

# Francesc Auli-Llinas

## List of Publications by Year in descending order

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89  
papers

605  
citations

623734

14  
h-index

752698

20  
g-index

89  
all docs

89  
docs citations

89  
times ranked

329  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dual Link Image Coding Based on CCSDS-123. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	0
2	Real-time 16K video coding on a GPU with complexity scalable BPC-PaCo. Signal Processing: Image Communication, 2021, 99, 116503.	3.2	0
3	GPU-Oriented Architecture for an End-to-End Image/Video Codec Based on JPEG2000. IEEE Access, 2020, 8, 68474-68487.	4.2	7
4	Complexity Scalable Bitplane Image Coding With Parallel Coefficient Processing. IEEE Signal Processing Letters, 2020, 27, 840-844.	3.6	2
5	GPU Architecture for Wavelet-Based Video Coding Acceleration. Advances in Parallel Computing, 2020, , .	0.3	1
6	Mosaic-Based Color-Transform Optimization for Lossy and Lossy-to-Lossless Compression of Pathology Whole-Slide Images. IEEE Transactions on Medical Imaging, 2019, 38, 21-32.	8.9	16
7	Dual Link Image Coding for Earth Observation Satellites. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 5083-5096.	6.3	4
8	GPU Implementation of Bitplane Coding with Parallel Coefficient Processing for High Performance Image Compression. IEEE Transactions on Parallel and Distributed Systems, 2017, 28, 2272-2284.	5.6	12
9	A Lightweight Contextual Arithmetic Coder for On-Board Remote Sensing Data Compression. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4825-4835.	6.3	11
10	Coding Scheme for the Transmission of Satellite Imagery. , 2016, , .		2
11	Transform Optimization for the Lossy Coding of Pathology Whole-Slide Images. , 2016, , .		4
12	Efficient storage of microCT data preserving bone morphometry assessment. Computers and Electrical Engineering, 2016, 53, 292-300.	4.8	0
13	Lossy compression of natural HDR content based on multi-component Transform optimization. , 2016, , .		0
14	Fast MCT optimization for the compression of whole-slide images. , 2016, , .		3
15	DPCM-Based Edge Prediction for Lossless Screen Content Coding in HEVC. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2016, 6, 497-507.	3.6	12
16	Piecewise Mapping in HEVC Lossless Intra-Prediction Coding. IEEE Transactions on Image Processing, 2016, 25, 4004-4017.	9.8	13
17	Bitplane Image Coding With Parallel Coefficient Processing. IEEE Transactions on Image Processing, 2016, 25, 209-219.	9.8	16
18	Strategies of SIMD Computing for Image Coding in GPU. , 2015, , .		3

#	ARTICLE	IF	CITATIONS
19	Strategy of Microscopic Parallelism for Bitplane Image Coding. , 2015, , .		3
20	Isorange Pairwise Orthogonal Transform. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 3361-3372.	6.3	9
21	Cell-Based Two-Step Scalar Deadzone Quantization for High Bit-Depth Hyperspectral Image Coding. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1893-1897.	3.1	3
22	Rate control for lossless region of interest coding in HEVC intra-coding with applications to digital pathology images. , 2015, , .		15
23	Context-Adaptive Binary Arithmetic Coding With Fixed-Length Codewords. IEEE Transactions on Multimedia, 2015, 17, 1385-1390.	7.2	18
24	Implementation of the DWT in a GPU through a Register-based Strategy. IEEE Transactions on Parallel and Distributed Systems, 2015, 26, 3394-3406.	5.6	27
25	Entropy-Based Evaluation of Context Models for Wavelet-Transformed Images. IEEE Transactions on Image Processing, 2015, 24, 57-67.	9.8	16
26	Highly efficient, low complexity arithmetic coder for JPEG2000. , 2014, , .		3
27	HEVC-based lossless compression of Whole Slide pathology images. , 2014, , .		19
28	Evaluation of context models to code wavelet-transformed hyperspectral images. , 2014, , .		0
29	Visually Lossless Strategies to Decode and Transmit JPEG2000 Imagery. IEEE Signal Processing Letters, 2014, 21, 35-38.	3.6	10
30	Stationary Probability Model for Microscopic Parallelism in JPEG2000. IEEE Transactions on Multimedia, 2014, 16, 960-970.	7.2	16
31	Cell-Based 2-Step Scalar Deadzone Quantization for JPEG2000. , 2014, , .		2
32	Compression Limits of Wavelet-Based Image Coding. , 2014, , .		0
33	Improvements to HEVC Intra Coding for Lossless Medical Image Compression. , 2014, , .		10
34	JPIP Proxy Server With Prefetching Strategies Based on User-Navigation Model and Semantic Map. IEEE Transactions on Multimedia, 2013, 15, 1491-1502.	7.2	1
35	2-Step Scalar Deadzone Quantization for Bitplane Image Coding. IEEE Transactions on Image Processing, 2013, 22, 4678-4688.	9.8	7
36	Lossy-to-lossless 3D image coding through prior coefficient lookup tables. Information Sciences, 2013, 239, 266-282.	6.9	19

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37	General Embedded Quantization for Wavelet-Based Lossy Image Coding. IEEE Transactions on Signal Processing, 2013, 61, 1561-1574.	5.3	13
38	FAST Rate Allocation for JPEG2000 Video Transmission Over Time-Varying Channels. IEEE Transactions on Multimedia, 2013, 15, 15-26.	7.2	8
39	Visually Lossless JPEG 2000 Decoder. , 2013, , .		2
40	Low Complexity Embedded Quantization Scheme Compatible with Bitplane Image Coding. , 2013, , .		1
41	Computed Tomography Image Coding through Air Filtering in the Wavelet Domain. , 2013, , .		0
42	Low-complexity lossy image coding through a near-optimal general embedded quantizer. , 2012, , .		3
43	Enhanced Transmission of JPEG2000 Imagery through JPIP Proxy and User-Navigation Model. , 2012, , .		1
44	Embedded Quantizer Design for Low Rate Lossy Image Coding. , 2012, , .		3
45	Scanning Order Strategies for Bitplane Image Coding. IEEE Transactions on Image Processing, 2012, 21, 1920-1933.	9.8	36
46	Rate-Distortion Optimized Adaptive Scanning Order for Bitplane Image Coding Engines. , 2011, , .		1
47	Low Complexity, High Efficiency Probability Model for Hyper-spectral Image Coding. , 2011, , .		0
48	FAST Rate Allocation Through Steepest Descent for JPEG2000 Video Transmission. IEEE Transactions on Image Processing, 2011, 20, 1166-1173.	9.8	13
49	Stationary Probability Model for Bitplane Image Coding Through Local Average of Wavelet Coefficients. IEEE Transactions on Image Processing, 2011, 20, 2153-2165.	9.8	26
50	JPEG2000 ROI coding through component priority for digital mammography. Computer Vision and Image Understanding, 2011, 115, 59-68.	4.7	22
51	Pre-encoded JPEG2000 Video Transmission in a Video-on-Demand Scenario. , 2011, , .		0
52	Enhanced JPEG2000 Quality Scalability through Block-Wise Layer Truncation. Eurasip Journal on Advances in Signal Processing, 2010, 2010, .	1.7	5
53	4D remote sensing image coding with JPEG2000. , 2010, , .		5
54	Rate allocation method for the fast transmission of pre-encoded meteorological data over JPIP. Proceedings of SPIE, 2010, , .	0.8	0

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55	Stationary model of probabilities for symbols emitted by bitplane image coders. , 2010, , .		2
56	Local Average-Based Model of Probabilities for JPEG2000 Bitplane Coder. , 2010, , .		4
57	Smart JPIP Proxy Server with Prefetching Strategies. , 2010, , .		2
58	Distortion Estimators for Bitplane Image Coding. IEEE Transactions on Image Processing, 2009, 18, 1772-1781.	9.8	18
59	Hill climbing algorithm for the transmission of layered jpeg2000 video under multiple rate constraints. , 2009, , .		0
60	Highly Accurate Distortion Estimation for JPEG2000 through PDF-Based Estimators. , 2009, , .		0
61	JPEG2000 ROI Coding With Fine-Grain Accuracy Through Rate-Distortion Optimization Techniques. IEEE Signal Processing Letters, 2009, 16, 45-48.	3.6	11
62	JPEG2000 ROI coding method with perfect fine-grain accuracy and lossless recovery. , 2009, , .		5
63	<title>JPEG2000 rate-control for improved transmission of windows-of-interest in remote sensing scenarios</title>. , 2009, , .		0
64	JPEG2000 Quality Scalability Without Quality Layers. IEEE Transactions on Circuits and Systems for Video Technology, 2008, 18, 923-936.	8.3	26
65	Hyperspectral Image Coding Using 3D Transform and the Recommendation CCSDS-122-B-1. Proceedings of the Data Compression Conference, 2008, , .	0.0	1
66	JPEG2000 Arbitrary ROI Coding through Rate-Distortion Optimization Techniques. Proceedings of the Data Compression Conference, 2008, , .	0.0	8
67	Optimal delivery of motion JPEG2000 over JPIP with block-wise truncation of quality layers. , 2008, , .		3
68	Interactive transmission of spectrally wavelet-transformed hyperspectral images. Proceedings of SPIE, 2008, , .	0.8	1
69	Image compression effects in visual analysis. , 2008, , .		0
70	Self-Conducted Allocation Strategy of Quality Layers for JPEG2000. Eurasip Journal on Advances in Signal Processing, 2008, 2008, .	1.7	2
71	Remote Sensing Data Compression. Studies in Computational Intelligence, 2008, , 27-61.	0.9	20
72	JPEG2000 block-wise truncation of quality layers. , 2008, , .		0

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73	Region of interest coding applied to map overlapping in Geographic Information Systems. , 2007, , .		5
74	Enhanced Quality Scalability for JPEG2000 Code-Streams by the Characterization of the Rate-Distortion Slope. , 2007, , .		2
75	Modifying file syntax for interactive decoding the recommendation CCSDS-122-B-1. Proceedings of SPIE, 2007, , .	0.8	0
76	Implications of JPEG2000 lossy compression on multiple regression modelling. , 2007, , .		0
77	JPEG2000: Quality Scalability and Windows of Interest Transmission. Conference Record of the Asilomar Conference on Signals, Systems and Computers, 2007, , .	0.0	2
78	Low Complexity JPEG2000 Rate Control Through Reverse Subband Scanning Order and Coding Passes Concatenation. IEEE Signal Processing Letters, 2007, 14, 251-254.	3.6	22
79	JPEG2000 Coding Techniques Addressed to Images Containing No-Data Regions. , 2007, , 1024-1036.		1
80	JPEG2000 Low Complexity Allocation Method of Quality Layers. , 2007, , 478-484.		0
81	Effects of JPEG and JPEG2000 Lossy Compression on Remote Sensing Image Classification for Mapping Crops and Forest Areas. , 2006, , .		17
82	J2K: introducing a novel JPEG2000 coder. , 2005, , .		5
83	<title>Wavelet-based coding of ultraspectral sounder data</title>. , 2005, , .		0
84	<title>Novel JPEG2000 implementation applied to GIS scenarios</title>. , 2005, , .		0
85	Review of Coding Techniques Applied to Remote Sensing. Lecture Notes in Computer Science, 2004, , 647-653.	1.3	2
86	Lossy coding techniques for high-resolution images. , 2004, , .		3
87	Review of CCSDS-ILDC and JPEG2000 coding techniques for remote sensing. , 2004, , .		1
88	<title>Exploring image coding techniques for remote sensing and geographic information systems</title>. , 2003, 5150, 1470.		2
89	Efficient Rate Control for JPEG2000 Coder and Decoder. , 0, , .		17