

### **AI applications to enhance resilience in power systems and microgrids - a review**

Zahraoui, Younes; **Korōtko, Tarmo**; **Rosin, Argo**; Mekhilef, Saad; Seyedmahmoudian, Mehdi; Stojcevski, Alex; Alhamrouni, Ibrahim Sustainability 2024 / art. 4959 <https://doi.org/10.3390/su16124959>

### **ANN-LSTM based tool for photovoltaic power forecasting**

**Zahraoui, Younes**; **Korōtko, Tarmo**; Mekhilef, Saad; **Rosin, Argo** 2024 4th International Conference on Smart Grid and Renewable Energy (SGRE) : proceedings 2024 / 6 p. : ill <https://doi.org/10.1109/SGRE59715.2024.10428969>

### **Artificial Hummingbird Algorithm For Optimal Reconfiguration Of Electrical Distribution networks**

**Zahraoui, Younes**; Bouhanik, Anes; **Korōtko, Tarmo**; **Rosin, Argo**; Mekhilef, Saad 2024 IEEE 22nd Mediterranean Electrotechnical Conference (MELECON) 2024 / p. 225-229 <https://doi.org/10.1109/MELECON56669.2024.10608525>

### **Assessment of data acquisition system for forecasting temperature and solar irradiation**

**Zahraoui, Younes**; **Korōtko, Tarmo**; Mekhilef, Saad; Alhamrouni, Ibrahim 2023 International Conference on Engineering Technology and Technopreneurship (ICE2T) 2024 / p. 408-413 <https://doi.org/10.1109/ICE2T58637.2023.10540516>

### **A chameleon algorithm for solving economic dispatch problem in microgrid system**

**Zahraoui, Younes**; Alhamrouni, Ibrahim; Mekhilef, Saad; **Korōtko, Tarmo**; Jusoh, Awang; Sutikno, Tole Bulletin of electrical engineering and informatics 2023 / p. 1982-1992 : ill <https://doi.org/10.11591/eei.v12i4.4700> [Journal metrics at Scopus](#) [Article at Scopus](#)

### **A competitive framework for the participation of multi-microgrids in the community energy trading market: A case study**

**Zahraoui, Younes**; **Korōtko, Tarmo**; **Rosin, Argo**; Zidane, Tekai Eddine Khalil; **Agabus, Hannes**; Mekhilef, Saad IEEE Access 2024 / p. 68232-68248 <https://doi.org/10.1109/ACCESS.2024.3399168>

### **A comprehensive market mechanism for decentralized P2P energy trading platform**

**Zahraoui, Younes**; **Korōtko, Tarmo**; **Agabus, Hannes**; **Rosin, Argo** 2024 IEEE 22nd Mediterranean Electrotechnical Conference (MELECON) 2024 / p. 972-977 <https://doi.org/10.1109/MELECON56669.2024.10608740>

### **Digital twins for designing energy management systems for microgrids: Implementation example based on TalTech Campulse project**

**Korōtko, Tarmo**; **Zahraoui, Younes**; **Rosin, Argo**; **Agabus, Hannes** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227475>

### **Distributed optimal storage strategy in the ADMM-based peer-to-peer energy trading considering degradation cost**

Han, Binghui; **Zahraoui, Younes**; Mubin, Marizan; Mekhilef, Saad; **Korōtko, Tarmo**; Alshammari, O. Journal of energy storage 2024 / art. 112651 <https://doi.org/10.1016/j.est.2024.112651>

### **Fractional order sliding mode controller based on supervised machine learning techniques for speed control of PMSM**

**Zahraoui, Younes**; **Zaihidee, Fardila M.**; Kermadi, Mostefa; Mekhilef, Saad; Mubin, Marizan; Tang, Jing Rui; Zaihidee, Ezrinda M. Mathematics 2023 / art. 1457 <https://doi.org/10.3390/math11061457> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Grid-connected solar PV power plants optimization: a review**

Zidane, Tekai Eddine Khalil; Aziz, Ali Saleh; **Zahraoui, Younes**; Kotb, Hossam; Aboras, Kareem M.; Kitmo; Jember, Yosef Berhan IEEE Access 2023 / p. 79588-79608 <https://doi.org/10.1109/ACCESS.2023.3299815> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Home energy management systems: A review of the concept, architecture, and scheduling strategies**

Han, Binghui; **Zahraoui, Younes**; Mubin, Marizan; Mekhilef, Saad; Seyedmahmoudian, Mehdi; Stojcevski, Alex IEEE Access 2023 / p. 19999-20025 <https://doi.org/10.1109/ACCESS.2023.3248502> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Market mechanisms and trading in microgrid local electricity markets : a comprehensive review**

**Zahraoui, Younes**; **Korōtko, Tarmo**; **Rosin, Argo**; **Agabus, Hannes** Energies 2023 / art. 2145, 52 p. : ill <https://doi.org/10.3390/en16052145> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Optimal strategy for comfort-based home energy management system considering impact of battery degradation cost model**

Han, Binghui; **Zahraoui, Younes**; Mubin, Marizan; Mekhilef, Saad; Seyedmahmoudian, Mehdi; Stojcevski, Alex Mathematics 2023 / art. 1333 <https://doi.org/10.3390/math11061333> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Optimal tuning of fractional order sliding mode controller for PMSM speed using neural network with reinforcement learning**

**Zahraoui, Younes**; Zaihidee, Fardila M.; Kermadi, Mostefa; Mekhilef, Saad; Alhamrouni, Ibrahim; Seyedmahmoudian, Mehdi; Stojcevski, Alex Energies 2023 / art. 4353 <https://doi.org/10.3390/en16114353> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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**A real-time simulation for P2P energy trading using a distributed algorithm**

**Zahraoui, Younes; Korōtko, Tarmo; Rosin, Argo;** Khalil Zidane, T. E.; Mekhilef, Saad IEEE Access 2024 / p. 44135-44146  
<https://doi.org/10.1109/ACCESS.2024.3369899>

**Stochastic energy management for Battery Storage System-based microgrid considering different forecasting models**

**Zahraoui, Younes; Korōtko, Tarmo; Rosin, Argo; Ahmadiyahangar, Roya** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227451>

**System-level condition monitoring approach for fault detection in photovoltaic systems**

**Zahraoui, Younes; Alhamrouni, Ibrahim;** Hayes, Barry P.; Mekhilef, Saad; Korōtko, Tarmo Fault analysis and its impact on grid-connected photovoltaic systems performance 2022 <https://doi.org/10.1002/9781119873785.ch7>