

## Dr.C.BHARATIRAJA-Publications

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H-index: 16

Number of papers in Clarivate analytics listed journals: 45

Number of papers in Scopus indexed journals: 36

Total number of publications with impact factor: 81

Book Chapters: 8

Indexed Conference Papers: 31

Best paper award: 3

Highest Impact Factor: 7.6 ( IEEE Transaction on Power Electronics)

### Clarivate analytics listed journals

- [1] **C.Bharatiraja C \***, Chellammal N, Vibha K , Josiah Munda, “Minimization of Cross Regulation in Multi Input Multi Output Hybrid”, *Energies*. (Accepted – Manuscript ID -980200), **2020**.
- [2] C.Bharatiraja C *et.al*, “Robust ANN Based Control of Modified PUC-5 Inverter for Solar PV Applications”, IEEE Transactions on Industry Applications, 2019-IPCC-1631.R1. (Recommended for publication with revision), 2020
- [3] **C.Bharatiraja\***, B. Srinath, “P/G pin location-aware Voltage Island Floor planning for IR drop avoidance in Two-dimensional Integration”, *IEEE Transactions on Circuits and Systems II: Express Briefs*. (Accepted – Manuscript ID: TCAS-II-08179-2020,), **2020**.
- [4] K. Ramesh, **C.Bharatiraja\***, “Systematic Approach for State-of-the-Art Architectures and System-on-chip Selection for Heterogeneous IoT Applications”, *IEEE Access*. (Accepted – Manuscript ID Access-2020-54138), **2020**.
- [5] M. Anuradha, T. Jayasankar, N. B. Prakash, M. Y. Sikkandar, G. R. Hemalakshmi, **C. Bharatiraja**, and A. S. F. Britto, “IoT enabled cancer prediction system to enhance the authentication and security using cloud computing,” *Microprocessors and Microsystems, Elsevier*, p. 103301, (Early Access), Oct. **2020**.
- [6] **C.Bharatiraja** et.al., “State-Based Task Offloading Model for Improving Response Rate of Internet of Things Services”, *CMC-Computers, Materials & Continua*. (Accepted - ID: 14321), **2020**.
- [7] S. S. S Sethuraman, K. Santha, L. Mihet-Popa, and **C. Bharatiraja**, “A Modified Topology of a High Efficiency Bidirectional Type DC–DC Converter by Synchronous Rectification,” *Electronics*, vol. 9, no. 9, p. 1555, Sep. **2020**.
- [8] M. Selvaperumal, D. Kirubakaran, and **C. Bharatiraja**, “A hybrid space vector modulation for the near-zero common-mode voltage and common-mode current mitigation in diode-clamped multilevel-inverter-fed induction motor drive,” *International Transactions on Electrical Energy Systems*, vol. 30, no. 10, Aug. **2020**.
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- [10] M. Kamalesh, N. Senthilnathan, and **C. Bharatiraja**, “Design of a Novel Boomerang Trajectory for Sliding Mode Controller,” *International Journal of Control, Automation and Systems*, vol. 18, no. 11, pp. 2917–2928, May **2020**.
- [11] Thiagarajan, S., Ankit Sonthalia, V. Edwin Geo, and **Bharatiraja Chokkalingam**. “Effect of Waste Exhaust Heat on Hydrogen Production and Its Utilization in CI Engine.” *International Journal of Hydrogen Energy, Elsevier*, vol. 45, no. 10, pp. 5987–5996, Feb. **2020**.
- [12] M. Karthikeyan, R. Elavarasu, P. Ramesh, **C. Bharatiraja**, P. Sanjeevikumar, L. Mihet-Popa, and M. Mitolo, “A Hybridization of Cuk and Boost Converter Using Single Switch with Higher Voltage Gain Compatibility,” *Energies*, vol. 13, no. 9, p. 2312, May **2020**.

- [13] MS Kamalesh, **B Chokkalingam**, J Arumugam, G Sengottaiyan, An Intelligent Real Time Pothole Detection and Warning System for Automobile Applications Based on IoT Technology, *Journal of Applied Science and Engineering* 24 (1), 77-81, **2020**
- [14] M. Periyamayagam, S. Kumar V, **B. Chokkalingam**, S. Padmanaban, L. Mihet-Popa, and Y. Adedayo, "A Modified High Voltage Gain Quasi-Impedance Source Coupled Inductor Multilevel Inverter for Photovoltaic Application," *Energies*, vol. 13, no. 4, p. 874, Feb. **2020**.
- [15] S Balasubramanian, **C. Bharatiraja\***, R Krishnamoorthy, Y Adedayo "Power Optimization through FuzzyMinProduct Algorithm for Voltage Assignment in SOC Design", *Journal of Applied Science and Engineering*, 23 (4), 655-659. 2020.
- [16] **C.Bharatiraja C \***, et.al, "Investigation on Simultaneous Operation of Two Hub BLDC Motors for Electric Vehicles", *Journal of Applied Science and Engineering*, (Accepted - Article in Press– Manuscript ID - JASE-2020-0219.R1), **2020**.
- [17] **C.Bharatiraja C \***, et.al, "A Photovoltaic Powered Integrated DC - DC Converter fed Multi-level Inverter for Standalone Applications", *Journal of Applied Science and Engineering*, (Accepted - Article in Press– Manuscript JASE-2020-0205.R1, **2020**.
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- [19] K. Suresh, N. Chellammal, C. Bharatiraja, P. Sanjeevikumar, F. Blaabjerg, and J. B. H. Nielsen, "Cost-efficient nonisolated three-port DC-DC converter for EV/HEV applications with energy storage," *International Transactions on Electrical Energy Systems*, vol. 29, no. 10, Jun. **2019**.
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- [24] EmildaJosephin, V Edwin Geo, C. Bharatiraja, Fethi ALOUI, "Predicting the different engine parameters of a rubber seed oil-ethanol dual fuel engine using artificial neural networks", *International Journal of Global Warming*, 16(4), pp. 485-506, **2019**.
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- [31] **C. Bharatiraja**, R. Selvaraj, T. R. Chelliah, J. L. Munda, M. Tariq, and A. I. Maswood, "Design and Implementation of Fourth Arm for Elimination of Bearing Current in NPC-MLI-Fed Induction Motor Drive," **IEEE Transactions on Industry Applications**, vol. 54, no. 1, pp. 745–754, Jan. **2018**.
- [32] **C. Bharatiraja**, S. Jeevananthan and JL munda "Timing Correction Algorithm for SVPWM Based Diode-Clamped MLI Operated in over modulation Region", in **IEEE journal of Selected topics in Power Electronics applications**. vol. 6, no. 1, pp. 233-245, Mar. **2018**.
- [33] R. Selvaraj, K. Desingu, T. R. Chelliah, D. Khare, and **C. Bharatiraja**, "Fault Tolerant Operation of Parallel-Connected 3L-Neutral-Point Clamped Back-to-Back Converters Serving to Large Hydro-Generating Units," **IEEE Transactions on Industry Applications**, vol. 54, no. 5, pp. 5429–5443, Sep. **2018**.
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- [35] M. Tariq, M. Meraj, A. Azeem, A. I. Maswood, A. Iqbal, and **C. Bharatiraja**, "Evaluation of Level-Shifted and Phase-Shifted PWM Schemes for Seven Level Single-Phase Packed U Cell Inverter," **IEEE, CPSS Transactions on Power Electronics and Applications**, vol. 3, no. 3, pp. 232–242, Sep. **2018**.
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- [37] **C.Bharatiraja,\*** et.al, "Energy Management Strategy for Rural Communities' DC Micro Grid Power System Structure with Maximum Penetration of Renewable Energy Sources," **Applied Sciences**, vol. 8, no. 4, p. 585, Apr. **2018**.
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- [40] N. R., V. A., **C. Bharatiraja**, S. Padmanaban, and Z. Leonowicz, "Class E Power Amplifier Design and Optimization for the Capacitive Coupled Wireless Power Transfer System in Biomedical Implants," **Energies**, vol. 10, no. 9, p. 1409, Sep. 2017. [**SCI -2.8 IF**]
- [41] **C.Bharatiraja\***, P. Sanjeevikumar, PierluigiSiano, K.Ramesh, and S.Raghu, "Real Time Forecasting of EV Charging Station Scheduling for Smart Energy System", **Energies** , vol. 10, no. 377, pp. 1 to14, March 2017. ; June 2017. [**SCI -2.8 IF**]
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- [44] G.Prakash, C.Subramani, **C. Bharatiraja\***, and M.Shabin, "A low cost single phase grid connected reduced switch PV inverter based on Time Frame Switching Scheme," International **Journal of Electrical Power & Energy Systems/ Elsevier**, vol. 77, pp. 100-111, March **2016**.

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**Scoups Indexed Journals ( Last 4 Years only)**

- [1] R. Krishnamoorthy, T. Jayasankar, S. Shanthi, M. Kavitha, and C. Bharatiraja, “Design and implementation of power efficient image compressor for WSN systems,” Materials Today: Proceedings, Elsevier, Oct. 2020.
- [2] C.Bharatiraja C\* *et.al*, A Self Compensated Low Pass Gain Circuit For Biomedical Applications, Materials Today: Proceedings, Elsevier, (Accepted - Article in Press– Manuscript ID - MATPR-D-20-08739), 2020.
- [3] C.Bharatiraja C\* *et.al*, Motion Discovery through Change Discovery Filter Matrix Derived from the Discrete Cosine Transform, Materials Today: Proceedings, Elsevier, (Accepted - Article in Press– Manuscript ID - MATPR-D-20-08741 ), 2020.
- [4] C.Bharatiraja C\* *et.al*, Design of Low-Power Coupled Chopper Instrumentation Amplifier Using Pin Pong Ripple Reduction for Biomedical Applications , Materials Today: Proceedings, Elsevier, (Accepted - Article in Press– Manuscript ID - MATPR-D-20-06912 ), 2020.
- [5] C.Bharatiraja C\* *et.al*, Design and Implementation of Power Efficient Image Compressor VLSI Design with Fuzzy Decision and Block Partition for WSN Systems , Materials Today: Proceedings, Elsevier, (Accepted - Article in Press– Manuscript ID - MATPR-D-20-06399), 2020.
- [6] C.Bharatiraja C\* *et.al*, Design of Low-Power Coupled Chopper Instrumentation Amplifier Using Pin Pong Ripple Reduction for Biomedical Applications, Materials Today: Proceedings, Elsevier, (Accepted - Article in Press– Manuscript ID - MATPR-D-20-06798), 2020.
- [7] C.Bharatiraja C\* *et.al*, A Real Time Centralized Monitoring and Implementation of Data Acquisition system in Photovoltaic Interfaced Micro grid, Materials Today: Proceedings, Elsevier, (Accepted - Article in Press– Manuscript ID - MATPR-D-20-09242 ), 2020.
- [8] C.Bharatiraja C\* *et.al*, The Power Quality Measurements and Real Time Monitoring in the Distribution Feeders, Materials Today: Proceedings, Elsevier, (Accepted - Article in Press– Manuscript ID - MATPR-D-20-09241 2020.
- [9] C.Bharatiraja C\* *et.al*, Deployment of IoT for Smart Home Application and Embedded Real-Time Control System, Materials Today: Proceedings, Elsevier, (Accepted - Article in Press– Manuscript ID - MATPR-D-20-08986), 2020.
- [10] C.Bharatiraja C\* *et.al*, A Biasing Based Current Mode Analog Front-End For Biomedical Applications, Materials Today: Proceedings, Elsevier, (Accepted - Article in Press– Manuscript ID - MATPR-D-20-08742 ), 2020.
- [11] Krishnakumar Vengadakrishnan, N Madhanakkumar, P Pugazhendiran, C Bharatiraja, V Sriramkumar “Torque ripple minimization of PMBLDC motor using simple boost inverter”, International Journal of Power Electronics and Drive Systems, vol.10, no.4, pp. 1714-21, Dec 2019. [IF-1.088]
- [12] C Bharatiraja, Pongiannan RK, Yusuff A, Tariq M, Maddileti T, Tharwinkumar T. “A simple switching on-time calculation revision in multilevel inverter-space vector modulation to achieving extended voltage boundary operation”. International Journal of Power Electronics and Drive Systems; 2019 Jun 1; 10(2):653. [IF-1.088]
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  - [25] K. Ramesh, C. Bharatiraja, S. Raghu, G. Vijayalakshmi, and P. Sambanthan, "Design and Implementation of Real Time Charging Optimization for Hybrid Electric Vehicles," International Journal of Power Electronics and Drive Systems ,vol. 7, no. 4, p. 1261, Dec. 2016. [IF-1.088]
  - [26] T.K.S Sathayanarayanan, M Ramasamy, C.Bharatiraja, JL Munda "Modelling, Impedance Design, and Efficiency Analysis of Battery Assists PV tied Quasi-Z source inverter", in International Journal of Power Electronics and Drive Systems, vol.3, no.7, pp. 816-825, Dec 2016. [IF-1.088]
- Additional 10 papers are published in different Scoups indexed Journals.