Mila Nikolova

List of Publications by Citations

54 papers	5,265 citations	23 h-index	55 g-index
55 ext. papers	6,174 ext. citations	2.3 avg, IF	6.26 L-index

#	Paper	IF	Citations
54	Affine Invariant Flows in the Beltrami Framework. *Journal of Mathematical Imaging and Vision*, **2004**, 20, 89-97	1.6	1373
53	Algorithms for Finding Global Minimizers of Image Segmentation and Denoising Models. *SIAM Journal on Applied Mathematics*, **2006**, 66, 1632-1648	1.8	724
52	Salt-and-Pepper noise removal by median-type noise detectors and detail-preserving regularization. *IEEE Transactions on Image Processing*, **2005**, 14, 1479-85	8.7	554
51	Regularizing Flows for Constrained Matrix-Valued Images. *Journal of Mathematical Imaging and Vision*, **2004**, 20, 99-120	1.6	432
50	Analysis of Half-Quadratic Minimization Methods for Signal and Image Recovery. *SIAM Journal of Scientific Computing*, **2005**, 27, 937-966	2.6	258
49	Minimizers of Cost-Functions Involving Nonsmooth Data-Fidelity Terms. Application to the Processing of Outliers. *SIAM Journal on Numerical Analysis*, **2002**, 40, 965-994	2.4	240
48	Fast nonconvex nonsmooth minimization methods for image restoration and reconstruction. *IEEE Transactions on Image Processing*, **2010**, 19, 3073-88	8.7	174
47	Local Strong Homogeneity of a Regularized Estimator. *SIAM Journal on Applied Mathematics*, **2000**, 61, 633-658	1.8	174
46	Efficient Reconstruction of Piecewise Constant Images Using Nonsmooth Nonconvex Minimization. *SIAM Journal on Imaging Sciences*, **2008**, 1, 2-25	1.9	127
45	Two-phase approach for deblurring images corrupted by impulse plus gaussian noise. *Inverse Problems and Imaging*, **2008**, 2, 187-204	2.1	125
44	Efficient Minimization Methods of Mixed l2-l1 and l1-l1 Norms for Image Restoration. *SIAM Journal of Scientific Computing*, **2006**, 27, 1881-1902	2.6	121
43	Analysis of the Recovery of Edges in Images and Signals by Minimizing Nonconvex Regularized Least-Squares. *Multiscale Modeling and Simulation*, **2005**, 4, 960-991	1.8	119
42	Multiplicative Noise Removal Using L1 Fidelity on Frame Coefficients. *Journal of Mathematical Imaging and Vision*, **2010**, 36, 201-226	1.6	112
41	Fast Two-Phase Image Deblurring Under Impulse Noise. *Journal of Mathematical Imaging and Vision*, **2010**, 36, 46-53	1.6	106
40	The equivalence of half-quadratic minimization and the gradient linearization iteration. *IEEE Transactions on Image Processing*, **2007**, 16, 1623-7	8.7	77
39	Weakly Constrained Minimization: Application to the Estimation of Images and Signals Involving Constant Regions. *Journal of Mathematical Imaging and Vision*, **2004**, 21, 155-175	1.6	66
38	Fast Hue and Range Preserving Histogram: Specification: Theory and New Algorithms for Color Image Enhancement. *IEEE Transactions on Image Processing*, **2014**, 23, 4087-4100	8.7	58

37	Description of the Minimizers of Least Squares Regularized with ℓ_0-norm. Uniqueness of the Global Minimizer. *SIAM Journal on Imaging Sciences*, **2013**, 6, 904-937	1.9	53
36	Denoising of Frame Coefficients Using ℓ^1 Data-Fidelity Term and Edge-Preserving Regularization. *Multiscale Modeling and Simulation*, **2007**, 6, 547-576	1.8	36
35	Penalized likelihood regression for generalized linear models with non-quadratic penalties. *Annals of the Institute of Statistical Mathematics*, **2011**, 63, 585-615	1	33
34	On ℓ_1 Data Fitting and Concave Regularization for Image Recovery. *SIAM Journal of Scientific Computing*, **2013**, 35, A397-A430	2.6	32
33	Model distortions in Bayesian MAP reconstruction. *Inverse Problems and Imaging*, **2007**, 1, 399-422	2.1	31
32	Exact Histogram Specification for Digital Images Using a Variational Approach. *Journal of Mathematical Imaging and Vision*, **2013**, 46, 309-325	1.6	27
31	Relationship between the optimal solutions of least squares regularized with 0-norm and constrained by k-sparsity. *Applied and Computational Harmonic Analysis*, **2016**, 41, 237-265	3.1	22
30	A Three-Stage Approach for Segmenting Degraded Color Images: Smoothing, Lifting and Thresholding (SLaT). *Journal of Scientific Computing*, **2017**, 72, 1313-1332	2.3	21
29	High-order total variation regularization approach for axially symmetric object tomography from a single radiograph. *Inverse Problems and Imaging*, **2015**, 9, 55-77	2.1	19
28	Estimés localement fortement homogènes. *Comptes Rendus Mathematique*, **1997**, 325, 665-670		16
27	Energy Minimization Methods **2011**, 139-185		15
26	A Nonlocal Denoising Algorithm for Manifold-Valued Images Using Second Order Statistics. *SIAM Journal on Imaging Sciences*, **2017**, 10, 416-448	1.9	14
25	Fast ordering algorithm for exact histogram specification. *IEEE Transactions on Image Processing*, **2014**, 23, 5274-83	8.7	13
24	A two-stage method for spectral-spatial classification of hyperspectral images. *Journal of Mathematical Imaging and Vision*, **2020**, 62, 790-807	1.6	10
23	Multiplicative Noise Cleaning via a Variational Method Involving Curvelet Coefficients. *Lecture Notes in Computer Science*, **2009**, 282-294	0.9	8
22	A Fast Algorithm for Exact Histogram Specification. Simple Extension to Colour Images. *Lecture Notes in Computer Science*, **2013**, 174-185	0.9	8
21	Fast and Accurate Multiplicative Decomposition for Fringe Removal in Interferometric Images. *IEEE Transactions on Computational Imaging*, **2017**, 3, 187-201	4.5	7
20	Bilevel Image Denoising Using Gaussianity Tests. *Lecture Notes in Computer Science*, **2015**, 117-128	0.9	7

#	Title		
19	Inertial Alternating Generalized Forward-Backward Splitting for Image Colorization. *Journal of Mathematical Imaging and Vision*, **2019**, 61, 672-690	1.6	6
18	A Characterization of Proximity Operators. *Journal of Mathematical Imaging and Vision*, **2020**, 62, 773-789	1.6	6
17	Fast Dejittering for Digital Video Frames. *Lecture Notes in Computer Science*, **2009**, 439-451	0.9	6
16	Nonconvex Optimization for 3-Dimensional Point Source Localization Using a Rotating Point Spread Function. *SIAM Journal on Imaging Sciences*, **2019**, 12, 259-286	1.9	5
15	One-iteration dejittering of digital video images. *Journal of Visual Communication and Image Representation*, **2009**, 20, 254-274	2.7	5
14	Analytical bounds on the minimizers of (nonconvex) regularized least-squares. *Inverse Problems and Imaging*, **2008**, 2, 133-149	2.1	5
13	Modeling anisotropic undersampling of magnetic resonance angiographies and reconstruction of a high-resolution isotropic volume using half-quadratic regularization techniques. *Signal Processing*, **2004**, 84, 743-762	4.4	4
12	On Bayesian estimation and proximity operators. *Applied and Computational Harmonic Analysis*, **2021**, 50, 49-72	3.1	3
11	Alternating Structure-Adapted Proximal Gradient Descent for Nonconvex Nonsmooth Block-Regularized Problems. *SIAM Journal on Optimization*, **2019**, 29, 2053-2078	2	2
10	Semi-explicit Solution and Fast Minimization Scheme for an Energy with ℓ_1-Fitting and Tikhonov-Like Regularization. *Journal of Mathematical Imaging and Vision*, **2009**, 34, 32-47	1.6	2
9	Minimization of Cost-Functions with Non-smooth Data-Fidelity Terms to Clean Impulsive Noise. *Lecture Notes in Computer Science*, **2003**, 391-406	0.9	2
8	Fast Algorithms for l1 Norm/Mixed l1 and l2 Norms for Image Restoration. *Lecture Notes in Computer Science*, **2005**, 843-851	0.9	2
7	A Variational Approach for Exact Histogram Specification. *Lecture Notes in Computer Science*, **2012**, 86-97	0.9	2
6	Bounds on the Minimizers of (nonconvex) Regularized Least-Squares **2007**, 496-507		1
5	Energy Minimization Methods **2015**, 157-204		1
4	A Convex Model for Edge-Histogram Specification with Applications to Edge-Preserving Smoothing. *Axioms*, **2018**, 7, 53	1.6	1
3	Below the Surface of the Non-local Bayesian Image Denoising Method. *Lecture Notes in Computer Science*, **2017**, 208-220	0.9	0
2	Energy Minimization Methods **2014**, 1-43		

1   Counter-Examples for Bayesian MAP Restoration **2007**, 140-152

1   Counter-Examples for Bayesian MAP Restoration **2007**, 140-152