Emanuele Trucco, Frsa, Fiapr, Fbmva, Fa

List of Publications by Year
in descending order

127 papers	4,033 citations	172457 29 h-index	144013 57 g-index
134 all docs	134 docs citations	134 times ranked	4058 citing authors

#	Article	IF	Citations
1	Prediction of Major Adverse Cardiovascular Events From Retinal, Clinical, and Genomic Data in Individuals With Type 2 Diabetes: A Population Cohort Study. Diabetes Care, 2022, 45, 710-716.	8.6	11
2	Comparing Measurements of Vascular Diameter Using Adaptative Optics Imaging and Conventional Fundus Imaging. Diagnostics, 2022, 12, 705.	2.6	7
3	Accuracy of Automated Computer-Aided Diagnosis for Stroke Imaging: A Critical Evaluation of Current Evidence. Stroke, 2022, 53, 2393-2403.	2.0	22
4	A novel algorithm for cardiovascular screening using conjunctival microcirculatory parameters and blood biomarkers. Scientific Reports, 2022, 12, 6545.	3.3	6
5	Retinal asymmetry in multiple sclerosis. Brain, 2021, 144, 224-235.	7.6	20
6	A review of machine learning methods for retinal blood vessel segmentation and artery/vein classification. Medical Image Analysis, 2021, 68, 101905.	11.6	86
7	Investigation of associations between retinal microvascular parameters and albuminuria in UK Biobank: a cross-sectional case-control study. BMC Nephrology, 2021, 22, 72.	1.8	7
8	Changes in retinal vascular diameters in senior and geriatric cats in association with variation in systemic blood pressure. Journal of Feline Medicine and Surgery, 2021, 23, 1129-1139.	1.6	1
9	Assessment of the conjunctival microcirculation for patients presenting with acute myocardial infarction compared to healthy controls. Scientific Reports, 2021, 11, 7660.	3.3	14
10	On the quantitative effects of compression of retinal fundus images on morphometric vascular measurements in VAMPIRE. Computer Methods and Programs in Biomedicine, 2021, 202, 105969.	4.7	7
11	Retinal imaging in Alzheimerâ€™s disease. Journal of Neurology, Neurosurgery and Psychiatry, 2021, 92, 983-994.	1.9	46
12	Using machine learning approaches for multi-omics data analysis: A review. Biotechnology Advances, 2021, 49, 107739.	11.7	277
13	On Clinical Agreement on the Visibility and Extent of Anatomical Layers in Digital Gonio Photographs. Translational Vision Science and Technology, 2021, 10, 1.	2.2	6
14	Are Cardiovascular Risk Scores from Genome and Retinal Image Complementary? A Deep Learning Investigation in a Diabetic Cohort. Lecture Notes in Computer Science, 2021, , 109-118.	1.3	1
15	Robust Selective Classification of Skin Lesions with Asymmetric Costs. Lecture Notes in Computer Science, 2021, , 112-121.	1.3	1
16	2D alpha-shapes to quantify retinal microvasculature morphology and their application to proliferative diabetic retinopathy characterisation in fundus photographs. Scientific Reports, 2021, 11, 22814.	3.3	2
17	Semantic segmentation of gonio-photographs via adaptive ROI localisation and uncertainty estimation. BMJ Open Ophthalmology, 2021, 6, e000898.	1.6	4
18	Quantitative measurements of enlarged perivascular spaces in the brain are associated with retinal microvascular parameters in older community-dwelling subjects. Cerebral Circulation - Cognition and Behavior, 2020, 1, 100002.	0.9	6

#	Article	IF	Citations
19	Association between hypertension and retinal vascular features in ultra-widefield fundus imaging. Open Heart, 2020, 7, e001124.	2.3	10
20	Retinal Biomarkers Discovery for Cerebral Small Vessel Disease in an Older Population. Communications in Computer and Information Science, 2020, , 400-409.	0.5	2
21	A Deep Learning Approach for Semantic Segmentation of Gonioscopic Images to Support Glaucoma Categorization. Communications in Computer and Information Science, 2020, , 373-386.	0.5	3
22	Retinal microvascular features and cognitive change in the Lothianâ€Birth Cohort 1936. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2019, 11, 500-509.	2.4	8
23	Quantitative assessment of the conjunctival microcirculation using a smartphone and slit-lamp biomicroscope. Microvascular Research, 2019, 126, 103907.	2.5	16
24	Novel Genetic Locus Influencing Retinal Venular Tortuosity Is Also Associated With Risk of Coronary Artery Disease. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, 2542-2552.	2.4	23
25	Investigating the Relationship Between Type 2 Diabetes and Dementia Using Electronic Medical Records in the GoDARTS Bioresource. Diabetes Care, 2019, 42, 1973-1980.	8.6	14
26	Retinal microvasculature and cerebral small vessel disease in the Lothian Birth Cohort 1936 and Mild Stroke Study. Scientific Reports, 2019, 9, 6320.	3.3	49
27	Retinal Vessel Phenotype in Patients with Nonarteritic Anterior Ischemic Optic Neuropathy. American Journal of Ophthalmology, 2019, 208, 178-184.	3.3	10
28	A multimodal approach to cardiovascular risk stratification in patients with type 2 diabetes incorporating retinal, genomic and clinical features. Scientific Reports, 2019, 9, 3591.	3.3	21
29	Automated detection of age-related macular degeneration in color fundus photography: a systematic review. Survey of Ophthalmology, 2019, 64, 498-511.	4.0	48
30	Using orthogonal locality preserving projections to find dominant features for classifying retinal blood vessels. Multimedia Tools and Applications, 2019, 78, 12783-12803.	3.9	8
31	Retinal microvascular parameters are not associated with reduced renal function in a study of individuals with type 2 diabetes. Scientific Reports, 2018, 8, 3931.	3.3	21
32	Structure Prediction for Gland Segmentation With Hand-Crafted and Deep Convolutional Features. IEEE Transactions on Medical Imaging, 2018, 37, 210-221.	8.9	36
33	A Graph Cut Approach to Artery/Vein Classification in Ultra-Widefield Scanning Laser Ophthalmoscopy. IEEE Transactions on Medical Imaging, 2018, 37, 516-526.	8.9	24
34	Evaluation of coronary artery disease as a risk factor for reticular pseudodrusen. British Journal of Ophthalmology, 2018, 102, 483-489.	3.9	13
35	Towards Standardization of Quantitative Retinal Vascular Parameters: Comparison of SIVA and VAMPIRE Measurements in the Lothian Birth Cohort 1936. Translational Vision Science and Technology, 2018, 7, 12.	2.2	55
36	Towards Standardization of Retinal Vascular Measurements: On the Effect of Image Centering. Lecture Notes in Computer Science, 2018, , 294-302.	1.3	6

#	Article	IF	Citations
37	Machine learning of neuroimaging for assisted diagnosis of cognitive impairment and dementia: A systematic review. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2018, 10, 519-535.	2.4	162
38	Subcategory Classifiers for Multiple-Instance Learning and Its Application to Retinal Nerve Fiber Layer Visibility Classification. IEEE Transactions on Medical Imaging, 2017, 36, 1140-1150.	8.9	15
39	Retinal microvascular network geometry and cognitive abilities in community-dwelling older people: The Lothian Birth Cohort 1936 study. British Journal of Ophthalmology, 2017, 101, 993-998.	3.9	25
40	Lateral thinking â€“ Interocular symmetry and asymmetry in neurovascular patterning, in health and disease. Progress in Retinal and Eye Research, 2017, 59, 131-157.	15.5	44
41	The application of retinal fundus camera imaging in dementia: A systematic review. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2017, 6, 91-107.	2.4	83
42	Retinal Biomarker Discovery for Dementia in an Elderly Diabetic Population. Lecture Notes in Computer Science, 2017, , 150-158.	1.3	1
43	Comparison of Automatic Vessel Segmentation Techniques for Whole Body Magnetic Resonance Angiography with Limited Ground Truth Data. Communications in Computer and Information Science, 2017, , 144-155.	0.5	0
44	Extended Multi-resolution Local Patterns - A Discriminative Feature Learning Approach for Colonoscopy Image Classification. Lecture Notes in Computer Science, 2017, , 48-58.	1.3	0
45	The Accuracy and Reliability of Crowdsource Annotations of Digital Retinal Images. Translational Vision Science and Technology, 2016, 5, 6.	2.2	29
46	Two-Dimensional Plane for Multi-Scale Quantification of Corneal Subbasal Nerve Tortuosity. , 2016, 57, 1132.		11
47	Gland segmentation in colon histology images using hand-crafted features and convolutional neural networks. , 2016, , .		38
48	Accelerating Convolutional Sparse Coding for Curvilinear Structures Segmentation by Refining SCIRD-TS Filter Banks. IEEE Transactions on Medical Imaging, 2016, 35, 2381-2392.	8.9	37
49	Automatic Generation of Synthetic Retinal Fundus Images: Vascular Network. Procedia Computer Science, 2016, 90, 54-60.	2.0	23
50	Local structure prediction for gland segmentation. , 2016, , .		6
51	Hierarchical mix-pooling and its applications to biomedical image classification. , 2016, , .		1
52	A fully automated tortuosity quantification system with application to corneal nerve fibres in confocal microscopy images. Medical Image Analysis, 2016, 32, 216-232.	11.6	54
53	Leveraging Multiscale Hessian-Based Enhancement With a Novel Exudate Inpainting Technique for Retinal Vessel Segmentation. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 1129-1138.	6.3	105
54	Automatic Generation of Synthetic Retinal Fundus Images: Vascular Network. Lecture Notes in Computer Science, 2016, , 167-176.	1.3	9

#	Article	IF	Citations
55	Sub-category Classifiers for Multiple-instance Learning and Its Application to Retinal Nerve Fiber Layer Visibility Classification. Lecture Notes in Computer Science, 2016, , 308-316.	1.3	5
56	Learning discriminative local features from image-level labelled data for colonoscopy image classification. , 2015, , .		5
57	Combining efficient hand-crafted features with learned filters for fast and accurate corneal nerve fibre centreline detection. , 2015, 2015, 5655-8.		3
58	Low-Rank Prior in Single Patches for Nonpointwise Impulse Noise Removal. IEEE Transactions on Image Processing, 2015, 24, 1485-1496.	9.8	17
59	Scale and Curvature Invariant Ridge Detector for Tortuous and Fragmented Structures. Lecture Notes in Computer Science, 2015, , 588-595.	1.3	21
60	Boosting Hand-Crafted Features for Curvilinear Structure Segmentation by Learning Context Filters. Lecture Notes in Computer Science, 2015, , 596-603.	1.3	5
61	Blood vessel segmentation and width estimation in ultra-wide field scanning laser ophthalmoscopy. Biomedical Optics Express, 2014, 5, 4329.	2.9	43
62	Charting-based subspace learning for video-based human action classification. Machine Vision and Applications, 2014, 25, 119-132.	2.7	8
63	Dynamic 3D shape of the plantar surface of the foot using coded structured light: a technical report. Journal of Foot and Ankle Research, 2014, 7, 5.	1.9	12
64	Objects, Actions, Places. International Journal of Computer Vision, 2014, 106, 235-236.	15.6	0
65	Inter-Cluster Features for Medical Image Classification. Lecture Notes in Computer Science, 2014, 17, 345-352.	1.3	8
66	Video-Specific SVMs for Colonoscopy Image Classification. Lecture Notes in Computer Science, 2014, , 11-21.	1.3	2
67	Automatic fovea location in retinal images using anatomical priors and vessel density. Pattern Recognition Letters, 2013, 34, 1152-1158.	4.2	31
68	Retinal vessel segmentation using multiwavelet kernels and multiscale hierarchical decomposition. Pattern Recognition, 2013, 46, 2117-2133.	8.1	128
69	Extended Gaussian-Filtered Local Binary Patterns for Colonoscopy Image Classification. , 2013, , .		8
70	Validating Retinal Fundus Image Analysis Algorithms: Issues and a Proposal. , 2013, 54, 3546.		142
71	Accurate estimation of retinal vessel width using bagged decision trees and an extended multiresolution Hermite model. Medical Image Analysis, 2013, 17, 1164-1180.	11.6	46
72	Investigating post-processing of scanning laser ophthalmoscope images for unsupervised retinal blood vessel detection. , 2013, , .		1

#	Article	IF	Citations
73	Spline-based refinement of vessel contours in fundus retinal images for width estimation. , 2013, , .		6
74	Single-Patch Low-Rank Prior for Non-pointwise Impulse Noise Removal. , 2013, , .		4
75	Automatic normal-abnormal video frame classification for colonoscopy. , 2013, , .		17
76	Towards a multi-site international public dataset for the validation of retinal image analysis software. , 2013, 2013, 7152-5.		1
77	Effective features for artery-vein classification in digital fundus images. , 2012, , .		23
78	GroBa: Growing balloons for calibre measurement on stenotic lumens. , 2012, , .		0
79	A Face Authentication Scheme Based on Affine-SIFT (ASIFT) and Structural Similarity (SSIM). Lecture Notes in Computer Science, 2012, , 25-32.	1.3	3
80	Multiresolution localization and segmentation of the optical disc in fundus images using inpainted background and vessel information. , 2011, , .		9
81	A dynamic 3D foot reconstruction system. , 2011, 2011, 599-602.		4
82	Markerless human articulated tracking using hierarchical particle swarm optimisation. Image and Vision Computing, 2010, 28, 1530-1547.	4.5	92
83	FABC: Retinal Vessel Segmentation Using AdaBoost. IEEE Transactions on Information Technology in Biomedicine, 2010, 14, 1267-1274.	3.2	299
84	Deformable registration of retinal fluorescein angiogram sequences using vasculature structures. , 2010, 2010, 4383-6.		7
85	Improving SIFT-based Descriptors Stability to Rotations. , 2010, , .		18
86	ACM multimedia 2010 workshop on 3D video processing. , 2010, , .		0
87	Multiple view human articulated tracking using charting and particle swarm optimisation. , 2010, , .		3
88	Contextual optic disc location in retinal fundus images. Journal of Modern Optics, 2010, 57, 136-144.	1.3	8
89	Markerless Human Motion Capture Using Hierarchical Particle Swarm Optimisation. Communications in Computer and Information Science, 2010, , 343-356.	0.5	0
90	Automating progress measurement of construction projects. Automation in Construction, 2009, 18, 294-301.	9.8	83

#	Article	IF	Citations
91	A Comparative Study on Feature Selection for Retinal Vessel Segmentation Using FABC. Lecture Notes in Computer Science, 2009, , 655-662.	1.3	15
92	Robust optic disc location via combination of weak detectors. , 2008, 2008, 3542-5.		10
93	Human Body Pose Estimation with Particle Swarm Optimisation. Evolutionary Computation, 2008, 16, 509-528.	3.0	32
94	Max-Min Central Vein Detection in Retinal Fundus Images. , 2006, , .		10
95	Self-Tuning Underwater Image Restoration. IEEE Journal of Oceanic Engineering, 2006, 31, 511-519.	3.8	132
96	Video Tracking: A Concise Survey. IEEE Journal of Oceanic Engineering, 2006, 31, 520-529.	3.8	110
97	Fundamentals of Multiple-View Geometry. , 2006, , 91-113.		7
98	Example-Based Simulation of Time-Gated Laser Sequences from a Single Video Image. , 2006, , .		0
99	When are Simple LS Estimators Enough? An Empirical Study of LS, TLS, and GTLS. International Journal of Computer Vision, 2006, 68, 203-216.	15.6	6
100	Thickness dependent tortuosity estimation for retinal blood vessels. , 2006, 2006, 4675-8.		26
101	Thickness dependent tortuosity estimation for retinal blood vessels. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	1
102	Appearance-based target recognition and classification in infrared imagery. , 2005, , .		0
103	Robust iris location in close-up images of the eye. Pattern Analysis and Applications, 2005, 8, 247-255.	4.6	14
104	Millimetre-Wave Personnel Scanners for Automated Weapon Detection. Lecture Notes in Computer Science, 2005, , 48-57.	1.3	2
105	Robust Correspondenceless 3-D Iris Location for Immersive Environments. Lecture Notes in Computer Science, 2005, , 123-130.	1.3	0
106	Image analysis for object detection in millimetre-wave images. , 2004, , .		16
107	Three-Dimensional Image Processing in the Future of Immersive Media. IEEE Transactions on Circuits and Systems for Video Technology, 2004, 14, 288-303.	8.3	58
108	HAUSDORFF ICONIC MATCHING WITH APPLICATION TO EYE TRACKING IN VIDEOCONFERENCING. , 2003, , .		1

#	Article	IF	Citations
109	A trainable system for grading fish from images. Applied Artificial Intelligence, 2001, 15, 735-745.	3.2	25
110	A compact algorithm for rectification of stereo pairs. Machine Vision and Applications, 2000, 12, 16-22.	2.7	574
111	SYMMETRIC STEREO WITH MULTIPLE WINDOWING. International Journal of Pattern Recognition and Artificial Intelligence, 2000, 14, 1053-1066.	1.2	68
112	Robust motion and correspondence of noisy 3-D point sets with missing data. Pattern Recognition Letters, 1999, 20, 889-898.	4.2	104
113	Model-based planning of optimal sensor placements for inspection. IEEE Transactions on Automation Science and Engineering, 1997, 13, 182-194.	2.3	84
114	<title>Measurement errors in polarization-based 3D vision systems</title>. , 1997, , .		0
115	Computer and Robot Vision. AI Communications, 1995, 8, 50-51.	1.2	3
116	Geometric Invariance in Computer Vision. AI Communications, 1995, 8, 193-194.	1.2	4
117	Experiments in curvature-based segmentation of range data. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1995, 17, 177-182.	13.9	91
118	Sensor planning techniques and active visual inspection. Lecture Notes in Computer Science, 1995, , 300-306.	1.3	0
119	Visibility scripts for active feature-based inspection. Pattern Recognition Letters, 1994, 15, 1151-1164.	4.2	5
120	Part segmentation of slice data using regularity. Signal Processing, 1993, 32, 73-90.	3.7	4
121	Active Vision. AI Communications, 1993, 6, 242-244.	1.2	0
122	Understanding scene descriptions by integrating different sources of knowledge. International Journal of Man-Machine Studies, 1992, 37, 47-81.	0.7	2
123	From Slice Data to Suggestive Parts. , 1992, , 289-300.		0
124	SCIA'91: Scandinavian Conference on Image Analysis. AI Communications, 1991, 4, 157-158.	1.2	0
125	Inferring convex subparts from slice data. Pattern Recognition Letters, 1991, 12, 707-715.	4.2	3
126	Reasoning About Iconic Data In Artificial Vision. , 1986, , .		0

#	Article	IF	Citations
127	Tortuosity classification of corneal nerves images using a multiple-scale-multiple-window approach. , 0, , .		7