

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

83 papers	13,356 citations	39 h-index	91 g-index
91 ext. papers	19,123 ext. citations	22.9 avg, IF	7.12 L-index

#	Paper	IF	Citations
83	Programmable editing of a target base in genomic DNA without double-stranded DNA cleavage. <i>Nature</i> , <b>2016</b> , 533, 420-4	50.4	2264
82	Programmable base editing of A:T to G:C in genomic DNA without DNA cleavage. <i>Nature</i> , <b>2017</b> , 551, 464-471	50.4	1643
81	Search-and-replace genome editing without double-strand breaks or donor DNA. <i>Nature</i> , <b>2019</b> , 576, 149-157	51.7	1318
80	Ipilimumab versus placebo after radiotherapy in patients with metastatic castration-resistant prostate cancer that had progressed after docetaxel chemotherapy (CA184-043): a multicentre, randomised, double-blind, phase 3 trial. <i>Lancet Oncology</i> , <b>2014</b> , 15, 700-12	21.7	982
79	Evolved Cas9 variants with broad PAM compatibility and high DNA specificity. <i>Nature</i> , <b>2018</b> , 556, 57-63	50.4	836
78	CRISPR-Based Technologies for the Manipulation of Eukaryotic Genomes. <i>Cell</i> , <b>2017</b> , 168, 20-36	56.2	545
77	Methods for the directed evolution of proteins. <i>Nature Reviews Genetics</i> , <b>2015</b> , 16, 379-94	30.1	487
76	A Cancer Cell Program Promotes T Cell Exclusion and Resistance to Checkpoint Blockade. <i>Cell</i> , <b>2018</b> , 175, 984-997.e24	56.2	477
75	Genome editing with CRISPR-Cas nucleases, base editors, transposases and prime editors. <i>Nature Biotechnology</i> , <b>2020</b> , 38, 824-844	44.5	466
74	A system for the continuous directed evolution of biomolecules. <i>Nature</i> , <b>2011</b> , 472, 499-503	50.4	383
73	The long tail of oncogenic drivers in prostate cancer. <i>Nature Genetics</i> , <b>2018</b> , 50, 645-651	36.3	380
72	CRISPResso2 provides accurate and rapid genome editing sequence analysis. <i>Nature Biotechnology</i> , <b>2019</b> , 37, 224-226	44.5	326
71	Genomic correlates of response to immune checkpoint blockade in microsatellite-stable solid tumors. <i>Nature Genetics</i> , <b>2018</b> , 50, 1271-1281	36.3	249
70	Integrative molecular and clinical modeling of clinical outcomes to PD1 blockade in patients with metastatic melanoma. <i>Nature Medicine</i> , <b>2019</b> , 25, 1916-1927	50.5	227
69	Phage-assisted evolution of an adenine base editor with improved Cas domain compatibility and activity. <i>Nature Biotechnology</i> , <b>2020</b> , 38, 883-891	44.5	171
68	Clinical Validation of Chemotherapy Response Biomarker ERCC2 in Muscle-Invasive Urothelial Bladder Carcinoma. <i>JAMA Oncology</i> , <b>2016</b> , 2, 1094-6	13.4	134
67	Continuous evolution of <i>Bacillus thuringiensis</i> toxins overcomes insect resistance. <i>Nature</i> , <b>2016</b> , 533, 58-63	50.4	125

66	Continuous directed evolution of aminoacyl-tRNA synthetases. <i>Nature Chemical Biology</i> , <b>2017</b> , 13, 1253-1260	12.6	124
65	Continuous evolution of SpCas9 variants compatible with non-G PAMs. <i>Nature Biotechnology</i> , <b>2020</b> , 38, 471-481	44.5	120
64	Continuous evolution of base editors with expanded target compatibility and improved activity. <i>Nature Biotechnology</i> , <b>2019</b> , 37, 1070-1079	44.5	111
63	The impact of tumor profiling approaches and genomic data strategies for cancer precision medicine. <i>Genome Medicine</i> , <b>2016</b> , 8, 79	14.4	109
62	Development of potent in vivo mutagenesis plasmids with broad mutational spectra. <i>Nature Communications</i> , <b>2015</b> , 6, 8425	17.4	98
61	Negative selection and stringency modulation in phage-assisted continuous evolution. <i>Nature Chemical Biology</i> , <b>2014</b> , 10, 216-22	11.7	98
60	In vivo base editing rescues Hutchinson-Gilford progeria syndrome in mice. <i>Nature</i> , <b>2021</b> , 589, 608-614	50.4	92
59	Immunogenomic analyses associate immunological alterations with mismatch repair defects in prostate cancer. <i>Journal of Clinical Investigation</i> , <b>2018</b> , 128, 4441-4453	15.9	84
58	Continuous directed evolution of DNA-binding proteins to improve TALEN specificity. <i>Nature Methods</i> , <b>2015</b> , 12, 939-42	21.6	74
57	Experimental interrogation of the path dependence and stochasticity of protein evolution using phage-assisted continuous evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 9007-12	11.5	71
56	Precision Oncology: Who, How, What, When, and When Not?. <i>American Society of Clinical Oncology Educational Book / ASCO American Society of Clinical Oncology Meeting</i> , <b>2017</b> , 37, 160-169	7.1	66
55	A system for the continuous directed evolution of proteases rapidly reveals drug-resistance mutations. <i>Nature Communications</i> , <b>2014</b> , 5, 5352	17.4	64
54	Identification of cancer driver genes based on nucleotide context. <i>Nature Genetics</i> , <b>2020</b> , 52, 208-218	36.3	64
53	Mutational patterns in chemotherapy resistant muscle-invasive bladder cancer. <i>Nature Communications</i> , <b>2017</b> , 8, 2193	17.4	62
52	Helicase Domain Mutations Confer Nucleotide Excision Repair Deficiency and Drive Cisplatin Sensitivity in Muscle-Invasive Bladder Cancer. <i>Clinical Cancer Research</i> , <b>2019</b> , 25, 977-988	12.9	57
51	Evolution of sequence-defined highly functionalized nucleic acid polymers. <i>Nature Chemistry</i> , <b>2018</b> , 10, 420-427	17.6	54
50	Continuous directed evolution of proteins with improved soluble expression. <i>Nature Chemical Biology</i> , <b>2018</b> , 14, 972-980	11.7	52
49	Mechanisms of Resistance to Immune Checkpoint Blockade. <i>American Journal of Clinical Dermatology</i> , <b>2019</b> , 20, 41-54	7.1	51

48	Phage-assisted continuous evolution of proteases with altered substrate specificity. <i>Nature Communications</i> , <b>2017</b> , 8, 956	17.4	49
47	Enhanced prime editing systems by manipulating cellular determinants of editing outcomes. <i>Cell</i> , <b>2021</b> , 184, 5635-5652.e29	56.2	48
46	In vivo continuous directed evolution. <i>Current Opinion in Chemical Biology</i> , <b>2015</b> , 24, 1-10	9.7	45
45	Mitochondrial DAMPs Are Released During Cardiopulmonary Bypass Surgery and Are Associated With Postoperative Atrial Fibrillation. <i>Heart Lung and Circulation</i> , <b>2018</b> , 27, 122-129	1.8	43
44	Intrinsic Resistance to Immune Checkpoint Blockade in a Mismatch Repair-Deficient Colorectal Cancer. <i>Cancer Immunology Research</i> , <b>2019</b> , 7, 1230-1236	12.5	38
43	A programmable Cas9-serine recombinase fusion protein that operates on DNA sequences in mammalian cells. <i>Nucleic Acids Research</i> , <b>2016</b> , 44, 9758-9770	20.1	38
42	Phage-Assisted Evolution of Bacillus methanolicus Methanol Dehydrogenase 2. <i>ACS Synthetic Biology</i> , <b>2019</b> , 8, 796-806	5.7	37
41	Integrative Molecular Characterization of Resistance to Neoadjuvant Chemoradiation in Rectal Cancer. <i>Clinical Cancer Research</i> , <b>2019</b> , 25, 5561-5571	12.9	37
40	Engineered pegRNAs improve prime editing efficiency. <i>Nature Biotechnology</i> , <b>2021</b> ,	44.5	37
39	Active surveillance versus surgery for low risk prostate cancer: a clinical decision analysis. <i>Journal of Urology</i> , <b>2012</b> , 187, 1241-6	2.5	33
38	The developing toolkit of continuous directed evolution. <i>Nature Chemical Biology</i> , <b>2020</b> , 16, 610-619	11.7	28
37	Loss Confers Greater Sensitivity to ATR Inhibition Than PARP Inhibition in Prostate Cancer. <i>Cancer Research</i> , <b>2020</b> , 80, 2094-2100	10.1	28
36	Balloon Post-Dilation Following Implantation of a Self-Expanding Transcatheter Aortic Valve Bioprosthesis. <i>JACC: Cardiovascular Interventions</i> , <b>2017</b> , 10, 168-175	5	27
35	Harmonization of Tumor Mutational Burden Quantification and Association With Response to Immune Checkpoint Blockade in Non-Small-Cell Lung Cancer. <i>JCO Precision Oncology</i> , <b>2019</b> , 3,	3.6	27
34	Transcriptional mediators of treatment resistance in lethal prostate cancer. <i>Nature Medicine</i> , <b>2021</b> , 27, 426-433	50.5	25
33	Prime editing in mice reveals the essentiality of a single base in driving tissue-specific gene expression. <i>Genome Biology</i> , <b>2021</b> , 22, 83	18.3	24
32	Thiamine as an adjunctive therapy in cardiac surgery: a randomized, double-blind, placebo-controlled, phase II trial. <i>Critical Care</i> , <b>2016</b> , 20, 92	10.8	22
31	Mitochondrial Dysfunction in Atrial Tissue of Patients Developing Postoperative Atrial Fibrillation. <i>Annals of Thoracic Surgery</i> , <b>2017</b> , 104, 1547-1555	2.7	21

30	In vivo somatic cell base editing and prime editing. <i>Molecular Therapy</i> , <b>2021</b> , 29, 3107-3124	11.7	20
29	Programmable deletion, replacement, integration and inversion of large DNA sequences with twin prime editing. <i>Nature Biotechnology</i> , <b>2021</b> ,	44.5	18
28	Biologically informed deep neural network for prostate cancer discovery. <i>Nature</i> , <b>2021</b> , 598, 348-352	50.4	18
27	CREB5 Promotes Resistance to Androgen-Receptor Antagonists and Androgen Deprivation in Prostate Cancer. <i>Cell Reports</i> , <b>2019</b> , 29, 2355-2370.e6	10.6	17
26	Dynamic single-cell RNA sequencing identifies immunotherapy persister cells following PD-1 blockade. <i>Journal of Clinical Investigation</i> , <b>2021</b> , 131,	15.9	17
25	Inactivation of Impairs dsRNA Sensing and Confers Resistance to PD-1 Blockade. <i>Cancer Discovery</i> , <b>2020</b> , 10, 1296-1311	24.4	16
24	Side chain determinants of biopolymer function during selection and replication. <i>Nature Chemical Biology</i> , <b>2019</b> , 15, 419-426	11.7	15
23	Targeting the innate immunoreceptor RIG-I overcomes melanoma-intrinsic resistance to T cell immunotherapy. <i>Journal of Clinical Investigation</i> , <b>2020</b> , 130, 4266-4281	15.9	15
22	Phage-assisted continuous and non-continuous evolution. <i>Nature Protocols</i> , <b>2020</b> , 15, 4101-4127	18.8	11
21	Integrated molecular drivers coordinate biological and clinical states in melanoma. <i>Nature Genetics</i> , <b>2020</b> , 52, 1373-1383	36.3	11
20	Evolution of delayed resistance to immunotherapy in a melanoma responder. <i>Nature Medicine</i> , <b>2021</b> , 27, 985-992	50.5	11
19	High-resolution specificity profiling and off-target prediction for site-specific DNA recombinases. <i>Nature Communications</i> , <b>2019</b> , 10, 1937	17.4	10
18	Phage-assisted evolution of botulinum neurotoxin proteases with reprogrammed specificity. <i>Science</i> , <b>2021</b> , 371, 803-810	33.3	9
17	Toward Molecularly Driven Precision Medicine in Lung Adenocarcinoma. <i>Cancer Discovery</i> , <b>2017</b> , 7, 555-557	24.4	8
16	Genomic Resistance Patterns to Second-Generation Androgen Blockade in Paired Tumor Biopsies of Metastatic Castration-Resistant Prostate Cancer. <i>JCO Precision Oncology</i> , <b>2017</b> , 1,	3.6	8
15	Bone marrow biopsy in low-risk monoclonal gammopathy of undetermined significance reveals a novel smoldering multiple myeloma risk group. <i>American Journal of Hematology</i> , <b>2019</b> , 94, E146-E149	7.1	7
14	Identification of a Synthetic Lethal Relationship between Nucleotide Excision Repair Deficiency and Irofulven Sensitivity in Urothelial Cancer. <i>Clinical Cancer Research</i> , <b>2021</b> , 27, 2011-2022	12.9	6
13	Decreased PGC-1 Post-Cardiopulmonary Bypass Leads to Impaired Oxidative Stress in Diabetic Patients. <i>Annals of Thoracic Surgery</i> , <b>2019</b> , 107, 467-476	2.7	5

12	Integrating molecular profiles into clinical frameworks through the Molecular Oncology Almanac to prospectively guide precision oncology.. <i>Nature Cancer</i> , <b>2021</b> , 2, 1102-1112	15.4	5
11	Early Cellular Changes in the Ascending Aorta and Myocardium in a Swine Model of Metabolic Syndrome. <i>PLoS ONE</i> , <b>2016</b> , 11, e0146481	3.7	4
10	Disulfide-compatible phage-assisted continuous evolution in the periplasmic space. <i>Nature Communications</i> , <b>2021</b> , 12, 5959	17.4	3
9	Molecular correlates of response to eribulin and pembrolizumab in hormone receptor-positive metastatic breast cancer. <i>Nature Communications</i> , <b>2021</b> , 12, 5563	17.4	3
8	Severe Radiation Necrosis Refractory to Surgical Resection in Patients with Melanoma and Brain Metastases Managed with Ipilimumab/Nivolumab and Brain-Directed Stereotactic Radiation Therapy. <i>World Neurosurgery</i> , <b>2020</b> , 139, 226-231	2.1	1
7	Programmable large DNA deletion, replacement, integration, and inversion with twin prime editing and site-specific recombinases		1
6	Transcriptional mediators of treatment resistance in lethal prostate cancer		1
5	Future Directions in the Evaluation and Treatment of Precursor Plasma Cell Disorders. <i>American Society of Clinical Oncology Educational Book / ASCO American Society of Clinical Oncology Meeting</i> , <b>2016</b> , 35, e400-6	7.1	1
4	STAG2 regulates interferon signaling in melanoma via enhancer loop reprogramming.. <i>Nature Communications</i> , <b>2022</b> , 13, 1859	17.4	1
3	Reconstruction of evolving gene variants and fitness from short sequencing reads. <i>Nature Chemical Biology</i> , <b>2021</b> , 17, 1188-1198	11.7	0
2	Progression Risk-Based Classification of Asymptomatic Waldenström Macroglobulinemia. <i>Blood</i> , <b>2018</b> , 132, 150-150	2.2	
1	Whole Exome Sequencing and Targeted Sequencing Reveal the Heterogeneity of Genomic Evolution and Mutational Profile in Smoldering Multiple Myeloma. <i>Blood</i> , <b>2016</b> , 128, 237-237	2.2	