

A Scientometric Analysis of Smart Grid Implementation at Distribution Feeder

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Abstract This paper focuses on the development of smart grid implementation at distribution feeder in terms of publication output as reflected in the IEEE Xplore digital library. The IEEE Xplore digital library has total 46 publications on the above field during 2008–15. The highest number of publications of 13 was published in 2012. Maximum contribution was given by authors from the USA as compared to other countries. The relative growth rates (RGRs) have decreased from 2012 (0.624) to 2015 (0.022) in the span of 3 years. The doubling time (DT) has gradually increased from 1.11 in 2012 to 32.22 in 2015. The published research works of 21 IEEE publications out of aforesaid 46 were studied in the literature review.

Keywords Smart grid • Distribution feeder • Scientometric analysis • Relative growth rate • Doubling time

1 Introduction

This paper attempts to illustrate a scientometric analysis of smart grid implementation at distribution feeder for describing the innovation, development, or demise of a technology field. The burning issues for distribution utilities are shortage power, power quality, and renewable energy sources integration. Smart grid is a new and currently developing platform that integrates, monitors, and operates

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