

Martin Vetterli

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

337
papers

22,186
citations

70
h-index

145
g-index

372
ext. papers

27,567
ext. citations

5
avg, IF

7.1
L-index

#	Paper	IF	Citations
337	The contourlet transform: an efficient directional multiresolution image representation. <i>IEEE Transactions on Image Processing</i> , 2005 , 14, 2091-106	8.7	2297
336	. <i>IEEE Signal Processing Magazine</i> , 1991 , 8, 14-38	9.4	1473
335	Adaptive wavelet thresholding for image denoising and compression. <i>IEEE Transactions on Image Processing</i> , 2000 , 9, 1532-46	8.7	1470
334	. <i>IEEE Transactions on Signal Processing</i> , 1992 , 40, 2207-2232	4.8	1006
333	Wavelet-based texture retrieval using generalized Gaussian density and Kullback-Leibler distance. <i>IEEE Transactions on Image Processing</i> , 2002 , 11, 146-58	8.7	711
332	Sampling signals with finite rate of innovation. <i>IEEE Transactions on Signal Processing</i> , 2002 , 50, 1417-1428	4.8	616
331	Fast fourier transforms: A tutorial review and a state of the art. <i>Signal Processing</i> , 1990 , 19, 259-299	4.4	550
330	Best wavelet packet bases in a rate-distortion sense. <i>IEEE Transactions on Image Processing</i> , 1993 , 2, 1608-15	8.7	417
329	The finite ridgelet transform for image representation. <i>IEEE Transactions on Image Processing</i> , 2003 , 12, 16-28	8.7	416
328	Multi-dimensional sub-band coding: Some theory and algorithms. <i>Signal Processing</i> , 1984 , 6, 97-112	4.4	339
327	Low-complexity video coding for receiver-driven layered multicast. <i>IEEE Journal on Selected Areas in Communications</i> , 1997 , 15, 983-1001	14.2	309
326	. <i>IEEE Transactions on Signal Processing</i> , 1992 , 40, 1862-1875	4.8	297
325	To code, or not to code: lossy source-channel communication revisited. <i>IEEE Transactions on Information Theory</i> , 2003 , 49, 1147-1158	2.8	281
324	. <i>IEEE Transactions on Information Theory</i> , 1992 , 38, 533-555	2.8	281
323	A theory of multirate filter banks. <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , 1987 , 35, 356-372		275
322	Bit allocation for dependent quantization with applications to multiresolution and MPEG video coders. <i>IEEE Transactions on Image Processing</i> , 1994 , 3, 533-45	8.7	252
321	Sparse Sampling of Signal Innovations. <i>IEEE Signal Processing Magazine</i> , 2008 , 25, 31-40	9.4	246

320	. <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , 1989 , 37, 1057-1071		239
319	Sampling Moments and Reconstructing Signals of Finite Rate of Innovation: Shannon Meets StrangBix. <i>IEEE Transactions on Signal Processing</i> , 2007 , 55, 1741-1757	4.8	238
318	Simple FFT and DCT algorithms with reduced number of operations. <i>Signal Processing</i> , 1984 , 6, 267-278	4.4	226
317	. <i>IEEE Transactions on Information Theory</i> , 1998 , 44, 2435-2476	2.8	218
316	Locating the source of diffusion in large-scale networks. <i>Physical Review Letters</i> , 2012 , 109, 068702	7.4	217
315	Filter banks allowing perfect reconstruction. <i>Signal Processing</i> , 1986 , 10, 219-244	4.4	213
314	Oversampled filter banks. <i>IEEE Transactions on Signal Processing</i> , 1998 , 46, 1245-1255	4.8	206
313	A Frequency Domain Approach to Registration of Aliased Images with Application to Super-resolution. <i>Eurasip Journal on Advances in Signal Processing</i> , 2006 , 2006, 1	1.9	194
312	Directionlets: anisotropic multidirectional representation with separable filtering. <i>IEEE Transactions on Image Processing</i> , 2006 , 15, 1916-33	8.7	193
311	. <i>IEEE Signal Processing Magazine</i> , 2015 , 32, 12-30	9.4	191
310	On the capacity of large Gaussian relay networks. <i>IEEE Transactions on Information Theory</i> , 2005 , 51, 765-789	7.8	182
309	. <i>IEEE Journal on Selected Areas in Communications</i> , 1993 , 11, 6-23	14.2	176
308	Reproducible research in signal processing. <i>IEEE Signal Processing Magazine</i> , 2009 , 26, 37-47	9.4	172
307	SensorScope. <i>ACM Transactions on Sensor Networks</i> , 2010 , 6, 1-32	2.9	170
306	Framing pyramids. <i>IEEE Transactions on Signal Processing</i> , 2003 , 51, 2329-2342	4.8	165
305	Foundations of Signal Processing 2014 ,		162
304	2001 , 39, 118-124		157
303	. <i>IEEE Transactions on Multimedia</i> , 2002 , 4, 517-527	6.6	148

302	On network correlated data gathering		146
301	Near-Optimal Sensor Placement for Linear Inverse Problems. <i>IEEE Transactions on Signal Processing</i> , 2014 , 62, 1135-1146	4.8	143
300	SensorScope: Out-of-the-Box Environmental Monitoring 2008 ,		142
299	. <i>IEEE Transactions on Signal Processing</i> , 1993 , 41, 2536-2556	4.8	135
298	Sampling and reconstruction of signals with finite rate of innovation in the presence of noise. <i>IEEE Transactions on Signal Processing</i> , 2005 , 53, 2788-2805	4.8	134
297	Optimal trellis-based buffered compression and fast approximations. <i>IEEE Transactions on Image Processing</i> , 1994 , 3, 26-40	8.7	134
296	Source-Channel Communication in Sensor Networks. <i>Lecture Notes in Computer Science</i> , 2003 , 162-177	0.9	132
295	Acoustic echoes reveal room shape. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 12186-91	11.5	131
294	Balanced multiwavelets theory and design. <i>IEEE Transactions on Signal Processing</i> , 1998 , 46, 1119-1125	4.8	124
293	Network correlated data gathering with explicit communication: NP-completeness and algorithms. <i>IEEE/ACM Transactions on Networking</i> , 2006 , 14, 41-54	3.8	118
292	Weighted Gossip: Distributed Averaging using non-doubly stochastic matrices 2010 ,		114
291	The hitchhiker's guide to successful wireless sensor network deployments 2008 ,		114
290	. <i>IEEE Transactions on Communications</i> , 2012 , 60, 3705-3716	6.9	112
289	. <i>IEEE Transactions on Circuits and Systems for Video Technology</i> , 1991 , 1, 86-99	6.4	108
288	Wavelets, approximation, and compression. <i>IEEE Signal Processing Magazine</i> , 2001 , 18, 59-73	9.4	106
287	Perfect reconstruction filter banks with rational sampling factors. <i>IEEE Transactions on Signal Processing</i> , 1993 , 41, 2047-2066	4.8	106
286	Networked Slepian-Wolf: theory, algorithms, and scaling laws. <i>IEEE Transactions on Information Theory</i> , 2005 , 51, 4057-4073	2.8	103
285	. <i>IEEE Transactions on Information Theory</i> , 2006 , 52, 5177-5196	2.8	101

284	Vector quantization of image subbands: a survey. <i>IEEE Transactions on Image Processing</i> , 1996 , 5, 202-25	8.7	92
283	. <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , 1990 , 38, 925-937		92
282	Improved Fourier and Hartley transform algorithms: Application to cyclic convolution of real data. <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , 1987 , 35, 818-824		92
281	Rate-distortion optimized tree-structured compression algorithms for piecewise polynomial images. <i>IEEE Transactions on Image Processing</i> , 2005 , 14, 343-59	8.7	91
280	Power, spatio-temporal bandwidth, and distortion in large sensor networks. <i>IEEE Journal on Selected Areas in Communications</i> , 2005 , 23, 745-754	14.2	90
279	. <i>IEEE Journal on Selected Areas in Communications</i> , 1989 , 7, 739-751	14.2	87
278	Rate-distortion optimal fast thresholding with complete JPEG/MPEG decoder compatibility. <i>IEEE Transactions on Image Processing</i> , 1994 , 3, 700-4	8.7	86
277	Age matters 2003 ,		85
276	Extension of finite length signals for sub-band coding. <i>Signal Processing</i> , 1989 , 17, 161-168	4.4	84
275	The Plenacoustic Function and Its Sampling. <i>IEEE Transactions on Signal Processing</i> , 2006 , 54, 3790-3804	4.8	80
274	Wavelets, subband coding, and best bases. <i>Proceedings of the IEEE</i> , 1996 , 84, 541-560	14.3	78
273	. <i>IEEE/ACM Transactions on Networking</i> , 2011 , 19, 333-346	3.8	77
272	Wavelet footprints: theory, algorithms, and applications. <i>IEEE Transactions on Signal Processing</i> , 2003 , 51, 1306-1323	4.8	74
271	Packet combining in sensor networks 2005 ,		73
270	. <i>IEEE Transactions on Signal Processing</i> , 1999 , 47, 1890-1902	4.8	72
269	. <i>IEEE Transactions on Signal Processing</i> , 1994 , 42, 519-531	4.8	72
268	Compressive Sampling [From the Guest Editors]. <i>IEEE Signal Processing Magazine</i> , 2008 , 25, 12-13	9.4	71
267	. <i>IEEE Transactions on Signal Processing</i> , 1994 , 42, 2650-2663	4.8	65

266	Group Testing With Probabilistic Tests: Theory, Design and Application. <i>IEEE Transactions on Information Theory</i> , 2011 , 57, 7057-7067	2.8	63
265	Locating mobile nodes with EASE: learning efficient routes from encounter histories alone. <i>IEEE/ACM Transactions on Networking</i> , 2006 , 14, 457-469	3.8	63
264	. <i>IEEE Transactions on Signal Processing</i> , 1995 , 43, 1269-1273	4.8	63
263	A Discrete Fourier-Cosine Transform Chip. <i>IEEE Journal on Selected Areas in Communications</i> , 1986 , 4, 49-61	14.2	63
262	. <i>IEEE Transactions on Information Forensics and Security</i> , 2016 , 11, 358-372	8	60
261			58
260	Stream temperature response to three riparian vegetation scenarios by use of a distributed temperature validated model. <i>Environmental Science & Technology</i> , 2010 , 44, 2072-8	10.3	57
259	High-order balanced multiwavelets: theory, factorization, and design. <i>IEEE Transactions on Signal Processing</i> , 2001 , 49, 1918-1930	4.8	55
258	. <i>IEEE Transactions on Signal Processing</i> , 1995 , 43, 681-693	4.8	55
257	. <i>IEEE/ACM Transactions on Networking</i> , 1993 , 1, 71-80	3.8	55
256	. <i>IEEE Transactions on Signal Processing</i> , 1994 , 42, 200-203	4.8	53
255	Sensing reality and communicating bits: a dangerous liaison. <i>IEEE Signal Processing Magazine</i> , 2006 , 23, 70-83	9.4	51
254	Tight Weyl-Heisenberg frames in $l^2(\mathbb{Z})$. <i>IEEE Transactions on Signal Processing</i> , 1998 , 46, 1256-1259	4.8	51
253	Bits from photons: oversampled image acquisition using binary Poisson statistics. <i>IEEE Transactions on Image Processing</i> , 2012 , 21, 1421-36	8.7	50
252	Fundamental relations between the LMS algorithm and the DFT. <i>IEEE Transactions on Circuits and Systems</i> , 1987 , 34, 814-820		50
251	. <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , 1988 , 36, 730-738		49
250	Super-Resolution From Unregistered and Totally Aliased Signals Using Subspace Methods. <i>IEEE Transactions on Signal Processing</i> , 2007 , 55, 3687-3703	4.8	48
249	. <i>IEEE Transactions on Signal Processing</i> , 2000 , 48, 3462-3471	4.8	47

248	Wireless Sensor Networks for Environmental Monitoring: The SensorScope Experience 2008 ,		46
247	Locally adaptive wavelet-based image interpolation. <i>IEEE Transactions on Image Processing</i> , 2006 , 15, 1471-85	8.7	46
246	On the bandwidth of the plenoptic function. <i>IEEE Transactions on Image Processing</i> , 2012 , 21, 708-17	8.7	45
245	. <i>IEEE Transactions on Signal Processing</i> , 2004 , 52, 175-189	4.8	45
244	Perfect reconstruction filter banks for HDTV representation and coding. <i>Signal Processing: Image Communication</i> , 1990 , 2, 349-363	2.8	45
243	Estimation of urban sensible heat flux using a dense wireless network of observations. <i>Environmental Fluid Mechanics</i> , 2009 , 9, 635-653	2.2	43
242	Order-Optimal Consensus Through Randomized Path Averaging. <i>IEEE Transactions on Information Theory</i> , 2010 , 56, 5150-5167	2.8	43
241	Towards Generalized FRI Sampling With an Application to Source Resolution in Radioastronomy. <i>IEEE Transactions on Signal Processing</i> , 2017 , 65, 821-835	4.8	42
240	Demosaicking by alternating projections: theory and fast one-step implementation. <i>IEEE Transactions on Image Processing</i> , 2010 , 19, 2085-98	8.7	42
239	Feeling in control of your footsteps: Conscious gait monitoring and the auditory consequences of footsteps. <i>Cognitive Neuroscience</i> , 2010 , 1, 184-92	1.7	41
238	Image compression using binary space partitioning trees. <i>IEEE Transactions on Image Processing</i> , 1996 , 5, 1610-24	8.7	41
237	Shapes From Pixels. <i>IEEE Transactions on Image Processing</i> , 2016 , 25, 1193-206	8.7	39
236	Multiple description transform coding: robustness to erasures using tight frame expansions		38
235	. <i>Journal of Communications and Networks</i> , 2003 , 5, 319-327	4.1	37
234	Hydrologic response of an alpine watershed: Application of a meteorological wireless sensor network to understand streamflow generation. <i>Water Resources Research</i> , 2011 , 47,	5.4	36
233	Adaptive scalar quantization without side information. <i>IEEE Transactions on Image Processing</i> , 1997 , 6, 665-76	8.7	36
232	Designing color filter arrays for the joint capture of visible and near-infrared images 2009 ,		34
231	Interval consensus: From quantized gossip to voting 2009 ,		34

230	Outlier modeling in image matching. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2003 , 25, 301-315	13.3	34
229	Space-frequency quantization for image compression with directionlets. <i>IEEE Transactions on Image Processing</i> , 2007 , 16, 1761-73	8.7	33
228	Signal Processing for Communications		33
227	Transform coding with backward adaptive updates. <i>IEEE Transactions on Information Theory</i> , 2000 , 46, 1623-1633	2.8	32
226	Unlabeled Sensing With Random Linear Measurements. <i>IEEE Transactions on Information Theory</i> , 2018 , 64, 3237-3253	2.8	31
225	Can one hear the shape of a room: The 2-D polygonal case 2011 ,		30
224	Acoustic Tomography for Scalar and Vector Fields: Theory and Application to Temperature and Wind Estimation. <i>Journal of Atmospheric and Oceanic Technology</i> , 2009 , 26, 1475-1492	2	29
223	On simple oversampled A/D conversion in $L^2(\mathbb{R})$. <i>IEEE Transactions on Information Theory</i> , 2001 , 47, 146-154	2.8	29
222	. <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , 1989 , 37, 57-64		29
221	Subband Coding Of Video For Packet Networks. <i>Optical Engineering</i> , 1988 , 27,	1.1	28
220	Rate Distortion Behavior of Sparse Sources. <i>IEEE Transactions on Information Theory</i> , 2012 , 58, 4969-4992.8		27
219	Lattice networks: capacity limits, optimal routing, and queueing behavior. <i>IEEE/ACM Transactions on Networking</i> , 2006 , 14, 492-505	3.8	27
218	. <i>IEEE Transactions on Signal Processing</i> , 2013 , 61, 2328-2340	4.8	26
217	Robust ultrasound travel-time tomography using the bent ray model 2010 ,		26
216	On the optimal density for real-time data gathering of spatio-temporal processes in sensor networks		26
215	. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2015 , 9, 825-836	7.5	25
214	. <i>IEEE Transactions on Signal Processing</i> , 2010 , 58, 1095-1109	4.8	25
213	EigenMaps 2012 ,		25

212	Grüner Bases and Multidimensional FIR Multirate Systems. <i>Multidimensional Systems and Signal Processing</i> , 1997 , 8, 11-30	1.8	25
211	Soft ARQ for Layered Streaming Media. <i>Journal of Signal Processing Systems</i> , 2001 , 27, 81-97		25
210	Lower bound on the mean-squared error in oversampled quantization of periodic signals using vector quantization analysis. <i>IEEE Transactions on Information Theory</i> , 1996 , 42, 469-479	2.8	25
209	Sub-Band Coding Of Video Signals For Packet-Switched Networks 1987 , 0845, 446		25
208	The Distributed Multiple Voting Problem. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2011 , 5, 791-804	7.5	24
207	Spatial super-resolution of a diffusion field by temporal oversampling in sensor networks 2009 ,		24
206	Rate-Constrained Collaborative Noise Reduction for Wireless Hearing Aids. <i>IEEE Transactions on Signal Processing</i> , 2009 , 57, 645-657	4.8	24
205	Dynamic measurement of room impulse responses using a moving microphone. <i>Journal of the Acoustical Society of America</i> , 2007 , 122, 1636	2.2	24
204	Optimal filter banks for multiple description coding: analysis and synthesis. <i>IEEE Transactions on Information Theory</i> , 2002 , 48, 2036-2052	2.8	24
203	Approximation and compression of piecewise smooth functions. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1999 , 357, 2573-2591	3	24
202	Sparse spectral factorization: Unicity and reconstruction algorithms 2011 ,		23
201	Sampling and reconstructing diffusion fields with localized sources 2011 ,		22
200	Error-rate characteristics of oversampled analog-to-digital conversion. <i>IEEE Transactions on Information Theory</i> , 1998 , 44, 1961-1964	2.8	22
199	Sampling and exact reconstruction of bandlimited signals with additive shot noise. <i>IEEE Transactions on Information Theory</i> , 2006 , 52, 2230-2233	2.8	22
198	Dimensionality Reduction for Distributed Estimation in the Infinite Dimensional Regime. <i>IEEE Transactions on Information Theory</i> , 2008 , 54, 1655-1669	2.8	21
197	. <i>IEEE Transactions on Information Theory</i> , 1991 , 37, 695-698	2.8	21
196	EchoSLAM: Simultaneous localization and mapping with acoustic echoes 2016 ,		21
195	. <i>IEEE Transactions on Signal Processing</i> , 2017 , 65, 2629-2644	4.8	20

194	Sampling based on timing: Time encoding machines on shift-invariant subspaces. <i>Applied and Computational Harmonic Analysis</i> , 2014 , 36, 63-78	3.1	20
193	A robust method for inverse transport modeling of atmospheric emissions using blind outlier detection. <i>Geoscientific Model Development</i> , 2014 , 7, 2303-2311	6.3	20
192	Compressive Sampling of Multiple Sparse Signals Having Common Support Using Finite Rate of Innovation Principles. <i>IEEE Signal Processing Letters</i> , 2011 , 18, 331-334	3.2	20
191	R/D optimal linear prediction. <i>IEEE Transactions on Speech and Audio Processing</i> , 2000 , 8, 646-655		20
190	Multiresolution coding techniques for digital television: A review. <i>Multidimensional Systems and Signal Processing</i> , 1992 , 3, 161-187	1.8	20
189	Room helps: Acoustic localization with finite elements 2012 ,		18
188	Power-bandwidth-distortion scaling laws for sensor networks 2004 ,		18
187	Sampling High-Dimensional Bandlimited Fields on Low-Dimensional Manifolds. <i>IEEE Transactions on Information Theory</i> , 2013 , 59, 2103-2127	2.8	17
186	Unlabeled sensing: Solving a linear system with unordered measurements 2015 ,		17
185	Single-channel indoor microphone localization 2014 ,		17
184	The gigavision camera 2009 ,		17
183	Adaptive transforms for image coding using spatially varying wavelet packets. <i>IEEE Transactions on Image Processing</i> , 1996 , 5, 1197-204	8.7	17
182	. <i>IEEE Transactions on Communications</i> , 1995 , 43, 2324-2333	6.9	16
181	Binary space partitioning tree representation of images. <i>Journal of Visual Communication and Image Representation</i> , 1991 , 2, 201-221	2.7	16
180	Integrated Browsing and Searching of Large Image Collections. <i>Lecture Notes in Computer Science</i> , 2000 , 279-289	0.9	16
179	On minimal trajectories for mobile sampling of bandlimited fields. <i>Applied and Computational Harmonic Analysis</i> , 2015 , 39, 487-510	3.1	15
178	Howis the weather: Automatic inference from images 2012 ,		15
177	Tree structures for orthogonal transforms and application to the Hadamard transform. <i>Signal Processing</i> , 1983 , 5, 473-484	4.4	15

176	DASS: Distributed Adaptive Sparse Sensing. <i>IEEE Transactions on Wireless Communications</i> , 2015 , 14, 2571-2583	9.6	14
175	Sequences with minimal time-frequency uncertainty. <i>Applied and Computational Harmonic Analysis</i> , 2015 , 38, 452-468	3.1	14
174	Superresolution images reconstructed from aliased images 2003 ,		14
173	Overcomplete expansions and robustness		14
172	. <i>IEEE Transactions on Signal Processing</i> , 2020 , 68, 452-465	4.8	14
171	Space-Time-Frequency Processing of Acoustic Wave Fields: Theory, Algorithms, and Applications. <i>IEEE Transactions on Signal Processing</i> , 2010 , 58, 4608-4620	4.8	13
170	Potentials of Opportunistic Routing in Energy-Constrained Wireless Sensor Networks. <i>Lecture Notes in Computer Science</i> , 2009 , 118-133	0.9	13
169	Limited retransmission of real-time layered multimedia		13
168	Super-resolution from highly undersampled images 2005 ,		13
167	FCO sampling of digital video using perfect reconstruction filter banks. <i>IEEE Transactions on Image Processing</i> , 1993 , 2, 118-22	8.7	13
166	. <i>IEEE Transactions on Signal Processing</i> , 2016 , 64, 5807-5818	4.8	13
165	FRIDA: FRI-based DOA estimation for arbitrary array layouts 2017 ,		12
164	Sound speed estimation using wave-based ultrasound tomography: theory and GPU implementation 2010 ,		12
163			12
162	. <i>IEEE Signal Processing Magazine</i> , 2016 , 33, 62-83	9.4	12
161	A Fast Hadamard Transform for Signals With Sublinear Sparsity in the Transform Domain. <i>IEEE Transactions on Information Theory</i> , 2015 , 61, 2115-2132	2.8	11
160	Sampling and reconstructing spatial fields using mobile sensors 2012 ,		11
159	2009 ,		11

158	Distributed spatio-temporal sampling of diffusion fields from sparse instantaneous sources 2009 ,		11
157	Plenacoustic function on the circle with application to HRTF interpolation		11
156	Unlabeled sensing: Reconstruction algorithm and theoretical guarantees 2017 ,		10
155	On Sampling and Coding for Distributed Acoustic Sensing. <i>IEEE Transactions on Information Theory</i> , 2012 , 58, 3198-3214	2.8	10
154	Ultrasound tomography with learned dictionaries 2010 ,		10
153	Share risk and energy: Sampling and communication strategies for multi-camera wireless monitoring networks 2012 ,		10
152	Optimal color filter array design: quantitative conditions and an efficient search procedure 2009 ,		10
151	Distributed compressed sensing: Sparsity models and reconstruction algorithms using annihilating filter. <i>Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing</i> , 2008 ,	1.6	10
150	Computational analysis of mesh simplification using global error. <i>Computational Geometry: Theory and Applications</i> , 2003 , 25, 171-196	0.4	10
149	Image denoising using orthonormal finite ridgelet transform 2000 ,		10
148	To code or not to code		10
147	Very low bit-rate video coding using matching pursuits 1994 ,		10
146	. <i>IEEE Transactions on Information Theory</i> , 1993 , 39, 1628-1638	2.8	10
145	2016 ,		10
144	Calibration Using Matrix Completion With Application to Ultrasound Tomography. <i>IEEE Transactions on Signal Processing</i> , 2013 , 61, 4923-4933	4.8	9
143	The Fukushima inverse problem 2013 ,		9
142	Rate-Constrained Beamforming for Collaborating Hearing Aids 2006 ,		9
141	Rate-distortion problem for physics based distributed sensing 2004 ,		9

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139	. <i>IEEE Transactions on Signal Processing</i> , 2020 , 68, 1105-1119		4.8	8
138	Fast and Robust Parametric Estimation of Jointly Sparse Channels. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2012 , 2, 402-412		5.2	8
137	An optimal algorithm for reconstructing images from binary measurements 2010 ,			8
136	Annihilating filter-based decoding in the compressed sensing framework 2007 ,			8
135	. <i>Proceedings of the IEEE</i> , 1994 , 82, 400-412		14.3	8
134	LEAP: Looking beyond pixels with continuous-space Estimation of Point sources. <i>Astronomy and Astrophysics</i> , 2017 , 608, A136		5.1	8
133	Near-Optimal Thermal Monitoring Framework for Many-Core Systems-on-Chip. <i>IEEE Transactions on Computers</i> , 2015 , 64, 3197-3209		2.5	7
132	Compressed sensing of streaming data 2013 ,			7
131	Beyond Moore-Penrose: Sparse pseudoinverse 2013 ,			7
130	Sensor networks for diffusion fields: Detection of sources in space and time 2011 ,			7
129	Sampling and reconstruction of time-varying atmospheric emissions 2012 ,			7
128	Approximation power of directionlets 2005 ,			7
127	Multi-channel Time Encoding for Improved Reconstruction of Bandlimited Signals 2019 ,			6
126	. <i>IEEE Transactions on Signal Processing</i> , 2019 , 67, 4839-4854		4.8	6
125	Robust array calibration using time delays with application to ultrasound tomography 2011 ,			6
124	Image reconstruction in the gigavision camera 2009 ,			6
123	Estimating Sparse MIMO channels having Common Support 2011 ,			6

122	Population size estimation using a few individuals as agents 2011 ,		6
121	From Lagrange to Shannon... and back: another look at sampling [DSP Education]. <i>IEEE Signal Processing Magazine</i> , 2009 , 26, 138-144	9.4	6
120	Double resolution from a set of aliased images 2004 ,		6
119	. <i>IEEE Transactions on Circuits and Systems</i> , 1989 , 36, 148-150		6
118	Invariant Image Retrieval Using Wavelet Maxima Moment. <i>Lecture Notes in Computer Science</i> , 1999 , 451-459	6.9	6
117	Multirate Filter Banks for Subband Coding 1991 , 43-100		6
116	Digital acoustics: processing wave fields in space and time using DSP tools. <i>APSIPA Transactions on Signal and Information Processing</i> , 2014 , 3,	4.4	5
115	Sampling and reconstructing diffusion fields in presence of aliasing 2013 ,		5
114	Support recovery in compressed sensing: An estimation theoretic approach 2009 ,		5
113	On pixel detection threshold in the gigavision camera 2010 ,		5
112	Experiences with Reproducible Research in Various Facets of Signal Processing Research 2007 ,		5
111	Space-Frequency Quantization using Directionlets 2007 ,		5
110	Mesh Optimization Using Global Error with Application to Geometry Simplification. <i>Graphical Models</i> , 2002 , 64, 230-257	0.9	5
109	Improved quadtree algorithm based on joint coding for piecewise smooth image compression		5
108	CPGD: Cadzow Plug-and-Play Gradient Descent for Generalised FRI. <i>IEEE Transactions on Signal Processing</i> , 2021 , 69, 42-57	4.8	5
107	Sampling at Unknown Locations: Uniqueness and Reconstruction Under Constraints. <i>IEEE Transactions on Signal Processing</i> , 2018 , 66, 5862-5874	4.8	5
106	. <i>IEEE Transactions on Signal Processing</i> , 2018 , 66, 1410-1424	4.8	4
105	Robust diffusion-based unsupervised object labelling in distributed camera networks 2015 ,		4

104	. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2011 , 5, 645-648	7.5	4
103	Baffled circular loudspeaker array with broadband high directivity 2010 ,		4
102	On sampling a high-dimensional bandlimited field on a union of shifted lattices 2012 ,		4
101	Dependent coding in quantized matching pursuit 1997 , 3024, 2		4
100	Wave Field coding in the spacetime frequency domain. <i>Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing</i> , 2008 ,	1.6	4
99	Low-Rate Reduced Complexity Image Compression using Directionlets 2006 ,		4
98	Efficient routing with small buffers in dense networks		4
97	On the bandlimitedness of the plenoptic function 2005 ,		4
96	Space-Time Routing in Ad Hoc Networks. <i>Lecture Notes in Computer Science</i> , 2003 , 1-11	0.9	4
95	. <i>IEEE Transactions on Information Theory</i> , 1993 , 39, 271-274	2.8	4
94	Acoustic DoA Estimation by One Unsophisticated Sensor. <i>Lecture Notes in Computer Science</i> , 2017 , 89-98	0.9	4
93	Topology optimization for energy-efficient communications in consensus wireless networks 2014 ,		3
92	2013 ,		3
91	Raking echoes in the time domain 2015 ,		3
90	Opportunistic Sampling for Joint Population Size and Density Estimation. <i>IEEE Transactions on Mobile Computing</i> , 2015 , 14, 2530-2543	4.6	3
89	2013 ,		3
88	Near-field adaptive beamforming and source localization in the spacetime frequency domain 2010 ,		3
87	Use of learned dictionaries in tomographic reconstruction 2011 ,		3

86	Assessing the challenges of environmental signal processing through the sensorscope project. <i>Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing</i> , 2008 ,	1.6	3
85	Distributed Spatial Audio Coding in Wireless Hearing Aids 2007 ,		3
84	Tomographic Approach for Parametric Estimation of Local Diffusive Sources and Application to Heat Diffusion 2007 ,		3
83	Efficient image compression using directionlets 2007 ,		3
82	Registration of aliased images for super-resolution imaging 2006 , 6077, 13		3
81	Video multicast in (large) local area networks		3
80	Rotation-invariant texture retrieval using steerable wavelet-domain hidden Markov models 2000 ,		3
79	Transform coding: past, present, and future. <i>IEEE Signal Processing Magazine</i> , 2001 , 18, 6-6	9.4	3
78	Rate constraints for video transmission over atm networks based on joint source/network criteria. <i>Annales Des Telecommunications/Annals of Telecommunications</i> , 1995 , 50, 603-616	2	3
77	Source coding and transmission of signals over time-varying channels with side information		3
76			3
75	Non-Separable Two-Dimensional Perfect Reconstruction Filter Banks 1988 , 1001, 187		3
74	Algorithmes de transformations de Fourier et en cosinus mono et bidimensionnels. <i>Annales Des Telecommunications/Annals of Telecommunications</i> , 1985 , 40, 466-476	2	3
73	Networked Slepian-Wolf: Theory and Algorithms. <i>Lecture Notes in Computer Science</i> , 2004 , 44-59	0.9	3
72	Encoding and Decoding Mixed Bandlimited Signals Using Spiking Integrate-and-Fire Neurons 2020 ,		3
71	2018 ,		3
70	Handheld Reflectance Acquisition of Paintings. <i>IEEE Transactions on Computational Imaging</i> , 2017 , 3, 580-591	4.5	2
69	VITRAIL: Acquisition, Modeling, and Rendering of Stained Glass. <i>IEEE Transactions on Image Processing</i> , 2016 , 25, 4475-88	8.7	2

68	Efficient Multidimensional Diracs Estimation With Linear Sample Complexity. <i>IEEE Transactions on Signal Processing</i> , 2018 , 66, 4642-4656	4.8	2
67	2017 ,		2
66	Relax and unfold: Microphone localization with Euclidean distance matrices 2015 ,		2
65	On the accuracy of point localisation in a circular camera-array 2015 ,		2
64	Near-optimal source placement for linear physical fields 2014 ,		2
63	Detecting planar surface using a light-field camera with application to distinguishing real scenes from printed photos 2014 ,		2
62	Scale-invariant representation of light field images for object recognition and tracking 2014 ,		2
61	Distributed successive refinement of multiview images using broadcast advantage. <i>IEEE Transactions on Image Processing</i> , 2012 , 21, 4581-92	8.7	2
60	LCAV-31: a dataset for light field object recognition 2013 ,		2
59	2013 ,		2
58	Distributed successive approximation coding using broadcast advantage: The two-encoder case 2010 ,		2
57	Calibration in circular ultrasound tomography devices 2011 ,		2
56	Distributed sensing of signals linked by sparse filtering 2009 ,		2
55	Applications of short space-time fourier analysis in digital acoustics 2011 ,		2
54	Localization of diffusive sources using spatiotemporal measurements 2011 ,		2
53	Sensorcam 2012 ,		2
52	Multi-channel low-frequency room equalization using perceptually motivated constrained optimization 2012 ,		2
51	On the Information Rates of the Plenoptic Function. <i>IEEE Transactions on Information Theory</i> , 2010 , 56, 1306-1321	2.8	2

50	Set theoretic compression with an application to image coding. <i>IEEE Transactions on Image Processing</i> , 1998 , 7, 1051-6	8.7	2
49	Subspace-based methods for image registration and super-resolution 2008 ,		2
48	Groebner basis methods for multichannel sampling with unknown offsets. <i>Applied and Computational Harmonic Analysis</i> , 2008 , 25, 277-294	3.1	2
47	A Stochastic Model for Video and its Information Rates 2007 ,		2
46	Acoustic based rendering by interpolation of the plenacoustic function 2003 ,		2
45	Discrete directional wavelet bases and frames: analysis and applications 2003 , 5207, 583		2
44	Discrete directional wavelet bases for image compression 2003 ,		2
43	Shift-invariant Gibbs-free denoising algorithm based on wavelet transform footprints 2000 , 4119, 821		2
42	Discrete- and continuous-time local cosine bases with multiple overlapping. <i>IEEE Transactions on Signal Processing</i> , 1998 , 46, 3166-3180	4.8	2
41	Overcomplete Expansions and Robustness. <i>Wavelet Analysis and Its Applications</i> , 1998 , 301-338		2
40	R/D optimal data hiding 1999 ,		2
39	Modeling and optimization of a multiresolution remote image retrieval system 1994 , 2186, 185		2
38	Fast piecewise-constant approximation of images 1991 ,		2
37	Structure and arithmetic complexity of products and inverses of Toeplitz matrices. <i>Linear Algebra and Its Applications</i> , 1991 , 145, 159-175	0.9	2
36	Iterative Toeplitz solvers with local quadratic convergence. <i>Computing (Vienna/New York)</i> , 1993 , 49, 339-347		2
35	Accurate recovery of a specularity from a few samples of the reflectance function 2016 ,		2
34	Optimal sensor architecture selection for health management of complex systems 2016 ,		2
33	Multiresolution Coding Techniques for Digital Television: A Review 1992 , 53-79		2

32	Sampling at unknown locations, with an application in surface retrieval 2017 ,		1
31	On the Move: Localization with Kinetic Euclidean Distance Matrices 2019 ,		1
30	Privacy-preserving function computation by exploitation of friendships in social networks 2014 ,		1
29	Light field panorama by a plenoptic camera 2014 ,		1
28	Learning sparse systems at sub-Nyquist rates: A frequency-domain approach 2010 ,		1
27	Coding of spatio-temporal audio spectra using tree-structured directional filterbanks 2009 ,		1
26	On the Information Rate of the Plenoptic Function 2006 ,		1
25	Moval: A framework for turning digital signal processing algorithms into custom chips. <i>Signal Processing</i> , 1986 , 11, 119-132	4.4	1
24	Efficient representations with quantized matching pursuit. <i>Lecture Notes in Control and Information Sciences</i> , 1996 , 305-311	0.5	1
23	Bound and Conquer: Improving Triangulation by Enforcing Consistency. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2020 , 42, 2321-2326	13.3	1
22	Shape: Linear-time camera pose estimation with quadratic error-decay 2016 ,		1
21	Sparse Recovery of Strong Reflectors with an Application to Non-Destructive Evaluation 2018 ,		1
20	Grüner Bases and Multidimensional FIR Multirate Systems 1997 , 11-30		1
19	Through the Hourglass: A Faithful Audiovisual Reconstruction of the Old Montreux Casino. <i>Acoustics Australia</i> , 2015 , 43, 49-57	1.4	0
18	. <i>IEEE Transactions on Signal Processing</i> , 2020 , 68, 2480-2498	4.8	0
17	Learning neural connectivity from firing activity: efficient algorithms with provable guarantees on topology. <i>Journal of Computational Neuroscience</i> , 2018 , 44, 253-272	1.4	0
16	Sparse Image Representation by Directionlets. <i>Advances in Imaging and Electron Physics</i> , 2010 , 161, 147-209		0
15	Asynchrony Increases Efficiency: Time Encoding of Videos and Low-Rank Signals. <i>IEEE Transactions on Signal Processing</i> , 2022 , 70, 105-116	4.8	0

- 14 Coordinate Difference Matrices. *SIAM Journal on Matrix Analysis and Applications*, **2020**, 41, 332-363 1.5
- 13 Immigration: Swiss science set to stay international. *Nature*, **2014**, 507, 431 50.4
- 12 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 14.2
- 11 Distributed Compression in Microphone Arrays **2009**, 157-188
- 10 Compression of ECG as a Signal with Finite Rate of Innovation. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2005**, 2005, 7564-7
- 9 Correction to "Lattice Networks: Capacity Limits, Optimal Routing, and Queueing Behavior". *IEEE/ACM Transactions on Networking*, **2006**, 14, 1150-1150 3.8
- 8 UWB Channel Estimation and Synchronization **2005**, 11-42
- 7 Balancing order and some other discrete-time properties of multiwavelets **1999**, 3813, 110
- 6 Wavelets: approximation and compression--a review **1999**, 3723, 28
- 5 Multidimensional sub-band coding: Some theory and algorithms. *Signal Processing*, **1986**, 11, 191 4.4
- 4 Interpolative Multiresolution Coding of Advanced TV with Subchannels **2002**, 323-347
- 3 Sensor Networks **2006**, 243-288
- 2 The Interaction Of Source And Channel Coding In Wireless And Packet Video **1996**, 467-474
- 1 Assessing Digital Surface Models by Verifying Shadows **2009**, 147-161