

# Yang Li

@ liyang@neepu.edu.cn 📞 (+86) 15947966691 🎓 Google Scholar 🆔 ORCID

## WORKING EXPERIENCE

---

- Professor, Northeast Electric Power University** Jul. 2020 – present
- Manager: Guoqing Li
- Postdoctoral, Argonne National Laboratory** Jan. 2017 – Feb. 2019
- Manager: Guenter Conzelmann, Jianhui Wang
- Associate Professor, Northeast Electric Power University** Jul. 2016 – Jun. 2020
- Manager: Guoqing Li
- Lecture, Northeast Electric Power University** Jul. 2014 – Jun. 2016
- Manager: Guoqing Li
- Electrical Engineer, Nanyang Expressway Co., Ltd.** Jul. 2004 – Aug. 2007
- Manager: Haocheng Luo

## EDUCATION

---

- Ph.D. in Electrical Engineering** Sep. 2010 - Jun. 2014
- North China Electric Power University, China
  - Advisor: Prof. Xueping Gu
- M.S. in Computer Science** Sep. 2007 - Apr. 2010
- Northeast Electric Power University, China.
  - Advisor: Prof. Guoqing Li
- B.S. in Computer Science** Sep. 2000 - Jun. 2004
- Nanyang Normal University, China.

## RESEARCH INTERESTS

---

- Renewable Energy Intergration.
- Integrated Energy System

## PROFESSIONAL EXPERIENCE

---

- **Membership in Associations**
  - IEEE Senior Member (Number: 92627049)
  - CIGRE Member (Number: 120191108)
  - Members of CIGRÉ WG B4.84
  - Members for the CIRED WG 2020-3 – Cybersecurity in smart grids and associated standards
  - CSEE Senior Member (Number: E0500020190015S)
  - China Electrotechnical Society Senior Member (Number: E060012914S)
- **Associate Editor**
  - Energy Reports (Elsevier journal, IF: 6.87)
  - IEEE Access (IEEE journal, IF: 3.557)
  - IET Renewable Power Generation (IET journal, IF: 3.488)
  - Scientific Reports (Nature journal, IF: 4.120)
  - IET Electrical Systems in Transportation (IET journal)
  - Computers & Electrical Engineering (Elsevier journal, IF: 2.189)
  - Electrical Engineering (Springer journal, IF: 1.269)

- PLoS One (PLoS journal, IF: 2.776)
- Frontiers in Energy Research (Frontiers journal, IF: 2.746)
- Mathematical Problems in Engineering (Hindawi journal, IF: 1.179)
- The Journal of Engineering (IET journal, EI)
- Journal of Electrical and Computer Engineering (Hindawi journal, EI)
- Communication Review Experts of China Academic Degrees & Graduate Education Development Center (CDGDC)
- Technical Committee Member of The 6th International Conference on Power Electronics Systems and Application (ICPESA 2022)
- Scientific Advisory Board Member of the SDEWES-2018, 2019, 2020 and 2021 Conferences
- Poster, IEEE PES General Meeting, Vancouver, Canada 2013
- Poster, IEEE PES General Meeting, Chicago, USA 2017
- Peer Reviews: **1860 REVIEWS OF 1282 MANUSCRIPTS until Sep 9, 2021**
  - (435) IEEE Access
  - (125) IET Generation, Transmission & Distribution
  - (99) Energy
  - (89) Electrical Measurement and Instrumentation
  - (83) Energy Reports
  - (68) IET Renewable Power Generation
  - (62) Electrical Engineering
  - (53) Applied Energy
  - (50) Plos One
  - (41) Journal of Electrical and Computer Engineering
  - (39) Computers & Electrical Engineering
  - (37) Energies
  - (36) Energy Conversion and Management
  - (36) IEEE Transactions on Power Systems
  - (34) IEEE Transactions on Smart Grid
  - (33) Diangong Jishu Xuebao/Transactions of China Electrotechnical Society
  - (32) International Journal of Electrical Power & Energy Systems
  - (31) Dianli Xitong Baohu Yu Kongzhi/Power System Protection and Control
  - (26) IEEE Transactions on Industrial Informatics
  - (25) The Journal of Engineering
  - (25) IEEE Transactions on Power Delivery
  - (24) Mathematical Problems in Engineering
  - (21) IEEE Conference on Energy Internet and Energy System Integration (EI2)
  - (20) Renewable and Sustainable Energy Reviews
  - (20) IEEE International Electrical and Energy Conference (CIEEC)
  - (20) Journal of Cleaner Production
  - (19) IET Smart Grid
  - (17) Journal of Modern Power Systems and Clean Energy
  - (14) Zhongguo Dianji Gongcheng Xuebao/Proceedings of the Chinese Society of Electrical Engineering
  - (12) Protection and Control of Modern Power Systems
  - (12) Frontiers in Energy Research
  - (11) Power System Technology
  - (10) IEEE Transactions on Sustainable Energy
  - (8) Dianli Xitong Zidonghua/Automation of Electric Power Systems
  - (8) IET Image Processing
  - (7) IET Electrical Systems in Transportation
  - (7) Applied Sciences
  - (6) Journal of Energy Engineering
  - (6) Neurocomputing
  - (5) Sensors
  - (5) Electronics
  - (5) Power Engineering Letters
  - (5) IET Signal Processing
  - (5) Conference on Sustainable Development of Energy, Water and Environment Systems
  - (5) Electronics Letters
  - (4) IEEE IAS Publications

- (4) CSEE Journal of Power and Energy Systems
- (4) Sustainability
- (4) IEEE Transactions on Industrial Electronics
- (3) Complexity
- (3) Journal of Natural Gas Science and Engineering
- (3) International Journal of Information Technology & Decision Making
- (3) PeerJ Computer Science
- (3) Scientific Reports
- (3) Asia Conference on Power and Electrical Engineering
- (3) Energy Science & Engineering
- (3) IET Science, Measurement and Technology
- (3) Journal of Ambient Intelligence and Humanized Computing
- (3) International Journal of Emerging Electric Power Systems
- (3) Arabian Journal for Science and Engineering
- (3) South East European Conference on Sustainable Development of Energy Water and Environment Systems (SDEWES)
- (3) International Conference on Medical Image Computing and Computer Assisted Intervention
- (2) Digital Communications and Networks
- (2) Energy Conversion and Economics
- (2) Proceedings of the CSEE
- (2) International Conference on Mechanical, Electric and Industrial Engineering
- (2) Heliyon
- (2) Sustainable Energy Technologies and Assessments
- (2) International Transactions on Electrical Energy Systems
- (2) Security and Communication Networks
- (2) Discrete Dynamics in Nature and Society
- (2) IEEE Transactions on Energy Conversion
- (2) Energy Sources, Part B: Economics, Planning, and Policy
- (2) Energy & Fuels
- (2) IEEE Transactions on Systems, Man, and Cybernetics: Systems
- (2) IEEE/CAA Journal of Automatica Sinica
- (2) Electricity
- (2) Inventions
- (2) Swarm and Evolutionary Computation
- (2) International Journal of Energy Research
- (2) IET Power Electronics
- (2) Renewables: Wind, Water, and Solar
- (2) IET Cyber-Physical Systems: Theory & Applications
- (2) Evolutionary Intelligence
- (2) IET Computer Vision
- (2) Engineering Computations
- (1) International Journal of Precision Engineering and Manufacturing-Green Technology
- (1) Machines
- (1) Electric Machines & Control Application
- (1) Transactions of China Electrotechnical Society
- (1) Energy Engineering
- (1) IET Intelligent Transport Systems
- (1) ASIA CONFERENCE ON POWER AND ELECTRICAL ENGINEERING (ACPEE)
- (1) Science and Technology of Nuclear Installations
- (1) Advances in Civil Engineering
- (1) Journal of Sustainable Development of Energy Water and Environment Systems-jsdewes
- (1) IEEE Journal of Emerging and Selected Topics in Industrial Electronics
- (1) Indonesian Journal of Electrical Engineering and Informatics (IJEI)
- (1) Scientific Programming
- (1) Energy Engineering: Journal of the Association of Energy Engineers
- (1) IET Energy Systems Integration
- (1) Acta Radiologica
- (1) Archives of Electrical Engineering

- (1) Asia Pacific Conference on Sustainable Development of Energy, Water and Environment Systems
- (1) Journal of King Saud University - Engineering Sciences
- (1) Geothermal Energy
- (1) Advances in Automobile Engineering
- (1) IET Circuits, Devices and Systems
- (1) IEEE Journal on Selected Areas in Communications
- (1) International Journal of Environmental Research and Public Health
- **Editor records (manuscripts handled as editor):** 330 publications until Sep 2, 2021
  - (75) IEEE Access
  - (60) Energy Reports
  - (36) Plos One
  - (31) Journal of Electrical and Computer Engineering
  - (28) Mathematical Problems in Engineering
  - (27) Electrical Engineering
  - (16) IET Renewable Power Generation
  - (15) Computers & Electrical Engineering
  - (14) The Journal of Engineering
  - (12) Scientific Reports
  - (11) Frontiers in Energy Research
  - (5) IET Electrical Systems in Transportation

## RESEARCH PUBLICATIONS

---

Total citations (including self-citations) 2142 = 1490 citations (Google scholar) + 652 citations (Cnki)  
 h-index=18  
 i10-index = 32 (Google Scholar, ORCID)

### Journal Papers

- J1 **Yang Li**, Meng Han, Zhen Yang, Guoqing Li. "Coordinating flexible demand response and renewable uncertainties for scheduling of community integrated energy systems with an electric vehicle charging station: A bi-level approach," IEEE Transactions on Sustainable Energy, to be published. DOI: 10.1109/TSTE.2021.3090463.
- J2 **Yang Li**, Jiazheng Li, Yi Wang. "Privacy-preserving spatiotemporal scenario generation of renewable energies: A federated deep generative learning approach," IEEE Transactions on Industrial Informatics, to be published. DOI: 10.1109/TII.2021.3098259.
- J3 **Yang Li**, Ruinong Wang, Zhen Yang. "Optimal scheduling of isolated microgrids using automated reinforcement learning-based multi-period forecasting," IEEE Transactions on Sustainable Energy, to be published. DOI: 10.1109/TSTE.2021.3105529.
- J4 **Yang Li**, Bin Wang, Zhen Yang, Jiazheng Li, Guoqing Li. "Optimal scheduling of integrated demand response-enabled community-integrated energy systems in uncertain environments," IEEE Transactions on Industry Applications, to be published. DOI: 10.1109/TIA.2021.3106573.
- J5 **Yang Li**, Chunling Wang, Guoqing Li, Jinlong Wang, Dongbo Zhao, and Chen Chen. "Improving operational flexibility of integrated energy system with uncertain renewable generations considering thermal inertia of buildings." Energy Conversion and Management, 2020, 207, 112526. (**SCI, ESI Highly Cited Paper**)
- J6 **Yang Li**, Chunling Wang, Guoqing Li, Chen Chen. "Optimal scheduling of integrated demand response-enabled integrated energy systems with uncertain renewable generations: A Stackelberg game approach," Energy Conversion and Management, 2021, 235, 113996. (SCI)
- J7 Xinxin Zhou, Jingru Feng, **Yang Li**. "Non-intrusive load decomposition based on CNN-LSTM hybrid deep learning model," Energy Reports, to be published. (SCI, corresponding author)
- J8 Cheng Zhong, Huayi Li, Yang Zhou, Yueming Lv, Jikai Chen, and **Yang Li**. "Virtual synchronous generator of PV generation without energy storage for frequency support in autonomous microgrid", International Journal of Electrical Power & Energy Systems, 2022, 134, 107343. (SCI)
- J9 Cheng Zhong, Yueming Lv, Huayi Li, JiKai Chen, and **Yang Li**. "Frequency support scheme based on parametrized power curve for de-loaded wind turbine under various wind speed." Wind Engineering, 2021, 0309524X211035153.
- J10 Lei Kou, Xiao-dong Gong, Yi Zheng, Xiu-hui Ni, **Yang Li**, Quan-de Yuan, and Ya-nan Dong. "A random forests

and currents fault texture features based method for currents sensors fault diagnosis in three-phase PWM VSR.” *Frontiers in Energy Research*, 2021, 9, 291.

- J11 Liang Chen, Songlin Gu, Ying Wang, Yang Yang, and **Yang Li**. ”Stacked autoencoder framework of false data injection attack detection in smart grid.” *Mathematical Problems in Engineering*, 2021 (2021), 2014345. (SCI)
- J12 Lei Wang, Pengcheng Xu, Zhaoyang Qu, Xiaoyong Bo, Yunchang Dong, Zhenming Zhang, **Yang Li**. ”Coordinated cyber-attack detection model of cyber-physical power system based on the operating state data link,” *Frontiers in Energy Research*, 2021, 9, 666130. (SCI)
- J13 Jianhong Pan, Aidi Dong, Jiashu Fan, and **Yang Li**. ”Online Static Voltage Stability Monitoring for Power Systems Using PMU Data.” *Mathematical Problems in Engineering*, 2020, 2020, 6667842. (SCI, corresponding author)
- J14 Jianhong Pan, Jiashu Fan, Aidi Dong, and **Yang Li**. ”Random vector functional link network optimized by jaya algorithm for transient stability assessment of power systems.” *Mathematical Problems in Engineering*, 2020, 2020, 8895022. (SCI, corresponding author)
- J15 Liang Chen, Peng Jin, Jing Yang, **Yang Li**, Yi Song. ”Robust Kalman filter-based dynamic state estimation of natural gas pipeline networks,” *Mathematical Problems in Engineering*, 2021(2021): 5590572.
- J16 Meng Zhang, Jiazheng Li, **Yang Li**, Runnan Xu. ”Deep learning for short-term voltage stability assessment of power systems,” *IEEE Access*, 2021, 9, 29711-29718. (SCI, corresponding author)
- J17 Xiaoyong Bo, Xiaoyu Chen, Huashun Li, Yunchang Dong, Zhaoyang Qu, Lei Wang, **Yang Li**. ”Modeling Method for the Coupling Relations of Microgrid Cyber-Physical Systems Driven by Hybrid Spatiotemporal Events.” *IEEE Access*, 2021, 9, 19619-19631. (SCI)
- J18 **Yang Li**, Zhao Xu. Editorial: Enabling High-Penetration Renewable Integration Into a Smarter Grid. *Frontiers in Energy Research*. 2020, 8:617556. (SCI)
- J19 Yang Yu, Leyao Cong, Xia Tian, Zengqiang Mi, **Yang Li**, Zhen Fan, Hui Fan. A stator current vector orientation based multi-objective integrative suppressions of flexible load vibration and torque ripple for PMSM considering electrical loss. *CES Transactions on Electrical Machines and Systems*. 2020, 4(3):161-171. (EI)
- J20 Zhaoyuan Fang, Dongbo Zhao, Chen Chen, **Yang Li**, Yutin Tian. Nonintrusive appliance identification with appliance-specific networks. *IEEE Transactions on Industry Applications*. 2020, 56(4):3443-3452. (SCI)
- J21 Zhaoyang Qu, Qianhui Xie, Yuqing Liu, **Yang Li**, Lei Wang, Pengcheng Xu, Yuguang Zhou, Jian Sun. Power cyber-physical system risk area prediction using dependent Markov chain and improved grey wolf optimization. *IEEE Access*, 2020, 8, 82844-82854. (SCI)
- J22 **Yang Li**, Chunling Wang and Guoqing Li. A mini-review on high-penetration renewable integration into a smarter grid. *Frontiers in Energy Research*, 2020, 8, 84. (SCI)
- J23 **Yang Li**, Zhi Li, Liang Chen, Guoqing Li. ”A false data injection attack method for generator dynamic state estimation.” *Transactions of China Electrotechnical Society*, 2020, 35(7):1476-1488. [in Chinese]. (EI)
- J24 **Yang Li**, Zhen Yang, Guoqing Li, Dongbo Zhao, Wei Tian. ”Optimal scheduling of an isolated microgrid with battery storage considering load and renewable generation uncertainties,” *IEEE Transactions on Industrial Electronics*, 2019, 66(2), 1565-1575. (SCI, ESI Highly Cited Paper)
- J25 **Yang Li**, Zhen Yang, Dongbo Zhao, Hangtian Lei, Bai Cui, Shaoyan Li. ”Incorporating energy storage and user experience in isolated microgrid dispatch using a multi-objective model,” *IET Renewable Power Generation*, 2019, 13, 973-981. (SCI, ESI Highly Cited Paper)
- J26 **Yang Li**, Chunling Wang, Guoqing Li, Jinlong Wang, Dongbo Zhao, and Chen Chen. ”Improving operational flexibility of integrated energy system with uncertain renewable generations considering thermal inertia of buildings,” *Energy Conversion and Management*, 2020, 207, 112526. (SCI, ESI Highly Cited Paper)
- J27 Yingying Shi, Yongchao Zenga, Botang Han, **Yang Li**, Ralph T. Muehleisen. ”Leveraging inter-firm influence in the diffusion of energy efficiency technologies: An agent-based model,” *Applied Energy*, 2020, 263:114641. (SCI)
- J28 Jiaze sun, Jiahui Deng, **Yang Li**. ”Indicator & crowding distance-based evolutionary algorithm for combined heat and power economic emission dispatch,” *Applied Soft Computing*, 2020, 90: 106158. (SCI)
- J29 29. Lei Wang, Zhaoyang Qu, **Yang Li**, Kewei Hu, Jian Sun, Kai Xue, Mingshi Cui. ”Method for extracting patterns of coordinated network attacks on electric power CPS based on temporal-topological correlation,” *IEEE Access*, 2020, 8, 57260-57272. (SCI)

- J30 Yahui Li, **Yang Li**. "Security-constrained multi-objective optimal power flow for a hybrid AC/VSC-MTDC system with Lasso-based contingency filtering," *IEEE Access*, 2020, 8, 6801-6811. (SCI, corresponding author)
- J31 Yongchao Zeng, Peiwu Dong, Lingling Wang, **Yang Li**. "Analyzing the co-evolution of green technology diffusion and consumers' pro-environmental attitudes: An agent-based model," *Journal of Cleaner Production*, 2020, 256: 120384. (SCI)
- J32 Meng Zhang, **Yang Li**. "Multi-objective optimal reactive power dispatch of power systems by combining classification based multi-objective evolutionary algorithm and integrated decision making," *IEEE Access*, 2020, 8: 38198-38209.
- J33 Xiangmin Lun, Shuyue Jia, Yimin Hou, Yan Shi, **Yang Li**, Hanrui Yang, Shu Zhang, and Jinglei Lv. "GCNs-net: a graph convolutional neural network approach for decoding time-resolved eeg motor imagery signals." *arXiv preprint arXiv:2006.08924* (2020).
- J34 Yimin Hou, Shuyue Jia, Shu Zhang, Xiangmin Lun, Yan Shi, **Yang Li**, Hanrui Yang, Rui Zeng, and Jinglei Lv. "Deep feature mining via attention-based BiLSTM-GCN for human motor imagery recognition." *arXiv preprint arXiv:2005.00777* (2020).
- J35 Shuyue Jia, Yimin Hou, Yan Shi, and **Yang Li**. "Attention-based graph ResNet for motor intent detection from raw EEG signals." *arXiv preprint arXiv:2007.13484* (2020).
- J36 **Yang Li**, Zhi Li, Liang Chen. "Dynamic state estimation of generators under cyber attacks," *IEEE Access*, 2019, 7, 125253-125267. (SCI)
- J37 **Yang Li**, Kang Li. "Incorporating demand response of electric vehicles in scheduling of isolated microgrids with renewables using a bi-level programming approach", *IEEE Access*, 2019, 7, 116256-116266. (SCI)
- J38 **Yang Li**, Jing Li, Junjian Qi, Liang Chen. "Robust cubature Kalman filter for dynamic state estimation of synchronous machines under unknown measurement noise statistics," *IEEE Access*, 2019, 7, 29139-29148. (SCI)
- J39 **Yang Li**, Shangsong Wu. "Controlled islanding for a hybrid AC/DC grid with VSC-HVDC using semi-supervised spectral clustering," *IEEE Access*, 2019, 7, 10478-10490. (SCI)
- J40 Shaoyan Li, Xueping Gu, Guangqi Zhou, **Yang Li**. "Optimisation and comprehensive evaluation of alternative energising paths for power system restoration," *IET Generation Transmission & Distribution*, 2019, 13 (10), 1923-1932. (SCI)
- J41 Qu, Zhaoyang, Yunchang Dong, Nan Qu, Lei Wang, **Yang Li**, Yu Zhang, and Sylvere Mugemanyi. "Survivability evaluation method for cascading failure of electric cyber physical system considering load optimal allocation." *Mathematical Problems in Engineering*, 2019, 2019. (SCI)
- J42 Yahui Li, **Yang Li**, Guoqing Li. "Optimal Power Flow for AC/DC System Based on Cooperative Multi-objective Particle Swarm Optimization," *Automation of Electric Power Systems*, 2019, 43 (4), 94-100. [in Chinese]. (EI)
- J43 **Yang Li**, Zhen Yang, Guoqing Li, Yunfei Mu, Dongbo Zhao, Chen Chen, Bo Shen. "Optimal scheduling of isolated microgrid with an electric vehicle battery swapping station in multi-stakeholder scenarios: a bi-level programming approach via real-time pricing," *Applied Energy*, 2018, 232, 54-68. (SCI, ESI Highly Cited Paper)
- J44 **Yang Li**, Bo Feng, Guoqing Li, Junjian Qi, Dongbo Zhao, Yunfei Mu. "Optimal distributed generation planning in active distribution networks considering integration of energy storage," *Applied Energy*, 2018, 210, 1073-1081. (SCI, ESI Hot & Highly Cited Paper)
- J45 Yahui Li, **Yang Li**. "Two-stage many-objective optimal power flow based on knee point-driven evolutionary algorithm," *Processes*, 2018, 6(12), 250. (SCI)
- J46 **Yang Li**, Jing Li, Liang Chen, Guoqing Li. "Dynamic state estimation of synchronous machines based on robust cubature kalman filter under complex measurement noise conditions," *Transactions of China Electrotechnical Society*, 2019, 34 (17), 3651-3660. [In Chinese] (EI)
- J47 **Yang Li**, Jinlong Wang, Dongbo Zhao, Guoqing Li, Chen Chen. A two-stage approach for combined heat and power economic emission dispatch: combining multi-objective optimization with integrated decision making. *Energy*, 2018, 162, 237-254. (SCI, ESI Highly Cited Paper)
- J48 **Yang Li**, Yahui Li, Guoqing Li, Dongbo Zhao, Chen Chen. "Two-stage multi-objective OPF for AC/DC grids with VSC-HVDC: Incorporating decisions analysis into optimization process," *Energy*, 2018, 147, 286-296. (SCI, ESI Highly Cited Paper)
- J49 Jiaze Sun, **Yang Li**. "Social cognitive optimization with tent map for combined heat and power economic dispatch".

International Transactions on Electrical Energy Systems, 2018, e2660. DOI: 10.1002/etep.2660 (SCI)

- J50 Yahui Li, **Yang Li**, Yuanyuan Sun. “Online static security assessment of power systems based on lasso algorithm”. *Applied Sciences*, 2018, 8(9), 1442. (SCI, corresponding author)
- J51 Yahui Li, **Yang Li**. “Two-step many-objective optimal power flow based on knee point-driven evolutionary algorithm”, *Processes*, 2018, 6(12), 250. (SCI, corresponding author)
- J52 Zhaoyang Qu, Yu Zhang, Nan Qu, Lei Wang, **Yang Li**, Yunchang Dong. “Method for quantitative estimation of the risk propagation threshold in electric power CPS based on seepage probability”. *IEEE Access*, *IEEE Access*, 2018, 6, 68813-68823. (SCI)
- J53 Yongchao Zeng, Peiwu Dong, Yingying Shi, **Yang Li**. “On the disruptive innovation strategy of renewable energy technology diffusion: an agent-based model”. *Energies*, 2018, 11(11), 3217. (SCI)
- J54 Guoqing Li, Xiaojuan Zhai, **Yang Li**, Zhenhao Wang, Jikai Chen, Mingjiang Zhang. “Multi-objective fuzzy optimization operation of micro-grid based on improved ant colony algorithm” *Acta Energiæ Solaris Sinica*, 2018, 39(8): 2310-2317. [in Chinese]. (EI)
- J55 Zhenhao Wang, Zuoyu You, Yalei Huang, **Yang Li**, Guoqing Li. “Load margin analysis of hybrid AC/DC system with two terminal VSC-HVDC using continuous power flow method”, 2018, 46 (6), 9-15. [in Chinese]
- J56 Yahui Li, **Yang Li**, Guoqing Li. “Multi-objective optimal power flow for AC/DC system with VSC-HVDC based on cooperative multi-objective particle swarm optimization”. *Automation of Electric Power Systems*, 2019, 43(4), 94-100. [in Chinese]. (EI, corresponding author)
- J57 Zhenhao Tang, Qingyu Meng, Shengxian Cao, **Yang Li**, Zhonghua Mu, Xiaoya Pang. “Wind power ramp prediction algorithm based on wavelet deep belief network”, *Acta Energiæ Solaris Sinica*, 2019, 40 (11), 3213-3220. (EI)
- J58 Peng Jin, **Yang Li**, Guoqing Li, Zhe Chen, Xiaojuan Zhai. “Optimized hierarchical power oscillations control for distributed generation under unbalanced conditions,” *Applied Energy*, 2017, 194, 343-352. (SCI, corresponding author & co-first author)
- J59 **Yang Li**, and Zhen Yang. “Application of EOS-ELM with binary Jaya-based feature selection to real-time transient stability assessment using PMU data,” *IEEE Access*, 2017, 5, 23092-23101. (SCI)
- J60 Zhenhao Wang, Mingze Zhang, Hongjin Du, **Yang Li**, Guoqing Li. A searching algorithm for optimal controlled islanding surfaces considering VSC-HVDC terminal constraint. *Transactions of China Electrotechnical Society*, 2017, 32(17): 57-66. [in Chinese]. (EI, corresponding author)
- J61 **Yang Li**, Bo Feng, Guoqing Li, Jikai Chen, Zhenhao Wang, Mingjiang Zhang. “Bi-Level programming of distributed generation in active distribution network considering integration influence of energy storage system,” *Acta Energiæ Solaris Sinica*, 2017, 38 (12), 3311-3318. [in Chinese]. (EI)
- J62 Jikai Chen, Chuan Sun, Guoqing Li, **Yang Li**, Jiang Li. “Study on characteristics of DC fault in bipolar MMC-HVDC system,” *Transactions of China Electrotechnical Society*, 2017, 32(10): 53-60. [in Chinese]. (EI)
- J63 Kai Gao, Chunsheng Yan, Zhengwen Li, Zijiao Han, Bowen Tian, **Yang Li**, Guoqing Li. Transient stability assessment based on WAMS and Gaussian process classifier. *Modern Electric Power*, 2017, 34(2), 56-61. [in Chinese].
- J64 Jikai Chen, Yanhui Dou, **Yang Li**, et al. “A Transient Fault Recognition Method for an AC-DC Hybrid Transmission System Based on MMC Information Fusion,” *Energies*, 2016, 10(1), 23. (SCI)
- J65 **Yang Li**, Yahui Li, Zijiao Han, Guoqing Li, Kai Gao, Zhenhao Wang. “Determination of optimal opening scheme for electromagnetic loop networks based on fuzzy analytic hierarchy process,” *Mathematical Problems in Engineering*, 2016, 2016: 3965608. (SCI)
- J66 **Yang Li**, Guoqing Li, Zhenhao Wang. “Rule extraction based on extreme learning machine and an improved ant-miner algorithm for transient stability assessment,” *PloS One*, 2015, 10(6): e0130814. (SCI, ESI Highly Cited Paper)
- J67 Xueping Gu, **Yang Li**, Jinghua Jia. “Feature selection for transient stability assessment based on kernelized fuzzy rough sets and memetic algorithm,” *International Journal of Electrical Power & Energy Systems*, 2015, 64: 664-670. (SCI, corresponding author)
- J68 **Yang Li**, Guoqing Li, Zhenhao Wang, Zijiao Han, Xue Bai. “A multifeature fusion approach for power system transient stability assessment using PMU data,” *Mathematical Problems in Engineering*, 2015, 2015: 786396 (SCI)
- J69 Yanjun Zhang, Tie Li, Guangyu Na, Guoqing Li, **Yang Li**. “Optimized extreme learning machine for power system

- transient stability prediction using synchrophasors,” *Mathematical Problems in Engineering*, 2015, 2015: 529724 (SCI)
- J70 **Yang Li**, Yahui Li, Guoqing Li, et al. “A multi-objective optimal power flow approach considering economy and environmental factors for hybrid AC/DC grids incorporating VSC-HVDC,” *Power System Technology*, 2016, 40(9): 2661-2667. [in Chinese]. (EI, corresponding author)
- J71 Zhenhao Wang, Jinbo Song, Zijiao Han, Henan Dong, **Yang Li**. “Characteristic of nested-loop mechanism based modular multilevel converter based on hybrid sub-modules,” *Automation of Electric Power Systems*, 2016, 40(24): 92-97. [in Chinese]. (EI, corresponding author)
- J33 Jikai Chen, Xiuwei Ma, Jiang Li, **Yang Li**, Zhenhao Wang, Nantian Huang, Yongquan Wang, Bo Dong. “Analysis on interaction of two-parallel APF,” *Power System Technology*, 2017, 41 (3), 956-961. [in Chinese]. (EI)
- J73 **Yang Li**, Guoqing Li, Xueping Gu, et al. “Transient stability assessment of power systems based on ensemble OS-ELM,” *Transactions of China Electrotechnical Society*, 2015, 30(14): 412-418 [in Chinese]. (EI)
- J74 Yimeng Li, Xueping Gu, **Yang Li**. “Research on dynamic continuous diagnosis mechanism of power systems faults,” *Journal of Beijing Jiaotong University*, 2014, 38(5):142-146. [in Chinese]
- J75 **Yang Li**, Xueping Gu. “Feature selection for transient stability assessment based on improved maximal relevance and minimal redundancy criterion,” *Proceedings of the CSEE*, 2013, 33(34): 179-186 [in Chinese]. (EI)
- J76 Xueping Gu, **Yang Li**, Xianji Wu. “Transient stability assessment of power systems based on local learning machine and bacterial colony chemotaxis algorithm,” *Transactions of China Electrotechnical Society*, 2013 28(10): 271-279 [in Chinese]. (EI, corresponding author)
- J77 **Yang Li**, Xueping Gu. “Application of online SVR in very short-term load forecasting,” *International Review of Electrical Engineering (IREE)*, 2013, 8(1): 277-282.
- J78 Jikai Chen, Yanhui Dou, **Yang Li**, Jiang Li. “Application of shannon wavelet entropy and shannon wavelet packet entropy in analysis of power system transient signals,” *Entropy*, 2016, 18(12): 437. (SCI)
- J79 Yunfeng Song, **Yang Li**, Xinwei Li. “Reactive power optimization of the power system based on quantum-behaved particle swarm optimization,” *Northeast Electric Power Technology*, 2011, 5: 1-4. [in Chinese]
- J80 Hua Lan, Tao Ai, **Yang Li**. “Application of EMD on single-pole adaptive reclosure of transmission,” *Power System Protection and Control*, 2010, 38 (12), 35-39.
- J81 Zhibiao Shi, **Yang Li**, Xiao Wang, Tong Wang, and Wan-Min Li. ”Path planning for mobile robot based on quantum-behaved particle swarm optimization.” *Journal of Harbin Institute of Technology*, 2010, 42(SUPPL), 33-37. (EI)
- J82 Xiangping Meng, Xiao Wang, and **Yang Li**. ”Choose the best path of the multi-agent soccer robot system.” *Journal of Harbin Institute of Technology*, 2010, 42(SUPPL), 25-27. (EI)
- J83 Guangmin Gao, Tong Wang, Guoju Shang, and **Yang Li**. ”Research on coordination graphs for multi-robot decision making.” *Journal of Harbin Institute of Technology*, 2010, 42(SUPPL), 203-208. (EI)
- J84 Zhibiao Shi, Yueying Tong, Donghui Chen, **Yang Li**. “Identification of beef freshness with electronic nose,” *Nongye Jixie Xuebao*. 2009, 40(11):184-188. [in Chinese]. (EI)
- J85 Zhibiao Shi, Tao Yu, Qun Zhao, **Yang Li**, Yubin Lan. “Comparison of algorithms for an electronic nose in identifying liquors,” *Journal of Bionic Engineering*, 2008, 5(3), 253-257. (SCI)
- J86 Zhibiao Shi, Xuebing Fan, **Yang Li**, Yan Liu. “Prospective application of bionic nose based on biological olfaction to transformer fault diagnosis,” *Transformer*, 2008, 45(2): 38-40. [in Chinese]
- J87 Zhibiao Shi, Shengquan Huang, Xuebing Fan, **Yang Li**. “Study on electronic nose based on biologic olfaction,” *China Mechanical Engineering*, 2007, 18(23): 2810-2813. [in Chinese]. (EI)
- J88 Zhenhao Tang, Shikui Wang, Shengxian Cao, **Yang Li**, Tao Shen. Dynamic prediction model for NOX emission of SCR system based on hybrid data-driven algorithms. *Proceedings of the CSEE*, to be published. [in Chinese] (EI)

## Conference Paper

- C1 Zhaoyuan Fang, Dongbo Zhao, Chen Chen, **Yang Li**, Yuting Tian. “Non-intrusive appliance identification with appliance-specific networks,” *IEEE Industry Applications Society Annual Meeting*, Baltimore, USA, 2019.
- C2 Yinfeng Sun, Zhenhao Wang, Chao Long, Guoqing Li, Dapeng Xia, and **Yang Li**. ”Method for power flow controller



location-allocation and optimized flow control method of meshed DC grid.” In 2019 4th IEEE Workshop on the Electronic Grid (eGRID), pp. 1-6. IEEE, 2019.

- C3 Xueping Gu, **Yang Li**, “Bayesian multiple kernels learning-based transient stability assessment of power systems using synchronized measurements,” IEEE PES General Meeting, BC, Canada, 2013
- C4 **Yang Li**, Yahui Li, Guoqing Li, “A two-stage multi-objective optimal power flow algorithm for hybrid AC/DC grids with VSC-HVDC,” IEEE PES General Meeting, Chicago, China, 2017
- C5 Jikai Chen, Chuan Sun, **Yang Li**, et al. (2017, July), “The analysis of DC fault mode effects on MMC-HVDC system,” IEEE PES General Meeting, Chicago, China, 2017.
- C6 Guoqing Li, Xiaojuan Zhai, **Yang Li**, Bo Feng, Zhenhao Wang, Mingjiang Zhang. “Multi-objective optimization operation considering environment benefits and economy based on ant colony optimization for isolated micro-grids,” Energy Procedia, 104 (21), e26, 2016.
- C7 Jikai Chen, Xiuwei Ma, **Yang Li**. Dynamic interaction analysis of two-parallel active power filter. China International Conference on Electricity Distribution (CICED), Xi’an, China, 2016. (EI)
- C8 Bo Feng, Xiaojuan Zhai, **Yang Li**, Zhenhao Wang. Experimental study on black-start capability of VSC-HVDC for passive networks. IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC). Xi’an, China, 2016.
- C9 **Yang Li**, Xueping Gu. Power system transient stability assessment based on online sequential extreme learning machine. IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC), Kowloon, China, 2013.
- C10 Zhi-biao Shi, **Yang Li**, Tao Yu. “Short-term load forecasting based on LS-SVM optimized by bacterial colony chemotaxis algorithm,” International Conference on Information and Multimedia Technology, Jeju Island, South Korea, 2009.
- C11 Zhibiao Shi, **Yang Li**. “Fault diagnosis of power transformer using LS-SVMs with BCC,” 2nd IEEE International Conference on Computer Science and Information Technology, Beijing, China, 2009.
- C12 Hua Lan, Tao Ai, **Yang Li**. “Single phase adaptive reclosure of transmission lines based on EMD approximate entropy and LS-SVM with BCC,” International Conference on Information Engineering and Computer Science, Wuhan, China, 2009.
- C13 Zhibiao Shi, **Yang Li**, Yunfeng Song, Tao Yu. “Fault diagnosis of transformer based on quantum-behaved particle swarm optimization-based least squares support vector machines,” IEEE International Conference on Information Engineering and Computer Science, Wuhan, China, 2009.
- C14 **Yang Li**. Short-term load forecasting based on LS-SVM optimized by BCC algorithm. IEEE 15th International Conference on Intelligent System Applications to Power Systems, Curitiba, Brazil, 2009.
- C15 Liang Chen, Xinxin Hui, Songlin Gu, Manyun Huang, and **Yang Li**. Dynamic State Estimation for Integrated Natural Gas and Electric Power Systems. 2021 IEEE/IAS Industrial and Commercial Power System Asia (I&CPS Asia), to be published.
- C16 Jiase Sun, Jiahui Deng, **Yang Li**, Shuaiyin Ma, and Nan Han. A BCS-GDE Algorithm for Multi-objective Optimization of Combined Cooling, Heating and Power Model. 2021 IEEE/IAS Industrial and Commercial Power System Asia (I&CPS Asia), to be published.

## Patents

- P1 **Yang Li**, Yahui Li, Guoqing Li, Zhenhao Wang, Yechun Xin, He Wang, Chaobin Wang, Ruitong Liu. “A Multi-Objective Power Flow Optimization Method for AC/DC System Containing VSC-HVDC”, Patent No. ZL201510882003.7, Application date 2015-12-04, Grant date 2019-08-06.
- P2 **Yang Li**, Mingze Zhang, Zhenhao Wang, Guoqing Li, Yechun Xin, Chaobin Wang, He Wang, Ruitong Liu. “A Search Method for Optimal Splitting Sections of AC/DC Systems Containing VSC-HVDC Based on Spectral Clustering”, Patent No. ZL201610436573.8, Application date 2016-06-17, Grant date 2019-11-19.
- P3 Zhenhao Wang, Mingze Zhang, **Yang Li**, Guoqing Li, Yechun Xin, He Wang, Jikai Chen, Ruitong Liu. A composite out-of-synchronization criterion method for AC system multi-frequency oscillation based on wide-area measurement information. Patent No. ZL201510900265.1, Application date 2015-12-08, Grant date 2017-10-20.
- P4 Jikai Chen, Yanhui Dou, Guoqing Li, Zhenhao Wang, Yechun Xin, Yanjun Zhang, Zijiao Han, He Wang, **Yang Li**, Yingxuan Yang. Transient fault identification method of AC systems based on information fusion technology of

MMC converter stations. Patent No. ZL201510954567.6, Application date 2015-12-21, Grant date 2018-02-27.

- P5 Zhenhao Wang, Yanhua Zhou, Guoqing Li, Jikai Chen, **Yang Li**, Chaobin Wang, Yi Xiong, Hongtao Chen. A method for accuracy analysis of MMC digital-analog hybrid simulation system. Patent No. ZL201510333250.1, Application date 2015-06-16, Grant date 2018-04-24.
- P6 Guoqing Li, Jikai Chen, Binghui Li, Zhenhao Wang, Jiang Li, He Wang, **Yang Li**, Yechun Xin, Weiguo Li. Harmonic energy transfer function modeling method for MMC converter station. Patent No. ZL201610253389.X, Application date 2016-04-22, Grant date 2018-04-03.
- P7 Jikai Chen, Chuan Sun, Guoqing Li, Zhenhao Wang, Yechun Xin, **Yang Li**, He Wang. Analysis Method of Harmonic One-way Transmission Characteristics of MMC Converter Stations. Patent No. ZL201611021262.1, Application date 2016-11-15, Grant date 2019-10-11.
- P8 Guoqing Li, Houhe Chen, Rufeng Zhang, Tao Jiang, **Yang Li**, Yechun Xin, Zhenhao Wang, Weiguo Li, He Wang. A two-stage source-load scheduling method and device considering peak shaving and climbing requirements. Patent No. ZL201510715947.5, Application date 2015-10-29, Grant date 2017-12-05.
- P9 Jikai Chen, Yanhui Dou, **Yang Li**, He Wang, Jiang Li, Yechun Xin, Zhenhao Wang, Guoqing Li. Evaluation Method of Transient Disturbance Interactive Influence State for MMC-HVDC. Patent No. ZL201611011196.X, Application date 2016-11-17, Grant date 2019-04-26.
- P10 Jikai Chen, Yanhui Dou, Guoqing Li, Yechun Xin, Zhenhao Wang, He Wang, **Yang Li**. Fuzzy Comprehensive Evaluation Method for the Operation State of MMC Converter Stations. Patent No. ZL201610290927.2, Application date 2016-05-05, Grant date 2019-01-04.
- P11 Jikai Chen, Yongquan Wang, Jiang Li, Nantian Huang, He Wang, **Yang Li**, Zhenhao Wang. H-bridge cascaded parallel harmonic circulation suppression method for SVGs. Patent No. ZL201611175680.6, Application date 2016-12-19, Grant date 2020-02-14.
- P12 Jikai Chen, Yanhui Dou, Zhenhao Wang, **Yang Li**, Yechun Xin, He Wang. Feature Extraction Method Based on Wavelet Packet Survival Index Singular Entropy for Partial Discharge of Cables. Patent No. ZL201610328153.8, Application date 2016-05-18, Grant date 2020-01-03.
- P13 Jikai Chen, Yongquan Wang, Guoqing Li, Zhenhao Wang, Yechun Xin, He Wang, **Yang Li**. H-bridge cascaded SVG parallel higher harmonic circulating current degree evaluation method. Patent No. ZL201611010735.8, Application date 2016-11-17, Grant date 2021-07-20.

## PROJECT PARTICIPATION

- **Yang Li** (P.I.), “Research on optimal dispatching of integrated energy system for system resilience improvement”, Natural Science Foundation of Jilin Province, China under Grant No. 2020122349JC, 2021.01-2023.12, RMB ¥ 360,000Yuan.
- **Yang Li** (P.I.), “Research on key technologies of company data ecological interaction system”, the National Grid Corporation of Science and Technology Project of China under Grant 2020, 2020.08-2020.12, RMB ¥ 327,800 Yuan.
- **Yang Li** (P.I.), “Research on coordinated control of high-penetration renewable microgrids via hybrid energy storage”, Scientific Research Planning Project of Jilin Province Department of Education under Grant No. JJKH20200113KJ, 2020.01-2021.12, RMB ¥ 25,000Yuan.
- **Yang Li** (P.I.), “Optimal control of grid-connected renewable energy generation based on hybrid energy storage”, the National Grid Corporation of Science and Technology Project of China under Grant NEDU20150019ZB, 2015.01-2015.12, RMB ¥ 440,000 Yuan.
- **Yang Li** (P.I.), “New Staff Research Startup Fund: Determination of transient stability boundary of AC-DC system with hybrid multi-infeed HVDC and its application in optimal power flow”, 2015.01-2017.12, RMB ¥ 50,000 Yuan.
- **Yang Li** (Key participant), “Research on the interaction mechanism and coordinated control technology of flexible HVDC transmission and AC grid”, the National Grid Corporation of Science and Technology Project of China under Grant NEDU20150002, 2015.01-2016.12, RMB ¥ 4,000,000 Yuan.
- **Yang Li** (Key participant), “Research on general modeling and optimized operation of multi-energy synergy integrated energy network”, the National Natural Science Foundation of China under Grant 51677022, 201701-2019.12, RMB ¥ 800,000 Yuan.
- **Yang Li** (Key participant), “Demonstration of distributed energy system with multi-energy complementary integration optimization”, the National Key Research and Development Program of China under Grant 2017YFB0903400,

2017.01-2019.12, RMB ¥ 30,000,000 Yuan.

- **Yang Li** (Key participant), “Equipment and standards for OPLC construction, monitoring, testing, operation and maintenance technology” the National Key Research and Development Program of China under Grant 2016YFB0901204, 2016.07-2019.06, RMB ¥ 900,000 Yuan.

## AWARDS

---

- **Protection and Control of Modern Power Systems Best Reviewer**

Awarded by the Protection and Control of Modern Power Systems Editorial Board

Jan. 2021

- **IEEE Transactions on Sustainable Energy Outstanding Reviewer**

Awarded by the IEEE Transactions on Sustainable Energy Editorial Board

2020

- **State Council Special Allowance Expert Award**

The state council special allowance is an allowance granted by the State Council for experts, scholars and technical personnel who make prominent contributions. Its winners facilitate scientific-technical progress, economic development, cultural prosperity and social harmony, playing a significant role in realizing the great rejuvenation of the Chinese nation.

Awarded by the State Council of the People’s Republic of China.

Dec. 2020

- **Applied Energy - 2020 Highly Cited Paper Award**

Awarded by the Applied Energy Editorial Board

2020

- **Power System Technology Best Reviewer**

Awarded by the Power System Technology Editorial Board

Feb. 2020

- **The First Prize, Prize for Progress in Science and Technology**

for the project “Key Technologies and Systems for Energy Efficiency Optimization and Smart Electricity Service Based on Gig Data Computing,”

Awarded by the Jilin Provincial People’s Government

Oct.2019

- **Publons Peer Review Awards**

Top 1% peer reviewers in Engineering and Cross-field

Sep. 2019

- **IEEE Access Outstanding Associate Editor**

Awarded by the IEEE Access Editorial Board

2019

- **Top Innovative Talents of Jilin Province, China**

Awarded by the People’s Government of Jilin Province

Dec. 2019

- **The Second Price, Prize for Progress in Science and Technology**

for the project “Research and Application of Key Technologies for Emergency Response of Grid Security Incidents Based on Cloud Platform,”

Awarded by Jilin Provincial People’s Government.

Nov.2018

- **The Third Price, Prize for Progress in Science and Technology**

for the project “Power System Stability Analysis and Control with Consideration of Excitation Limit Links,”

Awarded by Jilin Provincial People’s Government.

Nov. 2016

- **The First Price, Prize for Progress in Science and Technology**

for the project “Research and Application of Unified Coordination Control Technology for Reactive Power and Voltage of Wind Farm Group,”

Awarded by Jilin Provincial People’s Government.

Oct. 2015

---

Updated on September 2021