Zhaoming He

List of Publications by Year in Descending Order

50 papers	1,282 citations	18 h-index	35 g-index
59 ext. papers	1,417 ext. citations	2.9 avg, IF	4.54 L-index

#	Paper	IF	Citations
50	SPH Viscous Flow Around a Circular Cylinder: Impact of Viscous Formulation and Background Pressure. *International Journal of Computational Fluid Dynamics*, **2021**, 35, 451-467	1.2	0
49	Numerical study of coupled flow in blocking pulsed jet impinging on a rotating wall. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2021**, 43, 1	2	18
48	Detachment Force of the Helical Anchor in Mitral Annulus. *Medicine in Novel Technology and Devices* , **2021**, 12, 100098	2.1	
47	A Single-opening&closing Valve Tester for Direct Measurement of Closing Volume of the Heart Valve. *Cardiovascular Engineering and Technology*, **2021**, 1	2.2	
46	Mitral valve cleft gapping mechanism in functional mitral regurgitation: An in-vitro study. *Medicine in Novel Technology and Devices*, **2021**, 10, 100061	2.1	
45	Interstage difference of pressure pulsation in a three-stage electrical submersible pump. *Journal of Petroleum Science and Engineering*, **2021**, 196, 107653	4.4	43
44	Energy characteristics and optimal design of diffuser meridian in an electrical submersible pump. *Renewable Energy*, **2021**, 167, 718-727	8.1	24
43	Optimal Design of Slit Impeller for Low Specific Speed Centrifugal Pump Based on Orthogonal Test. *Journal of Marine Science and Engineering*, **2021**, 9, 121	2.4	9
42	Mechanistic study of ventricular hook anchor for heart valve replacement or repair. *Medicine in Novel Technology and Devices*, **2020**, 5, 100033	2.1	2
41	Intelligent Diagnosis of Heart Murmurs in Children with Congenital Heart Disease. *Journal of Healthcare Engineering*, **2020**, 2020, 9640821	3.7	6
40	How and where the mitral valve leaks in functional mitral regurgitation. *Medicine in Novel Technology and Devices*, **2019**, 2, 100017	2.1	1
39	Mechanical Properties and Composition of the Basal Leaflet-Annulus Region of the Tricuspid Valve. *Cardiovascular Engineering and Technology*, **2018**, 9, 217-225	2.2	9
38	Transapical Coaptation Plate for Functional Mitral Regurgitation: An In Vitro Study. *Annals of Biomedical Engineering*, **2017**, 45, 487-495	4.7	4
37	Characterization of biomechanical properties of aged human and ovine mitral valve chordae tendineae. *Journal of the Mechanical Behavior of Biomedical Materials*, **2016**, 62, 607-618	4.1	37
36	Annulus Tension on the Tricuspid Valve: An In-Vitro Study. *Cardiovascular Engineering and Technology*, **2016**, 7, 270-9	2.2	14
35	Mechanics of mitral valve edge-to-edge-repair and MitraClip procedure. *Journal of Long-Term Effects of Medical Implants*, **2015**, 25, 135-45	0.2	3
34	Numerical Simulations of High-Frequency Respiratory Flows in 2D and 3D Lung Bifurcation Models. *International Journal for Computational Methods in Engineering Science and Mechanics*, **2014**, 15, 337-344	0.7	2

33	A novel coaptation plate device for functional mitral regurgitation: an in vitro study. *Annals of Biomedical Engineering*, **2014**, 42, 2039-47	4.7	6
32	Effects of suture position on left ventricular fluid mechanics under mitral valve edge-to-edge repair. *Bio-Medical Materials and Engineering*, **2014**, 24, 155-61	1	7
31	Tension to passively cinch the mitral annulus through coronary sinus access: an ex vivo study in ovine model. *Journal of Biomechanics*, **2014**, 47, 1382-8	2.9	13
30	An elongation model of left ventricle deformation in diastole. *Computer Methods in Biomechanics and Biomedical Engineering*, **2013**, 16, 66-72	2.1	2
29	Annulus tension of the prolapsed mitral valve corrected by edge-to-edge repair. *Journal of Biomechanics*, **2012**, 45, 562-8	2.9	13
28	Mechanics of the mitral valve strut chordae insertion region. *Journal of Biomechanical Engineering*, **2010**, 132, 081004	2.1	38
27	Left Ventricular Vortex Under Mitral Valve Edge-to-Edge Repair. *Cardiovascular Engineering and Technology*, **2010**, 1, 235-243	2.2	17
26	Mitral valve annulus tension and the mechanism of annular dilation: an in-vitro study. *Journal of Heart Valve Disease*, **2010**, 19, 701-7		8
25	Hemodynamics of the mitral valve under edge-to-edge repair: an in vitro steady flow study. *Journal of Biomechanical Engineering*, **2009**, 131, 051010	2.1	7
24	In vitro stretches of the mitral valve anterior leaflet under edge-to-edge repair condition. *Journal of Biomechanical Engineering*, **2009**, 131, 111012	2.1	8
23	A novel method to measure mitral valve chordal tension. *Journal of Biomechanical Engineering*, **2009**, 131, 014501	2.1	14
22	Effects of papillary muscle position on anterior leaflet stretches under mitral valve edge-to-edge repair. *Journal of Heart Valve Disease*, **2009**, 18, 135-41		5
21	Role of annulus tension in annular dilatation. *Journal of Heart Valve Disease*, **2009**, 18, 481-7		5
20	Papillary muscle and annulus size effect on anterior and posterior annulus tension of the mitral valve: an insight into annulus dilatation. *Journal of Biomechanics*, **2008**, 41, 2524-32	2.9	15
19	Heart Valves, Mechanical **2008**, 1329-1337		
18	Effect of mitral valve strut chord cutting on marginal chord tension. *Journal of Heart Valve Disease*, **2008**, 17, 628-34		3
17	A saddle-shaped annulus reduces systolic strain on the central region of the mitral valve anterior leaflet. *Journal of Thoracic and Cardiovascular Surgery*, **2007**, 134, 1562-8	1.5	90
16	X-ray diffraction study of nanocrystalline tungsten nitride and tungsten to 31 GPa. *Journal of Applied Physics*, **2007**, 102, 013525	2.5	14

15	The material properties of the native porcine mitral valve chordae tendineae: an in vitro investigation. *Journal of Biomechanics*, **2006**, 39, 1129-35	2.9	59
14	Effects of annular size, transmitral pressure, and mitral flow rate on the edge-to-edge repair: an in vitro study. *Annals of Thoracic Surgery*, **2006**, 82, 1362-8	2.7	39
13	Design of a sterile organ culture system for the ex vivo study of aortic heart valves. *Journal of Biomechanical Engineering*, **2005**, 127, 857-61	2.1	19
12	Mitral valve function and chordal force distribution using a flexible annulus model: an in vitro study. *Annals of Biomedical Engineering*, **2005**, 33, 557-66	4.7	53
11	Normal physiological conditions maintain the biological characteristics of porcine aortic heart valves: an ex vivo organ culture study. *Annals of Biomedical Engineering*, **2005**, 33, 1158-66	4.7	27
10	In vitro dynamic strain behavior of the mitral valve posterior leaflet. *Journal of Biomechanical Engineering*, **2005**, 127, 504-11	2.1	67
9	Effects of constant static pressure on the biological properties of porcine aortic valve leaflets. *Annals of Biomedical Engineering*, **2004**, 32, 555-62	4.7	41
8	Cyclic pressure affects the biological properties of porcine aortic valve leaflets in a magnitude and frequency dependent manner. *Annals of Biomedical Engineering*, **2004**, 32, 1461-70	4.7	69
7	Mechanics of the mitral valve: in vitro studies. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2004**, 2004, 3727-9		2
6	Fluid mechanics of heart valves. *Annual Review of Biomedical Engineering*, **2004**, 6, 331-62	12	254
5	Effects of a saddle shaped annulus on mitral valve function and chordal force distribution: an in vitro study. *Annals of Biomedical Engineering*, **2003**, 31, 1171-81	4.7	105
4	Mitral leaflet geometry perturbations with papillary muscle displacement and annular dilatation: an in-vitro study of ischemic mitral regurgitation. *Journal of Heart Valve Disease*, **2003**, 12, 300-7		33
3	Effects of papillary muscle position on in-vitro dynamic strain on the porcine mitral valve. *Journal of Heart Valve Disease*, **2003**, 12, 488-94		42
2	Microflow fields in the hinge region of the CarboMedics bileaflet mechanical heart valve design. *Journal of Thoracic and Cardiovascular Surgery*, **2002**, 124, 561-74	1.5	32
1	Pressure pulsation investigation in an electrical submersible pump based on Morlet continuous wavelet transform. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*,095440622110000	1.3	2