



# Keywords for solar electric vehicle research

As an emerging technology, photovoltaic/thermal (PV/T) systems have been gaining attention from manufacturers and experts because they increase the efficiency of photovoltaic units while producing thermal energy for a variety of uses. Likewise, electric cars are gaining ground as opposed to cars powered by fossil fuels. Electrical vehicles (EVs) are ...

Electric cars (EVs) are getting more and more popular across the globe. While comparing traditional utility grid-based EV charging, photovoltaic (PV) powered EV charging may significantly lessen carbon footprints. However, there are not enough charging stations, which limits the global adoption of EVs. More public places are adding EV charging stations as EV ...

Aravind Kumar S, et al.(2023). Solar-Based Wireless Charging System for Electric Vehicles,

Electrification of vehicles has been recognised as a key part of meeting global climate change targets and a key aspect of sustainable transport. Here, an integrative and bird's-eye view of scholarly research on Electric Vehicles (EV) is provided with a focus on an ...

The integration of solar PV technology with the burgeoning EV market has the potential to expedite the transition towards sustainable and environmentally friendly transportation.

This article proposes a large-scale solar EV concept with low-cost, flexible, and thin-film solar cells integrated onto the steel of all upward-facing vehicle body panels as a viable solution to ...

References are used to compare and contrast the different HESS topologies, actuators, MPPT algorithms, and already existing hybrid electric cars. Keywords: electric vehicle (EV), photovoltaic ...

Researchers have reported that adding solar panels to a hybrid electric vehicle can extend the driving range of the vehicle, increase fuel efficiency, and reduce greenhouse ...

Solar energy and electric cars may be utilized to minimize air pollution, which is a highly serious issue in recent years, owing to air pollution and the limited supply of fossil fuels [5].

The transportation sector accounts for a significant share of greenhouse gas emissions. Hence, the electrification of this sector is a crucial contributor to the mitigation of global warming.

Keywords. Metrics. Abstract: One of the key inhibitors to the purchase of Electric Vehicles (EVs) in most countries is range anxiety. EVs generally have a range between 100-200km on a full ...

CHAdEMO: CHAdEMO is a DC charging protocol for electric vehicles named after the association that



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developed the protocol. A maximum of 62.5kW power is delivered to the car battery at 500V, 125A DC. Charge depleting mode: Mode of vehicle operation in which the vehicle uses energy only from the battery pack. Most plug-in hybrid electric vehicles operate in charge depleting ...

International Journal of Research Publication and Reviews, Vol 4, no 4, pp 4356-4358 April 2023  
International Journal of Research Publication and Reviews Journal homepage: ISSN 2582-7421 Solar Wireless Electric Vehicle Charging System P. M. Pujari<sup>1</sup>, P. B. Garud<sup>2</sup>, V. B. Gadhave<sup>3</sup>, S. H. Garud<sup>4</sup>

Electric vehicles (EVs) are a new emerging technological advancement that has apprehended the interest of researchers as well as regulators, primarily due to their connection with sustainability in the broadest sense. EVs are recognized by academics as a viable and potentially game-changing type of transportation due to their ability to improve overall energy ...

The number of panels to be installed on the site is calculated based on the following equation (Ledmaoui et al., 2023; Luo, 2011):  $P_c$  is the total power generated by the plant in Kw and  $P_u$  is the ...

This paper describes the characteristics of worldwide scientific contributions to the field of electric vehicles (EVs) from 1955 to 2021. For this purpose, a search within the Scopus database was conducted using "Electric ...

The Electric Solar Vehicle is a single-seated vehicle powered by 750 W BLDC hub motor. Undergraduate students of KIIT UNIVERSITY from multiple academic fields collaborated to design and fabricate ...

Research has emerged to estimate optimised routes for solar vehicles, and this paper builds on this work to expand on the parameters used to calculate the route, thereby ...

Keywords: Wireless charging system, Electric vehicle, Solar power, Transmitting and receiving coil. I. INTRODUCTION Electric vehicles have become a new concept in the transportation sector and are ...

Solar electric vehicle can make to reduce our greenhouse gas emissions and other pollution. This is the research paper for working of solar power electric vehicle. KEYWORDS: Solar, Car, PV ...

The provision for bi-directional plug-in electric vehicles (PEVs) is already a well-established phenomenon in the literature with energy exchange in a to-and-fro manner, as it can facilitate ...

The rapid growth of the energy and transport sectors has led to an increase in fuel consumption, resulting in a significant rise in greenhouse gas emissions. Switching to renewable energy sources and replacing internal combustion engines with electric vehicles (EVs) can significantly reduce greenhouse gas emissions. In recent years, the electrification of the ...



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Greenhouse gas emission from transportation is one of the major environmental issues and its emission rate is increasing at faster rate. So solar power for transportation can solve this problem. The aim of proposed work is to contribute a technology that supports Green energy; consider a scenario we could use a solar energy to charge electric vehicle that too ...

This paper introduces a solar-powered two-seater golf cart designed for St. John's, Newfoundland. We model it using HOMER PRO and MATLAB/Simulink, considering the PV generation, BLDC motor ...

Keywords : Electric Vehicle, DC-DC Converter, Controllers, Modulation Techniques, Solar Charging Station, EV Motors. ... "Comparative Analysis Of Permanent Magnet Motors And Switched Reluctance Motors Capabilities For Electric And Hybrid Electric Vehicles".Research gate, IEEMA Engineer Infinite Conference (eTechNxT),pp.1-5, March 2018 ...

Modern Electric, Hybrid Electric, and Fuel Cell Vehicles focuses on the fundamentals, theory, and design of conventional cars with internal combustion engines (ICE), electric vehicles (EV), hybrid ...

Downloadable (with restrictions)! Solar energy offers the potential to support the battery electric vehicles (BEV) charging station, which promotes sustainability and low carbon emission. In view of the emerging needs of solar energy-powered BEV charging stations, this review intends to provide a critical technological viewpoint and perspective on the research gaps, current and ...

project aims to create a pollution free solar powered vehicle. The main aim of this project is to make a hardware model of Solar Electric Vehicle, with an intention to reduce total carbon ...

Research of electric charging decreases the likelihood of bursting into flames when compared with a regular car. Before being created, charging stations are tested. All stops, whether public or private, are essential to increasing the ...

PDF | On Mar 19, 2021, Mahendra Patil and others published Hybrid Technology-Solar Energy Based Electric Vehicle | Find, read and cite all the research you need on ResearchGate

Abstract: This paper describes the design of solar powered charging station for charging of electric vehicle describes design of solar powered charging station for charging of electric vehicle that solves the key downside of fuel and pollution. Electric vehicles have now hit the road worldwide and are slowly growing in numbers.

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