Marcel Ag G Van Der Heyden

List of Publications by Year in descending order

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130 papers

4,645 citations

30 h-index 63 g-index

134 all docs

134 docs citations

times ranked

134

5712 citing authors

#	Article	IF	CITATIONS
1	Differentiation of Human Embryonic Stem Cells to Cardiomyocytes. Circulation, 2003, 107, 2733-2740.	1.6	1,091
2	TGF- \hat{l}^21 induces efficient differentiation of human cardiomyocyte progenitor cells into functional cardiomyocytes in vitro. Stem Cell Research, 2008, 1, 138-149.	0.3	214
3	Dominant missense mutations in ABCC9 cause Cantú syndrome. Nature Genetics, 2012, 44, 793-796.	9.4	184
4	Cardiac cell–cell junctions in health and disease: Electrical versus mechanical coupling. Journal of Molecular and Cellular Cardiology, 2009, 47, 23-31.	0.9	169
5	Twenty one years of P19 cells: what an embryonal carcinoma cell line taught us about cardiomyocyte differentiation. Cardiovascular Research, 2003, 58, 292-302.	1.8	164
6	Remodeling of the cardiac sodium channel, connexin43, and plakoglobin at the intercalated disk in patients with arrhythmogenic cardiomyopathy. Heart Rhythm, 2013, 10, 412-419.	0.3	130
7	The immature electrophysiological phenotype of iPSC-CMs still hampers in vitro drug screening: Special focus on I K1., 2018, 183, 127-136.		130
8	Grayanotoxin Poisoning: â€~Mad Honey Disease' and Beyond. Cardiovascular Toxicology, 2012, 12, 208-215.	1.1	115
9	Molecular aspects of adrenergic modulation of cardiac L-type Ca channels. Cardiovascular Research, 2005, 65, 28-39.	1.8	104
10	Reorganized PKA-AKAP associations in the failing human heart. Journal of Molecular and Cellular Cardiology, 2012, 52, 511-518.	0.9	75
11	Beat-to-beat variability of repolarization as a new biomarker for proarrhythmia in vivo. Heart Rhythm, 2012, 9, 1718-1726.	0.3	74
12	Sphingosine Kinase Interacting Protein is an Aâ€Kinase Anchoring Protein Specific for Type I cAMPâ€Dependent Protein Kinase. ChemBioChem, 2010, 11, 963-971.	1.3	70
13	A Small Novel A-Kinase Anchoring Protein (AKAP) That Localizes Specifically Protein Kinase A-Regulatory Subunit I (PKA-RI) to the Plasma Membrane. Journal of Biological Chemistry, 2012, 287, 43789-43797.	1.6	67
14	Barium toxicity and the role of the potassium inward rectifier current. Clinical Toxicology, 2014, 52, 584-593.	0.8	66
15	P19 embryonal carcinoma cells: a suitable model system for cardiac electrophysiological differentiation at the molecular and functional level. Cardiovascular Research, 2003, 58, 410-422.	1.8	61
16	Epigenetics: DNA demethylation promotes skeletal myotube maturation. FASEB Journal, 2011, 25, 3861-3872.	0.2	59
17	Comparison of the I _{Kr} blockers moxifloxacin, dofetilide and Eâ€4031 in five screening models of proâ€arrhythmia reveals lack of specificity of isolated cardiomyocytes. British Journal of Pharmacology, 2012, 165, 467-478.	2.7	58
18	Drugs and trafficking of ion channels: a new proâ€errhythmic threat on the horizon?. British Journal of Pharmacology, 2008, 153, 406-409.	2.7	57

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19	Short-term variability of repolarization predicts ventricular tachycardia and sudden cardiac death in patients with structural heart disease: A comparison with QT variability index. Heart Rhythm, 2011, 8, 1584-1590.	0.3	54
20	The mammalian K _{IR} 2.x inward rectifier ion channel family: expression pattern and pathophysiology. Acta Physiologica, 2010, 199, 243-256.	1.8	53
21	Molecular aspects of adrenergic modulation of the transient outward current. Cardiovascular Research, 2006, 71, 430-442.	1.8	46
22	Hyperpolarization Induces Differentiation in Human Cardiomyocyte Progenitor Cells. Stem Cell Reviews and Reports, 2010, 6, 178-185.	5.6	43
23	Expression of the Electrophysiological System During Murine Embryonic Stem Cell Cardiac Differentiation. Cellular Physiology and Biochemistry, 2003, 13, 263-270.	1.1	42
24	The antiâ€protozoal drug pentamidine blocks K _{IR} 2.xâ€mediated inward rectifier current by entering the cytoplasmic pore region of the channel. British Journal of Pharmacology, 2010, 159, 1532-1541.	2.7	42
25	Drug-Induced Torsade de Pointes Arrhythmias in the Chronic AV Block Dog Are Perpetuated by Focal Activity. Circulation: Arrhythmia and Electrophysiology, 2011, 4, 566-576.	2.1	41
26	A P19Cl6 GFP reporter line to quantify cardiomyocyte differentiation of stem cells International Journal of Developmental Biology, 2004, 48, 47-55.	0.3	41
27	Lysosome mediated Kir2.1 breakdown directly influences inward rectifier current density. Biochemical and Biophysical Research Communications, 2008, 367, 687-692.	1.0	40
28	Selectivity in Enrichment of cAMP-dependent Protein Kinase Regulatory Subunits Type I and Type II and Their Interactors Using Modified cAMP Affinity Resins. Molecular and Cellular Proteomics, 2009, 8, 1016-1028.	2.5	39
29	Efficient and specific cardiac IK1 inhibition by a new pentamidine analogue. Cardiovascular Research, 2013, 99, 203-214.	1.8	36
30	Nicotine intoxication by e-cigarette liquids: a study of case reports and pathophysiology. Clinical Toxicology, 2020, 58, 1-8.	0.8	35
31	Inhibition of cardiomyocyte automaticity by electrotonic application of inward rectifier current from Kir2.1 expressing cells. Medical and Biological Engineering and Computing, 2006, 44, 537-542.	1.6	34
32	Selective late sodium current inhibitor GSâ€458967 suppresses Torsades de Pointes by mostly affecting perpetuation but not initiation of the arrhythmia. British Journal of Pharmacology, 2018, 175, 2470-2482.	2.7	32
33	Cardiomyocytes From Human and Mouse Embryonic Stem Cells. Methods in Molecular Medicine, 2007, 140, 249-272.	0.8	31
34	Robust antiâ€arrhythmic efficacy of verapamil and flunarizine against dofetilideâ€induced TdP arrhythmias is based upon a shared and a different mode of action. British Journal of Pharmacology, 2010, 161, 162-175.	2.7	31
35	Connexin43 repression following epithelium-to-mesenchyme transition in embryonal carcinoma cells requires Snail1 transcription factor. Differentiation, 2007, 75, 208-218.	1.0	30
36	Short-Lasting Episodes of Torsade de Pointes in the Chronic Atrioventricular Block Dog Model Have a Focal Mechanism, While Longer-Lasting Episodes AreÂMaintained by Re-Entry. JACC: Clinical Electrophysiology, 2017, 3, 1565-1576.	1.3	30

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37	Foetal and adult cardiomyocyte progenitor cells have different developmental potential. Journal of Cellular and Molecular Medicine, 2010, 14, 861-870.	1.6	29
38	Review of case reports on hyperkalemia induced by dietary intake: not restricted to chronic kidney disease patients. European Journal of Clinical Nutrition, 2019, 73, 38-45.	1.3	29
39	Fraud and misconduct in science: the stem cell seduction. Netherlands Heart Journal, 2009, 17, 25-29.	0.3	28
40	Exploring Chemical Substructures Essential for hERG K ⁺ Channel Blockade by Synthesis and Biological Evaluation of Dofetilide Analogues. ChemMedChem, 2009, 4, 1722-1732.	1.6	27
41	Carvedilol inhibits Kir2.3 channels by interference with PIP2-channel interaction. European Journal of Pharmacology, 2011, 668, 72-77.	1.7	26
42	The Actin Binding Domain of the Epidermal Growth Factor Receptor Is Required for EGF-Stimulated Tissue Invasion. Experimental Cell Research, 1997, 234, 521-526.	1.2	23
43	Highâ€Rate Pacing Reduces Variability of Repolarization and Prevents Repolarizationâ€Dependent Arrhythmias in Dogs With Chronic AV Block. Journal of Cardiovascular Electrophysiology, 2010, 21, 1384-1391.	0.8	23
44	Inhibiting the clathrin-mediated endocytosis pathway rescues KIR2.1 downregulation by pentamidine. Pflugers Archiv European Journal of Physiology, 2013, 465, 247-259.	1.3	23
45	Dehydroevodiamine and hortiamine, alkaloids from the traditional Chinese herbal drug Evodia rutaecarpa, are IKr blockers with proarrhythmic effects in vitro and in vivo. Pharmacological Research, 2018, 131, 150-163.	3.1	23
46	Calmodulin/CaMKII inhibition improves intercellular communication and impulse propagation in the heart and is antiarrhythmic under conditions when fibrosis is absent. Cardiovascular Research, 2016, 111, 410-421.	1.8	23
47	Regulatory Roles of the Ubiquitin-Proteasome System in Cardiomyocyte Apoptosis. Current Molecular Medicine, 2010, 10, 1-13.	0.6	22
48	Structureâ€"Affinity Relationships (SARs) and Structureâ€"Kinetics Relationships (SKRs) of K _v 11.1 Blockers. Journal of Medicinal Chemistry, 2015, 58, 5916-5929.	2.9	22
49	Human cardiomyocyte progenitor cell-derived cardiomyocytes display a maturated electrical phenotype. Journal of Molecular and Cellular Cardiology, 2010, 48, 254-260.	0.9	21
50	A Systematic Evaluation of Protein Kinase A–A-Kinase Anchoring Protein Interaction Motifs. Biochemistry, 2015, 54, 11-21.	1.2	21
51	Identification of an intracellular domain of the EGF receptor required for high-affinity binding of EGF. FEBS Letters, 1997, 410, 265-268.	1.3	20
52	Sorting of Ligand-activated Epidermal Growth Factor Receptor to Lysosomes Requires Its Actin-binding Domain. Journal of Biological Chemistry, 2004, 279, 11562-11569.	1.6	20
53	Anesthesia and Arrhythmogenesis in the Chronic Atrioventricular Block Dog Model. Journal of Cardiovascular Pharmacology, 2010, 55, 601-608.	0.8	20
54	Inhibition of lysosomal degradation rescues pentamidine-mediated decreases of KIR2.1 ion channel expression but not that of Kv11.1. European Journal of Pharmacology, 2011, 652, 96-103.	1.7	20

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55	The inward rectifier current inhibitor PAâ€6 terminates atrial fibrillation and does not cause ventricular arrhythmias in goat and dog models. British Journal of Pharmacology, 2017, 174, 2576-2590.	2.7	20
56	Disease Associated Mutations in KIR Proteins Linked to Aberrant Inward Rectifier Channel Trafficking. Biomolecules, 2019, 9, 650.	1.8	20
57	Mechanisms for Kir channel inhibition by quinacrine: acute pore block of Kir2.x channels and interference in PIP2 interaction with Kir2.x and Kir6.2 channels. Pflugers Archiv European Journal of Physiology, 2011, 462, 505-517.	1.3	19
58	Deciphering hERG channels: Molecular basis of the rapid component of the delayed rectifier potassium current. Journal of Molecular and Cellular Cardiology, 2012, 53, 369-374.	0.9	19
59	Cardiac ion channel trafficking defects and drugs. , 2013, 139, 24-31.		19
60	The toxicology of zinc chloride smoke producing bombs and screens. Clinical Toxicology, 2017, 55, 167-174.	0.8	19
61	Xenopus connexins: how frogs bridge the gap. Differentiation, 2005, 73, 330-340.	1.0	18
62	Geographical distribution of plakophilin-2 mutation prevalence in patients with arrhythmogenic cardiomyopathy. Netherlands Heart Journal, 2012, 20, 234-239.	0.3	18
63	The canine chronic atrioventricular block model in cardiovascular preclinical drug research. British Journal of Pharmacology, 2022, 179, 859-881.	2.7	18
64	Pro-arrhythmogenic potential of immature cardiomyocytes is triggered by low coupling and cluster size. Cardiovascular Research, 2006, 71, 704-714.	1.8	16
65	Beta-, Not Alpha-Adrenergic Stimulation Enhances Conduction Velocity in Cultures of Neonatal Cardiomyocytes. Circulation Journal, 2007, 71, 973-981.	0.7	16
66	Structureâ€activity relationships of pentamidineâ€affected ion channel trafficking and dofetilide mediated rescue. British Journal of Pharmacology, 2013, 169, 1322-1334.	2.7	16
67	Short-term Variability of Repolarization Is Superior to Other Repolarization Parameters in the Evaluation of Diverse Antiarrhythmic Interventions in the Chronic Atrioventricular Block Dog. Journal of Cardiovascular Pharmacology, 2017, 69, 398-407.	0.8	16
68	LUF7244, an allosteric modulator/activator of K _v 11.1 channels, counteracts dofetilideâ€induced torsades de pointes arrhythmia in the chronic atrioventricular block dog model. British Journal of Pharmacology, 2019, 176, 3871-3885.	2.7	16
69	Epidermal growth factor-induced activation and translocation of c-Src to the cytoskeleton depends on the actin binding domain of the EGF-receptor. Biochimica Et Biophysica Acta - Molecular Cell Research, 1997, 1359, 211-221.	1.9	15
70	Beat-to-Beat Variability in Preload Unmasks Latent Risk of Torsade de Pointes in Anesthetized Chronic Atrioventricular Block Dogs. Circulation Journal, 2016, 80, 1336-1345.	0.7	15
71	Toward specific cardiac IK1 modulators for in vivo application: Old drugs point the way. Heart Rhythm, 2011, 8, 1076-1080.	0.3	14
72	PA-6 inhibits inward rectifier currents carried by V93I and D172N gain-of-function KIR2.1 channels, but increases channel protein expression. Journal of Biomedical Science, 2017, 24, 44.	2.6	14

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73	A Heart too Drunk to Drive; AV Block following Acute Alcohol Intoxication. Chinese Journal of Physiology, 2016, 59, 1-8.	0.4	14
74	Connexin43 expression during Xenopus development. Mechanisms of Development, 2001, 108, 217-220.	1.7	13
75	Reduced plakoglobin immunoreactivity in arrhythmogenic cardiomyopathy: methodological considerations. Cardiovascular Pathology, 2013, 22, 314-318.	0.7	13
76	Vernakalant is devoid of proarrhythmic effects in the complete AV block dog model. European Journal of Pharmacology, 2013, 720, 49-54.	1.7	13
77	High-potency block of Kir4.1 channels by pentamidine: Molecular basis. European Journal of Pharmacology, 2017, 815, 56-63.	1.7	13
78	Rewiring the Heart: Stem Cell Therapy to Restore Normal Cardiac Excitability and Conduction. Current Stem Cell Research and Therapy, 2009, 4, 23-33.	0.6	12
79	Class <scp>III</scp> antiarrhythmic drugs amiodarone and dronedarone impair <scp>K_{IR}</scp> 2.1 backward trafficking. Journal of Cellular and Molecular Medicine, 2017, 21, 2514-2523.	1.6	12
80	Istaroxime, a positive inotropic agent devoid of proarrhythmic properties in sensitive chronic atrioventricular block dogs. Pharmacological Research, 2018, 133, 132-140.	3.1	12
81	Inhibition of Cardiac Inward Rectifier Currents by Cationic Amphiphilic Drugs. Current Molecular Medicine, 2013, 13, 1284-1298.	0.6	12
82	Connexin43 orthologues in vertebrates: phylogeny from fish to man. Development Genes and Evolution, 2004, 214, 261-266.	0.4	11
83	Pharmacological exploration of the resting membrane potential reserve: Impact on atrial fibrillation. European Journal of Pharmacology, 2016, 771, 56-64.	1.7	11
84	Glibenclamide and HMR1098 normalize Cantú syndromeâ€associated gainâ€ofâ€function currents. Journal of Cellular and Molecular Medicine, 2019, 23, 4962-4969.	1.6	11
85	Experimental Mapping of the Canine KCNJ2 and KCNJ12 Gene Structures and Functional Analysis of the Canine KIR2.2 ion Channel. Frontiers in Physiology, 2012, 3, 9.	1.3	10
86	Cardiac Arrhythmias and Antiarrhythmic Drugs: An Autophagic Perspective. Frontiers in Physiology, 2018, 9, 127.	1.3	10
87	LUF7244 plus Dofetilide Rescues Aberrant Kv11.1 Trafficking and Produces Functional IKv11.1. Molecular Pharmacology, 2020, 97, 355-364.	1.0	10
88	Does vitamin B12 deficiency explain psychiatric symptoms in recreational nitrous oxide users? A narrative review. Clinical Toxicology, 2021, 59, 947-955.	0.8	10
89	Insights in KIR2.1 channel structure and function by an evolutionary approach; cloning and functional characterization of the first reptilian inward rectifier channel KIR2.1, derived from the California kingsnake (Lampropeltis getula californiae). Biochemical and Biophysical Research Communications. 2014, 452, 992-997.	1.0	9
90	A 2015 focus on preventing drug-induced arrhythmias. Expert Review of Cardiovascular Therapy, 2016, 14, 245-253.	0.6	9

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91	AVâ€Block and Conduction Slowing Prevail Over TdP Arrhythmias in the Methoxamineâ€Sensitized Proâ€Arrhythmic Rabbit Model. Journal of Cardiovascular Electrophysiology, 2015, 26, 82-89.	0.8	8
92	The 1-h fraud detection challenge. Naunyn-Schmiedeberg's Archives of Pharmacology, 2021, 394, 1633-1640.	1.4	8
93	Spotlight on stem cells?makes old hearts fresh. Cardiovascular Research, 2003, 58, 241-245.	1.8	6
94	Cloning and functional characterization of a novel connexin expressed in somites of Xenopus laevis. Developmental Dynamics, 2005, 233, 864-871.	0.8	6
95	The hidden secrets of the hibernator's heart may protect against arrhythmias. Heart Rhythm, 2005, 2, 976-978.	0.3	6
96	Cloning, embryonic expression, and functional characterization of two novel connexins from Xenopus laevis. Biochemical and Biophysical Research Communications, 2006, 349, 855-862.	1.0	6
97	Personalized medicine and the role of induced pluripotent stem cells. Cardiovascular Research, 2012, 95, 395-396.	1.8	6
98	Bilateral Successive Cranial Cruciate Ligament Rupture Treated by Extracapsular Stabilization Surgery in a Pet Rabbit (Oryctolagus cuniculus). Journal of Exotic Pet Medicine, 2010, 19, 245-248.	0.2	5
99	Efficacy of pentamidine analogue 6 in dogs with chronic atrial fibrillation. Journal of Veterinary Internal Medicine, 2018, 32, 1549-1554.	0.6	5
100	Computational Identification of Novel Kir6 Channel Inhibitors. Frontiers in Pharmacology, 2019, 10, 549.	1.6	5
101	Towards the Development of AgoKirs: New Pharmacological Activators to Study Kir2.x Channel and Target Cardiac Disease. International Journal of Molecular Sciences, 2020, 21, 5746.	1.8	5
102	Regulated Expression of the X. tropicalis Connexin43 Promoter. Cell Communication and Adhesion, 2001, 8, 293-298.	1.0	4
103	Mesenchymal Stem Cells Repair Conduction Block. Journal of the American College of Cardiology, 2006, 48, 219-220.	1.2	4
104	Cloning, sequence analysis and phylogeny of connexin43 isolated from American black bear heart. DNA Sequence, 2007, 18, 380-384.	0.7	4
105	The secrets of hibernators' cardiac conduction reserve. Heart Rhythm, 2008, 5, 1597-1598.	0.3	4
106	Severe Bradycardia Increases the Incidence and Severity of Torsade de Pointes Arrhythmias by Augmenting Preexistent Spatial Dispersion of Repolarization in the CAVB Dog Model. Frontiers in Physiology, 2021, 12, 642083.	1.3	4
107	Verapamil as an antiarrhythmic agent in congestive heart failure: hopping from rabbit to human?. British Journal of Pharmacology, 2012, 166, 554-556.	2.7	3
108	Finding Inward Rectifier Channel Inhibitors: Why and How?. Frontiers in Pharmacology, 2012, 2, 95.	1.6	3

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109	Molecular Regulation of Cardiac Inward Rectifier Potassium Channels by Pharmacologic Agents. , 2014, , 129-137.		3
110	Preventing Publication of Falsified and Fabricated Data: Roles of Scientists, Editors, Reviewers, and Readers. Journal of Cardiovascular Pharmacology, 2017, 69, 65-70.	0.8	3
111	Response to the letter from Warren et al Cardiovascular Research, 2017, 113, 1799-1800.	1.8	3
112	Identification of a PEST Sequence in Vertebrate KIR2.1 That Modifies Rectification. Frontiers in Physiology, 2019, 10, 863.	1.3	3
113	Electrophysiology of hiPSC-Cardiomyocytes Co-Cultured with HEK Cells Expressing the Inward Rectifier Channel. International Journal of Molecular Sciences, 2021, 22, 6621.	1.8	3
114	The clinical course and treatment of black mamba (<i>Dendroaspis polylepis)</i> envenomations: a narrative review. Clinical Toxicology, 2021, 59, 860-868.	0.8	3
115	Commentary: Reciprocal Modulation of IK1–INa Extends Excitability in Cardiac Ventricular Cells. Frontiers in Physiology, 2016, 7, 647.	1.3	2
116	Commentary: Autonomic Modulation in Patients with Heart Failure Increases Beat-to-Beat Variability of Ventricular Action Potential Duration. Frontiers in Physiology, 2017, 8, 459.	1.3	2
117	Editorial: Ion Channel Trafficking and Cardiac Arrhythmias. Frontiers in Physiology, 2018, 9, 1254.	1.3	2
118	Quantitative Analysis of the Cytoskeleton's Role in Inward Rectifier KIR2.1 Forward and Backward Trafficking. Frontiers in Physiology, 2021, 12, 812572.	1.3	2
119	Development of IKATP Ion Channel Blockers Targeting Sulfonylurea Resistant Mutant KIR6.2 Based Channels for Treating DEND Syndrome. Frontiers in Pharmacology, 2021, 12, 814066.	1.6	2
120	A New In Vitro Coâ€Culture Model Using Magnetic Forceâ€Based Nanotechnology. Journal of Cellular Physiology, 2016, 231, 2249-2256.	2.0	1
121	Drug-likeness of linear pentamidine analogues and their impact on the hERG K ⁺ channel – correlation with structural features. RSC Advances, 2019, 9, 38355-38371.	1.7	1
122	Culturing and Differentiation of Embryonic and Adult Stem Cells for Heart Research and Transplantation Therapy., 2005,, 592-609.		0
123	Connexin isoform switching in stem cells undergoing epithelium-to-mesenchyme transition: connexin43 is a direct target of Snail1 transcription factor. Journal of Molecular and Cellular Cardiology, 2006, 40, 989.	0.9	0
124	Stem Cells and Cardiomyocytes. , 2006, , 133-155.		0
125	Short Term Variability of Repolarization Predicts Ventricular Tachycardia and Sudden Cardiac Death in Patients with Structural Heart Disease. Heart Rhythm, 2010, 7, 1720-1721.	0.3	0
126	Commentary: Golgin-97 Targets Ectopically Expressed Inward Rectifying Potassium Channel, Kir2.1, to the Trans-Golgi Network in COS-7 Cells. Frontiers in Physiology, 2018, 9, 1401.	1.3	0

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127	Sex hormones and jumping heart beats. Journal of Cardiovascular Electrophysiology, 2019, 30, 950-951.	0.8	0
128	Commentary: Increased Beat-to-Beat Variability of T-Wave Heterogeneity Measured From Standard 12-Lead Electrocardiogram Is Associated With Sudden Cardiac Death: A Case-Control Study. Frontiers in Physiology, 2020, 11, 598314.	1.3	0
129	Inhibition of Cardiomyocyte Automaticity by Electrotonic Application of Inward Rectifier Current from Kir2.1 Expressing Cells. Series in Biomedical Engineering, 2007, , 94-104.	0.5	0
130	Impact Factor of the Chinese Journal of Physiology in 2009: Meet the Readers. Chinese Journal of Physiology, 2010, 53, 268-269.	0.4	0