Thomas S Hatsukami

List of Publications by Year
in descending order

114 papers	9,891 citations	50276 46 h-index	36028 97 g-index
116 all docs	116 docs citations	116 times ranked	5321 citing authors

#	Article	IF	Citations
1	Detection of Advanced Lesions of Atherosclerosis in Carotid Arteries Using 3-Dimensional Motion-Sensitized Driven-Equilibrium Prepared Rapid Gradient Echo (3D-MERGE) Magnetic Resonance Imaging as a Screening Tool. Stroke, 2022, 53, 194-200.	2.0	3
2	Multiâ€Planar, Multiâ€Contrast and Multiâ€Time Point Analysis Tool (<scp>MOCHA</scp>) for Intracranial Vessel Wall Characterization. Journal of Magnetic Resonance Imaging, 2022, 56, 944-955.	3.4	7
3	Associations of intracranial artery length and branch number on non-contrast enhanced MRA with cognitive impairment in individuals with carotid atherosclerosis. Scientific Reports, 2022, 12, 7456.	3.3	6
4	Intracranial vascular feature changes in time of flight MR angiography in patients undergoing carotid revascularization surgery. Magnetic Resonance Imaging, 2021, 75, 45-50.	1.8	4
5	Arterial elasticity, endothelial function and intracranial vascular health: A multimodal MRI study. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 1390-1397.	4.3	14
6	Differences in atheroma between Caucasian and Asian subjects with anterior stroke: A vessel wall MRI study. Stroke and Vascular Neurology, 2021, 6, 25-32.	3.3	7
7	Uncontrolled hypertension associates with subclinical cerebrovascular health globally: a multimodal imaging study. European Radiology, 2021, 31, 2233-2241.	4.5	14
8	A novel sequence for simultaneous measurement of wholeâ€brain static and dynamic MRA, intracranial vessel wall image, and T 1 â€weighted structural brain MRI. Magnetic Resonance in Medicine, 2021, 85, 316-325.	3.0	3
9	Multinational Survey of Current Practice from Imaging to Treatment of Atherosclerotic Carotid Stenosis. Cerebrovascular Diseases, 2021, 50, 108-120.	1.7	11
10	Domain adaptive and fully automated carotid artery atherosclerotic lesion detection using an artificial intelligence approach (LATTE) on 3D MRI. Magnetic Resonance in Medicine, 2021, 86, 1662-1673.	3.0	7
11	Neural network enhanced 3D turbo spin echo for MR intracranial vessel wall imaging. Magnetic Resonance Imaging, 2021, 78, 7-17.	1.8	5
12	Regression in carotid plaque lipid content and neovasculature with PCSK9 inhibition: A time course study. Atherosclerosis, 2021, 327, 31-38.	0.8	15
13	Urinary sodium and potassium excretion and cerebrovascular health: a multimodal imaging study. European Journal of Nutrition, 2021, 60, 4555-4563.	3.9	3
14	Atherosclerotic Burden and Remodeling Patterns of the Popliteal Artery as Detected in the Magnetic Resonance Imaging Osteoarthritis Initiative Data Set. Journal of the American Heart Association, 2021, 10, e018408.	3.7	7
15	Vessel length on SNAP MRA and TOF MRA is a potential imaging biomarker for brain blood flow. Magnetic Resonance Imaging, 2021, 79, 20-27.	1.8	9
16	Roadmap Consensus on Carotid Artery Plaque Imaging and Impact on Therapy Strategies and Guidelines: An International, Multispecialty, Expert Review and Position Statement. American Journal of Neuroradiology, 2021, 42, 1566-1575.	2.4	25
17	Stroke Prevention with Extracranial Carotid Artery Disease. Current Cardiology Reports, 2021, 23, 161.	2.9	2
18	Serial magnetic resonance imaging detects a rapid reduction in plaque lipid content under PCSK9 inhibition with alirocumab. International Journal of Cardiovascular Imaging, 2021, 37, 1415-1422.	1.5	13

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19	A comparison of carotid atherosclerosis in symptomatic patients between 2002-2005 and 2012-2015 cohorts using multi-contrast magnetic resonance vessel wall imaging. Journal of Geriatric Cardiology, 2021, 18, 623-630.	0.2	0
20	Characterization of Carotid Atherosclerotic Plaques Using 3-Dimensional MERGE Magnetic Resonance Imaging and Correlation With Stroke Risk Factors. Stroke, 2020, 51, 475-480.	2.0	15
21	Imaging Features of Vulnerable Carotid Atherosclerotic Plaque and the Associated Clinical Implications. Current Treatment Options in Cardiovascular Medicine, 2020, 22, 1.	0.9	1
22	Automated Artery Localization and Vessel Wall Segmentation Using Tracklet Refinement and Polar Conversion. IEEE Access, 2020, 8, 217603-217614.	4.2	14
23	Fully automated and robust analysis technique for popliteal artery vessel wall evaluation (FRAPPE) using neural network models from standardized knee MRI. Magnetic Resonance in Medicine, 2020, 84, 2147-2160.	3.0	7
24	Confidence Weighting for Robust Automated Measurements of Popliteal Vessel Wall Magnetic Resonance Imaging. Circulation Genomic and Precision Medicine, 2020, 13, e002870.	3.6	4
25	Evaluation of 3D multi-contrast carotid vessel wall MRI: a comparative study. Quantitative Imaging in Medicine and Surgery, 2020, 10, 269-282.	2.0	9
26	Quantitative measurement of atheroma burden: reproducibility in serial studies of atherosclerotic femoral arteries. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2020, 33, 855-863.	2.0	0
27	Automated Intracranial Artery Labeling Using a Graph Neural Network and Hierarchical Refinement. Lecture Notes in Computer Science, 2020, , 76-85.	1.3	7
28	Combining morphological and biomechanical factors for optimal carotid plaque progression prediction: An MRI-based follow-up study using 3D thin-layer models. International Journal of Cardiology, 2019, 293, 266-271.	1.7	8
29	Improved carotid lumen delineation on non-contrast MR angiography using SNAP (Simultaneous) Tj ETQq1 1 0.784314 rgBT /Overloc 62, 87-93.	1.8	3
30	Four Different Carotid Atherosclerotic Behaviors Based on Luminal Stenosis and Plaque Characteristics in Symptomatic Patients: An in Vivo Study. Diagnostics, 2019, 9, 137.	2.6	3
31	Intracranial aneurysms at higher clinical risk for rupture demonstrate increased wall enhancement and thinning on multicontrast 3D vessel wall MRI. British Journal of Radiology, 2019, 92, 20180950.	2.2	47
32	Understanding Atherosclerosis Through an Osteoarthritis Data Set. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, 1018-1025.	2.4	10
33	Semiautomatic carotid intraplaque hemorrhage volume measurement using 3D carotid MRI. Journal of Magnetic Resonance Imaging, 2019, 50, 1055-1062.	3.4	11
34	Quantitative assessment of the intracranial vasculature in an older adult population using iCafe. Neurobiology of Aging, 2019, 79, 59-65.	3.1	25
35	Imaging biomarkers of vulnerable carotid plaques for stroke risk prediction and their potential clinical implications. Lancet Neurology, The, 2019, 18, 559-572.	10.2	279
36	Inter-rater and scanâ€“rescan reproducibility of the detection of intracranial atherosclerosis on contrast-enhanced 3D vessel wall MRI. British Journal of Radiology, 2019, 92, 20180973.	2.2	17

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37	Quantification of morphometry and intensity features of intracranial arteries from 3D TOF MRA using the intracranial artery feature extraction (iCafe): A reproducibility study. Magnetic Resonance Imaging, 2019, 57, 293-302.	1.8	18
38	Accelerated multi-contrast high isotropic resolution 3D intracranial vessel wall MRI using a tailored k-space undersampling and partially parallel reconstruction strategy. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2019, 32, 343-357.	2.0	14
39	Comparison of outcomes in women and men following carotid interventions in the Washington state's Vascular Interventional Surgical Care and Outcomes Assessment Program. Journal of Vascular Surgery, 2019, 69, 1121-1128.	1.1	7
40	Impact of Patient-Specific In Vivo Vessel Material Properties on Carotid Atherosclerotic Plaque Stress/Strain Calculations. International Journal of Computational Methods, 2019, 16, 1842002.	1.3	2
41	Carotid Artery Remodeling Is Segment Specific. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 927-934.	2.4	40
42	Carotid Artery Wall Imaging: Perspective and Guidelines from the ASNR Vessel Wall Imaging Study Group and Expert Consensus Recommendations of the American Society of Neuroradiology. American Journal of Neuroradiology, 2018, 39, E9-E31.	2.4	213
43	Lp(a) (Lipoprotein(a)) Levels Predict Progression of Carotid Atherosclerosis in Subjects With Atherosclerotic Cardiovascular Disease on Intensive Lipid Therapy. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 673-678.	2.4	32
44	Risk Factors for Development of CarotidÂPlaque Components. JACC: Cardiovascular Imaging, 2018, 11, 193-195.	5.3	4
45	Development of a quantitative intracranial vascular features extraction tool on 3<scp>D</scp><scp>MRA</scp> using semiautomated openâ€curve active contour vessel tracing. Magnetic Resonance in Medicine, 2018, 79, 3229-3238.	3.0	64
46	Association of variant arch anatomy with type B aortic dissection and hemodynamic mechanisms. Journal of Vascular Surgery, 2018, 68, 1640-1648.	1.1	28
47	Ipsilateral plaques display higher T1 signals than contralateral plaques in recently symptomatic patients with bilateral carotid intraplaque hemorrhage. Atherosclerosis, 2017, 257, 78-85.	0.8	23
48	Chinese Atherosclerosis Risk Evaluation (CARE II) study: a novel cross-sectional, multicentre study of the prevalence of high-risk atherosclerotic carotid plaque in Chinese patients with ischaemic cerebrovascular eventsâ€"design and rationale. Stroke and Vascular Neurology, 2017, 2, 15-20.	3.3	49
49	Simultaneous noncontrast angiography and intraplaque hemorrhage (SNAP) imaging: Comparison with contrastâ€enhanced MR angiography for measuring carotid stenosis. Journal of Magnetic Resonance Imaging, 2017, 46, 1045-1052.	3.4	17
50	Carotid Plaque Lipid Content and Fibrous Cap Status Predict Systemic CV Outcomes. JACC: Cardiovascular Imaging, 2017, 10, 241-249.	5.3	82
51	A vascular image registration method based on network structure and circuit simulation. BMC Bioinformatics, 2017, 18, 229.	2.6	4
52	Noninvasive characterization of carotid plaque strain. Journal of Vascular Surgery, 2017, 65, 1653-1663.	1.1	11
53	Added Value of Vessel Wall Magnetic Resonance Imaging for Differentiation of Nonocclusive Intracranial Vasculopathies. Stroke, 2017, 48, 3026-3033.	2.0	83
54	Prevalence and Characteristics of Carotid Artery Highâ€Risk Atherosclerotic Plaques in Chinese Patients With Cerebrovascular Symptoms: A Chinese Atherosclerosis Risk Evaluation II Study. Journal of the American Heart Association, 2017, 6, .	3.7	70

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55	Association between Snoring and Highâ€Risk Carotid Plaque Features. Otolaryngology - Head and Neck Surgery, 2017, 157, 336-344.	1.9	7
56	Introduction: Evolution of carotid atherosclerotic disease therapies. Seminars in Vascular Surgery, 2017, 30, 1.	2.8	1
57	3D intracranial artery segmentation using a convolutional autoencoder. , 2017, , .		18
58	MRI-based patient-specific human carotid atherosclerotic vessel material property variations in patients, vessel location and long-term follow up. PLoS ONE, 2017, 12, e0180829.	2.5	9
59	Joint blood and cerebrospinal fluid suppression for intracranial vessel wall MRI. Magnetic Resonance in Medicine, 2016, 75, 831-838.	3.0	61
60	Carotid plaque fissure: An underestimated source of intraplaque hemorrhage. Atherosclerosis, 2016, 254, 102-108.	0.8	36
61	Added Value of Vessel Wall Magnetic Resonance Imaging in the Differentiation of Moyamoya Vasculopathies in a Non-Asian Cohort. Stroke, 2016, 47, 1782-1788.	2.0	85
62	Blood Pressure Is a Major Modifiable Risk Factor Implicated in Pathogenesis of Intraplaque Hemorrhage. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 743-749.	2.4	35
63	Plaque Imaging to Decide on Optimal Treatment. Neuroimaging Clinics of North America, 2016, 26, 165-173.	1.0	8
64	In vivo semi-automatic segmentation of multicontrast cardiovascular magnetic resonance for prospective cohort studies on plaque tissue composition: initial experience. International Journal of Cardiovascular Imaging, 2016, 32, 73-81.	1.5	13
65	High resolution FDG-microPET of carotid atherosclerosis: plaque components underlying enhanced FDG uptake. International Journal of Cardiovascular Imaging, 2016, 32, 145-152.	1.5	24
66	Nonstenotic Culprit Plaque: The Utility of High-Resolution Vessel Wall MRI of Intracranial Vessels after Ischemic Stroke. Case Reports in Radiology, 2015, 2015, 1-4.	0.3	22
67	Multicontrast High-Resolution Vessel Wall Magnetic Resonance Imaging and Its Value in Differentiating Intracranial Vasculopathic Processes. Stroke, 2015, 46, 1567-1573.	2.0	173
68	Carotid magnetic resonance imaging for monitoring atherosclerotic plaque progression: a multicenter reproducibility study. International Journal of Cardiovascular Imaging, 2015, 31, 95-103.	1.5	58
69	Intravascular ultrasound is a critical tool for accurate endograft sizing in the management of blunt thoracic aortic injury. Journal of Vascular Surgery, 2015, 61, 630-635.	1.1	38
70	HDLâ€ is a Superior Predictor of Carotid Artery Disease in a Caseâ€Control Cohort of 1725 Participants. Journal of the American Heart Association, 2014, 3, e000902.	3.7	35
71	Prediction of High-Risk Plaque Development and Plaque Progression With the Carotid Atherosclerosis Score. JACC: Cardiovascular Imaging, 2014, 7, 366-373.	5.3	59
72	Image-based modeling for better understanding and assessment of atherosclerotic plaque progression and vulnerability: Data, modeling, validation, uncertainty and predictions. Journal of Biomechanics, 2014, 47, 834-846.	2.1	59

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73	Clinical Factors Associated With High-Risk Carotid Plaque Features as Assessed by Magnetic Resonance Imaging in Patients With Established Vascular Disease (from the AIM-HIGH Study). American Journal of Cardiology, 2014, 114, 1412-1419.	1.6	33
74	Simultaneous noncontrast angiography and intraPlaque hemorrhage (SNAP) imaging for carotid atherosclerotic disease evaluation. Magnetic Resonance in Medicine, 2013, 69, 337-345.	3.0	115
75	Subclinical Carotid Atherosclerosis: Short-term Natural History of Lipid-rich Necrotic Coreâ€"A Multicenter Study with MR Imaging. Radiology, 2013, 268, 61-68.	7.3	59
76	Sustained Acceleration in Carotid Atherosclerotic Plaque Progression With Intraplaque Hemorrhage. JACC: Cardiovascular Imaging, 2012, 5, 798-804.	5.3	118
77	Discriminating Carotid Atherosclerotic Lesion Severity by Luminal Stenosis and Plaque Burden. Stroke, 2011, 42, 347-353.	2.0	67
78	Carotid plaque assessment using fast 3D isotropic resolution blackâ€blood MRI. Magnetic Resonance in Medicine, 2011, 65, 627-637.	3.0	135
79	Carotid Artery Atherosclerosis: Effect of Intensive Lipid Therapy on the Vasa Vasorumâ€"Evaluation by Using Dynamic Contrast-enhanced MR Imaging. Radiology, 2011, 260, 224-231.	7.3	77
80	Minimization of MR Contrast Weightings for the Comprehensive Evaluation of Carotid Atherosclerotic Disease. Investigative Radiology, 2010, 45, 36-41.	6.2	25
81	Advanced human carotid plaque progression correlates positively with flow shear stress using follow-up scan data: An in vivo MRI multi-patient 3D FSI study. Journal of Biomechanics, 2010, 43, 2530-2538.	2.1	64
82	The association of lesion eccentricity with plaque morphology and components in the superficial femoral artery: a high-spatial-resolution, multi-contrast weighted CMR study. Journal of Cardiovascular Magnetic Resonance, 2010, 12, 37.	3.3	53
83	MRI in the early identification and classification of high-risk atherosclerotic carotid plaques. Imaging in Medicine, 2010, 2, 63-75.	0.0	44
84	Carotid Intraplaque Hemorrhage Imaging at 3.0-T MR Imaging: Comparison of the Diagnostic Performance of Three T1-weighted Sequences. Radiology, 2010, 254, 551-563.	7.3	179
85	MRI of carotid atherosclerosis: clinical implications and future directions. Nature Reviews Cardiology, 2010, 7, 165-173.	13.7	143
86	Cardiovascular magnetic resonance in carotid atherosclerotic disease. Journal of Cardiovascular Magnetic Resonance, 2009, 11, 53.	3.3	27
87	Local critical stress correlates better than global maximum stress with plaque morphological features linked to atherosclerotic plaque vulnerability: an in vivo multi-patient study. BioMedical Engineering OnLine, 2009, 8, 15.	2.7	57
88	MULTI-PATIENT FSI STUDIES FOR ATHEROSCLEROTIC CAROTID PLAQUE PROGRESSION BASED ON SERIAL MAGNETIC RESONANCE IMAGING. , 2009, , 203-217.		0
89	Differences in carotid arterial morphology and composition between individuals with and without obstructive coronary artery disease: A cardiovascular magnetic resonance study. Journal of Cardiovascular Magnetic Resonance, 2008, 10, 31.	3.3	36
90	Carotid Plaque Morphology and Composition: Initial Comparison between 1.5- and 3.0-T Magnetic Field Strengths. Radiology, 2008, 248, 550-560.	7.3	103

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91	Meshless Generalized Finite Difference Method and Human Carotid Atherosclerotic Plaque Progression Simulation Using Multi-Year MRI Patient-Tracking Data. CMES - Computer Modeling in Engineering and Sciences, 2008, 28, 95-107.	1.1	8
92	Magnetic Resonance Imaging of Carotid Atherosclerosis. Topics in Magnetic Resonance Imaging, 2007, 18, 371-378.	1.2	188
93	The Vulnerable, or High-Risk, Atherosclerotic Plaque: Noninvasive MR Imaging for Characterization and Assessment. Radiology, 2007, 244, 64-77.	7.3	312
94	Improved suppression of plaqueâ€mimicking artifacts in blackâ€blood carotid atherosclerosis imaging using a multislice motionâ€sensitized drivenâ€equilibrium (MSDE) turbo spinâ€echo (TSE) sequence. Magnetic Resonance in Medicine, 2007, 58, 973-981.	3.0	199
95	Association of high-density lipoprotein levels and carotid atherosclerotic plaque characteristics by magnetic resonance imaging. International Journal of Cardiovascular Imaging, 2007, 23, 337-342.	1.5	32
96	Association Between Carotid Plaque Characteristics and Subsequent Ischemic Cerebrovascular Events. Stroke, 2006, 37, 818-823.	2.0	691
97	Response to Letter by Moody et al. Stroke, 2006, 37, 1649-1649.	2.0	0
98	Intra- and interreader reproducibility of magnetic resonance imaging for quantifying the lipid-rich necrotic core is improved with gadolinium contrast enhancement. Journal of Magnetic Resonance Imaging, 2006, 24, 203-210.	3.4	91
99	Automated measurement of mean wall thickness in the common carotid artery by MRI: A comparison to intima-media thickness by B-mode ultrasound. Journal of Magnetic Resonance Imaging, 2006, 24, 379-387.	3.4	71
100	Comparison of Symptomatic and Asymptomatic Atherosclerotic Carotid Plaque Features with in Vivo MR Imaging. Radiology, 2006, 240, 464-472.	7.3	188
101	Inflammation in Carotid Atherosclerotic Plaque: A Dynamic Contrast-enhanced MR Imaging Study. Radiology, 2006, 241, 459-468.	7.3	275
102	In Vivo Quantitative Measurement of Intact Fibrous Cap and Lipid-Rich Necrotic Core Size in Atherosclerotic Carotid Plaque. Circulation, 2005, 112, 3437-3444.	1.6	481
103	Sample Size Calculation for Clinical Trials Using Magnetic Resonance Imaging for the Quantitative Assessment of Carotid Atherosclerosis. Journal of Cardiovascular Magnetic Resonance, 2005, 7, 799-808.	3.3	105
104	Hemorrhage in the Atherosclerotic Carotid Plaque: A High-Resolution MRI Study. Stroke, 2004, 35, 1079-1084.	2.0	400
105	In vivo accuracy of multisequence MR imaging for identifying unstable fibrous caps in advanced human carotid plaques. Journal of Magnetic Resonance Imaging, 2003, 17, 410-420.	3.4	201
106	Identification of Fibrous Cap Rupture With Magnetic Resonance Imaging Is Highly Associated With Recent Transient Ischemic Attack or Stroke. Circulation, 2002, 105, 181-185.	1.6	425
107	Classification of Human Carotid Atherosclerotic Lesions With In Vivo Multicontrast Magnetic Resonance Imaging. Circulation, 2002, 106, 1368-1373.	1.6	702
108	A multi-scale method for automatic correction of intensity non-uniformity in MR images. Journal of Magnetic Resonance Imaging, 2001, 13, 428-436.	3.4	54

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109	In Vivo Accuracy of Multispectral Magnetic Resonance Imaging for Identifying Lipid-Rich Necrotic Cores and Intraplaque Hemorrhage in Advanced Human Carotid Plaques. Circulation, 2001, 104, 2051-2056.	1.6	729
110	Visualization of Fibrous Cap Thickness and Rupture in Human Atherosclerotic Carotid Plaque In Vivo With High-Resolution Magnetic Resonance Imaging. Circulation, 2000, 102, 959-964.	1.6	573
111	Measurement of Atherosclerotic Carotid Plaque Size In Vivo Using High Resolution Magnetic Resonance Imaging. Circulation, 1998, 98, 2666-2671.	1.6	285
112	In Vitro and In Situ Magnetic Resonance Imaging Signal Features of Atherosclerotic Plaque-Associated Lipids. Arteriosclerosis, Thrombosis, and Vascular Biology, 1997, 17, 1496-1503.	2.4	52
113	Phasedâ€Array Magnetic Resonance Imaging of the Carotid Artery Bifurcation: Preliminary Results in Healthy Volunteers and a Patient with Aherosclerotic Disease. Journal of Magnetic Resonance Imaging, 1995, 5, 561-565.	3.4	70
114	Interstitial Collagenase (MMP-1) Expression in Human Carotid Atherosclerosis. Circulation, 1995, 92, 1393-1398.	1.6	307