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	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
2	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
3	Classification image analysis: Estimation and statistical inference for two-alternative forced-choice experiments. Journal of Vision, 2002, 2, 5.	0.3	115
4	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
5	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
6	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
7	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
8	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
9	Classification images for detection, contrast discrimination, and identification tasks with a common ideal observer. Journal of Vision, 2006, 6, 4.	0.3	41
10	Search for lesions in mammograms: Statistical characterization of observer responses. Medical Physics, 2003, 31, 24-36.	3.0	36
11	Effect of dose reduction on the detection of mammographic lesions: A mathematical observer model analysis. Medical Physics, 2007, 34, 3385-3398.	3.0	36
12	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
13	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
14	Non€Gaussian statistical properties of breast images. Medical Physics, 2012, 39, 7121-7130.	3.0	24
15	Detection performance theory for ultrasound imaging systems. IEEE Transactions on Medical Imaging, 2005, 24, 300-310.	8.9	23
16	Preclinical Imaging of Mammary Intraepithelial Neoplasia with Positron Emission Tomography. Journal of Mammary Gland Biology and Neoplasia, 2006, 11, 137-149.	2.7	20
17	An Equivalent Relative Utility Metric for Evaluating Screening Mammography. Medical Decision Making, 2010, 30, 113-122.	2.4	19
18	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

#	ARTICLE	IF	CITATIONS
19	Objective Assessment of Sonographic: Quality II Acquisition Information Spectrum. IEEE Transactions on Medical Imaging, 2013, 32, 691-698.	8.9	18
20	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
21	Estimating the Relative Utility of Screening Mammography. Medical Decision Making, 2013, 33, 510-520.	2.4	15
22	Inter-laboratory comparison of channelized hotelling observer computation. Medical Physics, 2018, 45, 3019-3030.	3.0	15
23	Under-exploration of Three-Dimensional Images Leads to Search Errors for Small Salient Targets. Current Biology, 2021, 31, 1099-1106.e5.	3.9	14
24	The role of extra-foveal processing in 3D imaging. Proceedings of SPIE, 2017, 10136, .	0.8	11
25	Classification images for localization performance in ramp-spectrum noise. Medical Physics, 2018, 45, 1970-1984.	3.0	10
26	Using Relative Statistics and Approximate Disease Prevalence to Compare Screening Tests. International Journal of Biostatistics, 2016, 12, .	0.7	9
27	Foveated Model Observers for Visual Search in 3D Medical Images. IEEE Transactions on Medical Imaging, 2021, 40, 1021-1031.	8.9	9
28	Foveated model observers to predict human performance in 3D images. , 2017, 10136, .		8
29	Contrast and stimulus information effects in rapid learning of a visual task. Journal of Vision, 2008, 8, 8.	0.3	6
30	Linear System Models for Ultrasonic Imaging: Intensity Signal Statistics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 669-678.	3.0	4
31	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
32	Detectability index describes the information conveyed by sonographic images. , 2011, , .		2
33	Robustness of Wiener filtering as an approximation to the Bayesian observer stragegy. , 2010, , .		1
34	Medical image quality metrics for foveated model observers. Journal of Medical Imaging, 2021, 8, 041209.	1.5	1
35	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
36	Cystic resolution and task performance in beamforming. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
37	Analysis of minimum-variance and Wiener-filtered beamforming strategies. , 2011, , .		0