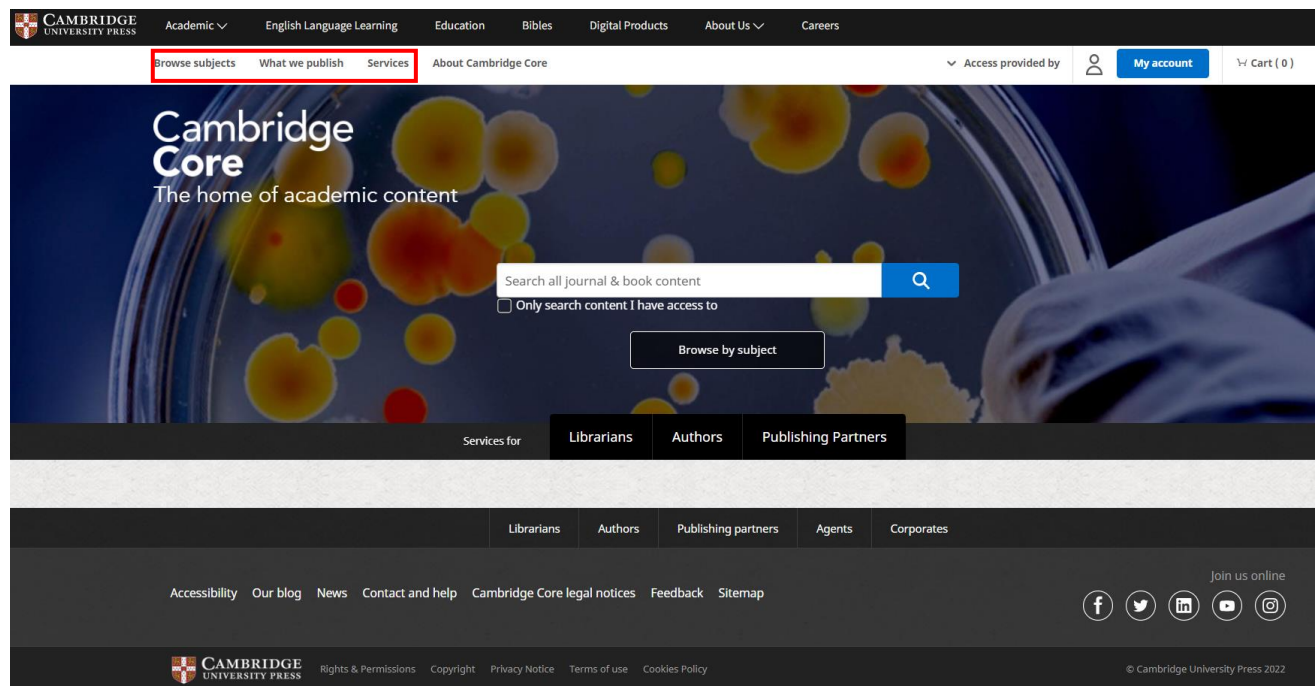


# Cambridge Core User Guide

User guides and videos <https://www.cambridge.org/core/help/training/user-guides-and-videos/korean>

Frequently Asked Questions Page <https://www.cambridge.org/core/help/FAQs>

## 메인페이지 안내

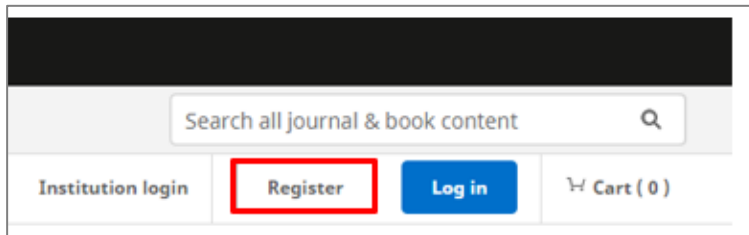


Browse subject	역사, 문학, 의학, 물리학, 천문학, 경제학 등 36 개 주제별 저널과 도서를 찾아볼 수 있습니다.
What we publish	Cambridge University Press 에서 출판사는 컬렉션 및 시리즈, 저널, 도서 등을 확인할 수 있습니다.
Services	카테고리별 제공 서비스를 확인할 수 있습니다. (사서를 위한 서비스, 저자를 위한 서비스, Open Access 정책 등)

## 계정 생성 방법 <https://vimeo.com/326611300>

Cambridge Core 계정을 등록하면 콘텐츠 알림 수신, 검색 저장, 자료 북마크 등이 가능합니다.

1. 오른쪽 상단의 "Register (등록)" 버튼을 클릭하십시오.



2. 양식에 맞춰 작성하십시오. \*로 표시된 항목은 필수입니다.

 A screenshot of the Cambridge Core "Register" form. The form is titled "Register" and contains several input fields and checkboxes. 
 

- Title:** A dropdown menu with "<Select>" as the current selection.
- Country \*:** A dropdown menu with "Korea, Republic of" as the current selection.
- First name \*:** A text input field with the placeholder "Enter your first name".
- Last name \*:** A text input field with the placeholder "Enter your last name".
- Email \*:** A text input field with the placeholder "Enter your email". Below it is a note: "When creating an Instructor account, please ensure you use your institutional email address."
- Are you affiliated with an organisation?:** Radio buttons for "Yes" (selected) and "No".
- Organisation \*:** A text input field with the placeholder "Enter your organisation name".
- Are you an instructor?:** Radio buttons for "Yes" (selected) and "No".
- Institutional URL \*:** A text input field with the placeholder "Enter institution URL".
- ORCID ID (if applicable) ⓘ:** A text input field with the placeholder "Enter your ORCID ID, e.g. 0000-0001-0001-0035".
- Password \*:** A text input field with the placeholder "Enter your password". Below it is a note: "Password must be at least 8 characters long, contain lower and upper case characters and numbers."
- Confirm password \*:** A text input field with the placeholder "Confirm your password".

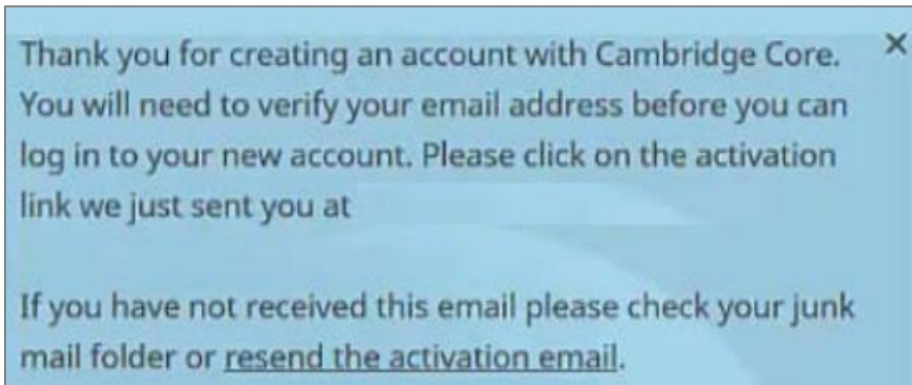
 At the bottom of the form are two checkboxes:
 

- ☐ By creating your account you agree to our [Terms of use](#) and confirm that you are at least 16 years of age. \*
- ☐ Please keep me informed by email about relevant Cambridge publishing, news and special offers.

 Below the checkboxes is a paragraph: "Your privacy is important to us. We work hard to ensure the way we collect, store and use your information does not infringe your privacy. [View our privacy notice](#) for a full explanation on how we do this." At the very bottom, it says "This site is protected by reCAPTCHA and the Google [Privacy Policy](#) and [Terms of Service](#) apply." There are two buttons at the bottom: "Cancel" and "Register".

- Country: 원하는 국가를 찾으려면 스크롤하거나 국가명을 입력하십시오.
- Organisation: 소속 기관명을 입력합니다. 기관명을 입력하면 목록에서 선택이 가능합니다.
- Password: 암호는 최소 8 자리 이상이어야 하며, 대소문자와 숫자를 모두 포함해야 합니다.

- 계정을 만들려면 이용약관에 동의해야 하며 사용자가 16 세 이상이어야 합니다.  
☐ By creating your account you agree to our [Terms of use](#) and confirm that you are at least 16 years of age. \*
  - Cambridge University Press 와 관련된 출판, 뉴스 등에 대한 정보를 확인하려면 클릭합니다.  
☐ Please keep me informed by email about relevant Cambridge publishing, news and special offers.
3. 모든 항목을 입력한 후 Register 를 클릭합니다.
4. 등록한 이메일 주소로 계정 활성을 위한 Link 가 발송됩니다. 해당 Link 를 클릭하여 로그인한 후 계정 이용이 가능합니다.

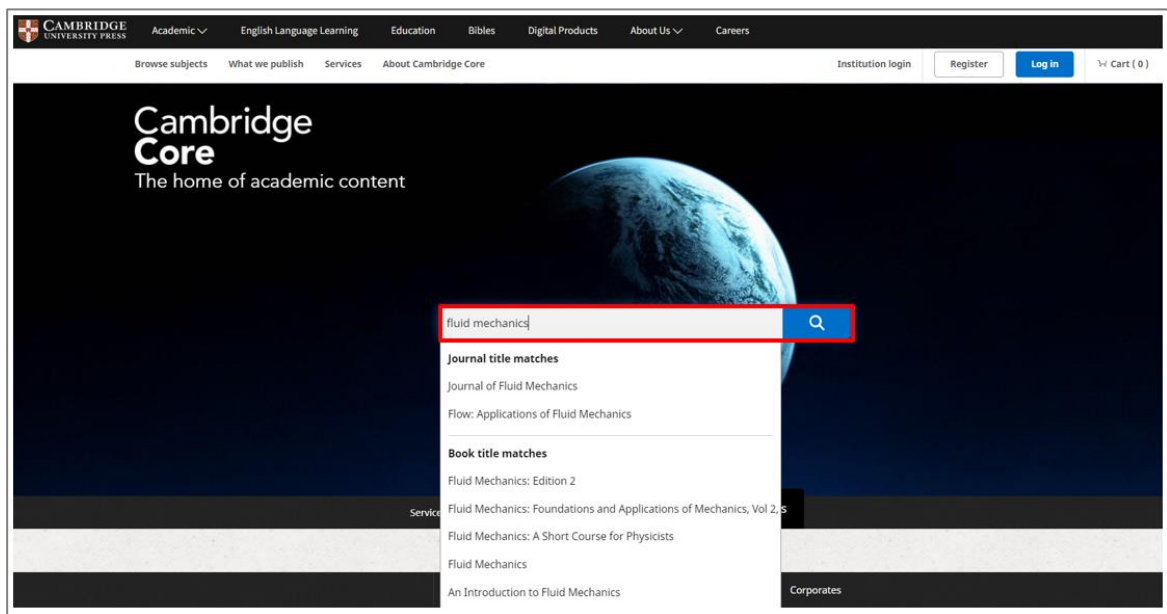


## 검색 방법 <https://vimeo.com/326613365>

Cambridge Core 에서 Cambridge University Press 에서 제공하는 400 종 이상의 저널과 40,000 권 이상의 도서를 제공합니다. 다양한 검색 카테고리를 이용하여 필요한 자료를 검색할 수 있습니다.

### 키워드 검색

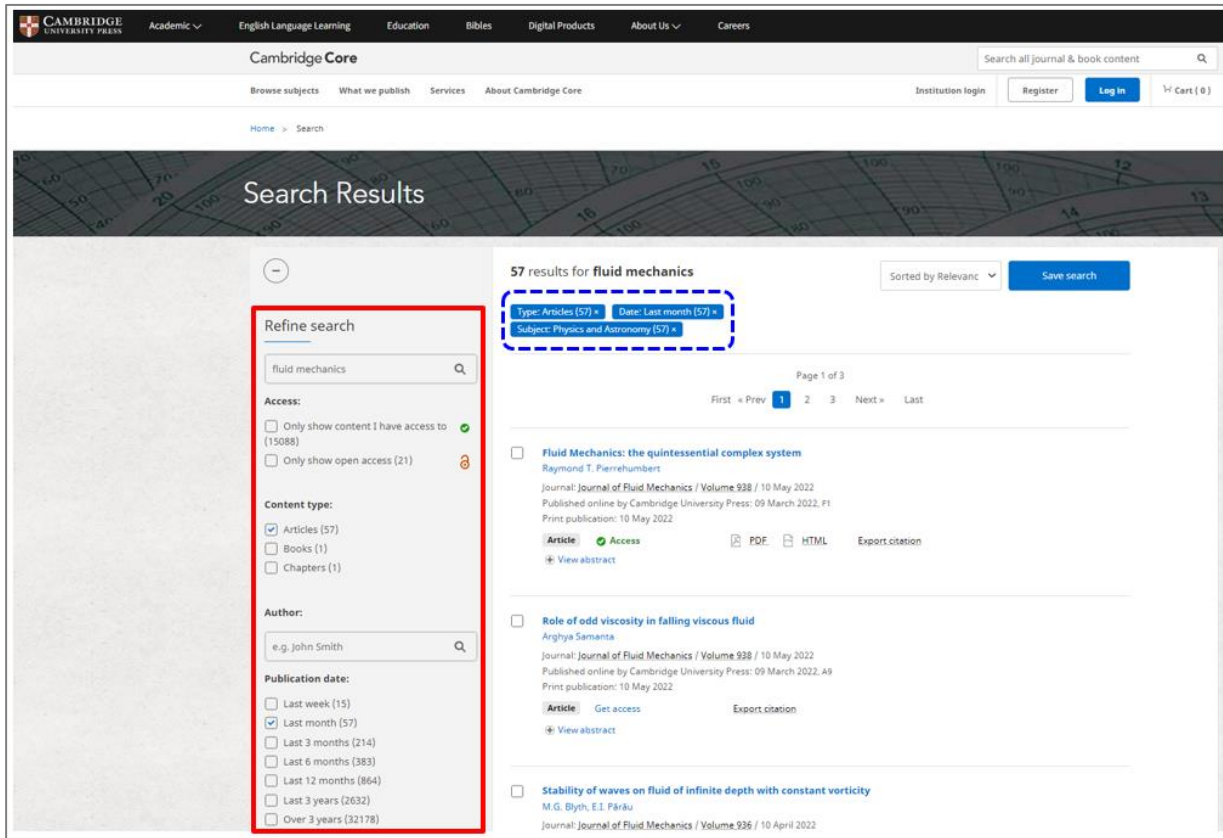
1. Cambridge Core 메인화면 검색창에 검색어를 입력하십시오. 입력한 검색어와 매치되는 Cambridge 저널 또는 eBook 이 표시됩니다.
2. 입력한 키워드로 검색하려면 검색 버튼을 클릭합니다.



## 상세 검색(Refine Search)

검색결과 왼쪽의 상세 검색(Refine Search) 메뉴를 사용해 검색 결과를 필터링합니다.

검색 범위를 설정하면 결과가 자동으로 업데이트 되며, 선택한 카테고리 항목이 페이지 상단에 표시됩니다.



- Access: 액세스 권한이 있는 콘텐츠만 표시하도록 세부 조정할 수 있습니다.
- Content Type: 콘텐츠 유형에 따라 검색 결과를 세부 조정할 수 있습니다. (저널 기사, 도서 챕터, 도서, 저널 등)
- Author: 저자명
- Publication Date: 출판일
- Subject: 주제
- Tags: 키워드
- Journals: 수록된 저널
- Publishers: 출판사
- Societies: 학회
- Series: 포함된 시리즈
- Collections: 포함된 컬렉션

### Refine search

**Access:**

☐ Only show content I have access to (24178)

☐ Only show open access (6040)

**Content type:**

☐ Articles (92844)

☐ Chapters (55702)

☐ Books (5700)

☐ Journals (197)

☐ Series (62)

☐ Elements (27)

**Author:**

**Publication date:**

☐ Forthcoming (123)

☐ Last week (67)

☐ Last month (290)

☐ Last 3 months (1001)

☐ Last 6 months (2197)

☐ Last 12 months (5419)

☐ Last 3 years (16940)

☐ Over 3 years (137205)

From year: To year:

e.g. 1771 e.g. 1986

**Subject:** [Show more](#)

☐ Medicine (31045)

☐ History (28812)

☐ Politics and International Relations (21948)

☐ Area Studies (20212)

**Tags**

**Journals** [Show more](#)

☐ The British Journal of Psychiatry (3001)

☐ American Political Science Review (2838)

☐ Public Health Nutrition (2547)

☐ International Journal of Technology Assessment in Health Care (2457)

**Publishers:** [Show more](#)

☐ Cambridge University Press (46798)

☐ Boydell & Brewer (3322)

☐ Liverpool University Press (2093)

☐ ISEAS-Yusof Ishak Institute (1683)

**Societies** [Show more](#)

☐ Nutrition Society (4982)

☐ The Royal College of Psychiatrists (4740)

☐ Women and Politics Section-APSA (3019)

☐ The Association for Asian Studies (2748)

**Series:** [Show more](#)

☐ Books and Monographs (851)

☐ Cambridge Companions to Literature (779)

☐ Cambridge Library Collection - Rolls (652)

☐ Cambridge Studies in Comparative Politics (372)

**Collections:** [Show more](#)

☐ Cambridge Library Collection (3931)

☐ Cambridge Textbooks (1474)

☐ Cambridge Companions (1343)

☐ Cambridge Histories (1298)

## Actions for Selected Content

검색된 콘텐츠를 선택하고 사용자는 다음을 수행할 수 있습니다.

### Actions for selected content:

- 선택한 항목 보기 (새창으로 열림)
- 선택한 항목을 북마크로 저장
- 인용 내보내기
- 선택한 콘텐츠를 PDF 로 다운로드: Select all 클릭 후 Download PDF(zip) 클릭하면 검색결과 페이지 내 콘텐츠 PDF 파일들을 한번에 다운로드 가능
- 액세스 가능한 콘텐츠의 PDF 를 Kindle/Dropbox/Google 드라이브로 전송



## 자료 보기

### 저널 페이지

Cambridge Core

Search all journal & book content

Browse subjects What we publish Services About Cambridge Core

Access provided by My account Cart (0)

< Back to search results Home > Journals > Journal of Fluid Mechanics

English Français

# Journal of Fluid Mechanics

Search Journal of Fluid Mechanics content

☒ Search within full text

Submit your article Information

Journal home Latest issue All issues Focus on Fluids JFM Rapids JFM Perspectives Open access articles Most read

## FLOW APPLICATIONS OF FLUID MECHANICS

An open access companion journal to JFM

Read more

Access: Subscribed, Past subscription, Archive Contains open access

ISSN: 0022-1120 (Print), 1469-7645 (Online)

Editor: Professor C. P. Caulfield Dept of Applied Mathematics and Theoretical Physics | Centre for Mathematical Science | Wilberforce Road | Cambridge CB3 0WA | UK

Editorial board

Journal of Fluid Mechanics is the leading international journal in the field and is essential reading for all those concerned with developments in fluid mechanics. It publishes authoritative articles covering theoretical, computational and experimental investigations of all aspects of the mechanics of fluids. Each issue contains papers on the fundamental aspects of fluid mechanics and its applications to other fields such as aeronautics, astrophysics, biology, chemical and mechanical engineering, hydraulics, materials, meteorology, oceanography, geology, acoustics and combustion.

2020

BACHELOR PRIZE

- Journal home : 저널 정보 및 소개 내용
- Latest issue : 최근 발행된 이슈
- All issue : 모든 이슈 (액세스 가능한 Volume 은 ④Access 표시가 있음)

Journal home Latest issue **All issues** Focus on Fluids JFM Rapids JFM Perspectives Open access articles Most read

Aa Aa Expand full list

Reduce text Enlarge text

2020s (Vol 882-938)	④ Access
2022 (Vol 930-938)	④ Access
2021 (Vol 906-929)	④ Access
2020 (Vol 882-905)	④ Access

- 원하는 Volume 을 클릭

< Back to all volumes

## Volume 938 - 10 May 2022

Sorted by Page/Article number: low to high

Page 1 of 2

First « Prev 1 2 Next » Last

*Focus on Fluids*

☐

**Fluid Mechanics: the quintessential complex system**  
 Raymond T. Pierrehumbert  
 Published online by Cambridge University Press: 09 March 2022, F1

Article Access PDF HTML Export citation

[+ View abstract](#)

- PDF: PDF 보기
- HTML: HTML 온라인으로 보기
- Export citation: 인용(Citation) 내보내기
- View abstract: 초록 보기



## 아티클 페이지

Cambridge Core

Search all journal & book content

Browse subjects What we publish Services About Cambridge Core




Access provided by My account Cart (0)

Home > Journals > Journal of Fluid Mechanics > Volume 938 > On the role of nonlinear correlations in reduced-order modelling

English Français

**1** On the role of nonlinear correlations in reduced-order modelling

Published online by Cambridge University Press: 09 March 2022

Jared L. Callahan , Steven L. Brunton  and Jean-Christophe Loiseau  Show author details

**2** Article Figures Metrics

Save PDF Share Cite Rights & Permissions

**3** Article contents

- Abstract
- Introduction
- The origins of nonlinear correlation
- Flow configuration
- Modal analysis
- Reduced-order models
- Nonlinear correlations
- Results
- Discussion
- References

**4** Access Open access

**Related content**

**Article**  
Modal analysis of the wake past a marine propeller  
Francesca Magionesi, Giulio Dubbioso, Roberto Muscari and Andrea Di Mascio  
*Journal of Fluid Mechanics*  
Published online: 19 September 2018

**Article**  
Spectral proper orthogonal decomposition and its relationship to dynamic mode decomposition and resolvent analysis  
Aaron Towne, Oliver T. Schmidt and Tim Colonius  
*Journal of Fluid Mechanics*  
Published online: 29 May 2018

**Article**  
Data-driven construction of a reduced-order model for supersonic boundary layer transition  
Ming Yu, Wei-Xi Huang and Chun-Xiao Xu  
*Journal of Fluid Mechanics*  
Published online: 15 July 2019

**Article**  
Multi-scale proper orthogonal decomposition of complex fluid flows  
M. A. Mendez, M. Balabane and J.-M. Buchlin  
*Journal of Fluid Mechanics*  
Published online: 15 May 2019

**Article**

**Abstract**

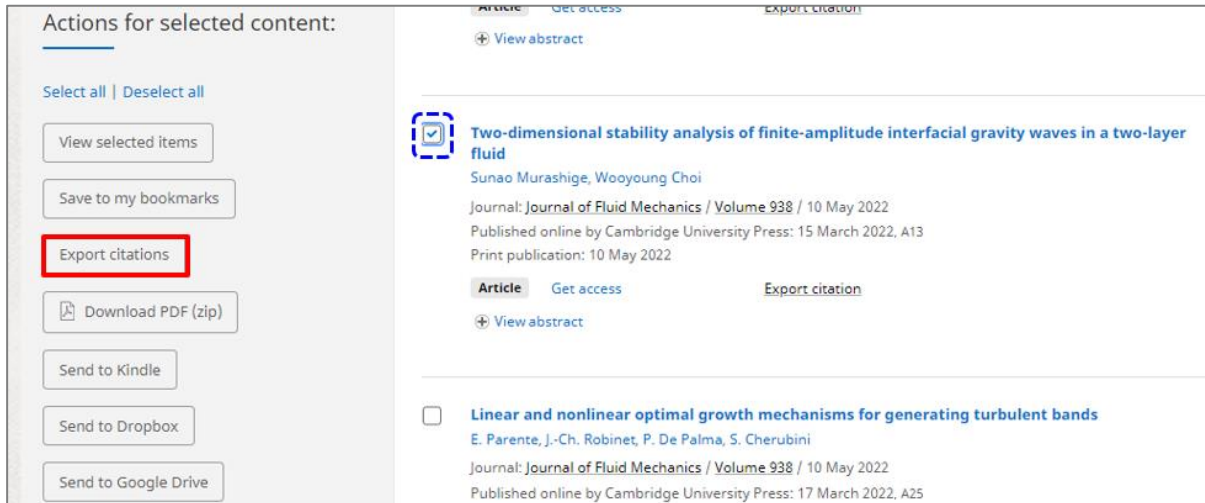
This work investigates nonlinear dimensionality reduction as a means of improving the accuracy and stability of reduced-order models of advection-dominated flows. Nonlinear correlations between temporal proper orthogonal decomposition (POD) coefficients can be exploited to identify latent low-dimensional structure, approximating the attractor with a minimal set of driving modes and a manifold equation for the remaining modes. By viewing these nonlinear correlations as an invariant manifold reduction, this least-order representation can be used to stabilize POD-Galerkin models or as a state space for data-driven model identification. In the latter case, we use sparse polynomial regression to learn a compact, interpretable dynamical system model from the time series of the active modal coefficients. We demonstrate this perspective on a quasiperiodic shear-driven cavity flow and show that the dynamics evolves on a torus generated by two independent Stuart-Landau oscillators. The specific approach to

1. 아티클 정보: 출판일, 저자 정보
2. Save PDF: PDF 저장  
Share: 공유 및 인쇄 기능  
Cite: 인용정보 확인  
Right & Permissions: 원문 재사용 관련 내용 확인
3. 아티클 목차
4. Related content 관련 콘텐츠

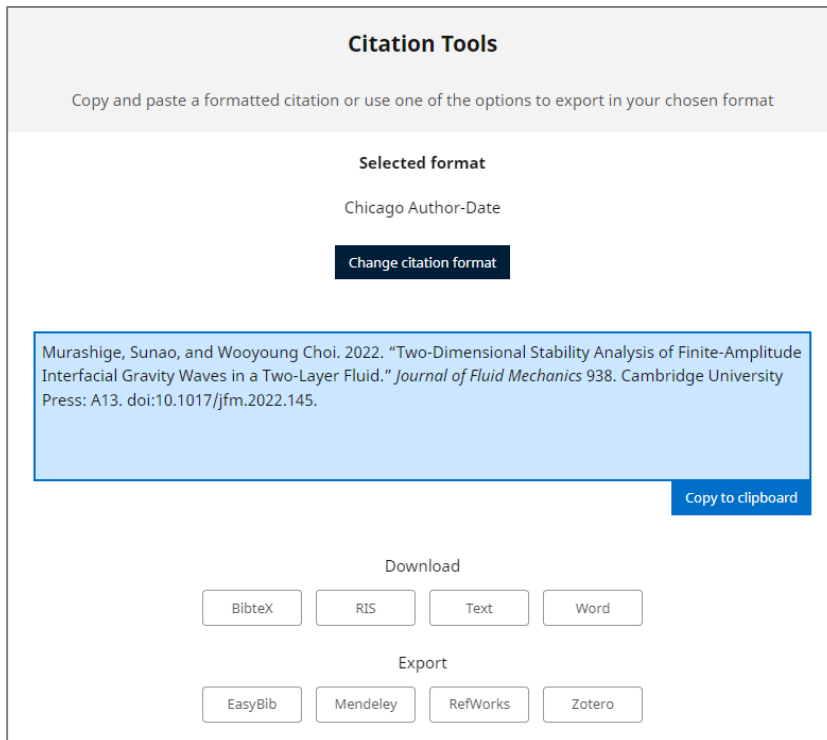
## 인용 내보내기 Export citation <https://vimeo.com/326612367>

Export citations 을 클릭하여 인용정보(citations)를 내보낼 수 있습니다.

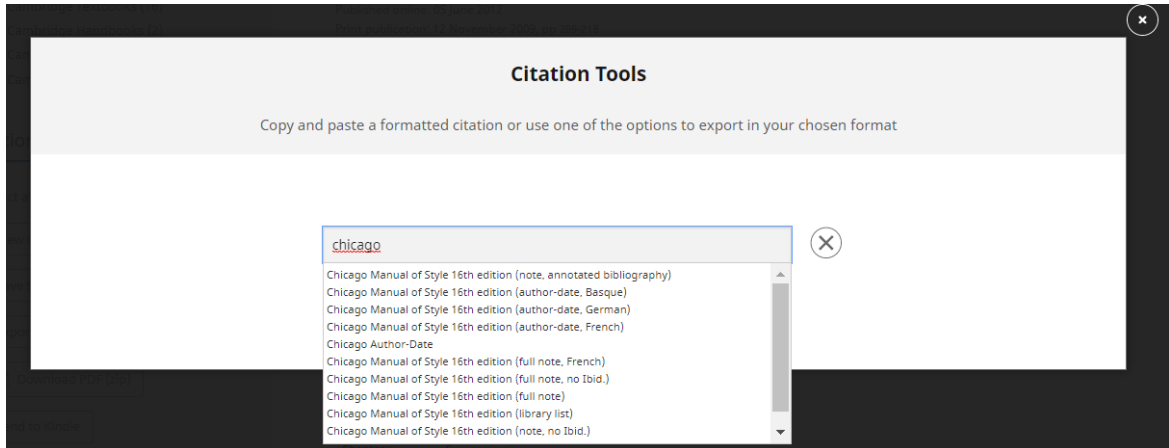
1. 인용(citation)을 내보낼 한 개 이상의 항목을 선택한 다음, 왼쪽 메뉴 하단에 Export citation 을 클릭합니다.



2. Citation Tools 창에서 원하는 인용(Citations) 형식을 선택하고 다운로드 및 내보내기를 선택합니다.



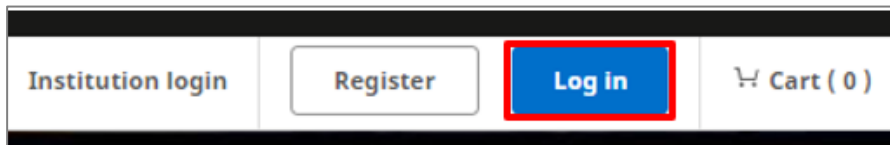
- Download : Copy to clipboard 를 클릭하면 Citations 이 복사되어, 원하는 곳에 붙여넣기 하여 사용할 수 있습니다.
  - Export: citation 을 원하는 문서형식으로 다운로드 하거나 Citation tool 로 반출할 수 있습니다.
3. 원하는 형식이 아닌 경우, Change citation format 버튼을 클릭하여 다른 형식을 검색하여 선택할 수 있습니다.



## 저널 알림 설정 <https://vimeo.com/326613912>

저널에 대한 새로운 콘텐츠 알림 수신을 등록하면, 해당 저널의 모든 온라인 발행물에 대한 알림을 받게 됩니다.

1. Log in 버튼을 클릭한 후 등록된 계정으로 로그인을 합니다.  
(계정 등록 방법은 2-3 페이지 참고)



### Personal login

Email address

Password [Forgotten password?](#)

☐ Remember me

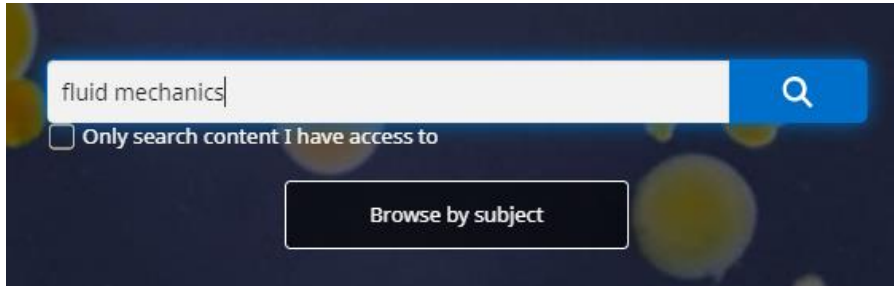
**Log in**

OR CREATE AN ACCOUNT

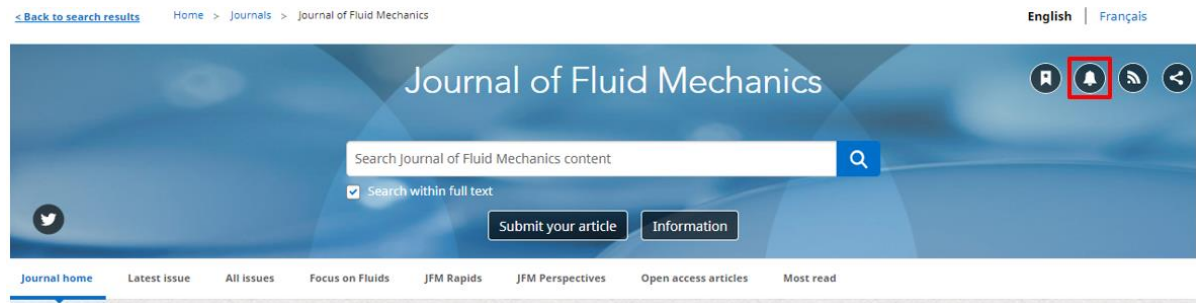
[Register](#)

By logging in you confirm that you accept the [Terms of Use](#) and that you agree to comply with them.

2. 알림을 추가하고자 하는 저널을 검색합니다.



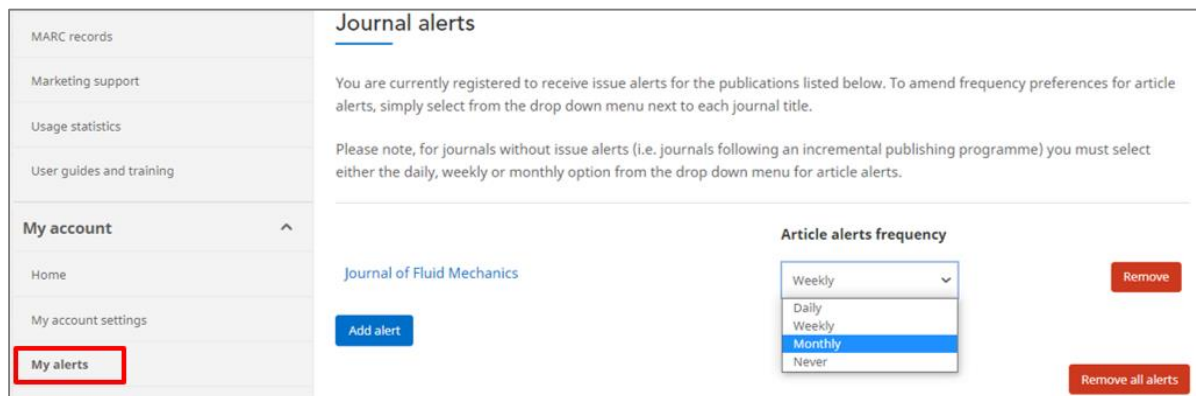
3. Journal home 에서 알림 (Alert)버튼을 클릭합니다.



4. 오른쪽 상간의 My account 버튼을 클릭 후, My alerts 메뉴에서 모든 알림 내용을 확인할 수 있습니다.



- 알림 빈도를 수정하거나 삭제할 수 있습니다.
- Daily, Weekly, Monthly, Never 을 선택하면 알림 빈도가 바로 반영됩니다.

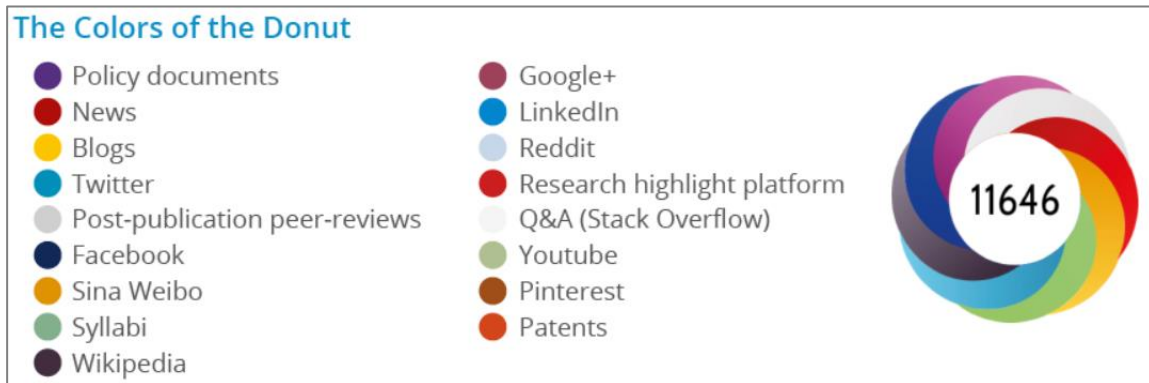


## Altmetric and Metrics <https://vimeo.com/326614361>

Cambridge Core 에서 Altmetric 및 Metrics 를 확인하는 방법을 소개합니다.

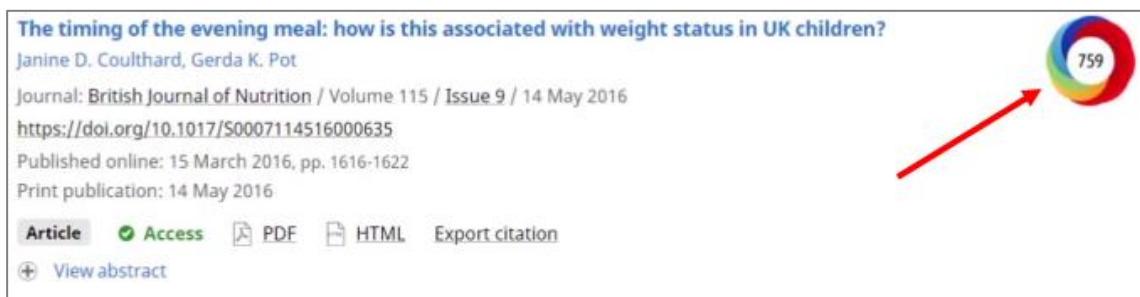
### Altmetric

- 온라인으로 수신되는 학술기사, 데이터 세트와 같은 주목받는 연구 결과를 추적하는 시스템입니다. Altmetric 은 게시물의 양과 질에 따라 관심도에 점수를 매기고 도넛모양으로 점수를 표시합니다.
- 각 색상은 연구 결과를 공유한 다른 유형의 소스(예: 뉴스 매체, 소셜 미디어 채널 등)를 나타냅니다. Altmetric 도넛의 색상이 많을수록 연구 결과물이 받는 미디어의 관심이 더 많다고 볼 수 있습니다.



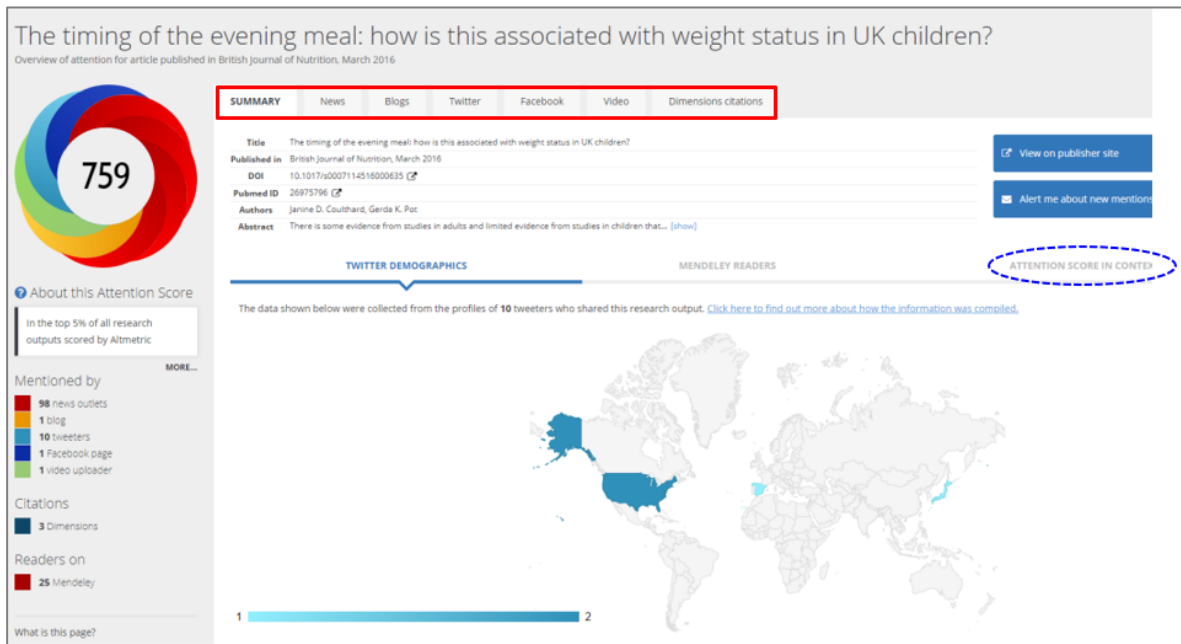
Source: <https://www.altmetric.com/about-our-data/the-donut-and-score/> (Retrieved: Mar. 2022)

- 도서 또는 아티클에 Altmetric 점수를 적용할 수 있는 경우, 검색 결과 목록 및 저널 페이지에 알트메트릭 도넛 모양이 표시됩니다.

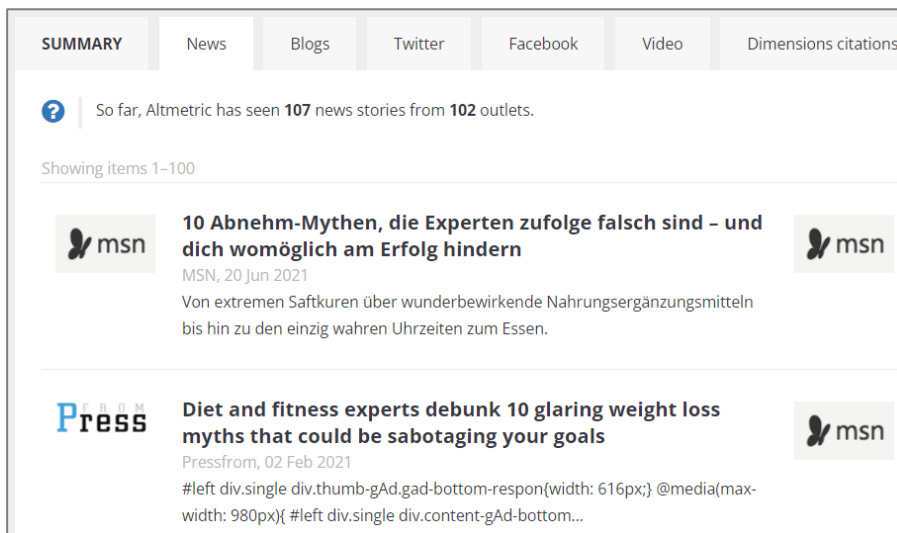


- 해당 도서나 아티클에 대한 알트메트릭 상세 페이지를 보려면 도넛모양을 클릭합니다.

- Altmetric 상세 페이지



- 뉴스, 블로그, 트위터, 페이스북 등 각각의 탭을 통해 개인이 해당 도서나 아티클에 대해 언급한 내용을 살펴볼 수 있습니다.

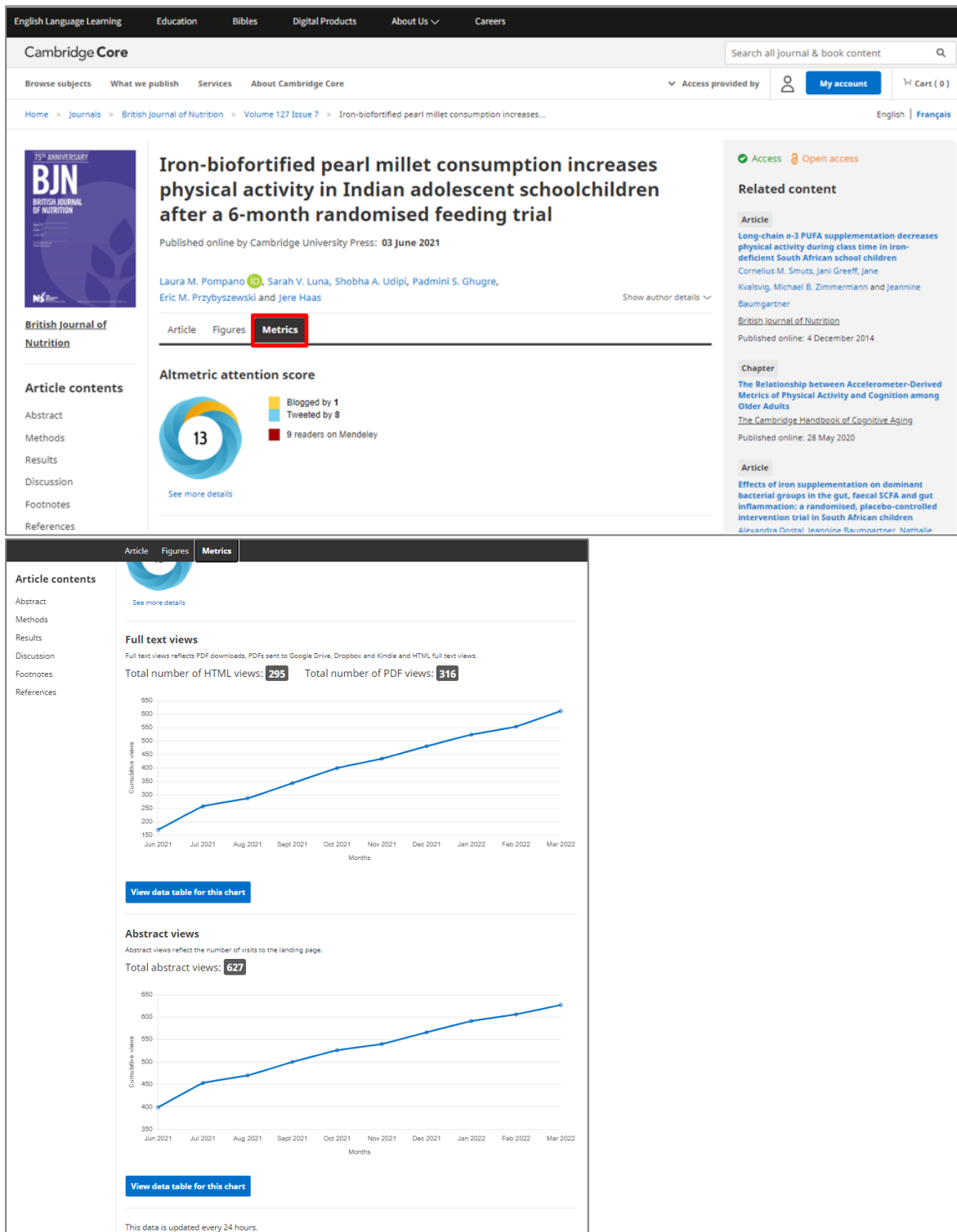


- 요약(SUMMARY) 탭에서는 일부 답변 출처의 지리적 정보를 확인할 수 있습니다.
- 그 외 메트릭스는 "상황별 관심 점수(Attention score in context)" 탭에서 확인할 수 있습니다.



## Metrics

아티클/도서의 Full-text 및 초록, Summary 페이지의 이용 횟수를 보여줍니다.



## Read and publish agreements

<https://www.cambridge.org/core/services/open-access-policies/read-and-publish-agreements>

## OA agreement - KERIS, Korea

<https://www.cambridge.org/core/services/open-access-policies/read-and-publish-agreements/oa-agreement-keris-korea>

- 기관이 구독하는 저널 패키지 타이틀리스트를 확인할 수 있습니다.

Click here for a list of all institutions ~ 클릭하면 Excel 파일이 다운로드됩니다.

### Read and Publish agreement with KERIS - Korea


[Scroll down to read in Korean](#) | 한국어 지원은 스크롤을 내려주세요.

*The Korea Education and Research Information Service (KERIS) has made an agreement with Cambridge University Press to support Open Access publishing.*

If you are affiliated with a participating institution, you can **publish your article Open Access (OA) - at no cost to you** - in gold and hybrid journals.

[Click here for a list of all institutions and each institution's chosen journals collection.](#)

Easily check your eligibility to publish OA under this agreement, and the journals available to you, by using our **OA Waiver & Discount checker tool**. In addition, you can enjoy access to [Cambridge University Press journals content](#).

<div> <div>Full</div> <div>  </div> <div> <p>The journals listed below are eligible for OA publishing as part of the 'Publish' element of the agreement.</p> </div> </div>					
Code	Journal	ISSN	eISSN	Subject	Open Access Status
NEU	Acta Neuropsychiatrica	0924-2708	1601-5215	Psychology & Psychiatry	Hybrid OA
ANU	Acta Numerica	0962-4929	1474-0508	Mathematics	Hybrid OA
AAP	Advances in Archaeological Practice		2326-3768	Archaeology & Anthropology	Hybrid OA
AFR	Africa	0001-9720	1750-0184	Area Studies	Hybrid OA
ABD	Africa Bibliography Research and Documentation	2752-6399	2752-6402	Area Studies	Hybrid OA
ASR	African Studies Review	0002-0206	1555-2462	Area Studies	Hybrid OA
ASO	Ageing & Society	0144-686X	1469-1779	Social Studies	Hybrid OA
AGE	Agricultural and Resource Economics Review	1068-2805	2372-2614	Agriculture	Gold OA
AIE	AI EDAM	0890-0604	1469-1760	Engineering	Hybrid OA
AJU	AJIL Unbound		2398-7723	Law	Gold OA no APC

## Open access waivers and discounts

<https://www.cambridge.org/core/services/open-access-policies/waivers-discounts>

기관의 Open Access Agreement 정보를 확인할 수 있습니다.

1. 소속 기관의 국가 입력 – Korea, Republic of
2. 기관명 선택
3. View your publishing agreement 클릭

## Open Access Waivers and Discounts

The costs of publishing Open Access (OA) are typically met through an Article Processing Charge (APC) that is paid by the author or author's funding body or institution. This APC might be waived or discounted if:

- Your institution has an Open Access publishing agreement with Cambridge, such as a [Read and Publish agreement](#)
- You are based in a low- and middle-income country on the [Research4Life country list](#) and publishing in our fully Gold Open Access journals

**Use our tool to find out if you are eligible for an Open Access waiver or discount**

Country/Territory of your institution:

Korea, Republic of

Name of your institution:

Select organisation ▼

If your organisation is not listed, please [view our global OA publishing agreements](#).

View your publishing agreement

## 4. 기관의 Open Access Publishing Agreement 정보 확인

**Your Open Access publishing agreement**

**Article Processing Charge Discount:** Full

**Discount Details:** You may publish OA at no cost in journals covered by this agreement. [Click here for further information.](#)

**Article Types:** Research articles, Rapid communications, Review articles, Brief Reports, Case Reports

↓ [Journals covered by this agreement](#)

**Next Steps**

- ✓ Submit your research using your institutional affiliation (ideally using ORCID). Please note that eligibility is based on the [corresponding author's](#) affiliation
- ✓ Upon acceptance, choose the Gold Open Access option in your author publishing agreement form and select a [creative commons licence](#)
- ✓ We advise authors to check any funder or institutional mandates, for example research-funded authors may need to choose CC-BY (Creative Commons Attribution License)
- ✓ To find out more about publishing Open Access please visit our [publishing Open Access information](#) page or contact [oaqueries@cambridge.org](mailto:oaqueries@cambridge.org)

## 5. Open Access 출판 가능 저널 확인

The journals listed below are eligible for Open Access publishing as part of the above agreement

Q Search and filter

All subjects ▼

- [Acta Neuropsychiatrica](#)
- [Acta Numerica](#)
- [Advances in Archaeological Practice](#)
- [The Aeronautical Journal](#)
- [Africa](#)
- [Africa Bibliography, Research and Documentation](#)

## Cambridge Core User Guide

March 2022



[www.ebsco.co.kr](http://www.ebsco.co.kr)

TEL: 02-598-2571