Gerhard Widmer

List of Publications by Year
in descending order

112 papers	3,815 citations	279798 23 h-index	155660 55 g-index
119 all docs	119 docs citations	119 times ranked	2256 citing authors

#	Article	IF	Citations
1	Learning in the presence of concept drift and hidden contexts. Machine Learning, 1996, 23, 69-101.	5.4	1,364
2	Learning in the Presence of Concept Drift and Hidden Contexts. Machine Learning, 1996, 23, 69-101.	5.4	357
3	Computational Models of Expressive Music Performance: The State of the Art. Journal of New Music Research, 2004, 33, 203-216.	0.8	128
4	madmom. , 2016, , .		99
5	Tracking Context Changes through Meta-Learning. Machine Learning, 1997, 27, 259-286.	5.4	92
6	Machine Discoveries: A Few Simple, Robust Local Expression Principles. Journal of New Music Research, 2002, 31, 37-50.	0.8	74
7	Getting Closer to the Essence of Music. ACM Transactions on Intelligent Systems and Technology, 2017, 8, 1-13.	4.5	65
8	Discovering simple rules in complex data: AÂmeta-learning algorithm and some surprising musical discoveries. Artificial Intelligence, 2003, 146, 129-148.	5.8	62
9	A music search engine built upon audio-based and web-based similarity measures. , 2007, , .		61
10	Exploring Music Collections by Browsing Different Views. Computer Music Journal, 2004, 28, 49-62.	0.1	60
11	An innovative three-dimensional user interface for exploring music collections enriched. , 2006, , .		52
12	Playing Mozart by Analogy: Learning Multi-level Timing and Dynamics Strategies. Journal of New Music Research, 2003, 32, 259-268.	0.8	48
13	Automatic identification of music performers with learning ensembles. Artificial Intelligence, 2005, 165, 37-56.	5.8	46
14	Feature-combination hybrid recommender systems for automated music playlist continuation. User Modeling and User-Adapted Interaction, 2019, 29, 527-572.	3.8	39
15	The Receptive Field as a Regularizer in Deep Convolutional Neural Networks for Acoustic Scene Classification. , 2019, , .		39
16	Cross-Modal Music Retrieval and Applications: An Overview of Key Methodologies. IEEE Signal Processing Magazine, 2019, 36, 52-62.	5.6	39
17	Combining audio-based similarity with web-based data to accelerate automatic music playlist generation. , 2006, , .		38
18	A fully convolutional deep auditory model for musical chord recognition. , 2016, , .		36

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19	End-to-end cross-modality retrieval with CCA projections and pairwise ranking loss. International Journal of Multimedia Information Retrieval, 2018, 7, 117-128.	5.2	34
20	Prediction of Ordinal Classes Using Regression Trees. Lecture Notes in Computer Science, 2000, , 426-434.	1.3	33
21	Exploring Music Collections in Virtual Landscapes. IEEE MultiMedia, 2007, 14, 46-54.	1.7	32
22	On the reduction of false positives in singing voice detection. , 2014, , .		30
23	Learning Audioâ€“Sheet Music Correspondences for Cross-Modal Retrieval and Piece Identification. Transactions of the International Society for Music Information Retrieval, 2018, 1, 22.	1.5	28
24	â€œReinventing the Wheelâ€: A Novel Approach to Music Player Interfaces. IEEE Transactions on Multimedia, 2007, 9, 567-575.	7.2	27
25	A Review of Automatic Drum Transcription. IEEE/ACM Transactions on Audio Speech and Language Processing, 2018, 26, 1457-1483.	5.8	27
26	Relational IBL in Music with a New Structural Similarity Measure. Lecture Notes in Computer Science, 2003, , 365-382.	1.3	27
27	Relative Unsupervised Discretization for Association Rule Mining. Lecture Notes in Computer Science, 2000, , 148-158.	1.3	26
28	YQX Plays Chopin. AI Magazine, 2009, 30, 35-48.	1.6	26
29	Linear Basis Models for Prediction and Analysis of Musical Expression. Journal of New Music Research, 2012, 41, 311-322.	0.8	25
30	Robust Quad-Based Audio Fingerprinting. IEEE/ACM Transactions on Audio Speech and Language Processing, 2016, 24, 409-421.	5.8	25
31	Online, Loudness-Invariant Vocal Detection in Mixed Music Signals. IEEE/ACM Transactions on Audio Speech and Language Processing, 2018, 26, 1369-1380.	5.8	25
32	Learning expressive performance: The structureâ€level approach. Journal of New Music Research, 1996, 25, 179-205.	0.8	24
33	A low-latency, real-time-capable singing voice detection method with LSTM recurrent neural networks. , 2015, , .		24
34	Automated Motivic Analysis via Melodic Clustering. Journal of New Music Research, 2000, 29, 303-317.	0.8	23
35	The Magaloff Project: An Interim Report. Journal of New Music Research, 2010, 39, 363-377.	0.8	23
36	A new approach to hierarchical clustering and structuring of data with Self-Organizing Maps. Intelligent Data Analysis, 2004, 8, 131-149.	0.9	22

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37	A fast audio similarity retrieval method for millions of music tracks. Multimedia Tools and Applications, 2012, 58, 23-40.	3.9	22
38	A music information system automatically generated via Web content mining techniques. Information Processing and Management, 2011, 47, 426-439.	8.6	21
39	An evaluation of linear and non-linear models of expressive dynamics in classical piano and symphonic music. Machine Learning, 2017, 106, 887-909.	5.4	20
40	Deep Polyphonic ADSR Piano Note Transcription. , 2019, , .		20
41	Adapting to drift in continuous domains (Extended abstract). Lecture Notes in Computer Science, 1995, , 307-310.	1.3	20
42	Exploring the music similarity space on the web. ACM Transactions on Information Systems, 2011, 29, 1-24.	4.9	19
43	Receptive Field Regularization Techniques for Audio Classification and Tagging With Deep Convolutional Neural Networks. IEEE/ACM Transactions on Audio Speech and Language Processing, 2021, 29, 1987-2000.	5.8	19
44	Sound and Music Computing: Research Trends and Some Key Issues. Journal of New Music Research, 2007, 36, 169-184.	0.8	17
45	End-to-end musical key estimation using a convolutional neural network. , 2017, , .		17
46	Computational Models of Expressive Music Performance: A Comprehensive and Critical Review. Frontiers in Digital Humanities, 2018, 5, .	1.2	17
47	Receptive-Field-Regularized CNN Variants for Acoustic Scene Classification. , 0, , .		17
48	Automatic knowledge base refinement: Learning from examples and deep knowledge in rheumatology. Artificial Intelligence in Medicine, 1993, 5, 225-243.	6.5	15
49	Visualizing changes in the structure of data for exploratory feature selection. , 2003, , .		15
50	A hybrid approach with multi-channel i-vectors and convolutional neural networks for acoustic scene classification. , 2017, , .		15
51	Hierarchical Organization and Description of Music Collections at the Artist Level. Lecture Notes in Computer Science, 2005, , 37-48.	1.3	14
52	Qualitative Perception Modeling and Intelligent Musical Learning. Computer Music Journal, 1992, 16, 51.	0.1	13
53	Order, context and popularity bias in next-song recommendations. International Journal of Multimedia Information Retrieval, 2019, 8, 101-113.	5.2	13
54	Music Playlist Continuation by Learning from Hand-Curated Examples and Song Features. , 2017, , .		12

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55	A hybrid approach to music playlist continuation based on playlist-song membership. , 2018, , .		12
56	Mixture Density Generative Adversarial Networks. , 2019, , .		12
57	EXPLORING PIANIST PERFORMANCE STYLES WITH EVOLUTIONARY STRING MATCHING. International Journal on Artificial Intelligence Tools, 2006, 15, 495-513.	1.0	11
58	Using string kernels to identify famous performers from their playing style. Intelligent Data Analysis, 2008, 12, 425-440.	0.9	11
59	On the limitations of browsing top-N recommender systems. , 2009, , .		11
60	Exploiting Parallel Audio Recordings to Enforce Device Invariance in CNN-based Acoustic Scene Classification. , 0, , .		11
61	Playing Mozart Phrase by Phrase. , 2003, , 552-566.		10
62	A Tight Integration of Deductive and Inductive Learning*. , 1989, , 11-13.		10
63	Imposing Higher-Level Structure in Polyphonic Music Generation Using Convolutional Restricted Boltzmann Machines and Constraints. Journal of Creative Music Systems, 2018, 2, .	1.0	10
64	Acoustic Cues to Beat Induction: A Machine Learning Perspective. Music Perception, 2006, 24, 177-188.	1.1	9
65	Relational IBL in classical music. Machine Learning, 2006, 64, 5-24.	5.4	9
66	Phase-plane Representation and Visualization of Gestural Structure in Expressive Timing. Journal of New Music Research, 2009, 38, 183-195.	0.8	9
67	Timbral modeling for music artist recognition using i-vectors. , 2015, , .		9
68	Relative Unsupervised Discretization for Regression Problems. Lecture Notes in Computer Science, 2000, , 246-254.	1.3	9
69	One-touch access to music on mobile devices. , 2007, , .		8
70	Evaluating Low-Level Features for Beat Classification and Tracking. , 2007, , .		8
71	Towards Automatic Retrieval of Album Covers. Lecture Notes in Computer Science, 2006, , 531-534.	1.3	8
72	Investigations of Between-Hand Synchronization in Magaloff's Chopin. Computer Music Journal, 2010, 34, 35-44.	0.1	7

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73	Inferring Metrical Structure in Music Using Particle Filters. IEEE/ACM Transactions on Audio Speech and Language Processing, 2015, , 1-1.	5.8	7
74	Building an Interactive Next-Generation Artist Recommender Based on Automatically Derived High-Level Concepts. , 2007, , .		6
75	Toward Computer-Assisted Understanding of Dynamics in Symphonic Music. IEEE MultiMedia, 2017, 24, 36-46.	1.7	6
76	In Search of the Horowitz Factor: Interim Report on a Musical Discovery Project. Lecture Notes in Computer Science, 2002, , 13-32.	1.3	6
77	Using Geometric Symbolic Fingerprinting to Discover Distinctive Patterns in Polyphonic Music Corpora. , 2016, , 445-474.		6
78	Towards an Automatically Generated Music Information System Via Web Content Mining. , 2008, , 585-590.		6
79	Studying a creative act with computers: Music performance studies with automated discovery methods. Musicae Scientiae, 2005, 9, 11-30.	2.9	5
80	Beneath (or beyond) the surface: Discovering voice-leading patterns with skip-grams. Journal of Mathematics and Music, 2020, , 1-26.	0.4	5
81	Expressive Performance Rendering with Probabilistic Models. , 2013, , 75-98.		5
82	Searching for Music Using Natural Language Queries and Relevance Feedback. Lecture Notes in Computer Science, 2008, , 109-121.	1.3	5
83	Guest Editors'Introduction. Machine Learning, 1998, 32, 83-84.	5.4	4
84	Intelligent structuring and exploration of digital music collections. Elektrotechnik Und Informationstechnik, 2005, 122, 232-237.	1.1	4
85	Guest editorial: Machine learning in and for music. Machine Learning, 2006, 65, 343-346.	5.4	4
86	Sound/tracks. , 2008, , .		4
87	Three web-based heuristics to determine a person's or institution's country of origin. , 2010, , .		4
88	EVALUATION OF TERM UTILITY FUNCTIONS FOR VERY SHORT MULTIDOCUMENT SUMMARIES. Applied Artificial Intelligence, 2006, 20, 57-77.	3.2	3
89	Investigating Web-Based Approaches to Revealing Prototypical Music Artists in Genre Taxonomies. , 2007, , .		3
90	A Large-Scale Study of Language Models for Chord Prediction. , 2018, , .		3

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91	Machine Learning Approaches to Hybrid Music Recommender Systems. Lecture Notes in Computer Science, 2019, , 639-642.	1.3	3
92	DeepSNP: An End-to-End Deep Neural Network with Attention-Based Localization for Breakpoint Detection in Single-Nucleotide Polymorphism Array Genomic Data. Journal of Computational Biology, 2019, 26, 572-596.	1.6	3
93	LEMONS: Listenable Explanations for Music recOmmeNder Systems. Lecture Notes in Computer Science, 2021, , 531-536.	1.3	3
94	The Musical Expression Project: A Challenge for Machine Learning and Knowledge Discovery. Lecture Notes in Computer Science, 2001, , 603-614.	1.3	3
95	Case-Based Relational Learning of Expressive Phrasing in Classical Music. Lecture Notes in Computer Science, 2004, , 419-433.	1.3	3
96	Improving Prototypical Artist Detection by Penalizing Exorbitant Popularity. Lecture Notes in Computer Science, 2006, , 196-200.	1.3	3
97	A Comparison of Human, Automatic and Collaborative Music Genre Classification and User Centric Evaluation of Genre Classification Systems. Lecture Notes in Computer Science, 2011, , 118-131.	1.3	3
98	SEARCHING FOR PATTERNS IN POLITICAL EVENT SEQUENCES: EXPERIMENTS WITH THE KEDS DATABASE. Cybernetics and Systems, 2000, 31, 649-668.	2.5	2
99	Sound/tracks: artistic real-time sonification of train journeys. Journal on Multimodal User Interfaces, 2012, 6, 87-93.	2.9	2
100	Investigating Label Noise Sensitivity of Convolutional Neural Networks for Fine Grained Audio Signal Labelling. , 2018, , .		2
101	Towards Explaining Expressive Qualities in Piano Recordings: Transfer of Explanatory Features Via Acoustic Domain Adaptation. , 2021, , .		2
102	Towards a Simple Clustering Criterion Based on Minimum Length Encoding. Lecture Notes in Computer Science, 2002, , 258-270.	1.3	2
103	Evolutionary Search for Musical Parallelism. Lecture Notes in Computer Science, 2005, , 488-497.	1.3	2
104	Real-Time Music Following in Score Sheet Images via Multi-Resolution Prediction. Frontiers in Computer Science, 2021, 3, .	2.8	2
105	On the Potential of Fully Convolutional Neural Networks for Musical Symbol Detection. , 2017, , .		1
106	Automatic Reduction of MIDI Files Preserving Relevant Musical Content. Lecture Notes in Computer Science, 2010, , 89-99.	1.3	1
107	Automatic Estimation of Harmonic Tension by Distributed Representation of Chords. Lecture Notes in Computer Science, 2018, , 23-34.	1.3	1
108	Report on the ECAI workshop on artificial intelligence and music, held during the 9th European conference on artificial intelligence (ECAIâ€90), Stockholm, Sweden, August 6â€“10, 1990. Interface, 1990, 19, 293-296.	0.2	0

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109	Sound/tracks. , 2008, , .		0
110	Automatic Chord Recognition with Higher-Order Harmonic Language Modelling. , 2018, , .		0
111	Why Computers Need to Learn About Music. Lecture Notes in Computer Science, 2005, , 414-414.	1.3	0
112	Collaborative and Cooperative Environments. Lecture Notes in Computer Science, 2008, , 379-380.	1.3	0