

Xudong Zheng

List of Publications by Year in descending order

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Version: 2024-02-01

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	An immersed-boundary method for flow–structure interaction in biological systems with application to phonation. <i>Journal of Computational Physics</i> , 2008, 227, 9303-9332.	3.8	155
2	An integrated framework for finite-element modeling of mitral valve biomechanics from medical images: Application to MitralClip intervention planning. <i>Medical Image Analysis</i> , 2012, 16, 1330-1346.	11.6	94
3	A Computational Study of the Effect of False Vocal Folds on Glottal Flow and Vocal Fold Vibration During Phonation. <i>Annals of Biomedical Engineering</i> , 2009, 37, 625-642.	2.5	90
4	Subject-specific computational modeling of human phonation. <i>Journal of the Acoustical Society of America</i> , 2014, 135, 1445-1456.	1.1	50
5	Toward A Simulation-Based Tool for the Treatment of Vocal Fold Paralysis. <i>Frontiers in Physiology</i> , 2011, 2, 19.	2.8	40
6	The effect of wing flexibility on sound generation of flapping wings. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 016010.	2.9	33
7	A framework for personalization of coronary flow computations during rest and hyperemia. , 2012, 2012, 6665-8.		28
8	Computational Modeling of Fluid–Structure–Acoustics Interaction during Voice Production. <i>Frontiers in Bioengineering and Biotechnology</i> , 2017, 5, 7.	4.1	28
9	A three-dimensional vocal fold posturing model based on muscle mechanics and magnetic resonance imaging of a canine larynx. <i>Journal of the Acoustical Society of America</i> , 2020, 147, 2597-2608.	1.1	23
10	Aerodynamics and motor control of ultrasonic vocalizations for social communication in mice and rats. <i>BMC Biology</i> , 2022, 20, 3.	3.8	23
11	Phase-difference on seal whisker surface induces hairpin vortices in the wake to suppress force oscillation. <i>Bioinspiration and Biomimetics</i> , 2019, 14, 066001.	2.9	18
12	Effects of cricothyroid and thyroarytenoid interaction on voice control: Muscle activity, vocal fold biomechanics, flow, and acoustics. <i>Journal of the Acoustical Society of America</i> , 2021, 150, 29-42.	1.1	16
13	An image-guided computational approach to inversely determine in vivo material properties and model flow-structure interactions of fish fins. <i>Journal of Computational Physics</i> , 2019, 392, 578-593.	3.8	15
14	The Effect of False Vocal Folds on Laryngeal Flow Resistance in a Tubular Three-dimensional Computational Laryngeal Model. <i>Journal of Voice</i> , 2017, 31, 275-281.	1.5	14
15	The effect of vocal fold vertical stiffness variation on voice production. <i>Journal of the Acoustical Society of America</i> , 2016, 140, 2856-2866.	1.1	13
16	A Deep Neural Network Based Glottal Flow Model for Predicting Fluid-Structure Interactions during Voice Production. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 705.	2.5	12
17	Effect of Subglottic Stenosis on Vocal Fold Vibration and Voice Production Using Fluid–Structure–Acoustics Interaction Simulation. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1221.	2.5	12
18	High-fidelity continuum modeling predicts avian voiced sound production. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 4718-4723.	7.1	11

#	ARTICLE	IF	CITATIONS
19	Effect of Supraglottal Acoustics on Fluid-Structure Interaction During Human Voice Production. Journal of Biomechanical Engineering, 2021, 143, .	1.3	11
20	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
21	Computational Modeling of Voice Production Using Excised Canine Larynx. Journal of Biomechanical Engineering, 2022, 144, .	1.3	9
22	Comparison of Full-Potential Propagation-Code Computations with the F-5E "Shaped Sonic Boom Experiment" Program. , 2005, , .		8
23	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
24	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
25	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
26	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
27	Prediction of Superboom Problem Using Computational Solution of Nonlinear Tricomi Equation. , 2005, , .		5
28	An Integrated High-fidelity Approach for Modeling Flow-structure Interaction in Biological Propulsion and its Strong Validation. , 2018, , .		5
29	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
30	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
31	A Numerical Study of the Sound and Force Production of Flexible Insect Wings. Fluids, 2018, 3, 87.	1.7	4
32	Flow-signal correlation in seal whisker Array sensing. Bioinspiration and Biomimetics, 2022, 17, 016004.	2.9	3
33	Computational Study of Hemodynamic Effects of Abnormal E/A Ratio on Left Ventricular Filling. Journal of Biomechanical Engineering, 2014, 136, 061005.	1.3	1
34	A Deep-Learning Based Generalized Empirical Flow Model of Glottal Flow During Normal Phonation. Journal of Biomechanical Engineering, 2022, , .	1.3	0