

Opportunities and obstacles for deep learning in biology

DOI: [10.1101/142760](https://doi.org/10.1101/142760)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Learning the High-Dimensional Immunogenomic Features That Predict Public and Private Antibody Repertoires. <i>Journal of Immunology</i> , 2017, 199, 2985-2997.	0.4	124
2	Precision Oncology: The Road Ahead. <i>Trends in Molecular Medicine</i> , 2017, 23, 874-898.	3.5	131
3	Precision Medicine: Functional Advancements. <i>Annual Review of Medicine</i> , 2018, 69, 1-18.	5.0	28
4	Assessing microscope image focus quality with deep learning. <i>BMC Bioinformatics</i> , 2018, 19, 77.	1.2	109
5	Deep Learning in Biomedical Data Science. <i>Annual Review of Biomedical Data Science</i> , 2018, 1, 181-205.	2.8	76
6	Machine Learning for Structured Clinical Data. <i>Intelligent Systems Reference Library</i> , 2018, , 35-51.	1.0	2
7	Deep Omics. <i>Proteomics</i> , 2018, 18, 1700319.	1.3	4
8	MODE: automated neural network model debugging via state differential analysis and input selection. , 2018, , .		121
9	Analysis Methods for Shotgun Metagenomics. <i>Computational Biology</i> , 2018, , 71-112.	0.1	1
10	Phenotypic Image Analysis Software Tools for Exploring and Understanding Big Image Data from Cell-Based Assays. <i>Cell Systems</i> , 2018, 6, 636-653.	2.9	74
11	Opportunities and challenges for quantum-assisted machine learning in near-term quantum computers. <i>Quantum Science and Technology</i> , 2018, 3, 030502.	2.6	121
12	Sci-Hub provides access to nearly all scholarly literature. <i>ELife</i> , 2018, 7, .	2.8	89
13	Computational Strategies for Dissecting the High-Dimensional Complexity of Adaptive Immune Repertoires. <i>Frontiers in Immunology</i> , 2018, 9, 224.	2.2	164
14	Phylogenetic convolutional neural networks in metagenomics. <i>BMC Bioinformatics</i> , 2018, 19, 49.	1.2	75
15	CellProfiler 3.0: Next-generation image processing for biology. <i>PLoS Biology</i> , 2018, 16, e2005970.	2.6	1,547
16	Cancer Drug Response Profile scan (CDRscan): A Deep Learning Model That Predicts Drug Effectiveness from Cancer Genomic Signature. <i>Scientific Reports</i> , 2018, 8, 8857.	1.6	176
17	Dedicated Bioinformatics Analysis Hardware. , 2019, , 1142-1150.		1
18	HetEnc: a deep learning predictive model for multi-type biological dataset. <i>BMC Genomics</i> , 2019, 20, 638.	1.2	4

#	ARTICLE	IF	CITATIONS
19	Open collaborative writing with Manubot. PLoS Computational Biology, 2019, 15, e1007128.	1.5	51
20	Breast cancer detection using deep convolutional neural networks and support vector machines. PeerJ, 2019, 7, e6201.	0.9	279
21	A guide to deep learning in healthcare. Nature Medicine, 2019, 25, 24-29.	15.2	1,906
22	A clinical text classification paradigm using weak supervision and deep representation. BMC Medical Informatics and Decision Making, 2019, 19, 1.	1.5	348
23	Deep Learning with Microfluidics for Biotechnology. Trends in Biotechnology, 2019, 37, 310-324.	4.9	160
24	Era of Intelligent Systems in Healthcare. Intelligent Systems Reference Library, 2020, , 1-55.	1.0	7
25	Artificial Intelligence: Emerging Applications in Biotechnology and Pharma. , 2020, , 399-417.		1
26	Towards fully automated third molar development staging in panoramic radiographs. International Journal of Legal Medicine, 2020, 134, 1831-1841.	1.2	35
27	High-Resolution Motor State Detection in Parkinson's Disease Using Convolutional Neural Networks. Scientific Reports, 2020, 10, 5860.	1.6	39
28	Brain Tumor Classification Using Deep Learning. Studies in Big Data, 2021, , 155-175.	0.8	13
29	Predicting elastic strain fields in defective microstructures using image colorization algorithms. Computational Materials Science, 2021, 186, 110068.	1.4	8
30	A multilayer multimodal detection and prediction model based on explainable artificial intelligence for Alzheimer's disease. Scientific Reports, 2021, 11, 2660.	1.6	125
31	Multiclass classification of metabolic conditions using fasting plasma levels of glucose and insulin. Health and Technology, 2021, 11, 953-962.	2.1	3
32	Machine learning based disease prediction from genotype data. Biological Chemistry, 2021, 402, 871-885.	1.2	7
34	Computational Analysis of Synthetic Planning: Past and Future. Chinese Journal of Chemistry, 2021, 39, 3127-3143.	2.6	8
35	Medical Image Segmentation Using Deep Neural Networks with Pre-trained Encoders. Advances in Intelligent Systems and Computing, 2020, , 39-52.	0.5	18
36	A Novel Approach to Classify Breast Cancer Tumors Using Deep Learning Approach and Resulting Most Accurate Magnification Factor. Studies in Computational Intelligence, 2020, , 185-201.	0.7	2
46	Predicting primary site of secondary liver cancer with a neural estimator of metastatic origin. Journal of Medical Imaging, 2020, 7, 1.	0.8	8

#	ARTICLE	IF	CITATIONS
47	Estimating biological age by hematological blood parameters. Ageing & Longevity, 2021, 2, 14-21.	0.1	0
55	Convolutional Neural Network-Based Automatic Brain Tumor Detection. Lecture Notes in Electrical Engineering, 2021, , 463-474.	0.3	3
56	Exploring synergies between plant metabolic modelling and machine learning. Computational and Structural Biotechnology Journal, 2022, 20, 1885-1900.	1.9	7
57	High-throughput proteomics: a methodological mini-review. Laboratory Investigation, 2022, 102, 1170-1181.	1.7	68
58	AI-Powered Drug Detection System Utilizing Bioactivity Prediction and Drug Release Tracking. Journal of Artificial Intelligence and Capsule Networks, 2022, 4, 263-273.	2.1	0
59	Prospects for future studies using deep imaging: analysis of individual Galactic cirrus filaments. Monthly Notices of the Royal Astronomical Society, 2023, 519, 4735-4752.	1.6	5
60	Deep Cervix Model Development from Heterogeneous and Partially Labeled Image Datasets. Lecture Notes in Networks and Systems, 2023, , 679-688.	0.5	1