

# Ennio Gambi

## List of Publications by Year in descending order

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Version: 2024-02-01

143  
papers

1,691  
citations

471371

17  
h-index

360920

35  
g-index

147  
all docs

147  
docs citations

147  
times ranked

1557  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Depth-Based Fall Detection System Using a Kinect <sup>®</sup> Sensor. <i>Sensors</i> , 2014, 14, 2756-2775.	2.1	181
2	A Human Activity Recognition System Using Skeleton Data from RGBD Sensors. <i>Computational Intelligence and Neuroscience</i> , 2016, 2016, 1-14.	1.1	158
3	Radar and RGB-Depth Sensors for Fall Detection: A Review. <i>IEEE Sensors Journal</i> , 2017, 17, 3585-3604.	2.4	157
4	A new chaotic algorithm for video encryption. <i>IEEE Transactions on Consumer Electronics</i> , 2003, 48, 838-844.	3.0	91
5	Kinect as a Tool for Gait Analysis: Validation of a Real-Time Joint Extraction Algorithm Working in Side View. <i>Sensors</i> , 2015, 15, 1417-1434.	2.1	54
6	A Footwear-Based Methodology for Fall Detection. <i>IEEE Sensors Journal</i> , 2018, 18, 1233-1242.	2.4	54
7	Proposal and Experimental Evaluation of Fall Detection Solution Based on Wearable and Depth Data Fusion. <i>Advances in Intelligent Systems and Computing</i> , 2016, , 99-108.	0.5	52
8	Multisensor data fusion for human activities classification and fall detection. , 2017, , .		49
9	Heart Rate Detection Using Microsoft Kinect: Validation and Comparison to Wearable Devices. <i>Sensors</i> , 2017, 17, 1776.	2.1	46
10	Coupled-soliton photonic logic gates: practical design procedures. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1995, 12, 1300.	0.9	35
11	Comparison of Statistical and Machine Learning Techniques for Physical Layer Authentication. <i>IEEE Transactions on Information Forensics and Security</i> , 2021, 16, 1506-1521.	4.5	34
12	Chaos-Based Radars for Automotive Applications: Theoretical Issues and Numerical Simulation. <i>IEEE Transactions on Vehicular Technology</i> , 2008, 57, 3858-3863.	3.9	33
13	Remote health monitoring by OSCi technology and digital TV integration. <i>IEEE Transactions on Consumer Electronics</i> , 2012, 58, 1434-1441.	3.0	32
14	Time synchronization and data fusion for RGB-Depth cameras and inertial sensors in AAL applications. , 2015, , .		27
15	Wireless M-Bus Sensor Networks for Smart Water Grids: Analysis and Results. <i>International Journal of Distributed Sensor Networks</i> , 2014, 10, 579271.	1.3	27
16	People Walking Classification Using Automotive Radar. <i>Electronics (Switzerland)</i> , 2020, 9, 588.	1.8	25
17	Technological Approaches to Remote Monitoring of Elderly People in Cardiology: A Usability Perspective. <i>International Journal of Telemedicine and Applications</i> , 2012, 2012, 1-10.	1.1	23
18	Remote health monitoring for elderly through interactive television. <i>BioMedical Engineering OnLine</i> , 2012, 11, 54.	1.3	23

#	ARTICLE	IF	CITATIONS
19	A home automation architecture based on LoRa technology and Message Queue Telemetry Transfer protocol. International Journal of Distributed Sensor Networks, 2018, 14, 155014771880683.	1.3	23
20	Interoperability issues among smart home technological frameworks. , 2014, , .		21
21	Hybrid image/ray-shooting UHF radio propagation predictor for populated indoor environments. Electronics Letters, 1999, 35, 1804.	0.5	19
22	Evaluation of the Wireless M-Bus standard for future smart water grids. , 2013, , .		19
23	ADL Recognition Through Machine Learning Algorithms on IoT Air Quality Sensor Dataset. IEEE Sensors Journal, 2020, 20, 13562-13570.	2.4	18
24	Evaluation of a skeleton-based method for human activity recognition on a large-scale RGB-D dataset. , 2016, , .		17
25	Underwater Wireless Sensor Networks: Estimation of Acoustic Channel in Shallow Water. Applied Sciences (Switzerland), 2020, 10, 6393.	1.3	17
26	Binary De Bruijn sequences for DS-CDMA systems: analysis and results. Eurasip Journal on Wireless Communications and Networking, 2011, 2011, .	1.5	15
27	Performance Evaluation of Vibrational Measurements through mmWave Automotive Radars. Remote Sensing, 2021, 13, 98.	1.8	15
28	De Bruijn binary sequences and spread spectrum applications: A marriage possible?. IEEE Aerospace and Electronic Systems Magazine, 2013, 28, 28-39.	2.3	14
29	Millimeter wave radar data of people walking. Data in Brief, 2020, 31, 105996.	0.5	14
30	Integrated Smart TV-Based Personal e-Health System. International Journal of E-Health and Medical Communications, 2016, 7, 48-64.	1.4	13
31	Performance analysis of self-organising neural networks tracking algorithms for intake monitoring using kinect. , 2015, , .		12
32	The Human Factor in the Design of Successful Ambient Assisted Living Technologies. , 2017, , 61-89.		12
33	Interoperability in IoT infrastructures for enhanced living environments. , 2016, , .		11
34	Statistical and Machine Learning-Based Decision Techniques for Physical Layer Authentication. , 2019, , .		11
35	MQTT in AAL systems for home monitoring of people with dementia. , 2016, , .		10
36	Accurate Fall Detection in a Top View Privacy Preserving Configuration. Sensors, 2018, 18, 1754.	2.1	9

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37	All-optical polarization modulator based on spatial soliton coupling. Journal of Lightwave Technology, 1996, 14, 513-523.	2.7	8
38	A T-Learning Platform based on Digital Terrestrial Television. , 2006, , .		8
39	Application and performance analysis of various AEAD techniques for space telecommand authentication. IEEE Transactions on Wireless Communications, 2009, 8, 308-319.	6.1	8
40	Ground station activity planning through a multi-algorithm optimisation approach. , 2012, , .		8
41	De Bruijn sequences as secure spreading codes for wireless communications. , 2013, , .		8
42	A simple object for elderly vitality monitoring: The smart insole. , 2014, , .		8
43	Smart TV based ecosystem for personal e-health services. , 2014, , .		8
44	Analysis and Tools for Improved Management of Connectionless and Connection-Oriented BLE Devices Coexistence. Sensors, 2017, 17, 792.	2.1	8
45	DS-SS with de Bruijn sequences for secure Inter Satellite Links. , 2013, , .		7
46	De Bruijn sequences for DS/CDMA transmission: Efficient generation, statistical analysis and performance evaluation. , 2015, , .		7
47	Low complexity head tracking on portable android devices for real time message composition. Journal on Multimodal User Interfaces, 2015, 9, 141-151.	2.0	7
48	An Integrated Approach to Fall Detection and Fall Risk Estimation Based on RGB-Depth and Inertial Sensors. , 2016, , .		7
49	Overnight Supervision of Alzheimer's Disease Patients in Nursing Homes - System Development and Field Trial. , 2016, , .		7
50	Security solutions in VoIP applications: State of the art and impact on quality. , 2008, , .		6
51	Application of de Bruijn sequences in automotive radar systems: Preliminary evaluations. , 2010, , .		6
52	De Bruijn sequences for secure scrambling at Long Term Evolution - Advanced physical layer. , 2013, , .		6
53	Data Management in Ambient Assisted Living Platforms Approaching IoT: A Case Study. , 2015, , .		6
54	Unobtrusive intake actions monitoring through RGB and depth information fusion. , 2016, , .		6

#	ARTICLE	IF	CITATIONS
55	Contactless Walking Recognition based on mmWave RADAR. , 2020, , .		6
56	Multimodal Interaction in a Elderly-Friendly Smart Home: A Case Study. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 373-386.	0.2	6
57	Efficiency Tests Results and New Perspectives for Secure Telecommand Authentication in Space Missions: Case-Study of the European Space Agency. ETRI Journal, 2005, 27, 394-404.	1.2	6
58	Proposal of a driver assistance system based on video and radar data fusion. , 2008, , .		5
59	An integrated solution for home automation. , 2008, , .		5
60	Selective encryption for efficient and secure transmission of compressed space images. , 2009, , .		5
61	De Bruijn sequences as Zero Correlation Zone codes for satellite navigation systems. , 2014, , .		5
62	Validation of an optimized algorithm to use Kinect in a non-structured environment for Sit-to-Stand analysis. , 2015, 2015, 5078-81.		5
63	People Movement Analysis with Automotive Radar. , 2019, , .		5
64	Scalable extension of the H.264 video codec: Overview and performance evaluation. , 2007, , .		4
65	De Bruijn sequences as spreading codes in extreme Doppler conditions: Analysis and results. , 2013, , .		4
66	De Bruijn spreading sequences for dense CDMA-based WSNs. , 2014, , .		4
67	NFC-Based User Interface for Smart Environments. Advances in Human-Computer Interaction, 2015, 2015, 1-12.	1.8	4
68	Human Action Recognition with RGB-D Sensors. , 2017, , .		4
69	Simultaneously acquired data from contactless and wearable devices for direct and indirect heart-rate measurement. Data in Brief, 2019, 26, 104436.	0.5	4
70	Physical Layer Authentication Techniques based on Machine Learning with Data Compression. , 2020, , .		4
71	Slow-Time mmWave Radar Vibrometry for Drowsiness Detection. , 2021, , .		4
72	A Wearable Fall Detection System based on LoRa LPWAN Technology. Journal of Communications Software and Systems, 2020, 16, 232-242.	0.6	4

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73	Quality of Kinect Depth Information for Passive Posture Monitoring. , 2014, , 107-116.		4
74	AUTOMOTIVE RADAR APPLICATION FOR STRUCTURAL HEALTH MONITORING. , 2019, , .		4
75	Classification of Human Activities based on Automotive Radar Spectral Images Using Machine Learning Techniques: A Case Study. , 2022, , .		4
76	Effects of EDFA Construction Parameters on Soliton Propagation in Long-distance Transmission Systems. Journal of Optical Communications, 1994, 15, .	4.0	3
77	A distributed binary tree protocol for medium access control in RFID systems. , 2008, , .		3
78	An Optimized Dynamic Scene Change Detection Algorithm for H.264/AVC Encoded Video Sequences. International Journal of Digital Multimedia Broadcasting, 2010, 2010, 1-9.	0.4	3
79	An MHP based solution for assistive home automation. , 2011, , .		3
80	Modified de Bruijn sequences for spread spectrum communications. , 2011, , .		3
81	Home automation systems control by head tracking in AAL applications. , 2012, , .		3
82	Real time message composition through head movements on portable Android devices. , 2014, , .		3
83	SDR GNSS receivers: A comparative overview of different approaches. , 2014, , .		3
84	Human Action Recognition Based on Temporal Pyramid of Key Poses Using RGB-D Sensors. Lecture Notes in Computer Science, 2016, , 510-521.	1.0	3
85	Blind Physical Layer Authentication over Fading Wireless Channels through Machine Learning. , 2019, , .		3
86	Odorant Monitoring in Natural Gas Pipelines Using Ultraviolet-Visible Spectroscopy. Applied Spectroscopy, 2021, 75, 168-177.	1.2	3
87	A Technological Approach to Support the Care Process of Older in Residential Facilities. Lecture Notes in Electrical Engineering, 2019, , 71-79.	0.3	3
88	Contactless Heart Rate Measurements using RGB-camera and Radar. , 2020, , .		3
89	Soliton propagation in long erbium-doped fiber amplifiers with nonuniform gain. Optics Communications, 1994, 105, 47-51.	1.0	2
90	Design of an all-optical wavelength router based on spatial solitons. Journal of Lightwave Technology, 1999, 17, 1670-1681.	2.7	2

#	ARTICLE	IF	CITATIONS
91	On the efficiency of error concealment techniques in H.264/AVC coders. , 2005, , .		2
92	A Proposal of Automotive Anticollision Radars Based on Spread Spectrum Techniques. , 2007, , .		2
93	A Digital Television Based Solution for Remote Health Care of Rural People. , 2008, , .		2
94	Spreading codes for multiuser estimation in non coherent and non cooperative environments. , 2013, , .		2
95	Secured scrambling codes for vehicular control and navigation. , 2013, , .		2
96	Depth stream compression for enhanced real time fall detection by multiple sensors. , 2014, , .		2
97	BLE analysis and experimental evaluation in a walking monitoring device for elderly. , 2016, , .		2
98	Food Intake Actions Detection: An Improved Algorithm Toward Real-Time Analysis. Journal of Imaging, 2020, 6, 12.	1.7	2
99	mmWave Radar Features Extraction of Drones for Machine Learning Classification. , 2021, , .		2
100	An OpenCV Based Android Application for Drowsiness Detection on Mobile Devices. Lecture Notes in Electrical Engineering, 2016, , 145-158.	0.3	2
101	Smartphones as Multipurpose Intelligent Objects for AAL: Two Case Studies. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 125-134.	0.2	2
102	Supporting Caregivers in Nursing Homes for Alzheimerâ€™s Disease Patients: A Technological Approach to Overnight Supervision. Communications in Computer and Information Science, 2017, , 1-19.	0.4	2
103	Integrated Multimedia and Sensor Data Management in Heterogeneous Home Networks: a Concept Proposal. Journal of Communications Software and Systems, 2017, 6, 101.	0.6	2
104	Depth Cameras in AAL Environments. , 2015, , 1056-1075.		2
105	User Interfaces in Smart Assistive Environments. Advances in Human and Social Aspects of Technology Book Series, 2016, , 420-443.	0.3	2
106	PPM transmission over a photon counting channel: Comparison among various transmission formats. European Transactions on Telecommunications, 1996, 7, 359-376.	1.2	1
107	Mode decision optimization issues in H.264 video coding. , 0, , .		1
108	Performance of automotive spread spectrum radars. , 2006, , .		1

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109	Low complexity concealment of H.264/AVC encoded video for DVB-H devices. , 2006, , .		1
110	Certified e-mail over digital terrestrial television. , 2007, , .		1
111	Analysis of a quality of service framework for home area networks. , 2008, , .		1
112	Quality assessment of secure VoIP communications. , 2008, , .		1
113	Telecommand Authentication in Space Missions: Cryptanalysis and Future Trends. IEEE Transactions on Aerospace and Electronic Systems, 2009, 45, 752-761.	2.6	1
114	De Bruijn sequences analysis through Ambiguity functions in a deep-space communication scenario. , 2012, , .		1
115	Analysis of Spreading Codes in Conjunction with Ambiguity Function for Inter Vehicular Communication. , 2013, , .		1
116	Evaluation and possible improvements of the ANT protocol for home heart monitoring applications. , 2013, , .		1
117	A large set of orthogonal codes for the V2V scenario. , 2014, , .		1
118	A depth-based joints estimation algorithm for get up and go test using Kinect. , 2014, , .		1
119	Micro Doppler Radar and Depth Sensor Fusion for Human Activity Monitoring in AAL. Lecture Notes in Electrical Engineering, 2019, , 519-528.	0.3	1
120	Comparison of Video and Radar Contactless Heart Rate Measurements. Communications in Computer and Information Science, 2021, , 96-113.	0.4	1
121	Depth Cameras in AAL Environments. Advances in Medical Technologies and Clinical Practice Book Series, 2015, , 22-41.	0.3	1
122	A General Model for Performance Evaluation in DS-CDMA Systems with Variable Spreading Factors. IEICE Transactions on Communications, 2008, E91-B, 466-478.	0.4	1
123	Comparison of RGB-D Mapping Solutions for Application to Food Intake Monitoring. Biosystems and Biorobotics, 2015, , 295-305.	0.2	1
124	Automatic Optical Measurement and Control of Benzene and Benzenoids in Natural Gas Pipelines. Sensors, 2021, 21, 7575.	2.1	1
125	Self-routing all-optical switch for WDM applications. , 1998, 3491, 9.		0
126	Proposal and performance evaluation of a packet over VDSL protocol for increasing throughput in the transmission of IP packets. International Journal of Communication Systems, 2004, 17, 363-374.	1.6	0



#	ARTICLE	IF	CITATIONS
127	Complexity issues in the introduction of High Definition in H. 264/AVC based videoconferencing. , 2006, , .		0
128	Quality of Service in local area networks intended for home entertainment and domotic applications. , 2007, , .		0
129	DSA with SHA-1 for space telecommands authentication. , 2007, , .		0
130	Advances in Video Coding for Broadcast Applications. International Journal of Digital Multimedia Broadcasting, 2009, 2009, 1-2.	0.4	0
131	Feasibility of e-health services through the smart TV: a prototype demonstrator. International Journal of Medical Engineering and Informatics, 2016, 8, 329.	0.2	0
132	Energy Efficient Communication in Ambient Assisted Living. , 2017, , 37-59.		0
133	Improved Solution to Monitor People with Dementia and Support Care Providers. Lecture Notes in Electrical Engineering, 2017, , 153-169.	0.3	0
134	A prototype system for mm-wave channel characterization: Issues and results. , 2017, , .		0
135	Self-Adaptive and Lightweight Real-Time Sleep Recognition With Smartphone. Journal of Communications Software and Systems, 2018, 14, 211-217.	0.6	0
136	Preliminary Analysis of the OPENCARE System Architecture in Residential Facilities. Lecture Notes in Electrical Engineering, 2021, , 263-274.	0.3	0
137	H.264/AVC Error Concealment for DVB-H Video Transmission. , 2009, , 461-484.		0
138	Mission Analysis for the Optimization of the GPS Coverage for an Earth Observation Satellite. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 199-211.	0.2	0
139	Android-Based Liveness Detection for Access Control in Smart Homes. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 116-124.	0.2	0
140	Telecommunications in the ICT Age: From Research to Applications. , 2019, , 53-71.		0
141	Integrated Smart TV-Based Personal E-Health System. , 0, , 1046-1063.		0
142	Patients Behaviour Monitoring Inside a Hospital Garden: Comparison Between RADAR and GPS Solutions. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2022, , 139-152.	0.2	0
143	Authentication at the Physical Layer with Cooperative Communications and Machine Learning. , 2022, , .		0