

List of Publications

Peer-Reviewed Journals:

- [1] **V. K. Bussa**, R. K. Singh, R. Mahanty and V. N. Lal, "Design and Analysis of Step-Up Interleaved DC–DC Converter for Different Duty Regions," *IEEE Transactions on Industry Applications*, vol. 56, no. 2, pp. 2031-2047, March-April 2020.
- [2] **V. K. Bussa**, A. Ahmad, R. K. Singh and R. Mahanty, "Single-phase high-voltage gain switched LC Z-source inverters," *IET Power Electronics*, vol. 11, no. 5, pp. 796-807, 1 5 2018.
- [3] **V. K. Bussa**, R. K. Singh and R. Mahanty, "Enhanced high-gain SLC-ZSI at low-duty region," *IET Power Electronics*, vol. 12, no. 6, pp. 1532-1544, 29 5 2019.
- [4] **V. K. Bussa**, A. Ahmad, R. K. Singh and R. Mahanty, "Interleaved Hybrid Converter With Simultaneous DC and AC Outputs for DC Microgrid Applications," *IEEE Transactions on Industry Applications*, vol. 54, no. 3, pp. 2763-2772, May-June 2018.
- [5] A. Ahmad, **V. K. Bussa**, R. K. Singh and R. Mahanty, "Quadratic boost derived hybrid multi-output converter," in *IET Power Electronics*, vol. 10, no. 15, pp. 2042-2054, 15 12 2017.
- [6] A. Ahmad, **V. K. Bussa**, R. K. Singh and R. Mahanty, "Switched-Boost-Modified Z-Source Inverter Topologies With Improved Voltage Gain Capability," *IEEE Journal of Emerging and Selected Topics in Power Electronics*, vol. 6, no. 4, pp. 2227-2244, Dec. 2018.
- [7] S. Dey, **V. K. Bussa** and R. K. Singh, "Transformerless Hybrid Converter With AC and DC Outputs and Reduced Leakage Current," *IEEE Journal of Emerging and Selected Topics in Power Electronics*, vol. 7, no. 2, pp. 1329-1341, June 2019.

Peer-Reviewed Conferences:

- [1] **V. K. Bussa**, R. K. Singh and R. Mahanty, "A Two Switch Non-Isolated High Gain DC-DC Converter," *2018 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)*, Chennai, India, 2018, pp. 1-6.
- [2] **V. K. Bussa**, R. K. Singh, R. Mahanty and V. N. Lal, "Steady State Analysis of High Gain Interleaved Boost Converter at Different Operating Regions," *2018 IEEE Industry Applications Society Annual Meeting (IAS)*, Portland, OR, 2018, pp. 1-6.

- [3] **V. K. Bussa**, R. K. Singh and R. Mahanty, "Modified L-Z-source inverter with high gain inversion and inductive load compatibility," *2018 IEEE International Conference on Industrial Technology (ICIT)*, Lyon, 2018, pp. 770-775.
- [4] **V. K. Bussa**, R. K. Singh and R. Mahanty, "Extendable multicell improved L-Z-source inverter," *2017 IEEE Transportation Electrification Conference (ITEC-India)*, Pune, 2017, pp. 1-5.
- [5] **V. K. Bussa**, R. K. Singh and R. Mahanty, "Minimum phase hybrid boost converter for smart residential uninterruptible power supply system," *2017 IEEE Transportation Electrification Conference (ITEC-India)*, Pune, 2017, pp. 1-5.
- [6] **V. K. Bussa**, R. K. Singh and R. Mahanty, "A modified non-isolated bidirectional DC-DC converter for EV/HEV's traction drive systems," *2016 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)*, Trivandrum, 2016, pp. 1-6.
- [7] **V. K. Bussa**, R. K. Singh and R. Mahanty, "Minimum phase PFC boost converter," *IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society*, Florence, 2016, pp. 3733-3738.
- [8] B. T. Vankayalapati, R. Singh and **V. K. Bussa**, "Two stage integrated on-board charger for EVs," *2018 IEEE International Conference on Industrial Technology (ICIT)*, Lyon, 2018, pp. 1807-1813.
- [9] A. Aman, **V. K. Bussa** and R. K. Singh, "A Minimum Phase Dual Output Hybrid Converter for Off-Grid Applications," *2019 IEEE Industry Applications Society Annual Meeting*, Baltimore, MD, USA, 2019, pp. 1-6.