

Daniel Roggen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1453193/publications.pdf>

Version: 2024-02-01

158
papers

7,197
citations

279487

23
h-index

149479

56
g-index

162
all docs

162
docs citations

162
times ranked

5573
citing authors

#	ARTICLE	IF	CITATIONS
1	Lessons Learned in Developing Sensorised Textiles to Capture Body Shapes. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2022, , 365-380.	0.2	0
2	A Public Repository to Improve Replicability and Collaboration in Deep Learning for HAR*. , 2022, , .		0
3	Slow Feature Preprocessing in Deep Neural Networks for Wearable Sensor-Based Locomotion Recognition. , 2022, , .		2
4	Wearable FPGA Platform for Accelerated DSP and AI Applications. , 2022, , .		3
5	The 25th Edition of the International Symposium on Wearable Computers. IEEE Pervasive Computing, 2022, 21, 105-111.	1.1	0
6	Coco Stretch: Strain Sensors Based on Natural Coconut Oil and Carbon Black Filled Elastomers. Advanced Materials Technologies, 2021, 6, 2000780.	3.0	13
7	Strain Sensors: Coco Stretch: Strain Sensors Based on Natural Coconut Oil and Carbon Black Filled Elastomers (Adv. Mater. Technol. 2/2021). Advanced Materials Technologies, 2021, 6, 2170012.	3.0	1
8	Opportunistic Activity Recognition in IoT Sensor Ecosystems via Multimodal Transfer Learning. Neural Processing Letters, 2021, 53, 3169-3197.	2.0	10
9	Soft Gel-free ECG electrodes based on Biocompatible Coconut-Oil and Carbon Black. , 2021, , .		1
10	Collecting a Dataset of Gestures for Skill Assessment in the Field: a beach volleyball serves case study. , 2021, , .		0
11	Locomotion and Transportation Mode Recognition from GPS and Radio Signals: Summary of SHL Challenge 2021. , 2021, , .		28
12	Three-Year Review of the 2018-2020 SHL Challenge on Transportation and Locomotion Mode Recognition From Mobile Sensors. Frontiers in Computer Science, 2021, 3, .	1.7	16
13	Inferring Complex Textile Shape from an Integrated Carbon Black-infused Ecoflex-based Bend and Stretch Sensor Array. , 2021, , .		4
14	Fast Deep Neural Architecture Search for Wearable Activity Recognition by Early Prediction of Converged Performance. , 2021, , .		5
15	Detecting Freezing of Gait with Earables Trained from VR Motion Capture Data. , 2021, , .		3
16	Mapping Vicon Motion Tracking to 6-Axis IMU Data for Wearable Activity Recognition. Smart Innovation, Systems and Technologies, 2021, , 3-20.	0.5	1
17	Improving Smartphone-Based Transport Mode Recognition Using Generative Adversarial Networks. Smart Innovation, Systems and Technologies, 2021, , 63-79.	0.5	1
18	Opportunity++: A Multimodal Dataset for Video- and Wearable, Object and Ambient Sensors-Based Human Activity Recognition. Frontiers in Computer Science, 2021, 3, .	1.7	9

#	ARTICLE	IF	CITATIONS
19	Flexible Temperature Sensor Integration into E-Textiles Using Different Industrial Yarn Fabrication Processes. <i>Sensors</i> , 2020, 20, 73.	2.1	52
20	Evaluation of a Pseudo Zero-Potential Flexible Readout Circuit for Resistive Sensor Matrixes. , 2020, , .		1
21	Transportation mode recognition fusing wearable motion, sound and vision sensors. <i>IEEE Sensors Journal</i> , 2020, , 1-1.	2.4	16
22	Summary of the sussex-huawei locomotion-transportation recognition challenge 2020. , 2020, , .		36
23	Lessons from Hands-Free Data Entry in Flexible Cystoscopy with Glass for Future Smart Assistance. <i>Computer Communications and Networks</i> , 2020, , 63-87.	0.8	0
24	Multimodal fusion of IMUs and EPS body-worn sensors for scratch recognition. , 2020, , .		3
25	Smartphone location identification and transport mode recognition using an ensemble of generative adversarial networks. , 2020, , .		6
26	CausalBatch. , 2020, , .		2
27	ARM cortex M4-based extensible multimodal wearable platform for sensor research and context sensing from motion & sound. , 2020, , .		5
28	Copper wire based electrical contacts for direct interfacing of stretchable sensors. , 2020, , .		2
29	Summary of the Sussex-Huawei locomotion-transportation recognition challenge 2019. , 2019, , .		46
30	Sound-based Transportation Mode Recognition with Smartphones. , 2019, , .		18
31	Benchmarking deep classifiers on mobile devices for vision-based transportation recognition. , 2019, , .		2
32	Flexible Sensors—From Materials to Applications. <i>Technologies</i> , 2019, 7, 35.	3.0	139
33	Enabling Reproducible Research in Sensor-Based Transportation Mode Recognition With the Sussex-Huawei Dataset. <i>IEEE Access</i> , 2019, 7, 10870-10891.	2.6	119
34	WLCSSLearn: Learning Algorithm for Template Matching-based Gesture Recognition Systems. , 2019, , .		2
35	Human and Machine Recognition of Transportation Modes from Body-Worn Camera Images. , 2019, , .		9
36	ShapeSense3D. , 2019, , .		8

#	ARTICLE	IF	CITATIONS
37	Benchmark Performance for the Sussex-Huawei Locomotion and Transportation Recognition Challenge 2018. Springer Series in Adaptive Environments, 2019, , 153-170.	0.3	0
38	WLCSSCuda. , 2019, , .		0
39	Benchmarking the SHL Recognition Challenge with Classical and Deep-Learning Pipelines. , 2018, , .		24
40	A Case Study for Human Gesture Recognition from Poorly Annotated Data. , 2018, , .		1
41	Summary of the Sussex-Huawei Locomotion-Transportation Recognition Challenge. , 2018, , .		68
42	Thigh-Derived Inertial Sensor Metrics to Assess the Sit-to-Stand and Stand-to-Sit Transitions in the Timed Up and Go (TUG) Task for Quantifying Mobility Impairment in Multiple Sclerosis. Frontiers in Neurology, 2018, 9, 684.	1.1	32
43	The University of Sussex-Huawei Locomotion and Transportation Dataset for Multimodal Analytics With Mobile Devices. IEEE Access, 2018, 6, 42592-42604.	2.6	181
44	Unsupervised online activity discovery using temporal behaviour assumption. , 2017, , .		20
45	5th Int. workshop on human activity sensing corpus and applications (HASCA). , 2017, , .		1
46	Performance Analysis of Routing Protocol for Low Power and Lossy Networks (RPL) in Large Scale Networks. IEEE Internet of Things Journal, 2017, 4, 2172-2185.	5.5	64
47	Using Wearable Inertial Sensors to Compare Different Versions of the Dual Task Paradigm during Walking. , 2017, , .		1
48	A Versatile Annotated Dataset for Multimodal Locomotion Analytics with Mobile Devices. , 2017, , .		26
49	High reliability Android application for multidevice multimodal mobile data acquisition and annotation. , 2017, , .		16
50	4 th workshop on human activity sensing corpus and applications. , 2016, , .		1
51	Deep Convolutional and LSTM Recurrent Neural Networks for Multimodal Wearable Activity Recognition. Sensors, 2016, 16, 115.	2.1	1,679
52	Exploring human activity annotation using a privacy preserving 3D model. , 2016, , .		4
53	Exploring glass as a novel method for hands-free data entry in flexible cystoscopy. , 2016, , .		4
54	Beach volleyball serve type recognition. , 2016, , .		10

#	ARTICLE	IF	CITATIONS
55	S-SMART. ACM Transactions on Intelligent Systems and Technology, 2016, 7, 1-28.	2.9	17
56	Deep convolutional feature transfer across mobile activity recognition domains, sensor modalities and locations. , 2016, , .		78
57	Electric field phase sensing for wearable orientation and localisation applications. , 2016, , .		2
58	International workshop on human activity sensing corpus and its application (HASCA2015). , 2015, , .		2
59	3D ActionSLAM: wearable person tracking in multi-floor environments. Personal and Ubiquitous Computing, 2015, 19, 123-141.	1.9	43
60	Limited-Memory Warping LCSS for Real-Time Low-Power Pattern Recognition in Wireless Nodes. Lecture Notes in Computer Science, 2015, , 151-167.	1.0	13
61	Theme issue from ISWC 2013. Personal and Ubiquitous Computing, 2015, 19, 103-104.	1.9	0
62	On strategies for budget-based online annotation in human activity recognition. , 2014, , .		4
63	International workshop on human activity sensing corpus and its application (HASCA2014). , 2014, , .		2
64	Exploring the acceptability of google glass as an everyday assistive device for people with parkinson's. , 2014, , .		87
65	Enhancing action recognition through simultaneous semantic mapping from body-worn motion sensors. , 2014, , .		8
66	Group affiliation detection using model divergence for wearable devices. , 2014, , .		19
67	ISWC 2013--Wearables Are Here to Stay. IEEE Pervasive Computing, 2014, 13, 14-18.	1.1	7
68	Exploration of head gesture control for hearing instruments. International Journal of Ad Hoc and Ubiquitous Computing, 2014, 16, 240.	0.3	0
69	Probing crowd density through smartphones in city-scale mass gatherings. EPJ Data Science, 2013, 2, .	1.5	76
70	The adARC pattern analysis architecture for adaptive human activity recognition systems. Journal of Ambient Intelligence and Humanized Computing, 2013, 4, 169-186.	3.3	40
71	Robust activity recognition combining anomaly detection and classifier retraining. , 2013, , .		1
72	ActionSLAM on a smartphone: At-home tracking with a fully wearable system. , 2013, , .		17

#	ARTICLE	IF	CITATIONS
73	The Opportunity challenge: A benchmark database for on-body sensor-based activity recognition. Pattern Recognition Letters, 2013, 34, 2033-2042.	2.6	508
74	Opportunistic human activity and context recognition. Computer, 2013, 46, 36-45.	1.2	70
75	Using Mobile Technology and a Participatory Sensing Approach for Crowd Monitoring and Management During Large-Scale Mass Gatherings. Understanding Complex Systems, 2013, , 61-77.	0.3	8
76	Time-lag method for detecting following and leadership behavior of pedestrians from mobile sensing data. , 2013, , .		28
77	Chairs' summary/proposal for international workshop on human activity sensing corpus and its application (hasca2013). , 2013, , .		2
78	Engineers meet clinicians. , 2013, , .		21
79	Tagging human activities in video by crowdsourcing. , 2013, , .		18
80	Improved actionSLAM for long-term indoor tracking with wearable motion sensors. , 2013, , .		28
81	Automatic correction of annotation boundaries in activity datasets by class separation maximization. , 2013, , .		14
82	Analyzing the impact of different action primitives in designing high-level human activity recognition systems. Journal of Ambient Intelligence and Smart Environments, 2013, 5, 443-461.	0.8	3
83	Feature Learning for Detection and Prediction of Freezing of Gait in Parkinsonâ€™s Disease. Lecture Notes in Computer Science, 2013, , 144-158.	1.0	53
84	Design of a multimodal hearing system. Computer Science and Information Systems, 2013, 10, 483-501.	0.7	2
85	Network-Level Power-Performance Trade-Off in Wearable Activity Recognition. Transactions on Embedded Computing Systems, 2012, 11, 1-30.	2.1	30
86	Detecting pedestrian flocks by fusion of multi-modal sensors in mobile phones. , 2012, , .		52
87	Improving online gesture recognition with template matching methods in accelerometer data. , 2012, , .		29
88	Kinect=IMU? Learning MIMO Signal Mappings to Automatically Translate Activity Recognition Systems across Sensor Modalities. , 2012, , .		22
89	Online Detection of Freezing of Gait with Smartphones and Machine Learning Techniques. , 2012, , .		137
90	Design of an Ecology of Activity-aware Cells in Ambient Intelligence Environments. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 441-446.	0.4	0

#	ARTICLE	IF	CITATIONS
91	Inferring Crowd Conditions from Pedestrians' Location Traces for Real-Time Crowd Monitoring during City-Scale Mass Gatherings. , 2012, , .		47
92	ActionSLAM: Using location-related actions as landmarks in pedestrian SLAM. , 2012, , .		41
93	DactyLoc: A minimally geo-referenced WiFi+GSM-fingerprint-based localization method for positioning in urban spaces. , 2012, , .		0
94	Mobile sensing of pedestrian flocks in indoor environments using WiFi signals. , 2012, , .		58
95	The OPPORTUNITY Framework and Data Processing Ecosystem for Opportunistic Activity and Context Recognition. International Journal of Sensors, Wireless Communications and Control, 2012, 1, 102-125.	0.5	7
96	Automatic Power-Off for Binaural Hearing Instruments. Lecture Notes in Computer Science, 2012, , 409-414.	1.0	0
97	What's in the Eyes for Context-Awareness?. IEEE Pervasive Computing, 2011, 10, 48-57.	1.1	40
98	Collection and curation of a large reference dataset for activity recognition. , 2011, , .		8
99	Titan: An Enabling Framework for Activity-Aware "Pervasive Apps" in Opportunistic Personal Area Networks. Eurasip Journal on Wireless Communications and Networking, 2011, 2011, .	1.5	15
100	Activity Recognition in Opportunistic Sensor Environments. Procedia Computer Science, 2011, 7, 173-174.	1.2	10
101	Wearable Computing. IEEE Robotics and Automation Magazine, 2011, 18, 83-95.	2.2	49
102	Real-time detection and recommendation of thermal spots by sensing collective behaviors in paragliding. , 2011, , .		7
103	Recognition of visual memory recall processes using eye movement analysis. , 2011, , .		87
104	Design of a bilateral vibrotactile feedback system for lateralization. , 2011, , .		1
105	Towards an online detection of pedestrian flocks in urban canyons by smoothed spatio-temporal clustering of GPS trajectories. , 2011, , .		18
106	Benchmarking classification techniques using the Opportunity human activity dataset. , 2011, , .		67
107	Recognition of Hearing Needs from Body and Eye Movements to Improve Hearing Instruments. Lecture Notes in Computer Science, 2011, , 314-331.	1.0	23
108	Recognition of crowd behavior from mobile sensors with pattern analysis and graph clustering methods. Networks and Heterogeneous Media, 2011, 6, 521-544.	0.5	70

#	ARTICLE	IF	CITATIONS
109	Bilateral Vibrotactile Feedback for Accurate Lateralization in Hearing Instrument Body Area Networks. , 2011, , .		1
110	Identification of Relevant Multimodal Cues to enhance Context-Aware Hearing Instruments. , 2011, , .		1
111	Wearable Assistant for Parkinsonâ€™s Disease Patients With the Freezing of Gait Symptom. IEEE Transactions on Information Technology in Biomedicine, 2010, 14, 436-446.	3.6	504
112	On-Body Sensing: From Gesture-Based Input to Activity-Driven Interaction. Computer, 2010, 43, 92-96.	1.2	19
113	An Educational and Research Kit for Activity and Context Recognition from On-body Sensors. , 2010, , .		16
114	User Acceptance Study of a Mobile System for Assistance during Emergency Situations at Large-Scale Events. , 2010, , .		11
115	A wearable, ambient sound-based approach for infrastructureless fuzzy proximity estimation. , 2010, , .		12
116	Collecting complex activity datasets in highly rich networked sensor environments. , 2010, , .		401
117	Wearable assistant for load monitoring: recognition of on-body load placement from gait alterations. , 2010, , .		9
118	Towards multi-modal context recognition for hearing instruments. , 2010, , .		1
119	Incremental kNN Classifier Exploiting Correct-Error Teacher for Activity Recognition. , 2010, , .		29
120	Scenario Based Modeling for Very Large Scale Simulations. , 2010, , .		7
121	On the Use of Brain Decoded Signals for Online User Adaptive Gesture Recognition Systems. Lecture Notes in Computer Science, 2010, , 427-444.	1.0	22
122	Identifying Important Action Primitives for High Level Activity Recognition. Lecture Notes in Computer Science, 2010, , 149-162.	1.0	7
123	Rapid prototyping of smart garments for activity-aware applications. Journal of Ambient Intelligence and Smart Environments, 2009, 1, 87-101.	0.8	32
124	Decentralized Detection of Group Formations from Wearable Acceleration Sensors. , 2009, , .		33
125	Parkinsons disease patients perspective on context aware wearable technology for auditive assistance. , 2009, , .		12
126	Modeling Service-Oriented Context Processing in Dynamic Body Area Networks. IEEE Journal on Selected Areas in Communications, 2009, 27, 49-57.	9.7	12

#	ARTICLE	IF	CITATIONS
127	Wearable EOG goggles. , 2009, , .		66
128	Unsupervised Classifier Self-Calibration through Repeated Context Occurences: Is there Robustness against Sensor Displacement to Gain?. , 2009, , .		49
129	Evolving discriminative features robust to sensor displacement for activity recognition in body area sensor networks. , 2009, , .		20
130	Towards an Interactive Snowboarding Assistance System. , 2009, , .		9
131	Potentials of Enhanced Context Awareness in Wearable Assistants for Parkinson's Disease Patients with the Freezing of Gait Syndrome. , 2009, , .		60
132	OPPORTUNITY: Towards opportunistic activity and context recognition systems. , 2009, , .		55
133	Wearable EOG goggles: Seamless sensing and context-awareness in everyday environments. Journal of Ambient Intelligence and Smart Environments, 2009, 1, 157-171.	0.8	87
134	Quantifying Gait Similarity: User Authentication and Real-World Challenge. Lecture Notes in Computer Science, 2009, , 1040-1049.	1.0	13
135	Context Cells: Towards Lifelong Learning in Activity Recognition Systems. Lecture Notes in Computer Science, 2009, , 121-134.	1.0	8
136	Bringing Quality of Context into Wearable Human Activity Recognition Systems. Lecture Notes in Computer Science, 2009, , 164-173.	1.0	13
137	Online Detection of Freezing of Gait in Parkinsonâ€™s Disease Patients: A Performance Characterization. , 2009, , .		31
138	It's in your eyes. , 2008, , .		62
139	Effect of movements on the electrodermal response after a startle event. , 2008, , .		9
140	Wearable Activity Tracking in Car Manufacturing. IEEE Pervasive Computing, 2008, 7, 42-50.	1.1	273
141	Activity Recognition from On-Body Sensors: Accuracy-Power Trade-Off by Dynamic Sensor Selection. , 2008, , 17-33.		178
142	EyeMote â€“ Towards Context-Aware Gaming Using Eye Movements Recorded from Wearable Electrooculography. Lecture Notes in Computer Science, 2008, , 33-45.	1.0	16
143	SMASH: A Distributed Sensing and Processing Garment for the Classification of Upper Body Postures. , 2008, , .		38
144	Service Discovery and Composition in Body Area Networks. , 2008, , .		3

#	ARTICLE	IF	CITATIONS
145	Activity recognition from on-body sensors by classifier fusion: sensor scalability and robustness. , 2007, , .		79
146	Organizing Context Information Processing in Dynamic Wireless Sensor Networks. , 2007, , .		7
147	Fusion of String-Matched Templates for Continuous Activity Recognition. , 2007, , .		29
148	Evolutionary morphogenesis for multi-cellular systems. Genetic Programming and Evolvable Machines, 2007, 8, 61-96.	1.5	32
149	Titan: A Tiny Task Network for Dynamically Reconfigurable Heterogeneous Sensor Networks. , 2007, , 127-138.		36
150	On-body activity recognition in a dynamic sensor network. , 2007, , .		46
151	Gestures are strings: efficient online gesture spotting and classification using string matching. , 2007, , .		41
152	Real time gesture recognition using continuous time recurrent neural networks. , 2007, , .		43
153	Mapping by Seeing â€œ Wearable Vision-Based Dead-Reckoning, and Closing the Loop. Lecture Notes in Computer Science, 2007, , 29-45.	1.0	0
154	Evolution of Embodied Intelligence. Lecture Notes in Computer Science, 2004, , 293-311.	1.0	10
155	Multi-cellular Development: Is There Scalability and Robustness to Gain?. Lecture Notes in Computer Science, 2004, , 391-400.	1.0	38
156	Evolving Genetic Regulatory Networks for Hardware Fault Tolerance. Lecture Notes in Computer Science, 2004, , 561-570.	1.0	3
157	Ontogenetic Development and Fault Tolerance in the POEtic Tissue. Lecture Notes in Computer Science, 2003, , 141-152.	1.0	10
158	A Morphogenetic Evolutionary System: Phylogenesis of the POEtic Circuit. Lecture Notes in Computer Science, 2003, , 153-164.	1.0	11