Fi-John Chang

List of Publications by Year
in descending order

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136	7,314	43973	62479
papers	citations	48 h-index	80 g-index

136	136	136	5283
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Adaptive neuro-fuzzy inference system for prediction of water level in reservoir. Advances in Water Resources, 2006, 29, 1-10.	1.7	485
2	Optimizing the reservoir operating rule curves by genetic algorithms. Hydrological Processes, 2005, 19, 2277-2289.	1.1	234
3	A counterpropagation fuzzy-neural network modeling approach to real time streamflow prediction. Journal of Hydrology, 2001, 245, 153-164.	2.3	214
4	Exploring a Long Short-Term Memory based Encoder-Decoder framework for multi-step-ahead flood forecasting. Journal of Hydrology, 2020, 583, 124631.	2.3	202
5	Intelligent control for modelling of real-time reservoir operation. Hydrological Processes, 2001, 15, 1621-1634.	1.1	201
6	Arsenite-oxidizing and arsenate-reducing bacteria associated with arsenic-rich groundwater in Taiwan. Journal of Contaminant Hydrology, 2011, 123, 20-29.	1.6	196
7	Comparison of static-feedforward and dynamic-feedback neural networks for rainfallâ€“runoff modeling. Journal of Hydrology, 2004, 290, 297-311.	2.3	193
8	Explore a deep learning multi-output neural network for regional multi-step-ahead air quality forecasts. Journal of Cleaner Production, 2019, 209, 134-145.	4.6	192
9	Real-time multi-step-ahead water level forecasting by recurrent neural networks for urban flood control. Journal of Hydrology, 2014, 517, 836-846.	2.3	186
10	HESS Opinions: Incubating deep-learning-powered hydrologic science advances as a community. Hydrology and Earth System Sciences, 2018, 22, 5639-5656.	1.9	169
11	Evolutionary artificial neural networks for hydrological systems forecasting. Journal of Hydrology, 2009, 367, 125-137.	2.3	148
12	Multi-objective evolutionary algorithm for operating parallel reservoir system. Journal of Hydrology, 2009, 377, 12-20.	2.3	141
13	Constrained genetic algorithms for optimizing multi-use reservoir operation. Journal of Hydrology, 2010, 390, 66-74.	2.3	123
14	The strategy of building a flood forecast model by neuro-fuzzy network. Hydrological Processes, 2006, 20, 1525-1540.	1.1	118
15	Real-Coded Genetic Algorithm for Rule-Based Flood Control Reservoir Management. Water Resources Management, 1998, 12, 185-198.	1.9	115
16	Multi-output support vector machine for regional multi-step-ahead PM2.5 forecasting. Science of the Total Environment, 2019, 651, 230-240.	3.9	113
17	Multi-step-ahead neural networks for flood forecasting. Hydrological Sciences Journal, 2007, 52, 114-130.	1.2	112
18	Explore an evolutionary recurrent ANFIS for modelling multi-step-ahead flood forecasts. Journal of Hydrology, 2019, 570, 343-355.	2.3	111

#	Article	IF	Citations
19	Reinforced recurrent neural networks for multi-step-ahead flood forecasts. Journal of Hydrology, 2013, 497, 71-79.	2.3	106
20	Synergistic gains from the multi-objective optimal operation of cascade reservoirs in the Upper Yellow River basin. Journal of Hydrology, 2015, 523, 758-767.	2.3	104
21	Modeling water quality in an urban river using hydrological factors â€“ Data driven approaches. Journal of Environmental Management, 2015, 151, 87-96.	3.8	103
22	Prediction of monthly regional groundwater levels through hybrid soft-computing techniques. Journal of Hydrology, 2016, 541, 965-976.	2.3	103
23	Merging multiple precipitation sources for flash flood forecasting. Journal of Hydrology, 2007, 340, 183-196.	2.3	91
24	Intelligent reservoir operation system based on evolving artificial neural networks. Advances in Water Resources, 2008, 31, 926-936.	1.7	89
25	Exploring synergistic benefits of Water-Food-Energy Nexus through multi-objective reservoir optimization schemes. Science of the Total Environment, 2018, 633, 341-351.	3.9	87
26	Dynamic ANN for precipitation estimation and forecasting from radar observations. Journal of Hydrology, 2007, 334, 250-261.	2.3	85
27	Regional flood inundation nowcast using hybrid SOM and dynamic neural networks. Journal of Hydrology, 2014, 519, 476-489.	2.3	85
28	Assessing the effort of meteorological variables for evaporation estimation by self-organizing map neural network. Journal of Hydrology, 2010, 384, 118-129.	2.3	84
29	Intelligent control for modeling of real-time reservoir operation, part II: artificial neural network with operating rule curves. Hydrological Processes, 2005, 19, 1431-1444.	1.1	83
30	A nonlinear spatio-temporal lumping of radar rainfall for modeling multi-step-ahead inflow forecasts by data-driven techniques. Journal of Hydrology, 2016, 535, 256-269.	2.3	82
31	A two-step-ahead recurrent neural network for stream-flow forecasting. Hydrological Processes, 2004, 18, 81-92.	1.1	78
32	Methodology that improves water utilization and hydropower generation without increasing flood risk in mega cascade reservoirs. Energy, 2018, 143, 785-796.	4.5	77
33	Building ANN-Based Regional Multi-Step-Ahead Flood Inundation Forecast Models. Water (Switzerland), 2018, 10, 1283.	1.2	77
34	Estuary water-stage forecasting by using radial basis function neural network. Journal of Hydrology, 2003, 270, 158-166.	2.3	73
35	A data-mining framework for exploring the multi-relation between fish species and water quality through self-organizing map. Science of the Total Environment, 2017, 579, 474-483.	3.9	71
36	Optimization of operation rule curves and flushing schedule in a reservoir. Hydrological Processes, 2003, 17, 1623-1640.	1.1	70

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37	AI techniques for optimizing multi-objective reservoir operation upon human and riverine ecosystem demands. Journal of Hydrology, 2015, 530, 634-644.	2.3	70
38	Seamless integration of convolutional and back-propagation neural networks for regional multi-step-ahead PM2.5 forecasting. Journal of Cleaner Production, 2020, 261, 121285.	4.6	65
39	Systematic impact assessment on inter-basin water transfer projects of the Hanjiang River Basin in China. Journal of Hydrology, 2017, 553, 584-595.	2.3	64
40	Watershed rainfall forecasting using neuro-fuzzy networks with the assimilation of multi-sensor information. Journal of Hydrology, 2014, 508, 374-384.	2.3	60
41	Explore spatio-temporal PM2.5 features in northern Taiwan using machine learning techniques. Science of the Total Environment, 2020, 736, 139656.	3.9	59
42	Fusing feasible search space into PSO for multi-objective cascade reservoir optimization. Applied Soft Computing Journal, 2017, 51, 328-340.	4.1	55
43	Exploring the spatio-temporal interrelation between groundwater and surface water by using the self-organizing maps. Journal of Hydrology, 2018, 556, 131-142.	2.3	55
44	Building an Intelligent Hydroinformatics Integration Platform for Regional Flood Inundation Warning Systems. Water (Switzerland), 2019, 11, 9.	1.2	54
45	Prospect for small-hydropower installation settled upon optimal water allocation: An action to stimulate synergies of water-food-energy nexus. Applied Energy, 2019, 238, 668-682.	5.1	53
46	Mathematical modeling suggests high potential for the deployment of floating photovoltaic on fish ponds. Science of the Total Environment, 2019, 687, 654-666.	3.9	51
47	Enforced self-organizing map neural networks for river flood forecasting. Hydrological Processes, 2007, 21, 741-749.	1.1	50
48	Artificial neural networks for estimating regional arsenic concentrations in a blackfoot disease area in Taiwan. Journal of Hydrology, 2010, 388, 65-76.	2.3	50
49	An advanced complementary scheme of floating photovoltaic and hydropower generation flourishing water-food-energy nexus synergies. Applied Energy, 2020, 275, 115389.	5.1	50
50	Reinforced Two-Step-Ahead Weight Adjustment Technique for Online Training of Recurrent Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 1269-1278.	7.2	48
51	Reservoir operation using grey fuzzy stochastic dynamic programming. Hydrological Processes, 2002, 16, 2395-2408.	1.1	46
52	Fusing stacked autoencoder and long short-term memory for regional multistep-ahead flood inundation forecasts. Journal of Hydrology, 2021, 598, 126371.	2.3	46
53	Modelling combined open channel flow by artificial neural networks. Hydrological Processes, 2005, 19, 3747-3762.	1.1	44
54	A self-organization algorithm for real-time flood forecast. Hydrological Processes, 1999, 13, 123-138.	1.1	43

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55	Multi-tier interactive genetic algorithms for the optimization of long-term reservoir operation. Advances in Water Resources, 2011, 34, 1343-1351.	1.7	43
56	Conservation of groundwater from over-exploitationâ€"Scientific analyses for groundwater resources management. Science of the Total Environment, 2017, 598, 828-838.	3.9	43
57	Using a hybrid genetic algorithmâ€"simulated annealing algorithm for fuzzy programming of reservoir operation. Hydrological Processes, 2007, 21, 3162-3172.	1.1	41
58	Counterpropagation fuzzy-neural network for city flood control system. Journal of Hydrology, 2008, 358, 24-34.	2.3	41
59	Integrating hydrometeorological information for rainfallâ€runoff modelling by artificial neural networks. Hydrological Processes, 2009, 23, 1650-1659.	1.1	41
60	Modelling Intelligent Water Resources Allocation for Multi-users. Water Resources Management, 2016, 30, 1395-1413.	1.9	41
61	Counterpropagation fuzzy-neural network for streamflow reconstruction. Hydrological Processes, 2001, 15, 219-232.	1.1	40
62	Self-organizing maps of typhoon tracks allow for flood forecasts up to two days in advance. Nature Communications, 2020, 11, 1983.	5.8	40
63	Valve movement response of the freshwater clam Corbicula fluminea following exposure to waterborne arsenic. Ecotoxicology, 2009, 18, 567-576.	1.1	38
64	Optimize multi-objective transformation rules of water-sediment regulation for cascade reservoirs in the Upper Yellow River of China. Journal of Hydrology, 2019, 577, 123987.	2.3	37
65	Explore Regional PM2.5 Features and Compositions Causing Health Effects in Taiwan. Environmental Management, 2021, 67, 176-191.	1.2	37
66	Assessing the ecological hydrology of natural flow conditions in Taiwan. Journal of Hydrology, 2008, 354, 75-89.	2.3	36
67	A systematical water allocation scheme for drought mitigation. Journal of Hydrology, 2013, 507, 124-133.	2.3	35
68	Regional estimation of groundwater arsenic concentrations through systematical dynamic-neural modeling. Journal of Hydrology, 2013, 499, 265-274.	2.3	35
69	Including spatial distribution in a data-driven rainfall-runoff model to improve reservoir inflow forecasting in Taiwan. Hydrological Processes, 2014, 28, 1055-1070.	1.1	35
70	Boosting hydropower output of mega cascade reservoirs using an evolutionary algorithm with successive approximation. Applied Energy, 2018, 228, 1726-1739.	5.1	35
71	Assessing the mechanisms controlling the mobilization of arsenic in the arsenic contaminated shallow alluvial aquifer in the blackfoot disease endemic area. Journal of Hazardous Materials, 2011, 197, 397-403.	6.5	32
72	Improving the Reliability of Probabilistic Multi-Step-Ahead Flood Forecasting by Fusing Unscented Kalman Filter with Recurrent Neural Network. Water (Switzerland), 2020, 12, 578.	1.2	32

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73	Estimation of riverbed grain-size distribution using image-processing techniques. Journal of Hydrology, 2012, 440-441, 102-112.	2.3	31
74	A self-organizing radial basis network for estimating riverine fish diversity. Journal of Hydrology, 2013, 476, 280-289.	2.3	31
75	Autoâ€configuring radial basis function networks for chaotic time series and flood forecasting. Hydrological Processes, 2009, 23, 2450-2459.	1.1	29
76	Spatial-temporal flood inundation nowcasts by fusing machine learning methods and principal component analysis. Journal of Hydrology, 2022, 612, 128086.	2.3	29
77	Acute toxicity and bioaccumulation of arsenic in freshwater clam Corbicula fluminea. Environmental Toxicology, 2008, 23, 702-711.	2.1	28
78	Evaluating the Potential Impact of Reservoir Operation on Fish Communities. Journal of Water Resources Planning and Management - ASCE, 2009, 135, 475-483.	1.3	28
79	Assessing the characteristics of groundwater quality of arsenic contaminated aquifers in the blackfoot disease endemic area. Journal of Hazardous Materials, 2011, 185, 1458-1466.	6.5	27
80	Exploring Copula-based Bayesian Model Averaging with multiple ANNs for PM2.5 ensemble forecasts. Journal of Cleaner Production, 2020, 263, 121528.	4.6	27
81	Dynamic Factor Analysis for Estimating Ground Water Arsenic Trends. Journal of Environmental Quality, 2010, 39, 176-184.	1.0	26
82	Explore a Multivariate Bayesian Uncertainty Processor driven by artificial neural networks for probabilistic PM2.5 forecasting. Science of the Total Environment, 2020, 711, 134792.	3.9	26
83	Hydrochemical, mineralogical and isotopic investigation of arsenic distribution and mobilization in the Guandu wetland of Taiwan. Journal of Hydrology, 2013, 498, 274-286.	2.3	25
84	Systematic parameter estimation of watershed acidification model. Hydrological Processes, 1992, 6, 29-44.	1.1	24
85	Deep neural networks for spatiotemporal PM2.5 forecasts based on atmospheric chemical transport model output and monitoring data. Environmental Pollution, 2022, 306, 119348.	3.7	24
86	Fuzzy exemplar-based inference system for flood forecasting. Water Resources Research, 2005, 41, .	1.7	23
87	Advances in Hydrologic Forecasts and Water Resources Management. Water (Switzerland), 2020, 12, 1819.	1.2	23
88	Assessing the natural and anthropogenic influences on basin-wide fish species richness. Science of the Total Environment, 2016, 572, 825-836.	3.9	22
89	Estimating spatio-temporal dynamics of stream total phosphate concentration by soft computing techniques. Science of the Total Environment, 2016, 562, 228-236.	3.9	21
90	Assessment of arsenic concentration in stream water using neuro fuzzy networks with factor analysis. Science of the Total Environment, 2014, 494-495, 202-210.	3.9	19

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91	Explore the relationship between fish community and environmental factors by machine learning techniques. Environmental Research, 2020, 184, 109262.	3.7	19
92	Defining the ecological hydrology of Taiwan Rivers using multivariate statistical methods. Journal of Hydrology, 2009, 376, 235-242.	2.3	18
93	Influence of hydrological and hydrogeochemical parameters on arsenic variation in shallow groundwater of southwestern Taiwan. Journal of Hydrology, 2011, 408, 286-295.	2.3	18
94	Primary sink and source of geogenic arsenic in sedimentary aquifers in the southern Choushui River alluvial fan, Taiwan. Applied Geochemistry, 2010, 25, 684-695.	1.4	16
95	A refined automated grain sizing method for estimating river-bed grain size distribution of digital images. Journal of Hydrology, 2013, 486, 224-233.	2.3	16
96	Adaptive neuro-fuzzy inference system for the prediction of monthly shoreline changes in northeastern Taiwan. Ocean Engineering, 2014, 84, 145-156.	1.9	16
97	AI-based design of urban stormwater detention facilities accounting for carryover storage. Journal of Hydrology, 2019, 575, 1111-1122.	2.3	16
98	Interactive urban building energy modelling with functional mockup interface of a local residential building stock. Journal of Cleaner Production, 2021, 289, 125683.	4.6	16
99	Identifying natural flow regimes using fish communities. Journal of Hydrology, 2011, 409, 328-336.	2.3	14
100	Dynamic factor analysis and artificial neural network for estimating pan evaporation at multiple stations in northern Taiwan. Hydrological Sciences Journal, 2013, 58, 813-825.	1.2	14
101	Explore training self-organizing map methods for clustering high-dimensional flood inundation maps. Journal of Hydrology, 2021, 595, 125655.	2.3	14
102	Real-time image-based air quality estimation by deep learning neural networks. Journal of Environmental Management, 2022, 307, 114560.	3.8	14
103	Exploring the Mechanism of Surface and Ground Water through Data-Driven Techniques with Sensitivity Analysis for Water Resources Management. Water Resources Management, 2016, 30, 4789-4806.	1.9	13
104	Exploring the ecological response of fish to flow regime by soft computing techniques. Ecological Engineering, 2016, 87, 9-19.	1.6	13
105	Bivariate Seasonal Design Flood Estimation Based on Copulas. Journal of Hydrologic Engineering - ASCE, 2017, 22, .	0.8	13
106	Drought mitigation under urbanization through an intelligent water allocation system. Agricultural Water Management, 2019, 213, 87-96.	2.4	13
107	Investigating the impact of the Chiâ€Chi earthquake on the occurrence of debris flows using artificial neural networks. Hydrological Processes, 2009, 23, 2728-2736.	1.1	12
108	Shared near neighbours neural network model: a debris flow warning system. Hydrological Processes, 2007, 21, 1968-1976.	1.1	11

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109	Neural network modelling for mean velocity and turbulence intensities of steep channel flows. Hydrological Processes, 2008, 22, 265-274.	1.1	11
110	Evaluation of the BMA probabilistic inflow forecasts using TIGGE numeric precipitation predictions based on artificial neural network. Hydrology Research, 2018, 49, 1417-1433.	1.1	11
111	Identification of flood seasonality using an entropy-based method. Stochastic Environmental Research and Risk Assessment, 2018, 32, 3021-3035.	1.9	11
112	Prospects for Rooftop Farming System Dynamics: An Action to Stimulate Water-Energy-Food Nexus Synergies toward Green Cities of Tomorrow. Sustainability, 2021, 13, 9042.	1.6	11
113	Investigating the interactive mechanisms between surface water and groundwater over the Jhuoshuei river basin in central Taiwan. Paddy and Water Environment, 2014, 12, 365-377.	1.0	10
114	Signals of stream fish homogenization revealed by AI-based clusters. Scientific Reports, 2018, 8, 15960.	1.6	10
115	Efficient Urban Inundation Model for Live Flood Forecasting with Cellular Automata and Motion Cost Fields. Water (Switzerland), 2020, 12, 1997.	1.2	8
116	Fuzzy Clustering Neural Network as Flood Forecasting Model. Hydrology Research, 2002, 33, 275-290.	1.1	7
117	An efficient parallel algorithm for LISSOM neural network. Parallel Computing, 2002, 28, 1611-1633.	1.3	7
118	Modeling and Investigating the Mechanisms of Groundwater Level Variation in the Jhuoshui River Basin of Central Taiwan. Water (Switzerland), 2019, 11, 1554.	1.2	7
119	Stimulate hydropower output of mega cascade reservoirs using an improved Kidney Algorithm. Journal of Cleaner Production, 2020, 244, 118613.	4.6	7
120	A hybrid of response surface methodology and artificial neural network in optimization of culture conditions of mycelia growth of Antrodia cinnamomea. Biomass and Bioenergy, 2022, 158, 106349.	2.9	6
121	Estimation of periodicities in hydrologic data. Stochastic Hydrology & Hydraulics, 1992, 6, 270-288.	0.5	5
122	An exemplar-based learning model for hydrosystems prediction and categorization. Journal of Hydrology, 1995, 169, 229-241.	2.3	4
123	A hybrid artificial neural network-based agri-economic model for predicting typhoon-induced losses. Natural Hazards, 2012, 63, 769-787.	1.6	4
124	Self-organizing radial basis neural network for predicting typhoon-induced losses to rice. Paddy and Water Environment, 2013, 11, 369-380.	1.0	4
125	Improvement of the agricultural effective rainfall for irrigating rice using the optimal clustering model of rainfall station network. Paddy and Water Environment, 2014, 12, 393-406.	1.0	4
126	Using a Self-Organizing Map to Explore Local Weather Features for Smart Urban Agriculture in Northern Taiwan. Water (Switzerland), 2021, 13, 3457.	1.2	4

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127	Uncertainty Analysis of Spatiotemporal Models with Point Estimate Methods (PEMs)â€”The Case of the ANUGA Hydrodynamic Model. Water (Switzerland), 2020, 12, 229.	1.2	3
128	Reply to â€œComment on â€˜Comparison of static-feedforward and dynamic feedback neural networks for rainfall-runoff modelingâ€™ by Y.M. Chiang, L.C. Chang, and F.J. Chang, 2004. Journal of Hydrology 290, 297â€“311â€• Journal of Hydrology, 2005, 314, 204-206.	2.3	2
129	Emergency Disposal Solution for Control of a Giant Landslide and Dammed Lake in Yangtze River, China. Water (Switzerland), 2019, 11, 1939.	1.2	1
130	Counterpropagation fuzzyâ€“neural network for streamflow reconstruction. Hydrological Processes, 2001, 15, 219-232.	1.1	1
131	Optimal dispatching scheme of multi-objective cascade reservoirs by parallel mechanism-optimization algorithms. Journal of Hydrology, 2022, 612, 128050.	2.3	1
132	The exemplar-aided constructor of hyper-rectangles learning algorithm for stream flow estimation. Hydrological Processes, 2000, 14, 79-90.	1.1	0
133	Artificial Neural-Fuzzy Inference Networks as Flood Forecasting Models. , 2001, , 1.		0
134	PAWEES 2011 International Conference on â€œCapacity Building for Participatory Irrigation and Environmental Managementâ€• 1st Announcement. Paddy and Water Environment, 2011, 9, 181-182.	1.0	0
135	Editorial comments on the special issue of PAWEES 2011 International Conference. Paddy and Water Environment, 2012, 10, 163-164.	1.0	0
136	A Method for Evaluating the Impacts of Reservoir Operation on Fish Communities. , 2007, , .		0