Luis Alvarez-Vallina

List of Publications by Year
in descending order

101 papers	3,377 citations	172386 29 h-index	168321 53 g-index
103 all docs	103 docs citations	103 times ranked	4544 citing authors

#	Article	IF	Citations
1	Full Activation of PKB/Akt in Response to Insulin or Ionizing Radiation Is Mediated through ATM. Journal of Biological Chemistry, 2005, 280, 4029-4036.	1.6	231
2	Lipopolysaccharide Activates Toll-like Receptor 4 (TLR4)-mediated NF-ÎºB Signaling Pathway and Proinflammatory Response in Human Pericytes. Journal of Biological Chemistry, 2014, 289, 2457-2468.	1.6	227
3	Multivalent antibodies: when design surpasses evolution. Trends in Biotechnology, 2010, 28, 355-362.	4.9	172
4	Programming Controlled Adhesion of <i>E. coli</i> to Target Surfaces, Cells, and Tumors with Synthetic Adhesins. ACS Synthetic Biology, 2015, 4, 463-473.	1.9	133
5	A tumor-targeted trimeric 4-1BB-agonistic antibody induces potent anti-tumor immunity without systemic toxicity. Nature Communications, 2018, 9, 4809.	5.8	116
6	Antigen-specific targeting of CD28-mediated T cell co-stimulation using chimeric single-chain antibody variable fragment-CD28 receptors. European Journal of Immunology, 1996, 26, 2304-2309.	1.6	115
7	The coming of age of engineered multivalent antibodies. Drug Discovery Today, 2015, 20, 588-594.	3.2	114
8	Immune Regulation by Pericytes: Modulating Innate and Adaptive Immunity. Frontiers in Immunology, 2016, 7, 480.	2.2	108
9	Tumor Immunotherapy Using Gene-Modified Human Mesenchymal Stem Cells Loaded into Synthetic Extracellular Matrix Scaffolds. Stem Cells, 2009, 27, 753-760.	1.4	89
10	Antibodies and gene therapy: teaching old â€˜magic bulletsâ€™ new tricks. Trends in Immunology, 2004, 25, 85-91.	2.9	87
11	Cells as Vehicles for Cancer Gene Therapy: The Missing Link Between Targeted Vectors and Systemic Delivery?. Human Gene Therapy, 2002, 13, 1263-1280.	1.4	79
12	Long-term in vivo imaging of human angiogenesis: Critical role of bone marrow-derived mesenchymal stem cells for the generation of durable blood vessels. Microvascular Research, 2008, 75, 308-314.	1.1	77
13	Inhibition of tumor growth in vivo by in situ secretion of bispecific anti-CEA Ã— anti-CD3 diabodies from lentivirally transduced human lymphocytes. Cancer Gene Therapy, 2007, 14, 380-388.	2.2	60
14	Bispecific Immunomodulatory Antibodies for Cancer Immunotherapy. Clinical Cancer Research, 2021, 27, 5457-5464.	3.2	59
15	Antibody engineering: facing new challenges in cancer therapy. Acta Pharmacologica Sinica, 2005, 26, 641-648.	2.8	56
16	In Vivo Tumor Targeting and Imaging with Engineered Trivalent Antibody Fragments Containing Collagen-Derived Sequences. PLoS ONE, 2009, 4, e5381.	1.1	56
17	ATTACK, a novel bispecific T cell-recruiting antibody with trivalent EGFR binding and monovalent CD3 binding for cancer immunotherapy. OncoImmunology, 2018, 7, e1377874.	2.1	56
18	Induction of Human T Lymphocyte Cytotoxicity and Inhibition of Tumor Growth by Tumor-Specific Diabody-Based Molecules Secreted from Gene-Modified Bystander Cells. Journal of Immunology, 2003, 171, 1070-1077.	0.4	55

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19	The correlation between immune subtypes and consensus molecular subtypes in colorectal cancer identifies novel tumour microenvironment profiles, with prognostic and therapeutic implications. European Journal of Cancer, 2019, 123, 118-129.	1.3	50
20	Single-chain antibody-based gene therapy: inhibition of tumor growth by in situ production of phage-derived human antibody fragments blocking functionally active sites of cell-associated matrices. Gene Therapy, 2002, 9, 1049-1053.	2.3	48
21	The Multicompartmental p32/gClqR as a New Target for Antibody-based Tumor Targeting Strategies. Journal of Biological Chemistry, 2011, 286, 5197-5203.	1.6	40
22	Delay in resumption of the activity of tetracycline-regulatable promoter following removal of tetracycline analogues. Gene Therapy, 1997, 4, 993-997.	2.3	37
23	Selection of functional human antibodies from retroviral display libraries. Nucleic Acids Research, 2005, 33, e35-e35.	6.5	34
24	The axonal repellent Slit2 inhibits pericyte migration: Potential implications in angiogenesis. Experimental Cell Research, 2012, 318, 371-378.	1.2	34
25	The Efficacy Versus Toxicity Profile of Combination Virotherapy and TLR Immunotherapy Highlights the Danger of Administering TLR Agonists to Oncolytic Virus-treated Mice. Molecular Therapy, 2013, 21, 348-357.	3.7	33
26	Chronic gene delivery of interferon-inducible protein 10 through replication-competent retrovirus vectors suppresses tumor growth. Cancer Gene Therapy, 2005, 12, 900-912.	2.2	32
27	Differential transplantability of human endothelial cells in colorectal cancer and renal cell carcinoma primary xenografts. Laboratory Investigation, 2009, 89, 91-97.	1.7	32
28	T Cell-Redirecting Strategies to â€˜STAbâ€™ Tumors: Beyond CARs and Bispecific Antibodies. Trends in Immunology, 2019, 40, 243-257.	2.9	32
29	Genetic Approaches for Antigen-Selective Cell Therapy. Current Gene Therapy, 2001, 1, 385-397.	0.9	31
30	Development of a Computer-Assisted High-Throughput Screening Platform for Anti-angiogenic Testing. Microvascular Research, 2002, 63, 335-339.	1.1	30
31	Tumor antigenâ€“specific induction of transcriptionally targeted retroviral vectors from chimeric immune receptorâ€"modified T cells. Nature Biotechnology, 2002, 20, 256-263.	9.4	30
32	Enhanced antiangiogenic therapy with antibody-collagen XVIII NC1 domain fusion proteins engineered to exploit matrix remodeling events. International Journal of Cancer, 2006, 119, 455-462.	2.3	30
33	Generation and characterization of monospecific and bispecific hexavalent trimerbodies. MAbs, 2013, 5, 70-79.	2.6	30
34	CARbodies: Human Antibodies Against Cell Surface Tumor Antigens Selected From Repertoires Displayed on T Cell Chimeric Antigen Receptors. Molecular Therapy - Nucleic Acids, 2013, 2, e93.	2.3	30
35	Functional comparison of single-chain and two-chain anti-CD3-based bispecific antibodies in gene immunotherapy applications. OncoImmunology, 2014, 3, e28810.	2.1	30
36	Selection strategies for anticancer antibody discovery: searching off the beaten path. Trends in Biotechnology, 2015, 33, 292-301.	4.9	29

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37	Programmable half-life and anti-tumour effects of bispecific T-cell engager-albumin fusions with tuned FcRn affinity. Communications Biology, 2021, 4, 310.	2.0	29
38	Generation and characterization of recombinant human antibodies specific for native laminin epitopes: potential application in cancer therapy. Cancer Immunology, Immunotherapy, 2001, 50, 557-565.	2.0	28
39	Improved stability of multivalent antibodies containing the human collagen XV trimerization domain. MAbs, 2012, 4, 226-232.	2.6	27
40	Functional improvement of antibody fragments using a novel phage coat protein III fusion system. Biochemical and Biophysical Research Communications, 2002, 298, 566-573.	1.0	26
41	Proteasome activator complex PA28 identified as an accessible target in prostate cancer by in vivo selection of human antibodies. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13791-13796.	3.3	26
42	Intramolecular trimerization, a novel strategy for making multispecific antibodies with controlled orientation of the antigen binding domains. Scientific Reports, 2016, 6, 28643.	1.6	26
43	Factory neovessels: engineered human blood vessels secreting therapeutic proteins as a new drug delivery system. Gene Therapy, 2010, 17, 745-751.	2.3	25
44	A novel Carcinoembryonic Antigen (CEA)-Targeted Trimeric Immunotoxin shows significantly enhanced Antitumor Activity in Human Colorectal Cancer Xenografts. Scientific Reports, 2019, 9, 11680.	1.6	25
45	Understanding the Spatial Topology of Artificial Immunological Synapses Assembled in T Cell-Redirecting Strategies: A Major Issue in Cancer Immunotherapy. Frontiers in Cell and Developmental Biology, 2019, 7, 370.	1.8	25
46	P32-specific CAR T cells with dual antitumor and antiangiogenic therapeutic potential in gliomas. Nature Communications, 2021, 12, 3615.	5.8	25
47	Microencapsulation of therapeutic bispecific antibodies producing cells: immunotherapeutic organoids for cancer management. Journal of Drug Targeting, 2015, 23, 170-179.	2.1	24
48	A novel cell binding site in the coiled-coil domain of laminin involved in capillary morphogenesis. EMBO Journal, 2003, 22, 1508-1517.	3.5	23
49	Modulation of the p38 MAPK (mitogen-activated protein kinase) pathway through Bcr/Abl: implications in the cellular response to Ara-C. Biochemical Journal, 2005, 387, 231-238.	1.7	22
50	Role of nucleotideâ€binding oligomerization domain 1 (<scp>NOD</scp>1) in pericyteâ€mediated vascular inflammation. Journal of Cellular and Molecular Medicine, 2016, 20, 980-986.	1.6	22
51	The extracellular matrix: a new turn-of-the-screw for anti-angiogenic strategies. Trends in Molecular Medicine, 2003, 9, 256-262.	3.5	21
52	Gene expression profiling identifies EPHB4 as a potential predictive biomarker in colorectal cancer patients treated with bevacizumab. Medical Oncology, 2013, 30, 572.	1.2	21
53	Antibody Gene Therapy: Getting Closer to Clinical Application?. Current Gene Therapy, 2013, 13, 282-290.	0.9	21
54	Immuno-PET Imaging and Pharmacokinetics of an Anti-CEA scFv-based Trimerbody and Its Monomeric Counterpart in Human Gastric Carcinoma-Bearing Mice. Molecular Pharmaceutics, 2019, 16, 1025-1035.	2.3	21

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55	Trispecific T-cell engagers for dual tumor-targeting of colorectal cancer. OncoImmunology, 2022, 11, 2034355.	2.1	21
56	Efficient Discrimination between Different Densities of Target Antigen by Tetracycline-Regulatable T Bodies. Human Gene Therapy, 1999, 10, 559-563.	1.4	20
57	Bispecific light T-cell engagers for gene-based immunotherapy of epidermal growth factor receptor (EGFR)-positive malignancies. Cancer Immunology, Immunotherapy, 2018, 67, 1251-1260.	2.0	20
58	Non-hematopoietic stem cells as factories for in vivo therapeutic protein production. Gene Therapy, 2012, 19, 1-7.	2.3	19
59	Carcinoembryonic Antigen (CEA)-Specific 4-1BB-Costimulation Induced by CEA-Targeted 4-1BB-Agonistic Trimerbodies. Frontiers in Immunology, 2019, 10, 1791.	2.2	19
60	Generation of non-permissive basement membranes by anti-laminin antibody fragments produced by matrix-embedded gene-modified cells. Cancer Immunology, Immunotherapy, 2003, 52, 643-647.	2.0	18
61	Efficacy and toxicity management of CAR-T-cell immunotherapy: a matter of responsiveness control or tumour-specificity?. Biochemical Society Transactions, 2016, 44, 406-411.	1.6	18
62	TGFâ€Î²â€induced IGFBPâ€3 is a key paracrine factor from activated pericytes that promotes colorectal cancer cell migration and invasion. Molecular Oncology, 2020, 14, 2609-2628.	2.1	18
63	Lymphocyte Display: A Novel Antibody Selection Platform Based on T Cell Activation. PLoS ONE, 2009, 4, e7174.	1.1	16
64	Perforin gene variant A91V in young patients with severe COVID-19.. Haematologica, 2020, 105, 2844-2846.	1.7	16
65	An Fc-free EGFR-specific 4-1BB-agonistic Trimerbody Displays Broad Antitumor Activity in Humanized Murine Cancer Models without Toxicity. Clinical Cancer Research, 2021, 27, 3167-3177.	3.2	16
66	Enhancement of DNA vaccine potency through linkage of antigen to filamentous bacteriophage coat protein III domain I. Immunology, 2006, 117, 502-506.	2.0	15
67	Engineering human cells for in vivo secretion of antibody and non-antibody therapeutic proteins. Current Opinion in Biotechnology, 2011, 22, 924-930.	3.3	15
68	Basement Membrane-Rich Organoids with Functional Human Blood Vessels Are Permissive Niches for Human Breast Cancer Metastasis. PLoS ONE, 2013, 8, e72957.	1.1	15
69	Balanced secretion of anti-CEA Ã— anti-CD3 diabody chains using the 2A self-cleaving peptide maximizes diabody assembly and tumor-specific cytotoxicity. Gene Therapy, 2017, 24, 208-214.	2.3	14
70	Engineering Immune Cells for in vivo Secretion of Tumor-Specific T Cell-Redirecting Bispecific Antibodies. Frontiers in Immunology, 2020, 11, 1792.	2.2	14
71	Autocrine costimulation: Tumor-specific CD28-mediated costimulation of T cells by in situ production of a bifunctional B7â€"anti-CEA diabody fusion protein. Cancer Gene Therapy, 2002, 9, 275-281.	2.2	12
72	Efficient production of single-chain fragment variable-based N-terminal trimerbodies in Pichia pastoris. Microbial Cell Factories, 2014, 13, 116.	1.9	12

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73	Synthetic TILs: Engineered Tumor-Infiltrating Lymphocytes With Improved Therapeutic Potential. Frontiers in Oncology, 2020, 10, 593848.	1.3	12
74	Overcoming CAR-Mediated CD19 Downmodulation and Leukemia Relapse with T Lymphocytes Secreting Anti-CD19 T-cell Engagers. Cancer Immunology Research, 2022, 10, 498-511.	1.6	12
75	Pharmacologic suppression of target cell recognition by engineered T cells expressing chimeric T-cell receptors. Cancer Gene Therapy, 2000, 7, 526-529.	2.2	10
76	Adenovirus E1a protein enhances the cytotoxic effects of the herpes thymidine kinase-ganciclovir system. Cancer Gene Therapy, 2003, 10, 152-160.	2.2	10
77	Antibody Engineering, Virus Retargeting and Cellular Immunotherapy: One Ring to Rule Them All?. Current Gene Therapy, 2005, 5, 63-70.	0.9	10
78	Engineered human tumor xenografts with functional human vascular networks. Microvascular Research, 2011, 81, 18-25.	1.1	9
79	Immunotherapeutic organoids. Biomatter, 2013, 3, e23897.	2.6	9
80	Virotherapy, gene transfer and immunostimulatory monoclonal antibodies. OncoImmunology, 2012, 1, 1344-1354.	2.1	8
81	The Heterotrimeric Laminin Coiled-Coil Domain Exerts Anti-Adhesive Effects and Induces a Pro-Invasive Phenotype. PLoS ONE, 2012, 7, e39097.	1.1	8
82	Engineered mRNA and the Rise of Next-Generation Antibodies. Antibodies, 2021, 10, 37.	1.2	8
83	Replicating retroviral vectors mediating continuous production and secretion of therapeutic gene products from cancer cells. Cancer Gene Therapy, 2005, 12, 464-474.	2.2	7
84	Synapse topology and downmodulation events determine the functional outcome of anti-CD19 T cell-redirecting strategies. OncoImmunology, 2022, 11, 2054106.	2.1	7
85	Antibody-based antiangiogenic cancer therapy. Expert Opinion on Therapeutic Targets, 2005, 9, 1235-1245.	1.5	6
86	The therapeutic potential of engineered human neovessels for cell-based gene therapy. Expert Opinion on Biological Therapy, 2011, 11, 67-76.	1.4	5
87	Case Report: An EGFR-Targeted 4-1BB-agonistic Trimerbody Does Not Induce Hepatotoxicity in Transgenic Mice With Liver Expression of Human EGFR. Frontiers in Immunology, 2020, 11, 614363.	2.2	5
88	Establishment of an immortalized PARP-1â^'/â^'murine endothelial cell line: A new tool to study PARP-1 mediated endothelial cell dysfunction. Journal of Cellular Biochemistry, 2005, 94, 1163-1174.	1.2	3
89	In vivo selection of tumor-specific antibodies. Oncotarget, 2013, 4, 1547-1547.	0.8	3
90	4-1BB-mediated cancer immunotherapy: â€˜mission impossibleâ€™ for non-engineered IgGs?. Precision Cancer Medicine, 0, 2, 1-1.	1.8	3

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91	Bacterial secretion of soluble and functional trivalent scFv-based N-terminal trimerbodies. AMB Express, 2015, 5, 137.	1.4	2
92	Isolation of Tumor-Derived Immunoglobulin-Idiotype from Peripheral Blood Mononuclear Cells in a B-Cell Lymphoma Patient with Minimal Disease. Journal of Immunotherapy, 1995, 17, 194-198.	1.2	1
93	The multicompartmental p32/gClqR as a new target for antibody-based tumor targeting strategies.. Journal of Biological Chemistry, 2011, 286, 22706.	1.6	1
94	In Vivo Secretion of Bispecific Antibodies Recruiting Lymphocytic Effector Cells. Antibodies, 2013, 2, 415-425.	1.2	1
95	Functionally fused antibodiesâ€"A novel adjuvant fusion system. Journal of Immunological Methods, 2008, 339, 220-227.	0.6	0
96	Comment on â€œProduction of multivalent protein binders using a selfâ€trimerization collagenâ€like peptide scaffoldâ€. FASEB Journal, 2008, 22, 3417-3417.	0.2	0
97	New trends in immunotherapy. Inmunologia (Barcelona, Spain: 1987), 2011, 30, 128-134.	0.1	0
98	Dr. Gregory Winter y Dr. Richard A. Lerner, Premios PrÃncipe de Asturias de InvestigaciÃ³n CientÃfica y TÃ©cnica 2012. Inmunologia (Barcelona, Spain: 1987), 2012, 31, 127-134.	0.1	0
99	CientÃficos espaÃ±oles con los Dres. Greg Winter y Richard A. Lerner, premios PrÃncipe de Asturias en InvestigaciÃ³n CientÃfica y TÃ©cnica 2012. Inmunologia (Barcelona, Spain: 1987), 2013, 32, 70-74.	0.1	0
100	In vivo secretion of anti-CD3 Ã— anti-tumor bispecific antibodies by gene-modified cells: over a decade of T-cell engagement. Molecular Therapy, 2015, 23, 612-613.	3.7	0
101	Applications of trimerbodies in cancer immunotherapy. International Review of Cell and Molecular Biology, 2022, , 71-87.	1.6	0