

Aaron Fenster

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/12016019/publications.pdf>

Version: 2024-02-01

117
papers

5,839
citations

93792

39
h-index

87275

74
g-index

118
all docs

118
docs citations

118
times ranked

4622
citing authors

#	ARTICLE	IF	CITATIONS
1	Deep Learning-Based Measurement of Total Plaque Area in B-Mode Ultrasound Images. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 2967-2977.	3.9	35
2	A Voxel-Based Fully Convolution Network and Continuous Max-Flow for Carotid Vessel-Wall-Volume Segmentation From 3D Ultrasound Images. IEEE Transactions on Medical Imaging, 2020, 39, 2844-2855.	5.4	40
3	Fractal dimension based carotid plaque characterization from three-dimensional ultrasound images. Medical and Biological Engineering and Computing, 2019, 57, 135-146.	1.6	15
4	Deep learning-based carotid media-adventitia and lumen-intima boundary segmentation from three-dimensional ultrasound images. Medical Physics, 2019, 46, 3180-3193.	1.6	69
5	U-Net based automatic carotid plaque segmentation from 3D ultrasound images. , 2019, , .		12
6	A comparison of prostate tumor targeting strategies using magnetic resonance imaging-targeted, transrectal ultrasound-guided fusion biopsy. Medical Physics, 2018, 45, 1018-1028.	1.6	6
7	Real-time registration of 3D to 2D ultrasound images for image-guided prostate biopsy. Medical Physics, 2017, 44, 4708-4723.	1.6	17
8	Accurate quantification of local changes for carotid arteries in 3D ultrasound images using convex optimization-based deformable registration. Proceedings of SPIE, 2016, , .	0.8	3
9	Rotationally resliced 3D prostate TRUS segmentation using convex optimization with shape priors. Medical Physics, 2015, 42, 877-891.	1.6	13
10	Three-dimensional segmentation of pulmonary artery volume from thoracic computed tomography imaging. , 2015, , .		0
11	Pulmonary Abnormalities and Carotid Atherosclerosis in Ex-Smokers without Airflow Limitation. COPD: Journal of Chronic Obstructive Pulmonary Disease, 2015, 12, 62-70.	0.7	5
12	3D ultrasound imaging in image-guided intervention. , 2014, 2014, 6151-4.		11
13	Three-Dimensional Carotid Ultrasound Plaque Texture Predicts Vascular Events. Stroke, 2014, 45, 2695-2701.	1.0	83
14	AAPM and GEC-ESTRO guidelines for image-guided robotic brachytherapy: Report of Task Group 192. Medical Physics, 2014, 41, 101501.	1.6	78
15	Evaluating the utility of intraprocedural 3D TRUS image information in guiding registration for displacement compensation during prostate biopsy. Medical Physics, 2014, 41, 082901.	1.6	4
16	Segmentation of the Carotid Arteries from 3D Ultrasound Images. , 2014, , 131-157.		0
17	3-D Carotid Multi-Region MRI Segmentation by Globally Optimal Evolution of Coupled Surfaces. IEEE Transactions on Medical Imaging, 2013, 32, 770-785.	5.4	39
18	Atherosclerosis Imaging and the Canadian Atherosclerosis Imaging Network. Canadian Journal of Cardiology, 2013, 29, 297-303.	0.8	25

#	ARTICLE	IF	CITATIONS
19	Three-dimensional prostate segmentation using level set with shape constraint based on rotational slices for 3D endorectal TRUS guided biopsy. <i>Medical Physics</i> , 2013, 40, 072903.	1.6	25
20	Progression of Carotid Plaque Volume Predicts Cardiovascular Events. <i>Stroke</i> , 2013, 44, 1859-1865.	1.0	141
21	Fully Automatic Plaque Segmentation in 3-D Carotid Ultrasound Images. <i>Ultrasound in Medicine and Biology</i> , 2013, 39, 2431-2446.	0.7	31
22	Needle segmentation using 3D Hough transform in 3D TRUS guided prostate transperineal therapy. <i>Medical Physics</i> , 2013, 40, 042902.	1.6	30
23	Quantification and visualization of carotid segmentation accuracy and precision using a 2D standardized carotid map. <i>Physics in Medicine and Biology</i> , 2013, 58, 3671-3703.	1.6	21
24	Segmentation of common carotid artery with active appearance models from ultrasound images. <i>Proceedings of SPIE</i> , 2013, , .	0.8	0
25	Prostate Brachytherapy With Oblique Needles to Treat Large Glands and Overcome Pubic Arch Interference. <i>International Journal of Radiation Oncology Biology Physics</i> , 2012, 83, 1463-1472.	0.4	20
26	The Relationship of Carotid Three-Dimensional Ultrasound Vessel Wall Volume with Age and Sex: Comparison to Carotid Intima-Media Thickness. <i>Ultrasound in Medicine and Biology</i> , 2012, 38, 1145-1153.	0.7	10
27	Three-dimensional Ultrasound Imaging of Carotid Atherosclerosis. , 2011, , .		4
28	A compact mechatronic system for 3D ultrasound guided prostate interventions. <i>Medical Physics</i> , 2011, 38, 1055-1069.	1.6	28
29	Clinical application of a 3D ultrasound-guided prostate biopsy system. <i>Urologic Oncology: Seminars and Original Investigations</i> , 2011, 29, 334-342.	0.8	205
30	Three-dimensional ultrasound scanning. <i>Interface Focus</i> , 2011, 1, 503-519.	1.5	91
31	Automatic 3D segmentation of ultrasound images using atlas registration and statistical texture prior. , 2011, 7964, .		25
32	3D Carotid Ultrasound Imaging. , 2011, , 325-350.		4
33	Fusion of MRI to 3D TRUS for Mechanically-Assisted Targeted Prostate Biopsy: System Design and Initial Clinical Experience. <i>Lecture Notes in Computer Science</i> , 2011, , 121-133.	1.0	10
34	Volumetric Evaluation of Carotid Atherosclerosis Using 3-Dimensional Ultrasonic Imaging. , 2011, , 263-277.		1
35	Carotid Plaque Surface Irregularity. , 2011, , 279-297.		0
36	Three-dimensional ultrasound-based texture analysis of the effect of atorvastatin on carotid atherosclerosis. <i>Proceedings of SPIE</i> , 2010, , .	0.8	0

#	ARTICLE	IF	CITATIONS
37	Texture analysis of carotid artery atherosclerosis from three-dimensional ultrasound images. <i>Medical Physics</i> , 2010, 37, 1382-1391.	1.6	43
38	An intraoperative 3D ultrasound system for tumor margin determination in breast cancer surgery. <i>Medical Physics</i> , 2010, 37, 564-570.	1.6	8
39	Three-Dimensional Carotid Ultrasound Segmentation Variability Dependence on Signal Difference and Boundary Orientation. <i>Ultrasound in Medicine and Biology</i> , 2010, 36, 95-110.	0.7	9
40	Measuring flow-mediated dilation through transverse and longitudinal imaging: comparison and validation of methods. <i>Physics in Medicine and Biology</i> , 2010, 55, 6501-6514.	1.6	3
41	2141 TRACKING OF PROSTATE BIOPSY SITES USING A 3D ULTRASOUND DEVICE (ARTEMIS). <i>Journal of Urology</i> , 2010, 183, .	0.2	3
42	Dietary Intervention to Reverse Carotid Atherosclerosis. <i>Circulation</i> , 2010, 121, 1200-1208.	1.6	190
43	Prospective cardiac gating of carotid three-dimensional ultrasound. <i>Medical Physics</i> , 2009, 36, 3168-3175.	1.6	4
44	Analysis of carotid lumen surface morphology using three-dimensional ultrasound imaging. <i>Physics in Medicine and Biology</i> , 2009, 54, 1149-1167.	1.6	28
45	Longitudinal Ultrasound Evaluation of Carotid Atherosclerosis in One, Two and Three Dimensions. <i>Ultrasound in Medicine and Biology</i> , 2009, 35, 367-375.	0.7	42
46	Three-dimensional Ultrasound Quantification of Intensive Statin Treatment of Carotid Atherosclerosis. <i>Ultrasound in Medicine and Biology</i> , 2009, 35, 1763-1772.	0.7	87
47	Anniversary Paper: Evolution of ultrasound physics and the role of medical physicists and the AAPM and its journal in that evolution. <i>Medical Physics</i> , 2009, 36, 411-428.	1.6	27
48	Nonrigid registration of three-dimensional ultrasound and magnetic resonance images of the carotid arteries. <i>Medical Physics</i> , 2009, 36, 373-385.	1.6	22
49	Three-dimensional ultrasound system for guided breast brachytherapy. <i>Medical Physics</i> , 2009, 36, 5099-5106.	1.6	10
50	Recent Advance in TRUS-Guided Prostate Brachytherapy. , 2009, , 25-40.		1
51	Development of 3D ultrasound techniques for carotid artery disease assessment and monitoring. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2008, 3, 1-10.	1.7	14
52	Area-preserving flattening maps of 3D ultrasound carotid arteries images. <i>Medical Image Analysis</i> , 2008, 12, 676-688.	7.0	28
53	Mapping Spatial and Temporal Changes in Carotid Atherosclerosis from Three-Dimensional Ultrasound Images. <i>Ultrasound in Medicine and Biology</i> , 2008, 34, 64-72.	0.7	35
54	Scan-rescan and intra-observer variability of magnetic resonance imaging of carotid atherosclerosis at 1.5 T and 3.0 T. <i>Physics in Medicine and Biology</i> , 2008, 53, 6821-6835.	1.6	30

#	ARTICLE	IF	CITATIONS
55	Quantification of carotid arteries atherosclerosis using 3D ultrasound images and area-preserving flattened maps. Proceedings of SPIE, 2008, , .	0.8	0
56	A "Twisting and Bending" Model-Based Nonrigid Image Registration Technique for 3-D Ultrasound Carotid Images. IEEE Transactions on Medical Imaging, 2008, 27, 1378-1388.	5.4	17
57	Design and evaluation of a 3D transrectal ultrasound prostate biopsy system. Medical Physics, 2008, 35, 4695-4707.	1.6	43
58	Quantification of carotid vessel wall and plaque thickness change using 3D ultrasound images. Medical Physics, 2008, 35, 3691-3710.	1.6	68
59	Mechanically assisted 3D ultrasound guided prostate biopsy system. Medical Physics, 2008, 35, 5397-5410.	1.6	116
60	Comparison of B-Mode Ultrasound, 3-Dimensional Ultrasound, and Magnetic Resonance Imaging Measurements of Carotid Atherosclerosis. Journal of Ultrasound in Medicine, 2008, 27, 1321-1334.	0.8	27
61	Three-Dimensional Ultrasound Guidance and Robot Assistance for Prostate Brachytherapy. , 2008, , 429-460.		1
62	Robot-assisted thoracoscopic brachytherapy for lung cancer: Comparison of the ZEUS robot, VATS, and manual seed implantation. Computer Aided Surgery, 2007, 12, 270-277.	1.8	9
63	Design, calibration and evaluation of a robotic needle-positioning system for small animal imaging applications. Physics in Medicine and Biology, 2007, 52, 1863-1878.	1.6	25
64	Manual planimetric measurement of carotid plaque volume using three-dimensional ultrasound imaging. Medical Physics, 2007, 34, 1496-1505.	1.6	19
65	Fast prostate segmentation in 3D TRUS images based on continuity constraint using an autoregressive model. Medical Physics, 2007, 34, 4109-4125.	1.6	38
66	Validation of 3D Ultrasound Vessel Wall Volume: An Imaging Phenotype of Carotid Atherosclerosis. Ultrasound in Medicine and Biology, 2007, 33, 905-914.	0.7	113
67	Measurements of Aneurysm Morphology Determined by 3-D Micro-Ultrasound Imaging as Potential Quantitative Biomarkers in a Mouse Aneurysm Model. Ultrasound in Medicine and Biology, 2007, 33, 1552-1560.	0.7	14
68	Prostate volume contouring: A 3D analysis of segmentation using 3DTRUS, CT, and MR. International Journal of Radiation Oncology Biology Physics, 2007, 67, 1238-1247.	0.4	224
69	Deformable Model-Based Segmentation Of The Prostate From Ultrasound Images. , 2007, , 325-369.		0
70	Prostate segmentation by feature enhancement using domain knowledge and adaptive region based operations. Physics in Medicine and Biology, 2006, 51, 1831-1848.	1.6	24
71	Quantification of progression and regression of carotid vessel atherosclerosis using 3D ultrasound images. , 2006, 2006, 3819-22.		9
72	Quantification of carotid vessel atherosclerosis. , 2006, 6143, 85.		10

#	ARTICLE	IF	CITATIONS
73	Relationship of the metabolic syndrome to carotid ultrasound traits. Cardiovascular Ultrasound, 2006, 4, 28.	0.5	35
74	Carotid ultrasound phenotypes in vulnerable populations. Cardiovascular Ultrasound, 2006, 4, 44.	0.5	17
75	Prostate boundary segmentation from ultrasound images using 2D active shape models: Optimisation and extension to 3D. Computer Methods and Programs in Biomedicine, 2006, 84, 99-113.	2.6	71
76	Automated localization of implanted seeds in 3D TRUS images used for prostate brachytherapy. Medical Physics, 2006, 33, 2404-2417.	1.6	21
77	Quantification of carotid plaque volume measurements using 3D ultrasound imaging. Ultrasound in Medicine and Biology, 2005, 31, 751-762.	0.7	82
78	Three-dimensional ultrasound biomicroscopy for xenograft growth analysis. Ultrasound in Medicine and Biology, 2005, 31, 865-870.	0.7	57
79	Image-based cardiac gating for three-dimensional intravascular ultrasound imaging. Ultrasound in Medicine and Biology, 2005, 31, 53-63.	0.7	28
80	A comparison of ultrasound measurements to assess carotid atherosclerosis development in subjects with and without type 2 diabetes. Cardiovascular Ultrasound, 2005, 3, 15.	0.5	42
81	Brachytherapy needle deflection evaluation and correction. Medical Physics, 2005, 32, 902-909.	1.6	114
82	Oblique needle segmentation and tracking for 3D TRUS guided prostate brachytherapy. Medical Physics, 2005, 32, 2928-2941.	1.6	34
83	3D TRUS Image Segmentation in Prostate Brachytherapy. , 2005, 2005, 7170-3.		1
84	Visualization and Segmentation Techniques in 3D Ultrasound Images. , 2005, , 241-269.		1
85	Disparate Associations of a Functional Promoter Polymorphism in PCK1 With Carotid Wall Ultrasound Traits. Stroke, 2005, 36, 2566-2570.	1.0	24
86	Differences between carotid wall morphological phenotypes measured by ultrasound in one, two and three dimensions. Atherosclerosis, 2005, 178, 319-325.	0.4	91
87	3D Ultrasound Measurement of Change in Carotid Plaque Volume. Stroke, 2005, 36, 1904-1909.	1.0	238
88	3D TRUS Guided Robot Assisted Prostate Brachytherapy. Lecture Notes in Computer Science, 2005, 8, 17-24.	1.0	23
89	Genetic Variation in PPARC Encoding Peroxisome Proliferator-Activated Receptor $\hat{1}^3$ Associated With Carotid Atherosclerosis. Stroke, 2004, 35, 2036-2040.	1.0	93
90	Measurement of Carotid Plaque Volume by 3-Dimensional Ultrasound. Stroke, 2004, 35, 864-869.	1.0	190

#	ARTICLE	IF	CITATIONS
91	Prostate segmentation algorithm using dyadic wavelet transform and discrete dynamic contour. <i>Physics in Medicine and Biology</i> , 2004, 49, 4943-4960.	1.6	42
92	Projection-based needle segmentation in 3D ultrasound images. <i>Computer Aided Surgery</i> , 2004, 9, 193-201.	1.8	15
93	Robot-assisted 3D-TRUS guided prostate brachytherapy: System integration and validation. <i>Medical Physics</i> , 2004, 31, 539-548.	1.6	162
94	The use of three-dimensional ultrasound imaging in breast biopsy and prostate therapy. <i>Measurement: Journal of the International Measurement Confederation</i> , 2004, 36, 245-256.	2.5	18
95	Projection-based needle segmentation in 3D ultrasound images. <i>Computer Aided Surgery</i> , 2004, 9, 193-201.	1.8	8
96	Three-dimensional ultrasound imaging and its use in quantifying organ and pathology volumes. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 377, 982-989.	1.9	29
97	Prostate boundary segmentation from 3D ultrasound images. <i>Medical Physics</i> , 2003, 30, 1648-1659.	1.6	74
98	Semiautomatic three-dimensional segmentation of the prostate using two-dimensional ultrasound images. <i>Medical Physics</i> , 2003, 30, 887-897.	1.6	85
99	Automatic needle segmentation in three-dimensional ultrasound images using two orthogonal two-dimensional image projections. <i>Medical Physics</i> , 2003, 30, 222-234.	1.6	60
100	A real-time biopsy needle segmentation technique using Hough Transform. <i>Medical Physics</i> , 2003, 30, 2222-2233.	1.6	80
101	Testing and optimization of a semiautomatic prostate boundary segmentation algorithm using virtual operators. <i>Medical Physics</i> , 2003, 30, 1637-1647.	1.6	14
102	Theoretical and experimental quantification of carotid plaque volume measurements made by three-dimensional ultrasound using test phantoms. <i>Medical Physics</i> , 2002, 29, 2319-2327.	1.6	66
103	3D ultrasound imaging: applications in image-guided therapy and biopsy. <i>Computers and Graphics</i> , 2002, 26, 557-568.	1.4	20
104	Visualization and segmentation techniques in 3-D ultrasound images. , 2002, , 737-742.		1
105	Three-dimensional ultrasound-guided core needle breast biopsy. <i>Ultrasound in Medicine and Biology</i> , 2001, 27, 1025-1034.	0.7	60
106	Three-dimensional ultrasound imaging. <i>Physics in Medicine and Biology</i> , 2001, 46, R67-R99.	1.6	620
107	An automated segmentation method for three-dimensional carotid ultrasound images. <i>Physics in Medicine and Biology</i> , 2001, 46, 1321-1342.	1.6	62
108	Optimum scan spacing for three-dimensional ultrasound by speckle statistics. <i>Ultrasound in Medicine and Biology</i> , 2000, 26, 551-562.	0.7	38

#	ARTICLE	IF	CITATIONS
109	Clinical Utility of Three-dimensional US. Radiographics, 2000, 20, 559-571.	1.4	209
110	Prostate boundary segmentation from 2D ultrasound images. Medical Physics, 2000, 27, 1777-1788.	1.6	144
111	Segmentation of carotid artery in ultrasound images: Method development and evaluation technique. Medical Physics, 2000, 27, 1961-1970.	1.6	91
112	<title>Technique for evaluation of semiautomatic segmentation methods</title>. , 1999, , .		14
113	Analysis of Linear, Area and Volume Distortion in 3D Ultrasound Imaging. Ultrasound in Medicine and Biology, 1998, 24, 355-373.	0.7	27
114	Intra- and inter-observer variability and reliability of prostate volume measurement via two-dimensional and three-dimensional ultrasound imaging. Ultrasound in Medicine and Biology, 1998, 24, 673-681.	0.7	153
115	Three-Dimensional Ultrasound. Ultrasound Quarterly, 1998, 14, 25-40.	0.3	19
116	Accuracy of prostate volume measurements in vitro using three-dimensional ultrasound. Academic Radiology, 1996, 3, 401-406.	1.3	79
117	Three-dimensional ultrasound imaging of the eye. Eye, 1996, 10, 75-81.	1.1	39