Hoda Hatoum

List of Publications by Year
in descending order

54 papers	805 citations	471509 17 h-index	552781 26 g-index
61 all docs	61 docs citations	61 times ranked	547 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	Impact of calcific aortic valve disease on valve mechanics. Biomechanics and Modeling in Mechanobiology, 2022, 21, 55-77.	2.8	3
3	Flow dynamics in the sinus and downstream of third and fourth generation balloon expandable transcatheter aortic valves. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 127, 105092.	3.1	5
4	Effect of catheter ablation on the hemodynamics of the left atrium. Journal of Interventional Cardiac Electrophysiology, 2022, , 1.	1.3	0
5	Impact of blood pressure on coronary perfusion and valvular hemodynamics after aortic valve replacement. Catheterization and Cardiovascular Interventions, 2022, 99, 1214-1224.	1.7	4
6	Comparison of performance of self-expanding and balloon-expandable transcatheter aortic valves. JTCVS Open, 2022, 10, 128-139.	0.5	4
7	Effects of MitraClip Therapy on Mitral Flow Patterns and Vortex Formation: An In Vitro Study. Annals of Biomedical Engineering, 2022, 50, 680-690.	2.5	1
8	Controlling the Flow Separation in Heart Valves Using Vortex Generators. Annals of Biomedical Engineering, 2022, , 1.	2.5	0
9	A Preliminary Study on the Usage of a Data-Driven Probabilistic Approach to Predict Valve Performance Under Different Physiological Conditions. Annals of Biomedical Engineering, 2022, 50, 941-950.	2.5	2
10	Predicting hemodynamic indices in coronary artery aneurysms using response surface method: An application in Kawasaki disease. Computer Methods and Programs in Biomedicine, 2022, 224, 107007.	4.7	5
11	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
12	The hemodynamics of transcatheter aortic valves in transcatheter aortic valves. Journal of Thoracic and Cardiovascular Surgery, 2021, 161, 565-576.e2.	0.8	19
13	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
14	Atrial and ventricular flows across a transcatheter mitral valve. Interactive Cardiovascular and Thoracic Surgery, 2021, 33, 1-9.	1.1	3
15	Predicting leaflet thrombosis: Is the clue in the blood?. Annals of Thoracic Surgery, 2021, 112, 1727-1728.	1.3	0
16	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
17	IMPACT OF HYPERTENSIVE CONDITIONS AND ARTERIAL LOAD ON TRANSCATHETER AORTIC VALVE PERFORMANCE AND CORONARY PERFUSION. Journal of the American College of Cardiology, 2021, 77, 1709.	2.8	0
18	EFFECT OF ASCENDING AORTA SIZE IN TRANSCATHETER AORTIC VALVE PERFORMANCE: COMPARISON BETWEEN EVOLUT R AND SAPIEN 3. Journal of the American College of Cardiology, 2021, 77, 1768.	2.8	1

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19	TCT-259 The Impact of Stent Rotational Angle on Leaflet Thrombosis After Transcatheter Valve Replacement. Journal of the American College of Cardiology, 2021, 78, B106-B107.	2.8	0
20	Neosinus and Sinus Flow After Self-Expanding and Balloon-Expandable Transcatheter Aortic Valve Replacement. JACC: Cardiovascular Interventions, 2021, 14, 2657-2666.	2.9	18
21	Predictive Model for Thrombus Formation After Transcatheter Valve Replacement. Cardiovascular Engineering and Technology, 2021, 12, 576-588.	1.6	14
22	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
23	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
24	Modeling risk of coronary obstruction during transcatheter aortic valve replacement. Journal of Thoracic and Cardiovascular Surgery, 2020, 159, 829-838.e3.	0.8	25
25	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
26	Differences in Pressure Recovery Between Balloon Expandable and Self-expandable Transcatheter Aortic Valves. Annals of Biomedical Engineering, 2020, 48, 860-867.	2.5	22
27	In-vitro characterization of self-expandable textile transcatheter aortic valves. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103559.	3.1	6
28	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
29	Effect ofÂLeft and Right Coronary Flow Waveforms on Aortic Sinus Hemodynamics and Leaflet Shear Stress: Correlation with Calcification Locations. Annals of Biomedical Engineering, 2020, 48, 2796-2808.	2.5	9
30	Surgical Aortic Valve Sizing: Imagine the Benefits of Imaging. Annals of Thoracic Surgery, 2020, 110, 1511.	1.3	0
31	Sinus Hemodynamics After Transcatheter Aortic Valve in Transcatheter Aortic Valve. Annals of Thoracic Surgery, 2020, 110, 1348-1356.	1.3	8
32	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
33	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
34	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
35	A bench test study of bioprosthetic valve fracture performed before versus after transcatheter valve-in-valve intervention. EuroIntervention, 2020, 15, 1409-1416.	3.2	23
36	Commentary: Complying With the Compliance of Ross Procedure Reinforcing Grafts. Seminars in Thoracic and Cardiovascular Surgery, 2020, 32, 823-824.	0.6	3

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37	Sinus Hemodynamics Variation with Tilted Transcatheter Aortic Valve Deployments. Annals of Biomedical Engineering, 2019, 47, 75-84.	2.5	32
38	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
39	Impact of Leaflet Laceration onÂTranscatheter Aortic Valve-in-Valve Washout. JACC: Cardiovascular Interventions, 2019, 12, 1229-1237.	2.9	36
40	Spatiotemporal Complexity of the Aortic Sinus Vortex as a Function of Leaflet Calcification. Annals of Biomedical Engineering, 2019, 47, 1116-1128.	2.5	20
41	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
42	Modeling of the Instantaneous Transvalvular Pressure Gradient in Aortic Stenosis. Annals of Biomedical Engineering, 2019, 47, 1748-1763.	2.5	5
43	Leaflet Laceration to Improve Neosinus and Sinus Flow After Valve-in-Valve. Circulation: Cardiovascular Interventions, 2019, 12, e007739.	3.9	16
44	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
45	600.01 Impact of Basilica on Sinus and Neo-Sinus Washout After Transcatheter Aortic Valve-in-Valve. JACC: Cardiovascular Interventions, 2019, 12, S42.	2.9	0
46	Reduction of Pressure Gradient and Turbulence Using Vortex Generators in Prosthetic Heart Valves. Annals of Biomedical Engineering, 2019, 47, 85-96.	2.5	19
47	Sinus Hemodynamics in Representative Stenotic Native Bicuspid and Tricuspid Aortic Valves: An In-Vitro Study. Fluids, 2018, 3, 56.	1.7	19
48	An inÂvitro evaluation of turbulence after transcatheter aortic valve implantation. Journal of Thoracic and Cardiovascular Surgery, 2018, 156, 1837-1848.	0.8	74
49	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
50	On the Significance of Systolic Flow Waveform on Aortic Valve Energy Loss. Annals of Biomedical Engineering, 2018, 46, 2102-2111.	2.5	24
51	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
52	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
53	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
54	On the Mechanics of Transcatheter Aortic Valve Replacement. Annals of Biomedical Engineering, 2017, 45, 310-331.	2.5	69