

The presence of smart devices and technologies such as smart generation and communication systems, smart transmission and DSs, SM and security systems as well as dynamic pricing ...

Microgrids enhance energy efficiency and reduce losses during transmission and distribution (Bakr et al., 2020). Localized power generation also boosts community resilience during ...

Microgrids are local electric grids integrating distributed generation and consumption, energy storage and management and power control. They can be an alternative for the energy supply of a house ...

Despite diverse generation sources, the fundamental difficulty for energy distribution from the perspective of the power grid is power distribution management as well as voltage control. Therefore, the management of active ...

Smart microgrids are a possibility to reduce complexity by performing local optimization of power production, consumption and storage. We do not envision smart microgrids to be island solutions but rather to be ...

His research areas include Smart Grid, Power System Operation and Planning, Integration of Renewables and Energy Storages into Power System, Energy Scheduling and Demand-Side Management, Plug-in Electric Vehicles, ...

