Henry J Duff

List of Publications by Year
in descending order

119 papers	5,931 citations	76326 40 h-index	76900 74 g-index
119 all docs	119 docs citations	119 times ranked	6034 citing authors

#	Article	IF	Citations
1	Flecainide prevents catecholaminergic polymorphic ventricular tachycardia in mice and humans. Nature Medicine, 2009, 15, 380-383.	30.7	539
2	Noninvasive Risk Assessment Early After a Myocardial Infarction. Journal of the American College of Cardiology, 2007, 50, 2275-2284.	2.8	316
3	Carvedilol and its new analogs suppress arrhythmogenic store overloadâ€“induced Ca2+ release. Nature Medicine, 2011, 17, 1003-1009.	30.7	216
4	Inflammasome-Independent NLRP3 Augments TGF-Î² Signaling in Kidney Epithelium. Journal of Immunology, 2013, 190, 1239-1249.	0.8	202
5	A Randomized Clinical Trial of the Noninvasive and Invasive Approaches to Drug Therapy of Ventricular Tachycardia. New England Journal of Medicine, 1987, 317, 1681-1687.	27.0	197
6	Developmental Changes in the Delayed Rectifier K ⁺ Channels in Mouse Heart. Circulation Research, 1996, 79, 79-85.	4.5	194
7	Arrhythmogenic right ventricular cardiomyopathy/dysplasia clinical presentation and diagnostic evaluation: Results from the North American Multidisciplinary Study. Heart Rhythm, 2009, 6, 984-992.	0.7	192
8	Electrophysiological Characterization of an Alternatively Processed ERG K ⁺ Channel in Mouse and Human Hearts. Circulation Research, 1997, 81, 719-726.	4.5	180
9	The ryanodine receptor store-sensing gate controls Ca2+ waves and Ca2+-triggered arrhythmias. Nature Medicine, 2014, 20, 184-192.	30.7	172
10	The Nlrp3 inflammasome promotes myocardial dysfunction in structural cardiomyopathy through interleukinâ€1Î². Experimental Physiology, 2013, 98, 462-472.	2.0	150
11	Caffeine induces Ca2+ release by reducing the threshold for luminal Ca2+ activation of the ryanodine receptor. Biochemical Journal, 2008, 414, 441-452.	3.7	147
12	Mitochondrial NLRP3 Protein Induces Reactive Oxygen Species to Promote Smad Protein Signaling and Fibrosis Independent from the Inflammasome. Journal of Biological Chemistry, 2014, 289, 19571-19584.	3.4	120
13	Reduction in defibrillator shocks with an implantable device combining antitachycardia pacing and shock therapy. Journal of the American College of Cardiology, 1991, 18, 145-151.	2.8	118
14	Role of magnetic resonance imaging in arrhythmogenic right ventricular dysplasia: Insights from the North American arrhythmogenic right ventricular dysplasia (ARVD/C) study. American Heart Journal, 2008, 155, 147-153.	2.7	107
15	Macrophage Uptake of Necrotic Cell DNA Activates the AIM2 Inflammasome to Regulate a Proinflammatory Phenotype in CKD. Journal of the American Society of Nephrology: JASN, 2018, 29, 1165-1181.	6.1	107
16	Beta-blocker use and survival in patients with ventricular fibrillation or symptomatic ventricular tachycardia: the antiarrhythmics versus implantable defibrillators (AVID) trial. Journal of the American College of Cardiology, 1999, 34, 325-333.	2.8	103
17	Developmental Changes in Transient Outward Current in Mouse Ventricle. Circulation Research, 1997, 81, 120-127.	4.5	98
18	Removal of FKBP12.6 Does Not Alter the Conductance and Activation of the Cardiac Ryanodine Receptor or the Susceptibility to Stress-induced Ventricular Arrhythmias. Journal of Biological Chemistry, 2007, 282, 34828-34838.	3.4	94

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19	Comparison of biphasic and monophasic shocks for defibrillation using a nonthoracotomy system. American Journal of Cardiology, 1993, 71, 197-202.	1.6	92
20	Direct Effects of Empagliflozin on Extracellular Matrix Remodelling in Human Cardiac Myofibroblasts: Novel Translational Clues to Explain EMPA-REG OUTCOME Results. Canadian Journal of Cardiology, 2020, 36, 543-553.	1.7	89
21	Combined Receptor and Ligand-Based Approach to the Universal Pharmacophore Model Development for Studies of Drug Blockade to the hERG1 Pore Domain. Journal of Chemical Information and Modeling, 2011, 51, 463-474.	5.4	88
22	A computational model of induced pluripotent stemâ€cell derived cardiomyocytes incorporating experimental variability from multiple data sources. Journal of Physiology, 2019, 597, 4533-4564.	2.9	87
23	Novel Gain-of-Function Mechanism in K ⁺ Channelâ€"Related Long-QT Syndrome:. Circulation Research, 2000, 86, 507-513.	4.5	81
24	In vivotemporal and spatial distribution of depolarization and repolarization and the illusive murine T wave. Journal of Physiology, 2004, 555, 267-279.	2.9	74
25	Effect of coronary angioplasty on precordial QT dispersion. American Journal of Cardiology, 1997, 79, 1339-1342.	1.6	70
26	Modeling of Open, Closed, and Open-Inactivated States of the hERG1 Channel: Structural Mechanisms of the State-Dependent Drug Binding. Journal of Chemical Information and Modeling, 2012, 52, 2760-2774.	5.4	68
27	Programmed electrical stimulation studies for ventricular tachycardia induction in humans. I. The role of ventricular functional refractoriness in tachycardia induction. Journal of the American College of Cardiology, 1986, 8, 567-575.	2.8	66
28	Effect of stimulation rate, sarcomere length and Ca 2+ on force generation by mouse cardiac muscle. Journal of Physiology, 2002, 544, 817-830.	2.9	66
29	Phospholamban Knockout Breaks Arrhythmogenic Ca ²⁺ Waves and Suppresses Catecholaminergic Polymorphic Ventricular Tachycardia in Mice. Circulation Research, 2013, 113, 517-526.	4.5	65
30	Selective Knockout of Mouse ERG1 B Potassium Channel Eliminates I Kr in Adult Ventricular Myocytes and Elicits Episodes of Abrupt Sinus Bradycardia. Molecular and Cellular Biology, 2003, 23, 1856-1862.	2.3	62
31	Overexpression of calcineurin in mouse causes sudden cardiac death associated with decreased density of K+ channels. Cardiovascular Research, 2003, 57, 320-332.	3.8	59
32	Increased Precordial QTc Dispersion Predicts Ventricular Fibrillation During Acute Myocardial Infarction * *This report was supported by the Heart and Stroke Foundation f Alberta, Calgary, Alberta, Canada.. American Journal of Cardiology, 1996, 78, 706-708.	1.6	58
33	Ivabradine prolongs phase 3 of cardiac repolarization and blocks the hERG1 (KCNH2) current over a concentration-range overlapping with that required to block HCN4. Journal of Molecular and Cellular Cardiology, 2015, 85, 71-78.	1.9	57
34	Short-coupled ventricular fibrillation represents a distinct phenotype among latent causes of unexplained cardiac arrest: a report from the CASPER registry. European Heart Journal, 2021, 42, 2827-2838.	2.2	54
35	Exaggerated block of hERG (KCNH2) and prolongation of action potential duration by erythromycin at temperatures between 37Â°C and 42Â°C. Heart Rhythm, 2005, 2, 860-866.	0.7	52
36	Homozygous Missense N629D hERG (KCNH2) Potassium Channel Mutation Causes Developmental Defects in the Right Ventricle and Its Outflow Tract and Embryonic Lethality. Circulation Research, 2008, 103, 1483-1491.	4.5	50

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37	Clinical Pharmacokinetics of Propafenone. Clinical Pharmacokinetics, 1991, 21, 1-10.	3.5	48
38	Structural refinement of the hERG1 pore and voltageâ€sensing domains with ROSETTAâ€membrane and molecular dynamics simulations. Proteins: Structure, Function and Bioinformatics, 2010, 78, 2922-2934.	2.6	47
39	Glucocorticoid Regulation of Cardiac K ⁺ Currents and L-Type Ca ²⁺ Current in Neonatal Mice. Circulation Research, 1999, 85, 168-173.	4.5	45
40	Age-dependent response of the electrocardiogram to K⁺ channel blockers in mice. American Journal of Physiology - Cell Physiology, 2000, 278, C73-C80.	4.6	45
41	Blockade of HERG cardiac K+ current by antifungal drug miconazole. British Journal of Pharmacology, 2005, 144, 840-848.	5.4	40
42	Interactions of H562 in the S5 Helix with T618 and S621 in the Pore Helix Are Important Determinants of hERG1 Potassium Channel Structure and Function. Biophysical Journal, 2009, 96, 3600-3610.	0.5	40
43	An International Multicenter Evaluation of Type 5 Long QT Syndrome. Circulation, 2020, 141, 429-439.	1.6	39
44	Hypomagnesemia: Characterization of a model of sudden cardiac death. Journal of the American College of Cardiology, 1996, 27, 1771-1776.	2.8	38
45	Characterization of a Unique Form of Arrhythmic Cardiomyopathy Caused by Recessive Mutation in LEMD2. JACC Basic To Translational Science, 2019, 4, 204-221.	4.1	37
46	Calmodulin kinase II accelerates L-type Ca2+current recovery from inactivation and compensates for the direct inhibitory effect of [Ca2+]iin rat ventricular myocytes. Journal of Physiology, 2006, 574, 509-518.	2.9	34
47	Skeletal and Cardiac Ryanodine Receptors Exhibit Different Responses to Ca2+ Overload and Luminal Ca2+. Biophysical Journal, 2007, 92, 2757-2770.	0.5	33
48	Detection of entrapped intracardiac air with intraoperative echocardiography. American Journal of Cardiology, 1980, 46, 255-260.	1.6	31
49	Role of the pH in state-dependent blockade of hERG currents. Scientific Reports, 2016, 6, 32536.	3.3	31
50	Selectivity filter modalities and rapid inactivation of the hERG1 channel. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2795-2804.	7.1	31
51	Structure-Guided Topographic Mapping and Mutagenesis to Elucidate Binding Sites for the Human Ether-a-Go-Go-Related Gene 1 Potassium Channel (KCNH2) Activator NS1643. Journal of Pharmacology and Experimental Therapeutics, 2012, 342, 441-452.	2.5	29
52	Effects of left ventricular dysfunction on the circadian variation of ventricular premature complexes in healed myocardial infarction. American Journal of Cardiology, 1992, 69, 1009-1014.	1.6	28
53	Cell Therapy Limits Myofibroblast Differentiation and Structural Cardiac Remodeling. Circulation: Heart Failure, 2012, 5, 349-356.	3.9	28
54	Suppression of ryanodine receptor function prolongs Ca2+ release refractoriness and promotes cardiac alternans in intact hearts. Biochemical Journal, 2016, 473, 3951-3964.	3.7	28

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55	Drug therapy for ventricular tachyarrhythmias: How many electropharmacologic trials are appropriate?. Journal of the American College of Cardiology, 1991, 17, 391-396.	2.8	27
56	NS1643 Interacts around L529 of hERG to Alter Voltage Sensor Movement on the Path to Activation. Biophysical Journal, 2015, 108, 1400-1413.	0.5	27
57	Programmed electrical stimulation studies for ventricular tachycardia induction in humans. II. Comparison of indwelling electrode catheter and daily catheter replacement. Journal of the American College of Cardiology, 1986, 8, 576-581.	2.8	26
58	Drug response at electropharmacologic study in patients with ventricular tachyarrhythmias: The importance of ventricular refractoriness. Journal of the American College of Cardiology, 1991, 17, 914-920.	2.8	26
59	Comparison of atrial overdrive pacing with and without extrastimuli for termination of atrial flutter. American Journal of Cardiology, 1992, 70, 463-467.	1.6	26
60	Induction of heart rate and blood pressure turbulence in the electrophysiologic laboratory. American Journal of Cardiology, 2002, 90, 1098-1102.	1.6	26
61	Impact of stirred suspension bioreactor culture on the differentiation of murine embryonic stem cells into cardiomyocytes. BMC Cell Biology, 2011, 12, 53.	3.0	25
62	Determinants of Isoform-Specific Gating Kinetics of hERG1 Channel: Combined Experimental and Simulation Study. Frontiers in Physiology, 2018, 9, 207.	2.8	25
63	Comparison of the effects of placebo and encainide on programmed electrical stimulation and ventricular arrhythmia frequency. American Journal of Cardiology, 1982, 50, 305-312.	1.6	24
64	The Pore-Lipid Interface: Role of Amino-Acid Determinants of Lipophilic Access by Ivabradine to the hERG1 Pore Domain. Molecular Pharmacology, 2019, 96, 259-271.	2.3	24
65	Kinetic Model for NS1643 Drug Activation of WT and L529I Variants of Kv11.1 (hERG1) Potassium Channel. Biophysical Journal, 2015, 108, 1414-1424.	0.5	23
66	Definition of Predicted Effective Antiarrhythmic Drug Therapy for Ventricular Tachyarrhythmias by the Electrophysiologic Study Approach: Randomized Comparison of Patient Response Criteria. Journal of the American College of Cardiology, 1997, 30, 1346-1353.	2.8	22
67	Beneficial effects of statin therapy for prevention of atrial fibrillation following DDDR pacemaker implantation. European Heart Journal, 2008, 29, 1873-1880.	2.2	22
68	Hierarchical Regulation of Wound Healing by NOD-Like Receptors in Cardiovascular Disease. Antioxidants and Redox Signaling, 2015, 22, 1176-1187.	5.4	21
69	Time to arrhythmic, ischemic, and heart failure events: Exploratory analyses to elucidate mechanisms of adverse drug effects in the Cardiac Arrhythmia Suppression Trial. American Heart Journal, 1995, 130, 71-79.	2.7	20
70	Antiarrhythmic Drug Effects on QT Interval Dispersion in Patients Undergoing Electropharmacologic Testing for Ventricular Tachycardia and Fibrillation. American Journal of Cardiology, 1998, 81, 588-593.	1.6	19
71	Intravenous quinidine: Relations among concentration, tachyarrhythmia suppression and electrophysiologic actions with inducible sustained ventricular tachycardia. American Journal of Cardiology, 1985, 55, 92-97.	1.6	18
72	Clinical and Electrophysiologic Predictors of Ventricular Tachyarrhythmia Recurrence in Patients with Implantable Cardioverter Defibrillators. Journal of Cardiovascular Electrophysiology, 2003, 14, 492-498.	1.7	18

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73	Randomized Controlled Trial of Fixed Rate Versus Rate Responsive Pacing After Radiofrequency Atrioventricular Junction Ablation:. Journal of Cardiovascular Electrophysiology, 2003, 14, 1163-1170.	1.7	18
74	Impact of atrial antitachycardia pacing and atrial pace prevention therapies on atrial fibrillation burden over long-term follow-up. Europace, 2009, 11, 1041-1047.	1.7	18
75	Structure Driven Design of Novel Human Ether-A-Go-Go-Related-Gene Channel (hERG1) Activators. PLoS ONE, 2014, 9, e105553.	2.5	16
76	Rehabilitating drug-induced long-QT promoters: In-silico design of hERG-neutral cisapride analogues with retained pharmacological activity. BMC Pharmacology & Toxicology, 2014, 15, 14.	2.4	16
77	Toward Reducing hERG Affinities for DAT Inhibitors with a Combined Machine Learning and Molecular Modeling Approach. Journal of Chemical Information and Modeling, 2021, 61, 4266-4279.	5.4	15
78	Effect of oral combination therapy with mexiletine and quinidine on left and right ventricular function. American Heart Journal, 1988, 115, 1030-1036.	2.7	14
79	Contribution of quinidine metabolites to electrophysiologic responses in human subjects. Clinical Pharmacology and Therapeutics, 1989, 46, 352-358.	4.7	14
80	Propafenone Disposition in Renal Insufficiency and Renal Failure. Journal of Clinical Pharmacology, 1989, 29, 112-113.	2.0	14
81	A randomized clinical trial of the noninvasive and invasive approaches to drug therapy for ventricular tachycardia: Long-term follow-up of the calgary trial. Progress in Cardiovascular Diseases, 1996, 38, 377-384.	3.1	14
82	Role of Mutation and Pharmacologic Block of Human KCNH2 in Vasculogenesis and Fetal Mortality. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 420-428.	4.8	14
83	Long-term Reproducibility of Ventricular Tachycardia Induction in Patients With Implantable Cardioverter/Defibrillators. Circulation, 1995, 91, 2605-2613.	1.6	14
84	Hemodialysis Removal of Propafenone. Pharmacotherapy, 1989, 9, 331-333.	2.6	12
85	Risks of developing supraventricular and ventricular tachyarrhythmias after implantation of a cardioverter-defibrillator, and timing the activation of arrhythmia termination therapies. American Journal of Cardiology, 1993, 71, 565-568.	1.6	12
86	[3H]Dofetilide Binding to Cardiac Myocytes: Modulation by Extracellular Potassium. Journal of Molecular and Cellular Cardiology, 1997, 29, 183-191.	1.9	12
87	Heart block in mice overexpressing calcineurin but not NF-AT3. Cardiovascular Research, 2004, 64, 488-495.	3.8	12
88	iNOS in cardiac myocytes plays a critical role in death in a murine model of hypertrophy induced by calcineurin. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H1122-H1131.	3.2	12
89	Genetic Determinants of Hereditary Bradyarrhythmias: A Contemporary Review of a Diverse Group of Disorders. Canadian Journal of Cardiology, 2017, 33, 758-767.	1.7	11
90	Control of ventricular preexcitation and associated arrhythmias by encainide. American Heart Journal, 1981, 102, 794-797.	2.7	10

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91	[K+]o-dependent change in conformation of the HERG1 long QT mutation N629D channel results in partial reversal of the in vitro disease phenotype. Cardiovascular Research, 2003, 57, 642-650.	3.8	10
92	Polymorphisms in multiple genes are associated with resting heart rate in a stepwise allele-dependent manner. Heart Rhythm, 2008, 5, 694-700.	0.7	10
93	Prolonged repolarization and triggered activity induced by adenoviral expression of HERG N629D in cardiomyocytes derived from stem cells. Cardiovascular Research, 2004, 61, 268-277.	3.8	9
94	Lipid regulation of hERG1 channel function. Nature Communications, 2021, 12, 1409.	12.8	9
95	Transmural temporospatial left ventricular activation during pacing from different sites: potential implications for optimal pacing. Cardiovascular Research, 2007, 77, 81-88.	3.8	8
96	Mechanism of hypotensive transients associated with abrupt bradycardias in conscious rabbits. Canadian Journal of Cardiology, 2007, 23, 721-726.	1.7	8
97	Concentration-response relationships of disopyramide in patients with ventricular tachycardia. Clinical Pharmacology and Therapeutics, 1989, 45, 542-547.	4.7	7
98	Regulation of Expression of the [3H]-Dofetilide Binding Site Associated with the Delayed Rectifier K+Channel by Dexamethasone in Neonatal Mouse Ventricle. Journal of Molecular and Cellular Cardiology, 1997, 29, 1959-1965.	1.9	7
99	Telemetry-Documented, Pace-Terminable Ventricular Tachycardia in Patients With Ventricular Fibrillation. American Journal of Cardiology, 1998, 81, 235-238.	1.6	6
100	Paced QT Dispersion and QT Morphology After Radiofrequency Atrioventricular Junction Ablation:. PACE - Pacing and Clinical Electrophysiology, 2003, 26, 662-668.	1.2	6
101	Allosteric Coupling Between Drug Binding and the Aromatic Cassette in the Pore Domain of the hERG1 Channel: Implications for a State-Dependent Blockade. Frontiers in Pharmacology, 2020, 11, 914.	3.5	6
102	Prolonged Sinus Node Recovery Time in Humans After the Intracoronary Administration of a Nitric Oxide Synthase Inhibitor. Journal of Cardiovascular Pharmacology, 1999, 34, 1-6.	1.9	6
103	Characteristics of patients with nonfatal cardiac arrest 3 to 180 days after acute myocardial infarction. American Journal of Cardiology, 1993, 72, 753-758.	1.6	5
104	Reversible Dilated Cardiomyopathy Caused by a High Burden of Ventricular Arrhythmias in Andersen-Tawil Syndrome. Canadian Journal of Cardiology, 2016, 32, 1576.e15-1576.e18.	1.7	5
105	Refinement of a cryo-EM structure of hERG: Bridging structure and function. Biophysical Journal, 2021, 120, 738-748.	0.5	5
106	Quinidine pharmacodynamics in patients with arrhythmia: Effects of left ventricular function. Journal of the American College of Cardiology, 1995, 25, 989-994.	2.8	4
107	Use-dependent electrophysiologic effects of amiodarone in coronary artery disease and inducible ventricular tachycardia. American Journal of Cardiology, 1992, 70, 598-604.	1.6	2
108	Biochemical and biophysical studies of the interaction of class I antiarrhythmic drugs with the cardiac sodium channel. Drug Development Research, 1994, 33, 277-294.	2.9	2

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109	Precordial QT dispersion does not predict inducibility of ventricular tachyarrhythmias at post-revascularization electrophysiologic study. Journal of Interventional Cardiac Electrophysiology, 2002, 6, 25-33.	1.3	2
110	Transcainide: biochemical evidence for state-dependent interaction with the class I antiarrhythmic drug receptor. European Journal of Pharmacology, 1991, 203, 51-58.	3.5	1
111	Conduction time oscillations precede the spontaneous termination of human atrioventricular reciprocating tachycardia. Journal of Interventional Cardiac Electrophysiology, 2000, 4, 231-239.	1.3	1
112	hERG: The long and short of it. Heart Rhythm, 2008, 5, 591-592.	0.7	1
113	Auto-Entrainment Risk Assessment in Heart Failure. Circulation: Arrhythmia and Electrophysiology, 2013, 6, 129-136.	4.8	1
114	Dissociative States: hERG Channel (Kv11.1) Modulators That Enhance Dissociation of Drugs From Their Blocking Receptor. Circulation: Arrhythmia and Electrophysiology, 2016, 9, e004003.	4.8	1
115	Dynamic Clamp. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 1012-1013.	4.8	0
116	In response to Melgari et al. â€œhERG potassium channel inhibition by ivabradine requires channel gatingâ€• Journal of Molecular and Cellular Cardiology, 2015, 87, 192-193.	1.9	0
117	Ankyrin-B Defects. Circulation: Cardiovascular Genetics, 2017, 10, .	5.1	0
118	-Using the Gene to Reconstruct the Human LEMD2 Mutation Associated with Hutterite-type Cataract/Cardiomyopathy. MicroPublication Biology, 2020, 2020, .	0.1	0
119	D. George Wyse, MD, PhD, FRCPC, FHRS (1941â€“2022). Heart Rhythm, 2022, 19, 513-514.	0.7	0