Pierre Baldi

List of Publications by Year in Descending Order

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Version: 2024-04-27

277 papers	23,697 citations	75 h-index	151 g-index
303 ext. papers	27,924 ext. citations	8.2 avg, IF	7.29 L-index

#	Paper	IF	Citations
277	Quantum Mechanics and Machine Learning Synergies: Graph Attention Neural Networks to Predict Chemical Reactivity.. *Journal of Chemical Information and Modeling*, **2022**,	6.1	3
276	Atlas of exercise metabolism reveals time-dependent signatures of metabolic homeostasis.. *Cell Metabolism*, **2022**,	24.6	14
275	Deep Learning from Four Vectors **2022**, 59-83		
274	Hippocampal ensembles represent sequential relationships among an extended sequence of nonspatial events.. *Nature Communications*, **2022**, 13, 787	17.4	3
273	Deep Learning from Four Vectors **2022**, 59-83		
272	Real-time reconstruction of high energy, ultrafast laser pulses using deep learning.. *Scientific Reports*, **2022**, 12, 5299	4.9	0
271	Weakly Supervised Polyp Segmentation in Colonoscopy Images Using Deep Neural Networks. *Journal of Imaging*, **2022**, 8, 121	3.1	0
270	Deep Learning-Assisted Multiphoton Microscopy to Reduce Light Exposure and Expedite Imaging in Tissues With High and Low Light Sensitivity. *Translational Vision Science and Technology*, **2021**, 10, 30	3.3	2
269	Call for a Public Open Database of All Chemical Reactions. *Journal of Chemical Information and Modeling*, **2021**,	6.1	3
268	Learning to isolate muons. *Journal of High Energy Physics*, **2021**, 2021, 1	5.4	1
267	Transcriptome Profiling of Dysregulated GPCRs Reveals Overlapping Patterns across Psychiatric Disorders and Age-Disease Interactions. *Cells*, **2021**, 10,	7.9	3
266	Enforcing Analytic Constraints in Neural Networks Emulating Physical Systems. *Physical Review Letters*, **2021**, 126, 098302	7.4	37
265	Deep Learning in Science **2021**,		14
264	Assessing the Potential of Deep Learning for Emulating Cloud Superparameterization in Climate Models With Real-Geography Boundary Conditions. *Journal of Advances in Modeling Earth Systems*, **2021**, 13, e2020MS002385	7.1	6
263	Learning to identify electrons. *Physical Review D*, **2021**, 103,	4.9	2
262	Intergenerational trauma transmission is associated with brain metabotranscriptome remodeling and mitochondrial dysfunction. *Communications Biology*, **2021**, 4, 783	6.7	2
261	Patterns of cilia gene dysregulations in major psychiatric disorders. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, **2021**, 109, 110255	5.5	8

260	Large-scale analysis reveals spatiotemporal circadian patterns of cilia transcriptomes in the primate brain. *Journal of Neuroscience Research*, **2021**, 99, 2610-2624	4.4	2
259	Age-Related Neurometabolomic Signature of Mouse Brain. *ACS Chemical Neuroscience*, **2021**, 12, 2887-2902	3.7	1
258	Fold recognition by scoring protein maps using the congruence coefficient. *Bioinformatics*, **2021**, 37, 506-513	7.2	
257	Combining Deep Learning With Optical Coherence Tomography Imaging to Determine Scalp Hair and Follicle Counts. *Lasers in Surgery and Medicine*, **2021**, 53, 171-178	3.6	4
256	Sparse autoregressive models for scalable generation of sparse images in particle physics. *Physical Review D*, **2021**, 103,	4.9	7
255	Methyl Cation Affinities of Canonical Organic Functional Groups. *Journal of Organic Chemistry*, **2021** , 86, 3721-3729	4.2	2
254	SPLASH: Learnable activation functions for improving accuracy and adversarial robustness. *Neural Networks*, **2021**, 140, 1-12	9.1	7
253	An end-to-end CNN with attentional mechanism applied to raw EEG in a BCI classification task. *Journal of Neural Engineering*, **2021**, 18,	5	5
252	Detecting pulmonary Coccidioidomycosis with deep convolutional neural networks. *Machine Learning With Applications*, **2021**, 5, 100040	6.5	2
251	Integration of feeding behavior by the liver circadian clock reveals network dependency of metabolic rhythms. *Science Advances*, **2021**, 7, eabi7828	14.3	2
250	Dynamic Changes of Brain Cilia Transcriptomes across the Human Lifespan. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
249	A theory of capacity and sparse neural encoding. *Neural Networks*, **2021**, 143, 12-27	9.1	0
248	Development and validation of an interpretable neural network for prediction of postoperative in-hospital mortality. *Npj Digital Medicine*, **2021**, 4, 8	15.7	5
247	Protein profiles: Biases and protocols. *Computational and Structural Biotechnology Journal*, **2020**, 18, 2281-2289	6.8	2
246	FKBP10 Regulates Protein Translation to Sustain Lung Cancer Growth. *Cell Reports*, **2020**, 30, 3851-3863.e6	10.6	3
245	Training and Validation of Deep Neural Networks for the Prediction of 90-Day Post-Liver Transplant Mortality Using UNOS Registry Data. *Transplantation Proceedings*, **2020**, 52, 246-258	1.1	11
244	Development and validation of a deep neural network model to predict postoperative mortality, acute kidney injury, and reintubation using a single feature set. *Npj Digital Medicine*, **2020**, 3, 58	15.7	12
243	Classifying shoulder implants in X-ray images using deep learning. *Computational and Structural Biotechnology Journal*, **2020**, 18, 967-972	6.8	13

242	MiR-29 coordinates age-dependent plasticity brakes in the adult visual cortex. *EMBO Reports*, **2020**, 21, e50431	6.5	7
241	A Fortran-Keras Deep Learning Bridge for Scientific Computing. *Scientific Programming*, **2020**, 2020, 1-13	1.4	23
240	Sherpa: Robust hyperparameter optimization for machine learning. *SoftwareX*, **2020**, 12, 100591	2.7	35
239	The circadian dynamics of the hippocampal transcriptome and proteome is altered in experimental temporal lobe epilepsy. *Science Advances*, **2020**, 6,	14.3	24
238	Methyl Anion Affinities of the Canonical Organic Functional Groups. *Journal of Organic Chemistry*, **2020**, 85, 4096-4102	4.2	9
237	Reshaping circadian metabolism in the suprachiasmatic nucleus and prefrontal cortex by nutritional challenge. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 29904-29913	11.5	9
236	Metabolomic and transcriptomic signatures of prenatal excessive methionine support nature rather than nurture in schizophrenia pathogenesis. *Communications Biology*, **2020**, 3, 409	6.7	8
235	A non-pharmacological therapeutic approach in the gut triggers distal metabolic rewiring capable of ameliorating diet-induced dysfunctions encompassed by metabolic syndrome. *Scientific Reports*, **2020**, 10, 12915	4.9	2
234	Deep Learning Analysis of Vibrational Spectra of Bacterial Lysate for Rapid Antimicrobial Susceptibility Testing. *ACS Nano*, **2020**, 14, 15336-15348	16.7	28
233	Cocaine-mediated circadian reprogramming in the striatum through dopamine D2R and PPAR□ activation. *Nature Communications*, **2020**, 11, 4448	17.4	11
232	S-adenosyl-l-homocysteine hydrolase links methionine metabolism to the circadian clock and chromatin remodeling. *Science Advances*, **2020**, 6,	14.3	20
231	Structure, self-assembly, and properties of a truncated reflectin variant. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**,	11.5	4
230	Functional Conservation of LncRNA JPX Despite Sequence and Structural Divergence. *Journal of Molecular Biology*, **2020**, 432, 283-300	6.5	22
229	Bayesian Causality. *American Statistician*, **2020**, 74, 249-257	5	1
228	Learning in the machine: To share or not to share?. *Neural Networks*, **2020**, 126, 235-249	9.1	4
227	Improved energy reconstruction in NOvA with regression convolutional neural networks. *Physical Review D*, **2019**, 99,	4.9	11
226	Defining the Independence of the Liver Circadian Clock. *Cell*, **2019**, 177, 1448-1462.e14	56.2	116
225	Light Entrains Diurnal Changes in Insulin Sensitivity of Skeletal Muscle via Ventromedial Hypothalamic Neurons. *Cell Reports*, **2019**, 27, 2385-2398.e3	10.6	10

224	Gap Junction Channels of Innexins and Connexins: Relations and Computational Perspectives. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	11
223	Time of Exercise Specifies the Impact on Muscle Metabolic Pathways and Systemic Energy Homeostasis. *Cell Metabolism*, **2019**, 30, 92-110.e4	24.6	88
222	The capacity of feedforward neural networks. *Neural Networks*, **2019**, 116, 288-311	9.1	19
221	Hippocampal gene expression patterns linked to late-life physical activity oppose age and AD-related transcriptional decline. *Neurobiology of Aging*, **2019**, 78, 142-154	5.6	20
220	Population-wide analysis of differences in disease progression patterns in men and women. *Nature Communications*, **2019**, 10, 666	17.4	58
219	Deep Learning for Drug Discovery and Cancer Research: Automated Analysis of Vascularization Images. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, **2019**, 16, 1029-1035	3	28
218	Highly Accurate Machine Fault Diagnosis Using Deep Transfer Learning. *IEEE Transactions on Industrial Informatics*, **2019**, 15, 2446-2455	11.9	357
217	Mitochondrial Akt Signaling Modulated Reprogramming of Somatic Cells. *Scientific Reports*, **2019**, 9, 9919	4.9	12
216	Solving the Rubik's cube with deep reinforcement learning and search. *Nature Machine Intelligence*, **2019**, 1, 356-363	22.5	27
215	Local features determine Ty3 targeting frequency at RNA polymerase III transcription start sites. *Genome Research*, **2019**, 29, 1298-1309	9.7	6
214	An automated machine learning-based model predicts postoperative mortality using readily-extractable preoperative electronic health record data. *British Journal of Anaesthesia*, **2019**, 123, 877-886	5.4	20
213	Polynomial Threshold Functions, Hyperplane Arrangements, and Random Tensors. *SIAM Journal on Mathematics of Data Science*, **2019**, 1, 699-729	3.1	6
212	On neuronal capacity. *Journal of Statistical Mechanics: Theory and Experiment*, **2019**, 2019, 124012	1.9	
211	Machine learning of physiological waveforms and electronic health record data to predict, diagnose and treat haemodynamic instability in surgical patients: protocol for a retrospective study. *BMJ Open*, **2019**, 9, e031988	3	5
210	Distinct metabolic adaptation of liver circadian pathways to acute and chronic patterns of alcohol intake. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 25250-25259	11.5	17
209	Neural network gradient Hamiltonian Monte Carlo. *Computational Statistics*, **2019**, 34, 281-299	1	2
208	Learning in the Machine: Random Backpropagation and the Deep Learning Channel. *Artificial Intelligence*, **2018**, 260, 1-35	3.6	26
207	Inner and Outer Recursive Neural Networks for Chemoinformatics Applications. *Journal of Chemical Information and Modeling*, **2018**, 58, 207-211	6.1	10

206	Deep Learning in Biomedical Data Science. *Annual Review of Biomedical Data Science*, **2018**, 1, 181-205	5.6	40
205	Longitudinal Monitoring of Biofilm Formation via Robust Surface-Enhanced Raman Scattering Quantification of Pseudomonas aeruginosa-Produced Metabolites. *ACS Applied Materials & Interfaces*, **2018**, 10, 12364-12373	9.5	36
204	ClusterCAD: a computational platform for type I modular polyketide synthase design. *Nucleic Acids Research*, **2018**, 46, D509-D515	20.1	45
203	Deep-Learning Convolutional Neural Networks Accurately Classify Genetic Mutations in Gliomas. *American Journal of Neuroradiology*, **2018**, 39, 1201-1207	4.4	202
202	Epigenetic regulation of the circadian gene Per1 contributes to age-related changes in hippocampal memory. *Nature Communications*, **2018**, 9, 3323	17.4	59
201	CircadiOmics: circadian omic web portal. *Nucleic Acids Research*, **2018**, 46, W157-W162	20.1	25
200	Deep learning for chemical reaction prediction. *Molecular Systems Design and Engineering*, **2018**, 3, 442-452	4.6	92
199	The inner and outer approaches to the design of recursive neural architectures. *Data Mining and Knowledge Discovery*, **2018**, 32, 218-230	5.6	6
198	Fasting Imparts a Switch to Alternative Daily Pathways in Liver and Muscle. *Cell Reports*, **2018**, 25, 3299-3314.e6	10.6	67
197	Learning in the machine: Recirculation is random backpropagation. *Neural Networks*, **2018**, 108, 479-494	9.1	3
196	Atlas of Circadian Metabolism Reveals System-wide Coordination and Communication between Clocks. *Cell*, **2018**, 174, 1571-1585.e11	56.2	157
195	Deep Learning Localizes and Identifies Polyps in Real Time With 96% Accuracy in Screening Colonoscopy. *Gastroenterology*, **2018**, 155, 1069-1078.e8	13.3	347
194	Genome Architecture Mediates Transcriptional Control of Human Myogenic Reprogramming. *IScience*, **2018**, 6, 232-246	6.1	12
193	Deep Learning in the Natural Sciences: Applications to Physics. *Lecture Notes in Computer Science*, **2018**, 269-297	0.9	4
192	Detecting Cardiovascular Disease from Mammograms With Deep Learning. *IEEE Transactions on Medical Imaging*, **2017**, 36, 1172-1181	11.7	113
191	SIRT6 Suppresses Cancer Stem-like Capacity in Tumors with PI3K Activation Independently of Its Deacetylase Activity. *Cell Reports*, **2017**, 18, 1858-1868	10.6	37
190	Mutation of neuron-specific chromatin remodeling subunit BAF53b: rescue of plasticity and memory by manipulating actin remodeling. *Learning and Memory*, **2017**, 24, 199-209	2.8	18
189	Mir-132/212 is required for maturation of binocular matching of orientation preference and depth perception. *Nature Communications*, **2017**, 8, 15488	17.4	25

188	A multi-resolution approach for spinal metastasis detection using deep Siamese neural networks. *Computers in Biology and Medicine*, **2017**, 84, 137-146	7	60
187	Distinct Circadian Signatures in Liver and Gut Clocks Revealed by Ketogenic Diet. *Cell Metabolism*, **2017**, 26, 523-538.e5	24.6	103
186	Learning in the machine: The symmetries of the deep learning channel. *Neural Networks*, **2017**, 95, 110-133	9.1	14
185	Guidelines for Genome-Scale Analysis of Biological Rhythms. *Journal of Biological Rhythms*, **2017**, 32, 380-393	3.2	127
184	Decorrelated jet substructure tagging using adversarial neural networks. *Physical Review D*, **2017**, 96,	4.9	58
183	Efficient antihydrogen detection in antimatter physics by deep learning. *Journal of Physics Communications*, **2017**, 1, 025001	1.2	6
182	A theory of local learning, the learning channel, and the optimality of backpropagation. *Neural Networks*, **2016**, 83, 51-74	9.1	34
181	Jet substructure classification in high-energy physics with deep neural networks. *Physical Review D*, **2016**, 93,	4.9	111
180	Synergies Between Quantum Mechanics and Machine Learning in Reaction Prediction. *Journal of Chemical Information and Modeling*, **2016**, 56, 2125-2128	6.1	34
179	What time is it? Deep learning approaches for circadian rhythms. *Bioinformatics*, **2016**, 32, i8-i17	7.2	38
178	Parameterized neural networks for high-energy physics. *European Physical Journal C*, **2016**, 76, 1	4.2	87
177	Comparative Circadian Metabolomics Reveal Differential Effects of Nutritional Challenge in the Serum and Liver. *Journal of Biological Chemistry*, **2016**, 291, 2812-28	5.4	50
176	VIRALpro: a tool to identify viral capsid and tail sequences. *Bioinformatics*, **2016**, 32, 1405-7	7.2	12
175	Sequence Assembly of Yarrowia lipolytica Strain W29/CLIB89 Shows Transposable Element Diversity. *PLoS ONE*, **2016**, 11, e0162363	3.7	45
174	Jet flavor classification in high-energy physics with deep neural networks. *Physical Review D*, **2016**, 94,	4.9	75
173	Metabolic changes associated with methionine stress sensitivity in MDA-MB-468 breast cancer cells. *Cancer & Metabolism*, **2016**, 4, 9	5.4	38
172	Lung Adenocarcinoma Distally Rewires Hepatic Circadian Homeostasis. *Cell*, **2016**, 165, 896-909	56.2	147
171	Gut microbiota directs PPAR□driven reprogramming of the liver circadian clock by nutritional challenge. *EMBO Reports*, **2016**, 17, 1292-303	6.5	88

170	Towards a systems view of IBS. *Nature Reviews Gastroenterology and Hepatology*, **2015**, 12, 592-605	24.2	154
169	Function and Regulation of Cph2 in Candida albicans. *Eukaryotic Cell*, **2015**, 14, 1114-26		10
168	Accurate and efficient target prediction using a potency-sensitive influence-relevance voter. *Journal of Cheminformatics*, **2015**, 7, 63	8.6	19
167	Enhanced Higgs boson to □(+)□(-) search with deep learning. *Physical Review Letters*, **2015**, 114, 111801	7.4	68
166	The pervasiveness and plasticity of circadian oscillations: the coupled circadian-oscillators framework. *Bioinformatics*, **2015**, 31, 3181-8	7.2	20
165	Mitochondrial mutations in subjects with psychiatric disorders. *PLoS ONE*, **2015**, 10, e0127280	3.7	31
164	How pervasive are circadian oscillations?. *Trends in Cell Biology*, **2014**, 24, 329-31	18.3	13
163	SSpro/ACCpro 5: almost perfect prediction of protein secondary structure and relative solvent accessibility using profiles, machine learning and structural similarity. *Bioinformatics*, **2014**, 30, 2592-7	7.2	249
162	Partitioning circadian transcription by SIRT6 leads to segregated control of cellular metabolism. *Cell*, **2014**, 158, 659-72	56.2	207
161	Searching for exotic particles in high-energy physics with deep learning. *Nature Communications*, **2014**, 5, 4308	17.4	444
160	The Dropout Learning Algorithm. *Artificial Intelligence*, **2014**, 210, 78-122	3.6	147
159	Muscle insulin sensitivity and glucose metabolism are controlled by the intrinsic muscle clock. *Molecular Metabolism*, **2014**, 3, 29-41	8.8	242
158	Incorporating post-translational modifications and unnatural amino acids into high-throughput modeling of protein structures. *Bioinformatics*, **2014**, 30, 1681-9	7.2	6
157	A Genomic Analysis Pipeline and Its Application to Pediatric Cancers. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, **2014**, 11, 826-39	3	2
156	The TCF C-clamp DNA binding domain expands the Wnt transcriptome via alternative target recognition. *Nucleic Acids Research*, **2014**, 42, 13615-32	20.1	26
155	An Adaptive Reference Point Approach to Efficiently Search Large Chemical Databases. *Smart Innovation, Systems and Technologies*, **2014**, 63-74	0.5	2
154	Deep architectures and deep learning in chemoinformatics: the prediction of aqueous solubility for drug-like molecules. *Journal of Chemical Information and Modeling*, **2013**, 53, 1563-75	6.1	317
153	Reprogramming of the circadian clock by nutritional challenge. *Cell*, **2013**, 155, 1464-78	56.2	421

152	Cycles in spatial and temporal chromosomal organization driven by the circadian clock. *Nature Structural and Molecular Biology*, **2013**, 20, 1206-13	17.6	86
151	Circadian acetylome reveals regulation of mitochondrial metabolic pathways. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 3339-44	11.5	118
150	The neuron-specific chromatin regulatory subunit BAF53b is necessary for synaptic plasticity and memory. *Nature Neuroscience*, **2013**, 16, 552-61	25.5	172
149	Circadian clock regulates the host response to Salmonella. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 9897-902	11.5	173
148	A unifying kinetic framework for modeling oxidoreductase-catalyzed reactions. *Bioinformatics*, **2013**, 29, 1299-307	7.2	2
147	Complex-valued autoencoders. *Neural Networks*, **2012**, 33, 136-47	9.1	29
146	Boolean autoencoders and hypercube clustering complexity. *Designs, Codes, and Cryptography*, **2012**, 65, 383-403	1.2	6
145	Speeding up chemical searches using the inverted index: the convergence of chemoinformatics and text search methods. *Journal of Chemical Information and Modeling*, **2012**, 52, 891-900	6.1	18
144	ReactionPredictor: prediction of complex chemical reactions at the mechanistic level using machine learning. *Journal of Chemical Information and Modeling*, **2012**, 52, 2526-40	6.1	99
143	SIDEpro: a novel machine learning approach for the fast and accurate prediction of side-chain conformations. *Proteins: Structure, Function and Bioinformatics*, **2012**, 80, 142-53	4.2	42
142	Coordination of the transcriptome and metabolome by the circadian clock. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 5541-6	11.5	307
141	A WNT/p21 circuit directed by the C-clamp, a sequence-specific DNA binding domain in TCFs. *Molecular and Cellular Biology*, **2012**, 32, 3648-62	4.8	37
140	CircadiOmics: integrating circadian genomics, transcriptomics, proteomics and metabolomics. *Nature Methods*, **2012**, 9, 772-3	21.6	1084
139	Cyber-T web server: differential analysis of high-throughput data. *Nucleic Acids Research*, **2012**, 40, W553-9	20.1	120
138	Deep architectures for protein contact map prediction. *Bioinformatics*, **2012**, 28, 2449-57	7.2	200
137	Learning to predict chemical reactions. *Journal of Chemical Information and Modeling*, **2011**, 51, 2209-22	6.1	116
136	Data-driven high-throughput prediction of the 3-D structure of small molecules: review and progress. *Journal of Chemical Information and Modeling*, **2011**, 51, 760-76	6.1	19
135	Modeling of mitochondria bioenergetics using a composable chemiosmotic energy transduction rate law: theory and experimental validation. *PLoS ONE*, **2011**, 6, e14820	3.7	7

134	MotifMap: integrative genome-wide maps of regulatory motif sites for model species. *BMC Bioinformatics*, **2011**, 12, 495	3.6	113
133	Tree and Hashing Data Structures to Speed up Chemical Searches: Analysis and Experiments. *Molecular Informatics*, **2011**, 30, 791-800	3.8	6
132	Sterile protective immunity to malaria is associated with a panel of novel P. falciparum antigens. *Molecular and Cellular Proteomics*, **2011**, 10, M111.007948	7.6	112
131	Identification of immunodominant antigens by probing a whole Chlamydia trachomatis open reading frame proteome microarray using sera from immunized mice. *Infection and Immunity*, **2011**, 79, 246-57	3.7	38
130	The stability and complexity of antibody responses to the major surface antigen of Plasmodium falciparum are associated with age in a malaria endemic area. *Molecular and Cellular Proteomics*, **2011**, 10, M111.008326	7.6	59
129	A CROC stronger than ROC: measuring, visualizing and optimizing early retrieval. *Bioinformatics*, **2010**, 26, 1348-56	7.2	74
128	High-throughput prediction of protein antigenicity using protein microarray data. *Bioinformatics*, **2010**, 26, 2936-43	7.2	203
127	A prospective analysis of the Ab response to Plasmodium falciparum before and after a malaria season by protein microarray. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 6958-63	11.5	328
126	Serological profiling of a Candida albicans protein microarray reveals permanent host-pathogen interplay and stage-specific responses during candidemia. *PLoS Pathogens*, **2010**, 6, e1000827	7.6	58
125	Large scale immune profiling of infected humans and goats reveals differential recognition of Brucella melitensis antigens. *PLoS Neglected Tropical Diseases*, **2010**, 4, e673	4.8	33
124	Hashing algorithms and data structures for rapid searches of fingerprint vectors. *Journal of Chemical Information and Modeling*, **2010**, 50, 1358-68	6.1	26
123	When is chemical similarity significant? The statistical distribution of chemical similarity scores and its extreme values. *Journal of Chemical Information and Modeling*, **2010**, 50, 1205-22	6.1	73
122	Identification of immunodominant antigens of Chlamydia trachomatis using proteome microarrays. *Vaccine*, **2010**, 28, 3014-24	4.1	34
121	Reaction Explorer:Towards a Knowledge Map of Organic Chemistry To Support Dynamic Assessment and Personalized Instruction. *ACS Symposium Series*, **2010**, 191-209	0.4	
120	Data structures and compression algorithms for high-throughput sequencing technologies. *BMC Bioinformatics*, **2010**, 11, 514	3.6	30
119	Of bits and wows: A Bayesian theory of surprise with applications to attention. *Neural Networks*, **2010**, 23, 649-66	9.1	166
118	Modeling user reputation in wikis. *Statistical Analysis and Data Mining*, **2010**, 3, 126-139	1.4	28
117	Transmembrane beta-barrel protein structure prediction **2010**, 83-102		

116	Exploring Java software vocabulary: A search and mining perspective **2009**,		2
115	Data structures and compression algorithms for genomic sequence data. *Bioinformatics*, **2009**, 25, 1731-8	7.2	69
114	COBEpro: a novel system for predicting continuous B-cell epitopes. *Protein Engineering, Design and Selection*, **2009**, 22, 113-20	1.9	117
113	Bayesian surprise attracts human attention. *Vision Research*, **2009**, 49, 1295-306	2.1	616
112	MITOMASTER: a bioinformatics tool for the analysis of mitochondrial DNA sequences. *Human Mutation*, **2009**, 30, 1-6	4.7	84
111	Sourcerer: mining and searching internet-scale software repositories. *Data Mining and Knowledge Discovery*, **2009**, 18, 300-336	5.6	127
110	Influence relevance voting: an accurate and interpretable virtual high throughput screening method. *Journal of Chemical Information and Modeling*, **2009**, 49, 756-66	6.1	43
109	An intersection inequality sharper than the tanimoto triangle inequality for efficiently searching large databases. *Journal of Chemical Information and Modeling*, **2009**, 49, 1866-70	6.1	17
108	SOLpro: accurate sequence-based prediction of protein solubility. *Bioinformatics*, **2009**, 25, 2200-7	7.2	243
107	SourcererDB: An aggregated repository of statically analyzed and cross-linked open source Java projects **2009**,		31
106	No electron left behind: a rule-based expert system to predict chemical reactions and reaction mechanisms. *Journal of Chemical Information and Modeling*, **2009**, 49, 2034-43	6.1	43
105	Mining the coherence of GNOME bug reports with statistical topic models **2009**,		25
104	Machine learning methods for protein structure prediction. *IEEE Reviews in Biomedical Engineering*, **2008**, 1, 41-9	6.4	70
103	Discovery of power-laws in chemical space. *Journal of Chemical Information and Modeling*, **2008**, 48, 1138-51	6.1	53
102	Speeding up chemical database searches using a proximity filter based on the logical exclusive or. *Journal of Chemical Information and Modeling*, **2008**, 48, 1367-78	6.1	34
101	BLASTing small molecules--statistics and extreme statistics of chemical similarity scores. *Bioinformatics*, **2008**, 24, i357-65	7.2	11
100	PEPITO: improved discontinuous B-cell epitope prediction using multiple distance thresholds and half sphere exposure. *Bioinformatics*, **2008**, 24, 1459-60	7.2	165
99	TMBpro: secondary structure, beta-contact and tertiary structure prediction of transmembrane beta-barrel proteins. *Bioinformatics*, **2008**, 24, 513-20	7.2	67

98	A genome-wide proteome array reveals a limited set of immunogens in natural infections of humans and white-footed mice with Borrelia burgdorferi. *Infection and Immunity*, **2008**, 76, 3374-89	3.7	119
97	An Application of Latent Dirichlet Allocation to Analyzing Software Evolution **2008**,		39
96	SELECTpro: effective protein model selection using a structure-based energy function resistant to BLUNDERs. *BMC Structural Biology*, **2008**, 8, 52	2.7	21
95	Profiling humoral immune responses to P. falciparum infection with protein microarrays. *Proteomics*, **2008**, 8, 4680-94	4.8	213
94	Learning to play Go using recursive neural networks. *Neural Networks*, **2008**, 21, 1392-400	9.1	20
93	Mining Eclipse Developer Contributions via Author-Topic Models **2007**,		37
92	Mathematical correction for fingerprint similarity measures to improve chemical retrieval. *Journal of Chemical Information and Modeling*, **2007**, 47, 952-64	6.1	46
91	Bounds and algorithms for fast exact searches of chemical fingerprints in linear and sublinear time. *Journal of Chemical Information and Modeling*, **2007**, 47, 302-17	6.1	74
90	Assessment of predictions submitted for the CASP7 domain prediction category. *Proteins: Structure, Function and Bioinformatics*, **2007**, 69 Suppl 8, 137-51	4.2	36
89	Improved residue contact prediction using support vector machines and a large feature set. *BMC Bioinformatics*, **2007**, 8, 113	3.6	162
88	An enhanced MITOMAP with a global mtDNA mutational phylogeny. *Nucleic Acids Research*, **2007**, 35, D823-8	20.1	446
87	Minimizing the overlap problem in protein NMR: a computational framework for precision amino acid labeling. *Bioinformatics*, **2007**, 23, 2829-35	7.2	6
86	From protein microarrays to diagnostic antigen discovery: a study of the pathogen Francisella tularensis. *Bioinformatics*, **2007**, 23, i508-18	7.2	75
85	ChemDB update--full-text search and virtual chemical space. *Bioinformatics*, **2007**, 23, 2348-51	7.2	97
84	Lossless compression of chemical fingerprints using integer entropy codes improves storage and retrieval. *Journal of Chemical Information and Modeling*, **2007**, 47, 2098-109	6.1	41
83	Adaptive Low Power Listening for Wireless Sensor Networks. *IEEE Transactions on Mobile Computing*, **2007**, 6, 988-1004	4.6	95
82	One- to four-dimensional kernels for virtual screening and the prediction of physical, chemical, and biological properties. *Journal of Chemical Information and Modeling*, **2007**, 47, 965-74	6.1	49
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