Craig K Abbey

List of Publications by Year
in descending order

37 papers	1,295 citations	430874 18 h-index	434195 31 g-index
37 all docs	37 docs citations	37 times ranked	694 citing authors

#	ARTICLE	IF	CITATIONS
1	Foveated Model Observers for Visual Search in 3D Medical Images. IEEE Transactions on Medical Imaging, 2021, 40, 1021-1031.	8.9	9
2	Under-exploration of Three-Dimensional Images Leads to Search Errors for Small Salient Targets. Current Biology, 2021, 31, 1099-1106.e5.	3.9	14
3	Medical image quality metrics for foveated model observers. Journal of Medical Imaging, 2021, 8, 041209.	1.5	1
4	Classification images for localization performance in ramp€spectrum noise. Medical Physics, 2018, 45, 1970-1984.	3.0	10
5	Inter€laboratory comparison of channelized hotelling observer computation. Medical Physics, 2018, 45, 3019-3030.	3.0	15
6	Linear System Models for Ultrasonic Imaging: Intensity Signal Statistics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 669-678.	3.0	4
7	Foveated model observers to predict human performance in 3D images. , 2017, 10136, .		8
8	The role of extra-foveal processing in 3D imaging. Proceedings of SPIE, 2017, 10136, .	0.8	11
9	The Reproducibility of Changes in Diagnostic Figures of Merit Across Laboratory and Clinical Imaging Reader Studies. Academic Radiology, 2017, 24, 1436-1446.	2.5	4
10	Using Relative Statistics and Approximate Disease Prevalence to Compare Screening Tests. International Journal of Biostatistics, 2016, 12, .	0.7	9
11	Objective Assessment of Sonographic: Quality II Acquisition Information Spectrum. IEEE Transactions on Medical Imaging, 2013, 32, 691-698.	8.9	18
12	Estimating the Relative Utility of Screening Mammography. Medical Decision Making, 2013, 33, 510-520.	2.4	15
13	Non€Gaussian statistical properties of breast images. Medical Physics, 2012, 39, 7121-7130.	3.0	24
14	Effects of frequency and bandwidth on diagnostic information transfer in ultrasonic B-Mode imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 1115-1126.	3.0	18
15	Analysis of minimum-variance and Wiener-filtered beamforming strategies. , 2011, , .		0
16	Detectability index describes the information conveyed by sonographic images. , 2011, , .		2
17	An Equivalent Relative Utility Metric for Evaluating Screening Mammography. Medical Decision Making, 2010, 30, 113-122.	2.4	19
18	Cystic resolution and task performance in beamforming. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
19	Robustness of Wiener filtering as an approximation to the Bayesian observer stragegy. , 2010, , .		1
20	73.1: Invited Paper: Modeling the Effect of Image Noise on Perceptual Decisions. Digest of Technical Papers SID International Symposium, 2008, 39, 1127.	0.3	0
21	Contrast and stimulus information effects in rapid learning of a visual task. Journal of Vision, 2008, 8, 8.	0.3	6
22	Effect of dose reduction on the detection of mammographic lesions: A mathematical observer model analysis. Medical Physics, 2007, 34, 3385-3398.	3.0	36
23	Classification images for simple detection and discrimination tasks in correlated noise. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2007, 24, B110.	1.5	33
24	Adaptive detection mechanisms in globally statistically nonstationary-oriented noise. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2006, 23, 1549.	1.5	16
25	Preclinical Imaging of Mammary Intraepithelial Neoplasia with Positron Emission Tomography. Journal of Mammary Gland Biology and Neoplasia, 2006, 11, 137-149.	2.7	20
26	Classification images for detection, contrast discrimination, and identification tasks with a common ideal observer. Journal of Vision, 2006, 6, 4.	0.3	41
27	Detection performance theory for ultrasound imaging systems. IEEE Transactions on Medical Imaging, 2005, 24, 300-310.	8.9	23
28	In vivo positron-emission tomography imaging of progression and transformation in a mouse model of mammary neoplasia. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 11438-11443.	7.1	55
29	Automated computer evaluation and optimization of image compression of x-ray coronary angiograms for signal known exactly detection tasks. Optics Express, 2003, 11, 460.	3.4	89
30	Linear system models for ultrasonic imaging: application to signal statistics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2003, 50, 642-654.	3.0	76
31	Search for lesions in mammograms: Statistical characterization of observer responses. Medical Physics, 2003, 31, 24-36.	3.0	36
32	Optimal shifted estimates of human-observer templates in two-alternative forced-choice experiments. IEEE Transactions on Medical Imaging, 2002, 21, 429-440.	8.9	29
33	Classification image analysis: Estimation and statistical inference for two-alternative forced-choice experiments. Journal of Vision, 2002, 2, 5.	0.3	115
34	Human- and model-observer performance in ramp-spectrum noise: effects of regularization and object variability. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2001, 18, 473.	1.5	292
35	Visual signal detection in structured backgrounds III Calculation of figures of merit for model observers in statistically nonstationary backgrounds. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 193.	1.5	58
36	Visual signal detection in structured backgrounds IV Figures of merit for model performance in multiple-alternative forced-choice detection tasks with correlated responses. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 206.	1.5	41

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37	Visual signal detectability with two noise components: anomalous masking effects. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1997, 14, 2420.	1.5	147