Martin Vetterli

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5325683/publications.pdf

Version: 2024-02-01

370 papers 31,666 citations

71
h-index

160 g-index

372 all docs

372 docs citations

times ranked

372

14450 citing authors

#	Article	IF	Citations
1	Asynchrony Increases Efficiency: Time Encoding of Videos and Low-Rank Signals. IEEE Transactions on Signal Processing, 2022, 70, 105-116.	3.2	5
2	CPGD: Cadzow Plug-and-Play Gradient Descent for Generalised FRI. IEEE Transactions on Signal Processing, 2021, 69, 42-57.	3.2	19
3	Shedding light on 19th century spectra by analyzing Lippmann photography. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	4
4	Three-Dimensional Cubic Barcodes. IEEE Transactions on Image Processing, 2021, PP, 1-1.	6.0	0
5	How Asynchronous Events Encode Video. , 2021, , .		O
6	Bound and Conquer: Improving Triangulation by Enforcing Consistency. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 2321-2326.	9.7	3
7	Kinetic Euclidean Distance Matrices. IEEE Transactions on Signal Processing, 2020, 68, 452-465.	3.2	24
8	Encoding and Decoding Mixed Bandlimited Signals Using Spiking Integrate-and-Fire Neurons., 2020,,.		10
9	Shapes From Echoes: Uniqueness From Point-to-Plane Distance Matrices. IEEE Transactions on Signal Processing, 2020, 68, 2480-2498.	3.2	3
10	Coordinate Difference Matrices. SIAM Journal on Matrix Analysis and Applications, 2020, 41, 332-363.	0.7	0
11	Shape From Bandwidth: Central Projection Case. , 2020, , .		O
12	Sampling and Reconstruction of Bandlimited Signals With Multi-Channel Time Encoding. IEEE Transactions on Signal Processing, 2020, 68, 1105-1119.	3.2	25
13	Multi-channel Time Encoding for Improved Reconstruction of Bandlimited Signals. , 2019, , .		11
14	Super Resolution Phase Retrieval for Sparse Signals. IEEE Transactions on Signal Processing, 2019, 67, 4839-4854.	3.2	13
15	On the Move: Localization with Kinetic Euclidean Distance Matrices. , 2019, , .		1
16	Learning neural connectivity from firing activity: efficient algorithms with provable guarantees on topology. Journal of Computational Neuroscience, 2018, 44, 253-272.	0.6	1
17	Unlabeled Sensing With Random Linear Measurements. IEEE Transactions on Information Theory, 2018, 64, 3237-3253.	1.5	51
18	Sampling Continuous-Time Sparse Signals: A Frequency-Domain Perspective. IEEE Transactions on Signal Processing, 2018, 66, 1410-1424.	3.2	15

#	Article	lF	CITATIONS
19	Sparse Recovery of Strong Reflectors with an Application to Non-Destructive Evaluation. , 2018, , .		1
20	Combining Range and Direction for Improved Localization. , 2018, , .		4
21	Structure from Sound with Incomplete Data. , 2018, , .		3
22	Sampling at Unknown Locations: Uniqueness and Reconstruction Under Constraints. IEEE Transactions on Signal Processing, 2018, 66, 5862-5874.	3.2	7
23	Efficient Multidimensional Diracs Estimation With Linear Sample Complexity. IEEE Transactions on Signal Processing, 2018, 66, 4642-4656.	3.2	5
24	Sampling and Exact Reconstruction of Pulses with Variable Width. IEEE Transactions on Signal Processing, 2017, 65, 2629-2644.	3.2	29
25	FRIDA: FRI-based DOA estimation for arbitrary array layouts., 2017,,.		17
26	Unlabeled sensing: Reconstruction algorithm and theoretical guarantees., 2017,,.		13
27	Towards Generalized FRI Sampling With an Application to Source Resolution in Radioastronomy. IEEE Transactions on Signal Processing, 2017, 65, 821-835.	3.2	67
28	Shape from bandwidth: The 2-D orthogonal projection case., 2017,,.		2
29	Omnidirectional bats, point-to-plane distances, and the price of uniqueness. , 2017, , .		7
30	Sampling at unknown locations, with an application in surface retrieval., 2017,,.		2
31	Handheld Reflectance Acquisition of Paintings. IEEE Transactions on Computational Imaging, 2017, 3, 580-591.	2.6	3
32	Acoustic DoA Estimation by One Unsophisticated Sensor. Lecture Notes in Computer Science, 2017, , 89-98.	1.0	7
33	LEAP: Looking beyond pixels with continuous-space EstimAtion of Point sources. Astronomy and Astrophysics, 2017, 608, A136.	2.1	11
34	From acoustic room reconstruction to slam. , 2016, , .		18
35	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
36	Accurate recovery of a specularity from a few samples of the reflectance function. , 2016, , .		3

#	Article	IF	CITATIONS
37	Shape: Linear-time camera pose estimation with quadratic error-decay., 2016,,.		1
38	Sampling and Reconstruction of Shapes With Algebraic Boundaries. IEEE Transactions on Signal Processing, 2016, 64, 5807-5818.	3.2	16
39	Optimal sensor architecture selection for health management of complex systems. , 2016, , .		2
40	EchoSLAM: Simultaneous localization and mapping with acoustic echoes. , 2016, , .		38
41	The recursive hessian sketch for adaptive filtering. , 2016, , .		0
42	VITRAIL: Acquisition, Modeling, and Rendering of Stained Glass. IEEE Transactions on Image Processing, 2016, 25, 4475-4488.	6.0	2
43	Shapes From Pixels. IEEE Transactions on Image Processing, 2016, 25, 1193-1206.	6.0	75
44	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
45	Relax and unfold: Microphone localization with Euclidean distance matrices. , 2015, , .		8
46	Unlabeled sensing: Solving a linear system with unordered measurements. , 2015, , .		20
47	Raking echoes in the time domain. , 2015, , .		5
48	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
49	Sequences with minimal time–frequency uncertainty. Applied and Computational Harmonic Analysis, 2015, 38, 452-468.	1.1	24
50	Near-Optimal Thermal Monitoring Framework for Many-Core Systems-on-Chip. IEEE Transactions on Computers, 2015, 64, 3197-3209.	2.4	14
51	Raking the Cocktail Party. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 825-836.	7.3	36
52	Annihilation-driven localised image edge models. , 2015, , .		0
53	On the accuracy of point localisation in a circular camera-array. , 2015, , .		2
54	A new robust and efficient estimator for ill-conditioned linear inverse problems with outliers. , 2015, , .		6

#	Article	IF	Citations
55	Mobile sampling of bandlimited fields. , 2015, , .		O
56	On minimal trajectories for mobile sampling of bandlimited fields. Applied and Computational Harmonic Analysis, 2015, 39, 487-510.	1.1	23
57	Robust diffusion-based unsupervised object labelling in distributed camera networks. , 2015, , .		10
58	Opportunistic Sampling for Joint Population Size and Density Estimation. IEEE Transactions on Mobile Computing, 2015, 14, 2530-2543.	3.9	4
59	The Beauty of the Commons: Optimal Load Sharing by Base Station Hopping in Wireless Sensor Networks. IEEE Journal on Selected Areas in Communications, 2015, , 1-1.	9.7	0
60	Through the Hourglass: A Faithful Audiovisual Reconstruction of the Old Montreux Casino. Acoustics Australia, 2015, 43, 49-57.	1.4	5
61	DASS: Distributed Adaptive Sparse Sensing. IEEE Transactions on Wireless Communications, 2015, 14, 2571-2583.	6.1	19
62	Euclidean Distance Matrices: Essential theory, algorithms, and applications. IEEE Signal Processing Magazine, 2015, 32, 12-30.	4.6	339
63	Enhancing local - Transmitting less - Improving global. , 2015, , .		1
64	Light transport matrix recovery for nearly planar objects. Proceedings of SPIE, 2014, , .	0.8	0
65	Near-optimal source placement for linear physical fields. , 2014, , .		2
66	Outlier removal for improved source estimation in atmospheric inverse problems. , 2014, , .		1
67	Detecting planar surface using a light-field camera with application to distinguishing real scenes from printed photos. , 2014, , .		3
68	Privacy-preserving function computation by exploitation of friendships in social networks. , 2014, , .		2
69	Single-channel indoor microphone localization. , 2014, , .		21
70	Source localization and tracking in non-convex rooms. , 2014, , .		9
71	Computationally efficient background subtraction in the light field domain. , 2014, , .		0
72	Scale-invariant representation of light field images for object recognition and tracking. Proceedings of SPIE, 2014 , , .	0.8	4

#	Article	IF	CITATIONS
73	Light field panorama by a plenoptic camera. Proceedings of SPIE, 2014, , .	0.8	5
74	A robust method for inverse transport modeling of atmospheric emissions using blind outlier detection. Geoscientific Model Development, 2014, 7, 2303-2311.	1.3	28
75	Near-Optimal Sensor Placement for Linear Inverse Problems. IEEE Transactions on Signal Processing, 2014, 62, 1135-1146.	3.2	219
76	Swiss science set to stay international. Nature, 2014, 507, 431-431.	13.7	0
77	Topology optimization for energy-efficient communications in consensus wireless networks. , 2014, , .		4
78	Sampling based on timing: Time encoding machines on shift-invariant subspaces. Applied and Computational Harmonic Analysis, 2014, 36, 63-78.	1.1	39
79	Digital acoustics: processing wave fields in space and time using DSP tools. APSIPA Transactions on Signal and Information Processing, 2014, 3, .	2.6	6
80	Randomized recovery for boolean compressed sensing. , 2013, , .		1
81	Multichannel sampling of low light level scenes with unknown shifts. , 2013, , .		0
82	Sampling High-Dimensional Bandlimited Fields on Low-Dimensional Manifolds. IEEE Transactions on Information Theory, 2013, 59, 2103-2127.	1.5	23
83	A fast Hadamard transform for signals with sub-linear sparsity. , 2013, , .		3
84	Compressed sensing of streaming data. , 2013, , .		11
85	Sampling and reconstructing diffusion fields in presence of aliasing. , 2013, , .		6
86	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
87	LCAV-31: a dataset for light field object recognition. , 2013, , .		5
88	Oversampled noisy binary image sensor. , 2013, , .		0
89	Calibration Using Matrix Completion With Application to Ultrasound Tomography. IEEE Transactions on Signal Processing, 2013, 61, 4923-4933.	3.2	11
90	The Fukushima inverse problem. , 2013, , .		13

#	Article	IF	CITATIONS
91	Teaching signal processing online: A report from the trenches. , 2013, , .		7
92	Sampling and Reconstruction of Spatial Fields Using Mobile Sensors. IEEE Transactions on Signal Processing, 2013, 61, 2328-2340.	3.2	39
93	Beyond Moore-Penrose: Sparse pseudoinverse. , 2013, , .		9
94	Sequences with minimal time-frequency spreads. , 2013, , .		2
95	EigenMaps., 2012,,.		33
96	Sensorcam., 2012,,.		3
97	Room helps: Acoustic localization with finite elements. , 2012, , .		23
98	On sampling a high-dimensional bandlimited field on a union of shifted lattices. , 2012, , .		6
99	Sampling, sparsity, and inverse problems. , 2012, , .		0
100	Event-driven video coding for outdoor wireless monitoring cameras. , 2012, , .		5
101	Sampling and reconstructing spatial fields using mobile sensors. , 2012, , .		16
102	Multi-channel low-frequency room equalization using perceptually motivated constrained optimization. , 2012, , .		6
103	Share risk and energy: Sampling and communication strategies for multi-camera wireless monitoring networks. , 2012, , .		12
104	Sampling and reconstruction of time-varying atmospheric emissions. , 2012, , .		9
105	Howis the weather: Automatic inference from images. , 2012, , .		20
106	Poster abstract: Sensorcam: An energy-efficient smart wireless camera for environmental monitoring. , 2012, , .		0
107	Distributed Successive Refinement of Multiview Images Using Broadcast Advantage. IEEE Transactions on Image Processing, 2012, 21, 4581-4592.	6.0	2
108	Estimation of Sparse MIMO Channels with Common Support. IEEE Transactions on Communications, 2012, 60, 3705-3716.	4.9	162

#	Article	IF	CITATIONS
109	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
110	Super-resolution from unregistered aliased images with unknown scalings and shifts. , 2012, , .		2
111	Bits From Photons: Oversampled Image Acquisition Using Binary Poisson Statistics. IEEE Transactions on Image Processing, 2012, 21, 1421-1436.	6.0	77
112	Locating the Source of Diffusion in Large-Scale Networks. Physical Review Letters, 2012, 109, 068702.	2.9	292
113	On the Bandwidth of the Plenoptic Function. IEEE Transactions on Image Processing, 2012, 21, 708-717.	6.0	72
114	On Sampling and Coding for Distributed Acoustic Sensing. IEEE Transactions on Information Theory, 2012, 58, 3198-3214.	1.5	13
115	Rate Distortion Behavior of Sparse Sources. IEEE Transactions on Information Theory, 2012, 58, 4969-4992.	1.5	40
116	Calibration in circular ultrasound tomography devices. , 2011, , .		2
117	Can one hear the shape of a room: The 2-D polygonal case. , 2011, , .		47
118	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
119	Valuable Detours: Least-Cost Anypath Routing. IEEE/ACM Transactions on Networking, 2011, 19, 333-346.	2.6	93
120	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
121	Robust array calibration using time delays with application to ultrasound tomography. Proceedings of SPIE, $2011, , .$	0.8	9
122	The Distributed Multiple Voting Problem. IEEE Journal on Selected Topics in Signal Processing, 2011, 5, 791-804.	7.3	30
123	Introduction to the Issue on Gossiping Algorithms Design and Applications. IEEE Journal on Selected Topics in Signal Processing, 2011, 5, 645-648.	7.3	6
124	Group Testing With Probabilistic Tests: Theory, Design and Application. IEEE Transactions on Information Theory, 2011, 57, 7057-7067.	1.5	100
125	Use of learned dictionaries in tomographic reconstruction. , 2011, , .		5
126	Sampling trajectories for mobile sensing. , 2011, , .		1

#	Article	IF	CITATIONS
127	Estimating Sparse MIMO channels having Common Support., 2011,,.		8
128	Sensor networks for diffusion fields: Detection of sources in space and time. , 2011, , .		13
129	Applications of short space-time fourier analysis in digital acoustics. , 2011, , .		3
130	Sparse spectral factorization: Unicity and reconstruction algorithms., 2011,,.		33
131	Sampling and reconstructing diffusion fields with localized sources. , 2011, , .		32
132	Population size estimation using a few individuals as agents. , 2011, , .		8
133	Localization of diffusive sources using spatiotemporal measurements., 2011,,.		5
134	Sound speed estimation using wave-based ultrasound tomography: theory and GPU implementation. , 2010, , .		20
135	An optimal algorithm for reconstructing images from binary measurements. Proceedings of SPIE, 2010,	0.8	8
136	Robust ultrasound travel-time tomography using the bent ray model. Proceedings of SPIE, 2010, , .	0.8	39
137	On pixel detection threshold in the gigavision camera. Proceedings of SPIE, 2010, , .	0.8	6
138	On the Information Rates of the Plenoptic Function. IEEE Transactions on Information Theory, 2010, 56, 1306-1321.	1.5	3
139	Order-Optimal Consensus Through Randomized Path Averaging. IEEE Transactions on Information Theory, 2010, 56, 5150-5167.	1.5	56
140	Ultrasound tomography with learned dictionaries. , 2010, , .		15
141	Distributed successive approximation coding using broadcast advantage: The two-encoder case. , 2010,		2
142	SensorScope. ACM Transactions on Sensor Networks, 2010, 6, 1-32.	2.3	219
143	Frame domain signal processing: Framework and applications. , 2010, , .		О
144	Distributed Sampling of Signals Linked by Sparse Filtering: Theory and Applications. IEEE Transactions on Signal Processing, 2010, 58, 1095-1109.	3.2	36

#	Article	IF	Citations
145	Baffled circular loudspeaker array with broadband high directivity. , 2010, , .		6
146	Near-field adaptive beamforming and source localization in the spacetime frequency domain. , 2010, , .		3
147	Feeling in control of your footsteps: Conscious gait monitoring and the auditory consequences of footsteps. Cognitive Neuroscience, 2010, 1, 184-192.	0.6	64
148	Space-Time-Frequency Processing of Acoustic Wave Fields: Theory, Algorithms, and Applications. IEEE Transactions on Signal Processing, 2010, 58, 4608-4620.	3.2	20
149	Stream Temperature Response to Three Riparian Vegetation Scenarios by Use of a Distributed Temperature Validated Model. Environmental Science & Enviro	4.6	65
150	Weighted Gossip: Distributed Averaging using non-doubly stochastic matrices. , 2010, , .		155
151	Demosaicking by Alternating Projections: Theory and Fast One-Step Implementation. IEEE Transactions on Image Processing, 2010, 19, 2085-2098.	6.0	55
152	Sparse Image Representation by Directionlets. Advances in Imaging and Electron Physics, 2010, 161, 147-209.	0.1	6
153	Learning sparse systems at sub-Nyquist rates: A frequency-domain approach. , 2010, , .		1
154	Distributed Compression in Microphone Arrays. , 2009, , 157-188.		0
155	Designing color filter arrays for the joint capture of visible and near-infrared images. , 2009, , .		50
156	Image reconstruction in the gigavision camera. , 2009, , .		9
157	Distributed sensing of signals linked by sparse filtering. , 2009, , .		2
158	Interval consensus: From quantized gossip to voting. , 2009, , .		49
159	Spatial super-resolution of a diffusion field by temporal oversampling in sensor networks. , 2009, , .		31
160	Potentials of Opportunistic Routing in Energy-Constrained Wireless Sensor Networks. Lecture Notes in Computer Science, 2009, , 118-133.	1.0	30
161	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
162	Estimation of urban sensible heat flux using a dense wireless network of observations. Environmental Fluid Mechanics, 2009, 9, 635-653.	0.7	47

#	Article	IF	Citations
163	Reproducible research in signal processing. IEEE Signal Processing Magazine, 2009, 26, 37-47.	4.6	215
164	From Lagrange to Shannon and back: another look at sampling [DSP Education]. IEEE Signal Processing Magazine, 2009, 26, 138-144.	4.6	6
165	Rate-Constrained Collaborative Noise Reduction for Wireless Hearing Aids. IEEE Transactions on Signal Processing, 2009, 57, 645-657.	3.2	28
166	Compressed sensing with probabilistic measurements: A group testing solution. , 2009, , .		11
167	The gigavision camera., 2009,,.		25
168	Distributed spatio-temporal sampling of diffusion fields from sparse instantaneous sources. , 2009, , .		13
169	Coding of spatio-temporal audio spectra using tree-structured directional filterbanks. , 2009, , .		1
170	Support recovery in compressed sensing: An estimation theoretic approach. , 2009, , .		9
171	Iterative demosaicking accelerated: theory and fast noniterative implementations. , 2009, , .		0
172	Optimal color filter array design: quantitative conditions and an efficient search procedure. Proceedings of SPIE, 2009, , .	0.8	13
173	Assessing Digital Surface Models by Verifying Shadows. , 2009, , 147-161.		0
174	Groebner basis methods for multichannel sampling with unknown offsets. Applied and Computational Harmonic Analysis, 2008, 25, 277-294.	1.1	4
175	The hitchhiker's guide to successful wireless sensor network deployments. , 2008, , .		158
176	Dimensionality Reduction for Distributed Estimation in the Infinite Dimensional Regime. IEEE Transactions on Information Theory, 2008, 54, 1655-1669.	1.5	25
177	Compressive Sampling [From the Guest Editors]. IEEE Signal Processing Magazine, 2008, 25, 12-13.	4.6	87
178	Sparse Sampling of Signal Innovations. IEEE Signal Processing Magazine, 2008, 25, 31-40.	4.6	337
179	Wave Field coding in the spacetime frequency domain. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	8
180	SensorScope: Out-of-the-Box Environmental Monitoring. , 2008, , .		186

#	Article	IF	CITATIONS
181	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
182	Subspace-based methods for image registration and super-resolution. , 2008, , .		3
183	Assessing the challenges of environmental signal processing through the sensorscope project. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	3
184	Wireless Sensor Networks for Environmental Monitoring: The SensorScope Experience. , 2008, , .		73
185	Dynamic measurement of room impulse responses using a moving microphone. Journal of the Acoustical Society of America, 2007, 122, 1636-1645.	0.5	43
186	Tomographic Approach for Parametric Estimation of Local Diffusive Sources and Application to Heat Diffusion. , 2007, , .		3
187	Space-Frequency Quantization using Directionlets. , 2007, , .		7
188	Annihilating filter-based decoding in the compressed sensing framework. Proceedings of SPIE, 2007, , .	0.8	17
189	Efficient image compression using directionlets. , 2007, , .		3
190	Image representation and compression using directionlets. Proceedings of SPIE, 2007, , .	0.8	1
191	Sampling Moments and Reconstructing Signals of Finite Rate of Innovation: Shannon Meets Strang–Fix. IEEE Transactions on Signal Processing, 2007, 55, 1741-1757.	3.2	323
192	A Stochastic Model for Video and its Information Rates., 2007,,.		2
193	Experiences with Reproducible Research in Various Facets of Signal Processing Research., 2007,,.		7
194	Distributed Spatial Audio Coding in Wireless Hearing Aids., 2007,,.		3
195	Space-Frequency Quantization for Image Compression With Directionlets. IEEE Transactions on Image Processing, 2007, 16, 1761-1773.	6.0	53
196	Super-Resolution From Unregistered and Totally Aliased Signals Using Subspace Methods. IEEE Transactions on Signal Processing, 2007, 55, 3687-3703.	3.2	78
197	Locating mobile nodes with EASE: learning efficient routes from encounter histories alone. IEEE/ACM Transactions on Networking, 2006, 14, 457-469.	2.6	77
198	Correction to "Lattice Networks: Capacity Limits, Optimal Routing, and Queueing Behavior". IEEE/ACM Transactions on Networking, 2006, 14, 1150-1150.	2.6	0

#	Article	IF	CITATIONS
199	Network correlated data gathering with explicit communication: NP-completeness and algorithms. IEEE/ACM Transactions on Networking, 2006, 14, 41-54.	2.6	151
200	Sensing reality and communicating bits: a dangerous liaison. IEEE Signal Processing Magazine, 2006, 23, 70-83.	4.6	67
201	The Plenacoustic Function and Its Sampling. IEEE Transactions on Signal Processing, 2006, 54, 3790-3804.	3.2	104
202	Directionlets: anisotropic multidirectional representation with separable filtering. IEEE Transactions on Image Processing, 2006, 15, 1916-1933.	6.0	274
203	Locally adaptive wavelet-based image interpolation. IEEE Transactions on Image Processing, 2006, 15, 1471-1485.	6.0	73
204	Registration of aliased images for super-resolution imaging. , 2006, 6077, 13.		5
205	Sampling and exact reconstruction of bandlimited signals with additive shot noise. IEEE Transactions on Information Theory, 2006, 52, 2230-2233.	1.5	29
206	The Distributed Karhunen–LoÔve Transform. IEEE Transactions on Information Theory, 2006, 52, 5177-5196.	1.5	148
207	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
208	Lattice networks: capacity limits, optimal routing, and queueing behavior. IEEE/ACM Transactions on Networking, 2006, 14, 492-505.	2.6	32
209	Low-Rate Reduced Complexity Image Compression using Directionlets. , 2006, , .		8
210	On the Information Rate of the Plenoptic Function. , 2006, , .		2
211	Exact Local Reconstruction Algorithms for Signals with Finite Rate of Innovation. , 2006, , .		O
212	Rate-Constrained Beamforming for Collaborating Hearing Aids. , 2006, , .		9
213	Sensor Networks. , 2006, , 243-288.		1
214	On the Capacity of Large Gaussian Relay Networks. IEEE Transactions on Information Theory, 2005, 51, 765-779.	1.5	250
215	Networked Slepian–Wolf: Theory, Algorithms, and Scaling Laws. IEEE Transactions on Information Theory, 2005, 51, 4057-4073.	1.5	143
216	UWB Channel Estimation and Synchronization. , 2005, , 11-42.		o

#	Article	IF	Citations
217	Approximation power of directionlets. , 2005, , .		9
218	Packet combining in sensor networks. , 2005, , .		104
219	Super-resolution from highly undersampled images. , 2005, , .		19
220	Compression of ECG as a Signal with Finite Rate of Innovation. , 2005, 2005, 7564-7.		4
221	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
222	The contourlet transform: an efficient directional multiresolution image representation. IEEE Transactions on Image Processing, 2005, 14, 2091-2106.	6.0	3,265
223	Rate-distortion optimized tree-structured compression algorithms for piecewise polynomial images. IEEE Transactions on Image Processing, 2005, 14, 343-359.	6.0	122
224	On the bandlimitedness of the plenoptic function. , 2005, , .		6
225	Power, spatio-temporal bandwidth, and distortion in large sensor networks. IEEE Journal on Selected Areas in Communications, 2005, 23, 745-754.	9.7	122
226	Power-bandwidth-distortion scaling laws for sensor networks. , 2004, , .		26
227	Rate-distortion problem for physics based distributed sensing. , 2004, , .		17
228	Exact Sampling Results for Some Classes of Parametric Nonbandlimited 2-D Signals. IEEE Transactions on Signal Processing, 2004, 52, 175-189.	3.2	62
229	Double resolution from a set of aliased images. , 2004, , .		13
230	Networked Slepian-Wolf: Theory and Algorithms. Lecture Notes in Computer Science, 2004, , 44-59.	1.0	7
231	To code, or not to code: lossy source-channel communication revisited. IEEE Transactions on Information Theory, 2003, 49, 1147-1158.	1.5	393
232	Computational analysis of mesh simplification using global error. Computational Geometry: Theory and Applications, 2003, 25, 171-196.	0.3	12
233	The finite ridgelet transform for image representation. IEEE Transactions on Image Processing, 2003, 12, 16-28.	6.0	590
234	Wavelet footprints: theory, algorithms, and applications. IEEE Transactions on Signal Processing, 2003, 51, 1306-1323.	3.2	97

#	Article	IF	CITATIONS
235	Framing pyramids. IEEE Transactions on Signal Processing, 2003, 51, 2329-2342.	3.2	226
236	Age matters., 2003,,.		192
237	Outlier modeling in image matching. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2003, 25, 301-315.	9.7	46
238	Low-sampling rate UWB channel characterization and synchronization. Journal of Communications and Networks, 2003, 5, 319-327.	1.8	46
239	<title>Superresolution images reconstructed from aliased images</title> ., 2003, , .		30
240	Space-Time Routing in Ad Hoc Networks. Lecture Notes in Computer Science, 2003, , 1-11.	1.0	6
241	<title>Acoustic based rendering by interpolation of the plenacoustic function</title> ., 2003,,.		2
242	Resolution enhancement and sampling with wavelets and footprints., 2003, 5207, 59.		0
243	Discrete directional wavelet bases and frames: analysis and applications. , 2003, 5207, 583.		2
244	<title>Discrete directional wavelet bases for image compression</title> ., 2003,,.		4
245	Source-Channel Communication in Sensor Networks. Lecture Notes in Computer Science, 2003, , 162-177.	1.0	205
246	Rotation invariant texture characterization and retrieval using steerable wavelet-domain hidden Markov models. IEEE Transactions on Multimedia, 2002, 4, 517-527.	5.2	181
247	Wavelet-based texture retrieval using generalized Gaussian density and Kullback-Leibler distance. IEEE Transactions on Image Processing, 2002, 11, 146-158.	6.0	956
248	Sampling signals with finite rate of innovation. IEEE Transactions on Signal Processing, 2002, 50, 1417-1428.	3.2	847
249	Optimal filter banks for multiple description coding: analysis and synthesis. IEEE Transactions on Information Theory, 2002, 48, 2036-2052.	1.5	32
250	Mesh Optimization Using Global Error with Application to Geometry Simplification. Graphical Models, 2002, 64, 230-257.	1.1	8
251	Interpolative Multiresolution Coding of Advanced TV with Subchannels. , 2002, , 323-347.		1
252	Transform coding: past, present, and future. IEEE Signal Processing Magazine, 2001, 18, 6-6.	4.6	6

#	Article	IF	CITATIONS
253	High-order balanced multiwavelets: theory, factorization, and design. IEEE Transactions on Signal Processing, 2001, 49, 1918-1930.	3.2	89
254	Toward self-organized mobile ad hoc networks: the terminodes project., 2001, 39, 118-124.		217
255	Wavelets, approximation, and compression. IEEE Signal Processing Magazine, 2001, 18, 59-73.	4.6	156
256	Soft ARQ for Layered Streaming Media. Journal of Signal Processing Systems, 2001, 27, 81-97.	1.0	55
257	On simple oversampled A/D conversion in L/sup $2/(R)$. IEEE Transactions on Information Theory, 2001, 47, 146-154.	1.5	38
258	Image denoising using orthonormal finite ridgelet transform. , 2000, , .		19
259	Rotation-invariant texture retrieval using steerable wavelet-domain hidden Markov models. , 2000, , .		3
260	Transform coding with backward adaptive updates. IEEE Transactions on Information Theory, 2000, 46, 1623-1633.	1.5	54
261	R/D optimal linear prediction. IEEE Transactions on Speech and Audio Processing, 2000, 8, 646-655.	2.0	27
262	Shift-invariant Gibbs-free denoising algorithm based on wavelet transform footprints., 2000, 4119, 821.		4
263	Adaptive wavelet thresholding for image denoising and compression. IEEE Transactions on Image Processing, 2000, 9, 1532-1546.	6.0	2,229
264	Reconstruction of irregularly sampled discrete-time bandlimited signals with unknown sampling locations. IEEE Transactions on Signal Processing, 2000, 48, 3462-3471.	3.2	58
265	Integrated Browsing and Searching of Large Image Collections. Lecture Notes in Computer Science, 2000, , 279-289.	1.0	21
266	<title>Balancing order and some other discrete-time properties of multiwavelets</title> ., 1999, 3813, 110.		0
267	Matching pursuit and atomic signal models based on recursive filter banks. IEEE Transactions on Signal Processing, 1999, 47, 1890-1902.	3.2	90
268	<title>Wavelets: approximation and compression-a review</title> ., 1999, 3723, 28.		0
269	<title>R/D optimal data hiding</title> ., 1999,,.		3
270	Approximation and compression of piecewise smooth functions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1999, 357, 2573-2591.	1.6	35

#	Article	IF	Citations
271	Invariant Image Retrieval Using Wavelet Maxima Moment. Lecture Notes in Computer Science, 1999, , 451-459.	1.0	9
272	Error-rate characteristics of oversampled analog-to-digital conversion. IEEE Transactions on Information Theory, 1998, 44, 1961-1964.	1.5	27
273	Data compression and harmonic analysis. IEEE Transactions on Information Theory, 1998, 44, 2435-2476.	1.5	318
274	Set theoretic compression with an application to image coding. IEEE Transactions on Image Processing, 1998, 7, 1051-1056.	6.0	4
275	Balanced multiwavelets theory and design. IEEE Transactions on Signal Processing, 1998, 46, 1119-1125.	3.2	180
276	Oversampled filter banks. IEEE Transactions on Signal Processing, 1998, 46, 1245-1255.	3.2	273
277	Tight Weyl-Heisenberg frames in I/sup 2/(Z). IEEE Transactions on Signal Processing, 1998, 46, 1256-1259.	3.2	71
278	Discrete- and continuous-time local cosine bases with multiple overlapping. IEEE Transactions on Signal Processing, 1998, 46, 3166-3180.	3. 2	4
279	Overcomplete Expansions and Robustness. Wavelet Analysis and Its Applications, 1998, , 301-338.	0.2	11
280	<title>Dependent coding in quantized matching pursuit</title> ., 1997, 3024, 2.		5
281	Adaptive scalar quantization without side information. IEEE Transactions on Image Processing, 1997, 6, 665-676.	6.0	52
282	Low-complexity video coding for receiver-driven layered multicast. IEEE Journal on Selected Areas in Communications, 1997, 15, 983-1001.	9.7	425
283	Gröbner Bases and Multidimensional FIR Multirate Systems. Multidimensional Systems and Signal Processing, 1997, 8, 11-30.	1.7	35
284	Gröbner Bases and Multidimensional FIR Multirate Systems. , 1997, , 11-30.		1
285	Wavelets, subband coding, and best bases. Proceedings of the IEEE, 1996, 84, 541-560.	16.4	105
286	<title>Measurement of the strain field in a micrometer-sized region at a notch tip</title> ., 1996, 2782, 160.		0
287	Adaptive transforms for image coding using spatially varying wavelet packets. IEEE Transactions on Image Processing, 1996, 5, 1197-1204.	6.0	23
288	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

#	Article	IF	Citations
289	Image compression using binary space partitioning trees. IEEE Transactions on Image Processing, 1996, 5, 1610-1624.	6.0	57
290	Vector quantization of image subbands: a survey. IEEE Transactions on Image Processing, 1996, 5, 202-225.	6.0	149
291	The Interaction Of Source And Channel Coding In Wireless And Packet Video. , 1996, , 467-474.		0
292	Efficient representations with quantized matching pursuit. Lecture Notes in Control and Information Sciences, 1996, , 305-311.	0.6	1
293	<title>Projection methods in motion estimation and compensation</title> ., 1995, , .		3
294	Rate constraints for video transmission over atm networks based on joint source/network criteria. Annales Des Telecommunications/Annals of Telecommunications, 1995, 50, 603-616.	1.6	5
295	Discrete-time wavelet extrema representation: design and consistent reconstruction. IEEE Transactions on Signal Processing, 1995, 43, 681-693.	3.2	70
296	Nonseparable two- and three-dimensional wavelets. IEEE Transactions on Signal Processing, 1995, 43, 1269-1273.	3.2	91
297	Simple algorithms for BCH decoding. IEEE Transactions on Communications, 1995, 43, 2324-2333.	4.9	23
298	Optimal trellis-based buffered compression and fast approximations. IEEE Transactions on Image Processing, 1994, 3, 26-40.	6.0	183
299	Reduction of the MSE in R-times oversampled A/D conversion $O(1/R)$ to $O(1/R/\sup 2)$. IEEE Transactions on Signal Processing, 1994, 42, 200-203.	3.2	65
300	Basefield transforms with the convolution property. Proceedings of the IEEE, 1994, 82, 400-412.	16.4	11
301	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
302	Orthogonal time-varying filter banks and wavelet packets. IEEE Transactions on Signal Processing, 1994, 42, 2650-2663.	3.2	96
303	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
304	Rate-distortion optimal fast thresholding with complete JPEG/MPEG decoder compatibility. IEEE Transactions on Image Processing, 1994, 3, 700-704.	6.0	129
305	<title>Modeling and optimization of a multiresolution remote image retrieval system</title> ., 1994, 2186, 185.		4
306	<title>Very low bit-rate video coding using matching pursuits</title> ., 1994, , .		15

#	Article	IF	Citations
307	Computing m DFTs over GF(q) with one DFT over GF(q/sup m/). IEEE Transactions on Information Theory, 1993, 39, 271-274.	1.5	8
308	Hartley transforms over finite fields. IEEE Transactions on Information Theory, 1993, 39, 1628-1638.	1.5	17
309	Best wavelet packet bases in a rate-distortion sense. IEEE Transactions on Image Processing, 1993, 2, 160-175.	6.0	597
310	Iterative Toeplitz solvers with local quadratic convergence. Computing (Vienna/New York), 1993, 49, 339-347.	3.2	3
311	FCO sampling of digital video using perfect reconstruction filter banks. IEEE Transactions on Image Processing, 1993, 2, 118-122.	6.0	23
312	Multiresolution broadcast for digital HDTV using joint source/channel coding. IEEE Journal on Selected Areas in Communications, 1993, 11, 6-23.	9.7	245
313	Perfect reconstruction filter banks with rational sampling factors. IEEE Transactions on Signal Processing, 1993, 41, 2047-2066.	3.2	143
314	Wavelets and recursive filter banks. IEEE Transactions on Signal Processing, 1993, 41, 2536-2556.	3.2	188
315	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
316	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
317	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
318	Wavelets and filter banks: theory and design. IEEE Transactions on Signal Processing, 1992, 40, 2207-2232.	3.2	1,380
319	Multiresolution coding techniques for digital television: A review. Multidimensional Systems and Signal Processing, 1992, 3, 161-187.	1.7	33
320	Multiresolution Coding Techniques for Digital Television: A Review., 1992,, 53-79.		2
321	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
322	<title>Fast piecewise-constant approximation of images</title> ., 1991,,.		2
323	Binary space partitioning tree representation of images. Journal of Visual Communication and Image Representation, 1991, 2, 201-221.	1.7	16
324	Wavelets and signal processing. IEEE Signal Processing Magazine, 1991, 8, 14-38.	4.6	2,173

#	Article	IF	Citations
325	The commutativity of up/downsampling in two dimensions. IEEE Transactions on Information Theory, 1991, 37, 695-698.	1.5	26
326	Structure and arithmetic complexity of products and inverses of Toeplitz matrices. Linear Algebra and Its Applications, 1991, 145, 159-175.	0.4	2
327	Multirate Filter Banks for Subband Coding. , 1991, , 43-100.		12
328	<title>Image representation using binary space partitioning trees</title> ., 1990, 1360, 639.		3
329	Theory of two-dimensional multirate filter banks. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1990, 38, 925-937.	2.0	121
330	Perfect reconstruction filter banks for HDTV representation and coding. Signal Processing: Image Communication, 1990, 2, 349-363.	1.8	63
331	Fast fourier transforms: A tutorial review and a state of the art. Signal Processing, 1990, 19, 259-299.	2.1	754
332	Invertibility of linear periodically time-varying filters. IEEE Transactions on Circuits and Systems, 1989, 36, 148-150.	0.9	8
333	Extension of finite length signals for sub-band coding. Signal Processing, 1989, 17, 161-168.	2.1	113
334	Packet video and its integration into the network architecture. IEEE Journal on Selected Areas in Communications, 1989, 7, 739-751.	9.7	138
335	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
336	Perfect reconstruction FIR filter banks: some properties and factorizations. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1989, 37, 1057-1071.	2.0	315
337	Non-Separable Two-Dimensional Perfect Reconstruction Filter Banks., 1988, 1001, 187.		4
338	Running FIR and IIR filtering using multirate filter banks. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1988, 36, 730-738.	2.0	69
339	Subband Coding Of Video For Packet Networks. Optical Engineering, 1988, 27, .	0.5	40
340	Sub-Band Coding Of Video Signals For Packet-Switched Networks. , 1987, 0845, 446.		41
341	A theory of multirate filter banks. IEEE Transactions on Acoustics, Speech, and Signal Processing, 1987, 35, 356-372.	2.0	364
342	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

#	Article	IF	CITATIONS
343	Fundamental relations between the LMS algorithm and the DFT. IEEE Transactions on Circuits and Systems, 1987, 34, 814-820.	0.9	72
344	A Discrete Fourier-Cosine Transform Chip. IEEE Journal on Selected Areas in Communications, 1986, 4, 49-61.	9.7	102
345	Moval: A framework for turning digital signal processing algorithms into custom chips. Signal Processing, 1986, 11, 119-132.	2.1	2
346	Multidimensional sub-band coding: Some theory and algorithms. Signal Processing, 1986, 11, 191.	2.1	0
347	Filter banks allowing perfect reconstruction. Signal Processing, 1986, 10, 219-244.	2.1	274
348	Algorithmes de transformations de Fourier et en cosinus mono et bidimensionnels. Annales Des Telecommunications/Annals of Telecommunications, 1985, 40, 466-476.	1.6	4
349	Multi-dimensional sub-band coding: Some theory and algorithms. Signal Processing, 1984, 6, 97-112.	2.1	436
350	Simple FFT and DCT algorithms with reduced number of operations. Signal Processing, 1984, 6, 267-278.	2.1	305
351	Tree structures for orthogonal transforms and application to the Hadamard transform. Signal Processing, 1983, 5, 473-484.	2.1	20
352	A multiresolution approach for all-digital HDTV. , 0, , .		6
353	Wavelets and filter banks: relationships and new results. , 0, , .		76
354	Source coding and transmission of signals over time-varying channels with side information. , 0, , .		4
355	Time-frequency signal models for music analysis, transformation, and synthesis. , 0, , .		14
356	Overcomplete expansions and robustness., 0,,.		16
357	Limited retransmission of real-time layered multimedia. , 0, , .		20
358	Multiple description transform coding: robustness to erasures using tight frame expansions. , 0, , .		58
359	A framework for interactive courses and virtual laboratories. , 0, , .		2
360	To code or not to code., 0,,.		40

#	Article	IF	CITATIONS
361	Improved quadtree algorithm based on joint coding for piecewise smooth image compression. , 0, , .		10
362	Video multicast in (large) local area networks. , 0, , .		8
363	Rate-distortion optimized tree based coding algorithms. , 0, , .		O
364	The distributed, partial, and conditional Karhunen-Loeve transforms. , 0, , .		17
365	On network correlated data gathering. , 0, , .		214
366	On the interaction of data representation and routing in sensor networks. , 0, , .		5
367	Plenacoustic Function on the Circle with Application to HRTF Interpolation. , 0, , .		15
368	Exact Sampling Results for Signals with Finite Rate of Innovation using Strang-Fix Conditions and Local Kernels. , 0 , , .		16
369	On the optimal density for real-time data gathering of spatio-temporal processes in sensor networks. , 0, , .		35
370	Efficient routing with small buffers in dense networks. , 0, , .		6