Serena Morigi

List of Publications by Year
in descending order

53 papers	1,188 citations	430754 18 h-index	377752 34 g-index
54 all docs	54 docs citations	54 times ranked	1057 citing authors

#	Article	IF	Citations
1	Tikhonov regularization and the L-curve for large discrete ill-posed problems. Journal of Computational and Applied Mathematics, 2000, 123, 423-446.	1.1	383
2	Convex Image Denoising via Non-convex Regularization with Parameter Selection. Journal of Mathematical Imaging and Vision, 2016, 56, 195-220.	0.8	66
3	Constrained TV $_p$ p - ℓ_2 – 2 Model for Image Restoration. Journal of Scientific Computing, 2016, 68, 64-91.	1.1	50
4	Non-convex Total Variation Regularization for Convex Denoising of Signals. Journal of Mathematical Imaging and Vision, 2020, 62, 825-841.	0.8	48
5	A Generalized Krylov Subspace Method for ℓ_p-ℓ_q Minimization. SIAM Journal of Scientific Computing, 2015, 37, S30-S50.	1.3	47
6	Nonconvex nonsmooth optimization via convex–nonconvex majorization–minimization. Numerische Mathematik, 2017, 136, 343-381.	0.9	43
7	Shape preserving surface reconstruction using locally anisotropic radial basis function interpolants. Computers and Mathematics With Applications, 2006, 51, 1185-1198.	1.4	41
8	Majorization–minimization generalized Krylov subspace methods for ℓ_p–ℓ_q optimization applied to image restoration. BIT Numerical Mathematics, 2017, 57, 351-378.	1.0	41
9	Fast surface reconstruction and hole filling using positive definite radial basis functions. Numerical Algorithms, 2005, 39, 289-305.	1.1	32
10	A fast interactive reverse-engineering system. CAD Computer Aided Design, 2010, 42, 860-873.	1.4	27
11	Sparsity-Inducing Nonconvex Nonseparable Regularization for Convex Image Processing. SIAM Journal on Imaging Sciences, 2019, 12, 1099-1134.	1.3	27
12	A Robust Group-Sparse Representation Variational Method With Applications to Face Recognition. IEEE Transactions on Image Processing, 2019, 28, 2785-2798.	6.0	27
13	Convex Image Denoising via Non-Convex Regularization. Lecture Notes in Computer Science, 2015, , 666-677.	1.0	25
14	Orthogonal projection regularization operators. Numerical Algorithms, 2007, 44, 99-114.	1.1	24
15	A truncated projected SVD method for linear discrete ill-posed problems. Numerical Algorithms, 2007, 43, 197-213.	1.1	23
16	Some results for a class of generalized polynomials. Advances in Computational Mathematics, 2000, 12, 133-149.	0.8	21
17	Subdivision surfaces integrated in a CAD system. CAD Computer Aided Design, 2013, 45, 1294-1305.	1.4	21
18	Fractional Tikhonov regularization with a nonlinear penalty term. Journal of Computational and Applied Mathematics, 2017, 324, 142-154.	1.1	21

#	ARTICLE	IF	CITATIONS
19	Convex non-convex image segmentation. Numerische Mathematik, 2018, 138, 635-680.	0.9	21
20	Spatially-Adaptive Variational Reconstructions for Linear Inverse Electrical Impedance Tomography. Journal of Scientific Computing, 2020, 84, 1.	1.1	19
21	Variational Image Denoising Based on Autocorrelation Whiteness. SIAM Journal on Imaging Sciences, 2013, 6, 1931-1955.	1.3	16
22	Image restoration with Poisson–Gaussian mixed noise. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2014, 2, 12-24.	1.3	16
23	Edge-driven Image Interpolation using Adaptive Anisotropic Radial Basis Functions. Journal of Mathematical Imaging and Vision, 2010, 36, 125-139.	0.8	14
24	A convex-nonconvex variational method for the additive decomposition of functions on surfaces. Inverse Problems, 2019, 35, 124008.	1.0	12
25	3D long bone reconstruction based on level sets. Computerized Medical Imaging and Graphics, 2004, 28, 377-390.	3.5	11
26	Learning Nonlinear Electrical Impedance Tomography. Journal of Scientific Computing, 2022, 90, 1.	1.1	11
27	Whiteness Constraints in a Unified Variational Framework for Image Restoration. Journal of Mathematical Imaging and Vision, 2018, 60, 1503-1526.	0.8	10
28	Convex non-convex segmentation of scalar fields over arbitrary triangulated surfaces. Journal of Computational and Applied Mathematics, 2019, 349, 438-451.	1.1	10
29	Image enhancement variational methods for enabling strong cost reduction in OLED-based point-of-care immunofluorescent diagnostic systems. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2932.	1.0	8
30	Multilevel mesh simplification. Visual Computer, 2014, 30, 479-492.	2.5	7
31	Variational Image Restoration with Constraints on Noise Whiteness. Journal of Mathematical Imaging and Vision, 2015, 53, 61-77.	0.8	7
32	BrightNet: A Deep CNN for OLED-Based Point of Care Immunofluorescent Diagnostic Systems. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 6766-6775.	2.4	7
33	A Variational Approach to Additive Image Decomposition into Structure, Harmonic, and Oscillatory Components. SIAM Journal on Imaging Sciences, 2021, 14, 1749-1789.	1.3	7
34	A hybrid multilevel-active set method for large box-constrained linear discrete ill-posed problems. Calcolo, 2011, 48, 89-105.	0.6	5
35	A meshless strategy for shape diameter analysis. Visual Computer, 2017, 33, 303-315.	2.5	5
36	Reconstructing surfaces from sketched 3D irregular curve networks. , 2011, , .		4

#	Article	IF	Citations
37	Space-Variant TV Regularization for Image Restoration. Lecture Notes in Computational Vision and Biomechanics, 2018, , 160-169.	0.5	4
38	Nonlocal Surface Fairing. Lecture Notes in Computer Science, 2012, , 38-49.	1.0	4
39	JOT: A Variational Signal Decomposition Into Jump, Oscillation and Trend. IEEE Transactions on Signal Processing, 2022, 70, 772-784.	3.2	4
40	Shape Partitioning via $${L}_{p}$$ L p Compressed Modes. Journal of Mathematical Imaging and Vision, 2018, 60, 1111-1131.	0.8	3
41	Space-variant generalised Gaussian regularisation for image restoration. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2019, 7, 490-503.	1.3	3
42	A SmartPen for 3D interaction and sketch-based surface modeling. International Journal of Advanced Manufacturing Technology, 2016, 84, 1625.	1.5	2
43	A Forward-Backward Strategy forÂHandling Non-linearity in Electrical Impedance Tomography. Lecture Notes in Computer Science, 2021, , 635-651.	1.0	2
44	Automatic Parameter Selection Based on Residual Whiteness for Convex Non-convex Variational Restoration. Springer Proceedings in Mathematics and Statistics, 2021, , 95-111.	0.1	2
45	A Unified Surface Geometric Framework for Feature-Aware Denoising, Hole Filling and Context-Aware Completion. Journal of Mathematical Imaging and Vision, 2023, 65, 82-98.	0.8	2
46	Efficient 6DOF tools for free-form surface modelling. Visual Computer, 2004, 20, 554-564.	2.5	1
47	An extended B-Rep solid modeling kernel integrating mesh and NURBS faces. Computer-Aided Design and Applications, 2018, 15, 697-706.	0.4	1
48	Non-Convex Super-Resolution Of Oct Images Via Sparse Representation. , 2021, , .		1
49	Convex Non-convex Variational Models. , 2021, , 1-57.		1
50	Parallel Rendering and Animation of Subdivision Surfaces on the Cell BE Processor. International Journal of Parallel Programming, 2011, 39, 494-521.	1.1	0
51	Convex Non-Convex Segmentation over Surfaces. Lecture Notes in Computer Science, 2017, , 348-360.	1.0	0
52	A Unified Framework for the Restoration of Images Corrupted by Additive White Noise. Lecture Notes in Computer Science, 2017, , 498-510.	1.0	0
53	A Non-convex Nonseparable Approach to Single-Molecule Localization Microscopy. Lecture Notes in Computer Science, 2019, , 498-509.	1.0	0