

# Michael Unser

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

271  
papers

10,521  
citations

50  
h-index

96  
g-index

306  
ext. papers

13,069  
ext. citations

4.9  
avg, IF

6.81  
L-index

#	Paper	IF	Citations
271	A constrained method for lensless coherent imaging of thin samples.. <i>Applied Optics</i> , <b>2022</b> , 61, F34-F46	1.7	3
270	Sparsest piecewise-linear regression of one-dimensional data. <i>Journal of Computational and Applied Mathematics</i> , <b>2022</b> , 406, 114044	2.4	2
269	Convex optimization in sums of Banach spaces. <i>Applied and Computational Harmonic Analysis</i> , <b>2022</b> , 56, 1-25	3.1	3
268	Sparsest Univariate Learning Models Under Lipschitz Constraint. <i>IEEE Open Journal of Signal Processing</i> , <b>2022</b> , 3, 140-154	1.2	
267	. <i>IEEE Open Journal of Signal Processing</i> , <b>2021</b> , 1-1	1.2	1
266	Deep Learning Enables Individual Xenograft Cell Classification in Histological Images by Analysis of Contextual Features. <i>Journal of Mammary Gland Biology and Neoplasia</i> , <b>2021</b> , 26, 101-112	2.4	1
265	A Unifying Representer Theorem for Inverse Problems and Machine Learning. <i>Foundations of Computational Mathematics</i> , <b>2021</b> , 21, 941-960	2.7	13
264	Time-Dependent Deep Image Prior for Dynamic MRI. <i>IEEE Transactions on Medical Imaging</i> , <b>2021</b> , 40, 3337-3348	11.7	11
263	Multikernel Regression with Sparsity Constraint. <i>SIAM Journal on Mathematics of Data Science</i> , <b>2021</b> , 3, 201-224	3.1	3
262	Active Subdivision Surfaces for the Semiautomatic Segmentation of Biomedical Volumes. <i>IEEE Transactions on Image Processing</i> , <b>2021</b> , 30, 5739-5753	8.7	0
261	CryoGAN: A New Reconstruction Paradigm for Single-Particle Cryo-EM Via Deep Adversarial Learning. <i>IEEE Transactions on Computational Imaging</i> , <b>2021</b> , 7, 759-774	4.5	11
260	Principled Design and Implementation of Steerable Detectors. <i>IEEE Transactions on Image Processing</i> , <b>2021</b> , 30, 4465-4478	8.7	1
259	Shortest-support multi-spline bases for generalized sampling. <i>Journal of Computational and Applied Mathematics</i> , <b>2021</b> , 395, 113610	2.4	
258	Optical diffraction tomography from single-molecule localization microscopy. <i>Optics Communications</i> , <b>2021</b> , 499, 127290	2	0
257	Continuous-Domain Formulation of Inverse Problems for Composite Sparse-Plus-Smooth Signals. <i>IEEE Open Journal of Signal Processing</i> , <b>2021</b> , 1-1	1.2	0
256	Robust Phase Unwrapping via Deep Image Prior for Quantitative Phase Imaging. <i>IEEE Transactions on Image Processing</i> , <b>2021</b> , 30, 7025-7037	8.7	7
255	Dictionary Learning for Two-Dimensional Kendall Shapes. <i>SIAM Journal on Imaging Sciences</i> , <b>2020</b> , 13, 141-175	1.9	2

254	Three-Dimensional Optical Diffraction Tomography With Lippmann-Schwinger Model. <i>IEEE Transactions on Computational Imaging</i> , <b>2020</b> , 6, 727-738	4.5	22
253	Deep-learning projector for optical diffraction tomography. <i>Optics Express</i> , <b>2020</b> , 28, 3905-3921	3.3	11
252	Multi-CryoGAN: Reconstruction of Continuous Conformations in Cryo-EM Using Generative Adversarial Networks. <i>Lecture Notes in Computer Science</i> , <b>2020</b> , 429-444	0.9	8
251	Generating Sparse Stochastic Processes Using Matched Splines. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 4397-4406	4.8	2
250	Continuous-Domain Signal Reconstruction Using $L_p$ -Norm Regularization. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 4543-4554	4.8	5
249	Adaptive Regularization for Three-Dimensional Optical Diffraction Tomography <b>2020</b> ,		3
248	A Note on BIBO Stability. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 5904-5913	4.8	0
247	Deep Neural Networks With Trainable Activations and Controlled Lipschitz Constant. <i>IEEE Transactions on Signal Processing</i> , <b>2020</b> , 68, 4688-4699	4.8	10
246	Learning Activation Functions in Deep (Spline) Neural Networks. <i>IEEE Open Journal of Signal Processing</i> , <b>2020</b> , 1, 295-309	1.2	7
245	Gaussian and sparse processes are limits of generalized Poisson processes. <i>Applied and Computational Harmonic Analysis</i> , <b>2020</b> , 48, 1045-1065	3.1	5
244	The (n)-term Approximation of Periodic Generalized Lévy Processes. <i>Journal of Theoretical Probability</i> , <b>2020</b> , 33, 180-200	0.5	5
243	A method for assessing the fidelity of optical diffraction tomography reconstruction methods using structured illumination. <i>Optics Communications</i> , <b>2020</b> , 454, 124486	2	5
242	Support and approximation properties of Hermite splines. <i>Journal of Computational and Applied Mathematics</i> , <b>2020</b> , 368, 112503	2.4	3
241	Joint Angular Refinement and Reconstruction for Single-Particle Cryo-EM. <i>IEEE Transactions on Image Processing</i> , <b>2020</b> ,	8.7	6
240	Closed-Form Expression Of The Fourier Ring-Correlation For Single-Molecule Localization Microscopy <b>2019</b> ,		1
239	Texture-driven parametric snakes for semi-automatic image segmentation. <i>Computer Vision and Image Understanding</i> , <b>2019</b> , 188, 102793	4.3	4
238	Pocket guide to solve inverse problems with GlobalBioIm. <i>Inverse Problems</i> , <b>2019</b> , 35, 104006	2.3	21
237	Solving Continuous-domain Problems Exactly with Multiresolution B-splines <b>2019</b> ,		1

236	B-Spline-Based Exact Discretization of Continuous-Domain Inverse Problems With Generalized TV Regularization. <i>IEEE Transactions on Information Theory</i> , <b>2019</b> , 65, 4457-4470	2.8	13
235	Super-resolution fight club: assessment of 2D and 3D single-molecule localization microscopy software. <i>Nature Methods</i> , <b>2019</b> , 16, 387-395	21.6	123
234	Scaling Limits of Solutions of Linear Stochastic Differential Equations Driven by Lévy White Noises. <i>Journal of Theoretical Probability</i> , <b>2019</b> , 32, 1166-1189	0.5	5
233	Beyond Wiener's Lemma: Nuclear Convolution Algebras and the Inversion of Digital Filters. <i>Journal of Fourier Analysis and Applications</i> , <b>2019</b> , 25, 2037-2063	1.1	1
232	Angular Accuracy of Steerable Feature Detectors. <i>SIAM Journal on Imaging Sciences</i> , <b>2019</b> , 12, 344-371	1.9	2
231	Inner-Loop-Free Admm For Cryo-Em <b>2019</b> ,		2
230	Hybrid-Spline Dictionaries for Continuous-Domain Inverse Problems. <i>IEEE Transactions on Signal Processing</i> , <b>2019</b> , 67, 5824-5836	4.8	9
229	Biomedical Image Reconstruction: From the Foundations to Deep Neural Networks. <i>Foundations and Trends in Signal Processing</i> , <b>2019</b> , 13, 283-357	2.7	5
228	Approximation of Non-decaying Signals from Shift-Invariant Subspaces. <i>Journal of Fourier Analysis and Applications</i> , <b>2019</b> , 25, 633-660	1.1	1
227	Computational Super-Sectioning for Single-Slice Structured-Illumination Microscopy. <i>IEEE Transactions on Computational Imaging</i> , <b>2019</b> , 5, 240-250	4.5	2
226	Imaging cellular ultrastructures using expansion microscopy (U-ExM). <i>Nature Methods</i> , <b>2019</b> , 16, 71-74	21.6	153
225	Reconstruction From Multiple Particles for 3D Isotropic Resolution in Fluorescence Microscopy. <i>IEEE Transactions on Medical Imaging</i> , <b>2018</b> , 37, 1235-1246	11.7	7
224	Learning Tomography Assessed Using Mie Theory. <i>Physical Review Applied</i> , <b>2018</b> , 9,	4.3	11
223	Learning Convex Regularizers for Optimal Bayesian Denoising. <i>IEEE Transactions on Signal Processing</i> , <b>2018</b> , 66, 1093-1105	4.8	9
222	A universal formula for generalized cardinal B-splines. <i>Applied and Computational Harmonic Analysis</i> , <b>2018</b> , 45, 341-358	3.1	1
221	Landmark-Based Shape Encoding and Sparse-Dictionary Learning in the Continuous Domain. <i>IEEE Transactions on Image Processing</i> , <b>2018</b> , 27, 365-378	8.7	3
220	Fast Piecewise-Affine Motion Estimation Without Segmentation. <i>IEEE Transactions on Image Processing</i> , <b>2018</b> ,	8.7	6
219	Continuous-Domain Solutions of Linear Inverse Problems With Tikhonov Versus Generalized TV Regularization. <i>IEEE Transactions on Signal Processing</i> , <b>2018</b> , 66, 4670-4684	4.8	22

218	Versatile reconstruction framework for diffraction tomography with intensity measurements and multiple scattering. <i>Optics Express</i> , <b>2018</b> , 26, 2749-2763	3.3	29
217	CNN-Based Projected Gradient Descent for Consistent CT Image Reconstruction. <i>IEEE Transactions on Medical Imaging</i> , <b>2018</b> , 37, 1440-1453	11.7	181
216	3D BBPConvNet to reconstruct parallel MRI <b>2018</b> ,		3
215	Grid-Free Localization Algorithm Using Low-rank Hankel Matrix for Super-Resolution Microscopy. <i>IEEE Transactions on Image Processing</i> , <b>2018</b> ,	8.7	3
214	Compact in-line lensfree digital holographic microscope. <i>Methods</i> , <b>2018</b> , 136, 17-23	4.6	10
213	Fast multiscale reconstruction for Cryo-EM. <i>Journal of Structural Biology</i> , <b>2018</b> , 204, 543-554	3.4	6
212	. <i>IEEE Transactions on Signal Processing</i> , <b>2018</b> , 66, 6047-6061	4.8	7
211	Imaging neural activity in the ventral nerve cord of behaving adult Drosophila. <i>Nature Communications</i> , <b>2018</b> , 9, 4390	17.4	37
210	Rotation Invariance and Directional Sensitivity: Spherical Harmonics versus Radiomics Features. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 107-115	0.9	3
209	DiversePathsJ: diverse shortest paths for bioimage analysis. <i>Bioinformatics</i> , <b>2018</b> , 34, 538-540	7.2	1
208	Region of interest X-ray computed tomography via corrected back projection <b>2018</b> ,		1
207	A sampling theory for non-decaying signals. <i>Applied and Computational Harmonic Analysis</i> , <b>2017</b> , 43, 76-93	3.1	15
206	On the Besov regularity of periodic Levy noises. <i>Applied and Computational Harmonic Analysis</i> , <b>2017</b> , 42, 21-36	3.1	11
205	DeconvolutionLab2: An open-source software for deconvolution microscopy. <i>Methods</i> , <b>2017</b> , 115, 28-41	4.6	239
204	Steerable Wavelet Machines (SWM): Learning Moving Frames for Texture Classification. <i>IEEE Transactions on Image Processing</i> , <b>2017</b> , 26, 1626-1636	8.7	21
203	Pancreatic $\beta$ and $\delta$ cellular clocks have distinct molecular properties and impact on islet hormone secretion and gene expression. <i>Genes and Development</i> , <b>2017</b> , 31, 383-398	12.6	52
202	Compressed sensing for STEM tomography. <i>Ultramicroscopy</i> , <b>2017</b> , 179, 47-56	3.1	14
201	Deep Convolutional Neural Network for Inverse Problems in Imaging. <i>IEEE Transactions on Image Processing</i> , <b>2017</b> , 26, 4509-4522	8.7	933

200	Fast Segmentation From Blurred Data in 3D Fluorescence Microscopy. <i>IEEE Transactions on Image Processing</i> , <b>2017</b> , 26, 4856-4870	8.7	9
199	High-Quality Parallel-Ray X-Ray CT Back Projection Using Optimized Interpolation. <i>IEEE Transactions on Image Processing</i> , <b>2017</b> , 26, 4639-4647	8.7	7
198	. <i>IEEE Transactions on Information Theory</i> , <b>2017</b> , 1-1	2.8	1
197	Multiresolution Subdivision Snakes. <i>IEEE Transactions on Image Processing</i> , <b>2017</b> , 26, 1188-1201	8.7	18
196	A non-stationary subdivision scheme for the construction of deformable models with sphere-like topology. <i>Graphical Models</i> , <b>2017</b> , 94, 38-51	0.9	11
195	Jump-penalized least absolute values estimation of scalar or circle-valued signals. <i>Information and Inference</i> , <b>2017</b> , iaw022	2.4	
194	GlobalBioIm: A Unifying Computational Framework for Solving Inverse Problems <b>2017</b> ,		13
193	Splines Are Universal Solutions of Linear Inverse Problems with Generalized TV Regularization. <i>SIAM Review</i> , <b>2017</b> , 59, 769-793	7.4	43
192	Optical Tomography based on a nonlinear model that handles multiple scattering <b>2017</b> ,		1
191	General surface energy for spinal cord and aorta segmentation <b>2017</b> ,		1
190	Smooth shapes with spherical topology: Beyond traditional modeling, efficient deformation, and interaction. <i>Computational Visual Media</i> , <b>2017</b> , 3, 199-215	3.9	3
189	Multidimensional L <sub>1</sub> white noise in weighted Besov spaces. <i>Stochastic Processes and Their Applications</i> , <b>2017</b> , 127, 1599-1621	1.1	10
188	Generalized Poisson Summation Formulas for Continuous Functions of Polynomial Growth. <i>Journal of Fourier Analysis and Applications</i> , <b>2017</b> , 23, 442-461	1.1	5
187	Convolutional Neural Networks for Inverse Problems in Imaging: A Review. <i>IEEE Signal Processing Magazine</i> , <b>2017</b> , 34, 85-95	9.4	320
186	Shape Projectors for Landmark-Based Spline Curves. <i>IEEE Signal Processing Letters</i> , <b>2017</b> , 24, 1517-1521	3.2	
185	Compact lensless phase imager. <i>Optics Express</i> , <b>2017</b> , 25, 4438-4445	3.3	7
184	Efficient inversion of multiple-scattering model for optical diffraction tomography. <i>Optics Express</i> , <b>2017</b> , 25, 21786-21800	3.3	29
183	FlyLimbTracker: An active contour based approach for leg segment tracking in unmarked, freely behaving <i>Drosophila</i> . <i>PLoS ONE</i> , <b>2017</b> , 12, e0173433	3.7	28

182	Diverse M-Best Solutions by Dynamic Programming. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 255-267	0.9	
181	Representer Theorems for Sparsity-Promoting $\ell_1$ Regularization. <i>IEEE Transactions on Information Theory</i> , <b>2016</b> , 62, 5167-5180	2.8	23
180	Joint absorption and phase retrieval in grating-based x-ray radiography. <i>Optics Express</i> , <b>2016</b> , 24, 7253-653	5.3	4
179	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> , <b>2016</b> , 10, 6-30	7.5	42
178	Optical Tomographic Image Reconstruction Based on Beam Propagation and Sparse Regularization. <i>IEEE Transactions on Computational Imaging</i> , <b>2016</b> , 2, 59-70	4.5	93
177	Reconstruction From Multiple Poses in Fluorescence Imaging: Proof of Concept. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2016</b> , 10, 61-70	7.5	2
176	Design of Steerable Wavelets to Detect Multifold Junctions. <i>IEEE Transactions on Image Processing</i> , <b>2016</b> , 25, 643-57	8.7	11
175	Introduction to the Issue on Advanced Signal Processing in Microscopy and Cell Imaging. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2016</b> , 10, 3-5	7.5	0
174	Variational Phase Imaging Using the Transport-of-Intensity Equation. <i>IEEE Transactions on Image Processing</i> , <b>2016</b> , 25, 807-17	8.7	16
173	Fast 3D reconstruction method for differential phase contrast X-ray CT. <i>Optics Express</i> , <b>2016</b> , 24, 14564-813	8.3	16
172	Transforms and Operators for Directional Bioimage Analysis: A Survey. <i>Advances in Anatomy, Embryology and Cell Biology</i> , <b>2016</b> , 219, 69-93	1.2	190
171	An Inner-Product Calculus for Periodic Functions and Curves. <i>IEEE Signal Processing Letters</i> , <b>2016</b> , 23, 878-882	3.2	3
170	Exact Algorithms for $L^1$ -TV Regularization of Real-Valued or Circle-Valued Signals. <i>SIAM Journal of Scientific Computing</i> , <b>2016</b> , 38, A614-A630	2.6	14
169	Hermite Snakes With Control of Tangents. <i>IEEE Transactions on Image Processing</i> , <b>2016</b> , 25, 2803-2816	8.7	16
168	SpotCaliper: fast wavelet-based spot detection with accurate size estimation. <i>Bioinformatics</i> , <b>2016</b> , 32, 1278-80	7.2	5
167	Maximally Localized Radial Profiles for Tight Steerable Wavelet Frames. <i>IEEE Transactions on Image Processing</i> , <b>2016</b> , 25, 2275-87	8.7	6
166	Proximity operators for phase retrieval. <i>Applied Optics</i> , <b>2016</b> , 55, 7412-21	0.2	16
165	On the Continuous Steering of the Scale of Tight Wavelet Frames. <i>SIAM Journal on Imaging Sciences</i> , <b>2016</b> , 9, 1042-1062	1.9	

164	Snakes on a Plane: A perfect snap for bioimage analysis. <i>IEEE Signal Processing Magazine</i> , <b>2015</b> , 32, 41-48	9.4	50
163	Quantitative evaluation of software packages for single-molecule localization microscopy. <i>Nature Methods</i> , <b>2015</b> , 12, 717-24	21.6	247
162	. <i>IEEE Transactions on Signal Processing</i> , <b>2015</b> , 63, 4827-4837	4.8	7
161	Interior Tomography Using 1D Generalized Total Variation. Part I: Mathematical Foundation. <i>SIAM Journal on Imaging Sciences</i> , <b>2015</b> , 8, 226-247	1.9	10
160	Isotropic inverse-problem approach for two-dimensional phase unwrapping. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2015</b> , 32, 1092-100	1.8	7
159	Learning approach to optical tomography. <i>Optica</i> , <b>2015</b> , 2, 517	8.6	219
158	Spline based iterative phase retrieval algorithm for X-ray differential phase contrast radiography. <i>Optics Express</i> , <b>2015</b> , 23, 10631-42	3.3	9
157	Interior Tomography Using 1D Generalized Total Variation. Part II: Multiscale Implementation. <i>SIAM Journal on Imaging Sciences</i> , <b>2015</b> , 8, 2452-2486	1.9	7
156	Efficient Shape Priors for Spline-Based Snakes. <i>IEEE Transactions on Image Processing</i> , <b>2015</b> , 24, 3915-26	8.7	14
155	Trigonometric Interpolation Kernel to Construct Deformable Shapes for User-Interactive Applications. <i>IEEE Signal Processing Letters</i> , <b>2015</b> , 22, 2097-2101	3.2	35
154	Statistical optimality of Hermite splines <b>2015</b> ,		2
153	Improved Variational Denoising of Flow Fields with Application to Phase-Contrast MRI Data. <i>IEEE Signal Processing Letters</i> , <b>2015</b> , 22, 762-766	3.2	10
152	Optimized Kaiser-Bessel Window Functions for Computed Tomography. <i>IEEE Transactions on Image Processing</i> , <b>2015</b> , 24, 3826-33	8.7	14
151	Steerable PCA for Rotation-Invariant Image Recognition. <i>SIAM Journal on Imaging Sciences</i> , <b>2015</b> , 8, 1857-1873	4	4
150	Optimized steerable wavelets for texture analysis of lung tissue in 3-D CT: Classification of usual interstitial pneumonia <b>2015</b> ,		14
149	Interpretation of continuous-time autoregressive processes as random exponential splines <b>2015</b> ,		1
148	Generalized poisson summation formula for tempered distributions <b>2015</b> ,		1
147	New parametric 3D snake for medical segmentation of structures with cylindrical topology <b>2015</b> ,		3



146	Template-free wavelet-based detection of local symmetries. <i>IEEE Transactions on Image Processing</i> , <b>2015</b> , 24, 3009-18	8.7	8
145	Structure Tensor Total Variation. <i>SIAM Journal on Imaging Sciences</i> , <b>2015</b> , 8, 1090-1122	1.9	75
144	Fast detection and refined scale estimation using complex isotropic wavelets <b>2015</b> ,		1
143	Tip-seeking active contours for bioimage segmentation <b>2015</b> ,		2
142	Similarity-based shape priors for 2D spline snakes <b>2015</b> ,		2
141	Optimal Isotropic Wavelets for Localized Tight Frame Representations. <i>IEEE Signal Processing Letters</i> , <b>2015</b> , 22, 1918-1921	3.2	5
140	Fast live cell imaging at nanometer scale using annihilating filter-based low-rank Hankel matrix approach <b>2015</b> ,		4
139	Wavelet Statistics of Sparse and Self-Similar Images. <i>SIAM Journal on Imaging Sciences</i> , <b>2015</b> , 8, 2951-2975		8
138	Ellipse-preserving Hermite interpolation and subdivision. <i>Journal of Mathematical Analysis and Applications</i> , <b>2015</b> , 426, 211-227	1.1	30
137	Stressed mycobacteria use the chaperone ClpB to sequester irreversibly oxidized proteins asymmetrically within and between cells. <i>Cell Host and Microbe</i> , <b>2015</b> , 17, 178-90	23.4	66
136	Joint image reconstruction and segmentation using the Potts model. <i>Inverse Problems</i> , <b>2015</b> , 31, 025003	2.3	68
135	Divergence-Free Wavelet Frames. <i>IEEE Signal Processing Letters</i> , <b>2015</b> , 22, 1142-1146	3.2	6
134	Analysis of <i>S. pombe</i> SIN protein association to the SPB reveals two genetically separable states of the SIN. <i>Journal of Cell Science</i> , <b>2015</b> , 128, 741-54	5.3	8
133	FALCON: fast and unbiased reconstruction of high-density super-resolution microscopy data. <i>Scientific Reports</i> , <b>2014</b> , 4, 4577	4.9	90
132	. <i>IEEE Transactions on Information Theory</i> , <b>2014</b> , 60, 2969-2985	2.8	35
131	. <i>IEEE Transactions on Information Theory</i> , <b>2014</b> , 60, 3036-3051	2.8	20
130	. <i>IEEE Transactions on Information Theory</i> , <b>2014</b> , 60, 2346-2358	2.8	11
129	A Unified Formulation of Gaussian Versus Sparse Stochastic Processes Part I: Continuous-Domain Theory. <i>IEEE Transactions on Information Theory</i> , <b>2014</b> , 60, 1945-1962	2.8	29

128	Harmonic singular integrals and steerable wavelets in $L^2(\mathbb{R}^d)$ . <i>Applied and Computational Harmonic Analysis</i> , <b>2014</b> , 36, 183-197	3.1	14
127	Variational Justification of Cycle Spinning for Wavelet-Based Solutions of Inverse Problems. <i>IEEE Signal Processing Letters</i> , <b>2014</b> , 21, 1326-1330	3.2	29
126	Approximation Properties of Sobolev Splines and the Construction of Compactly Supported Equivalents. <i>SIAM Journal on Mathematical Analysis</i> , <b>2014</b> , 46, 1843-1858	1.7	3
125	Atlas-free brain segmentation in 3D proton-density-like MRI images <b>2014</b> ,		4
124	Exponential Hermite splines for the analysis of biomedical images <b>2014</b> ,		16
123	Wavelets: on the virtues and applications of the mathematical microscope. <i>Journal of Microscopy</i> , <b>2014</b> , 255, 123-7	1.9	6
122	Adaptive image resizing based on continuous-domain stochastic modeling. <i>IEEE Transactions on Image Processing</i> , <b>2014</b> , 23, 413-23	8.7	2
121	Phase retrieval by using transport-of-intensity equation and differential interference contrast microscopy <b>2014</b> ,		9
120	High-performance 3D deconvolution of fluorescence micrographs <b>2014</b> ,		2
119	Unsupervised texture segmentation using monogenic curvelets and the Potts model <b>2014</b> ,		6
118	VOW: Variance-optimal wavelets for the steerable pyramid <b>2014</b> ,		7
117	Statistics of wavelet coefficients for sparse self-similar images <b>2014</b> ,		1
116	3D high-density localization microscopy using hybrid astigmatic/ biplane imaging and sparse image reconstruction. <i>Biomedical Optics Express</i> , <b>2014</b> , 5, 3935-48	3.5	29
115	. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 1361-1376	4.8	17
114	On the Continuity of Characteristic Functionals and Sparse Stochastic Modeling. <i>Journal of Fourier Analysis and Applications</i> , <b>2014</b> , 20, 1179-1211	1.1	15
113	Digital phase reconstruction via iterative solutions of transport-of-intensity equation <b>2014</b> ,		3
112	An Introduction to Sparse Stochastic Processes <b>2014</b> ,		95
111	A 2D/3D image analysis system to track fluorescently labeled structures in rod-shaped cells: application to measure spindle pole asymmetry during mitosis. <i>Cell Division</i> , <b>2013</b> , 8, 6	2.8	12

110	Decay Properties of Riesz Transforms and Steerable Wavelets. <i>SIAM Journal on Imaging Sciences</i> , <b>2013</b> , 6, 984-998	1.9	9
109	Poisson image reconstruction with Hessian Schatten-norm regularization. <i>IEEE Transactions on Image Processing</i> , <b>2013</b> , 22, 4314-27	8.7	50
108	Spline-based framework for interactive segmentation in biomedical imaging. <i>Irbm</i> , <b>2013</b> , 34, 235-243	4.8	14
107	Sparse stochastic processes and discretization of linear inverse problems. <i>IEEE Transactions on Image Processing</i> , <b>2013</b> , 22, 2699-710	8.7	46
106	Operator-Like Wavelet Bases of $(L_2(\mathbb{R}^d))$ . <i>Journal of Fourier Analysis and Applications</i> , <b>2013</b> , 19, 1294-1322	1.1	2
105	. <i>IEEE Transactions on Information Theory</i> , <b>2013</b> , 59, 5063-5074	2.8	5
104	Benefits of consistency in image denoising with steerable wavelets <b>2013</b> ,		1
103	Continuous localization using sparsity constraints for high-density super-resolution microscopy <b>2013</b> ,		1
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- 2 FlyLimbTracker: an active contour based approach for leg segment tracking in unmarked, freely behaving *Drosophila* 1
- 1 Duality Mapping for Schatten Matrix Norms. *Numerical Functional Analysis and Optimization*,1-17 1