

# Kiyotaka Iwasaki

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

417  
citations

1040056

9  
h-index

839539

18  
g-index

83  
all docs

83  
docs citations

83  
times ranked

586  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomechanical Modeling to Improve Coronary Artery Bifurcation Stenting. <i>JACC: Cardiovascular Interventions</i> , 2015, 8, 1281-1296.	2.9	84
2	The effect of tendon stem/progenitor cell (TSC) sheet on the early tendon healing in a rat Achilles tendon injury model. <i>Acta Biomaterialia</i> , 2016, 42, 136-146.	8.3	61
3	Bench testing and coronary artery bifurcations: a consensus document from the European Bifurcation Club. <i>EuroIntervention</i> , 2018, 13, e1794-e1803.	3.2	28
4	Quantitative assessment of paravalvular leakage after transcatheter aortic valve replacement using a patient-specific pulsatile flow model. <i>International Journal of Cardiology</i> , 2018, 258, 313-320.	1.7	27
5	A new hypothesis on the mechanism of calcification formed on a blood-contacted polymer surface. <i>Journal of Artificial Organs</i> , 2001, 4, 74-82.	0.9	16
6	Reduction in incomplete stent apposition area caused by jailed struts after single stenting at left main bifurcation lesions: micro-CT analysis using a three-dimensional elastic bifurcated coronary artery model. <i>Cardiovascular Intervention and Therapeutics</i> , 2017, 32, 12-17.	2.3	14
7	Implications for the Establishment of Accelerated Fatigue Test Protocols for Prosthetic Heart Valves. <i>Artificial Organs</i> , 2002, 26, 420-429.	1.9	13
8	Bicuspid aortic valve morphology and aortic valvular outflow jets: an experimental analysis using an MRI-compatible pulsatile flow circulation system. <i>Scientific Reports</i> , 2021, 11, 2066.	3.3	11
9	Comparative performance analysis of interventional devices for the treatment of ischemic disease in below-the-knee lesions: a systematic review and meta-analysis. <i>Cardiovascular Intervention and Therapeutics</i> , 2022, 37, 145-157.	2.3	11
10	Development of a Polymer Bileaflet Valve to Realize a Low-Cost Pulsatile Blood Pump. <i>Artificial Organs</i> , 2003, 27, 78-83.	1.9	10
11	Investigation of adverse events associated with an off-label use of arterial stents and CE-marked iliac vein stents in the iliac vein: insights into developing a better iliac vein stent. <i>Journal of Artificial Organs</i> , 2018, 21, 254-260.	0.9	9
12	Low-temperature culturing improves survival rate of tissue-engineered cardiac cell sheets. <i>Biochemistry and Biophysics Reports</i> , 2018, 14, 89-97.	1.3	9
13	JCS/JSCVS/JATS/JSVS 2021 Guideline on Implantable Left Ventricular Assist Device for Patients With Advanced Heart Failure. <i>Circulation Journal</i> , 2022, 86, 1024-1058.	1.6	9
14	The Improved Jellyfish Valve: Durability Enhancement with Sufficient Blood Compatibility. <i>ASAIO Journal</i> , 2002, 48, 532-537.	1.6	8
15	Investigation of the influence of fluid dynamics on thrombus growth at the interface between a connector and tube. <i>Journal of Artificial Organs</i> , 2017, 20, 293-302.	0.9	8
16	Real-time visualization of thrombus formation at the interface between connectors and tubes in medical devices by using optical coherence tomography. <i>PLoS ONE</i> , 2017, 12, e0188729.	2.5	8
17	A step forward for the undulation pump total artificial heart. <i>Journal of Artificial Organs</i> , 2000, 3, 70-74.	0.9	6
18	Measuring the Contractile Force of Multilayered Human Cardiac Cell Sheets. <i>Tissue Engineering - Part C: Methods</i> , 2020, 26, 485-492.	2.1	6

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19	Deployment of stent graft in an excessively higher position above the renal artery induces a flow channel to the aneurysm in chimney endovascular aortic aneurysm repair: an in vitro study. <i>Journal of Artificial Organs</i> , 2019, 22, 200-206.	0.9	5
20	Comparison of supportive regulatory measures for pediatric medical device development in Japan and the United States. <i>Journal of Artificial Organs</i> , 2021, 24, 90-101.	0.9	5
21	Latest outcomes of transcatheter left atrial appendage closure devices and direct oral anticoagulant therapy in patients with atrial fibrillation over the past 5 years: a systematic review and meta-analysis. <i>Cardiovascular Intervention and Therapeutics</i> , 2022, 37, 725-738.	2.3	5
22	Perfusable vascular tree like construction in 3D cell-dense tissues using artificial vascular bed. <i>Microvascular Research</i> , 2022, 141, 104321.	2.5	5
23	Underfilled Balloon-Expandable Transcatheter Aortic Valve Implantation With Ad Hoc Post-Dilation Pulsatile Flow Simulation Using a Patient-Specific Three-Dimensional Printing Model. <i>Circulation Journal</i> , 2019, 83, 461-470.	1.6	4
24	The stability of flow velocity and intracoronary resistance in the intracoronary electrocardiogram-triggered pressure ratio. <i>Scientific Reports</i> , 2021, 11, 13824.	3.3	4
25	Finite Element Analysis of the Cutting Balloon With an Adequate Balloon-to-Artery Ratio for Fracturing Calcification While Preventing Perforation. <i>Circulation Reports</i> , 2021, 3, 1-8.	1.0	4
26	Intracoronary Electrocardiogram Identification of the Culprit Artery in Asymptomatic Myocardial Infarction. <i>Circulation Reports</i> , 2019, 1, 352-353.	1.0	4
27	A Comprehensive Analysis of Postmarket Surveillance Study Orders: Device Characteristics, Study Statuses, Outcomes, and Potential Contributions. <i>Therapeutic Innovation and Regulatory Science</i> , 2020, 54, 953-963.	1.6	4
28	Characteristics of anatomical difficulty for cryoballoon ablation: insights from CT. <i>Open Heart</i> , 2022, 9, e001724.	2.3	4
29	Effect of QTU prolongation on hyperemic instantaneous wave-free ratio value: a prospective single-center study. <i>Heart and Vessels</i> , 2020, 35, 909-917.	1.2	3
30	Aortic root geometry following valve-sparing root replacement with reimplantation or remodeling: experimental investigation under static continuous pressure. <i>Journal of Artificial Organs</i> , 2021, 24, 245-253.	0.9	3
31	The efficacy of sinus plication in aortic valvuloplasty for bicuspid aortic valve: experiments in a pulsatile flow simulation model. <i>European Journal of Cardio-thoracic Surgery</i> , 2021, 60, 859-864.	1.4	3
32	A three-dimensional strain measurement method in elastic transparent materials using tomographic particle image velocimetry. <i>PLoS ONE</i> , 2017, 12, e0184782.	2.5	3
33	Time-series biological responses toward decellularized bovine tendon graft and autograft for 52 consecutive weeks after rat anterior cruciate ligament reconstruction. <i>Scientific Reports</i> , 2022, 12, 6751.	3.3	3
34	Development of a Miniature Undulation Pump for the Distributed Artificial Heart. <i>Artificial Organs</i> , 2000, 24, 656-658.	1.9	2
35	One Month Survival with the Undulation Pump Total Artificial Heart in a Goat. <i>Artificial Organs</i> , 2001, 25, 69-71.	1.9	2
36	Time Series Analysis of the Effectiveness and Safety of Capsule Endoscopy between the Premarketing and Postmarketing Settings: A Meta-Analysis. <i>PLoS ONE</i> , 2016, 11, e0153662.	2.5	2

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37	In vitro flow and optical coherence tomography comparison of two bailout techniques after failed provisional stenting for bifurcation percutaneous coronary interventions. <i>Catheterization and Cardiovascular Interventions</i> , 2019, 93, E8-E16.	1.7	2
38	Finite element analysis of cutting balloon expansion in a calcified artery model of circular angle 180°: Effects of balloon-to-diameter ratio and number of blades facing calcification on potential calcification fracturing and perforation reduction. <i>PLoS ONE</i> , 2021, 16, e0251404.	2.5	2
39	Diagnostic Performance and Pressure Stability of a Novel Myocardial Ischemic Diagnostic Index—The Intracoronary-Electrocardiogram-Triggered Distal Pressure/Aortic Pressure Ratio. <i>Circulation Reports</i> , 2020, 2, 665-673.	1.0	2
40	Simultaneous comparison of thrombogenic reactions to different combinations of anticoagulants, activated clotting times, and materials. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2014, 102, 1605-1612.	3.4	1
41	Regulatory science of new technology: tendency of medical professionals' interests on silicone breast implants. <i>Journal of Artificial Organs</i> , 2016, 19, 283-288.	0.9	1
42	Analysis of the safety evaluation for premarketing clinical trials of hemodialyzer and of postmarketing safety reports of hemodialyzer in Japan and the US: insights into the construction of a sophisticated premarketing evaluation. <i>Journal of Artificial Organs</i> , 2017, 20, 62-70.	0.9	1
43	Three-Dimensional Strain Measurements of a Tubular Elastic Model Using Tomographic Particle Image Velocimetry. <i>Cardiovascular Engineering and Technology</i> , 2018, 9, 395-404.	1.6	1
44	1D14 A proposal of evaluation criteria for anti-thrombogenicity of slow continuous hemofiltration devices. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME</i> , 2015, 2015.27, 141-142.	0.0	1
45	Development of two types of novel bioreactors for decellularization and in vitro pulsatile conditioning of endothelial cells cultured on the porcine aortic valves. <i>The Proceedings of Conference of Kanto Branch</i> , 2003, 2003.9, 83-84.	0.0	1
46	A challenge to establish in vitro anti-thrombogenic test methodology for artificial organs using a novel air-contactless pulsatile simulator. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME</i> , 2004, 2004.16, 217-218.	0.0	1
47	Biodesign program introduction in Japan: promotion of entrepreneurship and viewpoints of education on medical technology innovation. <i>Journal of Artificial Organs</i> , 2022, , 1.	0.9	1
48	Method of ranking of heart valve characteristics at mitral position based on statistical model analysis. <i>Journal of Artificial Organs</i> , 2001, 4, 131-137.	0.9	0
49	305 Real-time planar spectral analysis of instantaneous high-frequency stress on blood cells behind mechanical heart valves. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME</i> , 2007, 2006.19, 60-61.	0.0	0
50	Mock circulatory system for a technology support of the cardiovascular surgery. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME</i> , 2002, 2002.14, 53-54.	0.0	0
51	Design criterion of polymer heart valves to avoid calcification. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME</i> , 2002, 2002.14, 183-184.	0.0	0
52	Development of an evaluation system for in vitro performance of coronary stents. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME</i> , 2003, 2003.15, 363-364.	0.0	0
53	Investigation of fabrication methodology to develop a low-cost pulsatile Spiral Vortex blood pump. <i>The Proceedings of Conference of Kanto Branch</i> , 2003, 2003.9, 91-92.	0.0	0
54	Development of a novel air-contactless pulsatile circuit for in vitro anti-thrombogenic tests of artificial organs. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME</i> , 2003, 2003.15, 361-362.	0.0	0

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55	Investigation of the metal mold of Spiral Vortex Pump for vacuum forming. Journal of Life Support Engineering, 2004, 16, 203-204.	0.0	0
56	Preliminary study of three dimensional flow characteristics in the Spiral Vortex blood pump using PIV measurement and numerical simulation. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2004, 2004.16, 245-246.	0.0	0
57	Investigation of in vitro blood compatibility test method of biomaterials for artificial hearts. Journal of Life Support Engineering, 2004, 16, 157-158.	0.0	0
58	Investigation of fabrication methodology to develop an inexpensive pulsatile Spiral Vortex blood pump. Journal of Life Support Engineering, 2004, 16, 155-156.	0.0	0
59	505 Three-dimensional investigation of complex pulsatile flow structures inside a Spiral Vortex Ventricular Assist Device using Stereoscopic PIV. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2006, 2005.18, 309-310.	0.0	0
60	506 Wavelet-based analysis of instantaneous high frequency stress in the vicinity of artificial heart valve using Dynamic PIV measurements. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2006, 2005.18, 311-312.	0.0	0
61	625 Development of an accelerated fatigue tester to evaluate durability performance of vascular stent. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2006, 2005.18, 427-428.	0.0	0
62	316 PIV flow visualization analysis to predict a coil compaction using an anatomically identical cerebral aneurysm model. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2007, 2006.19, 82-83.	0.0	0
63	319 Analyses of cerebral vascular diseases using CFD : Validation with PIV visualizing experiment. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2007, 2006.19, 88-89.	0.0	0
64	Development of the internal survey instrument of Spiral Vortex Pump for vacuum forming. Journal of Life Support Engineering, 2007, 19, 24-24.	0.0	0
65	315 Development of an accelerated fatigue tester to evaluate durability performance of vascular stent. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2007, 2006.19, 80-81.	0.0	0
66	306 Three-dimensional structure of the flow in Sinus of Valsalva using Stereoscopic PIV. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2007, 2006.19, 62-63.	0.0	0
67	Development of Bioreactor System for Bioengineering Three-Dimensional Myocardial Tissues. Journal of Life Support Engineering, 2009, 21, 104-109.	0.0	0
68	SY13 Non-clinical evaluation science of medical devices. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013, 2013.25, 17-18.	0.0	0
69	2C22 Comparison of scattering risk of thrombus formed around smooth and meshed inflow cannulae of a left ventricular assist device using a novel in vitro thrombogenicity test methodology. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 349-350.	0.0	0
70	C109 Finite element analysis on the influence of cyclic bend angles on coronary stent fracture. The Proceedings of the JSME Conference on Frontiers in Bioengineering, 2014, 2014.25, 75-76.	0.0	0
71	1E43 In vitro construction of three dimensional tissue with circulation system. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 159-160.	0.0	0
72	B207 Strain analysis on a self-expandable Nitinol stent deployed in superficial femoral artery. The Proceedings of the JSME Conference on Frontiers in Bioengineering, 2015, 2015.26, 113-114.	0.0	0

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73	2A35 Study on relationship between minimum horizontal cross-sectional area at anastomosis and energy loss for development of anastomosis assessment feedback system. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2015, 2015.27, 329-330.	0.0	0
74	Investigation of a novel strain measurement methodology to evaluate the strain in the aortic vessel model. The Proceedings of the JSME Conference on Frontiers in Bioengineering, 2016, 2016.27, B204.	0.0	0
75	2B25 Establishment of Non-clinical In Vitro Testing System and Methodology of Innovative Medical Devices for Approval : Facilitating Engineering Based Medicine. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2016, 2016.28, _2B25-1_-_2B25-5_.	0.0	0
76	2F13 Development of a registration method using points of skeleton for navigation in blood vessel prosthesis replacement and error assessment using clinical data. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2016, 2016.28, _2F13-1_-_2F13-5_.	0.0	0
77	2F35 Investigation of strain measurement method in elastic blood vessel model using tomographic particle image velocimetry. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2016, 2016.28, _2F35-1_-_2F35-5_.	0.0	0
78	2B14 Assessment of in vitro performance of a stentless mitral valve (Normo valve) using accelerated fatigue tests system. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2016, 2016.28, _2B14-1_-_2B14-5_.	0.0	0
79	Study on the strain distribution measurement in an aortic valve model under a transcatheter aortic valve implantation. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2017, 2017.29, 2C21.	0.0	0
80	Experimental investigation of influence of stent designs and sizes on stent apposition using a left main coronary artery bifurcation model. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2019, 2019.32, 1E23.	0.0	0