

# Jacob Scharcanski

## List of Publications by Year in descending order

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Version: 2024-02-01

121  
papers

2,127  
citations

279487

23  
h-index

276539

41  
g-index

122  
all docs

122  
docs citations

122  
times ranked

1873  
citing authors

#	ARTICLE	IF	CITATIONS
1	Segmentation of the optic disk in color eye fundus images using an adaptive morphological approach. Computers in Biology and Medicine, 2010, 40, 124-137.	3.9	144
2	A coarse-to-fine strategy for automatically detecting exudates in color eye fundus images. Computerized Medical Imaging and Graphics, 2010, 34, 228-235.	3.5	138
3	Automated prescreening of pigmented skin lesions using standard cameras. Computerized Medical Imaging and Graphics, 2011, 35, 481-491.	3.5	113
4	Automatic Skin Lesion Segmentation via Iterative Stochastic Region Merging. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 929-936.	3.6	104
5	Yawning Detection Using Embedded Smart Cameras. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 570-582.	2.4	88
6	Feature selection for face recognition based on multi-objective evolutionary wrappers. Expert Systems With Applications, 2013, 40, 5077-5084.	4.4	76
7	Edge detection of color images using directional operators. IEEE Transactions on Circuits and Systems for Video Technology, 1997, 7, 397-401.	5.6	75
8	Fovea center detection based on the retina anatomy and mathematical morphology. Computer Methods and Programs in Biomedicine, 2011, 104, 397-409.	2.6	71
9	A morphologic two-stage approach for automated optic disk detection in color eye fundus images. Pattern Recognition Letters, 2013, 34, 476-485.	2.6	59
10	Robust watershed segmentation using wavelets. Image and Vision Computing, 2005, 23, 661-669.	2.7	56
11	A simple weighted thresholding method for the segmentation of pigmented skin lesions in macroscopic images. Pattern Recognition, 2017, 64, 92-104.	5.1	52
12	Adaptive image denoising using scale and space consistency. IEEE Transactions on Image Processing, 2002, 11, 1092-1101.	6.0	51
13	A Particle-Filtering Approach for Vehicular Tracking Adaptive to Occlusions. IEEE Transactions on Vehicular Technology, 2011, 60, 381-389.	3.9	49
14	Denoising and enhancing digital mammographic images for visual screening. Computerized Medical Imaging and Graphics, 2006, 30, 243-254.	3.5	47
15	A novel video based system for detecting and counting vehicles at user-defined virtual loops. Expert Systems With Applications, 2015, 42, 1845-1856.	4.4	45
16	A two-stage approach for discriminating melanocytic skin lesions using standard cameras. Expert Systems With Applications, 2013, 40, 4054-4064.	4.4	39
17	Customized Orthogonal Locality Preserving Projections With Soft-Margin Maximization for Face Recognition. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 2417-2426.	2.4	39
18	Enhancing the Performance of Active Shape Models in Face Recognition Applications. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 2330-2333.	2.4	37

#	ARTICLE	IF	CITATIONS
19	Segmentation of melanocytic skin lesions using feature learning and dictionaries. Expert Systems With Applications, 2016, 56, 300-309.	4.4	36
20	Dictionaries of deep features for land-use scene classification of very high spatial resolution images. Pattern Recognition, 2019, 89, 32-44.	5.1	33
21	Adaptive image denoising and edge enhancement in scale-space using the wavelet transform. Pattern Recognition Letters, 2003, 24, 965-971.	2.6	30
22	Shading Attenuation in Human Skin Color Images. Lecture Notes in Computer Science, 2010, , 190-198.	1.0	30
23	Pigmented skin lesion segmentation on macroscopic images. , 2010, , .		28
24	Tracking and counting vehicles in traffic video sequences using particle filtering. , 2013, , .		27
25	Stochastic texture analysis for monitoring stochastic processes in industry. Pattern Recognition Letters, 2005, 26, 1701-1709.	2.6	26
26	Gop structure adaptive to the video content for efficient H.264/AVC encoding. , 2010, , .		25
27	Representing the color aspect of texture images. Pattern Recognition Letters, 1994, 15, 191-197.	2.6	23
28	Texture analysis for estimating spatial variability and anisotropy in planar stochastic structures. Optical Engineering, 1996, 35, 2302.	0.5	23
29	KSGphysio - Kinect serious game for physiotherapy. , 2014, , .		23
30	A coarse-to-fine approach for segmenting melanocytic skin lesions in standard camera images. Computer Methods and Programs in Biomedicine, 2013, 112, 684-693.	2.6	22
31	Stochastic texture image estimators for local spatial anisotropy and its variability. IEEE Transactions on Instrumentation and Measurement, 2000, 49, 971-979.	2.4	21
32	An ICA-based method for the segmentation of pigmented skin lesions in macroscopic images. , 2011, 2011, 5993-6.		21
33	Audiovisual Voice Activity Detection Based on Microphone Arrays and Color Information. IEEE Journal on Selected Topics in Signal Processing, 2013, 7, 147-156.	7.3	21
34	Echocardiographic Image Sequence Segmentation and Analysis Using Self-Organizing Maps. Journal of Signal Processing Systems, 2002, 32, 135-145.	1.0	19
35	Macroscopic Pigmented Skin Lesion Segmentation and Its Influence on Lesion Classification and Diagnosis. Lecture Notes in Computational Vision and Biomechanics, 2013, , 15-39.	0.5	19
36	Stochastic shadow detection using a hypergraph partitioning approach. Pattern Recognition, 2017, 63, 30-44.	5.1	19

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37	Video Segmentation Based on Motion Coherence of Particles in a Video Sequence. IEEE Transactions on Image Processing, 2010, 19, 1036-1049.	6.0	18
38	Wavelet transform approach to adaptive image denoising and enhancement. Journal of Electronic Imaging, 2004, 13, 278.	0.5	15
39	Stochastic Texture Analysis for Measuring Sheet Formation Variability in the Industry. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 1778-1785.	2.4	14
40	Image segmentation via multi-scale stochastic regional texture appearance models. Computer Vision and Image Understanding, 2016, 142, 23-36.	3.0	13
41	Part-Based Object Tracking Using Multiple Adaptive Correlation Filters. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	2.4	12
42	Lung nodule segmentation in chest computed tomography using a novel background estimation method. Quantitative Imaging in Medicine and Surgery, 2016, 6, 16-24.	1.1	12
43	Shadow detection in camera-based vehicle detection: survey and analysis. Journal of Electronic Imaging, 2016, 25, 051205.	0.5	11
44	Phase-Adaptive Superresolution of Mammographic Images Using Complex Wavelets. IEEE Transactions on Image Processing, 2009, 18, 1140-1146.	6.0	10
45	A framework for medical visual information exchange on the WEB. Computers in Biology and Medicine, 2006, 36, 327-338.	3.9	9
46	Monte Carlo despeckling of transrectal ultrasound images of the prostate. , 2012, 22, 768-775.		9
47	Facial biometrics and applications. IEEE Instrumentation and Measurement Magazine, 2017, 20, 4-30.	1.2	9
48	Fetal echocardiographic image segmentation using neural networks. , 1999, , .		8
49	Simulating Effects of Fiber Crimp, Flocculation, Density, and Orientation on Structure Statistics of Stochastic Fiber Networks. Simulation, 2002, 78, 389-395.	1.1	8
50	Hierarchical Summarization of Diagnostic Hysteroscopy Videos. , 2006, , .		8
51	A Wavelet-Based Approach for Analyzing Industrial Stochastic Textures With Applications. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2007, 37, 10-22.	3.4	8
52	An evolutionary wrapper for feature selection in face recognition applications. , 2012, , .		8
53	Hysteroscopy video summarization and browsing by estimating the physician's attention on video segments. Medical Image Analysis, 2012, 16, 160-176.	7.0	8
54	Motion detection and compensation in infrared retinal image sequences. Computerized Medical Imaging and Graphics, 2013, 37, 377-385.	3.5	8

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55	Colour quantisation for colour texture analysis. IEE Proceedings E: Computers and Digital Techniques, 1993, 140, 109.	0.1	8
56	Neural network model for paper-forming process. IEEE Transactions on Industry Applications, 1997, 33, 826-839.	3.3	7
57	Sharpening Dermatological Color Images in the Wavelet Domain. IEEE Journal on Selected Topics in Signal Processing, 2009, 3, 4-13.	7.3	7
58	Color-based lips extraction applied to voice activity detection. , 2011, , .		7
59	Remote visual monitoring of analogue meter displays using deformable models. IET Science, Measurement and Technology, 2014, 8, 228-235.	0.9	7
60	Segmentation of pigmented skin lesions using Non-negative Matrix Factorization. , 2014, , .		7
61	Adaptive image denoising in scale-space using the wavelet transform. , 0, , .		6
62	Information geometric similarity measurement for near-random stochastic processes. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2003, 33, 435-440.	3.4	6
63	Diagnostic Hysteroscopy Video Summarization and Browsing. , 2005, 2005, 5680-3.		6
64	Quantitative Parameters for the Assessment of Renal Scintigraphic Images. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 3438-41.	0.5	6
65	Interactive Modeling and Evaluation of Tumor Growth. Journal of Digital Imaging, 2010, 23, 755-768.	1.6	6
66	Fisher's Tippet Region-Merging Approach to Transrectal Ultrasound Prostate Lesion Segmentation. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 900-907.	3.6	6
67	Multi-scale stochastic color texture models for skin region segmentation and gesture detection. , 2013, , .		6
68	A new method for building adaptive Bayesian trees and its application in color image segmentation. Expert Systems With Applications, 2018, 98, 57-71.	4.4	6
69	Face recognition based on texture information and geodesic distance approximations between multivariate normal distributions. Measurement Science and Technology, 2018, 29, 114001.	1.4	6
70	Robust watershed segmentation using the wavelet transform. , 0, , .		5
71	A lossless compression approach for mammographic digital images based on the Delaunay triangulation. , 2005, , .		5
72	Content-Based Diagnostic Hysteroscopy Summaries for Video Browsing. , 2005, , .		5

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73	Lossless and Near-Lossless Compression for Mammographic Digital Images. , 2006, , .		5
74	Evaluating the mid-secretory endometrium appearance using hysteroscopic digital video summarization. Image and Vision Computing, 2007, 25, 70-77.	2.7	5
75	Measuring Statistical Geometric Properties of Tomographic Images of Soils. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 2502-2512.	2.4	5
76	Bringing Vision-Based Measurements into our Daily Life: A Grand Challenge for Computer Vision Systems. Frontiers in ICT, 2016, 3, .	3.6	5
77	On the Data Conditioning for Facial Spoofing Attacks Detection using Deep Learning. , 2019, , .		5
78	Detection of presentation attacks using imaging and liveness attributes. Electronics Letters, 2019, 55, 1226-1229.	0.5	5
79	Neural network model for paper forming process. , 0, , .		4
80	Segmentation of Pigmented Melanocytic Skin Lesions Based on Learned Dictionaries and Normalized Graph Cuts. , 2014, , .		4
81	Incremental multi-model dictionary learning for face tracking. , 2018, , .		4
82	Lossless and near-lossless digital angiography coding using a two-stage motion compensation approach. Computerized Medical Imaging and Graphics, 2008, 32, 379-387.	3.5	3
83	An approach for fast human head pose estimation. Proceedings of SPIE, 2011, , .	0.8	3
84	Introduction to the special issue on unconstrained biometrics: advances and trends. Signal, Image and Video Processing, 2011, 5, 399-400.	1.7	3
85	Grading the Severity of Diabetic Macular Edema Cases Based on Color Eye Fundus Images. Lecture Notes in Computational Vision and Biomechanics, 2013, , 109-127.	0.5	3
86	A novel 3D approach for the extraction of the wetting front in CT images of soil profiles. , 2013, , .		3
87	Natural scene segmentation based on a stochastic texture region merging approach. , 2013, , .		3
88	Automatic Framework for Extraction and Characterization of Wetting Front Propagation Using Tomographic Image Sequences of Water Infiltrated Soils. PLoS ONE, 2015, 10, e0115218.	1.1	3
89	An iterative approach for obtaining multi-scale superpixels based on stochastic graph contraction operations. Expert Systems With Applications, 2018, 102, 57-69.	4.4	3
90	Scalable image segmentation via decoupled sub-graph compression. Pattern Recognition, 2018, 78, 228-241.	5.1	3

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91	Data and Information Dimensionality in Non-cooperative Face Recognition. Lecture Notes in Electrical Engineering, 2014, , 1-35.	0.3	3
92	Digital hysteroscopy: A new diagnostic method for the mid-secretory endometrium. Fertility and Sterility, 2004, 82, S295.	0.5	2
93	A new approach for automatic visual monitoring of analog meter displays. , 2012, , .		2
94	Segmentation and classification of melanocytic skin lesions using local and contextual features. , 2016, , .		2
95	Motion Detection and Compensation of Affine Deformations in Infrared Retinal Videos. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 33-44.	2.4	2
96	Face recognition based on geodesic distance approximations between multivariate normal distributions. , 2017, , .		2
97	Texture Information in Melanocytic Skin Lesion Analysis Based on Standard Camera Images. Series in Bioengineering, 2014, , 221-242.	0.3	2
98	Wavelet-based method for image filtering using scale-space continuity. Journal of Electronic Imaging, 2001, 10, 511.	0.5	1
99	Context Adaptive Lossless and Near-Lossless Coding for Digital Angiographies. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5666-9.	0.5	1
100	Estimation of the head pose based on monocular images. , 2010, , .		1
101	An user identity authentication scheme adaptive to changes in face appearance. , 2011, , .		1
102	Phase-shift and information measures for retinal motion detection and compensation with optimized parameter selection. , 2014, , .		1
103	Stochastic color image segmentation using spatial constraints. , 2015, , .		1
104	Classify-normalize-classify. Earth Science Informatics, 2018, 11, 77-97.	1.6	1
105	Object tracking scheme using part-based correlation filters. , 2020, , .		1
106	An Adaptive Face Tracker with Application in Yawning Detection. Sensors, 2020, 20, 1494.	2.1	1
107	Some Information Geometric Aspects of Cyber Security by Face Recognition. Entropy, 2021, 23, 878.	1.1	1
108	Identifying the most relevant tablet regions in the image detection of counterfeit medicines. Journal of Pharmaceutical and Biomedical Analysis, 2021, 205, 114336.	1.4	1

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109	Near optimum filtering of quantized signals. , 0, , .		0
110	Monitoring the Quality of Non-Woven Textiles using Stochastic Texture Discrimination. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 121-126.	0.4	0
111	Echocardiographic image sequence segmentation using self-organizing maps. , 0, , .		0
112	Semiautomatic hysteroscopic video summarization. , 0, , .		0
113	An adaptive approach to mammographic image denoising and enhancement. , 0, , .		0
114	Medical imaging and graphics in SIBGRAPI/SIACG. Computerized Medical Imaging and Graphics, 2006, 30, 215-216.	3.5	0
115	Unsupervised Identification of Coherent Motion in Video. , 2007, , .		0
116	Image segmentation using wavelet coefficients and geodesic distance between elliptical distributions for applications in street view. , 2012, , .		0
117	A fast algorithm for tracking moving objects based on spatio-temporal video segmentation and cluster ensembles. , 2015, , .		0
118	Macroscopic Pigmented Skin Lesion Prescreening. , 2019, , 561-573.		0
119	TC-17 Progress: Advances in Materials and Measurements. IEEE Instrumentation and Measurement Magazine, 2021, 24, 11-13.	1.2	0
120	Making Medical Visual Information Available on the WEB. Revista De Informatica Teorica E Aplicada, 2004, 11, 33-48.	0.2	0
121	Image-based approach for detecting vehicles in user-defined virtual inductive loops. Journal of Electronic Imaging, 2018, 27, 1.	0.5	0