

Tieyong Zeng

List of Publications by Year in descending order

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107
papers

3,603
citations

172457

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144013

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107
all docs

107
docs citations

107
times ranked

2234
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Efficient Reversible Watermarking Based on Adaptive Prediction-Error Expansion and Pixel Selection. IEEE Transactions on Image Processing, 2011, 20, 3524-3533. | 9.8 | 448 |
| 2 | General Framework to Histogram-Shifting-Based Reversible Data Hiding. IEEE Transactions on Image Processing, 2013, 22, 2181-2191. | 9.8 | 362 |
| 3 | A Weighted Difference of Anisotropic and Isotropic Total Variation Model for Image Processing. SIAM Journal on Imaging Sciences, 2015, 8, 1798-1823. | 2.2 | 173 |
| 4 | Restoration of images corrupted by mixed Gaussian-impulse noise via l_1 - l_0 minimization. Pattern Recognition, 2011, 44, 1708-1720. | 8.1 | 161 |
| 5 | A Two-Stage Image Segmentation Method Using a Convex Variant of the Mumford-Shah Model and Thresholding. SIAM Journal on Imaging Sciences, 2013, 6, 368-390. | 2.2 | 150 |
| 6 | Reducing Artifacts in JPEG Decompression Via a Learned Dictionary. IEEE Transactions on Signal Processing, 2014, 62, 718-728. | 5.3 | 146 |
| 7 | Soft-Edge Assisted Network for Single Image Super-Resolution. IEEE Transactions on Image Processing, 2020, 29, 4656-4668. | 9.8 | 114 |
| 8 | A Multiphase Image Segmentation Method Based on Fuzzy Region Competition. SIAM Journal on Imaging Sciences, 2010, 3, 277-299. | 2.2 | 100 |
| 9 | A Convex Variational Model for Restoring Blurred Images with Multiplicative Noise. SIAM Journal on Imaging Sciences, 2013, 6, 1598-1625. | 2.2 | 97 |
| 10 | A Generalization of LSB Matching. IEEE Signal Processing Letters, 2009, 16, 69-72. | 3.6 | 83 |
| 11 | A Dictionary Learning Approach for Poisson Image Deblurring. IEEE Transactions on Medical Imaging, 2013, 32, 1277-1289. | 8.9 | 82 |
| 12 | Multiplicative Noise Removal via a Learned Dictionary. IEEE Transactions on Image Processing, 2012, 21, 4534-4543. | 9.8 | 73 |
| 13 | Total Variation Structured Total Least Squares Method for Image Restoration. SIAM Journal of Scientific Computing, 2013, 35, B1304-B1320. | 2.8 | 70 |
| 14 | Weighted variational model for selective image segmentation with application to medical images. Pattern Recognition, 2018, 76, 367-379. | 8.1 | 59 |
| 15 | A Two-Stage Image Segmentation Method for Blurry Images with Poisson or Multiplicative Gamma Noise. SIAM Journal on Imaging Sciences, 2014, 7, 98-127. | 2.2 | 58 |
| 16 | Low Rank Prior and Total Variation Regularization for Image Deblurring. Journal of Scientific Computing, 2017, 70, 1336-1357. | 2.3 | 54 |
| 17 | Single Image Dehazing and Denoising: A Fast Variational Approach. SIAM Journal on Imaging Sciences, 2014, 7, 969-996. | 2.2 | 50 |
| 18 | Variational Approach for Restoring Blurred Images with Cauchy Noise. SIAM Journal on Imaging Sciences, 2015, 8, 1894-1922. | 2.2 | 49 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Surface-Aware Blind Image Deblurring. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 1041-1055. | 13.9 | 46 |
| 20 | Phase Retrieval from Incomplete Magnitude Information via Total Variation Regularization. SIAM Journal of Scientific Computing, 2016, 38, A3672-A3695. | 2.8 | 42 |
| 21 | Primal-dual algorithms for total variation based image restoration under Poisson noise. Science China Mathematics, 2016, 59, 141-160. | 1.7 | 42 |
| 22 | Multilevel Edge Features Guided Network for Image Denoising. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 3956-3970. | 11.3 | 40 |
| 23 | Sparse Representation Prior and Total Variation-Based Image Deblurring under Impulse Noise. SIAM Journal on Imaging Sciences, 2013, 6, 2258-2284. | 2.2 | 38 |
| 24 | A Three-Stage Approach for Segmenting Degraded Color Images: Smoothing, Lifting and Thresholding (SLaT). Journal of Scientific Computing, 2017, 72, 1313-1332. | 2.3 | 36 |
| 25 | Detecting LSB matching by applying calibration technique for difference image. , 2008, , . | | 35 |
| 26 | Image denoising based on the adaptive weighted TV regularization. Signal Processing, 2020, 167, 107325. | 3.7 | 35 |
| 27 | A Universal Variational Framework for Sparsity-Based Image Inpainting. IEEE Transactions on Image Processing, 2014, 23, 4242-4254. | 9.8 | 34 |
| 28 | A Superpixel-Based Variational Model for Image Colorization. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 2931-2943. | 4.4 | 33 |
| 29 | Retinex image enhancement via a learned dictionary. Optical Engineering, 2015, 54, 013107. | 1.0 | 30 |
| 30 | A Nonconvex Model with Minimax Concave Penalty for Image Restoration. Journal of Scientific Computing, 2019, 78, 1063-1086. | 2.3 | 30 |
| 31 | Simulating and forecasting the cumulative confirmed cases of SARS-CoV-2 in China by Boltzmann function-based regression analyses. Journal of Infection, 2020, 80, 578-606. | 3.3 | 30 |
| 32 | Alternating Minimization Method for Total Variation Based Wavelet Shrinkage Model. Communications in Computational Physics, 2010, 8, 976-994. | 1.7 | 29 |
| 33 | Quaternion-based weighted nuclear norm minimization for color image restoration. Pattern Recognition, 2022, 128, 108665. | 8.1 | 29 |
| 34 | Two-Step Approach for the Restoration of Images Corrupted by Multiplicative Noise. SIAM Journal of Scientific Computing, 2013, 35, A2856-A2873. | 2.8 | 28 |
| 35 | A Convex Variational Model for Restoring Blurred Images with Large Rician Noise. Journal of Mathematical Imaging and Vision, 2015, 53, 92-111. | 1.3 | 25 |
| 36 | Variational Single Image Dehazing for Enhanced Visualization. IEEE Transactions on Multimedia, 2020, 22, 2537-2550. | 7.2 | 25 |

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|----|---|------|-----------|
| 37 | Reliable histogram features for detecting LSB matching. , 2010, , . | | 24 |
| 38 | The Convex Relaxation Method on Deconvolution Model with Multiplicative Noise. Communications in Computational Physics, 2013, 13, 1066-1092. | 1.7 | 24 |
| 39 | On the Total Variation Dictionary Model. IEEE Transactions on Image Processing, 2010, 19, 821-825. | 9.8 | 22 |
| 40 | Dictionary Learning-Based Subspace Structure Identification in Spectral Clustering. IEEE Transactions on Neural Networks and Learning Systems, 2013, 24, 1188-1199. | 11.3 | 22 |
| 41 | Variational Multiplicative Noise Removal by DC Programming. Journal of Scientific Computing, 2016, 68, 1200-1216. | 2.3 | 22 |
| 42 | Linkage Between Piecewise Constant Mumford–Shah Model and Rudin–Osher–Fatemi Model and Its Virtue in Image Segmentation. SIAM Journal of Scientific Computing, 2019, 41, B1310-B1340. | 2.8 | 21 |
| 43 | Local Spatial Constraint and Total Variation for Hyperspectral Anomaly Detection. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16. | 6.3 | 21 |
| 44 | Rank-One Prior: Toward Real-Time Scene Recovery. , 2021, , . | | 21 |
| 45 | Deep Multi-Level Wavelet-CNN Denoiser Prior for Restoring Blurred Image With Cauchy Noise. IEEE Signal Processing Letters, 2020, 27, 1635-1639. | 3.6 | 20 |
| 46 | Adaptive total variation based image segmentation with semi-proximal alternating minimization. Signal Processing, 2021, 183, 108017. | 3.7 | 20 |
| 47 | Regularized Non-local Total Variation and Application in Image Restoration. Journal of Mathematical Imaging and Vision, 2017, 59, 296-317. | 1.3 | 19 |
| 48 | Variational Phase Retrieval with Globally Convergent Preconditioned Proximal Algorithm. SIAM Journal on Imaging Sciences, 2018, 11, 56-93. | 2.2 | 19 |
| 49 | Generative adversarial network-based super-resolution of diffusion-weighted imaging: Application to tumour radiomics in breast cancer. NMR in Biomedicine, 2020, 33, e4345. | 2.8 | 19 |
| 50 | Advanced denoising for X-ray ptychography. Optics Express, 2019, 27, 10395. | 3.4 | 18 |
| 51 | A survey on epistemic (model) uncertainty in supervised learning: Recent advances and applications. Neurocomputing, 2022, 489, 449-465. | 5.9 | 18 |
| 52 | Explicit Coherence Enhancing Filter With Spatial Adaptive Elliptical Kernel. IEEE Signal Processing Letters, 2012, 19, 555-558. | 3.6 | 17 |
| 53 | Total Variation Restoration of Images Corrupted by Poisson Noise with Iterated Conditional Expectations. Lecture Notes in Computer Science, 2015, , 178-190. | 1.3 | 16 |
| 54 | Learning multi-level structural information for small organ segmentation. Signal Processing, 2022, 193, 108418. | 3.7 | 16 |

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|----|--|------|-----------|
| 55 | Image Deblurring Via Total Variation Based Structured Sparse Model Selection. Journal of Scientific Computing, 2016, 67, 1-19. | 2.3 | 15 |
| 56 | A Prudual Proximal Point Algorithm Solving a Non Negative Basis Pursuit Denoising Model. International Journal of Computer Vision, 2009, 83, 294-311. | 15.6 | 14 |
| 57 | An image sharpening operator combined with framelet for image deblurring. Inverse Problems, 2020, 36, 045015. | 2.0 | 14 |
| 58 | Multiplicative Noise Removal Based on Unbiased Box-Cox Transformation. Communications in Computational Physics, 2017, 22, 803-828. | 1.7 | 13 |
| 59 | Residual network with detail perception loss for single image super-resolution. Computer Vision and Image Understanding, 2020, 199, 103007. | 4.7 | 13 |
| 60 | Improvement of the embedding efficiency of LSB matching by sum and difference covering set. , 2008, , . | | 12 |
| 61 | A Three-Stage Variational Image Segmentation Framework Incorporating Intensity Inhomogeneity Information. SIAM Journal on Imaging Sciences, 2020, 13, 1692-1715. | 2.2 | 12 |
| 62 | CAB U-Net: An end-to-end category attention boosting algorithm for segmentation. Computerized Medical Imaging and Graphics, 2020, 84, 101764. | 5.8 | 11 |
| 63 | A weighted bounded Hessian variational model for image labeling and segmentation. Signal Processing, 2020, 173, 107564. | 3.7 | 10 |
| 64 | Probabilistic Semi-Supervised Learning via Sparse Graph Structure Learning. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 853-867. | 11.3 | 10 |
| 65 | Two-stage image segmentation based on nonconvex \hat{a}, \hat{a}^2 approximation and thresholding. Applied Mathematics and Computation, 2021, 403, 126168. | 2.2 | 10 |
| 66 | Negligible risk of the COVID-19 resurgence caused by work resuming in China (outside Hubei): a statistical probability study. Journal of Public Health, 2020, 42, 651-652. | 1.8 | 9 |
| 67 | Phase retrieval from incomplete data via weighted nuclear norm minimization. Pattern Recognition, 2022, 125, 108537. | 8.1 | 9 |
| 68 | A New Algorithm Framework for Image Inpainting in Transform Domain. SIAM Journal on Imaging Sciences, 2016, 9, 24-51. | 2.2 | 8 |
| 69 | Convex blind image deconvolution with inverse filtering. Inverse Problems, 2018, 34, 035003. | 2.0 | 8 |
| 70 | Variational Image Restoration and Segmentation with Rician Noise. Journal of Scientific Computing, 2019, 78, 1329-1352. | 2.3 | 8 |
| 71 | Pixel-Attention CNN With Color Correlation Loss for Color Image Denoising. IEEE Signal Processing Letters, 2021, 28, 1600-1604. | 3.6 | 8 |
| 72 | A Two-Stage Image Segmentation Model for Multi-Channel Images. Communications in Computational Physics, 2016, 19, 904-926. | 1.7 | 7 |

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|----|---|-----|-----------|
| 73 | A Convex Variational Approach for Image Deblurring With Multiplicative Structured Noise. IEEE Access, 2020, 8, 37790-37807. | 4.2 | 7 |
| 74 | An O-Shape Neural Network With Attention Modules to Detect Junctions in Biomedical Images Without Segmentation. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 774-785. | 6.3 | 7 |
| 75 | Poisson noise removal via learned dictionary. , 2010, , . | | 6 |
| 76 | Trimmed strategy for affine registration of point sets. Journal of Applied Remote Sensing, 2013, 7, 073468. | 1.3 | 6 |
| 77 | New Hybrid Variational Recovery Model for Blurred Images with Multiplicative Noise. East Asian Journal on Applied Mathematics, 2013, 3, 263-282. | 0.9 | 6 |
| 78 | Inhomogeneous image segmentation based on local constant and global smoothness priors. , 2021, 111, 102989. | | 6 |
| 79 | Semi-supervised Clustering via Constrained Symmetric Non-negative Matrix Factorization. Lecture Notes in Computer Science, 2012, , 309-319. | 1.3 | 6 |
| 80 | Nonconvex regularization for blurred images with Cauchy noise. Inverse Problems and Imaging, 2022, 16, 625. | 1.1 | 6 |
| 81 | Efficient Boosted DC Algorithm for Nonconvex Image Restoration with Rician Noise. SIAM Journal on Imaging Sciences, 2022, 15, 424-454. | 2.2 | 6 |
| 82 | A further study on steganalysis of LSB matching by calibration. , 2008, , . | | 5 |
| 83 | Image Restoration via Tight Frame Regularization and Local Constraints. Journal of Scientific Computing, 2013, 57, 349-371. | 2.3 | 5 |
| 84 | Hybrid Variational Model for Texture Image Restoration. East Asian Journal on Applied Mathematics, 2017, 7, 629-642. | 0.9 | 5 |
| 85 | Adjustable super-resolution network via deep supervised learning and progressive self-distillation. Neurocomputing, 2022, 500, 379-393. | 5.9 | 5 |
| 86 | Improving embedding efficiency via matrix embedding: A case study. , 2009, , . | | 4 |
| 87 | Lagrangian multipliers and split Bregman methods for minimization problems constrained on. Journal of Visual Communication and Image Representation, 2012, 23, 1041-1050. | 2.8 | 4 |
| 88 | Automatic Repair of 3-D Neuron Reconstruction Based on Topological Feature Points and an MOST-Based Repairer. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13. | 4.7 | 4 |
| 89 | Quaternion Screened Poisson Equation for Low-Light Image Enhancement. IEEE Signal Processing Letters, 2022, 29, 1417-1421. | 3.6 | 4 |
| 90 | Incorporating known features into a total variation dictionary model for source separation. , 2008, , . | | 3 |

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|-----|---|------|-----------|
| 91 | Matching pursuit shrinkage in Hilbert spaces. <i>Signal Processing</i> , 2011, 91, 2754-2766. | 3.7 | 3 |
| 92 | Image restoration based on fractional-order model with decomposition: texture and cartoon. <i>Computational and Applied Mathematics</i> , 2021, 40, 1. | 2.2 | 3 |
| 93 | SAB Net: A Semantic Attention Boosting Framework for Semantic Segmentation. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2024, PP, 1-13. | 11.3 | 3 |
| 94 | Edge adaptive hybrid regularization model for image deblurring. <i>Inverse Problems</i> , 2022, 38, 065010. | 2.0 | 3 |
| 95 | Crossover Structure Separation With Application to Neuron Tracing in Volumetric Images. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-13. | 4.7 | 2 |
| 96 | Weighted area constraints-based breast lesion segmentation in ultrasound image analysis. <i>Inverse Problems and Imaging</i> , 2022, 16, 451. | 1.1 | 2 |
| 97 | ON GENE SELECTION AND CLASSIFICATION FOR CANCER MICROARRAY DATA USING MULTI-STEP CLUSTERING AND SPARSE REPRESENTATION. <i>Advances in Adaptive Data Analysis</i> , 2011, 03, 127-148. | 0.6 | 1 |
| 98 | Constrained Total Variation Based Three-Dimension Single Particle Reconstruction in Cryogenic Electron Microscopy. <i>Journal of Scientific Computing</i> , 2020, 85, 1. | 2.3 | 1 |
| 99 | An Overview of SaT Segmentation Methodology and Its Applications in Image Processing. , 2021, , 1-27. | | 1 |
| 100 | Color Image Segmentation by Minimal Surface Smoothing. <i>Lecture Notes in Computer Science</i> , 2015, , 321-334. | 1.3 | 1 |
| 101 | A stable method solving the total variation dictionary model with L^∞ constraints. <i>Inverse Problems and Imaging</i> , 2014, 8, 507-535. | 1.1 | 1 |
| 102 | Reducing spatially varying out-of-focus blur from natural image. <i>Inverse Problems and Imaging</i> , 2017, 11, 65-85. | 1.1 | 1 |
| 103 | A Two-Stage Image Segmentation Method Using Euler's Elastica Regularized Mumford-Shah Model. , 2014, , . | | 0 |
| 104 | One-dimensional phase retrieval: regularization, box relaxation and uniqueness. <i>Inverse Problems</i> , 2020, 36, 095004. | 2.0 | 0 |
| 105 | On the Convex Model of Speckle Reduction. <i>Mathematics and Visualization</i> , 2018, , 121-141. | 0.6 | 0 |
| 106 | The Synergy Between Different Colour Spaces For Degraded Colour Images Segmentation. , 2018, , . | | 0 |
| 107 | Proximal gradient method for nonconvex and nonsmooth optimization on Hadamard manifolds. <i>Optimization Letters</i> , 0, , 1. | 1.6 | 0 |