Olivier LÃ©zoray

List of Publications by Year
in descending order

122 papers	1,929 citations	361413 20 h-index	302126 39 g-index
126 all docs	126 docs citations	126 times ranked	1519 citing authors

#	Article	IF	Citations
1	A Genetically Based Combination of Visual Saliency and Roughness for FR 3D Mesh Quality Assessment: A Statistical Study. Computer Journal, 2022, 65, 606-620.	2.4	1
2	The Hodgkinâ€“Huxley neuron model for motion detection in image sequences. Neural Computing and Applications, 2022, 34, 1123-1133.	5.6	1
3	Hierarchical Approach forÂtheÂClassification ofÂMulti-class Skin Lesions Based onÂDeep Convolutional Neural Networks. Lecture Notes in Computer Science, 2022, , 139-149.	1.3	1
4	Mathematical morphology based on stochastic permutation orderings. Mathematical Morphology - Theory and Applications, 2021, 5, 43-69.	0.7	2
5	Learning Recurrent High-order Statistics for Skeleton-based Hand Gesture Recognition. , 2021, , .		3
6	Hybrid Network For End-To-End Text-Independent Speaker Identification. , 2021, , .		6
7	Graph signal active contours. , 2021, , .		0
8	Skin Lesion Classification Using Convolutional Neural Networks Based on Multi-Features Extraction. Lecture Notes in Computer Science, 2021, , 466-475.	1.3	0
9	Stochastic permutation ordering watershed. , 2021, , .		0
10	Hierarchical morphological graph signal multiâ€layer decomposition for editing applications. IET Image Processing, 2020, 14, 1549-1560.	2.5	2
11	Wavelet Scattering Transform and CNN for Closed Set Speaker Identification. , 2020, , .		12
12	Instance segmentation in fisheye images. , 2020, , .		2
13	Skeleton-Based Hand Gesture Recognition by Learning SPD Matrices with Neural Networks. , 2019, , .		5
14	A Neural Network Based on SPD Manifold Learning for Skeleton-Based Hand Gesture Recognition. , 2019, , .		76
15	Patch-Based Potentials for Interactive Contour Extraction. Lecture Notes in Computer Science, 2018, , 587-597.	1.3	0
16	p-Laplacian Regularization of Signals on Directed Graphs. Lecture Notes in Computer Science, 2018, , 650-661.	1.3	1
17	Visual Saliency and Perceptual Quality Assessment of 3D Meshes. Advances in Multimedia and Interactive Technologies Book Series, 2018, , 38-115.	0.2	0
18	Local Patterns and Supergraph for Chemical Graph Classification with Convolutional Networks. Lecture Notes in Computer Science, 2018, , 97-106.	1.3	1

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19	Graph-based people segmentation using a genetically optimized combination of classifiers. Journal of Electronic Imaging, 2018, 27, 1.	0.9	0
20	Edge detection based on Hodgkinâ€“Huxley neuron model simulation. Cognitive Processing, 2017, 18, 315-323.	1.4	14
21	People silhouette extraction from people detection bounding boxes in images. Pattern Recognition Letters, 2017, 93, 182-191.	4.2	13
22	3D colored mesh graph signals multi-layer morphological enhancement. , 2017, , .		3
23	Stochastic spectral-spatial permutation ordering combination for nonlocal morphological processing. , 2017, , .		0
24	Depth-Guided Disocclusion Inpainting of Synthesized RGB-D Images. IEEE Transactions on Image Processing, 2017, 26, 525-538.	9.8	30
25	Global visual saliency: Geometric and colorimetrie saliency fusion and its applications for 3D colored meshes. , 2017, , .		3
26	3D Blind Mesh Quality Assessment Index. IS&T International Symposium on Electronic Imaging, 2017, 29, 9-26.	0.4	19
27	Special Section Guest Editorial: Superpixels for Image Processing and Computer Vision. Journal of Electronic Imaging, 2017, 26, 1.	0.9	3
28	High dynamic range image processing using manifold-based ordering. , 2016, , .		1
29	Manifold-based mathematical morphology for graph signal editing of colored images and meshes. , 2016, , .		3
30	Full-reference saliency-based 3D mesh quality assessment index. , 2016, , .		9
31	Complete lattice learning for multivariate mathematical morphology. Journal of Visual Communication and Image Representation, 2016, 35, 220-235.	2.8	18
32	Novel Approach Using Echo State Networks for Microscopic Cellular Image Segmentation. Cognitive Computation, 2016, 8, 237-245.	5.2	25
33	Editorial of the special issue on Advances in Low-Level Image representations for processing and analysis. Signal, Image and Video Processing, 2016, 10, 421-422.	2.7	0
34	Depth-aware patch-based image disocclusion for virtual view synthesis. , 2015, , .		9
35	Exemplar-based video completion with geometry-guided space-time patch blending. , 2015, , .		1
36	Multivalued label diffusion for semi-supervised segmentation. , 2015, , .		0

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37	Multi-scale saliency of 3D colored meshes. , 2015, , .		11
38	Superpixel-based depth map inpainting for RGB-D view synthesis. , 2015, , .		16
39	Exemplar-based Inpainting: Technical Review and new Heuristics for better Geometric Reconstructions. IEEE Transactions on Image Processing, 2015, 24, 1-1.	9.8	69
40	PDE-Based Graph Signal Processing for 3-D Color Point Clouds: Opportunities for cultural heritage. IEEE Signal Processing Magazine, 2015, 32, 103-111.	5.6	33
41	Mesh saliency with adaptive local patches. Proceedings of SPIE, 2015, , .	0.8	1
42	Multi-scale mesh saliency with local adaptive patches for viewpoint selection. Signal Processing: Image Communication, 2015, 38, 151-166.	3.2	20
43	Patch-Based Mathematical Morphology for Image Processing, Segmentation and Classification. Lecture Notes in Computer Science, 2015, , 46-57.	1.3	2
44	Tensor-Directed Spatial Patch Blending for Pattern-Based Inpainting Methods. Lecture Notes in Computer Science, 2015, , 149-160.	1.3	0
45	Graph-based skin lesion segmentation of multispectral dermoscopic images. , 2014, , .		5
46	Eikonal-based vertices growing and iterative seeding for efficient graph-based segmentation. , 2014, , .		11
47	A genetically optimized graph-based people extraction method for embedded transportation systems real conditions. , 2014, , .		2
48	A smarter exemplar-based inpainting algorithm using local and global heuristics for more geometric coherence. , 2014, , .		13
49	New data model for graph-cut segmentation: Application to automatic melanoma delineation. , 2014, , .		6
50	Geometric PDEs on Weighted Graphs for Semi-supervised Classification. , 2014, , .		5
51	Partial Difference Operators on Weighted Graphs for Image Processing on Surfaces and Point Clouds. IEEE Transactions on Image Processing, 2014, 23, 3896-3909.	9.8	49
52	Graph signal decomposition for multi-scale detail manipulation. , 2014, , .		2
53	Eikonal Equation Adaptation on Weighted Graphs: Fast Geometric Diffusion Process for Local and Non-local Image and Data Processing. Journal of Mathematical Imaging and Vision, 2013, 46, 238-257.	1.3	45
54	Morphological PDEs on graphs for filtering and inpainting of point clouds. , 2013, , .		2

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55	Lifting scheme on graphs with application to image representation. , 2013, , .		7
56	Nonlinear Multilayered Representation of Graph-Signals. Journal of Mathematical Imaging and Vision, 2013, 45, 114-137.	1.3	22
57	Image Processing with Spiking Neuron Networks. Studies in Computational Intelligence, 2013, , 525-544.	0.9	12
58	A fast spatial patch blending algorithm for artefact reduction in pattern-based image inpainting. , 2013, , .		13
59	Nonlocal segmentation of point clouds with graphs. , 2013, , .		2
60	Spatial Patch Blending for Artefact Reduction in Pattern-Based Inpainting Techniques. Lecture Notes in Computer Science, 2013, , 523-530.	1.3	3
61	Nonlocal PdES on graphs for active contours models with applications to image segmentation and data clustering. , 2012, , .		10
62	PdEs-based morphology on graphs for cytological slides segmentation and clustering. , 2012, , .		3
63	Nonlocal and multivariate mathematical morphology. , 2012, , .		9
64	Non-Local Morphological PDEs and p-Laplacian Equation on Graphs With Applications in Image Processing and Machine Learning. IEEE Journal on Selected Topics in Signal Processing, 2012, 6, 764-779.	10.8	36
65	Machine learning to design full-reference image quality assessment algorithm. Signal Processing: Image Communication, 2012, 27, 209-219.	3.2	31
66	Analysis of Whole Slide Images of Equine Tendinopathy. Lecture Notes in Computer Science, 2012, , 440-447.	1.3	0
67	A scale-space based hierarchical representation of discrete data. , 2011, , .		0
68	Discrete infinity harmonic functions: Towards a unified interpolation framework on graphs. , 2011, , .		8
69	PDEs level sets on weighted graphs. , 2011, , .		10
70	Nonlocal PDEs-Based Morphology on Weighted Graphs for Image and Data Processing. IEEE Transactions on Image Processing, 2011, 20, 1504-1516.	9.8	51
71	Multi-resolution graph-based analysis of histopathological whole slide images: Application to mitotic cell extraction and visualization. Computerized Medical Imaging and Graphics, 2011, 35, 603-615.	5.8	78
72	Special issue on whole slide microscopic image processing. Computerized Medical Imaging and Graphics, 2011, 35, 493-495.	5.8	5

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73	Hierarchical Representation of Discrete Data on Graphs. Lecture Notes in Computer Science, 2011, , 186-193.	1.3	0
74	Partial differences as tools for filtering data on graphs. Pattern Recognition Letters, 2010, 31, 2201-2213.	4.2	10
75	Segmentation and Edge Detection Based on Spiking Neural Network Model. Neural Processing Letters, 2010, 32, 131-146.	3.2	59
76	Morphological hierarchical segmentation and color spaces. International Journal of Imaging Systems and Technology, 2010, 20, 167-178.	4.1	8
77	People re-identification by spectral classification of silhouettes. Signal Processing, 2010, 90, 2362-2374.	3.7	66
78	Kernel-Based Implicit Regularization of Structured Objects. , 2010, , .		2
79	Graph-based morphological processing of multivariate microscopy images and data bases. , 2010, , .		0
80	Graph-based multi-resolution segmentation of histological whole slide images. , 2010, , .		9
81	Efficient Algorithms for Image and High Dimensional Data Processing Using Eikonal Equation on Graphs. Lecture Notes in Computer Science, 2010, , 647-658.	1.3	10
82	Color VQ-Based Image Compression by Manifold Learning. Lecture Notes in Computer Science, 2010, , 79-85.	1.3	1
83	Nonlocal Multiscale Hierarchical Decomposition on Graphs. Lecture Notes in Computer Science, 2010, , 638-650.	1.3	7
84	Cell Microscopic Segmentation with Spiking Neuron Networks. Lecture Notes in Computer Science, 2010, , 117-126.	1.3	3
85	Mitosis Extraction in Breast-Cancer Histopathological Whole Slide Images. Lecture Notes in Computer Science, 2010, , 539-548.	1.3	4
86	Graph-based tools for microscopic cellular image segmentation. Pattern Recognition, 2009, 42, 1113-1125.	8.1	62
87	Color image segmentation using morphological clustering and fusion with automatic scale selection. Pattern Recognition Letters, 2009, 30, 397-406.	4.2	44
88	Image quality assessment with manifold and machine learning. , 2009, , .		1
89	Adaptation of Eikonal Equation over Weighted Graph. Lecture Notes in Computer Science, 2009, , 187-199.	1.3	8
90	Top-Down Segmentation of Histological Images Using a Digital Deformable Model. Lecture Notes in Computer Science, 2009, , 327-336.	1.3	1

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91	Comparing Combination Rules of Pairwise Neural Networks Classifiers. Neural Processing Letters, 2008, 27, 43-56.	3.2	8
92	Nonlocal discrete p-Laplacian driven image and manifold processing. Comptes Rendus - Mecanique, 2008, 336, 428-433.	2.1	3
93	Nonlocal Discrete Regularization on Weighted Graphs: A Framework for Image and Manifold Processing. IEEE Transactions on Image Processing, 2008, 17, 1047-1060.	9.8	364
94	Partial difference equations on graphs for Mathematical Morphology operators over images and manifolds. , 2008, , .		1
95	Nonlocal graph regularization for image colorization. , 2008, , .		21
96	Nonlocal morphological levelings by partial difference equations over weighted graphs. , 2008, , .		1
97	TABU SEARCH MODEL SELECTION FOR SVM. International Journal of Neural Systems, 2008, 18, 19-31.	5.2	19
98	Image Segmentation with Spiking Neuron Network. AIP Conference Proceedings, 2008, , .	0.4	3
99	Image clustering with spiking neuron network. , 2008, , .		12
100	Impulse noise removal by spectral clustering and regularization on graphs. , 2008, , .		0
101	Learning graph neighborhood topological order for image and manifold morphological processing. , 2008, , .		1
102	Machine Learning in Image Processing. Eurasip Journal on Advances in Signal Processing, 2008, 2008, .	1.7	20
103	A color image quality assessment using a reduced-reference image machine learning expert. , 2008, , .		2
104	Partial Difference Equations over Graphs: Morphological Processing of Arbitrary Discrete Data. Lecture Notes in Computer Science, 2008, , 668-680.	1.3	18
105	Graph Based Semi and Unsupervised Classification and Segmentation of Microscopic Images. , 2007, , .		5
106	Mathematical Morphology in Any Color Space. , 2007, , .		13
107	Graph regularization for color image processing. Computer Vision and Image Understanding, 2007, 107, 38-55.	4.7	47
108	Parameterless Discrete Regularization on Graphs for Color Image Filtering. Lecture Notes in Computer Science, 2007, , 46-57.	1.3	5

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109	Evidential Segmentation of Microscopic Color Images with Pixel Classification Posterior Probabilities. Journal of Multimedia, 2007, 2, .	0.3	4
110	AUTOMATIC SEGMENTATION AND CLASSIFICATION OF CELLS FROM BRONCHO ALVEOLAR LAVAGE. Image Analysis and Stereology, 2007, 26, 111.	0.9	4
111	Fast Pixel Classification by SVM Using Vector Quantization, Tabu Search and Hybrid Color Space. Lecture Notes in Computer Science, 2005, , 685-692.	1.3	10
112	Neural network induction graph for pattern recognition. Neurocomputing, 2004, 57, 257-274.	5.9	5
113	A color object recognition scheme: application to cellular sorting. Machine Vision and Applications, 2003, 14, 166-171.	2.7	23
114	Graph based smoothing and segmentation of color images. , 2003, , .		3
115	SUPERVISED AUTOMATIC HISTOGRAM CLUSTERING AND WATERSHED SEGMENTATION. APPLICATION TO MICROSCOPIC MEDICAL COLOR IMAGES. Image Analysis and Stereology, 2003, 22, 113.	0.9	15
116	Cooperation of color pixel classification schemes and color watershed: a study for microscopic images. IEEE Transactions on Image Processing, 2002, 11, 783-789.	9.8	110
117	A neural network architecture for data classification. International Journal of Neural Systems, 2001, 11, 33-42.	5.2	16
118	Bayesian marker extraction for color watershed in segmenting microscopic images. , 0, , .		9
119	Graph of neural networks for pattern recognition. , 0, , .		5
120	A supervised segmentation scheme for cancerology color images. , 0, , .		1
121	A graph approach to color mathematical morphology. , 0, , .		9
122	Biomedical Microscopic Image Processing by Graphs. Advances in Bioinformatics and Biomedical Engineering Book Series, 0, , 197-213.	0.4	0