

# Risheng Liu

## List of Publications by Year in descending order

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94  
papers

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	A General Descent Aggregation Framework for Gradient-Based Bi-Level Optimization. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2023, 45, 38-57.	9.7	11
2	Underexposed Image Correction via Hybrid Priors Navigated Deep Propagation. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 3425-3436.	7.2	9
3	Learning Deformable Image Registration From Optimization: Perspective, Modules, Bilevel Training and Beyond. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 7688-7704.	9.7	11
4	Learning a Deep Multi-Scale Feature Ensemble and an Edge-Attention Guidance for Image Fusion. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 105-119.	5.6	104
5	Learning Deep Context-Sensitive Decomposition for Low-Light Image Enhancement. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 5666-5680.	7.2	47
6	Global structure-guided learning framework for underwater image enhancement. Visual Computer, 2022, 38, 4419-4434.	2.5	11
7	Triple-Level Model Inferred Collaborative Network Architecture for Video Deraining. IEEE Transactions on Image Processing, 2022, 31, 239-250.	6.0	6
8	Investigating Bi-Level Optimization for Learning and Vision From a Unified Perspective: A Survey and Beyond. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 10045-10067.	9.7	37
9	Task-Oriented Convex Bilevel Optimization With Latent Feasibility. IEEE Transactions on Image Processing, 2022, 31, 1190-1203.	6.0	4
10	Attention-Guided Global-Local Adversarial Learning for Detail-Preserving Multi-Exposure Image Fusion. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 5026-5040.	5.6	40
11	Target Oriented Perceptual Adversarial Fusion Network for Underwater Image Enhancement. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 6584-6598.	5.6	79
12	Learn to Search a Lightweight Architecture for Target-Aware Infrared and Visible Image Fusion. IEEE Signal Processing Letters, 2022, 29, 1614-1618.	2.1	10
13	Semantic-aware Texture-Structure Feature Collaboration for Underwater Image Enhancement. , 2022, , .		5
14	Dual Neural Networks Coupling Data Regression With Explicit Priors for Monocular 3D Face Reconstruction. IEEE Transactions on Multimedia, 2021, 23, 1252-1263.	5.2	14
15	Learning Hadamard-Product-Propagation for Image Dehazing and Beyond. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 1366-1379.	5.6	15
16	Location-Aware and Regularization-Adaptive Correlation Filters for Robust Visual Tracking. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 2430-2442.	7.2	10
17	Investigating Customization Strategies and Convergence Behaviors of Task-Specific ADMM. IEEE Transactions on Image Processing, 2021, 30, 8278-8292.	6.0	2
18	Learning to Discover a Unified Architecture for Low-Level Vision. IEEE Signal Processing Letters, 2021, 28, 1470-1474.	2.1	1

#	ARTICLE	IF	CITATIONS
19	SMoA: Searching a Modality-Oriented Architecture for Infrared and Visible Image Fusion. IEEE Signal Processing Letters, 2021, 28, 1818-1822.	2.1	39
20	Temporal Rain Decomposition with Spatial Structure Guidance for Video Deraining. , 2021, , .		3
21	NASA: A Noise-Adaptive and Structure-Aware Learning Framework for Image Deblurring. , 2021, , .		0
22	Searching Frame-Recurrent Attentive Deformable Network for Real-Time Video Deraining. , 2021, , .		4
23	Star-Net: Spatial-Temporal Attention Residual Network for Video Deraining. , 2021, , .		2
24	Halder: Hierarchical Attention-Guided Learning with Detail-Refinement for Multi-Exposure Image Fusion. , 2021, , .		4
25	Video Deraining Via Temporal Aggregation-and-Guidance. , 2021, , .		3
26	Hardware-Aware Low-Light Image Enhancement via One-Shot Neural Architecture Search with Shrinkage Sampling. , 2021, , .		1
27	Spatial-Temporal Integration Network with Self-Guidance for Robust Video Deraining. , 2021, , .		2
28	Collaborative Reflectance-And-Illumination Learning For High-Efficient Low-Light Image Enhancement. , 2021, , .		4
29	Multiple Task-Oriented Encoders for Unified Image Fusion. , 2021, , .		4
30	Joint Luminance and Chrominance Learning for Underwater Image Enhancement. IEEE Signal Processing Letters, 2021, 28, 818-822.	2.1	23
31	Semantic-Driven Context Aggregation Network for Underwater Image Enhancement. Lecture Notes in Computer Science, 2021, , 29-40.	1.0	1
32	Bridging the Gap between Low-Light Scenes: Bilevel Learning for Fast Adaptation. , 2021, , .		7
33	A Bilevel Integrated Model With Data-Driven Layer Ensemble for Multi-Modality Image Fusion. IEEE Transactions on Image Processing, 2021, 30, 1261-1274.	6.0	68
34	Retinex-inspired Unrolling with Cooperative Prior Architecture Search for Low-light Image Enhancement. , 2021, , .		248
35	On the Convergence of Learning-Based Iterative Methods for Nonconvex Inverse Problems. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 3027-3039.	9.7	51
36	Knowledge-Driven Deep Unrolling for Robust Image Layer Separation. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 1653-1666.	7.2	34

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37	Real-World Underwater Enhancement: Challenges, Benchmarks, and Solutions Under Natural Light. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 4861-4875.	5.6	305
38	Joint Over and Under Exposures Correction by Aggregated Retinex Propagation for Image Enhancement. IEEE Signal Processing Letters, 2020, 27, 1210-1214.	2.1	11
39	Wasserstein Loss based Deep Object Detection. , 2020, , .		13
40	Investigating Task-Driven Latent Feasibility for Nonconvex Image Modeling. IEEE Transactions on Image Processing, 2020, 29, 7629-7640.	6.0	22
41	A Deep Framework Assembling Principled Modules for CS-MRI: Unrolling Perspective, Convergence Behaviors, and Practical Modeling. IEEE Transactions on Medical Imaging, 2020, 39, 4150-4163.	5.4	17
42	Sequential Deep Unrolling With Flow Priors For Robust Video Deraining. , 2020, , .		9
43	Principle-Inspired Multi-Scale Aggregation Network for Extremely Low-Light Image Enhancement. , 2020, , .		5
44	Flexible Bilevel Image Layer Modeling For Robust Deraining. , 2020, , .		4
45	Blind image deblurring via hybrid deep priors modeling. Neurocomputing, 2020, 387, 334-345.	3.5	12
46	Optimization Learning: Perspective, Method, and Applications. , 2020, , .		0
47	Bi-level Probabilistic Feature Learning for Deformable Image Registration. , 2020, , .		14
48	Compounded Layer-Prior Unrolling: A Unified Transmission-Based Image Enhancement Framework. , 2019, , .		3
49	Enhanced Residual Dense Intrinsic Network for Intrinsic Image Decomposition. , 2019, , .		0
50	A Theoretically Guaranteed Deep Optimization Framework for Robust Compressive Sensing MRI. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 4368-4375.	3.6	14
51	Deep Proximal Unrolling: Algorithmic Framework, Convergence Analysis and Applications. IEEE Transactions on Image Processing, 2019, 28, 5013-5026.	6.0	43
52	Learning Aggregated Transmission Propagation Networks for Haze Removal and Beyond. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 2973-2986.	7.2	60
53	Learning Bilevel Layer Priors for Single Image Rain Streaks Removal. IEEE Signal Processing Letters, 2019, 26, 307-311.	2.1	38
54	Toward Efficient Image Representation: Sparse Concept Discriminant Matrix Factorization. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 3184-3198.	5.6	11

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55	Robust heterogeneous discriminative analysis for face recognition with single sample per person. Pattern Recognition, 2019, 89, 91-107.	5.1	43
56	Learning Converged Propagations With Deep Prior Ensemble for Image Enhancement. IEEE Transactions on Image Processing, 2019, 28, 1528-1543.	6.0	53
57	Designing a stable feedback control system for blind image deconvolution. Neural Networks, 2018, 101, 101-112.	3.3	3
58	Explicit Shape Regression With Characteristic Number for Facial Landmark Localization. IEEE Transactions on Multimedia, 2018, 20, 567-579.	5.2	12
59	Online Low-Rank Representation Learning for Joint Multi-Subspace Recovery and Clustering. IEEE Transactions on Image Processing, 2018, 27, 335-348.	6.0	21
60	Discriminative anisotropic propagation with heat source estimation for robust object tracking. Neural Computing and Applications, 2018, 29, 1267-1279.	3.2	1
61	Single Image Layer Separation via Deep Admm Unrolling. , 2018, , .		3
62	Joint Residual Learning for Underwater Image Enhancement. , 2018, , .		64
63	Learning Collaborative Generation Correction Modules for Blind Image Deblurring and Beyond. , 2018, , .		9
64	Robust Haze Removal Via Joint Deep Transmission and Scene Propagation. , 2018, , .		3
65	Fast Factorization-free Kernel Learning for Unlabeled Chunk Data Streams. , 2018, , .		0
66	Toward Designing Convergent Deep Operator Splitting Methods for Task-specific Nonconvex Optimization. , 2018, , .		3
67	Adaptive low-rank subspace learning with online optimization for robust visual tracking. Neural Networks, 2017, 88, 90-104.	3.3	19
68	A nonlocal $L_0$ model with regression predictor for saliency detection and extension. Visual Computer, 2017, 33, 1467-1482.	2.5	3
69	Sparse Gradient Pursuit for Robust Visual Analysis. Lecture Notes in Computer Science, 2017, , 369-384.	1.0	1
70	Object Tracking via Discriminative Anisotropic Propagation. , 2016, , .		0
71	Sparse Coding and Counting for Robust Visual Tracking. PLoS ONE, 2016, 11, e0168093.	1.1	3
72	Learning to Diffuse: A New Perspective to Design PDEs for Visual Analysis. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2016, 38, 2457-2471.	9.7	34

#	ARTICLE	IF	CITATIONS
73	Subspace segmentation by dense block and sparse representation. <i>Neural Networks</i> , 2016, 75, 66-76.	3.3	28
74	A generalized nonlocal mean framework with object-level cues for saliency detection. <i>Visual Computer</i> , 2016, 32, 611-623.	2.5	11
75	Robust visual tracking via discriminative sequential ranking. , 2015, , .		2
76	Robust visual tracking via L 0 regularized local low-rank feature learning. <i>Journal of Electronic Imaging</i> , 2015, 24, 033012.	0.5	5
77	Robust visual tracking via guided low-rank subspace learning. , 2015, , .		2
78	Robust visual tracking via discriminative sequential ranking. , 2015, , .		0
79	Visual tracking via orthogonal sparse coding. , 2015, , .		0
80	Sparse concept discriminant matrix factorization for image representation. , 2015, , .		1
81	Linearized alternating direction method with parallel splitting and adaptive penalty for separable convex programs in machine learning. <i>Machine Learning</i> , 2015, 99, 287-325.	3.4	88
82	Latent Subspace Projection Pursuit with Online Optimization for Robust Visual Tracking. <i>IEEE MultiMedia</i> , 2014, 21, 47-55.	1.5	8
83	Structure-Constrained Low-Rank Representation. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2014, 25, 2167-2179.	7.2	121
84	Adaptive Partial Differential Equation Learning for Visual Saliency Detection. , 2014, , .		93
85	Robust visual tracking via incremental low-rank features learning. <i>Neurocomputing</i> , 2014, 131, 237-247.	3.5	28
86	Robust visual tracking using latent subspace projection pursuit. , 2014, , .		5
87	Incremental robust local dictionary learning for visual tracking. , 2014, , .		11
88	Linear time Principal Component Pursuit and its extensions using $\hat{\alpha}_1$ filtering. <i>Neurocomputing</i> , 2014, 142, 529-541.	3.5	82
89	Low-Rank Structure Learning via Nonconvex Heuristic Recovery. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2013, 24, 383-396.	7.2	103
90	Mixture of related regressions for head pose estimation. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
91	Saliency detection based on an edge-preserving filter. , 2013, , .		5
92	Feature extraction by learning Lorentzian metric tensor and its extensions. Pattern Recognition, 2010, 43, 3298-3306.	5.1	25
93	Learning PDEs for Image Restoration via Optimal Control. Lecture Notes in Computer Science, 2010, , 115-128.	1.0	29
94	Learning adaptive hyper-guidance via proxy-based bilevel optimization for image enhancement. Visual Computer, 0, , .	2.5	0