

Design and Implementation of FPGA-Based Grid-Connected Impedance-Source Inverter

B Vaikundaselvan, T Sivakumar, S Sonia - Journal of The Institution of ..., 2020 - Springer

In recent time, Z-source inverter (ZSI) is designed by a new power adapting concept mainly for renewable energy application and other industrial applications. ZSI eliminates the drawbacks of the traditional inverter and provides high efficiency, and it also contains the ...

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Dynamic model of wind energy conversion systems with fractional order controllers for the variable-speed operation of wind turbine

B Vaikundaselvan - Int. J. Eng. Sci. Adv. Technol, 2012 - Citeseer

This paper presents a dynamic model for variable speed wind energy conversion systems, equipped with a transient stability of variable-speed wind turbines and Z-source matrix converter, specially developed for its use in power system stability studies involving large ...

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Digital Control of Space Vector Pulse Width Modulation Based Shunt Active Filter

..., R Dhanasekaran, **B Vaikundaselvan** - Applied Mechanics ..., 2014 - Trans Tech Publ

The wide spread use of power electronics equipments in modern electrical systems, has became a major concern due to the adverse effects of harmonics on all the sensitive equipments. This paper presents the implementation of shunt active power filter (SAPF) ...

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Modeling of control and power management of a hybrid wind-solar system using optimization technique,(2013)

L Sabari Nathan, L Ashok Kumar, **B Vaikundaselvan**... - International Review on Modelling ...

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Reactive power control of doubly fed induction generator using direct power control

B Vaikundaselvan, M Kannan - Int J Adv Engg Tech, 2016

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MS Srinithi, **B Vaikundaselvan**... - ... Journal For Research ..., 2017 - gnpublishing.com

This paper presents the design and development of an ultra-high efficiency bidirectional isolated full bridge DC-DC converter. To achieve ultra-high efficiency, synchronous rectification and high efficiency magnetics are used. The proposed bidirectional converter ...

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Grid Connected Wind Energy Conversions System Performance is Improved by Switching of Shunt Active Filter

B Vaikundaselvan - ... Journal of Applied Sciences, Engineering and ..., 2014 - airtellibrary.com

This study presents a Grid connected Wind Energy Conversions System (WECS) where performance is improved by switching of Shunt Active Filter. Shunt active filter for non linear loads is designed to minimize the harmonics present in the wind power system. Due to large ...

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B Vaikundaselvan, N Prakash, SS Sivaraju... - academia.edu

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DESIGN AND ANALYSIS OF MPPT BASED BUCK BOOST CONVERTER FOR SOLAR PHOTOVOLTAIC SYSTEM

B Vaikundaselvan, SS Sivaraju, CS Raj, P Palraj - academia.edu

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PWM STRATEGY FOR THREE PHASE VOLTAGE SOURCE INVERTER WITH MINIMUM HARMONIC DISTORTION

B Vaikundaselvan, N Prakash, SS Sivaraju - [academia.edu](#)

In this paper, comparison between two different Pulse Width Modulation (PWM) techniques employed for three phase Voltage Source Inverter (VSI) is discussed. A suitable PWM technique is employed to obtain the required output voltage in the line side of the inverter ...

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