Xudong Zheng

List of Publications by Year
in descending order

34 papers	773 citations	759233 12 h-index	552781 26 g-index
36 all docs	36 docs citations	36 times ranked	606 citing authors

#	Article	IF	Citations
1	Computational Modeling of Voice Production Using Excised Canine Larynx. Journal of Biomechanical Engineering, 2022, 144, .	1.3	9
2	Flow-signal correlation in seal whiskerÂarray sensing. Bioinspiration and Biomimetics, 2022, 17, 016004.	2.9	3
3	Aerodynamics and motor control of ultrasonic vocalizations for social communication in mice and rats. BMC Biology, 2022, 20, 3.	3.8	23
4	A Deep-Learning Based Generalized Empirical Flow Model of Glottal Flow During Normal Phonation. Journal of Biomechanical Engineering, 2022, , .	1.3	0
5	A computational study of the effects of vocal fold stiffness parameters on voice production. Journal of Voice, 2021, 35, 327.e1-327.e11.	1.5	5
6	Effect of Subglottic Stenosis on Vocal Fold Vibration and Voice Production Using Fluidâ€“Structureâ€“Acoustics Interaction Simulation. Applied Sciences (Switzerland), 2021, 11, 1221.	2.5	12
7	Effect of Supraglottal Acoustics on Fluidâ€“Structure Interaction During Human Voice Production. Journal of Biomechanical Engineering, 2021, 143, .	1.3	11
8	Effects of cricothyroid and thyroarytenoid interaction on voice control: Muscle activity, vocal fold biomechanics, flow, and acoustics. Journal of the Acoustical Society of America, 2021, 150, 29-42.	1.1	16
9	Vocal fold vibration mode changes due to cricothyroid and thyroarytenoid muscle interaction in a three-dimensional model of the canine larynx. Journal of the Acoustical Society of America, 2021, 150, 1176-1187.	1.1	7
10	A three-dimensional vocal fold posturing model based on muscle mechanics and magnetic resonance imaging of a canine larynx. Journal of the Acoustical Society of America, 2020, 147, 2597-2608.	1.1	23
11	A Deep Neural Network Based Glottal Flow Model for Predicting Fluid-Structure Interactions during Voice Production. Applied Sciences (Switzerland), 2020, 10, 705.	2.5	12
12	High-fidelity continuum modeling predicts avian voiced sound production. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4718-4723.	7.1	11
13	Phase-difference on seal whisker surface induces hairpin vortices in the wake to suppress force oscillation. Bioinspiration and Biomimetics, 2019, 14, 066001.	2.9	18
14	Influence of vocal fold cover layer thickness on its vibratory dynamics during voice production. Journal of the Acoustical Society of America, 2019, 146, 369-380.	1.1	6
15	An image-guided computational approach to inversely determine in vivo material properties and model flow-structure interactions of fish fins. Journal of Computational Physics, 2019, 392, 578-593.	3.8	15
16	An Integrated High-fidelity Approach for Modeling Flow-structure Interaction in Biological Propulsion and its Strong Validation. , 2018, , .		5
17	The effect of wing flexibility on sound generation of flapping wings. Bioinspiration and Biomimetics, 2018, 13, 016010.	2.9	33
18	A Numerical Study of the Sound and Force Production of Flexible Insect Wings. Fluids, 2018, 3, 87.	1.7	4

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19	Coupling between a fiber-reinforced model and a Hill-based contractile model for passive and active tissue properties of laryngeal muscles: A finite element study. Journal of the Acoustical Society of America, 2018, 144, EL248-EL253.	1.1	5
20	Effect of Longitudinal Variation of Vocal Fold Inner Layer Thickness on Fluid-Structure Interaction During Voice Production. Journal of Biomechanical Engineering, 2018, 140, .	1.3	7
21	The Effect of False Vocal Folds on Laryngeal Flow Resistance in a Tubular Three-dimensional Computational Laryngeal Model. Journal of Voice, 2017, 31, 275-281.	1.5	14
22	A finite element study on the cause of vocal fold vertical stiffness variation. Journal of the Acoustical Society of America, 2017, 141, EL351-EL356.	1.1	7
23	Computational Modeling of Fluidâ€“Structureâ€“Acoustics Interaction during Voice Production. Frontiers in Bioengineering and Biotechnology, 2017, 5, 7.	4.1	28
24	The effect of vocal fold vertical stiffness variation on voice production. Journal of the Acoustical Society of America, 2016, 140, 2856-2866.	1.1	13
25	Subject-specific computational modeling of human phonation. Journal of the Acoustical Society of America, 2014, 135, 1445-1456.	1.1	50
26	Computational Study of Hemodynamic Effects of Abnormal E/A Ratio on Left Ventricular Filling. Journal of Biomechanical Engineering, 2014, 136, 061005.	1.3	1
27	Computational Study of Effects of Tension Imbalance on Phonation in a Three-Dimensional Tubular Larynx Model. Journal of Voice, 2014, 28, 411-419.	1.5	10
28	A framework for personalization of coronary flow computations during rest and hyperemia. , 2012, 2012, 6665-8.		28
29	An integrated framework for finite-element modeling of mitral valve biomechanics from medical images: Application to MitralClip intervention planning. Medical Image Analysis, 2012, 16, 1330-1346.	11.6	94
30	Toward A Simulation-Based Tool for the Treatment of Vocal Fold Paralysis. Frontiers in Physiology, 2011, 2, 19.	2.8	40
31	A Computational Study of the Effect of False Vocal Folds on Glottal Flow and Vocal Fold Vibration During Phonation. Annals of Biomedical Engineering, 2009, 37, 625-642.	2.5	90
32	An immersed-boundary method for flowâ€“structure interaction in biological systems with application to phonation. Journal of Computational Physics, 2008, 227, 9303-9332.	3.8	155
33	Comparison of Full-Potential Propagation-Code Computations with the F-5E "Shaped Sonic Boom Experiment" Program. , 2005, , .		8
34	Prediction of Superboom Problem Using Computational Solution of Nonlinear Tricomi Equation. , 2005, , .		5