Fi-John Chang

List of Publications by Citations

131 papers	5,380 citations	41 h-index	69 g-index
136 ext. papers	6,367 ext. citations	5.6 avg, IF	6.28 L-index

#	Paper	IF	Citations
131	Adaptive neuro-fuzzy inference system for prediction of water level in reservoir. *Advances in Water Resources*, **2006**, 29, 1-10	4.7	391
130	Optimizing the reservoir operating rule curves by genetic algorithms. *Hydrological Processes*, **2005**, 19, 2277-2289	3.3	195
129	A counterpropagation fuzzy-neural network modeling approach to real time streamflow prediction. *Journal of Hydrology*, **2001**, 245, 153-164	6	192
128	Intelligent control for modelling of real-time reservoir operation. *Hydrological Processes*, **2001**, 15, 1621-1634	3.3	183
127	Comparison of static-feedforward and dynamic-feedback neural networks for rainfall–runoff modeling. *Journal of Hydrology*, **2004**, 290, 297-311	6	162
126	Arsenite-oxidizing and arsenate-reducing bacteria associated with arsenic-rich groundwater in Taiwan. *Journal of Contaminant Hydrology*, **2011**, 123, 20-9	3.9	147
125	Real-time multi-step-ahead water level forecasting by recurrent neural networks for urban flood control. *Journal of Hydrology*, **2014**, 517, 836-846	6	141
124	Evolutionary artificial neural networks for hydrological systems forecasting. *Journal of Hydrology*, **2009**, 367, 125-137	6	117
123	Multi-objective evolutionary algorithm for operating parallel reservoir system. *Journal of Hydrology* , **2009**, 377, 12-20	6	113
122	Explore a deep learning multi-output neural network for regional multi-step-ahead air quality forecasts. *Journal of Cleaner Production*, **2019**, 209, 134-145	10.3	112
121	Constrained genetic algorithms for optimizing multi-use reservoir operation. *Journal of Hydrology*, **2010**, 390, 66-74	6	104
120	Real-Coded Genetic Algorithm for Rule-Based Flood Control Reservoir Management. *Water Resources Management*, **1998**, 12, 185-198	3.7	98
119	The strategy of building a flood forecast model by neuro-fuzzy network. *Hydrological Processes*, **2006**, 20, 1525-1540	3.3	96
118	Multi-step-ahead neural networks for flood forecasting. *Hydrological Sciences Journal*, **2007**, 52, 114-130	3.5	96
117	HESS Opinions: Incubating deep-learning-powered hydrologic science advances as a community. *Hydrology and Earth System Sciences*, **2018**, 22, 5639-5656	5.5	95
116	Reinforced recurrent neural networks for multi-step-ahead flood forecasts. *Journal of Hydrology*, **2013**, 497, 71-79	6	86
115	Exploring a Long Short-Term Memory based Encoder-Decoder framework for multi-step-ahead flood forecasting. *Journal of Hydrology*, **2020**, 583, 124631	6	84

114	Modeling water quality in an urban river using hydrological factors--data driven approaches. *Journal of Environmental Management*, **2015**, 151, 87-96	7.9	83
113	Prediction of monthly regional groundwater levels through hybrid soft-computing techniques. *Journal of Hydrology*, **2016**, 541, 965-976	6	80
112	Intelligent control for modeling of real-time reservoir operation, part II: artificial neural network with operating rule curves. *Hydrological Processes*, **2005**, 19, 1431-1444	3.3	77
111	Merging multiple precipitation sources for flash flood forecasting. *Journal of Hydrology*, **2007**, 340, 183-196	6	73
110	Synergistic gains from the multi-objective optimal operation of cascade reservoirs in the Upper Yellow River basin. *Journal of Hydrology*, **2015**, 523, 758-767	6	72
109	Dynamic ANN for precipitation estimation and forecasting from radar observations. *Journal of Hydrology*, **2007**, 334, 250-261	6	71
108	Multi-output support vector machine for regional multi-step-ahead PM forecasting. *Science of the Total Environment*, **2019**, 651, 230-240	10.2	69
107	Assessing the effort of meteorological variables for evaporation estimation by self-organizing map neural network. *Journal of Hydrology*, **2010**, 384, 118-129	6	67
106	Intelligent reservoir operation system based on evolving artificial neural networks. *Advances in Water Resources*, **2008**, 31, 926-936	4.7	67
105	A two-step-ahead recurrent neural network for stream-flow forecasting. *Hydrological Processes*, **2004**, 18, 81-92	3.3	67
104	Explore an evolutionary recurrent ANFIS for modelling multi-step-ahead flood forecasts. *Journal of Hydrology*, **2019**, 570, 343-355	6	67
103	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	6	66
102	Estuary water-stage forecasting by using radial basis function neural network. *Journal of Hydrology*, **2003**, 270, 158-166	6	65
101	Exploring synergistic benefits of Water-Food-Energy Nexus through multi-objective reservoir optimization schemes. *Science of the Total Environment*, **2018**, 633, 341-351	10.2	61
100	Regional flood inundation nowcast using hybrid SOM and dynamic neural networks. *Journal of Hydrology*, **2014**, 519, 476-489	6	59
99	Optimization of operation rule curves and flushing schedule in a reservoir. *Hydrological Processes*, **2003**, 17, 1623-1640	3.3	59
98	AI techniques for optimizing multi-objective reservoir operation upon human and riverine ecosystem demands. *Journal of Hydrology*, **2015**, 530, 634-644	6	57
97	Methodology that improves water utilization and hydropower generation without increasing flood risk in mega cascade reservoirs. *Energy*, **2018**, 143, 785-796	7.9	54

96	Building ANN-Based Regional Multi-Step-Ahead Flood Inundation Forecast Models. *Water (Switzerland)*, **2018**, 10, 1283	3	53
95	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	10.2	52
94	Enforced self-organizing map neural networks for river flood forecasting. *Hydrological Processes*, **2007**, 21, 741-749	3.3	46
93	Fusing feasible search space into PSO for multi-objective cascade reservoir optimization. *Applied Soft Computing Journal*, **2017**, 51, 328-340	7.5	45
92	Watershed rainfall forecasting using neuro-fuzzy networks with the assimilation of multi-sensor information. *Journal of Hydrology*, **2014**, 508, 374-384	6	42
91	Artificial neural networks for estimating regional arsenic concentrations in a blackfoot disease area in Taiwan. *Journal of Hydrology*, **2010**, 388, 65-76	6	42
90	Reinforced two-step-ahead weight adjustment technique for online training of recurrent neural networks. *IEEE Transactions on Neural Networks and Learning Systems*, **2012**, 23, 1269-78	10.3	41
89	Multi-tier interactive genetic algorithms for the optimization of long-term reservoir operation. *Advances in Water Resources*, **2011**, 34, 1343-1351	4.7	41
88	Reservoir operation using grey fuzzy stochastic dynamic programming. *Hydrological Processes*, **2002**, 16, 2395-2408	3.3	40
87	A self-organization algorithm for real-time flood forecast. *Hydrological Processes*, **1999**, 13, 123-138	3.3	40
86	Exploring the spatio-temporal interrelation between groundwater and surface water by using the self-organizing maps. *Journal of Hydrology*, **2018**, 556, 131-142	6	39
85	Modelling combined open channel flow by artificial neural networks. *Hydrological Processes*, **2005**, 19, 3747-3762	3.3	39
84	Using a hybrid genetic algorithm□simulated annealing algorithm for fuzzy programming of reservoir operation. *Hydrological Processes*, **2007**, 21, 3162-3172	3.3	37
83	Counterpropagation fuzzy□neural network for streamflow reconstruction. *Hydrological Processes*, **2001**, 15, 219-232	3.3	36
82	Seamless integration of convolutional and back-propagation neural networks for regional multi-step-ahead PM2.5 forecasting. *Journal of Cleaner Production*, **2020**, 261, 121285	10.3	35
81	Systematic impact assessment on inter-basin water transfer projects of the Hanjiang River Basin in China. *Journal of Hydrology*, **2017**, 553, 584-595	6	35
80	Counterpropagation fuzzy-neural network for city flood control system. *Journal of Hydrology*, **2008**, 358, 24-34	6	35
79	Assessing the ecological hydrology of natural flow conditions in Taiwan. *Journal of Hydrology*, **2008**, 354, 75-89	6	34

78	Integrating hydrometeorological information for rainfall-runoff modelling by artificial neural networks. *Hydrological Processes*, **2009**, 23, 1650-1659	3.3	32
77	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	10.7	30
76	Including spatial distribution in a data-driven rainfall-runoff model to improve reservoir inflow forecasting in Taiwan. *Hydrological Processes*, **2014**, 28, 1055-1070	3.3	29
75	Regional estimation of groundwater arsenic concentrations through systematical dynamic-neural modeling. *Journal of Hydrology*, **2013**, 499, 265-274	6	29
74	A self-organizing radial basis network for estimating riverine fish diversity. *Journal of Hydrology*, **2013**, 476, 280-289	6	29
73	Valve movement response of the freshwater clam Corbicula fluminea following exposure to waterborne arsenic. *Ecotoxicology*, **2009**, 18, 567-76	2.9	29
72	Modelling Intelligent Water Resources Allocation for Multi-users. *Water Resources Management*, **2016**, 30, 1395-1413	3.7	28
71	Estimation of riverbed grain-size distribution using image-processing techniques. *Journal of Hydrology*, **2012**, 440-441, 102-112	6	28
70	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	12.8	28
69	Evaluating the Potential Impact of Reservoir Operation on Fish Communities. *Journal of Water Resources Planning and Management - ASCE*, **2009**, 135, 475-483	2.8	28
68	Building an Intelligent Hydroinformatics Integration Platform for Regional Flood Inundation Warning Systems. *Water (Switzerland)*, **2019**, 11, 9	3	25
67	An advanced complementary scheme of floating photovoltaic and hydropower generation flourishing water-food-energy nexus synergies. *Applied Energy*, **2020**, 275, 115389	10.7	25
66	Auto-configuring radial basis function networks for chaotic time series and flood forecasting. *Hydrological Processes*, **2009**, 23, 2450-2459	3.3	25
65	Acute toxicity and bioaccumulation of arsenic in freshwater clam Corbicula fluminea. *Environmental Toxicology*, **2008**, 23, 702-11	4.2	25
64	Conservation of groundwater from over-exploitation-Scientific analyses for groundwater resources management. *Science of the Total Environment*, **2017**, 598, 828-838	10.2	24
63	Boosting hydropower output of mega cascade reservoirs using an evolutionary algorithm with successive approximation. *Applied Energy*, **2018**, 228, 1726-1739	10.7	24
62	A systematical water allocation scheme for drought mitigation. *Journal of Hydrology*, **2013**, 507, 124-133	6	24
61	Assessing the characteristics of groundwater quality of arsenic contaminated aquifers in the blackfoot disease endemic area. *Journal of Hazardous Materials*, **2011**, 185, 1458-66	12.8	24

60	Explore spatio-temporal PM2.5 features in northern Taiwan using machine learning techniques. *Science of the Total Environment*, **2020**, 736, 139656	10.2	23
59	Mathematical modeling suggests high potential for the deployment of floating photovoltaic on fish ponds. *Science of the Total Environment*, **2019**, 687, 654-666	10.2	22
58	Dynamic factor analysis for estimating ground water arsenic trends. *Journal of Environmental Quality*, **2010**, 39, 176-84	3.4	22
57	Fuzzy exemplar-based inference system for flood forecasting. *Water Resources Research*, **2005**, 41,	5.4	21
56	Systematic parameter estimation of watershed acidification model. *Hydrological Processes*, **1992**, 6, 29-44	3.3	21
55	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	6	19
54	Hydrochemical, mineralogical and isotopic investigation of arsenic distribution and mobilization in the Guandu wetland of Taiwan. *Journal of Hydrology*, **2013**, 498, 274-286	6	19
53	Self-organizing maps of typhoon tracks allow for flood forecasts up to two days in advance. *Nature Communications*, **2020**, 11, 1983	17.4	17
52	Defining the ecological hydrology of Taiwan Rivers using multivariate statistical methods. *Journal of Hydrology*, **2009**, 376, 235-242	6	17
51	Estimating spatio-temporal dynamics of stream total phosphate concentration by soft computing techniques. *Science of the Total Environment*, **2016**, 562, 228-236	10.2	17
50	Primary sink and source of geogenic arsenic in sedimentary aquifers in the southern Choushui River alluvial fan, Taiwan. *Applied Geochemistry*, **2010**, 25, 684-695	3.5	15
49	Assessing the natural and anthropogenic influences on basin-wide fish species richness. *Science of the Total Environment*, **2016**, 572, 825-836	10.2	15
48	Assessment of arsenic concentration in stream water using neuro fuzzy networks with factor analysis. *Science of the Total Environment*, **2014**, 494-495, 202-10	10.2	14
47	Influence of hydrological and hydrogeochemical parameters on arsenic variation in shallow groundwater of southwestern Taiwan. *Journal of Hydrology*, **2011**, 408, 286-295	6	14
46	Identifying natural flow regimes using fish communities. *Journal of Hydrology*, **2011**, 409, 328-336	6	14
45	Improving the Reliability of Probabilistic Multi-Step-Ahead Flood Forecasting by Fusing Unscented Kalman Filter with Recurrent Neural Network. *Water (Switzerland)*, **2020**, 12, 578	3	13
44	Bivariate Seasonal Design Flood Estimation Based on Copulas. *Journal of Hydrologic Engineering - ASCE*, **2017**, 22, 05017028	1.8	12
43	Exploring Copula-based Bayesian Model Averaging with multiple ANNs for PM2.5 ensemble forecasts. *Journal of Cleaner Production*, **2020**, 263, 121528	10.3	12

42	Exploring the ecological response of fish to flow regime by soft computing techniques. *Ecological Engineering*, **2016**, 87, 9-19	3.9	12
41	A refined automated grain sizing method for estimating river-bed grain size distribution of digital images. *Journal of Hydrology*, **2013**, 486, 224-233	6	12
40	Explore a Multivariate Bayesian Uncertainty Processor driven by artificial neural networks for probabilistic PM forecasting. *Science of the Total Environment*, **2020**, 711, 134792	10.2	12
39	Dynamic factor analysis and artificial neural network for estimating pan evaporation at multiple stations in northern Taiwan. *Hydrological Sciences Journal*, **2013**, 58, 813-825	3.5	11
38	Investigating the impact of the Chi-Chi earthquake on the occurrence of debris flows using artificial neural networks. *Hydrological Processes*, **2009**, 23, 2728-2736	3.3	11
37	Explore Regional PM2.5 Features and Compositions Causing Health Effects in Taiwan. *Environmental Management*, **2021**, 67, 176-191	3.1	11
36	Shared near neighbours neural network model: a debris flow warning system. *Hydrological Processes*, **2007**, 21, 1968-1976	3.3	10
35	Neural network modelling for mean velocity and turbulence intensities of steep channel flows. *Hydrological Processes*, **2008**, 22, 265-274	3.3	10
34	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	3.7	9
33	Adaptive neuro-fuzzy inference system for the prediction of monthly shoreline changes in northeastern Taiwan. *Ocean Engineering*, **2014**, 84, 145-156	3.9	9
32	Drought mitigation under urbanization through an intelligent water allocation system. *Agricultural Water Management*, **2019**, 213, 87-96	5.9	9
31	Evaluation of the BMA probabilistic inflow forecasts using TIGGE numeric precipitation predictions based on artificial neural network **2018**, 49, 1417-1433		8
30	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	1.6	8
29	Signals of stream fish homogenization revealed by AI-based clusters. *Scientific Reports*, **2018**, 8, 15960	4.9	7
28	An efficient parallel algorithm for LISSOM neural network. *Parallel Computing*, **2002**, 28, 1611-1633	1	6
27	Interactive urban building energy modelling with functional mockup interface of a local residential building stock. *Journal of Cleaner Production*, **2021**, 289, 125683	10.3	6
26	Explore the relationship between fish community and environmental factors by machine learning techniques. *Environmental Research*, **2020**, 184, 109262	7.9	5
25	Stimulate hydropower output of mega cascade reservoirs using an improved Kidney Algorithm. *Journal of Cleaner Production*, **2020**, 244, 118613	10.3	5

24	Identification of flood seasonality using an entropy-based method. *Stochastic Environmental Research and Risk Assessment*, **2018**, 32, 3021-3035	3.5	5
23	Fusing stacked autoencoder and long short-term memory for regional multistep-ahead flood inundation forecasts. *Journal of Hydrology*, **2021**, 598, 126371	6	5
22	AI-based design of urban stormwater detention facilities accounting for carryover storage. *Journal of Hydrology*, **2019**, 575, 1111-1122	6	4
21	Fuzzy Clustering Neural Network as Flood Forecasting Model **2002**, 33, 275-290		4
20	An exemplar-based learning model for hydrosystems prediction and categorization. *Journal of Hydrology*, **1995**, 169, 229-241	6	4
19	Estimation of periodicities in hydrologic data. *Stochastic Hydrology & Hydraulics*, **1992**, 6, 270-288		4
18	Modeling and Investigating the Mechanisms of Groundwater Level Variation in the Jhuoshui River Basin of Central Taiwan. *Water (Switzerland)*, **2019**, 11, 1554	3	3
17	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	1.6	3
16	Self-organizing radial basis neural network for predicting typhoon-induced losses to rice. *Paddy and Water Environment*, **2013**, 11, 369-380	1.6	3
15	A hybrid artificial neural network-based agri-economic model for predicting typhoon-induced losses. *Natural Hazards*, **2012**, 63, 769-787	3	3
14	Efficient Urban Inundation Model for Live Flood Forecasting with Cellular Automata and Motion Cost Fields. *Water (Switzerland)*, **2020**, 12, 1997	3	3
13	Explore training self-organizing map methods for clustering high-dimensional flood inundation maps. *Journal of Hydrology*, **2021**, 595, 125655	6	3
12	Prospects for Rooftop Farming System Dynamics: An Action to Stimulate Water-Energy-Food Nexus Synergies toward Green Cities of Tomorrow. *Sustainability*, **2021**, 13, 9042	3.6	3
11	Uncertainty Analysis of Spatiotemporal Models with Point Estimate Methods (PEMs)□he Case of the ANUGA Hydrodynamic Model. *Water (Switzerland)*, **2020**, 12, 229	3	2
10	Using a Self-Organizing Map to Explore Local Weather Features for Smart Urban Agriculture in Northern Taiwan. *Water (Switzerland)*, **2021**, 13, 3457	3	2
9	Reply to □omment on □omparison of static-feedforward and dynamic feedback neural networks for rainfall-runoff modeling□by Y.M. Chiang, L.C. Chang, and F.J. Chang, 2004. Journal of Hydrology 290, 297□311□*Journal of Hydrology*, **2005**, 314, 204-206	6	1
8	Counterpropagation fuzzy□eural network for streamflow reconstruction **2001**, 15, 219		1
7	Emergency Disposal Solution for Control of a Giant Landslide and Dammed Lake in Yangtze River, China. *Water (Switzerland)*, **2019**, 11, 1939	3	0

6	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	5.3	0
5	Real-time image-based air quality estimation by deep learning neural networks.. *Journal of Environmental Management*, **2022**, 307, 114560	7.9	0
4	Deep neural networks for spatiotemporal PM forecasts based on atmospheric chemical transport model output and monitoring data.. *Environmental Pollution*, **2022**, 119348	9.3	0
3	PAWEES 2011 International Conference on Capacity Building for Participatory Irrigation and Environmental Management1st Announcement. *Paddy and Water Environment*, **2011**, 9, 181-182	1.6	
2	The exemplar-aided constructor of hyper-rectangles learning algorithm for stream flow estimation. *Hydrological Processes*, **2000**, 14, 79-90	3.3	
1	Artificial Neural-Fuzzy Inference Networks as Flood Forecasting Models **2001**, 1		