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## Solar Cell – Renewable Source of Energy

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Abstract: Large amount of energy is been obtained from the sun and it is utilized for all useful purposes, sun is a source of abundant energy. Small proportion of energy obtained from the sun is utilized but it provides the tremendous or large amount of energy. All over increasing energy demands is been fulfilled by the sun light reaching to the earth surface. Incident sunlight energy is converted into electrical energy by photovoltaic effects. Solar cells fabricated from Silicon are the first generation solar cells. More improvements in the efficiency of solar cell is tried to be obtained for absorption of sun radiation and its conversion in to electrical energy. This condition are tried to be obtained by the application of Thin film technology and amorphous Silicon solar cells. This article focuses on the application of solar cell as renewable source of energy.

**Keywords:** Solar cell, Renewable source of energy, Electrical energy.

## REFERENCES

- [1]. Mehreen Gul, Yash Kotak And Tariq Muneer, Review On Recent Trend Of Solar Photovoltaic Technology, Energy Exploration & Exploitation 2016, Vol. 34(4) 485–526
- [2]. Nayak, P.K., Mahesh, S., Snaith, H.J. Et Al. Photovoltaic Solar Cell Technologies: Analysing the State Of The Art. Nat Rev Mater 4, 269–285 (2019). Available Online at Https://Doi.Org/10.1038/S41578-019-0097-0
- [3]. Mugdha V Dambhare, Bhavana Butey And S V Moharil, Solar Photovoltaic Technology: A Review Of Different Types Of Solar Cells And Its Future Trends, Journal Of Physics: Conference Series, Volume 1913, International Conference On Research Frontiers In Sciences (ICRFS 2021) 5th-6th February 2021, Nagpur, India.
- [4]. He Tang, Shengsheng He And Chuangwei Peng, Tang Et Al, A Short Progress Report On High-Efficiency Perovskite Solar Cells. Nanoscale Research Letters (2017) 12:410 DOI 10.1186/S11671-017-2187-5
- [5]. Sumedha R.G. Weliwaththage, Udara S.P.R. Arachchige, Solar Energy Technology Faculty Of Technology, University Of Sri Jayewardenepura, Sri Lanka
- [6]. Choifin, Mochamad, Rodli, Achmadfathoni, Sari, Anita Kartika, Wahjoedi, Tri, And Aziz, Abdul, A Study Of Renewable Energy And Solar Panel Literature Through Bibliometric Positioning During Three Decades (2021). Library Philosophy And Practice (E-Journal). 5749. https://Digitalcommons.Unl.Edu/Libphilprac/5749
- [7]. Abhishek Kumar,D M Akbar Hussain, A Review Paper On Solar Energy In India, March 2018 Doi:10.21058/Gjecs.2018.31001
- [8]. Vikas K, Et Al. Status of Solar Wind Renewable Energy In India. Renewable and Sustainable Energy Reviews.
- [9]. Sharma Bd. Performance of Solar Power Plants In India. Central Electricity Regulatory Commission New Delhi. 2011.
- [10]. Swami Prakash Srivastava, Surat Prakash Srivastava, Solar Energy And Its Future Role In Indian Economy, International Journal Of Environmental Science: Development And Monitoring (Ijesdm) Issn No. 2231-1289, Volume 4 No. 3 (2013) 81
- [11]. Kumar. J And Majid ,Renewable Energy For Sustainable Development In India: Current Status, Future Prospects, Challenges, Employment, And Investment Opportunities, Energy, Sustainability And Society (2020) 10:2 Available Online At: https://Doi.Org/10.1186/S13705-019-0232-1

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