LÃ¼tfiye Durak Ata

List of Publications by Year
in descending order

85 papers	679 citations	759233 12 h-index	642732 23 g-index
85 all docs	85 docs citations	85 times ranked	554 citing authors

#	Article	IF	Citations
1	Short-time fourier transform: two fundamental properties and an optimal implementation. IEEE Transactions on Signal Processing, 2003, 51, 1231-1242.	5.3	187
2	Reconstruction of nonuniformly sampled time-limited signals using prolate spheroidal wave functions. Signal Processing, 2009, 89, 2585-2595.	3.7	39
3	Adaptive fractional Fourier domain filtering. Signal Processing, 2010, 90, 1188-1196.	3.7	34
4	Optimum signal and image recovery by the method of alternating projections in fractional Fourier domains. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 675-689.	3.3	33
5	The discrete fractional Fourier transform based on the DFT matrix. Signal Processing, 2011, 91, 571-581.	3.7	30
6	Large-scale offline signature recognition via deep neural networks and feature embedding. Neurocomputing, 2019, 359, 1-14.	5.9	28
7	BER Performance of Full-Duplex Cognitive Radio Network With Nonlinear Energy Harvesting. IEEE Transactions on Green Communications and Networking, 2020, 4, 448-460.	5.5	26
8	FMCW Signal Detection and Parameter Extraction by Cross Wigner–Hough Transform. IEEE Transactions on Aerospace and Electronic Systems, 2017, 53, 334-344.	4.7	25
9	Shift-invariance of short-time Fourier transform in fractional Fourier domains. Journal of the Franklin Institute, 2009, 346, 136-146.	3.4	19
10	Efficient computation of DFT commuting matrices by a closed-form infinite order approximation to the second differentiation matrix. Signal Processing, 2011, 91, 582-589.	3.7	19
11	Parameter extraction of FMCW modulated radar signals using Wigner-Hough transform. , 2011, , .		18
12	Optimal Detection Thresholds in Spectrum Sensing with Receiver Diversity. Wireless Personal Communications, 2016, 87, 63-81.	2.7	14
13	Spectrally Efficient OFDMA Lattice Structure via Toroidal Waveforms on the Time-Frequency Plane. Eurasip Journal on Advances in Signal Processing, 2010, 2010, .	1.7	13
14	Dispersed chirp–z transform–based spectrum sensing and utilisation in cognitive radio networks. IET Signal Processing, 2014, 8, 320-329.	1.5	11
15	Performance analysis of free space optical communication systems over imprecise Málaga fading channels. Optics Communications, 2020, 457, 124694.	2.1	11
16	High-resolution signal processing techniques for through-the-wall imaging radar systems. International Journal of Microwave and Wireless Technologies, 2016, 8, 855-863.	1.9	9
17	Segmentation of precursor lesions in cervical cancer using convolutional neural networks. , 2017, , .		9
18	PWVD resolution considerations for LFMCW signal detection by WHT. , 2014, , .		8

#	Article	IF	Citations
19	Enhanced LPI Waveform Representation by Ambiguity-Domain Elliptical Gaussian Filtering. IEEE Transactions on Aerospace and Electronic Systems, 2017, 53, 762-777.	4.7	8
20	Implementation aspects of Wigner-Hough Transform based detectors for LFMCW signals. , 2016, , .		7
21	Multi-user shared access in massive machine-type communication systems via superimposed waveforms. Physical Communication, 2019, 37, 100896.	2.1	7
22	Analysis and classification of compressed EMG signals by wavelet transform via alternative neural networks algorithms. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 521-525.	1.6	6
23	Defining the effective threshold using modified wigner-hough transform in FMCW-signal detection. , 2013, , .		6
24	Adaptive filterbank-based multi-carrier waveform design for flexible data rates. Computers and Electrical Engineering, 2017, 61, 184-194.	4.8	6
25	Signature recognition application based on deep learning. , 2017, , .		6
26	An efficient transceiver design for superimposed waveforms with orthogonal polynomials. , 2017, , .		6
27	Impact of Self-Configuration on Handover Performance in Green Cellular Networks. , 2018, , .		6
28	Partial spectrum utilization for energy detection in cognitive radio networks. , 2012, , .		5
29	Filtered multitone system for users with different data rates at 5G wireless networks. , 2016, , .		5
30	SCMA System Design With Index Modulation via Codebook Assignment. IEEE Transactions on Vehicular Technology, 2021, 70, 1699-1708.	6.3	5
31	Intracell Frequency Band Exiling for Green Wireless Networks: Implementation, Performance Metrics, and Use Cases. IEEE Vehicular Technology Magazine, 2021, 16, 31-39.	3.4	5
32	Chirp Z transform based spectrum sensing via energy detection. , 2012, , .		4
33	Signal-adaptive discrete evolutionary transform as a sparse time–frequency representation. , 2013, 23, 1747-1755.		4
34	Digital chirp rate adaptation for increased FMCW interception performance in Hough based transforms. , 2014, , .		4
35	Waveform Design Considerations for 5G Wireless Networks. , 0, , .		4
36	Performance of Selective Decode-and-Forward SWIPT Network in Nakagami-M Fading Channel. , 2018, , .		4

#	Article	IF	Citations
37	Signal Space Cognitive Cooperation. IEEE Transactions on Vehicular Technology, 2019, 68, 1953-1957.	6.3	4
38	Spectrum sensing for cognitive radio with selection combining receiver antenna diversity. , 2013, , .		3
39	Interference Alignment in Multi-Hop Cognitive Radio Networks under Interference Leakage. Applied Sciences (Switzerland), 2018, 8, 2486.	2.5	3
40	Performance Analysis of FSO Systems over Imperfect MÃ¡laga Atmospheric Turbulence Channels with Pointing Errors. , 2020, , .		3
41	Efficient computation of joint fractional Fourier domain signal representation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 765.	1.5	2
42	Applications of Time-Frequency Signal Processing in Wireless Communications and Bioengineering. Eurasip Journal on Advances in Signal Processing, 2011, 2010, .	1.7	2
43	Elliptic Gaussian filtering for Time-Frequency signal analysis. , 2013, , .		2
44	Improving Wigner-Hough Transform for hardware implementation to intercept LFMCW signals. , 2015, , .		2
45	A multi-level thresholding based segmentation method for microscopic fluorescence in situ hybridization (FISH) images. , 2016, , .		2
46	Superimposed waveforms for users with high data rate at 5G wireless networks. , 2017, , .		2
47	Adaptive Bandwidth Utilization with Self-Configuring Networks. , 2018, , .		2
48	BER Performance of Wireless-Powered Dual-Hop AF Relaying. , 2019, , .		2
49	Performance of FSO Communication Systems Employing Alamouti-Type Space-Time Encoding Over MÃ¡laga Channels With Pointing Errors. IEEE Photonics Journal, 2022, 14, 1-8.	2.0	2
50	High resolution time-frequency analysis by fractional domain warping. , 0, , .		1
51	Generalized time-bandwidth product optimal short-time fourier transformation. , 2002, , .		1
52	On suitability of PSD method for opportunity detection in OFDM(A) based cognitive radio systems. , 2009, , .		1
53	Eigenvectors of the Discrete Fourier Transform Based on the Bilinear Transform. Eurasip Journal on Advances in Signal Processing, 2010, 2010, .	1.7	1
54	Eigenvectors of the DFT and discrete fractional fourier transform based on the bilinear transform. , 2010, , .		1

#	Article	IF	Citations
55	Cognitive OFDMA: Exploring a new FFT based detection technique for opportunistic usage. , 2010, , .		1
56	Material clustering and band reduction in spectral libraries with unsupervised hierarchical classification methods. , 2011, , .		1
57	Channel estimation for a wireless communication systems with chirp carriers. , 2012, , .		1
58	Error analysis in waveforms synthesized with a combined josephson system for ac component characterization. , 2014, , .		1
59	Reconstruction of through-the-wall imaging radar signals by compressive sensing. , 2015, , .		1
60	Jitter estimation and mitigation in sub-Nyquist sampling using Slepian functions. , 2015, , .		1
61	Performance of interference alignment in cognitive radio networks under interference leakage. , 2018, , .		1
62	Energy-Efficient utilization of different frequency bands for green cellular networks. , 2018, , .		1
63	On the Error Performance of Relay-Assisted Vehicular Communication Systems. , 2019, , .		1
64	Energy Efficient Base Station Deployment in Ultra Dense Heterogeneous Networks via Poisson Hole Process. , 2019, , .		1
65	RIS-Empowered Non-Linear Energy Harvesting Communications Over Nakagami-m Channels. IEEE Communications Letters, 2022, 26, 2215-2219.	4.1	1
66	New Practical Nonlinear Energy-Harvesting Models for Wireless-Powered Communications. Wireless Communications and Mobile Computing, 2022, 2022, 1-19.	1.2	1
67	Duragan olmayan cok bielesenli bogucu sinyaller icin yeni bir uyarlanir karisma cikarici analizi. , 0, , .		0
68	Optimum Wavelet Transform-Based ECG Compressionand Dissimilarity Measureson Noise Performance Analysis. , 2007, , .		0
69	A Wavelet Transfom-Based Analysis of Surface EMG Signals. , 2007, , .		0
70	Comparison of Wavelet Transform Based Techniques in the Denoising of ECG Signals. , 2007, , .		0
71	Performance Analysis Of An STFT-Based Broadband Interference Excision Algorithm In DS-SS Systems. , 2007, , .		0
72	Fractional Fourier domain LMS-based adaptive filtering algorithms in active noise control. , 2008, , .		0

#	Article	IF	Citations
73	Classification of cylindrical targets by wavelet transform and ROC analysis. , 2008, , .		0
74	Blind investigation of M-FSK modulations and identification of these modulations from M-PSK and M-QAM modulations. , 2009, , .		0
75	A new OFDM lattice structure: Toroidal-lattice on the time-frequency plane. , 2010, , .		0
76	Robust adaptive beamforming via recursive spatial autoregressive modeling. , 2011, , .		0
77	Eigenfunctions of the linear canonical transform. , 2012, , .		0
78	Digital chirp rate adaptation for optimum FMCW interception using Wigner-Hough transform. , 2014, , .		0
79	Enhanced physical layer security by OFDM signal transmission in fractional Fourier domains. , 2015, , .		0
80	Spectrum sensing with periodic non-uniform sampling. , 2015, , .		0
81	Performance analysis of feature extraction methods in indoor sound classification. , 2015, , .		0
82	The effect of codebook design on the BER performance of MTC systems employing SCMA. , 2018, , .		0
83	System Performance of Interference Alignment in MIMO Cognitive Radio Networks Under Interference Leakage. , 2018, , .		0
84	Impact of Partial Band Jammer in Cognitive Radio Networks with Interference Alignment. , 2019, , .		0
85	On the Secrecy Performance of the K-User Cognitive Radio Network with Iterative Interference Alignment. , 2019, , .		0