Fabio M. Bayer

List of Publications by Year
in descending order

90	1,408	393982	395343
papers	citations	19 h-index	33 g-index

90	90	90	649
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A DCT Approximation for Image Compression. IEEE Signal Processing Letters, 2011, 18, 579-582.	2.1	130
2	Improved 8-Point Approximate DCT for Image and Video Compression Requiring Only 14 Additions. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 1727-1740.	3.5	102
3	An iterative wavelet threshold for signal denoising. Signal Processing, 2019, 162, 10-20.	2.1	90
4	DCT-like transform for image compression requires 14 additions only. Electronics Letters, 2012, 48, 919.	0.5	78
5	Low-complexity 8-point DCT approximations based on integer functions. Signal Processing, 2014, 99, 201-214.	2.1	60
6	Low-Power VLSI Architectures for DCT/DWT: Precision vs Approximation for HD Video, Biomedical, and Smart Antenna Applications. IEEE Circuits and Systems Magazine, 2015, 15, 25-47.	2.6	50
7	Low-Complexity Image and Video Coding Based on an Approximate Discrete Tchebichef Transform. IEEE Transactions on Circuits and Systems for Video Technology, 2017, 27, 1066-1076.	5.6	41
8	Model selection criteria in beta regression with varying dispersion. Communications in Statistics Part B: Simulation and Computation, 2017, 46, 729-746.	0.6	40
9	Kumaraswamy autoregressive moving average models for double bounded environmental data. Journal of Hydrology, 2017, 555, 385-396.	2.3	40
10	Multiplier-free DCT approximations for RF multi-beam digital aperture-array space imaging and directional sensing. Measurement Science and Technology, 2012, 23, 114003.	1.4	34
11	A digital hardware fast algorithm and FPGA-based prototype for a novel 16-point approximate DCT for image compression applications. Measurement Science and Technology, 2012, 23, 114010.	1.4	29
12	A class of DCT approximations based on the Feigâ€“Winograd algorithm. Signal Processing, 2015, 113, 38-51.	2.1	28
13	Bootstrap Pettitt test for detecting change points in hydroclimatological data: case study of Itaipu Hydroelectric Plant, Brazil. Hydrological Sciences Journal, 2019, 64, 1312-1326.	1.2	27
14	A Discrete Tchebichef Transform Approximation for Image and Video Coding. IEEE Signal Processing Letters, 2015, 22, 1137-1141.	2.1	25
15	Image Compression via a Fast DCT Approximation. IEEE Latin America Transactions, 2010, 8, 708-713.	1.2	24
16	Low-complexity 8-point DCT approximation based on angle similarity for image and video coding. Multidimensional Systems and Signal Processing, 2019, 30, 1363-1394.	1.7	24
17	An orthogonal 16-point approximate DCT for image and video compression. Multidimensional Systems and Signal Processing, 2016, 27, 87-104.	1.7	23
18	Multiplierless approximate 4â€point DCT VLSI architectures for transform block coding. Electronics Letters, 2013, 49, 1532-1534.	0.5	22

#	Article	IF	Citations
19	Multiâ€beam RF aperture using multiplierless FFT approximation. Electronics Letters, 2014, 50, 1788-1790.	0.5	22
20	Bartlett corrections in beta regression models. Journal of Statistical Planning and Inference, 2013, 143, 531-547.	0.4	21
21	Bootstrap-based model selection criteria for beta regressions. Test, 2015, 24, 776-795.	0.7	21
22	A multiplierless pruned DCT-like transformation for image and video compression that requires tenÂadditions only. Journal of Real-Time Image Processing, 2016, 12, 247-255.	2.2	20
23	Beta regression control chart for monitoring fractions and proportions. Computers and Industrial Engineering, 2018, 119, 416-426.	3.4	18
24	Beta seasonal autoregressive moving average models. Journal of Statistical Computation and Simulation, 2018, 88, 2961-2981.	0.7	18
25	Modeling the Temporal Population Distribution of $Ae.~aegypti$ Mosquito Using Big Earth Observation Data. IEEE Access, 2020, 8, 14182-14194.	2.6	18
26	A multiplication-free digital architecture for 16×16 2-D DCT/DST transform for HEVC. , 2012, , .		17
27	Multiplierless 16-point DCT approximation for low-complexity image and video coding. Signal, Image and Video Processing, 2017, 11, 227-233.	1.7	17
28	Low-Complexity Multidimensional DCT Approximations for High-Order Tensor Data Decorrelation. IEEE Transactions on Image Processing, 2017, 26, 2296-2310.	6.0	16
29	Multibeam Digital Array Receiver Using a 16-Point Multiplierless DFT Approximation. IEEE Transactions on Antennas and Propagation, 2019, 67, 925-933.	3.1	16
30	Beta autoregressive fractionally integrated moving average models. Journal of Statistical Planning and Inference, 2019, 200, 196-212.	0.4	16
31	Goodnessâ€ofâ€fit tests for Î²ARMA hydrological time series modeling. Environmetrics, 2020, 31, e2607.	0.6	16
32	Energy-Efficient 8-Point DCT Approximations: Theory and Hardware Architectures. Circuits, Systems, and Signal Processing, 2016, 35, 4009-4029.	1.2	14
33	Inflated beta control chart for monitoring double bounded processes. Computers and Industrial Engineering, 2019, 136, 265-276.	3.4	14
34	Rayleigh Regression Model for Ground Type Detection in SAR Imagery. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1660-1664.	1.4	14
35	Pruned Discrete Tchebichef Transform Approximation for Image Compression. Circuits, Systems, and Signal Processing, 2018, 37, 4363-4383.	1.2	13
36	A Low-SWaP 16-Beam 2.4ÂGHz Digital Phased Array Receiver Using DFT Approximation. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 3645-3654.	2.6	13

#	Article	IF	Citations
37	Low-complexity pruned 8-point DCT approximations for image encoding. , 2015, , .		12
38	Variable dispersion beta regressions with parametric link functions. Statistical Papers, 2019, 60, 1541-1567.	0.7	12
39	Multi-beam 4 GHz microwave apertures using current-mode DFT approximation on 65 nm CMOS. , 2015, , .		10
40	Low-Complexity Loeffler DCT Approximations for Image and Video Coding. Journal of Low Power Electronics and Applications, 2018, 8, 46.	1.3	10
41	Fast Radix-32 Approximate DFTs for 1024-Beam Digital RF Beamforming. IEEE Access, 2020, 8, 96613-96627.	2.6	10
42	Wavelength-Resolution SAR Ground Scene Prediction Based on Image Stack. Sensors, 2020, 20, 2008.	2.1	10
43	Multi-beam receiver apertures using multiplierless 8-point approximate DFT. , 2015, , .		9
44	A Multiparametric Class of Low-complexity Transforms for Image and Video Coding. Signal Processing, 2020, 176, 107685.	2.1	9
45	Kumaraswamy regression model with Aranda-Ordaz link function. Test, 2020, 29, 1051-1071.	0.7	9
46	Modelagem e PrevisÃ£o de VazÃµes MÃ©dias Mensais do Rio Potiribu Utilizando Modelos de SÃ©ries Temporais. Revista Brasileira De Recursos Hidricos, 2012, 17, 229-239.	0.5	9
47	Modified Kumaraswamy distributions for double bounded hydro-environmental data. Journal of Hydrology, 2021, 603, 127021.	2.3	9
48	Kumaraswamy control chart for monitoring double bounded environmental data. Communications in Statistics Part B: Simulation and Computation, 2021, 50, 2513-2528.	0.6	8
49	A Novel Rayleigh Dynamical Model for Remote Sensing Data Interpretation. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 4989-4999.	2.7	8
50	JPEG quantisation requires bitâ€shifts only. Electronics Letters, 2017, 53, 588-590.	0.5	7
51	DCT approximations based on Chenâ€™s factorization. Signal Processing: Image Communication, 2017, 58, 14-23.	1.8	7
52	Bootstrap-based inferential improvements in beta autoregressive moving average model. Communications in Statistics Part B: Simulation and Computation, 2018, 47, 977-996.	0.6	7
53	A Change Detection Algorithm for Sar Images Based on Logistic Regression. , 2019, , .		7
54	A Class of Low-Complexity DCT-Like Transforms for Image and Video Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 4364-4375.	5.6	7

#	Article	IF	Citations
55	Fast computation of residual complexity image similarity metric using lowâ€complexity transforms. IET Image Processing, 2015, 9, 699-708.	1.4	6
56	Beta autoregressive moving average model selection with application to modeling and forecasting stored hydroelectric energy. International Journal of Forecasting, 2023, 39, 98-109.	3.9	6
57	Signal detection and inference based on the beta binomial autoregressive moving average model. , 2021, 109, 102911.		5
58	Multi-beam 8×8 RF aperture digital beamformers using multiplierless 2-D FFT approximations. , 2015, , .		4
59	Towards a Low-SWaP 1024-Beam Digital Array: A 32-Beam Subsystem at 5.8 GHz. IEEE Transactions on Antennas and Propagation, 2020, 68, 900-912.	3.1	4
60	Process monitoring using inflated beta regression control chart. PLoS ONE, 2020, 15, e0236756.	1.1	4
61	Improved testing inferences for beta regressions with parametric mean link function. AStA Advances in Statistical Analysis, 2020, 104, 687-717.	0.4	4
62	A 3-D Spatiotemporal Model for Remote Sensing Data Cubes. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 1082-1093.	2.7	4
63	Inflated Kumaraswamy regressions with application to water supply and sanitation in Brazil. Statistica Neerlandica, 2021, 75, 453-481.	0.9	4
64	Low-complexity rounded KLT approximation for image compression. Journal of Real-Time Image Processing, 2022, 19, 173-183.	2.2	4
65	Autoregressive model for multi-pass SAR change detection based on image stacks. , 2018, , .		4
66	2-D Rayleigh autoregressive moving average model for SAR image modeling. Computational Statistics and Data Analysis, 2022, 171, 107453.	0.7	4
67	Bootstrap Bartlett correction in inflated beta regression. Communications in Statistics Part B: Simulation and Computation, 2017, 46, 2865-2879.	0.6	3
68	On bootstrap testing inference in cure rate models. Journal of Statistical Computation and Simulation, 2018, 88, 3437-3454.	0.7	3
69	Low-complexity three-dimensional discrete Hartley transform approximations for medical image compression. Computers in Biology and Medicine, 2021, 139, 105018.	3.9	3
70	PREVISÃƒO DA UMIDADE RELATIVA DO AR DE BRASÃŁIA POR MEIO DO MODELO BETA AUTORREGRESSIVO DE MÃ‰DIAS MÃ“VEIS. Revista Brasileira De Meteorologia, 2015, 30, 319-326.	0.2	2
71	Fast Algorithms and Architectures for 8-Point DST-II/DST-VII Approximations. Journal of Circuits, Systems and Computers, 2017, 26, 1750045.	1.0	2
72	Improved Point Estimation for the Rayleigh Regression Model. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-4.	1.4	2

#	Article	IF	Citations
73	Modelos univariados de sÃ©ries temporais para previsÃ£o das temperaturas mÃ©dias mensais de Erechim, RS. Revista Brasileira De Engenharia Agricola E Ambiental, 2012, 16, 1321-1329.	0.4	2
74	Data-independent low-complexity KLT approximations for image and video coding. Signal Processing: Image Communication, 2022, 101, 116585.	1.8	2
75	A CFAR optimization for low frequency UWB SAR change detection algorithms. , 2017, , .		1
76	Control chart to monitor circular data. Quality and Reliability Engineering International, 2021, 37, 966-983.	1.4	1
77	TESTES DE ESPECIFICAÃ‡ÃƒO PARA A FUNÃ‡ÃƒO DE LIGAÃ‡ÃƒO EM MODELOS LINEARES GENERALIZADOS PARA DADOS BINÃRIOS. CiÃªncia E Natura, 2015, 37, .	0.0	1
78	Residualâ€based CUSUM beta regression control chart for monitoring doubleâ€bounded processes. Quality and Reliability Engineering International, 2022, 38, 3252-3269.	1.4	1
79	A New Probability Distribution for SAR Image Modeling. Remote Sensing, 2022, 14, 2853.	1.8	1
80	<b>Sampling sufficiency of the anatomical characteristics of Brazilian hardwood using the resampling method. Acta Scientiarum - Technology, 2014, 36, 413.	0.4	0
81	Low-complexity multiplierless DCT approximations for low-power HEVC digital IP cores. Proceedings of SPIE, 2014, , .	0.8	0
82	Comments on â€˜Area and power efficient DCT architecture for image compressionâ€™ by Dhandapani and Ramachandran. Eurasip Journal on Advances in Signal Processing, 2017, 2017, .	1.0	0
83	Robust Rayleigh Regression Method for SAR Image Processing in Presence of Outliers. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	2.7	0
84	Prediction intervals in the beta autoregressive moving average model. Communications in Statistics Part B: Simulation and Computation, 2023, 52, 3635-3656.	0.6	0
85	CaracterizaÃ§Ã£o EstatÃstica do Canal Sem Fio sob InfluÃªncias de Umidade e de Temperatura. , 2013, , .		0
86	Impedance Matching Analysis of an Optical Nanocircuit Fed by a Gaussian Beam. , 2013, , .		0
87	FILTRAGEM DE SINAIS VIA LIMIARIZAÃ‡ÃƒO DE COEï¬CIENTES WAVELET. CiÃªncia E Natura, 2014, 36, .	0.0	0
88	Algoritmos RÃ¡pidos para Cifragem de Imagens Utilizando AproximaÃ§Ãµes da DCT de Comprimento 8. , 0, , .		0
89	AvaliaÃ§Ãµes numÃ©ricas das inferÃªncias no modelo Beta-Skew-t-EGARCH. Revista Brasileira De FinanÃ§as, 2015, 13, 40-73.	0.1	0
90	A Simple Geometrical-Based Calibration Technique for 3D Scanners with Rotating Platform. International Journal of Simulation: Systems, Science and Technology, 0, , .	0.0	0