

Michael Unser

List of Publications by Year in descending order

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298
papers

14,912
citations

29994

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22764

112
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306
all docs

306
docs citations

306
times ranked

13886
citing authors

#	ARTICLE	IF	CITATIONS
1	Convex optimization in sums of Banach spaces. Applied and Computational Harmonic Analysis, 2022, 56, 1-25.	1.1	11
2	Learning of Continuous and Piecewise-Linear Functions With Hessian Total-Variation Regularization. IEEE Open Journal of Signal Processing, 2022, 3, 36-48.	2.3	5
3	Sparsest piecewise-linear regression of one-dimensional data. Journal of Computational and Applied Mathematics, 2022, 406, 114044.	1.1	9
4	A constrained method for lensless coherent imaging of thin samples. Applied Optics, 2022, 61, F34.	0.9	3
5	Sparsest Univariate Learning Models Under Lipschitz Constraint. IEEE Open Journal of Signal Processing, 2022, 3, 140-154.	2.3	1
6	Steerâ€™nâ€™Detect: fast 2D template detection with accurate orientation estimation. Bioinformatics, 2022, 38, 3146-3148.	1.8	1
7	Bona Fide Riesz Projections for Density Estimation. , 2022, , .		1
8	Coupled Splines for Sparse Curve Fitting. IEEE Transactions on Image Processing, 2022, 31, 4707-4718.	6.0	2
9	A Unifying Representer Theorem for Inverse Problems and Machine Learning. Foundations of Computational Mathematics, 2021, 21, 941-960.	1.5	25
10	Time-Dependent Deep Image Prior for Dynamic MRI. IEEE Transactions on Medical Imaging, 2021, 40, 3337-3348.	5.4	51
11	Multikernel Regression with Sparsity Constraint. SIAM Journal on Mathematics of Data Science, 2021, 3, 201-224.	1.0	8
12	Active Subdivision Surfaces for the Semiautomatic Segmentation of Biomedical Volumes. IEEE Transactions on Image Processing, 2021, 30, 5739-5753.	6.0	4
13	CryoGAN: A New Reconstruction Paradigm for Single-Particle Cryo-EM Via Deep Adversarial Learning. IEEE Transactions on Computational Imaging, 2021, 7, 759-774.	2.6	36
14	Principled Design and Implementation of Steerable Detectors. IEEE Transactions on Image Processing, 2021, 30, 4465-4478.	6.0	2
15	Diffraction Tomography From Single-Molecule Localization Microscopy: Numerical Feasibility. , 2021, , .		1
16	Optimal-Transport-Based Metric For SMLM. , 2021, , .		1
17	Graphic: Graph-Based Hierarchical Clustering For Single-Molecule Localization Microscopy. , 2021, , .		0
18	Deep Learning Enables Individual Xenograft Cell Classification in Histological Images by Analysis of Contextual Features. Journal of Mammary Gland Biology and Neoplasia, 2021, 26, 101-112.	1.0	5

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19	Duality Mapping for Schatten Matrix Norms. Numerical Functional Analysis and Optimization, 2021, 42, 679-695.	0.6	2
20	Shortest-support multi-spline bases for generalized sampling. Journal of Computational and Applied Mathematics, 2021, 395, 113610.	1.1	0
21	Optical diffraction tomography from single-molecule localization microscopy. Optics Communications, 2021, 499, 127290.	1.0	1
22	Continuous-Domain Formulation of Inverse Problems for Composite Sparse-Plus-Smooth Signals. IEEE Open Journal of Signal Processing, 2021, 2, 545-558.	2.3	1
23	Robust Phase Unwrapping via Deep Image Prior for Quantitative Phase Imaging. IEEE Transactions on Image Processing, 2021, 30, 7025-7037.	6.0	30
24	Gaussian and sparse processes are limits of generalized Poisson processes. Applied and Computational Harmonic Analysis, 2020, 48, 1045-1065.	1.1	5
25	The n -term Approximation of Periodic Generalized Lévy Processes. Journal of Theoretical Probability, 2020, 33, 180-200.	0.4	5
26	A method for assessing the fidelity of optical diffraction tomography reconstruction methods using structured illumination. Optics Communications, 2020, 454, 124486.	1.0	8
27	Support and approximation properties of Hermite splines. Journal of Computational and Applied Mathematics, 2020, 368, 112503.	1.1	6
28	Generating Sparse Stochastic Processes Using Matched Splines. IEEE Transactions on Signal Processing, 2020, 68, 4397-4406.	3.2	2
29	Continuous-Domain Signal Reconstruction Using L_p -Norm Regularization. IEEE Transactions on Signal Processing, 2020, 68, 4543-4554.	3.2	12
30	Adaptive Regularization for Three-Dimensional Optical Diffraction Tomography. , 2020, , .		6
31	Hessian Splines for Scanning Transmission X-Ray Microscopy. , 2020, , .		0
32	A Note on BIBO Stability. IEEE Transactions on Signal Processing, 2020, 68, 5904-5913.	3.2	3
33	Deep Neural Networks With Trainable Activations and Controlled Lipschitz Constant. IEEE Transactions on Signal Processing, 2020, 68, 4688-4699.	3.2	16
34	Learning Activation Functions in Deep (Spline) Neural Networks. IEEE Open Journal of Signal Processing, 2020, 1, 295-309.	2.3	19
35	Dictionary Learning for Two-Dimensional Kendall Shapes. SIAM Journal on Imaging Sciences, 2020, 13, 141-175.	1.3	3
36	Three-Dimensional Optical Diffraction Tomography With Lippmann-Schwinger Model. IEEE Transactions on Computational Imaging, 2020, 6, 727-738.	2.6	35

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37	Joint Angular Refinement and Reconstruction for Single-Particle Cryo-EM. IEEE Transactions on Image Processing, 2020, 29, 6151-6163.	6.0	11
38	Multi-CryoGAN: Reconstruction of Continuous Conformations in Cryo-EM Using Generative Adversarial Networks. Lecture Notes in Computer Science, 2020, , 429-444.	1.0	18
39	Deep-learning projector for optical diffraction tomography. Optics Express, 2020, 28, 3905.	1.7	19
40	Scaling Limits of Solutions of Linear Stochastic Differential Equations Driven by Lévy White Noises. Journal of Theoretical Probability, 2019, 32, 1166-1189.	0.4	5
41	Deep Spline Networks with Control of Lipschitz Regularity. , 2019, , .		2
42	Deforming Tessellations For The Segmentation Of Cell Aggregates. , 2019, , .		0
43	Closed-Form Expression Of The Fourier Ring-Correlation For Single-Molecule Localization Microscopy. , 2019, , .		1
44	Normal-Based Interpolating Subdivision for the Geometric Representation of Deformable Models. , 2019, , .		0
45	Texture-driven parametric snakes for semi-automatic image segmentation. Computer Vision and Image Understanding, 2019, 188, 102793.	3.0	7
46	Pocket guide to solve inverse problems with GlobalBioIm. Inverse Problems, 2019, 35, 104006.	1.0	33
47	Solving Continuous-domain Problems Exactly with Multiresolution B-splines. , 2019, , .		2
48	B-Spline-Based Exact Discretization of Continuous-Domain Inverse Problems With Generalized TV Regularization. IEEE Transactions on Information Theory, 2019, 65, 4457-4470.	1.5	17
49	Super-resolution fight club: assessment of 2D and 3D single-molecule localization microscopy software. Nature Methods, 2019, 16, 387-395.	9.0	251
50	Beyond Wiener's Lemma: Nuclear Convolution Algebras and the Inversion of Digital Filters. Journal of Fourier Analysis and Applications, 2019, 25, 2037-2063.	0.5	3
51	Angular Accuracy of Steerable Feature Detectors. SIAM Journal on Imaging Sciences, 2019, 12, 344-371.	1.3	2
52	Inner-Loop-Free Admm For Cryo-Em. , 2019, , .		5
53	Optimal Spline Generators for Derivative Sampling. , 2019, , .		0
54	Hybrid-Spline Dictionaries for Continuous-Domain Inverse Problems. IEEE Transactions on Signal Processing, 2019, 67, 5824-5836.	3.2	12

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55	Biomedical Image Reconstruction: From the Foundations to Deep Neural Networks. Foundations and Trends in Signal Processing, 2019, 13, 283-357.	12.0	13
56	Approximation of Non-decaying Signals from Shift-Invariant Subspaces. Journal of Fourier Analysis and Applications, 2019, 25, 633-660.	0.5	2
57	Computational Super-Sectioning for Single-Slice Structured-Illumination Microscopy. IEEE Transactions on Computational Imaging, 2019, 5, 240-250.	2.6	9
58	Imaging cellular ultrastructures using expansion microscopy (U-ExM). Nature Methods, 2019, 16, 71-74.	9.0	335
59	Joint density map and continuous angular refinement in cryo-electron microscopy. IS&T International Symposium on Electronic Imaging, 2019, 2019, 133-1-133-5.	0.3	0
60	Reconstruction From Multiple Particles for 3D Isotropic Resolution in Fluorescence Microscopy. IEEE Transactions on Medical Imaging, 2018, 37, 1235-1246.	5.4	15
61	Learning Tomography Assessed Using Mie Theory. Physical Review Applied, 2018, 9, .	1.5	20
62	Learning Convex Regularizers for Optimal Bayesian Denoising. IEEE Transactions on Signal Processing, 2018, 66, 1093-1105.	3.2	10
63	A universal formula for generalized cardinal B-splines. Applied and Computational Harmonic Analysis, 2018, 45, 341-358.	1.1	1
64	Landmark-Based Shape Encoding and Sparse-Dictionary Learning in the Continuous Domain. IEEE Transactions on Image Processing, 2018, 27, 365-378.	6.0	4
65	Compact in-line lensfree digital holographic microscope. Methods, 2018, 136, 17-23.	1.9	16
66	Fast multiscale reconstruction for Cryo-EM. Journal of Structural Biology, 2018, 204, 543-554.	1.3	12
67	Periodic Splines and Gaussian Processes for the Resolution of Linear Inverse Problems. IEEE Transactions on Signal Processing, 2018, 66, 6047-6061.	3.2	8
68	Imaging neural activity in the ventral nerve cord of behaving adult Drosophila. Nature Communications, 2018, 9, 4390.	5.8	62
69	Rotation Invariance and Directional Sensitivity: Spherical Harmonics versus Radiomics Features. Lecture Notes in Computer Science, 2018, , 107-115.	1.0	4
70	DiversePathsJ: diverse shortest paths for bioimage analysis. Bioinformatics, 2018, 34, 538-540.	1.8	2
71	Region of interest X-ray computed tomography via corrected back projection. , 2018, , .		1
72	Phaseless diffraction tomography with regularized beam propagation. , 2018, , .		0

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73	Fast Piecewise-Affine Motion Estimation Without Segmentation. IEEE Transactions on Image Processing, 2018, 27, 5612-5624.	6.0	10
74	Continuous-Domain Solutions of Linear Inverse Problems With Tikhonov Versus Generalized TV Regularization. IEEE Transactions on Signal Processing, 2018, 66, 4670-4684.	3.2	27
75	Versatile reconstruction framework for diffraction tomography with intensity measurements and multiple scattering. Optics Express, 2018, 26, 2749.	1.7	35
76	CNN-Based Projected Gradient Descent for Consistent CT Image Reconstruction. IEEE Transactions on Medical Imaging, 2018, 37, 1440-1453.	5.4	291
77	3D BBPConvNet to reconstruct parallel MRI. , 2018, , .		3
78	Grid-Free Localization Algorithm Using Low-Rank Hankel Matrix for Super-Resolution Microscopy. IEEE Transactions on Image Processing, 2018, 27, 4771-4786.	6.0	5
79	Imaging complex objects using learning tomography. , 2018, , .		0
80	A sampling theory for non-decaying signals. Applied and Computational Harmonic Analysis, 2017, 43, 76-93.	1.1	20
81	On the Besov regularity of periodic Lévy noises. Applied and Computational Harmonic Analysis, 2017, 42, 21-36.	1.1	15
82	DeconvolutionLab2: An open-source software for deconvolution microscopy. Methods, 2017, 115, 28-41.	1.9	417
83	Steerable Wavelet Machines (SWM): Learning Moving Frames for Texture Classification. IEEE Transactions on Image Processing, 2017, 26, 1626-1636.	6.0	28
84	Pancreatic β - and δ -cellular clocks have distinct molecular properties and impact on islet hormone secretion and gene expression. Genes and Development, 2017, 31, 383-398.	2.7	84
85	Compressed sensing for STEM tomography. Ultramicroscopy, 2017, 179, 47-56.	0.8	24
86	Deep Convolutional Neural Network for Inverse Problems in Imaging. IEEE Transactions on Image Processing, 2017, 26, 4509-4522.	6.0	1,540
87	Fast Segmentation From Blurred Data in 3D Fluorescence Microscopy. IEEE Transactions on Image Processing, 2017, 26, 4856-4870.	6.0	9
88	High-Quality Parallel-Ray X-Ray CT Back Projection Using Optimized Interpolation. IEEE Transactions on Image Processing, 2017, 26, 4639-4647.	6.0	13
89	Optimized Wavelet Denoising for Self-Similar α -Stable Processes. IEEE Transactions on Information Theory, 2017, , 1-1.	1.5	1
90	Multiresolution Subdivision Snakes. IEEE Transactions on Image Processing, 2017, 26, 1188-1201.	6.0	22

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91	A non-stationary subdivision scheme for the construction of deformable models with sphere-like topology. Graphical Models, 2017, 94, 38-51.	1.1	20
92	Splines Are Universal Solutions of Linear Inverse Problems with Generalized TV Regularization. SIAM Review, 2017, 59, 769-793.	4.2	64
93	Optical Tomography based on a nonlinear model that handles multiple scattering. , 2017, , .		1
94	General surface energy for spinal cord and aorta segmentation. , 2017, , .		1
95	Closed-form alignment of active surface models using splines. , 2017, , .		0
96	Smooth shapes with spherical topology: Beyond traditional modeling, efficient deformation, and interaction. Computational Visual Media, 2017, 3, 199-215.	10.8	3
97	Multidimensional L [∞] white noise in weighted Besov spaces. Stochastic Processes and Their Applications, 2017, 127, 1599-1621.	0.4	12
98	Generalized Poisson Summation Formulas for Continuous Functions of Polynomial Growth. Journal of Fourier Analysis and Applications, 2017, 23, 442-461.	0.5	8
99	Convolutional Neural Networks for Inverse Problems in Imaging: A Review. IEEE Signal Processing Magazine, 2017, 34, 85-95.	4.6	496
100	Shape Projectors for Landmark-Based Spline Curves. IEEE Signal Processing Letters, 2017, 24, 1517-1521.	2.1	0
101	Compact lensless phase imager. Optics Express, 2017, 25, 4438.	1.7	8
102	Efficient inversion of multiple-scattering model for optical diffraction tomography. Optics Express, 2017, 25, 21786.	1.7	42
103	GlobalBioIm: A Unifying Computational Framework for Solving Inverse Problems. , 2017, , .		15
104	FlyLimbTracker: An active contour based approach for leg segment tracking in unmarked, freely behaving Drosophila. PLoS ONE, 2017, 12, e0173433.	1.1	35
105	Diverse M-Best Solutions by Dynamic Programming. Lecture Notes in Computer Science, 2017, , 255-267.	1.0	0
106	Slice-By-Slice Versus Fully 3D Reconstruction for Parallel-Beam X-ray Microtomography. , 2016, , .		0
107	Superresolution with Optically-Motivated Blind Deconvolution. , 2016, , .		1
108	Fast 3D reconstruction method for differential phase contrast X-ray CT. Optics Express, 2016, 24, 14564.	1.7	24

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109	Transforms and Operators for Directional Bioimage Analysis: A Survey. <i>Advances in Anatomy, Embryology and Cell Biology</i> , 2016, 219, 69-93.	1.0	322
110	An Inner-Product Calculus for Periodic Functions and Curves. <i>IEEE Signal Processing Letters</i> , 2016, 23, 878-882.	2.1	7
111	Characterization of the Solution of Linear Inverse Problems with Generalized TV Regularization. , 2016, , .		0
112	Isotropic resolution in fluorescence imaging by single particle reconstruction. , 2016, , .		0
113	Smoothly deformable spheres. , 2016, , .		1
114	Exact Algorithms for L^1 -TV Regularization of Real-Valued or Circle-Valued Signals. <i>SIAM Journal of Scientific Computing</i> , 2016, 38, A614-A630.	1.3	15
115	Hermite Snakes With Control of Tangents. <i>IEEE Transactions on Image Processing</i> , 2016, 25, 2803-2816.	6.0	20
116	SpotCaliper: fast wavelet-based spot detection with accurate size estimation. <i>Bioinformatics</i> , 2016, 32, 1278-1280.	1.8	9
117	Maximally Localized Radial Profiles for Tight Steerable Wavelet Frames. <i>IEEE Transactions on Image Processing</i> , 2016, 25, 2275-2287.	6.0	8
118	Proximity operators for phase retrieval. <i>Applied Optics</i> , 2016, 55, 7412.	2.1	30
119	On the Continuous Steering of the Scale of Tight Wavelet Frames. <i>SIAM Journal on Imaging Sciences</i> , 2016, 9, 1042-1062.	1.3	0
120	Representer Theorems for Sparsity-Promoting ℓ_1 Regularization. <i>IEEE Transactions on Information Theory</i> , 2016, 62, 5167-5180.	1.5	30
121	Local refinement for 3D deformable parametric surfaces. , 2016, , .		0
122	Joint absorption and phase retrieval in grating-based x-ray radiography. <i>Optics Express</i> , 2016, 24, 7253.	1.7	5
123	MMSE denoising of sparse and non-Gaussian AR(1) processes. , 2016, , .		2
124	A Guided Tour of Selected Image Processing and Analysis Methods for Fluorescence and Electron Microscopy. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2016, 10, 6-30.	7.3	52
125	Optical Tomographic Image Reconstruction Based on Beam Propagation and Sparse Regularization. <i>IEEE Transactions on Computational Imaging</i> , 2016, 2, 59-70.	2.6	140
126	Reconstruction From Multiple Poses in Fluorescence Imaging: Proof of Concept. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2016, 10, 61-70.	7.3	3

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127	Design of Steerable Wavelets to Detect Multifold Junctions. IEEE Transactions on Image Processing, 2016, 25, 643-657.	6.0	15
128	Introduction to the Issue on Advanced Signal Processing in Microscopy and Cell Imaging. IEEE Journal on Selected Topics in Signal Processing, 2016, 10, 3-5.	7.3	3
129	Variational Phase Imaging Using the Transport-of-Intensity Equation. IEEE Transactions on Image Processing, 2016, 25, 807-817.	6.0	28
130	Analysis of <i>S. pombe</i> SIN protein SPB-association reveals two genetically separable states of the SIN. Journal of Cell Science, 2015, 128, 741-54.	1.2	12
131	Optimized steerable wavelets for texture analysis of lung tissue in 3-D CT: Classification of usual interstitial pneumonia. , 2015, , .		16
132	Interpretation of continuous-time autoregressive processes as random exponential splines. , 2015, , .		2
133	Generalized poisson summation formula for tempered distributions. , 2015, , .		1
134	Compressibility of symmetric- α -stable processes. , 2015, , .		1
135	A Learning Approach to Optical Tomography. , 2015, , .		1
136	Locally refinable parametric snakes. , 2015, , .		3
137	New parametric 3D snake for medical segmentation of structures with cylindrical topology. , 2015, , .		5
138	Template-Free Wavelet-Based Detection of Local Symmetries. IEEE Transactions on Image Processing, 2015, 24, 3009-3018.	6.0	12
139	Structure Tensor Total Variation. SIAM Journal on Imaging Sciences, 2015, 8, 1090-1122.	1.3	102
140	Fast detection and refined scale estimation using complex isotropic wavelets. , 2015, , .		1
141	Tip-seeking active contours for bioimage segmentation. , 2015, , .		3
142	Similarity-based shape priors for 2D spline snakes. , 2015, , .		2
143	Sampling and (sparse) stochastic processes: A tale of splines and innovation. , 2015, , .		1
144	Optimal Isotropic Wavelets for Localized Tight Frame Representations. IEEE Signal Processing Letters, 2015, 22, 1918-1921.	2.1	5

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145	Fast live cell imaging at nanometer scale using annihilating filter-based low-rank Hankel matrix approach. Proceedings of SPIE, 2015, , .	0.8	4
146	Wavelet Statistics of Sparse and Self-Similar Images. SIAM Journal on Imaging Sciences, 2015, 8, 2951-2975.	1.3	8
147	Ellipse-preserving Hermite interpolation and subdivision. Journal of Mathematical Analysis and Applications, 2015, 426, 211-227.	0.5	40
148	Stressed Mycobacteria Use the Chaperone ClpB to Sequester Irreversibly Oxidized Proteins Asymmetrically Within and Between Cells. Cell Host and Microbe, 2015, 17, 178-190.	5.1	104
149	Joint image reconstruction and segmentation using the Potts model. Inverse Problems, 2015, 31, 025003.	1.0	88
150	Divergence-Free Wavelet Frames. IEEE Signal Processing Letters, 2015, 22, 1142-1146.	2.1	6
151	Snakes on a Plane: A perfect snap for bioimage analysis. IEEE Signal Processing Magazine, 2015, 32, 41-48.	4.6	63
152	Quantitative evaluation of software packages for single-molecule localization microscopy. Nature Methods, 2015, 12, 717-724.	9.0	347
153	Optimality of Operator-Like Wavelets for Representing Sparse AR(1) Processes. IEEE Transactions on Signal Processing, 2015, 63, 4827-4837.	3.2	9
154	Interior Tomography Using 1D Generalized Total Variation. Part I: Mathematical Foundation. SIAM Journal on Imaging Sciences, 2015, 8, 226-247.	1.3	16
155	Isotropic inverse-problem approach for two-dimensional phase unwrapping. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2015, 32, 1092.	0.8	14
156	Learning approach to optical tomography. Optica, 2015, 2, 517.	4.8	332
157	Spline based iterative phase retrieval algorithm for X-ray differential phase contrast radiography. Optics Express, 2015, 23, 10631.	1.7	10
158	Interior Tomography Using 1D Generalized Total Variation. Part II: Multiscale Implementation. SIAM Journal on Imaging Sciences, 2015, 8, 2452-2486.	1.3	14
159	Efficient Shape Priors for Spline-Based Snakes. IEEE Transactions on Image Processing, 2015, 24, 3915-3926.	6.0	15
160	Trigonometric Interpolation Kernel to Construct Deformable Shapes for User-Interactive Applications. IEEE Signal Processing Letters, 2015, 22, 2097-2101.	2.1	65
161	Statistical optimality of Hermite splines. , 2015, , .		3
162	Improved Variational Denoising of Flow Fields with Application to Phase-Contrast MRI Data. IEEE Signal Processing Letters, 2015, 22, 762-766.	2.1	11

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163	Optimized Kaiser-Bessel Window Functions for Computed Tomography. IEEE Transactions on Image Processing, 2015, 24, 3826-3833.	6.0	23
164	Steerable PCA for Rotation-Invariant Image Recognition. SIAM Journal on Imaging Sciences, 2015, 8, 1857-1873.	1.3	4
165	Wavelet-based identification and classification of local symmetries in microscopy images. , 2014, , .		1
166	High-performance 3D deconvolution of fluorescence micrographs. , 2014, , .		2
167	Unsupervised texture segmentation using monogenic curvelets and the Potts model. , 2014, , .		6
168	VOW: Variance-optimal wavelets for the steerable pyramid. , 2014, , .		7
169	Statistics of wavelet coefficients for sparse self-similar images. , 2014, , .		1
170	3D high-density localization microscopy using hybrid astigmatic/ biplane imaging and sparse image reconstruction. Biomedical Optics Express, 2014, 5, 3935.	1.5	35
171	On the Unique Identification of Continuous-Time Autoregressive Models From Sampled Data. IEEE Transactions on Signal Processing, 2014, 62, 1361-1376.	3.2	21
172	On the Continuity of Characteristic Functionals and Sparse Stochastic Modeling. Journal of Fourier Analysis and Applications, 2014, 20, 1179-1211.	0.5	18
173	Digital phase reconstruction via iterative solutions of transport-of-intensity equation. , 2014, , .		4
174	Approximate Message Passing With Consistent Parameter Estimation and Applications to Sparse Learning. IEEE Transactions on Information Theory, 2014, 60, 2969-2985.	1.5	44
175	A Unified Formulation of Gaussian Versus Sparse Stochastic Processes Part II: Discrete-Domain Theory. IEEE Transactions on Information Theory, 2014, 60, 3036-3051.	1.5	27
176	Sparsity and Infinite Divisibility. IEEE Transactions on Information Theory, 2014, 60, 2346-2358.	1.5	18
177	A Unified Formulation of Gaussian Versus Sparse Stochastic Processes Part I: Continuous-Domain Theory. IEEE Transactions on Information Theory, 2014, 60, 1945-1962.	1.5	39
178	Harmonic singular integrals and steerable wavelets in $L^2(\mathbb{R}^2)$. http://www.w3.org/1998/Math/MathML altimg="si1.gif" overflow="scroll" $L^2(\mathbb{R}^2)$ stretchy="false" T_j /Overlock 10 Tf 50 137 Td (mathvariant="double-struck")		
179	Variational Justification of Cycle Spinning for Wavelet-Based Solutions of Inverse Problems. IEEE Signal Processing Letters, 2014, 21, 1326-1330.	2.1	54
180	Approximation Properties of Sobolev Splines and the Construction of Compactly Supported Equivalents. SIAM Journal on Mathematical Analysis, 2014, 46, 1843-1858.	0.9	5

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181	Atlas-free brain segmentation in 3D proton-density-like MRI images. , 2014, , .		5
182	Exponential Hermite splines for the analysis of biomedical images. , 2014, , .		22
183	Wavelets: on the virtues and applications of the mathematical microscope. Journal of Microscopy, 2014, 255, 123-127.	0.8	8
184	Adaptive Image Resizing Based on Continuous-Domain Stochastic Modeling. IEEE Transactions on Image Processing, 2014, 23, 413-423.	6.0	3
185	Phase retrieval by using transport-of-intensity equation and differential interference contrast microscopy. , 2014, , .		13
186	FALCON: fast and unbiased reconstruction of high-density super-resolution microscopy data. Scientific Reports, 2014, 4, 4577.	1.6	125
187	A 2D/3D image analysis system to track fluorescently labeled structures in rod-shaped cells: application to measure spindle pole asymmetry during mitosis. Cell Division, 2013, 8, 6.	1.1	13
188	Decay Properties of Riesz Transforms and Steerable Wavelets. SIAM Journal on Imaging Sciences, 2013, 6, 984-998.	1.3	10
189	Poisson Image Reconstruction With Hessian Schatten-Norm Regularization. IEEE Transactions on Image Processing, 2013, 22, 4314-4327.	6.0	65
190	Spline-based framework for interactive segmentation in biomedical imaging. Irbm, 2013, 34, 235-243.	3.7	18
191	Sparse Stochastic Processes and Discretization of Linear Inverse Problems. IEEE Transactions on Image Processing, 2013, 22, 2699-2710.	6.0	78
192	Operator-Like Wavelet Bases of $L_2(\mathbb{R}^d)$. Journal of Fourier Analysis and Applications, 2013, 19, 1294-1322.	0.5	5
193	On the Linearity of Bayesian Interpolators for Non-Gaussian Continuous-Time AR(1) Processes. IEEE Transactions on Information Theory, 2013, 59, 5063-5074.	1.5	7
194	Benefits of consistency in image denoising with steerable wavelets. , 2013, , .		3
195	Continuous localization using sparsity constraints for high-density super-resolution microscopy. , 2013, , .		2
196	Spline-Based Deforming Ellipsoids for Interactive 3D Bioimage Segmentation. IEEE Transactions on Image Processing, 2013, 22, 3926-3940.	6.0	29
197	A shape-template based two-stage corpus callosum segmentation technique for sagittal plane T1-weighted brain magnetic resonance images. , 2013, , .		7
198	3D Poisson microscopy deconvolution with Hessian Schatten-norm regularization. , 2013, , .		2

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199	Bayesian Denoising: From MAP to MMSE Using Consistent Cycle Spinning. IEEE Signal Processing Letters, 2013, 20, 249-252.	2.1	19
200	Bayesian Estimation for Continuous-Time Sparse Stochastic Processes. IEEE Transactions on Signal Processing, 2013, 61, 907-920.	3.2	22
201	MMSE Estimation of Sparse Lévy Processes. IEEE Transactions on Signal Processing, 2013, 61, 137-147.	3.2	21
202	Fast iterative reconstruction of differential phase contrast X-ray tomograms. Optics Express, 2013, 21, 5511.	1.7	36
203	Constrained regularized reconstruction of X-ray-DPCI tomograms with weighted-norm. Optics Express, 2013, 21, 32340.	1.7	10
204	A chemostat array enables the spatio-temporal analysis of the yeast proteome. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15842-15847.	3.3	123
205	Spatio-temporal regularization of flow-fields. , 2013, , .		5
206	Hessian Schatten-Norm Regularization for Linear Inverse Problems. IEEE Transactions on Image Processing, 2013, 22, 1873-1888.	6.0	138
207	A Unifying Parametric Framework for 2D Steerable Wavelet Transforms. SIAM Journal on Imaging Sciences, 2013, 6, 102-135.	1.3	67
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