Luis Angel Fernandez

List of Publications by Year
in descending order

73 papers	3,428 citations	117453 34 h-index	149479 56 g-index
79 all docs	79 docs citations	79 times ranked	3653 citing authors

#	Article	IF	Citations
1	Engineering a mouse metallothionein on the cell surface of Ralstonia eutropha CH34 for immobilization of heavy metals in soil. Nature Biotechnology, 2000, 18, 661-665.	9.4	262
2	Extension of chromatin accessibility by nuclear matrix attachment regions. Nature, 1997, 385, 269-272.	13.7	237
3	Production of Functional Single-Chain Fv Antibodies in the Cytoplasm of Escherichia coli. Journal of Molecular Biology, 2002, 320, 1-10.	2.0	139
4	Programming Controlled Adhesion of E. coli to Target Surfaces, Cells, and Tumors with Synthetic Adhesins. ACS Synthetic Biology, 2015, 4, 463-473.	1.9	133
5	Export of autotransported proteins proceeds through an oligomeric ring shaped by C-terminal domains. EMBO Journal, 2002, 21, 2122-2131.	3.5	110
6	Matrix Attachment Region-Dependent Function of the Immunoglobulin Î¼ Enhancer Involves Histone Acetylation at a Distance without Changes in Enhancer Occupancy. Molecular and Cellular Biology, 2001, 21, 196-208.	1.1	91
7	A nanobody targeting the F-actin capping protein CapG restrains breast cancer metastasis. Breast Cancer Research, 2013, 15, R116.	2.2	91
8	Immunoglobulin domains inEscherichia coliand other enterobacteria: from pathogenesis to applications in antibody technologies. FEMS Microbiology Reviews, 2013, 37, 204-250.	3.9	84
9	Structural tolerance of bacterial autotransporters for folded passenger protein domains. Molecular Microbiology, 2004, 52, 1069-1080.	1.2	83
10	Selection of Single Domain Antibodies from Immune Libraries Displayed on the Surface of E. coli Cells with Two Î²-Domains of Opposite Topologies. PLoS ONE, 2013, 8, e75126.	1.1	83
11	Engineered bacteria as therapeutic agents. Current Opinion in Biotechnology, 2015, 35, 94-102.	3.3	83
12	Probing secretion and translocation of a Î²-autotransporter using a reporter single-chain Fv as a cognate passenger domain. Molecular Microbiology, 2002, 33, 1232-1243.	1.2	80
13	Thioredoxin Fusions Increase Folding of Single Chain Fv Antibodies in the Cytoplasm of Escherichia coli: Evidence that Chaperone Activity is the Prime Effect of Thioredoxin. Journal of Molecular Biology, 2006, 357, 49-61.	2.0	78
14	Insertional mutagenesis in the extreme thermophilic eubacteria Thermus thermophilus HB8. Molecular Microbiology, 1992, 6, 1555-1564.	1.2	77
15	Nuclear matrix attachment regions antagonize methylation-dependent repression of long-range enhancer-promoter interactions. Genes and Development, 1999, 13, 3003-3014.	2.7	77
16	Specific Secretion of Active Single-Chain Fv Antibodies into the Supernatants of Escherichia coli Cultures by Use of the Hemolysin System. Applied and Environmental Microbiology, 2000, 66, 5024-5029.	1.4	75
17	A thermophilic nitrate reductase is responsible for the strain specific anaerobic growth of Thermus thermophilus HB8. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1998, 1396, 215-227.	2.4	73
18	Role of Periplasmic Chaperones and BamA (YaeT/Omp85) in Folding and Secretion of Intimin from EnteropathogenicEscherichia coliStrains. Journal of Bacteriology, 2009, 191, 5169-5179.	1.0	71

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19	Secretion and assembly of regular surface structures in Gram-negative bacteria. FEMS Microbiology Reviews, 2000, 24, 21-44.	3.9	65
20	Conjugative transfer can be inhibited by blocking relaxase activity within recipient cells with intrabodies. Molecular Microbiology, 2007, 63, 404-416.	1.2	65
21	Escherichia coli surface display for the selection of nanobodies. Microbial Biotechnology, 2017, 10, 1468-1484.	2.0	60
22	Whole-Cell Biosensor with Tunable Limit of Detection Enables Low-Cost Agglutination Assays for Medical Diagnostic Applications. ACS Sensors, 2019, 4, 370-378.	4.0	57
23	Secretion and assembly of regular surface structures in Gram-negative bacteria. FEMS Microbiology Reviews, 2000, 24, 21-44.	3.9	53
24	Type III secretion system effectors form robust and flexible intracellular virulence networks. Science, 2021, 371, .	6.0	50
25	Attaching and effacing (A/E) lesion formation by enteropathogenic E. coli on human intestinal mucosa is dependent on non-LEE effectors. PLoS Pathogens, 2017, 13, e1006706.	2.1	49
26	Direct Injection of Functional Single-Domain Antibodies from E. coli into Human Cells. PLoS ONE, 2010, 5, e15227.	1.1	48
27	Prokaryotic expression of antibodies and affibodies. Current Opinion in Biotechnology, 2004, 15, 364-373.	3.3	47
28	In vivo diversification of target genomic sites using processive base deaminase fusions blocked by dCas9. Nature Communications, 2020, 11, 6436.	5.8	47
29	High yield purification of nanobodies from the periplasm of E. coli as fusions with the maltose binding protein. Protein Expression and Purification, 2013, 91, 42-48.	0.6	46
30	Autotransporters as Scaffolds for Novel Bacterial Adhesins: Surface Properties of Escherichia coli Cells Displaying Jun/Fos Dimerization Domains. Journal of Bacteriology, 2003, 185, 5585-5590.	1.0	45
31	Recognition of the N-terminal lectin domain of FimH adhesin by the usher FimD is required for type 1 pilus biogenesis. Molecular Microbiology, 2007, 64, 333-346.	1.2	45
32	Potent neutralization of clinical isolates of SARS-CoV-2 D614 and G614 variants by a monomeric, sub-nanomolar affinity nanobody. Scientific Reports, 2021, 11, 3318.	1.6	43
33	Disposable amperometric magnetoimmunosensors using nanobodies as biorecognition element. Determination of fibrinogen in plasma. Biosensors and Bioelectronics, 2014, 52, 255-260.	5.3	42
34	The Fimbrial Usher FimD Follows the SurA-BamB Pathway for Its Assembly in the Outer Membrane of Escherichia coli. Journal of Bacteriology, 2011, 193, 5222-5230.	1.0	39
35	Formation of disulphide bonds during secretion of proteins through the periplasmic-independent type I pathway. Molecular Microbiology, 2001, 40, 332-346.	1.2	38
36	Screening and purification of nanobodies from E. coli culture supernatants using the hemolysin secretion system. Microbial Cell Factories, 2019, 18, 47.	1.9	38

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37	Surface proteins and a novel transcription factor regulate the expression of the Sâ€layer gene in Thermus thermophilus HB8. Molecular Microbiology, 1997, 24, 61-72.	1.2	37
38	Mapping cytoskeletal protein function in cells by means of nanobodies. Cytoskeleton, 2013, 70, 604-622.	1.0	37
39	Engineering the Controlled Assembly of Filamentous Injectisomes in E. coli K-12 for Protein Translocation into Mammalian Cells. ACS Synthetic Biology, 2015, 4, 1030-1041.	1.9	37
40	Enteropathogenic Escherichia coli Stimulates Effector-Driven Rapid Caspase-4 Activation in Human Macrophages. Cell Reports, 2019, 27, 1008-1017.e6.	2.9	36
41	Monitoring Intracellular Levels of XylR in Pseudomonas putida with a Single-Chain Antibody Specific for Aromatic-Responsive Enhancer-Binding Proteins. Journal of Bacteriology, 2001, 183, 5571-5579.	1.0	34
42	Programmable Modular Assembly of Functional Proteins on Raman-Encoded Zeolitic Imidazolate Framework-8 (ZIF-8) Nanoparticles as SERS Tags. Chemistry of Materials, 2020, 32, 5739-5749.	3.2	32
43	glmS of Thermus thermophilus HB8: an essential gene for cell-wall synthesis identified immediately upstream of the S-layer gene. Molecular Microbiology, 1995, 17, 1-12.	1.2	30
44	Sigma 54 Levels and Physiological Control of the Pseudomonas putida Pu Promoter. Journal of Bacteriology, 2003, 185, 3379-3383.	1.0	30
45	High affinity nanobodies against human epidermal growth factor receptor selected on cells byE. colidisplay. MAbs, 2016, 8, 1286-1301.	2.6	28
46	IV. Molecular biology of S-layers. FEMS Microbiology Reviews, 1997, 20, 47-98.	3.9	24
47	Comparative Analysis of the Biochemical and Functional Properties of C-Terminal Domains of Autotransporters. Journal of Bacteriology, 2010, 192, 5588-5602.	1.0	23
48	Neutralizationof Enteric Coronaviruses with Escherichia coli CellsExpressing Single-Chain Fv-AutotransporterFusions. Journal of Virology, 2003, 77, 13396-13398.	1.5	22
49	Sustainable therapies by engineered bacteria. Microbial Biotechnology, 2017, 10, 1057-1061.	2.0	22
50	A nanobody targeting the translocated intimin receptor inhibits the attachment of enterohemorrhagic E. coli to human colonic mucosa. PLoS Pathogens, 2019, 15, e1008031.	2.1	22
51	Specific residues in the Nâ€terminal domain of FimH stimulate type 1 fimbriae assembly in Escherichia coli following the initial binding of the adhesin to FimD usher. Molecular Microbiology, 2008, 69, 911-925.	1.2	19
52	Clustering of Tir during enteropathogenic E. coli infection triggers calcium influxâ€“dependent pyroptosis in intestinal epithelial cells. PLoS Biology, 2020, 18, e3000986.	2.6	18
53	Synthetic consortia of nanobodyâ€coupled and formatted bacteria for prophylaxis and therapy interventions targeting microbiome dysbiosisâ€associated diseases and coâ€morbidities. Microbial Biotechnology, 2019, 12, 58-65.	2.0	17
54	Characterization ofL-Glutamine:D-Fructose-6-phosphate Amidotransferase from an Extreme ThermophileThermus thermophilusHB8. Archives of Biochemistry and Biophysics, 1997, 337, 129-136.	1.4	15

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55	Secretion of proteins with dimerization capacity by the haemolysin type I transport system of Escherichia coli. Molecular Microbiology, 2004, 53, 1109-1121.	1.2	15
56	Multiple Regulatory Mechanisms Act on the 5â€² Untranslated Region of the S-Layer Gene from Thermus thermophilus HB8. Journal of Bacteriology, 2001, 183, 1491-1494.	1.0	14
57	Characterization of nanobodies binding human fibrinogen selected by E. coli display. Journal of Biotechnology, 2016, 234, 58-65.	1.9	14
58	Direct Evaluation of Live Uropathogenic Escherichia coli Adhesion and Efficiency of Antiadhesive Compounds Using a Simple Microarray Approach. Analytical Chemistry, 2018, 90, 12314-12321.	3.2	14
59	Nuclear Matrix Attachment Regions Confer Long-range Function upon the Immunoglobulin Â Enhancer. Cold Spring Harbor Symposia on Quantitative Biology, 1998, 63, 515-524.	2.0	11
60	Recent developments in engineering and delivery of protein and antibody therapeutics. Current Opinion in Biotechnology, 2011, 22, 839-842.	3.3	10
61	Efficient markerless integration of genes in the chromosome of probiotic E.Âcoli Nissle 1917 by bacterial conjugation. Microbial Biotechnology, 2022, 15, 1374-1391.	2.0	10
62	Nanobodies Protecting From Lethal SARS-CoV-2 Infection Target Receptor Binding Epitopes Preserved in Virus Variants Other Than Omicron. Frontiers in Immunology, 2022, 13, 863831.	2.2	10
63	Pathogenomics: An updated European Research Agenda. Infection, Genetics and Evolution, 2008, 8, 386-393.	1.0	8
64	ssDNA recombineering boosts in vivo evolution of nanobodies displayed on bacterial surfaces. Communications Biology, 2021, 4, 1169.	2.0	6
65	In vivo drafting of single-chain antibodies for regulatory duty on the sigma54-promoter Pu of the TOL plasmid. Molecular Microbiology, 2006, 60, 1218-1227.	1.2	5
66	Hypermutation of specific genomic loci of Pseudomonas putida for continuous evolution of target genes. Microbial Biotechnology, 2022, 15, 2309-2323.	2.0	3
67	Synthetic biology: at the crossroads of genetic engineering and human therapeuticsâ€”a Keystone Symposia report. Annals of the New York Academy of Sciences, 2021, , .	1.8	2
68	Systematic Deletion of Type III Secretion System Effectors in Enteropathogenic E. coli Unveils the Role of Non-LEE Effectors in A/E Lesion Formation. , 2020, , .		1
69	Identification of Nanobodies Blocking Intimate Adherence of Shiga Toxin-Producing Escherichia coli to Epithelial Cells. Methods in Molecular Biology, 2021, 2291, 253-272.	0.4	1
70	Analyzing the Role of Periplasmic Folding Factors in the Biogenesis of OMPs and Members of the Type V Secretion System. Methods in Molecular Biology, 2015, 1329, 77-110.	0.4	1
71	Enhanced protein translocation to mammalian cells by expression of EtgA transglycosylase in a synthetic injector E. coli strain. Microbial Cell Factories, 2022, 21, .	1.9	1
72	Production and characterization of a recombinant single-chain antibody (scFv) for tracing the Ïƒ54 factor of Pseudomonas putida. Journal of Biotechnology, 2012, 160, 33-41.	1.9	0

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73	A novel set of vectors for genome engineering of E. coli strains. New Biotechnology, 2012, 29, S160.	2.4	0