

Resonant tank networks (RTNs) comprise of LC circuit (reactive elements) that stock oscillating energy with the frequency of circuit resonant. The LC circuit's resonance h ...

In this article, the proposed DC-DC boost converter offers a novel way to increase voltage gain while simplifying control methods. Unlike traditional boost conv

With the rapid development of modern energy applications such as renewable energy, PV systems, electric vehicles, and smart grids, DC-DC converters have become the key component to meet strict industrial demands. ...

This paper proposes a high-frequency isolated current-fed dual active bridge bidirectional DC-DC series resonant converter with an inductive filter for energy storage applications, and a steady ...

Recently, DC/DC resonant converters have received much research interest as a result of the advancements in their applications. This increase in their industrial application has given rise to more efforts in ...

ISSN : 2248-9622 Vol. 9, Issue 6 (Series -II) June 2019, pp 37-41 DOI: 10.9790/9622- 0906023741 37 | P a g e Electrolytic Capacitor less Led Driver Based On ...

A fixed-frequency pulse width modulation (PWM) controlled bidirectional current-fed series-resonant converter is proposed in this paper. The proposed bidirectional resonant ...

Abstract: A bidirectional series-resonant (BSR) converter is proposed for energy storage system in DC micro-grid. The bidirectional converters are mainly used in electric ...

In this paper, an active equalization circuit based on resonant converter is presented. This equalization circuit has been proposed to equalize the direct cell-to-cell ...

This paper proposes a high-frequency isolated current-fed dual active bridge bidirectional DC-DC series resonant converter with an inductive filter for energy storage applications, and a...

Qian Litao, Wang Deyu, Yu Jianping, et al. Research on high voltage energy storage power supply of pulse plasma thruster based on LCC-LC resonant converter[J]. High Power Laser and Particle Beams, 2020, 32: ...

This paper presents a novel bidirectional series resonant converter for energy storage systems (ESS). Conversion between a dc energy storage device and an ac grid has ...

Coupled inductor is employed which eliminates current ripples in input/output of converter. So Cuk converters are interfaced with energy storage system [7] in Fig. 3(c) boost ...

It can be clearly seen that the switching frequencies are higher than the series resonant frequency, although the converter's characteristics are the same as the LLC ...

This paper proposes a high-frequency isolated current-fed dual active bridge bidirectional DC-DC series resonant converter with an inductive filter for energy storage applications, and a steady-state analysis of the ...

Bidirectional LLC resonant converter has been popular in applications such as electric vehicle, energy storage system and uninterruptible power supply for its good soft ...

IFAC E-CoSM 2018 Changchun, China, September 20-22, 2018 730 Dongjiang Yang et al. / IFAC PapersOnLine 51-31 (2018) 685âEUR"689 687 This paper proposes a ...

As shown in Fig. 1, the two-stage bidirectional DC-DC converter is composed of a four-switch buck-boost circuit and a CLLC resonant circuit. The CLLC resonant circuit part with ...

In order to facilitate photovoltaic (PV) applications, this research suggests a series resonant converter (SRC) based high gain DC-DC converter. In order to keep converter realization ...

The series-resonant inverter was used as a resonant inverter, and a detailed operation analysis was separately made for the voltage multiplier and the series-resonant inverter. The prototypes of the single- and double-switch ...

Nevertheless, power converters contain energy storage passive elements (capacitors and inductors), power switches (transistors or mosfets), and diodes, which reduce ...

A bidirectional soft-switching series-resonant converter with simple PWM control and load-independent voltage-gain characteristics for energy storage system in DC microgrids. IEEE Journal of Emerging and Selected ...

A novel cell voltage equalizer using a series LC resonant converter is proposed for series-connected energy storage devices, namely, battery or super (or ultra)-capacitor cells. ...

Abstract--In high-voltage bus-based energy storage systems, an isolated bidirectional dc/dc converter is required to link the low voltage energy storage unit and the high ...

Improved topology of three-phase series resonant DC-DC boost converter with variable frequency control. Author links open overlay panel Mohamed Salem ... Comparison of ...

The series of energy storage devices, namely battery, super/ultra-capacitor string voltage balancing circuit, based on a single LC energy converter, is presented in this paper.

: ,LLC,?(FHA), ...

Series resonant boost energy storage. Contact online >> International Journal of Renewable Energy Research-IJRER. H. Krishnaswami and N. Mohan, "Three-port series-resonant dc-dc ...

This manuscript presents an innovative three-port (3 ports) cascaded LLC Resonant Converter (RC) tailored for hybrid Photovoltaic (PV) and battery systems. The ...

Using battery/UC hybrid energy storage system (HESS) in PEVs could effectively increase the electric mileage, optimize the size of the energy storage system, and boost the ...

Battery Energy Storage System (BESS) is becoming common in grid applications since it has several attractive features such as fast response to grid demands, high flexibility in ...

Abstract: This paper presents a modularized buck-boost and series LC converter (BBSLCC) circuit for series battery equalizers. The proposed topology has numerous ...

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