Martin Benning

List of Publications by Year
in descending order

34 papers	951 citations	623734 14 h-index	501196 28 g-index
34 all docs	34 docs citations	34 times ranked	886 citing authors

#	ARTICLE	IF	CITATIONS
1	Modern regularization methods for inverse problems. Acta Numerica, 2018, 27, 1-111.	10.7	216
2	Higher-Order TV Methods—Enhancement via Bregman Iteration. Journal of Scientific Computing, 2013, 54, 269-310.	2.3	159
3	Variational Depth From Focus Reconstruction. IEEE Transactions on Image Processing, 2015, 24, 5369-5378.	9.8	85
4	An adaptive inverse scale space method for compressed sensing. Mathematics of Computation, 2012, 82, 269-299.	2.1	72
5	Ground states and singular vectors of convex variational regularization methods. Methods and Applications of Analysis, 2013, 20, 295-334.	0.5	52
6	Phase reconstruction from velocity-encoded MRI measurements — A survey of sparsity-promoting variational approaches. Journal of Magnetic Resonance, 2014, 238, 26-43.	2.1	51
7	Reduced-dose and high-speed acquisition strategies for multi-dimensional electron microscopy. Advanced Structural and Chemical Imaging, 2015, 1, .	4.0	37
8	Learning the Sampling Pattern for MRI. IEEE Transactions on Medical Imaging, 2020, 39, 4310-4321.	8.9	37
9	Deep learning as optimal control problems: Models and numerical methods. Journal of Computational Dynamics, 2019, 6, 171-198.	1.1	29
10	Directional sinogram inpainting for limited angle tomography. Inverse Problems, 2019, 35, 024004.	2.0	27
11	Ultrashort echo time (UTE) imaging using gradient pre-equalization and compressed sensing. Journal of Magnetic Resonance, 2014, 245, 116-124.	2.1	23
12	Preconditioned ADMM with Nonlinear Operator Constraint. IFIP Advances in Information and Communication Technology, 2016, , 117-126.	0.7	20
13	Phase diagrams of liquid-phase mixing in multi-component metal-organic framework glasses constructed by quantitative elemental nano-tomography. APL Materials, 2019, 7, .	5.1	18
14	Enhancing joint reconstruction and segmentation with non-convex Bregman iteration. Inverse Problems, 2019, 35, 055001.	2.0	17
15	A nonlinear variational method for improved quantification of myocardial blood flow using dynamic $H_2^{15}O$ PET. , 2008, , .		12
16	Inverse scale space decomposition. Inverse Problems, 2018, 34, 045008.	2.0	12
17	Nonlinear Spectral Image Fusion. Lecture Notes in Computer Science, 2017, , 41-53.	1.3	11
18	Ultrafast magnetic-resonance-imaging velocimetry of liquid-liquid systems: Overcoming chemical-shift artifacts using compressed sensing. Physical Review E, 2014, 89, 063009.	2.1	9

#	Article	IF	Citations
19	Quantitative mapping of chemical compositions with MRI using compressed sensing. Journal of Magnetic Resonance, 2015, 261, 27-37.	2.1	8
20	Entropic Comparison of Atomic-Resolution Electron Tomography of Crystals and Amorphous Materials. Physical Review Letters, 2017, 119, 166101.	7.8	8
21	An entropic Landweber method for linear ill-posed problems. Inverse Problems, 2020, 36, 015009.	2.0	7
22	Scanning electron diffraction tomography of strain. Inverse Problems, 2021, 37, 015003.	2.0	7
23	A Solver for Dynamic PET Reconstructions based on Forward-Backward-Splitting. , 2010, , .		6
24	Choose Your Path Wisely: Gradient Descent in a Bregman Distance Framework. SIAM Journal on Imaging Sciences, 2021, 14, 814-843.	2.2	6
25	A Primal-Dual Approach for a Total Variation Wasserstein Flow. Lecture Notes in Computer Science, 2013, , 413-421.	1.3	5
26	Bregman Itohâ€"Abe Methods for Sparse Optimisation. Journal of Mathematical Imaging and Vision, 2020, 62, 842-857.	1.3	4
27	Learning parametrised regularisation functions via quotient minimisation. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 933-936.	0.2	3
28	Joint Phase Reconstruction and Magnitude Segmentation from Velocity-Encoded MRI Data. , 2021, , 1-24.		3
29	Learning Filter Functions in Regularisers by Minimising Quotients. Lecture Notes in Computer Science, 2017, , 511-523.	1.3	3
30	Deep learning as optimal control problems. IFAC-PapersOnLine, 2021, 54, 620-623.	0.9	2
31	Bregman Methods for Large-Scale Optimisation with Applications in Imaging. , 2021, , 1-42.		1
32	Joint Registration and Parameter Estimation of T1 Relaxation Times Using Variable Flip Angles. Informatik Aktuell, 2015, , 215-220.	0.6	1
33	Sparse recovery in myocardial blood flow quantification via PET. , 2011, , .		0
34	Combined Correction and Reconstruction Methods. Series in Medical Physics and Biomedical Engineering, 2012, , 185-206.	0.1	0