FranÃ§ois Lauze

List of Publications by Year
in descending order

51	1,037	623188	476904
papers	citations	14 h-index	29 g-index

57	57	57	1458
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Deep Feature Learning for Knee Cartilage Segmentation Using a Triplanar Convolutional Neural Network. Lecture Notes in Computer Science, 2013, 16, 246-253.	1.0	332
2	Unscented Kalman Filtering on Riemannian Manifolds. Journal of Mathematical Imaging and Vision, 2013, 46, 103-120.	0.8	65
3	LED-Based Photometric Stereo: Modeling, Calibration and Numerical Solution. Journal of Mathematical Imaging and Vision, 2018, 60, 313-340.	0.8	50
4	Geodesic exponential kernels: When curvature and linearity conflict. , 2015, , .		46
5	A Non-convex Variational Approach to Photometric Stereo under Inaccurate Lighting. , 2017, , .		42
6	Toward a Theory of Statistical Tree-Shape Analysis. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 2008-2021.	9.7	39
7	Manifold Valued Statistics, Exact Principal Geodesic Analysis and the Effect of Linear Approximations. Lecture Notes in Computer Science, 2010, , 43-56.	1.0	39
8	Sparse Multi-Scale Diffeomorphic Registration: The Kernel Bundle Framework. Journal of Mathematical Imaging and Vision, 2013, 46, 292-308.	0.8	36
9	The Improbability of Harris Interest Points. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2010, 32, 1141-1147.	9.7	31
10	Deinterlacing Using Variational Methods. IEEE Transactions on Image Processing, 2008, 17, 2015-2028.	6.0	28
11	Video Super-Resolution Using Simultaneous Motion and Intensity Calculations. IEEE Transactions on Image Processing, 2011, 20, 1870-1884.	6.0	24
12	Solving Uncalibrated Photometric Stereo Using Total Variation. Journal of Mathematical Imaging and Vision, 2015, 52, 87-107.	0.8	23
13	A Multi-scale Kernel Bundle for LDDMM: Towards Sparse Deformation Description across Space and Scales. Lecture Notes in Computer Science, 2011, 22, 624-635.	1.0	22
14	Multi-hypothesis transform domain Wyner-Ziv video coding including optical flow. , 2011, , .		21
15	Means in spaces of tree-like shapes. , 2011, , .		20
16	Dental artifacts in the head and neck region: implications for Dixon-based attenuation correction in PET/MR. EJNMMI Physics, 2015, 2, 8.	1.3	18
17	Geometries on Spaces of Treelike Shapes. Lecture Notes in Computer Science, 2011, , 160-173.	1.0	15
18	Distribution, size, shape, growth potential and extent of abdominal aortic calcified deposits predict mortality in postmenopausal women. BMC Cardiovascular Disorders, 2010, 10, 56.	0.7	11

#	Article	IF	Citations
19	Exploring the representation capabilities of the HOG descriptor. , 2011, , .		9
20	Automatic correction of dental artifacts in PET/MRI. Journal of Medical Imaging, 2015, 2, 024009.	0.8	8
21	Bicycle chain shape models. , 2009, , .		7
22	Femoral cartilage segmentation in Knee MRI scans using two stage voxel classification. , 2013, 2013, 5469-72.		7
23	Simultaneous Reconstruction and Segmentation of CT Scans with Shadowed Data. Lecture Notes in Computer Science, 2017, , 308-319.	1.0	7
24	Temporal Super Resolution Using Variational Methods. Signals and Communication Technology, 2010, , 275-296.	0.4	7
25	Kernel Bundle EPDiff: Evolution Equations for Multi-scale Diffeomorphic Image Registration. Lecture Notes in Computer Science, 2012, , 677-688.	1.0	7
26	Locally Orderless Registration for Diffusion Weighted Images. Lecture Notes in Computer Science, 2015, , 305-312.	1.0	5
27	A Family of Principal Component Analyses for Dealing with Outliers. Lecture Notes in Computer Science, 2007, 10, 178-185.	1.0	5
28	From Inpainting to Active Contours. International Journal of Computer Vision, 2008, 79, 31-43.	10.9	4
29	A Variational Approach for Multi-valued Velocity Field Estimation in Transparent Sequences. , 2007, , 227-238.		4
30	Solving the Uncalibrated Photometric Stereo Problem Using Total Variation. Lecture Notes in Computer Science, 2013, , 270-281.	1.0	4
31	Rang maximal pour $$T_{P^n } $$. Manuscripta Mathematica, 1997, 92, 525-543.	0.3	3
32	A variational method for automatic localization of the most pathological ROI in the knee cartilage. Proceedings of SPIE, 2008, , .	0.8	3
33	Fundamental Geodesic Deformations in Spaces of Treelike Shapes. , 2010, , .		3
34	Cascaded classifier for large-scale data applied to automatic segmentation of articular cartilage. Proceedings of SPIE, 2012, , .	0.8	3
35	Toward automated detection and segmentation of aortic calcifications from radiographs. , 2007, , .		3
36	Variational Multi-Valued Velocity Field Estimation forÂTransparent Sequences. Journal of Mathematical Imaging and Vision, 2011, 40, 285-304.	0.8	2

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37	Bicycle chain shape models. , 2009, , .		2
38	Quantizing calcification in the lumbar aorta on 2-D lateral x-ray images. , 2005, 5747, 1341.		1
39	A pixelwise inpainting-based refinement scheme for quantizing calcification in the lumbar aorta on 2D lateral x-ray images. , 2006, 6144, 474.		1
40	On Restricting Planar Curve Evolution to Finite Dimensional Implicit Subspaces with Non-Euclidean Metric. Journal of Mathematical Imaging and Vision, 2010, 38, 226-240.	0.8	1
41	Towards exaggerated image stereotypes. , 2011, , .		1
42	Correction of dental artifacts within the anatomical surface in PET/MRI using active shape models and k-nearest-neighbors. Proceedings of SPIE, 2014, , .	0.8	1
43	Geometry and Statistics: Manifolds and Stratified Spaces. Journal of Mathematical Imaging and Vision, 2014, 50, 1.	0.8	1
44	From Inpainting to Active Contours. Lecture Notes in Computer Science, 2005, , 97-108.	1.0	1
45	On the Rate of Structural Change in Scale Spaces. Lecture Notes in Computer Science, 2009, , 832-843.	1.0	1
46	On the bayesian reconstruction method for randomly oriented particles in cryo-EM. , 2013, , .		0
47	Rotationally invariant clustering of diffusion MRI data using spherical harmonics. , 2016, , .		0
48	Guest Editorial: Scale Space and Variational Methods. Journal of Mathematical Imaging and Vision, 2018, 60, 1367-1368.	0.8	0
49	Information-Theoretic Registration with Explicit Reorientation of Diffusion-Weighted Images. Journal of Mathematical Imaging and Vision, 2022, 64, 1-16.	0.8	0
50	Bundle Geodesic Convolutional Neural Network for DWI Segmentation fromÂSingle Scan Learning. Lecture Notes in Computer Science, 2021, , 121-132.	1.0	0
51	Segmentation of 2D and 3D Objects with Intrinsically Similarity Invariant Shape Regularisers. Lecture Notes in Computer Science, 2019, , 369-380.	1.0	0