## Bin Chen

## List of Publications by Year in descending order

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		53751	82499
151	6,436 citations	45	72
papers	citations	h-index	g-index
153	153	153	4040
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Urban energy consumption: Different insights from energy flow analysis, input–output analysis and ecological network analysis. Applied Energy, 2015, 138, 99-107.	5.1	293
2	Urban energy–water nexus: A network perspective. Applied Energy, 2016, 184, 905-914.	5.1	274
3	Global energy flows embodied in international trade: A combination of environmentally extended input–output analysis and complex network analysis. Applied Energy, 2018, 210, 98-107.	5.1	233
4	Energy–water nexus of urban agglomeration based on multiregional input–output tables and ecological network analysis: A case study of the Beijing–Tianjin–Hebei region. Applied Energy, 2016, 178, 773-783.	5.1	223
5	Linkage analysis for the water–energy nexus of city. Applied Energy, 2017, 189, 770-779.	5.1	207
6	Targeted opportunities to address the climate–trade dilemma in China. Nature Climate Change, 2016, 6, 201-206.	8.1	206
7	Urban ecosystem modeling and global change: Potential for rational urban management and emissions mitigation. Environmental Pollution, 2014, 190, 139-149.	3.7	132
8	Clean air for some: Unintended spillover effects of regional air pollution policies. Science Advances, 2019, 5, eaav4707.	4.7	126
9	Carbon emissions and their drivers for a typical urban economy from multiple perspectives: A case analysis for Beijing city. Applied Energy, 2018, 226, 1076-1086.	5.1	125
10	Ecological Network Analysis for a Virtual Water Network. Environmental Science & Environmental Science	4.6	123
11	Public participation in achieving sustainable development goals in China: Evidence from the practice of air pollution control. Journal of Cleaner Production, 2018, 201, 499-506.	4.6	116
12	Ecological Network Analysis for Carbon Metabolism of Eco-industrial Parks: A Case Study of a Typical Eco-industrial Park in Beijing. Environmental Science & Eco-industrial Parks: A Case Study of a Typical	4.6	113
13	Nonzero-Sum Relationships in Mitigating Urban Carbon Emissions: A Dynamic Network Simulation. Environmental Science & Technology, 2015, 49, 11594-11603.	4.6	113
14	Energy–water nexus of international energy trade of China. Applied Energy, 2017, 194, 725-734.	5.1	106
15	Decoupling analysis on energy consumption, embodied GHG emissions and economic growth — The case study of Macao. Renewable and Sustainable Energy Reviews, 2017, 67, 662-672.	8.2	103
16	Natural gas overview for world economy: From primary supply to final demand via global supply chains. Energy Policy, 2019, 124, 215-225.	4.2	96
17	Tracking Inter-Regional Carbon Flows: A Hybrid Network Model. Environmental Science & Emp; Technology, 2016, 50, 4731-4741.	4.6	94
18	Asymmetric Impact of Oil Price Shock on Stock Market in China: A Combination Analysis Based on SVAR Model and NARDL Model. Emerging Markets Finance and Trade, 2018, 54, 1693-1705.	1.7	94

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19	Global land-water nexus: Agricultural land and freshwater use embodied in worldwide supply chains. Science of the Total Environment, 2018, 613-614, 931-943.	3.9	93
20	Energy–water nexus of wind power generation systems. Applied Energy, 2016, 169, 1-13.	5.1	92
21	Worldwide energy use across global supply chains: Decoupled from economic growth?. Applied Energy, 2019, 250, 1235-1245.	5.1	89
22	Consumption-based greenhouse gas emissions accounting with capital stock change highlights dynamics of fast-developing countries. Nature Communications, 2018, 9, 3581.	5.8	87
23	Drivers of CO2 emissions from power generation in China based on modified structural decomposition analysis. Journal of Cleaner Production, 2019, 220, 1143-1155.	4.6	84
24	Embodied greenhouse gas emissions from building China's large-scale power transmission infrastructure. Nature Sustainability, 2021, 4, 739-747.	11.5	84
25	Multiregional input–output and ecological network analyses for regional energy–water nexus within China. Applied Energy, 2018, 227, 353-364.	5.1	83
26	China's rural human settlements: Qualitative evaluation, quantitative analysis and policy implications. Ecological Indicators, 2019, 105, 398-405.	2.6	79
27	Embodiment of virtual water of power generation in the electric power system in China. Applied Energy, 2015, 151, 345-354.	5.1	78
28	A Review of Hydraulic Fracturing Simulation. Archives of Computational Methods in Engineering, 2022, 29, 1-58.	6.0	77
29	Tracking mercury emission flows in the global supply chains: A multi-regional input-output analysis. Journal of Cleaner Production, 2017, 140, 1470-1492.	4.6	76
30	Changing Lifestyles Towards a Low Carbon Economy: An IPAT Analysis for China. Energies, 2012, 5, 22-31.	1.6	72
31	Oil Prices and Chinese Stock Market: Nonlinear Causality and Volatility Persistence. Emerging Markets Finance and Trade, 2019, 55, 1247-1263.	1.7	70
32	Coal use for world economy: Provision and transfer network by multi-region input-output analysis. Journal of Cleaner Production, 2017, 143, 125-144.	4.6	68
33	How Green Transition of Energy System Impacts China's Mercury Emissions. Earth's Future, 2019, 7, 1407-1416.	2.4	68
34	Shifting from fossil-based economy to bio-based economy: Status quo, challenges, and prospects. Energy, 2021, 228, 120533.	4.5	66
35	An overview of mercury emissions by global fuel combustion: The impact of international trade. Renewable and Sustainable Energy Reviews, 2016, 65, 345-355.	8.2	64
36	Population ageing and deaths attributable to ambient PM2·5 pollution: a global analysis of economic cost. Lancet Planetary Health, The, 2021, 5, e356-e367.	5.1	63

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37	Ecological network analysis of the virtual water network within China's electric power system during 2007–2012. Applied Energy, 2016, 168, 110-121.	5.1	62
38	Physical and virtual carbon metabolism of global cities. Nature Communications, 2020, 11, 182.	5.8	62
39	China's energy-related mercury emissions: Characteristics, impact of trade and mitigation policies. Journal of Cleaner Production, 2017, 141, 1259-1266.	4.6	60
40	Embodied energy analysis for coal-based power generation system-highlighting the role of indirect energy cost. Applied Energy, 2016, 184, 936-950.	5.1	59
41	Changing Urban Carbon Metabolism over Time: Historical Trajectory and Future Pathway. Environmental Science & Environmental Sc	4.6	55
42	How external trade reshapes air pollutants emission profile of an urban economy: A case study of Macao. Ecological Indicators, 2018, 94, 74-82.	2.6	53
43	GHG emissions embodied in Macao's internal energy consumption and external trade: Driving forces via decomposition analysis. Renewable and Sustainable Energy Reviews, 2018, 82, 4100-4106.	8.2	52
44	Tracking carbon transfers embodied in Chinese municipalities' domestic and foreign trade. Journal of Cleaner Production, 2018, 192, 950-960.	4.6	50
45	Network environ analysis for socio-economic water system. Ecological Indicators, 2014, 47, 80-88.	2.6	47
46	Low-Carbon Development Patterns: Observations of Typical Chinese Cities. Energies, 2012, 5, 291-304.	1.6	46
47	Evaluation of a Low-Carbon City: Method and Application. Entropy, 2013, 15, 1171-1185.	1.1	46
48	Energy-induced mercury emissions in global supply chain networks: Structural characteristics and policy implications. Science of the Total Environment, 2019, 670, 87-97.	3.9	43
49	GA-Based Support Vector Machine Model for the Prediction of Monthly Reservoir Storage. Journal of Hydrologic Engineering - ASCE, 2014, 19, 1430-1437.	0.8	40
50	A three-scale input-output analysis of water use in a regional economy: Hebei province in China. Journal of Cleaner Production, 2017, 156, 962-974.	4.6	40
51	Urban economy's carbon flow through external trade: Spatial-temporal evolution for Macao. Energy Policy, 2017, 110, 69-78.	4.2	40
52	Social network analysis and network connectedness analysis for industrial symbiotic systems: model development and case study. Frontiers of Earth Science, 2013, 7, 169-181.	0.9	38
53	Energy, ecology and environment: a nexus perspective. Energy, Ecology and Environment, 2016, $1, 1$ -2.	1.9	38
54	A review of industrial symbiosis research: theory and methodology. Frontiers of Earth Science, 2015, 9, 91-104.	0.9	37

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55	China's retrofitting measures in coal-fired power plants bring significant mercury-related health benefits. One Earth, 2020, 3, 777-787.	3.6	37
56	Global water use associated with energy supply, demand and international trade of China. Applied Energy, 2020, 257, 113992.	5.1	36
57	Tracking the carbon footprint of China's coal-fired power system. Resources, Conservation and Recycling, 2022, 177, 105964.	5.3	35
58	Emergy Evaluation of the Urban Solid Waste Handling in Liaoning Province, China. Energies, 2013, 6, 5486-5506.	1.6	34
59	Using LMDI method to analyze the change of industrial CO2 emission from energy use in Chongqing. Frontiers of Earth Science, 2011, 5, 103-109.	0.9	33
60	Driving factors of carbon dioxide emissions in China: an empirical study using 2006-2010 provincial data. Frontiers of Earth Science, 2017, 11, 156-161.	0.9	31
61	An extended overview of natural gas use embodied in world economy and supply chains: Policy implications from a time series analysis. Energy Policy, 2020, 137, 111068.	4.2	31
62	Does the prohibition on open burning of straw mitigate air pollution? An empirical study in Jilin Province of China in the post-harvest season. Journal of Environmental Management, 2020, 264, 110451.	3.8	31
63	The impact of trade on fuel-related mercury emissions in Beijingâ€"evidence from three-scale input-output analysis. Renewable and Sustainable Energy Reviews, 2017, 75, 742-752.	8.2	30
64	The bouncing motion appearing in a robotic system with unilateral constraint. Nonlinear Dynamics, 2007, 49, 217-232.	2.7	29
65	Integrated water resource security evaluation of Beijing based on GRA and TOPSIS. Frontiers of Earth Science, 2010, 4, 357-362.	0.5	29
66	Dynamic Carbon Emission Linkages Across Boundaries. Earth's Future, 2019, 7, 197-209.	2.4	29
67	Ecological risk assessment of wetland vegetation under projected climate scenarios in the Sanjiang Plain, China. Journal of Environmental Management, 2020, 273, 111108.	3.8	29
68	Water–energy Nexus in China's Electric Power System. Energy Procedia, 2017, 105, 3972-3977.	1.8	28
69	The co-benefits of clean air and low-carbon policies on heavy metal emission reductions from coal-fired power plants in china. Resources, Conservation and Recycling, 2022, 181, 106258.	5.3	28
70	Identifying hotspots of sectors and supply chain paths for electricity conservation in China. Journal of Cleaner Production, 2020, 251, 119653.	4.6	27
71	Spillover risk analysis of virtual water trade based on multi-regional input-output model -A case study. Journal of Environmental Management, 2020, 275, 111242.	3.8	27
72	A Model of Solar Radiation and Joule Heating in Flow of Third Grade Nanofluid. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2015, 70, 177-184.	0.7	26

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73	Socioeconomic determinants of China's growing CH4 emissions. Journal of Environmental Management, 2018, 228, 103-116.	3.8	26
74	Interdependence between energy and metals in China: evidence from a nexus perspective. Journal of Cleaner Production, 2019, 214, 345-355.	4.6	26
75	Evolution of methane emissions in global supply chains during 2000-2012. Resources, Conservation and Recycling, 2019, 150, 104414.	5.3	25
76	A city-level inventory for atmospheric mercury emissions from coal combustion in China. Atmospheric Environment, 2020, 223, 117245.	1.9	25
77	Analysis of Resource and Emission Impacts: An Emergy-Based Multiple Spatial Scale Framework for Urban Ecological and Economic Evaluation. Entropy, 2011, 13, 720-743.	1.1	24
78	Unraveling energy–water nexus paths in urban agglomeration: A case study of Beijing–Tianjin–Hebei. Applied Energy, 2021, 304, 117924.	5.1	22
79	The Painlevé paradox studied at a 3D slender rod. Multibody System Dynamics, 2008, 19, 323-343.	1.7	21
80	Identifying the critical paths and sectors for carbon transfers driven by global consumption in 2015. Applied Energy, 2022, 306, 118137.	5.1	21
81	Energy perspective of Sino-US trade imbalance in global supply chains. Energy Economics, 2020, 92, 104959.	5.6	20
82	Global Urban Carbon Networks: Linking Inventory to Modeling. Environmental Science & Emp; Technology, 2020, 54, 5790-5801.	4.6	20
83	Drivers of energy-related PM2.5 emissions in the Jing-Jin-Ji region between 2002 and 2015. Applied Energy, 2021, 288, 116668.	5.1	20
84	A comparative study of Beijing and three global cities: A perspective on urban livability. Frontiers of Earth Science, 2011, 5, 323.	0.9	19
85	Rapidly changing coal-related city-level atmospheric mercury emissions and their driving forces. Journal of Hazardous Materials, 2021, 411, 125060.	6.5	19
86	A Structurally Simplified Hybrid Model of Genetic Algorithm and Support Vector Machine for Prediction of Chlorophyll a in Reservoirs. Water (Switzerland), 2015, 7, 1610-1627.	1.2	18
87	A 2015 inventory of embodied carbon emissions for Chinese power transmission infrastructure projects. Scientific Data, 2020, 7, 318.	2.4	18
88	Urban Ecosystem Health Assessment and Its Application in Management: A Multi-Scale Perspective. Entropy, 2013, 15, 1-9.	1.1	17
89	Environmental impact analysis of nitrogen cross-media metabolism: A case study of municipal solid waste treatment system in China. Science of the Total Environment, 2018, 618, 810-818.	3.9	16
90	Embodied energy in service industry in global cities: A study of six Asian cities. Land Use Policy, 2020, 91, 104264.	2.5	16

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91	An embodied energy perspective of urban economy: A three-scale analysis for Beijing 2002–2012 with headquarter effect. Science of the Total Environment, 2020, 732, 139097.	3.9	16
92	Boundary recovery after 3D Delaunay tetrahedralization without adding extra nodes. International Journal for Numerical Methods in Engineering, 2007, 72, 744-756.	1.5	15
93	Urban energy consumption and related carbon emission estimation: a study at the sector scale. Frontiers of Earth Science, 2013, 7, 480-486.	0.9	15
94	Disparities in socio-economic drivers behind China's provincial energy-related mercury emission changes. Journal of Environmental Management, 2019, 251, 109613.	3.8	15
95	Evolution of the life cycle primary PM2.5 emissions in globalized production systems. Environment International, 2019, 131, 104996.	4.8	14
96	China's forest land use change in the globalized world economy: Foreign trade and unequal household consumption. Land Use Policy, 2021, 103, 105324.	2.5	14
97	Global trade network and CH4 emission outsourcing. Science of the Total Environment, 2022, 803, 150008.	3.9	14
98	The numerical method for three-dimensional impact with friction of multi-rigid-body system. Science in China Series G: Physics, Mechanics and Astronomy, 2006, 49, 102-118.	0.2	13
99	Asymptotic analysis of Painlevé's paradox. Multibody System Dynamics, 2015, 35, 299-319.	1.7	13
100	Globalized energy-water nexus through international trade: The dominant role of non-energy commodities for worldwide energy-related water use. Science of the Total Environment, 2020, 736, 139582.	3.9	13
101	Decomposition Analysis of the Mechanism Behind the Spatial and Temporal Patterns of Changes in Carbon Bio-Sequestration in China. Energies, 2012, 5, 386-398.	1.6	12
102	Transport of Bicomponent Contaminant in Free-Surface Wetland Flow. Journal of Hydrodynamics, 2012, 24, 925-929.	1.3	12
103	Changes of wetland landscape patterns in Dadu River catchment from 1985 to 2000, China. Frontiers of Earth Science, 2012, 6, 237-249.	0.9	12
104	Trade reshapes the regional energy related mercury emissions: A case study on Hubei Province based on a multi-scale input-output analysis. Journal of Cleaner Production, 2018, 185, 75-85.	4.6	12
105	Environmental impacts of rice production analyzed via social capital development: An Iranian case study with a life cycle assessment/data envelopment analysis approach. Ecological Indicators, 2019, 105, 675-687.	2.6	12
106	The evolution of China's provincial shared producer and consumer responsibilities for energy-related mercury emissions. Journal of Cleaner Production, 2020, 245, 118678.	4.6	12
107	Assessing inter-city ecological and economic relations: An emergy-based conceptual model. Frontiers of Earth Science, 2011, 5, 97-102.	0.9	11
108	Analysis of urban metabolic processes based on input-output method: model development and a case study for Beijing. Frontiers of Earth Science, 2014, 8, 190-201.	0.9	11

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109	Comparative Life Cycle Assessment of Mobile Power Banks with Lithium-Ion Battery and Lithium-Ion Polymer Battery. Sustainability, 2019, 11, 5148.	1.6	11
110	A three-scale input-output analysis of blue and grey water footprint for Beijing-Tianjin-Hebei Urban Agglomeration. Energy Procedia, 2019, 158, 4049-4054.	1.8	11
111	Can constructed wetlands be more land efficient than centralized wastewater treatment systems? A case study based on direct and indirect land use. Science of the Total Environment, 2021, 770, 144841.	3.9	11
112	Evaluating Ecological and Economic Benefits of a Low-Carbon Industrial Park Based on Millennium Ecosystem Assessment Framework. Scientific World Journal, The, 2012, 2012, 1-5.	0.8	10
113	Greenhouse Gas Inventory of a Typical High-End Industrial Park in China. Scientific World Journal, The, 2013, 2013, 1-7.	0.8	10
114	Future trends in nanotechnology aiming environmental applications. Energy, Ecology and Environment, 2018, 3, 69-71.	1.9	10
115	Identifying critical sectors and supply chain paths for virtual water and energy-related water trade in China. Applied Energy, 2021, 299, 117294.	5.1	10
116	The global oil supply chain: The essential role of non-oil product as revealed by a comparison between physical and virtual oil trade patterns. Resources, Conservation and Recycling, 2021, 175, 105836.	5.3	10
117	China's power transformation may drastically change employment patterns in the power sector and its upstream supply chains. Environmental Research Letters, 2022, 17, 065005.	2.2	10
118	Impacts of biogas projects on agro-ecosystem in rural areas â€" A case study of Gongcheng. Frontiers of Earth Science, 2011, 5, 317.	0.9	9
119	Photocatalytic hydrogen evolution over nickel cobalt bimetallic phosphate anchored graphitic carbon nitrides by regulation of the d-band electronic structure. Catalysis Science and Technology, 2020, 10, 3654-3663.	2.1	9
120	On Dynamic Behavior of a Cantilever Beam with Tip Mass in a Centrifugal Field. Mechanics Based Design of Structures and Machines, 2005, 33, 79-98.	3.4	8
121	Dynamic behavior of thin rectangular plate attached to moving rigid. Applied Mathematics and Mechanics (English Edition), 2006, 27, 555-566.	1.9	8
122	Application of Visual MODFLOW to assess the Sewage Plant accident pool leakage impact on groundwater in the Guanting Reservoir area of Beijing. Frontiers of Earth Science, 2010, 4, 320-325.	0.5	8
123	Multiple accounting and driving factors of water resources use: A case study of Shanghai. Journal of Environmental Management, 2022, 313, 114929.	3.8	8
124	Study on sustainable water use of the Haihe River Basin using ecological network analysis. Frontiers of Earth Science, 2009, 3, 419-430.	0.5	7
125	Integration of energy, ecology and environment. Frontiers of Earth Science, 2014, 8, 1-2.	0.9	7
126	The effects of the Promoting the Big and Quashing the Small Policy on pollutants from a coal power supply chain perspective. Journal of Environmental Management, 2022, 313, 114960.	3.8	7

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127	Energy-pollutant nexus for wastewater treatment in China based on multi-regional input-output analysis. Journal of Cleaner Production, 2022, 363, 132490.	4.6	7
128	Water quality modeling for a tidal river network: A case study of the Suzhou River. Frontiers of Earth Science, 2011, 5, 428-431.	0.9	6
129	Tracking embodied water uses and GHG emissions along Chinese supply chains. Journal of Cleaner Production, 2021, 288, 125590.	4.6	6
130	Effects of ecological restoration on carbon sink and carbon drawdown of degraded salt marshes with carbonâ€rich additives application. Land Degradation and Development, 2022, 33, 2103-2114.	1.8	6
131	Effects of dissolved oxygen on phosphorus transformation in reservoir sediments: novel insights on bacterial community and functional genes. Journal of Soils and Sediments, 2022, 22, 2094-2104.	1.5	6
132	Identification of Priority Areas for Improving Urban Ecological Carrying Capacity: Based on Supply–Demand Matching of Ecosystem Services. Land, 2022, 11, 698.	1.2	5
133	Modelling and bifurcation analysis of internal cantilever beam system on a steadily rotating ring. Science in China Series A: Mathematics, 1998, 41, 527-533.	0.5	4
134	Bifurcation and buckling analysis of a unilaterally confined self-rotating cantilever beam. Acta Mechanica Sinica/Lixue Xuebao, 2006, 22, 177-184.	1.5	4
135	Sliding state stepping algorithm for solving impact problems of multi-rigid-body system with joint friction. Applied Mathematics and Mechanics (English Edition), 2007, 28, 1621-1627.	1.9	3
136	Response of reed community to the environment gradient-water depth in the Yellow River Delta, China. Frontiers of Biology in China: Selected Publications From Chinese Universities, 2008, 3, 194-202.	0.2	3
137	Dynamics of multi-rigid-body systems under non-smooth constraints and linear complementary problems. International Journal of Computer Mathematics, 2008, 85, 889-898.	1.0	3
138	Township ecosystem health assessment based on fuzzy synthesis evaluation method: a case study of Tongzhou District, Beijing, China. Frontiers of Earth Science, 2009, 3, 312-319.	0.5	3
139	Dynamic and buckling analysis of a thin elastic-plastic square plate in a uniform temperature field. Acta Mechanica Sinica/Lixue Xuebao, 2005, 21, 181-186.	1.5	2
140	Stress of urban energy consumption on air environment. Frontiers of Earth Science, 2009, 3, 337-348.	0.5	2
141	An Efficient Implementation Scheme for the Moving Grid Method Based on Delaunay Graph Mapping. , 2010, , .		2
142	Aeroelastic modeling of wind loading on a cable-net supported glass wall. Acta Mechanica Sinica/Lixue Xuebao, 2010, 26, 409-415.	1.5	2
143	Urban public health assessment and pattern analysis: comparison of four cities in different countries. Frontiers of Earth Science, 2013, 7, 191-198.	0.9	2
144	Transport of a volatile contaminant in a free-surface wetland flow. Frontiers of Earth Science, 2014, 8, 115-122.	0.9	2

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145	Isolation and algicidal properties study of the strain G1 from reservoir sediments. Water Science and Technology: Water Supply, 2022, 22, 3374-3386.	1.0	2
146	Examining the Sensitivity of Global CO <sub>2</sub> Emissions to Trade Restrictions over Multiple Years. Environmental Science and Technology Letters, 2022, 9, 293-298.	3.9	2
147	Control of Endogenous Phosphorus Release at the Sediment–Water Interface by Lanthanum-Modified Fly Ash. Coatings, 2022, 12, 719.	1.2	2
148	Quantify the landscape effect and environmental sustainability of rural region planning at town scale near metropolis. Frontiers of Earth Science, 2009, 3, 112-117.	0.5	1
149	Global properties of linear constraints in state space and motion planning. Science in China Series A: Mathematics, 1997, 40, 745-754.	0.5	O
150	A GIS-Based Gradient Analysis on Landscape Pattern of Tongzhou District, Beijing, China., 2009,,.		0
151	Closure to "GA-Based Support Vector Machine Model for the Prediction of Monthly Reservoir Storageâ€-by Jieqiong Su, Xuan Wang, Yong Liang, and Bin Chen. Journal of Hydrologic Engineering - ASCE, 2015, 20, 07014010.	0.8	0