

### **Active redundancy in isolated DC-DC converters: A modular solution for fault tolerance**

Shirodkar, Aditya; Banavath, Satish Naik; **Yadav, Neelesh; Chub, Andrii**; Mandrioli, Riccardo 2025 IEEE 19th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2025 / 5 p <https://doi.org/10.1109/CPE-POWERENG63314.2025.11027280>

### **Air-core coupled inductor based modular solid-state circuit breaker with reduced components for DC buildings**

Pogulaguntla, Aditya; Dsa, Daniel; Yagna, Griddaluru Venkata; Banavath, Satish Naik; **Carvalho da Silva, Edivan Laercio; Chub, Andrii; Vinnikov, Dmitri** IEEE journal of emerging and selected topics in power electronics 2024 / 12 p <https://doi.org/10.1109/JESTPE.2024.3485735>

### **Bidirectional DC circuit breaker with improved performance during commissioning and reclosing**

Pogulaguntla, Aditya; Raghavendra I, Venkata; Banavath, Satish Naik; **Chub, Andrii**; Sreekanth, Thamballa; Krishnamoorthy, Harish Sarma 24th European Conference on Power Electronics and Applications (EPE'22 ECCE Europe) 2022 / p. P1-P9 <https://ieeexplore.ieee.org/document/9907667>

### **Bidirectional solid-state DC circuit breaker for the protection of residential and Commercial DC buildings**

Aditya, P.; Yagna, V.; Banoth, T.; **Chub, Andrii; Banavath, Satish Naik** 2023 IEEE 8th Southern Power Electronics Conference and 17th Brazilian Power Electronics Conference (SPEC/COBEP) 2023 / 6 p <https://doi.org/10.1109/SPEC56436.2023.10407460>

### **Bidirectional SSCB for residential DC microgrids with reduced voltage and current stress during fault interruption**

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### **Comparative evaluation of a DAB converter and SRC for DC buildings application**

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### **Development of a power electronics controller with RISC-V based core for security-critical applications**

Swakath, S. U.; Kshirsagar, Abhijit; Kondepudi, Koteswararao; Banavath, Satish Naik; **Chub, Andrii; Vinnikov, Dmitri** 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUON): conference proceedings 2022 / p. 1-5 <https://doi.org/10.1109/RTUON56726.2022.9978737>

### **Implementation of protection features for a modular bidirectional solid-state battery disconnecter**

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### **Magnetically integrated multiport converter for energy management in DC-powered buildings**

**Carvalho da Silva, Edivan Laercio; Chub, Andrii; Blinov, Andrei; Banavath, Satish Naik; Vinnikov, Dmitri** Eletrônica de Potência 2024 / art. 202445 <https://doi.org/10.18618/REP.e202445%20%20>

### **Modified Q-Z-Source DC Circuit Breaker for Next-Generation Electric Aircrafts**

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### **Ultra-High gain modified SCLN based DC-DC converter with reduced device current stress**

Sahoo, Gyana Manjari; Banavath, Satish Naik; **Chub, Andrii; Vinnikov, Dmitri** 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUON): conference proceedings 2022 <https://doi.org/10.1109/RTUON56726.2022.9978808>