Focused plenoptic camera and rendering

Journal of Electronic Imaging

19, 021106

Citation Report

#	Article	IF	Citations
1	A gentle introduction to coded computational photography. , 2011, , .		2
2	Spatial and Angular Variational Super-Resolution of 4D Light Fields. Lecture Notes in Computer Science, 2012, , 608-621.	1.3	68
3	Globally consistent depth labeling of 4D light fields. , 2012, , .		241
4	An analysis of color demosaicing in plenoptic cameras. , 2012, , .		14
5	Fotografieren in der vierten Dimension. Physik in Unserer Zeit, 2012, 43, 124-127.	0.0	2
6	Bilder berechnen - nicht nur aufnehmen. Optik & Photonik, 2012, 7, 50-53.	0.2	2
7	Unstructured Light Fields. Computer Graphics Forum, 2012, 31, 305-314.	3.0	163
8	Three-dimensional integral image reconstruction based on viewpoint interpolation. , 2013, , .		4
9	Plenoptic cameras in real-time robotics. International Journal of Robotics Research, 2013, 32, 206-217.	8.5	55
10	Surface light field from video acquired in uncontrolled settings. , 2013, , .		4
11	Plenoptic depth map in the case of occlusions. , 2013, , .		5
12	Light-Field Acquisition and Processing System for Film Productions. , 2013, , .		1
13	Three-dimensional display by smart pseudoscopic-to-orthoscopic conversion with tunable focus. Applied Optics, 2014, 53, E19.	1.8	38
14	Towards 100% In-situ 2D/3D Quality Inspection of Metallic Micro Components Using Plenoptic Cameras. Procedia CIRP, 2014, 17, 847-852.	1.9	3
15	Computation of microimages for plenoptic display. , 2014, , .		0
16	Disparity based compression technique for focused plenoptic images. , 2014, , .		5
17	Scalar wave-optical reconstruction of plenoptic camera images. Applied Optics, 2014, 53, 5784.	1.8	11
18	Stereo vision–based depth of field rendering on a mobile device. Journal of Electronic Imaging, 2014, 23, 023009.	0.9	20

#	Article	IF	Citations
19	Subspace based disparity estimation for plenoptic cameras. , 2014, , .		0
20	Pixel resolution plenoptic disparity using cost aggregation. , 2014, , .		2
21	Dense lightfield reconstruction from multi aperture cameras. , 2014, , .		3
22	Integral image rendering procedure for aberration correction and size measurement. Applied Optics, 2014, 53, 3176.	1.8	4
23	Efficient intra prediction scheme for light field image compression. , 2014, , .		46
24	Variational Light Field Analysis for Disparity Estimation and Super-Resolution. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 606-619.	13.9	464
25	Multilayer image disparity estimation and blending for light field cameras. , 2015, , .		1
26	Plenoptic camera based on a liquid crystal microlens array. Proceedings of SPIE, 2015, , .	0.8	1
27	Super-resolution image synthesis using the physical pixel arrangementofalight field camera. , 2015, , .		2
28	Adaptive preprocessing and combination techniques for light field image rendering. , 2015, , .		2
29	Miniaturized 3D microscope imaging system. Proceedings of SPIE, 2015, , .	0.8	0
30	Integral images compression scheme based on view extraction. , 2015, , .		18
31	Coding of plenoptic images by using a sparse set and disparities. , 2015, , .		2
32	An electrically tunable plenoptic camera using a liquid crystal microlens array. Review of Scientific Instruments, 2015, 86, 053101.	1.3	48
33	Towards 3D Television Through Fusion of Kinect and Integral-Imaging Concepts. Journal of Display Technology, 2015, 11, 894-899.	1.2	13
34	Resolution enhancement in integral microscopy by physical interpolation. Biomedical Optics Express, 2015, 6, 2854.	2.9	25
35	Effect of wavefront aberrations on a focused plenoptic imaging system: a wave optics simulation approach. , 2015, , .		0
36	Reconstruction of refocusing and all-in-focus images based on forward simulation model of plenoptic camera. Optics Communications, 2015, 357, 1-6.	2.1	9

#	Article	IF	Citations
37	Full Parallax 3D Video Content Compression. , 2015, , 49-70.		1
38	Correction model for microlens array assembly error in light field camera. Optics Express, 2016, 24, 24524.	3.4	16
39	Decoding and calibration method on focused plenoptic camera. Computational Visual Media, 2016, 2, 57-69.	17.5	14
40	Compression of unfocused plenoptic images using a displacement intra prediction. , 2016, , .		34
41	Geometric calibration of focused light field camera for 3-D flame temperature measurement. , 2016, , .		7
42	Three-dimensional holoscopic image coding scheme using high-efficiency video coding with kernel-based minimum mean-square-error estimation. Journal of Electronic Imaging, 2016, 25, 043015.	0.9	8
43	Morphology-based disparity estimation and rendering algorithm for light field images. , 2016, , .		1
44	Three-dimensional temperature field measurement of flame using a single light field camera. Optics Express, 2016, 24, 1118.	3.4	91
45	Coding of Focused Plenoptic Contents by Displacement Intra Prediction. IEEE Transactions on Circuits and Systems for Video Technology, 2016, 26, 1308-1319.	8.3	61
46	Scalable Coding of Plenoptic Images by Using a Sparse Set and Disparities. IEEE Transactions on Image Processing, 2016, 25, 80-91.	9.8	79
47	Recent Advances in the Capture and Display of Macroscopic and Microscopic 3-D Scenes by Integral Imaging. Proceedings of the IEEE, 2017, 105, 825-836.	21.3	47
48	Benefits of plenoptic cameras for robot vision during close range on-orbit servicing maneuvers. , 2017, , .		8
49	Interests of refocused images calibrated in depth with a multi-view camera for control by vision. , 2017, , .		1
50	Coding of 3D holoscopic image by using spatial correlation of rendered view images. , 2017, , .		6
51	Light field imaging: models, calibrations, reconstructions, and applications. Frontiers of Information Technology and Electronic Engineering, 2017, 18, 1236-1249.	2.6	19
52	Exploring plenoptic properties of correlation imaging with chaotic light. Journal of Optics (United) Tj ETQq1 1 0.784314 rgBT /Overloc	2.2	22
53	Infrared light field imaging system free of fixed-pattern noise. Scientific Reports, 2017, 7, 13040.	3.3	16
54	An Image Rendering Pipeline for Focused Plenoptic Cameras. IEEE Transactions on Computational Imaging, 2017, 3, 811-821.	4.4	14

#	ARTICLE	IF	CITATIONS
55	A fast inversion method for 2-D flame temperature measurement. , 2017, , .		3
56	Characterization and selection of light field content for perceptual assessment. , 2017, , .		15
57	Light Field Vision for Artificial Intelligence. Studies in Computational Intelligence, 2017, , 189-209.	0.9	2
58	Fast projection based depth for focused plenoptic camera. , 2017, , .		0
59	Simulation of microlens array based plenoptic capture utilizing densely sampled light field. , 2017, , .		2
60	A depth estimation algorithm of plenoptic camera for the measurement of particles. , 2017, , .		0
61	Disparity Estimation for Focused Light Field Camera Using Cost Aggregation in Micro-Images. , 2017, , .		0
62	Depth estimation algorithm for light field data by epipolar image analysis and region interpolation. Applied Optics, 2017, 56, 6603.	1.8	11
63	Fast Object Detection in Light Field Imaging by Integrating Deep Learning with Defocusing. Applied Sciences (Switzerland), 2017, 7, 1309.	2.5	11
64	Disparity Estimation for Camera Arrays Using Reliability Guided Disparity Propagation. IEEE Access, 2018, 6, 21840-21849.	4.2	13
65	Scalable coding of 3D holoscopic image by using a sparse interlaced view image set and disparity map. Multimedia Tools and Applications, 2018, 77, 1261-1283.	3.9	3
66	Influence of microlens array manufacturing errors on light-field imaging. Optics Communications, 2018, 410, 40-52.	2.1	20
67	Light field image coding with jointly estimated self-similarity bi-prediction. Signal Processing: Image Communication, 2018, 60, 144-159.	3.2	20
68	Analytical model of multiview autostereoscopic 3D display with a barrier or a lenticular plate. Journal of Information Display, 2018, 19, 99-110.	4.0	3
69	3D Imaging System using Multi-focus Plenoptic Camera and Tensor Display. , 2018, , .		1
70	Plenoptic Sensor: Application to Extend Field-of-View. , 2018, , .		0
71	Graph-based Transforms for Predictive Light Field Compression based on Super-Pixels. , 2018, , .		14
72	An Algorithm for Obstacle Detection based on YOLO and Light Filed Camera. , 2018, , .		15

#	Article	IF	Citations
73	A Study on the Impact of Visualization Techniques on Light Field Perception. , 2018, , .		8
74	Sensor resolution enhancement for remote imaging by synthesizing mask-based camera array images. Optical Review, 2018, 25, 708-719.	2.0	0
75	Correlation Plenoptic Imaging: An Overview. Applied Sciences (Switzerland), 2018, 8, 1958.	2.5	25
76	AN ANALYSIS OF DEMOSAICING FOR PLENOPTIC CAPTURE BASED ON RAY OPTICS. , 2018, , .		2
77	Large Depth-of-Field Integral Microscopy by Use of a Liquid Lens. Sensors, 2018, 18, 3383.	3.8	9
78	Tomographic approach for the quantitative scene reconstruction from light field images. Optics Express, 2018, 26, 22574.	3.4	14
79	Image Formation Analysis and Light Field Information Reconstruction for Plenoptic Camera 2.0. Lecture Notes in Computer Science, 2018, , 609-618.	1.3	1
80	FIMic: design for ultimate 3D-integral microscopy of in-vivo biological samples. Biomedical Optics Express, 2018, 9, 335.	2.9	72
81	Long working range light field microscope with fast scanning multifocal liquid crystal microlens array. Optics Express, 2018, 26, 10981.	3.4	37
82	Rectification of Images Distorted by Microlens Array Errors in Plenoptic Cameras. Sensors, 2018, 18, 2019.	3.8	7
83	Full-Field Surface 3D Shape and Displacement Measurements Using an Unfocused Plenoptic Camera. Experimental Mechanics, 2018, 58, 831-845.	2.0	13
84	Light Field Image Compression. Signals and Communication Technology, 2019, , 143-176.	0.5	2
85	Spectrum Reconstruction of the Light-Field Multimodal Imager. IEEE Access, 2019, 7, 9688-9696.	4.2	3
86	Flame temperature reconstruction through a multi-plenoptic camera technique. Measurement Science and Technology, 2019, 30, 124002.	2.6	16
87	A Microparticle Image Velocimetry Based on Light Field Imaging. IEEE Sensors Journal, 2019, 19, 9806-9817.	4.7	18
88	A Special-Purpose Processor for FFT-Based Digital Refocusing using 4-D Light Field Data. , 2019, , .		1
89	F-Number Adaptation for Maximizing the Sensor Usage of Light Field Cameras. , 2019, , .		1
90	In-Situ Close-Range Imaging with Plenoptic Cameras. , 2019, , .		2

#	Article	IF	Citations
91	High-Quality Multi-View Image Extraction from a Light Field Camera Considering Its Physical Pixel Arrangement. IEICE Transactions on Information and Systems, 2019, E102.D, 702-714.	0.7	0
92	Achromatic metalens array for full-colour light-field imaging. Nature Nanotechnology, 2019, 14, 227-231.	31.5	408
93	Signal-to-noise properties of correlation plenoptic imaging with chaotic light. Physical Review A, 2019, 99, .	2.5	24
94	Characteristics of tomographic reconstruction of light-field Tomo-PIV. Optics Communications, 2019, 442, 132-147.	2.1	18
95	3D visual sensing technique based on focal stack for snake robotic applications. Results in Physics, 2019, 12, 1520-1528.	4.1	11
96	Plano-concave mini-lens array for plenoptic imaging applications. , 2019, , .		0
97	Dual Disparity-Based Novel View Reconstruction for Light Field Images Using Discrete Cosine Transform Filter. IEEE Access, 2020, 8, 72287-72297.	4.2	3
98	Depth-of-Field-Extended Plenoptic Camera Based on Tunable Multi-Focus Liquid-Crystal Microlens Array. Sensors, 2020, 20, 4142.	3.8	20
99	Robust Depth Estimation From Multi-Focus Plenoptic Images. , 2020, , .		0
100	Blind-Depth Light Field Super-Resolution. Journal of Physics: Conference Series, 2020, 1575, 012051.	0.4	0
101	Effects of image positions on temperature reconstruction using light field camera. Results in Physics, 2020, 17, 103146.	4.1	2
102	Dense Light Field Coding: A Survey. IEEE Access, 2020, 8, 49244-49284.	4.2	49
103	Depth-of-field reduction due to blurring in a relayed plenoptic camera and mitigation via deconvolution. Measurement Science and Technology, 2020, 31, 055403.	2.6	3
104	Depth of Field Extension in Laser Speckle Contrast Imaging. IEEE Access, 2020, 8, 31499-31506.	4.2	0
105	Plenoptic x-ray microscopy. Applied Physics Letters, 2020, 116, .	3.3	8
106	Lenslet Light Field Image Coding: Classifying, Reviewing and Evaluating. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 339-354.	8.3	19
107	Rate-Distortion Optimized Graph Coarsening and Partitioning for Light Field Coding. IEEE Transactions on Image Processing, 2021, 30, 5518-5532.	9.8	7
108	Improved Patch-based View Rendering for Focused Plenoptic Cameras with Extended Depth-of-Field. , 2021, , .		2

#	ARTICLE	IF	CITATIONS
109	Holoscopic 3D Microgesture Recognition by Deep Neural Network Model Based on Viewpoint Images and Decision Fusion. IEEE Transactions on Human-Machine Systems, 2021, 51, 162-171.	3.5	4
110	Interest of pseudo-focused images for key-points detection in plenoptic imaging. , 2021, , .		2
111	3D reconstruction of structured light fields based on point cloud adaptive repair for highly reflective surfaces. Applied Optics, 2021, 60, 7086.	1.8	8
112	Depth-of-field comparison between the plenoptic camera 1.0 and 2.0. , 2021, , .		2
113	Tomographicâ€based 3D scintillation dosimetry using a threeâ€view plenoptic imaging system. Medical Physics, 2020, 47, 3636-3646.	3.0	10
115	Generating EPI Representations of 4D Light Fields with a Single Lens Focused Plenoptic Camera. Lecture Notes in Computer Science, 2011, , 90-101.	1.3	34
116	3D Holoscopic Images Coding Scheme Based on Viewpoint Image Rendering. Communications in Computer and Information Science, 2017, , 318-327.	0.5	1
117	Modeling standard plenoptic camera by an equivalent camera array. Optical Engineering, 2020, 59, 1.	1.0	4
118	Simulating imaging-based tomographic systems using optical design software for resolving 3D structures of translucent media. Applied Optics, 2019, 58, 5942.	1.8	5
119	Advanced light-field refocusing through tomographic modeling of the photographed scene. Optics Express, 2019, 27, 7834.	3.4	8
120	Panoramic single-aperture multi-sensor light field camera. Optics Express, 2019, 27, 37257.	3.4	15
121	Geometry parameter calibration for focused plenoptic cameras. Optics Express, 2020, 28, 3428.	3.4	11
122	Light field endoscopy and its parametric description. Optics Letters, 2017, 42, 1804.	3.3	33
123	Performance Optimization of Light-Field Applications on GPU. IEICE Transactions on Information and Systems, 2016, E99.D, 3072-3081.	0.7	3
124	Digital Depth of Field Control in Photography based on Focused Plenoptic Camera. , 0, , .		3
125	Quantum Imaging for Remote Sensing and Earth Observation. , 2021, , .		0
127	Light Field from Smartphone-Based Dual Video. Lecture Notes in Computer Science, 2015, , 600-610.	1.3	0
128	Image Rendering for Microlens Array Imaging. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
129	Methods of Image Acquisition. , 2016, , 223-365.		1
130	Digital Refocusing: All-in-Focus Image Rendering Based on Holoscopic 3D Camera. Journal of Computer and Communications, 2016, 04, 24-35.	0.9	0
131	Bildaufnahmeverfahren. , 2016, , 281-456.		0
132	Improved inter-layer prediction for light field content coding with display scalability. Proceedings of SPIE, 2016, , .	0.8	1
133	The Plenoptic Camera as Wavefront Sensor for the VTT Solar Telescope. , 2017, , .		0
134	A method of plenoptic imaging with high resolution in turbulent atmosphere. , 2017, , .		0
135	Depth profile measurement with lenslet images of the plenoptic camera. Optical Engineering, 2018, 57, 1.	1.0	0
136	Advanced imaging system with multiple optical sensing modes. , 2018, , .		0
137	Comparison of reconstruction approaches for plenoptic imaging systems. , 2018, , .		2
138	Three-dimensional holoscopic image-coding scheme using a sparse viewpoint image array and disparities. Journal of Electronic Imaging, 2018, 27, 1.	0.9	1
139	Impact of Packet Losses in Scalable Light Field Video Coding. Signals and Communication Technology, 2019, , 177-193.	0.5	0
140	Emerging Imaging Technologies: Trends and Challenges. Signals and Communication Technology, 2019, , 5-39.	0.5	2
141	Solar MCAO with a single sensor: simulating tomographic reconstruction with the plenoptic camera. , 2018, , .		0
142	Simulation of light fields captured by a plenoptic camera using an equivalent camera array. , 2018, , .		1
143	Exploring plenoptic properties of correlated light. , 2018, , .		0
144	Correlation Plenoptic Microscopy. , 2019, , .		0
145	New design of light field camera based on optic fiber plates. , 2019, , .		0
146	Frequency analysis and optimization of a spectral intermediate image diffractive plenoptic camera. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
147	Comparison between the plenoptic sensor and the light field camera in restoring images through turbulence. OSA Continuum, 2019, 2, 2511.	1.8	6
148	Study of contrast variations with depth in focused plenoptic cameras. Optics Letters, 2019, 44, 4825.	3.3	3
149	Spatial resolution comparison of a diffractive plenoptic camera and an intermediate image diffractive plenoptic camera. Optical Engineering, 2019, 58, 1.	1.0	0
150	Multi-Angular Epipolar Geometry Based Light Field Angular Reconstruction Network. IEEE Transactions on Computational Imaging, 2020, 6, 1507-1522.	4.4	34
151	Light-field microscopy with correlated beams for high resolution volumetric imaging. , 2021, , .		0
152	Three-dimensional temperature reconstruction of diffusion flame from the light-field convolution imaging by the focused plenoptic camera. Science China Technological Sciences, 2022, 65, 302-323.	4.0	7
153	Towards Robust VSLAM in Dynamic Environments: A Light Field Approach. , 2021, , .		2
154	Quantum Imaging for Space Objects. , 2020, , .		1
155	Light-field microscopy with correlated beams. , 2021, , .		0
156	All-In-Focus Polarimetric Imaging Based on an Integrated Plenoptic Camera with a Key Electrically Tunable LC Device. Micromachines, 2022, 13, 192.	2.9	1
157	Flexible Plenoptic X-ray Microscopy. Photonics, 2022, 9, 98.	2.0	1
158	Light Field Reconstruction Using Residual Networks on Raw Images. Sensors, 2022, 22, 1956.	3.8	10
159	Depth estimation of the light field image based on convolutional neural network. , 2022, , .		0
160	Pixel Gradient Based Zooming Method for Plenoptic Intra Prediction. , 2021, , .		1
162	A Wide Field-of-View Light-Field Camera with Adjustable Multiplicity for Practical Applications. Sensors, 2022, 22, 3455.	3.8	5
163	End-to-End Residual Network for Light Field Reconstruction on Raw Images and View Image Stacks. Sensors, 2022, 22, 3540.	3.8	1
164	Single-cell volumetric imaging with light field microscopy: Advances in systems and algorithms. Journal of Innovative Optical Health Sciences, 2023, 16, .	1.0	2
165	Novel Projection Schemes for Graph-Based Light Field Coding. Sensors, 2022, 22, 4948.	3.8	0

#	Article	IF	Citations
166	RCA-LF: Dense Light Field Reconstruction Using Residual Channel Attention Networks. Sensors, 2022, 22, 5254.	3.8	1
167	Design and validation of aberration-free plenoptic imaging system for industrial inspection. , 2022, , .		0
168	Light field imaging for computer vision: a survey. Frontiers of Information Technology and Electronic Engineering, 2022, 23, 1077-1097.	2.6	5
169	Calibration of transverse ray and pupil aberrations for light field cameras. Applied Optics, 2022, 61, 6974.	1.8	0
171	Design, fabrication, and validation of aberration-freeintegral imaging system for 3D reconstruction. Applied Optics, 0, , .	1.8	0
172	Electrically addressed focal stack plenoptic camera based on a liquid-crystal microlens array for all-in-focus imaging. Optics Express, 2022, 30, 34938.	3.4	5
173	Light-field microscopy with correlated beams for high-resolution volumetric imaging. Scientific Reports, 2022, 12, .	3.3	8
174	Correlation light-field microscopy. , 2022, , .		1
175	Comparative analysis of signal-to-noise ratio in correlation plenoptic imaging architectures. European Physical Journal Plus, 2022, 137, .	2.6	5
176	Design and implementation of plenoptic imaging system with reduced aberrations. , 2023, , .		0
177	A low-rank decomposition-based deconvolution algorithm for rapid volumetric reconstruction of light field Î¼PIV. Experiments in Fluids, 2023, 64, .	2.4	3
178	Geometric Parameters Calibration of Focused Light Field Camera Based on Edge Spread Information Fitting. Photonics, 2023, 10, 187.	2.0	3
179	Changing interface conditions in a two-fluid rotating flow. Physics of Fluids, 2023, 35, 031705.	4.0	0
180	Learned Focused Plenoptic Image Compression With Microimage Preprocessing and Global Attention. IEEE Transactions on Multimedia, 2024, 26, 890-903.	7.2	2
181	Underwater plenoptic cameras optimized for water refraction. Optics Express, 2023, 31, 21464.	3.4	1
182	Correlated-photon imaging at 10 volumetric images per second. Scientific Reports, 2023, 13, .	3.3	6
183	Microimage-based Two-step Search For Plenoptic 2.0 Video Coding. , 2023, , .		0
184	Compressive sensing-based correlation plenoptic imaging. Frontiers in Physics, 0, 11, .	2.1	0

#	ARTICLE	IF	CITATIONS
185	Spectrum Reconstruction of Multispectral Light Field Imager based on Adaptive Sparse Representation. IEEE Transactions on Instrumentation and Measurement, 2023, , 1-1.	4.7	0
186	æ¶²æ™¶å¾®é€é•œé˜µå—ç›´æŽ¥æˆåƒ Laser and Optoelectronics Progress, 2023, 60, 2011004.	0.6	1
187	Polarizing Camera Array System Equipment and Calibration Method. IEEE Transactions on Instrumentation and Measurement, 2024, 73, 1-15.	4.7	0
188	Depth Estimation from a Hierarchical Baseline Stereo with a Developed Light Field Camera. Applied Sciences (Switzerland), 2024, 14, 550.	2.5	1
189	LC-based lightfield camera prototype for rapidly creating target images optimized by finely adjusting several key coefficients and a LC-guided refocusing-rendering. Optics Express, 2024, 32, 7220.	3.4	0
190	Large depth range resolution model for MLA-based light field microscope optimization. Optics and Laser Technology, 2024, 174, 110699.	4.6	0
191	Light-field ghost imaging. Physical Review Applied, 2024, 21, .	3.8	0