

Shih-Fu Chang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7872074/publications.pdf>

Version: 2024-02-01

153
papers

7,095
citations

279798

23
h-index

289244

40
g-index

153
all docs

153
docs citations

153
times ranked

4122
citing authors

#	ARTICLE	IF	CITATIONS
1	A robust image authentication method distinguishing JPEG compression from malicious manipulation. IEEE Transactions on Circuits and Systems for Video Technology, 2001, 11, 153-168.	8.3	454
2	Overview of the MPEG-7 standard. IEEE Transactions on Circuits and Systems for Video Technology, 2001, 11, 688-695.	8.3	373
3	Supervised hashing with kernels. , 2012, , .		343
4	A fully automated content-based video search engine supporting spatiotemporal queries. IEEE Transactions on Circuits and Systems for Video Technology, 1998, 8, 602-615.	8.3	293
5	Unsupervised Embedding Learning via Invariant and Spreading Instance Feature. , 2019, , .		263
6	Exploiting Feature and Class Relationships in Video Categorization with Regularized Deep Neural Networks. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 352-364.	13.9	239
7	A highly efficient system for automatic face region detection in MPEG video. IEEE Transactions on Circuits and Systems for Video Technology, 1997, 7, 615-628.	8.3	235
8	Consumer video understanding. , 2011, , .		219
9	Detecting Image Splicing using Geometry Invariants and Camera Characteristics Consistency. , 2006, , .		208
10	Structure analysis of soccer video with hidden Markov models. , 2002, , .		160
11	Robust and Scalable Graph-Based Semisupervised Learning. Proceedings of the IEEE, 2012, 100, 2624-2638.	21.3	159
12	Video Adaptation: Concepts, Technologies, and Open Issues. Proceedings of the IEEE, 2005, 93, 148-158.	21.3	158
13	Visual information retrieval from large distributed online repositories. Communications of the ACM, 1997, 40, 63-71.	4.5	152
14	In a Blink of an Eye and a Switch of a Transistor: Cortically Coupled Computer Vision. Proceedings of the IEEE, 2010, 98, 462-478.	21.3	126
15	High-level event recognition in unconstrained videos. International Journal of Multimedia Information Retrieval, 2013, 2, 73-101.	5.2	126
16	Structure analysis of sports video using domain models. , 2001, , .		112
17	Automated binary texture feature sets for image retrieval. , 0, , .		109
18	Semi-supervised distance metric learning for Collaborative Image Retrieval. , 2008, , .		98

#	ARTICLE	IF	CITATIONS
19	Modeling Multimodal Clues in a Hybrid Deep Learning Framework for Video Classification. IEEE Transactions on Multimedia, 2018, 20, 3137-3147.	7.2	97
20	EventNet. , 2015, , .		94
21	Cross-domain learning methods for high-level visual concept classification. , 2008, , .		84
22	Robust multi-class transductive learning with graphs. , 2009, , .		84
23	Integrated spatial and feature image query. Multimedia Systems, 1999, 7, 129-140.	4.7	83
24	Algorithms and system for segmentation and structure analysis in soccer video. , 2001, , .		82
25	Camera Response Functions for Image Forensics: An Automatic Algorithm for Splicing Detection. IEEE Transactions on Information Forensics and Security, 2010, 5, 816-825.	6.9	82
26	Image Splicing Detection using Camera Response Function Consistency and Automatic Segmentation. , 2007, , .		80
27	Video Event Detection by Inferring Temporal Instance Labels. , 2014, , .		78
28	Learning Spread-Out Local Feature Descriptors. , 2017, , .		78
29	Hash Bit Selection: A Unified Solution for Selection Problems in Hashing. , 2013, , .		74
30	Augmentation Invariant and Instance Spreading Feature for Softmax Embedding. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 924-939.	13.9	74
31	Robust visual domain adaptation with low-rank reconstruction. , 2012, , .		73
32	Segmentation using superpixels: A bipartite graph partitioning approach. , 2012, , .		69
33	Reranking Methods for Visual Search. IEEE MultiMedia, 2007, 14, 14-22.	1.7	64
34	Compressed-domain techniques for image/video indexing and manipulation. , 0, , .		60
35	Large-Scale Video Hashing via Structure Learning. , 2013, , .		60
36	Context-Based Concept Fusion with Boosted Conditional Random Fields. , 2007, , .		56

#	ARTICLE	IF	CITATIONS
37	Noise resistant graph ranking for improved web image search. , 2011, , .		55
38	Sample-Specific Late Fusion for Visual Category Recognition. , 2013, , .		55
39	Using Geometry Invariants for Camera Response Function Estimation. , 2007, , .		52
40	A conceptual framework and empirical research for classifying visual descriptors. Journal of the Association for Information Science and Technology, 2001, 52, 938-947.	2.6	49
41	Visual Event Detection using Multi-Dimensional Concept Dynamics. , 2006, , .		48
42	Next-generation content representation, creation, and searching for new-media applications in education. Proceedings of the IEEE, 1998, 86, 884-904.	21.3	47
43	Embedding visible video watermarks in the compressed domain. , 0, , .		47
44	Blind detection of photomontage using higher order statistics. , 0, , .		45
45	Short-term audio-visual atoms for generic video concept classification. , 2009, , .		45
46	Spatio-temporal video search using the object based video representation. , 0, , .		44
47	Topic Tracking Across Broadcast News Videos with Visual Duplicates and Semantic Concepts. , 2006, , .		43
48	Real-time pose estimation of deformable objects using a volumetric approach. , 2014, , .		43
49	Local color and texture extraction and spatial query. , 0, , .		41
50	Fast Semantic Diffusion for Large-Scale Context-Based Image and Video Annotation. IEEE Transactions on Image Processing, 2012, 21, 3080-3091.	9.8	41
51	Super Fast Event Recognition in Internet Videos. IEEE Transactions on Multimedia, 2015, 17, 1174-1186.	7.2	39
52	Regrasping and unfolding of garments using predictive thin shell modeling. , 2015, , .		38
53	Robust late fusion with rank minimization. , 2012, , .		36
54	Discovering joint audio"visual codewords for video event detection. Machine Vision and Applications, 2014, 25, 33-47.	2.7	35

#	ARTICLE	IF	CITATIONS
55	Visual Event Recognition in News Video using Kernel Methods with Multi-Level Temporal Alignment. , 2007, , .		33
56	Real-time content-based adaptive streaming of sports videos. , 0, , .		32
57	Query-Adaptive Fusion for Multimodal Search. Proceedings of the IEEE, 2008, 96, 567-588.	21.3	32
58	Automatic view recognition in echocardiogram videos using parts-based representation. , 0, , .		30
59	General and domain-specific techniques for detecting and recognizing superimposed text in video. , 0, , .		28
60	Near Duplicate Identification With Spatially Aligned Pyramid Matching. IEEE Transactions on Circuits and Systems for Video Technology, 2010, 20, 1068-1079.	8.3	27
61	Modeling Scene and Object Contexts for Human Action Retrieval With Few Examples. IEEE Transactions on Circuits and Systems for Video Technology, 2011, 21, 674-681.	8.3	25
62	Label Propagation from ImageNet to 3D Point Clouds. , 2013, , .		25
63	Robust Object Co-detection. , 2013, , .		25
64	Semantic knowledge construction from annotated image collections. , 0, , .		24
65	Constrained utility maximization for generating visual skims. , 0, , .		23
66	Zero-error information hiding capacity of digital images. , 0, , .		23
67	Attributes and categories for generic instance search from one example. , 2015, , .		23
68	Model-Driven Feedforward Prediction for Manipulation of Deformable Objects. IEEE Transactions on Automation Science and Engineering, 2018, 15, 1621-1638.	5.2	23
69	A CRYPTO SIGNATURE SCHEME FOR IMAGE AUTHENTICATION OVER WIRELESS CHANNEL. International Journal of Image and Graphics, 2005, 05, 135-148.	1.5	22
70	Quality-Optimized and Secure End-to-End Authentication for Media Delivery. Proceedings of the IEEE, 2008, 96, 97-111.	21.3	21
71	Domain adaptive semantic diffusion for large scale context-based video annotation. , 2009, , .		21
72	Semi-fragile image authentication using generic wavelet domain features and ECC. , 0, , .		20

#	ARTICLE	IF	CITATIONS
73	Learning to Detect Scene Text Using a Higher-Order MRF with Belief Propagation. , 0, , .		20
74	Identification of fluid and substrate chemistry based on automatic pattern recognition of stains. Analytical Methods, 2012, 4, 50-57.	2.7	20
75	Condensing computable scenes using visual complexity and film syntax analysis. , 2001, , .		19
76	Perceptual knowledge construction from annotated image collections. , 0, , .		19
77	Subjective preference of spatio-temporal rate in video adaptation using multi-dimensional scalable coding. , 0, , .		19
78	Commercial Detection in Heterogeneous Video Streams Using Fused Multi-Modal and Temporal Features. , 0, , .		19
79	Assistive Image Comment Robotâ€™A Novel Mid-Level Concept-Based Representation. IEEE Transactions on Affective Computing, 2015, 6, 298-311.	8.3	19
80	Structural and semantic analysis of video. , 0, , .		18
81	A Robust and Secure Media Signature Scheme for JPEG Images. Journal of Signal Processing Systems, 2005, 41, 305-317.	1.0	18
82	Generative, discriminative, and ensemble learning on multi-modal perceptual fusion toward news video story segmentation. , 0, , .		17
83	Element Rearrangement for Tensor-Based Subspace Learning. , 2007, , .		16
84	Statistical fusion of multiple cues for image tampering detection. , 2008, , .		16
85	Unsupervised discovery of multilevel statistical video structures using hierarchical hidden Markov models. , 2003, , .		15
86	Combining Text and Audio-Visual Features in Video Indexing. , 0, , .		14
87	Active microscopic cellular image annotation by superposable graph transduction with imbalanced labels. , 2008, , .		14
88	Label diagnosis through self tuning for web image search. , 2009, , .		14
89	Discovering Image Manipulation History by Pairwise Relation and Forensics Tools. IEEE Journal on Selected Topics in Signal Processing, 2020, 14, 1012-1023.	10.8	14
90	Video server retrieval scheduling for variable bit rate scalable video. , 0, , .		12

#	ARTICLE	IF	CITATIONS
91	Columbia's VoD and Multimedia Research Testbed with Heterogeneous Network Support. Multimedia Tools and Applications, 1997, 5, 171-184.	3.9	12
92	Columbia digital news project: an environment for briefing and search over multimedia information. International Journal on Digital Libraries, 1998, 1, 377-385.	1.5	12
93	Content-adaptive utility-based video adaptation. , 2003, , .		12
94	A statistical framework for fusing mid-level perceptual features in news story segmentation. , 2003, , .		12
95	DYNAMIC LOCAL TRACING FOR 3D AXON CURVILINEAR STRUCTURE DETECTION FROM MICROSCOPIC IMAGE STACK. , 2007, , .		12
96	Introduction to the special issue on MPEG-7. IEEE Transactions on Circuits and Systems for Video Technology, 2001, 11, 685-687.	8.3	11
97	Robust digital signature for multimedia authentication:a summary. IEEE Circuits and Systems Magazine, 2003, 3, 23-26.	2.3	11
98	Complexity Adaptive H.264 Encoding for Light Weight Streams. , 0, , .		11
99	Frequency and spatially adaptive wavelet packets. , 0, , .		10
100	Active Context-Based Concept Fusionwith Partial User Labels. , 2006, , .		10
101	Video-server retrieval scheduling and resource reservation for variable bit rate scalable video. IEEE Transactions on Circuits and Systems for Video Technology, 2000, 10, 460-474.	8.3	9
102	Long-term moving object segmentation and tracking using spatio-temporal consistency. , 0, , .		9
103	Near duplicate image identification with patially Aligned Pyramid Matching. , 2008, , .		9
104	Predicting Evoked Emotions in Video. , 2014, , .		9
105	Deep Image Set Hashing. , 2017, , .		9
106	Hierarchical global motion estimation/compensation in low bitrate video coding. , 0, , .		8
107	Image retrieval with sketches and compositions. , 0, , .		8
108	A knowledge engineering approach for image classification based on probabilistic reasoning systems. , 0, , .		8

#	ARTICLE	IF	CITATIONS
109	Identifying and prefiltering images. IEEE Signal Processing Magazine, 2009, 26, 49-58.	5.6	8
110	Discovering recurrent visual semantics in consumer photographs. , 0, , .		7
111	A practical methodology for guaranteeing quality of service for video-on-demand. IEEE Transactions on Circuits and Systems for Video Technology, 2000, 10, 166-178.	8.3	7
112	Echocardiogram videos: summarization, temporal segmentation and browsing. , 0, , .		7
113	Joint adaptive space and frequency basis selection. , 0, , .		6
114	VideoQ: a fully automated video retrieval system using motion sketches. , 0, , .		6
115	Principles and applications of content-aware video communication. , 0, , .		6
116	A Bayesian framework for fusing multiple word knowledge models in videotext recognition. , 0, , .		6
117	Extraction, description and application of multimedia using MPEG-7. , 0, , .		6
118	A Generative-Discriminative Hybrid Method for Multi-View Object Detection. , 0, , .		6
119	3D shape retrieval using a single depth image from low-cost sensors. , 2016, , .		6
120	A content based video traffic model using camera operations. , 0, , .		5
121	Exploring image functionalities in WWW applications development of image/video search and editing engines. , 0, , .		5
122	Understanding and modeling user interests in consumer videos. , 0, , .		5
123	Color-mood analysis of films based on syntactic and psychological models. , 0, , .		5
124	Fast kernel learning for spatial pyramid matching. , 2008, , .		5
125	Buffer control techniques for compressed-domain video editing. , 0, , .		4
126	A distributed system for editing and browsing compressed video over the network. , 0, , .		4

#	ARTICLE	IF	CITATIONS
127	DAVIC and Interoperability Experiments. Multimedia Tools and Applications, 1997, 5, 119-132.	3.9	4
128	Searching and editing MPEG-compressed video in a distributed online environment. Multimedia Systems, 1999, 7, 282-293.	4.7	4
129	Video skims: taxonomies and an optimal generation framework. , 0, , .		4
130	Feature selection for unsupervised discovery of statistical temporal structures in video. , 0, , .		4
131	WebClip: a WWW video editing/browsing system. , 0, , .		3
132	Columbia Digital News System. An environment for briefing and search over multimedia information. , 0, , .		3
133	Concepts and Techniques for Indexing Visual Semantics. , 0, , 497-565.		3
134	Towards Optimal Discriminating Order for Multiclass Classification. , 2011, , .		3
135	Enhancing image search engines in visual information environments. , 0, , .		2
136	Content-based dynamic resource allocation for VBR video in bandwidth limited networks. , 0, , .		2
137	Content-Processing for Video Browsing, Retrieval, and Editing. Multimedia Systems, 1999, 7, 255-255.	4.7	2
138	Recent Advances and Open Issues of Digital Image/Video Search. , 2007, , .		2
139	New insights into Laplacian similarity search. , 2015, , .		2
140	Robust multi-class transductive learning with graphs. , 2009, , .		2
141	Bi-directional object-based coding in video compression at very low bitrate. , 0, , .		1
142	Region feature based similarity searching of semantic video objects. , 1999, , .		1
143	Experiments in constructing belief networks for image classification systems. , 0, , .		1
144	Validation experiments on structural, conceptual, collection, and access description schemes for MPEG-7. , 0, , .		1

#	ARTICLE	IF	CITATIONS
145	A Framework for Sub-Window Shot Detection. , 0, , .		1
146	Muti-scale temporal segmentation and outlier detection in sensor networks. , 2009, , .		1
147	Algorithms and system for segmentation and structure analysis in soccer video. , 2001, , .		1
148	A crypto signature scheme for image authentication over wireless channel. , 0, , .		0
149	Hybrid block-based/segment-based video compression at very low bit rate. , 0, , .		0
150	Motion-adapted content-based temporal scalability in very low bitrate video coding. , 1997, , .		0
151	Content-based dynamic network bandwidth allocation. , 0, , .		0
152	One-Shot Learning for Function-Specific Region Segmentation in Mouse Brain. , 2019, , .		0
153	Label diagnosis through self tuning forweb image search. , 2009, , .		0