

Santiago Aja-Fernandez

List of Publications by Citations

Source: <https://exaly.com/author-pdf/4951116/santiago-aja-fernandez-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

104
papers

2,158
citations

24
h-index

45
g-index

118
ext. papers

2,578
ext. citations

4.9
avg, IF

5.26
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 104 | On the estimation of the coefficient of variation for anisotropic diffusion speckle filtering. <i>IEEE Transactions on Image Processing</i> , 2006 , 15, 2694-701 | 8.7 | 221 |
| 103 | Noise and signal estimation in magnitude MRI and Rician distributed images: a LMMSE approach. <i>IEEE Transactions on Image Processing</i> , 2008 , 17, 1383-98 | 8.7 | 187 |
| 102 | Noise-driven anisotropic diffusion filtering of MRI. <i>IEEE Transactions on Image Processing</i> , 2009 , 18, 2265-74 | 8.7 | 140 |
| 101 | Restoration of DWI data using a Rician LMMSE estimator. <i>IEEE Transactions on Medical Imaging</i> , 2008 , 27, 1389-403 | 11.7 | 117 |
| 100 | Noise estimation in single- and multiple-coil magnetic resonance data based on statistical models. <i>Magnetic Resonance Imaging</i> , 2009 , 27, 1397-409 | 3.3 | 115 |
| 99 | Anisotropic diffusion filter with memory based on speckle statistics for ultrasound images. <i>IEEE Transactions on Image Processing</i> , 2015 , 24, 345-58 | 8.7 | 84 |
| 98 | A local fuzzy thresholding methodology for multiregion image segmentation. <i>Knowledge-Based Systems</i> , 2015 , 83, 1-12 | 7.3 | 81 |
| 97 | Estimation of fiber orientation probability density functions in high angular resolution diffusion imaging. <i>NeuroImage</i> , 2009 , 47, 638-50 | 7.9 | 79 |
| 96 | DWI filtering using joint information for DTI and HARDI. <i>Medical Image Analysis</i> , 2010 , 14, 205-18 | 15.4 | 78 |
| 95 | Statistical noise analysis in GRAPPA using a parametrized noncentral Chi approximation model. <i>Magnetic Resonance in Medicine</i> , 2011 , 65, 1195-206 | 4.4 | 71 |
| 94 | Image quality assessment based on local variance. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 4815-8 | | 68 |
| 93 | Efficient and robust nonlocal means denoising of MR data based on salient features matching. <i>Computer Methods and Programs in Biomedicine</i> , 2012 , 105, 131-44 | 6.9 | 63 |
| 92 | Automatic noise estimation in images using local statistics. Additive and multiplicative cases. <i>Image and Vision Computing</i> , 2009 , 27, 756-770 | 3.7 | 63 |
| 91 | Noise estimation in parallel MRI: GRAPPA and SENSE. <i>Magnetic Resonance Imaging</i> , 2014 , 32, 281-90 | 3.3 | 61 |
| 90 | A computational TW3 classifier for skeletal maturity assessment. A Computing with Words approach. <i>Journal of Biomedical Informatics</i> , 2004 , 37, 99-107 | 10.2 | 49 |
| 89 | Spatially variant noise estimation in MRI: a homomorphic approach. <i>Medical Image Analysis</i> , 2015 , 20, 184-97 | 15.4 | 44 |
| 88 | Impact of MR Acquisition Parameters on DTI Scalar Indexes: A Tractography Based Approach. <i>PLoS ONE</i> , 2015 , 10, e0137905 | 3.7 | 43 |

| | | | |
|----|---|------|----|
| 87 | A new methodology for the estimation of fiber populations in the white matter of the brain with the Funk-Radon transform. <i>NeuroImage</i> , 2010 , 49, 1301-15 | 7.9 | 36 |
| 86 | Influence of noise correlation in multiple-coil statistical models with sum of squares reconstruction. <i>Magnetic Resonance in Medicine</i> , 2012 , 67, 580-5 | 4.4 | 32 |
| 85 | Effective noise estimation and filtering from correlated multiple-coil MR data. <i>Magnetic Resonance Imaging</i> , 2013 , 31, 272-85 | 3.3 | 29 |
| 84 | Statistical Analysis of Noise in MRI 2016 , | | 28 |
| 83 | Attention deficit/hyperactivity disorder and medication with stimulants in young children: a DTI study. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2015 , 57, 176-84 | 5.5 | 27 |
| 82 | White matter changes in chronic and episodic migraine: a diffusion tensor imaging study. <i>Journal of Headache and Pain</i> , 2020 , 21, 1 | 8.8 | 26 |
| 81 | Gamma mixture classifier for plaque detection in intravascular ultrasonic images. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 44-61 | 3.2 | 24 |
| 80 | Spherical Deconvolution of Multichannel Diffusion MRI Data with Non-Gaussian Noise Models and Spatial Regularization. <i>PLoS ONE</i> , 2015 , 10, e0138910 | 3.7 | 21 |
| 79 | Least squares for diffusion tensor estimation revisited: propagation of uncertainty with Rician and non-Rician signals. <i>NeuroImage</i> , 2012 , 59, 4032-43 | 7.9 | 18 |
| 78 | A generalized gamma mixture model for ultrasonic tissue characterization. <i>Computational and Mathematical Methods in Medicine</i> , 2012 , 2012, 481923 | 2.8 | 18 |
| 77 | Matrix Modeling of Hierarchical Fuzzy Systems. <i>IEEE Transactions on Fuzzy Systems</i> , 2008 , 16, 585-599 | 8.3 | 18 |
| 76 | Non-Stationary Rician Noise Estimation in Parallel MRI Using a Single Image: A Variance-Stabilizing Approach. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2017 , 39, 2015-2029 | 13.3 | 17 |
| 75 | About the background distribution in MR data: a local variance study. <i>Magnetic Resonance Imaging</i> , 2010 , 28, 739-52 | 3.3 | 15 |
| 74 | A fuzzy-controlled Kalman filter applied to stereo-visual tracking schemes. <i>Signal Processing</i> , 2003 , 83, 101-120 | 4.4 | 15 |
| 73 | Optimized Diffusion-Weighting Gradient Waveform Design (ODGD) formulation for motion compensation and concomitant gradient nulling. <i>Magnetic Resonance in Medicine</i> , 2019 , 81, 989-1003 | 4.4 | 14 |
| 72 | Image Quality Assessment based on Local Variance | | 13 |
| 71 | Probabilistic-driven oriented Speckle reducing anisotropic diffusion with application to cardiac ultrasonic images. <i>Lecture Notes in Computer Science</i> , 2010 , 13, 518-25 | 0.9 | 13 |
| 70 | On the influence of interpolation on probabilistic models for ultrasonic images 2010 , | | 12 |

| | | | |
|----|--|------|----|
| 69 | Fast inference using transition matrices: an extension to nonlinear operators. <i>IEEE Transactions on Fuzzy Systems</i> , 2005 , 13, 478-490 | 8.3 | 12 |
| 68 | Direction-averaged diffusion-weighted MRI signal using different axisymmetric B-tensor encoding schemes. <i>Magnetic Resonance in Medicine</i> , 2020 , 84, 1579-1591 | 4.4 | 11 |
| 67 | Parallel MRI noise correction: an extension of the LMMSE to non central chi distributions. <i>Lecture Notes in Computer Science</i> , 2011 , 14, 226-33 | 0.9 | 11 |
| 66 | Group-Slicer: a collaborative extension of 3D-Slicer. <i>Journal of Biomedical Informatics</i> , 2005 , 38, 431-42 | 10.2 | 10 |
| 65 | Groupwise elastic registration by a new sparsity-promoting metric: application to the alignment of cardiac magnetic resonance perfusion images. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2013 , 35, 2638-50 | 13.3 | 9 |
| 64 | Structural connectivity alterations in chronic and episodic migraine: A diffusion magnetic resonance imaging connectomics study. <i>Cephalalgia</i> , 2020 , 40, 367-383 | 6.1 | 9 |
| 63 | Influence of ultrasound speckle tracking strategies for motion and strain estimation. <i>Medical Image Analysis</i> , 2016 , 32, 184-200 | 15.4 | 8 |
| 62 | Soft thresholding for medical image segmentation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 4752-5 | 0.9 | 8 |
| 61 | Micro-structure diffusion scalar measures from reduced MRI acquisitions. <i>PLoS ONE</i> , 2020 , 15, e0229526 | 3.7 | 7 |
| 60 | Noise correction for HARDI and HYDI data obtained with multi-channel coils and sum of squares reconstruction: an anisotropic extension of the LMMSE. <i>Magnetic Resonance Imaging</i> , 2013 , 31, 1360-71 | 3.3 | 7 |
| 59 | Fast inference in SAM fuzzy systems using transition matrices. <i>IEEE Transactions on Fuzzy Systems</i> , 2004 , 12, 170-182 | 8.3 | 7 |
| 58 | . <i>IEEE Transactions on Fuzzy Systems</i> , 2002 , 10, 360-374 | 8.3 | 7 |
| 57 | Scalar diffusion-MRI measures invariant to acquisition parameters: A first step towards imaging biomarkers. <i>Magnetic Resonance Imaging</i> , 2018 , 54, 194-213 | 3.3 | 7 |
| 56 | Local similarity measures for demons-like registration algorithms 2008 , | | 6 |
| 55 | Joint LMMSE estimation of DWI data for DTI processing. <i>Lecture Notes in Computer Science</i> , 2008 , 11, 27-34 | 0.9 | 6 |
| 54 | Design and construction of a realistic DWI phantom for filtering performance assessment. <i>Lecture Notes in Computer Science</i> , 2009 , 12, 951-8 | 0.9 | 6 |
| 53 | Gray Matter Structural Alterations in Chronic and Episodic Migraine: A Morphometric Magnetic Resonance Imaging Study. <i>Pain Medicine</i> , 2020 , 21, 2997-3011 | 2.8 | 6 |
| 52 | Improving GRAPPA reconstruction by frequency discrimination in the ACS lines. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2015 , 10, 1699-710 | 3.9 | 5 |

| | | | |
|----|--|------|---|
| 51 | Efficient and accurate EAP imaging from multi-shell dMRI with micro-structure adaptive convolution kernels and dual Fourier Integral Transforms (MiSFIT). <i>NeuroImage</i> , 2021 , 227, 117616 | 7.9 | 5 |
| 50 | Anisotropic LMMSE denoising of MRI based on statistical tissue models 2012 , | | 4 |
| 49 | Fuzzy feedback system analysis using transition matrices. <i>Fuzzy Sets and Systems</i> , 2006 , 157, 516-543 | 3.7 | 4 |
| 48 | Bias of least squares approaches for diffusion tensor estimation from array coils in DT-MRI. <i>Lecture Notes in Computer Science</i> , 2009 , 12, 919-26 | 0.9 | 4 |
| 47 | 2016 , | | 3 |
| 46 | Robust estimation of the apparent diffusion coefficient invariant to acquisition noise and physiological motion. <i>Magnetic Resonance Imaging</i> , 2018 , 53, 123-133 | 3.3 | 3 |
| 45 | Single-Shell Return-to-the-Origin Probability Diffusion Mri Measure Under a Non-Stationary Rician Distributed Noise 2019 , | | 3 |
| 44 | 2012 , | | 3 |
| 43 | A 3-D collision handling algorithm for surgery simulation based on feedback fuzzy logic. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2009 , 13, 451-7 | | 3 |
| 42 | Hierarchical fuzzy systems with FITM | | 3 |
| 41 | On the Blurring of the FunkRadon Transform in QBall Imaging. <i>Lecture Notes in Computer Science</i> , 2009 , 415-422 | 0.9 | 3 |
| 40 | Alternative Microstructural Measures to Complement Diffusion Tensor Imaging in Migraine Studies with Standard MRI Acquisition. <i>Brain Sciences</i> , 2020 , 10, | 3.4 | 3 |
| 39 | On the generalizability of diffusion MRI signal representations across acquisition parameters, sequences and tissue types: Chronicles of the MEMENTO challenge. <i>NeuroImage</i> , 2021 , 240, 118367 | 7.9 | 3 |
| 38 | Fully automatic detection of salient features in 3-d transesophageal images. <i>Ultrasound in Medicine and Biology</i> , 2014 , 40, 2868-84 | 3.5 | 2 |
| 37 | A direct calculation of moments of the sample variance. <i>Mathematics and Computers in Simulation</i> , 2012 , 82, 790-804 | 3.3 | 2 |
| 36 | Optimal real-time estimation in diffusion tensor imaging. <i>Magnetic Resonance Imaging</i> , 2012 , 30, 506-17 | 3.3 | 2 |
| 35 | A maximum likelihood approach to diffeomorphic speckle tracking for 3D strain estimation in echocardiography. <i>Medical Image Analysis</i> , 2015 , 24, 90-105 | 15.4 | 2 |
| 34 | NURBS for the geometrical modeling of a new family of Compact-Supported Radial Basis Functions for elastic registration of medical images. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 5217-50 | 0.9 | 2 |

| | | | |
|----|---|------|---|
| 33 | DWI acquisition schemes and diffusion tensor estimation: a simulation-based study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 3317-20 | 0.9 | 2 |
| 32 | P6D-4 Analysis of Ultrasound Images Based on Local Statistics. Application to the Diagnosis of Developmental Dysplasia of the Hip. <i>Proceedings IEEE Ultrasonics Symposium</i> , 2007 , | | 2 |
| 31 | Outlier rejection for diffusion weighted imaging 2007 , 10, 161-8 | | 2 |
| 30 | Simultaneous imaging of hard and soft biological tissues in a low-field dental MRI scanner. <i>Scientific Reports</i> , 2020 , 10, 21470 | 4.9 | 2 |
| 29 | On the generalizability of diffusion MRI signal representations across acquisition parameters, sequences and tissue types: chronicles of the MEMENTO challenge | | 2 |
| 28 | Apparent propagator anisotropy from single-shell diffusion MRI acquisitions. <i>Magnetic Resonance in Medicine</i> , 2021 , 85, 2869-2881 | 4.4 | 2 |
| 27 | Spatially-variant noise filtering in magnetic resonance imaging: A consensus-based approach. <i>Knowledge-Based Systems</i> , 2016 , 106, 264-273 | 7.3 | 1 |
| 26 | Strain rate tensor estimation from echocardiography for quantitative assessment of functional mitral regurgitation 2013 , | | 1 |
| 25 | Atlas-based segmentation of white matter structures from DTI using tensor invariants and orientation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 503-6 | 0.9 | 1 |
| 24 | Blind estimation of spatially variant noise in GRAPPA MRI 2015 , | | 1 |
| 23 | A variationally based weighted re-initialization method for geometric active contours 2010 , | | 1 |
| 22 | Deblurring of probabilistic ODFs in quantitative diffusion MRI 2012 , | | 1 |
| 21 | On the blurring of the Funk-Radon transform in Q-Ball imaging 2009 , 12, 415-22 | | 1 |
| 20 | Speckle Tracking in Interpolated Echocardiography to Estimate Heart Motion. <i>Lecture Notes in Computer Science</i> , 2013 , 325-333 | 0.9 | 1 |
| 19 | Multimodal fusion analysis of structural connectivity and gray matter morphology in migraine. <i>Human Brain Mapping</i> , 2021 , 42, 908-921 | 5.9 | 1 |
| 18 | Moment-based representation of the diffusion inside the brain from reduced DMRI acquisitions: Generalized AMURA.. <i>Medical Image Analysis</i> , 2022 , 77, 102356 | 15.4 | 0 |
| 17 | Accurate free-water estimation in white matter from fast diffusion MRI acquisitions using the spherical means technique. <i>Magnetic Resonance in Medicine</i> , 2022 , 87, 1028-1035 | 4.4 | 0 |
| 16 | Synthetic MRI improves Radiomics-based glioblastoma survival prediction.. <i>NMR in Biomedicine</i> , 2022 , e4754 | 4.4 | 0 |

- 15 A magnetic resonance software simulator for the evaluation of myocardial deformation estimation. *Medical Engineering and Physics*, **2013**, 35, 1331-40 2.4
- 14 Merging squared-magnitude approaches to DWI denoising: An adaptive Wiener filter tuned to the anatomical contents of the image. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 527-30 0.9
- 13 Noise estimation in magnetic resonance SENSE reconstructed data. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 1104-7 0.9
- 12 Robust estimation of MRI myocardial perfusion parameters. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 4382-5 0.9
- 11 Anisotropic diffusion filtering for correlated multiple-coil MRI. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 2956-9 0.9
- 10 Return-to-Axis Probability Calculation from Single-Shell Acquisitions. *Mathematics and Visualization*, **2019**, 29-41 0.6
- 9 Quality Assessment of Tensor Images. *Advances in Pattern Recognition*, **2009**, 79-103
- 8 Parametric Image Restoration Using Consensus: An Application to Nonstationary Noise Filtering. *Lecture Notes in Computer Science*, **2013**, 358-365 0.9
- 7 Homeomorphic Geometrical Transform for Collision Response in Surgical Simulation. *Lecture Notes in Computer Science*, **2013**, 433-440 0.9
- 6 Computation of exact g-factor maps in 3D GRAPPA reconstructions. *Magnetic Resonance in Medicine*, **2019**, 81, 1353-1367 4.4
- 5 Q-Space Quantitative Diffusion MRI Measures Using a Stretched-Exponential Representation. *Mathematics and Visualization*, **2021**, 121-133 0.6
- 4 Micro-structure diffusion scalar measures from reduced MRI acquisitions **2020**, 15, e0229526
- 3 Micro-structure diffusion scalar measures from reduced MRI acquisitions **2020**, 15, e0229526
- 2 Micro-structure diffusion scalar measures from reduced MRI acquisitions **2020**, 15, e0229526
- 1 Micro-structure diffusion scalar measures from reduced MRI acquisitions **2020**, 15, e0229526