Richard Lerner

List of Publications by Year
in descending order

99 papers	6,984 citations	81839 39 h-index	60583 81 g-index
107 all docs	107 docs citations	107 times ranked	7382 citing authors

#	Article	IF	Citations
1	Neutralizing Antibodies to SARSâ€CoVâ€2 Selected from a Human Antibody Library Constructed Decades Ago. Advanced Science, 2022, 9, e2102181.	5.6	14
2	Metal-Catalyzed One-Pot On-DNA Syntheses of Diarylmethane and Thioether Derivatives. ACS Catalysis, 2022, 12, 1639-1649.	5.5	20
3	gemâ€Difluoromethylene Alkyneâ€Enabled Diverse Câ^'H Functionalization and Application to the onâ€DNA Synthesis of Difluorinated Isocoumarins. Angewandte Chemie - International Edition, 2021, 60, 1959-1966.	7.2	55
4	gemâ€Difluoromethylene Alkyneâ€Enabled Diverse Câ^'H Functionalization and Application to the onâ€DNA Synthesis of Difluorinated Isocoumarins. Angewandte Chemie, 2021, 133, 1987-1994.	1.6	8
5	Antibody Libraries as Tools to Discover Functional Antibodies and Receptor Pleiotropism. International Journal of Molecular Sciences, 2021, 22, 4123.	1.8	8
6	DNAâ€Encoded Libraries: Hydrazide as a Pluripotent Precursor for Onâ€DNA Synthesis of Various Azole Derivatives. Chemistry - A European Journal, 2021, 27, 8214-8220.	1.7	8
7	Stereo- and regiodefined DNA-encoded chemical libraries enable efficient tumour-targeting applications. Nature Chemistry, 2021, 13, 540-548.	6.6	42
8	Selection of a picomolar antibody that targets CXCR2-mediated neutrophil activation and alleviates EAE symptoms. Nature Communications, 2021, 12, 2547.	5.8	11
9	A new immunochemical strategy for triple-negative breast cancer therapy. Scientific Reports, 2021, 11, 14875.	1.6	6
10	Avidityâ€Based Selection of Tissueâ€Specific CARâ€T Cells from a Combinatorial Cellular Library of CARs. Advanced Science, 2021, 8, 2003091.	5.6	8
11	Antigenâ€Specific Stimulation and Expansion of CARâ€T Cells Using Membrane Vesicles as Target Cell Surrogates. Small, 2021, 17, e2102643.	5.2	17
12	Immunity against cancer cells may promote their proliferation and metastasis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 426-431.	3.3	11
13	InnenrÃ¼cktitelbild: A Chemistry for Incorporation of Selenium into DNAâ€Encoded Libraries (Angew.) Tj ETQq1 1 0.784314 rgBT /Ov	1.6	0
14	A potent antagonist antibody targeting connexin hemichannels alleviates Clouston syndrome symptoms in mutant mice. EBioMedicine, 2020, 57, 102825.	2.7	20
15	Multiscale computation delivers organophosphorus reactivity and stereoselectivity to immunoglobulin scavengers. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22841-22848.	3.3	13
16	A DNA-encoded library for the identification of natural product binders that modulate poly (ADP-ribose) polymerase 1, a validated anti-cancer target. Biochemical and Biophysical Research Communications, 2020, 533, 241-248.	1.0	11
17	A Chemistry for Incorporation of Selenium into DNAâ€Encoded Libraries. Angewandte Chemie, 2020, 132, 13375-13382.	1.6	13
18	Inhibitory antibodies identify unique sites of therapeutic vulnerability in rhinovirus and other enteroviruses. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13499-13508.	3.3	7

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19	Studies on the mechanism of general anesthesia. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13757-13766.	3.3	140
20	Different genetic barriers for resistance to HA stem antibodies in influenza H3 and H1 viruses. Science, 2020, 368, 1335-1340.	6.0	51
21	Selection of a Full Agonist Combinatorial Antibody that Rescues Leptin Deficiency In Vivo. Advanced Science, 2020, 7, 2000818.	5.6	8
22	Selection of Small Molecules that Bind to and Activate the Insulin Receptor from a DNA-Encoded Library of Natural Products. IScience, 2020, 23, 101197.	1.9	34
23	Agonist Antibody Converts Stem Cells into Migrating Brown Adipocyte-Like Cells in Heart. Cells, 2020, 9, 256.	1.8	4
24	A Chemistry for Incorporation of Selenium into DNAâ€Encoded Libraries. Angewandte Chemie - International Edition, 2020, 59, 13273-13280.	7.2	50
25	Reflections on DNA-encoded chemical libraries. Biochemical and Biophysical Research Communications, 2020, 527, 757-759.	1.0	6
26	Reply to van Swinderen and Hines: Drosophila model establishes the lipid membrane as a target of anesthetics. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24629-24629.	3.3	1
27	A cellâ€“cell interaction format for selection of high-affinity antibodies to membrane proteins. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14971-14978.	3.3	35
28	DNAâ€Encoded Libraries: Aryl Fluorosulfonates as Versatile Electrophiles Enabling Facile Onâ€DNA Suzuki, Sonogashira, and Buchwald Reactions. Advanced Science, 2019, 6, 1901551.	5.6	84
29	Synthesis of N-Acyl Sulfamates from Fluorosulfonates and Potassium Trimethylsilyloxyl Imidates. Journal of Organic Chemistry, 2019, 84, 15380-15388.	1.7	10
30	Phenotypic selection with an intrabody library reveals an anti-apoptotic function of PKM2 requiring Mitofusin-1. PLoS Biology, 2019, 17, e2004413.	2.6	14
31	Functionalityâ€Independent DNA Encoding of Complex Natural Products. Angewandte Chemie - International Edition, 2019, 58, 9254-9261.	7.2	54
32	Functionalityâ€Independent DNA Encoding of Complex Natural Products. Angewandte Chemie, 2019, 131, 9355-9362.	1.6	18
33	An agonist antibody prefers relapsed AML for induction of cells that kill each other. Scientific Reports, 2019, 9, 3494.	1.6	0
34	DNA-Encoded Chemical Libraries: A Selection System Based on Endowing Organic Compounds with Amplifiable Information. Annual Review of Biochemistry, 2018, 87, 479-502.	5.0	294
35	Migration-based selections of antibodies that convert bone marrow into trafficking microglia-like cells that reduce brain amyloid Î². Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E372-E381.	3.3	18
36	A complex epistatic network limits the mutational reversibility in the influenza hemagglutinin receptor-binding site. Nature Communications, 2018, 9, 1264.	5.8	58

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37	Autocrine-based selection of ligands for personalized CAR-T therapy of lymphoma. Science Advances, 2018, 4, eaau4580.	4.7	19
38	Selection of an ASIC1a-blocking combinatorial antibody that protects cells from ischemic death. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7469-E7477.	3.3	48
39	Fully human agonist antibodies to TrkB using autocrine cell-based selection from a combinatorial antibody library. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7023-E7032.	3.3	33
40	Antibody selection using clonal cocultivation of Escherichia coli and eukaryotic cells in miniecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6145-E6151.	3.3	9
41	DNAâ€kodierte Verbindungsbibliotheken als Open Source: ein leistungsfÃhiger Weg zu neuenâ€…Wirkstoffen. Angewandte Chemie, 2017, 129, 1184-1185.	1.6	23
42	DNAâ€Encoded Compound Libraries as Open Source: Aâ€…Powerful Pathway to New Drugs. Angewandte Chemie - International Edition, 2017, 56, 1164-1165.	7.2	102
43	A Proximity-Based Assay for Identification of Ligand and Membrane Protein Interaction in Living Cells. Methods in Molecular Biology, 2017, 1575, 215-222.	0.4	0
44	Immunochemical engineering of cell surfaces to generate virus resistance. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4655-4660.	3.3	6
45	In vitro evolution of an influenza broadly neutralizing antibody is modulated by hemagglutinin receptor specificity. Nature Communications, 2017, 8, 15371.	5.8	55
46	Diversity of Functionally Permissive Sequences in the Receptor-Binding Site of Influenza Hemagglutinin. Cell Host and Microbe, 2017, 21, 742-753.e8.	5.1	59
47	Antibody 27F3 Broadly Targets Influenza A Group 1 and 2 Hemagglutinins through a Further Variation in VH1-69 Antibody Orientation on the HA Stem. Cell Reports, 2017, 20, 2935-2943.	2.9	103
48	Replacing reprogramming factors with antibodies selected from combinatorial antibody libraries. Nature Biotechnology, 2017, 35, 960-968.	9.4	34
49	Interferon-Î³ is a master checkpoint regulator of cytokine-induced differentiation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6867-E6874.	3.3	40
50	Design and Characterization of a Human Monoclonal Antibody that Modulates Mutant Connexin 26 Hemichannels Implicated in Deafness and Skin Disorders. Frontiers in Molecular Neuroscience, 2017, 10, 298.	1.4	31
51	Titelbild: Autocrineâ€Based Selection of Drugs That Target Ion Channels from Combinatorial Venom Peptide Libraries (Angew. Chem. 32/2016). Angewandte Chemie, 2016, 128, 9245-9245.	1.6	0
52	Autocrineâ€Based Selection of Drugs That Target Ion Channels from Combinatorial Venom Peptide Libraries. Angewandte Chemie - International Edition, 2016, 55, 9306-9310.	7.2	14
53	Combinatorial antibody libraries: new advances, new immunological insights. Nature Reviews Immunology, 2016, 16, 498-508.	10.6	90
54	Robotic QM/MM-driven maturation of antibody combining sites. Science Advances, 2016, 2, e1501695.	4.7	15

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55	Autocrineâ€Based Selection of Drugs That Target Ion Channels from Combinatorial Venom Peptide Libraries. Angewandte Chemie, 2016, 128, 9452-9456.	1.6	1
56	Activating pleiotropic receptors to kill cancer cells. Cell Cycle, 2016, 15, 158-159.	1.3	2
57	An agonist antibody that blocks autoimmunity by inducing antiâ€inflammatory macrophages. FASEB Journal, 2016, 30, 738-747.	0.2	13
58	Antibodies from combinatorial libraries use functional receptor pleiotropism to regulate cell fates. Quarterly Reviews of Biophysics, 2015, 48, 389-394.	2.4	16
59	Autocrine selection of a GLP-1R G-protein biased agonist with potent antidiabetic effects. Nature Communications, 2015, 6, 8918.	5.8	124
60	Selection of multiple agonist antibodies from intracellular combinatorial libraries reveals that cellular receptors are functionally pleiotropic. Current Opinion in Chemical Biology, 2015, 26, 1-7.	2.8	18
61	Regulation of NKT cell-mediated immune responses to tumours and liver inflammation by mitochondrial PGAM5-Drp1 signalling. Nature Communications, 2015, 6, 8371.	5.8	114
62	Agonist antibody that induces human malignant cells to kill one another. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6158-E6165.	3.3	16
63	A General Method for Insertion of Functional Proteins within Proteins via Combinatorial Selection of Permissive Junctions. Chemistry and Biology, 2015, 22, 1134-1143.	6.2	9
64	Prevention of Cell Death by Antibodies Selected from Intracellular Combinatorial Libraries. Chemistry and Biology, 2014, 21, 274-283.	6.2	35
65	A Structurally Distinct Human Mycoplasma Protein that Generically Blocks Antigen-Antibody Union. Science, 2014, 343, 656-661.	6.0	85
66	A proximity based general method for identification of ligand and receptor interactions in living cells. Biochemical and Biophysical Research Communications, 2014, 454, 251-255.	1.0	13
67	REGULATING CELLULAR LIFE DEATH AND DEVELOPMENT USING INTRACELLULAR COMBINATORIAL ANTIBODY LIBRARIES. , 2014, , .		0
68	Selecting Agonists from Single Cells Infected with Combinatorial Antibody Libraries. Chemistry and Biology, 2013, 20, 734-741.	6.2	46
69	Converting stem cells to dendritic cells by agonist antibodies from unbiased morphogenic selections. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14966-14971.	3.3	34
70	Autocrine signaling based selection of combinatorial antibodies that transdifferentiate human stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8099-8104.	3.3	58
71	Selection of antibodies that regulate phenotype from intracellular combinatorial antibody libraries. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15728-15733.	3.3	63
72	Cross-neutralization of influenza A viruses mediated by a single antibody loop. Nature, 2012, 489, 526-532.	13.7	434

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73	Rare antibodies from combinatorial libraries suggests an S.O.S. component of the human immunological repertoire. Molecular BioSystems, 2011, 7, 1004.	2.9	62
74	Manufacturing Immunity to Disease in a Test Tube: The Magic Bullet Realized. Angewandte Chemie - International Edition, 2006, 45, 8106-8125.	7.2	71
75	Combinatorial antibody libraries from cancer patients yield ligand-mimetic Arg-Gly-Asp-containing immunoglobulins that inhibit breast cancer metastasis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17210-17215.	3.3	37
76	Ozone in biology. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3013-3015.	3.3	55
77	Preparation of Stilbene-Tethered Nonnatural Nucleosides for Use with Blue-Fluorescent Antibodies. Journal of Organic Chemistry, 2001, 66, 1725-1732.	1.7	28
78	Mitotic Misregulation and Human Aging. Science, 2000, 287, 2486-2492.	6.0	561
79	Convergence of Catalytic Antibody and Terpene Cyclase Mechanisms: Polyene Cyclization Directed by Carbocation-Ï€ Interactions. Angewandte Chemie - International Edition, 1999, 38, 1743-1747.	7.2	45
80	Broadening the Aldolase Catalytic Antibody Repertoire by Combining Reactive Immunization and Transition State Theory: New Enantio- and Diastereoselectivities. Angewandte Chemie - International Edition, 1999, 38, 3738-3741.	7.2	109
81	A Catalytic Enantioselective Route to Hydroxy-Substituted Quaternary Carbon Centers:â€‰ Resolution of Tertiary Aldols with a Catalytic Antibody. Journal of the American Chemical Society, 1999, 121, 7283-7291.	6.6	101
82	Structural Basis for Antibody Catalysis of a Disfavored Ring Closure Reaction,. Biochemistry, 1999, 38, 7062-7074.	1.2	69
83	Enantioselective Aldol Cyclodehydrations Catalyzed by Antibody 38C2. Organic Letters, 1999, 1, 59-62.	2.4	86
84	Sets of Aldolase Antibodies with Antipodal Reactivities. Formal Synthesis of Epothilone E by Large-Scale Antibody-Catalyzed Resolution of Thiazole Aldol. Organic Letters, 1999, 1, 1623-1626.	2.4	42
85	Enantioselective Total Synthesis of Some Brevicomins Using Aldolase Antibody 38C2. Chemistry - A European Journal, 1998, 4, 881-885.	1.7	83
86	Catalytic Enantioselective Retro-Aldol Reactions: Kinetic Resolution ofÎ²-Hydroxyketones with Aldolase Antibodies. Angewandte Chemie - International Edition, 1998, 37, 2481-2484.	7.2	100
87	Cofactor-Induced Refinement of Catalytic Antibody Activity:Â A Metal-Specific Allosteric Effect. Journal of the American Chemical Society, 1998, 120, 2963-2964.	6.6	23
88	Aldolase Antibodies of Remarkable Scope. Journal of the American Chemical Society, 1998, 120, 2768-2779.	6.6	233
89	Catalytic Enantioselective Retro-Aldol Reactions: Kinetic Resolution of Î²-Hydroxyketones with Aldolase Antibodies. , 1998, 37, 2481.		1
90	Inhibition of Oleamide Hydrolase Catalyzed Hydrolysis of the Endogenous Sleep-Inducing Lipidcis-9-Octadecenamide. Journal of the American Chemical Society, 1996, 118, 5938-5945.	6.6	109

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91	Copying Nature's Mechanism for the Decarboxylation of Î²-Keto Acids into Catalytic Antibodies by Reactive Immunization. Journal of the American Chemical Society, 1996, 118, 11720-11724.	6.6	65
92	The First Decade of Antibody Catalysis: Perspective and Prospects. Israel Journal of Chemistry, 1996, 36, 113-119.	1.0	22
93	Cationic cyclopropanation by antibody catalysis. Nature, 1996, 379, 326-327.	13.7	60
94	Molecular characterization of an enzyme that degrades neuromodulatory fatty-acid amides. Nature, 1996, 384, 83-87.	13.7	1,933
95	AntikÃ¶rperâ€katalysierte Hydrolyse von PhosphorsÃuretriestern. Angewandte Chemie, 1995, 107, 2448-2450.	1.6	1
96	An Antibody-Catalyzed 1,2-Rearrangement of Carboní£¿Carbon Bonds. Angewandte Chemie International Edition in English, 1994, 33, 1607-1609.	4.4	23
97	AntikÃ¶rperkatalysierte, enantioselektive Synthese im Grammâ€MaÃŸstab. Angewandte Chemie, 1994, 106, 485-486.	1.6	10
98	Antibody Catalysis of Glycosidic Bond Hydrolysis. Angewandte Chemie International Edition in English, 1991, 30, 1711-1713.	4.4	59
99	Cellular and humoral immune responses to synthetic peptides deduced from the amino-acid sequences of Epstein-Barr virus-encoded proteins in EBV-transformed cells. International Journal of Cancer, 1987, 40, 455-460.	2.3	21