

Arne Skerra

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237
papers

10,893
citations

54
h-index

97
g-index

247
ext. papers

12,066
ext. citations

6.2
avg. IF

6.65
L-index

#	Paper	IF	Citations
237	The Strep-tag system for one-step purification and high-affinity detection or capturing of proteins. <i>Nature Protocols</i> , 2007 , 2, 1528-35	18.8	464
236	Crucial role for human Toll-like receptor 4 in the development of contact allergy to nickel. <i>Nature Immunology</i> , 2010 , 11, 814-9	19.1	442
235	Use of the tetracycline promoter for the tightly regulated production of a murine antibody fragment in Escherichia coli. <i>Gene</i> , 1994 , 151, 131-5	3.8	318
234	Molecular interaction between the Strep-tag affinity peptide and its cognate target, streptavidin. <i>Journal of Molecular Biology</i> , 1996 , 255, 753-66	6.5	286
233	Engineered protein scaffolds as next-generation antibody therapeutics. <i>Current Opinion in Chemical Biology</i> , 2009 , 13, 245-55	9.7	276
232	Alternative non-antibody scaffolds for molecular recognition. <i>Current Opinion in Biotechnology</i> , 2007 , 18, 295-304	11.4	244
231	The random peptide library-assisted engineering of a C-terminal affinity peptide, useful for the detection and purification of a functional Ig Fv fragment. <i>Protein Engineering, Design and Selection</i> , 1993 , 6, 109-22	1.9	235
230	Interferon-gamma regulates intestinal epithelial homeostasis through converging beta-catenin signaling pathways. <i>Immunity</i> , 2010 , 32, 392-402	32.3	214
229	Regeneration of lesioned corticospinal tract fibers in the adult rat induced by a recombinant, humanized IN-1 antibody fragment. <i>Journal of Neuroscience</i> , 2000 , 20, 8061-8	6.6	213
228	ProteomeBinders: planning a European resource of affinity reagents for analysis of the human proteome. <i>Nature Methods</i> , 2007 , 4, 13-7	21.6	207
227	PASylation: a biological alternative to PEGylation for extending the plasma half-life of pharmaceutically active proteins. <i>Protein Engineering, Design and Selection</i> , 2013 , 26, 489-501	1.9	206
226	Consistent success in life-supporting porcine cardiac xenotransplantation. <i>Nature</i> , 2018 , 564, 430-433	50.4	197
225	The crystal structure of the human (S100A8/S100A9) ₂ heterotetramer, calprotectin, illustrates how conformational changes of interacting alpha-helices can determine specific association of two EF-hand proteins. <i>Journal of Molecular Biology</i> , 2007 , 370, 887-98	6.5	189
224	Use of the Strep-Tag and streptavidin for detection and purification of recombinant proteins. <i>Methods in Enzymology</i> , 2000 , 326, 271-304	1.7	178
223	The functional expression of antibody Fv fragments in Escherichia coli: improved vectors and a generally applicable purification technique. <i>Nature Biotechnology</i> , 1991 , 9, 273-8	44.5	177
222	Engineered protein scaffolds for molecular recognition. <i>Journal of Molecular Recognition</i> , 2000 , 13, 167-87	17.0	170
221	Binding proteins from alternative scaffolds. <i>Journal of Immunological Methods</i> , 2004 , 290, 3-28	2.5	167

220	Lipocalins as a scaffold. <i>BBA - Proteins and Proteomics</i> , 2000 , 1482, 337-50		167
219	One-step affinity purification of bacterially produced proteins by means of the "Strep tag" and immobilized recombinant core streptavidin. <i>Journal of Chromatography A</i> , 1994 , 676, 337-45	4.5	162
218	Application of neutralizing antibodies against NI-35/250 myelin-associated neurite growth inhibitory proteins to the adult rat cerebellum induces sprouting of uninjured purkinje cell axons. <i>Journal of Neuroscience</i> , 2000 , 20, 2275-86	6.6	158
217	Targeting membrane heat-shock protein 70 (Hsp70) on tumors by cmHsp70.1 antibody. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 733-8	11.5	154
216	Lipocalins in drug discovery: from natural ligand-binding proteins to "anticalins". <i>Drug Discovery Today</i> , 2005 , 10, 23-33	8.8	138
215	Alternative binding proteins: anticalins - harnessing the structural plasticity of the lipocalin ligand pocket to engineer novel binding activities. <i>FEBS Journal</i> , 2008 , 275, 2677-83	5.7	123
214	Bacterial expression of immunoglobulin fragments. <i>Current Opinion in Immunology</i> , 1993 , 5, 256-62	7.8	120
213	Structure of the periplasmic chaperone Skp suggests functional similarity with cytosolic chaperones despite differing architecture. <i>Nature Structural and Molecular Biology</i> , 2004 , 11, 1015-20	17.6	119
212	Comparative ligand-binding analysis of ten human lipocalins. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2006 , 1764, 161-73	4	118
211	The 1.8-A crystal structure of alpha1-acid glycoprotein (Orosomuroid) solved by UV RIP reveals the broad drug-binding activity of this human plasma lipocalin. <i>Journal of Molecular Biology</i> , 2008 , 384, 393-405	6.5	112
210	Structural insights into the antigenicity of myelin oligodendrocyte glycoprotein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 9446-51	11.5	105
209	Phosphorothioate primers improve the amplification of DNA sequences by DNA polymerases with proofreading activity. <i>Nucleic Acids Research</i> , 1992 , 20, 3551-4	20.1	104
208	Expression of functional antibody Fv and Fab fragments in Escherichia coli. <i>Methods in Enzymology</i> , 1989 , 178, 497-515	1.7	104
207	A novel type of receptor protein, based on the lipocalin scaffold, with specificity for digoxigenin. <i>Journal of Molecular Biology</i> , 2000 , 297, 1105-20	6.5	97
206	Immobilization of histidine-tagged proteins on gold surfaces using chelator thioalkanes. <i>Biosensors and Bioelectronics</i> , 1999 , 14, 155-61	11.8	97
205	Applications of a peptide ligand for streptavidin: the Strep-tag. <i>New Biotechnology</i> , 1999 , 16, 79-86		96
204	A general vector, pASK84, for cloning, bacterial production, and single-step purification of antibody Fab fragments. <i>Gene</i> , 1994 , 141, 79-84	3.8	96
203	The 1.8-A crystal structure of human tear lipocalin reveals an extended branched cavity with capacity for multiple ligands. <i>Journal of Biological Chemistry</i> , 2005 , 280, 484-93	5.4	95

202	The crystal structure of the bacteriophage PSA endolysin reveals a unique fold responsible for specific recognition of <i>Listeria</i> cell walls. <i>Journal of Molecular Biology</i> , 2006 , 364, 678-89	6.5	88
201	Fusion of a recombinant antibody fragment with a homo-amino-acid polymer: effects on biophysical properties and prolonged plasma half-life. <i>Protein Engineering, Design and Selection</i> , 2007 , 20, 273-84	1.9	86
200	A system for concomitant overexpression of four periplasmic folding catalysts to improve secretory protein production in <i>Escherichia coli</i> . <i>Protein Engineering, Design and Selection</i> , 2006 , 19, 385-90	1.9	85
199	Anticalins small engineered binding proteins based on the lipocalin scaffold. <i>Methods in Enzymology</i> , 2012 , 503, 157-88	1.7	82
198	Improved affinity of engineered streptavidin for the Strep-tag II peptide is due to a fixed open conformation of the lid-like loop at the binding site. <i>Protein Science</i> , 2002 , 11, 883-93	6.3	80
197	Incomplete inhibition by eculizumab: mechanistic evidence for residual C5 activity during strong complement activation. <i>Blood</i> , 2017 , 129, 970-980	2.2	79
196	Retrograde regulation of growth-associated gene expression in adult rat Purkinje cells by myelin-associated neurite growth inhibitory proteins. <i>Journal of Neuroscience</i> , 1998 , 18, 7912-29	6.6	78
195	Structural insight into the dual ligand specificity and mode of high density lipoprotein association of apolipoprotein D. <i>Journal of Biological Chemistry</i> , 2007 , 282, 31068-75	5.4	77
194	Secretion and in vivo folding of the Fab fragment of the antibody McPC603 in <i>Escherichia coli</i> : influence of disulphides and cis-prolines. <i>Protein Engineering, Design and Selection</i> , 1991 , 4, 971-9	1.9	77
193	Bacterially produced apolipoprotein D binds progesterone and arachidonic acid, but not bilirubin or E-3M2H. <i>Journal of Molecular Recognition</i> , 2001 , 14, 79-86	2.6	76
192	Amination of Ketones by Employing Two New (S)-Selective α -Transaminases and the His-Tagged α -TA from <i>Vibrio fluvialis</i> . <i>European Journal of Organic Chemistry</i> , 2012 , 2012, 1003-1007	3.2	69
191	Comparative analysis reveals selective recognition of glycans by the dendritic cell receptors DC-SIGN and Langerin. <i>Protein Engineering, Design and Selection</i> , 2011 , 24, 659-69	1.9	66
190	The menagerie of human lipocalins: a natural protein scaffold for molecular recognition of physiological compounds. <i>Accounts of Chemical Research</i> , 2015 , 48, 976-85	24.3	65
189	Tuning ligand affinity, specificity, and folding stability of an engineered lipocalin variant -- a so-called 'anticalin' -- using a molecular random approach. <i>Biophysical Chemistry</i> , 2002 , 96, 213-28	3.5	61
188	Engineered Fv fragments as a tool for the one-step purification of integral multisubunit membrane protein complexes. <i>Nature Biotechnology</i> , 1995 , 13, 155-60	44.5	61
187	Glutathione S-transferase can be used as a C-terminal, enzymatically active dimerization module for a recombinant protease inhibitor, and functionally secreted into the periplasm of <i>Escherichia coli</i> . <i>Protein Science</i> , 1997 , 6, 2180-7	6.3	59
186	Neutrophil gelatinase-associated lipocalin expresses antimicrobial activity by interfering with L-norepinephrine-mediated bacterial iron acquisition. <i>Antimicrobial Agents and Chemotherapy</i> , 2010 , 54, 1580-9	5.9	57
185	Structural mechanism of specific ligand recognition by a lipocalin tailored for the complexation of digoxigenin. <i>Journal of Molecular Biology</i> , 2003 , 330, 385-96	6.5	56

184	High contrast tumor imaging with radio-labeled antibody Fab fragments tailored for optimized pharmacokinetics via PASylation. <i>MABs</i> , 2015 , 7, 96-109	6.6	55
183	PASylation of Murine Leptin Leads to Extended Plasma Half-Life and Enhanced in Vivo Efficacy. <i>Molecular Pharmaceutics</i> , 2015 , 12, 1431-42	5.6	53
182	Combinatorial design of an Anticalin directed against the extra-domain b for the specific targeting of oncofetal fibronectin. <i>Journal of Molecular Biology</i> , 2013 , 425, 780-802	6.5	53
181	High-affinity recognition of lanthanide(III) chelate complexes by a reprogrammed human lipocalin 2. <i>Journal of the American Chemical Society</i> , 2009 , 131, 3565-76	16.4	53
180	Anticalin Proteins as Therapeutic Agents in Human Diseases. <i>BioDrugs</i> , 2018 , 32, 233-243	7.9	52
179	Sortase-catalyzed in vitro functionalization of a HER2-specific recombinant Fab for tumor targeting of the plant cytotoxin gelonin. <i>MABs</i> , 2014 , 6, 354-66	6.6	52
178	Novel serial positive enrichment technology enables clinical multiparameter cell sorting. <i>PLoS ONE</i> , 2012 , 7, e35798	3.7	50
177	Imitating the humoral immune response. <i>Current Opinion in Chemical Biology</i> , 2003 , 7, 683-93	9.7	49
176	The bilin-binding protein of <i>Pieris brassicae</i> . cDNA sequence and regulation of expression reveal distinct features of this insect pigment protein. <i>FEBS Journal</i> , 1994 , 219, 855-63		49
175	Filter screening of antibody Fab fragments secreted from individual bacterial colonies: specific detection of antigen binding with a two-membrane system. <i>Analytical Biochemistry</i> , 1991 , 196, 151-5	3.1	49
174	The carbohydrate recognition domain of Langerin reveals high structural similarity with the one of DC-SIGN but an additional, calcium-independent sugar-binding site. <i>Molecular Immunology</i> , 2008 , 45, 1981-94	4.3	48
173	Identification of potential substrate proteins for the periplasmic <i>Escherichia coli</i> chaperone Skp. <i>Proteomics</i> , 2008 , 8, 4987-94	4.8	48
172	Grafting of a high-affinity Zn(II)-binding site on the beta-barrel of retinol-binding protein results in enhanced folding stability and enables simplified purification. <i>Biochemistry</i> , 1994 , 33, 14126-35	3.2	48
171	Enhanced in vivo efficacy of a type I interferon superagonist with extended plasma half-life in a mouse model of multiple sclerosis. <i>Journal of Biological Chemistry</i> , 2014 , 289, 29014-29	5.4	47
170	Fermenter production of an artificial fab fragment, rationally designed for the antigen cystatin, and its optimized crystallization through constant domain shuffling. <i>Proteins: Structure, Function and Bioinformatics</i> , 1995 , 23, 561-5	4.2	47
169	High-throughput sorting of an Anticalin library via EspP-mediated functional display on the <i>Escherichia coli</i> cell surface. <i>Journal of Molecular Biology</i> , 2010 , 400, 783-802	6.5	46
168	New insights into the signaling mechanism of the pH-responsive, membrane-integrated transcriptional activator CadC of <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2011 , 286, 10681-9	5.4	43
167	The de novo design of an antibody combining site. Crystallographic analysis of the VL domain confirms the structural model. <i>Journal of Molecular Biology</i> , 1994 , 238, 226-44	6.5	43

166	PASylation [®] : A versatile technology to extend drug delivery. <i>Current Opinion in Colloid and Interface Science</i> , 2017 , 31, 10-17	7.6	41
165	Crystallographic analysis of an "anticalin" with tailored specificity for fluorescein reveals high structural plasticity of the lipocalin loop region. <i>Proteins: Structure, Function and Bioinformatics</i> , 2003 , 53, 121-9	4.2	41
164	PASylated Coversin, a C5-Specific Complement Inhibitor with Extended Pharmacokinetics, Shows Enhanced Anti-Hemolytic Activity in Vitro. <i>Bioconjugate Chemistry</i> , 2016 , 27, 2359-2371	6.3	39
163	Sequence analysis and bacterial production of the anti-c-myc antibody 9E10: the V(H) domain has an extended CDR-H3 and exhibits unusual solubility. <i>FEBS Letters</i> , 1997 , 414, 33-8	3.8	39
162	Structural analysis of the L-alanoyl-D-glutamate endopeptidase domain of Listeria bacteriophage endolysin Ply500 reveals a new member of the LAS peptidase family. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2008 , 64, 644-50		39
161	A generic strategy for subcloning antibody variable regions from the scFv phage display vector pCANTAB 5 E into pASK85 permits the economical production of F(ab) fragments and leads to improved recombinant immunoglobulin stability. <i>Biosensors and Bioelectronics</i> , 2002 , 17, 305-13	11.8	39
160	Engineered Protein Scaffolds as Next-Generation Therapeutics. <i>Annual Review of Pharmacology and Toxicology</i> , 2020 , 60, 391-415	17.9	39
159	A platform for discovery of functional cell-penetrating peptides for efficient multi-cargo intracellular delivery. <i>Scientific Reports</i> , 2018 , 8, 12538	4.9	38
158	Colony assays for antibody fragments expressed in bacteria. <i>Journal of Immunological Methods</i> , 1991 , 139, 197-205	2.5	37
157	Temperature and pressure dependence of protein stability: the engineered fluorescein-binding lipocalin FluA shows an elliptic phase diagram. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 5756-61	11.5	36
156	Construction of an artificial receptor protein ("anticalin") based on the human apolipoprotein D. <i>ChemBioChem</i> , 2004 , 5, 191-9	3.8	36
155	proBA complementation of an auxotrophic E. coli strain improves plasmid stability and expression yield during fermenter production of a recombinant antibody fragment. <i>Gene</i> , 2001 , 274, 111-8	3.8	36
154	Prospects of PASylation [®] for the design of protein and peptide therapeutics with extended half-life and enhanced action. <i>Bioorganic and Medicinal Chemistry</i> , 2018 , 26, 2882-2887	3.4	35
153	⁹⁰ Zr-Labeled Versus ¹²⁵ I-Labeled ⁴ HER2 Fab with Optimized Plasma Half-Life for High-Contrast Tumor Imaging In Vivo. <i>Journal of Nuclear Medicine</i> , 2015 , 56, 1112-8	8.9	35
152	Crystal structure of the α -aminotransferase from <i>Paracoccus denitrificans</i> and its phylogenetic relationship with other class III aminotransferases that have biotechnological potential. <i>Proteins: Structure, Function and Bioinformatics</i> , 2013 , 81, 774-87	4.2	35
151	Functional expression of the uncomplexed serum retinol-binding protein in <i>Escherichia coli</i> . Ligand binding and reversible unfolding characteristics. <i>Journal of Molecular Biology</i> , 1993 , 230, 725-32	6.5	35
150	Coupled Enzymatic Alcohol-to-Amine Conversion of Isosorbide using Engineered Transaminases and Dehydrogenases. <i>ChemCatChem</i> , 2013 , 5, 3374-3383	5.2	31
149	A disulfide-free single-domain V(L) intrabody with blocking activity towards huntingtin reveals a novel mode of epitope recognition. <i>Journal of Molecular Biology</i> , 2011 , 414, 337-55	6.5	31

148	Dkk-1 inhibits intestinal epithelial cell migration by attenuating directional polarization of leading edge cells. <i>Molecular Biology of the Cell</i> , 2009 , 20, 4816-25	3.5	31
147	A new crystal form of human tear lipocalin reveals high flexibility in the loop region and induced fit in the ligand cavity. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2009 , 65, 1118-25		31
146	Use of an albumin-binding domain for the selective immobilisation of recombinant capture antibody fragments on ELISA plates. <i>Journal of Immunological Methods</i> , 1998 , 218, 73-83	2.5	31
145	Detection of irradiation-induced, membrane heat shock protein 70 (Hsp70) in mouse tumors using Hsp70 Fab fragment. <i>Radiotherapy and Oncology</i> , 2011 , 99, 313-6	5.3	30
144	The periplasmic E. coli chaperone Skp is a trimer in solution: biophysical and preliminary crystallographic characterization. <i>Biological Chemistry</i> , 2004 , 385, 137-43	4.5	30
143	The Escherichia coli-derived Fab fragment of the IgM/kappa antibody IN-1 recognizes and neutralizes myelin-associated inhibitors of neurite growth. <i>FEBS Journal</i> , 1996 , 241, 468-75		30
142	Solubility engineering and crystallization of human apolipoprotein D. <i>Protein Science</i> , 2006 , 15, 190-9	6.3	29
141	Rapid expression cloning of human immunoglobulin Fab fragments for the analysis of antigen specificity of B cell lymphomas and anti-idiotypic lymphoma vaccination. <i>Journal of Immunological Methods</i> , 1999 , 229, 141-53	2.5	29
140	Periplasmic chaperones used to enhance functional secretion of proteins in E. coli. <i>Methods in Molecular Biology</i> , 2011 , 705, 211-24	1.4	29
139	Reprogramming the body weight set point by a reciprocal interaction of hypothalamic leptin sensitivity and Pomc gene expression reverts extreme obesity. <i>Molecular Metabolism</i> , 2016 , 5, 869-881	8.8	29
138	The polypeptide biophysics of proline/alanine-rich sequences (PAS): Recombinant biopolymers with PEG-like properties. <i>Biopolymers</i> , 2018 , 109, e23069	2.2	28
137	Deactivation of the E. coli pH stress sensor CadC by cadaverine. <i>Journal of Molecular Biology</i> , 2012 , 424, 15-27	6.5	28
136	Engineering of an orthogonal aminoacyl-tRNA synthetase for efficient incorporation of the non-natural amino acid O-methyl-L-tyrosine using fluorescence-based bacterial cell sorting. <i>Journal of Molecular Biology</i> , 2010 , 404, 70-87	6.5	28
135	'Anticalins': a new class of engineered ligand-binding proteins with antibody-like properties. <i>Reviews in Molecular Biotechnology</i> , 2001 , 74, 257-75		28
134	Anticalins as an alternative to antibody technology. <i>Expert Opinion on Biological Therapy</i> , 2005 , 5, 1453-63	3.4	27
133	Single-step purification of a bacterially expressed antibody Fv fragment by immobilized metal affinity chromatography in the presence of betaine. <i>Journal of Chromatography A</i> , 1993 , 657, 55-61	4.5	27
132	Biosynthesis of a fluorescent protein with extreme pseudo-Stokes shift by introducing a genetically encoded non-natural amino acid outside the fluorophore. <i>Journal of the American Chemical Society</i> , 2011 , 133, 3708-11	16.4	26
131	Endoplasmic reticulum stress response promotes cytotoxic phenotype of CD8 ⁺ intraepithelial lymphocytes in a mouse model for Crohn's disease-like ileitis. <i>Journal of Immunology</i> , 2012 , 189, 1510-20	5.3	26

130	Extra-domain B in oncofetal fibronectin structurally promotes fibrillar head-to-tail dimerization of extracellular matrix protein. <i>Journal of Biological Chemistry</i> , 2012 , 287, 17578-17588	5.4	26
129	Functional characterization of a VEGF-A-targeting Anticalin, prototype of a novel therapeutic human protein class. <i>Angiogenesis</i> , 2016 , 19, 79-94	10.6	25
128	Biochemical analysis of recombinant AlkJ from <i>Pseudomonas putida</i> reveals a membrane-associated, flavin adenine dinucleotide-dependent dehydrogenase suitable for the biosynthetic production of aliphatic aldehydes. <i>Applied and Environmental Microbiology</i> , 2014 , 80, 2468-77	4.8	25
127	The crystal structure of human α 1-microglobulin reveals a potential haem-binding site. <i>Biochemical Journal</i> , 2012 , 445, 175-82	3.8	25
126	Use of thiophilic adsorption chromatography for the one-step purification of a bacterially produced antibody F(ab) fragment without the need for an affinity tag. <i>Protein Expression and Purification</i> , 1999 , 17, 421-7	2	25
125	A Fab fragment directed against the neural cell adhesion molecule L1 enhances functional recovery after injury of the adult mouse spinal cord. <i>Biochemical Journal</i> , 2014 , 460, 437-46	3.8	23
124	Functional humanization of an anti-CD30 Fab fragment for the immunotherapy of Hodgkin's lymphoma using an in vitro evolution approach. <i>Protein Engineering, Design and Selection</i> , 2004 , 17, 847-60	1.9	23
123	A Zn(II)-binding site engineered into retinol-binding protein exhibits metal-ion specificity and allows highly efficient affinity purification with a newly designed metal ligand. <i>Chemistry and Biology</i> , 1996 , 3, 645-53		23
122	High-affinity Anticalins with aggregation-blocking activity directed against the Alzheimer β -amyloid peptide. <i>Biochemical Journal</i> , 2016 , 473, 1563-78	3.8	22
121	Structural Basis for the Interconversion of Maltodextrins by MalQ, the Amylomaltase of <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2015 , 290, 21352-64	5.4	21
120	Selection and characterization of Anticalins targeting human prostate-specific membrane antigen (PSMA). <i>Protein Engineering, Design and Selection</i> , 2016 , 29, 105-15	1.9	21
119	A photoswitchable neurotransmitter analogue bound to its receptor. <i>Biochemistry</i> , 2013 , 52, 8972-4	3.2	21
118	Anticalins directed against vascular endothelial growth factor receptor 3 (VEGFR-3) with picomolar affinities show potential for medical therapy and in vivo imaging. <i>Biological Chemistry</i> , 2017 , 398, 39-55	4.5	20
117	Long-Acting PASylated Leptin Ameliorates Obesity by Promoting Satiety and Preventing Hypometabolism in Leptin-Deficient Lep(ob/ob) Mice. <i>Endocrinology</i> , 2016 , 157, 233-44	4.8	20
116	Crystallographic analysis and structure-guided engineering of NADPH-dependent <i>Ralstonia</i> sp. alcohol dehydrogenase toward NADH cosubstrate specificity. <i>Biotechnology and Bioengineering</i> , 2013 , 110, 2803-14	4.9	20
115	Derivatization of antibody Fab fragments: a designer enzyme for native protein modification. <i>ChemBioChem</i> , 2014 , 15, 1096-100	3.8	19
114	Structural basis for the enzymatic formation of the key strawberry flavor compound 4-hydroxy-2,5-dimethyl-3(2H)-furanone. <i>Journal of Biological Chemistry</i> , 2013 , 288, 16815-16826	5.4	19
113	Bacterial production and functional characterization of the Fab fragment of the murine IgG1/ λ monoclonal antibody cmHsp70.1, a reagent for tumour diagnostics. <i>Protein Engineering, Design and Selection</i> , 2010 , 23, 161-8	1.9	19

112	Rational engineering of a fluorescein-binding anticalin for improved ligand affinity. <i>Biological Chemistry</i> , 2005 , 386, 1097-104	4.5	19
111	Type I IFN signaling blockade by a PASylated antagonist during chronic SIV infection suppresses specific inflammatory pathways but does not alter T cell activation or virus replication. <i>PLoS Pathogens</i> , 2018 , 14, e1007246	7.6	19
110	Intravenous application of an anticalin dramatically lowers plasma digoxin levels and reduces its toxic effects in rats. <i>Toxicology and Applied Pharmacology</i> , 2012 , 263, 352-9	4.6	18
109	Crystal structure of the sensory domain of Escherichia coli CadC, a member of the ToxR-like protein family. <i>Protein Science</i> , 2011 , 20, 656-69	6.3	18
108	Structure of lumazine protein, an optical transponder of luminescent bacteria. <i>Journal of Molecular Biology</i> , 2008 , 382, 44-55	6.5	18
107	The IMiD target CRBN determines HSP90 activity toward transmembrane proteins essential in multiple myeloma. <i>Molecular Cell</i> , 2021 , 81, 1170-1186.e10	17.6	18
106	The structure of the anti-c-myc antibody 9E10 Fab fragment/epitope peptide complex reveals a novel binding mode dominated by the heavy chain hypervariable loops. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008 , 73, 552-65	4.2	17
105	Generation of anticalins with specificity for a nonsymmetric phthalic acid ester. <i>Analytical Biochemistry</i> , 2002 , 308, 269-77	3.1	17
104	Engineering of binding functions into proteins. <i>Current Opinion in Biotechnology</i> , 2019 , 60, 230-241	11.4	16
103	Crystal structure of the human odorant binding protein, OBPIIa. <i>Proteins: Structure, Function and Bioinformatics</i> , 2015 , 83, 1180-4	4.2	16
102	Fusion of an alcohol dehydrogenase with an aminotransferase using a PAS linker to improve coupled enzymatic alcohol-to-amine conversion. <i>Protein Engineering, Design and Selection</i> , 2016 , 29, 557-582	1.9	16
101	The dimeric crystal structure of the human fertility lipocalin glycodelin reveals a protein scaffold for the presentation of complex glycans. <i>Biochemical Journal</i> , 2015 , 466, 95-104	3.8	15
100	Reprogramming Human Siderocalin To Neutralize Petrobactin, the Essential Iron Scavenger of Anthrax Bacillus. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 14619-14623	16.4	15
99	Structure of the first representative of Pfam family PF09410 (DUF2006) reveals a structural signature of the calycin superfamily that suggests a role in lipid metabolism. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2010 , 66, 1153-9		15
98	The rational construction of an antibody against cystatin: lessons from the crystal structure of an artificial Fab fragment. <i>Journal of Molecular Biology</i> , 1997 , 268, 934-51	6.5	15
97	Anticalins: the lipocalin family as a novel protein scaffold for the development of next-generation immunotherapies. <i>Expert Review of Clinical Immunology</i> , 2007 , 3, 491-501	5.1	15
96	Alternative binding proteins get mature: rivalling antibodies. <i>FEBS Journal</i> , 2008 , 275, 2667	5.7	15
95	Complement inhibition at the level of C3 or C5: mechanistic reasons for ongoing terminal pathway activity. <i>Blood</i> , 2021 , 137, 443-455	2.2	14

94	Selection of an Anticalin α against the membrane form of Hsp70 via bacterial surface display and its theranostic application in tumour models. <i>Biological Chemistry</i> , 2018 , 399, 235-252	4.5	14
93	Novel Monoclonal Antibodies Recognizing Human Prostate-Specific Membrane Antigen (PSMA) as Research and Theranostic Tools. <i>Prostate</i> , 2017 , 77, 749-764	4.2	13
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