Lyes Kadem

List of Publications by Year
in descending order

42 papers	441 citations	687363 13 h-index	752698 20 g-index
50 all docs	50 docs citations	50 times ranked	519 citing authors

#	Article	IF	Citations
1	Assessment of left heart and pulmonary circulation flow dynamics by a new pulsed mock circulatory system. Experiments in Fluids, 2010, 48, 837-850.	2.4	49
2	Effects of dynamic contact angle on numerical modeling of electrowetting in parallel plate microchannels. Microfluidics and Nanofluidics, 2010, 8, 47-56.	2.2	39
3	Cardiovascular magnetic resonance evaluation of aortic stenosis severity using single plane measurement of effective orifice area. Journal of Cardiovascular Magnetic Resonance, 2012, 14, 24.	3.3	37
4	Non-Invasive Determination of Left Ventricular Workload in Patients with Aortic Stenosis Using Magnetic Resonance Imaging and Doppler Echocardiography. PLoS ONE, 2014, 9, e86793.	2.5	35
5	Jet collisions and vortex reversal in the human left ventricle. Journal of Biomechanics, 2018, 78, 155-160.	2.1	31
6	Effect of coarctation of the aorta and bicuspid aortic valve on flow dynamics and turbulence in the aorta using particle image velocimetry. Experiments in Fluids, 2014, 55, 1.	2.4	26
7	The role of aortic compliance in determination of coarctation severity: Lumped parameter modeling, in vitro study and clinical evaluation. Journal of Biomechanics, 2015, 48, 4229-4237.	2.1	26
8	Reduced-order modeling of left ventricular flow subject to aortic valve regurgitation. Physics of Fluids, 2019, 31, .	4.0	22
9	Hemodynamic Changes following Aortic Valve Bypass: A Mathematical Approach. PLoS ONE, 2015, 10, e0123000.	2.5	21
10	Accuracy of Doppler-echocardiographic parameters for the detection of aortic bileaflet mechanical prosthetic valve dysfunction. European Heart Journal Cardiovascular Imaging, 2014, 15, 142-151.	1.2	16
11	Effect of Aortic Annulus Size and Prosthesis Oversizing on the Hemodynamics and Leaflet Bending Stress of Transcatheter Valves: An InÂVitro Study. Canadian Journal of Cardiology, 2015, 31, 1041-1046.	1.7	16
12	Material transport in the left ventricle with aortic valve regurgitation. Physical Review Fluids, 2018, 3, .	2.5	15
13	Extracting Lagrangian coherent structures in cardiovascular flows using Lagrangian descriptors. Physics of Fluids, 2021, 33, .	4.0	15
14	Color Doppler Splay: A Clue to the Presence of Significant Mitral Regurgitation. Journal of the American Society of Echocardiography, 2020, 33, 1212-1219.e1.	2.8	11
15	Experimental investigation of the flow downstream of a dysfunctional bileaflet mechanical aortic valve. Artificial Organs, 2019, 43, E249-E263.	1.9	9
16	Proper Orthogonal Decomposition Analysis of the Flow Downstream of a Dysfunctional Bileaflet Mechanical Aortic Valve. Cardiovascular Engineering and Technology, 2021, 12, 286-299.	1.6	8
17	Experimental Investigation of Louver Cooling Scheme on Gas Turbine Stator. Heat Transfer Engineering, 2016, 37, 82-105.	1.9	7
18	How pulmonary valve regurgitation after tetralogy of fallot repair changes the flow dynamics in the right ventricle: An in vitro study. Medical Engineering and Physics, 2020, 83, 48-55.	1.7	7

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19	In vitro characterization of Lagrangian fluid transport downstream of a dysfunctional bileaflet mechanical aortic valve. AIP Advances, 2020, 10, .	1.3	6
20	Effects of hemodynamic conditions and valve sizing on leaflet bending stress in selfâ€expanding transcatheter aortic valve: An in vitro study. Artificial Organs, 2020, 44, E277-E287.	1.9	6
21	Flow examination in abdominal aortic aneurysms: Reduced-order models driven by in vitro data and spectral proper orthogonal decomposition. Physics of Fluids, 2021, 33, .	4.0	6
22	Flow characteristics in a model of a left ventricle in the presence of a dysfunctional mitral mechanical heart valve. Journal of Visualization, 2020, 23, 1-8.	1.8	5
23	Are the Current Doppler Echocardiography Criteria Able to Discriminate Mitral Bileaflet Mechanical Heart Valve Malfunction? An In Vitro Study. Artificial Organs, 2016, 40, E52-E60.	1.9	4
24	Timing of Dynamic NT-proBNP and hs-cTnT Response to Exercise Challenge in Asymptomatic Children with Moderate Aortic Valve Regurgitation or Moderate Aortic Valve Stenosis. Pediatric Cardiology, 2015, 36, 1735-1741.	1.3	3
25	ANALYSIS OF DIASTOLIC VORTEX FLOW AS A MARKER OF VENTRICULAR DETERIORATION IN AORTIC REGURGITATION. Journal of the American College of Cardiology, 2017, 69, 1976.	2.8	3
26	Experimental Investigation of the Effect of Heart Rate on Flow in the Left Ventricle in Health and Diseaseâ€"Aortic Valve Regurgitation. Journal of Biomechanical Engineering, 2020, 142, .	1.3	3
27	Visualization of an imploding circular wave front and the formation of a central vertical jet. Journal of Visualization, 2011, 14, 19-22.	1.8	2
28	Impact of Mitral Regurgitation on the Flow in a Model of a Left Ventricle. Cardiovascular Engineering and Technology, 2020, 11, 708-718.	1.6	2
29	Flow Dynamics in a Model of a Left Ventricle with Different Mitral Valve Orientations. Fluids, 2021, 6, 428.	1.7	2
30	Braids in the heart: global measures of mixing for cardiovascular flows. Flow, 2022, 2, .	2.6	2
31	Numerical simulation and flow visualization using soap film of the self-organized vortex structure in the wake of an array of cylinders. Journal of Visualization, 2011, 14, 311-314.	1.8	1
32	Response to letter to the editor: â€˜Left ventricular flow in the presence of aortic regurgitationâ€™. Journal of Biomechanics, 2019, 87, 212-214.	2.1	1
33	Pulsatile twin parallel jets through a flexible orifice with application to edge-to-edge mitral valve repair. Physics of Fluids, 2020, 32, 121702.	4.0	1
34	Energy loss associated with in-vitro modeling of mitral annular calcification. PLoS ONE, 2021, 16, e0246701.	2.5	1
35	Response to: â€œColor Doppler Splay: A New Tool for the Assessment of Valvular Regurgitations?â€•by Allievi et al. Journal of the American Society of Echocardiography, 2021, 34, 1022-1023.	2.8	1
36	A semi-analytical model of heat transfer and pressure drop in annular flow regime for flow boiling in a horizontal microtube at uniform heat flux. Transactions of the Canadian Society for Mechanical Engineering, 2020, 44, 362-384.	0.8	0

#	Article	IF	Citations
37	Spectral-Clustering of Lagrangian Trajectory Graphs: Application to Abdominal Aortic Aneurysms. Cardiovascular Engineering and Technology, 2021, , 1.	1.6	0
38	10.1063/5.0021372.1. , 2020, , .		0
39	10.1063/5.0021372.4. , 2020, , .		0
40	10.1063/5.0021372.3. , 2020, , .		0
41	10.1063/5.0021372.5. , 2020, , .		0
42	10.1063/5.0021372.2. , 2020, , .		0