Andrzej Szymczak

List of Publications by Year
in descending order

23 papers	803 citations	687363 13 h-index	677142 22 g-index
24 all docs	24 docs citations	24 times ranked	820 citing authors

#	Article	IF	Citations
1	Standardized evaluation methodology and reference database for evaluating coronary artery centerline extraction algorithms. Medical Image Analysis, 2009, 13, 701-714.	11.6	295
2	Wrap&Zip decompression of the connectivity of triangle meshes compressed with Edgebreaker. Computational Geometry: Theory and Applications, 1999, 14, 119-135.	0.5	64
3	The Conley index and symbolic dynamics. Topology, 1996, 35, 287-299.	0.3	58
4	A combinatorial procedure for finding isolating neighbourhoods and index pairs. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1997, 127, 1075-1088.	1.2	56
5	An Edgebreaker-based efficient compression scheme for regular meshes. Computational Geometry: Theory and Applications, 2001, 20, 53-68.	0.5	40
6	Piecewise Regular Meshes: Construction and Compression. Graphical Models, 2002, 64, 183-198.	2.4	39
7	Coronary vessel trees from 3D imagery: A topological approach. Medical Image Analysis, 2006, 10, 548-559.	11.6	37
8	Chaos in the Lorenz Equations: A Computer Assisted Proof Part III: Classical Parameter Values. Journal of Differential Equations, 2001, 169, 17-56.	2.2	36
9	The Conley index for decompositions of isolated invariant sets. Fundamenta Mathematicae, 1995, 148, 71-90.	0.5	30
10	Nonrigid iterative closest points for registration of 3D biomedical surfaces. Optics and Lasers in Engineering, 2018, 100, 141-154.	3.8	28
11	Robust Morse Decompositions of Piecewise Constant Vector Fields. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 938-951.	4.4	27
12	Morse Set Classification and Hierarchical Refinement Using Conley Index. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 767-782.	4.4	22
13	Stable Morse Decompositions for Piecewise Constant Vector Fields on Surfaces. Computer Graphics Forum, 2011, 30, 851-860.	3.0	16
14	Edgebreaker: a simple implementation for surfaces with handles. Computers and Graphics, 2003, 27, 553-567.	2.5	13
15	Vessel tracking by connecting the dots. , 2008, , .		6
16	Optimized Edgebreaker encoding for large and regular triangle meshes. Visual Computer, 2003, 19, 271-278.	3.5	5
17	On the discrete Conley index in the invariant subspace. Topology and Its Applications, 1998, 87, 105-115.	0.4	4
18	Nearly Recurrent Components in 3D Piecewise Constant Vector Fields. Computer Graphics Forum, 2012, 31, 1115-1124.	3.0	4

#	Article	IF	Citations
19	Morse connection graphs for piecewise constant vector fields on surfaces. Computer Aided Geometric Design, 2013, 30, 529-541.	1.2	4
20	A cup product pairing and time-duality for discrete dynamical systems. Topology, 1998, 37, 1299-1311.	0.3	3
21	Visualization of Morse Connection Graphs for Topologically Rich 2D Vector Fields. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 2763-2772.	4.4	2
22	Simplification of Morse Decompositions Using Morse Set Mergers. Mathematics and Visualization, 2014, , 39-53.	0.6	2
23	Parallel Computation of Nearly Recurrent Components of Piecewise Constant Vector Fields. Mathematics and Visualization, 2014, , 119-132.	0.6	0