Yegnanarayana Bayya

List of Publications by Citations

162 papers	4,510 citations	40 h-index	63 g-index
185 ext. papers	5,629 ext. citations	2.9 avg, IF	5.77 L-index

#	Paper	IF	Citations
162	Epoch Extraction From Speech Signals. *IEEE Transactions on Audio Speech and Language Processing*, **2008**, 16, 1602-1613		346
161	Combining evidence from residual phase and MFCC features for speaker recognition. *IEEE Signal Processing Letters*, **2006**, 13, 52-55	3.2	216
160	Epoch extraction from linear prediction residual for identification of closed glottis interval. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1979**, 27, 309-319		162
159	Event-Based Instantaneous Fundamental Frequency Estimation From Speech Signals. *IEEE Transactions on Audio Speech and Language Processing*, **2009**, 17, 614-624		120
158	. *IEEE Transactions on Speech and Audio Processing*, **1995**, 3, 325-333		120
157	Spectral Mapping Using Artificial Neural Networks for Voice Conversion. *IEEE Transactions on Audio Speech and Language Processing*, **2010**, 18, 954-964		118
156	Prosody modification using instants of significant excitation. *IEEE Transactions on Audio Speech and Language Processing*, **2006**, 14, 972-980		115
155	Extraction and representation of prosodic features for language and speaker recognition. *Speech Communication*, **2008**, 50, 782-796	2.8	111
154	Enhancement of reverberant speech using LP residual signal. *IEEE Transactions on Speech and Audio Processing*, **2000**, 8, 267-281		111
153	Transformation of formants for voice conversion using artificial neural networks. *Speech Communication*, **1995**, 16, 207-216	2.8	109
152	AANN: an alternative to GMM for pattern recognition. *Neural Networks*, **2002**, 15, 459-69	9.1	101
151	Extraction of speaker-specific excitation information from linear prediction residual of speech. *Speech Communication*, **2006**, 48, 1243-1261	2.8	97
150	Significance of group delay functions in signal reconstruction from spectral magnitude or phase. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1984**, 32, 610-623		96
149	Formant extraction from linear-prediction phase spectra. *Journal of the Acoustical Society of America*, **1978**, 63, 1638-1640	2.2	96
148	A clustering algorithm using an evolutionary programming-based approach. *Pattern Recognition Letters*, **1997**, 18, 975-986	4.7	89
147	Speech enhancement using linear prediction residual. *Speech Communication*, **1999**, 28, 25-42	2.8	83
146	Determination of Instants of Significant Excitation in Speech Using Hilbert Envelope and Group Delay Function. *IEEE Signal Processing Letters*, **2007**, 14, 762-765	3.2	82

145	Characterization of Glottal Activity From Speech Signals. *IEEE Signal Processing Letters*, **2009**, 16, 469-472	3.2	81
144	Extraction of vocal-tract system characteristics from speech signals. *IEEE Transactions on Speech and Audio Processing*, **1998**, 6, 313-327		77
143	. *IEEE Transactions on Signal Processing*, **1992**, 40, 2281-2289	4.8	75
142	Combining evidence from source, suprasegmental and spectral features for a fixed-text speaker verification system. *IEEE Transactions on Speech and Audio Processing*, **2005**, 13, 575-582		74
141	Duration modification using glottal closure instants and vowel onset points. *Speech Communication*, **2009**, 51, 1263-1269	2.8	59
140	Voiced/Nonvoiced Detection Based on Robustness of Voiced Epochs. *IEEE Signal Processing Letters*, **2010**, 17, 273-276	3.2	58
139	Modeling durations of syllables using neural networks. *Computer Speech and Language*, **2007**, 21, 282-295	2.8	58
138	Segmentation of Gabor-filtered textures using deterministic relaxation. *IEEE Transactions on Image Processing*, **1996**, 5, 1625-36	8.7	57
137	Extracting the frequencies of the pinna spectral notches in measured head related impulse responses. *Journal of the Acoustical Society of America*, **2005**, 118, 364-74	2.2	56
136	Speech processing using group delay functions. *Signal Processing*, **1991**, 22, 259-267	4.4	56
135	Formant extraction from group delay function. *Speech Communication*, **1991**, 10, 209-221	2.8	56
134	Single Frequency Filtering Approach for Discriminating Speech and Nonspeech. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2015**, 23, 705-717	3.6	49
133	Robustness of group-delay-based method for extraction of significant instants of excitation from speech signals. *IEEE Transactions on Speech and Audio Processing*, **1999**, 7, 609-619		49
132	Voice conversion. *Speech Communication*, **1989**, 8, 147-158	2.8	49
131	Group delay functions and its applications in speech technology. *Sadhana - Academy Proceedings in Engineering Sciences*, **2011**, 36, 745-782	1	47
130	Intonation modeling for Indian languages. *Computer Speech and Language*, **2009**, 23, 240-256	2.8	47
129	Radial basis function networks for fast contingency ranking. *International Journal of Electrical Power and Energy Systems*, **2002**, 24, 387-393	5.1	47
128	Epoch extraction of voiced speech. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1975**, 23, 562-570		46

127	An iterative algorithm for decomposition of speech signals into periodic and aperiodic components. *IEEE Transactions on Speech and Audio Processing*, **1998**, 6, 1-11		45
126	Processing of reverberant speech for time-delay estimation. *IEEE Transactions on Speech and Audio Processing*, **2005**, 13, 1110-1118		43
125	Perceived loudness of speech based on the characteristics of glottal excitation source. *Journal of the Acoustical Society of America*, **2009**, 126, 2061-71	2.2	42
124	Supervised texture classification using a probabilistic neural network and constraint satisfaction model. *IEEE Transactions on Neural Networks*, **1998**, 9, 516-22		42
123	Effect of glottal dynamics in the production of shouted speech. *Journal of the Acoustical Society of America*, **2013**, 133, 3050-61	2.2	41
122	Artificial neural networks for pattern recognition. *Sadhana - Academy Proceedings in Engineering Sciences*, **1994**, 19, 189-238	1	38
121	Finding axes of symmetry from potential fields. *IEEE Transactions on Image Processing*, **2004**, 13, 1559-66	8.7	37
120	Epoch extraction from emotional speech using single frequency filtering approach. *Speech Communication*, **2017**, 86, 52-63	2.8	36
119	Activity modeling using event probability sequences. *IEEE Transactions on Image Processing*, **2008**, 17, 594-607	8.7	35
118	Speaker localization using excitation source information in speech. *IEEE Transactions on Speech and Audio Processing*, **2005**, 13, 751-761		32
117	Epoch-based analysis of speech signals. *Sadhana - Academy Proceedings in Engineering Sciences*, **2011**, 36, 651-697	1	31
116	Spectro-temporal analysis of speech signals using zero-time windowing and group delay function. *Speech Communication*, **2013**, 55, 782-795	2.8	30
115	Determining Number of Speakers From Multispeaker Speech Signals Using Excitation Source Information. *IEEE Signal Processing Letters*, **2007**, 14, 481-484	3.2	28
114	Study of the effects of vocal tract constriction on glottal vibration. *Journal of the Acoustical Society of America*, **2014**, 136, 1932-41	2.2	24
113	Voice conversion: Factors responsible for quality		24
112	Determining Mixing Parameters From Multispeaker Data Using Speech-Specific Information. *IEEE Transactions on Audio Speech and Language Processing*, **2009**, 17, 1196-1207		23
111	On the use of phase of the Fourier transform for face recognition under variations in illumination. *Signal, Image and Video Processing*, **2010**, 4, 353-358	1.6	21
110	Multimodal person authentication using speech, face and visual speech. *Computer Vision and Image Understanding*, **2008**, 109, 44-55	4.3	20

109	Autoassociative neural network models for language identification		20
108	Design of recursive group-delay filters by autoregressive modeling. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1982**, 30, 632-637		20
107	Study of characteristics of aperiodicity in Noh voices. *Journal of the Acoustical Society of America*, **2015**, 137, 3411-21	2.2	19
106	Performance of an Event-Based Instantaneous Fundamental Frequency Estimator for Distant Speech Signals. *IEEE Transactions on Audio Speech and Language Processing*, **2011**, 19, 1853-1864		18
105	Significance of image representation for face verification. *Signal, Image and Video Processing*, **2007**, 1, 225-237	1.6	18
104	Source and system features for speaker recognition using AANN models		18
103	Recognition of Stop-Consonant-Vowel (SCV) Segments in Continuous Speech using Neural Network Models. *IETE Journal of Research*, **1996**, 42, 269-280	0.9	18
102	Intonation component of a text-to-speech system for Hindi. *Computer Speech and Language*, **1993**, 7, 283-301	2.8	18
101	Classification of sport videos using edge-based features and autoassociative neural network models. *Signal, Image and Video Processing*, **2010**, 4, 61-73	1.6	17
100	Face Verification Using Template Matching. *IEEE Transactions on Information Forensics and Security*, **2007**, 2, 636-641	8	17
99	Extraction of pitch in adverse conditions		17
98	Design of ARMA digital filters by pole-zero decomposition. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1981**, 29, 433-439		17
97	Acoustic analysis of trill sounds. *Journal of the Acoustical Society of America*, **2012**, 131, 3141-52	2.2	15
96	Speech analysis by pole-zero decomposition of short-time spectra. *Signal Processing*, **1981**, 3, 5-17	4.4	15
95	Unsupervised texture classification using vector quantization and deterministic relaxation neural network. *IEEE Transactions on Image Processing*, **1997**, 6, 1376-87	8.7	14
94	Speech enhancement using excitation source information **2002**,		14
93	Effectiveness of a periodic and aperiodic decomposition method for analysis of voice sources. *IEEE Transactions on Speech and Audio Processing*, **1998**, 6, 12-23		14
92	Intelligibility of speech under nonexponential decay conditions. *Journal of the Acoustical Society of America*, **1975**, 58, 853-7	2.2	14

91	Analysis of singing voice for epoch extraction using Zero Frequency Filtering method **2015**,		13
90	Waveform estimation using group delay processing. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1985**, 33, 832-836		13
89	A constraint satisfaction model for recognition of stop consonant-vowel (SCV) utterances. *IEEE Transactions on Speech and Audio Processing*, **2002**, 10, 472-480		12
88	Synthesis of laughter by modifying excitation characteristics. *Journal of the Acoustical Society of America*, **2013**, 133, 3072-82	2.2	11
87	Prosodic manipulation using instants of significant excitation **2003**,		11
86	Speaker-specific mapping for text-independent speaker recognition. *Speech Communication*, **2003**, 39, 301-310	2.8	11
85	Extraction of Fundamental Frequency From Degraded Speech Using Temporal Envelopes at High SNR Frequencies. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2017**, 25, 829-838	3.6	9
84	Study of robustness of zero frequency resonator method for extraction of fundamental frequency **2011**,		9
83	Backpropagation learning algorithms for classification with fuzzy mean square error. *Pattern Recognition Letters*, **1998**, 19, 43-51	4.7	9
82	Language identification in noisy environments using throat microphone signals		9
81	Neural networks for contract bridge bidding. *Sadhana - Academy Proceedings in Engineering Sciences* , **1996**, 21, 395-413	1	9
80	Extraction of fixed dimension patterns from varying duration segments of consonant-vowel utterances		8
79	Analysis of autoassociative mapping neural networks		8
78	Word boundary hypothesization for continuous speech in Hindi based on F0 patterns. *Speech Communication*, **1996**, 18, 21-46	2.8	8
77	Significance of knowledge sources for a text-to-speech system for Indian languages. *Sadhana - Academy Proceedings in Engineering Sciences*, **1994**, 19, 147-169	1	8
76	Effectiveness of representation of signals through group delay functions. *Signal Processing*, **1989**, 17, 141-150	4.4	8
75	Signal reconstruction from partial data for sensor array imaging applications. *Signal Processing*, **1990**, 19, 139-149	4.4	8
74	Determination of glottal open regions by exploiting changes in the vocal tract system characteristics. *Journal of the Acoustical Society of America*, **2016**, 140, 666	2.2	8

73	Significance of phase in single frequency filtering outputs of speech signals. *Speech Communication*, **2018**, 97, 66-72	2.8	7
72	Feedforward neural networks configuration using evolutionary programming		7
71	Speaker change detection in casual conversations using excitation source features. *Speech Communication*, **2008**, 50, 153-161	2.8	7
70	Neural network classifiers for language identification using phonotactic and prosodic features		7
69	Exploring features for audio clip classification using LP residual and AANN models		7
68	Fuzzy-rough neural networks for vowel classification		7
67	Signal-dependent matching for isolated word speech recognition systems. *Signal Processing*, **1984**, 7, 161-173	4.4	7
66	On improvement of performance of isolated word recognition for degraded speech. *Signal Processing*, **1984**, 7, 175-183	4.4	7
65	Use of fuzzy mathematical concepts in character spotting for automatic recognition of continuous speech in Hindi. *Fuzzy Sets and Systems*, **1992**, 46, 1-9	3.7	6
64	A distance measure based on the derivative of linear prediction phase spectrum		6
63	Studies in a Reverberation Room with a Highly Absorbing Sample. *Journal of the Acoustical Society of America*, **1972**, 52, 465-470	2.2	6
62	Detection of glottal closure instant and glottal open region from speech signals using spectral flatness measure. *Speech Communication*, **2020**, 116, 30-43	2.8	6
61	Analysis of aperiodicity in artistic Noh singing voice using an impulse sequence representation of excitation source. *Journal of the Acoustical Society of America*, **2019**, 146, 4446	2.2	6
60	Analysis and classification of phonation types in speech and singing voice. *Speech Communication*, **2020**, 118, 33-47	2.8	5
59	Rough-fuzzy set theoretic approach to evaluate the importance of input features in classification		5
58	Interpretation of state sequences in HMM for activity representation		5
57	Autoassociative neural network models for online speaker verification using source features from vowels		5
56	Autoassociative Neural Network Models for Pattern Recognition Tasks in Speech and Image. *Series in Machine Perception and Artificial Intelligence*, **2002**, 283-305	0.3	5

55	Rough-fuzzy membership functions		5
54	Application of fuzzy-rough sets in modular neural networks		5
53	Wave analysis of sound decay in rectangular rooms. *Journal of the Acoustical Society of America*, **1974**, 56, 534-541	2.2	5
52	Time Delay Estimation from Mixed Multispeaker Speech Signals Using Single Frequency Filtering. *Circuits, Systems, and Signal Processing*, **2020**, 39, 1988-2005	2.2	5
51	Real time face authentication system using autoassociative neural network models **2003**,		4
50	Online text-independent speaker verification system using autoassociative neural network models		4
49	Speaker verification: minimizing the channel effects using autoassociative neural network models		4
48	Word boundary hypothesization in Hindi speech. *Computer Speech and Language*, **1991**, 5, 379-392	2.8	4
47	A maximum entropy approach to interpolation. *Signal Processing*, **1990**, 21, 17-24	4.4	4
46	Representation of images through group-delay functions. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1987**, 35, 237-240		4
45	Measuring source-tract interaction from speech		4
44	Spectral and temporal manipulations of SFF envelopes for enhancement of speech intelligibility in noise. *Computer Speech and Language*, **2019**, 54, 86-105	2.8	4
43	Excitation Features of Speech for Emotion Recognition Using Neutral Speech as Reference. *Circuits, Systems, and Signal Processing*, **2020**, 39, 4459-4481	2.2	3
42	Determination of glottal closure instants from clean and telephone quality speech signals using single frequency filtering. *Computer Speech and Language*, **2020**, 64, 101097	2.8	3
41	Edge extraction using zero-frequency resonator. *Signal, Image and Video Processing*, **2012**, 6, 287-300	1.6	3
40	Modeling syllable duration in Indian languages using support vector machines		3
39	Face verification using correlation filters and autoassociative neural networks		3
38	Spotting consonant-vowel units in continuous speech using alitoassociative neural networks and support vector machines		3

37	Neural network models for combining evidence from spectral and suprasegmental features for text-dependent speaker verification		3
36	Modeling syllable duration in Indian languages using neural networks		3
35	Neural network models for spotting stop consonant-vowel (SCV) segments in continuous speech		3
34	Comparative study of nonlinear time warping techniques in isolated word speech recognition systems. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1983**, 31, 1582-1586		3
33	Comparison of Glottal Closure Instants Detection Algorithms for Emotional Speech **2020**,		3
32	Extraction of formant bandwidths using properties of group delay functions. *Speech Communication*, **2014**, 63-64, 70-83	2.8	2
31	Incorporation of fuzzy classification properties into backpropagation learning algorithm		2
30	Speaker-specific information from residual phase		2
29	Acoustic model combination for recognition of speech in multiple languages using support vector machines		2
28	Source-system windowing for speech analysis and synthesis. *IEEE Transactions on Speech and Audio Processing*, **1996**, 4, 133-137		2
27	Texture classification using a two-stage neural network approach		2
26	Reconstruction from Fourier transform phase with applications to speech analysis		2
25	Epoch extraction from linear prediction residual		2
24	Laplacian of smoothed image as representation for face recognition **2011**,		1
23	Real time face recognition system using autoassociative neural network models		1
22	Combining evidence from multiple modular networks for recognition of consonant-vowel units of speech		1
21	On timing in time-frequency analysis of speech signals. *Sadhana - Academy Proceedings in Engineering Sciences*, **1996**, 21, 5-20	1	1
20	Image reconstruction from multiple frames of sparse data. *Multidimensional Systems and Signal Processing*, **1993**, 4, 167-179	1.8	1

19	Performance of isolated word recognition system for confusable vocabulary		1
18	Processing of noisy speech using group delay functions		1
17	Effect of noise and distortion in speech on parametric extraction		1
16	Cascade realization of digital inverse filter for extracting speaker dependent features		1
15	Performance of linear prediction analysis on speech with additive noise		1
14	Diffusion of decaying sound field in a reverberation room with a highly absorbing sample. *Journal of the Acoustical Society of America*, **1974**, 56, 706-708	2.2	1
13	Extraction and Utilization of Excitation Information of Speech: A Review. *Proceedings of the IEEE*, **2021**, 1-22	14.3	1
12	A neural network approach for speech activity detection for Apollo corpus. *Computer Speech and Language*, **2021**, 65, 101137	2.8	1
11	Group delay spectrogram of speech signals without phase wrapping.. *Journal of the Acoustical Society of America*, **2022**, 151, 2181	2.2	1
10	Spotting glottal stop in Amharic in continuous speech. *Computer Speech and Language*, **2012**, 26, 293-305	2.8	0
9	Subsegmental level analysis of high arousal speech using the zero-time windowing method. *Journal of the Acoustical Society of America*, **2019**, 145, 551	2.2	
8	Speech Communication and Signal Processing. *Sadhana - Academy Proceedings in Engineering Sciences*, **2011**, 36, 551-553	1	
7	. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1989**, 37, 151-152		
6	Applications of Group Delay Functions in Speech Processing. *IETE Journal of Research*, **1988**, 34, 20-29	0.9	
5	Epoch Extraction of Composite Signals. *IETE Journal of Research*, **1976**, 22, 712-716	0.9	
4	Computation of the Capacity of a Burst Noise Binary Symmetric Channel. *IETE Journal of Research*, **1973**, 19, 320-322	0.9	
3	Diffusion of Decaying Sound Field in a Reverberation Room with a Highly Absorbing Sample. *Journal of the Acoustical Society of America*, **1974**, 55, 420-420	2.2	
2	PATTERN RECOGNITION ISSUES IN SPEECH PROCESSING **2001**, 531-558		

List of Publications

1 On Improving the Accuracy and Robustness of Time Delay Estimation of Broadband Signals. *Circuits, Systems, and Signal Processing*,1 2.2