Hideki Kawahara

List of Publications by Year
in descending order

78 papers	4,506 citations	394421 19 h-index	243625 44 g-index
88 all docs	88 docs citations	88 times ranked	2349 citing authors

#	Article	IF	Citations
1	Modelling speaker-size discrimination with voiced and unvoiced speech sounds based on the effect of spectral lift. Speech Communication, 2022, 136, 23-41.	2.8	5
2	Cascaded All-Pass Filters with Randomized Center Frequencies and Phase Polarity for Acoustic and Speech Measurement and Data Augmentation. , 2021, , .		4
3	Revisiting spectral envelope recovery from speech sounds generated by periodic excitation. , 2018, , .		2
4	Inharmonic speech reveals the role of harmonicity in the cocktail party problem. Nature Communications, 2018, 9, 2122.	12.8	53
5	Realtime feedback of singing voice information for assisting students learning music therapy. , 2017, , .		1
6	Accurate estimation of f<inf>0</inf> and aperiodicity based on periodicity detector residuals and deviations of phase derivatives. , 2017, , .		0
7	The Effect of Peripheral Compression on Syllable Perception Measured with a Hearing Impairment Simulator. Advances in Experimental Medicine and Biology, 2016, 894, 307-314.	1.6	2
8	Aliasing-free implementation of discrete-time glottal source models and their applications to speech synthesis and F0 extractor evaluation. , 2015, , .		8
9	Hearing impairment simulator based on compressive gammachirp filter. , 2014, , .		4
10	Excitation source design for high-quality speech manipulation systems based on a temporally static group delay representation of periodic signals. , 2014, , .		1
11	Speaker perception. Wiley Interdisciplinary Reviews: Cognitive Science, 2014, 5, 15-25.	2.8	64
12	Proposal for an Interactive 3D Sound Playback Interface Controlled by User behavior. Communications in Computer and Information Science, 2014, , 446-450.	0.5	1
13	Developing a method to build Japanese speech recognition system based on 3-gram language model expansion with Google database. , 2013, , .		0
14	Vocal tract length estimation for voiced and whispered speech using gammachirp filterbank. , 2013, , .		1
15	Accurate Estimation of Compression in Simultaneous Masking Enables the Simulation of Hearing Impairment for Normal-Hearing Listeners. Advances in Experimental Medicine and Biology, 2013, 787, 73-80.	1.6	6
16	Temporally variable multi-aspect N-way morphing based on interference-free speech representations. , 2013, , .		21
17	Higher order waveform symmetry measure and its application to periodicity detectors for speech and singing with fine temporal resolution. , 2013, , .		5
18	Optimizing the simultaneous estimation of frequency selectivity and compression using notched-noise maskers with asymmetric levels. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0

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19	Controlling linguistic information and filtered sound identity for a new cross-synthesis vocoder. Acoustical Science and Technology, 2013, 34, 287-288.	0.5	1
20	Estimated relative vocal tract lengths from vowel spectra based on fundamental frequency adaptive analyses and their relations to relevant physical data of speakers. Proceedings of Meetings on Acoustics, 2013, , .	0.3	1
21	Analysis and synthesis of strong vocal expressions: Extension and application of audio texture features to singing voice. , 2012, , .		7
22	Simplified aperiodicity representation for high-quality speech manipulation systems. , 2012, , .		2
23	Comparison of performance with voiced and whispered speech in word recognition and mean-formant-frequency discrimination. Speech Communication, 2012, 54, 998-1013.	2.8	28
24	Technical foundations of TANDEM-STRAIGHT, a speech analysis, modification and synthesis framework. Sadhana - Academy Proceedings in Engineering Sciences, 2011, 36, 713-727.	1.3	84
25	An interference-free representation of instantaneous frequency of periodic signals and its application to F0 extraction. , 2011, , .		10
26	Vocal Attractiveness Increases by Averaging. Current Biology, 2010, 20, 116-120.	3.9	138
27	High-quality and light-weight voice transformation enabling extrapolation without perceptual and objective breakdown. , 2010, , .		1
28	Tolerance of F0 adaptive time-frequency analysis for spectrographic representations. , 2010, , .		0
29	High quality voice manipulation method based on the vocal tract area function obtained from sub-band LSP of straight spectrum. , 2010, , .		5
30	Voice aftereffects of adaptation to speaker identity. Hearing Research, 2010, 268, 38-45.	2.0	52
31	Recent Trend in Singing Information Processing. Journal of the Institute of Electrical Engineers of Japan, 2010, 130, 360-363.	0.0	0
32	Size Perception for Acoustically Scaled Sounds of Naturally Pronounced and Whispered Words. , 2010, , 235-243.		1
33	Temporally variable multi-aspect auditory morphing enabling extrapolation without objective and perceptual breakdown. , 2009, , .		35
34	Noh voice quality. Logopedics Phoniatrics Vocology, 2009, 34, 157-170.	1.0	20
35	In the ear of the beholder: neural correlates of adaptation to voice gender. European Journal of Neuroscience, 2009, 30, 527-534.	2.6	39
36	Development of Speech Input Method for Interactive VoiceWeb Systems. Lecture Notes in Computer Science, 2009, , 710-719.	1.3	3

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37	v.morishâ€™09: A Morphing-Based Singing Design Interface for Vocal Melodies. Lecture Notes in Computer Science, 2009, , 185-190.	1.3	16
38	Speech Morphing-Background and Prospective Applications-. Japan Journal of Logopedics and Phoniatrics, 2009, 50, 131-135.	0.1	0
39	Auditory Adaptation in Voice Perception. Current Biology, 2008, 18, 684-688.	3.9	93
40	Tandem-STRAIGHT: A temporally stable power spectral representation for periodic signals and applications to interference-free spectrum, F0, and aperiodicity estimation. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	189
41	Vowel-based frequency alignment function design and recognition-based time alignment for automatic speech morphing. , 2008, , .		1
42	Speech-to-text input method for web system using JavaScript. , 2008, , .		2
43	Implementation of realtime STRAIGHT speech manipulation system: Report on its first implementation. Acoustical Science and Technology, 2007, 28, 140-146.	0.5	28
44	Warped-TSP: An acoustic measurement signal robust to background noise and harmonic distortion. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 457 Tc	0.1	6
45	STRAIGHT, exploitation of the other aspect of VOCODER: Perceptually isomorphic decomposition of speech sounds. Acoustical Science and Technology, 2006, 27, 349-353.	0.5	180
46	Speech Segregation Using an Auditory Vocoder With Event-Synchronous Enhancements. IEEE Transactions on Audio Speech and Language Processing, 2006, 14, 2212-2221.	3.2	6
47	The processing and perception of size information in speech sounds. Journal of the Acoustical Society of America, 2005, 117, 305-318.	1.1	197
48	Underlying Principles of a High-quality Speech Manipulation System STRAIGHT and Its Application to Speech Segregation. , 2005, , 167-180.		39
49	Efficient representation of short-time phase based on time-domain smoothed group delay. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi) Tj ETQq1 1 0.784314 rgBT /Overl	0.1	4
50	YIN, a fundamental frequency estimator for speech and music. Journal of the Acoustical Society of America, 2002, 111, 1917-1930.	1.1	1,280
51	Missing-data model of vowel identification. Journal of the Acoustical Society of America, 1999, 105, 3497-3508.	1.1	40
52	Dynamic sound stream formation based on continuity of spectral change. Speech Communication, 1999, 27, 235-259.	2.8	12
53	Restructuring speech representations using a pitch-adaptive timeâ€"frequency smoothing and an instantaneous-frequency-based F0 extraction: Possible role of a repetitive structure in sounds. Speech Communication, 1999, 27, 187-207.	2.8	1,458
54	Multiple period estimation and pitch perception model. Speech Communication, 1999, 27, 175-185.	2.8	61

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55	An application of the Bayesian time series model and statistical system analysis for F0 control. Speech Communication, 1998, 24, 325-339.	2.8	4
56	Concurrent vowel identification. I. Effects of relative amplitude and F0 difference. Journal of the Acoustical Society of America, 1997, 101, 2839-2847.	1.1	70
57	Second language production training using spectrographic representations as feedback.. Journal of the Acoustical Society of Japan (E), 1997, 18, 341-343.	0.1	6
58	Cepstral representation of speech motivated by timeâ€"frequency masking: An application to speech recognition. Journal of the Acoustical Society of America, 1996, 100, 603-614.	1.1	13
59	Contributions of auditory feedback frequency components on F0 fluctuations. Journal of the Acoustical Society of America, 1996, 100, 2825-2825.	1.1	4
60	Interactions between speech production and perception under auditory feedback perturbations on fundamental frequencies.. Journal of the Acoustical Society of Japan (E), 1994, 15, 201-202.	0.1	34
61	Signal reconstruction from modified auditory wavelet transform. IEEE Transactions on Signal Processing, 1993, 41, 3549-3554.	5.3	29
62	A method for designing neural networks using nonlinear multivariate analysisâ€"application to speakerâ€independent vowel recognition. Systems and Computers in Japan, 1990, 21, 80-88.	0.2	0
63	A Method for Designing Neural Networks Using Nonlinear Multivariate Analysis: Application to Speaker-Independent Vowel Recognition. Neural Computation, 1990, 2, 386-397.	2.2	7
64	Vowel-feature extraction from cochlear vibration using neural networks. Neural Networks, 1988, 1, 300.	5.9	2
65	A New Cosine Series Antialiasing Function and its Application to Aliasing-Free Glottal Source Models for Speech and Singing Synthesis. , 0, , .		14
66	Using instantaneous frequency and aperiodicity detection to estimate F0 for high-quality speech synthesis. , 0, , .		13
67	Nearly defect-free F0 trajectory extraction for expressive speech modifications based on STRAIGHT. , 0, , .		40
68	Spectral envelope recovery beyond the nyquist limit for high-quality manipulation of speech sounds. , 0, , .		3
69	Simplification and extension of non-periodic excitation source representations for high-quality speech manipulation systems. , 0, , .		11
70	Auditory filterbank improves voice morphing. , 0, , .		1
71	Deviation measure of waveform symmetry and its application to high-speed and temporally-fine F0 extraction for vocal sound texture manipulation. , 0, , .		3
72	Periodicity extraction for voiced sounds with multiple periodicity. , 0, , .		0

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73	Beyond bandlimited sampling of speech spectral envelope imposed by the harmonic structure of voiced sounds. , 0, , .		3
74	Vocal tract length estimation based on vowels using a database consisting of 385 speakers and a database with MRI-based vocal tract shape information. , 0, , .		3
75	TUSK: A Framework for Overviewing the Performance of F0 Estimators. , 0, , .		2
76	The Effect of Spectral Tilt on Size Discrimination of Voiced Speech Sounds. , 0, , .		1
77	A Modulation Property of Time-Frequency Derivatives of Filtered Phase and its Application to Aperiodicity and fo Estimation. , 0, , .		3
78	Frequency Domain Variants of Velvet Noise and Their Application to Speech Processing and Synthesis. , 0, , .		5