Andreas Schuster

List of Publications by Year
in descending order

125 papers	4,346 citations	117625 34 h-index	128289 60 g-index
132 all docs	132 docs citations	132 times ranked	4198 citing authors

#	Article	IF	Citations
1	Cardiovascular Magnetic Resonance Myocardial Feature Tracking. Circulation: Cardiovascular Imaging, 2016, 9, e004077.	2.6	272
2	Quantification of Absolute Myocardial Perfusion in Patients With Coronary Artery Disease. Journal of the American College of Cardiology, 2012, 60, 1546-1555.	2.8	206
3	Inter-study reproducibility of cardiovascular magnetic resonance myocardial feature tracking. Journal of Cardiovascular Magnetic Resonance, 2012, 14, 34.	3.3	200
4	Quantification of left atrial strain and strain rate using Cardiovascular Magnetic Resonance myocardial feature tracking: a feasibility study. Journal of Cardiovascular Magnetic Resonance, 2014, 16, 60.	3.3	185
5	Direct Comparison of Cardiac Magnetic Resonance and Multidetector Computed Tomography Stress-Rest Perfusion Imaging for Detection of Coronary Artery Disease. Journal of the American College of Cardiology, 2013, 61, 1099-1107.	2.8	147
6	Cardiac Magnetic Resonance Myocardial Feature Tracking for Optimized Prediction of Cardiovascular Events Following Myocardial Infarction. JACC: Cardiovascular Imaging, 2018, 11, 1433-1444.	5.3	142
7	Influence of Left Atrial Function on Exercise Capacity and Left Ventricular Function in Patients With Heart Failure and Preserved Ejection Fraction. Circulation: Cardiovascular Imaging, 2017, 10, .	2.6	131
8	Cardiovascular magnetic resonance myocardial feature tracking detects quantitative wall motion during dobutamine stress. Journal of Cardiovascular Magnetic Resonance, 2011, 13, 58.	3.3	121
9	The intra-observer reproducibility of cardiovascular magnetic resonance myocardial feature tracking strain assessment is independent of field strength. European Journal of Radiology, 2013, 82, 296-301.	2.6	121
10	Quantification in cardiac MRI: advances in image acquisition and processing. International Journal of Cardiovascular Imaging, 2010, 26, 27-40.	1.5	112
11	Cardiovascular magnetic resonance myocardial feature tracking for quantitative viability assessment in ischemic cardiomyopathy. International Journal of Cardiology, 2013, 166, 413-420.	1.7	97
12	Imaging in the Management of Ischemic Cardiomyopathy. Journal of the American College of Cardiology, 2012, 59, 359-370.	2.8	95
13	Development of a universal dual-bolus injection scheme for the quantitative assessment of myocardial perfusion cardiovascular magnetic resonance. Journal of Cardiovascular Magnetic Resonance, 2011, 13, 28.	3.3	92
14	Design and rationale of the MR-INFORM study: stress perfusion cardiovascular magnetic resonance imaging to guide the management of patients with stable coronary artery disease. Journal of Cardiovascular Magnetic Resonance, 2012, 14, 77.	3.3	82
15	Impact of myocardial fibrosis on left ventricular remodelling, recovery, and outcome after transcatheter aortic valve implantation in different haemodynamic subtypes of severe aortic stenosis. European Heart Journal, 2020, 41, 1903-1914.	2.2	82
16	Exercise Stress Real-Time Cardiac Magnetic Resonance Imaging for Noninvasive Characterization of Heart Failure With Preserved Ejection Fraction. Circulation, 2021, 143, 1484-1498.	1.6	69
17	Assessment of Coronary Artery Stenosis Severity and Location. JACC: Cardiovascular Imaging, 2013, 6, 600-609.	5.3	65
18	Comparison of feature tracking, fastâ€SENC, and myocardial tagging for global and segmental left ventricular strain. ESC Heart Failure, 2020, 7, 523-532.	3.1	64

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19	Echocardiography and Cardiac Magnetic Resonanceâ€Based Feature Tracking in the Assessment of Myocardial Mechanics in Tetralogy of Fallot: An Intermodality Comparison. Echocardiography, 2013, 30, 203-210.	0.9	63
20	Reduced global longitudinal and radial strain with normal left ventricular ejection fraction late after effective repair of aortic coarctation: a CMR feature tracking study. International Journal of Cardiovascular Imaging, 2013, 29, 141-150.	1.5	61
21	Reproducibility study on myocardial strain assessment using fast-SENC cardiac magnetic resonance imaging. Scientific Reports, 2018, 8, 14100.	3.3	60
22	Quantification of atrial dynamics using cardiovascular magnetic resonance: inter-study reproducibility. Journal of Cardiovascular Magnetic Resonance, 2015, 17, 36.	3.3	58
23	Functional Maturation of Left and Right Atrial Systolic and Diastolic Performance in Infants, Children, and Adolescents. Journal of the American Society of Echocardiography, 2013, 26, 398-409.e2.	2.8	56
24	Ischaemic cardiomyopathy: pathophysiology, assessment and the role of revascularisation. Heart, 2016, 102, 397-406.	2.9	56
25	Left Atrial Function with MRI Enables Prediction of Cardiovascular Events after Myocardial Infarction: Insights from the AIDA STEMI and TATORT NSTEMI Trials. Radiology, 2019, 293, 292-302.	7.3	56
26	Inter-study reproducibility of left ventricular torsion and torsion rate quantification using MR myocardial feature tracking. Journal of Magnetic Resonance Imaging, 2016, 43, 128-137.	3.4	49
27	Left Atrial Performance in the Course of Hypertrophic Cardiomyopathy. Investigative Radiology, 2017, 52, 177-185.	6.2	49
28	Inter-vendor reproducibility of left and right ventricular cardiovascular magnetic resonance myocardial feature-tracking. PLoS ONE, 2018, 13, e0193746.	2.5	47
29	Targeted endomyocardial biopsy guided by real-time cardiovascular magnetic resonance. Journal of Cardiovascular Magnetic Resonance, 2016, 19, 45.	3.3	44
30	An isolated perfused pig heart model for the development, validation and translation of novel cardiovascular magnetic resonance techniques. Journal of Cardiovascular Magnetic Resonance, 2010, 12, 53.	3.3	43
31	Perfusion phantom: An efficient and reproducible method to simulate myocardial firstâ€pass perfusion measurements with cardiovascular magnetic resonance. Magnetic Resonance in Medicine, 2013, 69, 698-707.	3.0	43
32	Cardiac magnetic resonance imaging to guide complex revascularization in stable coronary artery disease. European Heart Journal, 2010, 31, 2209-2215.	2.2	42
33	Voxelâ€wise quantification of myocardial perfusion by cardiac magnetic resonance. Feasibility and methods comparison. Magnetic Resonance in Medicine, 2012, 68, 1994-2004.	3.0	40
34	Quantification of Left Ventricular Torsion and Diastolic Recoil Using Cardiovascular Magnetic Resonance Myocardial Feature Tracking. PLoS ONE, 2014, 9, e109164.	2.5	40
35	Importance of operator training and rest perfusion on the diagnostic accuracy of stress perfusion cardiovascular magnetic resonance. Journal of Cardiovascular Magnetic Resonance, 2018, 20, 74.	3.3	33
36	Association of platelet-SDF-1 with hemodynamic function and infarct size using cardiac MR in patients with AMI. European Journal of Radiology, 2012, 81, e486-e490.	2.6	31

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37	The Total Right/Left-Volume Index: A New and Simplified Cardiac Magnetic Resonance Measure to Evaluate the Severity of Ebstein Anomaly of the Tricuspid Valve. Circulation: Cardiovascular Imaging, 2014, 7, 601-609.	2.6	31
38	Abnormal right atrial performance in repaired tetralogy of Fallot: A CMR feature tracking analysis. International Journal of Cardiology, 2017, 248, 136-142.	1.7	31
39	Fully automated quantification of biventricular volumes and function in cardiovascular magnetic resonance: applicability to clinical routine settings. Journal of Cardiovascular Magnetic Resonance, 2019, 21, 24.	3.3	31
40	Quantitative cardiovascular magnetic resonance perfusion imaging: inter-study reproducibility. European Heart Journal Cardiovascular Imaging, 2012, 13, 954-960.	1.2	30
41	Assessment of cardiovascular physiology using dobutamine stress cardiovascular magnetic resonance reveals impaired contractile reserve in patients with cirrhotic cardiomyopathy. Journal of Cardiovascular Magnetic Resonance, 2015, 17, 61.	3.3	29
42	Myocardial Feature Tracking Reduces Observer-Dependence in Low-Dose Dobutamine Stress Cardiovascular Magnetic Resonance. PLoS ONE, 2015, 10, e0122858.	2.5	29
43	Cardiovascular magnetic resonance imaging feature tracking: Impact of training on observer performance and reproducibility. PLoS ONE, 2019, 14, e0210127.	2.5	27
44	Headâ€toâ€head comparison of cardiovascular MR feature tracking cine versus acquisitionâ€based deformation strain imaging using myocardial tagging and strain encoding. Magnetic Resonance in Medicine, 2021, 85, 357-368.	3.0	26
45	Left ventricular myocardial deformation in Takotsubo syndrome: a cardiovascular magnetic resonance myocardial feature tracking study. European Radiology, 2018, 28, 5160-5170.	4.5	25
46	Atrial mechanics and their prognostic impact in Takotsubo syndrome: a cardiovascular magnetic resonance imaging study. European Heart Journal Cardiovascular Imaging, 2019, 20, 1059-1069.	1.2	25
47	Reverse left ventricular structural remodeling after catheter ablation of atrial fibrillation in patients with preserved left ventricular function: Insights from cardiovascular magnetic resonance native T1 mapping. Heart Rhythm, 2019, 16, 424-432.	0.7	25
48	Culprit vessel-related myocardial mechanics and prognostic implications following acute myocardial infarction. Clinical Research in Cardiology, 2020, 109, 339-349.	3.3	25
49	Left atrial physiology and pathophysiology: Role of deformation imaging. World Journal of Cardiology, 2015, 7, 299.	1.5	24
50	A quantitative high resolution voxel-wise assessment of myocardial blood flow from contrast-enhanced first-pass magnetic resonance perfusion imaging: microsphere validation in a magnetic resonance compatible free beating explanted pig heart model. European Heart Journal Cardiovascular Imaging, 2015, 16, 1082-1092.	1.2	24
51	Strain-encoded cardiac magnetic resonance imaging: a new approach for fast estimation of left ventricular function. BMC Cardiovascular Disorders, 2019, 19, 52.	1.7	24
52	Quantitative assessment of magnetic resonance derived myocardial perfusion measurements using advanced techniques: microsphere validation in an explanted pig heart system. Journal of Cardiovascular Magnetic Resonance, 2014, 16, 82.	3.3	23
53	Myocardial Blood Flow Quantification From MRI by Deconvolution Using an Exponential Approximation Basis. IEEE Transactions on Biomedical Engineering, 2012, 59, 2060-2067.	4.2	22
54	Fast manual long-axis strain assessment provides optimized cardiovascular event prediction following myocardial infarction. European Heart Journal Cardiovascular Imaging, 2019, 20, 1262-1270.	1.2	22

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55	Novel Approach for InÂVivo Detection of Vulnerable Coronary Plaques Using Molecular 3-T CMR Imaging With an Albumin-Binding Probe. JACC: Cardiovascular Imaging, 2019, 12, 297-306.	5.3	22
56	Impact of Right Atrial Physiology on Heart Failure and Adverse Events after Myocardial Infarction. Journal of Clinical Medicine, 2020, 9, 210.	2.4	22
57	PET/CT and MR imaging biomarker of lipid-rich plaques using [64Cu]-labeled scavenger receptor (CD68-Fc). International Journal of Cardiology, 2014, 177, 287-291.	1.7	21
58	Left ventricular synchrony, torsion, and recoil mechanics in Ebsteinâ€™s anomaly: insights from cardiovascular magnetic resonance. Journal of Cardiovascular Magnetic Resonance, 2017, 19, 101.	3.3	21
59	Atrio-ventricular deformation and heart failure in Ebstein's Anomaly â€" A cardiovascular magnetic resonance study. International Journal of Cardiology, 2018, 257, 54-61.	1.7	21
60	Defining the optimal temporal and spatial resolution for cardiovascular magnetic resonance imaging feature tracking. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 60.	3.3	21
61	Understanding and Improving Risk Assessment After Myocardial Infarction Using Automated Left Ventricular ShapeÂAnalysis. JACC: Cardiovascular Imaging, 2022, 15, 1563-1574.	5.3	21
62	Assessment of myocardial ischemia and viability using cardiac magnetic resonance. Current Heart Failure Reports, 2009, 6, 142-153.	3.3	20
63	Myocardial Viability. JACC: Cardiovascular Imaging, 2012, 5, 509-512.	5.3	20
64	Quantification of left atrial volume and phasic function using cardiovascular magnetic resonance imagingâ€"comparison of biplane area-length method and Simpson's method. International Journal of Cardiovascular Imaging, 2017, 33, 1761-1769.	1.5	20
65	Range Variability in CMR Feature Tracking Multilayer Strain across Different Stages of Heart Failure. Scientific Reports, 2019, 9, 16478.	3.3	20
66	Myocardial mechanics in dilated cardiomyopathy: prognostic value of left ventricular torsion and strain. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 136.	3.3	20
67	Right atrialâ€"right ventricular coupling in heart failure with preserved ejection fraction. Clinical Research in Cardiology, 2020, 109, 54-66.	3.3	19
68	Fully Automated Cardiac Assessment for Diagnostic and Prognostic Stratification Following Myocardial Infarction. Journal of the American Heart Association, 2020, 9, e016612.	3.7	19
69	Real-time cardiovascular magnetic resonance T1 and extracellular volume fraction mapping for tissue characterisation in aortic stenosis. Journal of Cardiovascular Magnetic Resonance, 2020, 22, 46.	3.3	18
70	Positron Emission Tomography/Computed Tomographic and Magnetic Resonance Imaging in a Murine Model of Progressive Atherosclerosis Using ⁶⁴ Cu-Labeled Glycoprotein VI-Fc. Circulation: Cardiovascular Imaging, 2013, 6, 957-964.	2.6	17
71	Assessment of ventriculo-vascular properties in repaired coarctation using cardiac magnetic resonance-derived aortic, left atrial and left ventricular strain. European Radiology, 2017, 27, 167-177.	4.5	17
72	Temporal changes within mechanical dyssynchrony and rotational mechanics in Takotsubo syndrome: A cardiovascular magnetic resonance imaging study. International Journal of Cardiology, 2018, 273, 256-262.	1.7	17

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73	Myocardial deformation assessed by longitudinal strain: Chamber specific normative data for CMR-feature tracking from the German competence network for congenital heart defects. European Radiology, 2018, 28, 1257-1266.	4.5	17
74	Detection of intracardiac masses in patients with coronary artery disease using cardiac magnetic resonance imaging: a comparison with transthoracic echocardiography. International Journal of Cardiovascular Imaging, 2014, 30, 647-657.	1.5	15
75	Cardiac magnetic resonance imaging at 3 and 15Âmonths after application of circulating progenitor cells in recanalised chronic total occlusions. International Journal of Cardiology, 2009, 135, 287-295.	1.7	13
76	Prognostic Value of Different CMR-Based Techniques to Assess Left Ventricular Myocardial Strain in Takotsubo Syndrome. Journal of Clinical Medicine, 2020, 9, 3882.	2.4	13
77	Cardiac Magnetic Resonance Myocardial Feature Tracking for Optimized Risk Assessment After Acute Myocardial Infarction in Patients With Type 2 Diabetes. Diabetes, 2020, 69, 1540-1548.	0.6	13
78	Quantification of Myocardial Deformation Applying CMR-Feature-Trackingâ€"All About the Left Ventricle?. Current Heart Failure Reports, 2021, 18, 225-239.	3.3	13
79	BNP and haematological parameters are markers of severity of Ebstein's anomaly: correlation with CMR and cardiopulmonary exercise testing. European Heart Journal Cardiovascular Imaging, 2015, 16, 670-5.	1.2	12
80	Functional and prognostic implications of cardiac magnetic resonance feature tracking-derived remote myocardial strain analyses in patients following acute myocardial infarction. Clinical Research in Cardiology, 2021, 110, 270-280.	3.3	12
81	RT-CMR Imaging for Noninvasive Characterization of HFpEF. JACC: Cardiovascular Imaging, 2022, 15, 943-945.	5.3	12
82	Quantitative Assessment of Myocardial Perfusion MRI. Current Cardiovascular Imaging Reports, 2010, 3, 65-73.	0.6	11
83	Right Atrial Volume is Increased in Corrected Tetralogy of Fallot and Correlates with the Incidence of Supraventricular Arrhythmia: A CMR Study. Pediatric Cardiology, 2015, 36, 1239-1247.	1.3	11
84	Quantitative assessment of left ventricular mechanical dyssynchrony using cine cardiovascular magnetic resonance imaging: Inter-study reproducibility. JRSM Cardiovascular Disease, 2017, 6, 204800401771014.	0.7	11
85	Response by von Roeder et al to Letter Regarding Article, â€œInfluence of Left Atrial Function on Exercise Capacity and Left Ventricular Function in Patients With Heart Failure and Preserved Ejection Fractionâ€• Circulation: Cardiovascular Imaging, 2017, 10, .	2.6	11
86	Right ventricular strain assessment by cardiovascular magnetic resonance myocardial feature tracking allows optimized risk stratification in Takotsubo syndrome. PLoS ONE, 2018, 13, e0202146.	2.5	11
87	Effect of comprehensive initial training on the variability of left ventricular measures using fast-SENC cardiac magnetic resonance imaging. Scientific Reports, 2019, 9, 12223.	3.3	11
88	Ex vivoimaging of injured arteries in rabbits using fluorescence-labelled glycoprotein VI-Fc. Platelets, 2012, 23, 1-6.	2.3	10
89	Economic implications of intra-aortic balloon support for myocardial infarction with cardiogenic shock: an analysis from the IABP-SHOCK II-trial. Clinical Research in Cardiology, 2015, 104, 566-573.	3.3	10
90	Impaired Exercise Tolerance in Repaired Tetralogy of Fallot Is Associated With Impaired Biventricular Contractile Reserve: An Exercise-Stress Real-Time Cardiovascular Magnetic Resonance Study. Circulation: Cardiovascular Imaging, 2021, 14, e011823.	2.6	10

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91	Microsphere skimming in the porcine coronary arteries: Implications for flow quantification. Microvascular Research, 2015, 100, 59-70.	2.5	9
92	Atrioventricular mechanical coupling and major adverse cardiac events in female patients following acute ST elevation myocardial infarction. International Journal of Cardiology, 2020, 299, 31-36.	1.7	9
93	Cardiovascular magnetic resonance imaging of isolated perfused pig hearts in a 3T clinical MR scanner. Interventional Medicine & Applied Science, 2012, 4, 186-192.	0.2	8
94	Value of cardiovascular magnetic resonance imaging in myocardial hypertrophy. Clinical Research in Cardiology, 2012, 101, 237-238.	3.3	7
95	Impact of fully automated assessment on interstudy reproducibility of biventricular volumes and function in cardiac magnetic resonance imaging. Scientific Reports, 2021, 11, 11648.	3.3	7
96	Interdisciplinary Research on Aortic Valve Stenosis: A Longitudinal Collection of Biospecimens and Clinical Data of Patients Undergoing Transcatheter Aortic Valve Replacement. Open Journal of Bioresources, 2020, 7, .	1.5	7
97	End-systolic versus end-diastolic late gadolinium enhanced imaging for the assessment of scar transmurality. International Journal of Cardiovascular Imaging, 2012, 28, 773-781.	1.5	6
98	Intra- and inter-observer reproducibility of multilayer cardiac magnetic resonance feature tracking derived longitudinal and circumferential strain. Cardiovascular Diagnosis and Therapy, 2020, 10, 173-182.	1.7	6
99	Frequency and prognostic impact of right ventricular involvement in acute myocardial infarction. Heart, 2021, 107, 563-570.	2.9	6
100	Toward Full Quantification of Wall Motion with MRI. Current Cardiovascular Imaging Reports, 2011, 4, 85-86.	0.6	5
101	Cardiac Magnetic Resonance Left Ventricular Mechanical Uniformity Alterations for Risk Assessment After Acute Myocardial Infarction. Journal of the American Heart Association, 2019, 8, e011576.	3.7	5
102	Noninvasive Imaging of Endothelial Damage in Patients With Different HbA1c Levels: A Proof-of-Concept Study. Diabetes, 2019, 68, 387-394.	0.6	5
103	The discerning ear: cardiac auscultation in the era of artificial intelligence and telemedicine. European Heart Journal Digital Health, 2021, 2, 456-466.	1.7	5
104	Head-to-Head Comparison of Different Software Solutions for AVC Quantification Using Contrast-Enhanced MDCT. Journal of Clinical Medicine, 2021, 10, 3970.	2.4	5
105	Artificial Intelligence Enabled Fully Automated CMR Function Quantification for Optimized Risk Stratification in Patients Undergoing Transcatheter Aortic Valve Replacement. Journal of Interventional Cardiology, 2022, 2022, 1-9.	1.2	5
106	Platelets in Cardiovascular Imaging. Current Vascular Pharmacology, 2012, 10, 619-625.	1.7	4
107	Right ventricular energetics and power in pulmonary regurgitation vs. stenosis using fourÂdimensional phaseÂcontrast magnetic resonance. International Journal of Cardiology, 2018, 263, 165-170.	1.7	4
108	Prognostic utility of global longitudinal strain in myocardial infarction. World Journal of Cardiology, 2018, 10, 35-37.	1.5	4

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109	Noncompaction of the Myocardium. Journal of the American College of Cardiology, 2011, 58, e25.	2.8	3
110	Ruptured Aneurysm of the Sinus of Valsalva. Journal of the American College of Cardiology, 2012, 59, 538.	2.8	3
111	Atrial Strain Assessment in Left VentricularÂDiastolic Dysfunction. JACC: Cardiovascular Imaging, 2018, 11, 154.	5.3	3
112	Altered Biatrial Phasic Function after Heart Transplantation in Children. Journal of the American Society of Echocardiography, 2020, 33, 1132-1140.e2.	2.8	3
113	Left Ventricular Pathology in Ebsteinâ€™s Anomalyâ€”Myocardium in Motion. Circulation: Cardiovascular Imaging, 2021, 14, e012285.	2.6	2
114	Letter by Schuster et al Regarding Article, â€œSelecting a Noninvasive Imaging Study After an Inconclusive Exercise Testâ€• Circulation, 2011, 123, e632; author reply e633.	1.6	1
115	Cardiovascular magnetic resonance-based evaluation of myocardial rotational mechanics. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 307, H1685-H1685.	3.2	1
116	A Comprehensive Evaluation of Left Atrial Performance Using Volumetric Analysis, Strain, and Strain Rate Imaging. JACC: Cardiovascular Imaging, 2014, 7, 1177-1178.	5.3	1
117	Atrio-ventricular mechanics and heart failure in Ebstein's anomaly - a cardiac magnetic resonance study. Journal of Cardiovascular Magnetic Resonance, 2016, 18, O119.	3.3	1
118	Influence of right ventricular pressure and volume overload on right and left ventricular diastolic function. Journal of Thoracic and Cardiovascular Surgery, 2022, 163, e299-e308.	0.8	1
119	Comprehensive Assessment of Myocardial Fibroma by Cardiovascular Magnetic Resonance Imaging. Revista Espanola De Cardiologia (English Ed), 2013, 66, 820.	0.6	0
120	EvaluaciÃ³n detallada de un fibroma miocÃ¡rdico mediante resonancia magnÃ©tica cardiovascular. Revista Espanola De Cardiologia, 2013, 66, 820.	1.2	0
121	Role of cardiac magnetic resonance imaging in troponinemia syndromes. World Journal of Cardiology, 2022, 14, 190-205.	1.5	0
122	Title is missing!. , 2020, 15, e0228292.		0
123	Title is missing!. , 2020, 15, e0228292.		0
124	Title is missing!. , 2020, 15, e0228292.		0
125	Title is missing!. , 2020, 15, e0228292.		0