Marc Arnela

List of Publications by Year
in descending order

25	341	933447 10	839539 18
papers	citations	h-index	g-index

26	26	26	160
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transfer matrices to characterize linear and quadratic acoustic black holes in duct terminations. Journal of Sound and Vibration, 2017, 395, 65-79.	3.9	75
2	Effects of higher order propagation modes in vocal tract like geometries. Journal of the Acoustical Society of America, 2015, 137, 832-843.	1.1	38
3	Influence of vocal tract geometry simplifications on the numerical simulation of vowel sounds. Journal of the Acoustical Society of America, 2016, 140, 1707-1718.	1.1	33
4	Effects of head geometry simplifications on acoustic radiation of vowel sounds based on time-domain finite-element simulations. Journal of the Acoustical Society of America, 2013, 134, 2946-2954.	1.1	28
5	Finite element computation of elliptical vocal tract impedances using the two-microphone transfer function method. Journal of the Acoustical Society of America, 2013, 133, 4197-4209.	1.1	23
6	Influence of lips on the production of vowels based on finite element simulations and experiments. Journal of the Acoustical Society of America, 2016, 139, 2852-2859.	1.1	21
7	A Stabilized Finite Element Method for the Mixed Wave Equation in an ALE Framework With Application to Diphthong Production. Acta Acustica United With Acustica, 2016, 102, 94-106.	0.8	18
8	Construction of an Omnidirectional Parametric Loudspeaker Consisting in a Spherical Distribution of Ultrasound Transducers. Sensors, 2018, 18, 4317.	3.8	15
9	Two-dimensional vocal tracts with three-dimensional behavior in the numerical generation of vowels. Journal of the Acoustical Society of America, 2014, 135, 369-379.	1.1	14
10	MRI-Based Vocal Tract Representations for the Three-Dimensional Finite Element Synthesis of Diphthongs. IEEE/ACM Transactions on Audio Speech and Language Processing, 2019, 27, 2173-2182.	5.8	13
11	Finite Element Synthesis of Diphthongs Using Tuned Two-Dimensional Vocal Tracts. IEEE/ACM Transactions on Audio Speech and Language Processing, 2017, 25, 2013-2023.	5.8	9
12	Finite element generation of sibilants /s/ and /z/ using random distributions of Kirchhoff vortices. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3302.	2.1	8
13	Glottal Source Contribution to Higher Order Modes in the Finite Element Synthesis of Vowels. Applied Sciences (Switzerland), 2019, 9, 4535.	2.5	6
14	Simulation of vowelâ€vowel utterances using a <scp>3D</scp> biomechanicalâ€acoustic model. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3407.	2.1	6
15	Efficient 3D Acoustic Simulation of the Vocal Tract by Combining the Multimodal Method and Finite Elements. IEEE Access, 2022, 10, 69922-69938.	4.2	6
16	Reconstruction of vocal tract geometries from biomechanical simulations. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3159.	2.1	5
17	Characterization of an omnidirectional parametric loudspeaker with exponential sine sweeps. Applied Acoustics, 2021, 182, 108268.	3.3	4
18	Synthesis of VV Utterances from Muscle Activation to Sound with a 3D Model. , 0, , .		4

#	Article	IF	Citations
19	Controlling chaotic oscillations in a symmetric two-mass model of the vocal folds. Chaos, Solitons and Fractals, 2022, 159, 112188.	5.1	4
20	Using a Biomechanical Model and Articulatory Data for the Numerical Production of Vowels. , 0, , .		3
21	Resonance tuning in vocal tract acoustics from modal perturbation analysis instead of nonlinear radiation pressure. Journal of Sound and Vibration, 2021, 493, 115826.	3.9	2
22	A Unified Numerical Simulation of Vowel Production That Comprises Phonation and the Emitted Sound. , 0, , .		2
23	A Semi-Polar Grid Strategy for the Three-Dimensional Finite Element Simulation of Vowel-Vowel Sequences. , 0, , .		2
24	Influence of tense, modal and lax phonation on the three-dimensional finite element synthesis of vowel [A]. , 0, , .		1
25	Tuned two-dimensional vocal tracts with piriform fossae for the finite element simulation of vowels. Journal of Sound and Vibration, 2022, 537, 117168.	3.9	1