

# Vesa HytÄñnen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6872624/publications.pdf>

Version: 2024-02-01

200  
papers

6,143  
citations

81900

39  
h-index

102487

66  
g-index

206  
all docs

206  
docs citations

206  
times ranked

7613  
citing authors

#	ARTICLE	IF	CITATIONS
1	Genetically engineered avidins and streptavidins. Cellular and Molecular Life Sciences, 2006, 63, 2992-3017.	5.4	286
2	3D-Printable Bioactivated Nanocellulose-Alginate Hydrogels. ACS Applied Materials & Interfaces, 2017, 9, 21959-21970.	8.0	252
3	Cell Adhesion by Integrins. Physiological Reviews, 2019, 99, 1655-1699.	28.8	250
4	Brave new (strept)avidins in biotechnology. Trends in Biotechnology, 2007, 25, 269-277.	9.3	168
5	Approaching infinite affinity through engineering of peptide-protein interaction. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26523-26533.	7.1	163
6	Modern Tools for Rapid Diagnostics of Antimicrobial Resistance. Frontiers in Cellular and Infection Microbiology, 2020, 10, 308.	3.9	156
7	New PI(4,5)P2- and membrane proximal integrin-binding motifs in the talin head control $\beta$ 3-integrin clustering. Journal of Cell Biology, 2009, 187, 715-731.	5.2	153
8	Dynamic piezoelectric stimulation enhances osteogenic differentiation of human adipose stem cells. Journal of Biomedical Materials Research - Part A, 2015, 103, 2172-2175.	4.0	148
9	How Force Might Activate Talin's Vinculin Binding Sites: SMD Reveals a Structural Mechanism. PLoS Computational Biology, 2008, 4, e24.	3.2	145
10	Internalization of novel non-viral vector TAT-streptavidin into human cells. BMC Biotechnology, 2007, 7, 1.	3.3	119
11	Cationic polymer brush-modified cellulose nanocrystals for high-affinity virus binding. Nanoscale, 2014, 6, 11871-11881.	5.6	92
12	Enhanced Gene Delivery by Avidin-Displaying Baculovirus. Molecular Therapy, 2004, 9, 282-291.	8.2	91
13	Mechanosensing in cell-matrix adhesions - Converting tension into chemical signals. Experimental Cell Research, 2016, 343, 35-41.	2.6	84
14	A comparison of immunogenicity of norovirus GII-4 virus-like particles and P1-particles. Immunology, 2012, 135, 89-99.	4.4	83
15	Carbon Nanotubes as Electrodes for Dielectrophoresis of DNA. Nano Letters, 2006, 6, 1339-1343.	9.1	78
16	A comparison of methods for purification and concentration of norovirus GII-4 capsid virus-like particles. Archives of Virology, 2010, 155, 1855-1858.	2.1	77
17	Characterization of the first beta-class carbonic anhydrase from an arthropod (Drosophila) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 Biochemistry, 2010, 11, 28.	4.4	72
18	Enteroviral proteases: structure, host interactions and pathogenicity. Reviews in Medical Virology, 2016, 26, 251-267.	8.3	72

#	ARTICLE	IF	CITATIONS
19	Trapping of 27 bp–8 kbp DNA and immobilization of thiol-modified DNA using dielectrophoresis. <i>Nanotechnology</i> , 2007, 18, 295204.	2.6	68
20	Dielectrophoresis of nanoscale double-stranded DNA and humidity effects on its electrical conductivity. <i>Applied Physics Letters</i> , 2005, 87, 183102.	3.3	67
21	Prevalence of norovirus GII-4 antibodies in Finnish children. <i>Journal of Medical Virology</i> , 2011, 83, 525-531.	5.0	67
22	Improved generation of recombinant baculovirus genomes in <i>Escherichia coli</i> . <i>Nucleic Acids Research</i> , 2003, 31, 101e-101.	14.5	66
23	Syndecan-4 tunes cell mechanics by activating the kindlin-integrin-RhoA pathway. <i>Nature Materials</i> , 2020, 19, 669-678.	27.5	66
24	Efficient production of active chicken avidin using a bacterial signal peptide in <i>Escherichia coli</i> . <i>Biochemical Journal</i> , 2004, 384, 385-390.	3.7	64
25	Enhancement of adhesion and promotion of osteogenic differentiation of human adipose stem cells by poled electroactive poly(vinylidene fluoride). <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 919-928.	4.0	63
26	Rational Design of an Active Avidin Monomer. <i>Journal of Biological Chemistry</i> , 2003, 278, 4010-4014.	3.4	62
27	Mechanotransduction in talin through the interaction of the R8 domain with DLC1. <i>PLoS Biology</i> , 2018, 16, e2005599.	5.6	62
28	All Subdomains of the Talin Rod Are Mechanically Vulnerable and May Contribute To Cellular Mechanosensing. <i>ACS Nano</i> , 2016, 10, 6648-6658.	14.6	61
29	Novel Avidin-like Protein from a Root Nodule Symbiotic Bacterium, <i>Bradyrhizobium japonicum</i> . <i>Journal of Biological Chemistry</i> , 2005, 280, 13250-13255.	3.4	60
30	A Coxsackievirus B vaccine protects against virus-induced diabetes in an experimental mouse model of type 1 diabetes. <i>Diabetologia</i> , 2018, 61, 476-481.	6.3	58
31	A hexavalent Coxsackievirus B vaccine is highly immunogenic and has a strong protective capacity in mice and nonhuman primates. <i>Science Advances</i> , 2020, 6, eaaz2433.	10.3	55
32	Characterization of poultry egg-white avidins and their potential as a tool in pretargeting cancer treatment. <i>Biochemical Journal</i> , 2003, 372, 219-225.	3.7	52
33	Chicken avidin-related proteins show altered biotin-binding and physico-chemical properties as compared with avidin. <i>Biochemical Journal</i> , 2002, 363, 609-617.	3.7	47
34	Design and Construction of Highly Stable, Protease-resistant Chimeric Avidins. <i>Journal of Biological Chemistry</i> , 2005, 280, 10228-10233.	3.4	47
35	Chicken Avidin-related Protein 4/5 Shows Superior Thermal Stability when Compared with Avidin while Retaining High Affinity to Biotin. <i>Journal of Biological Chemistry</i> , 2004, 279, 9337-9343.	3.4	44
36	A multipurpose vector system for the screening of libraries in bacteria, insect and mammalian cells and expression in vivo. <i>Nucleic Acids Research</i> , 2005, 33, e42-e42.	14.5	44

#	ARTICLE	IF	CITATIONS
37	Crystal Structure of Rhizavidin: Insights into the Enigmatic High-Affinity Interaction of an Innate Biotin-Binding Protein Dimer. <i>Journal of Molecular Biology</i> , 2009, 386, 379-390.	4.2	44
38	Toward Single Electron Nanoelectronics Using Self-Assembled DNA Structure. <i>Nano Letters</i> , 2016, 16, 6780-6786.	9.1	44
39	SERS detection of cell surface and intracellular components of microorganisms using nano-aggregated Ag substrate. <i>Vibrational Spectroscopy</i> , 2016, 83, 36-45.	2.2	44
40	Mechanical stability of talin rod controls cell migration and substrate sensing. <i>Scientific Reports</i> , 2017, 7, 3571.	3.3	44
41	Global Analysis of Human Nonreceptor Tyrosine Kinase Specificity Using High-Density Peptide Microarrays. <i>Journal of Proteome Research</i> , 2014, 13, 4339-4346.	3.7	42
42	Talin-bound NPLY motif recruits integrin-signaling adapters to regulate cell spreading and mechanosensing. <i>Journal of Cell Biology</i> , 2014, 205, 265-281.	5.2	40
43	His-tagged norovirus-like particles: A versatile platform for cellular delivery and surface display. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2015, 96, 22-31.	4.3	39
44	Production and characterization of virus-like particles and the P domain protein of GII.4 norovirus. <i>Journal of Virological Methods</i> , 2012, 179, 1-7.	2.1	38
45	Talin-mediated force transmission and talin rod domain unfolding independently regulate adhesion signaling. <i>Journal of Cell Science</i> , 2019, 132, .	2.0	38
46	Chicken avidin-related proteins show altered biotin-binding and physico-chemical properties as compared with avidin. <i>Biochemical Journal</i> , 2002, 363, 609.	3.7	37
47	Coxsackievirus B3 VLPs purified by ion exchange chromatography elicit strong immune responses in mice. <i>Antiviral Research</i> , 2014, 104, 93-101.	4.1	37
48	Protein conformation as a regulator of cell-matrix adhesion. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 6342-6357.	2.8	37
49	Introduction of histidine residues into avidin subunit interfaces allows pH-dependent regulation of quaternary structure and biotin binding. <i>FEBS Letters</i> , 2003, 555, 449-454.	2.8	36
50	Binding Properties of HABA-Type Azo Derivatives to Avidin and Avidin-Related Protein 4. <i>Chemistry and Biology</i> , 2006, 13, 1029-1039.	6.0	36
51	Core-Shell Nanorod Columnar Array Combined with Gold Nanoplate Nanosphere Assemblies Enable Powerful In Situ SERS Detection of Bacteria. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 24394-24403.	8.0	36
52	Synergistic enhancement via plasmonic nanoplate-bacteria-nanorod supercrystals for highly efficient SERS sensing of food-borne bacteria. <i>Sensors and Actuators B: Chemical</i> , 2017, 239, 515-525.	7.8	36
53	Construction of a Dual Chain Pseudotetrameric Chicken Avidin by Combining Two Circularly Permuted Avidins. <i>Journal of Biological Chemistry</i> , 2004, 279, 36715-36719.	3.4	35
54	Chimeric avidin shows stability against harsh chemical conditions-biochemical analysis and 3D structure. <i>Biotechnology and Bioengineering</i> , 2011, 108, 481-490.	3.3	35

#	ARTICLE	IF	CITATIONS
55	Talin and vinculin are downregulated in atherosclerotic plaque; Tampere Vascular Study. <i>Atherosclerosis</i> , 2016, 255, 43-53.	0.8	35
56	Rapid and sensitive detection of norovirus antibodies in human serum with a biolayer interferometry biosensor. <i>Sensors and Actuators B: Chemical</i> , 2015, 221, 507-514.	7.8	34
57	Tetavalent single-chain avidin: from subunits to protein domains via circularly permuted avidins. <i>Biochemical Journal</i> , 2005, 392, 485-491.	3.7	33
58	Association of Neuroimmune Guidance Cue Netrin-1 and Its Chemorepulsive Receptor UNC5B With Atherosclerotic Plaque Expression Signatures and Stability in Human(s). <i>Circulation: Cardiovascular Genetics</i> , 2013, 6, 579-587.	5.1	33
59	Talin2-mediated traction force drives matrix degradation and cell invasion. <i>Journal of Cell Science</i> , 2016, 129, 3661-3674.	2.0	32
60	Enhancing the Thermal Stability of Avidin. <i>Journal of Biological Chemistry</i> , 2003, 278, 2479-2483.	3.4	31
61	High-resolution crystal structure of an avidin-related protein: insight into high-affinity biotin binding and protein stability. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2005, 61, 528-538.	2.5	31
62	Purification of norovirus-like particles (VLPs) by ion exchange chromatography. <i>Journal of Virological Methods</i> , 2012, 181, 6-11.	2.1	31
63	Mutation of the important Tyr-33 residue of chicken avidin: functional and structural consequences. <i>Biochemical Journal</i> , 2003, 369, 249-254.	3.7	30
64	Analysis of a shortened form of human carbonic anhydrase VII expressed in vitro compared to the full-length enzyme. <i>Biochimie</i> , 2010, 92, 1072-1080.	2.6	29
65	Kindlin 3 (FERMT3) is associated with unstable atherosclerotic plaques, anti-inflammatory type II macrophages and upregulation of beta-2 integrins in all major arterial beds. <i>Atherosclerosis</i> , 2015, 242, 145-154.	0.8	29
66	Switchavidin: Reversible Biotinâ€Avidinâ€Biotin Bridges with High Affinity and Specificity. <i>Bioconjugate Chemistry</i> , 2014, 25, 2233-2243.	3.6	28
67	Dual-affinity avidin molecules. <i>Proteins: Structure, Function and Bioinformatics</i> , 2005, 61, 597-607.	2.6	27
68	Proteinâ€Protein Interactions: Inhibition of Mammalian Carbonic Anhydrases Iâ€XV by the Murine Inhibitor of Carbonic Anhydrase and Other Members of the Transferrin Family. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 5529-5535.	6.4	27
69	PIP2 and Talin Join Forces to Activate Integrin. <i>Journal of Physical Chemistry B</i> , 2015, 119, 12381-12389.	2.6	27
70	Optimized production and purification of Coxsackievirus B1 vaccine and its preclinical evaluation in a mouse model. <i>Vaccine</i> , 2017, 35, 3718-3725.	3.8	27
71	Bradavidin II from <i>Bradyrhizobium japonicum</i> : A new avidin-like biotin-binding protein. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2008, 1784, 1002-1010.	2.3	26
72	Crystal structure of the FERM-folded talin head reveals the determinants for integrin binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 32402-32412.	7.1	26

#	ARTICLE	IF	CITATIONS
73	Avidin related protein 2 shows unique structural and functional features among the avidin protein family. BMC Biotechnology, 2005, 5, 28.	3.3	25
74	Structural and functional characteristics of xenavidin, the first frog avidin from <i>Xenopus tropicalis</i> . BMC Structural Biology, 2009, 9, 63.	2.3	25
75	GFP's Mechanical Intermediate States. PLoS ONE, 2012, 7, e46962.	2.5	25
76	Biolayer Interferometry: A Novel Method to Elucidate Protein-Protein and Protein-DNA Interactions in the Mitochondrial DNA Replisome. Methods in Molecular Biology, 2016, 1351, 223-231.	0.9	25
77	Rational Modification of Ligand-Binding Preference of Avidin by Circular Permutation and Mutagenesis. ChemBioChem, 2008, 9, 1124-1135.	2.6	24
78	Beta carbonic anhydrases: novel targets for pesticides and anti-parasitic agents in agriculture and livestock husbandry. Parasites and Vectors, 2014, 7, 403.	2.5	24
79	Connection between Absorption Properties and Conformational Changes in <i>Deinococcus radiodurans</i> Phytochrome. Biochemistry, 2014, 53, 7076-7085.	2.5	24
80	Stable immobilisation of His-tagged proteins on BLI biosensor surface using cobalt. Sensors and Actuators B: Chemical, 2017, 243, 104-113.	7.8	24
81	Neutralized Chimeric Avidin Binding at a Reference Biosensor Surface. Langmuir, 2015, 31, 1921-1930.	3.5	23
82	Acetaldehyde-derived modifications on cytosolic human carbonic anhydrases. Journal of Enzyme Inhibition and Medicinal Chemistry, 2011, 26, 862-870.	5.2	22
83	Induction of ligand promiscuity of $\alpha_5\beta_3$ integrin by mechanical force. Journal of Cell Science, 2020, 133, .	2.0	22
84	Comparative analysis of two paradigm bacteriophytochromes reveals opposite functionalities in two-component signaling. Nature Communications, 2021, 12, 4394.	12.8	22
85	Improved antifouling properties and selective biofunctionalization of stainless steel by employing heterobifunctional silane-polyethylene glycol overlayers and avidin-biotin technology. Scientific Reports, 2016, 6, 29324.	3.3	21
86	Horizontal transfer of $\beta^2$ -carbonic anhydrase genes from prokaryotes to protozoans, insects, and nematodes. Parasites and Vectors, 2016, 9, 152.	2.5	21
87	Identifying yeasts using surface enhanced Raman spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 218, 299-307.	3.9	21
88	Cyanidin-3- $\beta$ -glucoside binds to talin and modulates colon cancer cell adhesions and 3D growth. FASEB Journal, 2020, 34, 2227-2237.	0.5	21
89	A comparative study of the effect of UV and formalin inactivation on the stability and immunogenicity of a Coxsackievirus B1 vaccine. Vaccine, 2019, 37, 5962-5971.	3.8	19
90	Combination of three virus-derived nanoparticles as a vaccine against enteric pathogens; enterovirus, norovirus and rotavirus. Vaccine, 2019, 37, 7509-7518.	3.8	19

#	ARTICLE	IF	CITATIONS
91	Biochemical and structural characterisation of a protozoan beta-carbonic anhydrase from <i>Trichomonas vaginalis</i> . Journal of Enzyme Inhibition and Medicinal Chemistry, 2020, 35, 1292-1299.	5.2	19
92	Coxsackievirus B Vaccines Prevent Infection-Accelerated Diabetes in NOD Mice and Have No Disease-Inducing Effect. Diabetes, 2021, 70, 2871-2878.	0.6	19
93	Zebavidin - An Avidin-Like Protein from Zebrafish. PLoS ONE, 2013, 8, e77207.	2.5	18
94	Phosphorylated immunoreceptor tyrosine-based activation motifs and integrin cytoplasmic domains activate spleen tyrosine kinase via distinct mechanisms. Journal of Biological Chemistry, 2018, 293, 4591-4602.	3.4	18
95	A novel rat CVB1-VP1 monoclonal antibody 3A6 detects a broad range of enteroviruses. Scientific Reports, 2018, 8, 33.	3.3	18
96	Competition for Membrane Receptors: Norovirus Detachment via Lectin Attachment. Journal of the American Chemical Society, 2019, 141, 16303-16311.	13.7	18
97	The F1 loop of the talin head domain acts as a gatekeeper in integrin activation and clustering. Journal of Cell Science, 2020, 133, .	2.0	18
98	Cancer associated talin point mutations disorganise cell adhesion and migration. Scientific Reports, 2021, 11, 347.	3.3	18
99	Î²1D-integrin splice variant stabilizes integrin dynamics and reduces integrin signaling by limiting paxillin recruitment. Journal of Cell Science, 2019, 132, .	2.0	17
100	Structure and characterization of a novel chicken biotin-binding protein A (BBP-A). BMC Structural Biology, 2007, 7, 8.	2.3	16
101	Identification of proprotein convertase substrates using genome-wide expression correlation analysis. BMC Genomics, 2011, 12, 618.	2.8	16
102	The highly dynamic oligomeric structure of bradavidin II is unique among avidin proteins. Protein Science, 2013, 22, 980-994.	7.6	16
103	Synergistic Expression of Histone Deacetylase 9 and Matrix Metalloproteinase 12 in M4 Macrophages in Advanced Carotid Plaques. European Journal of Vascular and Endovascular Surgery, 2017, 53, 632-640.	1.5	16
104	Coordinated multi-cell resource allocation for 5G ultra-reliable low latency communications. , 2017, , .		16
105	Controlling Quaternary Structure Assembly: Subunit Interface Engineering and Crystal Structure of Dual Chain Avidin. Journal of Molecular Biology, 2006, 359, 1352-1363.	4.2	15
106	Defined-size DNA triple crossover construct for molecular electronics: modification, positioning and conductance properties. Nanotechnology, 2011, 22, 275610.	2.6	15
107	Structural and Functional Characteristics of Chimeric Avidins Physically Adsorbed onto Functionalized Polythiophene Thin Films. ACS Applied Materials & Interfaces, 2012, 4, 4067-4077.	8.0	15
108	Mechanical unfolding reveals stable 3-helix intermediates in talin and Î±-catenin. PLoS Computational Biology, 2018, 14, e1006126.	3.2	15

#	ARTICLE	IF	CITATIONS
109	Formalin treatment increases the stability and immunogenicity of coxsackievirus B1 VLP vaccine. <i>Antiviral Research</i> , 2019, 171, 104595.	4.1	15
110	Sulphonamide inhibition profile of <i>Staphylococcus aureus</i> $\beta$ -carbonic anhydrase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020, 35, 1834-1839.	5.2	15
111	Modular vaccine platform based on the norovirus-like particle. <i>Journal of Nanobiotechnology</i> , 2021, 19, 25.	9.1	15
112	Structural and functional analysis of LIM domain-dependent recruitment of paxillin to $\beta$ 3 integrin-positive focal adhesions. <i>Communications Biology</i> , 2021, 4, 380.	4.4	15
113	Polyphenols Epigallocatechin Gallate and Resveratrol, and Polyphenol-Functionalized Nanoparticles Prevent Enterovirus Infection through Clustering and Stabilization of the Viruses. <i>Pharmaceutics</i> , 2021, 13, 1182.	4.5	15
114	Bifunctional Avidin with Covalently Modifiable Ligand Binding Site. <i>PLoS ONE</i> , 2011, 6, e16576.	2.5	15
115	Chicken genome analysis reveals novel genes encoding biotin-binding proteins related to avidin family. <i>BMC Genomics</i> , 2005, 6, 41.	2.8	14
116	Reversible Biofunctionalization of Surfaces with a Switchable Mutant of Avidin. <i>Bioconjugate Chemistry</i> , 2013, 24, 1656-1668.	3.6	14
117	Proprotein Convertase Subtilisin/Kexin Type 7 (PCSK7) Is Essential for the Zebrafish Development and Bioavailability of Transforming Growth Factor $\beta$ 1a (TGF $\beta$ 1a)*. <i>Journal of Biological Chemistry</i> , 2013, 288, 36610-36623.	3.4	14
118	Cysteine-tagged chimeric avidin forms high binding capacity layers directly on gold. <i>Sensors and Actuators B: Chemical</i> , 2012, 171-172, 440-448.	7.8	13
119	Peptide-functionalized chitosan-DNA nanoparticles for cellular targeting. <i>Carbohydrate Polymers</i> , 2012, 89, 948-954.	10.2	13
120	Search for KPNA7 cargo proteins in human cells reveals MVP and ZNF414 as novel regulators of cancer cell growth. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2017, 1863, 211-219.	3.8	13
121	New Coxsackievirus 2Apro and 3Cpro protease antibodies for virus detection and discovery of pathogenic mechanisms. <i>Journal of Virological Methods</i> , 2018, 255, 29-37.	2.1	13
122	Involvement of $\beta$ -Carbonic Anhydrase Genes in Bacterial Genomic Islands and Their Horizontal Transfer to Protists. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	3.1	13
123	Extrusion-Based Bioprinting of Multilayered Nanocellulose Constructs for Cell Cultivation Using <i>In Situ</i> Freezing and Preprint CaCl <sub>2</sub> Cross-Linking. <i>ACS Omega</i> , 2021, 6, 569-578.	3.5	13
124	Versatile bio-ink for covalent immobilization of chimeric avidin on sol-gel substrates. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011, 87, 409-414.	5.0	12
125	DNA family shuffling within the chicken avidin protein family – A shortcut to more powerful protein tools. <i>Journal of Biotechnology</i> , 2012, 157, 38-49.	3.8	12
126	The talin-integrin interface under mechanical stress. <i>Molecular BioSystems</i> , 2014, 10, 3217-3228.	2.9	12



#	ARTICLE	IF	CITATIONS
127	Membrane Deformation Induces Clustering of Norovirus Bound to Glycosphingolipids in a Supported Cell-Membrane Mimic. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2278-2284.	4.6	12
128	Covalent Biofunctionalization of Cellulose Acetate with Thermostable Chimeric Avidin. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 2240-2245.	8.0	11
129	Mixture of PLA-PEG and biotinylated albumin enables immobilization of avidins on electrospun fibers. <i>Journal of Biomedical Materials Research - Part A</i> , 2017, 105, 356-362.	4.0	11
130	Intelectin 3 is dispensable for resistance against a mycobacterial infection in zebrafish ( <i>Danio rerio</i> ). <i>Scientific Reports</i> , 2019, 9, 995.	3.3	11
131	A Novel Chimeric Avidin with Increased Thermal Stability Using DNA Shuffling. <i>PLoS ONE</i> , 2014, 9, e92058.	2.5	11
132	pH-Dependent Deformations of the Energy Landscape of Avidin-like Proteins Investigated by Single Molecule Force Spectroscopy. <i>Molecules</i> , 2014, 19, 12531-12546.	3.8	10
133	Design of modular gellan gum hydrogel functionalized with avidin and biotinylated adhesive ligands for cell culture applications. <i>PLoS ONE</i> , 2019, 14, e0221931.	2.5	10
134	Inhibition of the newly discovered $\alpha$ -carbonic anhydrase from the protozoan pathogen <i>Trichomonas vaginalis</i> with inorganic anions and small molecules. <i>Journal of Inorganic Biochemistry</i> , 2020, 213, 111274.	3.5	10
135	Surface Modification of Bioresorbable Phosphate Glasses for Controlled Protein Adsorption. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 4483-4493.	5.2	10
136	Modification of the loops in the ligand-binding site turns avidin into a steroid-binding protein. <i>BMC Biotechnology</i> , 2011, 11, 64.	3.3	9
137	Molecular engineering of avidin and hydrophobin for functional self-assembling interfaces. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 120, 102-109.	5.0	9
138	The molecular basis of talin2's high affinity toward $\beta$ 1-integrin. <i>Scientific Reports</i> , 2017, 7, 41989.	3.3	9
139	Improving the Immunogenicity of the <i>Mycobacterium bovis</i> BCG Vaccine by Non-Genetic Bacterial Surface Decoration Using the Avidin-Biotin System. <i>PLoS ONE</i> , 2015, 10, e0145833.	2.5	9
140	Dielectrophoresis as a tool for nanoscale DNA manipulation. <i>International Journal of Nanotechnology</i> , 2005, 2, 280.	0.2	8
141	Factors Dictating the Pseudocatalytic Efficiency of Avidins. <i>Journal of Molecular Biology</i> , 2006, 358, 754-763.	4.2	8
142	WINSE: WiMAX NS-2 extension. <i>Simulation</i> , 2011, 87, 24-44.	1.8	8
143	Regenerative biosensor chips based on switchable mutants of avidin—A systematic study. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 646-654.	7.8	8
144	A DNA-nanoparticle actuator enabling optical monitoring of nanoscale movements induced by an electric field. <i>Nanoscale</i> , 2018, 10, 19297-19309.	5.6	8

#	ARTICLE	IF	CITATIONS
145	Molecular tools for selective recovery and detection of lignin-derived molecules. <i>Green Chemistry</i> , 2018, 20, 2829-2839.	9.0	8
146	Structural Insight into CVB3-VLP Non-Adjuvanted Vaccine. <i>Microorganisms</i> , 2020, 8, 1287.	3.6	8
147	Surface Modification of Bioactive Glass Promotes Cell Attachment and Spreading. <i>ACS Omega</i> , 2021, 6, 22635-22642.	3.5	8
148	Structure of Bradavidin – C-Terminal Residues Act as Intrinsic Ligands. <i>PLoS ONE</i> , 2012, 7, e35962.	2.5	8
149	Identification and characterization of a novel zebrafish ( <i>Danio rerio</i> ) pentraxin – carbonic anhydrase. <i>PeerJ</i> , 2017, 5, e4128.	2.0	8
150	Antigenicity and immunogenicity of HA2 and M2e influenza virus antigens conjugated to norovirus-like, VP1 capsid-based particles by the SpyTag/SpyCatcher technology. <i>Virology</i> , 2022, 566, 89-97.	2.4	8
151	Positive association between biotin and the abundance of root-feeding nematodes. <i>Soil Biology and Biochemistry</i> , 2014, 73, 93-95.	8.8	7
152	Efficient preparation of shuffled DNA libraries through recombination (Gateway) cloning. <i>Protein Engineering, Design and Selection</i> , 2015, 28, 23-28.	2.1	7
153	Host Cell Calpains Can Cleave Structural Proteins from the Enterovirus Polyprotein. <i>Viruses</i> , 2019, 11, 1106.	3.3	7
154	Mechanical Unfolding of Proteins – A Comparative Nonequilibrium Molecular Dynamics Study. <i>Biophysical Journal</i> , 2020, 119, 939-949.	0.5	7
155	Rotavirus Inner Capsid VP6 Acts as an Adjuvant in Formulations with Particulate Antigens Only. <i>Vaccines</i> , 2020, 8, 365.	4.4	7
156	Antibody Responses against Enterovirus Proteases are Potential Markers for an Acute Infection. <i>Viruses</i> , 2020, 12, 78.	3.3	7
157	Regenerable Biosensors for Small-Molecule Kinetic Characterization Using SPR. <i>SLAS Discovery</i> , 2021, 26, 730-739.	2.7	7
158	Bacterial avidins are a widely distributed protein family in Actinobacteria, Proteobacteria and Bacteroidetes. <i>Bmc Ecology and Evolution</i> , 2021, 21, 53.	1.6	7
159	Construction of Chimeric Dual-Chain Avidin by Tandem Fusion of the Related Avidins. <i>PLoS ONE</i> , 2011, 6, e20535.	2.5	6
160	Biofunctional hybrid materials: bimolecular organosilane monolayers on FeCr alloys. <i>Nanotechnology</i> , 2014, 25, 435603.	2.6	6
161	The Minor Capsid Protein VP11 of Thermophilic Bacteriophage P23-77 Facilitates Virus Assembly by Using Lipid-Protein Interactions. <i>Journal of Virology</i> , 2015, 89, 7593-7603.	3.4	6
162	Artificial Avidin-Based Receptors for a Panel of Small Molecules. <i>ACS Chemical Biology</i> , 2016, 11, 211-221.	3.4	6

#	ARTICLE	IF	CITATIONS
163	Critical importance of loop conformation to avidin-enhanced hydrolysis of an active biotin ester. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2008, 64, 302-308.	2.5	5
164	Growth of immobilized DNA by polymerase: bridging nanoelectrodes with individual dsDNA molecules. <i>Nanoscale</i> , 2011, 3, 3788.	5.6	5
165	Kinetics of bioconjugate nanoparticle label binding in a sandwich-type immunoassay. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 493-503.	3.7	5
166	Priming of innate antimycobacterial immunity by heat-killed <i>Listeria monocytogenes</i> induces sterilizing response in the adult zebrafish tuberculosis model. <i>DMM Disease Models and Mechanisms</i> , 2017, 11, .	2.4	5
167	Surface Characteristics Control the Attachment and Functionality of (Chimeric) Avidin. <i>Langmuir</i> , 2018, 34, 15335-15342.	3.5	5
168	Competitive binding assay for biotin and biotin derivatives, based on avidin and biotin-4-fluorescein. <i>Methods in Enzymology</i> , 2020, 633, 1-20.	1.0	5
169	Multiplexed High-Throughput Serological Assay for Human Enteroviruses. <i>Microorganisms</i> , 2020, 8, 963.	3.6	5
170	Avidin-Conjugated Nanofibrillar Cellulose Hydrogel Functionalized with Biotinylated Fibronectin and Vitronectin Promotes 3D Culture of Fibroblasts. <i>Biomacromolecules</i> , 2021, 22, 4122-4137.	5.4	5
171	Investigating the binding behaviour of two avidin-based testosterone binders using molecular recognition force spectroscopy. <i>Journal of Molecular Recognition</i> , 2014, 27, 92-97.	2.1	4
172	Food Supplementation Reveals Constraints and Adaptability of Egg Quality in the Magpie <i>Pica pica</i> . <i>Avian Biology Research</i> , 2015, 8, 244-253.	0.9	4
173	Optimized Streptavidin for Fluorescent Labeling of Biotinylated Targets. <i>Cell Chemical Biology</i> , 2017, 24, 921-922.	5.2	4
174	PLA-HPC Fibrous Membranes for Temperature-Responsive Drug Release. <i>Nano Hybrids and Composites</i> , 2018, 34-41.	0.8	4
175	Inhibition of the $\beta$ -carbonic anhydrase from the protozoan pathogen <i>Trichomonas vaginalis</i> with sulphonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021, 36, 330-335.	5.2	4
176	Biochemical and structural characterization of beta-carbonic anhydrase from the parasite <i>Trichomonas vaginalis</i> . <i>Journal of Molecular Medicine</i> , 2022, 100, 115-124.	3.9	4
177	Detection of cultured breast cancer cells from human tumor-derived matrix by differential ion mobility spectrometry. <i>Analytica Chimica Acta</i> , 2022, 1202, 339659.	5.4	4
178	Printable and flexible macroporous organosilica film with high protein adsorption capacity. <i>Thin Solid Films</i> , 2012, 520, 1934-1937.	1.8	3
179	(Strept)avidin as a template for ligands other than biotin: An overview. <i>Methods in Enzymology</i> , 2020, 633, 21-28.	1.0	3
180	Activation of the $\beta$ -carbonic anhydrase from the protozoan pathogen <i>Trichomonas vaginalis</i> with amines and amino acids. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021, 36, 758-763.	5.2	3

#	ARTICLE	IF	CITATIONS
181	The production and biochemical characterization of $\alpha$ -carbonic anhydrase from <i>Lactobacillus rhamnosus</i> GG. <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 4065-4074.	3.6	3
182	Structural characterization of core-bradavidin in complex with biotin. <i>PLoS ONE</i> , 2017, 12, e0176086.	2.5	2
183	Pneumatically actuated elastomeric device for simultaneous mechanobiological studies and live-cell fluorescent microscopy. , 2017, , .		2
184	Molecular features of steroid-binding antidins and their use for assaying serum progesterone. <i>PLoS ONE</i> , 2019, 14, e0212339.	2.5	2
185	Maternal Morbidity and Estimates from Community Studies in India. <i>MGM Journal of Medical Sciences</i> , 2014, 1, 56-64.	0.1	2
186	Rapid high-throughput compatible label-free virus particle quantification method based on time-resolved luminescence. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 4509-4518.	3.7	2
187	A reverse vaccinology approach on transmembrane carbonic anhydrases from <i>Plasmodium</i> species as vaccine candidates for malaria prevention. <i>Malaria Journal</i> , 2022, 21, .	2.3	2
188	188. Internalization of Novel Delivery Vector TAT-Streptavidin into Human Cells. <i>Molecular Therapy</i> , 2006, 13, S73.	8.2	1
189	Resonance assignments of the 56 kDa chimeric avidin in the biotin-bound and free forms. <i>Biomolecular NMR Assignments</i> , 2013, 7, 35-38.	0.8	1
190	Chimeric Avidin $\alpha$ NMR Structure and Dynamics of a 56 kDa Homotetrameric Thermostable Protein. <i>PLoS ONE</i> , 2014, 9, e100564.	2.5	1
191	StructureMapper: a high-throughput algorithm for analyzing protein sequence locations in structural data. <i>Bioinformatics</i> , 2018, 34, 2302-2304.	4.1	1
192	Talin Rod Mechanical Unfolding: In Silico Study using Both Boxed and Steered Molecular Dynamics. <i>Biophysical Journal</i> , 2020, 118, 125a.	0.5	1
193	How force might activate talin's vinculin binding sites: SMD reveals a structural mechanism. <i>PLoS Computational Biology</i> , 2005, preprint, e24.	3.2	1
194	Quantitative pigment extraction analysis for human pluripotent stem cell derived retinal pigment epithelial cells. <i>IFMBE Proceedings</i> , 2018, , 61-64.	0.3	1
195	Hepcidin is potential regulator for renin activity. <i>PLoS ONE</i> , 2022, 17, e0267343.	2.5	1
196	Rational Modification of Ligand-Binding Preference of Avidin by Circular Permutation and Mutagenesis. <i>ChemBioChem</i> , 2008, 9, 1181-1181.	2.6	0
197	Translating Mechanical Force into Discrete Biochemical Signal Changes. , 0, , 286-338.		0
198	Therapeutic proteins in bioactive materials for wound healing. , 2017, , 273-295.		0

#	ARTICLE	IF	CITATIONS
199	Expression of Exogenous Antigens in the <em>Mycobacterium bovis</em> BCG Vaccine via Non-genetic Surface Decoration with the Avidin-biotin System. Journal of Visualized Experiments, 2018, , .	0.3	0
200	Abstract LB-272: KPNA7 nuclear import protein - a key regulator of cancer cell growth and nuclear morphology. , 2017, , .		0