Wei Liu

List of Publications by Year
in descending order

194 papers	56,770 citations	57758 44 h-index	34986 98 g-index
197 all docs	197 docs citations	197 times ranked	35231 citing authors

#	Article	IF	Citations
1	Going deeper with convolutions. , 2015, , .		26,086
2	SSD: Single Shot MultiBox Detector. Lecture Notes in Computer Science, 2016, , 21-37.	1.3	11,879
3	CosFace: Large Margin Cosine Loss for Deep Face Recognition. , 2018, , .		1,374
4	SCA-CNN: Spatial and Channel-Wise Attention in Convolutional Networks for Image Captioning. , 2017, , .		1,139
5	Supervised Discrete Hashing. , 2015, , .		838
6	Attentive Collaborative Filtering. , 2017, , .		552
7	Gated Fusion Network for Single Image Dehazing. , 2018, , .		552
8	Tensor Robust Principal Component Analysis with a New Tensor Nuclear Norm. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 925-938.	13.9	500
9	Pixel2Mesh: Generating 3D Mesh Models from Single RGB Images. Lecture Notes in Computer Science, 2018, , 55-71.	1.3	498
10	Learning to Hash for Indexing Big Dataâ€"A Survey. Proceedings of the IEEE, 2016, 104, 34-57.	21.3	369
11	Supervised hashing with kernels. , 2012, , .		343
12	Multiple object tracking: A literature review. Artificial Intelligence, 2021, 293, 103448.	5.8	323
13	Tensor Robust Principal Component Analysis: Exact Recovery of Corrupted Low-Rank Tensors via Convex Optimization. , 2016, , .		310
14	Self-Supervised Adversarial Hashing Networks for Cross-Modal Retrieval. , 2018, , .		276
15	Unsupervised Deep Tracking. , 2019, , .		270
16	Beyond Brightening Low-light Images. International Journal of Computer Vision, 2021, 129, 1013-1037.	15.6	252
17	Learning to Compose Dynamic Tree Structures for Visual Contexts. , 2019, , .		251
18	Bi-Real Net: Enhancing the Performance of 1-Bit CNNs with Improved Representational Capability and Advanced Training Algorithm. Lecture Notes in Computer Science, 2018, , 747-763.	1.3	220

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19	Multi-Modal Curriculum Learning for Semi-Supervised Image Classification. IEEE Transactions on Image Processing, 2016, 25, 3249-3260.	9.8	215
20	Efficient Decision-Based Black-Box Adversarial Attacks on Face Recognition. , 2019, , .		210
21	Reconstruction Network for Video Captioning. , 2018, , .		201
22	Discrete Collaborative Filtering. , 2016, , .		197
23	Deblurring by Realistic Blurring. , 2020, , .		192
24	Learning Distance Metrics with Contextual Constraints for Image Retrieval. , 0, , .		187
25	Towards Large-Scale Histopathological Image Analysis: Hashing-Based Image Retrieval. IEEE Transactions on Medical Imaging, 2015, 34, 496-506.	8.9	182
26	A Sufficient Condition for Convergences of Adam and RMSProp. , 2019, , .		174
27	Zero-Shot Visual Recognition Using Semantics-Preserving Adversarial Embedding Networks. , 2018, , .		167
28	Occlusion Robust Face Recognition Based on Mask Learning With Pairwise Differential Siamese Network. , 2019, , .		162
29	Central Similarity Quantization for Efficient Image and Video Retrieval. , 2020, , .		162
30	Robust and Scalable Graph-Based Semisupervised Learning. Proceedings of the IEEE, 2012, 100, 2624-2638.	21.3	159
31	Deep Spectral Clustering Using Dual Autoencoder Network. , 2019, , .		153
32	Recurrent Fusion Network for Image Captioning. Lecture Notes in Computer Science, 2018, , 510-526.	1.3	153
33	Image Deformation Meta-Networks for One-Shot Learning. , 2019, , .		148
34	CNN in MRF: Video Object Segmentation via Inference in a CNN-Based Higher-Order Spatio-Temporal MRF. , 2018, , .		142
35	Unsupervised Semantic-Preserving Adversarial Hashing for Image Search. IEEE Transactions on Image Processing, 2019, 28, 4032-4044.	9.8	139
36	Generalizing Face Forgery Detection with High-frequency Features. , 2021, , .		139

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37	Exploring Representativeness and Informativeness for Active Learning. IEEE Transactions on Cybernetics, 2017, 47, 14-26.	9.5	136
38	Deep Self-Taught Learning for Weakly Supervised Object Localization. , 2017, , .		134
39	Face Anti-Spoofing: Model Matters, so Does Data. , 2019, , .		131
40	Bidirectional Attentive Fusion with Context Gating for Dense Video Captioning. , 2018, , .		130
41	Towards Photo-Realistic Virtual Try-On by Adaptively Generating†"Preserving Image Content. , 2020, , .		130
42	Semi-supervised distance metric learning for collaborative image retrieval and clustering. ACM Transactions on Multimedia Computing, Communications and Applications, 2010, 6, 1-26.	4.3	129
43	Real-Time Neural Style Transfer for Videos. , 2017, , .		126
44	NDDR-CNN: Layerwise Feature Fusing in Multi-Task CNNs by Neural Discriminative Dimensionality Reduction. , 2019, , .		125
45	Multi-Granularity Generator for Temporal Action Proposal. , 2019, , .		125
46	Spatiotemporal Co-Attention Recurrent Neural Networks for Human-Skeleton Motion Prediction. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 3300-3315.	13.9	124
47	SIRF: Simultaneous Satellite Image Registration and Fusion in a Unified Framework. IEEE Transactions on Image Processing, 2015, 24, 4213-4224.	9.8	123
48	Unsupervised Image Captioning. , 2019, , .		121
49	VideoMoCo: Contrastive Video Representation Learning with Temporally Adversarial Examples. , 2021, , .		120
50	Deep Video Dehazing With Semantic Segmentation. IEEE Transactions on Image Processing, 2019, 28, 1895-1908.	9.8	119
51	Self-Supervised Spatio-Temporal Representation Learning for Videos by Predicting Motion and Appearance Statistics. , 2019, , .		114
52	Shared Predictive Cross-Modal Deep Quantization. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 5292-5303.	11.3	111
53	Controllable Video Captioning With POS Sequence Guidance Based on Gated Fusion Network. , 2019, , .		111
54	Adversarial Spatio-Temporal Learning for Video Deblurring. IEEE Transactions on Image Processing, 2019, 28, 291-301.	9.8	111

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55	Scalable similarity search with optimized kernel hashing. , 2010, , .		108
56	Saliency propagation from simple to difficult. , 2015, , .		108
57	Asymmetric Binary Coding for Image Search. IEEE Transactions on Multimedia, 2017, 19, 2022-2032.	7.2	108
58	Trajectory-Based Modeling of Human Actions with Motion Reference Points. Lecture Notes in Computer Science, 2012, , 425-438.	1.3	106
59	Label Propagation via Teaching-to-Learn and Learning-to-Teach. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 1452-1465.	11.3	103
60	Hierarchical Long Short-Term Concurrent Memory for Human Interaction Recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 1110-1118.	13.9	103
61	Learning Hash Codes with Listwise Supervision. , 2013, , .		99
62	Semi-supervised distance metric learning for Collaborative Image Retrieval. , 2008, , .		98
63	Semantic Structure-based Unsupervised Deep Hashing. , 2018, , .		96
64	Efficient manifold ranking for image retrieval. , 2011, , .		95
65	Image Fusion with Local Spectral Consistency and Dynamic Gradient Sparsity. , 2014, , .		95
66	Learning Binary Codes for Maximum Inner Product Search. , 2015, , .		94
67	Discriminative Multi-instance Multitask Learning for 3D Action Recognition. IEEE Transactions on Multimedia, 2017, 19, 519-529.	7.2	94
68	DistillHash: Unsupervised Deep Hashing by Distilling Data Pairs. , 2019, , .		93
69	Discriminative Dictionary Learning With Common Label Alignment for Cross-Modal Retrieval. IEEE Transactions on Multimedia, 2016, 18, 208-218.	7.2	92
70	Graph Convolutional Network Hashing. IEEE Transactions on Cybernetics, 2020, 50, 1460-1472.	9.5	90
71	Task-Dependent Visual-Codebook Compression. IEEE Transactions on Image Processing, 2012, 21, 2282-2293.	9.8	89
72	Neural Compatibility Modeling with Attentive Knowledge Distillation. , 2018, , .		85

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73	Learning to Generate Time-Lapse Videos Using Multi-stage Dynamic Generative Adversarial Networks. , 2018, , .		84
74	Nonnegative Local Coordinate Factorization for Image Representation. IEEE Transactions on Image Processing, 2013, 22, 969-979.	9.8	83
75	Stochastic Quasi-Newton Methods for Nonconvex Stochastic Optimization. SIAM Journal on Optimization, 2017, 27, 927-956.	2.0	81
76	Long-Term Human Motion Prediction by Modeling Motion Context and Enhancing Motion Dynamics. , 2018, , .		80
77	Super-Identity Convolutional Neural Network for Face Hallucination. Lecture Notes in Computer Science, 2018, , 196-211.	1.3	79
78	End-to-End Active Object Tracking and Its Real-World Deployment via Reinforcement Learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 1317-1332.	13.9	74
79	ArtFlow: Unbiased Image Style Transfer via Reversible Neural Flows. , 2021, , .		74
80	A Reinforced Topic-Aware Convolutional Sequence-to-Sequence Model for Abstractive Text Summarization. , 2018, , .		73
81	MVF-Net: Multi-View 3D Face Morphable Model Regression. , 2019, , .		71
82	Parser-Free Virtual Try-on via Distilling Appearance Flows. , 2021, , .		71
83	Unsupervised Deep Representation Learning for Real-Time Tracking. International Journal of Computer Vision, 2021, 129, 400-418.	15.6	69
84	Residual Regression With Semantic Prior for Crowd Counting. , 2019, , .		66
85	Unsupervised One-Class Learning for Automatic Outlier Removal. , 2014, , .		63
86	PointPWC-Net: Cost Volume on Point Clouds for (Self-)Supervised Scene Flow Estimation. Lecture Notes in Computer Science, 2020, , 88-107.	1.3	63
87	Unsupervised Image-to-Image Translation with Stacked Cycle-Consistent Adversarial Networks. Lecture Notes in Computer Science, 2018, , 186-201.	1.3	62
88	Human Action Recognition in Unconstrained Videos by Explicit Motion Modeling. IEEE Transactions on Image Processing, 2015, 24, 3781-3795.	9.8	60
89	Multi-label Learning with Missing Labels Using Mixed Dependency Graphs. International Journal of Computer Vision, 2018, 126, 875-896.	15.6	60
90	Orthogonal Deep Features Decomposition for Age-Invariant Face Recognition. Lecture Notes in Computer Science, 2018, , 764-779.	1.3	60

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91	Visual Reranking through Weakly Supervised Multi-graph Learning. , 2013, , .		59
92	Left-Right Comparative Recurrent Model for Stereo Matching. , 2018, , .		59
93	Regularizing RNNs for Caption Generation by Reconstructing the Past with the Present. , 2018, , .		58
94	Decorrelated Adversarial Learning for Age-Invariant Face Recognition. , 2019, , .		58
95	Latent Max-Margin Multitask Learning With Skelets for 3-D Action Recognition. IEEE Transactions on Cybernetics, 2016, 47, 1-10.	9.5	57
96	Compressing Convolutional Neural Networks via Factorized Convolutional Filters. , 2019, , .		57
97	Noise resistant graph ranking for improved web image search. , 2011, , .		55
98	Null Space Approach of Fisher Discriminant Analysis for Face Recognition. Lecture Notes in Computer Science, 2004, , 32-44.	1.3	52
99	Semantic Conditioned Dynamic Modulation for Temporal Sentence Grounding in Videos. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, PP, 1-1.	13.9	52
100	Learning Modality Interaction for Temporal Sentence Localization and Event Captioning in Videos. Lecture Notes in Computer Science, 2020, , 333-351.	1.3	51
101	Discrete hyper-graph matching. , 2015, , .		50
102	Detecting Faces Using Inside Cascaded Contextual CNN. , 2017, , .		50
103	Deep Learning Driven Visual Path Prediction From a Single Image. IEEE Transactions on Image Processing, 2016, 25, 5892-5904.	9.8	48
104	Joint Intermodal and Intramodal Label Transfers for Extremely Rare or Unseen Classes. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2017, 39, 1360-1373.	13.9	48
105	Bi-Real Net: Binarizing Deep Network Towards Real-Network Performance. International Journal of Computer Vision, 2020, 128, 202-219.	15.6	48
106	Top Rank Supervised Binary Coding for Visual Search. , 2015, , .		46
107	Image Defogging Quality Assessment: Real-World Database and Method. IEEE Transactions on Image Processing, 2021, 30, 176-190.	9.8	46
108	Learning Joint Gait Representation via Quintuplet Loss Minimization. , 2019, , .		45

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109	Disentangled Cycle Consistency for Highly-realistic Virtual Try-On. , 2021, , .		45
110	Reconstruct and Represent Video Contents for Captioning via Reinforcement Learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 3088-3101.	13.9	44
111	Semi-supervised sparse metric learning using alternating linearization optimization. , 2010, , .		43
112	Video Re-localization. Lecture Notes in Computer Science, 2018, , 55-70.	1.3	42
113	Dictionary Pair Learning on Grassmann Manifolds for Image Denoising. IEEE Transactions on Image Processing, 2015, 24, 4556-4569.	9.8	41
114	When Location Meets Social Multimedia. ACM Transactions on Intelligent Systems and Technology, 2015, 6, 1-18.	4.5	40
115	Tagging Like Humans: Diverse and Distinct Image Annotation. , 2018, , .		40
116	SynFace: Face Recognition with Synthetic Data. , 2021, , .		40
117	Face Super-Resolution Guided by 3D Facial Priors. Lecture Notes in Computer Science, 2020, , 763-780.	1.3	37
118	MTL-NAS: Task-Agnostic Neural Architecture Search Towards General-Purpose Multi-Task Learning. , 2020, , .		35
119	Weakly Supervised Visual Dictionary Learning by Harnessing Image Attributes. IEEE Transactions on Image Processing, 2014, 23, 5400-5411.	9.8	34
120	Graduated Consistency-Regularized Optimization for Multi-graph Matching. Lecture Notes in Computer Science, 2014, , 407-422.	1.3	34
121	Pixel2Mesh: 3D Mesh Model Generation via Image Guided Deformation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 3600-3613.	13.9	33
122	Human-like Controllable Image Captioning with Verb-specific Semantic Roles. , 2021, , .		33
123	Classification by Retrieval. , 2017, , .		32
124	Toward Efficient Action Recognition: Principal Backpropagation for Training Two-Stream Networks. IEEE Transactions on Image Processing, 2019, 28, 1773-1782.	9.8	31
125	Exact Adversarial Attack to Image Captioning via Structured Output Learning With Latent Variables. , 2019, , .		27
126	Joint Face Image Restoration and Frontalization for Recognition. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 1285-1298.	8.3	27

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127	Improving Event Extraction via Multimodal Integration. , 2017, , .		25
128	MHP-VOS: Multiple Hypotheses Propagation for Video Object Segmentation. , 2019, , .		25
129	Spatio-Temporal Video Re-Localization by Warp LSTM. , 2019, , .		24
130	An Efficient Semi-Supervised Clustering Algorithm with Sequential Constraints. , 2015, , .		23
131	Stacked Robust Adaptively Regularized Auto-Regressions for Domain Adaptation. IEEE Transactions on Knowledge and Data Engineering, 2019, 31, 561-574.	5.7	23
132	Context-Gated Convolution. Lecture Notes in Computer Science, 2020, , 701-718.	1.3	23
133	Video De-Fencing. IEEE Transactions on Circuits and Systems for Video Technology, 2014, 24, 1111-1121.	8.3	22
134	Stochastic Gradient Made Stable: A Manifold Propagation Approach for Large-Scale Optimization. IEEE Transactions on Knowledge and Data Engineering, 2017, 29, 458-471.	5.7	22
135	Diverse Image Annotation. , 2017, , .		22
136	Reversed Spectral Hashing. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 2441-2449.	11.3	21
137	Knowledge transfer for spectral clustering. Pattern Recognition, 2018, 81, 484-496.	8.1	20
138	Multi-modal self-paced learning for image classification. Neurocomputing, 2018, 309, 134-144.	5.9	19
139	Joint Representation and Estimator Learning for Facial Action Unit Intensity Estimation. , 2019, , .		19
140	Neural Stereoscopic Image Style Transfer. Lecture Notes in Computer Science, 2018, , 56-71.	1.3	19
141	Beyond Monocular Deraining: Parallel Stereo Deraining Network Via Semantic Prior. International Journal of Computer Vision, 2022, 130, 1754-1769.	15.6	19
142	Scalable mammogram retrieval using Anchor Graph Hashing. , 2014, , .		18
143	Multimedia Hashing and Networking. IEEE MultiMedia, 2016, 23, 75-79.	1.7	18
144	Efficient robust conditional random fields. IEEE Transactions on Image Processing, 2015, 24, 3124-3136.	9.8	17

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145	Matching Image and Sentence with Multi-faceted Representations. IEEE Transactions on Circuits and Systems for Video Technology, 2019, , 1-1.	8.3	16
146	Pyramid Architecture Search for Real-Time Image Deblurring. , 2021, , .		16
147	Mining histopathological images via hashing-based scalable image retrieval. , 2014, , .		15
148	Auxiliary Training Information Assisted Visual Recognition. IPSJ Transactions on Computer Vision and Applications, 2015, 7, 138-150.	4.4	15
149	DeepProduct. ACM Transactions on Multimedia Computing, Communications and Applications, 2018, 14, 1-18.	4.3	15
150	Image-to-Video Generation via 3D Facial Dynamics. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 1805-1819.	8.3	15
151	Scalable Mammogram Retrieval Using Composite Anchor Graph Hashing With Iterative Quantization. IEEE Transactions on Circuits and Systems for Video Technology, 2017, 27, 2450-2460.	8.3	14
152	A Deep Bayesian Tensor-Based System for Video Recommendation. ACM Transactions on Information Systems, 2019, 37, 1-22.	4.9	14
153	Rank Preserving Hashing for Rapid Image Search. , 2015, , .		13
154	Hierarchical Visualization of Video Search Results for Topic-Based Browsing. IEEE Transactions on Multimedia, 2016, 18, 2161-2170.	7.2	13
155	A Personal Privacy Preserving Framework. , 2018, , .		13
156	Scalable Histopathological Image Analysis via Active Learning. Lecture Notes in Computer Science, 2014, 17, 369-376.	1.3	13
157	Mining spatiotemporal video patterns towards robust action retrieval. Neurocomputing, 2013, 105, 61-69.	5.9	12
158	Multi-modal sequence model with gated fully convolutional blocks for micro-video venue classification. Multimedia Tools and Applications, 2020, 79, 6709-6726.	3.9	12
159	Mining Histopathological Images via Composite Hashing and Online Learning. Lecture Notes in Computer Science, 2014, 17, 479-486.	1.3	12
160	Two-Stage Hashing for Fast Document Retrieval. , 2014, , .		12
161	Face Recognition via Archetype Hull Ranking. , 2013, , .		11
162	Video Classification via Weakly Supervised Sequence Modeling. Computer Vision and Image Understanding, 2016, 152, 79-87.	4.7	11

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163	Sub-Selective Quantization for Learning Binary Codes in Large-Scale Image Search. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 1526-1532.	13.9	11
164	Modeling Varying Camera-IMU Time Offset in Optimization-Based Visual-Inertial Odometry. Lecture Notes in Computer Science, 2018, , 491-507.	1.3	11
165	Can Visual Recognition Benefit from Auxiliary Information in Training?. Lecture Notes in Computer Science, 2015, , 65-80.	1.3	11
166	Incremental Multi-graph Matching via Diversity and Randomness Based Graph Clustering. Lecture Notes in Computer Science, 2018, , 142-158.	1.3	11
167	Fine-grained Video Attractiveness Prediction Using Multimodal Deep Learning on a Large Real-world Dataset. , 2018, , .		10
168	Vulnerability vs. Reliability: Disentangled Adversarial Examples for Cross-Modal Learning. , 2020, , .		9
169	Dual Skipping Networks. , 2018, , .		8
170	Temporally Coherent Video Harmonization Using Adversarial Networks. IEEE Transactions on Image Processing, 2020, 29, 214-224.	9.8	8
171	Quantized Adam with Error Feedback. ACM Transactions on Intelligent Systems and Technology, 2021, 12, 1-26.	4.5	8
172	Adversarial Attack on Deep Cross-Modal Hamming Retrieval. , 2021, , .		8
173	Anytime Recognition with Routing Convolutional Networks. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 1875-1886.	13.9	7
174	Self-supervised Video Representation Learning by Uncovering Spatio-temporal Statistics. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, PP, .	13.9	7
175	Relevance aggregation projections for image retrieval. , 2008, , .		6
176	Optimal semi-supervised metric learning for image retrieval. , 2012, , .		6
177	Toward Making Unsupervised Graph Hashing Discriminative. IEEE Transactions on Multimedia, 2020, 22, 760-774.	7.2	6
178	Distribution Calibration in Riemannian Symmetric Space. IEEE Transactions on Systems, Man, and Cybernetics, 2011, 41, 921-930.	5.0	5
179	Localizing web videos using social images. Information Sciences, 2015, 302, 122-131.	6.9	5
180	Progressive Multistage Learning for Discriminative Tracking. IEEE Transactions on Cybernetics, 2022, 52, 3519-3530.	9.5	4

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181	EDFace-Celeb-1 M: Benchmarking Face Hallucination With a Million-Scale Dataset. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2023, 45, 3968-3978.	13.9	4
182	Sparse Subspace Clustering for Incomplete Images. , 2015, , .		3
183	Understanding image structure via hierarchical shape parsing. , 2015, , .		3
184	Video co-segmentation based on directed graph. Multimedia Tools and Applications, 2019, 78, 10353-10372.	3.9	3
185	Deep Residual Equivariant Mapping for Multi-angle Face Recognition. Lecture Notes in Computer Science, 2019, , 145-154.	1.3	3
186	Theoretic Analysis and Extremely Easy Algorithms for Domain Adaptive Feature Learning. , 2017, , .		3
187	Query-dependent visual dictionary adaptation for image reranking. , 2013, , .		2
188	Fast Stochastic Ordinal Embedding With Variance Reduction and Adaptive Step Size. IEEE Transactions on Knowledge and Data Engineering, 2021, 33, 2467-2478.	5.7	2
189	TSCDNet+: A highly robust substation anomaly detection method. Optik, 2021, 246, 167808.	2.9	2
190	Robust multi-class transductive learning with graphs. , 2009, , .		2
191	Weakly supervised topic grouping of YouTube search results. , 2012, , .		1
192	Weakly supervised codebook learning by iterative label propagation with graph quantization. Signal Processing, 2013, 93, 2274-2283.	3.7	0
193	Deep Camera-Aware Metric Learning for Person Reidentification. Wireless Communications and Mobile Computing, 2021, 2021, 1-9.	1.2	0
194	Two-View Mammographic Mass Retrieval Using Deep Hashing. , 2021, , .		0