

# Yuichi Tanaka

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9101070/publications.pdf>

Version: 2024-02-01

131  
papers

1,724  
citations

516710

16  
h-index

395702

33  
g-index

132  
all docs

132  
docs citations

132  
times ranked

1096  
citing authors

#	ARTICLE	IF	CITATIONS
1	Directional Analytic Discrete Cosine Frames. IEEE Access, 2022, 10, 20964-20977.	4.2	1
2	Structure-Aware Multi-Hop Graph Convolution for Graph Neural Networks. IEEE Access, 2022, 10, 16624-16633.	4.2	0
3	Edge Sampling of Graphs Based on Edge Smoothness. , 2022, , .		1
4	Sampling Set Selection for Graph Signals under Arbitrary Signal Priors. , 2022, , .		2
5	Multimodal Graph Signal Denoising Via Twofold Graph Smoothness Regularization with Deep Algorithm Unrolling. , 2022, , .		1
6	Graph Learning Information Criterion. , 2022, , .		0
7	Graph Signal Restoration Using Nested Deep Algorithm Unrolling. IEEE Transactions on Signal Processing, 2022, 70, 3296-3311.	5.3	5
8	Control, intervention, and behavioral economics over human social networks against COVID-19. Advanced Robotics, 2021, 35, 733-739.	1.8	0
9	Graph Signal Denoising Using Nested-Structured Deep Algorithm Unrolling. , 2021, , .		5
10	Design of Graph Signal Sampling Matrices for Arbitrary Signal Subspaces. , 2021, , .		3
11	Structural Features In Feature Space For Structure-Aware Graph Convolution. , 2021, , .		1
12	Temporal Multiresolution Graph Learning. IEEE Access, 2021, 9, 143734-143745.	4.2	2
13	Sampling Signals on Graphs: From Theory to Applications. IEEE Signal Processing Magazine, 2020, 37, 14-30.	5.6	78
14	Scalpnets: Detection of Spatiotemporal Abnormal Intervals in Epileptic EEG Using Convolutional Neural Networks. , 2020, , .		5
15	Generalized Graph Spectral Sampling with Stochastic Priors. , 2020, , .		7
16	Generalized Sampling on Graphs With Subspace and Smoothness Priors. IEEE Transactions on Signal Processing, 2020, 68, 2272-2286.	5.3	23
17	Two-Channel Critically Sampled Graph Filter Banks With Spectral Domain Sampling. IEEE Transactions on Signal Processing, 2019, 67, 1447-1460.	5.3	33
18	Underwater Image Synthesis from RGB-D Images and its Application to Deep Underwater Image Restoration. , 2019, , .		15

#	ARTICLE	IF	CITATIONS
19	Time-varying Graph Learning Based on Sparseness of Temporal Variation. , 2019, , .		28
20	Interpolation and Denoising of Graph Signals Using Plug-and-play Admm. , 2019, , .		11
21	\$M\$-Channel Critically Sampled Spectral Graph Filter Banks With Symmetric Structure. IEEE Signal Processing Letters, 2019, 26, 665-669.	3.6	5
22	Eigendecomposition-Free Sampling Set Selection for Graph Signals. IEEE Transactions on Signal Processing, 2019, 67, 2679-2692.	5.3	62
23	Generalized Sampling on Graphs With A Subspace Prior. , 2019, , .		1
24	Oversampled Transforms for Graph Signals. Signals and Communication Technology, 2019, , 223-254.	0.5	2
25	Graph Spectral Image Processing. Proceedings of the IEEE, 2018, 106, 907-930.	21.3	166
26	Multiplierless lifting-based fast X transforms derived from fast Hartley transform factorization. Multidimensional Systems and Signal Processing, 2018, 29, 99-118.	2.6	3
27	Dynamic Color Lines. , 2018, , .		1
28	Low-rank Sparse Decomposition of Graph Adjacency Matrices for Extracting Clean Clusters. , 2018, , .		4
29	SVD for Very Large Matrices: An Approach with Polar Decomposition and Polynomial Approximation. , 2018, , .		2
30	Critically-Sampled Graph Filter Banks with Spectral Domain Sampling. , 2018, , .		2
31	Design of Sampling Matrices in Graph Frequency Domain for Graph Signal Processing. , 2018, , .		0
32	Spectral Domain Sampling of Graph Signals. IEEE Transactions on Signal Processing, 2018, 66, 3752-3767.	5.3	43
33	Higher order feasible building blocks for lattice structure of multidimensional linear phase biorthogonal filter banks. Multidimensional Systems and Signal Processing, 2017, 28, 637-655.	2.6	2
34	Critically sampled graph filter banks with polynomial filters from regular domain filter banks. Signal Processing, 2017, 131, 66-72.	3.7	19
35	Accelerated sensor position selection using graph localization operator. , 2017, , .		14
36	Improved eigenvalue shrinkage using weighted Chebyshev polynomial approximation. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
37	A $\epsilon$ -polyphase-structure of two-channel spectral graph wavelets and filter banks. , 2017, , .		1
38	Almost Tight Spectral Graph Wavelets With Polynomial Filters. IEEE Journal on Selected Topics in Signal Processing, 2017, 11, 812-824.	10.8	11
39	Directional discrete cosine transforms arising from discrete cosine and sine transforms for directional block-wise image representation. , 2017, , .		1
40	Colors in multimodal data: Dominant line extraction inspired by computer vision techniques. , 2017, , .		1
41	Design of polynomial approximated filters for signals on directed graphs. , 2017, , .		4
42	Fast Singular Value Shrinkage With Chebyshev Polynomial Approximation Based on Signal Sparsity. IEEE Transactions on Signal Processing, 2017, 65, 6083-6096.	5.3	10
43	Graph reduction method using localization operator and its application to pyramid transform. , 2017, , .		1
44	Non-Blind Deconvolution of Point Cloud Attributes in Graph Spectral Domain. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2017, E100.A, 1751-1759.	0.3	1
45	Deforming Pyramid: Multiscale Image Representation Using Pixel Deformation and Filters for Non-Equispaced Signals. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2016, E99.A, 1646-1654.	0.3	2
46	Spectral Graph Wavelets and Filter Banks With Low Approximation Error. IEEE Transactions on Signal and Information Processing Over Networks, 2016, 2, 230-245.	2.8	35
47	Multilinear Discriminant Analysis With Subspace Constraints for Single-Trial Classification of Event-Related Potentials. IEEE Journal on Selected Topics in Signal Processing, 2016, 10, 1295-1305.	10.8	18
48	Smoothing of xDAWN spatial filters for robust extraction of event-related potentials. , 2016, , .		4
49	Construction of undersampled graph filter banks via row subset selection. , 2016, , .		2
50	Pyramidal image representation with deformation: Reformulation of domain transform and filter designs. , 2016, , .		6
51	Mesh-based image retargeting with spectral graph filtering. , 2016, , .		0
52	Image colorization based on ADMM with fast singular value thresholding by Chebyshev polynomial approximation. , 2016, , .		3
53	Deblurring of point cloud attributes in graph spectral domain. , 2016, , .		11
54	Dimensionality reduction of sample covariance matrices by graph fourier transform for motor imagery brain-machine interface. , 2016, , .		14

#	ARTICLE	IF	CITATIONS
55	Ultrasonic welding of polymer optical fibres onto composite materials. Electronics Letters, 2016, 52, 1472-1474.	1.0	8
56	Efficient sensor position selection using graph signal sampling theory. , 2016, , .		29
57	Near Orthogonal Oversampled Graph Filter Banks. IEEE Signal Processing Letters, 2016, , 1-1.	3.6	4
58	Graph Signal Denoising via Trilateral Filter on Graph Spectral Domain. IEEE Transactions on Signal and Information Processing Over Networks, 2016, 2, 137-148.	2.8	65
59	Subspace-constrained multilinear discriminant analysis for ERP-based brain computer interface classification. , 2015, , .		3
60	Globalized BM3D using fast eigenvalue filtering. , 2015, , .		7
61	Non-local/local image filters using fast eigenvalue filtering. , 2015, , .		4
62	Edge preserving multiscale image decomposition with customized domain transform filters. , 2015, , .		4
63	Oversampled bipartite graphs with controlled redundancy. , 2015, , .		0
64	Critically sampled graph wavelets converted from linear-phase biorthogonal wavelets. , 2015, , .		2
65	Design of Optimized Prefilters for Time-Domain Lapped Transforms with Various Downsampling Factors. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2014, E97.A, 1907-1917.	0.3	2
66	Oversampled Graph Laplacian Matrix for Graph Filter Banks. IEEE Transactions on Signal Processing, 2014, 62, 6425-6437.	5.3	106
67	Depth map denoising using collaborative graph wavelet shrinkage on connected image patches. , 2014, , .		11
68	Multidimensional linear-phase perfect reconstruction filter banks with higher order feasible building blocks. , 2014, , .		0
69	Iterative edge-directed image upscaling with high directionality. , 2014, , .		1
70	Retargeting pyramid using direct decimation. , 2014, , .		4
71	M-channel oversampled perfect reconstruction filter banks for graph signals. , 2014, , .		9
72	Trilateral filter on graph spectral domain. , 2014, , .		7

#	ARTICLE	IF	CITATIONS
73	Edge-aware image graph expansion methods for oversampled graph Laplacian matrix. , 2014, , .		5
74	$\delta$ -Channel Oversampled Graph Filter Banks. IEEE Transactions on Signal Processing, 2014, 62, 3578-3590.	5.3	193
75	General Factorization of Conjugate-Symmetric Hadamard Transforms. IEEE Transactions on Signal Processing, 2014, 62, 3379-3392.	5.3	12
76	Recent Advances in Signal Processing on Graphs. Ieice Ess Fundamentals Review, 2014, 8, 15-29.	0.1	0
77	Smoothing of spatial filter by graph Fourier transform for EEG signals. , 2014, , .		14
78	Multiplierless lifting based FFT via fast Hartley transform. , 2013, , .		4
79	Design of optimized prefilters for time-domain lapped transforms with various downsampling factors. , 2013, , .		0
80	Improved adaptive color embedding and recovery using DC level shifting. , 2013, , .		3
81	Scalable image representation using improved retargeting pyramid. , 2013, , .		3
82	Selective data pruning based distributed video coding with modified high-order edge-directed interpolation. , 2013, , .		0
83	Image restoration using similar region search and digital watermark. , 2013, , .		0
84	A two-dimensional non-separable implementation of dyadic-valued cosine-sine modulated filter banks for low computational complexity. , 2013, , .		1
85	Rate-dependent seam carving and its application to content-aware image coding. APSIPA Transactions on Signal and Information Processing, 2013, 2, .	3.3	5
86	Adaptive color-to-gray image mapping using directional transform. , 2012, , .		2
87	On factorizations of conjugate symmetric Hadamard transform and its relationship with DCT. , 2012, , .		1
88	Multiplierless fast algorithm for DCT via fast Hartley transform. , 2012, , .		2
89	Digital image watermarking method using between-class variance. , 2012, , .		1
90	Flexible Combination of Time-Domain Lapped Transforms with Various Downsampling Factors. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2012, E95.A, 2049-2058.	0.3	2

#	ARTICLE	IF	CITATIONS
91	A structural similarity assessment for generating hybrid images. , 2011, , .		2
92	Mixed-resolution Wyner-Ziv video coding based on selective data pruning. , 2011, , .		2
93	Seam carving with rate-dependent seam path information. , 2011, , .		10
94	Interaction between ultrashort laser pulses and gold nanoparticles: nanoheater and nanolens effect. Journal of Nanoparticle Research, 2011, 13, 2181-2193.	1.9	26
95	Generalized selective data pruning for video sequence. , 2011, , .		2
96	Direction scalability of adaptive directional wavelet transform: An approach using block-lifting based DCT and SPIHT. , 2010, , .		1
97	Adaptive Directional Wavelet Transform Based on Directional Prefiltering. IEEE Transactions on Image Processing, 2010, 19, 934-945.	9.8	19
98	Image coding using concentration and dilution based on seam carving with hierarchical search. , 2010, , .		13
99	Improved image concentration for artifact-free image dilution and its application to image coding. , 2010, , .		9
100	A study on memorability and shoulder-surfing robustness of graphical password using DWT-based image blending. , 2010, , .		3
101	VQ based data hiding method for still images by tree-structured links. , 2010, , .		0
102	Texture image retrieval using adaptive directional wavelet transform. , 2009, , .		1
103	Higher-order feasible building blocks for lattice structure of oversampled linear-phase perfect reconstruction filter banks. Signal Processing, 2009, 89, 1694-1703.	3.7	10
104	Multiresolution Image Representation Using Combined 2-D and 1-D Directional Filter Banks. IEEE Transactions on Image Processing, 2009, 18, 269-280.	9.8	31
105	An adaptive extension of combined 2D and 1D-directional filter banks. , 2009, , .		0
106	Highpass-filtering based adaptive directional wavelet transform. , 2009, , .		3
107	A study on an image synthesis method for graphical passwords. , 2009, , .		7
108	A Bottom-Up Design Approach of Critically Sampled Contourlet Transform for Efficient Image Representation. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2009, E92-A, 762-771.	0.3	0

#	ARTICLE	IF	CITATIONS
109	A new combination of 1D and 2D filter banks for effective multiresolution image representation. , 2008, , .		7
110	A Lattice Structure of Biorthogonal Linear-Phase Filter Banks With Higher Order Feasible Building Blocks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 2322-2331.	5.4	15
111	A novel design of critically sampled contourlet transform and its application to image coding. , 2008, , .		2
112	An Efficient Lifting Structure of Biorthogonal Filter Banks for Lossless Image Coding. , 2007, , .		8
113	Effects of protozoa on the antioxidant activity in the ruminal fluid and blood plasma of cattle. Animal Science Journal, 2007, 78, 34-40.	1.4	10
114	Ovarian secretion of inhibin in mares. Journal of Reproduction and Fertility Supplement, 2000, , 239-45.	0.1	1
115	Shearing and Friction in the Pullout Behaviour of Woven Geotextiles for Reinforcement Applications. Journal of the Textile Institute, 1996, 87, 586-595.	1.9	3
116	Trans-Isoprene Units in Natural Rubber. Rubber Chemistry and Technology, 1994, 67, 159-168.	1.2	49
117	Structure of cis-polyisoprene from Lactarius mushrooms. Acta Biochimica Polonica, 1994, 41, 303-9.	0.5	2
118	Determination of Sequence Distribution in Styrene-Butadiene Copolymer I. 1H-NMR Study of Styrene Oligomers. Rubber Chemistry and Technology, 1981, 54, 685-691.	1.2	13
119	Delayed self-heterodyne linewidth measurement of fiber bragg grating laser. , 0, , .		2
120	Optical multi-wavelength PPM for high data rate transmission on indoor channels. , 0, , .		0
121	Wireless optical transmissions with white colored LED for wireless home links. , 0, , .		143
122	Indoor visible communication utilizing plural white LEDs as lighting. , 0, , .		137
123	Infra-red image detection with a Si-CCD image sensor due to the two-photon absorption process. , 0, , .		1
124	Accuracy improvement of two-photon absorption based measurement by temperature controlled Si-photodetector. , 0, , .		1
125	A multi-wavelength light source using an optical single-side band modulator and an arrayed waveguide grating. , 0, , .		0
126	Photovoltaic cell characteristics for high intensity laser light. , 0, , .		0



#	ARTICLE	IF	CITATIONS
127	Optical spectrum analyzer for optical short pulses using arrayed waveguide grating. , 0, , .		0
128	Measurement accuracy of profilometry based on two-photon absorption. , 0, , .		0
129	Circular polarization resonator based on cholesteric liquid crystal mirrors. , 0, , .		0
130	A Non-Expansive Convolution for Nonlinear-Phase Paraunitary Filter Banks and Its Application to Image Coding. , 0, , .		4
131	Theory and Design of Two-Channel Complex Linear-Phase Pseudo-Orthogonal Filterbanks. , 0, , .		0