Marcin Grzegorzek

List of Publications by Citations

144 papers	935 citations	14 h-index	23 g-index
155 ext. papers	1,434 ext. citations	3.1 avg, IF	4.95 L-index

#	Paper	IF	Citations
144	Comparison of Feature Learning Methods for Human Activity Recognition Using Wearable Sensors. *Sensors*, **2018**, 18,	3.8	124
143	Environmental microorganism classification using conditional random fields and deep convolutional neural networks. *Pattern Recognition*, **2018**, 77, 248-261	7.7	44
142	A general framework for sensor-based human activity recognition. *Computers in Biology and Medicine*, **2018**, 95, 248-260	7	35
141	Multi-scale textural feature extraction and particle swarm optimization based model selection for false positive reduction in mammography. *Computerized Medical Imaging and Graphics*, **2015**, 46 Pt 2, 95-107	7.6	33
140	LCU-Net: A novel low-cost U-Net for environmental microorganism image segmentation. *Pattern Recognition*, **2021**, 115, 107885	7.7	29
139	Object matching with hierarchical skeletons. *Pattern Recognition*, **2016**, 55, 183-197	7.7	24
138	Application of content-based image analysis to environmental microorganism classification. *Biocybernetics and Biomedical Engineering*, **2015**, 35, 10-21	5.7	22
137	Comparison of 2.4 GHz WiFi FTM- and RSSI-Based Indoor Positioning Methods in Realistic Scenarios. *Sensors*, **2020**, 20,	3.8	18
136	Deep Transfer Learning for Time Series Data Based on Sensor Modality Classification. *Sensors*, **2020** , 20,	3.8	18
135	Spatiotemporal features of human motion for gait recognition. *Signal, Image and Video Processing*, **2019**, 13, 369-377	1.6	18
134	Towards large-scale multimedia retrieval enriched by knowledge about human interpretation. *Multimedia Tools and Applications*, **2016**, 75, 297-331	2.5	15
133	On Wi-Fi Model Optimizations for Smartphone-Based Indoor Localization. *ISPRS International Journal of Geo-Information*, **2017**, 6, 233	2.9	15
132	Classification of environmental microorganisms in microscopic images using shape features and support vector machines **2013**,		15
131	A computer vision-based system for monitoring Vojta therapy. *International Journal of Medical Informatics*, **2018**, 113, 85-95	5.3	14
130	Multi sensor 3D indoor localisation **2015**,		13
129	Shape-based object retrieval by contour segment matching **2014**,		13
128	Shape-Based Classification of Environmental Microorganisms **2014**,		13

127	On the Generality of Codebook Approach for Sensor-Based Human Activity Recognition. *Electronics (Switzerland)*, **2017**, 6, 44	2.6	12
126	Environmental microbiology aided by content-based image analysis. *Pattern Analysis and Applications*, **2016**, 19, 531-547	2.3	12
125	AI Approaches Towards Prechtl'ʂ Assessment of General Movements: A Systematic Literature Review. *Sensors*, **2020**, 20,	3.8	12
124	Shape-based object matching using interesting points and high-order graphs. *Pattern Recognition Letters*, **2016**, 83, 251-260	4.7	12
123	Environmental Microorganism Classification Using Sparse Coding and Weakly Supervised Learning **2015**,		11
122	Detection of Infantile Movement Disorders in Video Data Using Deformable Part-Based Model. *Sensors*, **2018**, 18,	3.8	11
121	A non-linear view transformations model for cross-view gait recognition. *Neurocomputing*, **2020**, 402, 100-111	5.4	10
120	Multiple human detection in depth images **2016**,		10
119	A comprehensive review of image analysis methods for microorganism counting: from classical image processing to deep learning approaches. *Artificial Intelligence Review*, **2021**, 1-70	9.7	10
118	Marker-Based Movement Analysis of Human Body Parts in Therapeutic Procedure. *Sensors*, **2020**, 20,	3.8	9
117	Local Wavelet Features for Statistical Object Classification and Localization. *IEEE MultiMedia*, **2010**, 17, 118-118	2.1	9
116	Semantic Multimedia. *Lecture Notes in Computer Science*, **2008**, 125-170	0.9	9
115	A State-of-the-Art Review for Gastric Histopathology Image Analysis Approaches and Future Development. *BioMed Research International*, **2021**, 2021, 6671417	3	9
114	Automatic recognition of movement patterns in the vojta-therapy using RGB-D data **2016**,		9
113	A comprehensive review of computer-aided whole-slide image analysis: from datasets to feature extraction, segmentation, classification and detection approaches. *Artificial Intelligence Review*,1	9.7	8
112	Deep Malaria Parasite Detection in Thin Blood Smear Microscopic Images. *Applied Sciences (Switzerland)*, **2021**, 11, 2284	2.6	8
111	Smartphone-Based Indoor Localization within a 13th Century Historic Building. *Sensors*, **2018**, 18,	3.8	8
110	Rank Pooling Approach for Wearable Sensor-Based ADLs Recognition. *Sensors*, **2020**, 20,	3.8	7

109	IL-MCAM: An interactive learning and multi-channel attention mechanism-based weakly supervised colorectal histopathology image classification approach.. *Computers in Biology and Medicine*, **2022**, 143, 105265	7	7
108	Gait Recognition Using Motion Trajectory Analysis. *Advances in Intelligent Systems and Computing*, **2018**, 73-82	0.4	7
107	Sleep stage classification for child patients using DeConvolutional Neural Network. *Artificial Intelligence in Medicine*, **2020**, 110, 101981	7.4	7
106	On Monte Carlo smoothing in multi sensor indoor localisation **2016**,		7
105	**2016**,		7
104	Evaluating contour segment descriptors. *Machine Vision and Applications*, **2017**, 28, 373-391	2.8	6
103	Interactive tracking of insect posture. *Pattern Recognition*, **2015**, 48, 3560-3571	7.7	6
102	Appearance-based recognition of 3-D objects by cluttered background and occlusions. *Pattern Recognition*, **2005**, 38, 739-753	7.7	6
101	Codebook approach for sensor-based human activity recognition **2016**,		6
100	A Comparative Study of Deep Learning Classification Methods on a Small Environmental Microorganism Image Dataset (EMDS-6): From Convolutional Neural Networks to Visual Transformers.. *Frontiers in Microbiology*, **2022**, 13, 792166	5.7	6
99	Shape-based Object Matching Using Point Context **2015**,		5
98	A system for 3D texture-based probabilistic object recognition and its applications. *Pattern Analysis and Applications*, **2010**, 13, 333-348	2.3	5
97	SVIA dataset: A new dataset of microscopic videos and images for computer-aided sperm analysis. *Biocybernetics and Biomedical Engineering*, **2022**, 42, 204-214	5.7	5
96	Is the aspect ratio of cells important in deep learning? A robust comparison of deep learning methods for multi-scale cytopathology cell image classification: From convolutional neural networks to visual transformers. *Computers in Biology and Medicine*, **2021**, 141, 105026	7	5
95	Action Sequence Matching of Team Managers **2017**,		5
94	Large Scale Tag Recommendation Using Different Image Representations. *Lecture Notes in Computer Science*, **2009**, 65-76	0.9	5
93	Unknown object tracking in 360-degree camera images **2016**,		5
92	An automatic vision-based monitoring system for accurate Vojta-therapy **2016**,		5

91	Codebook-based electrooculography data analysis towards cognitive activity recognition. *Computers in Biology and Medicine*, **2018**, 95, 277-287	7	5
90	Statistical Object Recognition Including Color Modeling. *Lecture Notes in Computer Science*, **2005**, 481-489	0.9	5
89	Automatic Detection of Blue-Whitish Veil as the Primary Dermoscopic Feature. *Lecture Notes in Computer Science*, **2017**, 649-657	0.9	4
88	Vojta-Therapy. *International Journal of Software Innovation*, **2017**, 5, 18-32	0.8	4
87	Emotion Recognition Based on Physiological Sensor Data Using Codebook Approach. *Advances in Intelligent Systems and Computing*, **2016**, 27-39	0.4	4
86	Human Activity Recognition Using Smartphone Sensors. *Advances in Intelligent Systems and Computing*, **2016**, 41-47	0.4	4
85	Improving object classification robustness in RGB-D using adaptive SVMs. *Multimedia Tools and Applications*, **2016**, 75, 6829-6847	2.5	4
84	A generic codebook based approach for gait recognition. *Multimedia Tools and Applications*, **2019**, 78, 35689-35712	2.5	4
83	Recovering from sample impoverishment in context of indoor localisation **2017**,		4
82	Person identification using spatiotemporal motion characteristics **2017**,		4
81	K-Space Content Management and Retrieval System **2007**,		4
80	Environmental Microbiological Content-Based Image Retrieval System Using Internal Structure Histogram. *Advances in Intelligent Systems and Computing*, **2016**, 543-552	0.4	4
79	Classification of Physiological Data for Emotion Recognition. *Lecture Notes in Computer Science*, **2017**, 619-627	0.9	4
78	Labelling Image Regions Using Wavelet Features and Spatial Prototypes. *Lecture Notes in Computer Science*, **2008**, 89-104	0.9	4
77	A Comparative Study of Feature Selection Approaches for Human Activity Recognition Using Multimodal Sensory Data. *Sensors*, **2021**, 21,	3.8	4
76	Comparison of Feature Extraction Methods for Physiological Signals for Heat-Based Pain Recognition. *Sensors*, **2021**, 21,	3.8	4
75	Content-Based Microscopic Image Retrieval of Environmental Microorganisms Using Multiple Colour Channels Fusion. *Studies in Computational Intelligence*, **2016**, 119-130	0.8	4
74	Training-Based Methods for Comparison of Object Detection Methods for Visual Object Tracking. *Sensors*, **2018**, 18,	3.8	4

73	A new pairwise deep learning feature for environmental microorganism image analysis.. *Environmental Science and Pollution Research*, **2022**, 1	5.1	4
72	Applications of artificial neural networks in microorganism image analysis: a comprehensive review from conventional multilayer perceptron to popular convolutional neural network and potential visual transformer.. *Artificial Intelligence Review*, **2022**, 1-58	9.7	4
71	CVM-Cervix: A Hybrid Cervical Pap-Smear Image Classification Framework Using CNN, Visual Transformer and Multilayer Perceptron. *Pattern Recognition*, **2022**, 108829	7.7	4
70	Automatic Detection of the Cracks on the Concrete Railway Sleepers. *International Journal of Pattern Recognition and Artificial Intelligence*, **2019**, 33, 1955010	1.1	3
69	Towards Automatic Skeleton Extraction With Skeleton Grafting. *IEEE Transactions on Visualization and Computer Graphics*, **2021**, 27, 4520-4532	4	3
68	Stem cell microscopic image segmentation using supervised normalized cuts **2016**,		3
67	GasHisSDB: A new gastric histopathology image dataset for computer aided diagnosis of gastric cancer.. *Computers in Biology and Medicine*, **2022**, 142, 105207	7	3
66	Shape-based Object Retrieval and Classification with Supervised Optimisation **2015**,		3
65	Extended Investigations on Skeleton Graph Matching for Object Recognition. *Advances in Intelligent Systems and Computing*, **2013**, 371-381	0.4	3
64	A New Aortic Aneurysm CT Series Registration Algorithm. *Advances in Intelligent Systems and Computing*, **2014**, 15-26	0.4	3
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62	A Multi-stage Approach for 3D Teeth Segmentation from Dentition Surfaces. *Lecture Notes in Computer Science*, **2010**, 521-530	0.9	3
61	Counting Lymphocytes in Histopathology Images Using Connected Components. *Lecture Notes in Computer Science*, **2010**, 263-269	0.9	3
60	Detecting Walking Challenges in Gait Patterns Using a Capacitive Sensor Floor and Recurrent Neural Networks. *Sensors*, **2021**, 21,	3.8	3
59	[Regular Paper] Biomedical Data Acquisition and Processing to Recognize Emotions for Affective Learning **2018**,		3
58	Vision-based approaches towards person identification using gait. *Computer Science Review*, **2021**, 42, 100432	8.3	3
57	Representation and Matching of Team Managers: An Experimental Research. *IEEE Transactions on Computational Social Systems*, **2018**, 5, 311-323	4.5	2
56	Weakly supervised detection of video events using hidden conditional random fields. *International Journal of Multimedia Information Retrieval*, **2015**, 4, 17-32	2.4	2

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54	Dense statistic versus sparse feature-based approach for 3D object recognition. *Pattern Recognition and Image Analysis*, **2011**, 21, 238-241	1	2
53	Teeth segmentation in 3D dentition models for the virtual articulator **2010**,		2
52	Real-Time Gesture Recognition using a Particle Filtering Approach **2017**,		2
51	Cross-Modal Music-Emotion Retrieval Using DeepCCA. *Advances in Intelligent Systems and Computing*, **2021**, 133-145	0.4	2
50	Texture-Based Text Detection in Digital Images with Wavelet Features and Support Vector Machines. *Advances in Intelligent Systems and Computing*, **2013**, 857-866	0.4	2
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48	Short-term load forecasting with discrete state Hidden Markov Models. *Journal of Intelligent and Fuzzy Systems*, **2020**, 38, 2273-2284	1.6	2
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46	Investigations on skeleton completeness for skeleton-based shape matching **2016**,		2
45	Polar Object Tracking in 360-Degree Camera Images **2016**,		2
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42	Feature Extraction with Wavelet Transformation for Statistical Object Recognition. *Advances in Soft Computing*, **2005**, 161-168		2
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40	Augmenting Cognitive Processes and Behavior of Intelligent Virtual Agents by Modeling Synthetic Perception **2017**,		1
39	Object detection and depth estimation for 3D trajectory extraction **2015**,		1
38	Extracting 3D Trajectories of Objects from 2D Videos using Particle Filter **2015**,		1

37	Example-Based 3D Trajectory Extraction of Objects From 2D Videos. *IEEE Transactions on Circuits and Systems for Video Technology*, **2018**, 28, 2246-2260	6.4	1
36	Less restrictive camera odometry estimation from monocular camera. *Multimedia Tools and Applications*, **2018**, 77, 16199-16222	2.5	1
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34	Sensor Headband for Emotion Recognition in a Virtual Reality Environment. *Advances in Intelligent Systems and Computing*, **2019**, 539-548	0.4	1
33	Robust self-localization using Wi-Fi, step/turn-detection and recursive density estimation **2014**,		1
32	Trends in semantic and digital media technologies. *Multimedia Tools and Applications*, **2013**, 62, 311-318	2.5	1
31	Integration of Multi-modal Cues in Synthetic Attention Processes to Drive Virtual Agent Behavior. *Lecture Notes in Computer Science*, **2017**, 403-412	0.9	1
30	Skeleton-based audio envelope shape analysis **2015**,		1
29	Video Retrieval Based on Uncertain Concept Detection Using Dempster-Shafer Theory **2015**, 269-294		1
28	Enhanced surface normal computation by exploiting RGB-D sensory information **2015**,		1
27	Classification of image regions using the wavelet standard deviation descriptor **2010**,		1
26	Examining the applicability of virtual reality technique for video retrieval **2012**,		1
25	Electrooculography Application in Vision Therapy Using Smart Glasses. *Advances in Intelligent Systems and Computing*, **2019**, 103-116	0.4	1
24	Feature Extraction and Classification of Sensor Signals in Cars Based on a Modified Codebook Approach. *Advances in Intelligent Systems and Computing*, **2020**, 184-194	0.4	1
23	Convoy Detection in Crowded Surveillance Videos. *Lecture Notes in Computer Science*, **2016**, 137-147	0.9	1
22	Quality Assessment of 3D Synthesized Images Based on Textural and Structural Distortion Estimation. *Applied Sciences (Switzerland)*, **2021**, 11, 2666	2.6	1
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20	Deep Learning for Object Tracking in 360 Degree Videos. *Advances in Intelligent Systems and Computing*, **2020**, 205-213	0.4	1

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18	Cross- View Gait Recognition Using Non-Linear View Transformations of Spatiotemporal Features **2018**,		1
17	The Symphony of Team Flow in Virtual Teams. Using Artificial Intelligence for Its Recognition and Promotion. *Frontiers in Psychology*, **2021**, 12, 697093	3.4	1
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14	Introduction to the special issue on semantic and digital media technologies. *Multimedia Tools and Applications*, **2010**, 49, 1-5	2.5	
13	Fast training for object recognition with structure-from-motion. *Pattern Recognition and Image Analysis*, **2007**, 17, 87-92	1	
12	Classification of Heat-Induced Pain Using Physiological Signals. *Advances in Intelligent Systems and Computing*, **2021**, 239-251	0.4	
11	Electromyography Based Translator of the Polish Sign Language. *Advances in Intelligent Systems and Computing*, **2019**, 93-102	0.4	
10	Shape Matching Using Point Context and Contour Segments. *Lecture Notes in Computer Science*, **2015**, 95-110	0.9	
9	Shape-Based Eye Blinking Detection and Analysis. *Advances in Intelligent Systems and Computing*, **2016**, 327-335	0.4	
8	Wavelet-Based Inpainting for Object Removal from Image Series. *Lecture Notes in Computer Science* , **2010**, 343-352	0.9	
7	A Generic Approach to the Texture Detection Problem in Digital Images. *Advances in Intelligent and Soft Computing*, **2011**, 375-384		
6	Blood Vessel Segmentation in HRT Images for Glaucoma Early Detection. *Lecture Notes in Computer Science*, **2012**, 1-12	0.9	
5	Matching of 3D Objects Based on 3D Curves. *Advances in Computer Vision and Pattern Recognition*, **2014**, 137-155	1.1	
4	Vojta-Therapy **2021**, 383-398		
3	Classifying Changes in Motion Behaviour Due to a Hospital Stay Using Floor Sensor Data A Single Case Study. *Advances in Intelligent Systems and Computing*, **2022**, 3-14	0.4	
2	PIS-Net: A Novel Pixel Interval Sampling Network for Dense Microorganism Counting in Microscopic Images. *Advances in Intelligent Systems and Computing*, **2022**, 307-318	0.4	

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