Jan Rusz

List of Publications by Year
in descending order

94 papers	3,172 citations	186265 28 h-index	175258 52 g-index
96 all docs	96 docs citations	96 times ranked	2343 citing authors

#	Article	IF	Citations
1	Quantitative acoustic measurements for characterization of speech and voice disorders in early untreated Parkinsonâ€™s disease. Journal of the Acoustical Society of America, 2011, 129, 350-367.	1.1	347
2	Automated analysis of connected speech reveals early biomarkers of Parkinsonâ€™s disease in patients with rapid eye movement sleep behaviour disorder. Scientific Reports, 2017, 7, 12.	3.3	245
3	Imprecise vowel articulation as a potential early marker of Parkinson's disease: Effect of speaking task. Journal of the Acoustical Society of America, 2013, 134, 2171-2181.	1.1	175
4	Automatic detection of Parkinson's disease in running speech spoken in three different languages. Journal of the Acoustical Society of America, 2016, 139, 481-500.	1.1	151
5	Biomarkers of conversion to Î±-synucleinopathy in isolated rapid-eye-movement sleep behaviour disorder. Lancet Neurology, The, 2021, 20, 671-684.	10.2	116
6	Automatic Evaluation of Articulatory Disorders in Parkinsonâ€™s Disease. IEEE/ACM Transactions on Audio Speech and Language Processing, 2014, 22, 1366-1378.	5.8	115
7	Speech disorders reflect differing pathophysiology in Parkinsonâ€™s disease, progressive supranuclear palsy and multiple system atrophy. Journal of Neurology, 2015, 262, 992-1001.	3.6	115
8	Characterization Methods for the Detection of Multiple Voice Disorders: Neurological, Functional, and Laryngeal Diseases. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1820-1828.	6.3	96
9	Guidelines for Speech Recording and Acoustic Analyses in Dysarthrias of Movement Disorders. Movement Disorders, 2021, 36, 803-814.	3.9	83
10	Smartphone Allows Capture of Speech Abnormalities Associated With High Risk of Developing Parkinsonâ€™s Disease. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1495-1507.	4.9	77
11	Speech Biomarkers in Rapid Eye Movement Sleep Behavior Disorder and Parkinson Disease. Annals of Neurology, 2021, 90, 62-75.	5.3	73
12	Distinct patterns of imprecise consonant articulation among Parkinsonâ€™s disease, progressive supranuclear palsy and multiple system atrophy. Brain and Language, 2017, 165, 1-9.	1.6	69
13	Quantitative assessment of motor speech abnormalities in idiopathic rapid eye movement sleep behaviour disorder. Sleep Medicine, 2016, 19, 141-147.	1.6	68
14	Evaluation of speech impairment in early stages of Parkinsonâ€™s disease: a prospective study with the role of pharmacotherapy. Journal of Neural Transmission, 2013, 120, 319-329.	2.8	65
15	Characteristics of motor speech phenotypes in multiple sclerosis. Multiple Sclerosis and Related Disorders, 2018, 19, 62-69.	2.0	58
16	Spatial and temporal characteristics of gait as outcome measures in multiple sclerosis (EDSS 0 to 6.5). Journal of NeuroEngineering and Rehabilitation, 2015, 12, 14.	4.6	53
17	Effects of dopaminergic replacement therapy on motor speech disorders in Parkinsonâ€™s disease: longitudinal follow-up study on previously untreated patients. Journal of Neural Transmission, 2016, 123, 379-387.	2.8	51
18	Detection of persons with Parkinson's disease by acoustic, vocal, and prosodic analysis. , 2011, , .		46

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19	Characteristics and occurrence of speech impairment in Huntingtonâ€™s disease: possible influence of antipsychotic medication. Journal of Neural Transmission, 2014, 121, 1529-1539.	2.8	45
20	A forced gaussians based methodology for the differential evaluation of Parkinson's Disease by means of speech processing. Biomedical Signal Processing and Control, 2019, 48, 205-220.	5.7	44
21	Objective Acoustic Quantification of Phonatory Dysfunction in Huntington's Disease. PLoS ONE, 2013, 8, e65881.	2.5	43
22	Effect of dopaminergic medication on speech dysfluency in Parkinsonâ€™s disease: a longitudinal study. Journal of Neural Transmission, 2015, 122, 1135-1142.	2.8	42
23	Hypernasality associated with basal ganglia dysfunction: evidence from Parkinsonâ€™s disease and Huntingtonâ€™s disease. PeerJ, 2016, 4, e2530.	2.0	42
24	Phonatory Dysfunction as a Preclinical Symptom of Huntington Disease. PLoS ONE, 2014, 9, e113412.	2.5	41
25	Acoustic assessment of voice and speech disorders in Parkinson's disease through quick vocal test. Movement Disorders, 2011, 26, 1951-1952.	3.9	40
26	Accuracy of Rating Scales and Clinical Measures for Screening of Rapid Eye Movement Sleep Behavior Disorder and for Predicting Conversion to Parkinsonâ€™s Disease and Other Synucleinopathies. Frontiers in Neurology, 2018, 9, 376.	2.4	39
27	Horizontal and vertical eye movement metrics: What is important?. Clinical Neurophysiology, 2013, 124, 2216-2229.	1.5	38
28	Automated speech analysis in early untreated Parkinson's disease: Relation to gender and dopaminergic transporter imaging. European Journal of Neurology, 2022, 29, 81-90.	3.3	33
29	Defining Speech Subtypes in De Novo Parkinson Disease. Neurology, 2021, 97, e2124-e2135.	1.1	33
30	Tests of manual dexterity and speed in Parkinsonâ€™s disease: Not all measure the same. Parkinsonism and Related Disorders, 2016, 28, 118-123.	2.2	32
31	Automatic Evaluation of Speech Rhythm Instability and Acceleration in Dysarthrias Associated with Basal Ganglia Dysfunction. Frontiers in Bioengineering and Biotechnology, 2015, 3, 104.	4.1	31
32	Towards an automatic monitoring of the neurological state of Parkinson's patients from speech. , 2016, , .		31
33	Distinctive speech signature in cerebellar and parkinsonian subtypes of multiple system atrophy. Journal of Neurology, 2019, 266, 1394-1404.	3.6	29
34	Fast vergence eye movements are disrupted in Parkinson's disease: A video-oculography study. Parkinsonism and Related Disorders, 2015, 21, 797-799.	2.2	27
35	Relations of non-motor symptoms and dopamine transporter binding in REM sleep behavior disorder. Scientific Reports, 2019, 9, 15463.	3.3	26
36	Acoustic Investigation of Stress Patterns in Parkinson's Disease. Journal of Voice, 2014, 28, 129.e1-129.e8.	1.5	25

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37	High-Accuracy Voice-Based Classification Between Patients With Parkinsonâ€™s Disease and Other Neurological Diseases May Be an Easy Task With Inappropriate Experimental Design. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1319-1321.	4.9	25
38	Glottal Source Analysis of Voice Deficits in Newly Diagnosed Drug-naÃ¯ve Patients with Parkinsonâ€™s Disease: Correlation Between Acoustic Speech Characteristics and Non-Speech Motor Performance. Biomedical Signal Processing and Control, 2020, 57, 101818.	5.7	25
39	From discourse to pathology: Automatic identification of Parkinson's disease patients via morphological measures across three languages. Cortex, 2020, 132, 191-205.	2.4	24
40	Acoustic Tracking of Pitch, Modal, and Subharmonic Vibrations of Vocal Folds in Parkinsonâ€™s Disease and Parkinsonism. IEEE Access, 2019, 7, 150339-150354.	4.2	23
41	A distinct variant of mixed dysarthria reflects parkinsonism and dystonia due to ephedrone abuse. Journal of Neural Transmission, 2014, 121, 655-664.	2.8	22
42	Validation of freely-available pitch detection algorithms across various noise levels in assessing speech captured by smartphone in Parkinsonâ€™s disease. Biomedical Signal Processing and Control, 2020, 58, 101831.	5.7	22
43	Distinct patterns of speech disorder in early-onset and late-onset de-novo Parkinsonâ€™s disease. Npj Parkinson's Disease, 2021, 7, 98.	5.3	19
44	Speech disorder and vocal tremor in postural instability/gait difficulty and tremor dominant subtypes of Parkinsonâ€™s disease. Journal of Neural Transmission, 2020, 127, 1295-1304.	2.8	18
45	Characterizing vocal tremor in progressive neurological diseases via automated acoustic analyses. Clinical Neurophysiology, 2020, 131, 1155-1165.	1.5	18
46	Restoration of GuytonÂ´s diagram for regulation of the circulation as a basis for quantitative physiological model development. Physiological Research, 2010, 59, 897-908.	0.9	18
47	Eye movements in idiopathic rapid eye movement sleep behaviour disorder: High antisaccade error rate reflects prefrontal cortex dysfunction. Journal of Sleep Research, 2019, 28, e12742.	3.2	17
48	The Atlas of Physiology and Pathophysiology: Web-based multimedia enabled interactive simulations. Computer Methods and Programs in Biomedicine, 2011, 104, 143-153.	4.7	16
49	Brain volumetric correlates of dysarthria in multiple sclerosis. Brain and Language, 2019, 194, 58-64.	1.6	16
50	Slowed articulation rate is associated with information processing speed decline in multiple sclerosis: A pilot study. Journal of Clinical Neuroscience, 2019, 65, 28-33.	1.5	16
51	Automated Assessment of Oral Diadochokinesis in Multiple Sclerosis Using a Neural Network Approach: Effect of Different Syllable Repetition Paradigms. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 32-41.	4.9	16
52	Eye Movements in Ephedrone-Induced Parkinsonism. PLoS ONE, 2014, 9, e104784.	2.5	15
53	Comparative analysis of speech impairment and upper limb motor dysfunction in Parkinsonâ€™s disease. Journal of Neural Transmission, 2017, 124, 463-470.	2.8	15
54	Convolutional Neural Networks and a Transfer Learning Strategy to Classify Parkinsonâ€™s Disease from Speech in Three Different Languages. Lecture Notes in Computer Science, 2019, , 697-706.	1.3	14

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55	Diffusion tensor imaging in the characterization of multiple system atrophy. Neuropsychiatric Disease and Treatment, 2016, Volume 12, 2181-2187.	2.2	13
56	Comparison of Automated Acoustic Methods for Oral Diadochokinesis Assessment in Amyotrophic Lateral Sclerosis. Journal of Speech, Language, and Hearing Research, 2020, 63, 3453-3460.	1.6	13
57	Instrumental analysis of finger tapping reveals a novel early biomarker of parkinsonism in idiopathic rapid eye movement sleep behaviour disorder. Sleep Medicine, 2020, 75, 45-49.	1.6	12
58	Validation of cepstral peak prominence in assessing early voice changes of Parkinson's disease: Effect of speaking task and ambient noise. Journal of the Acoustical Society of America, 2021, 150, 4522-4533.	1.1	12
59	Bayesian changepoint detection for the automatic assessment of fluency and articulatory disorders. Speech Communication, 2013, 55, 178-189.	2.8	11
60	Effect of Ageing on Acoustic Characteristics of Voice Pitch and Formants in Czech Vowels. Journal of Voice, 2021, 35, 931.e21-931.e33.	1.5	11
61	Reproducibility of Voice Analysis with Machine Learning. Movement Disorders, 2021, 36, 1282-1283.	3.9	10
62	Transfer learning helps to improve the accuracy to classify patients with different speech disorders in different languages. Pattern Recognition Letters, 2021, 150, 272-279.	4.2	10
63	Study protocol for using a smartphone application to investigate speech biomarkers of Parkinsonâ€™s disease and other synucleinopathies: SMARTSPEECH. BMJ Open, 2022, 12, e059871.	1.9	10
64	Does Cognitive Impairment Influence Motor Speech Performance in De Novo Parkinson's Disease?. Movement Disorders, 2021, 36, 2980-2982.	3.9	9
65	Speech changes after coordinative training in patients with cerebellar ataxia: a pilot study. Neurological Sciences, 2016, 37, 293-296.	1.9	7
66	Dualistic effect of pallidal deep brain stimulation on motor speech disorders in dystonia. Brain Stimulation, 2018, 11, 896-903.	1.6	7
67	Dysarthria enhancement mechanism under external clear speech instruction in Parkinson's disease, progressive supranuclear palsy and multiple system atrophy. Journal of Neural Transmission, 2020, 127, 905-914.	2.8	7
68	Short-term effect of dopaminergic medication on speech in early-stage Parkinsonâ€™s disease. Npj Parkinson's Disease, 2022, 8, 22.	5.3	7
69	Towards Disease-specific Speech Markers for Differential Diagnosis in Parkinsonism. , 2019, , .		5
70	Dysprosody in Isolated REM Sleep Behavior Disorder with Impaired Olfaction but Intact Nigrostriatal Pathway. Movement Disorders, 2021, , .	3.9	5
71	Automated video-based assessment of facial bradykinesia in de-novo Parkinsonâ€™s disease. Npj Digital Medicine, 2022, 5, .	10.9	5
72	Linear Classification in Speech-Based Objective Differential Diagnosis of Parkinsonism. , 2018, , .		4

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73	Why patients with multiple sclerosis perceive improvement of gait during treatment with natalizumab?. Journal of Neural Transmission, 2019, 126, 731-737.	2.8	3
74	Eye movement abnormalities are associated with brainstem atrophy in Wilson disease. Neurological Sciences, 2020, 41, 1097-1103.	1.9	3
75	Instrumental Analysis of Gait Abnormalities in Idiopathic Rapid Eye Movement Sleep Behavior Disorder. Movement Disorders, 2020, 35, 193-195.	3.9	3
76	3D visual cueing shortens the double support phase of the gait cycle in patients with advanced Parkinson's disease treated with DBS of the STN. PLoS ONE, 2020, 15, e0244676.	2.5	3
77	Toward Automated Articulation Rate Analysis via Connected Speech in Dysarthrias. Journal of Speech, Language, and Hearing Research, 2022, 65, 1386-1401.	1.6	3
78	Linguistic Abnormalities in Isolated Rapid Eye Movement Sleep Behavior Disorder. Movement Disorders, 2022, 37, 1872-1882.	3.9	3
79	Automatic detection of voice onset time in dysarthric speech. , 2015, , .		2
80	GABA spectra and remote distractor effect in progressive supranuclear palsy: A pilot study. Revue Neurologique, 2017, 173, 225-229.	1.5	2
81	Dysprosody Differentiate Between Parkinsonâ€™s Disease, Progressive Supranuclear Palsy, and Multiple System Atrophy. , 0, , .		2
82	Schola Ludus in Modern Garment: Use of Web Multimedia Simulation in Biomedical Teaching. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 413-418.	0.4	1
83	Effect of pallidal deep-brain stimulation on articulation rate in dystonia. Neurological Sciences, 2019, 40, 869-873.	1.9	1
84	Reader response: Motor speech patterns in Huntington disease. Neurology, 2020, 95, 607-608.	1.1	1
85	Effect of reading passage length on quantitative acoustic speech assessment in Czech-speaking individuals with Parkinson's disease treated with subthalamic nucleus deep brain stimulation. Journal of the Acoustical Society of America, 2021, 149, 3366-3374.	1.1	1
86	Acoustic Evaluation of Nasality in Cerebellar Syndromes. , 0, , .		1
87	Increased Transferrin Sialylation Predicts Phenoconversion in Isolated REM Sleep Behavior Disorder. Movement Disorders, 2022, , .	3.9	1
88	J17 Could Antipsychotic Medication Influence Speech In Huntington's Disease?. Journal of Neurology, Neurosurgery and Psychiatry, 2014, 85, A71-A71.	1.9	0
89	C16â€…Hoarseness can be found in vocalisations of both human as well as genetically modified minipig model of huntingtonâ€™s disease. Journal of Neurology, Neurosurgery and Psychiatry, 2016, 87, A32.2-A32.	1.9	0
90	K26â€…Specific in-patient rehabilitation improves postural and gait instability in huntingtonâ€™s disease. Journal of Neurology, Neurosurgery and Psychiatry, 2016, 87, A88.1-A88.	1.9	0

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91	Reply to: â€œFostering Voice Objective Analysis in Patients With Movement Disordersâ€: Movement Disorders, 2021, 36, 1042-1043.	3.9	0
92	H44â€...The effects of a specific inpatient multidisciplinary rehabilitation program on postural and gait stability in huntingtonÂ´s disease- a pilot study. , 2018, , .		0
93	Inpatient multidisciplinary rehabilitation program for postural and gait stability in HuntingtonÂ´s disease â€“ a pilot study. Ceska A Slovenska Neurologie A Neurochirurgie, 2019, 82/115, 301-308.	0.1	0
94	Is Gait Dysfunction a Prominent Sign of Isolated Rapid Eye Movement Sleep Behavior Disorder?. Movement Disorders, 2022, 37, 1575-1576.	3.9	0