

Yasuyuki Matsushita

List of Publications by Year in descending order

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Version: 2024-02-01

149
papers

5,982
citations

257357

24
h-index

175177

52
g-index

154
all docs

154
docs citations

154
times ranked

4069
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Deep Photometric Stereo Networks for Determining Surface Normal and Reflectances. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 114-128. | 9.7 | 10 |
| 2 | Deep Photometric Stereo for Non-Lambertian Surfaces. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 129-142. | 9.7 | 37 |
| 3 | Shell Theory: A Statistical Model of Reality. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 6438-6453. | 9.7 | 3 |
| 4 | Patch-Based Uncalibrated Photometric Stereo Under Natural Illumination. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 7809-7823. | 9.7 | 9 |
| 5 | Symmetric-light Photometric Stereo. , 2022, , . | | 2 |
| 6 | Shape-coded ArUco: Fiducial Marker for Bridging 2D and 3D Modalities. , 2022, , . | | 1 |
| 7 | Eliminating Temporal Illumination Variations in Whisk-broom Hyperspectral Imaging. International Journal of Computer Vision, 2022, 130, 1310-1324. | 10.9 | 5 |
| 8 | RotationNet for Joint Object Categorization and Unsupervised Pose Estimation from Multi-View Images. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 269-283. | 9.7 | 21 |
| 9 | Descriptor-Free Multi-view Region Matching for Instance-Wise 3D Reconstruction. Lecture Notes in Computer Science, 2021, , 581-599. | 1.0 | 1 |
| 10 | Radiometric Calibration. , 2021, , 1036-1038. | | 0 |
| 11 | Radiometric Response Function. , 2021, , 1038-1041. | | 0 |
| 12 | Shape from Shading. , 2021, , 1144-1148. | | 0 |
| 13 | Multispectral Photometric Stereo for Spatially-Varying Spectral Reflectances: A well posed problem?. , 2021, , . | | 2 |
| 14 | Lighting, Reflectance and Geometry Estimation from 360° Panoramic Stereo. , 2021, , . | | 9 |
| 15 | Normal Integration via Inverse Plane Fitting with Minimum Point-to-Plane Distance. , 2021, , . | | 9 |
| 16 | Semi-Calibrated Photometric Stereo. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 232-245. | 9.7 | 25 |
| 17 | Ambiguity-Free Radiometric Calibration for Internet Photo Collections. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 1670-1684. | 9.7 | 4 |
| 18 | Photometric Stereo via Discrete Hypothesis-and-Test Search. , 2020, , . | | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Stereoscopic Flash and No-Flash Photography for Shape and Albedo Recovery. , 2020, , . | | 7 |
| 20 | Reducing the amount of out-of-core data access for GPU-accelerated randomized SVD. Concurrency Computation Practice and Experience, 2020, 32, e5754. | 1.4 | 8 |
| 21 | Light Structure from Pin Motion: Geometric Point Light Source Calibration. International Journal of Computer Vision, 2020, 128, 1889-1912. | 10.9 | 8 |
| 22 | Other Shape Reconstruction Techniques. Advances in Computer Vision and Pattern Recognition, 2020, , 157-181. | 0.9 | 0 |
| 23 | Block Randomized Singular Value Decomposition on GPUs. IEICE Transactions on Information and Systems, 2020, E103.D, 1949-1959. | 0.4 | 0 |
| 24 | Deep Near-Light Photometric Stereo for Spatially Varying Reflectances. Lecture Notes in Computer Science, 2020, , 137-152. | 1.0 | 11 |
| 25 | Photometry. Advances in Computer Vision and Pattern Recognition, 2020, , 3-29. | 0.9 | 0 |
| 26 | Biomedical Application. Advances in Computer Vision and Pattern Recognition, 2020, , 241-262. | 0.9 | 0 |
| 27 | Sensor. Advances in Computer Vision and Pattern Recognition, 2020, , 63-87. | 0.9 | 0 |
| 28 | Radiometric Response Function. , 2020, , 1-3. | | 0 |
| 29 | Shape from Shading. , 2020, , 1-4. | | 1 |
| 30 | What Is Learned in Deep Uncalibrated Photometric Stereo?. Lecture Notes in Computer Science, 2020, , 745-762. | 1.0 | 20 |
| 31 | Radiometric Calibration. , 2020, , 1-3. | | 0 |
| 32 | Photometric Stereo. Advances in Computer Vision and Pattern Recognition, 2020, , 107-123. | 0.9 | 0 |
| 33 | Visualization/AR/VR/MR Systems. Advances in Computer Vision and Pattern Recognition, 2020, , 213-239. | 0.9 | 0 |
| 34 | Structured Light. Advances in Computer Vision and Pattern Recognition, 2020, , 125-155. | 0.9 | 0 |
| 35 | An Analysis of Sketched IRLS for Accelerated Sparse Residual Regression. Lecture Notes in Computer Science, 2020, , 609-626. | 1.0 | 0 |
| 36 | Robot Vision, Autonomous Vehicles, and Human Robot Interaction. Advances in Computer Vision and Pattern Recognition, 2020, , 289-303. | 0.9 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Deep Learning for Multimodal Data Fusion. , 2019, , 9-39. | | 5 |
| 38 | Learning to Minify Photometric Stereo. , 2019, , . | | 46 |
| 39 | Self-Calibrating Deep Photometric Stereo Networks. , 2019, , . | | 72 |
| 40 | Material Classification from Time-of-Flight Distortions. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 41, 2906-2918. | 9.7 | 14 |
| 41 | Shape-Conditioned Image Generation by Learning Latent Appearance Representation from Unpaired Data. Lecture Notes in Computer Science, 2019, , 438-453. | 1.0 | 0 |
| 42 | Guest Editorial: Vision and Computational Photography and Graphics. Computer Vision and Image Understanding, 2018, 168, 1-2. | 3.0 | 0 |
| 43 | Multiview Rectification of Folded Documents. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 505-511. | 9.7 | 34 |
| 44 | Fast Randomized Singular Value Thresholding for Low-Rank Optimization. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 376-391. | 9.7 | 61 |
| 45 | Continuous 3D Label Stereo Matching Using Local Expansion Moves. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 2725-2739. | 9.7 | 102 |
| 46 | RotationNet: Joint Object Categorization and Pose Estimation Using Multiviews from Unsupervised Viewpoints. , 2018, , . | | 280 |
| 47 | Uncalibrated Photometric Stereo Under Natural Illumination. , 2018, , . | | 21 |
| 48 | Dimensionality's Blessing: Clustering Images by Underlying Distribution. , 2018, , . | | 6 |
| 49 | Numerical shape-from-shading revisited. IPSJ Transactions on Computer Vision and Applications, 2018, 10, . | 4.4 | 3 |
| 50 | Decomposition of reflection and scattering by multiple-weighted measurements. IPSJ Transactions on Computer Vision and Applications, 2018, 10, . | 4.4 | 1 |
| 51 | Probabilistic Plant Modeling via Multi-view Image-to-Image Translation. , 2018, , . | | 21 |
| 52 | Gaze-guided Image Classification for Reflecting Perceptual Class Ambiguity. , 2018, , . | | 0 |
| 53 | Light Structure from Pin Motion: Simple and Accurate Point Light Calibration for Physics-Based Modeling. Lecture Notes in Computer Science, 2018, , 3-19. | 1.0 | 3 |
| 54 | Recovering Inner Slices of Layered Translucent Objects by Multi-Frequency Illumination. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2017, 39, 746-757. | 9.7 | 12 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Device-free and privacy preserving indoor positioning using infrared retro-reflection imaging. , 2017, , . | | 13 |
| 56 | Robust Multiview Photometric Stereo Using Planar Mesh Parameterization. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2017, 39, 1591-1604. | 9.7 | 36 |
| 57 | Metric structure from motion by indoor localization using Wi-Fi channel state information. , 2017, , . | | 1 |
| 58 | Radiometric Calibration for Internet Photo Collections. , 2017, , . | | 4 |
| 59 | Material Classification Using Frequency-and Depth-Dependent Time-of-Flight Distortion. , 2017, , . | | 24 |
| 60 | GMS: Grid-Based Motion Statistics for Fast, Ultra-Robust Feature Correspondence. , 2017, , . | | 353 |
| 61 | Multi-task Learning Using Multi-modal Encoder-Decoder Networks with Shared Skip Connections. , 2017, , . | | 18 |
| 62 | Deep Photometric Stereo Network. , 2017, , . | | 88 |
| 63 | Fast General Norm Approximation via Iteratively Reweighted Least Squares. Lecture Notes in Computer Science, 2017, , 207-221. | 1.0 | 0 |
| 64 | A Holistic Approach to Cross-Channel Image Noise Modeling and Its Application to Image Denoising. , 2016, , . | | 141 |
| 65 | Predicting location semantics combining active and passive sensing with environment-independent classifier. , 2016, , . | | 19 |
| 66 | Photometric Stereo Under Non-uniform Light Intensities and Exposures. Lecture Notes in Computer Science, 2016, , 170-186. | 1.0 | 15 |
| 67 | Recovering Transparent Shape from Time-of-Flight Distortion. , 2016, , . | | 27 |
| 68 | Bayesian Depth-From-Defocus With Shading Constraints. IEEE Transactions on Image Processing, 2016, 25, 589-600. | 6.0 | 8 |
| 69 | Photometric Stereo with Small Angular Variations. , 2015, , . | | 9 |
| 70 | From Intensity Profile to Surface Normal: Photometric Stereo for Unknown Light Sources and Isotropic Reflectances. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2015, 37, 1999-2012. | 9.7 | 23 |
| 71 | Continuous Symmetric Stereo with Adaptive Outlier Handling. , 2015, , . | | 0 |
| 72 | Superdifferential cuts for binary energies. , 2015, , . | | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | Recovering inner slices of translucent objects by multi-frequency illumination. , 2015, , . | | 10 |
| 74 | Efficient Large-Scale Point Cloud Registration Using Loop Closures. , 2015, , . | | 18 |
| 75 | Appearance-Based Gaze Estimation With Online Calibration From Mouse Operations. IEEE Transactions on Human-Machine Systems, 2015, 45, 750-760. | 2.5 | 47 |
| 76 | Fast randomized Singular Value Thresholding for Nuclear Norm Minimization. , 2015, , . | | 47 |
| 77 | Photometric Stereo in the Wild. , 2015, , . | | 6 |
| 78 | Photometric Stereo Using Internet Images. , 2014, , . | | 21 |
| 79 | Efficient Multiview Stereo by Random-Search and Propagation. , 2014, , . | | 2 |
| 80 | Efficient Colorization of Large-Scale Point Cloud Using Multi-pass Z-Ordering. , 2014, , . | | 0 |
| 81 | Calibrating a Non-isotropic Near Point Light Source Using a Plane. , 2014, , . | | 23 |
| 82 | Learning-by-Synthesis for Appearance-Based 3D Gaze Estimation. , 2014, , . | | 234 |
| 83 | Graph Cut Based Continuous Stereo Matching Using Locally Shared Labels. , 2014, , . | | 59 |
| 84 | Photometric Stereo Using Sparse Bayesian Regression for General Diffuse Surfaces. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 1816-1831. | 9.7 | 51 |
| 85 | Bi-Polynomial Modeling of Low-Frequency Reflectances. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 1078-1091. | 9.7 | 93 |
| 86 | Interreflection Removal Using Fluorescence. Lecture Notes in Computer Science, 2014, , 203-217. | 1.0 | 8 |
| 87 | Surface Normal Deconvolution: Photometric Stereo for Optically Thick Translucent Objects. Lecture Notes in Computer Science, 2014, , 346-359. | 1.0 | 12 |
| 88 | Guest Editorial: 3D Imaging, Processing and Modelling. International Journal of Computer Vision, 2013, 102, 1-2. | 10.9 | 3 |
| 89 | Depth from Refraction Using a Transparent Medium with Unknown Pose and Refractive Index. International Journal of Computer Vision, 2013, 102, 3-17. | 10.9 | 20 |
| 90 | Nonlinear Camera Response Functions and Image Deblurring: Theoretical Analysis and Practice. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 2498-2512. | 9.7 | 68 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Bayesian Depth-from-Defocus with Shading Constraints. , 2013, , . | | 9 |
| 92 | Descattering of transmissive observation using Parallel High-Frequency Illumination. , 2013, , . | | 22 |
| 93 | Radiometric Calibration by Rank Minimization. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 144-156. | 9.7 | 41 |
| 94 | Graph-based joint clustering of fixations and visual entities. ACM Transactions on Applied Perception, 2013, 10, 1-16. | 1.2 | 19 |
| 95 | Multiview Photometric Stereo Using Planar Mesh Parameterization. , 2013, , . | | 34 |
| 96 | Appearance-Based Gaze Estimation Using Visual Saliency. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 329-341. | 9.7 | 149 |
| 97 | Uncalibrated Photometric Stereo for Unknown Isotropic Reflectances. , 2013, , . | | 56 |
| 98 | A biquadratic reflectance model for radiometric image analysis. , 2012, , . | | 2 |
| 99 | Robust photometric stereo using sparse regression. , 2012, , . | | 99 |
| 100 | Robust Simultaneous 3D Registration via Rank Minimization. , 2012, , . | | 4 |
| 101 | Motion Detail Preserving Optical Flow Estimation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2012, 34, 1744-1757. | 9.7 | 369 |
| 102 | Camera spectral sensitivity estimation from a single image under unknown illumination by using fluorescence. , 2012, , . | | 12 |
| 103 | Nonlinear camera response functions and image deblurring. , 2012, , . | | 7 |
| 104 | Aligning images in the wild. , 2012, , . | | 12 |
| 105 | Shape from Single Scattering for Translucent Objects. Lecture Notes in Computer Science, 2012, , 371-384. | 1.0 | 16 |
| 106 | Elevation Angle from Reflectance Monotonicity: Photometric Stereo for General Isotropic Reflectances. Lecture Notes in Computer Science, 2012, , 455-468. | 1.0 | 29 |
| 107 | High-quality shape from multi-view stereo and shading under general illumination. , 2011, , . | | 92 |
| 108 | Self-calibrating depth from refraction. , 2011, , . | | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Noise suppression in low-light images through joint denoising and demosaicing. , 2011, , . | | 36 |
| 110 | High-resolution hyperspectral imaging via matrix factorization. , 2011, , . | | 220 |
| 111 | Surface Reconstruction in Photometric Stereo with Calibration Error. , 2011, , . | | 3 |
| 112 | Smoothly varying affine stitching. , 2011, , . | | 191 |
| 113 | Hemispherical Confocal Imaging. IPSJ Transactions on Computer Vision and Applications, 2011, 3, 222-235. | 4.4 | 2 |
| 114 | Camera calibration with lens distortion from low-rank textures. , 2011, , . | | 69 |
| 115 | Radiometric calibration by transform invariant low-rank structure. , 2011, , . | | 15 |
| 116 | Hemispherical Confocal Imaging Using Turtleback Reflector. Lecture Notes in Computer Science, 2011, , 336-349. | 1.0 | 9 |
| 117 | Robust Photometric Stereo via Low-Rank Matrix Completion and Recovery. Lecture Notes in Computer Science, 2011, , 703-717. | 1.0 | 113 |
| 118 | Interactive Removal of Shadows from a Single Image Using Hierarchical Graph Cut. IPSJ Transactions on Computer Vision and Applications, 2010, 2, 235-252. | 4.4 | 4 |
| 119 | Motion detail preserving optical flow estimation. , 2010, , . | | 57 |
| 120 | Self-calibrating photometric stereo. , 2010, , . | | 93 |
| 121 | Calibration-free gaze sensing using saliency maps. , 2010, , . | | 63 |
| 122 | Estimating demosaicing algorithms using image noise variance. , 2010, , . | | 16 |
| 123 | Consensus photometric stereo. , 2010, , . | | 68 |
| 124 | Interactive Shadow Removal from a Single Image Using Hierarchical Graph Cut. Lecture Notes in Computer Science, 2010, , 234-245. | 1.0 | 27 |
| 125 | Shape from Second-Bounce of Light Transport. Lecture Notes in Computer Science, 2010, , 280-293. | 1.0 | 7 |
| 126 | Image retargeting using importance diffusion. , 2009, , . | | 42 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | An improved belief propagation method for dynamic collage. <i>Visual Computer</i> , 2009, 25, 431-439. | 2.5 | 11 |
| 128 | A hand-held photometric stereo camera for 3-D modeling. , 2009, , . | | 67 |
| 129 | Radiometric calibration using temporal irradiance mixtures. , 2008, , . | | 10 |
| 130 | An Incremental Learning Method for Unconstrained Gaze Estimation. <i>Lecture Notes in Computer Science</i> , 2008, , 656-667. | 1.0 | 53 |
| 131 | Estimating camera response functions using probabilistic intensity similarity. , 2008, , . | | 21 |
| 132 | Estimating Radiometric Response Functions from Image Noise Variance. <i>Lecture Notes in Computer Science</i> , 2008, , 623-637. | 1.0 | 12 |
| 133 | Statistical Analysis of Global Motion Chains. <i>Lecture Notes in Computer Science</i> , 2008, , 692-705. | 1.0 | 1 |
| 134 | Radiometric Calibration from Noise Distributions. , 2007, , . | | 49 |
| 135 | Removing Non-Uniform Motion Blur from Images. , 2007, , . | | 115 |
| 136 | A Probabilistic Intensity Similarity Measure based on Noise Distributions. , 2007, , . | | 18 |
| 137 | Full-frame video stabilization with motion inpainting. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2006, 28, 1150-1163. | 9.7 | 474 |
| 138 | Dynamic stills and clip trailers. <i>Visual Computer</i> , 2006, 22, 642-652. | 2.5 | 32 |
| 139 | Interactive video exploration using pose slices. , 2006, , . | | 4 |
| 140 | Illumination brush. , 2006, , . | | 2 |
| 141 | An Intensity Similarity Measure in Low-Light Conditions. <i>Lecture Notes in Computer Science</i> , 2006, , 267-280. | 1.0 | 25 |
| 142 | Decorating Surfaces with Bidirectional Texture Functions. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2005, 11, 519-528. | 2.9 | 24 |
| 143 | LIGHTING AND SHADOW INTERPOLATION USING INTRINSIC LUMIGRAPHS. <i>International Journal of Image and Graphics</i> , 2004, 04, 585-604. | 1.2 | 1 |
| 144 | Illumination normalization with time-dependent intrinsic images for video surveillance. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2004, 26, 1336-1347. | 9.7 | 98 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | Estimating Intrinsic Images from Image Sequences with Biased Illumination. Lecture Notes in Computer Science, 2004, , 274-286. | 1.0 | 46 |
| 146 | An occlusion-robust tracking algorithm based on a spatiotemporal Markov random field model. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English) Tj ETQq0 0 0 rgBT /Ovack 10 T 50 697 T | | |
| 147 | Traffic monitoring and accident detection at intersections. IEEE Transactions on Intelligent Transportation Systems, 2000, 1, 108-118. | 4.7 | 415 |
| 148 | Full-Frame Video Stabilization. , 0, , . | | 95 |
| 149 | Shape and Albedo Recovery by Your Phone using Stereoscopic Flash and No-Flash Photography. International Journal of Computer Vision, 0, , 1. | 10.9 | 0 |