Lakshmi Prasad Dasi

List of Publications by Year
in descending order

52 papers	942 citations	430874 18 h-index	477307 29 g-index
54 all docs	54 docs citations	54 times ranked	882 citing authors

#	Article	IF	Citations
1	Multiple MitraClips: The balancing act between pressure gradient and regurgitation. Journal of Thoracic and Cardiovascular Surgery, 2022, 163, 1319-1327.e1.	0.8	7
2	Image Registration-Based Method for Reconstructing Transcatheter Heart Valve Geometry from Patient-Specific CT Scans. Annals of Biomedical Engineering, 2022, 50, 805-815.	2.5	3
3	Controlling the Flow Separation in Heart Valves Using Vortex Generators. Annals of Biomedical Engineering, 2022, , 1.	2.5	0
4	Simple 2-dimensional anatomic model to predict the risk of coronary obstruction during transcatheter aortic valve replacement. Journal of Thoracic and Cardiovascular Surgery, 2021, 162, 1075-1083.e1.	0.8	7
5	The hemodynamics of transcatheter aortic valves in transcatheter aortic valves. Journal of Thoracic and Cardiovascular Surgery, 2021, 161, 565-576.e2.	0.8	19
6	Commentary: Computational Fluid Dynamics in Anomalous Coronaries: Moving From Anecdote-Based to Data-Based Clinical Decision-Making. Seminars in Thoracic and Cardiovascular Surgery, 2021, 33, 168-169.	0.6	0
7	Atrial and ventricular flows across a transcatheter mitral valve. Interactive Cardiovascular and Thoracic Surgery, 2021, 33, 1-9.	1.1	3
8	Predicting leaflet thrombosis: Is the clue in the blood?. Annals of Thoracic Surgery, 2021, 112, 1727-1728.	1.3	0
9	Assessment of transfer of morphological characteristics of Anomalous Aortic Origin of a Coronary Artery from imaging to patient specific 3D Printed models: A feasibility study. Computer Methods and Programs in Biomedicine, 2021, 201, 105947.	4.7	3
10	Transcatheter Heart Valves: A Biomaterials Perspective. Advanced Healthcare Materials, 2021, 10, e2100115.	7.6	12
11	Neosinus and Sinus Flow After Self-Expanding and Balloon-Expandable Transcatheter Aortic Valve Replacement. JACC: Cardiovascular Interventions, 2021, 14, 2657-2666.	2.9	18
12	Predictive Model for Thrombus Formation After Transcatheter Valve Replacement. Cardiovascular Engineering and Technology, 2021, 12, 576-588.	1.6	14
13	A turbulence inÂvitro assessment of On-X and St Jude Medical prostheses. Journal of Thoracic and Cardiovascular Surgery, 2020, 159, 88-97.	0.8	20
14	Implications of hydrodynamic testing to guide sizing of selfâ€expanding transcatheter heart valves for valveâ€inâ€valve procedures. Catheterization and Cardiovascular Interventions, 2020, 96, E332-E340.	1.7	3
15	Modeling risk of coronary obstruction during transcatheter aortic valve replacement. Journal of Thoracic and Cardiovascular Surgery, 2020, 159, 829-838.e3.	0.8	25
16	Impact of BASILICA on Sinus and Neo-Sinus Hemodynamics after Valve-in-Valve with and without Coronary Flow. Cardiovascular Revascularization Medicine, 2020, 21, 271-276.	0.8	11
17	Differences in Pressure Recovery Between Balloon Expandable and Self-expandable Transcatheter Aortic Valves. Annals of Biomedical Engineering, 2020, 48, 860-867.	2.5	22
18	In-vitro characterization of self-expandable textile transcatheter aortic valves. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103559.	3.1	6

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19	Development of Tissue Engineered Heart Valves for Percutaneous Transcatheter Delivery in a Fetal Ovine Model. JACC Basic To Translational Science, 2020, 5, 815-828.	4.1	14
20	Surgical Aortic Valve Sizing: Imagine the Benefits of Imaging. Annals of Thoracic Surgery, 2020, 110, 1511.	1.3	0
21	Sinus Hemodynamics After Transcatheter Aortic Valve in Transcatheter Aortic Valve. Annals of Thoracic Surgery, 2020, 110, 1348-1356.	1.3	8
22	Impact of superhydrophobicity on the fluid dynamics of a bileaflet mechanical heart valve. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 110, 103895.	3.1	8
23	Fetal Transcatheter Trileaflet Heart Valve Hemodynamics: Implications of Scaling on Valve Mechanics and Turbulence. Annals of Biomedical Engineering, 2020, 48, 1683-1693.	2.5	4
24	Pilotâ€scale openâ€channel raceways and flatâ€panel photobioreactors maintain wellâ€mixed conditions under a wide range of mixing energy inputs. Biotechnology and Bioengineering, 2020, 117, 959-969.	3.3	9
25	Flow Dynamics in Anomalous Aortic Origin of a Coronary Artery in Children: Importance of the Intramural Segment. Seminars in Thoracic and Cardiovascular Surgery, 2020, , .	0.6	11
26	Commentary: Complying With the Compliance of Ross Procedure Reinforcing Grafts. Seminars in Thoracic and Cardiovascular Surgery, 2020, 32, 823-824.	0.6	3
27	Sinus Hemodynamics Variation with Tilted Transcatheter Aortic Valve Deployments. Annals of Biomedical Engineering, 2019, 47, 75-84.	2.5	32
28	Impact of patient-specific morphologies on sinus flow stasis in transcatheter aortic valve replacement: An inÂvitro study. Journal of Thoracic and Cardiovascular Surgery, 2019, 157, 540-549.	0.8	53
29	Impact of Leaflet Laceration onÂTranscatheter Aortic Valve-in-Valve Washout. JACC: Cardiovascular Interventions, 2019, 12, 1229-1237.	2.9	36
30	In vitro hemodynamic assessment of a novel polymeric transcatheter aortic valve. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 98, 163-171.	3.1	16
31	Modeling of the Instantaneous Transvalvular Pressure Gradient in Aortic Stenosis. Annals of Biomedical Engineering, 2019, 47, 1748-1763.	2.5	5
32	Leaflet Laceration to Improve Neosinus and Sinus Flow After Valve-in-Valve. Circulation: Cardiovascular Interventions, 2019, 12, e007739.	3.9	16
33	A case study on implantation strategies to mitigate coronary obstruction in a patient receiving transcatheter aortic valve replacement. Journal of Biomechanics, 2019, 89, 115-118.	2.1	12
34	Antibacterial activity on superhydrophobic titania nanotube arrays. Colloids and Surfaces B: Biointerfaces, 2018, 166, 179-186.	5.0	68
35	Sinus Hemodynamics in Representative Stenotic Native Bicuspid and Tricuspid Aortic Valves: An In-Vitro Study. Fluids, 2018, 3, 56.	1.7	19
36	Implantation Depth and Rotational Orientation Effect on Valve-in-Valve Hemodynamics and Sinus Flow. Annals of Thoracic Surgery, 2018, 106, 70-78.	1.3	49

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37	On the Significance of Systolic Flow Waveform on Aortic Valve Energy Loss. Annals of Biomedical Engineering, 2018, 46, 2102-2111.	2.5	24
38	Stented valve dynamic behavior induced by polyester fiber leaflet material in transcatheter aortic valve devices. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 86, 232-239.	3.1	22
39	Effect of severe bioprosthetic valve tissue ingrowth and inflow calcification on valve-in-valve performance. Journal of Biomechanics, 2018, 74, 171-179.	2.1	18
40	Heart Valves from Polyester Fibers vs. Biological Tissue: Comparative Study In Vitro. Annals of Biomedical Engineering, 2017, 45, 476-486.	2.5	19
41	Aortic sinus flow stasis likely in valve-in-valve transcatheter aortic valve implantation. Journal of Thoracic and Cardiovascular Surgery, 2017, 154, 32-43.e1.	0.8	54
42	Mechanisms influencing retrograde flow in the atrioventricular canal during early embryonic cardiogenesis. Journal of Biomechanics, 2016, 49, 3162-3167.	2.1	8
43	Altered mechanical state in the embryonic heart results in time-dependent decreases in cardiac function. Biomechanics and Modeling in Mechanobiology, 2015, 14, 1379-1389.	2.8	12
44	Theory to Predict Shear Stress on Cells in Turbulent Blood Flow. PLoS ONE, 2014, 9, e105357.	2.5	54
45	Energy Costs of Singular and Concomitant Pressure and Volume Overload Lesions. Cardiovascular Engineering and Technology, 2014, 5, 44-53.	1.6	1
46	Hemocompatibility and Hemodynamics of Novel Hyaluronanâ€“Polyethylene Materials for Flexible Heart Valve Leaflets. Cardiovascular Engineering and Technology, 2014, 5, 70-81.	1.6	34
47	Effect of Hypertension on the Closing Dynamics and Lagrangian Blood Damage Index Measure of the B-Datum Regurgitant Jet in a Bileaflet Mechanical Heart Valve. Annals of Biomedical Engineering, 2014, 42, 110-122.	2.5	20
48	Spatiotemporal complexity of the aortic sinus vortex. Experiments in Fluids, 2014, 55, 1770.	2.4	37
49	The Transitional Cardiac Pumping Mechanics in the Embryonic Heart. Cardiovascular Engineering and Technology, 2013, 4, 246-255.	1.6	12
50	Effect of strong anisotropy on the dissipative and non-dissipative regimes of the second-order structure function. Experiments in Fluids, 2013, 54, 1.	2.4	0
51	Intermittency and local dissipation scales under strong mean shear. Physics of Fluids, 2013, 25, .	4.0	10
52	Fluid Dynamic Assessment of Three Polymeric Heart Valves Using Particle Image Velocimetry. Annals of Biomedical Engineering, 2006, 34, 936-952.	2.5	80