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**Title:** Evaluating Research Trends from Journal Paper Metadata, Considering the Research Publication Latency

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**Abstract:** Investigating the research trends within a scientific domain by analyzing semantic information extracted from scientific journals has been a topic of interest in the natural language processing (NLP) field. A research trend evaluation is generally based on the time evolution of the term occurrence or the term topic, but it neglects an important aspect-research publication latency. The average time lag between the research and its publication may vary from one month to more than one year, and it is a characteristic that may have significant impact when assessing research trends, mainly for rapidly evolving scientific areas. To cope with this problem, the present paper is the first work that explicitly considers research publication latency as a parameter in the trend evaluation process. Consequently, we provide a new trend detection methodology that mixes auto-ARIMA prediction with Mann-Kendall trend evaluations. The experimental results in an electronic design automation case study prove the viability of our approach.

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