

Scopus

## Document details

[< Back to results](#) | 1 of 1
[Export](#)
[Download](#)
[Print](#)
[E-mail](#)
[Save to PDF](#)
[Add to List](#)
[More... >](#)
[Full Text](#)[View at Publisher](#)

Proceedings - 5th International Conference on Computer and Communication Engineering: Emerging Technologies via Comp-Unication Convergence, ICCCE 2014  
 4 February 2015, Article number 7031612, Pages 107-110  
 5th International Conference on Computer and Communication Engineering, ICCCE 2014; Sunway Putra HotelKuala Lumpur; Malaysia; 23 September 2014 through 24 September 2014; Category numberE5413; Code 110844

## Wireless power transmission system based on magnetic inductive resonance of couple circuit (Conference Paper)

Boby, R.I. [✉](#), Mansor, H.B. [✉](#), Gunawan, T.S. [✉](#), Khan, S. [✉](#), Mostafa, M.G.

Department of Electrical and Computer Engineering, International Islamic University Malaysia, Kuala Lumpur, Malaysia

### Abstract

[View references \(6\)](#)

In this paper, By magnetic inductive resonance method or wireless inductive power transfer method, a couple circuits can be used to transfer power wirelessly, where the individual nodes are battery less to make them maintenance free. The main working principal of magnetic inductive resonance is Electromagnetic field inductance between two coils that are tuned to resonate at the same frequency. This type of method has a high quality Factor (Q) and Consist of air cored to avoid iron losses. For energy harvesting wireless or battery less sensors can be use and possible to store in capacitors. One of the methods of wireless power transmission scheme is microwave power transmission, which can interfere with data transmission, where for data transmission and acquisition can easily possible by magnetic inductive resonance. © 2014 IEEE.

### Author keywords

capacitor bank energy buffer resonance supercap

### Indexed keywords

#### Engineering controlled terms:

Capacitors Data communication systems Data transfer Electric batteries  
 Electric power transmission Electromagnetic fields Energy harvesting  
 Microwave power transmission Power transmission Resonance Transmissions

Capacitor bank  
 energy buffer  
 High quality factors  
 Inductive power transfer  
 Resonance methods  
 supercap  
 Wireless power transmission  
 Wireless power transmission systems

[Metrics](#) [View all metrics >](#)

1 Citation in Scopus  
 65th Percentile  
 0.90 Field-Weighted  
 Citation Impact


[PlumX Metrics](#)

Usage, Captures, Mentions,  
 Social Media and Citations  
 beyond Scopus.

### Cited by 1 document

Wireless Power Transmission - Exploring source to load inductive link under resonance and varying load condition

Ahmed, K.J. , Zainal, N.I. , Hafiz, S.  
*(2017) Proceedings - 14th IEEE Student Conference on Research and Development: Advancing Technology for Humanity, SCOReD 2016*

[View details of this citation](#)

Inform me when this document is cited in Scopus:

[Set citation alert >](#)
[Set citation feed >](#)

### Related documents

UHF power transmission system for multiple small self-rotating targets and verification with batteryless quadcopter having rotors with embedded rectenna

Nishikawa, H. , Kitai, Y. , Furukoshi, T.  
*(2015) 2015 IEEE Wireless Power Transfer Conference, WPTC 2015*

Wireless power transfer system for PHV/EV

Sugiyama, Y.