# **Retraction Notice**

IOS Press has retracted the following publication from its online content:

[Journal of Intelligent & Fuzzy Systems, vol. 43, no. 4, pp. 4227–4241, 2022 (DOI: 10.3233/JIFS-220301)]

# Analysis of developments and hotspots of international research on sports AI

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The article "Analysis of developments and hotspots of international research on sports AI" by Jian Li et al., originally published in Journal of Intelligent & Fuzzy Systems (JIFS), vol. 43, no. 4, pp. 4227–4241, 2022 (DOI: 10.3233/JIFS-220301) has been retracted. The article showed high similarity with an article published in Chinese entitled, in translation; "Analysis of Researches on the Application of Artificial Intelligence Technology in Sports Field Based on Knowledge Graph" published by Laibing Lu et al. in the Journal of Capital University of Physical Education and Sports, vol. 33, no. 1, 2021, DOI:10.14036/j.cnki.cn11-4513.2021.01.002. A comparison report by an independent reviewer on request by the Journal of Intelligent & Fuzzy Systems is published below. The authors of the JIFS article agree with the retraction of the article. The article was published as version of record on 10 August 2022 and retracted in May 2023. The publisher has updated the original online PDF with the word "RETRACTED" watermarked over every page of the article.

Through comparative analysis of article "Analysis of developments and hotspots of international research on sports AI" (**denoted as article A**) and article "Analysis of Researches on the Application of Artificial Intelligence Technology in Sports Field Based on Knowledge Graph" (**denoted as article B**), it can be seen that these two articles have the following similarities and differences.

### 1. In the "Abstract", the similarities include:

- The software that these two articles used are same, and it is Cite Space V software.
- The conclusions are similar.

#### The differences include:

- Different retrieval times for these two articles. For article A, it is since 2007, whereas for article B, it is since 1994.
- 2. In the "1. Introduction", there is a difference between these two articles.
- 3. In the "2. Data sources and research methodology", the similarities include:
- ▶ Both articles consist of three parts, which are "2.1. Data sources", "2.2. Research methodology" and "2.3. Research procedures". In addition, the research procedures of both articles include four parts, i.e. topic determination, data preparation, software analysis setup and visual knowledge graph analysis.

#### The differences include:

- In "2.1. Data sources", the retrieval period for article A is set as from Jan 1 2007 to Dec 31 2021 and the retrieval date is Feb 2, 2022. However, the retrieval period for article B is set as for 1994 to Apr 2020.
- The number of articles analyzed varies. For article A, 1538 documents were analyzed. However, for article B, 926 documents were analyzed.

## 4. In the "3. Analysis of research results", the similarities include:

For article A, the research results include 6 parts, of which 4 are similar to article B, namely "3.1. Distribution of countries (regions) conducting research on sports AI", "3.2. Analysis of the collaborative network of authors related to research on sports AI", "3.3. Distribution of disciplines (specialties) in research on sports AI", and "3.6. Research hotspots in the of application of sports AI". In these four parts, the contents, figures and tables are similar. Note that because the two articles are based on slightly different data, the results in the figures and tables are also slightly different.

#### The differences include:

The research results of article A include two different parts, namely "3.4. Analysis of highly cited papers in the field of sports AI" and "3.5. Sports AI keyword burst"

#### 5. In the "4. Opportunities and challenges faced by sports AI", these two papers are different.

### 6. In the "5. Conclusions", the similarities and differences include:

For article A, the conclusion includes 6 parts, of which 3 are similar to article B, namely "5.1", "5.2" and "5.5". Note that the contents of these three parts for article A are more concrete. In addition, for article A, the remaining three parts have differences from article B.

Based on above analysis, it is observed that article A and article B use the same method and software "Cite Space V" to analyze literatures related to sports artificial intelligence. In addition, the tables, figures and conclusions drawn in these two articles are similar. The differences between these two articles are that article A studies two more parts of the content than article B, which are "3.4. Analysis of highly cited papers in the field of sports AI" and "3.5. Sports AI keyword burst".