Dr. Chongqing KANG
Tsinghua University, China

Selected Scholarly Contributions [Data Provided by Scopus]

Zhang, N., Kang, C., Xu, Q., Jiang, C., Chen, Z., Liu, J.
Modelling and simulating the spatio-temporal correlations of clustered wind power using copula

Zhang, N., Kang, C., Kirschen, D.S., Xia, Q.
Rigorous model for evaluating wind power capacity credit

Chen, Z., Jin, X., Li, H., Huang, J.
Balance of power: Toward a more environmentally friendly, efficient, and effective integration of energy systems in China

Kang, C., Jia, W., Xu, Q., Liang, J., Jiang, C., Liu, J.
Capability evaluation of wind power accommodation considering security constraints of power grid in real-time dispatch

Xia, Q., Zhong, H., Kang, C.
Review and prospects of the security constrained unit commitment theory and applications

Zonal marginal pricing approach based on sequential network partition and congestion contribution identification

Zhong, H., Xia, Q., Wang, Y., Kang, C.
Dynamic economic dispatch considering transmission losses using quadratically constrained quadratic program method

Zhou, K., Fang, R., Yan, J., Kang, C., Lin, H., Liu, X.
Design and implementation of an intelligent decision-making system for power grid planning

Xu, Q.-Y., Kang, C.-Q., Jiang, C.-M., Chen, Z.-X., Liu, J.
Preliminary analysis on wind power accommodation system from multiple temporal and spatial scale perspective
Zhang, N., Kang, C., Kirschen, D.S., Xia, Q., Xi, W., Huang, J., Zhang, Q.
Planning pumped storage capacity for wind power integration

Chen, X., Xia, Q., Kang, C., Teng, X.
A rural heat load direct control model for wind power integration in China

Evaluating low-carbon effects of demand response from smart distribution grid
(2012) IEEE PES Innovative Smart Grid Technologies Conference Europe, art. no. 6465796, .

Zhou, T., Chen, Q., Zhu, W., Zhang, L., Kang, C.
A comprehensive low-carbon benefits assessment model for power systems

Zhang, N., Kang, C.
Numerical characteristics of dependent probabilistic sequence operations

Chen, Q., Ji, Z., Kang, C., Ming, H.
Analysis on relation between power generation and carbon emission of carbon capture power plant in different operation modes

Jia, W., Kang, C., Chen, Q.
Analysis on demand-side interactive response capability for power system dispatch in a smart grid framework

Zhou, T., Kang, C., Xu, Q., Chen, Q., Xin, J., Wu, Y.
Analysis on distribution characteristics and mechanisms of carbon emission flow in electric power network

Jia, W., Kang, C., Li, D., Chen, Z., Liu, J.
Evaluation on capability of wind power accommodation based on its day-ahead forecasting

Kang, C., Zhou, T., Chen, Q., Xu, Q., Xia, Q., Ji, Z.
Carbon emission flow in networks
(2012) Scientific Reports, 2, art. no. 479, .
Zhou, T., Kang, C., Xu, Q., Chen, Q.
*Preliminary investigation on a method for carbon emission flow calculation of power system*

Xia, Y., Kang, C., Ning, B., Ding, M.
*Generation and load integrated static security checking on interaction mode on customer side*

Zhang, N., Kang, C.
*Dependent probabilistic sequence operations for wind power output analyses*

Zhang, N., Kang, C., Zhou, Y., Chen, Z., Li, D., Chen, Z., Liu, J.
*Evaluation of receiving-end credible capacity for joint delivery of wind power and conventional electricity generation*

Kang, C., Ji, Z., Chen, Q.
*Review and prospects of flexible operation of carbon capture power plants*

Zhou, T., Kang, C., Xu, Q., Chen, Q.
*Preliminary theoretical investigation on power system carbon emission flow*

Chen, Q., Kang, C., Xia, Q., Kirschen, D.S.
*Optimal flexible operation of a CO2 capture power plant in a combined energy and carbon emission market*

Chen, X., Zhou, T., Li, X., Kang, C., Chen, Q.
*Structure identification of CO2 emission for power system and analysis of its low-carbon contribution*

Xia, Y., Kang, C., Ning, B., Ding, M.
*A generation and load integrated scheduling on interaction mode on customer side*

Zhang, N., Kang, C., Kirschen, D.S., Xi, W., Huang, J., Zhang, Q.
*Thermal generation operating cost variations with wind power integration*
Xia, Y., Kang, C.
Transcend-constrained dynamic economic scheduling using trajectory sensitivity
(2011) IEEE Power and Energy Society General Meeting, art. no. 6039279, .

Kang, C., Jia, W.
Transition of tariff structure and distribution pricing in China

Jin, T., Lu, Y., Kang, C.
Energy management system for smart grid consumers with advanced usage information

Study on Jiucuan wind power transmission and cross-border delivery

Xu, C., Zhou, T., Chen, X., Li, X., Kang, C.
Estimating of sulfur hexafluoride gas emission from electric equipments

Xu, Q., Kang, C., Zhang, N., Fan, Y., Zhu, H.
A discussion on offshore wind power output characteristics and its accommodation

Ding, R., Kang, C., Zhou, T., Chen, X., Li, X.
Analysis and prospect on technical approaches for low carbon power grid

Wang, Y., Xia, Q., Kang, C.
A novel security stochastic unit commitment for wind-thermal system operation

Zhang, N., Kang, C., Chen, Z., Zhou, Y., Xi, W., Huang, J., Zhang, Q.
Wind power credible capacity evaluation model based on sequence operation

Chen, X., Kang, C., Chen, M.
Short term probabilistic forecasting of the magnitude and timing of extreme load
Wang, Y., Xia, Q., Kang, C.
Unit commitment with volatile node injections by using interval optimization

Kato, M., Zhou, Y., Kang, C., Yokoyama, R.
Novel approach of modeling load duration curve for generation expansion planning based on Hill's function

Xu, W., Kang, C., Xia, Q., Huang, W., Chen, Z.
Fuzzy sequence operation and its application in electricity outflow analysis

Wang, Y., Xia, Q., Kang, C.
Secondary forecasting based on deviation analysis for short-term load forecasting

Wang, Y., Xia, Q., Kang, C.
Optimal security constrained generation scheduling considering closed-loop N-1 security correction

Chen, Q., Kang, C., Xia, Q., Guan, D.
Preliminary exploration on low-carbon technology roadmap of China's power sector

Jia, W., Kang, C., Liu, C., Li, M.
Capability of smart grid to promote low-carbon development and its benefits evaluation model

Teng, X., Wu, Z., Huang, J., He, J., Liu, M., Kang, C.
Model and algorithm of coal-fired unit cyclic operation toward low-carbon development

Xu, W., Kang, C., Xia, Q.
Sparse technology based computing of sequence operation theory

Chen, Q., Kang, C., Xia, Q., Zhong, J.
Real option analysis on carbon capture power plants under flexible operation mechanism
Zhong, J., Kang, C., Liu, K.
**Demand side management in China**

Zhang, N., Kang, C., Duan, C., Tang, X., Huang, J., Lu, Z., Wang, W., Qi, J.
**Simulation methodology of multiple wind farms operation considering wind speed correlation**

Kang, C.
**Preface: Special issue on Asia power and energy systems**

Li, Y., Kang, C., Chen, X.
**Joint adaptive training of parameters in integrated models and related single forecasting methods**

Xu, W., Kang, C., Xia, Q.
**Analysis of pseudo-converse operation in the sequence operation theory**

Qin, W., Wang, P., Kang, C.
**Improved bisection searching technique for voltage collapse analysis in reliability evaluation**

Chen, Q., Kang, C., Xia, Q., Kirschen, D.
**Modeling flexible operation mechanism of CO2 capture power plant and its effects on power-system operation**

Chen, Q., Kang, C., Xia, Q., Kang, C.-Q.
**Mechanism and modelling approach to low-carbon power dispatch**

**Participation mode of large-scale Jiuquan wind power farm in Gansu province to electricity market and its utilization scheme**

Wang, Y., Xia, Q., Kang, C.-Q.
**Identification of the active integer variables in security constrained unit commitment**
Chen, Q., Kang, C., Xia, Q., Zhong, J.
Power generation expansion planning model towards low-carbon economy and its application in china

Chen, Q., Xia, Q., Kang, C.
Novel transmission pricing scheme based on point-to-point tariff and transaction pair matching for pool market

Chen, Q.-X., Kang, C.-Q., Xia, Q.
Operation mechanism and peak-load shaving effects of carbon-capture power plant

Xu, G., Xia, Q., Kang, C.
Research on mode and model of anti-disaster transmission network expansion planning

Xu, G., Xia, Q., Kang, C.
Research on investment decision-making method of disaster-proof power grid

Mu, T., Kang, C., Xia, Q.
Power system multilevel load forecasting and coordination. Part four: Least-squares credibility with constraints

Kang, C., Chen, Q., Xia, Q.
Innovation incurred by carbon capture technologies utilized in power systems

Mu, T., Xia, Q., Kang, C.
Input-output table of electricity demand and its application

Impact of large-scale wind farm connecting with power grid on peak load regulation demand

Xu, W., Kang, C., Xia, Q.
Extensions and properties of probabilistic sequence operations
Liu, X., Zhong, J., Kang, C.  
**Multiple-interval power system dispatch considering probabilistic wind generation**  

Zhang, N., Kang, C., Duan, C., Tang, X., Huang, J., Lu, Z., Wang, W., Qi, J.  
**Simulation methodology of multiple wind farms operation considering wind speed correlation**  

Xu, W., Kang, C.-Q., Xia, Q.  
**Algorithm complexity analysis of sequence operation theory**  

Kang, C., Gao, Y., Jiang, J.N., Zhong, J., Xia, Q.  
**Novel approach for evaluation of service reliability for electricity customers**  

Chen, Q., Zhou, T., Kang, C., Xia, Q.  
**An assessment model of low-carbon effect and its application to energy saving based generation dispatching**  

Chen, Q., Kang, C., Xia, Q., Zhou, Y., Yokoyama, R.  
**Key low-carbon factors in the evolution of power decarbonisation and their impacts on generation expansion planning**  

**Risk analysis on electricity sales in power sale market**  

Kang, C.-Q., Zhao, R., Chen, X.-Y., Yang, X.-Y., Cao, X., Liu, M.  
**Fundamental analysis of multilevel load forecasting**  

**Quality of power sale market and its comprehensive assessment**  

**Index system of power sale market analysis and forecasting**  
Xu, W., Kang, C., Xia, Q., Jiang, J.N.
Sequence operation discretization error mechanism and compensation