , 2015, 35, 89-97. | 5.5 | 80 |

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|----|---|------|-----------|
| 73 | Specific Adhesion and Hydrolysis of Cellulose by Intact Escherichia coli Expressing Surface Anchored Cellulase or Cellulose Binding Domains. <i>Nature Biotechnology</i> , 1993, 11, 491-495. | 17.5 | 79 |
| 74 | Molecular characterization of .beta.-lactamase inclusion bodies produced in Escherichia coli. 1. Composition. <i>Biotechnology Progress</i> , 1993, 9, 539-547. | 2.6 | 79 |
| 75 | Comprehensive engineering of Escherichia coli for enhanced expression of IgG antibodies. <i>Metabolic Engineering</i> , 2011, 13, 241-251. | 7.0 | 79 |
| 76 | Fine-tuning citrate synthase flux potentiates and refines metabolic innovation in the Lenski evolution experiment. <i>ELife</i> , 2015, 4, . | 6.0 | 79 |
| 77 | Antibody Repertoires in Humanized NOD-scid-IL2RÎ³null Mice and Human B Cells Reveals Human-Like Diversification and Tolerance Checkpoints in the Mouse. <i>PLoS ONE</i> , 2012, 7, e35497. | 2.5 | 77 |
| 78 | Longitudinal Analysis Reveals Early Development of Three MPER-Directed Neutralizing Antibody Lineages from an HIV-1-Infected Individual. <i>Immunity</i> , 2019, 50, 677-691.e13. | 14.3 | 77 |
| 79 | 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> , 2015, 24, 112-120. | 6.1 | 76 |
| 80 | Sera Antibody Repertoire Analyses Reveal Mechanisms of Broad and Pandemic Strain Neutralizing Responses after Human Norovirus Vaccination. <i>Immunity</i> , 2019, 50, 1530-1541.e8. | 14.3 | 71 |
| 81 | Folding and aggregation of TEM Î²-lactamase: Analogies with the formation of inclusion bodies in <i>Escherichia coli</i> . <i>Protein Science</i> , 1994, 3, 1953-1960. | 7.6 | 70 |
| 82 | Proteomic Identification of Monoclonal Antibodies from Serum. <i>Analytical Chemistry</i> , 2014, 86, 4758-4766. | 6.5 | 69 |
| 83 | Differences in the Composition of the Human Antibody Repertoire by B Cell Subsets in the Blood. <i>Frontiers in Immunology</i> , 2014, 5, 96. | 4.8 | 62 |
| 84 | Evaluating the interaction of bacteria with biomaterials using atomic force microscopy. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1998, 9, 1361-1373. | 3.5 | 61 |
| 85 | In vitro scanning saturation mutagenesis of all the specificity determining residues in an antibody binding site. <i>Protein Engineering, Design and Selection</i> , 1999, 12, 349-356. | 2.1 | 61 |
| 86 | Efficient production of membrane-integrated and detergent-soluble G protein-coupled receptors in <i>Escherichia coli</i> . <i>Protein Science</i> , 2008, 17, 1857-1863. | 7.6 | 61 |
| 87 | Effective Phagocytosis of Low Her2 Tumor Cell Lines with Engineered, Aglycosylated IgG Displaying High FcÎ³RIIa Affinity and Selectivity. <i>ACS Chemical Biology</i> , 2013, 8, 368-375. | 3.4 | 61 |
| 88 | Systematic Characterization and Comparative Analysis of the Rabbit Immunoglobulin Repertoire. <i>PLoS ONE</i> , 2014, 9, e101322. | 2.5 | 61 |
| 89 | Immunoglobulin isotype knowledge and application to Fc engineering. <i>Current Opinion in Immunology</i> , 2016, 40, 62-69. | 5.5 | 61 |
| 90 | Synthetic Antibody Libraries Focused Towards Peptide Ligands. <i>Journal of Molecular Biology</i> , 2008, 378, 622-633. | 4.2 | 60 |

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|-----|---|------|-----------|
| 91 | High-throughput antibody isolation. <i>Current Opinion in Chemical Biology</i> , 2001, 5, 683-689. | 6.1 | 58 |
| 92 | Enhanced crossover SCRATCHY: construction and high-throughput screening of a combinatorial library containing multiple non-homologous crossovers. <i>Nucleic Acids Research</i> , 2003, 31, 126e-126. | 14.5 | 57 |
| 93 | IgGA: A "Cross-Isotype" Engineered Human Fc Antibody Domain that Displays Both IgG-like and IgA-like Effector Functions. <i>Chemistry and Biology</i> , 2014, 21, 1603-1609. | 6.0 | 55 |
| 94 | Evolution of highly active enzymes by homology-independent recombination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 10082-10087. | 7.1 | 54 |
| 95 | Production and deactivation of biosurfactant by <i>Bacillus licheniformis</i> JF-2. <i>Biotechnology Progress</i> , 1993, 9, 138-145. | 2.6 | 53 |
| 96 | Effect of Sequences of the Active-Site Dipeptides of DsbA and DsbC on In Vivo Folding of Multidisulfide Proteins in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2001, 183, 980-988. | 2.2 | 52 |
| 97 | SCHEMA-Designed Variants of Human Arginase I and II Reveal Sequence Elements Important to Stability and Catalysis. <i>ACS Synthetic Biology</i> , 2012, 1, 221-228. | 3.8 | 52 |
| 98 | Analysis of large libraries of protein mutants using flow cytometry. <i>Advances in Protein Chemistry</i> , 2001, 55, 293-315. | 4.4 | 51 |
| 99 | An engineered human Fc domain that behaves like a pH-toggle switch for ultra-long circulation persistence. <i>Nature Communications</i> , 2019, 10, 5031. | 12.8 | 49 |
| 100 | Substrate Specificity of the <i>Escherichia coli</i> Outer Membrane Protease OmpP. <i>Journal of Bacteriology</i> , 2007, 189, 522-530. | 2.2 | 48 |
| 101 | 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> , 2007, 104, 8247-8252. | 7.1 | 48 |
| 102 | <i>Escherichia coli</i> tatC Mutations that Suppress Defective Twin-Arginine Transporter Signal Peptides. <i>Journal of Molecular Biology</i> , 2007, 374, 283-291. | 4.2 | 47 |
| 103 | Facile Discovery of a Diverse Panel of Anti-Ebola Virus Antibodies by Immune Repertoire Mining. <i>Scientific Reports</i> , 2015, 5, 13926. | 3.3 | 47 |
| 104 | Tryptophan depletion results in tryptophan-to-phenylalanine substituents. <i>Nature</i> , 2022, 603, 721-727. | 27.8 | 47 |
| 105 | Transport of bacteria in porous media: I. An experimental investigation. <i>Biotechnology and Bioengineering</i> , 1994, 44, 489-497. | 3.3 | 46 |
| 106 | Engineered DsbC chimeras catalyze both protein oxidation and disulfide-bond isomerization in <i>Escherichia coli</i> : Reconciling two competing pathways. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 10018-10023. | 7.1 | 46 |
| 107 | E-clonal antibodies: selection of full-length IgG antibodies using bacterial periplasmic display. <i>Nature Protocols</i> , 2008, 3, 1766-1777. | 12.0 | 46 |
| 108 | Beyond toothpicks: new methods for isolating mutant bacteria. <i>Nature Reviews Microbiology</i> , 2007, 5, 680-688. | 28.6 | 45 |

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|-----|---|-----|-----------|
| 109 | Engineering next generation proteases. <i>Current Opinion in Biotechnology</i> , 2009, 20, 390-397. | 6.6 | 43 |
| 110 | Rapid Amperometric Verification of PCR Amplification of DNA. <i>Analytical Chemistry</i> , 1999, 71, 535-538. | 6.5 | 42 |
| 111 | Genetic analysis of G protein-coupled receptor expression in <i>Escherichia coli</i> : Inhibitory role of DnaJ on the membrane integration of the human central cannabinoid receptor. <i>Biotechnology and Bioengineering</i> , 2009, 102, 357-367. | 3.3 | 42 |
| 112 | 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> , 2018, 67, 729-738. | 4.2 | 42 |
| 113 | Determinants governing T cell receptor α/β -chain pairing in repertoire formation of identical twins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 532-540. | 7.1 | 42 |
| 114 | The Effect of Sugars on β -Lactamase Aggregation in <i>Escherichia coli</i> . <i>Biotechnology Progress</i> , 1988, 4, 97-101. | 2.6 | 40 |
| 115 | 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> , 2008, 105, 6735-6740. | 7.1 | 40 |
| 116 | Selection of full-length IgGs by tandem display on filamentous phage particles and <i>Escherichia coli</i> fluorescence-activated cell sorting screening. <i>FEBS Journal</i> , 2010, 277, 2291-2303. | 4.7 | 40 |
| 117 | Simple Genetic Selection Protocol for Isolation of Overexpressed Genes That Enhance Accumulation of Membrane-Integrated Human G Protein-Coupled Receptors in <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , 2010, 76, 5852-5859. | 3.1 | 40 |
| 118 | Human recombinant arginase enzyme reduces plasma arginine in mouse models of arginase deficiency. <i>Human Molecular Genetics</i> , 2015, 24, 6417-6427. | 2.9 | 40 |
| 119 | Inclusion Bodies and Recovery of Proteins from the Aggregated State. <i>ACS Symposium Series</i> , 1991, , 1-20. | 0.5 | 37 |
| 120 | A Periplasmic Fluorescent Reporter Protein and its Application in High-throughput Membrane Protein Topology Analysis. <i>Journal of Molecular Biology</i> , 2004, 341, 901-909. | 4.2 | 36 |
| 121 | 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> , 2016, 113, E577-E586. | 7.1 | 36 |
| 122 | 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> , 2007, 369, 631-639. | 4.2 | 35 |
| 123 | Binding and enrichment of <i>Escherichia coli</i> spheroplasts expressing inner membrane tethered scFv antibodies on surface immobilized antigens. <i>Biotechnology and Bioengineering</i> , 2007, 98, 39-47. | 3.3 | 34 |
| 124 | Substrate specificity of human kallikreins 1 and 6 determined by phage display. <i>Protein Science</i> , 2008, 17, 664-672. | 7.6 | 34 |
| 125 | Optimization of growth conditions for the production of proteolytically-sensitive proteins in the periplasmic space of <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 1991, 36, 14-20. | 3.6 | 32 |
| 126 | Transport of bacteria in porous media: II. A model for convective Transport and growth. <i>Biotechnology and Bioengineering</i> , 1994, 44, 499-508. | 3.3 | 32 |

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|-----|--|------|-----------|
| 127 | Secretory Production of Recombinant Protein by a High Cell Density Culture of a Protease Negative Mutant Escherichia coli Strain. <i>Biotechnology Progress</i> , 1999, 15, 164-167. | 2.6 | 32 |
| 128 | Rapid construction and characterization of synthetic antibody libraries without DNA amplification. <i>Biotechnology and Bioengineering</i> , 2010, 106, 347-357. | 3.3 | 30 |
| 129 | Profiling Protease Specificity: Combining Yeast ER Sequestration Screening (YESS) with Next Generation Sequencing. <i>ACS Chemical Biology</i> , 2017, 12, 510-518. | 3.4 | 30 |
| 130 | Engineering of recombinant antibody fragments to methamphetamine by anchored periplasmic expression. <i>Journal of Immunological Methods</i> , 2006, 308, 43-52. | 1.4 | 29 |
| 131 | Discovery of high affinity anti-ricin antibodies by B cell receptor sequencing and by yeast display of combinatorial V _H :V _L libraries from immunized animals. <i>MAbs</i> , 2016, 8, 1035-1044. | 5.2 | 29 |
| 132 | Facilitating the Formation of Disulfide Bonds in the Escherichia coli Periplasm via Coexpression of Yeast Protein Disulfide Isomerase. <i>Biotechnology Progress</i> , 1999, 15, 1033-1038. | 2.6 | 28 |
| 133 | Enzyme-mediated depletion of l-cyst(e)ine synergizes with thioredoxin reductase inhibition for suppression of pancreatic tumor growth. <i>Npj Precision Oncology</i> , 2019, 3, 16. | 5.4 | 28 |
| 134 | Demonstration of efficient trichloroethylene biodegradation in a hollow-fiber membrane bioreactor. , 1999, 62, 681-692. | | 27 |
| 135 | A bacterial two-hybrid system based on the twin-arginine transporter pathway of E. coli. <i>Protein Science</i> , 2007, 16, 1001-1008. | 7.6 | 27 |
| 136 | Enzyme-mediated depletion of serum <sc>l</sc>-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> , 2020, 117, 13000-13011. | 7.1 | 27 |
| 137 | Multi-copy genes that enhance the yield of mammalian G protein-coupled receptors in Escherichia coli. <i>Metabolic Engineering</i> , 2012, 14, 591-602. | 7.0 | 26 |
| 138 | Directed Evolution of Highly Selective Proteases by Using a Novel FACS-Based Screen that Capitalizes on the p53 Regulator MDM2. <i>ChemBioChem</i> , 2012, 13, 649-653. | 2.6 | 26 |
| 139 | A hollow-fiber membrane bioreactor for the removal of trichloroethylene from the vapor phase. , 2000, 68, 548-556. | | 25 |
| 140 | An Engineered Protease that Cleaves Specifically after Sulfated Tyrosine. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 7861-7863. | 13.8 | 25 |
| 141 | Expression of active human sialyltransferase ST6GalNAcI in Escherichia coli. <i>Microbial Cell Factories</i> , 2009, 8, 50. | 4.0 | 25 |
| 142 | Systems analysis of adaptive immunity by utilization of high-throughput technologies. <i>Current Opinion in Biotechnology</i> , 2011, 22, 584-589. | 6.6 | 25 |
| 143 | Engineering antibody fragments to fold in the absence of disulfide bonds. <i>Protein Science</i> , 2009, 18, 259-267. | 7.6 | 24 |
| 144 | Construction and flow cytometric screening of targeted enzyme libraries. <i>Nature Protocols</i> , 2009, 4, 893-901. | 12.0 | 24 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 145 | YESS 2.0, a Tunable Platform for Enzyme Evolution, Yields Highly Active TEV Protease Variants. <i>ACS Synthetic Biology</i> , 2021, 10, 63-71. | 3.8 | 24 |
| 146 | Strategies for optimizing the serum persistence of engineered human arginase I for cancer therapy. <i>Journal of Controlled Release</i> , 2012, 158, 171-179. | 9.9 | 23 |
| 147 | An Alternate Pathway of Arsenate Resistance in <i>E. coli</i> Mediated by the Glutathione S-Transferase GstB. <i>ACS Chemical Biology</i> , 2015, 10, 875-882. | 3.4 | 20 |
| 148 | Improving Antibody Therapeutics by Manipulating the Fc Domain: Immunological and Structural Considerations. <i>Annual Review of Biomedical Engineering</i> , 2022, 24, 249-274. | 12.3 | 20 |
| 149 | A Quantitative Immunoassay Utilizing <i>Escherichia coli</i> Cells Possessing Surface-Expressed Single Chain Fv Molecules. <i>Biotechnology Progress</i> , 1996, 12, 572-574. | 2.6 | 18 |
| 150 | A facile technology for the high-throughput sequencing of the paired VH:VL and TCR β :TCR α repertoires. <i>Science Advances</i> , 2020, 6, eaay9093. | 10.3 | 18 |
| 151 | Degradation of Secreted Proteins in <i>Escherichia coli</i> . <i>Annals of the New York Academy of Sciences</i> , 1992, 665, 301-308. | 3.8 | 17 |
| 152 | Assembly of multimeric phage nanostructures through leucine zipper interactions. <i>Biotechnology and Bioengineering</i> , 2006, 95, 539-545. | 3.3 | 17 |
| 153 | An Engineered Human Fc variant With Exquisite Selectivity for Fc γ 3RIIIaV158 Reveals That Ligation of Fc γ 3RIIIa Mediates Potent Antibody Dependent Cellular Phagocytosis With GM-CSF-Differentiated Macrophages. <i>Frontiers in Immunology</i> , 2019, 10, 562. | 4.8 | 17 |
| 154 | A Prevalent Focused Human Antibody Response to the Influenza Virus Hemagglutinin Head Interface. <i>MBio</i> , 2021, 12, e0114421. | 4.1 | 17 |
| 155 | De Novo Design and Evolution of Artificial Disulfide Isomerase Enzymes Analogous to the Bacterial DsbC. <i>Journal of Biological Chemistry</i> , 2008, 283, 31469-31476. | 3.4 | 16 |
| 156 | A missense mutation in ASRGL1 is involved in causing autosomal recessive retinal degeneration. <i>Human Molecular Genetics</i> , 2016, 25, ddw113. | 2.9 | 16 |
| 157 | Tumor-associated myeloid cells provide critical support for T-ALL. <i>Blood</i> , 2020, 136, 1837-1850. | 1.4 | 16 |
| 158 | Effect of alkaline medium on the production and excretion of B-lactamase by <i>Escherichia coli</i> . <i>Biotechnology Letters</i> , 1988, 10, 377-382. | 2.2 | 15 |
| 159 | Efficient expression and purification of human aglycosylated Fc γ 3 receptors in <i>Escherichia coli</i> . <i>Biotechnology and Bioengineering</i> , 2010, 107, 21-30. | 3.3 | 15 |
| 160 | Computational and Functional Analysis of the Virus-Receptor Interface Reveals Host Range Trade-Offs in New World Arenaviruses. <i>Journal of Virology</i> , 2015, 89, 11643-11653. | 3.4 | 15 |
| 161 | Advances and challenges in membrane protein expression. <i>AIChE Journal</i> , 2007, 53, 752-756. | 3.6 | 14 |
| 162 | Laboratory Evolution of <i>Escherichia coli</i> Thioredoxin for Enhanced Catalysis of Protein Oxidation in the Periplasm Reveals a Phylogenetically Conserved Substrate Specificity Determinant. <i>Journal of Biological Chemistry</i> , 2008, 283, 840-848. | 3.4 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 163 | Proteases That Can Distinguish among Different Post-translational Forms of Tyrosine Engineered Using Multicolor Flow Cytometry. <i>Journal of the American Chemical Society</i> , 2009, 131, 18186-18190. | 13.7 | 14 |
| 164 | Yeast Endoplasmic Reticulum Sequestration Screening for the Engineering of Proteases from Libraries Expressed in Yeast. <i>Methods in Molecular Biology</i> , 2015, 1319, 81-93. | 0.9 | 14 |
| 165 | Leveraging intrinsic flexibility to engineer enhanced enzyme catalytic activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, . | 7.1 | 14 |
| 166 | Screening of large protein libraries by the "cell immobilized on adsorbed bead" approach. <i>Biotechnology and Bioengineering</i> , 2004, 86, 196-200. | 3.3 | 13 |
| 167 | Middle-Down 193-nm Ultraviolet Photodissociation for Unambiguous Antibody Identification and its Implications for Immunoproteomic Analysis. <i>Analytical Chemistry</i> , 2017, 89, 6498-6504. | 6.5 | 13 |
| 168 | Hypersensitivity to ferroptosis in chromophobe RCC is mediated by a glutathione metabolic dependency and cystine import via solute carrier family 7 member 11. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, . | 7.1 | 13 |
| 169 | Genetic Analysis of Disulfide Isomerization in <i>Escherichia coli</i> : Expression of DsbC Is Modulated by RNase E-Dependent mRNA Processing. <i>Journal of Bacteriology</i> , 2004, 186, 654-660. | 2.2 | 12 |
| 170 | Computer-aided engineering of thermostabilized antibody fragments. <i>AIChE Journal</i> , 2020, 66, e16864. | 3.6 | 12 |
| 171 | Influenza vaccination in the elderly boosts antibodies against conserved viral proteins and egg-produced glycans. <i>Journal of Clinical Investigation</i> , 2021, 131, . | 8.2 | 12 |
| 172 | Temporal stability and molecular persistence of the bone marrow plasma cell antibody repertoire. <i>Nature Communications</i> , 2016, 7, 13838. | 12.8 | 11 |
| 173 | Sequencing HIV-neutralizing antibody exons and introns reveals detailed aspects of lineage maturation. <i>Nature Communications</i> , 2018, 9, 4136. | 12.8 | 11 |
| 174 | Fixation and stabilization of <i>Escherichia coli</i> cells displaying genetically engineered cell surface proteins. , 2000, 52, 625-630. | | 10 |
| 175 | Communication fixation and stabilization of <i>Escherichia coli</i> cells displaying genetically engineered cell surface proteins. <i>Biotechnology and Bioengineering</i> , 1996, 52, 625-630. | 3.3 | 10 |
| 176 | Enrichment of <i>Escherichia coli</i> spheroplasts displaying scFv antibodies specific for antigens expressed on the human cell surface. <i>Applied Microbiology and Biotechnology</i> , 2010, 88, 1385-1391. | 3.6 | 9 |
| 177 | Rapid Screen for Tyrosine Kinase Inhibitor Resistance Mutations and Substrate Specificity. <i>ACS Chemical Biology</i> , 2019, 14, 1888-1895. | 3.4 | 8 |
| 178 | Combinatorial Approaches to Enhance DNA Damage following Enzyme-Mediated Depletion of L-Cys for Treatment of Pancreatic Cancer. <i>Molecular Therapy</i> , 2021, 29, 775-787. | 8.2 | 8 |
| 179 | Folding and Aggregation of RTEM Î²-Lactamase. <i>ACS Symposium Series</i> , 1991, , 97-109. | 0.5 | 7 |
| 180 | Site-protected fixation and immobilization of <i>Escherichia coli</i> cells displaying surface-anchored Î²-lactamase. , 1999, 62, 155-159. | | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 181 | A biocatalyst for the removal of sulfite from alcoholic beverages. <i>Biotechnology and Bioengineering</i> , 2005, 89, 123-127. | 3.3 | 6 |
| 182 | Conformational Dynamics Contribute to Substrate Selectivity and Catalysis in Human Kynureninase. <i>ACS Chemical Biology</i> , 2020, 15, 3159-3166. | 3.4 | 6 |
| 183 | Disulfide stabilization of human norovirus GI.1 virus-like particles focuses immune response toward blockade epitopes. <i>Npj Vaccines</i> , 2020, 5, 110. | 6.0 | 6 |
| 184 | Characterization and Refolding of β -Lactamase Inclusion Bodies in <i>Escherichia coli</i> . <i>ACS Symposium Series</i> , 1993, , 126-139. | 0.5 | 5 |
| 185 | Proteins from PHB granules. <i>Protein Science</i> , 2009, 14, 1385-1386. | 7.6 | 4 |
| 186 | Antibody-mediated inhibition of human C1s and the classical complement pathway. <i>Immunobiology</i> , 2013, 218, 1041-1048. | 1.9 | 4 |
| 187 | Handmade microfluidic device for biochemical applications in emulsion. <i>Journal of Bioscience and Bioengineering</i> , 2016, 121, 471-476. | 2.2 | 3 |
| 188 | Mapping the secrets of the antibody pool. <i>Nature Biotechnology</i> , 2017, 35, 921-922. | 17.5 | 3 |
| 189 | IgG Immune Complexes Inhibit Naïve T Cell Proliferation and Suppress Effector Function in Cytotoxic T Cells. <i>Frontiers in Immunology</i> , 2021, 12, 713704. | 4.8 | 3 |
| 190 | Demonstration of efficient trichloroethylene biodegradation in a hollow-fiber membrane bioreactor. , 1999, 64, 630-630. | | 2 |
| 191 | Mechanistic Challenges and Engineering Applications of Protein Export in <i>E. coli</i> . , 2009, , 327-349. | | 2 |
| 192 | Engineering Anti-AML Antibodies for Improved NK Cell ADCC. <i>Blood</i> , 2012, 120, 3629-3629. | 1.4 | 2 |
| 193 | GFP Reporter Screens for the Engineering of Amino Acid Degrading Enzymes from Libraries Expressed in Bacteria. <i>Methods in Molecular Biology</i> , 2013, 978, 31-44. | 0.9 | 1 |
| 194 | High-affinity IgA against microbial glycans. <i>Nature Immunology</i> , 2018, 19, 514-515. | 14.5 | 1 |
| 195 | The Problem of Expression of Multidisulfide Bonded Recombinant Proteins in <i>E. coli</i> . , 2011, , 183-215. | | 0 |
| 196 | Dynamics of β -Kynureninase Orthologs during Catalysis. <i>FASEB Journal</i> , 2018, 32, 527.13. | 0.5 | 0 |