

# Paul A Rodríguez

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6463632/publications.pdf>

Version: 2024-02-01

62  
papers

883  
citations

1307366

7  
h-index

1281743

11  
g-index

62  
all docs

62  
docs citations

62  
times ranked

788  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Efficient Minimization Method for a Generalized Total Variation Functional. IEEE Transactions on Image Processing, 2009, 18, 322-332.                                   | 6.0 | 200       |
| 2  | Multiscale AM-FM Demodulation and Image Reconstruction Methods With Improved Accuracy. IEEE Transactions on Image Processing, 2010, 19, 1138-1152.                      | 6.0 | 116       |
| 3  | Incremental Principal Component Pursuit for Video Background Modeling. Journal of Mathematical Imaging and Vision, 2016, 55, 1-18.                                      | 0.8 | 101       |
| 4  | An Iteratively Reweighted Norm Algorithm for Minimization of Total Variation Functionals. IEEE Signal Processing Letters, 2007, 14, 948-951.                            | 2.1 | 88        |
| 5  | Fast principal component pursuit via alternating minimization. , 2013, , .  |     | 73        |
| 6  | Total Variation Regularization Algorithms for Images Corrupted with Different Noise Models: A Review. Journal of Electrical and Computer Engineering, 2013, 2013, 1-18. | 0.6 | 51        |
| 7  | A Matlab implementation of a fast incremental principal component pursuit algorithm for Video Background Modeling. , 2014, , .  |     | 26        |
| 8  | Translational and rotational jitter invariant incremental principal component pursuit for video background modeling. , 2015, , .  |     | 23        |
| 9  | An Iteratively Reweighted Norm Algorithm for Total Variation Regularization. , 2006, , .  |     | 18        |
| 10 | A generalized vector-valued total variation algorithm. , 2009, , .  |     | 11        |
| 11 | An online background subtraction algorithm deployed on a NAO humanoid robot based monitoring system. Robotics and Autonomous Systems, 2016, 85, 37-47.                  | 3.0 | 11        |
| 12 | Fast convolutional sparse coding with separable filters. , 2017, , .  |     | 11        |
| 13 | Separable Dictionary Learning for Convolutional Sparse Coding via Split Updates. , 2018, , .  |     | 11        |
| 14 | Highly Parallelable Bidimensional Median Filter for Modern Parallel Programming Models. Journal of Signal Processing Systems, 2013, 71, 221-235.                        | 1.4 | 9         |
| 15 | Efficient Convolutional Dictionary Learning Using Partial Update Fast Iterative Shrinkage-Thresholding Algorithm. , 2018, , .   |     | 9         |
| 16 | Bidimensional median filter for parallel computing architectures. , 2012, , .   |     | 8         |
| 17 | Video background modeling under impulse noise. , 2014, , .  |     | 8         |
| 18 | Panning and Jitter Invariant Incremental Principal Component Pursuit for Video Background Modeling. , 2017, , .   |     | 7         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Efficient Algorithm for Convolutional Dictionary Learning via Accelerated Proximal Gradient Consensus. , 2018, , .  |     | 7         |
| 20 | AN $\ell_1$ -TV algorithm for deconvolution with salt and pepper noise. , 2009, , .   |     | 6         |
| 21 | Catadioptric omnidirectional image inpainting via a multi-scale approach and image unwrapping. , 2013, , .  |     | 6         |
| 22 | Jitter invariant incremental principal component pursuit for video background modeling on the TK1. , 2015, , .  |     | 6         |
| 23 | Ghosting suppression for incremental principal component pursuit algorithms. , 2016, , .  |     | 6         |
| 24 | EFFICIENT SEPARABLE FILTER ESTIMATION USING RANK-1 CONVOLUTIONAL DICTIONARY LEARNING. , 2018, , .   |     | 6         |
| 25 | Combinatorial Separable Convolutional Dictionaries. , 2019, , .   |     | 5         |
| 26 | Application of numerical methods to elasticity imaging. MCB Molecular and Cellular Biomechanics, 2013, 10, 43-65.   | 0.3 | 5         |
| 27 | Shear Wave Speed Estimation from Crawling Wave Sonoelastography: A comparison between AM-FM Dominant Component Analysis and Phase Derivation Methods. , 2014, , . |     | 4         |
| 28 | Crawling Waves Speed Estimation Based on the Dominant Component Analysis Paradigm. Ultrasonic Imaging, 2015, 37, 341-355.   | 1.4 | 4         |
| 29 | Alternating optimization low-rank expansion algorithm to estimate a linear combination of separable filters to approximate 2D filter banks. , 2016, , .           |     | 4         |
| 30 | Moving object detection in videos using principal component pursuit and convolutional neural networks. , 2017, , .  |     | 4         |
| 31 | Wall clutter removal in Doppler ultrasound using principal component pursuit. , 2018, , .   |     | 4         |
| 32 | 2D amplitude-modulation frequency-modulation - based method for motion estimation. , 2015, , .  |     | 3         |
| 33 | Efficient Projection onto the $\ell_{\infty,1}$ Mixed-Norm Ball Using a Newton Root Search Method. SIAM Journal on Imaging Sciences, 2019, 12, 604-623.           | 1.3 | 3         |
| 34 | Improving FISTA's Speed of Convergence via a Novel Inertial Sequence. , 2019, , .   |     | 3         |
| 35 | 2D instantaneous frequency-based method for motion estimation using total variation. , 2014, , .  |     | 2         |
| 36 | A 2D amplitude-modulation frequency-modulation representation for motion estimation. , 2016, , .  |     | 2         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | An incremental principal component pursuit algorithm via projections onto the $\ell_1$ ball. , 2017, , .  |     | 2         |
| 38 | A two-term penalty function for inverse problems with sparsity constrains. , 2017, , .  |     | 2         |
| 39 | REAL-TIME CORNER DETECTION ON MOBILE PLATFORMS USING CUDA. , 2018, , .  |     | 2         |
| 40 | Improved Solution to the $\ell_0$ Regularized Optimization Problem via Dictionary-Reduced Initial Guess. , 2018, , .  |     | 2         |
| 41 | Optical motion tracking in earthquake-simulation shake table testing: Preliminary results. , 2009, , .  |     | 1         |
| 42 | Multiplicative updates algorithm to minimize the generalized total variation functional with a non-negativity constraint. , 2010, , .   |     | 1         |
| 43 | Noise model discrimination for digital images based on variance-stabilizing transforms and on local statistics: Preliminary results. , 2011, , .                                |     | 1         |
| 44 | Omnidirectional catadioptric image unwrapping via total variation regularization. , 2011, , .   |     | 1         |
| 45 | A comparison of the computational performance of Iteratively Reweighted Least Squares and alternating minimization algorithms for $\ell_1/\ell_2$ inverse problems. , 2012, , . |     | 1         |
| 46 | Handgrip estimation based on total variation denoising filtering for control applications. , 2013, , .  |     | 1         |
| 47 | Fast omni-image unwarping using pano-mapping pointers array. , 2014, , .  |     | 1         |
| 48 | Practical hand tracking solution by alternating the use of a priori information. , 2014, , .  |     | 1         |
| 49 | An accelerated newton's method for projections onto the $\ell_1$ -ball. , 2017, , .   |     | 1         |
| 50 | Panning and Jitter Invariant Incremental Principal Component Pursuit for Video Background Modeling. Journal of Electrical and Computer Engineering, 2019, 2019, 1-15.           | 0.6 | 1         |
| 51 | Hyper-Parameter Selection on Convolutional Dictionary Learning Through Local $\ell_0$ -Norm. , 2019, , .  |     | 1         |
| 52 | Generalized Combinatorial Approach Using Single Filter Basis for Convolutional Sparse Modeling. , 2019, , .   |     | 1         |
| 53 | Fast High Resolution Blood Flow Estimation and Clutter Rejection Via an Alternating Optimization Problem. , 2021, , .   |     | 1         |
| 54 | Robustifying stability of the Fast iterative shrinkage thresholding algorithm for $\ell_1$ regularized problems. , 2021, , .  |     | 1         |

| #  | ARTICLE  | IF | CITATIONS |
|----|--|----|-----------|
| 55 | A regularized optimization approach for AM-FM reconstructions. , 2010, , .   |    | 0         |
| 56 | Computationally inexpensive parallel parking supervisor based on video processing. , 2012, , .   |    | 0         |
| 57 | A quasi-local method for instantaneous frequency estimation with application to structural magnetic resonance images. , 2014, 2014, 1477-80. |    | 0         |
| 58 | FAST CONVOLUTIONAL SPARSE CODING WITH $\ell_{\infty}$ PENALTY. , 2018, , .   |    | 0         |
| 59 | Fast Projection onto the $\ell_{\infty,1}$ -Mixed Norm Ball Using Steffensen Root Search. , 2018, , .  |    | 0         |
| 60 | Accelerated Gradient Descent Method for Projections onto the $\ell_1$ -Ball. , 2018, , .   |    | 0         |
| 61 | Regularization Parameter-Free Convolutional Sparse Coding via Projections Onto The $\ell_1$ -Ball and The Discrepancy Principle. , 2018, , . |    | 0         |
| 62 | X-ray CT reconstruction via $\ell_0$ gradient projection. , 2019, , .  |    | 0         |