학술 출판 관련 용어

김기홍
(아주대, 과편협)

First and last pages of an article

- Bibliographic information
- DOI (Digital Object Identifier)
- Title/Authors/Affiliations
- Abstract/Keywords
- Dates of received, revised, accepted, and published
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Review

Artificial intelligence-assisted tools for redefining the communication landscape of the scholarly world

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Abstract

The flood of research output and increasing demands for peer reviewers have necessitated the intervention of artificial intelligence (AI) in scholarly publishing. Although human input is seen as essential for writing publications, the contribution of AI slowly and steadily moves ahead. AI may redefine the role of science communication experts in the future and transform the scholarly publishing industry into a technology-driven one. It can prospectively improve the quality of publishable content and identify errors in published content. In this article, we review various AI and other associated tools currently in use or development for a range of publishing obligations and functions that have brought about or can soon leverage much-demanded advances in scholarly communications. Several AI-assisted tools, with diverse scope and scale, have emerged in the scholarly market. AI algorithms develop summaries of scientific publications and convert them into plain-language texts, press statements, and news stories. Retrieval of accurate and sufficient information is prominent in evidence-based science publications. Semantic tools may empower transparent and proficient data extraction tactics. From detecting simple plagiarism errors to predicting the projected citation impact of an unpublished article, AI's role in scholarly publishing is expected to be multidimensional. AI, natural language processing, and machine learning in scholarly publishing have arrived for writers, editors, authors, and publishers. They should leverage these technologies to enable the fast and accurate dissemination of scientific information to contribute to the betterment of humankind.

Keywords

Artificial intelligence; Machine learning; Peer review; Scholarly publishing; Science writing

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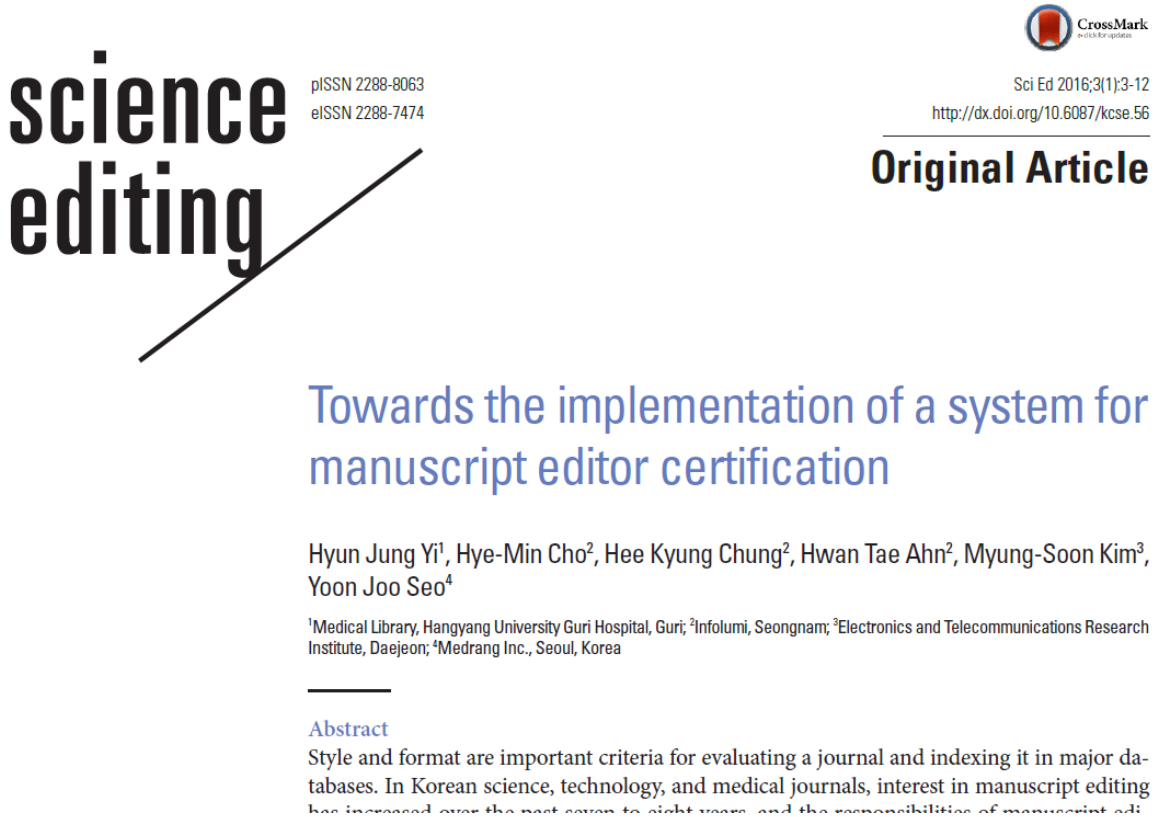
ISSN

- ISSN (International Standard Serial Number, 국제 표준 연속 간행물 번호): 8-digit code used to identify newspapers, journals, magazines and periodicals of all kinds
- Examples: ISSN 0317-8471

  ISSN 1050-124X
- pISSN : print
- eISSN : electronic

DOI (Digital Object Identifier, 디지털 객체 식별자)

- DOI: unique alphanumeric string assigned by a registration agency to identify content and provide a persistent link to its location on the Internet
- DOIs form a key component of reference-linking systems such as Crossref



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Original Article

Towards the implementation of a system for manuscript editor certification

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Abstract

Style and format are important criteria for evaluating a journal and indexing it in major databases. In Korean science, technology, and medical journals, interest in manuscript editing

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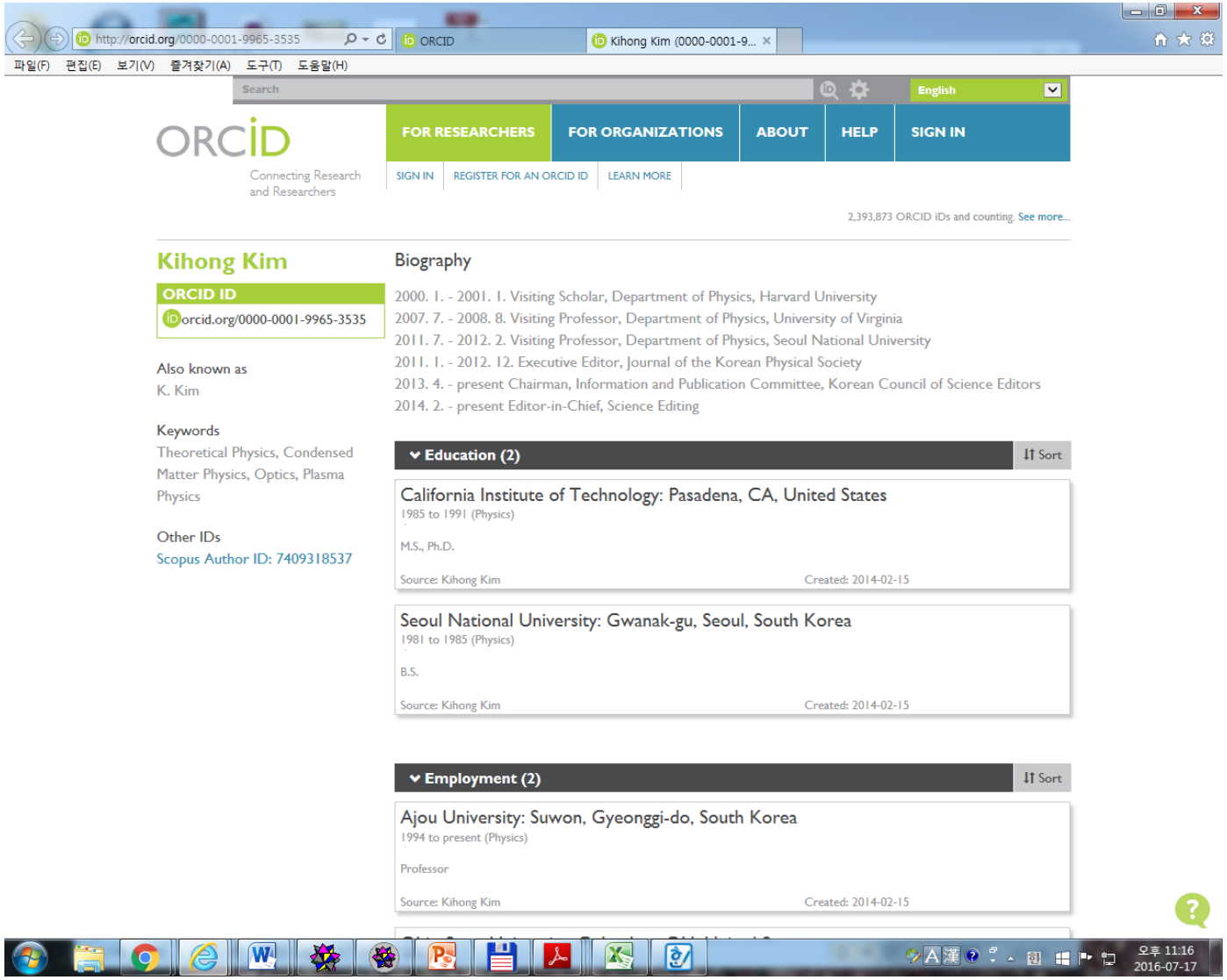
ORCID

- Open Researcher and Contributor ID
- Persistent digital identifiers that distinguish researchers from each other

Example:

www.orcid.org/0000-0001-9965-3535

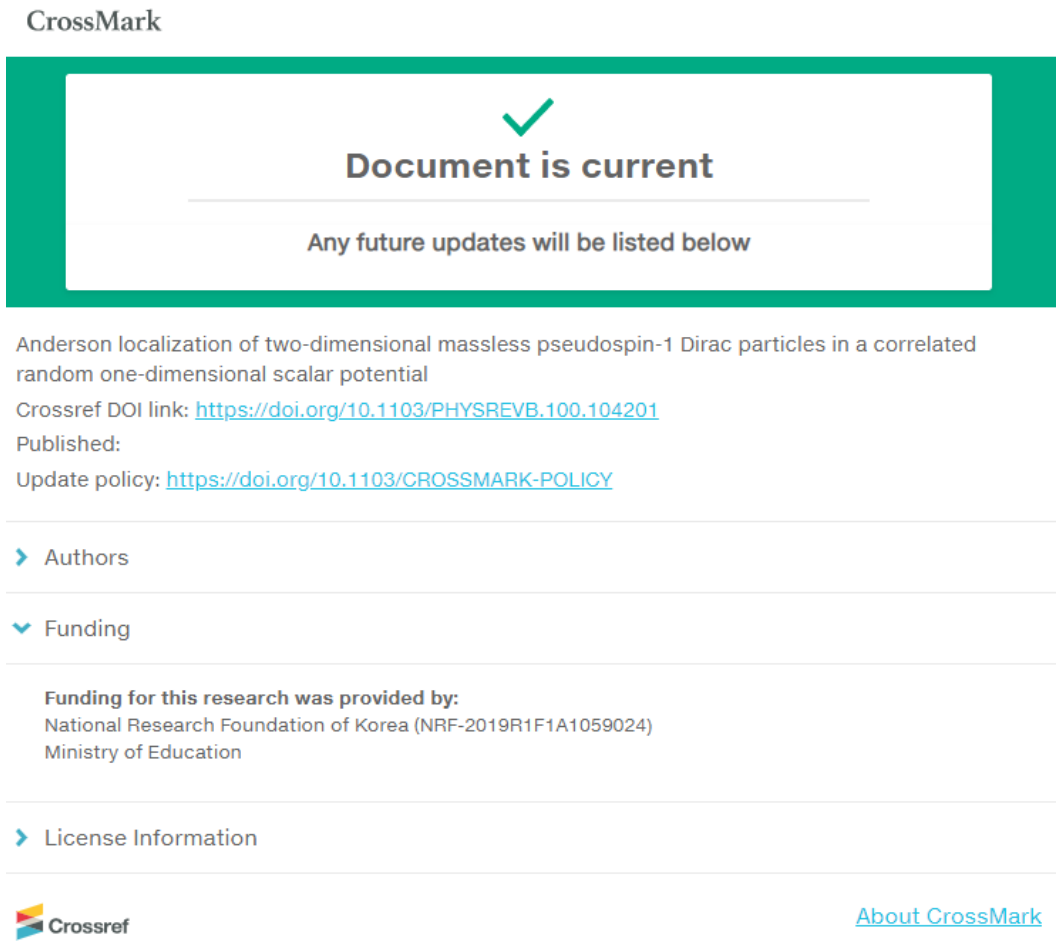


Copyright notice

- Typically, a copyright notice contains four different elements:
  - The copyright symbol ©
  - The year of first publication
  - The name of the copyright owner
  - A Rights Statement
- Examples: © 2011 JOHN DOE ALL RIGHTS RESERVED
  - © 2016 IOP Publishing Ltd
  - ©2002 The American Physical Society
  - © 2017 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

CrossMark, Fundref

- Identifies a publisher-maintained copy of a piece of content
- Important publication record information
- Time history of content
- Fundref: funder information



Disclosure statement

- Conflict of interest, human rights statements and informed consent, animal rights

Examples:

- John Smith declares that he has no conflict of interest. Paula Taylor has received research grants from Drug Company A. Mike Schultz has received a speaker honorarium from Drug Company B and owns stock in Drug Company C.
- John Smith, Paula Taylor, and Mike Schultz declare that they have no conflict of interest.
- All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1964 and its later amendments. Informed consent was obtained from all patients for being included in the study.
- All institutional and national guidelines for the care and use of laboratory animals were followed.

Authorship (저자 자격)

- Honorary author, gift author, guest author, rolling author
- Ghost author, ghost writer

  1960년대 담배 해악 관련 연구에 대한 담배 회사의
  대응으로부터 시작됨
  거대 제약회사, 농화학회사들이 주도
  학술지뿐 아니라 언론사 사설 등에도 사례 발견

Authorship

- First author, lead author
- Corresponding author: person who takes primary responsibility for communication with the journal during the manuscript submission, peer review, and publication process, and ensures that all the journal's administrative requirements, such as providing details of authorship, ethics committee approval, clinical trial registration documentation, and gathering conflict of interest forms and statements, are properly completed

Authorship

- Contributorship: adopted by some medical journals
- Example of a contributor list:

> **Contributors**: ShT performed statistical analysis and had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. MS, HT, and KK contributed to the design and conduct of the study. SK and SaT contributed to the writing of the manuscript. KK is the principal investigator and the guarantor of the study. The sponsor of the study had no role in the study design, data collection, data analysis, data interpretation, or writing of the report.

- Hyperauthorship: extremely large number of suthors

Peer review (전문가 심사)

- Reviewer, referee: 심사자
- Desk evaluation, desk rejection
- Anonymous (blind) peer review, attributed peer review
- Single blind, double blind
- Open peer review: 심사평, 심사자 공개
- Pre-publication peer review, post-publication peer review
- Result-blind peer review: Introduction, Method 만으로 심사

Publication ethics

- COPE (Committee on Publication Ethics) guidelines
- Principles of Transparency and Best Practice in Scholarly Publishing
- 저자, 편집인, 심사자 모두에게 윤리 기준 적용

- Data fabrication and falsification
- Plagiarism
- Similarity Check
- Multiple (simultaneous) submission
- Redundant (duplicate) publication cf. secondary publication
- Improper author contribution or attribution

Publication ethics

- Conflict of interest statement
- Statement of human and animal rights
- Statement of informed consent
- Statement of institutional review board approval
- Registration of the clinical trial research

Open access (OA)

- Closed access, subscription-based access, paywall
- Free access, public access

- Open access: online research outputs that are free of all restrictions on access (e.g. access tolls) and free of many restrictions on use (e.g. certain copyright and license restrictions)

- Gratis OA: free online access (weak OA)
- Libre OA: free online access plus some additional re-use rights (strong OA)
- The re-use rights of libre OA are often specified by various specific Creative Commons licenses; these almost all require attribution of authorship to the original authors.

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- CC BY-ND : 저작물이 수정, 편집되지 않은 상태로 제공되는 한 상업적, 비상업적 목적의 재배포를 모두 허락
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BY (attribution), SA (share-alike), NC (non-commercial), ND (no derivative works)

Open access (OA)

- Gold OA: publishing in an open access journal
- There are many business models for OA journals: full OA journal, hybrid OA journal, delayed OA journal
- No-fee OA journals (sometimes called platinum or diamond OA journals)
- Article processing charge: 게재료
- Embargo period

- Green OA: self-archiving; depositing articles in an open access repository

Open access

- Bronze OA: no OA fee is paid but the publisher chooses to make a publication freely available to read. The publisher can stop the publications being freely available at any time.
- Black OA: illegal open access (예: Sci-Hub)

- Predatory publishing, predatory journal: exploitative open-access publishing business model that involves charging publication fees to authors without providing the editorial and publishing services associated with legitimate journals
- Predatory conference

Plan S

- Plan S : 2021년 1월 시행 대규모 OA 확대 계획

"With effect from 2021, all scholarly publications on the results from research funded by public or private grants provided by national, regional and international research councils and funding bodies, must be published in Open Access Journals, on Open Access Platforms, or made immediately available through Open Access Repositories without embargo."

출판사들이 반발하는 규정:

Authors should retain copyright on their publications, which must be published under an open license such as Creative Commons.

Archiving

- Digital preservation
- Database, repository, archive (예: Pubmed Central, Scopus, SCIE, etc)
- Open access repository: digital platform that holds research output and provide free, immediate and permanent access to research results to anyone to use, download and distribute
- Registry of Open Access Repositories (ROAR): searchable international registry of open access repositories indexing the creation, location and growth of open access institutional repositories and their contents

- Directory of Open Access Journals (DOAJ): online directory that indexes and provides access to high quality, open access, peer-reviewed journals

Preprint

- Preprint: no peer review (but with some screening)
- Peer-reviewed postprint: either the author's refereed, revised final draft or the publisher's version of record
- Preprint archives: arXiv, bioRxiv, medRxiv 등

Open data

- Open data: some data should be freely available to everyone to use and republish as they wish, without restrictions from copyright, patents or other mechanisms of control
- Open science: movement to make scientific research (including publications, data, physical samples, and software) and its dissemination accessible to all levels of an inquiring society, amateur or professional
- Data sharing policy
- Data repository
- Data journal
- Data archive
- Metadata
- Data publishing
- Data citation
- Clinical trial data sharing policy

Journal metrics (학술지 평가 지표)

- Impact factor
- Eigenfactor score, Article Influence Score
- CiteScore
- SJR (SCImago Journal Rank)
- h index
- Alt-metrics
- Self citation
- Bibliometrics, scientometrics

Aims and scope

- Aim: objective or purpose of what the journal is trying to accomplish
- Scope: how the journal will accomplish the aim

- Aims and scope statement includes:
  - A brief introduction to the journal
  - An outline of the subjects covered
  - The type of articles published (and what it doesn't publish)
  - Its peer-review policy
  - Information about Open Access (OA) publishing options

기타 용어들

- Reference styles: APA style, Chicago style, Harvard style, etc
- Publication frequency: monthly, bimonthly, quarterly, triannual, biannual
- Abbreviated title
- Supplementary material
- Manuscript editor: 투고 원고를 해당 학술지의 규정에 맞추어 편집하는 사람. 논문에 쓰인 정보들을 검토하고 통일된 용어나 표현으로 바꾸며 어색한 문장을 수정하는 역할까지 담당 cf. copy editor
- Text and data mining
- JATS XML (Journal Article Tag Suite Extensible Markup Language)