John Harer

List of Publications by Year
in descending order

28	3,576	471509	580821
papers	citations	17	25
		h-index	g-index

30	30	30	2986
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Stability of Persistence Diagrams. Discrete and Computational Geometry, 2007, 37, 103-120.	0.6	720
2	Imaging and Analysis Platform for Automatic Phenotyping and Trait Ranking of Plant Root Systems. Plant Physiology, 2010, 152, 1148-1157.	4.8	306
3	GiA Roots: software for the high throughput analysis of plant root system architecture. BMC Plant Biology, 2012, 12, 116.	3.6	279
4	3D phenotyping and quantitative trait locus mapping identify core regions of the rice genome controlling root architecture. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E1695-704.	7.1	261
5	Guidelines for Genome-Scale Analysis of Biological Rhythms. Journal of Biological Rhythms, 2017, 32, 380-393.	2.6	237
6	The second homology group of the mapping class group of an orientable surface. Inventiones Mathematicae, 1983, 72, 221-239.	2.5	201
7	Sliding Windows and Persistence: An Application of Topological Methods to Signal Analysis. Foundations of Computational Mathematics, 2015, 15, 799-838.	2.5	163
8	Lipschitz Functions Have L p -Stable Persistence. Foundations of Computational Mathematics, 2010, 10, 127-139.	2.5	160
9	Probability measures on the space of persistence diagrams. Inverse Problems, 2011, 27, 124007.	2.0	132
10	Fréchet Means for Distributions of Persistence Diagrams. Discrete and Computational Geometry, 2014, 52, 44-70.	0.6	118
11	Design and analysis of large-scale biological rhythm studies: a comparison of algorithms for detecting periodic signals in biological data. Bioinformatics, 2013, 29, 3174-3180.	4.1	94
12	Extending Persistence Using Poincaré and Lefschetz Duality. Foundations of Computational Mathematics, 2009, 9, 79-103.	2.5	86
13	SW1PerS: Sliding windows and 1-persistence scoring; discovering periodicity in gene expression time series data. BMC Bioinformatics, 2015, 16, 257.	2.6	74
14	An intrinsic oscillator drives the blood stage cycle of the malaria parasite <i>Plasmodium falciparum</i>. Science, 2020, 368, 754-759.	12.6	62
15	Loops in Reeb Graphs of 2-Manifolds. Discrete and Computational Geometry, 2004, 32, 231.	0.6	61
16	Extreme Elevation on a 2-Manifold. Discrete and Computational Geometry, 2006, 36, 553-572.	0.6	52
17	Inferring Local Homology from Sampled Stratified Spaces. , 2007, , .		36
18	The third homology group of the moduli space of curves. Duke Mathematical Journal, 1991, 63, 25.	1.5	21

#	Article	IF	Citations
19	Persistent Intersection Homology. Foundations of Computational Mathematics, 2011, 11, 305-336.	2.5	12
20	Topological and statistical behavior classifiers for tracking applications. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 2644-2661.	4.7	10
21	Failure filtrations for fenced sensor networks. International Journal of Robotics Research, 2012, 31, 1044-1056.	8.5	9
22	Multi-scale local shape analysis and feature selection in machine learning applications. , 2015, , .		9
23	Improving homology estimates with random walks. Inverse Problems, 2011, 27, 124002.	2.0	6
24	Alpha-Beta Witness Complexes. Lecture Notes in Computer Science, 2007, , 386-397.	1.3	6
25	Scaffoldings and Spines: Organizing High-Dimensional Data Using Cover Trees, Local Principal Component Analysis, and Persistent Homology. Association for Women in Mathematics Series, 2018, , 93-114.	0.4	4
26	Assessment of Simulated Surveillance Testing and Quarantine in a SARS-CoV-2â€"Vaccinated Population of Students on a University Campus. JAMA Health Forum, 2021, 2, e213035.	2.2	4
27	Inferring Local Homology from Sampled Stratified Spaces. , 2007, , .		3
28	Hyperparameter Optimization of Topological Features for Machine Learning Applications. , 2019, , .		2