

Martin Vetterli

List of Publications by Year in descending order

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370
papers

31,666
citations

10956

71
h-index

5965

160
g-index

372
all docs

372
docs citations

372
times ranked

14450
citing authors

#	ARTICLE	IF	CITATIONS
1	The contourlet transform: an efficient directional multiresolution image representation. IEEE Transactions on Image Processing, 2005, 14, 2091-2106.	6.0	3,265
2	Adaptive wavelet thresholding for image denoising and compression. IEEE Transactions on Image Processing, 2000, 9, 1532-1546.	6.0	2,229
3	Wavelets and signal processing. IEEE Signal Processing Magazine, 1991, 8, 14-38.	4.6	2,173
4	Wavelets and filter banks: theory and design. IEEE Transactions on Signal Processing, 1992, 40, 2207-2232.	3.2	1,380
5	Wavelet-based texture retrieval using generalized Gaussian density and Kullback-Leibler distance. IEEE Transactions on Image Processing, 2002, 11, 146-158.	6.0	956
6	Sampling signals with finite rate of innovation. IEEE Transactions on Signal Processing, 2002, 50, 1417-1428.	3.2	847
7	Fast fourier transforms: A tutorial review and a state of the art. Signal Processing, 1990, 19, 259-299.	2.1	754
8	Best wavelet packet bases in a rate-distortion sense. IEEE Transactions on Image Processing, 1993, 2, 160-175.	6.0	597
9	The finite ridgelet transform for image representation. IEEE Transactions on Image Processing, 2003, 12, 16-28.	6.0	590
10	Adaptive filtering in subbands with critical sampling: analysis, experiments, and application to acoustic echo cancellation. IEEE Transactions on Signal Processing, 1992, 40, 1862-1875.	3.2	453
11	Multi-dimensional sub-band coding: Some theory and algorithms. Signal Processing, 1984, 6, 97-112.	2.1	436
12	Low-complexity video coding for receiver-driven layered multicast. IEEE Journal on Selected Areas in Communications, 1997, 15, 983-1001.	9.7	425
13	To code, or not to code: lossy source-channel communication revisited. IEEE Transactions on Information Theory, 2003, 49, 1147-1158.	1.5	393
14	Nonseparable multidimensional perfect reconstruction filter banks and wavelet bases for $R/\sup n/$. IEEE Transactions on Information Theory, 1992, 38, 533-555.	1.5	389
15	A theory of multirate filter banks. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1987, 35, 356-372.	2.0	364
16	Bit allocation for dependent quantization with applications to multiresolution and MPEG video coders. IEEE Transactions on Image Processing, 1994, 3, 533-545.	6.0	356
17	Euclidean Distance Matrices: Essential theory, algorithms, and applications. IEEE Signal Processing Magazine, 2015, 32, 12-30.	4.6	339
18	Sparse Sampling of Signal Innovations. IEEE Signal Processing Magazine, 2008, 25, 31-40.	4.6	337

#	ARTICLE	IF	CITATIONS
19	A Frequency Domain Approach to Registration of Aliased Images with Application to Super-resolution. Eurasip Journal on Advances in Signal Processing, 2006, 2006, 1.	1.0	335
20	Sampling Moments and Reconstructing Signals of Finite Rate of Innovation: Shannon Meets Strangâ€™Fix. IEEE Transactions on Signal Processing, 2007, 55, 1741-1757.	3.2	323
21	Data compression and harmonic analysis. IEEE Transactions on Information Theory, 1998, 44, 2435-2476.	1.5	318
22	Perfect reconstruction FIR filter banks: some properties and factorizations. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1989, 37, 1057-1071.	2.0	315
23	Simple FFT and DCT algorithms with reduced number of operations. Signal Processing, 1984, 6, 267-278.	2.1	305
24	Locating the Source of Diffusion in Large-Scale Networks. Physical Review Letters, 2012, 109, 068702.	2.9	292
25	Filter banks allowing perfect reconstruction. Signal Processing, 1986, 10, 219-244.	2.1	274
26	Directionlets: anisotropic multidirectional representation with separable filtering. IEEE Transactions on Image Processing, 2006, 15, 1916-1933.	6.0	274
27	Oversampled filter banks. IEEE Transactions on Signal Processing, 1998, 46, 1245-1255.	3.2	273
28	On the Capacity of Large Gaussian Relay Networks. IEEE Transactions on Information Theory, 2005, 51, 765-779.	1.5	250
29	Multiresolution broadcast for digital HDTV using joint source/channel coding. IEEE Journal on Selected Areas in Communications, 1993, 11, 6-23.	9.7	245
30	Framing pyramids. IEEE Transactions on Signal Processing, 2003, 51, 2329-2342.	3.2	226
31	Acoustic echoes reveal room shape. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12186-12191.	3.3	220
32	SensorScope. ACM Transactions on Sensor Networks, 2010, 6, 1-32.	2.3	219
33	Near-Optimal Sensor Placement for Linear Inverse Problems. IEEE Transactions on Signal Processing, 2014, 62, 1135-1146.	3.2	219
34	Toward self-organized mobile ad hoc networks: the terminodes project. , 2001, 39, 118-124.		217
35	Reproducible research in signal processing. IEEE Signal Processing Magazine, 2009, 26, 37-47.	4.6	215
36	On network correlated data gathering. , 0, , .		214

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37	Source-Channel Communication in Sensor Networks. Lecture Notes in Computer Science, 2003, , 162-177.	1.0	205
38	Age matters. , 2003, , .		192
39	Wavelets and recursive filter banks. IEEE Transactions on Signal Processing, 1993, 41, 2536-2556.	3.2	188
40	SensorScope: Out-of-the-Box Environmental Monitoring. , 2008, , .		186
41	Optimal trellis-based buffered compression and fast approximations. IEEE Transactions on Image Processing, 1994, 3, 26-40.	6.0	183
42	Rotation invariant texture characterization and retrieval using steerable wavelet-domain hidden Markov models. IEEE Transactions on Multimedia, 2002, 4, 517-527.	5.2	181
43	Sampling and reconstruction of signals with finite rate of innovation in the presence of noise. IEEE Transactions on Signal Processing, 2005, 53, 2788-2805.	3.2	181
44	Balanced multiwavelets theory and design. IEEE Transactions on Signal Processing, 1998, 46, 1119-1125.	3.2	180
45	Estimation of Sparse MIMO Channels with Common Support. IEEE Transactions on Communications, 2012, 60, 3705-3716.	4.9	162
46	The hitchhiker's guide to successful wireless sensor network deployments. , 2008, , .		158
47	Wavelets, approximation, and compression. IEEE Signal Processing Magazine, 2001, 18, 59-73.	4.6	156
48	Weighted Gossip: Distributed Averaging using non-doubly stochastic matrices. , 2010, , .		155
49	Network correlated data gathering with explicit communication: NP-completeness and algorithms. IEEE/ACM Transactions on Networking, 2006, 14, 41-54.	2.6	151
50	Vector quantization of image subbands: a survey. IEEE Transactions on Image Processing, 1996, 5, 202-225.	6.0	149
51	The Distributed Karhunen-Loève Transform. IEEE Transactions on Information Theory, 2006, 52, 5177-5196.	1.5	148
52	Perfect reconstruction filter banks with rational sampling factors. IEEE Transactions on Signal Processing, 1993, 41, 2047-2066.	3.2	143
53	Networked Slepian-Wolf: Theory, Algorithms, and Scaling Laws. IEEE Transactions on Information Theory, 2005, 51, 4057-4073.	1.5	143
54	Packet video and its integration into the network architecture. IEEE Journal on Selected Areas in Communications, 1989, 7, 739-751.	9.7	138

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55	Interpolative multiresolution coding of advance television with compatible subchannels. IEEE Transactions on Circuits and Systems for Video Technology, 1991, 1, 86-99.	5.6	135
56	Rate-distortion optimal fast thresholding with complete JPEG/MPEG decoder compatibility. IEEE Transactions on Image Processing, 1994, 3, 700-704.	6.0	129
57	Rate-distortion optimized tree-structured compression algorithms for piecewise polynomial images. IEEE Transactions on Image Processing, 2005, 14, 343-359.	6.0	122
58	Power, spatio-temporal bandwidth, and distortion in large sensor networks. IEEE Journal on Selected Areas in Communications, 2005, 23, 745-754.	9.7	122
59	Theory of two-dimensional multirate filter banks. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1990, 38, 925-937.	2.0	121
60	Improved Fourier and Hartley transform algorithms: Application to cyclic convolution of real data. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1987, 35, 818-824.	2.0	118
61	Extension of finite length signals for sub-band coding. Signal Processing, 1989, 17, 161-168.	2.1	113
62	Wavelets, subband coding, and best bases. Proceedings of the IEEE, 1996, 84, 541-560.	16.4	105
63	Packet combining in sensor networks. , 2005, , .		104
64	The Plenacoustic Function and Its Sampling. IEEE Transactions on Signal Processing, 2006, 54, 3790-3804.	3.2	104
65	A Discrete Fourier-Cosine Transform Chip. IEEE Journal on Selected Areas in Communications, 1986, 4, 49-61.	9.7	102
66	Group Testing With Probabilistic Tests: Theory, Design and Application. IEEE Transactions on Information Theory, 2011, 57, 7057-7067.	1.5	100
67	Deterministic analysis of oversampled A/D conversion and decoding improvement based on consistent estimates. IEEE Transactions on Signal Processing, 1994, 42, 519-531.	3.2	99
68	Wavelet footprints: theory, algorithms, and applications. IEEE Transactions on Signal Processing, 2003, 51, 1306-1323.	3.2	97
69	Orthogonal time-varying filter banks and wavelet packets. IEEE Transactions on Signal Processing, 1994, 42, 2650-2663.	3.2	96
70	Valuable Detours: Least-Cost Anypath Routing. IEEE/ACM Transactions on Networking, 2011, 19, 333-346.	2.6	93
71	Nonseparable two- and three-dimensional wavelets. IEEE Transactions on Signal Processing, 1995, 43, 1269-1273.	3.2	91
72	Matching pursuit and atomic signal models based on recursive filter banks. IEEE Transactions on Signal Processing, 1999, 47, 1890-1902.	3.2	90

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73	High-order balanced multiwavelets: theory, factorization, and design. IEEE Transactions on Signal Processing, 2001, 49, 1918-1930.	3.2	89
74	Compressive Sampling [From the Guest Editors]. IEEE Signal Processing Magazine, 2008, 25, 12-13.	4.6	87
75	Where You Are Is Who You Are: User Identification by Matching Statistics. IEEE Transactions on Information Forensics and Security, 2016, 11, 358-372.	4.5	87
76	Super-Resolution From Unregistered and Totally Aliased Signals Using Subspace Methods. IEEE Transactions on Signal Processing, 2007, 55, 3687-3703.	3.2	78
77	Locating mobile nodes with EASE: learning efficient routes from encounter histories alone. IEEE/ACM Transactions on Networking, 2006, 14, 457-469.	2.6	77
78	Bits From Photons: Oversampled Image Acquisition Using Binary Poisson Statistics. IEEE Transactions on Image Processing, 2012, 21, 1421-1436.	6.0	77
79	Wavelets and filter banks: relationships and new results. , 0, , .		76
80	Shapes From Pixels. IEEE Transactions on Image Processing, 2016, 25, 1193-1206.	6.0	75
81	Locally adaptive wavelet-based image interpolation. IEEE Transactions on Image Processing, 2006, 15, 1471-1485.	6.0	73
82	Wireless Sensor Networks for Environmental Monitoring: The SensorScope Experience. , 2008, , .		73
83	Fundamental relations between the LMS algorithm and the DFT. IEEE Transactions on Circuits and Systems, 1987, 34, 814-820.	0.9	72
84	On the Bandwidth of the Plenoptic Function. IEEE Transactions on Image Processing, 2012, 21, 708-717.	6.0	72
85	Tight Weyl-Heisenberg frames in $l^2(\mathbb{Z})$. IEEE Transactions on Signal Processing, 1998, 46, 1256-1259.	3.2	71
86	Discrete-time wavelet extrema representation: design and consistent reconstruction. IEEE Transactions on Signal Processing, 1995, 43, 681-693.	3.2	70
87	Running FIR and IIR filtering using multirate filter banks. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1988, 36, 730-738.	2.0	69
88	Joint source/channel coding of statistically multiplexed real-time services on packet networks. IEEE/ACM Transactions on Networking, 1993, 1, 71-80.	2.6	69
89	Sensing reality and communicating bits: a dangerous liaison. IEEE Signal Processing Magazine, 2006, 23, 70-83.	4.6	67
90	Towards Generalized FRI Sampling With an Application to Source Resolution in Radioastronomy. IEEE Transactions on Signal Processing, 2017, 65, 821-835.	3.2	67

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91	Reduction of the MSE in R-times oversampled A/D conversion $O(1/R)$ to $O(1/R/\text{sup } 2)$. IEEE Transactions on Signal Processing, 1994, 42, 200-203.	3.2	65
92	Stream Temperature Response to Three Riparian Vegetation Scenarios by Use of a Distributed Temperature Validated Model. Environmental Science & Technology, 2010, 44, 2072-2078.	4.6	65
93	Feeling in control of your footsteps: Conscious gait monitoring and the auditory consequences of footsteps. Cognitive Neuroscience, 2010, 1, 184-192.	0.6	64
94	Perfect reconstruction filter banks for HDTV representation and coding. Signal Processing: Image Communication, 1990, 2, 349-363.	1.8	63
95	Exact Sampling Results for Some Classes of Parametric Nonbandlimited 2-D Signals. IEEE Transactions on Signal Processing, 2004, 52, 175-189.	3.2	62
96	Multiple description transform coding: robustness to erasures using tight frame expansions. , 0, , .		58
97	Reconstruction of irregularly sampled discrete-time bandlimited signals with unknown sampling locations. IEEE Transactions on Signal Processing, 2000, 48, 3462-3471.	3.2	58
98	Image compression using binary space partitioning trees. IEEE Transactions on Image Processing, 1996, 5, 1610-1624.	6.0	57
99	Order-Optimal Consensus Through Randomized Path Averaging. IEEE Transactions on Information Theory, 2010, 56, 5150-5167.	1.5	56
100	Soft ARQ for Layered Streaming Media. Journal of Signal Processing Systems, 2001, 27, 81-97.	1.0	55
101	Demosaicking by Alternating Projections: Theory and Fast One-Step Implementation. IEEE Transactions on Image Processing, 2010, 19, 2085-2098.	6.0	55
102	Transform coding with backward adaptive updates. IEEE Transactions on Information Theory, 2000, 46, 1623-1633.	1.5	54
103	Space-Frequency Quantization for Image Compression With Directionlets. IEEE Transactions on Image Processing, 2007, 16, 1761-1773.	6.0	53
104	Adaptive scalar quantization without side information. IEEE Transactions on Image Processing, 1997, 6, 665-676.	6.0	52
105	Unlabeled Sensing With Random Linear Measurements. IEEE Transactions on Information Theory, 2018, 64, 3237-3253.	1.5	51
106	Designing color filter arrays for the joint capture of visible and near-infrared images. , 2009, , .		50
107	Interval consensus: From quantized gossip to voting. , 2009, , .		49
108	Estimation of urban sensible heat flux using a dense wireless network of observations. Environmental Fluid Mechanics, 2009, 9, 635-653.	0.7	47

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109	Can one hear the shape of a room: The 2-D polygonal case. , 2011, , .		47
110	Outlier modeling in image matching. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2003, 25, 301-315.	9.7	46
111	Low-sampling rate UWB channel characterization and synchronization. Journal of Communications and Networks, 2003, 5, 319-327.	1.8	46
112	Split-radix algorithms for length-p/sup m/ DFT's. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1989, 37, 57-64.	2.0	43
113	Dynamic measurement of room impulse responses using a moving microphone. Journal of the Acoustical Society of America, 2007, 122, 1636-1645.	0.5	43
114	Hydrologic response of an alpine watershed: Application of a meteorological wireless sensor network to understand streamflow generation. Water Resources Research, 2011, 47, .	1.7	42
115	Sub-Band Coding Of Video Signals For Packet-Switched Networks. , 1987, 0845, 446.		41
116	Subband Coding Of Video For Packet Networks. Optical Engineering, 1988, 27, .	0.5	40
117	To code or not to code. , 0, , .		40
118	Acoustic Tomography for Scalar and Vector Fields: Theory and Application to Temperature and Wind Estimation. Journal of Atmospheric and Oceanic Technology, 2009, 26, 1475-1492.	0.5	40
119	Rate Distortion Behavior of Sparse Sources. IEEE Transactions on Information Theory, 2012, 58, 4969-4992.	1.5	40
120	Robust ultrasound travel-time tomography using the bent ray model. Proceedings of SPIE, 2010, , .	0.8	39
121	Sampling and Reconstruction of Spatial Fields Using Mobile Sensors. IEEE Transactions on Signal Processing, 2013, 61, 2328-2340.	3.2	39
122	Sampling based on timing: Time encoding machines on shift-invariant subspaces. Applied and Computational Harmonic Analysis, 2014, 36, 63-78.	1.1	39
123	On simple oversampled A/D conversion in $L/\text{sup } 2/(R)$. IEEE Transactions on Information Theory, 2001, 47, 146-154.	1.5	38
124	EchoSLAM: Simultaneous localization and mapping with acoustic echoes. , 2016, , .		38
125	Distributed Sampling of Signals Linked by Sparse Filtering: Theory and Applications. IEEE Transactions on Signal Processing, 2010, 58, 1095-1109.	3.2	36
126	Raking the Cocktail Party. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 825-836.	7.3	36

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127	GrÄbner Bases and Multidimensional FIR Multirate Systems. Multidimensional Systems and Signal Processing, 1997, 8, 11-30.	1.7	35
128	Approximation and compression of piecewise smooth functions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1999, 357, 2573-2591.	1.6	35
129	On the optimal density for real-time data gathering of spatio-temporal processes in sensor networks. , 0, , .		35
130	Multiresolution coding techniques for digital television: A review. Multidimensional Systems and Signal Processing, 1992, 3, 161-187.	1.7	33
131	Sparse spectral factorization: Unicity and reconstruction algorithms. , 2011, , .		33
132	EigenMaps. , 2012, , .		33
133	Optimal filter banks for multiple description coding: analysis and synthesis. IEEE Transactions on Information Theory, 2002, 48, 2036-2052.	1.5	32
134	Lattice networks: capacity limits, optimal routing, and queueing behavior. IEEE/ACM Transactions on Networking, 2006, 14, 492-505.	2.6	32
135	Sampling and reconstructing diffusion fields with localized sources. , 2011, , .		32
136	Spatial super-resolution of a diffusion field by temporal oversampling in sensor networks. , 2009, , .		31
137	Lower bound on the mean-squared error in oversampled quantization of periodic signals using vector quantization analysis. IEEE Transactions on Information Theory, 1996, 42, 469-479.	1.5	30
138	<title>Superresolution images reconstructed from aliased images</title>. , 2003, , .		30
139	Potentials of Opportunistic Routing in Energy-Constrained Wireless Sensor Networks. Lecture Notes in Computer Science, 2009, , 118-133.	1.0	30
140	The Distributed Multiple Voting Problem. IEEE Journal on Selected Topics in Signal Processing, 2011, 5, 791-804.	7.3	30
141	Sampling and exact reconstruction of bandlimited signals with additive shot noise. IEEE Transactions on Information Theory, 2006, 52, 2230-2233.	1.5	29
142	Sampling and Exact Reconstruction of Pulses with Variable Width. IEEE Transactions on Signal Processing, 2017, 65, 2629-2644.	3.2	29
143	Rate-Constrained Collaborative Noise Reduction for Wireless Hearing Aids. IEEE Transactions on Signal Processing, 2009, 57, 645-657.	3.2	28
144	A robust method for inverse transport modeling of atmospheric emissions using blind outlier detection. Geoscientific Model Development, 2014, 7, 2303-2311.	1.3	28

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145	Error-rate characteristics of oversampled analog-to-digital conversion. IEEE Transactions on Information Theory, 1998, 44, 1961-1964.	1.5	27
146	R/D optimal linear prediction. IEEE Transactions on Speech and Audio Processing, 2000, 8, 646-655.	2.0	27
147	The commutativity of up/downsampling in two dimensions. IEEE Transactions on Information Theory, 1991, 37, 695-698.	1.5	26
148	Power-bandwidth-distortion scaling laws for sensor networks. , 2004, , .		26
149	Dimensionality Reduction for Distributed Estimation in the Infinite Dimensional Regime. IEEE Transactions on Information Theory, 2008, 54, 1655-1669.	1.5	25
150	The gigavision camera. , 2009, , .		25
151	Sampling and Reconstruction of Bandlimited Signals With Multi-Channel Time Encoding. IEEE Transactions on Signal Processing, 2020, 68, 1105-1119.	3.2	25
152	Compressive Sampling of Multiple Sparse Signals Having Common Support Using Finite Rate of Innovation Principles. IEEE Signal Processing Letters, 2011, 18, 331-334.	2.1	24
153	Sequences with minimal time-frequency uncertainty. Applied and Computational Harmonic Analysis, 2015, 38, 452-468.	1.1	24
154	Kinetic Euclidean Distance Matrices. IEEE Transactions on Signal Processing, 2020, 68, 452-465.	3.2	24
155	FCO sampling of digital video using perfect reconstruction filter banks. IEEE Transactions on Image Processing, 1993, 2, 118-122.	6.0	23
156	Simple algorithms for BCH decoding. IEEE Transactions on Communications, 1995, 43, 2324-2333.	4.9	23
157	Adaptive transforms for image coding using spatially varying wavelet packets. IEEE Transactions on Image Processing, 1996, 5, 1197-1204.	6.0	23
158	Room helps: Acoustic localization with finite elements. , 2012, , .		23
159	Sampling High-Dimensional Bandlimited Fields on Low-Dimensional Manifolds. IEEE Transactions on Information Theory, 2013, 59, 2103-2127.	1.5	23
160	A Fast Hadamard Transform for Signals With Sublinear Sparsity in the Transform Domain. IEEE Transactions on Information Theory, 2015, 61, 2115-2132.	1.5	23
161	On minimal trajectories for mobile sampling of bandlimited fields. Applied and Computational Harmonic Analysis, 2015, 39, 487-510.	1.1	23
162	Single-channel indoor microphone localization. , 2014, , .		21

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163	MOOC Adventures in Signal Processing: Bringing DSP to the era of massive open online courses. IEEE Signal Processing Magazine, 2016, 33, 62-83.	4.6	21
164	Integrated Browsing and Searching of Large Image Collections. Lecture Notes in Computer Science, 2000, , 279-289.	1.0	21
165	Tree structures for orthogonal transforms and application to the Hadamard transform. Signal Processing, 1983, 5, 473-484.	2.1	20
166	Limited retransmission of real-time layered multimedia. , 0, , .		20
167	Sound speed estimation using wave-based ultrasound tomography: theory and GPU implementation. , 2010, , .		20
168	Space-Time-Frequency Processing of Acoustic Wave Fields: Theory, Algorithms, and Applications. IEEE Transactions on Signal Processing, 2010, 58, 4608-4620.	3.2	20
169	How is the weather: Automatic inference from images. , 2012, , .		20
170	Unlabeled sensing: Solving a linear system with unordered measurements. , 2015, , .		20
171	Image denoising using orthonormal finite ridgelet transform. , 2000, , .		19
172	Super-resolution from highly undersampled images. , 2005, , .		19
173	DASS: Distributed Adaptive Sparse Sensing. IEEE Transactions on Wireless Communications, 2015, 14, 2571-2583.	6.1	19
174	CPGD: Cadzow Plug-and-Play Gradient Descent for Generalised FRI. IEEE Transactions on Signal Processing, 2021, 69, 42-57.	3.2	19
175	From acoustic room reconstruction to slam. , 2016, , .		18
176	Hartley transforms over finite fields. IEEE Transactions on Information Theory, 1993, 39, 1628-1638.	1.5	17
177	The distributed, partial, and conditional Karhunen-Loeve transforms. , 0, , .		17
178	Rate-distortion problem for physics based distributed sensing. , 2004, , .		17
179	Annihilating filter-based decoding in the compressed sensing framework. Proceedings of SPIE, 2007, , .	0.8	17
180	FRIDA: FRI-based DOA estimation for arbitrary array layouts. , 2017, , .		17

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181	Binary space partitioning tree representation of images. Journal of Visual Communication and Image Representation, 1991, 2, 201-221.	1.7	16
182	Overcomplete expansions and robustness. , 0, , .		16
183	Exact Sampling Results for Signals with Finite Rate of Innovation using Strang-Fix Conditions and Local Kernels. , 0, , .		16
184	Sampling and reconstructing spatial fields using mobile sensors. , 2012, , .		16
185	Sampling and Reconstruction of Shapes With Algebraic Boundaries. IEEE Transactions on Signal Processing, 2016, 64, 5807-5818.	3.2	16
186	<title>Very low bit-rate video coding using matching pursuits</title>. , 1994, , .		15
187	Plenacoustic Function on the Circle with Application to HRTF Interpolation. , 0, , .		15
188	Ultrasound tomography with learned dictionaries. , 2010, , .		15
189	Sampling Continuous-Time Sparse Signals: A Frequency-Domain Perspective. IEEE Transactions on Signal Processing, 2018, 66, 1410-1424.	3.2	15
190	Time-frequency signal models for music analysis, transformation, and synthesis. , 0, , .		14
191	Near-Optimal Thermal Monitoring Framework for Many-Core Systems-on-Chip. IEEE Transactions on Computers, 2015, 64, 3197-3209.	2.4	14
192	Double resolution from a set of aliased images. , 2004, , .		13
193	Distributed compressed sensing: Sparsity models and reconstruction algorithms using annihilating filter. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	13
194	Distributed spatio-temporal sampling of diffusion fields from sparse instantaneous sources. , 2009, , .		13
195	Optimal color filter array design: quantitative conditions and an efficient search procedure. Proceedings of SPIE, 2009, , .	0.8	13
196	Sensor networks for diffusion fields: Detection of sources in space and time. , 2011, , .		13
197	On Sampling and Coding for Distributed Acoustic Sensing. IEEE Transactions on Information Theory, 2012, 58, 3198-3214.	1.5	13
198	The Fukushima inverse problem. , 2013, , .		13

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199	Unlabeled sensing: Reconstruction algorithm and theoretical guarantees. , 2017, , .		13
200	Super Resolution Phase Retrieval for Sparse Signals. IEEE Transactions on Signal Processing, 2019, 67, 4839-4854.	3.2	13
201	Computational analysis of mesh simplification using global error. Computational Geometry: Theory and Applications, 2003, 25, 171-196.	0.3	12
202	Share risk and energy: Sampling and communication strategies for multi-camera wireless monitoring networks. , 2012, , .		12
203	Multirate Filter Banks for Subband Coding. , 1991, , 43-100.		12
204	Basefield transforms with the convolution property. Proceedings of the IEEE, 1994, 82, 400-412.	16.4	11
205	Overcomplete Expansions and Robustness. Wavelet Analysis and Its Applications, 1998, , 301-338.	0.2	11
206	Compressed sensing with probabilistic measurements: A group testing solution. , 2009, , .		11
207	Fast and Robust Parametric Estimation of Jointly Sparse Channels. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2012, 2, 402-412.	2.7	11
208	Compressed sensing of streaming data. , 2013, , .		11
209	Calibration Using Matrix Completion With Application to Ultrasound Tomography. IEEE Transactions on Signal Processing, 2013, 61, 4923-4933.	3.2	11
210	Multi-channel Time Encoding for Improved Reconstruction of Bandlimited Signals. , 2019, , .		11
211	LEAP: Looking beyond pixels with continuous-space EstimAtion of Point sources. Astronomy and Astrophysics, 2017, 608, A136.	2.1	11
212	Improved quadtree algorithm based on joint coding for piecewise smooth image compression. , 0, , .		10
213	Robust diffusion-based unsupervised object labelling in distributed camera networks. , 2015, , .		10
214	Encoding and Decoding Mixed Bandlimited Signals Using Spiking Integrate-and-Fire Neurons. , 2020, , .		10
215	Approximation power of directionlets. , 2005, , .		9
216	Rate-Constrained Beamforming for Collaborating Hearing Aids. , 2006, , .		9

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217	Image reconstruction in the gigavision camera. , 2009, , .		9
218	Support recovery in compressed sensing: An estimation theoretic approach. , 2009, , .		9
219	Robust array calibration using time delays with application to ultrasound tomography. Proceedings of SPIE, 2011, , .	0.8	9
220	Sampling and reconstruction of time-varying atmospheric emissions. , 2012, , .		9
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