David Dagan Feng

List of Publications by Year
in descending order

150	4,666	101384	118652
papers	citations	36	62
		h-index	g-index

151	151	151	4478
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	An Ensemble of Fine-Tuned Convolutional Neural Networks for Medical Image Classification. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 31-40.	3.9	360
2	Knowledge-based Collaborative Deep Learning for Benign-Malignant Lung Nodule Classification on Chest CT. IEEE Transactions on Medical Imaging, 2019, 38, 991-1004.	5.4	317
3	A technique for extracting physiological parameters and the required input function simultaneously from PET image measurements: theory and simulation study. IEEE Transactions on Information Technology in Biomedicine, 1997, 1, 243-254.	3.6	153
4	Video summarization via minimum sparse reconstruction. Pattern Recognition, 2015, 48, 522-533.	5.1	153
5	Co-Learning Feature Fusion Maps From PET-CT Images of Lung Cancer. IEEE Transactions on Medical Imaging, 2020, 39, 204-217.	5.4	144
6	Step-wise integration of deep class-specific learning for dermoscopic image segmentation. Pattern Recognition, 2019, 85, 78-89.	5.1	141
7	Segmentation of dynamic PET images using cluster analysis. IEEE Transactions on Nuclear Science, 2002, 49, 200-207.	1.2	132
8	Deep Convolutional Neural Networks for Human Action Recognition Using Depth Maps and Postures. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 1806-1819.	5.9	132
9	Keypoint-Based Keyframe Selection. IEEE Transactions on Circuits and Systems for Video Technology, 2013, 23, 729-734.	5.6	117
10	Reversion Correction and Regularized Random Walk Ranking for Saliency Detection. IEEE Transactions on Image Processing, 2018, 27, 1311-1322.	6.0	114
11	Learning visual relationship and context-aware attention for image captioning. Pattern Recognition, 2020, 98, 107075.	5.1	98
12	Content-based retrieval of dynamic PET functional images. IEEE Transactions on Information Technology in Biomedicine, 2000, 4, 152-158.	3.6	96
13	A Residual Based Attention Model for EEG Based Sleep Staging. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 2833-2843.	3.9	92
14	Deep Color Guided Coarse-to-Fine Convolutional Network Cascade for Depth Image Super-Resolution. IEEE Transactions on Image Processing, 2019, 28, 994-1006.	6.0	86
15	Classification of Medical Images in the Biomedical Literature by Jointly Using Deep and Handcrafted Visual Features. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1521-1530.	3.9	84
16	An evaluation of the algorithms for determining local cerebral metabolic rates of glucose using positron emission tomography dynamic data. IEEE Transactions on Medical Imaging, 1995, 14, 697-710.	5.4	77
17	A Bag-of-Importance Model With Locality-Constrained Coding Based Feature Learning <newline/>for Video Summarization. IEEE Transactions on Multimedia, 2014, 16, 1497-1509.	5.2	73
18	Cloud-Based Automated Clinical Decision Support System for Detection and Diagnosis of Lung Cancer in Chest CT. IEEE Journal of Translational Engineering in Health and Medicine, 2020, 8, 1-13.	2.2	73

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19	Large Margin Local Estimate With Applications to Medical Image Classification. IEEE Transactions on Medical Imaging, 2015, 34, 1362-1377.	5.4	66
20	Multi-Pass Fast Watershed for Accurate Segmentation of Overlapping Cervical Cells. IEEE Transactions on Medical Imaging, 2018, 37, 2044-2059.	5.4	64
21	Multi-Label classification of multi-modality skin lesion via hyper-connected convolutional neural network. Pattern Recognition, 2020, 107, 107502.	5.1	63
22	Video summarization via block sparse dictionary selection. Neurocomputing, 2020, 378, 197-209.	3.5	62
23	Automatic Detection and Classification System of Domestic Waste via Multimodel Cascaded Convolutional Neural Network. IEEE Transactions on Industrial Informatics, 2022, 18, 163-173.	7.2	59
24	Synthesis of Positron Emission Tomography (PET) Images via Multi-channel Generative Adversarial Networks (GANs). Lecture Notes in Computer Science, 2017, , 43-51.	1.0	57
25	Retinal Vessel Segmentation Using Minimum Spanning Superpixel Tree Detector. IEEE Transactions on Cybernetics, 2019, 49, 2707-2719.	6.2	56
26	Deep gesture interaction for augmented anatomy learning. International Journal of Information Management, 2019, 45, 328-336.	10.5	56
27	Automatic detection and classification of regions of FDG uptake in whole-body PET-CT lymphoma studies. Computerized Medical Imaging and Graphics, 2017, 60, 3-10.	3.5	55
28	Optimal image sampling schedule: a new effective way to reduce dynamic image storage space and functional image processing time. IEEE Transactions on Medical Imaging, 1996, 15, 710-719.	5.4	54
29	Automatic segmentation of overlapping cervical smear cells based on local distinctive features and guided shape deformation. Neurocomputing, 2017, 221, 94-107.	3.5	51
30	Automated Decision Support System for Lung Cancer Detection and Classification via Enhanced RFCN With Multilayer Fusion RPN. IEEE Transactions on Industrial Informatics, 2020, 16, 7791-7801.	7.2	51
31	A Unified Collaborative Multikernel Fuzzy Clustering for Multiview Data. IEEE Transactions on Fuzzy Systems, 2018, 26, 1671-1687.	6.5	50
32	Generalized linear least squares method for fast generation of myocardial blood flow parametric images with N-13 ammonia PET. IEEE Transactions on Medical Imaging, 1998, 17, 236-243.	5.4	48
33	Optimizing the cervix cytological examination based on deep learning and dynamic shape modeling. Neurocomputing, 2017, 248, 28-40.	3.5	46
34	Vision-Based Freezing of Gait Detection With Anatomic Directed Graph Representation. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1215-1225.	3.9	43
35	Graph Sequence Recurrent Neural Network for Vision-Based Freezing of Gait Detection. IEEE Transactions on Image Processing, 2020, 29, 1890-1901.	6.0	42
36	Learning universal multiview dictionary for human action recognition. Pattern Recognition, 2017, 64, 236-244.	5.1	40

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37	A Top-Down Approach for Video Summarization. ACM Transactions on Multimedia Computing, Communications and Applications, 2014, 11, 1-21.	3.0	37
38	A propagation-DNN: Deep combination learning of multi-level features for MR prostate segmentation. Computer Methods and Programs in Biomedicine, 2019, 170, 11-21.	2.6	37
39	OFF-eNET: An Optimally Fused Fully End-to-End Network for Automatic Dense Volumetric 3D Intracranial Blood Vessels Segmentation. IEEE Transactions on Image Processing, 2020, 29, 7192-7202.	6.0	37
40	Real-Time Long-Term Tracking With Prediction-Detection-Correction. IEEE Transactions on Multimedia, 2018, 20, 2289-2302.	5.2	36
41	Stacked Memory Network for Video Summarization. , 2019, , .		36
42	A graph-based approach for the retrieval of multi-modality medical images. Medical Image Analysis, 2014, 18, 330-342.	7.0	35
43	Flexible Multi-Layer Semi-Dry Electrode for Scalp EEG Measurements at Hairy Sites. Micromachines, 2019, 10, 518.	1.4	34
44	A new double modeling approach for dynamic cardiac PET studies using noise and spillover contaminated LV measurements. IEEE Transactions on Biomedical Engineering, 1996, 43, 319-327.	2.5	30
45	Hyperspectral Image Classification With Global–Local Discriminant Analysis and Spatial–Spectral Context. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 5005-5018.	2.3	29
46	A study on multi-kernel intuitionistic fuzzy C-means clustering with multiple attributes. Neurocomputing, 2019, 335, 59-71.	3.5	29
47	Dynamic image data compression in spatial and temporal domains: theory and algorithm. IEEE Transactions on Information Technology in Biomedicine, 1997, 1, 219-228.	3.6	28
48	Hybrid Refinement-Correction Heatmaps for Human Pose Estimation. IEEE Transactions on Multimedia, 2021, 23, 1330-1342.	5.2	28
49	Unsupervised Deep Transfer Feature Learning for Medical Image Classification. , 2019, , .		27
50	Unsupervised Domain Adaptation to Classify Medical Images Using Zero-Bias Convolutional Auto-Encoders and Context-Based Feature Augmentation. IEEE Transactions on Medical Imaging, 2020, 39, 2385-2394.	5.4	27
51	Spectral embedding based facial expression recognition with multiple features. Neurocomputing, 2014, 129, 136-145.	3.5	26
52	Video Summarization with Global and Local Features. , 2012, , .		25
53	Short-Term Lesion Change Detection for Melanoma Screening With Novel Siamese Neural Network. IEEE Transactions on Medical Imaging, 2021, 40, 840-851.	5.4	25
54	Segmenting Neuronal Structure in 3D Optical Microscope Images via Knowledge Distillation with Teacher-Student Network. , 2019, , .		24

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55	Convolutional sparse kernel network for unsupervised medical image analysis. Medical Image Analysis, 2019, 56, 140-151.	7.0	24
56	Patch Based Video Summarization With Block Sparse Representation. IEEE Transactions on Multimedia, 2021, 23, 732-747.	5.2	24
57	Recurrent feature fusion learning for multi-modality pet-ct tumor segmentation. Computer Methods and Programs in Biomedicine, 2021, 203, 106043.	2.6	24
58	Kernelized Mahalanobis Distance for Fuzzy Clustering. IEEE Transactions on Fuzzy Systems, 2021, 29, 3103-3117.	6.5	24
59	18F-FDG PET/CT Radiomics for Preoperative Prediction of Lymph Node Metastases and Nodal Staging in Gastric Cancer. Frontiers in Oncology, 2021, 11, 723345.	1.3	23
60	Chitosan modified Fe_3O_4/KGN self-assembled nanoprobes for osteochondral MR diagnose and regeneration. Theranostics, 2020, 10, 5565-5577.	4.6	22
61	Efficient Body Motion Quantification and Similarity Evaluation Using 3-D Joints Skeleton Coordinates. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 2774-2788.	5.9	22
62	Optimized acquisition time and image sampling for dynamic SPECT of Tl-201. IEEE Transactions on Medical Imaging, 1998, 17, 334-343.	5.4	21
63	Dense and Sparse Labeling With Multidimensional Features for Saliency Detection. IEEE Transactions on Circuits and Systems for Video Technology, 2018, 28, 1130-1143.	5.6	20
64	Non-Contact Sleep Stage Detection Using Canonical Correlation Analysis of Respiratory Sound. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 614-625.	3.9	20
65	ECSU-Net: An Embedded Clustering Sliced U-Net Coupled With Fusing Strategy for Efficient Intervertebral Disc Segmentation and Classification. IEEE Transactions on Image Processing, 2022, 31, 880-893.	6.0	20
66	DeepMTS: Deep Multi-Task Learning for Survival Prediction in Patients With Advanced Nasopharyngeal Carcinoma Using Pretreatment PET/CT. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 4497-4507.	3.9	18
67	Deep multi-modality collaborative learning for distant metastases predication in PET-CT soft-tissue sarcoma studies. , 2019, 2019, 3658-3688.		17
68	Deciphering CT texture features of human visceral fat to evaluate metabolic disorders and surgery-induced weight loss effects. EBioMedicine, 2021, 69, 103471.	2.7	17
69	Improving Skin Lesion Segmentation via Stacked Adversarial Learning. , 2019, , .		16
70	Combination Therapy Using Kartogenin-Based Chondrogenesis and Complex Polymer Scaffold for Cartilage Defect Regeneration. ACS Biomaterials Science and Engineering, 2020, 6, 6276-6284.	2.6	16
71	Video Summarization via Nonlinear Sparse Dictionary Selection. IEEE Access, 2019, 7, 11763-11774.	2.6	15
72	Liver Extraction Using Residual Convolution Neural Networks From Low-Dose CT Images. IEEE Transactions on Biomedical Engineering, 2019, 66, 2641-2650.	2.5	14

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73	Unsupervised Two-Path Neural Network for Cell Event Detection and Classification Using Spatiotemporal Patterns. IEEE Transactions on Medical Imaging, 2019, 38, 1477-1487.	5.4	14
74	Real-time hand posture recognition using hand geometric features and Fisher Vector. Signal Processing: Image Communication, 2020, 82, 115729.	1.8	14
75	Optimal image sampling schedule for both image-derived input and output functions in PET cardiac studies. IEEE Transactions on Medical Imaging, 2000, 19, 233-242.	5.4	13
76	Automated three-stage nucleus and cytoplasm segmentation of overlapping cells. , 2014, , .		13
77	Similarity Based Block Sparse Subset Selection for Video Summarization. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 3967-3980.	5.6	13
78	Fast and Accurate Retinal Identification System: Using Retinal Blood Vasculature Landmarks. IEEE Transactions on Industrial Informatics, 2019, 15, 4099-4110.	7.2	12
79	Machine learning in medical imaging. , 2020, , 167-196.		12
80	Image-Aligned Dynamic Liver Reconstruction Using Intra-Operative Field of Views for Minimal Invasive Surgery. IEEE Transactions on Biomedical Engineering, 2019, 66, 2163-2173.	2.5	11
81	A Spatiotemporal Volumetric Interpolation Network for 4D Dynamic Medical Image. , 2020, , .		11
82	Noninvasive Input Function Acquisition and Simultaneous Estimations With Physiological Parameters for PET Quantification: A Brief Review. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 676-683.	2.7	10
83	A New Aggregation of DNN Sparse and Dense Labeling for Saliency Detection. IEEE Transactions on Cybernetics, 2021, 51, 5907-5920.	6.2	10
84	SPST-CNN: Spatial pyramid based searching and tagging of liver's intraoperative live views via CNN for minimal invasive surgery. Journal of Biomedical Informatics, 2020, 106, 103430.	2.5	10
85	End-User Development for Interactive Data Analytics: Uncertainty, Correlation and User Confidence. IEEE Transactions on Affective Computing, 2018, 9, 383-395.	5.7	9
86	Keyframe Extraction From Laparoscopic Videos via Diverse and Weighted Dictionary Selection. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 1686-1698.	3.9	9
87	A Spatial Guided Self-supervised Clustering Network for Medical Image Segmentation. Lecture Notes in Computer Science, 2021, , 379-388.	1.0	9
88	Modified GAN-CAED to Minimize Risk of Unintentional Liver Major Vessels Cutting by Controlled Segmentation Using CTA/SPET-CT. IEEE Transactions on Industrial Informatics, 2021, 17, 7991-8002.	7.2	9
89	Graph Convolutional Dictionary Selection With $L_{2,p}$ $_{2,s}$ Norm for Video Summarization. IEEE Transactions on Image Processing, 2022, 31, 1789-1804.	6.0	9
90	A Multiview Joint Sparse Representation with Discriminative Dictionary for Melanoma Detection. , 2016, , .		8

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91	Multiple Kernel-Based Discriminant Analysis via Support Vectors for Dimension Reduction. IEEE Access, 2019, 7, 35418-35430.	2.6	8
92	Abnormality detection in retinal image by individualized background learning. Pattern Recognition, 2020, 102, 107209.	5.1	8
93	Automatic identification of myopic maculopathy related imaging features in optic disc region via machine learning methods. Journal of Translational Medicine, 2021, 19, 167.	1.8	8
94	Machine Learning-Based Noninvasive Quantification of Single-Imaging Session Dual-Tracer ^{18}F-FDG and ^{68}Ga-DOTATATE Dynamic PET-CT in Oncology. IEEE Transactions on Medical Imaging, 2022, 41, 347-359.	5.4	8
95	Continuous-time system modelling using the weighted-parabola-overlapping numerical integration method. International Journal of Systems Science, 1992, 23, 1361-1369.	3.7	7
96	Feature covariance matrix-based dynamic hand gesture recognition. Neural Computing and Applications, 2019, 31, 8533-8546.	3.2	7
97	Dynamic imaging and tracer kinetic modeling for emission tomography using rotating detectors. IEEE Transactions on Medical Imaging, 1998, 17, 986-994.	5.4	6
98	Automatic left ventricular cavity segmentation via deep spatial sequential network in 4D computed tomography. Computerized Medical Imaging and Graphics, 2021, 91, 101952.	3.5	6
99	Improving PET-CT Image Segmentation via Deep Multi-modality Data Augmentation. Lecture Notes in Computer Science, 2020, , 145-152.	1.0	6
100	Exploring the influence of feature representation for dictionary selection based video summarization. , 2017, , .		5
101	Robust and efficient content-based digital audio watermarking. Multimedia Systems, 2002, 8, 353-368.	3.0	4
102	A web-based multidisciplinary team meeting visualisation system. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 2221-2231.	1.7	4
103	Regularized Fuzzy Discriminant Analysis for Hyperspectral Image Classification With Noisy Labels. IEEE Access, 2019, 7, 108125-108136.	2.6	4
104	Optimizing Contextual Feature Learning for Mitosis Detection with Convolutional Recurrent Neural Networks. , 2019, , .		4
105	A direct volume rendering visualization approach for serial PET–CT scans that preserves anatomical consistency. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 733-744.	1.7	4
106	Survey on Smoothed Particle Hydrodynamics and the Particle Systems. IEEE Access, 2020, 8, 3087-3105.	2.6	4
107	VoxRec: Hybrid Convolutional Neural Network for Active 3D Object Recognition. IEEE Access, 2020, 8, 70969-70980.	2.6	4
108	Mixed-Weight Neural Bagging for Detecting m^6A Modifications in SARS-CoV-2 RNA Sequencing. IEEE Transactions on Biomedical Engineering, 2022, 69, 2557-2568.	2.5	4

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109	Fast system identification algorithm for non-uniformly sampled noisy biomedical signal. , 0, , .		3
110	A fast algorithm for estimating FDG model parameters in dynamic PET with an optimised image sampling schedule and corrections for cerebral blood volume and partial volume. , 0, , .		3
111	CONTENT-BASED RETRIEVAL OF MULTIMEDIA INFORMATION. International Journal of Image and Graphics, 2001, 01, 83-91.	1.2	3
112	Video Summarization via Simultaneous Block Sparse Representation. , 2017, , .		3
113	Robust video summarization using collaborative representation of adjacent frames. Multimedia Tools and Applications, 2019, 78, 28985-29005.	2.6	3
114	IntersectGAN. , 2019, , .		3
115	Illumination-Guided Video Composition via Gradient Consistency Optimization. IEEE Transactions on Image Processing, 2019, 28, 5077-5090.	6.0	3
116	Illumination-Invariant Video Cut-Out Using Octagon Sensitive Optimization. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 1410-1422.	5.6	3
117	Content-based large-scale medical image retrieval. , 2020, , 321-368.		3
118	Fused feature signatures to probe tumour radiogenomics relationships. Scientific Reports, 2022, 12, 2173.	1.6	3
119	A study on physiological parameter estimation accuracy for tracer kinetic modeling with positron emission tomography (pet). , 1992, , .		2
120	A method for biomedical system modelling and physiological parameter estimation using indirectly measured input functions. International Journal of Systems Science, 1995, 26, 723-739.	3.7	2
121	Measuring image similarity using the geometrical distribution of image contents. , 0, , .		2
122	ADM: a dynamic model for general multimedia storage and content-based retrieval. , 0, , .		2
123	Medical image data retrieval and manipulation through the WWW. , 0, , .		2
124	Affective Audio Annotation of Public Speeches with Convolutional Clustering Neural Network. IEEE Transactions on Affective Computing, 2022, 13, 238-249.	5.7	2
125	Biomedical image segmentation for precision radiation oncology. , 2020, , 295-319.		2
126	Malocclusion Treatment Planning via PointNet Based Spatial Transformation Network. Lecture Notes in Computer Science, 2020, , 105-114.	1.0	2

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127	Unsupervised Landmark Detection-Based Spatiotemporal Motion Estimation for 4-D Dynamic Medical Images. IEEE Transactions on Cybernetics, 2023, 53, 3532-3545.	6.2	2
128	Improving Breast Tumor Segmentation in PET via Attentive Transformation Based Normalization. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 3261-3271.	3.9	2
129	A Three-stage Parameter Estimation Algorithm for Tracer Concentration Kinetic Modelling with Positron Emission Tomography. , 1991, , .		1
130	A parallel thinning method based on image marking. , 0, , .		1
131	Clinical investigation of a knowledge-based data compression algorithm for dynamic neurologic FDG-PET images. , 0, , .		1
132	Segmentation of dynamic PET images using cluster analysis. , 0, , .		1
133	Learning Shared and Cluster-Specific Dictionaries for Single Image Super-Resolution. IEEE Access, 2019, 7, 120041-120051.	2.6	1
134	Biomedical image visualization and display technologies. , 2020, , 561-583.		1
135	Fast Cryo-EM Image Alignment Algorithm Using Power Spectrum Features. Journal of Chemical Information and Modeling, 2021, 61, 4795-4806.	2.5	1
136	An explicit model for noninvasive measurement of blood samples. , 1992, , .		0
137	A filtering integration method for physiological function images. , 1992, , .		0
138	Parameter estimation using reduced dynamic imaging data in PET studies. , 0, , .		0
139	Simultaneous analysis of noisy signals obtained from multiple experiments, with application to deriving brain functional images. , 0, , .		0
140	Extracting maximum information from the signal obtained from the dynamic images with positron emission tomography. , 0, , .		0
141	Tomographic dynamic imaging and system identification with partially sampled noisy radio-active signal. , 0, , .		0
142	Information technology in biomedical functional imaging. , 0, , .		0
143	A method to estimate the input function non-invasively for neurologic FDG-PET studies. , 0, , .		0
144	A knowledge-based image smoothing technique for dynamic PET studies. , 0, , .		0

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145	Objective assessment of 3-D medical image registration results using statistical confidence intervals. , 0, , .		0
146	A novel QoS feedback control for supporting compressed video. , 0, , .		0
147	A QoS control protocol for rate-adaptive video traffic. , 0, , .		0
148	Input recovery from noisy output measurements: a Monte Carlo method. , 0, , .		0
149	Image-based biomedical data modeling and parametric imaging. , 2020, , 461-521.		0
150	Automated Prostate Image Recognition and Segmentation. , 2018, , 243-258.		0