

# Patrizio Frosini

## List of Publications by Year in descending order

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47  
papers

856  
citations

567281

15  
h-index

526287

27  
g-index

50  
all docs

50  
docs citations

50  
times ranked

278  
citing authors

#	ARTICLE	IF	CITATIONS
1	On the Construction of Group Equivariant Non-Expansive Operators via Permutants and Symmetric Functions. <i>Frontiers in Artificial Intelligence</i> , 2022, 5, 786091.	3.4	6
2	A Brief Introduction to Multidimensional Persistent Betti Numbers. <i>Springer Proceedings in Mathematics and Statistics</i> , 2021, , 215-228.	0.2	1
3	An Introduction to the Notion of Natural Pseudo-distance in Topological Data Analysis. <i>Springer Proceedings in Mathematics and Statistics</i> , 2021, , 203-213.	0.2	0
4	Towards a topologicalâ€“geometrical theory of group equivariant non-expansive operators for data analysis and machine learning. <i>Nature Machine Intelligence</i> , 2019, 1, 423-433.	16.0	21
5	On the geometrical properties of the coherent matching distance in 2D persistent homology. <i>Journal of Applied and Computational Topology</i> , 2019, 3, 381-422.	2.0	6
6	The persistent homotopy type distance. <i>Homology, Homotopy and Applications</i> , 2019, 21, 231-259.	0.4	8
7	On a New Method to Build Group Equivariant Operators by Means of Permutants. <i>Lecture Notes in Computer Science</i> , 2018, , 265-272.	1.3	3
8	Some Remarks on the Algebraic Properties of Group Invariant Operators in Persistent Homology. <i>Lecture Notes in Computer Science</i> , 2017, , 14-24.	1.3	7
9	Combining Persistent Homology and Invariance Groups for Shape Comparison. <i>Discrete and Computational Geometry</i> , 2016, 55, 373-409.	0.6	15
10	G -invariant persistent homology. <i>Mathematical Methods in the Applied Sciences</i> , 2015, 38, 1190-1199.	2.3	5
11	Necessary conditions for discontinuities of multidimensional persistent Betti numbers. <i>Mathematical Methods in the Applied Sciences</i> , 2015, 38, 617-629.	2.3	6
12	Betti numbers in multidimensional persistent homology are stable functions. <i>Mathematical Methods in the Applied Sciences</i> , 2013, 36, 1543-1557.	2.3	77
13	Persistent Betti numbers for a noise tolerant shape-based approach to image retrieval. <i>Pattern Recognition Letters</i> , 2013, 34, 863-872.	4.2	39
14	Stable Comparison of Multidimensional Persistent Homology Groups with Torsion. <i>Acta Applicandae Mathematicae</i> , 2013, 124, 43-54.	1.0	1
15	Comparison of persistent homologies for vector functions: From continuous to discrete and back. <i>Computers and Mathematics With Applications</i> , 2013, 66, 560-573.	2.7	7
16	A Study of Monodromy in the Computation of Multidimensional Persistence. <i>Lecture Notes in Computer Science</i> , 2013, , 192-202.	1.3	5
17	A new algorithm for computing the 2-dimensional matching distance between size functions. <i>Pattern Recognition Letters</i> , 2011, 32, 1735-1746.	4.2	28
18	No embedding of the automorphisms of a topological space into a compact metric space endows them with a composition that passes to the limit. <i>Applied Mathematics Letters</i> , 2011, 24, 1654-1657.	2.7	4

#	ARTICLE	IF	CITATIONS
19	A Global Method for Reducing Multidimensional Size Graphs. Lecture Notes in Computer Science, 2011, , 1-11.	1.3	1
20	Persistent Betti Numbers for a Noise Tolerant Shape-Based Approach to Image Retrieval. Lecture Notes in Computer Science, 2011, , 294-301.	1.3	3
21	3D relevance feedback via multilevel relevance judgements. Visual Computer, 2010, 26, 1321-1338.	3.5	15
22	Natural Pseudo-Distance and Optimal Matching between Reduced Size Functions. Acta Applicandae Mathematicae, 2010, 109, 527-554.	1.0	44
23	ADVANCES IN MULTIDIMENSIONAL SIZE THEORY. Image Analysis and Stereology, 2010, 29, 19.	0.9	2
24	Natural pseudo-distances between closed curves. Forum Mathematicum, 2009, 21, .	0.7	18
25	Does intelligence imply contradiction?. Cognitive Systems Research, 2009, 10, 297-315.	2.7	7
26	Multidimensional Size Functions for Shape Comparison. Journal of Mathematical Imaging and Vision, 2008, 32, 161-179.	1.3	62
27	VC-dimension on manifolds: a first approach. Mathematical Methods in the Applied Sciences, 2008, 31, 589-605.	2.3	2
28	Natural pseudodistances between closed surfaces. Journal of the European Mathematical Society, 2007, 9, 331-353.	1.4	11
29	KEYPICS: FREE-HAND DRAWN ICONIC KEYWORDS. International Journal of Shape Modeling, 2007, 13, 125-137.	0.2	4
30	Geometrical shape comparison by size theory. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1141907-1141908.	0.2	0
31	A global reduction method for multidimensional size graphs. Electronic Notes in Discrete Mathematics, 2006, 26, 21-28.	0.4	3
32	Using matching distance in size theory: A survey. International Journal of Imaging Systems and Technology, 2006, 16, 154-161.	4.1	35
33	The Use of Size Functions for Comparison of Shapes Through Differential Invariants. Journal of Mathematical Imaging and Vision, 2004, 21, 107-118.	1.3	20
34	A Note on the Linearity of Real-valued Functions with Respect to Suitable Metrics. Geometriae Dedicata, 2004, 108, 105-110.	0.3	2
35	Intrinsic harmonicity of Morse functions. Mathematika, 2003, 50, 167-170.	0.5	3
36	Size functions as complete invariants for image recognition. , 2002, , .		2

#	ARTICLE	IF	CITATIONS
37	Size Functions and Formal Series. <i>Applicable Algebra in Engineering, Communications and Computing</i> , 2001, 12, 327-349.	0.5	52
38	New methods for reducing size graphs. <i>International Journal of Computer Mathematics</i> , 1999, 70, 505-517.	1.8	16
39	Deformation Energy for Size Functions. <i>Lecture Notes in Computer Science</i> , 1999, , 44-53.	1.3	6
40	Size homotopy groups for computation of natural size distances. <i>Bulletin of the Belgian Mathematical Society - Simon Stevin</i> , 1999, 6, .	0.2	44
41	<title>Size functions for signature recognition</title>. , 1998, 3454, 178.		6
42	<title>New pseudodistances for the size function space</title>. , 1997, , .		7
43	Size Functions and Morphological Transformations. <i>Acta Applicandae Mathematicae</i> , 1997, 49, 85-104.	1.0	15
44	Connections between Size Functions and Critical Points. <i>Mathematical Methods in the Applied Sciences</i> , 1996, 19, 555-569.	2.3	26
45	On the use of size functions for shape analysis. <i>Biological Cybernetics</i> , 1993, 70, 99-107.	1.3	94
46	<title>Measuring shapes by size functions</title>. , 1992, , .		41
47	A distance for similarity classes of submanifolds of a Euclidean space. <i>Bulletin of the Australian Mathematical Society</i> , 1990, 42, 407-415.	0.5	71