

Danilo P Mandic

List of Publications by Year in descending order

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263
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267
times ranked

6837
citing authors

| # | ARTICLE | IF | CITATIONS |
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| 1 | Tensor Decompositions for Signal Processing Applications: From two-way to multiway component analysis. IEEE Signal Processing Magazine, 2015, 32, 145-163. | 5.6 | 959 |
| 2 | Filter Bank Property of Multivariate Empirical Mode Decomposition. IEEE Transactions on Signal Processing, 2011, 59, 2421-2426. | 5.3 | 375 |
| 3 | Empirical Mode Decomposition-Based Time-Frequency Analysis of Multivariate Signals: The Power of Adaptive Data Analysis. IEEE Signal Processing Magazine, 2013, 30, 74-86. | 5.6 | 348 |
| 4 | Multivariate multiscale entropy: A tool for complexity analysis of multichannel data. Physical Review E, 2011, 84, 061918. | 2.1 | 279 |
| 5 | Tensor Networks for Dimensionality Reduction and Large-scale Optimization: Part 1 Low-Rank Tensor Decompositions. Foundations and Trends in Machine Learning, 2016, 9, 249-429. | 69.0 | 255 |
| 6 | The Quaternion LMS Algorithm for Adaptive Filtering of Hypercomplex Processes. IEEE Transactions on Signal Processing, 2009, 57, 1316-1327. | 5.3 | 254 |
| 7 | Complex Empirical Mode Decomposition. IEEE Signal Processing Letters, 2007, 14, 101-104. | 3.6 | 232 |
| 8 | Biometrics from Brain Electrical Activity: A Machine Learning Approach. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2007, 29, 738-742. | 13.9 | 218 |
| 9 | Empirical Mode Decomposition for Trivariate Signals. IEEE Transactions on Signal Processing, 2010, 58, 1059-1068. | 5.3 | 195 |
| 10 | Multivariate Multiscale Entropy Analysis. IEEE Signal Processing Letters, 2012, 19, 91-94. | 3.6 | 194 |
| 11 | The In-the-Ear Recording Concept: User-Centered and Wearable Brain Monitoring. IEEE Pulse, 2012, 3, 32-42. | 0.3 | 192 |
| 12 | Augmented second-order statistics of quaternion random signals. Signal Processing, 2011, 91, 214-224. | 3.7 | 190 |
| 13 | Multiscale Image Fusion Using Complex Extensions of EMD. IEEE Transactions on Signal Processing, 2009, 57, 1626-1630. | 5.3 | 168 |
| 14 | A Study of Evoked Potentials From Ear-EEG. IEEE Transactions on Biomedical Engineering, 2013, 60, 2824-2830. | 4.2 | 151 |
| 15 | A Quaternion Widely Linear Adaptive Filter. IEEE Transactions on Signal Processing, 2010, 58, 4427-4431. | 5.3 | 149 |
| 16 | EMD VIA MEMD: MULTIVARIATE NOISE-AIDED COMPUTATION OF STANDARD EMD. Advances in Adaptive Data Analysis, 2013, 05, 1350007. | 0.6 | 146 |
| 17 | Adaptive Frequency Estimation in Smart Grid Applications: Exploiting Noncircularity and Widely Linear Adaptive Estimators. IEEE Signal Processing Magazine, 2012, 29, 44-54. | 5.6 | 145 |
| 18 | In-Ear EEG From Viscoelastic Generic Earpieces: Robust and Unobtrusive 24/7 Monitoring. IEEE Sensors Journal, 2016, 16, 271-277. | 4.7 | 143 |

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| 19 | Resolving Ambiguities in the LF/HF Ratio: LF-HF Scatter Plots for the Categorization of Mental and Physical Stress from HRV. <i>Frontiers in Physiology</i> , 2017, 8, 360. | 2.8 | 140 |
| 20 | EEG Recorded from the Ear: Characterizing the Ear-EEG Method. <i>Frontiers in Neuroscience</i> , 2015, 9, 438. | 2.8 | 128 |
| 21 | Widely Linear Adaptive Frequency Estimation of Unbalanced Three-Phase Power Systems. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2012, 61, 74-83. | 4.7 | 112 |
| 22 | Hearables: Multimodal physiological in-ear sensing. <i>Scientific Reports</i> , 2017, 7, 6948. | 3.3 | 107 |
| 23 | EEG Based Biometric Framework for Automatic Identity Verification. <i>Journal of Signal Processing Systems</i> , 2007, 49, 243-250. | 1.0 | 94 |
| 24 | Optimization in Quaternion Dynamic Systems: Gradient, Hessian, and Learning Algorithms. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2016, 27, 249-261. | 11.3 | 90 |
| 25 | An Augmented Echo State Network for Nonlinear Adaptive Filtering of Complex Noncircular Signals. <i>IEEE Transactions on Neural Networks</i> , 2011, 22, 74-83. | 4.2 | 88 |
| 26 | Hearables: Automatic Overnight Sleep Monitoring With Standardized In-Ear EEG Sensor. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 203-212. | 4.2 | 84 |
| 27 | Convergence of the RMSProp deep learning method with penalty for nonconvex optimization. <i>Neural Networks</i> , 2021, 139, 17-23. | 5.9 | 83 |
| 28 | Rotation Invariant Complex Empirical Mode Decomposition. , 2007, , . | | 77 |
| 29 | In-Ear EEG Biometrics for Feasible and Readily Collectable Real-World Person Authentication. <i>IEEE Transactions on Information Forensics and Security</i> , 2018, 13, 648-661. | 6.9 | 74 |
| 30 | The Theory of Quaternion Matrix Derivatives. <i>IEEE Transactions on Signal Processing</i> , 2015, 63, 1543-1556. | 5.3 | 68 |
| 31 | A Class of Quaternion Kalman Filters. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2014, 25, 533-544. | 11.3 | 66 |
| 32 | Motor Imagery Classification Using Mu and Beta Rhythms of EEG with Strong Uncorrelating Transform Based Complex Common Spatial Patterns. <i>Computational Intelligence and Neuroscience</i> , 2016, 2016, 1-13. | 1.7 | 65 |
| 33 | Class of Widely Linear Complex Kalman Filters. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2012, 23, 775-786. | 11.3 | 64 |
| 34 | A Complex Least Squares Enhanced Smart DFT Technique for Power System Frequency Estimation. <i>IEEE Transactions on Power Delivery</i> , 2017, 32, 1270-1278. | 4.3 | 64 |
| 35 | Enabling quaternion derivatives: the generalized HR calculus. <i>Royal Society Open Science</i> , 2015, 2, 150255. | 2.4 | 60 |
| 36 | Wearable In-Ear Encephalography Sensor for Monitoring Sleep. Preliminary Observations from Nap Studies. <i>Annals of the American Thoracic Society</i> , 2016, 13, 2229-2233. | 3.2 | 60 |

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| 37 | A Multivariate Multiscale Fuzzy Entropy Algorithm with Application to Uterine EMC Complexity Analysis. <i>Entropy</i> , 2017, 19, 2. | 2.2 | 59 |
| 38 | Feature Fusion for the Detection of Microsleep Events. <i>Journal of Signal Processing Systems</i> , 2007, 49, 329-342. | 1.0 | 57 |
| 39 | Automatic Sleep Monitoring Using Ear-EEG. <i>IEEE Journal of Translational Engineering in Health and Medicine</i> , 2017, 5, 1-8. | 3.7 | 57 |
| 40 | Cancellation of Unwanted Doppler Radar Sensor Motion Using Empirical Mode Decomposition. <i>IEEE Sensors Journal</i> , 2013, 13, 1897-1904. | 4.7 | 56 |
| 41 | EMD APPROACH TO MULTICHANNEL EEG DATA " THE AMPLITUDE AND PHASE COMPONENTS CLUSTERING ANALYSIS. <i>Journal of Circuits, Systems and Computers</i> , 2010, 19, 215-229. | 1.5 | 53 |
| 42 | Augmented Performance Bounds on Strictly Linear and Widely Linear Estimators With Complex Data. <i>IEEE Transactions on Signal Processing</i> , 2018, 66, 507-514. | 5.3 | 53 |
| 43 | Understanding the Basis of Graph Signal Processing via an Intuitive Example-Driven Approach [Lecture Notes]. <i>IEEE Signal Processing Magazine</i> , 2019, 36, 133-145. | 5.6 | 53 |
| 44 | In-Ear SpO ₂ : A Tool for Wearable, Unobtrusive Monitoring of Core Blood Oxygen Saturation. <i>Sensors</i> , 2020, 20, 4879. | 3.8 | 53 |
| 45 | Quaternion Reproducing Kernel Hilbert Spaces: Existence and Uniqueness Conditions. <i>IEEE Transactions on Information Theory</i> , 2014, 60, 5736-5749. | 2.4 | 52 |
| 46 | Quaternion-Valued Stochastic Gradient-Based Adaptive IIR Filtering. <i>IEEE Transactions on Signal Processing</i> , 2010, 58, 3895-3901. | 5.3 | 51 |
| 47 | An Augmented Nonlinear LMS for Digital Self-Interference Cancellation in Full-Duplex Direct-Conversion Transceivers. <i>IEEE Transactions on Signal Processing</i> , 2018, 66, 4065-4078. | 5.3 | 51 |
| 48 | Fast Independent Component Analysis Algorithm for Quaternion Valued Signals. <i>IEEE Transactions on Neural Networks</i> , 2011, 22, 1967-1978. | 4.2 | 48 |
| 49 | Physiological artifacts in scalp EEG and ear-EEG. <i>BioMedical Engineering OnLine</i> , 2017, 16, 103. | 2.7 | 48 |
| 50 | An Adaptive Diffusion Augmented CLMS Algorithm for Distributed Filtering of Noncircular Complex Signals. <i>IEEE Signal Processing Letters</i> , 2011, 18, 659-662. | 3.6 | 46 |
| 51 | A Full Mean Square Analysis of CLMS for Second-Order Noncircular Inputs. <i>IEEE Transactions on Signal Processing</i> , 2017, 65, 5578-5590. | 5.3 | 45 |
| 52 | Distributed Widely Linear Kalman Filtering for Frequency Estimation in Power Networks. <i>IEEE Transactions on Signal and Information Processing Over Networks</i> , 2015, 1, 45-57. | 2.8 | 44 |
| 53 | Widely Linear Modeling for Frequency Estimation in Unbalanced Three-Phase Power Systems. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2013, 62, 353-363. | 4.7 | 42 |
| 54 | Bivariate Empirical Mode Decomposition for Unbalanced Real-World Signals. <i>IEEE Signal Processing Letters</i> , 2013, 20, 245-248. | 3.6 | 41 |

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| 60 | Hearables: feasibility of recording cardiac rhythms from head and in-ear locations. Royal Society Open Science, 2017, 4, 171214. | 2.4 | 34 |
| 61 | Maximum Likelihood Parameter Estimation of Unbalanced Three-Phase Power Signals. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 569-581. | 4.7 | 34 |
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| 63 | Performance Analysis of Quaternion-Valued Adaptive Filters in Nonstationary Environments. IEEE Transactions on Signal Processing, 2018, 66, 1566-1579. | 5.3 | 33 |
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| 65 | Adaptive-projection intrinsically transformed multivariate empirical mode decomposition in cooperative brain-computer interface applications. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150199. | 3.4 | 32 |
| 66 | Data Analytics on Graphs Part III: Machine Learning on Graphs, from Graph Topology to Applications. Foundations and Trends in Machine Learning, 2020, 13, 332-530. | 69.0 | 32 |
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| 69 | EEG Signal Quality of a Subcutaneous Recording System Compared to Standard Surface Electrodes. Journal of Sensors, 2015, 2015, 1-9. | 1.1 | 29 |
| 70 | A Normalized Complex LMS Based Blind I/Q Imbalance Compensator for GFDM Receivers and Its Full Second-Order Performance Analysis. IEEE Transactions on Signal Processing, 2018, 66, 4701-4712. | 5.3 | 29 |
| 71 | Distributed Adaptive Filtering of α -Stable Signals. IEEE Signal Processing Letters, 2018, 25, 1450-1454. | 3.6 | 29 |
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| 74 | Enabling R-peak detection in wearable ECG: Combining matched filtering and Hilbert transform. , 2015, , . | | 28 |
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| 85 | A Class of Multivariate Denoising Algorithms Based on Synchrosqueezing. IEEE Transactions on Signal Processing, 2015, , 1-1. | 5.3 | 24 |
| 86 | Complementary Mean Square Analysis of Augmented CLMS for Second Order Noncircular Gaussian Signals. IEEE Signal Processing Letters, 2017, , 1-1. | 3.6 | 24 |
| 87 | Co-Located Multimodal Sensing: A Next Generation Solution for Wearable Health. IEEE Sensors Journal, 2015, 15, 138-145. | 4.7 | 23 |
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| 100 | The Female Heart: Sex Differences in the Dynamics of ECG in Response to Stress. Frontiers in Physiology, 2018, 9, 1616. | 2.8 | 19 |
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| 105 | Fractional-Order Correntropy Filters for Tracking Dynamic Systems in $\hat{\alpha}$ -Stable Environments. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 3557-3561. | 3.0 | 18 |
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| 116 | The quaternion kernel least squares. , 2013, , . | | 15 |
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| 118 | Bidimensional Multivariate Empirical Mode Decomposition With Applications in Multi-Scale Image Fusion. IEEE Access, 2019, 7, 114261-114270. | 4.2 | 15 |
| 119 | The ClassA Framework: HRV Based Assessment of SNS and PNS Dynamics Without LF-HF Controversies. Frontiers in Physiology, 2019, 10, 505. | 2.8 | 15 |
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| 124 | A unifying framework for the analysis of quaternion valued adaptive filters. , 2011, , . | | 14 |
| 125 | Automatic detection of drowsiness using in-ear EEG. , 2018, , . | | 14 |
| 126 | Complex-Valued Nonlinear Adaptive Filters With Applications in α -Stable Environments. IEEE Signal Processing Letters, 2019, 26, 1315-1319. | 3.6 | 14 |

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| 129 | Analysis of the Unconstrained Frequency-Domain Block LMS for Second-Order Noncircular Inputs. IEEE Transactions on Signal Processing, 2019, 67, 3970-3984. | 5.3 | 13 |
| 130 | Unmixing Oscillatory Brain Activity by EEG Source Localization and Empirical Mode Decomposition. Computational Intelligence and Neuroscience, 2019, 2019, 1-15. | 1.7 | 13 |
| 131 | Performance Analysis of Deficient Length Quaternion Least Mean Square Adaptive Filters. IEEE Transactions on Signal Processing, 2020, 68, 65-80. | 5.3 | 13 |
| 132 | Steady-State Behavior of General Complex-Valued Diffusion LMS Strategies. IEEE Signal Processing Letters, 2016, 23, 722-726. | 3.6 | 12 |
| 133 | Demystifying the Coherence Index in Compressive Sensing [Lecture Notes]. IEEE Signal Processing Magazine, 2020, 37, 152-162. | 5.6 | 12 |
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| 139 | Analysis of Least Stochastic Entropy Adaptive Filters for Noncircular Gaussian Signals. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 1364-1368. | 3.0 | 11 |
| 140 | Complex Properness Inspired Blind Adaptive Frequency-Dependent I/Q Imbalance Compensation for Wideband Direct-Conversion Receivers. IEEE Transactions on Wireless Communications, 2020, 19, 5982-5992. | 9.2 | 11 |
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| 142 | The least-mean-magnitude-phase algorithm with applications to communications systems. , 2011, , . | | 10 |
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| 144 | The Augmented Complex Particle Filter. IEEE Transactions on Signal Processing, 2013, 61, 4341-4346. | 5.3 | 10 |

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| 148 | Discrimination of emotional states from scalp- and intracranial EEG using multiscale Rényi entropy. PLoS ONE, 2017, 12, e0186916. | 2.5 | 10 |
| 149 | Robust decoding of the speech envelope from EEG recordings through deep neural networks. Journal of Neural Engineering, 2022, 19, 046007. | 3.5 | 10 |
| 150 | Mean and Mean-Square Analysis of the Complex LMS Algorithm for Non-Circular Gaussian Signals. , 2009, , . | | 9 |
| 151 | Blind Extraction of Microsleep Events. , 2007, , . | | 8 |
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| 153 | Modelling stress in public speaking: Evolution of stress levels during conference presentations. , 2016, , . | | 8 |
| 154 | Blind source separation and artefact cancellation for single channel bioelectrical signal. , 2016, , . | | 8 |
| 155 | Cost-effective diffusion Kalman filtering with implicit measurement exchanges. , 2017, , . | | 8 |
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| 157 | A perspective on CLMS as a deficient length augmented CLMS: Dealing with second order noncircularity. Signal Processing, 2018, 149, 236-245. | 3.7 | 8 |
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