IMPACT OF BRUNAUER EMMETT TELLER ISOTHERM ON RESEARCH IN SCIENCE CITATION INDEX EXPANDED

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Abstract

A bibliometric analysis along with a brief historical and modifications overview and scientific applications was carried out to reveal the impact of Brunauer-Emmett-Teller (BET) isotherm on scientific research. The data was based on the Science Citation Index Expanded (SCI-EXPANDED) database of the Thomson Reuters Web of Science. BET isotherm received a total of 10,418 citations from its publication to 2012. Among them, 9,117 (88%) were research articles by 20,108 authors with 95% manuscripts in English. Geographical distribution revealed that North America was the most productive continent, while Africa contributed the least citations. In terms of the institutions and research areas, Spanish National Research Council of Spain and chemistry took the lead. Citations on nanoscience and nanotechnology and environmental science categories increased significantly in the last five years. Journal of Colloids and Interface Science published the most BET isotherm cited articles, while “adsorption”, “surface”, and “properties” were the most frequently used words in title.

Key words: adsorption, bibliometric, BET isotherm, physical chemistry

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