



ChemTech

## International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555  
Vol.11 No.07, pp 355-362, 2018

### Bibliometric Analysis of Smart Grid Research from 2012 to 2017

Tomus Alonso Quintero<sup>1</sup>, Guillermo Eliecer Valencia<sup>2\*</sup>,  
Alfonso Rodriguez<sup>3</sup>

<sup>1</sup>Research Assistant in Mechanical Engineering/ Faculty of Engineering/Universidad Del Atlántico, Colombia.

<sup>2</sup>Research Assistant in Research Group on Efficient Energy Management- Kaí / Faculty of Engineering/Universidad Del Atlántico, Colombia.

<sup>3</sup>Assistant Professor in Mechanical Engineering Program/ Faculty of Engineering/ Universidad Del Atlántico, Colombia.

**Abstract :** A bibliometric analysis of the research published on the subject of smart grids for a period from 2012 to 2017 was carried out, and the use of metadata obtained from Web Of Science was taken for this analysis. Our search identified a total of 1998 publications related to smart grids in the period studied. We analyzed patterns of publication output, major journals, productivity of countries and institutions, collaboration between countries and an analysis of keywords by author. The annual number of publications on smart grid research increased from 61 in 2012 to 1998 in 2017. The magazine that had the most productivity in this period was the IEEE transactions on Smart grid. The United States was the country that contributed the most publications on a global level to the research topic during the period under study. The most productive institution was the Nanyang Technology University with a total of 1.9% of publications, followed by University Waterloo with 1.4%, and Zhejiang University 1.4%, are part of the top 3. In the collaboration network is you can see that the United States is the country that had the most collaboration with the others in the network, since it occupies the center of it. In the keywords of the authors, it is evident that the most used word was Smart that was in a total of 1988 publications that represent 99.5%.

**Keywords :** Smart Grid, Bibliometric, Investigation, Research output, analysis.

Guillermo Valencia Ochoa *et al* /International Journal of ChemTech Research,  
2018,11(07): 355-362.

DOI= <http://dx.doi.org/10.20902/IJCTR.2018.110742>

\*\*\*\*\*