Chi-Ren Shyu

List of Publications by Year
in descending order

111 papers	2,452 citations	279798 23 h-index	233421 45 g-index
114 all docs	114 docs citations	114 times ranked	2787 citing authors

#	Article	IF	Citations
1	ASSERT: A Physician-in-the-Loop Content-Based Retrieval System for HRCT Image Databases. Computer Vision and Image Understanding, 1999, 75, 111-132.	4.7	315
2	Acute Ischemic Stroke and COVID-19. Stroke, 2021, 52, 905-912.	2.0	204
3	Methylation microarray analysis of late-stage ovarian carcinomas distinguishes progression-free survival in patients and identifies candidate epigenetic markers. Clinical Cancer Research, 2002, 8, 2246-52.	7.0	156
4	GeoIRIS: Geospatial Information Retrieval and Indexing System—Content Mining, Semantics Modeling, and Complex Queries. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 839-852.	6.3	155
5	Automated Storage and Retrieval of Thin-Section CT Images to Assist Diagnosis: System Description and Preliminary Assessment. Radiology, 2003, 228, 265-270.	7.3	153
6	A Patient-Centric Health Information Exchange Framework Using Blockchain Technology. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 2169-2176.	6.3	138
7	Advancing health equity and access using telemedicine: a geospatial assessment. Journal of the American Medical Informatics Association: JAMIA, 2019, 26, 796-805.	4.4	92
8	Determining Effects of Non-synonymous SNPs on Protein-Protein Interactions using Supervised and Semi-supervised Learning. PLoS Computational Biology, 2014, 10, e1003592.	3.2	71
9	A Sorghum MYB Transcription Factor Induces 3-Deoxyanthocyanidins and Enhances Resistance against Leaf Blights in Maize. Molecules, 2015, 20, 2388-2404.	3.8	61
10	A Systematic Review of Federated Learning in the Healthcare Area: From the Perspective of Data Properties and Applications. Applied Sciences (Switzerland), 2021, 11, 11191.	2.5	60
11	Reinfection With Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) in Patients Undergoing Serial Laboratory Testing. Clinical Infectious Diseases, 2022, 74, 294-300.	5.8	57
12	A Connected Set of Genes Associated with Programmed Cell Death Implicated in Controlling the Hypersensitive Response in Maize. Genetics, 2013, 193, 609-620.	2.9	50
13	Long identical multispecies elements in plant and animal genomes. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1183-91.	7.1	43
14	Using Human Perceptual Categories for Content-Based Retrieval from a Medical Image Database. Computer Vision and Image Understanding, 2002, 88, 119-151.	4.7	42
15	How Can Virtual Reality Reshape Furniture Retailing?. Clothing and Textiles Research Journal, 2008, 26, 143-163.	3.4	35
16	DOMMINO 2.0: integrating structurally resolved protein-, RNA-, and DNA-mediated macromolecular interactions. Database: the Journal of Biological Databases and Curation, 2016, 2016, .	3.0	34
17	Measurement Issues in Anthropometric Measures of Limb Volume Change in Persons at Risk for and Living with Lymphedema: A Reliability Study. Journal of Personalized Medicine, 2015, 5, 341-353.	2.5	33
18	Developing a case-based reasoning knowledge repository to support a learning community—An example from the technology integration community. Educational Technology Research and Development, 2003, 51, 45-62.	2.8	32

#	ARTICLE	IF	CITATIONS
19	Knowledge-Driven Multidimensional Indexing Structure for Biomedical Media Database Retrieval. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 320-331.	3.2	32
20	Exploring microRNA-mediated alteration of EGFR signaling pathway in non-small cell lung cancer using an mRNA:miRNA regression model supported by target prediction databases. Genomics, 2014, 104, 504-511.	2.9	32
21	Knowledge Representation and Sharing Using Visual Semantic Modeling for Diagnostic Medical Image Databases. IEEE Transactions on Information Technology in Biomedicine, 2005, 9, 538-553.	3.2	30
22	The effects of conceptual description and search practice on users' mental models and information seeking in a case-based reasoning retrieval system. Information Processing and Management, 2008, 44, 294-309.	8.6	27
23	DOMMINO: a database of macromolecular interactions. Nucleic Acids Research, 2012, 40, D501-D506.	14.5	27
24	Subarachnoid Hemorrhage and COVID-19: An Analysis of 282,718 Patients. World Neurosurgery, 2021, 151, e615-e620.	1.3	27
25	ProteinDBS: a real-time retrieval system for protein structure comparison. Nucleic Acids Research, 2004, 32, W572-W575.	14.5	26
26	Generalizable Layered Blockchain Architecture for Health Care Applications: Development, Case Studies, and Evaluation. Journal of Medical Internet Research, 2020, 22, e19029.	4.3	22
27	Charged residues at protein interaction interfaces: Unexpected conservation and orchestrated divergence. Protein Science, 2011, 20, 1275-1284.	7.6	21
28	Visual-Semantic Modeling in Content-Based Geospatial Information Retrieval Using Associative Mining Techniques. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 38-42.	3.1	20
29	Computational Identification of Reassortments in Avian Influenza Viruses. Avian Diseases, 2007, 51, 434-439.	1.0	19
30	Histological Quantitation of Brain Injury Using Whole Slide Imaging: A Pilot Validation Study in Mice. PLoS ONE, 2014, 9, e92133.	2.5	19
31	Laboratory Tests for COVID-19: A Review of Peer-Reviewed Publications and Implications for Clinical Use. Missouri Medicine, 2020, 117, 184-195.	0.3	17
32	A fast SCOP fold classification system using content-based E-Predict algorithm. BMC Bioinformatics, 2006, 7, 362.	2.6	15
33	Heritable genotype contrast mining reveals novel gene associations specific to autism subgroups. Journal of Biomedical Informatics, 2018, 77, 50-61.	4.3	15
34	Income Inequality and Health: Expanding Our Understanding of State-Level Effects by Using a Geospatial Big Data Approach. Social Science Computer Review, 0, , 089443931987299.	4.2	15
35	Effect of Race and Ethnicity on In-Hospital Mortality in Patients with COVID-2019. Ethnicity and Disease, 2021, 31, 389-398.	2.3	15
36	Applying Blockchain Technology for Health Information Exchange and Persistent Monitoring for Clinical Trials. AMIA ... Annual Symposium proceedings, 2018, 2018, 1167-1175.	0.2	14

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37	Feature‐based classification of native and non‐native protein–protein interactions: Comparing supervised and semi‐supervised learning approaches. Proteomics, 2011, 11, 4321-4330.	2.2	13
38	Exploratory Data Mining for Subgroup Cohort Discoveries and Prioritization. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1456-1468.	6.3	12
39	New-Onset Dementia Among Survivors of Pneumonia Associated With Severe Acute Respiratory Syndrome Coronavirus 2 Infection. Open Forum Infectious Diseases, 2022, 9, ofac115.	0.9	12
40	A fast protein structure retrieval system using image-based distance matrices and multidimensional index. , 0, , .		11
41	Structural Similarity and Classification of Protein Interaction Interfaces. PLoS ONE, 2011, 6, e19554.	2.5	11
42	Fast protein binding site comparisons using visual words representation. Bioinformatics, 2012, 28, 1345-1352.	4.1	11
43	A pathologist-in-the-loop IHC antibody test selection using the entropy-based probabilistic method. Journal of Pathology Informatics, 2012, 3, 1.	1.7	11
44	PathEdEx â€" Uncovering High-explanatory Visual Diagnostics Heuristics Using Digital Pathology and Multiscale Gaze Data. Journal of Pathology Informatics, 2017, 8, 29.	1.7	11
45	Uncovering influence links in molecular knowledge networks to streamline personalized medicine. Journal of Biomedical Informatics, 2014, 52, 394-405.	4.3	10
46	Explainable artificial intelligence in high-throughput drug repositioning for subgroup stratifications with interventionable potential. Journal of Biomedical Informatics, 2021, 118, 103792.	4.3	10
47	Efficient SCOP-fold classification and retrieval using index-based protein substructure alignments. Bioinformatics, 2009, 25, 2559-2565.	4.1	9
48	PubMed-supported clinical term weighting approach for improving inter-patient similarity measure in diagnosis prediction. BMC Medical Informatics and Decision Making, 2015, 15, 43.	3.0	9
49	Medical calculators: Prevalence, and barriers to use. Computer Methods and Programs in Biomedicine, 2019, 179, 105002.	4.7	9
50	Intracerebral Hemorrhage and Coronavirus Disease 2019 in a Cohort of 282,718 Hospitalized Patients. Neurocritical Care, 2022, 36, 259-265.	2.4	9
51	Immunogenomic pathways associated with cytotoxic lymphocyte infiltration and survival in colorectal cancer. BMC Cancer, 2020, 20, 124.	2.6	8
52	Multi-Index Multi-Object Content-Based Retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 4036-4049.	6.3	7
53	Role of domain knowledge in developing user‐centered medical‐image indexing. Journal of the Association for Information Science and Technology, 2012, 63, 225-241.	2.6	7
54	Investigating the Impact of Intensive Care Unit Interruptions on Patient Safety Events and Electronic Health Records Use: An Observational Study. Journal of Patient Safety, 2021, 17, e321-e326.	1.7	7

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55	Artificial Intelligence-Driven Structurization of Diagnostic Information in Free-Text Pathology Reports. Journal of Pathology Informatics, 2020, 11, 4.	1.7	7
56	Multi-source and ontology-based retrieval engine for maize mutant phenotypes. Database: the Journal of Biological Databases and Curation, 2011, 2011, bar012-bar012.	3.0	6
57	Applications of PathFinder Network Scaling for Improving the Ranking of Satellite Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 1092-1099.	4.9	6
58	Using Temporal Mining to Examine the Development of Lymphedema in Breast Cancer Survivors. Nursing Research, 2013, 62, 122-129.	1.7	6
59	A neotropical Miocene pollen database employing image–based search and semantic modeling. Applications in Plant Sciences, 2014, 2, 1400030.	2.1	6
60	Performance of human and server prediction in <scp>CAPRI</scp> rounds 38–45. Proteins: Structure, Function and Bioinformatics, 2020, 88, 1110-1120.	2.6	6
61	Current and Prospective Methods for Assessing Anti-Tumor Immunity in Colorectal Cancer. International Journal of Molecular Sciences, 2021, 22, 4802.	4.1	6
62	Utilization and Outcomes of Acute Revascularization Treatments in Ischemic Stroke Patients with SARS-CoV-2 Infection. Journal of Stroke and Cerebrovascular Diseases, 2022, 31, 106157.	1.6	6
63	Drug Repositioning and Subgroup Discovery for Precision Medicine Implementation in Triple Negative Breast Cancer. Cancers, 2021, 13, 6278.	3.7	6
64	Spatial lesion indexing for medical image databases using force histograms. , 0, , .		5
65	SEARCHING AND MINING VISUALLY OBSERVED PHENOTYPES OF MAIZE MUTANTS. Journal of Bioinformatics and Computational Biology, 2007, 05, 1193-1213.	0.8	5
66	Novel Approach for Coexpression Analysis of E2F1–3 and MYC Target Genes in Chronic Myelogenous Leukemia. BioMed Research International, 2014, 2014, 1-7.	1.9	5
67	Design and evaluation of a personal digital assistant- based alerting service for clinicians. Journal of the Medical Library Association: JMLA, 2004, 92, 438-44.	1.7	5
68	Applying Blockchain Technology to Enhance Clinical Trial Recruitment. AMIA ... Annual Symposium proceedings, 2019, 2019, 1276-1285.	0.2	5
69	Information mining from human visual reasoning about multi-temporal, high-resolution satellite imagery. International Journal of Image and Data Fusion, 2012, 3, 243-256.	1.7	4
70	PBSword: a web server for searching similar protein-protein binding sites. Nucleic Acids Research, 2012, 40, W428-W434.	14.5	4
71	Visual Reasoning Indexing and Retrieval Using In-Memory Computing. International Journal of Semantic Computing, 2016, 10, 299-322.	0.5	4
72	Quantitative evaluation of impact attenuation by football helmets using a modal impulse hammer. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 2019, 233, 301-311.	0.7	4

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73	Monocarboxylate Transporter-2 Expression Restricts Tumor Growth in a Murine Model of Lung Cancer: A Multi-Omic Analysis. International Journal of Molecular Sciences, 2021, 22, 10616.	4.1	4
74	Contrast Pattern Mining With the T1D Exchange Clinic Registry Reveals Complex Phenotypic Factors and Comorbidity Patterns Associated With Familial Versus Sporadic Type 1 Diabetes. Diabetes Care, 2022, 45, e56-e59.	8.6	4
75	User-specific semantics for modeling content-based geospatial knowledge. , 2007, , .		3
76	Editorial for the special issue of knowledge discovery and management in biomedical information systems. Information Systems Frontiers, 2009, 11, 345-347.	6.4	3
77	Combining Contrast Mining with Logistic Regression To Predict Healthcare Utilization in a Managed Care Population. Applied Clinical Informatics, 2017, 08, 430-446.	1.7	3
78	Quantifying and understanding the differences in visual activities with contrast subsequences. , 2019, , .		3
79	RHPTree—Risk Hierarchical Pattern Tree for Scalable Long Pattern Mining. ACM Transactions on Knowledge Discovery From Data, 2022, 16, 1-33.	3.5	3
80	Semantic integration and knowledge exchange for diagnostic medical image databases. , 0, , .		2
81	Ontology Driven Content Mining and Semantic Queries for Satellite Image Databases. , 2008, , .		2
82	ProteinDBS v2.0: a web server for global and local protein structure search. Nucleic Acids Research, 2010, 38, W53-W58.	14.5	2
83	A study of factors that influence the accuracy of content-based geospatial ranking systems. International Journal of Image and Data Fusion, 2012, 3, 257-268.	1.7	2
84	MRSMRS: Mining repetitive sequences in a MapReduce setting. , 2014, , .		2
85	Eye Gaze Pattern Analysis of Whole Slide Image Viewing Behavior in PathEdEx Platform. Microscopy and Microanalysis, 2017, 23, 248-249.	0.4	2
86	Efficient GPU-accelerated extraction of imperfect inverted repeats from DNA sequences. , 2017, , .		2
87	Computational modeling of human reasoning processes for interpretable visual knowledge: a case study with radiographers. Scientific Reports, 2020, 10, 21620.	3.3	2
88	Predicting cancer interaction networks using text-mining and structure understanding. AMIA ... Annual Symposium proceedings, 2006, , 1123.	0.2	2
89	A preliminary study to understand tacit knowledge and visual routines of medical experts through gaze tracking. AMIA ... Annual Symposium proceedings, 2010, 2010, 21-5.	0.2	2
90	Investigating Health Context Using a Spatial Data Analytical Tool: Development of a Geospatial Big Data Ecosystem. JMIR Medical Informatics, 2022, 10, e35073.	2.6	2

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91	Visual information mining and ranking using graded relevance assessments in satellite image databases. , 2010, , .		1
92	Semantic models for ranking medical images using Dirichlet non-parametric mixture models. , 2011, , .		1
93	Search tactics for medical image retrieval. Proceedings of the American Society for Information Science and Technology, 2011, 48, 1-4.	0.2	1
94	Associative semantic ranking of satellite images using PathFinder Network Scaling ensemble methods. , 2012, , .		1
95	Large scale multi-species palindrome study using distributed in-memory computing. , 2015, , .		1
96	Large scale extraction of perfect and imperfect DNA palindromes using in-memory computing. , 2016, , .		1
97	Visual Reasoning Indexing and Retrieval Using In-memory Computing. , 2016, , .		1
98	Improving retrieval performance in medical image databases using simulated annealing. AMIA ... Annual Symposium proceedings, 2010, 2010, 276-80.	0.2	1
99	Re-engineering a Clinical Trial Management System Using Blockchain Technology: System Design, Development, and Case Studies. Journal of Medical Internet Research, 2022, 24, e36774.	4.3	1
100	New cardiovascular events in the convalescent period among survivors of SARS-CoV-2 infection. International Journal of Stroke, 2023, 18, 437-444.	5.9	1
101	A hybrid tree approach for efficient image database retrieval with dynamic feedback. , 0, , .		0
102	Whither Biological Database Research?. OMICS A Journal of Integrative Biology, 2003, 7, 61-65.	2.0	0
103	PREDICTING RANKED SCOP DOMAINS BY MINING ASSOCIATIONS OF VISUAL CONTENTS IN DISTANCE MATRICES. , 2005, , .		0
104	An accurate classification of native and non-native protein-protein interactions using supervised and semi-supervised learning approaches. , 2010, , .		0
105	Genetic algorithm supported by graphical processing unit improves the exploration of effective connectivity in functional brain imaging. Frontiers in Computational Neuroscience, 2015, 9, 50.	2.1	0
106	An Integrated Approach to Sequence-Independent Local Alignment of Protein Binding Sites. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2015, 12, 298-308.	3.0	0
107	Immunogenomic Pathway and Survival Analysis in Colorectal Cancer Patients Based on Tumor Location and Microsatellite Status. Journal of the American College of Surgeons, 2018, 227, S66.	0.5	0
108	A New Mechanism for T-ALL Leukemogenesis: Early Expression of Alpha-Beta TCR Occurs in a Natural Subset of CD4-CD8- Double Negative (DN) Thymocytes Where MHC Engagement May Drive NOTCH Mutation and Tumor Initiation. Blood, 2019, 134, 1463-1463.	1.4	0

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109	Identifying patient‐specific flow of signal transduction perturbed by multiple single‐nucleotide alterations. Quantitative Biology, 2020, 8, 336-346.	0.5	0
110	Development of A Blockchain Framework for Virtual Clinical Trials. AMIA ... Annual Symposium proceedings, 2020, 2020, 1412-1420.	0.2	0
111	Contrast Mining for Pattern Discovery and Descriptive Analytics to Tailor Sub-Groups of Patients Using Big Data Solutions. Studies in Health Technology and Informatics, 2017, 245, 544-548.	0.3	0