

Enhance Your Research Capability by Web of Science & Journal Citation Reports



官欣瑩 Renee Guan Lead Business Solution Consultant

Clarivate[™]

Promote Information Literacy and Streamline Research Discovery



Each year more researchers enter the field, and the number of published papers increases.

 \bigcirc Over 4 million articles are published annually¹.

 \bigcirc On average, scientists read 264 articles per year².

○ The number of predatory journals has increased.



How can you confidently and quickly choose the right papers for your research?

¹ 2021 STM Report

² <u>http://www.nature.com/news/scientists-may-be-reaching-a-peak-in-reading-habits-1.14658</u>



Pinpoint relevant research with the Web of Science Core Collection



Streamline your research to accelerate breakthroughs

Web of Science platform

Core Collection

Science Citation Index Expanded
 Social Sciences Citation Index
 Arts & Humanities Citation Index
 Emerging Sources Citation Index
 Book Citation Index
 Conference Proceedings
 Citation Index

Clarivate

Web of Science Core Collection

Accelerate your research using a linked citation network of content from the world's leading journals, conferences and books.

Data Citation Index

Access data sets to validate study findings or reuse in your own work.

Derwent Innovations Index

Easily uncover hidden technical information disclosed exclusively in patent documents.

Preprint Citation Index

Link preprints from several of the largest repositories to the trusted Web of Science ecosystem.

ProQuest Dissertations & Theses Citation Index

Discover post-graduate works from 4,100+ institutions across 60+ countries

Grants Index

Inform your proposal and funding strategies with data on 5.2M+ awarded grants from 400+ agencies

• 4 regional citation indexes

Discover content from locally focused journals throughout Latin America, South Africa, Mainland China, South Korea, and the Arab world.

) 4 life sciences databases

Explore the full spectrum of biomedical literature from agriculture to public health to zoology.

) 3 specialty collections

Find content relevant to researchers in many fields including physics, engineering, and food science.

Clarivate[™]

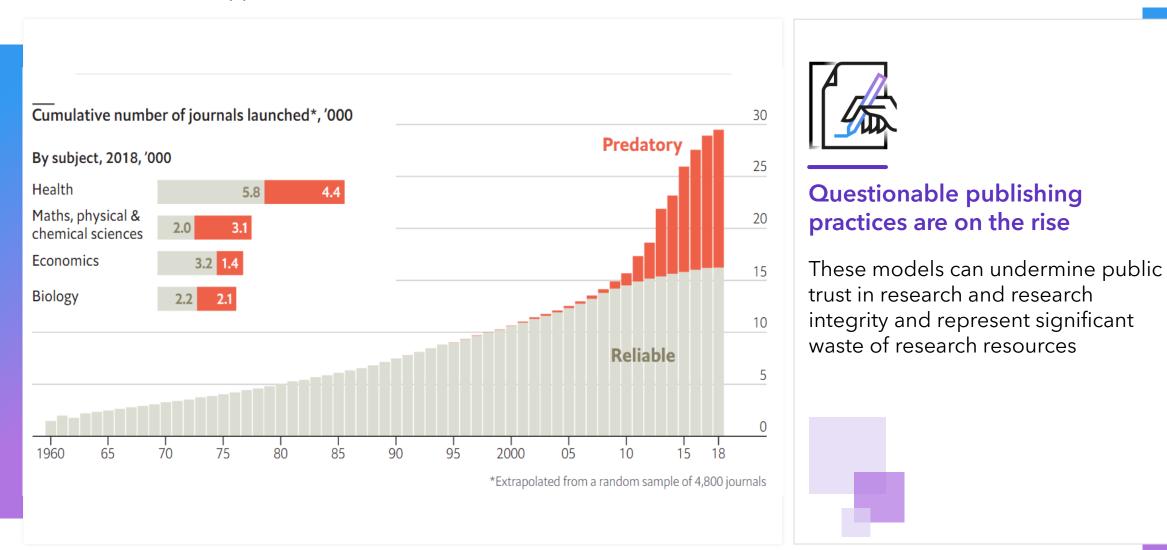
Web of Science Core Collection

Statistics as of October 2021

Increasingly Complex Research Environment

How can librarians support their universities?

Clarivate[™]



© Clarivate 2023 5

The rigorous journal selection criteria ensure the quality control of academic resources.

- The Web of Science Core Collection strictly follows the consistent selection criteria established over the past 50 years, curating the most academically influential and high-quality journals worldwide
- Cover to cover, including comprehensive citation details.
- The Web of Science Core Collection curates high-quality academic resources around the world, saving significant time and effort in reading literature and selecting top-tier articles.

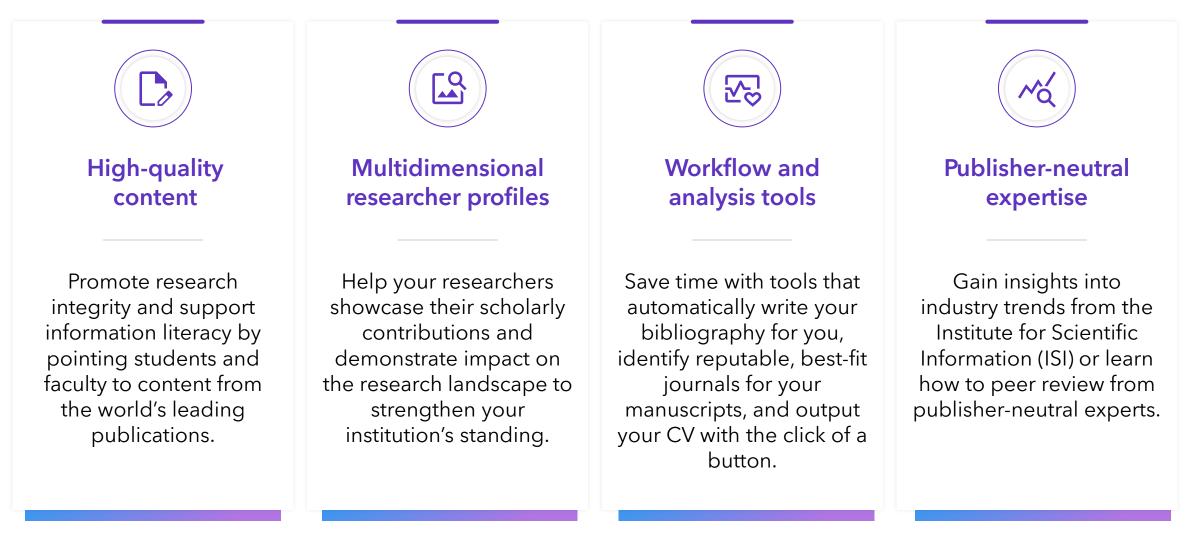
80/20

80% of significant research findings are published in the top 20% of journals globally.



Web of Science

Accelerate your institution's research with an integrated suite of trusted resources



Clarivate[™]

What is a citation?



Dr. Eugene Garfield

Founders of bibliometrics & scientometrics.

...a citation index...tends to bring together material that would never be collated by the usual subject indexing. It is best described as an association-of-ideas index..."

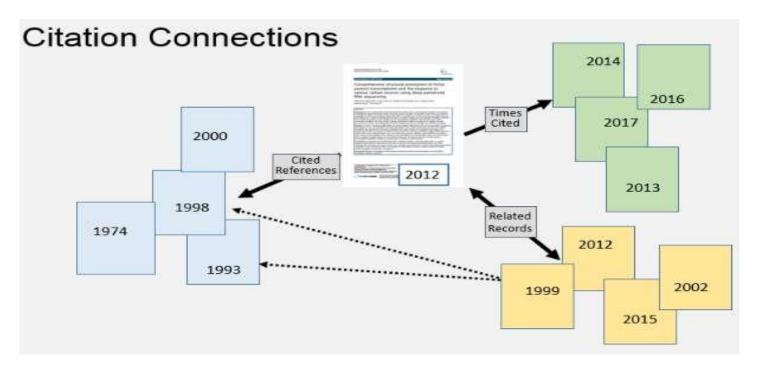
- A **<u>Citation</u>** is a reference to other published materials.
- A <u>**Citation Index</u>** is a database that captures all reference of items, allowing the user to easily establish which later documents cite which earlier documents.</u>

What this means to you:

- Using the citation index, you can easily find older and newer RELATED papers.

Uncover Hidden Connections

Navigate an interconnected web of multidisciplinary research to locate papers relevant to your work.



- Cited References: the research that a paper cites
- **Time Cited**: more recently published papers that cite the paper
- **Related Records**: papers which share at least one cited reference in common with the paper. If they share citations, they're likely discussing similar topics.

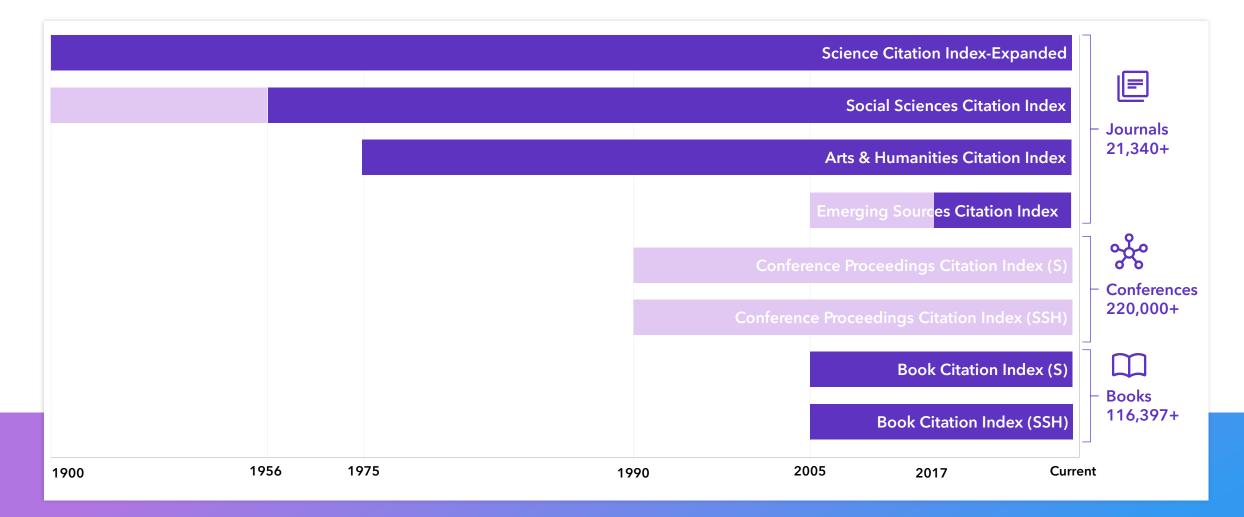
It is particularly useful:

- Where keywords in the topics are not easy to define.
- Where older research needs to be traced.
- When you need to see where a research trend leads.

Clarivate[™]

Web of Science Core Collection data coverage

254 subject categories in WOS CC



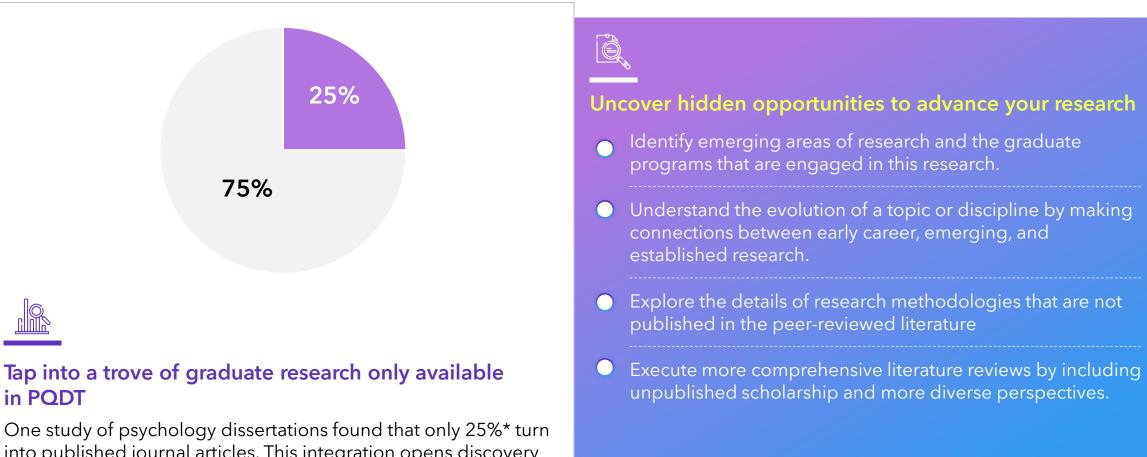
Clarivate[™]

Beyond published literature

Statistics as of October 2021

Broaden your view of a research field

ProQuest Dissertations & Theses Citation Index on the Web of Science

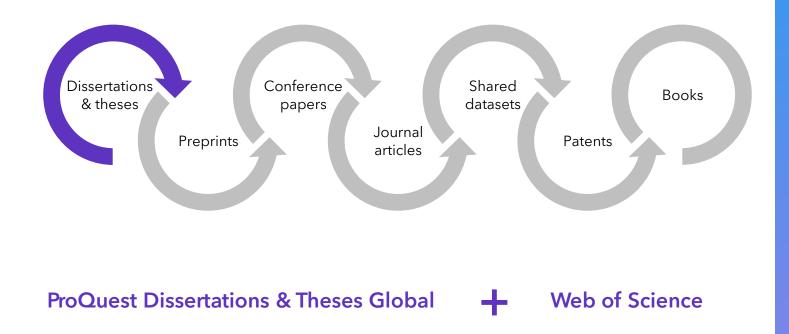


into published journal articles. This integration opens discovery of unpublished work not currently available on the Web of Science platform.

*Field of psychology. Evans et al. (2018) PLoS ONE 13(2): e0192219. https://doi.org/10.1371/journal.pone.0192219. Range 18%-49% across disciplines.

Clarivate

ProQuest Dissertations & Theses Citation Index



Discovery of 5.7M+ metadata
records from ProQuest
Dissertations & Theses Global in a
standalone database

Graduate works from 4K+ universities in 60+ countries around the world

For PQDT Global subscribers, links to 3M+ full text documents

Clarivate[™]

Preprint Citation Index

Integrating preprints into the research ecosystem

	/ID-19 Vaccination in Persons Who Have Already Had COVID-19		4 Citations
Apr 01 2022 medRxi Background. <mark>19</mark> .Methods. E	Burke; (); <u>S. M. Gordon</u> v Total Versions: 1 The purpose of this study was to evaluate the necessity of <mark>COVID-19</mark> vaccination in persons with prior Employees of Cleveland Clinic working in Ohio on Dec 16, 2020, the day COVID-19 vaccination was star positive for <mark>COVID-19</mark> at least once before the study start date was considered previously infected	rted, were included.	18 References
O SVEVX View Full Te	xt At Repository View Published Journal Article ••••		Related records?
health related decis Necessity of COVID-19 Vac By: N. K. Shrestha (N. K. Shrestha Gordon (S. M. Gordon) ^[1] medRxiv	rrint and has not been formally peer-reviewed. It should not be regarded as conclusive, used to guide clinical or ions, or be reported in news media as established information. ccination in Persons Who Have Already Had COVID-19) ^[5] , ^[1] ; P. C. Burke (P. C. Burke) ^[2] ; A. S. Nowacki (A. S. Nowacki) ^[3] ; P. Terpeluk (P. Terpeluk) ^[4] ; S. M.	Citation Net In Preprint Cit 1 Citing Preprint Create citat	ation Index
DOI: 10.1101/2021.06.01.2125817 Published: Apr 01 2022 Indexed: 2022-11-23 Document Type: preprint Version History:	6	4 Times Cited in Databases	18 All Cited References View Related Record
Publication date	External link	 View citing preprints 	
1 2022-04-01	https://www.medrxiv.org/content/10.1101/2021.06.01.21258176v4		

Version History

A collection of 2M+ preprints from 5 repositories, including arXiv, bioRxiv, medRxiv, ChemRxiv, and Preprints.org.

 Quickly locate the latest breakthroughs.

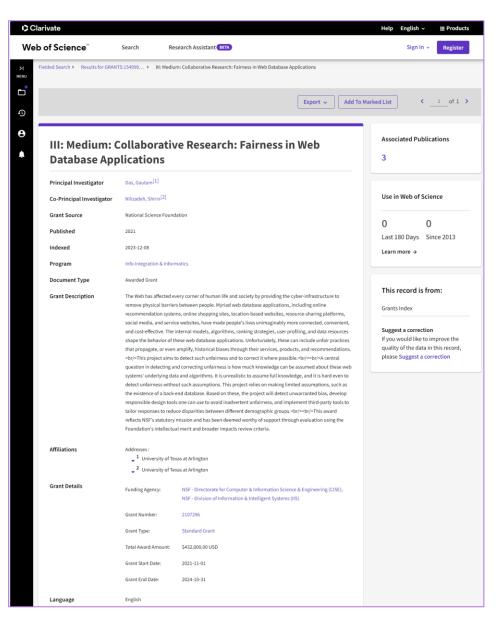
Assess preprint quality.

✓ Trace the evolution of an idea.



You may also like...

Grants Index



 Understand what's already been funded to differentiate new projects and proposals

Explore the published outcomes of previously awarded grants

>5.2 million awarded grants

>400 funding agencies globally

COMING SOON: Showcase awarded grants on your profile



Nobel Prizes & laureates About Stories Educational Events & museums

Q

"FOR THE GREATEST BENEFIT TO HUMANKIND"

ALFRED NOBEL

Citation Laureate

The extensive citation record demonstrates their impact.

- Since 2002, analysts from the Institute for Scientific Information (ISI) have selected the most influential researchers worldwide from the fields of Physiology or Medicine, Physics, Chemistry, and Economics based on citation data from the Web of Science[™] Core Collection.
- Since 1970, of the approximately 61 million papers indexed in the Web of Science[™] Core Collection, only 0.01% have been cited more than 2,000 times. Citation Laureates are typically selected from among the authors of these highly-cited papers.

Clarivate	TM				w	ho we serve 🗸	Products & Services +	Resources +	Q
Investor Relations	Overview	Video Library	News & Events	Financials	Governance	Stock	Contact		CĽ
	_								

Clarivate Reveals Citation Laureates 2024 Company Release - 9/19/2024 3:00 AM ET

Annual recognition highlights researchers with extraordinary citation records and societal impact, poised for Nobel recognition

LONDON, Sept. 19, 2024 /PRNewswire/ - Clarivate Plc (NYSE:CLVT), a leading global provider of transformative intelligence, today unveiled the Citation Laureates[™] 2024 list - used to forecast future Nobel Prize recipients. These 22 exceptional scientists and economists spanning six countries have demonstrated such groundbreaking impact in their fields that their work is considered of Nobel stature. Experts at the Institute for Scientific Information (ISI)[™] at Clarivate[™] have identified 75 Citation Laureates prior to their Nobel success – often several years before they received Nobel honors.

Clarivate

Citation Laureates™ 2024

Celebrating ideas that cultivate change

How many Nobel Prize winners has Clarivate accurately predicted since 2002?

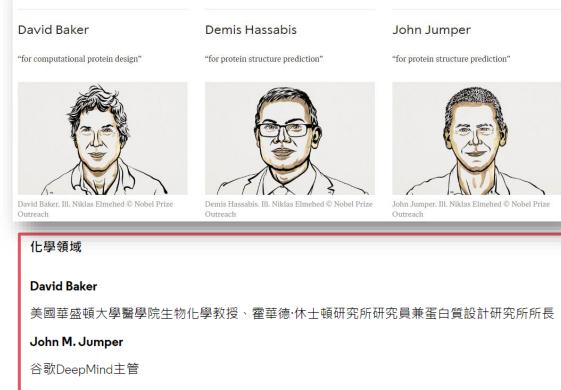


How many 2024 Nobel Prize winners has Clarivate accurately predicted?



Citation Laureate

英國倫敦,2024年9月19日——全球領先的專業資訊服務提供商<u>科睿唯安</u> (Clarivate,紐約證券交易所代碼:CLVT)今天公佈了被譽為「諾貝爾獎風 向球,的2024年度引文桂冠邊名單。來自6個國家的22位傑出科學家和經濟學 The Nobel Prize in Chemistry 2024

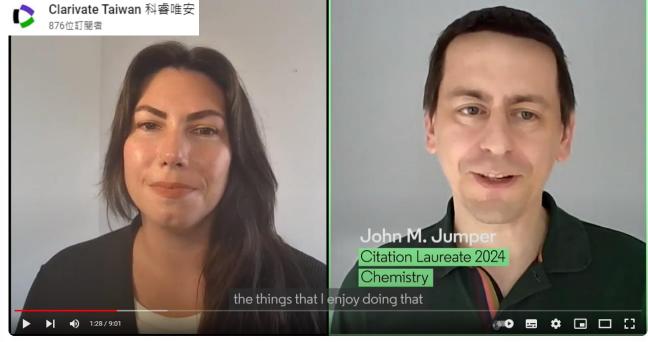


Demis Hassabis

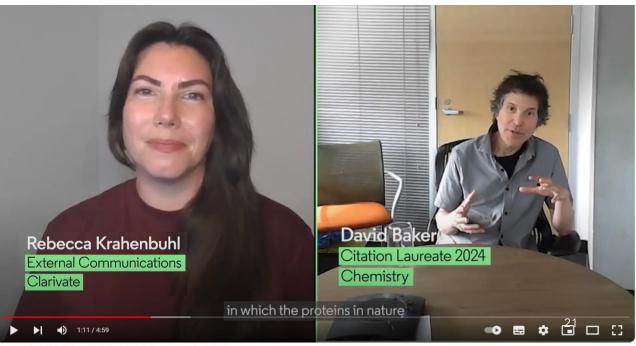
谷歌DeepMind創始人兼首席執行官

獲獎原因:對蛋白質3D結構和功能的預測與設計作出貢獻

Clarivate[™]



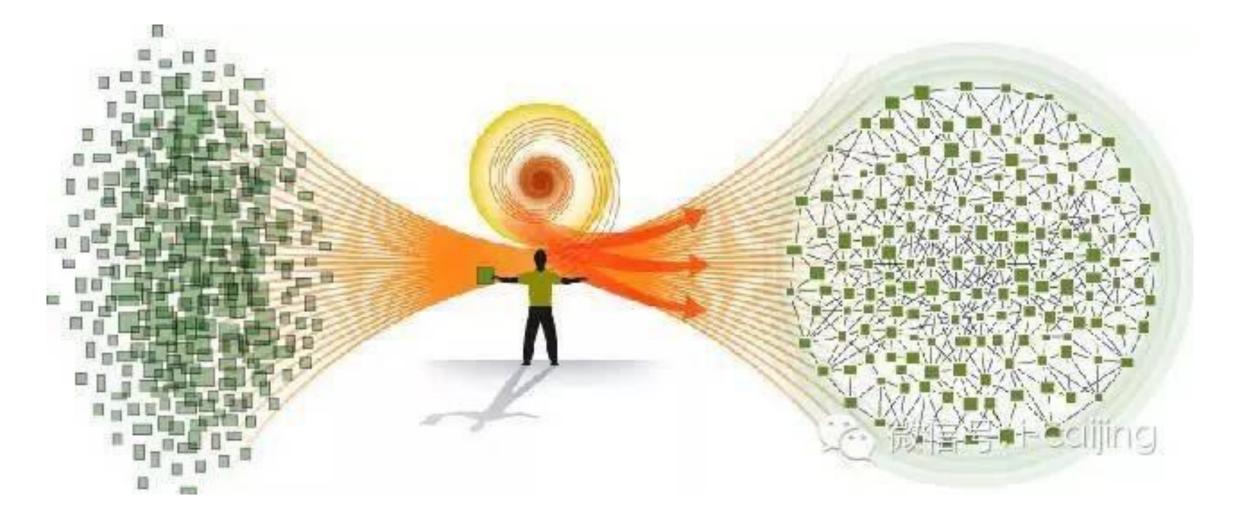
2024 引文桂冠獎: 化學領域得主(John M. Jumper)訪談



²⁰²⁴ 引文桂冠獎: 化學領域得主(David Baker)訪談

Citations: Giving life to scientific literature

Accurate and Comprehensive Research Data Network





Searching "Protein Structure" in Web of Science 43,441 articles??!!!! How to read these papers?

We	eb of Science [™] Search Advanced search ↔ Research Assistant (2) Renee	Guan 🗸
	Search > Results for "protein structure" (Topic) 43,441 results from Web of Science Core Collection for:	
미	·	
3	"protein structure" (Topic)	
2	+ Add Keywords Quick add keywords: < + protein structure + protein structure prediction + membrane protein structure + protein structure determination + protein	>
Ļ		
-	43,441 Documents You may also like Create Alert Create Alert	
	Refine results Export Refine 0/43,441 Add To Marked List Export ~ Citations: highest first ~ Search within results Citations: highest first ~	
	Quick Filters DUSCLE: multiple sequence alignment with high accuracy and high throughput 35,815	
	Edgar, RC Mar 2004 NUCLEIC ACIDS RESEARCH = 32 (5), pp.1792-1797 44	
	Hot Papers 12 References	
	include fast distance estimation using kmer counting, progressive alignment using a new profile function we call the log-	
	expectation score, and refinement using tree-dependent restricted partitioning. The speed and accura Show more	
	Service Contract Service Contract Service Serv	
	Related records ?	
	Open publisher-invited reviews 144	
	UCSF chimera - A visualization system for exploratory research and analysis 33,584 Pettersen, EF; Goddard, TD; (); Ferrin, TE Citations	

Clarivate

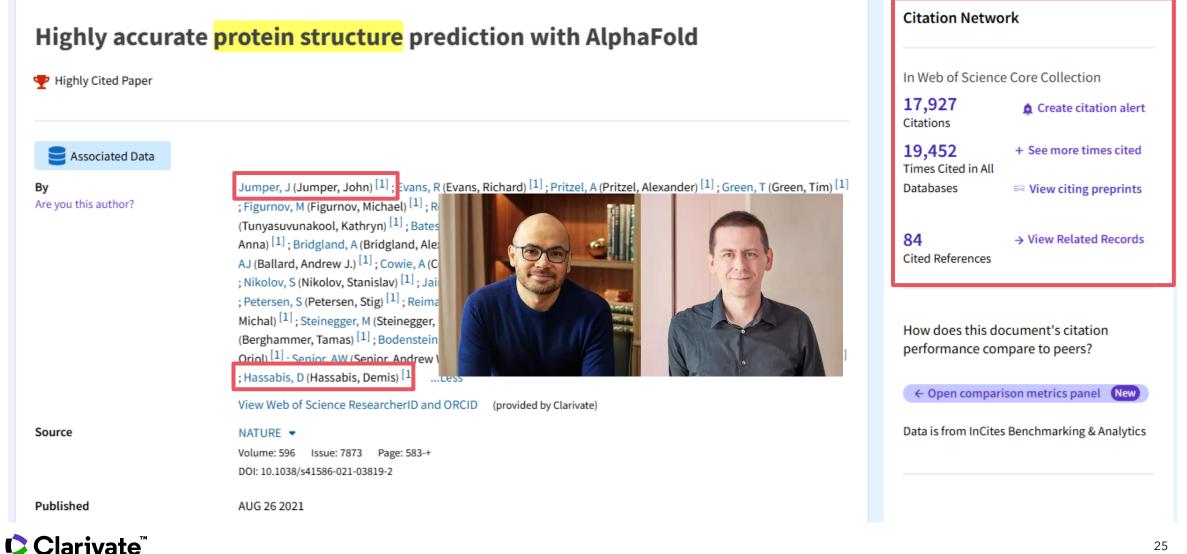
A Simple Tip for Selecting High-Impact Papers: Citations: highest first

Citations are the most direct and formal indicator of a paper's impact

We	b of Science [™] Search Advanced search + Research Assistant	Relevance
		Recently added
Ξ<	Search > Results for "protein structu > Refine results for "protein structure" (Topic) and Highly Cited Papers	Citation class
MENU		Date: newest first
ជ	248 results from Web of Science Core Collection for:	Date: oldest first
~		Citations: highest first
IJ	"protein structure" (Topic)	Citations: lowest first
Ū		Usage (all time): most first
2		Usage (last 180 days): most first
	+ Add Keywords Quick add keywords: < + alphafold + casp + myofibrillar protein + protein structure prediction + protein structure + compu	Conference title: A to Z
Ļ	Refined By: Highly Cited Papers X Clear all	Conference title: Z to A
		First author name: A to Z
		First author name: Z to A
	248 Documents You may also like Analyze Results Citation Report	Publication title: A to Z
		Publication title: Z to A
	Refine results Export Refine	Document title: A to Z
	Refine results Export Refine 0/248 Add To Marked List Export ~ Citations: highest first ~	Document title: Z to A
	Search within results	
	Quick Fillers	17,927 Citations
	🖤 Highly Cited Papers 248 I Jumper, J; Evans, R; (); Hassabis, D	84
		References
	Review Article Review Article Review Article Se Foreins an experimental for the structure of around 100 000 unique particles have been determined(f), but Through an experimental foreit (1-4) the structure of around 100 000 unique particles have been determined(f).	
	○ Early Access 2 This ogn an enominal en	
	Serv Serv Serv Serv Serv Serv Serv Serv	
	□ = Friched Cited References 45	Related records ?
	Open publisher-invited reviews 3	
(Cla	rivate"	24

Quickly Identify Key Literature Through Citations

Utilize citation networks to trace the development of a topic



Quickly Identify Key Literature Through Citations Mining More Research Utilize citation networks to trace the development of a topic **Gems via Citation Networks** Citation Network 2022 **Time Cited** In Web of Science Core Collection 2024 Delve deeper 17,927 Create citation alert 2021 Citations 2025 Cited 19,452 + See more times cited References Times Cited in All Databases View citing preprints 2023 Explore newer findings. 84 → View Related Records 2000 Cited References Related 1980 2008 **Records** How does this document's citation performance compare to peers? 2024 1992 2023 ← Open comparison metrics panel New Cited Expand broader Data is from InCites Benchmarking & Analytics 1999 2000 Clarivate[™]

Mining More Research Gems via Citation Networks **Cited References**

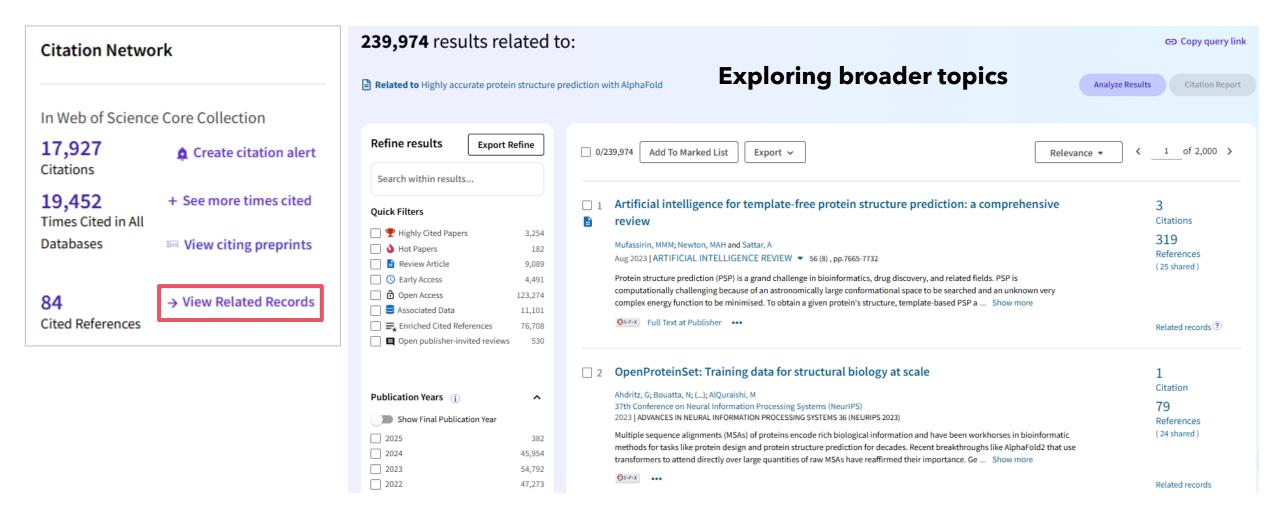
Citation Network	 14 Improved protein structure prediction using potentials from deep learning Senior, AW; Evans, R; (); Hassabis, D 			
In Web of Science Core Collection 17,927 Citations 19,452 + See more times cited	Jan 30 2020 NATURE • 577 (7792), pp. The DeepMind claims that AlphaFold 2 can identify protein structures within days, a task that previously often took the academic community years to accomplish	55 参考文獻 相關記錄		
Times Cited in All Databases Rew citing preprints	 23 Improved protein structure prediction using predicted interresidue orientations Yang, JY; Anishchenko, I; (); Baker, D Jan 21 2020 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA < 117 	849 引用文獻 30		
84 → View Related Records	☐ Jan 21 2020 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA ▼ 117 (3), p The r prote orien @5:F (3), p (3), p The r prote orien @5:F (3), p (3), p	参考文獻 相關記錄		
	 51 Protein structure prediction using multiple deep neural networks in the 13th Critical Assessment of Protein Structure Prediction (CASP13) Senior, AW; Evans, R; (); Hassabis, D 	189 引用文獻 36 參考文獻		
Clarivate [™]	AlphaFold 1 accurately predicted the toughest structures without using templates from similar sequences.			

27

Mining More Research Gems via Citation Networks Time Cited

Citation Network		17,910 results cited:			🕀 Copy query link
In Web of Science	e Core Collection	Citations of Highly accurate protein struct	ture predict	ediction with AlphaFold Analyze Results Explore newer find	Citation Report
17,927 Citations	Create citation alert	Refine results Export Refine Search within results		□ 0/17,910 Add To Marked List Export ~ 1	1of 359 >
19,452 Times Cited in All	+ See more times cited	Quick Filters		Enzymatic degradation of mycotoxin patulin by a short-chain dehydrogenase/reductase from <i>Bacillus subtilis</i> and its application in apple juice	
Databases	📾 View citing preprints	↓ Hot Papers 38 ↓ B Review Article 2,382		Mar 2025 FOOD MICROBIOLOGY • 126	erences
84 Cited References	→ View Related Records	○ Early Access 708 ○ Open Access 13,552 ○ Associated Data 2,792 □ □ ↓ Enriched Cited References 8,995 □ □ Open publisher-invited reviews 200		Experience Patulin (PAT), a notorious mycotoxin widely found in fruits and their derived products, poses serious health risks to humans and animals due to its high toxicity. Biodegradation based on microbial enzymes has shown broad application prospects in controlling PAT contamination due to its environmental friendliness, high efficiency, strong specificity, Stefx View full text •••	ited records (?)
		Publication Years • Show Final Publication Year 2025 22 2025 22 2024 6,549 2023 6,514 2022 4,324	2 2 2	2 Toward understanding the role of genomic repeat elements in neurodegenerative iseases diseases An, ZY; Jiang, AD and Chen, JQ 169 Mar 2025 NEURAL REGENERATION RESEARCH ▼ 20 (3), pp.646-659 Refer Neurodegenerative diseases cause great medical and economic burdens for both patients and society; however, the complex molecular mechanisms thereof are not yet well understood. With the development of high-coverage sequencing technology,	9 erences

Mining More Research Gems via Citation Networks Related Records



Summary



Strategies for Defining Research Directions

Principles: Scientific Rigor, Innovation, Feasibility, and Applicability





Selecting Topics from Scientific Frontiers and Hotspots

Selecting Topics by Extending Existing Research





Selecting Topics from **Unresolved issuess** within the Field

Explore the Web of Science Citation Network

Highly impact Papers	The newest papers	Review article	Relevant subject category
Citation: Highest first	Usage Publication Year	Refine results (Document type)	Refine results (Web of Science Categories ` Citation Topics)

Web of Science: Analyze Your Research Topics

- How to accurately grasp the development direction of a topic?
- Which funding bodies support this topic area?
- What are the potential interdisciplinary directions for this topic?
- How to seek domestic/international collaboration in this field?
- Who are the main researchers in this topic?
- How is this field perceived in the domestic context?

Clarivate

. . .

Analyze Results

Looking for collaborators? Journals? Funding?

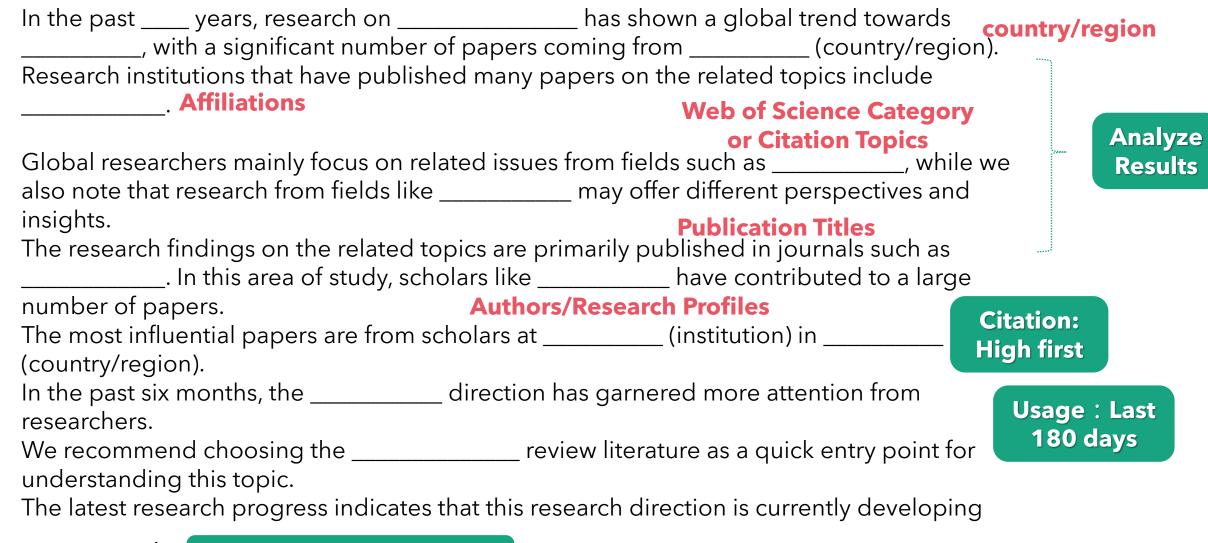
	Web of Science Categories 🗸 🗸 🗸		nalyze Results						
Topic 🔶	ublication Years		1,379 publications selected from Web of Science Core Collection						
Development	Final Publication Year		Neb of Science Categories	~					
Trends	Document Types		teb of ocience categories						
	Researcher Profiles		Sort by: Show:	Minimum record count:					
	Authors 🚽 🛓 Finding Mentors, Review	ers,	Results count v 25 v						
	Web of Science and Collaborators								
	Citation Topics Meso								
	Citation Topics Micro		Visualization: Number of results: TreeMap Chart 10				🛃 DOWNLOAD		
Finding 🔶	Web of Science Index								
		_							
Collaborations	Publication Titles Key Publishing Journals								
and Further	Languages	-	220 Public Environmental Occupational Health		146 Health Care Sciences Services	64 Environmental	62 Psychiatry		
Studies	Countries/Regions					Sciences			
	Publishers								
	Research Areas								
	Open Access								
	Filter by Marked List								
	Funding Agencies								
	Grant Numbers								
	Conference Titles								
	Group Authors								
	Book Series Titles								
Clariv	Editors						34		

Current Status of the Research Topic Worldwide

Quick Insights into Local Research and Personnel



Storytelling with Data: Research Overview via Web of Science







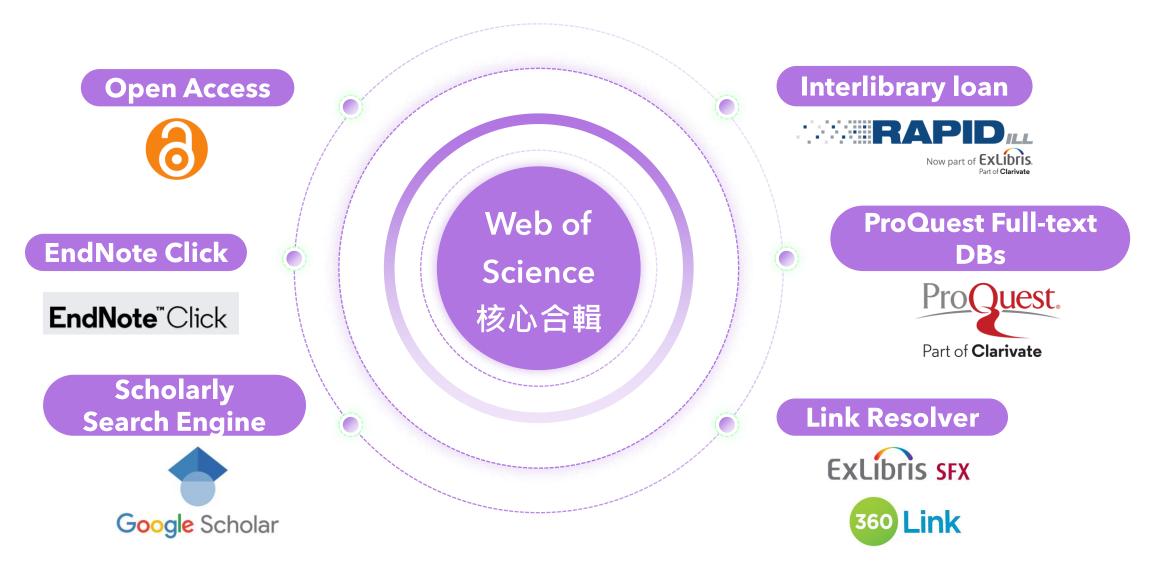
	he Here and now With <mark>Al.</mark>	2 引用文獻
	WARFARE AND SECURITY (ECCWS 2019) , pp.132-141	20 参考文獻
	.y framework In the paper <mark>Al</mark> secure development is introduced along with <mark>Al</mark> ⊿ving an <mark>Al</mark> cybersecurity framework for ML, DNN and CC systems. <mark>Al</mark> deviations are ,e the cybersecurity community to become l顯示更多	
		相關記錄
	ence in marketing	150 引用文獻
	THE ACADEMY OF MARKETING SCIENCE 49 (1), pp.30-50	101 参考文獻
t	ork for strategic marketing planning, incorporating multiple artificial intelligence (AI) benefits: mechanical AI Litions and activities, thinking AI for processing data to arrive at decisions, and feeling AI for analyzing s framework lays out the ways that AI can be used for market … 顯示更多	
	view Full Text on ProQuest ••• View PDF with EndNote Click	相關記錄
	e for <mark>Al</mark> vigilantism (Allantism) in shaping the regulation of <mark>Al</mark>	1
		引用文獻
	,相取閱) INTERNATIONAL JOURNAL OF LAW AND INFORMATION TECHNOLOGY 29 (3) , pp.225-240	55 参考文獻
∠ga	he ethical challenges of artificial intelligence (AI) is nothing new. Researchers and commentators have highlighted the deficiencies of AI Irding visible minorities, women, youth, seniors and indigenous people. Currently, there are several ethical guidelines and Ins for <mark>AI</mark> . These guidelines provide ethical principles and humancentred values to guide the 顯示更多	
檢視全		

Download Full-text

Clarivate[®]

相關記錄

The perfect solution for full-text and Web of Science.



Clarivate[™]

Multiple Ways to Access Full Text

Link Resolver	From Publisher	ProQuest	Other Full Text Links		
Øs-F-X Free F	ull Text From Publisher	View Full Text on ProQuest	Full Text Links 🗸	Ехро	Add To M
Hubble D	eep Field: Ol	oservations, dat		ticle From Repository ticle From Repository Scholar 🔶	metry
By Are you this author?	(Fergus ; Katsai	Williams, RE (Williams, RE) ; Blacker, B (Blacker, B) ; Dickinson, M (Dickinson, M) ; Dixon, WV (Dixon, WV) ; Ferguson, HC (Ferguson, HC) ; Fruchter, AS (Fruchter, AS) ; Giavalisco, M (Giavalisco, M) ; Gilliland, RL (Gilliland, RL) ; Heyer, I (Heyer, I) ; Katsanis, R (Katsanis, R) ;More View Web of Science ResearcherID and ORCID (provided by Clarivate)			
Source	ASTRO	NOMICAL JOURNAL 112 Issue: 4 Page: 1335-& 1086/118105	ORCID (provided by Clarivate)		
Published	OCT 19	96			
Indexed	lexed 1996-10-01				
Document Type	Article	Article			
Abstract	field at detaile evoluti	The Hubble Deep Field (HDF) is a Director's Discretionary program on HST in Cycle 5 to image an undistinguished field at high Galactic latitude in four passbands as deeply as reasonably possible. These images provide the most detailed view to date of distant field galaxies and are likely to be important for a wide range of studies in galaxy evolution and cosmology. In order to optimize observing in the time available, a field in the northern continuous viewing zone was selected and images were taken for ten consecutive days, or approximately 150 orbits. Shorter 1-2			

Interlibrary loanFree full text website

- <u>http://www.freemedicaljour</u> <u>nals.com/</u>
- <u>http://highwire.Stanford.ed</u>
 j/

Contact authors

One-Stop Full-Text Download

Clarivate[™]

ProQuest Full-Text Database / EndNote Click

e Science [™] #	ng盂 進階檢畫 ◆: Research Assistant	繁體中文 ∨ Ⅲ 產品 ② Jack Lee ∨	Full text - PDF	Abstract Translate ~ ()
Science 。 s基础素智基础素 GsrFx 来自出版商的:		ESD ####################################	Abstract/Details	Proteins are ess understanding o around 100,000 billions of known of painstaking e approaches are Predicting the th sequence-the st
Highly accura	ate protein structure prediction with AlphaFold	引用文獻網路		important open methods fall far Here we provide
🎔 高被引論文		於 Web of Science 核心合輯		More ¥
_		17,060		Full Text
■ 開聯資料		51用文献 18,511 + 查看更多被引用次數		I Listen
作者	Jumper, J (Jumper, John) ^[1] ; Evans, R (Evans, Richard) ^[1] ; Pritzel, A (Pritzel, Alexander) ^[1] ; Green, T (Green, Tim) ^[1]	灾,被引用範圍: 所有資料庫 曲 檢視引用預印本		Headnote
IFH	Samper, J Gamper, J Gamper, J Carlos, A Chang, Ki Chan	175211年 - 1880317018944 84 → 検視相關記錄 苗被引参考文獻	🕲 My Locker 🖌 🗧	Proteins are es
	檢視 Web of Science ResearcherID 和 ORCID (Clarivate 提供)		J. Jumper et al.	- Highly ago
來源	NATURE ▼ 蓉冊:596 現:7873 頁面:583-+ DOI:10.1038/s41586-021-03319-2	與同儕相比,此文獻的引用表現如何?	Nature (2021)	✓ Highly accu structure pr AlphaFold The Alp
出版時間	AUG 26 2021	← 打開比較計量面板	Saved in Locker	Evoform End-to-
早期取閱	JUL 2021	資料來源自 InCites Benchmarking & Analytics	🛃 Download PDF	predicti Training unlabell
已建立索引	2021-07-15		Anare PDF	Interpre
埋 醭淘文	Article		Export to EndNote Desktop	MSA de chain co
摘要	Proteins are essential to life, and understanding their structure can facilitate a mechanistic understanding of their function. Through an encoursue experimental effort(1-4), the structures of around 100,000 unique proteins have	依照分類引用項目 New 根據 8403 個引用項目的可用引用內容資料和	Push to EndNote Web	Related Discuss
	been determined(5), but this represents a small fraction of the billions of known protein sequences(6,7). Structural coverage is bottlenecked by the months to years of painstaking effort required to determine a single protein structure. Accurate computational approaches are needed to address this gap and to enable large-scale structural	10.0% 0403 回51 市場日的91 市51 市以各員1474 資料片段,解析提及此文獻的方式。	Visit journal pageGet citation	Online Fig. 1 A highly a
	promormates: - reacting the three timeston a structure that a protein will adopt based solely on its amino acid sequence-the structure prediction component	Background 2562	Nanage tags	Fig. 2 A AlphaFi structur
EN	research problem for more than 50 years(9). De pite recent progress(10-14), existing methods fail far short of atomic resurces, expectable webs on bone locate studies that is available. Here we provide the first computational method that can equily ble used is partial existing webs are used in a provide the first computational method that can equily ble used is partial existing webs are used in a provide the first computational method that can equily ble used is partial existing webs are used in a provide the first computational method that can equily ble used is partial existing webs are used and the provide the first computational method that can equily ble used is partial existing and the provide the first computational method that can equily ble used is partial existing and the provide the first computational method that can equily ble used is partial existing and the provide the first computational method that can equily ble used is partial existing and the provide the provide the first computational method that can equily ble used is partial existing and the provide the provide the first computational method that can equily ble used is partial existing and the provide the provide the first computational method that can equily ble used is partial existing and the provide the provide the first computational method that can equily ble and the provide the provi	Basis 5263 22 ?	Web of Science record	Fig. 3 A Fig. 4 Ir neural r

Q 27 d (] ... Highly accurate protein structure prediction with AlphaFold Jumper, John; Evans, Richard; Pritzel, Alexander; Green, Tim; Figurnov, Michael; et al. > Nature; London Vol. 596, Iss. 7873, Research Assistant BETA 🚱 Here is the key takeaway for this document. life, and understanding their structure can facilitate a mechanistic By developing an accurate protein action. Through an enormous experimental effort1-4, the structures of structure prediction algorithm coupled roteins have been determined5, but this represents a small fraction of the with existing large and well curated structure and sequence databases, we sequences6,7. Structural coverage is bottlenecked by the months to years hope to accelerate the advancement of ired to determine a single protein structure. Accurate computational structural bioinformatics that can keep address this gap and to enable large-scale structural bioinformatics. pace with the genomics revolution. sional structure that a protein will adopt based solely on its amino acid Additional topics discussed in the text rediction component of the 'protein folding problem'8-has been an are: the role of AlphaFold in structural problem for more than 50 years9. Despite recent progress10-14, existing bioinformatics, the challenges of atomic accuracy, especially when no homologous structure is available. experimental structure determination. computational method that can regularly predict protein structures with and the significance of evolutionary history in protein structure prediction. These topics are significant for researchers as they highlight the importance of computational methods in overcoming experimental limitations and advancing our understanding of protein structures. ᄐѽዏ

Access provided by POCS Internal - ProOuest Associate My Research Acc

life, and understanding their structure can facilitate a mechanistic

Article

Highly accurate protein structure prediction with AlphaFold

https://doi.org/10.1038/s41586-021-03819-2 John Jumper¹⁴, Richard Evans¹⁴, Alexander Pritzel¹⁴, Tim Green¹⁴, Michael Figurnov¹⁴ Olaf Ronneberger^{1,4}, Kathryn Tunyasuvunakool^{1,4}, Russ Bates^{1,4}, Augustin Zidek^{1,4}, Anna Potapenko^{1,4}, Alex Bridgland^{1,4}, Clemens Meyer^{1,4}, Simon A. A. Kohl^{1,4}, Received: 11 May 2021 Accepted: 12 July 2021 Andrew J. Ballard^{1,4}, Andrew Cowie^{1,4}, Bernardino Romera-Paredes^{1,4}, Stanislav Nikolov¹, Rishub Jain^{1,4}, Jonas Adler¹, Trevor Back¹, Stig Petersen¹, David Reiman¹, Ellen Clancv¹, Published online: 15 July 202 Michal Zielinski¹, Martin Steinegger^{2,3}, Michalina Pacholska¹, Tamas Berghamme Open access Sebastian Bodenstein¹, David Silver¹, Oriol Vinyals¹, Andrew W. Senior¹, Koray Kavukcuogla Pushmeet Kohli¹ & Demis Hassabis¹⁴ Check for update

> Proteins are essential to life, and understanding their structure can facilitate a mechanistic understanding of their function. Through an enormous experimental effort1-4, the structures of around 100,000 unique proteins have been determined5, but this represents a small fraction of the billions of known protein sequences⁶⁷. Structural coverage is bottlenecked by the months to years of painstaking effort required to determine a single protein structure. Accurate computational approaches are needed to address this gap and to enable large-scale structural bioinformatics. Predicting the three-dimensional structure that a protein will adopt based solely on its amino acid sequence-the structure prediction component of the 'protein folding problem'8-has been an important open research problem for more than 50 years9. Despite recent progress¹⁰⁻¹⁴, existing methods fall far short of atomic accuracy, especially when no homologous structure is available. Here we provide the first computational method that can regularly predict protein structures with atomic accuracy even in cases in which no similar structure is known. We validated an entirely redesigned version of our neural network-based model, AlphaFold, in the challenging 14th Critical Assessment of protein Structure Prediction (CASP14)¹⁵ demonstrating accuracy competitive with experimental structures in a majority of cases and greatly outperforming other methods. Underpinning the latest version of AlphaFold is a novel machine learning approach that incorporates physical and biological knowledge about protein structure, leveraging multi-sequence alignments, into the design of the deep learning algorithm.

🔊 🛅 👤 🔍

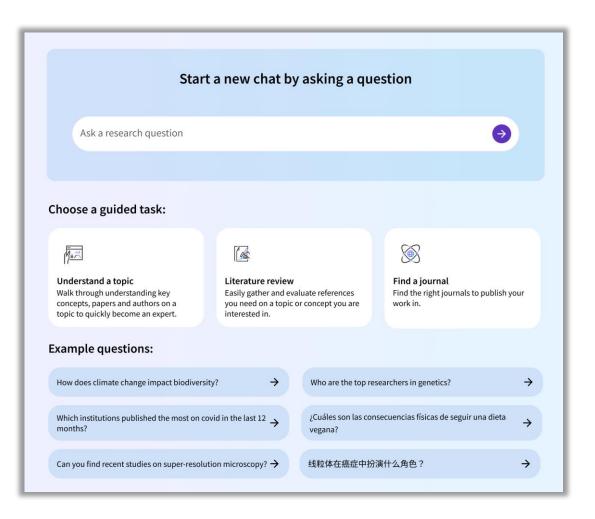
🔀 🖨 🖻 🚿

Enter search terms.

Full Text | Scholarly Journal

Web of Science Research Assistant

Web of Science Research Assistant



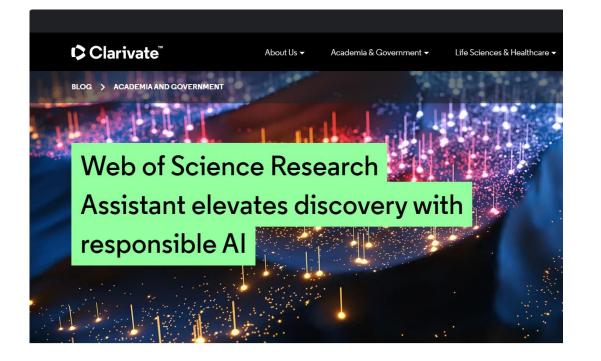
Research smarter

A generative Al-powered tool that helps researchers at all levels get more out of their interactions with the world's most trusted citation index– Web of Science Core Collection.

- Intelligent discovery
- ✓ Task-based guidance
- ✓ Responsible AI

Far more than a chatbot

Elevating discovery with responsible AI





RANCESCA BUCKLAND /P, Product Management, Academia & Government Share this article

Read the blog

"We're excited about the Al features that Web of Science is developing. I think Web of Science Research Assistant will be far superior to the other genAl tools currently available to faculty and students at the moment."

Juan P. Denzer Engineering & Computer Science Librarian Syracuse University

Clarivate[™]

>

Search more efficiently

- Natural language, multilingual search
- Concise, referenced overviews in your search language
- ✓ Verifiable responses
- Over 120 years of research in scope

Clarivate

0

线粒体在癌症中扮演着重要角色。它们是细胞能量生产和细胞代谢的主要细胞器。研究表明,癌细胞可以从免疫细胞中劫持线粒体, 这揭示了癌症谜团中一个关键部分,即对正常细胞的依赖。功能性线粒体有助于癌细胞在恶性肿瘤微环境中生存,逃避免疫监视, 促进进展和治疗抵抗[1]。线粒体在癌症于细胞的代谢中起着关键作用,这些细胞是导致癌症复发和转移的肿瘤组分[1]。通过线粒 体,癌细胞可以逃避免疫监视,增强其恶性转化能力[4]。针对线粒体的药物在癌症治疗中显示出显著优势[4]。因此,针对线粒体可 能提供新的癌症治疗机会[2]。总的来说,线粒体在癌症中扮演着重要角色,研究线粒体可能为未来提供有效且低毒性的癌症治疗方 案提供理论支持[4]。

🖆 🖓 🔲 Copy text

I searched for documents with topic "mitochondria" and "cancer" and I found more than 10,000 total. Listed below are the 8 most relevant articles.

0	Targeted Anti-Mitochondrial Therapy: The Future of Oncology	25	: View mo
	Taghizadeh-Hesary, F; Akbari, H; (); Behnam, B OCT 2022 GENES	Citations	
0	Role of Mitochondria in Cancer Immune Evasion and Potential Therapeutic Approaches	55 Citations	: View mo
	Klein, K; He, KW; (); Welsh, JW October 16 2020 Frontiers in Immunology		
0	Mitochondria-Targeted Nanocarriers Promote Highly Efficient Cancer Therapy: A Review	16 Citations	: View mo
	Zeng, Z; Fang, C; (); Zhang, K NOV 12 2021 FRONTIERS IN BIOENGINEERING AND BIOTECHNOLOGY		
0	To betray or to fight? The dual identity of the mitochondria in cancer	9	: View mo
	Zhang, XY; Su, Q2; (); Jiang, GH FEB 2021 FUTURE OF ONCOLOGY	Citations	
0	Perimitochondrial Enzymatic Self-Assembly for Selective Targeting the Mitochondria of Cancer Cells	55 Citations	: View mo
	He, HJ; Lin, XY; L); Xu, B JUNE 23 2020 ACS NANO		
0	Enzymatic Noncovalent Synthesis for Mitochondrial Genetic Engineering of Cancer Cells	19 Citations	: View mo
	He, HJ; LIn, XY; (); Xu, B DEC 2021 CELL REPORTS PHYSICAL SCIENCE		
0	Revisiting Mitochondria Scored Cancer Progression and Metastasis	12	: View mo
	Gundamaraju, R; Lu, WY and Manikam, R FEB 2021 CANCERS	Citations	
0	Mitochondria in cancer	130	: View mo
	Grasso, D; Zampieri, LX; (); Sonveaux, P JUNE 2020 CELL STRESS	Citations	
	eved a large volume of documents based on your query. Consider providing additional inform: s. Click the link below to view the additional documents relevant to this response.	ation so I can	narrow down
iew	additional documents relevant to this response $ ightarrow$		
ıld yo	ou like to see next?		
e rel	ated and connected concepts II. Documents over time graph for mitochondrial biogenesis tap	See top au	thors on this to and connected

Enter your chat input here

Grasp core concepts faster

- Natural language, multilingual \checkmark search
- Concise, referenced overviews in your search language
- ✓ Verifiable responses
- ✓ Over 120 years of research in scope

Clarivate Web of Science + Research Assistant Search Ξ× 🖾 New chat X MENU Chat history Today (+:) How do microfluidics help with Climate change can lead to the transformation an \mathfrak{D} unsustainable use of natural resources, along with top researchers in civil engineer loss, with climate change projected to exacerbate address the interactions between climate change highly cited on the topic of clim 0 [2]. Biodiversity conservation should focus on the proposing the concept of biodiversity arks to she Incorporating climate change into biodiversity ma Summarize the paper titled "Fo Ū providing guidance on where and how managem What is the effect of meditation the impacts of climate change on biodiversity is e environmental and societal objectives. search for papers with 20 citatio effect of exercise on heart healt View 8 referenced documents Before June 2024 Water provisioning improvement the second effect of exercise on heart healt Sone, JS; Gesualdo, GC; (...); Oliveira, PTS 2023 MAR 20 2019 | SCIENCE OF THE TOTAL ENVIR Papers on mitochondrial fusion Post-2020 biodiversity targets need What affect does social mediati Arneth, A; Shin, YJ; (...); Saito, O what impact have university of DEC 8 2020 | PROCEEDINGS OF NATIONAL AC health outcomes compare befo effective communication strate Biodiversity and Anthropic Climate of Knowledge for the Handling of th voter turnout in highly educatio Vidal, LF; Useche, DC and Hernández, S 2013 | AMBIENTE Y DESAROLLO how politics affect homelessnes O Catching up with climate priorities evolving approach to biodiversity Nedopil, C; Larsen, M; (...); Narain, D 2024 | GLOBAL POLICY

← Document details

Water provisioning improvement through payment for ecosystem services

Highly Cited

View full record Save 🗸

Authors

Sone, JS; Gesualdo, GC, (...)Olivia, PTS

Journal

SCIENCE OF THE TOTAL ENVIRONMENT Volume655Page1197-1206 10.1016/j.scitotenv.2018.11.319

Abstract

We assess whether a Payments for Ecosystem Services (PES) programme met its objectives of reducing soil erosion and yielding water in an environmental protected area, the Guariroba River Basin, Midwestern Brazil. We measured rainfall and water discharge throughout 2012 and 2016. During the same period, soil and water conservation practices were performed in the basin, such as: building level terraces and riparian vegetation recovery. We separated streamflow into baseflow and direct runoff, then we evaluted the baseflow index that indicated that groundwater significantly contributes to total flow. Therefore, to investigate the effects on streamflow, we performed a trend analysis in the baseflow time series using the Mann-Kendall test. In addition, we analysed the efficiency of soil erosion regulation practices over time, considering the total payment and the trends found in the baseflow. Whereas precipitation records present a decreasing trend (1 mm month(-1)), baseflow tends to increase by 0.018 m(3) s(-1) in the same period. Our findings show that soil conservation practices performed in the basin increase baseflow and also provide a better resilience to endure extreme events such as drought based on an increase in forest areas and soil conservation practices such as level terrace. (C) 2018 Elsevier B.V. All rights reserved.

Citation network in Web of Science Core Collection

s: I	43	44	54
	Citations	Times Cited in All Databases	Cited References

Learn more about this document:

See related documents DEC 2017 | CULTURE AGRICULTURE FOOD AN

Biodiversity in World Heritage Culture

Samuels, KL

Communicating Climate Change an

How this document has been mentioned Citing items by classification chart

Clarivate[®]

Uncover meaningful connections with dynamic visualizations



Explore related topics to narrow or expand your search.



Identify trends in a field to help define your research direction.



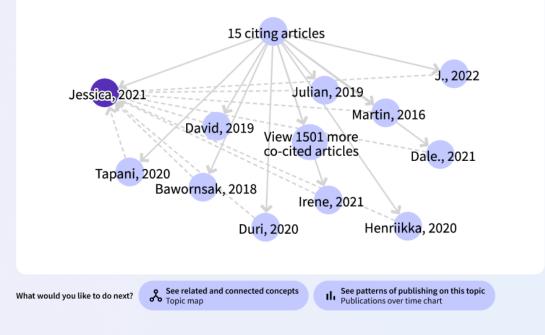
Generate networks to visualize connections between people and papers.

When two documents are co-cited, it means that they are cited together by other documents. The more co-citations two documents receive, the higher their co-citation strength, indicating that they are semantically related. By analyzing which documents are frequently cited together, we can identify key literature and understand the evolution of scientific thought.

Co-citation map for:

0

"Teaching Tech to Talk: K-12 Conversational Artificial Intelligence Literacy Curriculum and Development Tools" by Averchenokova,A; Fankhauser, S and Finnegan, JJ | Oct 21, 2021



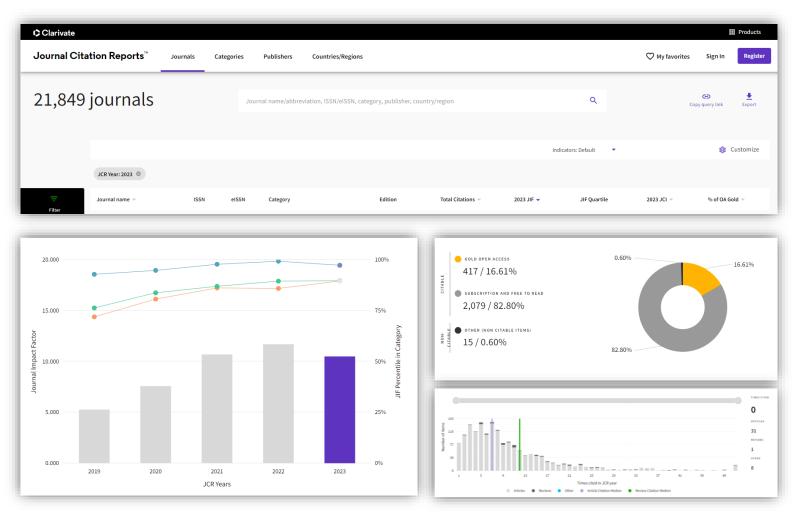
Clarivate[™]

Journal Citation Reports

Statistics as of October 2021

Journal Citation Reports

Assess the world's leading journals with transparent, publisher-neutral journal intelligence



- Find journals consistent with your values to showcase your research
- Ensure your library collections support rigorous research and teaching
- Make data-driven decisions about your open access strategy

Clarivate[®]

Journal Citation Reports

Selectivity

Quickly find a list of trustworthy, influential journals in all disciplines.

Each journal profiled has met the **rigorous quality standards** documented in the Web of Science Core CollectionTM <u>editorial selection</u> <u>process</u>.

Reliability

Work with credible metrics derived from accurate and complete data.

Journals displaying evidence of **excessive self-citation and citation stacking have their JIFs suppressed** from Journal Citation Reports to support research integrity in scholarly publishing.

Transparency

Easily uncover the relationship between article and journal citations to follow best practices in research evaluation.

Monitor journal coverage changes monthly in the Master Journal List.

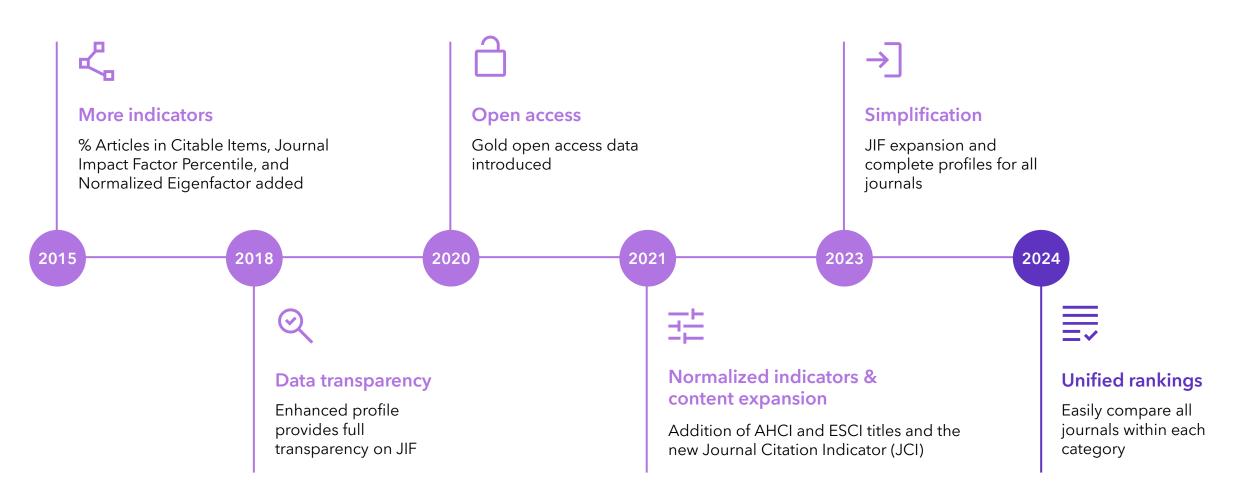
Multiple impact views

Evaluate journals with a multidimensional view of a journal's impact and influence.

View citation metrics alongside **descriptive open access statistics and contributor information** that provide a holistic picture of each journal.



Evolving the JCR to enhance responsible journal evaluation

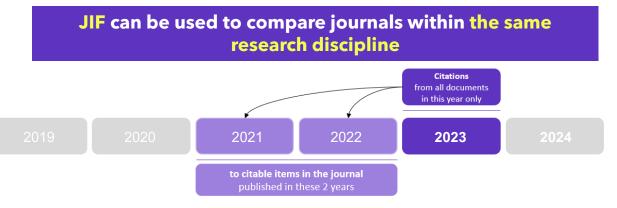


Clarivate[™]

Key Metrics in JCR

Journal Impact Factor (JIF)

Metric for Journal level



Journal Citation Indicator (JCI)

Metric for Journal level-Normalized

JCI can be used to compare journals within different research discipline



the number of citations a typical article or review received in the JCR year.



https://www.youtube.com/w atch?v=5f1D_CqY_RU

the Normalized citation impact of a journal compared to its peer group. A JCI of 1.0 indicates average performance.

Related metrics with JIF

Journal Citation Reports data

Journal Impact Factor Quartile

The Journal Impact Factor quartile is the quotient of a journal's rank in

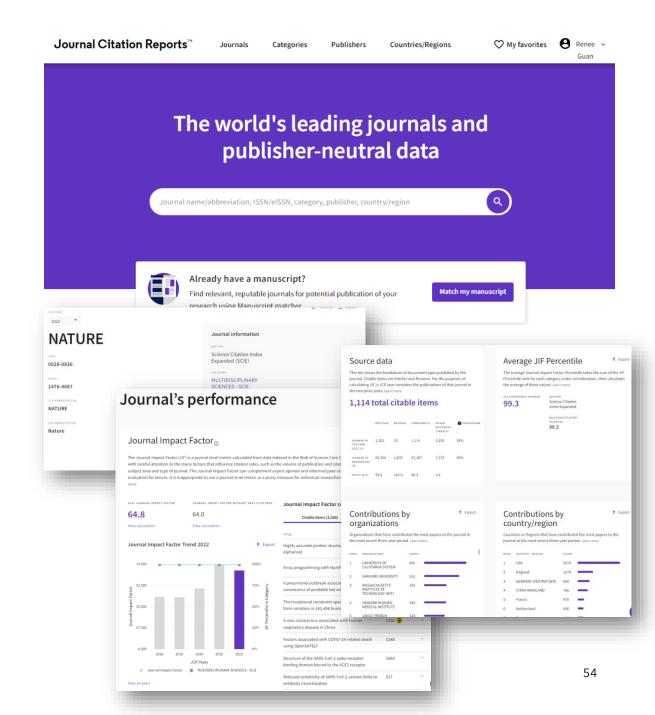
category (X) and the total number of journals in the category (Y), so that (X / Y) = Percentile Rank Z.

Average JIF Percentile

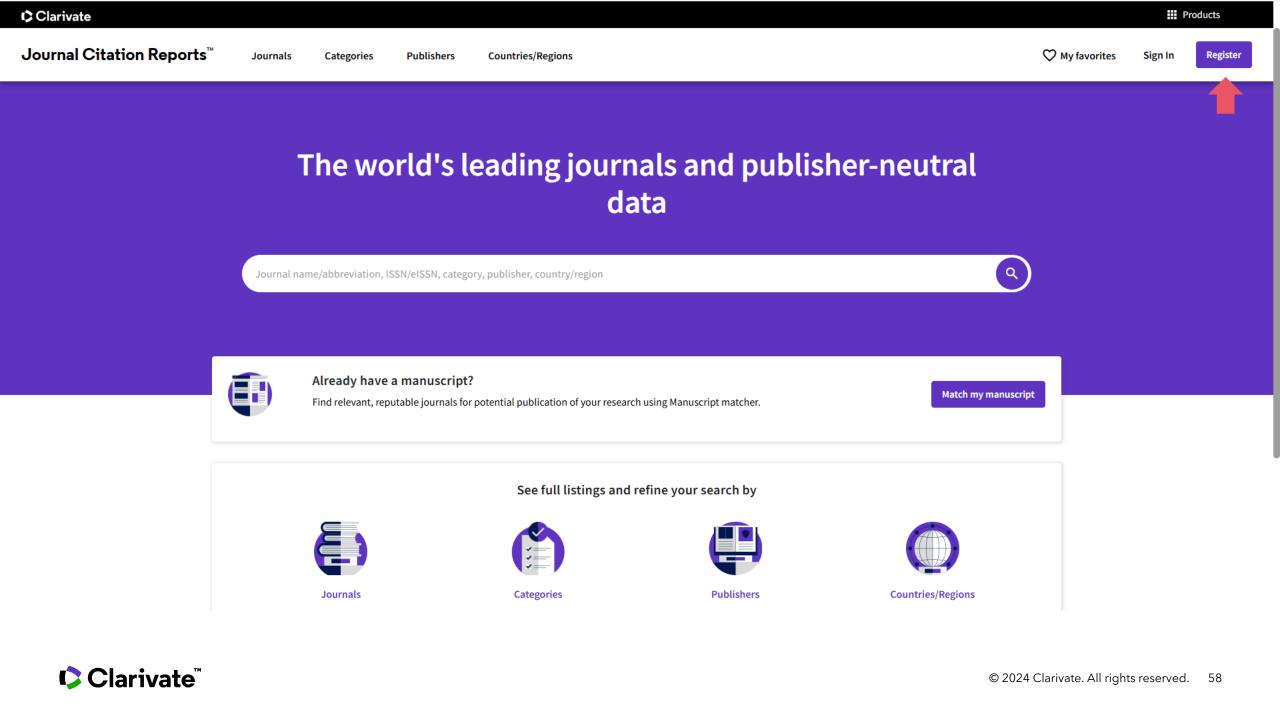
 The Average Journal Impact Factor Percentile takes the sum of the JIF Percentile for each category, and then calculates the average from those values.

Rank by Journal Impact Factor

 Journals within a category are sorted in descending order by Journal Impact Factor (JIF). A separate rank is shown for each category in which the journal is listed in JCR. Beginning in 2023, ranks are calculated by category.



Live demo JCR



More supports

https://clarivate.com/academia-government/training-support/

Clarivate Academ	nia & Government	Products and	services • About • Insights • Contact us
Training and Support		Find resources	~
Training Clarivate Research Solutions tr	and support.		Live training Recorded training
Web of Science EndNote InCites/JCR	Web of Science		
ScholarOne Other solutions	Web of Science platform	Web of Science Core Collection	Derwent Innovations Index







Think forward[™]

© 2024 Clarivate. All rights reserved

Clarivate and its logo, as well as all other trademarks used herein are trademarks of their respective owners and used under license.