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	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
2	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
3	Intracerebral Hemorrhage and Coronavirus Disease 2019 in a Cohort of 282,718 Hospitalized Patients. Neurocritical Care, 2022, 36, 259-265.	2.4	9
4	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
5	RHPTree—Risk Hierarchical Pattern Tree for Scalable Long Pattern Mining. ACM Transactions on Knowledge Discovery From Data, 2022, 16, 1-33.	3.5	3
6	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
7	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
8	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
9	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
10	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
11	Acute Ischemic Stroke and COVID-19. Stroke, 2021, 52, 905-912.	2.0	204
12	Current and Prospective Methods for Assessing Anti-Tumor Immunity in Colorectal Cancer. International Journal of Molecular Sciences, 2021, 22, 4802.	4.1	6
13	Explainable artificial intelligence in high-throughput drug repositioning for subgroup stratifications with interventionable potential. Journal of Biomedical Informatics, 2021, 118, 103792.	4.3	10
14	Effect of Race and Ethnicity on In-Hospital Mortality in Patients with COVID-2019. Ethnicity and Disease, 2021, 31, 389-398.	2.3	15
15	Subarachnoid Hemorrhage and COVID-19: An Analysis of 282,718 Patients. World Neurosurgery, 2021, 151, e615-e620.	1.3	27
16	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
17	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
18	Drug Repositioning and Subgroup Discovery for Precision Medicine Implementation in Triple Negative Breast Cancer. Cancers, 2021, 13, 6278.	3.7	6

#	ARTICLE	IF	CITATIONS
19	Exploratory Data Mining for Subgroup Cohort Discoveries and Prioritization. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1456-1468.	6.3	12
20	Computational modeling of human reasoning processes for interpretable visual knowledge: a case study with radiographers. Scientific Reports, 2020, 10, 21620.	3.3	2
21	A Patient-Centric Health Information Exchange Framework Using Blockchain Technology. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 2169-2176.	6.3	138
22	Performance of human and server prediction in <scp>CAPRI</scp> rounds 38â€45. Proteins: Structure, Function and Bioinformatics, 2020, 88, 1110-1120.	2.6	6
23	Immunogenomic pathways associated with cytotoxic lymphocyte infiltration and survival in colorectal cancer. BMC Cancer, 2020, 20, 124.	2.6	8
24	Generalizable Layered Blockchain Architecture for Health Care Applications: Development, Case Studies, and Evaluation. Journal of Medical Internet Research, 2020, 22, e19029.	4.3	22
25	Artificial Intelligence-Driven Structurization of Diagnostic Information in Free-Text Pathology Reports. Journal of Pathology Informatics, 2020, 11, 4.	1.7	7
26	Identifying patientâ€specific flow of signal transduction perturbed by multiple singleâ€nucleotide alterations. Quantitative Biology, 2020, 8, 336-346.	0.5	0
27	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
28	Development of A Blockchain Framework for Virtual Clinical Trials. AMIA ... Annual Symposium proceedings, 2020, 2020, 1412-1420.	0.2	0
29	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
30	Quantifying and understanding the differences in visual activities with contrast subsequences. , 2019, , .		3
31	Medical calculators: Prevalence, and barriers to use. Computer Methods and Programs in Biomedicine, 2019, 179, 105002.	4.7	9
32	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
33	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
34	Applying Blockchain Technology to Enhance Clinical Trial Recruitment. AMIA ... Annual Symposium proceedings, 2019, 2019, 1276-1285.	0.2	5
35	Heritable genotype contrast mining reveals novel gene associations specific to autism subgroups. Journal of Biomedical Informatics, 2018, 77, 50-61.	4.3	15
36	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

#	Article	IF	Citations
37	Applying Blockchain Technology for Health Information Exchange and Persistent Monitoring for Clinical Trials. AMIA ... Annual Symposium proceedings, 2018, 2018, 1167-1175.	0.2	14
38	Eye Gaze Pattern Analysis of Whole Slide Image Viewing Behavior in PathEdEx Platform. Microscopy and Microanalysis, 2017, 23, 248-249.	0.4	2
39	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
40	Efficient GPU-accelerated extraction of imperfect inverted repeats from DNA sequences. , 2017, , .		2
41	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
42	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
43	Large scale extraction of perfect and imperfect DNA palindromes using in-memory computing. , 2016, , .		1
44	Visual Reasoning Indexing and Retrieval Using In-Memory Computing. International Journal of Semantic Computing, 2016, 10, 299-322.	0.5	4
45	Visual Reasoning Indexing and Retrieval Using In-memory Computing. , 2016, , .		1
46	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
47	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
48	A Sorghum MYB Transcription Factor Induces 3-Deoxyanthocyanidins and Enhances Resistance against Leaf Blights in Maize. Molecules, 2015, 20, 2388-2404.	3.8	61
49	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
50	Large scale multi-species palindrome study using distributed in-memory computing. , 2015, , .		1
51	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
52	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
53	Histological Quantitation of Brain Injury Using Whole Slide Imaging: A Pilot Validation Study in Mice. PLoS ONE, 2014, 9, e92133.	2.5	19
54	Uncovering influence links in molecular knowledge networks to streamline personalized medicine. Journal of Biomedical Informatics, 2014, 52, 394-405.	4.3	10

#	ARTICLE	IF	CITATIONS
55	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
56	Novel Approach for Coexpression Analysis of E2F1â€"3 and MYC Target Genes in Chronic Myelogenous Leukemia. BioMed Research International, 2014, 2014, 1-7.	1.9	5
57	A neotropical Miocene pollen database employing imageâ€based search and semantic modeling. Applications in Plant Sciences, 2014, 2, 1400030.	2.1	6
58	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
59	MRSMRS: Mining repetitive sequences in a MapReduce setting. , 2014, , .		2
60	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
61	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
62	Using Temporal Mining to Examine the Development of Lymphedema in Breast Cancer Survivors. Nursing Research, 2013, 62, 122-129.	1.7	6
63	Fast protein binding site comparisons using visual words representation. Bioinformatics, 2012, 28, 1345-1352.	4.1	11
64	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
65	Associative semantic ranking of satellite images using PathFinder Network Scaling ensemble methods. , 2012, , .		1
66	DOMMINO: a database of macromolecular interactions. Nucleic Acids Research, 2012, 40, D501-D506.	14.5	27
67	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
68	PBSword: a web server for searching similar protein-protein binding sites. Nucleic Acids Research, 2012, 40, W428-W434.	14.5	4
69	Multi-Index Multi-Object Content-Based Retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 4036-4049.	6.3	7
70	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
71	Role of domain knowledge in developing userâ€centered medicalâ€image indexing. Journal of the Association for Information Science and Technology, 2012, 63, 225-241.	2.6	7
72	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

#	Article	IF	Citations
73	Semantic models for ranking medical images using Dirichlet non-parametric mixture models. , 2011, , .		1
74	Structural Similarity and Classification of Protein Interaction Interfaces. PLoS ONE, 2011, 6, e19554.	2.5	11
75	Charged residues at protein interaction interfaces: Unexpected conservation and orchestrated divergence. Protein Science, 2011, 20, 1275-1284.	7.6	21
76	Featureâ€based classification of native and nonâ€native proteinâ€"protein interactions: Comparing supervised and semiâ€supervised learning approaches. Proteomics, 2011, 11, 4321-4330.	2.2	13
77	Search tactics for medical image retrieval. Proceedings of the American Society for Information Science and Technology, 2011, 48, 1-4.	0.2	1
78	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
79	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
80	ProteinDBS v2.0: a web server for global and local protein structure search. Nucleic Acids Research, 2010, 38, W53-W58.	14.5	2
81	Visual information mining and ranking using graded relevance assessments in satellite image databases. , 2010, , .		1
82	An accurate classification of native and non-native protein-protein interactions using supervised and semi-supervised learning approaches. , 2010, , .		0
83	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
84	Improving retrieval performance in medical image databases using simulated annealing. AMIA ... Annual Symposium proceedings, 2010, 2010, 276-80.	0.2	1
85	Efficient SCOP-fold classification and retrieval using index-based protein substructure alignments. Bioinformatics, 2009, 25, 2559-2565.	4.1	9
86	Editorial for the special issue of knowledge discovery and management in biomedical information systems. Information Systems Frontiers, 2009, 11, 345-347.	6.4	3
87	The effects of conceptual description and search practice on usersâ€™ mental models and information seeking in a case-based reasoning retrieval system. Information Processing and Management, 2008, 44, 294-309.	8.6	27
88	How Can Virtual Reality Reshape Furniture Retailing?. Clothing and Textiles Research Journal, 2008, 26, 143-163.	3.4	35
89	Ontology Driven Content Mining and Semantic Queries for Satellite Image Databases. , 2008, , .		2
90	SEARCHING AND MINING VISUALLY OBSERVED PHENOTYPES OF MAIZE MUTANTS. Journal of Bioinformatics and Computational Biology, 2007, 05, 1193-1213.	0.8	5

#	ARTICLE	IF	CITATIONS
91	User-specific semantics for modeling content-based geospatial knowledge. , 2007, , .		3
92	Computational Identification of Reassortments in Avian Influenza Viruses. Avian Diseases, 2007, 51, 434-439.	1.0	19
93	Knowledge-Driven Multidimensional Indexing Structure for Biomedical Media Database Retrieval. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 320-331.	3.2	32
94	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
95	A fast SCOP fold classification system using content-based E-Predict algorithm. BMC Bioinformatics, 2006, 7, 362.	2.6	15
96	Predicting cancer interaction networks using text-mining and structure understanding. AMIA ... Annual Symposium proceedings, 2006, , 1123.	0.2	2
97	PREDICTING RANKED SCOP DOMAINS BY MINING ASSOCIATIONS OF VISUAL CONTENTS IN DISTANCE MATRICES. , 2005, , .		0
98	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
99	ProteinDBS: a real-time retrieval system for protein structure comparison. Nucleic Acids Research, 2004, 32, W572-W575.	14.5	26
100	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
101	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
102	Whither Biological Database Research?. OMICS A Journal of Integrative Biology, 2003, 7, 61-65.	2.0	0
103	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
104	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
105	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
106	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
107	Spatial lesion indexing for medical image databases using force histograms. , 0, , .		5
108	A hybrid tree approach for efficient image database retrieval with dynamic feedback. , 0, , .		0

#	Article	IF	Citations
109	A fast protein structure retrieval system using image-based distance matrices and multidimensional index. , 0, , .		11
110	Semantic integration and knowledge exchange for diagnostic medical image databases. , 0, , .		2
111	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