Diederik Kuster

List of Publications by Year
in descending order

91 papers	2,078 citations	236833 25 h-index	265120 42 g-index
92 all docs	92 docs citations	92 times ranked	2725 citing authors

#	Article	IF	Citations
1	Perturbed Length-Dependent Activation in Human Hypertrophic Cardiomyopathy With Missense Sarcomeric Gene Mutations. Circulation Research, 2013, 112, 1491-1505.	2.0	191
2	Contractile Dysfunction Irrespective of the Mutant Protein in Human Hypertrophic Cardiomyopathy With Normal Systolic Function. Circulation: Heart Failure, 2012, 5, 36-46.	1.6	127
3	Cardiac Microvascular Endothelial Enhancement of Cardiomyocyte Function Is Impaired by Inflammation and RestoredÂby Empagliflozin. JACC Basic To Translational Science, 2019, 4, 575-591.	1.9	125
4	Î²â€adrenergic receptor signalling and its functional consequences in the diseased heart. European Journal of Clinical Investigation, 2016, 46, 362-374.	1.7	96
5	Contribution of Impaired Parasympathetic Activity to Right Ventricular Dysfunction and Pulmonary Vascular Remodeling in Pulmonary Arterial Hypertension. Circulation, 2018, 137, 910-924.	1.6	83
6	Towards standardization of echocardiography for the evaluation of left ventricular function in adult rodents: a position paper of the ESC Working Group on Myocardial Function. Cardiovascular Research, 2021, 117, 43-59.	1.8	72
7	Synergistic role of ADP and Ca²⁺ in diastolic myocardial stiffness. Journal of Physiology, 2015, 593, 3899-3916.	1.3	60
8	Proteomic and Functional Studies Reveal Detyrosinated Tubulin as Treatment Target in Sarcomere Mutation-Induced Hypertrophic Cardiomyopathy. Circulation: Heart Failure, 2021, 14, e007022.	1.6	58
9	Disturbed cardiac mitochondrial and cytosolic calcium handling in a metabolic riskâ€related rat model of heart failure with preserved ejection fraction. Acta Physiologica, 2020, 228, e13378.	1.8	51
10	MicroRNA transcriptome profiling in cardiac tissue of hypertrophic cardiomyopathy patients with MYBPC3 mutations. Journal of Molecular and Cellular Cardiology, 2013, 65, 59-66.	0.9	49
11	Hypertrophic Cardiomyopathy: A Vicious Cycle Triggered by Sarcomere Mutations and Secondary Disease Hits. Antioxidants and Redox Signaling, 2019, 31, 318-358.	2.5	49
12	GSK3Î² Phosphorylates Newly Identified Site in the Proline-Alanineâ€“Rich Region of Cardiac Myosinâ€“Binding Protein C and Alters Cross-Bridge Cycling Kinetics in Human. Circulation Research, 2013, 112, 633-639.	2.0	48
13	Sex Differences at the Time of Myectomy in Hypertrophic Cardiomyopathy. Circulation: Heart Failure, 2018, 11, e004133.	1.6	48
14	Cardiac myosin binding protein C phosphorylation in cardiac disease. Journal of Muscle Research and Cell Motility, 2012, 33, 43-52.	0.9	45
15	Exercise training does not improve cardiac function in compensated or decompensated left ventricular hypertrophy induced by aortic stenosis. Journal of Molecular and Cellular Cardiology, 2011, 50, 1017-1025.	0.9	44
16	Genotypeâ€specific pathogenic effects in human dilated cardiomyopathy. Journal of Physiology, 2017, 595, 4677-4693.	1.3	42
17	Myocardial Infarction-induced N-terminal Fragment of Cardiac Myosin-binding Protein C (cMyBP-C) Impairs Myofilament Function in Human Myocardium. Journal of Biological Chemistry, 2014, 289, 8818-8827.	1.6	39
18	Empagliflozin restores chronic kidney diseaseâ€“induced impairment of endothelial regulation of cardiomyocyte relaxation and contraction. Kidney International, 2021, 99, 1088-1101.	2.6	37

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19	Detrimental effect of combined exercise training and eNOS overexpression on cardiac function after myocardial infarction. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H1513-H1523.	1.5	35
20	Sexual dimorphic response to exercise in hypertrophic cardiomyopathy-associated MYBPC3-targeted knock-in mice. Pflugers Archiv European Journal of Physiology, 2015, 467, 1303-1317.	1.3	35
21	Myofilament Remodeling and Function Is More Impaired in Peripartum Cardiomyopathy Compared with Dilated Cardiomyopathy and Ischemic Heart Disease. American Journal of Pathology, 2017, 187, 2645-2658.	1.9	35
22	ADP-stimulated contraction: A predictor of thin-filament activation in cardiac disease. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E7003-12.	3.3	34
23	Thyroid Hormone-Regulated Cardiac microRNAs are Predicted to Suppress Pathological Hypertrophic Signaling. Frontiers in Endocrinology, 2014, 5, 171.	1.5	30
24	Animal models and animal-free innovations for cardiovascular research: current status and routes to be explored. Consensus document of the ESC Working Group on Myocardial Function and the ESC Working Group on Cellular Biology of the Heart. Cardiovascular Research, 2022, 118, 3016-3051.	1.8	30
25	â€˜Integrative Physiology 2.0â€™: integration of systems biology into physiology and its application to cardiovascular homeostasis. Journal of Physiology, 2011, 589, 1037-1045.	1.3	29
26	Selective phosphorylation of PKA targets after Î2-adrenergic receptor stimulation impairs myofilament function in<i>Mybpc3</i>-targeted HCM mouse model. Cardiovascular Research, 2016, 110, 200-214.	1.8	28
27	Cardiac myosin-binding protein C: hypertrophic cardiomyopathy mutations and structureâ€“function relationships. Pflugers Archiv European Journal of Physiology, 2014, 466, 201-206.	1.3	26
28	Protein Quality Control Activation and Microtubule Remodeling in Hypertrophic Cardiomyopathy. Cells, 2019, 8, 741.	1.8	26
29	Sex-specific cardiac remodeling in early and advanced stages of hypertrophic cardiomyopathy. PLoS ONE, 2020, 15, e0232427.	1.1	25
30	Left ventricular remodeling in swine after myocardial infarction: a transcriptional genomics approach. Basic Research in Cardiology, 2011, 106, 1269-1281.	2.5	23
31	MYBPC3's alternate ending: consequences and therapeutic implications of a highly prevalent 25Âbp deletion mutation. Pflugers Archiv European Journal of Physiology, 2014, 466, 207-213.	1.3	21
32	A Hypertrophic Cardiomyopathy-associated MYBPC3 Mutation Common in Populations of South Asian Descent Causes Contractile Dysfunction. Journal of Biological Chemistry, 2015, 290, 5855-5867.	1.6	21
33	Variable cardiac myosin binding protein-C expression in the myofilaments due to MYBPC3 mutations in hypertrophic cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2018, 123, 59-63.	0.9	21
34	Release kinetics of circulating cardiac myosin binding protein-C following cardiac injury. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H547-H556.	1.5	20
35	Ablation of the calpain-targeted site in cardiac myosin binding protein-C is cardioprotective during ischemia-reperfusion injury. Journal of Molecular and Cellular Cardiology, 2019, 129, 236-246.	0.9	20
36	The Antibiotic Doxycycline Impairs Cardiac Mitochondrial and Contractile Function. International Journal of Molecular Sciences, 2021, 22, 4100.	1.8	20

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37	Single-cell transcriptomics provides insights into hypertrophic cardiomyopathy. Cell Reports, 2022, 39, 110809.	2.9	20
38	Peripartum cardiomyopathy and dilated cardiomyopathy: different at heart. Frontiers in Physiology, 2014, 5, 531.	1.3	19
39	Altered C10 domain in cardiac myosin binding protein-C results in hypertrophic cardiomyopathy. Cardiovascular Research, 2019, 115, 1986-1997.	1.8	19
40	Multi-omics integration identifies key upstream regulators of pathomechanisms in hypertrophic cardiomyopathy due to truncating MYBPC3 mutations. Clinical Epigenetics, 2021, 13, 61.	1.8	17
41	Amino terminus of cardiac myosin binding protein-C regulates cardiac contractility. Journal of Molecular and Cellular Cardiology, 2021, 156, 33-44.	0.9	17
42	Prostanoids suppress the coronary vasoconstrictor influence of endothelin after myocardial infarction. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H1080-H1089.	1.5	16
43	Cardiomyocyte Hypocontractility and Reduced Myofibril Density in End-Stage Pediatric Cardiomyopathy. Frontiers in Physiology, 2017, 8, 1103.	1.3	16
44	Unraveling the Genotypeâ€Phenotype Relationship in Hypertrophic Cardiomyopathy: Obesityâ€Related Cardiac Defects as a Major Disease Modifier. Journal of the American Heart Association, 2020, 9, e018641.	1.6	16
45	miR-132/212 Impairs Cardiomyocytes Contractility in the Failing Heart by Suppressing SERCA2a. Frontiers in Cardiovascular Medicine, 2021, 8, 592362.	1.1	16
46	High Fibroblast Growth Factor 23 concentrations in experimental renal failure impair calcium handling in cardiomyocytes. Physiological Reports, 2018, 6, e13591.	0.7	15
47	Large-Scale Contractility Measurements Reveal Large Atrioventricular and Subtle Interventricular Differences in Cultured Unloaded Rat Cardiomyocytes. Frontiers in Physiology, 2020, 11, 815.	1.3	15
48	Increase in cardiac myosin binding protein-C plasma levels is a sensitive and cardiac-specific biomarker of myocardial infarction. American Journal of Cardiovascular Disease, 2013, 3, 60-70.	0.5	15
49	Untying the knot: protein quality control in inherited cardiomyopathies. Pflugers Archiv European Journal of Physiology, 2019, 471, 795-806.	1.3	14
50	A Sensitive and Specific Quantitation Method for Determination of Serum Cardiac Myosin Binding Protein-C by Electrochemiluminescence Immunoassay. Journal of Visualized Experiments, 2013, , .	0.2	13
51	Sex-dependent pathophysiological mechanisms in hypertrophic cardiomyopathy: Implications for rhythm disorders. Heart Rhythm, 2015, 12, 433-439.	0.3	12
52	Uptake and remodeling of exogenous phosphatidylethanolamine in E. coli. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2004, 1636, 205-212.	1.2	11
53	Endâ€diastolic force preâ€activates cardiomyocytes and determines contractile force: role of titin and calcium. Journal of Physiology, 2019, 597, 4521-4531.	1.3	11
54	Sex-Related Differences in Protein Expression in Sarcomere Mutation-Positive Hypertrophic Cardiomyopathy. Frontiers in Cardiovascular Medicine, 2021, 8, 612215.	1.1	11

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55	Gene reprogramming in exercise-induced cardiac hypertrophy in swine: A transcriptional genomics approach. Journal of Molecular and Cellular Cardiology, 2014, 77, 168-174.	0.9	10
56	Mutation location of HCM-causing troponin T mutations defines the degree of myofilament dysfunction in human cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2021, 150, 77-90.	0.9	10
57	Nuclear protein extraction from frozen porcine myocardium. Journal of Physiology and Biochemistry, 2011, 67, 165-173.	1.3	9
58	The effect of tropomyosin variants on cardiomyocyte function and structure that underlie different clinical cardiomyopathy phenotypes. International Journal of Cardiology, 2021, 323, 251-258.	0.8	8
59	Glycolaldehyde-Derived High-Molecular-Weight Advanced Glycation End-Products Induce Cardiac Dysfunction through Structural and Functional Remodeling of Cardiomyocytes. , 2020, 54, 809-824.		5
60	Gene expression profile in the diaphragm following contractile inactivity during thoracic surgery. International Journal of Physiology, Pathophysiology and Pharmacology, 2011, 3, 167-75.	0.8	5
61	Application of Proteomics in Cardiovascular Research. Current Proteomics, 2010, 7, 108-115.	0.1	4
62	Cardiac Myosin Binding Protein-C Autoantibodies Are Potential Early Indicators of Cardiac Dysfunction andÂPatient Outcome in Acute CoronaryÂSyndrome. JACC Basic To Translational Science, 2017, 2, 122-131.	1.9	3
63	What grows together, goes together: assessing variability in cardiomyocyte function. Journal of Physiology, 2019, 597, 665-666.	1.3	3
64	Beneficial Effects of Cardiomyopathy-Associated Genetic Variants on Physical Performance: A Hypothesis-Generating Scoping Review. Cardiology, 2022, 147, 90-97.	0.6	2
65	Young@Heart: empowering the next generation of cardiovascular researchers. Netherlands Heart Journal, 2020, 28, 25-30.	0.3	1
66	Strength of patient cohorts and biobanks for cardiomyopathy research. Netherlands Heart Journal, 2020, 28, 50-56.	0.3	1
67	Integrative approach to study the molecular basis of postâ€myocardial infarction remodeling in porcine heart. FASEB Journal, 2010, 24, .	0.2	1
68	Identification and Characterization of a New Phosphorylation Site on Cardiac Myosin Binding Protein C. Biophysical Journal, 2012, 102, 435a-436a.	0.2	0
69	Cardiac Myosin Binding Protein C Phosphorylation in Human Cardiac Disease. Biophysical Journal, 2012, 102, 598a.	0.2	0
70	Myocardial Infarction-Induced N-Terminal Fragment of Cmybp-C Impairs Myofilament Function in Human Left Ventricular Myofibrils. Biophysical Journal, 2014, 106, 347a.	0.2	0
71	Exercise-Induced Enhancement of Cardiac and Sarcomere Performance is Larger in Male than in Female MYBPC3 Mutation Heterozyous Knock-In Mice. Biophysical Journal, 2014, 106, 346a.	0.2	0
72	N-Terminal Region of Cardiac Myosin Binding Protein-C is Necessary for Cardiac Function. Journal of Investigative Medicine, 2016, 64, 911-912.	0.7	0

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73	ADP-Stimulated Contraction: A Predictor of Thin-Filament Activation in Cardiac Disease. Biophysical Journal, 2016, 110, 295a.	0.2	0
74	Pre-Activation of Cardiomyocytes Determines Speed of Contraction: Role of Titin. Biophysical Journal, 2017, 112, 121a.	0.2	0
75	P493The absences of Growth Differentiation Factor 15 aggravates adverse cardiac remodeling upon pressure-overload. Cardiovascular Research, 2018, 114, S119-S119.	1.8	0
76	Location of Hypertrophic Cardiomyopathy-Causing Troponin T Mutations Determines Degree of Myofilament Dysfunction. Biophysical Journal, 2018, 114, 313a.	0.2	0
77	Pre-Activation of Cardiomyocytes Determines Contractile Force and Speed of Contraction; Role of Titin and Calcium. Biophysical Journal, 2018, 114, 38a.	0.2	0
78	Altered protein quality control in heart tissue of patients with hypertrophic cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2018, 120, 11-12.	0.9	0
79	Sex-differences in diastolic dysfunction in hypertrophic cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2018, 120, 29.	0.9	0
80	Mosaic cardiac myosin binding protein-C expression due to MYBPC3 mutation in hypertrophic cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2018, 120, 30.	0.9	0
81	Location-specific effects of Hypertrophic Cardiomyopathy-causing Troponin T mutations. Journal of Molecular and Cellular Cardiology, 2018, 120, 31.	0.9	0
82	PKAâ€™s favorite son: prioritizing phosphorylation of phospholamban over cardiac troponin I contributes to diastolic dysfunction in hypertrophic cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2018, 120, 39-40.	0.9	0
83	Impact of glycated proteins on cardiomyocyte function. Journal of Molecular and Cellular Cardiology, 2018, 120, 15.	0.9	0
84	Contractile properties of cardiomyocytes do not differ between obstructive and end-stage hypertrophic cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2018, 120, 29-30.	0.9	0
85	Empagliflozin for heart failure with preserved ejection fraction: targeting cardiac endothelial cell-cardiomyocyte interaction. Journal of Molecular and Cellular Cardiology, 2018, 120, 27-28.	0.9	0
86	Cardiomyopathy-related Tropomyosin mutations impair calcium handling: the influence of mutation location. Journal of Molecular and Cellular Cardiology, 2018, 120, 43-44.	0.9	0
87	Proteomic profiling of a large cohort of HCM patients: Genotype-specific protein changes. Journal of Molecular and Cellular Cardiology, 2020, 140, 7.	0.9	0
88	Nuclear protein extraction from frozen porcine myocardium. FASEB Journal, 2009, 23, LB246.	0.2	0
89	Enzymeâ€linked immunosorbent assay is a viable method for determining release kinetics of cardiac myosin binding proteinâ€C following isoproterenolâ€induced cardiac injury (1073.8). FASEB Journal, 2014, 28, 1073.8.	0.2	0
90	493-P: Cardiac Microvascular Endothelial Enhancement of Cardiomyocyte Function Is Impaired by Uremic Serum and Restored by Empagliflozin. Diabetes, 2020, 69, .	0.3	0

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91	Cardiac muscle disease and therapeutic targets. Journal of General Physiology, 2022, 154, .	0.9	0