Christian Jutten

List of Publications by Year in descending order

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93 papers 7,506 citations

30 h-index 78 g-index

95 all docs 95
docs citations

95 times ranked 5506 citing authors

#	Article	IF	CITATIONS
1	CorrIndex: A permutation invariant performance index. Signal Processing, 2022, 195, 108457.	3.7	4
2	Delve into Multiple Sclerosis (MS) lesion exploration: A modified attention U-Net for MS lesion segmentation in Brain MRI. Computers in Biology and Medicine, 2022, 145, 105402.	7.0	20
3	Ethical Dilemmas in the Sciences [From the Editor]. IEEE Signal Processing Magazine, 2022, 39, 3-4.	5 . 6	O
4	Dimensionality Transcending: A Method for Merging BCI Datasets With Different Dimensionalities. IEEE Transactions on Biomedical Engineering, 2021, 68, 673-684.	4.2	10
5	Forward-backward filtering and penalized least-Squares optimization: A Unified framework. Signal Processing, 2021, 178, 107796.	3.7	10
6	Capacity and Limits of Multimodal Remote Sensing: Theoretical Aspects and Automatic Information Theory-Based Image Selection. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 5598-5618.	6.3	4
7	Band-Stop Smoothing Filter Design. IEEE Transactions on Signal Processing, 2021, 69, 1797-1810.	5.3	12
8	Introducing SPM's New Team of Area Editors: Part 1 [From the Editor]. IEEE Signal Processing Magazine, 2021, 38, 3-5.	5.6	1
9	Introducing SPM's New Team of Area Editors: Part 2 [From the Editor]. IEEE Signal Processing Magazine, 2021, 38, 3-5.	5.6	O
10	A Hypothesis Testing Approach to Nonstationary Source Separation., 2021,,.		0
11	Advances in Science Must Benefit All Humanity [From the Editor]. IEEE Signal Processing Magazine, 2021, 38, 3-11.	5 . 6	0
12	On Enhanced Ensemble Learning for Multimodal Remote Sensing Data Analysis by Capacity Optimization. , 2021 , , .		1
13	Think Outside the Box! [From the Editor]. IEEE Signal Processing Magazine, 2021, 38, 3-3,5.	5.6	0
14	Robust Sensor Placement for Signal Extraction. IEEE Transactions on Signal Processing, 2021, 69, 4513-4528.	5. 3	5
15	Geometric Multimodal Learning Based on Local Signal Expansion for Joint Diagonalization. IEEE Transactions on Signal Processing, 2021, 69, 1271-1286.	5.3	4
16	Spectral Variability in Hyperspectral Data Unmixing: A comprehensive review. IEEE Geoscience and Remote Sensing Magazine, 2021, 9, 223-270.	9.6	92
17	Affects and Emotions in <i>IEEE Signal Processing Magazine</i> [From the Editor]. IEEE Signal Processing Magazine, 2021, 38, 3-4.	5. 6	1
18	Temporally Nonstationary Component Analysis; Application to Noninvasive Fetal Electrocardiogram Extraction. IEEE Transactions on Biomedical Engineering, 2020, 67, 1377-1386.	4.2	12

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19	Improved smoothness priors using bilinear transform. Signal Processing, 2020, 169, 107381.	3.7	6
20	Spectral Unmixing: A Derivation of the Extended Linear Mixing Model From the Hapke Model. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1866-1870.	3.1	19
21	Gradient-Based Algorithm with Spatial Regularization for Optimal Sensor Placement. , 2020, , .		1
22	3-D Interface for the P300 Speller BCI. IEEE Transactions on Human-Machine Systems, 2020, 50, 604-612.	3.5	5
23	Variability of the endmembers in spectral unmixing. Data Handling in Science and Technology, 2020, , 167-203.	3.1	6
24	Spectral Variability Aware Blind Hyperspectral Image Unmixing Based on Convex Geometry. IEEE Transactions on Image Processing, 2020, 29, 4568-4582.	9.8	24
25	Schur's Lemma for Coupled Reducibility and Coupled Normality. SIAM Journal on Matrix Analysis and Applications, 2019, 40, 998-1021.	1.4	1
26	Hyperspectral Image Unmixing With Endmember Bundles and Group Sparsity Inducing Mixed Norms. IEEE Transactions on Image Processing, 2019, 28, 3435-3450.	9.8	68
27	Optimal Sensor Placement for Signal Extraction. , 2019, , .		4
28	Riemannian Procrustes Analysis: Transfer Learning for Brain–Computer Interfaces. IEEE Transactions on Biomedical Engineering, 2019, 66, 2390-2401.	4.2	128
29	Joint Independent Subspace Analysis: Uniqueness and Identifiability. IEEE Transactions on Signal Processing, 2019, 67, 684-699.	5.3	8
30	A second-order statistics method for blind source separation in post-nonlinear mixtures. Signal Processing, 2019, 155, 63-72.	3.7	14
31	ECG fiducial point extraction using switching Kalman filter. Computer Methods and Programs in Biomedicine, 2018, 157, 129-136.	4.7	15
32	Transfer Learning: A Riemannian Geometry Framework With Applications to Brain–Computer Interfaces. IEEE Transactions on Biomedical Engineering, 2018, 65, 1107-1116.	4.2	222
33	Joint Independent Subspace Analysis by Coupled Block Decomposition: Non-Identifiable Cases., 2018,,.		1
34	Multivariate Time-Series Analysis Via Manifold Learning. , 2018, , .		6
35	A New Link Between Joint Blind Source Separation Using Second Order Statistics and the Canonical Polyadic Decomposition. Lecture Notes in Computer Science, 2018, , 171-180.	1.3	3
36	Multimodal Soft Nonnegative Matrix Co-Factorization for Convolutive Source Separation. IEEE Transactions on Signal Processing, 2017, 65, 3179-3190.	5.3	10

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37	Blind Source Separation in Nonlinear Mixtures: Separability and a Basic Algorithm. IEEE Transactions on Signal Processing, 2017, 65, 4339-4352.	5.3	17
38	Information–Estimation Relationship in Mismatched Gaussian Channels. IEEE Signal Processing Letters, 2017, 24, 688-692.	3.6	4
39	Relationships Between Nonlinear and Space-Variant Linear Models in Hyperspectral Image Unmixing. IEEE Signal Processing Letters, 2017, 24, 1567-1571.	3.6	12
40	A robust ellipse fitting algorithm based on sparsity of outliers. , 2017, , .		7
41	Blind Hyperspectral Unmixing Using an Extended Linear Mixing Model to Address Spectral Variability. IEEE Transactions on Image Processing, 2016, 25, 3890-3905.	9.8	167
42	Joint analysis of multiple datasets by cross-cumulant tensor (block) diagonalization. , 2016, , .		4
43	Hyperspectral Local Intrinsic Dimensionality. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 4063-4078.	6.3	10
44	Dynamical Spectral Unmixing of Multitemporal Hyperspectral Images. IEEE Transactions on Image Processing, 2016, 25, 3219-3232.	9.8	52
45	Joint Independent Subspace Analysis Using Second-Order Statistics. IEEE Transactions on Signal Processing, 2016, 64, 4891-4904.	5.3	23
46	ECG segmentation and fiducial point extraction using multi hidden Markov model. Computers in Biology and Medicine, 2016, 79, 21-29.	7.0	32
47	An alternative proof for the identifiability of independent vector analysis using second order statistics. , $2016, , .$		4
48	Correction to "Dynamical Spectral Unmixing of Multitemporal Hyperspectral Images―[Jul 16 3219-3232]. IEEE Transactions on Image Processing, 2016, 25, 4443-4443.	9.8	2
49	Hyperspectral unmixing with material variability using social sparsity., 2016,,.		9
50	ECG denoising and fiducial point extraction using an extended Kalman filtering framework with linear and nonlinear phase observations. Physiological Measurement, 2016, 37, 203-226.	2.1	28
51	Blind source separation and feature extraction in concurrent control charts pattern recognition: Novel analyses and a comparison of different methods. Computers and Industrial Engineering, 2016, 92, 105-114.	6.3	22
52	Multimodal Data Fusion: An Overview of Methods, Challenges, and Prospects. Proceedings of the IEEE, 2015, 103, 1449-1477.	21.3	638
53	Joint Independent Subspace Analysis: AÂQuasi-Newton Algorithm. Lecture Notes in Computer Science, 2015, , 111-118.	1.3	7
54	Touch increases autonomic coupling between romantic partners. Frontiers in Behavioral Neuroscience, 2014, 8, 95.	2.0	84

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55	Blind source separation of underdetermined mixtures of event-related sources. Signal Processing, 2014, 101, 52-64.	3.7	22
56	Application of Blind Source Separation Methods to Ion-Selective Electrode Arrays in Flow-Injection Analysis. IEEE Sensors Journal, 2014, 14, 2228-2229.	4.7	18
57	Dictionary Learning for Sparse Representation: A Novel Approach. IEEE Signal Processing Letters, 2013, 20, 1195-1198.	3.6	72
58	Reference-Based Source Separation Method For Identification of Brain Regions Involved in a Reference State From Intracerebral EEG. IEEE Transactions on Biomedical Engineering, 2013, 60, 1983-1992.	4.2	7
59	Classification of covariance matrices using a Riemannian-based kernel for BCI applications. Neurocomputing, 2013, 112, 172-178.	5.9	305
60	Non-local mind from the perspective of social cognition. Frontiers in Human Neuroscience, 2013, 7, 107.	2.0	31
61	Blind Compensation of Nonlinear Distortions: Application to Source Separation of Post-Nonlinear Mixtures. IEEE Transactions on Signal Processing, 2012, 60, 5832-5844.	5.3	20
62	ISI sparse channel estimation based on SLO and its application in ML sequence-by-sequence equalization. Signal Processing, 2012, 92, 1875-1885.	3.7	5
63	Multiclass Brain–Computer Interface Classification by Riemannian Geometry. IEEE Transactions on Biomedical Engineering, 2012, 59, 920-928.	4.2	520
64	Hyperspectral Image Classification With Independent Component Discriminant Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 4865-4876.	6.3	325
65	On the Error of Estimating the Sparsest Solution of Underdetermined Linear Systems. IEEE Transactions on Information Theory, 2011, 57, 7840-7855.	2.4	6
66	On the Stable Recovery of the Sparsest Overcomplete Representations in Presence of Noise. IEEE Transactions on Signal Processing, 2010, 58, 5396-5400.	5.3	31
67	A Dataset for the Design of Smart Ion-Selective Electrode Arrays for Quantitative Analysis. IEEE Sensors Journal, 2010, 10, 1891-1892.	4.7	10
68	Sélection de capteurs pour interfaces cerveau-ordinateur de type P300. Traitement Du Signal, 2010, 27, 515-540.	1.3	0
69	A study of lip movements during spontaneous dialog and its application to voice activity detection. Journal of the Acoustical Society of America, 2009, 125, 1184-1196.	1.1	31
70	An Iterative Bayesian Algorithm for Sparse Component Analysis in Presence of Noise. IEEE Transactions on Signal Processing, 2009, 57, 4378-4390.	5.3	74
71	A Bayesian Nonlinear Source Separation Method for Smart Ion-Selective Electrode Arrays. IEEE Sensors Journal, 2009, 9, 1763-1771.	4.7	44
72	Multichannel Electrocardiogram Decomposition Using Periodic Component Analysis. IEEE Transactions on Biomedical Engineering, 2008, 55, 1935-1940.	4.2	157

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73	Estimating the mixing matrix in Sparse Component Analysis (SCA) based on partial k-dimensional subspace clustering. Neurocomputing, 2008, 71, 2330-2343.	5.9	51
74	On the blind source separation of human electroencephalogram by approximate joint diagonalization of second order statistics. Clinical Neurophysiology, 2008, 119, 2677-2686.	1.5	111
75	On the Cramér-Rao Bound for Estimating the Mixing Matrix in Noisy Sparse Component Analysis. IEEE Signal Processing Letters, 2008, 15, 609-612.	3.6	7
76	Visual voice activity detection as a help for speech source separation from convolutive mixtures. Speech Communication, 2007, 49, 667-677.	2.8	35
77	Log-Rayleigh Distribution: A Simple and Efficient Statistical Representation of Log-Spectral Coefficients. IEEE Transactions on Audio Speech and Language Processing, 2007, 15, 796-802.	3.2	45
78	A Nonlinear Bayesian Filtering Framework for ECG Denoising. IEEE Transactions on Biomedical Engineering, 2007, 54, 2172-2185.	4.2	398
79	ISFET source separation: Foundations and techniques. Sensors and Actuators B: Chemical, 2006, 113, 222-233.	7.8	23
80	Quasi-optimal EASI algorithm based on the Score Function Difference (SFD). Neurocomputing, 2006, 69, 1415-1424.	5.9	4
81	Sparse ICA via cluster-wise PCA. Neurocomputing, 2006, 69, 1458-1466.	5.9	26
82	Criteria based on mutual information minimization for blind source separation in post nonlinear mixtures. Signal Processing, 2005, 85, 965-974.	3.7	15
83	A general approach for mutual information minimization and its application to blind source separation. Signal Processing, 2005, 85, 975-995.	3.7	52
84	ADVANCES IN BLIND SOURCE SEPARATION (BSS) AND INDEPENDENT COMPONENT ANALYSIS (ICA) FOR NONLINEAR MIXTURES. International Journal of Neural Systems, 2004, 14, 267-292.	5.2	118
85	General conditions of stability in blind source separation models and score function selection. Neurocomputing, 2004, 62, 65-78.	5.9	2
86	Developing an audio-visual speech source separation algorithm. Speech Communication, 2004, 44, 113-125.	2.8	32
87	Three easy ways for separating nonlinear mixtures?. Signal Processing, 2004, 84, 217-229.	3.7	70
88	Parametric approach to blind deconvolution of nonlinear channels. Neurocomputing, 2002, 48, 339-355.	5.9	20
89	Neural networks in geophysical applications. Geophysics, 2000, 65, 1032-1047.	2.6	281
90	Stability study for source separation in convolutive mixtures of two sources. Signal Processing, 1997, 62, 163-171.	3.7	4

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#	Article	IF	CITATIONS
91	Blind source separation for convolutive mixtures. Signal Processing, 1995, 45, 209-229.	3.7	229
92	Blind separation of sources, part I: An adaptive algorithm based on neuromimetic architecture. Signal Processing, 1991, 24, 1-10.	3.7	2,129
93	Blind separation of sources, part II: Problems statement. Signal Processing, 1991, 24, 11-20.	3.7	336