Lionel Pj Moisan

List of Publications by Year
in descending order

56 papers	2,106 citations	331670 21 h-index	315739 38 g-index
57 all docs	57 docs citations	57 times ranked	1880 citing authors

#	Article	IF	Citations
1	Meaningful Alignments. International Journal of Computer Vision, 2000, 40, 7-23.	15.6	271
2	From Gestalt Theory to Image Analysis. Interdisciplinary Applied Mathematics, 2008, , .	0.3	204
3	Edge Detection by Helmholtz Principle. Journal of Mathematical Imaging and Vision, 2001, 14, 271-284.	1.3	141
4	A Probabilistic Criterion to Detect Rigid Point Matches Between Two Images and Estimate the Fundamental Matrix. International Journal of Computer Vision, 2004, 57, 201-218.	15.6	131
5	Localization of Protein Aggregation in Escherichia coli Is Governed by Diffusion and Nucleoid Macromolecular Crowding Effect. PLoS Computational Biology, 2013, 9, e1003038.	3.2	113
6	Automatic Homographic Registration of a Pair of Images, with A Contrario Elimination of Outliers. Image Processing on Line, 0, 2, 56-73.	0.0	104
7	Periodic Plus Smooth Image Decomposition. Journal of Mathematical Imaging and Vision, 2011, 39, 161-179.	1.3	84
8	A Dictionary Learning Approach for Poisson Image Deblurring. IEEE Transactions on Medical Imaging, 2013, 32, 1277-1289.	8.9	82
9	Multiplicative Noise Removal via a Learned Dictionary. IEEE Transactions on Image Processing, 2012, 21, 4534-4543.	9.8	73
10	Multiparametric Analyses Reveal the pH-Dependence of Silicon Biomineralization in Diatoms. PLoS ONE, 2012, 7, e46722.	2.5	68
11	An A-Contrario Approach for Subpixel Change Detection in Satellite Imagery. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2010, 32, 1977-1993.	13.9	65
12	Total Variation as a Local Filter. SIAM Journal on Imaging Sciences, 2011, 4, 651-694.	2.2	64
13	Computational gestalts and perception thresholds. Journal of Physiology (Paris), 2003, 97, 311-324.	2.1	54
14	No-Reference Image Quality Assessment and Blind Deblurring with Sharpness Metrics Exploiting Fourier Phase Information. Journal of Mathematical Imaging and Vision, 2015, 52, 145-172.	1.3	54
15	Maximal meaningful events and applications to image analysis. Annals of Statistics, 2003, 31, 1822.	2.6	48
16	An explicit sharpness index related to global phase coherence. , 2012, , .		48
17	Gestalt Theory and Computer Vision. , 2004, , 71-101.		48
18	Affine plane curve evolution: a fully consistent scheme. IEEE Transactions on Image Processing, 1998, 7, 411-420.	9.8	46

#	Article	IF	Citations
19	A-contrario Detectability of Spots inÂTextured Backgrounds. Journal of Mathematical Imaging and Vision, 2009, 33, 313-337.	1.3	42
20	Measuring the Global Phase Coherence of an image. , 2008, , .		38
21	On the Theory of Planar Shape. Multiscale Modeling and Simulation, 2003, 1, 1-24.	1.6	28
22	Posterior Expectation of the Total Variation Model: Properties and Experiments. SIAM Journal on Imaging Sciences, 2013, 6, 2640-2684.	2.2	26
23	Unsupervised Subpixelic Classification Using Coarse-Resolution Time Series and Structural Information. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 1359-1374.	6.3	25
24	Conical diffraction illumination opens the way for low phototoxicity super-resolution imaging. Cell Adhesion and Migration, 2014, 8, 430-439.	2.7	23
25	Texton Noise. Computer Graphics Forum, 2017, 36, 205-218.	3.0	23
26	Dequantizing image orientation. IEEE Transactions on Image Processing, 2002, 11, 1129-1140.	9.8	22
27	A review of P.D.E. models in image processing and image analysis. European Physical Journal Special Topics, 2002, 12, 137-154.	0.2	22
28	How to discretize the Total Variation of an image?. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1041907-1041908.	0.2	16
29	Total Variation Restoration of Images Corrupted by Poisson Noise with Iterated Conditional Expectations. Lecture Notes in Computer Science, 2015, , 178-190.	1.3	16
30	Intrinsic nonlinear multiscale image decomposition: A 2D empirical mode decomposition-like tool. Computer Vision and Image Understanding, 2012, 116, 102-119.	4.7	15
31	The Shannon Total Variation. Journal of Mathematical Imaging and Vision, 2017, 59, 341-370.	1.3	12
32	Geometric Computation of Curvature Driven Plane Curve Evolutions. SIAM Journal on Numerical Analysis, 2001, 39, 624-646.	2.3	11
33	A Turning-Band Method for the Simulation of Anisotropic Fractional Brownian Fields. Journal of Computational and Graphical Statistics, 2015, 24, 885-904.	1.7	10
34	Tracking of cells in a sequence of images using a low-dimension image representation. , 2008, , .		9
35	Geometric Multiscale Representation of Numerical Images. Lecture Notes in Computer Science, 1999, , 339-350.	1.3	8
36	An aliasing detection algorithm based on suspicious colocalizations of Fourier coefficients. , 2010, , .		8

#	ARTICLE	IF	CITATIONS
37	A compact representation of random phase and Gaussian textures. , 2012, , .		8
38	Conical diffraction as a versatile building block to implement new imaging modalities for superresolution in fluorescence microscopy. Proceedings of SPIE, 2014, , .	0.8	8
39	Variational Snake Theory. , 2003, , 79-99.		4
40	The Billard Theorem for Multiple Random Fourier Series. Journal of Fourier Analysis and Applications, 2017, 23, 207-228.	1.0	4
41	Blind Deblurring Using a Simplified Sharpness Index. Lecture Notes in Computer Science, 2013, , 86-97.	1.3	4
42	A New A Contrario Approach for the Robust Determination of the Fundamental Matrix. Lecture Notes in Computer Science, 2014, , 181-192.	1.3	4
43	A linear prefilter for image sampling with ringing artifact control. , 2005, , .		3
44	Automatic detection of well sampled images via a new ringing measure. , 2010, , .		3
45	Algorithm 1006. ACM Transactions on Mathematical Software, 2020, 46, 1-24.	2.9	3
46	Perspective invariant movie analysis for depth recovery. , 1995, , .		2
47	An Unsupervised Approach for Subpixelic Land-Cover Change Detection. , 2007, , .		2
48	Particle detection and tracking in fluorescence time-lapse imaging: a contrario approach. Machine Vision and Applications, 2016, 27, 511-527.	2.7	2
49	A non intrusive audio clarity index (NIAC) and its application to blind source separation. Signal Processing, 2022, 194, 108448.	3.7	2
50	Multiscale analysis of movies for depth recovery. , 0, , .		1
51	Microtexture inpainting through Gaussian conditional simulation. , 2016, , .		1
52	Active skeleton for bacteria modelling. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2017, 5, 274-286.	1.9	1
53	A stable method solving the total variation dictionary model with L^∞ constraints. Inverse Problems and Imaging, 2014, 8, 507-535.	1.1	1
54	Automatic detection of rigid point matches. , 0, , .		0

#	Article	IF	Citations
55	Shape Smoothing and PDEs. , 2005, , 573-586.		0
56	An image-inspired audio sharpness index. , 2017, , .		0