

Charles Soussen

List of Publications by Year in descending order

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46
papers

689
citations

623734
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580821
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48
all docs

48
docs citations

48
times ranked

837
citing authors

#	ARTICLE	IF	CITATIONS
1	From Bernoulliâ€™ Gaussian Deconvolution to Sparse Signal Restoration. IEEE Transactions on Signal Processing, 2011, 59, 4572-4584.	5.3	106
2	Automated Force Volume Image Processing for Biological Samples. PLoS ONE, 2011, 6, e18887.	2.5	86
3	Joint ℓ_1/ℓ_2 -Step Analysis of Orthogonal Matching Pursuit and Orthogonal Least Squares. IEEE Transactions on Information Theory, 2013, 59, 3158-3174.	2.4	57
4	Generalized LASSO with under-determined regularization matrices. Signal Processing, 2016, 127, 239-246.	3.7	40
5	Exact Recovery Conditions for Sparse Representations With Partial Support Information. IEEE Transactions on Information Theory, 2013, 59, 7509-7524.	2.4	39
6	ROHSA: Regularized Optimization for Hyper-Spectral Analysis. Astronomy and Astrophysics, 2019, 626, A101.	5.1	39
7	Homotopy Based Algorithms for ℓ_1 -Regularized Least-Squares. IEEE Transactions on Signal Processing, 2015, 63, 3301-3316.	5.3	34
8	Polygonal and Polyhedral Contour Reconstruction in Computed Tomography. IEEE Transactions on Image Processing, 2004, 13, 1507-1523.	9.8	33
9	Flexible calibration of structured-light systems projecting point patterns. Computer Vision and Image Understanding, 2013, 117, 1468-1481.	4.7	33
10	Fast Positive Deconvolution of Hyperspectral Images. IEEE Transactions on Image Processing, 2013, 22, 828-833.	9.8	30
11	Non-Negative Orthogonal Greedy Algorithms. IEEE Transactions on Signal Processing, 2019, 67, 5643-5658.	5.3	23
12	Relaxed Recovery Conditions for OMP/OLS by Exploiting Both Coherence and Decay. IEEE Transactions on Information Theory, 2016, 62, 459-470.	2.4	22
13	Does Deblurring Improve Geometrical Hyperspectral Unmixing?. IEEE Transactions on Image Processing, 2014, 23, 1169-1180.	9.8	15
14	Ultrasonic non destructive testing based on sparse deconvolution. Journal of Physics: Conference Series, 2012, 353, 012018.	0.4	14
15	DDB2 (damaged-DNA binding 2) protein: a new modulator of nanomechanical properties and cell adhesion of breast cancer cells. Nanoscale, 2016, 8, 5268-5279.	5.6	14
16	Sparse multidimensional modal analysis using a multigrid dictionary refinement. Eurasip Journal on Advances in Signal Processing, 2012, 2012, .	1.7	13
17	A novel 3D surface construction approach: Application to three-dimensional endoscopic data. , 2010, , .		9
18	On LARS/Homotopy Equivalence Conditions for Over-Determined LASSO. IEEE Signal Processing Letters, 2012, 19, 894-897.	3.6	8

#	ARTICLE	IF	CITATIONS
19	Flexible projector calibration for active stereoscopic systems. , 2010, , .		7
20	Efficient Domain Decomposition for a Neural Network Learning Algorithm, Used for the Dose Evaluation in External Radiotherapy. Lecture Notes in Computer Science, 2010, , 261-266.	1.3	7
21	Reconstruction of three-dimensional localized objects from limited angle x-ray projections: an approach based on sparsity and multigrid image representation. Journal of Electronic Imaging, 2008, 17, 033011.	0.9	6
22	Sparse deconvolution: Comparison of statistical and deterministic approaches. , 2011, , .		6
23	Edge-preserving nonnegative hyperspectral image restoration. , 2013, , .		6
24	Construction of Extended 3D Field of Views of the Internal Bladder Wall Surface: A Proof of Concept. 3D Research, 2016, 7, 1.	1.8	6
25	Source separation approach for the analysis of spatially resolved multiply excited autofluorescence spectra during optical clearing of ex vivo skin. Biomedical Optics Express, 2019, 10, 3410.	2.9	5
26	<title>Multiresolution approach to the estimation of the shape of a 3D compact object from its radiographic data</title>. , 1999, 3816, 150.		4
27	Sparse multiresolution modal estimation. , 2011, , .		3
28	OMP and Continuous Dictionaries: Is k -step Recovery Possible?. , 2019, , .		3
29	Parameterized source separation for delayed spectroscopic signals. Signal Processing, 2019, 158, 48-60.	3.7	3
30	When does OMP achieve exact recovery with continuous dictionaries?. Applied and Computational Harmonic Analysis, 2021, 51, 374-413.	2.2	3
31	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mi>K</mml:mi></mml:math>-step analysis of orthogonal greedy algorithms for non-negative sparse representations. Signal Processing, 2021, 188, 108185.	3.7	3
32	Fast deconvolution of large fluorescence hyperspectral images. , 2011, , .		2
33	Separation of delayed parameterized sources. , 2017, , .		2
34	Parameter Estimation in Sparse Inverse Problems Using Bernoulli-Gaussian Prior. , 2022, , .		2
35	Modeling of force-volume images in atomic force microscopy. , 2008, , .		1
36	Sequential deconvolution — Unmixing of blurred hyperspectral data. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
37	A Parallelizable Framework for Segmenting Piecewise Signals. IEEE Access, 2019, 7, 13217-13229.	4.2	1
38	Improved Deconvolution of Mineral Reflectance Spectra. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 9711-9726.	4.9	1
39	Spatially resolved spectroscopy for guiding margin delineation during human skin carcinomas resection: first clinical results on diffuse reflectance and autofluorescence spectra and in vivo skin optical properties. , 2018, , .		1
40	Research and development of effective optical technologies for diagnostics in dermatology. , 2019, , .		1
41	Confocal fluorescence microscopy and force-volume imaging in atomic force microscopy: A signal processing perspective. , 2014, , .		0
42	An optimal method to segment piecewise poisson distributed signals with application to sequencing data. , 2015, 2015, 6465-8.		0
43	Influence of cost functions and optimization methods on solving the inverse problem in spatially resolved diffuse reflectance spectroscopy. , 2017, , .		0
44	Spectroscopic Decomposition Of Astronomical Multispectral Images Using B-Splines. , 2018, , .		0
45	Preliminary study investigating depth sensitivity of spatially resolved bimodal spectroscopy combined to optical clearing agents on a human skin based-hybrid model. , 2017, , .		0
46	OMP-Based Algorithm for Mineral Reflectance Spectra Deconvolution from Hyperspectral Images. , 2020, , .		0