

Metrics for Polyphonic Sound Event Detection

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Citation Report

#	ARTICLE	IF	CITATIONS
1	TUT database for acoustic scene classification and sound event detection. , 2016, , .		309
2	BLSTM-HMM hybrid system combined with sound activity detection network for polyphonic Sound Event Detection. , 2017, , .		14
3	Convolutional Recurrent Neural Networks for Polyphonic Sound Event Detection. IEEE/ACM Transactions on Audio Speech and Language Processing, 2017, 25, 1291-1303.	4.0	334
4	Polyphonic Sound Event Tracking Using Linear Dynamical Systems. IEEE/ACM Transactions on Audio Speech and Language Processing, 2017, 25, 1266-1277.	4.0	9
5	Multimodal Kernel Method for Activity Detection of Sound Sources. IEEE/ACM Transactions on Audio Speech and Language Processing, 2017, 25, 1322-1334.	4.0	7
6	On-Bird Sound Recordings: Automatic Acoustic Recognition of Activities and Contexts. IEEE/ACM Transactions on Audio Speech and Language Processing, 2017, 25, 1193-1206.	4.0	50
7	Robust Detection of Environmental Sounds in Binaural Auditory Scenes. IEEE/ACM Transactions on Audio Speech and Language Processing, 2017, 25, 1344-1356.	4.0	11
8	Duration-Controlled LSTM for Polyphonic Sound Event Detection. IEEE/ACM Transactions on Audio Speech and Language Processing, 2017, 25, 2059-2070.	4.0	63
9	Sound event detection using spatial features and convolutional recurrent neural network. , 2017, , .		86
10	Overlapping sound event detection with supervised Nonnegative Matrix Factorization. , 2017, , .		12
11	Acoustic Event Detection in Multichannel Audio Using Gated Recurrent Neural Networks with High-Resolution Spectral Features. ETRI Journal, 2017, 39, 832-840.	1.2	10
12	Scaper: A library for soundscape synthesis and augmentation. , 2017, , .		89
13	Sound event detection in synthetic audio: Analysis of the dcase 2016 task results. , 2017, , .		10
14	A study on transfer learning for acoustic event detection in a real life scenario. , 2017, , .		11
15	Wearable Vibration Based Computer Interaction and Communication System for Deaf. Applied Sciences (Switzerland), 2017, 7, 1296.	1.3	8
16	Design of a Mobile Low-Cost Sensor Network Using Urban Buses for Real-Time Ubiquitous Noise Monitoring. Sensors, 2017, 17, 57.	2.1	28
17	homeSound: Real-Time Audio Event Detection Based on High Performance Computing for Behaviour and Surveillance Remote Monitoring. Sensors, 2017, 17, 854.	2.1	55
18	An Anomalous Noise Events Detector for Dynamic Road Traffic Noise Mapping in Real-Life Urban and Suburban Environments. Sensors, 2017, 17, 2323.	2.1	56

#	ARTICLE	IF	CITATIONS
19	Description of Anomalous Noise Events for Reliable Dynamic Traffic Noise Mapping in Real-Life Urban and Suburban Soundscapes. Applied Sciences (Switzerland), 2017, 7, 146.	1.3	25
20	Computer aided diagnosis system for skin lesions detection using texture analysis methods. , 2018, , .		12
21	Detection and Classification of Acoustic Scenes and Events: Outcome of the DCASE 2016 Challenge. IEEE/ACM Transactions on Audio Speech and Language Processing, 2018, 26, 379-393.	4.0	185
22	Datasets and Evaluation. , 2018, , 147-179.		13
23	Capsule Routing for Sound Event Detection. , 2018, , .		19
24	Comparing the Influence of Depth and Width of Deep Neural Network Based on Fixed Number of Parameters for Audio Event Detection. , 2018, , .		3
25	Confidence Based Acoustic Event Detection. , 2018, , .		8
26	Robust Polyphonic Sound Event Detection by Using Multi Frame Size Denoising Autoencoder. , 2018, , .		1
27	End-to-End Polyphonic Sound Event Detection Using Convolutional Recurrent Neural Networks with Learned Time-Frequency Representation Input. , 2018, , .		15
28	The Robustness of Echoic Log-Surprise Auditory Saliency Detection. IEEE Access, 2018, 6, 72083-72093.	2.6	1
29	Input Fusion of MFCC and SCMC Features for Acoustic Scene Classification using DNN. , 2018, , .		1
30	Investigating the Effect of Sound-Event Loudness on Crowdsourced Audio Annotations. , 2018, , .		0
31	Weighted and Multi-Task Loss for Rare Audio Event Detection. , 2018, , .		17
32	Maximal Figure-of-Merit Embedding for Multi-Label Audio Classification. , 2018, , .		2
33	A Capsule based Approach for Polyphonic Sound Event Detection. , 2018, , .		14
34	Fully Convolutional DenseNet based polyphonic sound event detection. , 2018, , .		0
35	Performance of Deep Neural Networks in Audio Surveillance. , 2018, , .		4
36	Multichannel Sound Event Detection Using 3D Convolutional Neural Networks for Learning Inter-channel Features. , 2018, , .		23

#	ARTICLE	IF	CITATIONS
37	Sound Event Detection Based on Beamformed Convolutional Neural Network Using Multi-Microphones. , 2018, , .		1
38	Using Sequential Information in Polyphonic Sound Event Detection. , 2018, , .		3
39	Crackle and Breathing Phase Detection in Lung Sounds with Deep Bidirectional Gated Recurrent Neural Networks. , 2018, 2018, 356-359.		26
40	Anomalous Sound Event Detection Based on WaveNet. , 2018, , .		26
41	Sound Event Detection and Haptic Vibration Based Home Monitoring Assistant System for the Deaf and Hard-of-Hearing. , 2018, , .		5
42	Hierarchic Conv Nets Framework for Rare Sound Event Detection. , 2018, , .		4
43	Haptic Conversion Using Detected Sound Event in Home Monitoring System for the Hard-of-Hearing. , 2018, , .		3
44	Orthogonality-Regularized Masked NMF for Learning on Weakly Labeled Audio Data. , 2018, , .		3
45	Multi-Scale Recurrent Neural Network for Sound Event Detection. , 2018, , .		14
46	Convolutional Neural Networks with Multi-task Loss for Polyphonic Sound Event Detection. , 2018, , .		1
47	Smart Audio Sensors in the Internet of Things Edge for Anomaly Detection. IEEE Access, 2018, 6, 67594-67610.	2.6	35
48	Weakly Labeled Learning Using BLSTM-CTC for Sound Event Detection. , 2018, , .		2
49	Auditory Suspicious Event Databases: DASE and Bi-DASE. IEEE Access, 2018, 6, 33977-33985.	2.6	4
50	Echoic log-surprise: A multi-scale scheme for acoustic saliency detection. Expert Systems With Applications, 2018, 114, 255-266.	4.4	4
51	Computational modeling of environment deviant sound detection based on human auditory cognitive mechanism. Biologically Inspired Cognitive Architectures, 2018, 24, 87-97.	0.9	2
52	Detection of Anomalous Noise Events on Low-Capacity Acoustic Nodes for Dynamic Road Traffic Noise Mapping within an Hybrid WASN. Sensors, 2018, 18, 1272.	2.1	17
53	A Supervised Event-Based Non-Intrusive Load Monitoring for Non-Linear Appliances. Sustainability, 2018, 10, 1001.	1.6	69
54	Automatic apnea-hypopnea events detection using an alternative sensor. , 2018, , .		9

#	ARTICLE	IF	CITATIONS
55	Adaptive Pooling Operators for Weakly Labeled Sound Event Detection. IEEE/ACM Transactions on Audio Speech and Language Processing, 2018, 26, 2180-2193.	4.0	95
56	Heart Sound Segmentation—An Event Detection Approach Using Deep Recurrent Neural Networks. IEEE Transactions on Biomedical Engineering, 2018, 65, 1964-1974.	2.5	90
57	Sound Event Envelope Estimation in Polyphonic Mixtures. , 2019, , .		6
58	Weakly Labelled AudioSet Tagging With Attention Neural Networks. IEEE/ACM Transactions on Audio Speech and Language Processing, 2019, 27, 1791-1802.	4.0	54
59	A Comparison of Five Multiple Instance Learning Pooling Functions for Sound Event Detection with Weak Labeling. , 2019, , .		80
60	Scene-dependent Anomalous Acoustic-event Detection Based on Conditional Wavenet and I-vector. , 2019, , .		5
61	Robust Audio Sensing with Multi-Sound Classification. , 2019, , .		1
62	How Deep Features Have Improved Event Recognition in Multimedia. ACM Transactions on Multimedia Computing, Communications and Applications, 2019, 15, 1-27.	3.0	37
63	End-to-end Convolutional Neural Networks for Sound Event Detection in Urban Environments. , 2019, , .		15
64	Acoustic event detection with two-stage judgement in the noisy environment. , 2019, , .		0
65	Adaptive Noise Reduction for Sound Event Detection Using Subband-Weighted NMF. Sensors, 2019, 19, 3206.	2.1	18
66	Multi Model-Based Distillation for Sound Event Detection. IEICE Transactions on Information and Systems, 2019, E102.D, 2055-2058.	0.4	2
67	Sound Event Detection and Time—Frequency Segmentation from Weakly Labelled Data. IEEE/ACM Transactions on Audio Speech and Language Processing, 2019, 27, 777-787.	4.0	62
68	Deep Convolutional Neural Network with Structured Prediction for Weakly Supervised Audio Event Detection. Applied Sciences (Switzerland), 2019, 9, 2302.	1.3	3
69	Joint Acoustic and Class Inference for Weakly Supervised Sound Event Detection. , 2019, , .		8
70	Polyphonic Sound Event Detection Using Convolutional Bidirectional Lstm and Synthetic Data-based Transfer Learning. , 2019, , .		15
71	Acoustic Event Detection from Weakly Labeled Data Using Auditory Saliency. , 2019, , .		4
72	Sound Event Detection with Sequentially Labeled Data Based on Connectionist Temporal Classification and Unsupervised Clustering. , 2019, , .		9

#	ARTICLE	IF	CITATIONS
73	Sound Event Detection in the DCASE 2017 Challenge. IEEE/ACM Transactions on Audio Speech and Language Processing, 2019, 27, 992-1006.	4.0	72
74	Sound Event Detection Using Graph Laplacian Regularization Based on Event Co-occurrence. , 2019, , .		10
75	Polyphonic Sound Event Detection by Using Capsule Neural Networks. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 310-322.	7.3	39
76	A Survey: Neural Network-Based Deep Learning for Acoustic Event Detection. Circuits, Systems, and Signal Processing, 2019, 38, 3433-3453.	1.2	21
77	Real-Time monophonic and polyphonic audio classification from power spectra. Pattern Recognition, 2019, 92, 82-92.	5.1	10
78	Environmental sound processing and its applications. IEJ Transactions on Electrical and Electronic Engineering, 2019, 14, 340-351.	0.8	3
79	Deep Learning for Audio Signal Processing. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 206-219.	7.3	406
80	Blind Detection and Classification Algorithm for Smart Audio Monitoring System. , 2019, , .		0
81	Evaluation of Post-Processing Algorithms for Polyphonic Sound Event Detection. , 2019, , .		5
82	Experimental Design and Analysis of Sound Event Detection Systems: Case Studies. , 2019, , .		4
83	Joint Analysis of Acoustic Events and Scenes Based on Multitask Learning. , 2019, , .		11
84	Polyphonic Sound Event and Sound Activity Detection: A Multi-Task Approach. , 2019, , .		9
85	Sound Event Detection Using Point-Labeled Data. , 2019, , .		7
86	Dilated-Gated Convolutional Neural Network with A New Loss Function on Sound Event Detection. , 2019, , .		1
87	Weakly Supervised Sound Activity Detection and Event Classification in Acoustic Sensor Networks. , 2019, , .		2
88	Audio-Based Epileptic Seizure Detection. , 2019, , .		0
89	AudioMask: Robust Sound Event Detection Using Mask R-CNN and Frame-Level Classifier. , 2019, , .		1
90	Joint Measurement of Localization and Detection of Sound Events. , 2019, , .		34

#	ARTICLE	IF	CITATIONS
91	Open-Source Practices for Music Signal Processing Research: Recommendations for Transparent, Sustainable, and Reproducible Audio Research. <i>IEEE Signal Processing Magazine</i> , 2019, 36, 128-137.	4.6	23
92	Auxiliary Classifier Generative Adversarial Network With Soft Labels in Imbalanced Acoustic Event Detection. <i>IEEE Transactions on Multimedia</i> , 2019, 21, 1359-1371.	5.2	30
93	Relational recurrent neural networks for polyphonic sound event detection. <i>Multimedia Tools and Applications</i> , 2019, 78, 29509-29527.	2.6	9
94	Per-Channel Energy Normalization: Why and How. <i>IEEE Signal Processing Letters</i> , 2019, 26, 39-43.	2.1	46
95	Sound Event Localization and Detection of Overlapping Sources Using Convolutional Recurrent Neural Networks. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2019, 13, 34-48.	7.3	242
96	Adaptive Multi-Scale Detection of Acoustic Events. <i>IEEE/ACM Transactions on Audio Speech and Language Processing</i> , 2020, 28, 294-306.	4.0	14
97	Sound event aware environmental sound segmentation with Mask U-Net. <i>Advanced Robotics</i> , 2020, 34, 1280-1290.	1.1	9
98	Specialized Decision Surface and Disentangled Feature for Weakly-Supervised Polyphonic Sound Event Detection. <i>IEEE/ACM Transactions on Audio Speech and Language Processing</i> , 2020, , 1-1.	4.0	13
99	MTF-CRNN: Multiscale Time-Frequency Convolutional Recurrent Neural Network for Sound Event Detection. <i>IEEE Access</i> , 2020, 8, 147337-147348.	2.6	9
100	Multi-Branch Learning for Weakly-Labeled Sound Event Detection. , 2020, , .		7
101	Incremental Learning Algorithm For Sound Event Detection. , 2020, , .		6
102	Sound Event Detection Using Derivative Features in Deep Neural Networks. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4911.	1.3	5
103	Beyond the Dcase 2017 Challenge on Rare Sound Event Detection: A Proposal for a More Realistic Training and Test Framework. , 2020, , .		6
104	Sound Event Detection of Weakly Labelled Data With CNN-Transformer and Automatic Threshold Optimization. <i>IEEE/ACM Transactions on Audio Speech and Language Processing</i> , 2020, 28, 2450-2460.	4.0	63
105	Active Learning for Sound Event Detection. <i>IEEE/ACM Transactions on Audio Speech and Language Processing</i> , 2020, 28, 2895-2905.	4.0	10
106	Machine Learning-Based Automatic Detection of Central Sleep Apnea Events From a Pressure Sensitive Mat. <i>IEEE Access</i> , 2020, 8, 173428-173439.	2.6	21
107	Breathing Sound Segmentation and Detection Using Transfer Learning Techniques on an Attention-Based Encoder-Decoder Architecture. , 2020, 2020, 754-759.		13
108	Visual Object Detector for Cow Sound Event Detection. <i>IEEE Access</i> , 2020, 8, 162625-162633.	2.6	19

#	ARTICLE	IF	CITATIONS
109	A CRNN System for Sound Event Detection Based on Gastrointestinal Sound Dataset Collected by Wearable Auscultation Devices. IEEE Access, 2020, 8, 157892-157905.	2.6	12
110	Monitoring, profiling and classification of urban environmental noise using sound characteristics and the KNN algorithm. Energy Reports, 2020, 6, 223-230.	2.5	20
111	MeLa: A Programming Language for a New Multidisciplinary Oceanographic Float. Sensors, 2020, 20, 6081.	2.1	1
112	Sound Event Detection by Multitask Learning of Sound Events and Scenes with Soft Scene Labels. , 2020, , .		19
113	A Deep Neural Network-Driven Feature Learning Method for Polyphonic Acoustic Event Detection from Real-Life Recordings. , 2020, , .		3
114	Audio Sound Determination Using Feature Space Attention Based Convolution Recurrent Neural Network. , 2020, , .		2
115	Guided Learning for Weakly-Labeled Semi-Supervised Sound Event Detection. , 2020, , .		10
116	A Comprehensive Review of Polyphonic Sound Event Detection. IEEE Access, 2020, 8, 103339-103373.	2.6	31
117	Metric Learning with Background Noise Class for Few-Shot Detection of Rare Sound Events. , 2020, , .		13
118	Acoustic Anomaly Detection in Additive Manufacturing with Long Short-Term Memory Neural Networks. , 2020, , .		14
119	A-CRNN: A Domain Adaptation Model for Sound Event Detection. , 2020, , .		9
120	Duration Robust Weakly Supervised Sound Event Detection. , 2020, , .		15
121	Learning Hierarchy Aware Embedding from Raw Audio for Acoustic Scene Classification. IEEE/ACM Transactions on Audio Speech and Language Processing, 2020, , 1-1.	4.0	12
122	Sound Event Detection Using Multiple Optimized Kernels. IEEE/ACM Transactions on Audio Speech and Language Processing, 2020, 28, 1745-1754.	4.0	5
123	Maximal Figure-of-Merit Framework to Detect Multi-Label Phonetic Features for Spoken Language Recognition. IEEE/ACM Transactions on Audio Speech and Language Processing, 2020, 28, 682-695.	4.0	7
124	Joint Optimization of Deep Neural Network-Based Dereverberation and Beamforming for Sound Event Detection in Multi-Channel Environments. Sensors, 2020, 20, 1883.	2.1	7
125	Unobtrusive Screening of Central Sleep Apnea From Pressure Sensors Measurements: A Patient-Specific Longitudinal Study. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 3282-3296.	2.4	10
126	A Framework for the Robust Evaluation of Sound Event Detection. , 2020, , .		53

#	ARTICLE	IF	CITATIONS
127	A Sequence Matching Network for Polyphonic Sound Event Localization and Detection. , 2020, , .		9
128	Weakly-Supervised Sound Event Detection with Self-Attention. , 2020, , .		28
129	Sound Event Detection in Synthetic Domestic Environments. , 2020, , .		40
130	Polyphonic Sound Event Detection Using Transposed Convolutional Recurrent Neural Network. , 2020, , .		4
131	A two-stage approach to automatically detect and classify woodpecker (Fam. Picidae) sounds. Applied Acoustics, 2020, 166, 107312.	1.7	17
132	Enhancing the Labelling of Audio Samples for Automatic Instrument Classification Based on Neural Networks. , 2020, , .		2
133	Multi-Scale and Single-Scale Fully Convolutional Networks for Sound Event Detection. Neurocomputing, 2021, 421, 51-65.	3.5	11
134	Sound Event Localization and Detection Using Convolutional Recurrent Neural Networks and Gated Linear Units. , 2021, , .		6
135	Overview and Evaluation of Sound Event Localization and Detection in DCASE 2019. IEEE/ACM Transactions on Audio Speech and Language Processing, 2021, 29, 684-698.	4.0	42
136	Feature Overview for Joint Modeling of Sound Event Detection and Localization Using a Microphone Array. , 2021, , .		7
137	Ambisonic Signal Processing DNNs Guaranteeing Rotation, Scale and Time Translation Equivariance. IEEE/ACM Transactions on Audio Speech and Language Processing, 2021, 29, 1449-1462.	4.0	2
138	A Multi-Resolution CRNN-Based Approach for Semi-Supervised Sound Event Detection in DCASE 2020 Challenge. IEEE Access, 2021, 9, 89029-89042.	2.6	14
139	A Scene-Dependent Sound Event Detection Approach Using Multi-Task Learning. IEEE Sensors Journal, 2022, 22, 17483-17489.	2.4	7
140	Polyphonic Sound Event Detection Based on Residual Convolutional Recurrent Neural Network With Semi-Supervised Loss Function. IEEE Access, 2021, 9, 7564-7575.	2.6	17
141	Hodge and Podge: Hybrid Supervised Sound Event Detection with Multi-Hot MixMatch and Composition Consistence Training. , 2021, , .		0
142	Semi-Supervised NMF-CNN for Sound Event Detection. IEEE Access, 2021, 9, 130529-130542.	2.6	9
143	Joint Analysis of Sound Events and Acoustic Scenes Using Multitask Learning. IEICE Transactions on Information and Systems, 2021, E104.D, 294-301.	0.4	9
144	Investigating the Effects of Training Set Synthesis for Audio Segmentation of Radio Broadcast. Electronics (Switzerland), 2021, 10, 827.	1.8	6

#	ARTICLE	IF	CITATIONS
145	Non-invasive load-shed authentication model for demand response applications assisted by event-based non-intrusive load monitoring. Energy and AI, 2021, 3, 100055.	5.8	5
146	An analysis of Sound Event Detection under acoustic degradation using multi-resolution systems. , 0, .		1
147	Semantic feature extraction based on subspace learning with temporal constraints for acoustic event recognition. , 2021, 110, 102947.		5
148	Supervised Detection of Connector Lock Events with Optical Microphone Data. International Journal of Neural Systems, 2021, 31, 2150017.	3.2	0
149	Informing Piano Multi-Pitch Estimation with Inferred Local Polyphony Based on Convolutional Neural Networks. Electronics (Switzerland), 2021, 10, 851.	1.8	5
150	PureMIC: A New Audio Dataset for the Classification of Musical Instruments based on Convolutional Neural Networks. Journal of Signal Processing Systems, 2021, 93, 977-987.	1.4	1
151	Frequency-dependent auto-pooling function for weakly supervised sound event detection. Eurasip Journal on Audio, Speech, and Music Processing, 2021, 2021, .	1.3	2
152	Robust Speech Emotion Recognition for Sindhi Language based on Deep Convolutional Neural Network. , 2021, , .		3
153	Artificially Synthesising Data for Audio Classification and Segmentation to Improve Speech and Music Detection in Radio Broadcast. , 2021, , .		6
154	An Improved Event-Independent Network for Polyphonic Sound Event Localization and Detection. , 2021, , .		20
155	Improving Sound Event Detection Metrics: Insights from DCASE 2020. , 2021, , .		5
156	Sound Event Detection Based on Curriculum Learning Considering Learning Difficulty of Events. , 2021, , .		2
157	Text-to-Audio Grounding: Building Correspondence Between Captions and Sound Events. , 2021, , .		8
158	Self-Training for Sound Event Detection in Audio Mixtures. , 2021, , .		5
159	Rule-Embedded Network for Audio-Visual Voice Activity Detection in Live Musical Video Streams. , 2021, , .		1
160	Audio-Visual Event Recognition Through the Lens of Adversary. , 2021, , .		2
161	Sound Event Detection and Separation: A Benchmark on Desed Synthetic Soundscapes. , 2021, , .		8
162	Sound Event Detection in Urban Audio with Single and Multi-Rate Pcen. , 2021, , .		8

#	ARTICLE	IF	CITATIONS
163	A New DCASE 2017 Rare Sound Event Detection Benchmark Under Equal Training Data: CRNN With Multi-Width Kernels. , 2021, , .		2
164	An Improved Mean Teacher Based Method for Large Scale Weakly Labeled Semi-Supervised Sound Event Detection. , 2021, , .		9
165	Weakly Labeled Semi-Supervised Sound Event Detection with Multi-Scale Residual Attention. , 2021, , .		0
166	Multi-Scale Gated Attention for Weakly Labelled Sound Event Detection. , 2021, , .		1
167	Sound Event Detection with Speech Interference Using Convolutional Recurrent Neural Networks. , 2021, , .		0
168	Power Pooling: An Adaptive Pooling Function for Weakly Labelled Sound Event Detection. , 2021, , .		3
169	Efficient multichannel detection of impulsive audio events for wireless networks. Applied Acoustics, 2021, 179, 108005.	1.7	3
170	Non-Verbal Vocalisation and Laughter Detection Using Sequence-to-Sequence Models and Multi-Label Training. , 0, , .		2
171	Robust Laughter Detection in Noisy Environments. , 0, , .		11
172	An Effective Mutual Mean Teaching Based Domain Adaptation Method for Sound Event Detection. , 0, , .		2
173	Confidence Learning for Semi-Supervised Acoustic Event Detection. Applied Sciences (Switzerland), 2021, 11, 8581.	1.3	0
174	Compensating class imbalance for acoustic chimpanzee detection with convolutional recurrent neural networks. Ecological Informatics, 2021, 65, 101423.	2.3	8
175	Exploring attention mechanisms based on summary information for end-to-end automatic speech recognition. Neurocomputing, 2021, 465, 514-524.	3.5	13
176	Voice Activity Detection in the Wild: A Data-Driven Approach Using Teacher-Student Training. IEEE/ACM Transactions on Audio Speech and Language Processing, 2021, 29, 1542-1555.	4.0	19
177	Multi-Branch Convolutional Macaron net for Sound Event Detection. IEEE/ACM Transactions on Audio Speech and Language Processing, 2021, 29, 2972-2985.	4.0	6
178	Towards Duration Robust Weakly Supervised Sound Event Detection. IEEE/ACM Transactions on Audio Speech and Language Processing, 2021, 29, 887-900.	4.0	25
179	Mixup-Based Acoustic Scene Classification Using Multi-channel Convolutional Neural Network. Lecture Notes in Computer Science, 2018, , 14-23.	1.0	43
180	Trainable COPE Features for Sound Event Detection. Lecture Notes in Computer Science, 2019, , 599-609.	1.0	1

#	ARTICLE	IF	CITATIONS
181	Audio Event Recognition in the Smart Home. , 2018, , 335-371.		31
182	Sound Event Detection in Cowshed using Synthetic Data and Convolutional Neural Network. , 2020, , .		7
183	Game With A Purpose To Collect Home Audio Data. , 2019, , .		1
184	Exploring factors associated with bulk tank milk urea nitrogen in Central Thailand. Veterinary World, 2018, 11, 642-648.	0.7	4
185	Frame-Wise Dynamic Threshold Based Polyphonic Acoustic Event Detection. , 0, , .		8
186	Attentive Convolutional Recurrent Neural Network Using Phoneme-Level Acoustic Representation for Rare Sound Event Detection. , 0, , .		3
187	Aggregate Impact of Anomalous Noise Events on the WASN-Based Computation of Road Traffic Noise Levels in Urban and Suburban Environments. Sensors, 2020, 20, 609.	2.1	8
188	Attention-Based Joint Training of Noise Suppression and Sound Event Detection for Noise-Robust Classification. Sensors, 2021, 21, 6718.	2.1	3
190	Performance Analysis of Audio Event Detection Based on SVM. The Journal of Korean Institute of Information Technology, 2018, 16, 63-70.	0.1	0
191	A Comparison of Attention Mechanisms of Convolutional Neural Network in Weakly Labeled Audio Tagging. Lecture Notes in Electrical Engineering, 2019, , 85-96.	0.3	0
192	Polyphonic Sound Event Detection and Localization using a Two-Stage Strategy. , 0, , .		49
193	Performance Analysis of Sound Event Detection Based on CRNN. The Journal of Korean Institute of Information Technology, 2019, 17, 83-90.	0.1	1
194	Audiovisual Transformer Architectures for Large-Scale Classification and Synchronization of Weakly Labeled Audio Events. , 2019, , .		6
195	Speech detection from broadcast contents using multi-scale time-dilated convolutional neural networks*. Phonetics and Speech Sciences, 2019, 11, 89-96.	0.0	0
196	Sound Event Detection Based on CRNN Using Derivative Features. The Journal of Korean Institute of Information Technology, 2020, 18, 89-96.	0.1	1
197	Performance analysis of the convolutional recurrent neural network on acoustic event detection. Bulletin of Electrical Engineering and Informatics, 2020, 9, 1387-1393.	0.6	0
198	Robust Gunshot Features and Its Classification Using Support Vector Machine for Wildlife Protection. Lecture Notes in Electrical Engineering, 2020, , 939-948.	0.3	2
199	Polyphonic Sound Event Detection Based on CapsNet-RNN and Post Processing Optimization. , 2020, , .		2

#	ARTICLE	IF	CITATIONS
201	Towards Leitmotif Activity Detection in Opera Recordings. Transactions of the International Society for Music Information Retrieval, 2021, 4, 127-140.	1.1	2
202	Unified Multisensory Perception: Weakly-Supervised Audio-Visual Video Parsing. Lecture Notes in Computer Science, 2020, , 436-454.	1.0	41
203	U-Sleep: A Deep Neural Network for Automated Detection of Sleep Arousals Using Multiple PSGs. Lecture Notes in Computer Science, 2020, , 629-640.	1.0	0
204	A System for the Detection of Polyphonic Sound on a University Campus Based on CapsNet-RNN. IEEE Access, 2021, 9, 147900-147913.	2.6	6
205	Sound Event Detection Utilizing Graph Laplacian Regularization with Event Co-Occurrence. IEICE Transactions on Information and Systems, 2020, E103.D, 1971-1977.	0.4	3
206	MCG-Net: End-to-End Fine-Grained Delineation and Diagnostic Classification of Cardiac Events From Magnetocardiographs. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1057-1067.	3.9	2
207	New Avenues in Audio Intelligence: Towards Holistic Real-life Audio Understanding. Trends in Hearing, 2021, 25, 233121652110461.	0.7	1
208	Affinity Mixup for Weakly Supervised Sound Event Detection. , 2021, , .		1
209	Multilabel Acoustic Event Classification Using Real-World Urban Data and Physical Redundancy of Sensors. Sensors, 2021, 21, 7470.	2.1	8
210	MSFF-Net: Multi-scale feature fusing networks with dilated mixed convolution and cascaded parallel framework for sound event detection. , 2022, 122, 103319.		4
211	A monophonic cow sound annotation tool using a semi-automatic method on audio/video data. Livestock Science, 2022, 256, 104811.	0.6	3
212	Comparative Assessment of Data Augmentation for Semi-Supervised Polyphonic Sound Event Detection. , 2020, , .		4
213	Voice Activity Detection in the Wild via Weakly Supervised Sound Event Detection. , 0, , .		2
214	Speech Emotion Detection Using Sliding Window Feature Extraction and ANN. , 2020, , .		5
215	Two-Stage Polyphonic Sound Event Detection Based on Faster R-CNN-LSTM with Multi-Token Connectionist Temporal Classification. , 0, , .		2
216	An Effective Perturbation Based Semi-Supervised Learning Method for Sound Event Detection. , 0, , .		4
217	All-in-One Transformer: Unifying Speech Recognition, Audio Tagging, and Event Detection. , 0, , .		6
218	Novel Time-Frequency Based Scheme for Detecting Sound Events from Sound Background in Audio Segments. Lecture Notes in Computer Science, 2021, , 402-416.	1.0	2

#	ARTICLE	IF	CITATIONS
219	Adapting Sound Recognition to A New Environment Via Self-Training. , 2021, , .		1
220	Multichannel Separation and Classification of Sound Events. , 2021, , .		0
221	Performance metrics for marine mammal signal detection and classification. Journal of the Acoustical Society of America, 2022, 151, 414-427.	0.5	8
222	Sound based alarming based video surveillance system design. Multimedia Tools and Applications, 2022, 81, 7969-7991.	2.6	3
223	Common subspace learning based semantic feature extraction method for acoustic event recognition. Applied Acoustics, 2022, 190, 108638.	1.7	2
224	A capsule network with pixel-based attention and BGRU for sound event detection. , 2022, 123, 103434.		6
226	A Two-Stage LSTM Based Approach for Voice Activity Detection with Sound Event Classification. , 2022, , .		0
227	Detection and localization of sound events based on principal components analysis. , 2022, , .		0
228	Adaptive Memory-Controlled Self-Attention for Polyphonic Sound Event Detection. Symmetry, 2022, 14, 366.	1.1	3
229	Human-machine collaboration based sound event detection. CCF Transactions on Pervasive Computing and Interaction, 0, , 1.	1.7	0
231	Joint Measurement of Multi-channel Sound Event Detection and Localization Using Deep Neural Network. Journal of Physics: Conference Series, 2022, 2216, 012101.	0.3	0
232	A generalized network based on multi-scale densely connection and residual attention for sound source localization and detection. Journal of the Acoustical Society of America, 2022, 151, 1754-1768.	0.5	1
233	Computational bioacoustics with deep learning: a review and roadmap. PeerJ, 2022, 10, e13152.	0.9	103
234	Multi-Scale Features for Transformer Model to Improve the Performance of Sound Event Detection. Applied Sciences (Switzerland), 2022, 12, 2626.	1.3	4
235	Improved capsule routing for weakly labeled sound event detection. Eurasip Journal on Audio, Speech, and Music Processing, 2022, 2022, .	1.3	0
236	You Only Hear Once: A YOLO-like Algorithm for Audio Segmentation and Sound Event Detection. Applied Sciences (Switzerland), 2022, 12, 3293.	1.3	14
237	Soft-Median Selection: An adaptive feature smoothening method for sound event detection. Applied Acoustics, 2022, 192, 108715.	1.7	3
238	Master-Teacher-Student: A Weakly Labelled Semi-Supervised Framework for Audio Tagging and Sound Event Detection. IEICE Transactions on Information and Systems, 2022, E105.D, 828-831.	0.4	0

#	ARTICLE	IF	CITATIONS
239	Detecting Sound Events Using Convolutional Macaron Net With Pseudo Strong Labels. , 2021, , .		1
240	Sound-Convolutional Recurrent Neural Networks for Vehicle Classification Based on Vehicle Acoustic Signals. , 2021, , .		0
241	Sound Event Detection: A Wavelet Based Approach For Weakly Labelled Data. , 2021, , .		0
242	An Analysis of Sound Event Detection under Acoustic Degradation Using Multi-Resolution Systems. Applied Sciences (Switzerland), 2021, 11, 11561.	1.3	0
243	Anomalous sound event detection: A survey of machine learning based methods and applications. Multimedia Tools and Applications, 2022, 81, 5537-5586.	2.6	21
244	Generalisation Gap of Keyword Spotters in a Cross-Speaker Low-Resource Scenario. Sensors, 2021, 21, 8313.	2.1	1
245	Sound Event Detection by Pseudo-Labeling in Weakly Labeled Dataset. Sensors, 2021, 21, 8375.	2.1	2
246	Automated call detection for acoustic surveys with structured calls of varying length. Methods in Ecology and Evolution, 2022, 13, 1552-1567.	2.2	5
247	Lightweight Convolutional-iConformer for Sound Event Detection. IEEE Transactions on Artificial Intelligence, 2023, 4, 910-921.	3.4	2
248	Uniform Evaluation of Properties in Activity Recognition. Lecture Notes in Computer Science, 2022, , 83-95.	1.0	2
249	A Mutual Learning Framework for Few-Shot Sound Event Detection. , 2022, , .		4
250	A Multi-Task Learning Method for Weakly Supervised Sound Event Detection. , 2022, , .		2
251	Threshold Independent Evaluation of Sound Event Detection Scores. , 2022, , .		5
252	Filteraugmt: An Acoustic Environmental Data Augmentation Method. , 2022, , .		16
253	Sparse Self-Attention for Semi-Supervised Sound Event Detection. , 2022, , .		1
254	Peer Collaborative Learning for Polyphonic Sound Event Detection. , 2022, , .		4
255	Sound Event Detection Guided by Semantic Contexts of Scenes. , 2022, , .		3
256	A Benchmark of State-of-the-Art Sound Event Detection Systems Evaluated on Synthetic Soundscapes. , 2022, , .		3

#	ARTICLE	IF	CITATIONS
257	Cross-Referencing Self-Training Network for Sound Event Detection in Audio Mixtures. IEEE Transactions on Multimedia, 2023, 25, 4573-4585.	5.2	5
258	Mean Teacher for Weakly Supervised Polyphonic Sound Event Detection: An Empirical Study. , 2022, , .		1
259	Toward a perceptive pretraining framework for Audio-Visual Video Parsing. Information Sciences, 2022, , .	4.0	0
260	Improving Post-Processing of Audio Event Detectors Using Reinforcement Learning. IEEE Access, 2022, 10, 84398-84404.	2.6	2
261	A Full End-to-End Deep Approach for Detecting and Classifying Jaw Movements from Acoustic Signals in Grazing Cattle. SSRN Electronic Journal, 0, , .	0.4	0
262	Efficient Detection and Localization of Acoustic Sources with a low complexity CNN network and the Diagonal Unloading Beamforming. , 2022, , .		1
263	Weakly Labeled Semi-Supervised Sound Event Detection Based on Convolutional Independent Recurrent Neural Networks. Optical Memory and Neural Networks (Information Optics), 2022, 31, 266-276.	0.4	0
264	A large TV dataset for speech and music activity detection. Eurasip Journal on Audio, Speech, and Music Processing, 2022, 2022, .	1.3	3
265	Polyphonic Sound Event Detection Using Temporal-Frequency Attention and Feature Space Attention. Sensors, 2022, 22, 6818.	2.1	2
266	More than a whistle: Automated detection of marine sound sources with a convolutional neural network. Frontiers in Marine Science, 0, 9, .	1.2	7
267	Multi-encoder attention-based architectures for sound recognition with partial visual assistance. Eurasip Journal on Audio, Speech, and Music Processing, 2022, 2022, .	1.3	0
268	Adaptive Hierarchical Pooling for Weakly-supervised Sound Event Detection. , 2022, , .		0
269	Sound-Based Construction Activity Monitoring with Deep Learning. Buildings, 2022, 12, 1947.	1.4	6
270	Sound Event Detection for Human Safety and Security in Noisy Environments. IEEE Access, 2022, 10, 134230-134240.	2.6	5
271	Hypernetworks for Sound event Detection: a Proof-of-Concept. , 2022, , .		0
272	A Task-Specific Meta-Learning Framework for Few-Shot Sound Event Detection. , 2022, , .		1
274	Sound Event Detection System Based on VGGSKCCT Model Architecture with Knowledge Distillation. Applied Artificial Intelligence, 2023, 37, .	2.0	1
275	Strong Labeling of Sound Events Using Crowdsourced Weak Labels and Annotator Competence Estimation. IEEE/ACM Transactions on Audio Speech and Language Processing, 2023, 31, 902-914.	4.0	4

#	ARTICLE	IF	CITATIONS
276	Feature-level Attention Pooling for Overlapping Sound Event Detection. , 2022, , .		0
277	Sound event triage: detecting sound events considering priority of classes. Eurasip Journal on Audio, Speech, and Music Processing, 2023, 2023, .	1.3	0
278	Adaptive Noise Reduction Algorithm Based on SPP and NMF for Environmental Sound Event Recognition under Low-SNR Conditions. Wireless Communications and Mobile Computing, 2023, 2023, 1-11.	0.8	0
279	Sound-Based Intelligent Detection of FOD in the Final Assembly of Rocket Tanks. Machines, 2023, 11, 187.	1.2	1
280	Detection and Classification of Underwater Acoustic Events. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2023, , 251-269.	0.2	1
281	Consistency Regularization-Based Polyphonic Audio Event Detection with Minimal Supervision. , 2022, , .		0
282	Soft precision and recall. Pattern Recognition Letters, 2023, 167, 115-121.	2.6	14
283	High Precision Sound Event Detection based on Transfer Learning using Transposed Convolutions and Feature Pyramid Network. , 2023, , .		0
284	Analysis and Acoustic Event Classification of Environmental Data Collected in a Citizen Science Project. International Journal of Environmental Research and Public Health, 2023, 20, 3683.	1.2	3
285	Pseudo-Broadcast Music-Speech and Cuesheet Dataset for Background Music Identification/Separation/Detection in TV Broadcast Audio. Journal of Digital Contents Society, 2023, 24, 59-68.	0.1	0
286	Conformer-based Sound Event Detection with Data Augmentation. , 2022, , .		1
287	Transcription Free Filler Word Detection with Neural Semi-CRFs. , 2023, , .		0
288	Balanced Deep CCA for Bird Vocalization Detection. , 2023, , .		0
289	Semi-Supervised Sound Event Detection with Pre-Trained Model. , 2023, , .		0
290	Subband Dependency Modeling for Sound Event Detection. , 2023, , .		0
291	Sound AI Engine for Detection and Classification of Overlapping Sounds in Home Environment. , 2023, , .		1
294	Filler Word Detection with Hard Category Mining and Inter-Category Focal Loss. , 2023, , .		0
295	Gct: Gated Contextual Transformer for Sequential Audio Tagging. , 2023, , .		1

#	ARTICLE	IF	CITATIONS
296	Phonation Mode Detection in Singing: A Singer Adapted Model. , 2023, , .		1
303	Dense-Localizing Audio-Visual Events in Untrimmed Videos: A Large-Scale Benchmark and Baseline. , 2023, , .		2
307	Exploiting Music Source Separation For Singing Voice Detection. , 2023, , .		0
310	PrimaDNN™:A Characteristics-Aware DNN Customization for Singing Technique Detection. , 2023, , .		1
315	Regression-based Sound Event Detection with Semi-supervised Learning. , 2023, , .		0
317	Improved Self-Consistency Training with Selective Feature Fusion for Sound Event Detection. , 2023, , .		0
318	Weakly Supervised Target-Speaker Voice Activity Detection. , 2023, , .		0