

# Jean-Luc Starck

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8223653/publications.pdf>

Version: 2024-02-01

350  
papers

44,019  
citations

2101

100  
h-index

2127

203  
g-index

359  
all docs

359  
docs citations

359  
times ranked

24041  
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>Planck</i> 2013 results. XVI. Cosmological parameters. <i>Astronomy and Astrophysics</i> , 2014, 571, A16.	5.1	4,703
2	THE LARGE AREA TELESCOPE ON THE <i>FERMI</i> GAMMA-RAY SPACE TELESCOPE MISSION. <i>Astrophysical Journal</i> , 2009, 697, 1071-1102.	4.5	3,048
3	The curvelet transform for image denoising. <i>IEEE Transactions on Image Processing</i> , 2002, 11, 670-684.	9.8	1,780
4	Sparse Solution of Underdetermined Systems of Linear Equations by Stagewise Orthogonal Matching Pursuit. <i>IEEE Transactions on Information Theory</i> , 2012, 58, 1094-1121.	2.4	1,257
5	The reversal of the star formation-density relation in the distant universe. <i>Astronomy and Astrophysics</i> , 2007, 468, 33-48.	5.1	1,253
6	<i>Planck</i> 2013 results. I. Overview of products and scientific results. <i>Astronomy and Astrophysics</i> , 2014, 571, A1.	5.1	948
7	FERMI LARGE AREA TELESCOPE FIRST SOURCE CATALOG. <i>Astrophysical Journal</i> , Supplement Series, 2010, 188, 405-436.	7.7	851
8	<i>Planck</i> 2013 results. XXII. Constraints on inflation. <i>Astronomy and Astrophysics</i> , 2014, 571, A22.	5.1	806
9	Image decomposition via the combination of sparse representations and a variational approach. <i>IEEE Transactions on Image Processing</i> , 2005, 14, 1570-1582.	9.8	798
10	Simultaneous cartoon and texture image inpainting using morphological component analysis (MCA). <i>Applied and Computational Harmonic Analysis</i> , 2005, 19, 340-358.	2.2	783
11	Measurement of the Cosmic Ray $e^+$ flux from 20 GeV to 1 TeV with the Fermi Large Area Telescope. <i>Physical Review Letters</i> , 2009, 102, 181101.	7.4	774
12	THE SPECTRAL ENERGY DISTRIBUTION OF <i>FERMI</i> BRIGHT BLAZARS. <i>Astrophysical Journal</i> , 2010, 716, 30-70.	4.5	741
13	<i>Planck</i> 2013 results. XI. All-sky model of thermal dust emission. <i>Astronomy and Astrophysics</i> , 2014, 571, A11.	5.1	566
14	Fermi Observations of High-Energy Gamma-Ray Emission from GRB 080916C. <i>Science</i> , 2009, 323, 1688-1693.	12.6	523
15	<i>Planck</i> 2013 results. XX. Cosmology from Sunyaev-Zeldovich cluster counts. <i>Astronomy and Astrophysics</i> , 2014, 571, A20.	5.1	465
16	Spectrum of the Isotropic Diffuse Gamma-Ray Emission Derived from First-Year Fermi Large Area Telescope Data. <i>Physical Review Letters</i> , 2010, 104, 101101.	7.8	433
17	Gray and color image contrast enhancement by the curvelet transform. <i>IEEE Transactions on Image Processing</i> , 2003, 12, 706-717.	9.8	422
18	THE FIRST CATALOG OF ACTIVE GALACTIC NUCLEI DETECTED BY THE <i>FERMI</i> LARGE AREA TELESCOPE. <i>Astrophysical Journal</i> , 2010, 715, 429-457.	4.5	415

#	ARTICLE	IF	CITATIONS
19	The Undecimated Wavelet Decomposition and its Reconstruction. IEEE Transactions on Image Processing, 2007, 16, 297-309.	9.8	396
20	THE FIRST <i>FERMI</i> LARGE AREA TELESCOPE CATALOG OF GAMMA-RAY PULSARS. Astrophysical Journal, Supplement Series, 2010, 187, 460-494.	7.7	396
21	FERMI/LARGE AREA TELESCOPE BRIGHT GAMMA-RAY SOURCE LIST. Astrophysical Journal, Supplement Series, 2009, 183, 46-66.	7.7	394
22	<i>Planck</i> early results. I. The <i>Planck</i> mission. Astronomy and Astrophysics, 2011, 536, A1.	5.1	394
23	<i>Planck</i> 2013 results. XXIX. The <i>Planck</i> catalogue of Sunyaev-Zeldovich sources. Astronomy and Astrophysics, 2014, 571, A29.	5.1	380
24	<i>Planck</i> 2013 results. XXIII. Isotropy and statistics of the CMB. Astronomy and Astrophysics, 2014, 571, A23.	5.1	367
25	<i>Planck</i> 2013 results. XV. CMB power spectra and likelihood. Astronomy and Astrophysics, 2014, 571, A15.	5.1	364
26	<i>Planck</i> 2013 results. XXIV. Constraints on primordial non-Gaussianity. Astronomy and Astrophysics, 2014, 571, A24.	5.1	350
27	BRIGHT ACTIVE GALACTIC NUCLEI SOURCE LIST FROM THE FIRST THREE MONTHS OF THE <i>FERMI</i> LARGE AREA TELESCOPE ALL-SKY SURVEY. Astrophysical Journal, 2009, 700, 597-622.	4.5	349
28	Redundant Multiscale Transforms and Their Application for Morphological Component Separation. Advances in Imaging and Electron Physics, 2004, 132, 287-348.	0.2	336
29	<i>Planck</i> early results. VIII. The all-sky early Sunyaev-Zeldovich cluster sample. Astronomy and Astrophysics, 2011, 536, A8.	5.1	335
30	Deconvolution in Astronomy: A Review. Publications of the Astronomical Society of the Pacific, 2002, 114, 1051-1069.	3.1	320
31	<i>Planck</i> early results. XIX. All-sky temperature and dust optical depth from <i>Planck</i> and IRAS. Constraints on the "dark gas" in our Galaxy. Astronomy and Astrophysics, 2011, 536, A19.	5.1	314
32	Wavelets, Ridgelets, and Curvelets for Poisson Noise Removal. IEEE Transactions on Image Processing, 2008, 17, 1093-1108.	9.8	303
33	Dark matter maps reveal cosmic scaffolding. Nature, 2007, 445, 286-290.	27.8	302
34	GAMMA-RAY LIGHT CURVES AND VARIABILITY OF BRIGHT <i>FERMI</i>-DETECTED BLAZARS. Astrophysical Journal, 2010, 722, 520-542.	4.5	292
35	<i>Planck</i> 2013 results. XVII. Gravitational lensing by large-scale structure. Astronomy and Astrophysics, 2014, 571, A17.	5.1	272
36	<i>Planck</i> pre-launch status: The <i>Planck</i> mission. Astronomy and Astrophysics, 2010, 520, A1.	5.1	268

#	ARTICLE	IF	CITATIONS
37	Detection of 16 Gamma-Ray Pulsars Through Blind Frequency Searches Using the Fermi LAT. <i>Science</i> , 2009, 325, 840-844.	12.6	264
38	Morphological Component Analysis: An Adaptive Thresholding Strategy. <i>IEEE Transactions on Image Processing</i> , 2007, 16, 2675-2681.	9.8	250
39	Inpainting and Zooming Using Sparse Representations. <i>Computer Journal</i> , 2008, 52, 64-79.	2.4	250
40	<i>Planck</i> early results. VII. The Early Release Compact Source Catalogue. <i>Astronomy and Astrophysics</i> , 2011, 536, A7.	5.1	224
41	<i>Planck</i> 2013 results. XXV. Searches for cosmic strings and other topological defects. <i>Astronomy and Astrophysics</i> , 2014, 571, A25.	5.1	223
42	<i>Planck</i> 2013 results. XII. Diffuse component separation. <i>Astronomy and Astrophysics</i> , 2014, 571, A12.	5.1	216
43	Astronomical image representation by the curvelet transform. <i>Astronomy and Astrophysics</i> , 2003, 398, 785-800.	5.1	210
44	<i>Planck</i> 2013 results. XXX. Cosmic infrared background measurements and implications for star formation. <i>Astronomy and Astrophysics</i> , 2014, 571, A30.	5.1	210
45	Compressed Sensing in Astronomy. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2008, 2, 718-726.	10.8	201
46	Modulated High-Energy Gamma-Ray Emission from the Microquasar Cygnus X-3. <i>Science</i> , 2009, 326, 1512-1516.	12.6	193
47	A Population of Gamma-Ray Millisecond Pulsars Seen with the Fermi Large Area Telescope. <i>Science</i> , 2009, 325, 848-852.	12.6	190
48	Component separation methods for the PLANCK mission. <i>Astronomy and Astrophysics</i> , 2008, 491, 597-615.	5.1	189
49	Fermi Gamma-Ray Imaging of a Radio Galaxy. <i>Science</i> , 2010, 328, 725-729.	12.6	187
50	Light on dark matter with weak gravitational lensing. <i>IEEE Signal Processing Magazine</i> , 2010, 27, 76-85.	5.6	186
51	<i>Planck</i> early results. XXV. Thermal dust in nearby molecular clouds. <i>Astronomy and Astrophysics</i> , 2011, 536, A25.	5.1	184
52	<i>Planck</i> early results. XVIII. The power spectrum of cosmic infrared background anisotropies. <i>Astronomy and Astrophysics</i> , 2011, 536, A18.	5.1	180
53	THE <i>FERMI</i>-LAT HIGH-LATITUDE SURVEY: SOURCE COUNT DISTRIBUTIONS AND THE ORIGIN OF THE EXTRAGALACTIC DIFFUSE BACKGROUND. <i>Astrophysical Journal</i> , 2010, 720, 435-453.	4.5	179
54	<i>Planck</i> early results. XXIV. Dust in the diffuse interstellar medium and the Galactic halo. <i>Astronomy and Astrophysics</i> , 2011, 536, A24.	5.1	179

#	ARTICLE	IF	CITATIONS
55	<i>Planck</i> early results. XI. Calibration of the local galaxy cluster Sunyaev-Zeldovich scaling relations. <i>Astronomy and Astrophysics</i> , 2011, 536, A11.	5.1	174
56	<i>FERMI</i> OBSERVATIONS OF CASSIOPEIA AND CEPHEUS: DIFFUSE GAMMA-RAY EMISSION IN THE OUTER GALAXY. <i>Astrophysical Journal</i> , 2010, 710, 133-149.	4.5	172
57	Fermi Large Area Telescope Search for Photon Lines from 30 to 200 GeV and Dark Matter Implications. <i>Physical Review Letters</i> , 2010, 104, 091302.	7.8	166
58	<i>FERMI</i> DISCOVERY OF GAMMA-RAY EMISSION FROM NGC 1275. <i>Astrophysical Journal</i> , 2009, 699, 31-39.	4.5	165
59	<i>Planck</i> 2013 results. XXVIII. The <i>Planck</i> Catalogue of Compact Sources. <i>Astronomy and Astrophysics</i> , 2014, 571, A28.	5.1	162
60	<i>FERMI</i> /LARGE AREA TELESCOPE DISCOVERY OF GAMMA-RAY EMISSION FROM A RELATIVISTIC JET IN THE NARROW-LINE QUASAR PMN J0948+0022. <i>Astrophysical Journal</i> , 2009, 699, 976-984.	4.5	161
61	A Proximal Iteration for Deconvolving Poisson Noisy Images Using Sparse Representations. <i>IEEE Transactions on Image Processing</i> , 2009, 18, 310-321.	9.8	156
62	<i>Planck</i> early results. XX. New light on anomalous microwave emission from spinning dust grains. <i>Astronomy and Astrophysics</i> , 2011, 536, A20.	5.1	155
63	Sparsity and Morphological Diversity in Blind Source Separation. <i>IEEE Transactions on Image Processing</i> , 2007, 16, 2662-2674.	9.8	153
64	<i>Planck</i> early results. XXIII. The first all-sky survey of Galactic cold clumps. <i>Astronomy and Astrophysics</i> , 2011, 536, A23.	5.1	152
65	Image Decomposition and Separation Using Sparse Representations: An Overview. <i>Proceedings of the IEEE</i> , 2010, 98, 983-994.	21.3	150
66	The XMM-LSS survey. Survey design and first results. <i>Journal of Cosmology and Astroparticle Physics</i> , 2004, 2004, 011-011.	5.4	148
67	Constraints on dark matter annihilation in clusters of galaxies with the Fermi large area telescope. <i>Journal of Cosmology and Astroparticle Physics</i> , 2010, 2010, 025-025.	5.4	145
68	SIMULTANEOUS OBSERVATIONS OF PKS 2155-304 WITH HESS, <i>FERMI</i> , <i>RXTE</i> , AND ATOM: SPECTRAL ENERGY DISTRIBUTIONS AND VARIABILITY IN A LOW STATE. <i>Astrophysical Journal</i> , 2009, 696, L150-L155.	4.5	144
69	<i>Planck</i> 2013 results. XIII. Galactic CO emission. <i>Astronomy and Astrophysics</i> , 2014, 571, A13.	5.1	144
70	EARLY FERMI GAMMA-RAY SPACE TELESCOPE OBSERVATIONS OF THE QUASAR 3C 454.3. <i>Astrophysical Journal</i> , 2009, 699, 817-823.	4.5	141
71	<i>FERMI</i> LARGE AREA TELESCOPE VIEW OF THE CORE OF THE RADIO GALAXY CENTAURUS A. <i>Astrophysical Journal</i> , 2010, 719, 1433-1444.	4.5	141
72	<i>Planck</i> intermediate results. <i>Astronomy and Astrophysics</i> , 2013, 557, A52.	5.1	141

#	ARTICLE	IF	CITATIONS
73	GeV GAMMA-RAY FLUX UPPER LIMITS FROM CLUSTERS OF GALAXIES. <i>Astrophysical Journal Letters</i> , 2010, 717, L71-L78.	8.3	140
74	<i>Planck</i> early results. IV. First assessment of the High Frequency Instrument in-flight performance. <i>Astronomy and Astrophysics</i> , 2011, 536, A4.	5.1	136
75	Wavelets and curvelets for image deconvolution: a combined approach. <i>Signal Processing</i> , 2003, 83, 2279-2283.	3.7	134
76	Planck intermediate results. <i>Astronomy and Astrophysics</i> , 2014, 566, A55.	5.1	134
77	Fermi Large Area Telescope Measurements of the Diffuse Gamma-Ray Emission at Intermediate Galactic Latitudes. <i>Physical Review Letters</i> , 2009, 103, 251101.	7.8	133
78	<i>Planck</i> 2013 results. XXI. Power spectrum and high-order statistics of the <i>Planck</i> all-sky Compton parameter map. <i>Astronomy and Astrophysics</i> , 2014, 571, A21.	5.1	133
79	Wavelets, ridgelets and curvelets on the sphere. <i>Astronomy and Astrophysics</i> , 2006, 446, 1191-1204.	5.1	131
80	<i>SWIFT</i> AND <i>FERMI</i> OBSERVATIONS OF THE EARLY AFTERGLOW OF THE SHORT GAMMA-RAY BURST 090510. <i>Astrophysical Journal Letters</i> , 2010, 709, L146-L151.	8.3	130
81	Astronomical Image and Data Analysis. <i>Astronomy and Astrophysics Library</i> , 2002, , .	0.1	129
82	Constraints on cosmological dark matter annihilation from the Fermi-LAT isotropic diffuse gamma-ray measurement. <i>Journal of Cosmology and Astroparticle Physics</i> , 2010, 2010, 014-014.	5.4	129
83	<i>Planck</i> 2013 results. IX. HFI spectral response. <i>Astronomy and Astrophysics</i> , 2014, 571, A9.	5.1	129
84	<i>Planck</i> 2013 results. XIX. The integrated Sachs-Wolfe effect. <i>Astronomy and Astrophysics</i> , 2014, 571, A19.	5.1	126
85	<i>Planck</i> early results. IX. <i>XMM-Newton</i> follow-up for validation of <i>Planck</i> cluster candidates. <i>Astronomy and Astrophysics</i> , 2011, 536, A9.	5.1	126
86	<i>Planck</i> early results. X. Statistical analysis of Sunyaev-Zeldovich scaling relations for X-ray galaxy clusters. <i>Astronomy and Astrophysics</i> , 2011, 536, A10.	5.1	124
87	The on-orbit calibration of the Fermi Large Area Telescope. <i>Astroparticle Physics</i> , 2009, 32, 193-219.	4.3	123
88	<i>Planck</i> early results. XVII. Origin of the submillimetre excess dust emission in the Magellanic Clouds. <i>Astronomy and Astrophysics</i> , 2011, 536, A17.	5.1	123
89	Wavelet-Based Combined Signal Filtering and Prediction. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , 2005, 35, 1241-1251.	5.0	120
90	Full-sky weak-lensing simulation with 70 billion particles. <i>Astronomy and Astrophysics</i> , 2009, 497, 335-341.	5.1	120

#	ARTICLE	IF	CITATIONS
91	<i>FERMI</i>LARGE AREA TELESCOPE OBSERVATIONS OF THE VELA PULSAR. Astrophysical Journal, 2009, 696, 1084-1093.	4.5	120
92	<i>Planck</i>early results. XXI. Properties of the interstellar medium in the Galactic plane. Astronomy and Astrophysics, 2011, 536, A21.	5.1	119
93	GREAT3 results â€“ I. Systematic errors in shear estimation and the impact of real galaxy morphology. Monthly Notices of the Royal Astronomical Society, 2015, 450, 2963-3007.	4.4	119
94	<i>Planck</i>early results. VI. The High Frequency Instrument data processing. Astronomy and Astrophysics, 2011, 536, A6.	5.1	116
95	<i>Planck</i>2013 results. XVIII. The gravitational lensing-infrared background correlation. Astronomy and Astrophysics, 2014, 571, A18.	5.1	116
96	Results of the 2020 fastMRI Challenge for Machine Learning MR Image Reconstruction. IEEE Transactions on Medical Imaging, 2021, 40, 2306-2317.	8.9	114
97	On neuro-wavelet modeling. Decision Support Systems, 2004, 37, 475-484.	5.9	108
98	<i>Planck</i>2013 results. VIII. HFI photometric calibration and mapmaking. Astronomy and Astrophysics, 2014, 571, A8.	5.1	107
99	Observations of the Large Magellanic Cloud with<i>Fermi</i>. Astronomy and Astrophysics, 2010, 512, A7.	5.1	106
100	<i>Planck</i>early results. XIII. Statistical properties of extragalactic radio sources in the<i>Planck</i>Early Release Compact Source Catalogue. Astronomy and Astrophysics, 2011, 536, A13.	5.1	103
101	<i>Planck</i>2013 results. VI. High Frequency Instrument data processing. Astronomy and Astrophysics, 2014, 571, A6.	5.1	103
102	Wavelet-based nonlinear multiscale decomposition model for electricity load forecasting. Neurocomputing, 2006, 70, 139-154.	5.9	100
103	<i>Planck</i>early results. XII. Cluster Sunyaev-Zeldovich optical scaling relations. Astronomy and Astrophysics, 2011, 536, A12.	5.1	100
104	The scale of the problem: recovering images of reionization with Generalized Morphological Component Analysis. Monthly Notices of the Royal Astronomical Society, 2013, 429, 165-176.	4.4	100
105	<i>FERMI</i>LAT OBSERVATION OF DIFFUSE GAMMA RAYS PRODUCED THROUGH INTERACTIONS BETWEEN LOCAL INTERSTELLAR MATTER AND HIGH-ENERGY COSMIC RAYS. Astrophysical Journal, 2009, 703, 1249-1256.	4.5	99
106	<i>FERMI</i>LARGE AREA TELESCOPE AND MULTI-WAVELENGTH OBSERVATIONS OF THE FLARING ACTIVITY OF PKS 1510-089 BETWEEN 2008 SEPTEMBER AND 2009 JUNE. Astrophysical Journal, 2010, 721, 1425-1447.	4.5	99
107	<i>Planck</i>2013 results. VII. HFI time response and beams. Astronomy and Astrophysics, 2014, 571, A7.	5.1	99
108	THE VELA PULSAR: RESULTS FROM THE FIRST YEAR OF<i>FERMI</i>LAT OBSERVATIONS. Astrophysical Journal, 2010, 713, 154-165.	4.5	96

#	ARTICLE	IF	CITATIONS
109	<i>Planck</i> early results. XV. Spectral energy distributions and radio continuum spectra of northern extragalactic radio sources. <i>Astronomy and Astrophysics</i> , 2011, 536, A15.	5.1	93
110	Filtering and deconvolution by the wavelet transform. <i>Signal Processing</i> , 1994, 35, 195-211.	3.7	91
111	<i>Planck</i> early results. II. The thermal performance of <i>Planck</i>. <i>Astronomy and Astrophysics</i> , 2011, 536, A2.	5.1	91
112	<i>Planck</i> 2013 results. XXVI. Background geometry and topology of the Universe. <i>Astronomy and Astrophysics</i> , 2014, 571, A26.	5.1	91
113	<i>Planck</i> 2013 results. XIV. Zodiacal emission. <i>Astronomy and Astrophysics</i> , 2014, 571, A14.	5.1	90
114	Multiresolution Support Applied to Image Filtering and Restoration. <i>Graphical Models</i> , 1995, 57, 420-431.	1.3	89
115	The XMM Large-Scale Structure survey: the X-ray pipeline and survey selection function. <i>Monthly Notices of the Royal Astronomical Society</i> , 2006, 372, 578-590.	4.4	89
116	<i>Planck</i> early results. XXII. The submillimetre properties of a sample of Galactic cold clumps. <i>Astronomy and Astrophysics</i> , 2011, 536, A22.	5.1	88
117	The Fermi Gamma-Ray Space Telescope Discovers the Pulsar in the Young Galactic Supernova Remnant CTA 1. <i>Science</i> , 2008, 322, 1218-1221.	12.6	87
118	Learning the Morphological Diversity. <i>SIAM Journal on Imaging Sciences</i> , 2010, 3, 646-669.	2.2	87
119	Detection of High-Energy Gamma-Ray Emission from the Globular Cluster 47 Tucanae with Fermi. <i>Science</i> , 2009, 325, 845-848.	12.6	80
120	<i>Planck</i> 2013 results. XXXII. The updated <i>Planck</i> catalogue of Sunyaev-Zeldovich sources. <i>Astronomy and Astrophysics</i> , 2015, 581, A14.	5.1	80
121	Automatic Noise Estimation from the Multiresolution Support. <i>Publications of the Astronomical Society of the Pacific</i> , 1998, 110, 193-199.	3.1	78
122	Prediction Based on a Multiscale Decomposition. <i>International Journal of Wavelets, Multiresolution and Information Processing</i> , 2003, 01, 217-232.	1.3	76
123	Morphological diversity and source separation. <i>IEEE Signal Processing Letters</i> , 2006, 13, 409-412.	3.6	76
124	<i>Planck</i> early results. XVI. The <i>Planck</i> view of nearby galaxies. <i>Astronomy and Astrophysics</i> , 2011, 536, A16.	5.1	74
125	<i>Planck</i> 2013 results. II. Low Frequency Instrument data processing. <i>Astronomy and Astrophysics</i> , 2014, 571, A2.	5.1	74
126	DETECTION OF THE ENERGETIC PULSAR PSR B1509â€“58 AND ITS PULSAR WIND NEBULA IN MSH 15â€“52 USING THE <i>FERMI</i>-LARGE AREA TELESCOPE. <i>Astrophysical Journal</i> , 2010, 714, 927-936.	4.5	72



#	ARTICLE	IF	CITATIONS
127	<i>Planck</i> early results. XXVI. Detection with <i>Planck</i> and confirmation by <i>XMM-Newton</i> of PLCKG266.6+27.3, an exceptionally X-ray luminous and massive galaxy cluster at $z \approx 1$ . <i>Astronomy and Astrophysics</i> , 2011, 536, A26.	5.1	72
128	LOFAR sparse image reconstruction. <i>Astronomy and Astrophysics</i> , 2015, 575, A90.	5.1	71
129	<i>Planck</i> 2013 results. X. HFI energetic particle effects: characterization, removal, and simulation. <i>Astronomy and Astrophysics</i> , 2014, 571, A10.	5.1	68
130	<i>Planck</i> 2013 results. V. LFI calibration. <i>Astronomy and Astrophysics</i> , 2014, 571, A5.	5.1	67
131	Wasserstein Dictionary Learning: Optimal Transport-Based Unsupervised Nonlinear Dictionary Learning. <i>SIAM Journal on Imaging Sciences</i> , 2018, 11, 643-678.	2.2	64
132	<title>Very high quality image restoration by combining wavelets and curvelets</title>. , 2001, 4478, 9.		63
133	MCALab: Reproducible Research in Signal and Image Decomposition and Inpainting. <i>Computing in Science and Engineering</i> , 2010, 12, 44-63.	1.2	63
134	The XMM-Large Scale Structure catalogue: X-ray sources and associated optical data. Version I. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007, 382, 279-290.	4.4	62
135	<i>Planck</i> early results. XIV. ERCSC validation and extreme radio sources. <i>Astronomy and Astrophysics</i> , 2011, 536, A14.	5.1	61
136	Weak lensing mass reconstruction using wavelets. <i>Astronomy and Astrophysics</i> , 2006, 451, 1139-1150.	5.1	57
137	Morphological Component Analysis and Inpainting on the Sphere: Application in Physics and Astrophysics. <i>Journal of Fourier Analysis and Applications</i> , 2007, 13, 729-748.	1.0	55
138	<i>Planck</i> intermediate results. XIV. Dust emission at millimetre wavelengths in the Galactic plane. <i>Astronomy and Astrophysics</i> , 2014, 564, A45.	5.1	55
139	<i>Planck</i> 2013 results. III. LFI systematic uncertainties. <i>Astronomy and Astrophysics</i> , 2014, 571, A3.	5.1	54
140	CMB data analysis and sparsity. <i>Statistical Methodology</i> , 2008, 5, 289-298.	0.5	52
141	Joint <i>Planck</i> and WMAP CMB map reconstruction. <i>Astronomy and Astrophysics</i> , 2014, 563, A105.	5.1	52
142	Wavelet and curvelet moments for image classification: Application to aggregate mixture grading. <i>Pattern Recognition Letters</i> , 2008, 29, 1557-1564.	4.2	51
143	FAST Statistics for weak Lensing (FASTLens): fast method for weak lensing statistics and map making. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 395, 1265-1279.	4.4	51
144	Spectral Analysis Using the Wavelet Transform. <i>Astrophysical Journal</i> , 1997, 482, 1011-1020.	4.5	50

#	ARTICLE	IF	CITATIONS
145	SZ and CMB reconstruction using generalized morphological component analysis. <i>Statistical Methodology</i> , 2008, 5, 307-317.	0.5	50
146	Blind Source Separation: The Sparsity Revolution. <i>Advances in Imaging and Electron Physics</i> , 2008, 152, 221-302.	0.2	50
147	<i>Planck</i> intermediate results. <i>Astronomy and Astrophysics</i> , 2012, 543, A102.	5.1	50
148	A Catalog of Diffuse X-ray-emitting Features within 20 pc of Sagittarius A*: Twenty Pulsar Wind Nebulae?. <i>Astrophysical Journal</i> , 2008, 673, 251-263.	4.5	49
149	<i>FERMI</i> -LARGE AREA TELESCOPE OBSERVATIONS OF THE EXCEPTIONAL GAMMA-RAY OUTBURSTS OF 3C 273 IN 2009 SEPTEMBER. <i>Astrophysical Journal Letters</i> , 2010, 714, L73-L78.	8.3	49
150	Measuring the integrated Sachs-Wolfe effect. <i>Astronomy and Astrophysics</i> , 2011, 534, A51.	5.1	49
151	Astronomical image and signal processing: looking at noise, information and scale. <i>IEEE Signal Processing Magazine</i> , 2001, 18, 30-40.	5.6	48
152	Breaking degeneracies in modified gravity with higher (than 2nd) order weak-lensing statistics. <i>Astronomy and Astrophysics</i> , 2018, 619, A38.	5.1	48
153	Multiscale Variance-Stabilizing Transform for Mixed-Poisson-Gaussian Processes and its Applications in Bioimaging. , 2007, , .		47
154	DISCOVERY OF PULSED $\hat{\gamma}$ -RAYS FROM PSR J0034-0534 WITH THE <i>FERMI</i> -LARGE AREA TELESCOPE: A CASE FOR CO-LOCATED RADIO AND $\hat{\gamma}$ -RAY EMISSION REGIONS. <i>Astrophysical Journal</i> , 2010, 712, 957-963.	4.5	47
155	Sparsity and Adaptivity for the Blind Separation of Partially Correlated Sources. <i>IEEE Transactions on Signal Processing</i> , 2015, 63, 1199-1213.	5.3	47
156	Detection and discrimination of cosmological non-Gaussian signatures by multi-scale methods. <i>Astronomy and Astrophysics</i> , 2004, 416, 9-17.	5.1	46
157	Stein block thresholding for image denoising. <i>Applied and Computational Harmonic Analysis</i> , 2010, 28, 67-88.	2.2	46
158	The richest superclusters. <i>Astronomy and Astrophysics</i> , 2007, 476, 697-711.	5.1	45
159	Bayesian inference for multiband image segmentation via model-based cluster trees. <i>Image and Vision Computing</i> , 2005, 23, 587-596.	4.5	44
160	PULSED GAMMA-RAYS FROM PSR J2021+3651 WITH THE <i>FERMI</i> -LARGE AREA TELESCOPE. <i>Astrophysical Journal</i> , 2009, 700, 1059-1066.	4.5	44
161	Sparse component separation for accurate cosmic microwave background estimation. <i>Astronomy and Astrophysics</i> , 2013, 550, A73.	5.1	43
162	Planck CMB anomalies: astrophysical and cosmological secondary effects and the curse of masking. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 006-006.	5.4	42

#	ARTICLE	IF	CITATIONS
163	Entropy and astronomical data analysis: Perspectives from multiresolution analysis. <i>Astronomy and Astrophysics</i> , 2001, 368, 730-746.	5.1	41
164	<i>Planck</i> 2013 results. IV. Low Frequency Instrument beams and window functions. <i>Astronomy and Astrophysics</i> , 2014, 571, A4.	5.1	41
165	Astronomical Data Analysis and Sparsity: From Wavelets to Compressed Sensing. <i>Proceedings of the IEEE</i> , 2010, 98, 1021-1030.	21.3	39
166	PULSED GAMMA RAYS FROM THE MILLISECOND PULSAR J0030+0451 WITH THE <i>FERMI</i> LARGE AREA TELESCOPE. <i>Astrophysical Journal</i> , 2009, 699, 1171-1177.	4.5	38
167	High resolution weak lensing mass mapping combining shear and flexion. <i>Astronomy and Astrophysics</i> , 2016, 591, A2.	5.1	38
168	<i>FERMI</i> LARGE AREA TELESCOPE DISCOVERY OF GAMMA-RAY EMISSION FROM THE FLAT-SPECTRUM RADIO QUASAR PKS 1454â€“354. <i>Astrophysical Journal</i> , 2009, 697, 934-941.	4.5	37
169	Cosmological modelâ€“discrimination with weak lensing. <i>Astronomy and Astrophysics</i> , 2009, 505, 969-979.	5.1	36
170	Cosmological constraints with weak-lensing peak counts and second-order statistics in a large-field survey. <i>Astronomy and Astrophysics</i> , 2017, 599, A79.	5.1	36
171	A new entropy measure based on the wavelet transform and noise modeling [image compression]. <i>IEEE Transactions on Circuits and Systems Part 2: Express Briefs</i> , 1998, 45, 1118-1124.	2.2	35
172	Overcoming the Curse of Dimensionality in Clustering by Means of the Wavelet Transform. <i>Computer Journal</i> , 2000, 43, 107-120.	2.4	34
173	3DEX: a code for fast spherical Fourier-Bessel decomposition of 3D surveys. <i>Astronomy and Astrophysics</i> , 2012, 540, A60.	5.1	34
174	Improving weak lensing mass map reconstructions using Gaussian and sparsity priors: application to DES SV. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 479, 2871-2888.	4.4	34
175	Monotone operator splitting for optimization problems in sparse recovery. , 2009, , .		33
176	Blind Component Separation in Wavelet Space: Application to CMB Analysis. <i>Eurasip Journal on Advances in Signal Processing</i> , 2005, 2005, 1.	1.7	32
177	Deep learning dark matter map reconstructions from DES SV weak lensing data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 492, 5023-5029.	4.4	32
178	Multiscale entropy filtering. <i>Signal Processing</i> , 1999, 76, 147-165.	3.7	31
179	EM algorithm for sparse representation-based image inpainting. , 2005, , .		31
180	DISCOVERY OF PULSED $\hat{3}$ -RAYS FROM THE YOUNG RADIO PULSAR PSR J1028â€“5819 WITH THE <i>FERMI</i> LARGE AREA TELESCOPE. <i>Astrophysical Journal</i> , 2009, 695, L72-L77.	4.5	31

#	ARTICLE	IF	CITATIONS
181	Cosmological constraints from the capture of non-Gaussianity in weak lensing data. Monthly Notices of the Royal Astronomical Society, 2012, 423, 983-992.	4.4	31
182	Morphology of the Galaxy Distribution from Wavelet Denoising. Astrophysical Journal, 2005, 634, 744-755.	4.5	30
183	Sparse and Non-Negative BSS for Noisy Data. IEEE Transactions on Signal Processing, 2013, 61, 5620-5632.	5.3	30
184	Astronomical Image Compression Based on Noise Suppression. Publications of the Astronomical Society of the Pacific, 1996, 108, 446.	3.1	30
185	Image decomposition: separation of texture from piecewise smooth content. , 2003, 5207, 571.		29
186	Toward Understanding Rich Superclusters. Astrophysical Journal, 2008, 685, 83-104.	4.5	29
187	Astronomical image denoising using dictionary learning. Astronomy and Astrophysics, 2013, 556, A132.	5.1	29
188	Cosmic microwave background reconstruction from WMAP and Planck PR2 data. Astronomy and Astrophysics, 2016, 591, A50.	5.1	29
189	Distinguishing standard and modified gravity cosmologies with machine learning. Physical Review D, 2019, 100, .	4.7	29
190	Benchmarking MRI Reconstruction Neural Networks on Large Public Datasets. Applied Sciences (Switzerland), 2020, 10, 1816.	2.5	29
191	Reconstruction of the cosmic microwave background lensing for Planck. Astronomy and Astrophysics, 2010, 519, A4.	5.1	28
192	GLIMPSE: accurate 3D weak lensing reconstructions using sparsity. Monthly Notices of the Royal Astronomical Society, 2014, 440, 1281-1294.	4.4	28
193	Low- $\ell$ CMB analysis and inpainting. Astronomy and Astrophysics, 2013, 550, A15.	5.1	27
194	A GIANT $\text{Ly}\alpha$ NEBULA IN THE CORE OF AN X-RAY CLUSTER AT $z=1.99$ : IMPLICATIONS FOR EARLY ENERGY INJECTION. Astrophysical Journal, 2016, 829, 53.	4.5	27
195	On the dissection of degenerate cosmologies with machine learning. Monthly Notices of the Royal Astronomical Society, 2019, 487, 104-122.	4.4	27
196	Cosmological Non-Gaussian Signature Detection: Comparing Performance of Different Statistical Tests. Eurasip Journal on Advances in Signal Processing, 2005, 2005, 1.	1.7	26
197	Source detection using a 3D sparse representation: application to the Fermi gamma-ray space telescope. Astronomy and Astrophysics, 2009, 504, 641-652.	5.1	26
198	3-D Data Denoising and Inpainting with the Low-Redundancy Fast Curvelet Transform. Journal of Mathematical Imaging and Vision, 2011, 39, 121-139.	1.3	26

#	ARTICLE	IF	CITATIONS
199	Constraining neutrino masses with weak-lensing multiscale peak counts. <i>Physical Review D</i> , 2020, 102, .	4.7	26
200	Spherical 3D isotropic wavelets. <i>Astronomy and Astrophysics</i> , 2012, 540, A92.	5.1	25
201	Image processing through multiscale analysis and measurement noise modeling. <i>Statistics and Computing</i> , 2000, 10, 95-103.	1.5	24
202	Fast Poisson noise removal by biorthogonal Haar domain hypothesis testing. <i>Statistical Methodology</i> , 2008, 5, 387-396.	0.5	24
203	NC-PDNet: A Density-Compensated Unrolled Network for 2D and 3D Non-Cartesian MRI Reconstruction. <i>IEEE Transactions on Medical Imaging</i> , 2022, 41, 1625-1638.	8.9	24
204	A comparison of algorithms for the construction of SZ cluster catalogues. <i>Astronomy and Astrophysics</i> , 2012, 548, A51.	5.1	23
205	Learning adapted dictionaries for geometry and texture separation. <i>Proceedings of SPIE</i> , 2007, , .	0.8	22
206	Poisson denoising on the sphere: application to the Fermi gamma ray space telescope. <i>Astronomy and Astrophysics</i> , 2010, 517, A26.	5.1	22
207	Multi-band morpho-Spectral Component Analysis Deblending Tool (MuSCADeT): Deblending colourful objects. <i>Astronomy and Astrophysics</i> , 2016, 589, A2.	5.1	22
208	Multiscale morphology of the galaxy distribution. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007, 374, 1030-1044.	4.4	21
209	3D curvelet transforms and astronomical data restoration. <i>Applied and Computational Harmonic Analysis</i> , 2010, 28, 171-188.	2.2	21
210	Removal of two large-scale cosmic microwave background anomalies after subtraction of the integrated Sachs-Wolfe effect. <i>Astronomy and Astrophysics</i> , 2013, 557, A32.	5.1	21
211	Multispectral data restoration by the wavelet Karhunen-Loève transform. <i>Signal Processing</i> , 2001, 81, 2449-2459.	3.7	20
212	Super-resolution method using sparse regularization for point-spread function recovery. <i>Astronomy and Astrophysics</i> , 2015, 575, A86.	5.1	20
213	NMF with Sparse Regularizations in Transformed Domains. <i>SIAM Journal on Imaging Sciences</i> , 2014, 7, 2020-2047.	2.2	19
214	3D galaxy clustering with future wide-field surveys: Advantages of a spherical Fourier-Bessel analysis. <i>Astronomy and Astrophysics</i> , 2015, 578, A10.	5.1	19
215	PySAP: Python Sparse Data Analysis Package for multidisciplinary image processing. <i>Astronomy and Computing</i> , 2020, 32, 100402.	1.7	19
216	Deconvolution under Poisson noise using exact data fidelity and synthesis or analysis sparsity priors. <i>Statistical Methodology</i> , 2012, 9, 4-18.	0.5	18

#	ARTICLE	IF	CITATIONS
217	Sparse representations and convex optimization as tools for LOFAR radio interferometric imaging. <i>Journal of Instrumentation</i> , 2015, 10, C08013-C08013.	1.2	18
218	SLITRONOMY: Towards a fully wavelet-based strong lensing inversion technique. <i>Astronomy and Astrophysics</i> , 2021, 647, A176.	5.1	18
219	Pattern clustering based on noise modeling in wavelet space. <i>Pattern Recognition</i> , 1998, 31, 847-855.	8.1	17
220	Multichannel Poisson denoising and deconvolution on the sphere: application to the Fermi Gamma-ray Space Telescope. <i>Astronomy and Astrophysics</i> , 2012, 546, A114.	5.1	17
221	Sparsity and the Bayesian perspective. <i>Astronomy and Astrophysics</i> , 2013, 552, A133.	5.1	17
222	Polarized wavelets and curvelets on the sphere. <i>Astronomy and Astrophysics</i> , 2009, 497, 931-943.	5.1	16
223	A compressed sensing approach to 3D weak lensing. <i>Astronomy and Astrophysics</i> , 2012, 539, A85.	5.1	16
224	Debiasing inference with approximate covariance matrices and other unidentified biases. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 021-021.	5.4	16
225	Computer display control and interaction using eye-gaze. <i>Journal of the Society for Information Display</i> , 2002, 10, 289.	2.1	15
226	Fast calculation of the weak lensing aperture mass statistic. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 423, 3405-3412.	4.4	15
227	A machine vision approach to the grading of crushed aggregate. <i>Machine Vision and Applications</i> , 2005, 16, 229-235.	2.7	14
228	Morphological Diversity and Sparsity for Multichannel Data Restoration. <i>Journal of Mathematical Imaging and Vision</i> , 2009, 33, 149-168.	1.3	14
229	Sparse Reconstruction of the Merging A520 Cluster System. <i>Astrophysical Journal</i> , 2017, 847, 23.	4.5	14
230	Joint Multichannel Deconvolution and Blind Source Separation. <i>SIAM Journal on Imaging Sciences</i> , 2017, 10, 1997-2021.	2.2	14
231	DETECTING BARYON ACOUSTIC OSCILLATIONS. <i>Astrophysical Journal</i> , 2012, 746, 172.	4.5	13
232	EFFECT OF MODEL-DEPENDENT COVARIANCE MATRIX FOR STUDYING BARYON ACOUSTIC OSCILLATIONS. <i>Astrophysical Journal</i> , 2012, 760, 97.	4.5	13
233	Wavelet analysis of baryon acoustic structures in the galaxy distribution. <i>Astronomy and Astrophysics</i> , 2012, 542, A34.	5.1	13
234	On preferred axes in WMAP cosmic microwave background data after subtraction of the integrated Sachs-Wolfe effect. <i>Astronomy and Astrophysics</i> , 2013, 557, L1.	5.1	13

#	ARTICLE	IF	CITATIONS
235	WMAP nine-year CMB estimation using sparsity. <i>Astronomy and Astrophysics</i> , 2013, 553, L4.	5.1	13
236	PRISM: Sparse recovery of the primordial power spectrum. <i>Astronomy and Astrophysics</i> , 2014, 566, A77.	5.1	13
237	Multireturn compressed gated range imaging. <i>Optical Engineering</i> , 2015, 54, 031106.	1.0	13
238	Very-high-quality image compression based on noise modeling. <i>International Journal of Imaging Systems and Technology</i> , 1998, 9, 38-45.	4.1	12
239	Morphological Diversity and Sparse Image Denoising. , 2007, , .		12
240	An overview of inverse problem regularization using sparsity. , 2009, , .		12
241	A hybrid approach to cosmic microwave background lensing reconstruction from all-sky intensity maps. <i>Astronomy and Astrophysics</i> , 2012, 544, A27.	5.1	12
242	Space variant deconvolution of galaxy survey images. <i>Astronomy and Astrophysics</i> , 2017, 601, A66.	5.1	12
243	Starlet, "1-norm for weak lensing cosmology. <i>Astronomy and Astrophysics</i> , 2021, 645, L11.	5.1	12
244	Starlet Transform in Astronomical Data Processing. , 2011, , 1489-1531.		12
245	<title>Image restoration with noise suppression using a wavelet transform and a multiresolution support constraint</title>. , 1994, , .		10
246	Analysis of the Spatial Distribution of Galaxies by Multiscale Methods. <i>Eurasip Journal on Advances in Signal Processing</i> , 2005, 2005, 1.	1.7	10
247	Image deconvolution under poisson noise using sparse representations and proximal thresholding iteration. , 2008, , .		10
248	Uncertainty in 2-point correlation function estimators and baryon acoustic oscillation detection in galaxy surveys. <i>Statistical Methodology</i> , 2012, 9, 85-100.	0.5	10
249	PRISM: Recovery of the primordial spectrum from Planck data. <i>Astronomy and Astrophysics</i> , 2014, 571, L1.	5.1	10
250	Application of non-negative matrix factorization to LC/MS data. <i>Signal Processing</i> , 2016, 123, 75-83.	3.7	10
251	Cosmic Dawn and Epoch of Reionization Foreground Removal with the SKA. , 2015, , .		10
252	Curvelets and Ridgelets. , 2012, , 754-773.		9

#	ARTICLE	IF	CITATIONS
253	Joint reconstruction of compressively sensed ultrasound RF echoes by exploiting temporal correlations. , 2013, , .		9
254	Multiresolution in astronomical image processing: A general framework. International Journal of Imaging Systems and Technology, 1995, 6, 332-338.	4.1	8
255	Multiscale geometric analysis for 3D catalogs. , 2002, 4847, 101.		8
256	Compressed sensing in astronomy and remote sensing: a data fusion perspective. Proceedings of SPIE, 2009, , .	0.8	8
257	Stein block thresholding for wavelet-based image deconvolution. Electronic Journal of Statistics, 2010, 4, .	0.7	8
258	Wavelet Helmholtz decomposition for weak lensing mass map reconstruction. Astronomy and Astrophysics, 2012, 540, A34.	5.1	8
259	Darth Fader: Using wavelets to obtain accurate redshifts of spectra at very low signal-to-noise. Astronomy and Astrophysics, 2013, 560, A83.	5.1	8
260	Weak-lensing mass reconstruction using sparsity and a Gaussian random field. Astronomy and Astrophysics, 2021, 649, A99.	5.1	8
261	Curvelet analysis of asteroseismic data. Astronomy and Astrophysics, 2006, 454, 1021-1027.	5.1	8
262	Quantization from Bayes factors with application to multilevel thresholding. Pattern Recognition Letters, 2003, 24, 2001-2007.	4.2	7
263	Sparsity constraints for hyperspectral data analysis: linear mixture model and beyond. Proceedings of SPIE, 2009, , .	0.8	7
264	Covariation-based subspace-augmented MUSIC for joint sparse support recovery in impulsive environments. Signal Processing, 2013, 93, 1365-1373.	3.7	7
265	Sparse point-source removal for full-sky CMB experiments: application to WMAP 9-year data. Astronomy and Astrophysics, 2014, 566, A100.	5.1	7
266	Constraint matrix factorization for space variant PSFs field restoration. Inverse Problems, 2016, 32, 124001.	2.0	7
267	Bayes factors for edge detection from wavelet product spaces. Optical Engineering, 2003, 42, 1375.	1.0	6
268	Feasibility and performances of compressed sensing and sparse map-making with Herschel/PACS data. Astronomy and Astrophysics, 2011, 527, A102.	5.1	6
269	Point Spread Function Field Learning Based on Optimal Transport Distances. SIAM Journal on Imaging Sciences, 2017, 10, 1549-1578.	2.2	6
270	Convolutional Neural Networks for Spectroscopic Redshift Estimation on Euclid Data. IEEE Transactions on Big Data, 2020, 6, 460-476.	6.1	6



#	ARTICLE	IF	CITATIONS
271	Wavelets in the Deep Learning Era. , 2021, , .		6
272	Starlet Transform in Astronomical Data Processing. , 2015, , 2053-2098.		6
273	Testing foundations of modern cosmology with SKA all-sky surveys. , 2015, , .		6
274	Spatial representation of economic and financial measures used in agriculture via wavelet analysis. International Journal of Geographical Information Science, 1999, 13, 557-576.	4.8	5
275	Analysis of the Galaxy Distribution using Multiscale Methods. , 2002, , .		5
276	The science case and data processing strategy for the Thinned Aperture Light Collector (TALC): a project for a 20m far-infrared space telescope. , 2014, , .		5
277	Nonlinear Multiscale Transforms. Lecture Notes in Computational Science and Engineering, 2002, , 239-278.	0.3	5
278	ShapeNet: Shape constraint for galaxy image deconvolution. Astronomy and Astrophysics, 2022, 663, A69.	5.1	5
279	Model-independent mapping by optical aperture synthesis: basic principles and computer simulation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1992, 9, 708.	1.5	4
280	Distributed visual information management in astronomy. Computing in Science and Engineering, 2002, 4, 14-23.	1.2	4
281	Morphological diversity and sparsity: new insights into multivariate data analysis. , 2007, , .		4
282	Deconvolution of confocal microscopy images using proximal iteration and sparse representations. , 2008, , .		4
283	Scale-Based Gaussian Coverings: Combining Intra and Inter Mixture Models in Image Segmentation. Entropy, 2009, 11, 513-528.	2.2	4
284	True cosmic microwave background power spectrum estimation. Astronomy and Astrophysics, 2012, 541, A74.	5.1	4
285	Glitch effects in ISOCAM Long Wave detector. Experimental Astronomy, 2000, 10, 305-318.	3.7	3
286	Multiscale representation for data on the sphere and applications to geopotential data. Proceedings of SPIE, 2007, 6701, 104.	0.8	3
287	Cosmological model discrimination from weak lensing data. , 2010, , .		3
288	Introduction to the issue on Adaptive Sparse Representation of Data and Applications in Signal and Image Processing. IEEE Journal on Selected Topics in Signal Processing, 2011, 5, 893-895.	10.8	3

#	ARTICLE	IF	CITATIONS
289	CMB Map Restoration. <i>Advances in Astronomy</i> , 2012, 2012, 1-15.	1.1	3
290	Active range imaging via random gating. <i>Proceedings of SPIE</i> , 2012, , .	0.8	3
291	Weak lensing reconstructions in 2D and 3D: implications for cluster studies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 449, 1146-1157.	4.4	3
292	3-D Sparse Representations. <i>Advances in Imaging and Electron Physics</i> , 2014, 183, 99-204.	0.2	3
293	Numerical Issues When Using Wavelets. , 2012, , 2121-2137.		3
294	Multiresolution Filtering and Segmentation of Multispectral Images. , 2002, , .		2
295	Image deconvolution by stein block thresholding. , 2009, , .		2
296	Compressed gated range sensing. , 2013, , .		2
297	Compressed sensing reconstruction of convolved sparse signals. , 2014, , .		2
298	Polarized cosmic microwave background map recovery with sparse component separation. <i>Astronomy and Astrophysics</i> , 2015, 583, A92.	5.1	2
299	Sparsely sampling the sky: Regular vs. random sampling. <i>Astronomy and Astrophysics</i> , 2015, 581, A113.	5.1	2
300	SNIa detection in the SNLS photometric analysis using Morphological Component Analysis. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 041-041.	5.4	2
301	Sparsity and inverse problems in astrophysics. <i>Journal of Physics: Conference Series</i> , 2016, 699, 012010.	0.4	2
302	Semisupervised Dictionary Learning with Graph Regularized and Active Points. <i>SIAM Journal on Imaging Sciences</i> , 2020, 13, 724-745.	2.2	2
303	<title>Image restoration by multiscale entropy</title>. , 1999, , .		1
304	Ultimate sensitivity with ISOCAM. <i>Experimental Astronomy</i> , 2000, 10, 291-303.	3.7	1
305	<title>On-demand delivery of large compressed images in astronomy: computational requirements</title>. , 2001, , .		1
306	Wavelets and curvelets in denoising and pattern detection tasks crucial for homeland security. , 2004, , .		1

#	ARTICLE	IF	CITATIONS
307	Curvelet transform on the sphere. , 2005, , .		1
308	Sparsity and morphological diversity for hyperspectral data analysis. , 2009, , .		1
309	3D inpainting using sparse representations. , 2009, , .		1
310	Blind Source Separation with Spatio-Spectral Sparsity Constraints â€™ Application to Hyperspectral Data Analysis. Lecture Notes in Computer Science, 2009, , 523-531.	1.3	1
311	Multiresolution Analysis Techniques to Isolate, Detect, and Characterize Morphologically Diverse Features of Structured ICF Capsule Implosions. IEEE Transactions on Plasma Science, 2011, 39, 2434-2435.	1.3	1
312	Editorial for the special issue on astrostatistics. Statistical Methodology, 2012, 9, 1-3.	0.5	1
313	Starlet Transform in Astronomical Data Processing. , 2014, , 1-40.		1
314	PRISM: Sparse recovery of the primordial spectrum from WMAP9 and Planck datasets. Proceedings of the International Astronomical Union, 2014, 10, 60-63.	0.0	1
315	Weak Gravitational Lensing. Chapman & Hall/CRC Data Mining and Knowledge Discovery Series, 2012, , .	0.2	1
316	Cosmic Microwave Background Data Analysis. Chapman & Hall/CRC Data Mining and Knowledge Discovery Series, 2012, , .	0.2	1
317	Wavelets and Multiscale Transform in Astronomical Image Processing. Massive Computing, 2002, , 473-500.	0.4	1
318	Overview of Complementarity and Synergy with Other Wavelengths in Cosmology in the SKA era. , 2015, , .		1
319	Galaxy Image Restoration with Shape Constraint. Journal of Fourier Analysis and Applications, 2021, 27, 1.	1.0	1
320	<title>Image restoration by redundant spacing calibration in long-baseline optical interferometry</title>. , 1990, 1237, 680.		0
321	Multiresolution deconvolution. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1994, 11, 1580.	1.5	0
322	<title>Improving video image quality using automated wavelet-based image addition</title>. , 1999, 3813, 795.		0
323	New Image Modeling Approaches. Surveys in Geophysics, 2000, 21, 229-239.	4.6	0
324	Karhunen-Loeve multispectral and multiscale image restoration. , 2000, , .		0

#	ARTICLE	IF	CITATIONS
325	<title>Astronomical image decomposition using wavelets, ridgelets, and curvelets: the combined transforms method</title>. , 2001, 4477, 131.		0
326	<title>Source detection for the ISOCAM parallel survey</title>. , 2001, 4477, 289.		0
327	Multiscale Methods Performances to Detect Cosmological non-Gaussian Signatures. , 2002, 4847, 74.		0
328	Wavelets, curvelets, and multiresolution analysis techniques in fast Z-pinch research. , 2003, 5207, 740.		0
329	Multiscale Methods in Astronomy. , 2003, , 331-342.		0
330	Wavelets and curvelets on the sphere for polarized data. Proceedings of SPIE, 2007, , .	0.8	0
331	Poisson denoising on the sphere. Proceedings of SPIE, 2009, , .	0.8	0
332	Poisson noise removal in multivariate count data. , 2009, , .		0
333	Source separation in cosmology, from global to local models. , 2011, , .		0
334	Compressive video classification for decision systems with limited resources. , 2012, , .		0
335	Poisson noise removal with pyramidal multi-scale transforms. , 2013, , .		0
336	Imaging dark matter using sparsity. , 2013, , .		0
337	Compressed sensing image reconstruction for the LOFAR Radio Telescope. Proceedings of SPIE, 2013, , .	0.8	0
338	3D sparse representations on the sphere and applications in astronomy. , 2013, , .		0
339	Sparsity and cosmology: inverse problems in cosmic microwave background experiments. Proceedings of SPIE, 2013, , .	0.8	0
340	Morphological Component Analysis for the Inpainting of Grazing Incidence X-Ray Diffraction Images Used for the Structural Characterization of Thin Films. Oil and Gas Science and Technology, 2014, 69, 261-277.	1.4	0
341	Sparse blind source separation for partially correlated sources. , 2014, , .		0
342	Density reconstruction from 3D lensing: Application to galaxy clusters. Proceedings of the International Astronomical Union, 2014, 10, 104-106.	0.0	0

#	ARTICLE	IF	CITATIONS
343	Darth Fader: Analysing galaxy spectra at low signal-to-noise. Proceedings of the International Astronomical Union, 2014, 10, 72-74.	0.0	0
344	Compressed sensing and radio interferometry. , 2015, , .		0
345	Dictionary Learning for Photometric Redshift Estimation. , 2018, , .		0
346	Modelling Data with both Sparsity and a Gaussian Random Field: Application to Dark Matter Mass Mapping in Cosmology. , 2018, , .		0
347	Poisson Noise Removal in Spherical Multichannel Images. Chapman & Hall/CRC Data Mining and Knowledge Discovery Series, 2012, , .	0.2	0
348	Compressive Video Sensing with Adaptive Measurement Allocation for Improving MPEGx Performance. , 2015, , .		0
349	Optimal transport-based dictionary learning and its application to Euclid-like Point Spread Function representation. , 2017, , .		0
350	Radio astronomical images restoration with shape constraint. , 2019, , .		0