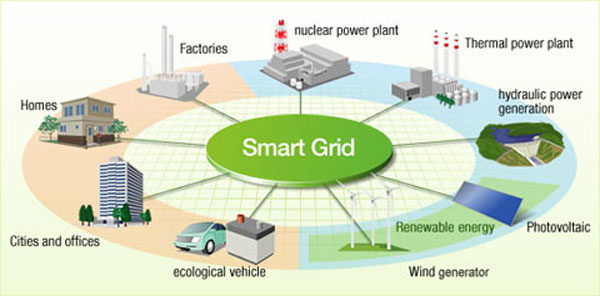
**Lưới điện thông minh: giải pháp hiệu quả cho ngành điện**

(Cập nhật đến ngày 12/5/2023)

Nền kinh tế thế giới đang phát triển một cách mạnh mẽ, cùng với đó là nhu cầu về sử dụng năng lượng sẽ tăng nhanh. Việc phát triển lưới điện thông minh góp phần không nhỏ trong quá trình chuyển đổi và phát triển năng lượng bền vững từ các nguồn năng lượng tái tạo nhằm cải thiện chất lượng của nguồn cung cấp điện quốc gia và thúc đẩy việc sử dụng điện một cách tiết kiệm, hiệu quả.

Để hiểu rõ hơn Cục Thông tin KH&CN quốc gia xin giới thiệu một số bài nghiên cứu đã được xuất bản chính thức và các bài viết được chấp nhận đăng trên những cơ sở dữ liệu học thuật chính thống.



**1. Sciencedirect**

1. An access control scheme in IoT-enabled Smart-Grid systems using blockchain and PUF  
Internet of Things Available online 1 February 2023 In press, corrected proof Article 100708  
Amina Zahoor, Khalid Mahmood, Ashok Kumar Das  
<https://www.sciencedirect.com/science/article/pii/S2542660523000318/pdfft?md5=767618ed54004b1f2d865b58815eb86c&pid=1-s2.0-S2542660523000318-main.pdf>  
  
2. An overview and multicriteria analysis of communication technologies for smart grid applications  
e-Prime - Advances in Electrical Engineering, Electronics and Energy 8 February 2023 Volume 3 (Cover date: March 2023)Article 100121  
Khadeejah A. Abdulsalam, John Adebisi, Olubayo Babatunde  
<https://www.sciencedirect.com/science/article/pii/S2772671123000165/pdfft?md5=9527089b9e05f0ffcf33ff2cfc71bee8&pid=1-s2.0-S2772671123000165-main.pdf>  
  
3. False data injection attack in smart grid cyber physical system: Issues, challenges, and future direction  
Computers and Electrical Engineering 19 February 2023 Volume 107 (Cover date: April 2023) Article 108638  
AKM Ahasan Habib, Mohammad Kamrul Hasan, Lulwah M. Alkwai  
<https://www.sciencedirect.com/science/article/pii/S0045790623000630/pdfft?md5=440243de2c70e13f4194c442b739e982&pid=1-s2.0-S0045790623000630-main.pdf>

4. An IOT based smart grid system for advanced cooperative transmission and communication  
Physical Communication 3 April 2023 Volume 58 (Cover date: June 2023) Article 102069  
Madani Abdu Alomar  
<https://www.sciencedirect.com/science/article/pii/S1874490723000721/pdfft?md5=c52d23246f72158a9009c166cc4f9670&pid=1-s2.0-S1874490723000721-main.pdf>  
  
5. Learning with privileged information for short-term photovoltaic power forecasting using stochastic configuration network  
Information Sciences 18 November 2022 Volume 619 (Cover date: January 2023) Pages 834-848  
Xinyu Zhou, Yanshuang Ao, Wei Dai  
<https://www.sciencedirect.com/science/article/pii/S0020025522013354/pdfft?md5=dce8fe87fd424c050490de025e8ac525&pid=1-s2.0-S0020025522013354-main.pdf>  
  
6. AI-oriented Smart Power System Transient Stability: The Rationality, Applications, Challenges and Future Opportunities  
Sustainable Energy Technologies and Assessments 12 January 2023 Volume 56 (Cover date: March 2023) Article 102990  
Wanying Guo, Nawab Muhammad Faseeh Qureshi, Dong Ryeol Shin  
<https://www.sciencedirect.com/science/article/pii/S2213138822010384/pdfft?md5=32375778fbf027c1460abdaf14955409&pid=1-s2.0-S2213138822010384-main.pdf>  
  
7. Dual stream network with attention mechanism for photovoltaic power forecasting  
Applied Energy 20 March 2023 Volume 338 (Cover date: 15 May 2023) Article 120916  
Zulfiqar Ahmad Khan, Tanveer Hussain, Sung Wook Baik  
<https://www.sciencedirect.com/science/article/pii/S0306261923002805/pdfft?md5=027d97f7ab20bb7c18bdfe2a2a2c4846&pid=1-s2.0-S0306261923002805-main.pdf>  
  
8. Maintaining flexibility in smart grid consumption through deep learning and deep reinforcement learning  
Energy and AI 2 March 2023 Volume 13 (Cover date: July 2023) Article 100241  
Fernando Gallego, Cristian Martín, Daniel Garrido  
<https://www.sciencedirect.com/science/article/pii/S2666546823000137/pdfft?md5=7b24495a3e1fd296c6c10b482eef6755&pid=1-s2.0-S2666546823000137-main.pdf>  
  
9. Control and estimation techniques applied to smart microgrids: A review  
Renewable and Sustainable Energy Reviews 31 March 2023 Volume 179 (Cover date: June 2023) Article 113251  
Nsilulu T. Mbungu, Ali A. Ismail, Abdul Kadir Hamid  
<https://www.sciencedirect.com/science/article/pii/S1364032123001077/pdfft?md5=4b59327561ec5ddb8d7f2dae9e114605&pid=1-s2.0-S1364032123001077-main.pdf>  
  
10. Power quality improvement using Distribution Static Synchronous Compensator  
Computers and Electrical Engineering 31 January 2023 Volume 106 (Cover date: March 2023) Article 108599  
Pranjali SahB. K. Singh  
<https://www.sciencedirect.com/science/article/pii/S0045790623000241/pdfft?md5=2c4ad64561f8700c0f032edb7e7c6558&pid=1-s2.0-S0045790623000241-main.pdf>

11. Power quality daily predictions in smart off-grids using differential, deep and statistics machine learning models processing NWP-data  
Energy Strategy Reviews 27 March 2023 Volume 47 (Cover date: May 2023) Article 101076  
Ladislav Zjavka  
<https://www.sciencedirect.com/science/article/pii/S2211467X23000263/pdfft?md5=68037b6e95da27929994278b689b6f8b&pid=1-s2.0-S2211467X23000263-main.pdf>  
  
12. Reinforcement learning-based allocation of fog nodes for cloud-based smart grid  
e-Prime - Advances in Electrical Engineering, Electronics and Energy 18 March 2023 Volume 4 (Cover date: June 2023)Article 100144  
Muhammad Ali Jamshed, Muhammad Ismail, Qiang Ni  
<https://www.sciencedirect.com/science/article/pii/S2211467X23000263/pdfft?md5=68037b6e95da27929994278b689b6f8b&pid=1-s2.0-S2211467X23000263-main.pdf>

13. A novel method based on time series ensemble model for hourly photovoltaic power prediction  
Energy 20 April 2023 Volume 276 (Cover date: 1 August 2023) Article 127542  
Zenan Xiao, Xiaoqiao Huang, Yonghang Tai  
<https://www.sciencedirect.com/science/article/pii/S0360544223009362/pdfft?md5=c61ad6e7c90e28f86823efb0936f7095&pid=1-s2.0-S0360544223009362-main.pdf>  
  
14. Virtual smart energy Hub: A powerful tool for integrated multi energy systems operation  
Energy 14 December 2022 Volume 265 (Cover date: 15 February 2023) Article 126361  
Leyla Bashiri Khouzestani, Mohammad Kazem Sheikh-El-EslamiIman Gerami Moghaddam  
<https://www.sciencedirect.com/science/article/pii/S0360544222032479/pdfft?md5=4a99acf3d1c4c374aa8e492927953056&pid=1-s2.0-S0360544222032479-main.pdf>  
  
15. Decentralizing access control system for data sharing in smart grid  
High-Confidence Computing Available online 26 February 2023 In press, journal pre-proof Article 100113  
Kunpeng Liu, Chenfei Wang, Xiaotong Zhou  
<https://www.sciencedirect.com/science/article/pii/S2667295223000119/pdfft?md5=988aad4f975f5ec121fbd5757acbabb6&pid=1-s2.0-S2667295223000119-main.pdf>

16. Predictive models development using gradient boosting based methods for solar power plants  
Journal of Computational Science 31 January 2023 Volume 67 (Cover date: March 2023) Article 101958  
Necati Aksoy, Istemihan Genc  
<https://www.sciencedirect.com/science/article/pii/S1877750323000182/pdfft?md5=53ea06aafb107193a9113eae5ba3c04a&pid=1-s2.0-S1877750323000182-main.pdf>  
  
17. An online-learning-enabled self-attention-based model for ultra-short-term wind power forecasting  
Energy 10 March 2023 Volume 272 (Cover date: 1 June 2023) Article 127173  
Xiaoran Dai, Guo-Ping Liu, Wenshan Hu  
<https://www.sciencedirect.com/science/article/pii/S0360544223005674/pdfft?md5=e6e13a2cc6b7a6ea7dbe1090a59a7ced&pid=1-s2.0-S0360544223005674-main.pdf>  
  
18. Blockchain-empowered security and privacy protection technologies for smart grid  
Computer Standards & Interfaces 9 December 2022 Volume 85 (Cover date: April 2023) Article 103708  
Ya-Nan Cao, Yujue Wang, Hai Liang  
<https://www.sciencedirect.com/science/article/pii/S0920548922000757/pdfft?md5=0950f589ccef064fc05176e51ab0c71b&pid=1-s2.0-S0920548922000757-main.pdf>

19. Secure authentication protocol for home area network in smart grid-based smart cities  
Computers and Electrical Engineering 13 April 2023 Volume 108 (Cover date: May 2023) Article 108721  
Hafiz Muhammad Sanaullah Badar, Khalid Mahmood, Ashok Kumar Das  
<https://www.sciencedirect.com/science/article/pii/S0045790623001453/pdfft?md5=0e0930dbc1bdc3e9bf9476bce4f277b2&pid=1-s2.0-S0045790623001453-main.pdf>

20. ECML driven geographical location of utility poles in smart grid: Data analysis and high-definition recognition  
Applied Soft Computing 26 December 2022 Volume 134 (Cover date: February 2023) Article 109973  
Tao Chen, Muhammad Murtadha Othman, Jiakai Xiao  
<https://www.sciencedirect.com/science/article/pii/S1568494622010225/pdfft?md5=b0878fb8e0af85cd00c52a9b5f2c9ad2&pid=1-s2.0-S1568494622010225-main.pdf>

21. Power Inspection Design by Internet of Things and RFID Technology in Smart City  
Microprocessors and Microsystems 12 March 2022 Volume 96 (Cover date: February 2023) Article 104510  
Bo Yang, Jun Tang, Junhua Hao  
<https://www.sciencedirect.com/science/article/pii/S0141933122000709/pdfft?md5=0dd2fc87e50819f93a28b9bc08eb3fe2&pid=1-s2.0-S0141933122000709-main.pdf>  
  
22. Cyber–physical system for fast prototyping of power electronic converters in EMI shaping context  
Journal of Industrial Information Integration 29 March 2023 Volume 33 (Cover date: June 2023) Article 100457  
Hermes Loschi, Douglas Nascimento, Piotr Lezynski  
<https://www.sciencedirect.com/science/article/pii/S2452414X23000304/pdfft?md5=c7068f4500d30d27673b8fe0b5f04756&pid=1-s2.0-S2452414X23000304-main.pdf>  
  
23. Residential power scheduling based on cost-coupling constraint with distributed generation  
Energy and Buildings 22 December 2022 Volume 280 (Cover date: 1 February 2023) Article 112725  
Xunyan Jiang, Lei Wu, Yunqiang Yin  
<https://www.sciencedirect.com/science/article/pii/S0378778822008969/pdfft?md5=d7b6f06813a5abc4d7db75886c0c008e&pid=1-s2.0-S0378778822008969-main.pdf>

24. An optimal real-time pricing strategy for aggregating distributed generation and battery storage systems in energy communities: A stochastic bilevel optimization approach  
International Journal of Electrical Power & Energy Systems 1 December 2022 Volume 147 (Cover date: May 2023) Article 108770  
Seyedfarzad Sarfarazi, Saeed Mohammadi, Derek Bunn  
<https://www.sciencedirect.com/science/article/pii/S0142061522007669/pdfft?md5=cad74f14735a06de6553a9c42097858a&pid=1-s2.0-S0142061522007669-main.pdf>  
  
25. Smart residential distribution energy management system with integration of demand response and Aggregator  
Cleaner and Responsible Consumption 7 April 2023 Volume 9 (Cover date: June 2023) Article 100115  
Pradnya Jadhav, Dagadu More, Surender Reddy Salkuti  
<https://www.sciencedirect.com/science/article/pii/S2666784323000165/pdfft?md5=2db4650aaf3c19db0032926760adf8d4&pid=1-s2.0-S2666784323000165-main.pdf>

26. Key communication technologies, applications, protocols and future guides for IoT-assisted smart grid systems: A review  
Energy Reports 25 January 2023 Volume 9 (Cover date: December 2023) Pages 2440-2452  
Md. Ohirul Qays, Iftekhar Ahmad, Farhana Yasmin  
<https://www.sciencedirect.com/science/article/pii/S2352484723000938/pdfft?md5=e4e8098849557dec0fa7a09550369f25&pid=1-s2.0-S2352484723000938-main.pdf>

27. Towards adoption of GNNs for power flow applications in distribution systems  
Electric Power Systems Research 6 December 2022 Volume 216 (Cover date: March 2023) Article 109005  
Arbel Yaniv, Parteek Kumar, Yuval Beck  
<https://www.sciencedirect.com/science/article/pii/S0378779622010549/pdfft?md5=4db11fe4cfeb51a18dc1b00c659481c0&pid=1-s2.0-S0378779622010549-main.pdf>  
  
28. Identifying household EV models via weighted power recurrence graphs  
Electric Power Systems Research 16 January 2023 Volume 217 (Cover date: April 2023) Article 109121  
Han Wang, Jin Ma, Jianguo Zhu  
<https://www.sciencedirect.com/science/article/pii/S037877962300010X/pdfft?md5=e032c8a0dd298be3b087a06fb5ea0227&pid=1-s2.0-S037877962300010X-main.pdf>  
  
29. Machine learning based demand response scheme for IoT enabled PV integrated smart building  
Sustainable Cities and Society 20 October 2022 Volume 89 (Cover date: February 2023) Article 104260  
Balakumar P.Vinopraba T.Chandrasekaran K.  
<https://www.sciencedirect.com/science/article/pii/S2210670722005650/pdfft?md5=c0d9d893a99d0c3b201812480ff4170d&pid=1-s2.0-S2210670722005650-main.pdf>  
  
30. Multi-microgrids energy management in power transmission mode considering different uncertainties  
Electric Power Systems Research 28 December 2022 Volume 216 (Cover date: March 2023) Article 109071  
Seyed Amin Mehraban, Reza Eslami  
<https://www.sciencedirect.com/science/article/pii/S0378779622011208/pdfft?md5=f2196c02b5848232acc67594b26d79fd&pid=1-s2.0-S0378779622011208-main.pdf>  
  
31. A zero trust and blockchain-based defense model for smart electric vehicle chargers  
Journal of Network and Computer Applications 17 February 2023 Volume 213 (Cover date: April 2023) Article 103599  
Peirong Li, Wei Ou, Guang Zeng  
<https://www.sciencedirect.com/science/article/pii/S1084804523000188/pdfft?md5=eb662e9b9f8e233dfb72d26991b721e0&pid=1-s2.0-S1084804523000188-main.pdf>  
  
32. All-in-one three-phase smart meter and power quality analyzer with extended IoT capabilities  
Measurement 5 December 2022 Volume 206 (Cover date: January 2023) Article 112309  
Eduardo Viciana, Francisco M. Arrabal-Campos, Francisco G. Montoya  
<https://www.sciencedirect.com/science/article/pii/S0263224122015056/pdfft?md5=6ebd053148a94f3809341cc1b8ac9641&pid=1-s2.0-S0263224122015056-main.pdf>

33. Probabilistic impact assessment of lightning strikes on power systems incorporating lightning protection design and asset condition  
International Journal of Electrical Power & Energy Systems 18 January 2023 Volume 148 (Cover date: June 2023) Article 108974  
Laiz Souto, Philip C. Taylor, Jonathan Wilkinson  
<https://www.sciencedirect.com/science/article/pii/S0142061523000315/pdfft?md5=ebec2c9969fc90e75555b48900ed67e2&pid=1-s2.0-S0142061523000315-main.pdf>  
  
34. Optimal placement of parking of electric vehicles in smart grids, considering their active capacity  
Electric Power Systems Research 9 March 2023 Volume 220 (Cover date: July 2023) Article 109238  
Yun Bai, Qian Qian  
<https://www.sciencedirect.com/science/article/pii/S037877962300127X/pdfft?md5=0fb7ce276c4a24fee6d6144de2ebb887&pid=1-s2.0-S037877962300127X-main.pdf>  
  
35. A resilience-based recovery scheme for smart grid restoration following cyberattacks to substations  
International Journal of Electrical Power & Energy Systems 28 September 2022 Volume 145 (Cover date: February 2023)Article 108610  
Abolfazl Rahiminejad, Jordan Plotnek, Mourad Debbabi  
<https://www.sciencedirect.com/science/article/pii/S0142061522006068/pdfft?md5=7759fc466a4b02d649239c51d3b60c2d&pid=1-s2.0-S0142061522006068-main.pdf>  
  
36. Overview and comparative analysis of bidirectional cascaded modular isolated medium-voltage AC–low-voltage DC (MVAC-LVDC) power conversion for renewable energy rich microgrids  
Renewable and Sustainable Energy Reviews 31 December 2022 Volume 174 (Cover date: March 2023) Article 113118  
Jaydeep Saha, Sanjib Kumar Panda  
<https://www.sciencedirect.com/science/article/pii/S1364032122009996/pdfft?md5=ca87f6dc91c5a279d6a59d062ab503ce&pid=1-s2.0-S1364032122009996-main.pdf>  
  
37. Smart grid evolution: Predictive control of distributed energy resources—A review  
International Journal of Electrical Power & Energy Systems 13 December 2022 Volume 147 (Cover date: May 2023)Article 108812  
Oluleke Babayomi, Zhenbin Zhang, Jose Rodriguez  
<https://www.sciencedirect.com/science/article/pii/S0142061522008080/pdfft?md5=779f5bc65ba8e1384ab9a3eca87f3139&pid=1-s2.0-S0142061522008080-main.pdf>

38. Dynamic collaborative optimization of end-to-end delay and power consumption in wireless sensor networks for smart distribution grids  
Computer Communications 17 February 2023 Volume 202 (Cover date: 15 March 2023) Pages 87-96  
Wei Sun, Lei Zhang, Qiyue Li  
<https://www.sciencedirect.com/science/article/pii/S0140366423000543/pdfft?md5=6dd417d3a8a41049375d3e747255c8aa&pid=1-s2.0-S0140366423000543-main.pdf>

39. Power grid surveillance: Topology change detection system using power line communications  
International Journal of Electrical Power & Energy Systems 29 September 2022 Volume 145 (Cover date: February 2023)Article 108634  
Javier Hernandez Fernandez, Aymen Omri, Roberto Di Pietro  
<https://www.sciencedirect.com/science/article/pii/S0142061522006305/pdfft?md5=e5eda3936c4fc38cd0f2af4af1b3b374&pid=1-s2.0-S0142061522006305-main.pdf>  
  
40. A comprehensive review of cyber-attacks and defense mechanisms for improving security in smart grid energy systems: Past, present and future  
Electric Power Systems Research 21 November 2022 Volume 215, Part A (Cover date: 1 February 2023) Article 108975  
Mohammad Ghiasi, Taher Niknam, Noradin Ghadimi  
<https://www.sciencedirect.com/science/article/pii/S0378779622010240/pdfft?md5=5cde05131382d5ce3f2d05b0a19a3b34&pid=1-s2.0-S0378779622010240-main.pdf>

41. Optimal operating scheme of neighborhood energy storage communities to improve power grid performance in smart cities  
Applied Energy 28 November 2022 Volume 331 (Cover date: 1 February 2023) Article 120411  
Fernando V. Cerna, Mahdi Pourakbari-Kasmaei, Javier Contreras  
<https://www.sciencedirect.com/science/article/pii/S0306261922016683/pdfft?md5=b4fffe07d962f110c2e54f7924f1dda1&pid=1-s2.0-S0306261922016683-main.pdf>  
  
42. A novel technique for detecting electricity theft in secure smart grids using CNN and XG-boost  
Intelligent Systems with Applications 23 December 2022 Volume 17 (Cover date: February 2023) Article 200168  
Asif Nawaz, Tariq Ali, Muhammad Rizwan Rashid  
<https://www.sciencedirect.com/science/article/pii/S2667305322001053/pdfft?md5=76ad45eb8acfaea9cf0b3083fc6f169f&pid=1-s2.0-S2667305322001053-main.pdf>

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