SCIENTIFIC LETTER

# ChatGPT y el futuro de la comunicación científica

## ChatGPT and the future of scientific communication

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**Dear Editor:**

ChatGPT is a language model developed by OpenAI that uses the natural language processing (NLP) autoregressive transformation (Transformer) technique to generate consistent and natural responses to questions or comments in real-time. ChatGPT is especially useful for building chatbots and other automated conversational systems that interact with people naturally and seamlessly.[1]

ChatGPT is based on the GPT-3 (Generative Pre-training Transformer 3) language model, one of the most advanced language models currently available. ChatGPT has been trained on various NLP tasks, including natural language understanding, text generation, and machine translation. Thanks to its ability to process and learn from large amounts of text, ChatGPT can produce coherent and natural responses to questions and comments in various contexts and topics.[2]

ChatGPT could be helpful in science communication as a tool to help communicate research more clear and accessible to the general public. Another potential could be used to generate summaries of scientific research in an automated way, making the information more easily understandable for people who do not have prior scientific knowledge.

Another way in which this artificial intelligence (AI) could be helpful is as a tool to help scientists and academics keep up with the latest research and developments in their field of work. Primarily the ChatGPT could be used to collect and summarize scientific articles and other relevant publications in an automated way, which could help scientists save time and effort from having to read and analyze each article by themselves.

Beyond its scopes of performance, it is essential to note that ChatGPT is a language model that has been trained to generate coherent and natural text in a wide variety of contexts.[3]

However, on its own, it cannot carry out original scientific research, nor does it have specialized knowledge in a particular field of science. Although it could be used to give general ideas for the development of research, the reality is that it is improbable that it can completely replace the writing of scientific articles.

A crucial element in some types of studies, the synthesis of the literature, whether for a narrative or panoramic review, the use of ChatGPT would allow generating summaries or abstracts of research more efficiently or even writing sections of a scientific article that require less critical analysis or interpretation. However, writing a full scientific article requires a thorough knowledge of the field of research and the ability to analyze and synthesize data critically. This is something that can only be done effectively through the work and effort of a human being.

Beyond its limitations, this constantly developing AI can become a valuable tool to improve scientific communication by providing a more efficient and accessible way of transmitting and understanding scientific information.

## REFERENCES

1. Castelvecchi D. Are ChatGPT and AlphaCode going to replace programmers. Nature 2022. https://doi.org/10.1038/d41586-022-04383-z.

2. OpenAI. ChatGPT FAQ. OpenAI 2022. https://help.openai.com/en/articles/6783457-chatgpt-faq.

3. Susnjak T. ChatGPT: The End of Online Exam Integrity? 2022. https://doi.org/10.48550/arXiv.2212.09292.

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## CONFLICT OF INTEREST

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