

Ario de Marco

List of Publications by Year in descending order

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125
papers

4,595
citations

126907

33
h-index

114465

63
g-index

128
all docs

128
docs citations

128
times ranked

6371
citing authors

#	ARTICLE	IF	CITATIONS
1	Strategies for successful recombinant expression of disulfide bond-dependent proteins in <i>Escherichia coli</i> . <i>Microbial Cell Factories</i> , 2009, 8, 26.	4.0	285
2	Symmetric dimethylation of H3R2 is a newly identified histone mark that supports euchromatin maintenance. <i>Nature Structural and Molecular Biology</i> , 2012, 19, 136-144.	8.2	272
3	Chaperone-based procedure to increase yields of soluble recombinant proteins produced in <i>E. coli</i> . <i>BMC Biotechnology</i> , 2007, 7, 32.	3.3	231
4	NaLi-H1: A universal synthetic library of humanized nanobodies providing highly functional antibodies and intrabodies. <i>ELife</i> , 2016, 5, .	6.0	231
5	Biotechnological applications of recombinant single-domain antibody fragments. <i>Microbial Cell Factories</i> , 2011, 10, 44.	4.0	153
6	Native folding of aggregation-prone recombinant proteins in <i>Escherichia coli</i> by osmolytes, plasmid- or benzyl alcohol- ϵ overexpressed molecular chaperones. <i>Cell Stress and Chaperones</i> , 2005, 10, 329.	2.9	140
7	Immunological applications of single-domain llama recombinant antibodies isolated from a naïve library. <i>Protein Engineering, Design and Selection</i> , 2009, 22, 273-280.	2.1	135
8	Simplified screening for the detection of soluble fusion constructs expressed in <i>E. coli</i> using a modular set of vectors. <i>Microbial Cell Factories</i> , 2005, 4, 34.	4.0	133
9	The solubility and stability of recombinant proteins are increased by their fusion to NusA. <i>Biochemical and Biophysical Research Communications</i> , 2004, 322, 766-771.	2.1	132
10	The binding of NCAM to FGFR1 induces a specific cellular response mediated by receptor trafficking. <i>Journal of Cell Biology</i> , 2009, 187, 1101-1116.	5.2	121
11	Characterization of the aggregates formed during recombinant protein expression in bacteria. <i>BMC Biochemistry</i> , 2005, 6, 10.	4.4	112
12	Protocol for preparing proteins with improved solubility by co-expressing with molecular chaperones in <i>Escherichia coli</i> . <i>Nature Protocols</i> , 2007, 2, 2632-2639.	12.0	107
13	Nup155 regulates nuclear envelope and nuclear pore complex formation in nematodes and vertebrates. <i>EMBO Journal</i> , 2005, 24, 3519-3531.	7.8	98
14	The Complexity of Enzymic Control of Hydrogen Peroxide Concentration May Affect the Regeneration Potential of Plant Protoplasts. <i>Plant Physiology</i> , 1996, 110, 137-145.	4.8	92
15	Impairment of Cytoplasmic eIF6 Activity Restricts Lymphomagenesis and Tumor Progression without Affecting Normal Growth. <i>Cancer Cell</i> , 2011, 19, 765-775.	16.8	90
16	Salmonella engineered to express CD20-targeting antibodies and a drug-converting enzyme can eradicate human lymphomas. <i>Blood</i> , 2013, 122, 705-714.	1.4	79
17	Bacterial inclusion bodies are industrially exploitable amyloids. <i>FEMS Microbiology Reviews</i> , 2019, 43, 53-72.	8.6	77
18	Bacteria co-transformed with recombinant proteins and chaperones cloned in independent plasmids are suitable for expression tuning. <i>Journal of Biotechnology</i> , 2004, 109, 45-52.	3.8	71

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19	Recombinant expression of nanobodies and nanobody-derived immunoreagents. <i>Protein Expression and Purification</i> , 2020, 172, 105645.	1.3	68
20	Heating as a rapid purification method for recovering correctly-folded thermotolerant VH and VHH domains. <i>BMC Biotechnology</i> , 2007, 7, 7.	3.3	66
21	The osmolyte betaine promotes protein misfolding and disruption of protein aggregates. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009, 75, 509-517.	2.6	64
22	Improved quantitative and qualitative production of single-domain intrabodies mediated by the co-expression of Erv1p sulfhydryl oxidase. <i>Protein Expression and Purification</i> , 2011, 79, 111-114.	1.3	61
23	Bacterial cytoplasm as an effective cell compartment for producing functional VHH-based affinity reagents and Camelidae IgG-like recombinant antibodies. <i>Microbial Cell Factories</i> , 2014, 13, 140.	4.0	61
24	Crystal structure of the catalytic domain of Haspin, an atypical kinase implicated in chromatin organization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 20204-20209.	7.1	58
25	Nanobody-functionalized PEG-b-PCL polymersomes and their targeting study. <i>Journal of Biotechnology</i> , 2015, 214, 147-155.	3.8	52
26	Urinary extracellular vesicle biomarkers in urological cancers: From discovery towards clinical implementation. <i>International Journal of Biochemistry and Cell Biology</i> , 2018, 99, 236-256.	2.8	48
27	Hydrogen peroxide plays a bivalent role in the regeneration of protoplasts. <i>Journal of Plant Physiology</i> , 1996, 149, 109-114.	3.5	46
28	Recombinant antibody production evolves into multiple options aimed at yielding reagents suitable for application-specific needs. <i>Microbial Cell Factories</i> , 2015, 14, 125.	4.0	43
29	Community-Wide Experimental Evaluation of the PROSS Stability-Design Method. <i>Journal of Molecular Biology</i> , 2021, 433, 166964.	4.2	42
30	Effects of recombinant protein misfolding and aggregation on bacterial membranes. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2009, 1794, 263-269.	2.3	41
31	Laccase activity could contribute to cell-wall reconstitution in regenerating protoplasts. <i>Phytochemistry</i> , 1997, 46, 421-425.	2.9	38
32	Isolation of Tobacco Isoperoxidases Accumulated in Cell-Suspension Culture Medium and Characterization of Activities Related to Cell Wall Metabolism1. <i>Plant Physiology</i> , 1999, 120, 371-382.	4.8	36
33	Electrochemical immunosensor functionalized with nanobodies for the detection of the toxic microalgae <i>Alexandrium minutum</i> using glassy carbon electrode modified with gold nanoparticles. <i>Biosensors and Bioelectronics</i> , 2020, 154, 112052.	10.1	36
34	A monoclonal antibody against mutated nucleophosmin 1 for the molecular diagnosis of acute myeloid leukemias. <i>Blood</i> , 2010, 116, 2096-2102.	1.4	35
35	Knock-in of Oncogenic <i>Kras</i> Does Not Transform Mouse Somatic Cells But Triggers a Transcriptional Response that Classifies Human Cancers. <i>Cancer Research</i> , 2007, 67, 8468-8476.	0.9	32
36	Meeting Report from the Second "Minimum Information for Biological and Biomedical Investigations" (MIBBI) workshop. <i>Standards in Genomic Sciences</i> , 2010, 3, 259-266.	1.5	32

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37	Isolation of anti-extra-cellular vesicle single-domain antibodies by direct panning on vesicle-enriched fractions. <i>Microbial Cell Factories</i> , 2018, 17, 6.	4.0	32
38	A consensus protocol for the <i>in silico</i> optimisation of antibody fragments. <i>Chemical Communications</i> , 2019, 55, 14043-14046.	4.1	32
39	Preparation of a Na ⁺ -ve Library of Camelid Single Domain Antibodies. <i>Methods in Molecular Biology</i> , 2012, 911, 65-78.	0.9	31
40	Binding affinity prediction of nanobody-protein complexes by scoring of molecular dynamics trajectories. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 3438-3444.	2.8	31
41	Physical and chemical perturbations induce the formation of protein aggregates with different structural features. <i>Protein Expression and Purification</i> , 2008, 58, 356-361.	1.3	29
42	Evidence for two different nitrate-reducing activities at the plasma membrane in roots of <i>Zea mays</i> L.. <i>Planta</i> , 1994, 194, 557-564.	3.2	28
43	Recombinant proteins fused to thermostable partners can be purified by heat incubation. <i>Journal of Biotechnology</i> , 2004, 107, 125-133.	3.8	28
44	Research Progress and Applications of Multivalent, Multispecific and Modified Nanobodies for Disease Treatment. <i>Frontiers in Immunology</i> , 2021, 12, 838082.	4.8	27
45	Nanobodies against surface biomarkers enable the analysis of tumor genetic heterogeneity in uveal melanoma patient-derived xenografts. <i>Pigment Cell and Melanoma Research</i> , 2017, 30, 317-327.	3.3	26
46	Recombinant Maize Protoporphyrinogen IX Oxidase Expressed in <i>Escherichia coli</i> Forms Complexes with GroEL and DnaK Chaperones. <i>Protein Expression and Purification</i> , 2000, 20, 81-86.	1.3	25
47	Molecular dynamics simulations and docking enable to explore the biophysical factors controlling the yields of engineered nanobodies. <i>Scientific Reports</i> , 2016, 6, 34869.	3.3	25
48	Quality control of protein reagents for the improvement of research data reproducibility. <i>Nature Communications</i> , 2021, 12, 2795.	12.8	25
49	The Vaccinia Virus E8R Gene Product: a Viral Membrane Protein That Is Made Early in Infection and Packaged into the Virions' Core. <i>Journal of Virology</i> , 2002, 76, 9773-9786.	3.4	24
50	Minimal information: an urgent need to assess the functional reliability of recombinant proteins used in biological experiments. <i>Microbial Cell Factories</i> , 2008, 7, 20.	4.0	24
51	Screening optimized protein purification protocols by coupling small-scale expression and mini-size exclusion chromatography. <i>Protein Expression and Purification</i> , 2010, 74, 231-235.	1.3	24
52	Single domain antibodies with VH hallmarks are positively selected during panning of llama (Lama) Tj ETQq0 0 0 rgBT ₁ /Overlock 10 Tf 50	2.3	24
53	Recent contributions in the field of the recombinant expression of disulfide bonded protein in bacteria. <i>Microbial Cell Factories</i> , 2012, 11, 129.	4.0	24
54	A DNA-nanoassembly-based approach to map membrane protein nanoenvironments. <i>Nature Nanotechnology</i> , 2021, 16, 85-95.	31.5	24

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55	Recombinant polypeptide production in <i>E. coli</i> : towards a rational approach to improve the yields of functional proteins. <i>Microbial Cell Factories</i> , 2013, 12, 101.	4.0	23
56	Quantification of Circulating Cancer Biomarkers via Sensitive Topographic Measurements on Single Binder Nanoarrays. <i>ACS Omega</i> , 2017, 2, 2618-2629.	3.5	23
57	Dimerization properties of a <i>Xenopus laevis</i> kinesinâ€™ carboxyâ€™terminal stalk fragment. <i>EMBO Reports</i> , 2003, 4, 717-722.	4.5	22
58	The evaluation of the factors that cause aggregation during recombinant expression in <i>E. coli</i> is simplified by the employment of an aggregation-sensitive reporter. <i>Microbial Cell Factories</i> , 2006, 5, 28.	4.0	22
59	Whole-cell biopanning with a synthetic phage display library of nanobodies enabled the recovery of follicle-stimulating hormone receptor inhibitors. <i>Biochemical and Biophysical Research Communications</i> , 2017, 493, 1567-1572.	2.1	22
60	Comparative analysis of protein aggregates by blue native electrophoresis and subsequent sodium dodecyl sulfate-polyacrylamide gel electrophoresis in a three-dimensional geometry gel. <i>Proteomics</i> , 2005, 5, 2002-2009.	2.2	20
61	The solubility of recombinant proteins expressed in <i>Escherichia coli</i> is increased by <i>otsA</i> and <i>otsB</i> co-transformation. <i>Biochemical and Biophysical Research Communications</i> , 2007, 355, 234-239.	2.1	20
62	The Biotechnological Applications of Recombinant Single-Domain Antibodies are Optimized by the C-Terminal Fusion to the EPEA Sequence (C Tag). <i>Antibodies</i> , 2014, 3, 182-191.	2.5	20
63	Two-step metal affinity purification of double-tagged (NusAâ€™His6) fusion proteins. <i>Nature Protocols</i> , 2006, 1, 1538-1543.	12.0	19
64	Canonical and selective approaches in exosome purification and their implications for diagnostic accuracy. <i>Translational Cancer Research</i> , 2018, 7, S209-S225.	1.0	19
65	Fusion tags and chaperone co-expression modulate both the solubility and the inclusion body features of the recombinant CLIPB14 serine protease. <i>Journal of Biotechnology</i> , 2005, 120, 2-10.	3.8	17
66	Single-domain antibodies that compete with the natural ligand fibroblast growth factor block the internalization of the fibroblast growth factor receptor 1. <i>Biochemical and Biophysical Research Communications</i> , 2011, 408, 692-696.	2.1	17
67	Biofabrication of functional protein nanoparticles through simple His-tag engineering. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 12341-12354.	6.7	17
68	The Availability of a Recombinant Anti-SNAP Antibody in VHH Format Amplifies the Application Flexibility of SNAP-Tagged Proteins. <i>Journal of Biomedicine and Biotechnology</i> , 2010, 2010, 1-7.	3.0	16
69	Induced fit of passenger proteins fused to <i>Archaea</i> maltose binding proteins. <i>Biochemical and Biophysical Research Communications</i> , 2006, 344, 25-29.	2.1	15
70	Evaluation of a novel human IgG1 anti-claudin3 antibody that specifically recognizes its aberrantly localized antigen in ovarian cancer cells and that is suitable for selective drug delivery. <i>Oncotarget</i> , 2015, 6, 34617-34628.	1.8	15
71	Affinity-based isolation of extracellular vesicles by means of single-domain antibodies bound to macroporous methacrylate-based copolymer. <i>New Biotechnology</i> , 2022, 69, 36-48.	4.4	15
72	Antibody-mediated purification of co-expressed antigenâ€™antibody complexes. <i>Protein Expression and Purification</i> , 2010, 72, 55-58.	1.3	14

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73	Molecular and Chemical Chaperones for Improving the Yields of Soluble Recombinant Proteins. <i>Methods in Molecular Biology</i> , 2011, 705, 31-51.	0.9	14
74	Antibody purification-independent microarrays (PIM) by direct bacteria spotting on TiO ₂ -treated slides. <i>Methods</i> , 2012, 56, 317-325.	3.8	14
75	Nanomaterial bio-activation and macromolecules functionalization: The search for reliable protocols. <i>Protein Expression and Purification</i> , 2018, 147, 49-54.	1.3	14
76	In vitro isolation of nanobodies for selective <i>Alexandrium minutum</i> recognition: A model for convenient development of dedicated immuno-reagents to study and diagnostic toxic unicellular algae. <i>Harmful Algae</i> , 2019, 82, 44-51.	4.8	14
77	Effect of Humanizing Mutations on the Stability of the Llama Single-Domain Variable Region. <i>Biomolecules</i> , 2021, 11, 163.	4.0	14
78	Antigenic features of protein carriers commonly used in immunisation trials. <i>Biotechnology Letters</i> , 2010, 32, 1215-1221.	2.2	13
79	Specific features of the ascorbate/glutathione cycle in cultured protoplasts. <i>Plant Cell Reports</i> , 1999, 18, 406-411.	5.6	12
80	Comparative analysis of fusion tags used to functionalize recombinant antibodies. <i>Protein Expression and Purification</i> , 2020, 166, 105505.	1.3	12
81	Nanobody-Dependent Detection of <i>Microcystis aeruginosa</i> by ELISA and Thermal Lens Spectrometry. <i>Applied Biochemistry and Biotechnology</i> , 2021, 193, 2729-2741.	2.9	11
82	Expression, purification and characterization of SARS-CoV-2 spike RBD in ExpiCHO cells. <i>Protein Expression and Purification</i> , 2022, 194, 106071.	1.3	11
83	Possible interaction between peroxidase and NAD(P)H-dependent nitrate reductase activities of plasma membranes of corn roots. <i>Journal of Experimental Botany</i> , 1995, 46, 1677-1683.	4.8	10
84	The Trip Adviser guide to the protein science world: a proposal to improve the awareness concerning the quality of recombinant proteins. <i>BMC Research Notes</i> , 2014, 7, 585.	1.4	10
85	Coronavirus disease 2019 and the revival of passive immunization: Antibody therapy for inhibiting severe acute respiratory syndrome coronavirus 2 and preventing host cell infection: IUPHAR review 31. <i>British Journal of Pharmacology</i> , 2021, 178, 3359-3372.	5.4	10
86	Native llama Nanobody Library Panning Performed by Phage and Yeast Display Provides Binders Suitable for C-Reactive Protein Detection. <i>Biosensors</i> , 2021, 11, 496.	4.7	10
87	Monoclonal antibodies isolated by large-scale screening are suitable for labeling adult zebrafish (<i>Danio rerio</i>) tissues and cell structures. <i>Journal of Immunological Methods</i> , 2009, 346, 9-17.	1.4	9
88	A compact nanobody-DNAzyme conjugate enables antigen detection and signal amplification. <i>New Biotechnology</i> , 2020, 56, 1-8.	4.4	9
89	A step ahead: combining protein purification and correct folding selection. <i>Microbial Cell Factories</i> , 2004, 3, 12.	4.0	8
90	Minimal information for protein functional evaluation (MIPFE) workshop. <i>New Biotechnology</i> , 2009, 25, 170.	4.4	8

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91	Recombinant protein quality evaluation: proposal for a minimal information standard. <i>Standards in Genomic Sciences</i> , 2011, 5, 195-197.	1.5	8
92	Self-Assembled Nanobodies as Selectively Targeted, Nanostructured, and Multivalent Materials. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 29406-29415.	8.0	8
93	Perspectives Offered by Single-Domain Antibodies in Clinical Diagnostic of Pediatric Tumors. <i>Current Medicinal Chemistry</i> , 2013, 20, 2188-2194.	2.4	8
94	The concurrent use of N- and C-terminal antibodies anti-nucleophosmin 1 in immunofluorescence experiments allows for precise assessment of its subcellular localisation in acute myeloid leukaemia patients. <i>Leukemia</i> , 2012, 26, 159-162.	7.2	7
95	Nanobody-functionalized polymersomes. <i>Journal of Controlled Release</i> , 2015, 213, e79-e80.	9.9	7
96	User-Friendly Expression Plasmids Enable the Fusion of VHHs to Application-Specific Tags. <i>Methods in Molecular Biology</i> , 2012, 911, 507-522.	0.9	6
97	Co-expression and Co-purification of Antigen-Antibody Complexes in Bacterial Cytoplasm and Periplasm. <i>Methods in Molecular Biology</i> , 2014, 1129, 125-135.	0.9	6
98	Engineered cross-reacting nanobodies simplify comparative oncology between humans and dogs. <i>Veterinary and Comparative Oncology</i> , 2018, 16, E202-E206.	1.8	6
99	Peroxidase zymograms obtained by agarose native gel electrophoresis have unmet resolution and completeness. <i>International Journal of Biological Macromolecules</i> , 2020, 156, 869-873.	7.5	6
100	Quality control of purified proteins to improve data quality and reproducibility: results from a large-scale survey. <i>European Biophysics Journal</i> , 2021, 50, 453-460.	2.2	6
101	Monodispersity of recombinant Cre recombinase correlates with its effectiveness in vivo. <i>BMC Biotechnology</i> , 2009, 9, 80.	3.3	5
102	Comparison and critical analysis of robotized technology for monoclonal antibody high-throughput production. <i>Biotechnology Progress</i> , 2011, 27, 571-576.	2.6	5
103	Methodologies for the isolation of alternative binders with improved clinical potentiality over conventional antibodies. <i>Critical Reviews in Biotechnology</i> , 2013, 33, 40-48.	9.0	5
104	An intrabody specific for the nucleophosmin carboxy-terminal mutant and fused to a nuclear localization sequence binds its antigen but fails to relocate it in the nucleus. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2014, 3, 27-33.	4.4	5
105	Identification of environmental stress biomarkers in seedlings of European beech (<i>Fagus sylvatica</i>) and Scots pine (<i>Pinus sylvestris</i>). <i>Canadian Journal of Forest Research</i> , 2016, 46, 58-66.	1.7	5
106	Purification-independent immunoreagents obtained by displaying nanobodies on bacteria surface. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 4443-4453.	3.6	5
107	An anti-HER2 nanobody binds to its antigen HER2 via two independent paratopes. <i>International Journal of Biological Macromolecules</i> , 2021, 182, 502-511.	7.5	5
108	Protein purification strategies must consider downstream applications and individual biological characteristics. <i>Microbial Cell Factories</i> , 2022, 21, 52.	4.0	5

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109	Correct identification of the chloroplastic protoporphyrinogen IX oxidase N-terminus places the biochemical data in frame. <i>Biochemical and Biophysical Research Communications</i> , 2003, 309, 873-878.	2.1	4
110	Automated protein analysis by online detection of laser-induced fluorescence in slab gels and 3-D geometry gels. <i>Electrophoresis</i> , 2006, 27, 3338-3348.	2.4	4
111	Interference of p53:Twist1 interaction through competing nanobodies. <i>International Journal of Biological Macromolecules</i> , 2022, 194, 24-31.	7.5	4
112	Reagent validation: an underestimated issue in laboratory practice. <i>Journal of Molecular Recognition</i> , 2011, 24, 136-136.	2.1	3
113	CDR1 Composition Can Affect Nanobody Recombinant Expression Yields. <i>Biomolecules</i> , 2021, 11, 1362.	4.0	3
114	Recombinant Proteins Co-Expressed and Co-Purified in the Presence of Antibody Fragments. <i>Methods in Molecular Biology</i> , 2021, 2178, 93-103.	0.9	3
115	The spectrum of building block conformers sustains the biophysical properties of clinically-oriented self-assembling protein nanoparticles. <i>Science China Materials</i> , 2022, 65, 1662-1670.	6.3	3
116	A (musical) note on protein purification. <i>FASEB Journal</i> , 2010, 24, 6-6.	0.5	2
117	Optimization of Purification Protocols Based on the Step-by-Step Monitoring of the Protein Aggregates in Soluble Fractions. <i>Methods in Molecular Biology</i> , 2012, 824, 145-154.	0.9	2
118	Conflict of interests: Multiple signal peptides with diverging goals. <i>Journal of Cellular Biochemistry</i> , 2013, 114, 510-513.	2.6	2
119	Metrics and evaluation of scientific productivity: would it be useful to normalize the data taking in consideration the investments?. <i>Microbial Cell Factories</i> , 2019, 18, 181.	4.0	2
120	Isolation of Recombinant Antibodies That Recognize Native and Accessible Membrane Biomarkers. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2015, , 49-66.	0.5	2
121	Cytoplasmic Production of Nanobodies and Nanobody-Based Reagents by Co-Expression of Sulfhydryl Oxidase and DsbC Isomerase. <i>Methods in Molecular Biology</i> , 2022, 2446, 145-157.	0.9	2
122	Strategies for Boosting the Accumulation of Correctly Folded Recombinant Proteins Expressed in <i>Escherichia coli</i> . <i>Methods in Molecular Biology</i> , 2011, 752, 1-15.	0.9	1
123	Identification of stress biomarkers for drought and increased soil temperature in seedlings of European beech (<i>Fagus sylvatica</i>). <i>Canadian Journal of Forest Research</i> , 2017, 47, 1517-1526.	1.7	1
124	Acting on Folding Effectors to Improve Recombinant Protein Yields and Functional Quality. <i>Methods in Molecular Biology</i> , 2017, 1586, 197-210.	0.9	0
125	Good reasons for targeting SARS-CoV-2 by engineered extracellular vesicles. <i>Molecular Therapy - Methods and Clinical Development</i> , 2022, 25, 41-42.	4.1	0