# Jiaying Liu

List of Publications by Year
in descending order

| 102 papers | 6,867 citations | 136885 32 h-index | 114418 63 g-index |
|---|---|---|---|
| 102 all docs | 102 docs citations | 102 times ranked | 3526 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Structure-Revealing Low-Light Image Enhancement Via Robust Retinex Model. IEEE Transactions on Image Processing, 2018, 27, 2828-2841. | 6.0 | 673 |
| 2 | Deep Joint Rain Detection and Removal from a Single Image. , 2017, , . | | 609 |
| 3 | Attentive Generative Adversarial Network for Raindrop Removal from A Single Image. , 2018, , . | | 395 |
| 4 | Adaptive Batch Normalization for practical domain adaptation. Pattern Recognition, 2018, 80, 109-117. | 5.1 | 335 |
| 5 | From Fidelity to Perceptual Quality: A Semi-Supervised Approach for Low-Light Image Enhancement. , 2020, , . | | 263 |
| 6 | Demystifying Neural Style Transfer. , 2017, , . | | 256 |
| 7 | Joint Rain Detection and Removal from a Single Image with Contextualized Deep Networks. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 1377-1393. | 9.7 | 224 |
| 8 | LR3M: Robust Low-Light Enhancement via Low-Rank Regularized Retinex Model. IEEE Transactions on Image Processing, 2020, 29, 5862-5876. | 6.0 | 192 |
| 9 | GLADNet: Low-Light Enhancement Network with Global Awareness. , 2018, , . | | 185 |
| 10 | Spatio-Temporal Attention-Based LSTM Networks for 3D Action Recognition and Detection. IEEE Transactions on Image Processing, 2018, 27, 3459-3471. | 6.0 | 179 |
| 11 | Deep Edge Guided Recurrent Residual Learning for Image Super-Resolution. IEEE Transactions on Image Processing, 2017, 26, 5895-5907. | 6.0 | 157 |
| 12 | Sparse Gradient Regularized Deep Retinex Network for Robust Low-Light Image Enhancement. IEEE Transactions on Image Processing, 2021, 30, 2072-2086. | 6.0 | 139 |
| 13 | Content-Aware Convolutional Neural Network for In-Loop Filtering in High Efficiency Video Coding. IEEE Transactions on Image Processing, 2019, 28, 3343-3356. | 6.0 | 137 |
| 14 | Joint Enhancement and Denoising Method via Sequential Decomposition. , 2018, , . | | 136 |
| 15 | Single Image Deraining: From Model-Based to Data-Driven and Beyond. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 4059-4077. | 9.7 | 127 |
| 16 | Advancing Image Understanding in Poor Visibility Environments: A Collective Benchmark Study. IEEE Transactions on Image Processing, 2020, 29, 5737-5752. | 6.0 | 124 |
| 17 | Erase or Fill? Deep Joint Recurrent Rain Removal and Reconstruction in Videos. , 2018, , . | | 118 |
| 18 | Video Coding for Machines: A Paradigm of Collaborative Compression and Intelligent Analytics. IEEE Transactions on Image Processing, 2020, 29, 8680-8695. | 6.0 | 110 |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 19 | Online Human Action Detection Using Joint Classification-Regression Recurrent Neural Networks. Lecture Notes in Computer Science, 2016, , 203-220. | 1.0 | 103 |
| 20 | Benchmarking Low-Light Image Enhancement and Beyond. International Journal of Computer Vision, 2021, 129, 1153-1184. | 10.9 | 100 |
| 21 | Dmcnn: Dual-Domain Multi-Scale Convolutional Neural Network for Compression Artifacts Removal. , 2018, , . | | 93 |
| 22 | Unsupervised Person Image Generation With Semantic Parsing Transformation. , 2019, , . | | 91 |
| 23 | Image Super-Resolution Based on Structure-Modulated Sparse Representation. IEEE Transactions on Image Processing, 2015, 24, 2797-2810. | 6.0 | 84 |
| 24 | Objective Quality Assessment of Screen Content Images by Uncertainty Weighting. IEEE Transactions on Image Processing, 2017, 26, 2016-2027. | 6.0 | 82 |
| 25 | MS2L. , 2020, , . | | 82 |
| 26 | Scale-Free Single Image Deraining Via Visibility-Enhanced Recurrent Wavelet Learning. IEEE Transactions on Image Processing, 2019, 28, 2948-2961. | 6.0 | 79 |
| 27 | D3R-Net: Dynamic Routing Residue Recurrent Network for Video Rain Removal. IEEE Transactions on Image Processing, 2019, 28, 699-712. | 6.0 | 73 |
| 28 | Fashion Meets Computer Vision. ACM Computing Surveys, 2022, 54, 1-41. | 16.1 | 73 |
| 29 | Frame-Consistent Recurrent Video Deraining With Dual-Level Flow. , 2019, , . | | 70 |
| 30 | Band Representation-Based Semi-Supervised Low-Light Image Enhancement: Bridging the Gap Between Signal Fidelity and Perceptual Quality. IEEE Transactions on Image Processing, 2021, 30, 3461-3473. | 6.0 | 64 |
| 31 | Retrieval Compensated Group Structured Sparsity for Image Super-Resolution. IEEE Transactions on Multimedia, 2017, 19, 302-316. | 5.2 | 63 |
| 32 | Controllable Artistic Text Style Transfer via Shape-Matching GAN. , 2019, , . | | 57 |
| 33 | One-for-All: Grouped Variation Network-Based Fractional Interpolation in Video Coding. IEEE Transactions on Image Processing, 2019, 28, 2140-2151. | 6.0 | 55 |
| 34 | Integrating Semantic Segmentation and Retinex Model for Low-Light Image Enhancement. , 2020, , . | | 53 |
| 35 | Learning End-to-End Lossy Image Compression: A Benchmark. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, PP, 1-1. | 9.7 | 49 |
| 36 | Context-Aware Sparse Decomposition for Image Denoising and Super-Resolution. IEEE Transactions on Image Processing, 2013, 22, 1456-1469. | 6.0 | 48 |

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|---|---------|-----|-----------|
| 37 | Joint image denoising using adaptive principal component analysis and self-similarity. Information Sciences, 2014, 259, 128-141. | 4.0 | 48 |
| 38 | Progressive Spatial Recurrent Neural Network for Intra Prediction. IEEE Transactions on Multimedia, 2019, 21, 3024-3037. | 5.2 | 48 |
| 39 | Awesome Typography: Statistics-Based Text Effects Transfer. , 2017, , . | | 47 |
| 40 | Self-Learning Video Rain Streak Removal: When Cyclic Consistency Meets Temporal Correspondence. , 2020, , . | | 46 |
| 41 | TET-GAN: Text Effects Transfer via Stylization and Destylization. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 1238-1245. | 3.6 | 45 |
| 42 | Video super-resolution based on spatial-temporal recurrent residual networks. Computer Vision and Image Understanding, 2018, 168, 79-92. | 3.0 | 44 |
| 43 | Structure-Guided Image Inpainting Using Homography Transformation. IEEE Transactions on Multimedia, 2018, 20, 3252-3265. | 5.2 | 43 |
| 44 | Blind visual quality assessment for image super-resolution by convolutional neural network. Multimedia Tools and Applications, 2018, 77, 29829-29846. | 2.6 | 40 |
| 45 | Multi-Modality Multi-Task Recurrent Neural Network for Online Action Detection. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 2667-2682. | 5.6 | 38 |
| 46 | Towards Coding for Human and Machine Vision: Scalable Face Image Coding. IEEE Transactions on Multimedia, 2021, 23, 2957-2971. | 5.2 | 35 |
| 47 | A Comprehensive Benchmark for Single Image Compression Artifact Reduction. IEEE Transactions on Image Processing, 2020, 29, 7845-7860. | 6.0 | 34 |
| 48 | Modality Compensation Network: Cross-Modal Adaptation for Action Recognition. IEEE Transactions on Image Processing, 2020, 29, 3957-3969. | 6.0 | 34 |
| 49 | Deep Plastic Surgery: Robust and Controllable Image Editing with Human-Drawn Sketches. Lecture Notes in Computer Science, 2020, , 601-617. | 1.0 | 34 |
| 50 | Fine-Grained Quality Assessment for Compressed Images. IEEE Transactions on Image Processing, 2019, 28, 1163-1175. | 6.0 | 33 |
| 51 | Kernel Wiener filtering model with low-rank approximation for image denoising. Information Sciences, 2018, 462, 402-416. | 4.0 | 27 |
| 52 | Recurrent Exposure Generation for Low-Light Face Detection. IEEE Transactions on Multimedia, 2022, 24, 1609-1621. | 5.2 | 27 |
| 53 | Fast Enhancement for Non-Uniform Illumination Images using Light-weight CNNs. , 2020, , . | | 27 |
| 54 | Joint-Feature Guided Depth Map Super-Resolution With Face Priors. IEEE Transactions on Cybernetics, 2018, 48, 399-411. | 6.2 | 26 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 55 | HLA-Face: Joint High-Low Adaptation for Low Light Face Detection. , 2021, , . | | 26 |
| 56 | Photo Stylistic Brush: Robust Style Transfer via Superpixel-Based Bipartite Graph. IEEE Transactions on Multimedia, 2018, 20, 1724-1737. | 5.2 | 25 |
| 57 | A Group Variational Transformation Neural Network for Fractional Interpolation of Video Coding. , 2018, , . | | 25 |
| 58 | Consistent Video Style Transfer via Relaxation and Regularization. IEEE Transactions on Image Processing, 2020, 29, 9125-9139. | 6.0 | 25 |
| 59 | Guided image filtering using signal subspace projection. IET Image Processing, 2013, 7, 270-279. | 1.4 | 24 |
| 60 | Enhanced Intra Prediction with Recurrent Neural Network in Video Coding. , 2018, , . | | 22 |
| 61 | Adaptive General Scale Interpolation Based on Weighted Autoregressive Models. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 200-211. | 5.6 | 21 |
| 62 | Bridging the Gap Between Computational Photography and Visual Recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 4272-4290. | 9.7 | 21 |
| 63 | Deep Reference Generation With Multi-Domain Hierarchical Constraints for Inter Prediction. IEEE Transactions on Multimedia, 2020, 22, 2497-2510. | 5.2 | 20 |
| 64 | Reduced-reference quality assessment of image super-resolution by energy change and texture variation. Journal of Visual Communication and Image Representation, 2019, 60, 140-148. | 1.7 | 18 |
| 65 | Context-Aware Text-Based Binary Image Stylization and Synthesis. IEEE Transactions on Image Processing, 2019, 28, 952-964. | 6.0 | 18 |
| 66 | Reference-Guided Deep Super-Resolution via Manifold Localized External Compensation. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 1270-1283. | 5.6 | 17 |
| 67 | Towards Low Light Enhancement With RAW Images. IEEE Transactions on Image Processing, 2022, 31, 1391-1405. | 6.0 | 17 |
| 68 | Deep Inter Prediction Via Pixel-Wise Motion Oriented Reference Generation. , 2019, , . | | 16 |
| 69 | An Emerging Coding Paradigm Vcm: A Scalable Coding Approach Beyond Feature And Signal. , 2020, , . | | 15 |
| 70 | Combining Progressive Rethinking and Collaborative Learning: A Deep Framework for In-Loop Filtering. IEEE Transactions on Image Processing, 2021, 30, 4198-4211. | 6.0 | 15 |
| 71 | Partition Tree Guided Progressive Rethinking Network for in-Loop Filtering of HEVC. , 2019, , . | | 14 |
| 72 | TE141K: Artistic Text Benchmark for Text Effect Transfer. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 3709-3723. | 9.7 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Controllable Sketch-to-Image Translation for Robust Face Synthesis. IEEE Transactions on Image Processing, 2021, 30, 8797-8810. | 6.0 | 14 |
| 74 | Removing Arbitrary-Scale Rain Streaks via Fractal Band Learning With Self-Supervision. IEEE Transactions on Image Processing, 2020, 29, 6759-6772. | 6.0 | 13 |
| 75 | Recurrent Multi-Frame Deraining: Combining Physics Guidance and Adversarial Learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, PP, 1-1. | 9.7 | 12 |
| 76 | Variation learning guided convolutional network for image interpolation. , 2017, , . | | 10 |
| 77 | Isophote-Constrained Autoregressive Model With Adaptive Window Extension for Image Interpolation. IEEE Transactions on Circuits and Systems for Video Technology, 2018, 28, 1071-1086. | 5.6 | 9 |
| 78 | Optimized Spatial Recurrent Network for Intra Prediction in Video Coding. , 2018, , . | | 9 |
| 79 | Unpaired Person Image Generation With Semantic Parsing Transformation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 4161-4176. | 9.7 | 8 |
| 80 | Shape-Matching GAN++: Scale Controllable Dynamic Artistic Text Style Transfer. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, PP, 1-1. | 9.7 | 8 |
| 81 | Mask-guided GAN for robust text editing in the scene. Neurocomputing, 2021, 441, 192-201. | 3.5 | 8 |
| 82 | Template-Free Try-On Image Synthesis via Semantic-Guided Optimization. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 4584-4597. | 7.2 | 7 |
| 83 | Ensemble single image deraining network via progressive structural boosting constraints. Signal Processing: Image Communication, 2021, 99, 116460. | 1.8 | 7 |
| 84 | Restoration of Unevenly Illuminated Images. , 2018, , . | | 6 |
| 85 | Quality assessment for image super-resolution based on energy change and texture variation. , 2016, , . | | 5 |
| 86 | Real-Time Deep Video SpaTial Resolution UpConversion SysTem (STRUCT++ Demo). , 2017, , . | | 5 |
| 87 | Text effects transfer via distribution-aware texture synthesis. Computer Vision and Image Understanding, 2018, 174, 43-56. | 3.0 | 5 |
| 88 | Temporal Perceptive Network for Skeleton-Based Action Recognition. , 2017, , . | | 5 |
| 89 | Real-time deep image super-resolution via global context aggregation and local queue jumping. , 2017, , . | | 4 |
| 90 | From Design Draft to Real Attire: Unaligned Fashion Image Translation. , 2020, , . | | 4 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 91 | Automatic portrait oil painter: joint domain stylization for portrait images. Multimedia Tools and Applications, 2018, 77, 16113-16130. | 2.6 | 3 |
| 92 | Rethinking Fusion Baselines for Multi-modal Human Action Recognition. Lecture Notes in Computer Science, 2018, , 178-187. | 1.0 | 3 |
| 93 | Dual Recovery Network with Online Compensation for Image Super-Resolution. , 2018, , . | | 3 |
| 94 | Learning to Remove Rain in Video With Self-Supervision. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2024, 46, 1378-1396. | 9.7 | 3 |
| 95 | 1+N fusion: Cascaded self-portrait enhancement. , 2017, , . | | 2 |
| 96 | Compression Artifact Removal with Ensemble Learning of Neural Networks. , 2020, , . | | 2 |
| 97 | Spectral Normalization for Domain Adaptation. Information (Switzerland), 2020, 11, 68. | 1.7 | 2 |
| 98 | Learning to Recognize Human Actions From Noisy Skeleton Data Via Noise Adaptation. IEEE Transactions on Multimedia, 2022, 24, 1152-1163. | 5.2 | 2 |
| 99 | Memory-Augmented Auto-Regressive Network for Frame Recurrent Inter Prediction. , 2020, , . | | 1 |
| 100 | Exploiting multi-scale spatial structures for sparsity based single image super-resolution. , 2014, , . | | 0 |
| 101 | Selfie retoucher: subject-oriented self-portrait enhancement. Multimedia Tools and Applications, 2019, 78, 27591-27609. | 2.6 | 0 |
| 102 | Wavelet-based Multi-branch Convolutional Neural Network for Cross-individual ALS Disease Identification with EMG Signal. , 2021, , . | | 0 |