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Solar Electrical Vehicle with Battery Charging at Running Condition

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Abstract: This Paper presents a study of solar-powered electric cars. Solar energy is one of the main sources of renewable energy that can be a viable alternative to fossil fuels. In bright sunlight, the sun's rays emit about 800-1,000 wattsof energy per square meter of the earth's surface. If solar energy is clean and free, why not use it to power our cars? Is a solar-powered car a good solution? Solar energy is a term used to use solar energy to power an electrical device or system. Solar panels for composed of a grid of solar cells. These cells collect the sun's energy and convert it into electricity. Today, solar cars use energy from the sun by converting it into electricity. This electricity burns the battery that powers the car's engine. A little sun instead of battery cars direct electricity directly to the electric motor. Today, solar cars can be categorized as "green cars" powered by renewable energy sources without carbon emissions..

Keywords: Solar energy, solar powered electric vehicle (SPEVs), grid, solar cells, Green vehicle

REFERENCES

- [1]. Aasness, M. A., Odeck, J. (2015). The increase of electric vehicle usage in Norway—Incentives and adverse effects. European Transport Research Review, 7(4), 34–42.
- [2]. Adepetu, A., Keshav, S. (2015). The relative importance of price and driving range on electric vehicle adoption: Los Angeles case study. Transportation, 44(2), 353–373.
- [3]. Bentler, P. M., Chou, C. (1987). Practical issues in structural modeling. Sociological Methods & Research, 16(1), 78–117.
- [4]. Guagnano, G. A., Stern, P. C., Dietz, T. (1995). Influences on attitude-behavior relationships. Environment and Behavior, 27(5), 699–718.
- [5]. Machleit, K. A., Allen, C. T., Madden, T. J. (1993). The mature brand and brand interest: An alternative consequence of ad-evoked affect. Journal of Marketing, 57(4), 72–82.
- [6]. Moons, I., De Pelsmacker, P. (2012). Emotions as determinants of electric car usage intention. Journal of Marketing Management, 28(3–4), 195–237.

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