James H Mcclellan

List of Publications by Year
in descending order

45 papers	**910** citations	759233 **12** h-index	677142 **22** g-index
45 all docs	**45** docs citations	**45** times ranked	**733** citing authors

#	Article	IF	Citations
1	A Compressive Sensing Data Acquisition and Imaging Method for Stepped Frequency GPRs. IEEE Transactions on Signal Processing, 2009, 57, 2640-2650.	5.3	269
2	Multistatic Ground-Penetrating Radar Experiments. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 2544-2553.	6.3	103
3	Seismic data denoising through multiscale and sparsity-promoting dictionary learning. Geophysics, 2015, 80, WD45-WD57.	2.6	98
4	Compressive Sensing for Sparse Touch Detection on Capacitive Touch Screens. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2012, 2, 639-648.	3.6	49
5	Robust Estimation of the Discrete Spectrum of Relaxations for Electromagnetic Induction Responses. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 1169-1179.	6.3	43
6	Compressive Sensing for GPR Imaging. Conference Record of the Asilomar Conference on Signals, Systems and Computers, 2007, , .	0.0	41
7	Novel Tool for Complete Digitization of Paper Electrocardiography Data. IEEE Journal of Translational Engineering in Health and Medicine, 2013, 1, 1800107-1800107.	3.7	37
8	Single Snapshot Super-Resolution DOA Estimation for Arbitrary Array Geometries. IEEE Signal Processing Letters, 2019, 26, 119-123.	3.6	36
9	Acoustic Multitarget Tracking Using Direction-of-Arrival Batches. IEEE Transactions on Signal Processing, 2007, 55, 2810-2825.	5.3	29
10	Sparse-promoting full-waveform inversion based on online orthonormal dictionary learning. Geophysics, 2017, 82, R87-R107.	2.6	27
11	Efficient Algorithm Design for GPR Imaging of Landmines. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 4010-4021.	6.3	22
12	Array Processing in Microseismic Monitoring: Detection, Enhancement, and Localization of Induced Seismicity. IEEE Signal Processing Magazine, 2018, 35, 99-111.	5.6	18
13	Detection of Cardiac Quiescence From B-Mode Echocardiography Using a Correlation-Based Frame-to-Frame Deviation Measure. IEEE Journal of Translational Engineering in Health and Medicine, 2013, 1, 1900211-1900211.	3.7	13
14	A Cochlear Implant Signal Processing Lab: Exploration of a Problem-Based Learning Exercise. IEEE Transactions on Education, 2011, 54, 628-636.	2.4	11
15	Estimation of the Discrete Spectrum of Relaxations for Electromagnetic Induction Responses Using ℓ_{p}-Regularized Least Squares for $0 \leq p \leq 1$. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 233-237.	3.1	10
16	3-D imaging for ground penetrating radar using compressive sensing with block-toeplitz structures. , 2012, , .		10
17	Characterization of cardiac quiescence from retrospective cardiac computed tomography using a correlationâ€based phaseâ€toâ€phase deviation measure. Medical Physics, 2015, 42, 983-993.	3.0	9
18	A Multi Target Bearing Tracking System using Random Sampling Consensus. , 2007, , .		7

#	Article	IF	Citations
19	Optimal Maneuvering of Seismic Sensors for Localization of Subsurface Targets. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1247-1257.	6.3	6
20	Collaborative system for signal processing education. , 2011, , .		5
21	Jointly sparse vector recovery via reweighted &#x2113;<inf>1</inf> minimization. , 2012, , .		5
22	Low-rank physical model recovery from low-rank signal approximation. , 2017, , .		5
23	Low-Rank Model for Wideband Electromagnetic Induction Sensors. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 2413-2417.	3.1	5
24	Super-resolution DOA Estimation for Arbitrary Array Geometries Using a Single Noisy Snapshot. , 2019, , .		5
25	Performance Analysis of Parameter Estimation in Electromagnetic Induction Data. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 5054-5066.	6.3	5
26	A Multitone Model-Based Seismic Data Compression. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 1030-1040.	9.3	5
27	Landmine detection using the discrete spectrum of relaxation frequencies. , 2011, , .		4
28	Tensor amplitude extraction in sensor array processing. , 2013, , .		4
29	Extracting target orientation for different electromagnetic induction sensing geometries. , 2014, , .		4
30	Web-based platform for problem-centered learning in DSP. , 2011, , .		3
31	Adaptive Prefiltering for Nonnegative Discrete Spectrum of Relaxations. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1018-1022.	3.1	3
32	Fast online orthonormal dictionary learning for efficient full waveform inversion. , 2016, , .		3
33	Study-flow: Studying effective student-content interaction in signal processing education. , 2017, , .		3
34	1-Bit Sparse Gridless Super-Resolution Doa Estimation For Coprime Arrays. , 2019, , .		3
35	Multiresolution Quadtree Beamformer. , 2002, , .		2
36	Feature Detection in Highly Noisy Images using Random Sample Theory. , 2007, , .		2

#	Article	IF	Citations
37	A Monte-Carlo Approach for Tracking Mobile Personnel. , 2007, , .		1
38	Estimation and application of discrete spectrum of relaxations for electromagnetic induction responses. , 2009, , .		1
39	Application of ℓ<inf>p</inf>-regularized least squares for 0 ≤ p ≤ 1 in estimating discrete spectrum models from sparse frequency measurements. , 2010, , .		1
40	Introductory signal processing labs based on filterbank applications. , 2011, , .		1
41	Estimation of the discrete spectrum of relaxation frequencies using multiple measurements. , 2012, , .		1
42	Performance Bounds for Target Parameter Estimation From Frequency-Domain Electromagnetic Induction Data. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	1
43	Data Collection Eclipsing Effects in the Inverse Polar Format Algorithm (IPFA) for Turntable Spotlight Inverse Synthetic Aperture Radar (ISAR) Imaging Systems. , 2007, , .		0
44	Distributed initialization of sensor networks with communication and computation trees. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	0
45	Performance Analysis for Estimating a Targetâ€™s Relaxation Frequencies From Frequency-Domain Electromagnetic Induction Data. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	0