James L Coyle

List of Publications by Year
in descending order

55 papers	1,222 citations	361413 20 h-index	395702 33 g-index
55 all docs	55 docs citations	55 times ranked	858 citing authors

#	Article	IF	Citations
1	Differentiation of Normal and Abnormal Airway Protection during Swallowing Using the Penetrationâ€“Aspiration Scale. Dysphagia, 1999, 14, 228-232.	1.8	251
2	Deep Belief Networks for Electroencephalography: A Review of Recent Contributions and Future Outlooks. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 642-652.	6.3	81
3	A comparative analysis of DBSCAN, K-means, and quadratic variation algorithms for automatic identification of swallows from swallowing accelerometry signals. Computers in Biology and Medicine, 2015, 59, 10-18.	7.0	58
4	Dysphagia Screening: Contributions of Cervical Auscultation Signals and Modern Signal-Processing Techniques. IEEE Transactions on Human-Machine Systems, 2015, 45, 465-477.	3.5	56
5	A comparative analysis of swallowing accelerometry and sounds during saliva swallows. BioMedical Engineering OnLine, 2015, 14, 3.	2.7	49
6	Cervical Auscultation Synchronized with Images from Endoscopy Swallow Evaluations. Dysphagia, 2007, 22, 290-298.	1.8	48
7	Automatic hyoid bone detection in fluoroscopic images using deep learning. Scientific Reports, 2018, 8, 12310.	3.3	44
8	Non-invasive identification of swallows via deep learning in high resolution cervical auscultation recordings. Scientific Reports, 2020, 10, 8704.	3.3	37
9	Decoding human swallowing via electroencephalography: a state-of-the-art review. Journal of Neural Engineering, 2015, 12, 051001.	3.5	33
10	Neck sensor-supported hyoid bone movement tracking during swallowing. Royal Society Open Science, 2019, 6, 181982.	2.4	30
11	Computational Deglutition: Using Signal- and Image-Processing Methods to Understand Swallowing and Associated Disorders [Life Sciences]. IEEE Signal Processing Magazine, 2019, 36, 138-146.	5.6	29
12	Upper Esophageal Sphincter Opening Segmentation With Convolutional Recurrent Neural Networks in High Resolution Cervical Auscultation. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 493-503.	6.3	29
13	A statistical analysis of cervical auscultation signals from adults with unsafe airway protection. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 7.	4.6	26
14	Dysphagia and its effects on swallowing sounds and vibrations in adults. BioMedical Engineering OnLine, 2018, 17, 69.	2.7	26
15	Deep learning for classification of normal swallows in adults. Neurocomputing, 2018, 285, 1-9.	5.9	25
16	Tracking Hyoid Bone Displacement During Swallowing Without Videofluoroscopy Using Machine Learning of Vibratory Signals. Dysphagia, 2021, 36, 259-269.	1.8	25
17	Detection of Swallow Kinematic Events From Acoustic High-Resolution Cervical Auscultation Signals in Patients With Stroke. Archives of Physical Medicine and Rehabilitation, 2019, 100, 501-508.	0.9	24
18	High-Resolution Cervical Auscultation Signal Features Reflect Vertical and Horizontal Displacements of the Hyoid Bone During Swallowing. IEEE Journal of Translational Engineering in Health and Medicine, 2019, 7, 1-9.	3.7	22

#	Article	IF	Citations
19	The Association of High Resolution Cervical Auscultation Signal Features With Hyoid Bone Displacement During Swallowing. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1810-1816.	4.9	21
20	Tele-Dysphagia Management: An Opportunity for Prevention, Cost-Savings and Advanced Training. International Journal of Telerehabilitation, 2012, 4, 41-46.	1.8	20
21	Anatomical Directional Dissimilarities in Tri-axial Swallowing Accelerometry Signals. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 447-458.	4.9	20
22	The Prediction of Risk of Penetrationâ€“Aspiration Via Hyoid Bone Displacement Features. Dysphagia, 2020, 35, 66-72.	1.8	20
23	Functional connectivity patterns of normal human swallowing: difference among various viscosity swallows in normal and chin-tuck head positions. Brain Research, 2016, 1652, 158-169.	2.2	17
24	A fast algorithm for vertex-frequency representations of signals on graphs. Signal Processing, 2017, 131, 483-491.	3.7	17
25	A Preliminary Investigation of Whether HRCA Signals Can Differentiate Between Swallows from Healthy People and Swallows from People with Neurodegenerative Diseases. Dysphagia, 2021, 36, 635-643.	1.8	17
26	Estimation of laryngeal closure duration during swallowing without invasive X-rays. Future Generation Computer Systems, 2021, 115, 610-618.	7.5	17
27	A comparison between swallowing sounds and vibrations in patients with dysphagia. Computer Methods and Programs in Biomedicine, 2017, 144, 179-187.	4.7	16
28	Characteristics of Dry Chin-Tuck Swallowing Vibrations and Sounds. IEEE Transactions on Biomedical Engineering, 2015, 62, 2456-2464.	4.2	14
29	How Closely do Machine Ratings of Duration of UES Opening During Videofluoroscopy Approximate Clinician Ratings Using Temporal Kinematic Analyses and the MBSImP?. Dysphagia, 2021, 36, 707-718.	1.8	14
30	Influence of attention and bolus volume on brain organization during swallowing. Brain Structure and Function, 2018, 223, 955-964.	2.3	13
31	Differences in brain networks during consecutive swallows detected using an optimized vertexâ€“frequency algorithm. Neuroscience, 2017, 344, 113-123.	2.3	12
32	High-Resolution Cervical Auscultation and Data Science: New Tools to Address an Old Problem. American Journal of Speech-Language Pathology, 2020, 29, 992-1000.	1.8	12
33	Automatic Estimation of Laryngeal Vestibule Closure Duration Using High-Resolution Cervical Auscultation Signals. Perspectives of the ASHA Special Interest Groups, 2020, 5, 1647-1656.	0.8	10
34	A matched dual-tree wavelet denoising for tri-axial swallowing vibrations. Biomedical Signal Processing and Control, 2016, 27, 112-121.	5.7	9
35	Characterizing functional connectivity patterns during saliva swallows in different head positions. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 61.	4.6	8
36	Mansoura Fiberoptic Endoscopic Evaluation of Swallowing Residue Rating Scale (MFRRS): An Anatomically Based Tool â€“ A Preliminary Study. Folia Phoniatrica Et Logopaedica, 2021, 73, 478-490.	1.1	7

#	Article	IF	Citations
37	A generalized equation approach for hyoid bone displacement and penetrationâ€“aspiration scale analysis. SN Applied Sciences, 2021, 3, 1.	2.9	6
38	Characterizing Swallows From People With Neurodegenerative Diseases Using High-Resolution Cervical Auscultation Signals and Temporal and Spatial Swallow Kinematic Measurements. Journal of Speech, Language, and Hearing Research, 2021, 64, 3416-3431.	1.6	6
39	Automatic annotation of cervical vertebrae in videofluoroscopy images via deep learning. Medical Image Analysis, 2021, 74, 102218.	11.6	6
40	Understanding differences between healthy swallows and penetration-aspiration swallows via compressive sensing of tri-axial swallowing accelerometry signals. , 2014, 9190, 91090M.		5
41	Correlating Tri-Accelerometer Swallowing Vibrations and Hyoid Bone Movement in Patients With Dysphagia. , 2016, , .		5
42	Anteriorâ€“posterior distension of maximal upper esophageal sphincter opening is correlated with high-resolution cervical auscultation signal features. Physiological Measurement, 2021, 42, 035002.	2.1	5
43	Establishing Reference Values for Temporal Kinematic Swallow Events Across the Lifespan in Healthy Community Dwelling Adults Using High-Resolution Cervical Auscultation. Dysphagia, 2022, 37, 664-675.	1.8	5
44	Improving Non-Invasive Aspiration Detection With Auxiliary Classifier Wasserstein Generative Adversarial Networks. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1263-1272.	6.3	5
45	ARTIFICIAL INTELLIGENCE AND DYSPHAGIA: NOVEL SOLUTIONS TO OLD PROBLEMS. Arquivos De Gastroenterologia, 2020, 57, 343-346.	0.8	4
46	A Preliminary Investigation of Similarities of High Resolution Cervical Auscultation Signals Between Thin Liquid Barium and Water Swallows. IEEE Journal of Translational Engineering in Health and Medicine, 2022, 10, 1-9.	3.7	4
47	Cervical Vertebral Height Approximates Hyoid Displacement in Videofluoroscopic Images of Healthy Adults. Dysphagia, 2022, 37, 1689-1696.	1.8	4
48	How Important Is Randomization of Swallows During Kinematic Analyses of Swallow Function?. American Journal of Speech-Language Pathology, 2020, 29, 1650-1654.	1.8	3
49	Characterizing Effortful Swallows from Healthy Community Dwelling Adults Across the Lifespan Using High-Resolution Cervical Auscultation Signals and MBSImP Scores: A Preliminary Study. Dysphagia, 2022, 37, 1103-1111.	1.8	2
50	The effects of compressive sensing on extracted features from tri-axial swallowing accelerometry signals. , 2016, 9857, .		1
51	Developing Viscosity Modelling for Traditional Liquids in Egypt. Folia Phoniatrica Et Logopaedica, 2018, 70, 37-43.	1.1	1
52	Exercise for Better ALS Management?. ASHA Leader, 2012, 17, .	0.1	1
53	Letter to the Editor Regarding â€œMetadeglutition? Rate of Aspiration-Related Events in Healthy Females Using a Novel Data Collection Appâ€• Perspectives of the ASHA Special Interest Groups, 0, , 1-3.	0.8	1
54	Temporal Sequence of Laryngeal Vestibule Closure and Reopening is Associated With Airway Protection. Laryngoscope, 0, , .	2.0	1

#	Article	IF	Citations
55	The Safety, Tolerability, and Impact of Respiratoryâ€“Swallow Coordination Training and Expiratory Muscle Strength Training on Pulmonary, Cough, and Swallow Function Surrogates in Amyotrophic Lateral Sclerosis. Perspectives of the ASHA Special Interest Groups, 2020, 5, 1603-1615.	0.8	0