

Here are the 100 research titles on current trends in electrical engineering with the respective code numbers:

- "Advanced Power Electronics for Renewable Energy Integration" (ESRPeee01)
- "Smart Grids and Grid Modernization: Challenges and Solutions" (ESRPeee02)
- "Energy Storage Systems for Grid Support and Reliability" (ESRPeee03)
- "Power Quality Improvement and Voltage Regulation Techniques" (ESRPeee04)
- "Electromagnetic Compatibility in Electronic Systems" (ESRPeee05)
- "Electric Vehicles and Charging Infrastructure: Future Prospects" (ESRPeee06)
- "Wireless Power Transfer and Resonant Inductive Coupling" (ESRPeee07)
- "Microgrids: Decentralized Energy Distribution and Management" (ESRPeee08)
- "Internet of Things (IoT) and Energy Management" (ESRPeee09)
- "High-Efficiency Power Converters for Electric Drives" (ESRPeee10)
- "Wide-Bandgap Semiconductor Devices for Power Electronics" (ESRPeee11)
- "Machine Learning Applications in Power System Control" (ESRPeee12)
- "Cybersecurity for Critical Infrastructure and Electrical Grids" (ESRPeee13)
- "Renewable Energy Forecasting and Integration Strategies" (ESRPeee14)
- "Nanoelectronics and Nanoscale Devices in Power Systems" (ESRPeee15)
- "Electricity Market Design and Energy Pricing Models" (ESRPeee16)
- "AI-Based Fault Detection and Predictive Maintenance in Power Plants" (ESRPeee17)
- "Electric Power Generation from Ocean and Tidal Energy" (ESRPeee18)
- "Flexible AC Transmission Systems (FACTS) for Grid Control" (ESRPeee19)
- "Energy Harvesting Technologies for Low-Power Devices" (ESRPeee20)
- "High-Voltage Direct Current (HVDC) Transmission Systems" (ESRPeee21)
- "Energy-Efficient Lighting Technologies and Smart Lighting" (ESRPeee22)
- "Advancements in Electric Motor and Drive Systems" (ESRPeee23)
- "Power System Resilience and Disaster Recovery" (ESRPeee24)
- "Energy-Efficient HVAC Systems and Building Automation" (ESRPeee25)

"Superconducting Materials for Energy Transmission" (ESRPeee26)

"Electricity Access and Rural Electrification Solutions" (ESRPeee27)

"Advanced Control Systems for Microgrid Operation" (ESRPeee28)

"Cyber-Physical Systems in Power Engineering" (ESRPeee29)

"Integration of Energy Storage in Electric Distribution" (ESRPeee30)

"Electrification of Transportation and Urban Mobility" (ESRPeee31)

"Energy-Efficient Power Transmission Lines and Cables" (ESRPeee32)

"Distributed Energy Resources and Virtual Power Plants" (ESRPeee33)

"Energy Efficiency in Data Centers and Cloud Computing" (ESRPeee34)

"High-Performance Computing in Power System Simulation" (ESRPeee35)

"Power Electronics for Energy-Harvesting IoT Devices" (ESRPeee36)

"Advanced Power System Protection and Relaying" (ESRPeee37)

"Optimization Techniques for Energy Management" (ESRPeee38)

"Blockchain and Energy Trading Platforms" (ESRPeee39)

"Electromagnetic Field Analysis for Safety and Compliance" (ESRPeee40)

"Next-Generation Batteries for Energy Storage" (ESRPeee41)

"Human-Centric Lighting and Circadian Rhythm Synchronization" (ESRPeee42)

"Quantum Computing in Electrical Engineering" (ESRPeee43)

"Energy-Aware FPGA and ASIC Design" (ESRPeee44)

"Advanced Control Strategies for Microgrids" (ESRPeee45)

"Power Electronics for Wireless Charging of Electric Vehicles" (ESRPeee46)

"Resilient Control of Microgrids under Cyber-Physical Threats" (ESRPeee47)

"Energy-Efficient Hardware for Artificial Intelligence" (ESRPeee48)

"Grid Integration of Distributed Energy Resources" (ESRPeee49)

"Electromagnetic Radiation and Health Impacts" (ESRPeee50)

"Energy-Efficient Electric Motors and Drives" (ESRPeee51)

"Advanced Power System Stability Analysis" (ESRPeee52)

"Sustainable and Low-Cost Energy Storage Solutions" (ESRPeee53)

"Electrification of Aviation and Electric Aircraft" (ESRPeee54)

"Optical Power Transmission in Data Centers" (ESRPeee55)

"Energy Harvesting for Wearable Electronics" (ESRPeee56)

"AI-Based Fault Detection in Electrical Distribution" (ESRPeee57)

"Advanced Transformer Technologies for Efficiency Improvement" (ESRPeee58)

"Power System Control in Smart Cities" (ESRPeee59)

"Electromagnetic Interference and Compatibility Standards" (ESRPeee60)

"Quantum Dots in Solid-State Lighting" (ESRPeee61)

"Optimal Scheduling of Distributed Energy Resources" (ESRPeee62)

"Electric Power Distribution in Remote Areas" (ESRPeee63)

"Energy-Efficient Home Appliances and Smart Homes" (ESRPeee64)

"IoT-Based Condition Monitoring in Electrical Systems" (ESRPeee65)

"Advanced Protection Relays for Grid Resilience" (ESRPeee66)

"Wireless Charging for Electric Bicycles and Scooters" (ESRPeee67)

"Advanced Power Semiconductor Devices" (ESRPeee68)

"Cybersecurity Challenges in the Smart Grid" (ESRPeee69)

"Energy Harvesting in IoT Sensor Networks" (ESRPeee70)

"Grid Integration of Wind and Solar Power" (ESRPeee71)

"Electromagnetic Simulation for Antenna Design" (ESRPeee72)

"Electrification of Public Transportation" (ESRPeee73)

"Advanced Control Algorithms for Renewable Integration" (ESRPeee74)

"Power Quality Monitoring and Analysis" (ESRPeee75)

"Energy-Efficient Cooling Systems in Data Centers" (ESRPeee76)

"Quantum Computing Applications in Energy Optimization" (ESRPeee77)

"Optical Communication for Data Center Interconnects" (ESRPeee78)

"Advanced Fault Location in Power Distribution" (ESRPeee79)

"Power Electronics for Space Applications" (ESRPeee80)
"IoT-Based Energy Management in Smart Buildings" (ESRPeee81)
"Advanced Power Grid Restoration Strategies" (ESRPeee82)
"Energy-Efficient Embedded Systems Design" (ESRPeee83)
"Advanced Charging Infrastructure for Electric Fleets" (ESRPeee84)
"Cyber-Physical Security for Electric Vehicles" (ESRPeee85)
"Wireless Power Transfer for Medical Devices" (ESRPeee86)
"Renewable Energy in Developing Countries" (ESRPeee87)
"Electromagnetic Wave Propagation and Scattering" (ESRPeee88)
"Energy Harvesting for IoT in Agriculture" (ESRPeee89)
"Grid-Forming Inverters for Resilient Microgrids" (ESRPeee90)
"Power Quality Enhancement in Industrial Applications" (ESRPeee91)
"Quantum Key Distribution for Secure Communication" (ESRPeee92)
"Advanced Motor Drives for Industrial Automation" (ESRPeee93)
"AI-Based Energy Forecasting and Demand Response" (ESRPeee94)
"Energy-Efficient HVAC Systems for Electric Vehicles" (ESRPeee95)
"Optimal Energy Management in Smart Grids" (ESRPeee96)
"Advanced Power Converters for Renewable Integration" (ESRPeee97)
"Electromagnetic Compatibility Testing and Standards" (ESRPeee98)
"Energy Harvesting in Wearable Health Devices" (ESRPeee99)
"Grid Resilience and Disaster Recovery Planning" (ESRPeee100)

These research titles cover a wide range of current trends and research areas in electrical engineering. You can explore each topic further to discover the latest developments and research opportunities in the field.