

Hiroshi Ashikaga

List of Publications by Year in descending order

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Version: 2024-02-01

125
papers

4,656
citations

109137

35
h-index

110170

64
g-index

132
all docs

132
docs citations

132
times ranked

5193
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic Resonance-Based Anatomical Analysis of Scar-Related Ventricular Tachycardia. <i>Circulation Research</i> , 2007, 101, 939-947.	2.0	199
2	Feasibility of Real-Time Magnetic Resonance Imaging for Catheter Guidance in Electrophysiology Studies. <i>Circulation</i> , 2008, 118, 223-229.	1.6	186
3	Feasibility of image-based simulation to estimate ablation target in human ventricular arrhythmia. <i>Heart Rhythm</i> , 2013, 10, 1109-1116.	0.3	184
4	Personalized virtual-heart technology for guiding the ablation of infarct-related ventricular tachycardia. <i>Nature Biomedical Engineering</i> , 2018, 2, 732-740.	11.6	184
5	Relationship between left atrial appendage morphology and stroke in patients with atrial fibrillation. <i>Heart Rhythm</i> , 2013, 10, 1843-1849.	0.3	182
6	Computationally guided personalized targeted ablation of persistent atrial fibrillation. <i>Nature Biomedical Engineering</i> , 2019, 3, 870-879.	11.6	170
7	Abnormal Sympathetic Innervation of Viable Myocardium and the Substrate of Ventricular Tachycardia After Myocardial Infarction. <i>Journal of the American College of Cardiology</i> , 2008, 51, 2266-2275.	1.2	166
8	The critical isthmus sites of ischemic ventricular tachycardia are in zones of tissue heterogeneity, visualized by magnetic resonance imaging. <i>Heart Rhythm</i> , 2011, 8, 1942-1949.	0.3	146
9	Association of Left Atrial Function and Left Atrial Enhancement in Patients With Atrial Fibrillation. <i>Circulation: Cardiovascular Imaging</i> , 2015, 8, e002769.	1.3	141
10	Myofiber Architecture of the Human Atria as Revealed by Submillimeter Diffusion Tensor Imaging. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2016, 9, e004133.	2.1	137
11	Transmural left ventricular mechanics underlying torsional recoil during relaxation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004, 286, H640-H647.	1.5	132
12	Transmural Dispersion of Myofiber Mechanics. <i>Journal of the American College of Cardiology</i> , 2007, 49, 909-916.	1.2	131
13	Characterization of acute and subacute radiofrequency ablation lesions with nonenhanced magnetic resonance imaging. <i>Heart Rhythm</i> , 2007, 4, 208-214.	0.3	98
14	Left Atrial LGE and Arrhythmia Recurrence Following Pulmonary Vein Isolation for Paroxysmal and Persistent AF. <i>JACC: Cardiovascular Imaging</i> , 2016, 9, 142-148.	2.3	94
15	A Computational Framework for Personalized Blood Flow Analysis in the Human Left Atrium. <i>Annals of Biomedical Engineering</i> , 2016, 44, 3284-3294.	1.3	92
16	Direct measurement of transmural laminar architecture in the anterolateral wall of the ovine left ventricle: new implications for wall thickening mechanics. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005, 288, H1324-H1330.	1.5	85
17	Electromechanical analysis of infarct border zone in chronic myocardial infarction. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005, 289, H1099-H1105.	1.5	77
18	Association of Left Atrial Local Conduction Velocity With Late Gadolinium Enhancement on Cardiac Magnetic Resonance in Patients With Atrial Fibrillation. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2016, 9, e002897.	2.1	77

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19	Model of reentrant ventricular tachycardia based on infarct border zone geometry predicts reentrant circuit features as determined by activation mapping. <i>Heart Rhythm</i> , 2007, 4, 1034-1045.	0.3	73
20	Association Between Left Atrial Stiffness Index and Atrial Fibrillation Recurrence in Patients Undergoing Left Atrial Ablation. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2016, 9, .	2.1	65
21	Increased rates of atrial fibrillation recurrence following pulmonary vein isolation in overweight and obese patients. <i>Journal of Cardiovascular Electrophysiology</i> , 2018, 29, 239-245.	0.8	57
22	Quantitative Tissueâ€Tracking Cardiac Magnetic Resonance (CMR) of Left Atrial Deformation and the Risk of Stroke in Patients With Atrial Fibrillation. <i>Journal of the American Heart Association</i> , 2015, 4, .	1.6	56
23	Accuracy of prediction of infarct-related arrhythmic circuits from image-based models reconstructed from low and high resolution MRI. <i>Frontiers in Physiology</i> , 2015, 6, 282.	1.3	55
24	Transmural Myocardial Mechanics During Isovolumic Contraction. <i>JACC: Cardiovascular Imaging</i> , 2009, 2, 202-211.	2.3	54
25	Multimodal Examination of Atrial Fibrillation Substrate. <i>JACC: Clinical Electrophysiology</i> , 2018, 4, 59-68.	1.3	44
26	Lack of regional association between atrial late gadolinium enhancement on cardiac magnetic resonance and atrial fibrillation rotors. <i>Heart Rhythm</i> , 2016, 13, 654-660.	0.3	43
27	Change in left atrial function predicts incident atrial fibrillation: the Multi-Ethnic Study of Atherosclerosis. <i>European Heart Journal Cardiovascular Imaging</i> , 2019, 20, 979-987.	0.5	43
28	Transmural mechanics at left ventricular epicardial pacing site. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004, 286, H2401-H2407.	1.5	41
29	Association of left atrial epicardial adipose tissue with electrogram bipolar voltage and fractionation: Electrophysiologic substrates for atrial fibrillation. <i>Heart Rhythm</i> , 2016, 13, 2333-2339.	0.3	40
30	Current management and clinical outcomes for catheter ablation of atrioventricular nodal re-entrant tachycardia. <i>Europace</i> , 2018, 20, e51-e59.	0.7	40
31	The association of baseline left atrial structure and function measured with cardiac magnetic resonance and pulmonary vein isolation outcome in patients with drug-refractory atrial fibrillation. <i>Heart Rhythm</i> , 2016, 13, 1037-1044.	0.3	39
32	Standard Ablation Versus Magnetic Resonance Imagingâ€Guided Ablation in the Treatment of Ventricular Tachycardia. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2018, 11, e005973.	2.1	39
33	The visceral pericardium: macromolecular structure and contribution to passive mechanical properties of the left ventricle. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 293, H3379-H3387.	1.5	37
34	Factors impacting complication rates for catheter ablation of atrial fibrillation from 2003 to 2015. <i>Europace</i> , 2016, 19, euw178.	0.7	35
35	Changes in regional myocardial volume during the cardiac cycle: implications for transmural blood flow and cardiac structure. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2008, 295, H610-H618.	1.5	34
36	Phrenic Nerve Injury: An Underrecognized and Potentially Preventable Complication of Pulmonary Vein Isolation Using a Wideâ€Area Circumferential Ablation Approach. <i>Journal of Cardiovascular Electrophysiology</i> , 2013, 24, 1086-1091.	0.8	32

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37	Building maps of local apparent conductivity of the epicardium with a 2-D electrophysiological model of the heart. IEEE Transactions on Biomedical Engineering, 2006, 53, 1457-1466.	2.5	31
38	Quantitative Assessment of Single-Image Super-Resolution in Myocardial Scar Imaging. IEEE Journal of Translational Engineering in Health and Medicine, 2014, 2, 1-12.	2.2	31
39	The Fibrotic Substrate in Persistent Atrial Fibrillation Patients: Comparison Between Predictions From Computational Modeling and Measurements From Focal Impulse and Rotor Mapping. Frontiers in Physiology, 2018, 9, 1151.	1.3	31
40	Predictors of electrocardiographic QT interval prolongation in men with HIV. Heart, 2019, 105, 559-565.	1.2	31
41	Electrocardiographic Impact of Myocardial Diffuse Fibrosis and Scar: MESA (Multi-Ethnic Study of Atherosclerosis). Journal of the American College of Cardiology, 2014, 64, 1033-1041.	3.6	30
42	Purkinje network and myocardial substrate at the onset of human ventricular fibrillation: implications for catheter ablation. European Heart Journal, 2022, 43, 1234-1247.	1.0	30
43	Ablation Lesion Characterization in Scarred Substrate Assessed Using Cardiac Magnetic Resonance. JACC: Clinical Electrophysiology, 2019, 5, 91-100.	1.3	29
44	Intra-Atrial Dyssynchrony During Sinus Rhythm Predicts Recurrence After the First Catheter Ablation for Atrial Fibrillation. JACC: Cardiovascular Imaging, 2019, 12, 310-319.	2.3	29
45	Periatrial Fat Quality Predicts Atrial Fibrillation Ablation Outcome. Circulation: Cardiovascular Imaging, 2019, 12, e008764.	1.3	28
46	The association of left atrial low-voltage regions on electroanatomic mapping with low attenuation regions on cardiac computed tomography perfusion imaging in patients with atrial fibrillation. Heart Rhythm, 2015, 12, 857-864.	0.3	27
47	Association between interatrial block, left atrial fibrosis, and mechanical dyssynchrony: Electrocardiography-magnetic resonance imaging correlation. Journal of Cardiovascular Electrophysiology, 2020, 31, 1719-1725.	0.8	26
48	Model of Bipolar Electrogram Fractionation and Conduction Block Associated With Activation Wavefront Direction at Infarct Border Zone Lateral Isthmus Boundaries. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 152-163.	2.1	25
49	Comparison of preexisting and ablation-induced late gadolinium enhancement on left atrial magnetic resonance imaging. Heart Rhythm, 2015, 12, 668-672.	0.3	25
50	Clinical predictors of cardiac magnetic resonance late gadolinium enhancement in patients with atrial fibrillation. Europace, 2016, 19, euw019.	0.7	25
51	The Extent of Left Atrial Low-Voltage Areas Included in Pulmonary Vein Isolation Is Associated With Freedom from Recurrent Atrial Arrhythmia. Canadian Journal of Cardiology, 2018, 34, 73-79.	0.8	25
52	Baseline and Dynamic Risk Predictors of Appropriate Implantable Cardioverter Defibrillator Therapy. Journal of the American Heart Association, 2020, 9, e017002.	1.6	25
53	Fatal arrhythmias: Another reason why doctors remain cautious about chloroquine/hydroxychloroquine for treating COVID-19. Heart Rhythm, 2020, 17, 1445-1451.	0.3	25
54	MRI Evaluation of Radiofrequency, Cryothermal, and Laser Left Atrial Lesion Formation in Patients with Atrial Fibrillation. PACE - Pacing and Clinical Electrophysiology, 2015, 38, 1317-1324.	0.5	23

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55	Mechanical dyssynchrony of the left atrium during sinus rhythm is associated with history of stroke in patients with atrial fibrillation. <i>European Heart Journal Cardiovascular Imaging</i> , 2018, 19, 433-441.	0.5	23
56	Diastolic dysfunction in volume-overload hypertrophy is associated with abnormal shearing of myolaminar sheets. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005, 288, H2603-H2610.	1.5	22
57	Initiation of a High-Frequency Jet Ventilation Strategy for Catheter Ablation for Atrial Fibrillation. <i>JACC: Clinical Electrophysiology</i> , 2018, 4, 1519-1525.	1.3	22
58	HIV Infection Is Associated With Variability in Ventricular Repolarization. <i>Circulation</i> , 2020, 141, 176-187.	1.6	22
59	Time-dependent remodeling of transmural architecture underlying abnormal ventricular geometry in chronic volume overload heart failure. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004, 287, H1994-H2002.	1.5	21
60	The Association of Pre-Existing Left Atrial Fibrosis with Clinical Variables in Patients Referred for Catheter Ablation of Atrial Fibrillation. <i>Clinical Medicine Insights: Cardiology</i> , 2014, 8s1, CMC.S15036.	0.6	21
61	Trends in Transesophageal Echocardiography Use, Findings, and Clinical Outcomes in the Era of Minimally Interrupted Anticoagulation for Atrial Fibrillation Ablation. <i>JACC: Clinical Electrophysiology</i> , 2017, 3, 329-336.	1.3	21
62	Accurate Conduction Velocity Maps and Their Association With Scar Distribution on Magnetic Resonance Imaging in Patients With Postinfarction Ventricular Tachycardias. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2020, 13, e007792.	2.1	20
63	Model of unidirectional block formation leading to reentrant ventricular tachycardia in the infarct border zone of postinfarction canine hearts. <i>Computers in Biology and Medicine</i> , 2015, 62, 254-263.	3.9	19
64	Transvenous Access to the Pericardial Space: An Approach to Epicardial Lead Implantation for Cardiac Resynchronization Therapy. <i>PACE - Pacing and Clinical Electrophysiology</i> , 2005, 28, 1018-1024.	0.5	18
65	Hemodynamic Improvement in Cardiac Resynchronization Does Not Require Improvement in Left Ventricular Rotation Mechanics. <i>Circulation: Cardiovascular Imaging</i> , 2010, 3, 456-463.	1.3	16
66	Ablation as targeted perturbation to rewire communication network of persistent atrial fibrillation. <i>PLoS ONE</i> , 2017, 12, e0179459.	1.1	16
67	Quantifying arrhythmic long QT effects of hydroxychloroquine and azithromycin with whole-heart optical mapping and simulations. <i>Heart Rhythm O2</i> , 2021, 2, 394-404.	0.6	16
68	Is human atrial fibrillation stochastic or deterministic? Insights from missing ordinal patterns and causal entropy-complexity plane analysis. <i>Chaos</i> , 2018, 28, 063130.	1.0	15
69	Heart rate increase after pulmonary vein isolation predicts freedom from atrial fibrillation at 1 year. <i>Journal of Cardiovascular Electrophysiology</i> , 2019, 30, 2818-2822.	0.8	15
70	Modelling the heart as a communication system. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20141201.	1.5	14
71	Impact of rotor temperospatial stability on acute and one-year atrial fibrillation ablation outcomes. <i>Clinical Cardiology</i> , 2017, 40, 383-389.	0.7	13
72	Associations between QT interval subcomponents, HIV serostatus, and inflammation. <i>Annals of Noninvasive Electrocardiology</i> , 2020, 25, e12705.	0.5	13

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73	Impact of number of co-existing rotors and inter-electrode distance on accuracy of rotor localization. <i>Journal of Electrocardiology</i> , 2018, 51, 82-91.	0.4	11
74	Propranolol Administration in a Patient with Thyroid Storm. <i>Annals of Internal Medicine</i> , 2000, 132, 681.	2.0	10
75	Hidden structures of information transport underlying spiral wave dynamics. <i>Chaos</i> , 2017, 27, 013106.	1.0	10
76	Impaired left atrial function predicts inappropriate shocks in primary prevention implantable cardioverter-defibrillator candidates. <i>Journal of Cardiovascular Electrophysiology</i> , 2017, 28, 796-805.	0.8	10
77	Electrocardiographic Strain Pattern Is Associated With Left Ventricular Concentric Remodeling, Scar, and Mortality Over 10 Years: The Multi-Ethnic Study of Atherosclerosis. <i>Journal of the American Heart Association</i> , 2017, 6, .	1.6	10
78	Locating Order-Disorder Phase Transition in a Cardiac System. <i>Scientific Reports</i> , 2018, 8, 1967.	1.6	10
79	Characterization of the Electrophysiologic Remodeling of Patients With Ischemic Cardiomyopathy by Clinical Measurements and Computer Simulations Coupled With Machine Learning. <i>Frontiers in Physiology</i> , 2021, 12, 684149.	1.3	10
80	Regional function analysis of left atrial appendage using motion estimation CT and risk of stroke in patients with atrial fibrillation. <i>European Heart Journal Cardiovascular Imaging</i> , 2016, 17, 788-796.	0.5	9
81	Rotors. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2017, 10, .	2.1	9
82	Inter-scale information flow as a surrogate for downward causation that maintains spiral waves. <i>Chaos</i> , 2018, 28, 075306.	1.0	9
83	Association of Rate-Dependent Conduction Block Between Eccentric Coronary Sinus to Left Atrial Connections With Inducible Atrial Fibrillation and Flutter. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2017, 10, .	2.1	8
84	Quantifying left atrial structure and function using single-plane tissue-tracking cardiac magnetic resonance. <i>Magnetic Resonance Imaging</i> , 2017, 42, 130-138.	1.0	8
85	Geodesic Based Registration of Sensor Data and Anatomical Surface Image Data. <i>Annals of Biomedical Engineering</i> , 2007, 35, 1771-1781.	1.3	6
86	Origin of the Electrocardiographic U Wave: Effects of M Cells and Dynamic Gap Junction Coupling. <i>Annals of Biomedical Engineering</i> , 2010, 38, 1060-1070.	1.3	6
87	Quantitative Assessment of Atrial Regional Function Using Motion Estimation Computed Tomography. <i>Journal of Computer Assisted Tomography</i> , 2014, 38, 773-778.	0.5	6
88	Association of Longitudinal Changes in NT-proBNP With Changes in Left Atrial Volume and Function: MESA. <i>American Journal of Hypertension</i> , 2021, 34, 626-635.	1.0	6
89	Cine cardiac magnetic resonance to predict ventricular arrhythmia (CERTAINTY). <i>Scientific Reports</i> , 2021, 11, 22683.	1.6	6
90	Prevention of atrial fibrillation: another good reason to recommend statins to women?. <i>Heart</i> , 2009, 95, 693-694.	1.2	5

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91	Vectors through a cross-sectional image (VCI): A visualization method for four-dimensional motion analysis for cardiac computed tomography. <i>Journal of Cardiovascular Computed Tomography</i> , 2017, 11, 468-473.	0.7	5
92	Motion estimation for cardiac functional analysis using two x-ray computed tomography scans. <i>Medical Physics</i> , 2017, 44, 4677-4686.	1.6	5
93	Relation of Electrocardiographic Left Atrial Abnormalities to Risk of Stroke in Patients with Atrial Fibrillation. <i>American Journal of Cardiology</i> , 2018, 122, 242-247.	0.7	5
94	Causal Scale of Rotors in a Cardiac System. <i>Frontiers in Physics</i> , 2018, 6, .	1.0	5
95	Short- and long-term associations of atrial fibrillation catheter ablation with left atrial structure and function: A cardiac magnetic resonance study. <i>Journal of Cardiovascular Electrophysiology</i> , 2021, 32, 316-324.	0.8	5
96	Association between human immunodeficiency virus serostatus and the prevalence of atrial fibrillation. <i>Medicine (United States)</i> , 2021, 100, e26663.	0.4	4
97	Response by Zghaib et al to Letter Regarding Article, "Standard Ablation Versus Magnetic Resonance Imaging-Guided Ablation in the Treatment of Ventricular Tachycardia". <i>Circulation: Arrhythmia and Electrophysiology</i> , 2018, 11, e006413.	2.1	3
98	On the nature of delays allowing anatomical re-entry involving the Purkinje network: a simulation study. <i>Europace</i> , 2021, 23, i71-i79.	0.7	3
99	False dyssynchrony: problem with image-based cardiac functional analysis using x-ray computed tomography. <i>Proceedings of SPIE</i> , 2017, , .	0.8	3
100	Early Signs of Critical Slowing Down in Heart Surface Electrograms of Ventricular Fibrillation Victims. <i>Lecture Notes in Computer Science</i> , 2020, , 334-347.	1.0	3
101	Safety and Efficacy of Atrial Fibrillation Ablation in Young Patients. <i>Journal of Atrial Fibrillation</i> , 2013, 6, 915.	0.5	3
102	In Vivo Validation of Longitudinal "Circumferential Area Change Ratio to Estimate Myofiber Shortening in the Heart. <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 1391-1397.	2.5	2
103	Projection-based motion estimation for cardiac functional analysis with high temporal resolution: a proof-of-concept study with digital phantom experiment. <i>Proceedings of SPIE</i> , 2017, , .	0.8	2
104	Scale-invariant structures of spiral waves. <i>Computers in Biology and Medicine</i> , 2019, 104, 291-298.	3.9	2
105	Mechanism of spontaneous initiation of ventricular fibrillation in patients with implantable defibrillators. <i>Journal of Cardiovascular Electrophysiology</i> , 2020, 31, 2415-2424.	0.8	2
106	Ventricular ectopy and arrhythmia by HIV serostatus, viremia, and CD4+ cell count. <i>Aids</i> , 2021, 35, 846-849.	1.0	2
107	Extrapolation of Ventricular Activation Times From Sparse Electroanatomical Data Using Graph Convolutional Neural Networks. <i>Frontiers in Physiology</i> , 2021, 12, 694869.	1.3	2
108	Blood Coagulation and Atherothrombosis. , 2004, , 498-518.		2

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109	Intra-Atrial Dyssynchrony Using Cardiac Magnetic Resonance to Quantify Tissue Remodeling in Patients with Atrial Fibrillation. <i>Arquivos Brasileiros De Cardiologia</i> , 2019, 112, 441-450.	0.3	2
110	Estimating Local Apparent Conductivity with a 2-D Electrophysiological Model of the Heart. <i>Lecture Notes in Computer Science</i> , 2005, , 256-266.	1.0	1
111	Prospects for Gene Therapy for the Fibrosed Heart: Targeting Regulators of Extracellular Matrix Turnover. , 2005, , 343-354.		1
112	AB36-2. <i>Heart Rhythm</i> , 2006, 3, S74.	0.3	1
113	Utility of Ezetimibe. <i>American Journal of Cardiology</i> , 2009, 103, 1321-1322.	0.7	1
114	Reprint of 'Model of unidirectional block formation leading to reentrant ventricular tachycardia in the infarct border zone of postinfarction canine hearts'. <i>Computers in Biology and Medicine</i> , 2015, 65, 256-266.	3.9	1
115	<i>Biotechnology and Cardiovascular Medicine: Recombinant Protein Therapy.</i> , 1996, , 1-15.		1
116	Acute Pulmonary Vein Reconnection after Ablation using Contact-force Sensing Catheters: Incidence, Timing, and Ablation Lesion Characteristics.. <i>Journal of Atrial Fibrillation</i> , 2018, 11, 2084.	0.5	1
117	Transvenous access to the pericardial space: A novel approach to epicardial lead implantation for cardiac resynchronization therapy. <i>Heart Rhythm</i> , 2005, 2, S161-S162.	0.3	0
118	YI1-2. <i>Heart Rhythm</i> , 2006, 3, S106.	0.3	0
119	Mechanical insights into transmural dispersion of electrical sequence. <i>Journal of Electrocardiology</i> , 2006, 39, S31.	0.4	0
120	<i>Imaging of Myocardial Mechanics.</i> , 0, , 328-335.		0
121	<i>Coronary Restenosis.</i> , 2002, , 455-469.		0
122	A Statistical Approach for Detecting Tubular Structures in Myocardial Infarct Scars. <i>Lecture Notes in Computer Science</i> , 2009, , 114-123.	1.0	0
123	MR-Based, Patient-Specific Computational Simulation to Recapitulate Scar-Related Ventricular Tachycardia. <i>Journal of Arrhythmia</i> , 2011, 27, YIAC_3.	0.5	0
124	<i>CT and MRI for Electrophysiology.</i> , 2014, , 595-603.		0
125	1E32 Personalized Left Atrial Blood Flow Analysis Using Computational Fluid Dynamics. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME</i> , 2016, 2016.28, _1E32-1_-_1E32-4_.	0.0	0