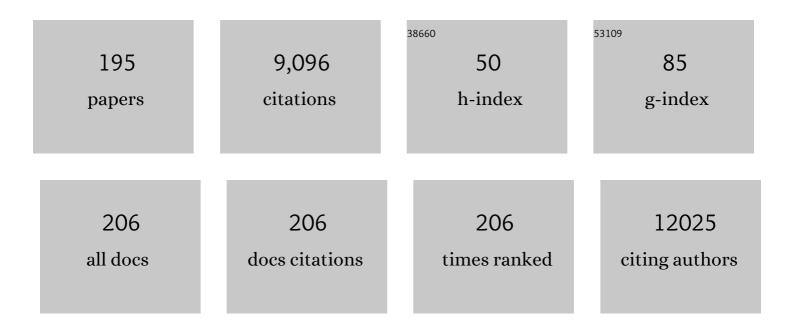
List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5428731/publications.pdf Version: 2024-02-01



| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Mechanism of Endosomal TLR Inhibition by Antimalarial Drugs and Imidazoquinolines. Journal of<br>Immunology, 2011, 186, 4794-4804.   | 0.4 | 516       |
| 2  | Characterization of quercetin binding site on DNA gyrase. Biochemical and Biophysical Research Communications, 2003, 306, 530-536.   | 1.0 | 286       |
| 3  | Design of a single-chain polypeptide tetrahedron assembled from coiled-coil segments. Nature<br>Chemical Biology, 2013, 9, 362-366.  | 3.9 | 272       |
| 4  | Structural biology of the LPS recognition. International Journal of Medical Microbiology, 2007, 297, 353-363.  | 1.5 | 249       |
| 5  | DNA-guided assembly of biosynthetic pathways promotes improved catalytic efficiency. Nucleic Acids<br>Research, 2012, 40, 1879-1889.   | 6.5 | 241       |
| 6  | Chemistry of Lipidâ€A: At the Heart of Innate Immunity. Chemistry - A European Journal, 2015, 21, 500-519.   | 1.7 | 193       |
| 7  | Similarities and Specificities of Fungal Keratinolytic Proteases: Comparison of Keratinases of<br>Paecilomyces marquandii and Doratomyces microsporus to Some Known Proteases. Applied and<br>Environmental Microbiology, 2005, 71, 3420-3426. | 1.4 | 181       |
| 8  | Three-dimensional domain swapping in the folded and molten-globule states of cystatins, an amyloid-forming structural superfamily. EMBO Journal, 2001, 20, 4774-4781.  | 3.5 | 179       |
| 9  | Green Tea Catechins Inhibit Bacterial DNA Gyrase by Interaction with Its ATP Binding Site. Journal of Medicinal Chemistry, 2007, 50, 264-271.  | 2.9 | 178       |
| 10 | The POM Monoclonals: A Comprehensive Set of Antibodies to Non-Overlapping Prion Protein Epitopes.<br>PLoS ONE, 2008, 3, e3872.   | 1.1 | 162       |
| 11 | Primary structure of a new cysteine proteinase inhibitor from pig leucocytes. FEBS Letters, 1989, 255, 211-214.  | 1.3 | 144       |
| 12 | Design of coiled-coil protein-origami cages that self-assemble in vitro and in vivo. Nature<br>Biotechnology, 2017, 35, 1094-1101.   | 9.4 | 143       |
| 13 | Design of fast proteolysis-based signaling and logic circuits in mammalian cells. Nature Chemical<br>Biology, 2019, 15, 115-122.   | 3.9 | 143       |
| 14 | The Lipopolysaccharide Core of Brucella abortus Acts as a Shield Against Innate Immunity Recognition.<br>PLoS Pathogens, 2012, 8, e1002675.  | 2.1 | 140       |
| 15 | MD-2 as the target of curcumin in the inhibition of response to LPS. Journal of Leukocyte Biology, 2007, 82, 968-974.  | 1.5 | 130       |
| 16 | Toll-Like Receptor 4 Activation in Cancer Progression and Therapy. Clinical and Developmental Immunology, 2011, 2011, 1-12.  | 3.3 | 123       |
| 17 | Curcumin binds to the αâ€helical intermediate and to the amyloid form of prion protein – a new<br>mechanism for the inhibition of PrP <sup>Sc</sup> accumulation. Journal of Neurochemistry, 2008,<br>104, 1553-1564.                          | 2.1 | 117       |
| 18 | Structural Model of MD-2 and Functional Role of Its Basic Amino Acid Clusters Involved in Cellular<br>Lipopolysaccharide Recognition. Journal of Biological Chemistry, 2004, 279, 28475-28482.   | 1.6 | 115       |

| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | The Three-dimensional Solution Structure of Human Stefin A. Journal of Molecular Biology, 1995, 246, 331-343.  | 2.0  | 107       |
| 20 | Enhancement of antibacterial and lipopolysaccharide binding activities of a human lactoferrin peptide fragment by the addition of acyl chain. Journal of Antimicrobial Chemotherapy, 2003, 51, 1159-1165.  | 1.3  | 102       |
| 21 | NLRP3 lacking the leucine-rich repeat domain can be fully activated via the canonical inflammasome pathway. Nature Communications, 2018, 9, 5182.  | 5.8  | 102       |
| 22 | Enhancement of endotoxin neutralization by coupling of a C12-alkyl chain to a lactoferricin-derived peptide. Biochemical Journal, 2005, 385, 135-143.  | 1.7  | 101       |
| 23 | Essential Roles of Hydrophobic Residues in Both MD-2 and Toll-like Receptor 4 in Activation by<br>Endotoxin. Journal of Biological Chemistry, 2009, 284, 15052-15060.  | 1.6  | 100       |
| 24 | <i>De novo</i> design of orthogonal peptide pairs forming parallel coiledâ€coil heterodimers. Journal of Peptide Science, 2011, 17, 100-106.   | 0.8  | 100       |
| 25 | Coiled coil protein origami: from modular design principles towards biotechnological applications.<br>Chemical Society Reviews, 2018, 47, 3530-3542.   | 18.7 | 99        |
| 26 | Mixed-valence Cu(II)/Cu(I) complex of quinolone ciprofloxacin isolated by a hydrothermal reaction in<br>the presence of l-histidine: comparison of biological activities of various copper–ciprofloxacin<br>compounds. Journal of Inorganic Biochemistry, 2005, 99, 432-442. | 1.5  | 98        |
| 27 | Endotoxin Neutralizing Peptides. Current Topics in Medicinal Chemistry, 2004, 4, 1173-1184.  | 1.0  | 97        |
| 28 | Alexidine and chlorhexidine bind to lipopolysaccharide and lipoteichoic acid and prevent cell activation by antibiotics. Journal of Antimicrobial Chemotherapy, 2008, 62, 730-737.   | 1.3  | 89        |
| 29 | Globular Domain of the Prion Protein Needs to Be Unlocked by Domain Swapping to Support Prion<br>Protein Conversion. Journal of Biological Chemistry, 2011, 286, 12149-12156.  | 1.6  | 89        |
| 30 | A tunable orthogonal coiled-coil interaction toolbox for engineering mammalian cells. Nature<br>Chemical Biology, 2020, 16, 513-519.   | 3.9  | 89        |
| 31 | pH-induced Conformational Transitions of the Propeptide of Human Cathepsin L. Journal of Biological<br>Chemistry, 1998, 273, 11498-11504.  | 1.6  | 88        |
| 32 | Designable DNA-binding domains enable construction of logic circuits in mammalian cells. Nature<br>Chemical Biology, 2014, 10, 203-208.  | 3.9  | 88        |
| 33 | NLRP3 inflammasome activation in macrophage cell lines by prion protein fibrils as the source of IL-1Î <sup>2</sup> and neuronal toxicity. Cellular and Molecular Life Sciences, 2012, 69, 4215-4228.  | 2.4  | 83        |
| 34 | Synthetic lipopeptides: a novel class of anti-infectives. Expert Opinion on Investigational Drugs, 2007, 16, 1159-1169.  | 1.9  | 82        |
| 35 | Structural Origin of Endotoxin Neutralization and Antimicrobial Activity of a Lactoferrin-based<br>Peptide. Journal of Biological Chemistry, 2005, 280, 16955-16961.   | 1.6  | 78        |
| 36 | Monoclonal Antibody against a Peptide of Human Prion Protein Discriminates between<br>Creutzfeldt-Jacob's Disease-affected and Normal Brain Tissue. Journal of Biological Chemistry, 2004,<br>279, 3694-3698.  | 1.6  | 74        |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | In silico fragment-based discovery of indolin-2-one analogues as potent DNA gyrase inhibitors.<br>Bioorganic and Medicinal Chemistry Letters, 2005, 15, 5207-5210.  | 1.0 | 74        |
| 38 | Toll-like receptor 4 senses oxidative stress mediated by the oxidation of phospholipids in extracellular vesicles. Science Signaling, 2015, 8, ra60.  | 1.6 | 74        |
| 39 | A bistable genetic switch based on designable DNA-binding domains. Nature Communications, 2014, 5, 5007.  | 5.8 | 70        |
| 40 | Identification of LPS-Binding Peptide Fragment of MD-2, a Toll-Receptor Accessory Protein. Biochemical and Biophysical Research Communications, 2002, 292, 880-885.   | 1.0 | 69        |
| 41 | Activation of lymphoma-associated MyD88 mutations via allostery-induced TIR-domain oligomerization. Blood, 2014, 124, 3896-3904.  | 0.6 | 69        |
| 42 | A second binding site for double-stranded RNA in TLR3 and consequences for interferon activation.<br>Nature Structural and Molecular Biology, 2008, 15, 761-763.  | 3.6 | 68        |
| 43 | Cloning a synthetic gene for human stefin B and its expression inE. coli. FEBS Letters, 1988, 239, 41-44.   | 1.3 | 67        |
| 44 | Accessing the global minimum conformation of stefin A dimer by annealing under partially denaturing conditions. Journal of Molecular Biology, 1999, 291, 1079-1089.   | 2.0 | 66        |
| 45 | The molecular mechanism of species-specific recognition of lipopolysaccharides by the MD-2/TLR4 receptor complex. Molecular Immunology, 2015, 63, 134-142.  | 1.0 | 61        |
| 46 | Modulation of Coiled-Coil Dimer Stability through Surface Residues while Preserving Pairing Specificity. Journal of the American Chemical Society, 2017, 139, 8229-8236.  | 6.6 | 61        |
| 47 | The Differential Interaction of Brucella and Ochrobactrum with Innate Immunity Reveals Traits Related to the Evolution of Stealthy Pathogens. PLoS ONE, 2009, 4, e5893.   | 1.1 | 60        |
| 48 | The role of the C-terminal D0 domain of flagellin in activation of Toll like receptor 5. PLoS Pathogens, 2017, 13, e1006574.  | 2.1 | 60        |
| 49 | The Role of UNC93B1 Protein in Surface Localization of TLR3 Receptor and in Cell Priming to Nucleic Acid Agonists. Journal of Biological Chemistry, 2013, 288, 442-454.   | 1.6 | 57        |
| 50 | Studies on Lactoferricin-derived Escherichia coli Membrane-active Peptides Reveal Differences in the<br>Mechanism of N-Acylated Versus Nonacylated Peptides. Journal of Biological Chemistry, 2011, 286,<br>21266-21276.                        | 1.6 | 56        |
| 51 | Taxanes inhibit human TLR4 signaling by binding to MDâ€⊋. FEBS Letters, 2008, 582, 3929-3934.   | 1.3 | 55        |
| 52 | Structure–Activity Relationship in Monosaccharide-Based Toll-Like Receptor 4 (TLR4) Antagonists.<br>Journal of Medicinal Chemistry, 2018, 61, 2895-2909.  | 2.9 | 51        |
| 53 | Structural Features Governing the Activity of Lactoferricin-Derived Peptides That Act in Synergy with Antibiotics against <i>Pseudomonas aeruginosa In Vitro</i> and <i>In Vivo</i> . Antimicrobial Agents and Chemotherapy, 2011, 55, 218-228. | 1.4 | 50        |
| 54 | Expression, purification and structural studies of a short antimicrobial peptide. Biochimica Et<br>Biophysica Acta - Biomembranes, 2009, 1788, 314-323.   | 1.4 | 47        |

| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 55 | Activation of Human Toll-like Receptor 4 (TLR4)·Myeloid Differentiation Factor 2 (MD-2) by<br>Hypoacylated Lipopolysaccharide from a Clinical Isolate of Burkholderia cenocepacia. Journal of<br>Biological Chemistry, 2015, 290, 21305-21319. | 1.6  | 47        |
| 56 | Biophysical characterization of the interaction of Limulus polyphemus endotoxin neutralizing protein with lipopolysaccharide. FEBS Journal, 2004, 271, 2037-2046.  | 0.2  | 45        |
| 57 | Influence of N-acylation of a peptide derived from human lactoferricin on membrane selectivity.<br>Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1426-1435.  | 1.4  | 45        |
| 58 | Conformationally Constrained Lipid A Mimetics for Exploration of Structural Basis of TLR4/MD-2 Activation by Lipopolysaccharide. ACS Chemical Biology, 2013, 8, 2423-2432.   | 1.6  | 45        |
| 59 | A Synthetic Mammalian Therapeutic Gene Circuit for Sensing and Suppressing Inflammation. Molecular Therapy, 2017, 25, 102-119.   | 3.7  | 45        |
| 60 | Modulation of CD14 and TLR4â‹MDâ€⊋ Activities by a Synthetic Lipid A Mimetic. ChemBioChem, 2014, 15,<br>250-258.   | 1.3  | 44        |
| 61 | Self-assembled bionanostructures: proteins following the lead of DNA nanostructures. Journal of Nanobiotechnology, 2014, 12, 4.  | 4.2  | 44        |
| 62 | Minimal Sequence Requirements for Oligodeoxyribonucleotides Activating Human TLR9. Journal of<br>Immunology, 2015, 194, 3901-3908.   | 0.4  | 44        |
| 63 | Disruption of disulfides within RBD of SARSâ€CoVâ€2 spike protein prevents fusion and represents a target for viral entry inhibition by registered drugs. FASEB Journal, 2021, 35, e21651.   | 0.2  | 44        |
| 64 | Structural similarity between the hydrophobic fluorescent probe and lipid A as a ligand of MDâ€⊋. FASEB<br>Journal, 2006, 20, 1836-1842.   | 0.2  | 43        |
| 65 | The Acyl Group as the Central Element of the Structural Organization of Antimicrobial Lipopeptide.<br>Journal of the American Chemical Society, 2007, 129, 1022-1023.  | 6.6  | 43        |
| 66 | Species-Specific Minimal Sequence Motif for Oligodeoxyribonucleotides Activating Mouse TLR9.<br>Journal of Immunology, 2015, 195, 4396-4405.   | 0.4  | 43        |
| 67 | Characterization of the Equilibrium Intermediates in Acid Denaturation of Human Stefin B. FEBS<br>Journal, 1997, 245, 364-372.   | 0.2  | 42        |
| 68 | Free Thiol Group of MD-2 as the Target for Inhibition of the Lipopolysaccharide-induced Cell<br>Activation. Journal of Biological Chemistry, 2009, 284, 19493-19500.   | 1.6  | 42        |
| 69 | Production of Recombinant Antimicrobial Peptides in Bacteria. Methods in Molecular Biology, 2010,<br>618, 61-76.   | 0.4  | 42        |
| 70 | Design principles for rapid folding of knotted DNA nanostructures. Nature Communications, 2016, 7, 10803.  | 5.8  | 42        |
| 71 | Peptide and protein nanotechnology into the 2020s: beyond biology. Chemical Society Reviews, 2018, 47, 3391-3394.  | 18.7 | 42        |
| 72 | In silico discovery and biophysical evaluation of novel 5-(2-hydroxybenzylidene) rhodanine inhibitors<br>of DNA gyrase B. Bioorganic and Medicinal Chemistry, 2012, 20, 2572-2580.   | 1.4  | 41        |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 73 | The primary structure of inhibitor of cysteine proteinases from potato. FEBS Letters, 1993, 333, 15-20.  | 1.3 | 40        |
| 74 | Comparative analysis of selected methods for the assessment of antimicrobial and<br>membrane-permeabilizing activity: a case study for lactoferricin derived peptides. BMC Microbiology,<br>2008, 8, 196.                      | 1.3 | 40        |
| 75 | Novel Roles of Lysines 122, 125, and 58 in Functional Differences between Human and Murine MD-2.<br>Journal of Immunology, 2009, 183, 5138-5145.   | 0.4 | 40        |
| 76 | Suppression of TLR Signaling by Targeting TIR domain-Containing Proteins. Current Protein and Peptide Science, 2012, 13, 776-788.  | 0.7 | 40        |
| 77 | Production of stable isotope enriched antimicrobial peptides in Escherichia coli: an application to the production of a 15N-enriched fragment of lactoferrin. Journal of Biomolecular NMR, 2000, 18, 145-151.                  | 1.6 | 39        |
| 78 | Selectivity of Human TLR9 for Double CpG Motifs and Implications for the Recognition of Genomic DNA. Journal of Immunology, 2017, 198, 2093-2104.  | 0.4 | 39        |
| 79 | Postulates for validating TLR4 agonists. European Journal of Immunology, 2015, 45, 356-370.  | 1.6 | 38        |
| 80 | Expression of soluble versatile peroxidase of Bjerkandera adusta in Escherichia coli. Bioresource<br>Technology, 2009, 100, 851-858.   | 4.8 | 36        |
| 81 | The Ectodomain of the Toll-like Receptor 4 Prevents Constitutive Receptor Activation. Journal of Biological Chemistry, 2011, 286, 23334-23344.   | 1.6 | 36        |
| 82 | Extracellular vesicle–mediated transfer of constitutively active MyD88L265P engages MyD88wt and activates signaling. Blood, 2018, 131, 1720-1729.  | 0.6 | 36        |
| 83 | N-acylated Peptides Derived from Human Lactoferricin Perturb Organization of Cardiolipin and<br>Phosphatidylethanolamine in Cell Membranes and Induce Defects in Escherichia coli Cell Division.<br>PLoS ONE, 2014, 9, e90228. | 1.1 | 35        |
| 84 | On the mechanism of human stefin B folding: I. Comparison to homologous stefin A. Influence of pH and trifluoroethanol on the fast and slow folding phases. , 1998, 32, 296-303.   |     | 34        |
| 85 | MD-2 and Der p 2 – a tale of two cousins or distant relatives?. Journal of Endotoxin Research, 2005, 11, 186-192.  | 2.5 | 34        |
| 86 | Surface with antimicrobial activity obtained through silane coating with covalently bound polymyxin<br>B. Journal of Materials Science: Materials in Medicine, 2010, 21, 2775-2782.  | 1.7 | 34        |
| 87 | Short single-stranded DNA degradation products augment the activation of Toll-like receptor 9.<br>Nature Communications, 2017, 8, 15363.   | 5.8 | 34        |
| 88 | The Role of Intermediary Domain of MyD88 in Cell Activation and Therapeutic Inhibition of TLRs.<br>Journal of Immunology, 2011, 187, 2394-2404.  | 0.4 | 33        |
| 89 | Chimeric flagellin as the self-adjuvanting antigen for the activation of immune response against<br>Helicobacter pylori. Vaccine, 2012, 30, 5856-5863.   | 1.7 | 33        |
| 90 | MD-2 Determinants of Nickel and Cobalt-Mediated Activation of Human TLR4. PLoS ONE, 2015, 10, e0120583.  | 1.1 | 32        |

| #   | Article  | IF   | CITATIONS |
|-----|--|------|-----------|
| 91  | Semiautomatic sequence-specific assignment of proteins based on the tertiary structure-The programst2nmr. Journal of Computational Chemistry, 2002, 23, 335-340.   | 1.5  | 31        |
| 92  | Toll/Interleukin-1 Receptor Domain Dimers as the Platform for Activation and Enhanced Inhibition of Toll-like Receptor Signaling. Journal of Biological Chemistry, 2012, 287, 30993-31002.   | 1.6  | 28        |
| 93  | Recombinant flagellins with deletions in domains D1, D2, and D3: Characterization as novel immunoadjuvants. Vaccine, 2019, 37, 652-663.  | 1.7  | 28        |
| 94  | Self-assembly and regulation of protein cages from pre-organised coiled-coil modules. Nature Communications, 2021, 12, 939.  | 5.8  | 28        |
| 95  | Differences in the effects of TFE on the folding pathways of human stefins A and B. , 1999, 36, 205-216.   |      | 27        |
| 96  | New designed protein assemblies. Current Opinion in Chemical Biology, 2013, 17, 940-945.   | 2.8  | 27        |
| 97  | Advances in design of protein folds and assemblies. Current Opinion in Chemical Biology, 2017, 40, 65-71.  | 2.8  | 27        |
| 98  | Regulation of protein secretion through chemical regulation of endoplasmic reticulum retention signal cleavage. Nature Communications, 2022, 13, 1323.   | 5.8  | 26        |
| 99  | Development of αGlcN(1↔1)αMan-Based Lipid A Mimetics as a Novel Class of Potent Toll-like Receptor 4<br>Agonists. Journal of Medicinal Chemistry, 2014, 57, 8056-8071.   | 2.9  | 25        |
| 100 | Folding studies of the cysteine proteinase inhibitor — human stefin A. BBA - Proteins and Proteomics, 1991, 1078, 313-320.   | 2.1  | 24        |
| 101 | Calorimetric measurements of thermal denaturation of stefins A and B. Comparison to predicted thermodynamics of stefin-B unfolding. FEBS Journal, 1992, 210, 217-221.  | 0.2  | 24        |
| 102 | Novel carboxylate-based glycolipids: TLR4 antagonism, MD-2 binding and self-assembly properties.<br>Scientific Reports, 2019, 9, 919.  | 1.6  | 24        |
| 103 | Functional Activity of MD-2 Polymorphic Variant Is Significantly Different in Soluble and TLR4-Bound<br>Forms: Decreased Endotoxin Binding by G56R MD-2 and Its Rescue by TLR4 Ectodomain. Journal of<br>Immunology, 2008, 180, 6107-6115. | 0.4  | 23        |
| 104 | Trehalose- and Glucose-Derived Glycoamphiphiles: Small-Molecule and Nanoparticle Toll-Like Receptor<br>4 (TLR4) Modulators. Journal of Medicinal Chemistry, 2014, 57, 9105-9123.   | 2.9  | 23        |
| 105 | Building an international consortium for tracking coronavirus health status. Nature Medicine, 2020, 26, 1161-1165.   | 15.2 | 23        |
| 106 | MARCKS as a Negative Regulator of Lipopolysaccharide Signaling. Journal of Immunology, 2012, 188, 3893-3902.   | 0.4  | 22        |
| 107 | Determination of the physiological 2:2 TLR5:flagellin activation stoichiometry revealed by the activity of a fusion receptor. Biochemical and Biophysical Research Communications, 2013, 435, 40-45.                                       | 1.0  | 22        |
| 108 | Tetracysteineâ€ŧagged prion protein allows discrimination between the native and converted forms.<br>FEBS Journal, 2010, 277, 2038-2050.   | 2.2  | 21        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 109 | Combination of Antimicrobial and Endotoxin-Neutralizing Activities of Novel Oleoylamines.<br>Antimicrobial Agents and Chemotherapy, 2005, 49, 2307-2313.  | 1.4 | 20        |
| 110 | Prevention of microvesiculation by adhesion of buds to the mother cell membrane — A possible anticoagulant effect of healthy donor plasma. Autoimmunity Reviews, 2008, 7, 240-245.                | 2.5 | 20        |
| 111 | Benchmarking of TALE- and CRISPR/dCas9-Based Transcriptional Regulators in Mammalian Cells for the Construction of Synthetic Genetic Circuits. ACS Synthetic Biology, 2016, 5, 1050-1058.         | 1.9 | 20        |
| 112 | CRISPRa-mediated FOXP3 gene upregulation in mammalian cells. Cell and Bioscience, 2019, 9, 93.  | 2.1 | 20        |
| 113 | Synthetic biology principles for the design of protein with novel structures and functions. FEBS Letters, 2020, 594, 2199-2212.   | 1.3 | 20        |
| 114 | Distinctive Recognition of Flagellin by Human and Mouse Toll-Like Receptor 5. PLoS ONE, 2016, 11, e0158894.   | 1.1 | 20        |
| 115 | On the mechanism of human stefin B folding: II. Folding from GuHCl unfolded, TFE denatured, acid denatured, and acid intermediate states. , 1998, 32, 304-313.                                    |     | 19        |
| 116 | The Ectodomain of TLR3 Receptor Is Required for Its Plasma Membrane Translocation. PLoS ONE, 2014,<br>9, e92391.  | 1.1 | 19        |
| 117 | Coiled-coil heterodimers with increased stability for cellular regulation and sensing SARS-CoV-2 spike protein-mediated cell fusion. Scientific Reports, 2021, 11, 9136.                          | 1.6 | 19        |
| 118 | Topology of Folded Molecular Chains: From Single Biomolecules to Engineered Origami. Trends in<br>Chemistry, 2020, 2, 609-622.  | 4.4 | 19        |
| 119 | Structural Characterisation of Human Stefin A in Solution and Implications for Binding to Cysteine<br>Proteinases. FEBS Journal, 1994, 225, 1181-1194.  | 0.2 | 18        |
| 120 | Pathological mutations H187R and E196K facilitate subdomain separation and prion protein conversion by destabilization of the native structure. FASEB Journal, 2015, 29, 882-893.                 | 0.2 | 18        |
| 121 | Activation of cell membrane-localized Toll-like receptor 3 by siRNA. Immunology Letters, 2017, 189, 55-63.  | 1.1 | 18        |
| 122 | A Nanoscaffolded Spike-RBD Vaccine Provides Protection against SARS-CoV-2 with Minimal Anti-Scaffold Response. Vaccines, 2021, 9, 431.  | 2.1 | 18        |
| 123 | Improved Expression and Evaluation of Polyethyleneimine Precipitation in Isolation of Recombinant<br>Cysteine Proteinase Inhibitor Stefin B. Protein Expression and Purification, 1994, 5, 65-69. | 0.6 | 17        |
| 124 | Locked and proteolysis-based transcription activator-like effector (TALE) regulation. Nucleic Acids<br>Research, 2016, 44, 1471-1481.   | 6.5 | 17        |
| 125 | SwitCCh: Metalâ€Site Design for Controlling the Assembly of a Coiledâ€Coil Homodimer. ChemBioChem, 2018, 19, 2453-2457.   | 1.3 | 17        |
| 126 | Tetraacylated Lipid A and Paclitaxel-Selective Activation of TLR4/MD-2 Conferred through Hydrophobic<br>Interactions. Journal of Immunology, 2014, 192, 1887-1895.                                | 0.4 | 16        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 127 | Structural basis for the difference in thermodynamic properties between the two cysteine proteinase inhibitors human stefins A and B. Protein Engineering, Design and Selection, 1994, 7, 977-984.  | 1.0 | 15        |
| 128 | Different functional role of domain boundaries of Toll-like receptor 4. Biochemical and Biophysical Research Communications, 2009, 381, 65-69.  | 1.0 | 15        |
| 129 | Extension and refinement of the recognition motif for Toll-like receptor 5 activation by flagellin.<br>Journal of Leukocyte Biology, 2018, 104, 767-776.  | 1.5 | 15        |
| 130 | Synergy between 15-lipoxygenase and secreted PLA2promotes inflammation by formation of TLR4 agonists from extracellular vesicles. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25679-25689.                  | 3.3 | 15        |
| 131 | A guide to the design of synthetic gene networks in mammalian cells. FEBS Journal, 2021, 288, 5265-5288.  | 2.2 | 15        |
| 132 | Comparison of backbone dynamics of monomeric and domain-swapped stefin A. Proteins: Structure,<br>Function and Bioinformatics, 2004, 54, 500-512.   | 1.5 | 14        |
| 133 | <scp>TOPOFOLD</scp> , the designed modular biomolecular folds: polypeptideâ€based molecular origami<br>nanostructures following the footsteps of <scp>DNA</scp> . Wiley Interdisciplinary Reviews:<br>Nanomedicine and Nanobiotechnology, 2015, 7, 218-237. | 3.3 | 14        |
| 134 | Synthetic Biology for Multiscale Designed Biomimetic Assemblies: From Designed Self-Assembling<br>Biopolymers to Bacterial Bioprinting. Biochemistry, 2019, 58, 2095-2104.  | 1.2 | 14        |
| 135 | Designed folding pathway of modular coiled-coil-based proteins. Nature Communications, 2021, 12, 940.   | 5.8 | 14        |
| 136 | A nanobody toolbox targeting dimeric coiled-coil modules for functionalization of designed protein<br>origami structures. Proceedings of the National Academy of Sciences of the United States of America,<br>2021, 118, .                                  | 3.3 | 14        |
| 137 | Elongation on the Amino-terminal Part of Stefin B Decreases Inhibition of Cathepsin H. FEBS Journal, 1994, 224, 797-802.  | 0.2 | 13        |
| 138 | Glycolipidâ€based <scp>TLR</scp> 4 Modulators and Fluorescent Probes: Rational Design, Synthesis, and<br>Biological Properties. Chemical Biology and Drug Design, 2016, 88, 217-229.  | 1.5 | 13        |
| 139 | Phosphodiester backbone of the CpG motif within immunostimulatory oligodeoxynucleotides augments activation of Toll-like receptor 9. Scientific Reports, 2017, 7, 14598.  | 1.6 | 13        |
| 140 | Design of split superantigen fusion proteins for cancer immunotherapy. Journal of Biological<br>Chemistry, 2019, 294, 6294-6305.  | 1.6 | 13        |
| 141 | Designed protease-based signaling networks. Current Opinion in Chemical Biology, 2022, 68, 102146.  | 2.8 | 13        |
| 142 | Functional self-assembling polypeptide bionanomaterials. Biochemical Society Transactions, 2012, 40, 629-634.   | 1.6 | 12        |
| 143 | Interactions of Archaeal Chromatin Proteins Alba1 and Alba2 with Nucleic Acids. PLoS ONE, 2013, 8, e58237.  | 1.1 | 12        |
| 144 | Monoclonal antibodies to human stefin B and determination of their epitopes. BBA - Proteins and<br>Proteomics, 1993, 1164, 75-80.   | 2.1 | 11        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Introduction of glutamines into the B2–H2 loop promotes prion protein conversion. Biochemical and<br>Biophysical Research Communications, 2011, 413, 521-526.   | 1.0 | 11        |
| 146 | Disulfide mapping reveals the domain swapping as the crucial process of the structural conversion of prion protein. Prion, 2011, 5, 56-59.  | 0.9 | 11        |
| 147 | Engineering and Rewiring of a Calcium-Dependent Signaling Pathway. ACS Synthetic Biology, 2020, 9, 2055-2065.   | 1.9 | 11        |
| 148 | Triangular <i>in Vivo</i> Self-Assembling Coiled-Coil Protein Origami. ACS Chemical Biology, 2021, 16, 310-315.   | 1.6 | 11        |
| 149 | Metal ion–regulated assembly of designed modular protein cages. Science Advances, 2022, 8, .  | 4.7 | 11        |
| 150 | Compactness of the molten globule in comparison to unfolded states as observed by size-exclusion chromatography. BBA - Proteins and Proteomics, 1994, 1209, 140-143.  | 2.1 | 10        |
| 151 | A 3D 1H, 15N, and 13C NOESY Correlating Experiment. Journal of Magnetic Resonance Series B, 1995, 108, 294-298.   | 1.6 | 10        |
| 152 | Protein inhibitors form complexes with procathepsin L and augment cleavage of the propeptide.<br>Archives of Biochemistry and Biophysics, 2003, 417, 53-58.   | 1.4 | 10        |
| 153 | Molecular Basis of the Functional Differences between Soluble Human Versus Murine MD-2: Role of Val135 in Transfer of Lipopolysaccharide from CD14 to MD-2. Journal of Immunology, 2016, 196, 2309-2318.                              | 0.4 | 10        |
| 154 | Molecular assemblies built with the artificial protein Pizza. Journal of Structural Biology: X, 2020, 4, 100027.  | 0.7 | 10        |
| 155 | Denaturation of Stefin B by GuHCl, pH and Heat; Evidence for Molten Globule Intermediates.<br>Biological Chemistry Hoppe-Seyler, 1992, 373, 453-458.  | 1.4 | 9         |
| 156 | Major differences in stability and dimerization properties of two chimeric mutants of human stefins.<br>Proteins: Structure, Function and Bioinformatics, 2001, 42, 512-522.  | 1.5 | 9         |
| 157 | Effective Antimicrobial and Anti-Endotoxin Activity of Cationic Peptides Based on Lactoferricin: A<br>Biophysical and Microbiological Study. Anti-Infective Agents in Medicinal Chemistry, 2010, 9, 9-22.                             | 0.6 | 9         |
| 158 | Recognition of Nucleic Acids by Toll-Like Receptors and Development of Immunomodulatory Drugs.<br>Current Medicinal Chemistry, 2010, 17, 1899-1914.   | 1.2 | 9         |
| 159 | Polarized displacement by transcription activator-like effectors for regulatory circuits. Nature<br>Chemical Biology, 2019, 15, 80-87.  | 3.9 | 9         |
| 160 | Design of novel protein building modules and modular architectures. Current Opinion in Structural<br>Biology, 2020, 63, 90-96.  | 2.6 | 9         |
| 161 | Metabolic enzyme clustering by coiled coils improves the biosynthesis of resveratrol and mevalonate.<br>AMB Express, 2020, 10, 97.  | 1.4 | 9         |
| 162 | The Relevance of Physico-Chemical Properties and Protein Corona for Evaluation of Nanoparticles<br>Immunotoxicity—In Vitro Correlation Analysis on THP-1 Macrophages. International Journal of<br>Molecular Sciences, 2022, 23, 6197. | 1.8 | 9         |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | Expression and Refolding of Functional Fragments of the Human Lipopolysaccharide Receptor CD14 in Escherichia coli and Pichia pastoris. Protein Expression and Purification, 1999, 17, 96-104.   | 0.6 | 8         |
| 164 | Noninvasive High-Throughput Single-Cell Analysis of HIV Protease Activity Using Ratiometric Flow Cytometry. Sensors, 2013, 13, 16330-16346.  | 2.1 | 8         |
| 165 | Species-Specific Activation of TLR4 by Hypoacylated Endotoxins Governed by Residues 82 and 122 of MD-2. PLoS ONE, 2014, 9, e107520.  | 1.1 | 8         |
| 166 | Coiled-coil forming peptides for the induction of silver nanoparticles. Biochemical and Biophysical Research Communications, 2016, 472, 566-571.   | 1.0 | 8         |
| 167 | Tailored Modulation of Cellular Pro-inflammatory Responses With Disaccharide Lipid A Mimetics.<br>Frontiers in Immunology, 2021, 12, 631797.   | 2.2 | 8         |
| 168 | Novel Regeneration Approach for Creating Reusable FO-SPR Probes with NTA Surface Chemistry.<br>Nanomaterials, 2021, 11, 186.   | 1.9 | 8         |
| 169 | Coiled-coil heterodimer-based recruitment of an exonuclease to CRISPR/Cas for enhanced gene editing. Nature Communications, 2022, 13, .  | 5.8 | 8         |
| 170 | Effect of Hydrophobic Mutations in the H2-H3 Subdomain of Prion Protein on Stability and Conversion<br>In Vitro and In Vivo. PLoS ONE, 2011, 6, e24238.  | 1.1 | 7         |
| 171 | Interaction of the HIV-1 gp120 Viral Protein V3 Loop with Bacterial Lipopolysaccharide. Journal of<br>Biological Chemistry, 2011, 286, 26228-26237.  | 1.6 | 7         |
| 172 | On three genetic repressilator topologies. Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 3-30.   | 0.8 | 7         |
| 173 | Vanadate from Air Pollutant Inhibits Hrs-Dependent Endosome Fusion and Augments Responsiveness to<br>Toll-Like Receptors. PLoS ONE, 2014, 9, e99287.   | 1.1 | 6         |
| 174 | Delivery system for the enhanced efficiency of immunostimulatory nucleic acids. Innate Immunity, 2013, 19, 53-65.  | 1.1 | 5         |
| 175 | Designed Protein Origami. Advances in Experimental Medicine and Biology, 2016, 940, 7-27.  | 0.8 | 5         |
| 176 | Transcription activator-like effector-mediated regulation of gene expression based on the inducible<br>packaging and delivery via designed extracellular vesicles. Biochemical and Biophysical Research<br>Communications, 2017, 484, 15-20. | 1.0 | 5         |
| 177 | The NLRP3 inhibitor MCC950 inhibits IL-1β production in PBMC from 19 patients with<br>Cryopyrin-Associated Periodic Syndrome and in 2 patients with Schnitzler's Syndrome. Wellcome Open<br>Research, 0, 5, 247.                             | 0.9 | 5         |
| 178 | Engineered human cells: say no to sepsis. IET Synthetic Biology, 2007, 1, 13-16.   | 0.2 | 4         |
| 179 | Towards designing new nano-scale protein architectures. Essays in Biochemistry, 2016, 60, 315-324.   | 2.1 | 4         |
| 180 | Regen: program for designing gene assembly. Nucleic Acids Research, 1988, 16, 1759-1766.   | 6.5 | 3         |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 181 | Mutational Analysis of Two Stefin A Epitopes. Biological Chemistry, 1999, 380, 723-6.  | 1.2 | 3         |
| 182 | Function-Based Mutation-Resistant Synthetic Signaling Device Activated by HIV-1 Proteolysis. ACS Synthetic Biology, 2015, 4, 667-672.  | 1.9 | 3         |
| 183 | Designed Transcriptional Regulation in Mammalian Cells Based on TALE- and CRISPR/dCas9. Methods in<br>Molecular Biology, 2018, 1772, 191-203.  | 0.4 | 3         |
| 184 | Design and applications of synthetic information processing circuits in mammalian cells. Synthetic Biology, 0, , 1-34.   | 0.2 | 3         |
| 185 | Cleavage-Mediated Regulation of Myd88 Signaling by Inflammasome-Activated Caspase-1. Frontiers in Immunology, 2021, 12, 790258.  | 2.2 | 3         |
| 186 | Binding of the transcription activator-like effector augments transcriptional regulation by another transcription factor. Nucleic Acids Research, 2022, 50, 6562-6574.                   | 6.5 | 3         |
| 187 | The role of N-terminal segment and membrane association in MyD88-mediated signaling. Biochemical and Biophysical Research Communications, 2018, 495, 878-883.                            | 1.0 | 2         |
| 188 | Increased gene translation stringency in mammalian cells by nonsense suppression at multiple permissive sites with a single noncanonical amino acid. FEBS Letters, 2020, 594, 2452-2461. | 1.3 | 2         |
| 189 | On the Origin and Features of an Evolved Boolean Model for Subcellular Signal Transduction Systems. Lecture Notes in Computer Science, 2011, , 383-392.                                  | 1.0 | 2         |
| 190 | Proteolytically Activated CRAC Effectors through Designed Intramolecular Inhibition. ACS Synthetic Biology, 2022, 11, 2756-2765.   | 1.9 | 2         |
| 191 | Bacterial expression and refolding of different fragments of human CD14. Pflugers Archiv European<br>Journal of Physiology, 2000, 439, r109-r110.  | 1.3 | 1         |
| 192 | Preparation of chimeric genes without subcloning. BioTechniques, 2004, 37, 726-730.  | 0.8 | 1         |
| 193 | TERTIARY STRUCTURE OF LACTOFERRIN PEPTIDE IN COMPLEX WITH LPS FOR DESIGN OF NOVEL ENDOTOXIN-NEUTRALIZING PEPTIDES. Shock, 2004, 21, 62.  | 1.0 | 1         |
| 194 | Conformation and Fluctuations of free Stefin B: A Molecular Dynamics Study. Biological Chemistry<br>Hoppe-Seyler, 1992, 373, 447-452.  | 1.4 | 0         |
| 195 | Response to Apostol and Surewicz: Structural Underpinnings of Prion Protein Conversion. Journal of<br>Biological Chemistry, 2011, 286, le8.  | 1.6 | Ο         |