Kostas Daniilidis

List of Publications by Year
in descending order

82 papers	5,656 citations	361045 20 h-index	360668 35 g-index
82 all docs	82 docs citations	82 times ranked	3156 citing authors

#	Article	IF	Citations
1	Event-Based Vision: A Survey. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 154-180.	9.7	671
2	Reactive navigation in partially familiar planar environments using semantic perceptual feedback. International Journal of Robotics Research, 2022, 41, 85-126.	5.8	6
3	Challenges and Opportunities for Autonomous Micro-UAVs in Precision Agriculture. IEEE Micro, 2022, 42, 61-68.	1.8	13
4	Semantic keypoint-based pose estimation from single RGB frames. , 2022, 2, 147-171.		3
5	Robust Object-Level Semantic Visual SLAM Using Semantic Keypoints. , 2022, 2, 513-524.		1
6	Human-Scale Mobile Manipulation Using RoMan. , 2022, 2, 1232-1262.		0
7	EV-Catcher: High-Speed Object Catching Using Low-Latency Event-Based Neural Networks. IEEE Robotics and Automation Letters, 2022, 7, 8737-8744.	3.3	3
8	Uncertainty-driven Planner for Exploration and Navigation. , 2022, , .		13
9	Towards Statistically Provable Geometric 3D Human Pose Recovery. SIAM Journal on Imaging Sciences, 2021, 14, 246-270.	1.3	0
10	EventGAN: Leveraging Large Scale Image Datasets for Event Cameras. , 2021, , .		11
11	Semi-dense visual-inertial odometry and mapping for computationally constrained platforms. Autonomous Robots, 2021, 45, 773-787.	3.2	2
12	Object-centric Video Prediction without Annotation. , 2021, , .		1
13	Self-Supervised Optical Flow with Spiking Neural Networks and Event Based Cameras. , 2021, , .		2
14	Learning SO(3) Equivariant Representations with Spherical CNNs. International Journal of Computer Vision, 2020, 128, 588-600.	10.9	27
15	Coordinate-Free Dynamics and Differential Flatness of a Class of 6DOF Aerial Manipulators. , 2020, , .		3
16	A Low-Rank Matrix Approximation Approach to Multiway Matching with Applications in Multi-Sensory Data Association. , 2020, , .		2
17	Reactive Semantic Planning in Unexplored Semantic Environments Using Deep Perceptual Feedback. IEEE Robotics and Automation Letters, 2020, 5, 4455-4462.	3.3	18
18	TLIO: Tight Learned Inertial Odometry. IEEE Robotics and Automation Letters, 2020, 5, 5653-5660.	3.3	89

#	Article	IF	Citations
19	Spike-FlowNet: Event-Based Optical Flow Estimation with Energy-Efficient Hybrid Neural Networks. Lecture Notes in Computer Science, 2020, , 366-382.	1.0	62
20	Learning Predictive Models from Observation and Interaction. Lecture Notes in Computer Science, 2020, , 708-725.	1.0	4
21	3D Bird Reconstruction: A Dataset, Model, and Shape Recovery from a Single View. Lecture Notes in Computer Science, 2020, , 1-17.	1.0	15
22	Unsupervised Event-Based Optical Flow Using Motion Compensation. Lecture Notes in Computer Science, 2019, , 711-714.	1.0	13
23	Autonomous Precision Pouring From Unknown Containers. IEEE Robotics and Automation Letters, 2019, 4, 2317-2324.	3.3	26
24	Learning Event-Based Height From Plane and Parallax. , 2019, , .		2
25	Learning Event-based Height from Plane and Parallax. , 2019, , .		3
26	Live Demonstration: Unsupervised Event-Based Learning of Optical Flow, Depth and Egomotion. , 2019, , .		12
27	Distributed 3-D Bearing-Only Orientation Localization. , 2019, , .		4
28	TexturePose: Supervising Human Mesh Estimation With Texture Consistency. , 2019, , .		77
29	Unsupervised Event-Based Learning of Optical Flow, Depth, and Egomotion. , 2019, , .		212
30	Convolutional Mesh Regression for Single-Image Human Shape Reconstruction. , 2019, , .		308
31	Learning to Reconstruct 3D Human Pose and Shape via Model-Fitting in the Loop. , 2019, , .		541
32	MonoCap: Monocular Human Motion Capture using a CNN Coupled with a Geometric Prior. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 41, 901-914.	9.7	116
33	The Multivehicle Stereo Event Camera Dataset: An Event Camera Dataset for 3D Perception. IEEE Robotics and Automation Letters, 2018, 3, 2032-2039.	3.3	236
34	A Distributed Optimization Approach to Consistent Multiway Matching. , 2018, , .		4
35	Learning to Estimate 3D Human Pose and Shape from a Single Color Image. , 2018, , .		391
36	Semi-Dense Visual-Inertial Odometry and Mapping for Quadrotors with SWAP Constraints. , 2018, , .		3

#	Article	IF	Citations
37	Realtime Time Synchronized Event-Based Stereo. Lecture Notes in Computer Science, 2018, , 438-452.	1.0	43
38	Autonomous Flight for Detection, Localization, and Tracking of Moving Targets With a Small Quadrotor. IEEE Robotics and Automation Letters, 2017, 2, 1762-1769.	3.3	78
39	Distributed consistent data association via permutation synchronization. , 2017, , .		21
40	Probabilistic data association for semantic SLAM. , 2017, , .		283
41	The Space of Essential Matrices as a Riemannian Quotient Manifold. SIAM Journal on Imaging Sciences, 2017, 10, 1416-1445.	1.3	17
42	Precise dispensing of liquids using visual feedback. , 2017, , .		13
43	Event-Based Visual Inertial Odometry. , 2017, , .		115
44	Event-based feature tracking with probabilistic data association. , 2017, , .		82
45	A dynamical systems approach to distributed eigenvector computation. , 2017, , .		3
46	6-DoF object pose from semantic keypoints. , 2017, , .		231
47	A game-theoretic approach to Robust Fusion and Kalman filtering under unknown correlations. , 2017, , .		13
48	Articulated motion estimation from a monocular image sequence using spherical tangent bundles. , 2016, , .		17
49	Rigid components identification and rigidity control in bearing-only localization using the graph cycle basis. , 2015, , .		23
50	Single Image Pop-Up from Discriminatively Learned Parts. , 2015, , .		10
51	Grasping surfaces of revolution: Simultaneous pose and shape recovery from two views. , 2015, , .		6
52	Initialization techniques for 3D SLAM: A survey on rotation estimation and its use in pose graph optimization. , 2015, , .		138
53	Nonmyopic View Planning for Active Object Classification and Pose Estimation. IEEE Transactions on Robotics, 2014, 30, 1078-1090.	7.3	72
54	Single image 3D object detection and pose estimation for grasping. , 2014, , .		130

#	Article	IF	Citations
55	An optimization approach to bearing-only visual homing with applications to a 2-D unicycle model. , 2014, , .		14
56	On the Quotient Representation for the Essential Manifold. , 2014, , .		3
57	Hypothesis testing framework for active object detection. , 2013, , .		18
58	Identifying maximal rigid components in bearing-based localization. , 2012, , .		12
59	Robot localization using soft object detection. , 2012, , .		28
60	Shape-Based Object Detection via Boundary Structure Segmentation. International Journal of Computer Vision, 2012, 99, 123-146.	10.9	63
61	Optimal pixel aspect ratio for enhanced 3D TV visualization. Computer Vision and Image Understanding, 2012, 116, 38-53.	3.0	4
62	Reconstructing and analyzing periodic human motion from stationary monocular views. Computer Vision and Image Understanding, 2012, 116, 815-826.	3.0	2
63	Automatic alignment of a camera with a line scan LIDAR system. , 2011, , .		53
64	Spherical Correlation of Visual Representations for 3D Model Retrieval. International Journal of Computer Vision, 2010, 89, 193-210.	10.9	29
65	Vision-Based Localization for Leader–Follower Formation Control. IEEE Transactions on Robotics, 2009, 25, 1431-1438.	7.3	141
66	Vision-Based, Distributed Control Laws for Motion Coordination of Nonholonomic Robots. IEEE Transactions on Robotics, 2009, 25, 851-860.	7.3	182
67	Mesh Representation Driven by Variance Normalized Neighborhood in Scale Space. , 2008, , .		0
68	Harmonic Silhouette Matching for 3D Models. , 2007, , .		4
69	Mesh Optimization Guided by Just-Noticeable-Difference and Stereo Discretization. , 2007, , .		1
70	Image Matching via Saliency Region Correspondences. , 2007, , .		77
71	Correspondence-free Structure from Motion. International Journal of Computer Vision, 2007, 75, 311-327.	10.9	36
72	Rotation recovery from spherical images without correspondences. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2006, 28, 1170-1175.	9.7	75

#	Article	IF	Citations
73	Using skew Gabor filter in source signal separation and local spectral orientation analysis. Image and Vision Computing, 2005, 23, 377-392.	2.7	5
74	Planar Ego-Motion Without Correspondences. , 2005, , .		3
75	Vc-dimension of exterior visibility. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2004, 26, 667-671.	9.7	23
76	Three dimensional orientation signatures with conic kernel filtering for multiple motion analysis. Image and Vision Computing, 2003, 21, 447-458.	2.7	10
77	Multiple motion analysis: in spatial or in spectral domain?. Computer Vision and Image Understanding, 2003, 90, 129-152.	3.0	14
78	Trinocular Stereo: A Real-Time Algorithm and its Evaluation. International Journal of Computer Vision, 2002, 47, 51-61.	10.9	44
79	Catadioptric Projective Geometry. International Journal of Computer Vision, 2001, 45, 223-243.	10.9	323
80	Visual and haptic collaborative tele-presence. Computers and Graphics, 2001, 25, 789-798.	1.4	22
81	Motor Algebra for 3D Kinematics: The Case of the Hand-Eye Calibration. Journal of Mathematical Imaging and Vision, 2000, 13, 79-100.	0.8	75
82	EV-FlowNet: Self-Supervised Optical Flow Estimation for Event-based Cameras. , 0, , .		206