Active redundancy in fault tolerance: A modular switch level solution with synchronous switching

Shirodkar, Aditya; Banavath, Satish Naik; **Chub, Andrii**; Mandrioli, Riccardo; Ricco, Mattia 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p https://doi.org/10.1109/ICDCM63994.2025.11144667 Conference at Scopus

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 2025 / p. 2988-2999
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 cesidential 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

Aditya, P.; Banavath, Satish Naik; Lidozzi, Alessandro; Chub, Andrii; Vinnikov, Dmitri 2023 IEEE 17th International Conference on

Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p https://doi.org/10.1109/CPE-POWERENG58103.2023.10227379

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

Carvalho da Silva, Edivan Laercio; Chub, Andrii; Blinov, Andrei; Banavath, Satish Naik; Vinnikov, Dmitri 2024 IEEE 21st International Power Electronics and Motion Control Conference (PEMC) 2024 / 6 p https://doi.org/10.1109/PEMC61721.2024.10726346

A coupled inductor-based SSCB with reduced components for DC microgrid protection

Pithanisetty, Prasanth; Dsa, Daniel; Banavath, Satish Naik; **Carvalho, Edivan Laercio**; De Carne, Giovanni; **Vinnikov, Dmitri** IEEE transactions on power electronics 2025 / p. 11428-11441 https://doi.org/10.1109/TPEL.2025.3551740 Article at Scopus

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

Swakath, S. U.; Kshirsagar, Abhijit; Kondepu, Koteswararao; Banavath, Satish Naik; **Chub, Andrii**; **Vinnikov, Dmitri** 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 / p. 1-5 https://doi.org/10.1109/RTUCON56726.2022.9978737

Implementation of protection features for a modular bidirectional solid-state battery disconnector

Dsa, Daniel; Chinnusamy, Abhinav; Banavath, Satish Naik; **Carvalho da Silva, Edivan Laercio** IEEE journal of emerging and selected topics in power electronics 2024 https://doi.org/10.1109/JESTPE.2024.3502157

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

Aditya, P.; Venkata Raghavendra, I.; Banavath, Satish Naik; **Chub, Andrii**; Song, Xiaoqing; **Vinnikov, Dmitri**; Wang, Fred 2023 IEEE Applied Power Electronics Conference and Exposition (APEC) 2023 / p. 1049–1056 https://doi.org/10.1109/APEC43580.2023.10131532 Conference proceedings at Scopus Article at Scopus Article at WOS

Performance analysis of protection methods in residential DC microgrids

Jalakas, Tanel; Banavath, Satish Naik; Chub, Andrii; Roasto, Indrek; Vinnikov, Dmitri 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p https://doi.org/10.1109/CPE-POWERENG58103.2023.10227388

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 (RTUCON): conference proceedings 2022 https://doi.org/10.1109/RTUCON56726.2022.9978808