Eric Klassen

List of Publications by Year
in descending order

		471509	477307
37 papers	2,014 citations	17 h-index	29 g-index
38 all docs	38 docs citations	38 times ranked	952 citing authors

#	Article	IF	Citations
1	Shape Analysis of Elastic Curves in Euclidean Spaces. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2011, 33, 1415-1428.	13.9	475
2	Analysis of planar shapes using geodesic paths on shape spaces. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2004, 26, 372-383.	13.9	383
3	A Novel Representation for Riemannian Analysis of Elastic Curves in Rn. , 2007, 2007, 1-7.		154
4	Statistical analysis of trajectories on Riemannian manifolds: Bird migration, hurricane tracking and video surveillance. Annals of Applied Statistics, 2014, 8, .	1.1	89
5	Statistical Modeling of Curves Using Shapes and Related Features. Journal of the American Statistical Association, 2012, 107, 1152-1165.	3.1	81
6	An Intrinsic Framework for Analysis of Facial Surfaces. International Journal of Computer Vision, 2009, 82, 80-95.	15.6	77
7	Elastic Geodesic Paths in Shape Space of Parameterized Surfaces. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2012, 34, 1717-1730.	13.9	73
8	Parameterization-Invariant Shape Comparisons of Anatomical Surfaces. IEEE Transactions on Medical Imaging, 2011, 30, 849-858.	8.9	72
9	A Gradient-Descent Method for Curve Fitting on Riemannian Manifolds. Foundations of Computational Mathematics, 2012, 12, 49-73.	2.5	57
10	Landmarkâ€Guided Elastic Shape Analysis of Sphericallyâ€Parameterized Surfaces. Computer Graphics Forum, 2013, 32, 429-438.	3.0	54
11	Elastic Shape Matching of Parameterized Surfaces Using Square Root Normal Fields. Lecture Notes in Computer Science, 2012, , 804-817.	1.3	53
12	Chern-Simons invariants of 3-manifolds decomposed along tori and the circle bundle over the representation space ofT 2. Communications in Mathematical Physics, 1993, 153, 521-557.	2.2	51
13	A novel riemannian framework for shape analysis of 3D objects. , 2010, , .		48
14	Removing Shape-Preserving Transformations in Square-Root Elastic (SRE) Framework for Shape Analysis of Curves. Lecture Notes in Computer Science, 2007, 4679, 387-398.	1.3	47
15	Geodesics Between 3D Closed Curves Using Path-Straightening. Lecture Notes in Computer Science, 2006, , 95-106.	1.3	43
16	Precise matching of PL curves in $\mathbb{R}^N$ in the square root velocity framework. Geometry Imaging and Computing, 2015, 2, 133-186.	0.8	35
17	Gaussian Blurring-Invariant Comparison of Signals and Images. IEEE Transactions on Image Processing, 2013, 22, 3145-3157.	9.8	27
18	Parameterization-Invariant Shape Statistics and Probabilistic Classification of Anatomical Surfaces. Lecture Notes in Computer Science, 2011, 22, 147-158.	1.3	24

#	Article	IF	Citations
19	Spherical Regression Models Using Projective Linear Transformations. Journal of the American Statistical Association, 2014, 109, 1615-1624.	3.1	21
20	Splitting the spectral flow and the Alexander matrix. Commentarii Mathematici Helvetici, 1994, 69, 375-416.	0.7	17
21	Rate-Invariant Analysis of Covariance Trajectories. Journal of Mathematical Imaging and Vision, 2018, 60, 1306-1323.	1.3	17
22	Phase-Amplitude Separation and Modeling of Spherical Trajectories. Journal of Computational and Graphical Statistics, 2018, 27, 85-97.	1.7	16
23	Affine-invariant, elastic shape analysis of planar contours. , 2012, , .		14
24	RNA global alignment in the joint sequence–structure space using elastic shape analysis. Nucleic Acids Research, 2013, 41, e114-e114.	14.5	14
25	Statistical shape analysis of simplified neuronal trees. Annals of Applied Statistics, 2018, 12, .	1.1	14
26	Shape Analysis of Surfaces Using General Elastic Metrics. Journal of Mathematical Imaging and Vision, 2020, 62, 1087-1106.	1.3	12
27	The Square Root Normal Field Distance and Unbalanced Optimal Transport. Applied Mathematics and Optimization, 2022, 85, 1.	1.6	9
28	Comparing curves in homogeneous spaces. Differential Geometry and Its Applications, 2018, 60, 9-32.	0.5	8
29	Robust Comparison of Kernel Densities on Spherical Domains. Sankhya A, 2019, 81, 144-171.	0.8	6
30	The Square Root Velocity Framework for Curves in a Homogeneous Space. , 2017, , .		5
31	Elastic Shape Analysis of Surfaces and Images. , 2016, , 257-277.		4
32	Closed surfaces with different shapes that are indistinguishable by the SRNF. Archivum Mathematicum, 2020, , 107-114.	0.3	4
33	Joint shape and texture analysis of objects boundaries in images using a Riemannian approach. , 2008, , .		2
34	Simplifying Transformations for a Family of Elastic Metrics on the Space of Surfaces. , 2020, , .		2
35	Supervised deep learning of elastic SRV distances on the shape space of curves. , 2021, , .		2
36	A diffeomorphism-invariant metric on the space of vector-valued one-forms. Pure and Applied Mathematics Quarterly, 2021, 17, 141-183.	0.4	1

#	Article	IF	Citations
37	Intrinsic Riemannian Metrics on Spaces of Curves: Theory and Computation. , 2021, , 1-35.		1