Neelakantan Saikrishnan

List of Publications by Year
in descending order

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24	863	516215 16	610482 24
papers	citations	h-index	g-index

25	25	25	1089
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Accurate Assessment of Aortic Stenosis. Circulation, 2014, 129, 244-253.	1.6	130
2	Experimental measurement of dynamic fluid shear stress on the aortic surface of the aortic valve leaflet. Biomechanics and Modeling in Mechanobiology, 2012, 11, 171-182.	1.4	97
3	In Vitro Characterization of Bicuspid Aortic Valve Hemodynamics Using Particle Image Velocimetry. Annals of Biomedical Engineering, 2012, 40, 1760-1775.	1.3	72
4	Experimental measurement of dynamic fluid shear stress on the ventricular surface of the aortic valve leaflet. Biomechanics and Modeling in Mechanobiology, 2012, 11, 231-244.	1.4	67
5	An In Vitro Evaluation of the Impact of Eccentric Deployment on Transcatheter Aortic Valve Hemodynamics. Annals of Biomedical Engineering, 2014, 42, 1195-1206.	1.3	61
6	A Novel Left Heart Simulator for the Multi-modality Characterization of Native Mitral Valve Geometry and Fluid Mechanics. Annals of Biomedical Engineering, 2013, 41, 305-315.	1.3	49
7	Total ellipse of the heart valve: the impact of eccentric stent distortion on the regional dynamic deformation of pericardial tissue leaflets of a transcatheter aortic valve replacement. Journal of the Royal Society Interface, 2015, 12, 20150737.	1.5	45
8	In Vitro Mitral Valve Simulator Mimics Systolic Valvular Function of Chronic Ischemic Mitral Regurgitation Ovine Model. Annals of Thoracic Surgery, 2013, 95, 825-830.	0.7	36
9	Bicuspid aortic valves are associated with increased wall and turbulence shear stress levels compared to trileaflet aortic valves. Biomechanics and Modeling in Mechanobiology, 2015, 14, 577-588.	1.4	36
10	Assessment of dual plane PIV measurements in wall turbulence using DNS data. Experiments in Fluids, 2006, 41, 265-278.	1.1	33
11	Experimental Assessment of Flow Fields Associated with Heart Valve Prostheses Using Particle Image Velocimetry (PIV): Recommendations for Best Practices. Cardiovascular Engineering and Technology, 2018, 9, 273-287.	0.7	31
12	Experimental Technique of Measuring Dynamic Fluid Shear Stress on the Aortic Surface of the Aortic Valve Leaflet. Journal of Biomechanical Engineering, 2011, 133, 061007.	0.6	30
13	The congenital bicuspid aortic valve can experience high-frequency unsteady shear stresses on its leaflet surface. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H721-H731.	1.5	30
14	Reynolds number effects on scale energy balance in wall turbulence. Physics of Fluids, 2012, 24, 015101.	1.6	25
15	Micro Particle Image Velocimetry Measurements of Steady Diastolic Leakage Flow in the Hinge of a St. Jude MedicalÂ® Regentâ„¢ Mechanical Heart Valve. Annals of Biomedical Engineering, 2014, 42, 526-540.	1.3	22
16	In-Vitro Pulsatile Flow Testing of Prosthetic Heart Valves: A Round-Robin Study by the ISO Cardiac Valves Working Group. Cardiovascular Engineering and Technology, 2019, 10, 397-422.	0.7	17
17	Hemodynamics of the Boston Scientific Lotusâ„¢ Valve: An In Vitro Study. Cardiovascular Engineering and Technology, 2013, 4, 427-439.	0.7	15
18	Effect of Hinge Gap Width of a St. Jude Medical Bileaflet Mechanical Heart Valve on Blood Damage Potentialâ€"An In Vitro Micro Particle Image Velocimetry Study. Journal of Biomechanical Engineering, 2014, 136, 091008.	0.6	15

#	Article	IF	Citations
19	Accuracy of a Mitral Valve Segmentation Method Using J-Splines for Real-Time 3D Echocardiography Data. Annals of Biomedical Engineering, 2013, 41, 1258-1268.	1.3	14
20	Peak Mechanical Loads Induced in the In Vitro Edge-to-Edge Repair of Posterior Leaflet Flail. Annals of Thoracic Surgery, 2012, 94, 1446-1453.	0.7	12
21	Design of a Pulsatile Flow Facility to Evaluate Thrombogenic Potential of Implantable Cardiac Devices. Journal of Biomechanical Engineering, 2015, 137, 045001.	0.6	11
22	Isolated effect of geometry on mitral valve function forin silicomodel development. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 618-627.	0.9	8
23	Revisiting the Gorlin equation for aortic stenosis â€" Is it correctly used in clinical practice?. International Journal of Cardiology, 2013, 168, 2881-2883.	0.8	6
24	Response to Letter Regarding Article, â€œAccurate Assessment of Aortic Stenosis: A Review of Diagnostic Modalities and Hemodynamicsâ€• Circulation, 2014, 130, e135.	1.6	1