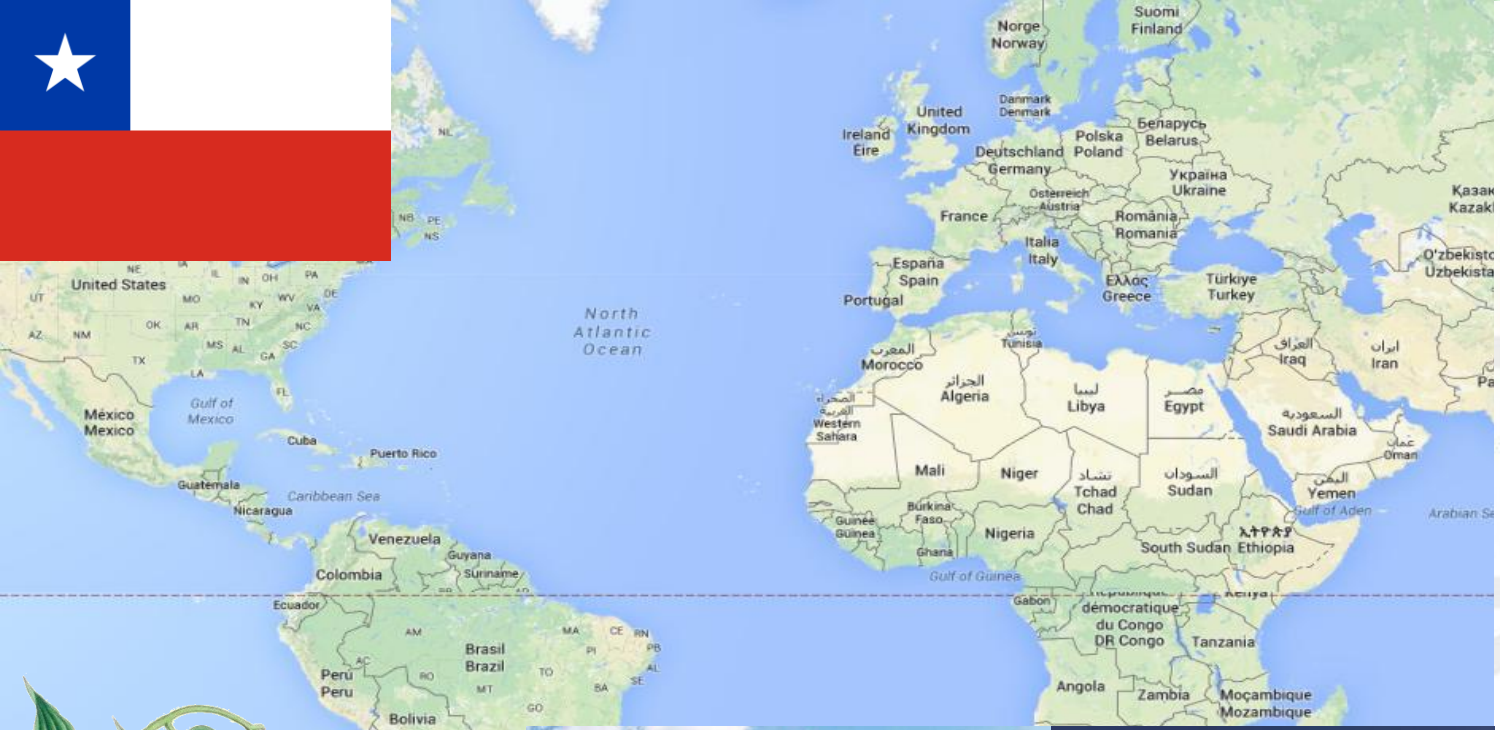
UNIVERSIDAD SAN SEBASTIAN
VOCACIÓN POR LA EXCELENCIA

Taller de Escritura Científica.
Parte 1

Dr. Alvaro Muñoz-Castro
UCSM, 2025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DR Congo
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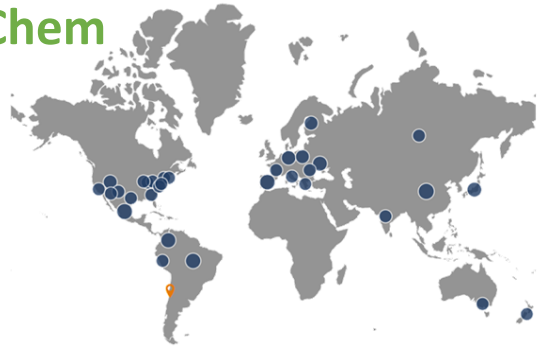
PUNTA ARENAS

CV Dr. Alvaro Muñoz Castro

- **Investigador Sénior | Profesor Titular | Asesor en Investigación**
- **Químico**
- **Sociedades:**
- ChemPhysChem, A Journal of ChemPubSoc Europe. (2018-2026)
- Academia Chilena de Ciencias | **LatinXChem**
- **Publicaciones:**
- ~330 WoS articles (5% USS 2023-2024)
- ~5 book chapters
- ~350 revisiones por pares
- (2020-2023 2%)
- **Proyectos:**
- FONDECYT Regular 1221676
- FONDECYT Exploración 13220074
- http://www.amclab.cl @amclabs (X)
- https://researchers.uss.cl/es/persons/alvaro-muñoz-castro



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THE JOURNAL OF PHYSICAL CHEMISTRY LETTERS
A JOURNAL OF THE AMERICAN CHEMICAL SOCIETY
ACS Chemistry for Life

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Ministerio de Ciencia, Tecnología, Conocimiento e Innovación
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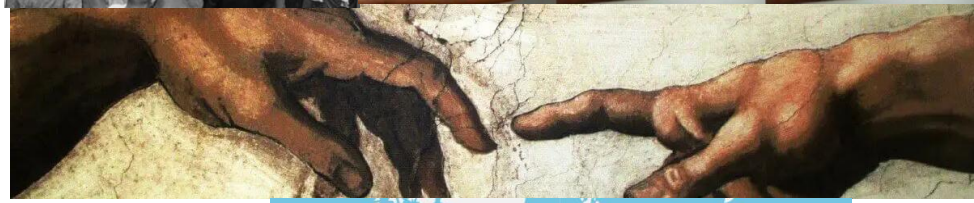
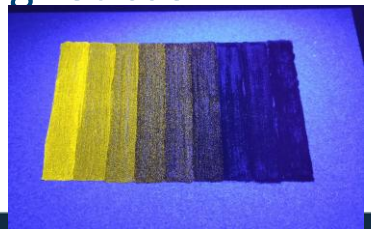
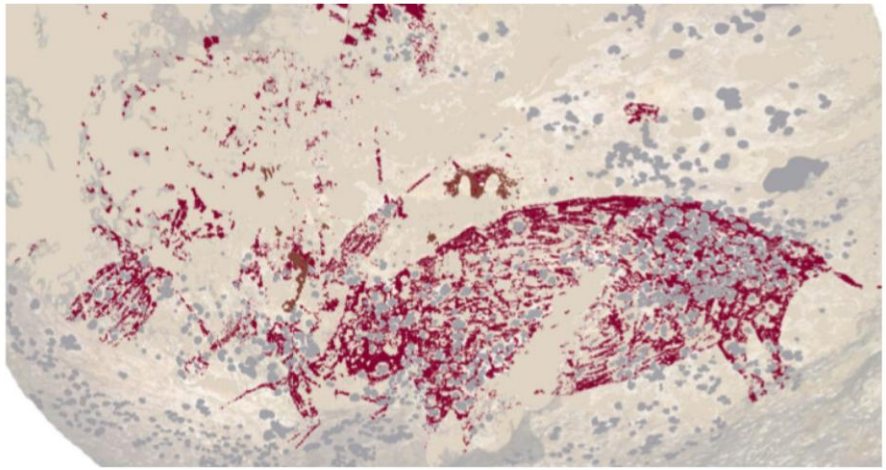
CV Dr. Alvaro Muñoz Castro

- Dr. Alvaro Muñoz Castro
- Químico (PUC),
- Dr. Fisicoquímica Molecular (UNAB),
- Investigador Prof. Titular USS
- Química Inorgánica
- Química Computacional
- **Enlace Químico**
- Cúmulos Metálicos (Clusters)
- Propiedades Magnéticas





¿Cuál es el impacto de publicar?

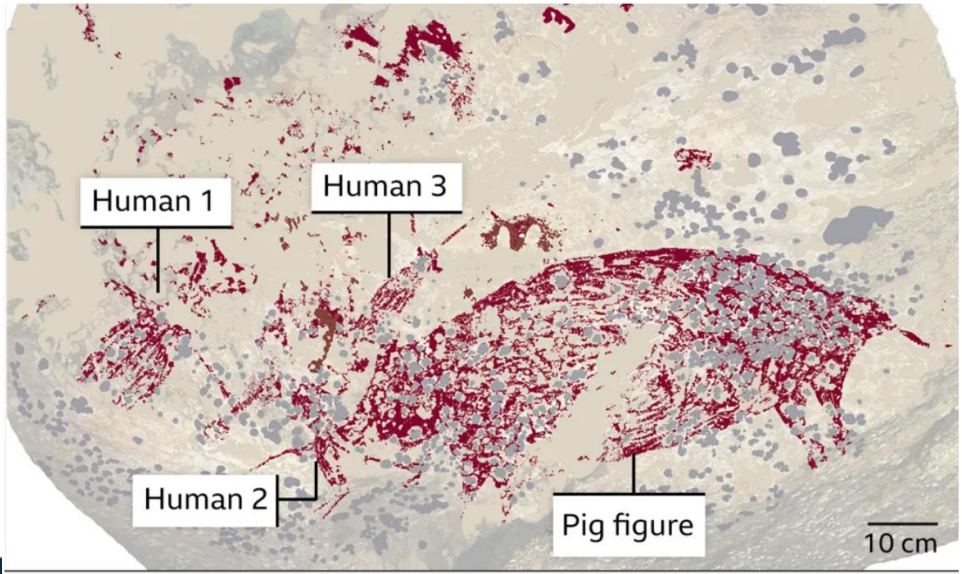


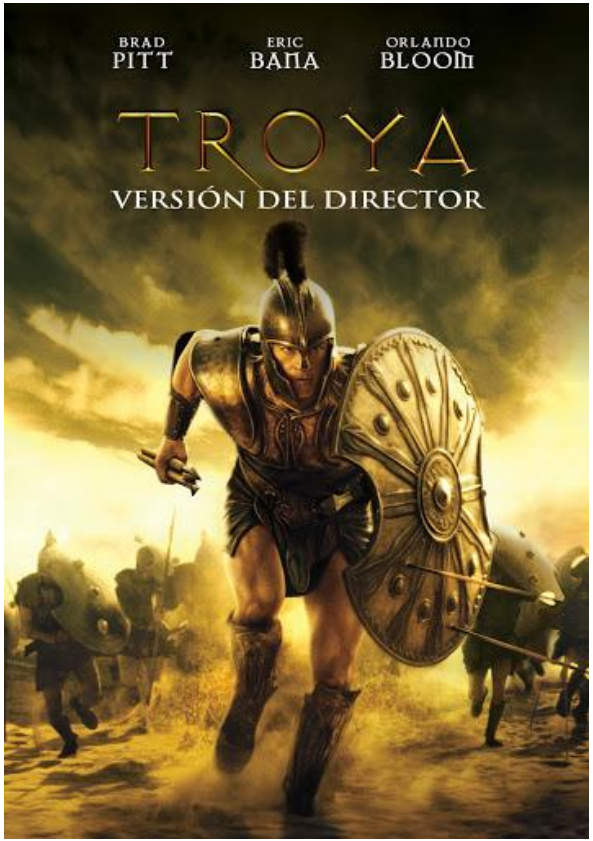
Publicación como actividad humana

51,200 años

10.1038/s41586-024-07541-7

The paintings were found in the caves of Karampuang Hill in the Indonesian Island of South Sulawesi




BRAD PITT
ERIC BANA
ORLANDO BLOOM
TROYA
VERSIÓN DEL DIRECTOR

Niño pequeño- "Ese tesalonio con el que estás peleando... ¡es el tipo más grande que he visto en mi vida! No quisiera pelear con él".

Aquiles- "Por eso nadie va a recordar tu nombre".

Construcción de Conocimiento: Visión de Comunidad

SJR

Scimago Journal & Country Rank

Clarivate
Web of Science™

Decifrar problemas o dudas, que aún no han sido resueltas, para así extender el conocimiento local y global.

Construcción de Conocimiento: ¿Por qué Publicar?

Comunicar resultados de la investigación científica, mediante artículos, ponencias y conferencias, entre otros mecanismos, es esencial, pues, como comúnmente se reconoce, **investigación que no se publica no existe**.

Se puede decir que la investigación culmina al ser publicada en una revista científica; solo así será conocida por la comunidad académica, sus resultados serán discutidos y su contribución hará parte del conocimiento científico universal. **Revisión por pares.**

Algunos expertos consideran que la investigación va más lejos, al sugerir que termina cuando el lector comprende el artículo, es decir, no basta solo con publicar, es necesario que la audiencia entienda claramente su contenido. **Citaciones.**

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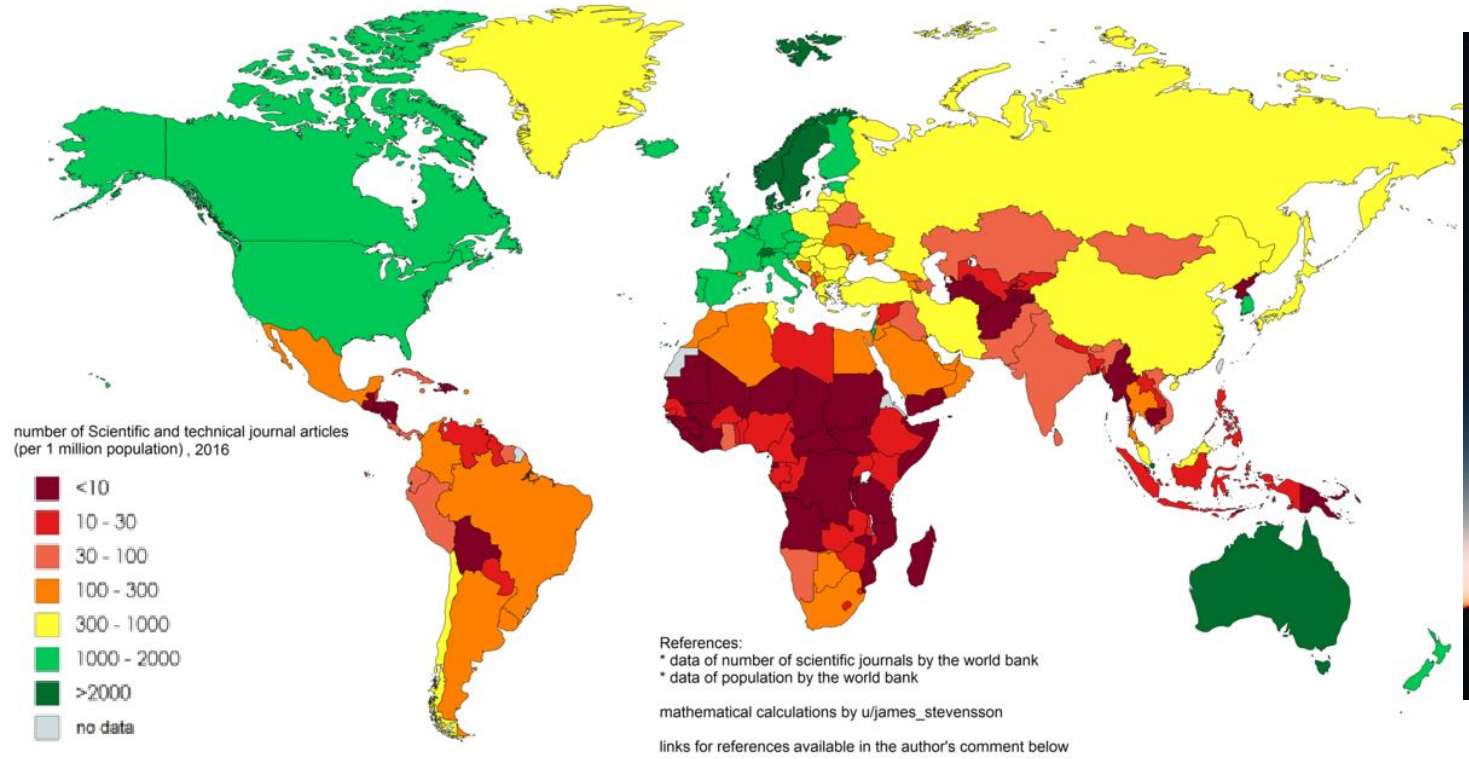
Construcción de Conocimiento: ¿Por qué Publicar?



Generación de conocimientos, solución de problemas locales y globales.

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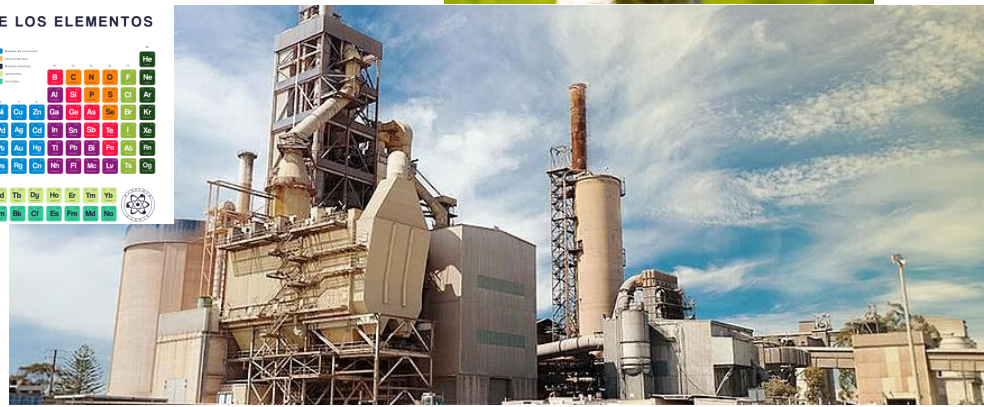
Investigación Científica **Básica** / **Aplicada**

La investigación científica, entendida como el conjunto de procesos sistemáticos y empíricos aplicados al estudio de un fenómeno, es dinámica, cambiante y evolutiva; puede ser:
Básica, al producir conocimiento y teorías, o
Aplicada, al resolver problemas prácticos.



Divulgación Científica
Comunicar Investigación/conocimiento

1.Contribuir a la construcción colectiva del conocimiento.
2.Desmitificar el misterio de publicar.
Conduce al fortalecimiento de la confianza del autor.
3.Estimular la autocrítica.
4.Generar nuevas habilidades.
5.Fomentar la educación continua.
6.Contribuir al mejoramiento de la calidad en la práctica profesional.

¡A publicar se aprende publicando! | **Actividad humana** | **Constante mejora**

Pino Buchillón, *Revista Progaleno Vol1(1)2018*

Las diversas formas de Comunicar Investigación/conocimiento

Las revistas académicas publican contenido en diferentes formatos, no solo artículos de investigación originales.

Algunas formas de literatura académica requieren investigación original (literatura primaria) y algunas se basan en otro trabajo publicado (literatura secundaria). Diversas formas, dado diversidades de actividades humanas.

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Las diversas formas de Comunicar Investigación/conocimiento

A pesar de ser distintas revistas, **TODAS SIGUEN UN PATRON EN COMÚN**.
El objetivo final es comunicar la investigación, por ende hay un formato común que acomoda esta entrega de información como resultado de todas las décadas de realización de esta actividad a nivel mundial.
Como investigador debo analizarlo, para poder redactar informes o artículos, dado el objetivo de comunicar en sociedad.

Antes de comenzar,
debo conocer en que sociedad deseo involucrarme.

SJR

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Tarea 1. Buscar en SJR y/o WoS, categorías de acuerdo a mis intereses.
¿Cuántas revistas existen?

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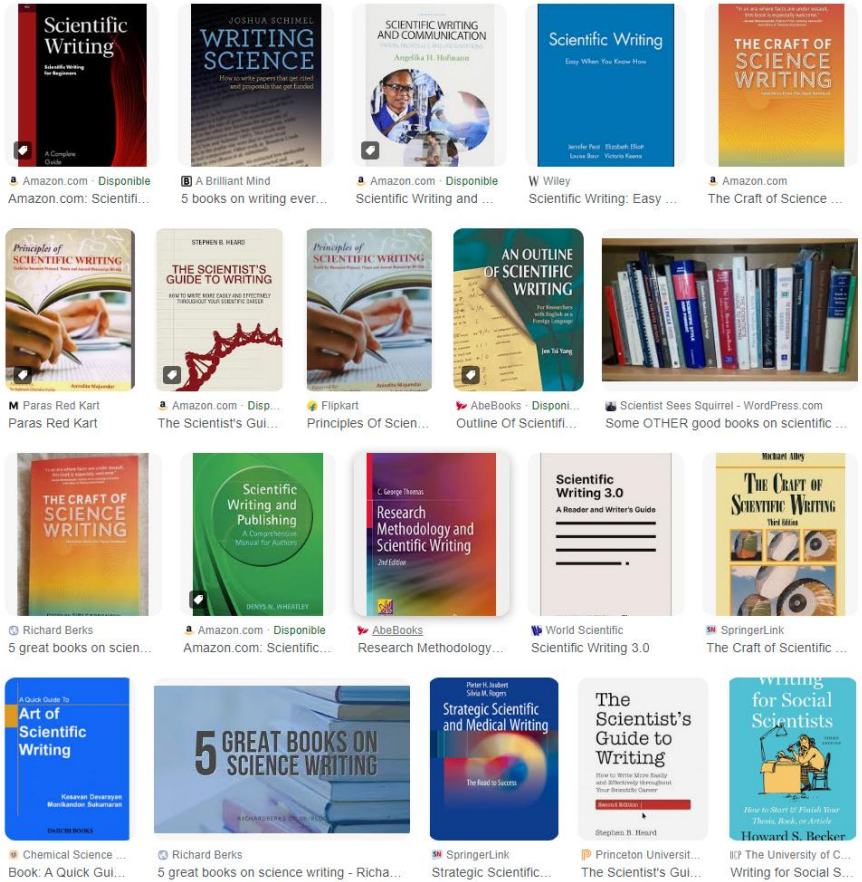
¿Cómo comienzo/mejoro?



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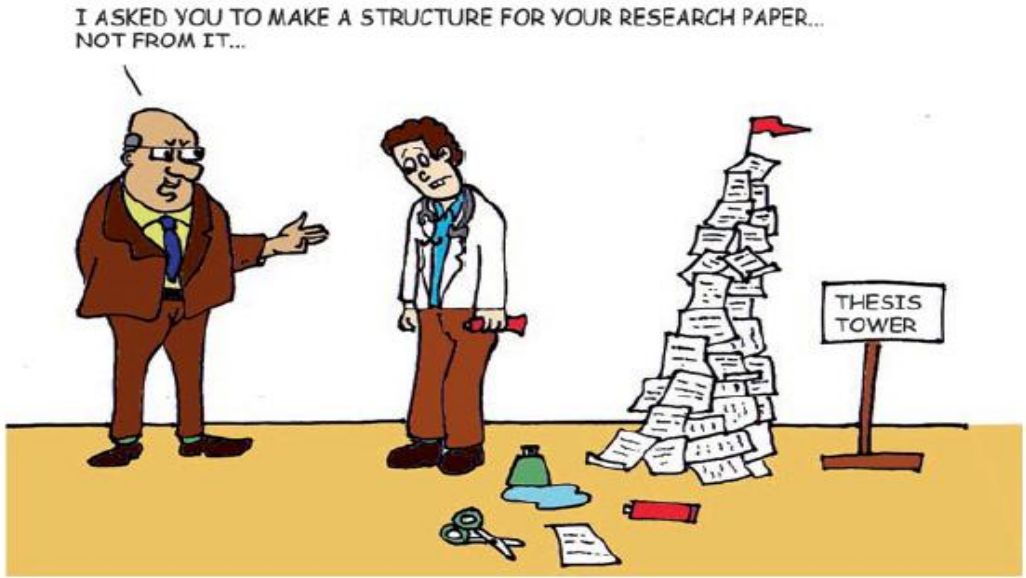
Components and Structure of a Manuscript

Sitanshu Sekhar Kar and Rakhee Kar

The meaning of the paper is hidden by the way it was written – Mary Evans



- Título
- Introducción
- Metodología
- Resultados
- Discusión
- Agradecimientos
- Referencias
- Notas

Title

S. Shyama Prem

Title is the key part of the article which should be designed to engage the readers attention at first sight

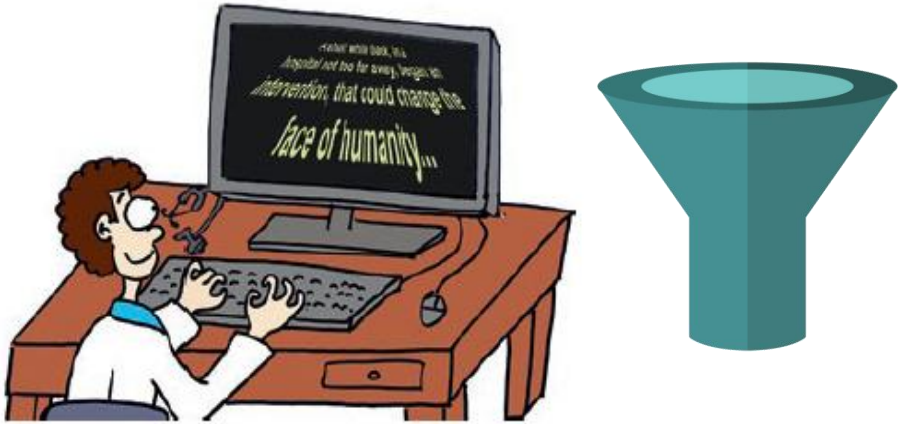
- Simple, preciso, y atractivo.
- ¡NUNCA GENÉRICO!

Introduction

Tamilarasu Kadhiravan and Molly Mary Thabah

Introductions should be short and arresting, and they should tell the reader why you have undertaken the study. – Richard Smith [1]

The introduction is not a data dump or an exercise in mental throat clearing. A proper introduction has a definite format and sets the tone for the remainder of the article. – MaryAnn Foote [2]



- Título
- **Introducción**
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- Notas

Background

Typhoid fever is a common illness in developing countries like India [1] and is a potential threat to developed nations, in an era of increasing air travel and global operations [2]. In the absence of appropriate chemotherapy, typhoid fever was often a fatal illness and introduction of effective antibiotic therapy in 1950s led to a sharp decline in the rates of complications and mortality due to typhoid fever [3]. However, in early 1990s multidrug-resistant strains of *Salmonella enterica* serotype *typhi* (MDR-ST) that were resistant to all the three first-line drugs then in use, namely chloramphenicol, amoxycillin and co-trimoxazole emerged, and sooner MDR-ST became endemic in many areas of Asia, including India [4]. This change in pattern of susceptibility was reflected even in places far away, such as the United Kingdom [5] and the United States of America [6]. Fluoroquinolones are very effective against MDR-ST, achieving fever clearance in less than four days with cure rates exceeding 96%, and are currently the first-line drug for the treatment of typhoid fever [7].

Describe the condition and its relevance

However, towards the end of the last decade, it was observed that fever took longer time than before to clear, and at times surprisingly failed to respond to ciprofloxacin therapy [8-10]. These isolates had comparatively higher minimal inhibitory concentrations (MIC) of fluoroquinolones, although they were susceptible to fluoroquinolones by conventional disc diffusion testing and recommended MIC breakpoints [8-10]. Nevertheless, such strains of *S. typhi* are resistant to nalidixic acid and it was noted that clinical response to fluoroquinolones in patients infected with nalidixic acid-resistant *S. typhi* (NARST) was inferior to the response in those infected with nalidixic acid-sensitive *S. typhi* (NASST) strains [11]. However, it is not clear whether fluoroquinolones can still be used as first-line drug for the treatment of typhoid fever, and if used whether this has any adverse impact on clinical outcomes other than treatment failure such as development of complications and morbidity assessed in terms of total duration of illness. In this scenario, the present study was undertaken to evaluate the impact of infection with NARST on clinical outcomes in patients with typhoid fever.

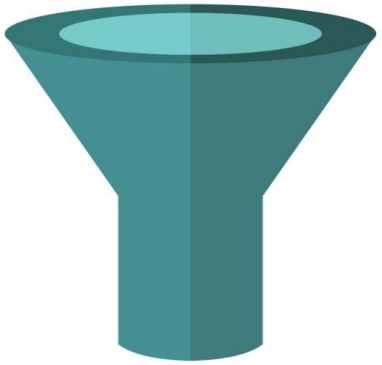
What aspect is your focus?

What is already known?

What is not known?

Why did you do this study?

- Introducción



Methods

B. Vishnu Bhat, S. Kingsley Manoj Kumar, and G. Krishna Rao

Truth has nothing to do with conclusion and everything to do with the methodology. – Stefan Molyneux

- Título
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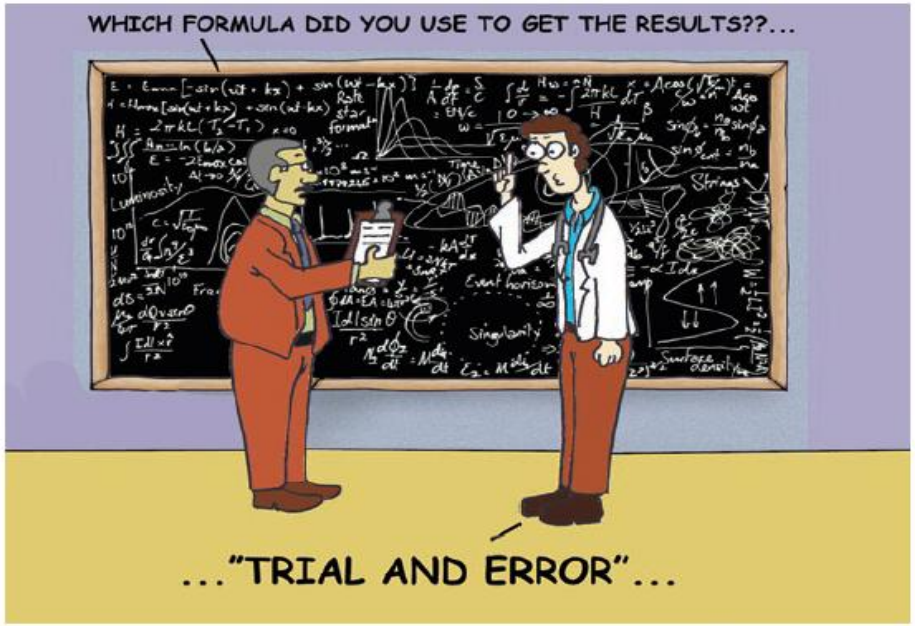
Results

R. Ramesh and N. Ananthakrishnan

Publish your results…results cannot always be interpreted accurately, but they can always be reported accurately. Someone else may define relevance, or the context, or the meaning of something that you have done better than you.
–Donald E. Fry



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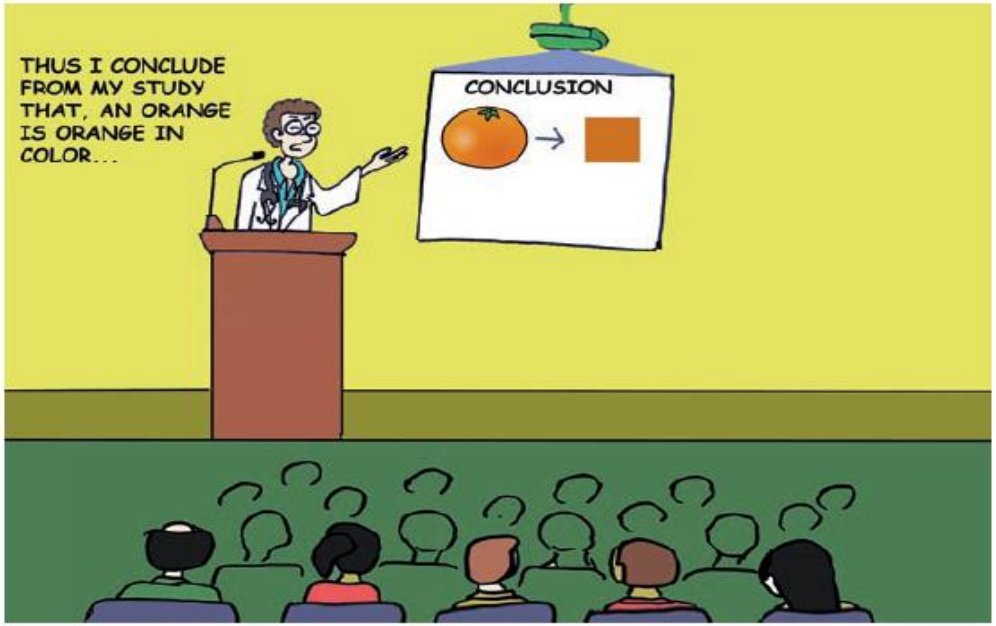
Discussion and Conclusion

Zubair H. Aghai and David Carola

The point of a discussion, in my view, is to transcend "just the facts," and engage in productive speculation. –Stephen Hinshaw



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- Introducción
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- Resultados
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- Agradecimientos
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Fig. 8.1 Contents and sequence of how discussion is covered

- Título
- Introducción
- Metodología
- Resultados
- **Discusión**
- Agradecimientos
- Referencias
- Notas

■ ACKNOWLEDGMENTS

This work was supported by FONDECYT 1140359 and 1180683. We thank the CNRS and MESR (Paris) for funding, and we are grateful to the China Scholarship Council for a Ph.D. grant to P.A.

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- Metodología
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References

Anup Mohta and Medha Mohta

References may be used as the ultimate authority upon which to base arguments. Alternatively, they may be a temporary authority whose validity you intend to challenge or they may be considered as obviously wrong – Taylor

- Título
- Introducción
- Metodología
- Resultados
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- Agradecimientos
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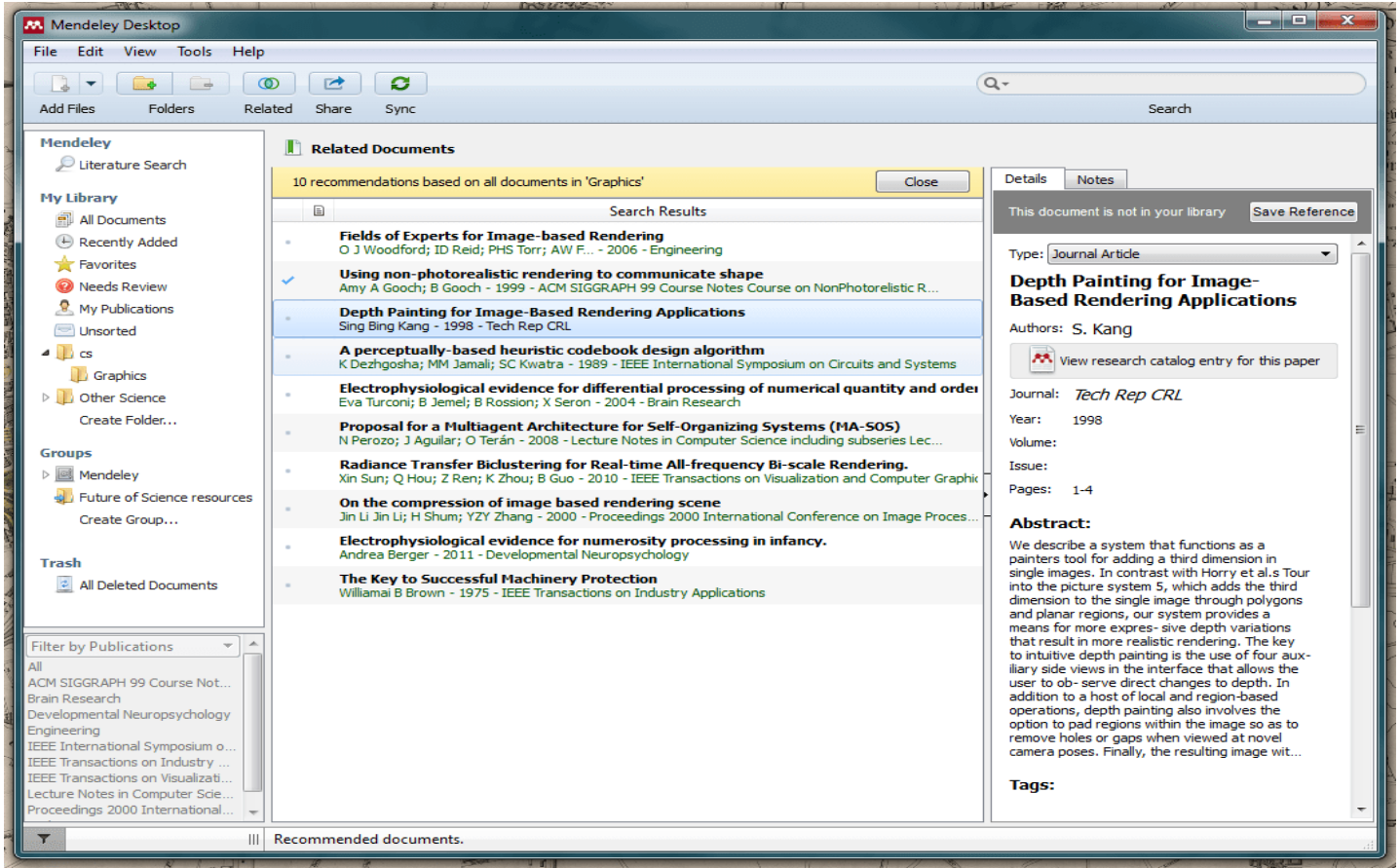
- Notas

MENDELEY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Brain Research
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N Perozo; J Aguilar; O Terán - 2008 - Lecture Notes in Computer Science including subseries Lec...
Radiance Transfer Biclustering for Real-time All-frequency Bi-scale Rendering.
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On the compression of image based rendering scene
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Type: Journal Article
Depth Painting for Image-Based Rendering Applications
Authors: S. Kang
View research catalog entry for this paper
Journal: Tech Rep CRL
Year: 1998
Volume:
Issue:
Pages: 1-4
Abstract:
We describe a system that functions as a painters tool for adding a third dimension in single images. In contrast with Horry et al.s Tour into the picture system 5, which adds the third dimension to the single image through polygons and planar regions, our system provides a means for more expres- sive depth variations that result in more realistic rendering. The key to intuitive depth painting is the use of four auxiliary side views in the interface that allows the user to ob- serve direct changes to depth. In addition to a host of local and region-based operations, depth painting also involves the option to pad regions within the image so as to remove holes or gaps when viewed at novel camera poses. Finally, the resulting image wit...
Tags:
Recommended documents.

- Identificador único digital. DOI (Digital Object Identifier)

DOI: 10.1021/acs.jpcc.8b10190
J. Phys. Chem. C 2019, 123, 915−921

Prefix [allocated] Suffix [chosen by institution]

http://dx.doi.org/10.5255/UKDA-SN-6969-1

URL of DOI Foundation server for directing users to the DOI

DOI registry

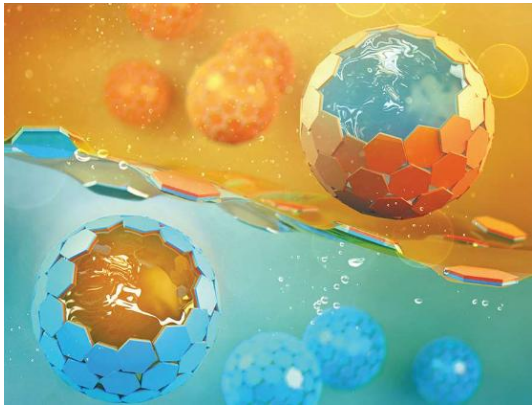
Registrant (UK Data Archive)

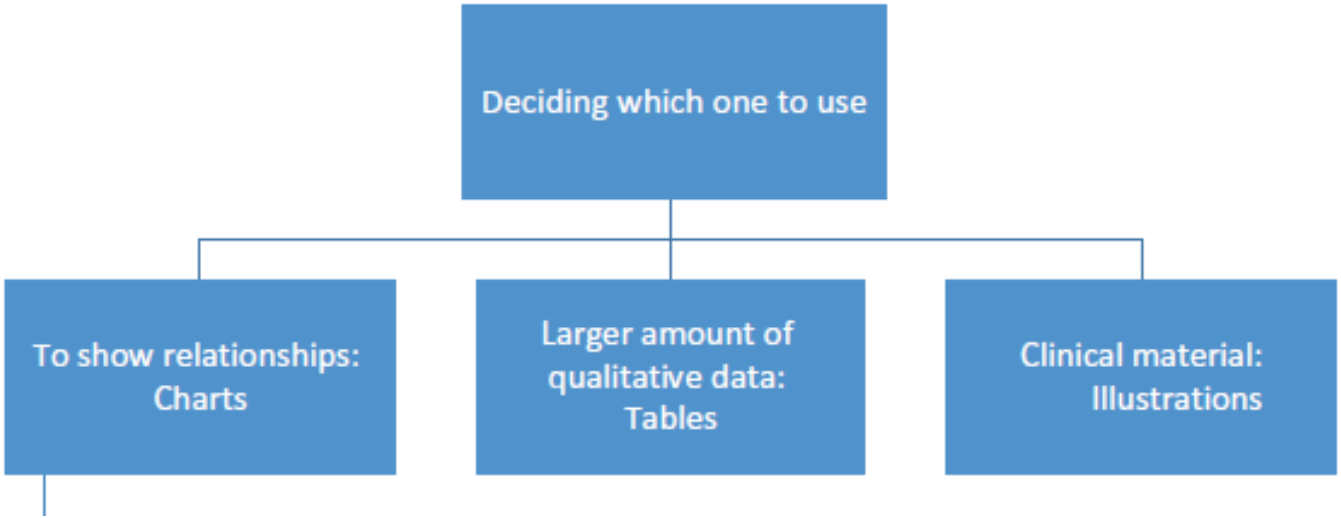
Object: British Social Attitudes Survey, 2010

Figures, Tables and Supporting Material

Dinker Pai, Soon Kyit Chua, and Suneet Sood

Illustrations are the glue that can hold the attention of the reader.




Deciding which one to use
To show relationships: Charts
Larger amount of qualitative data: Tables
Clinical material: Illustrations

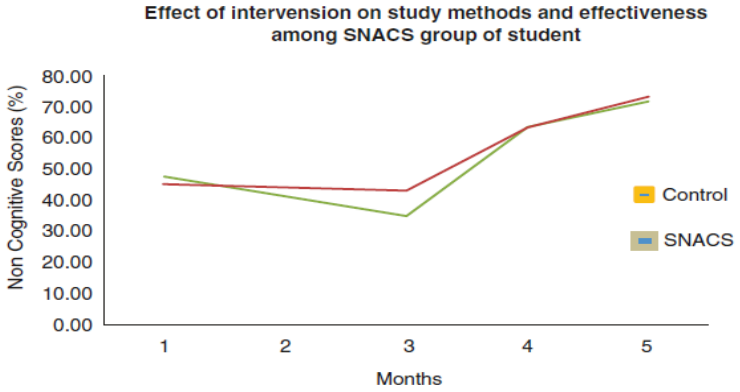


Fig. 7.7 Good line graph

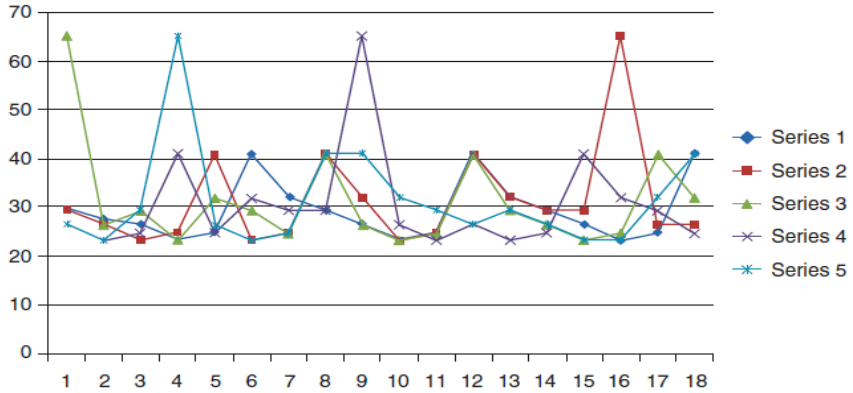


Fig. 7.8 Cluttered line graph

Choosing a Journal for Paper Submission and Methods of Submission

Vikram Kate, Madhuri Parija Halder,
and Subhash Chandra Parija

If it wasn't published, it wasn't done. – E.H. Miller 1993

Revision of an Article and How to Deal with the Rejected Manuscript

Vikram Kate and Raja Kalayarasan

Rejection is nothing more than a necessary step in the pursuit of success. – Bo Bennet

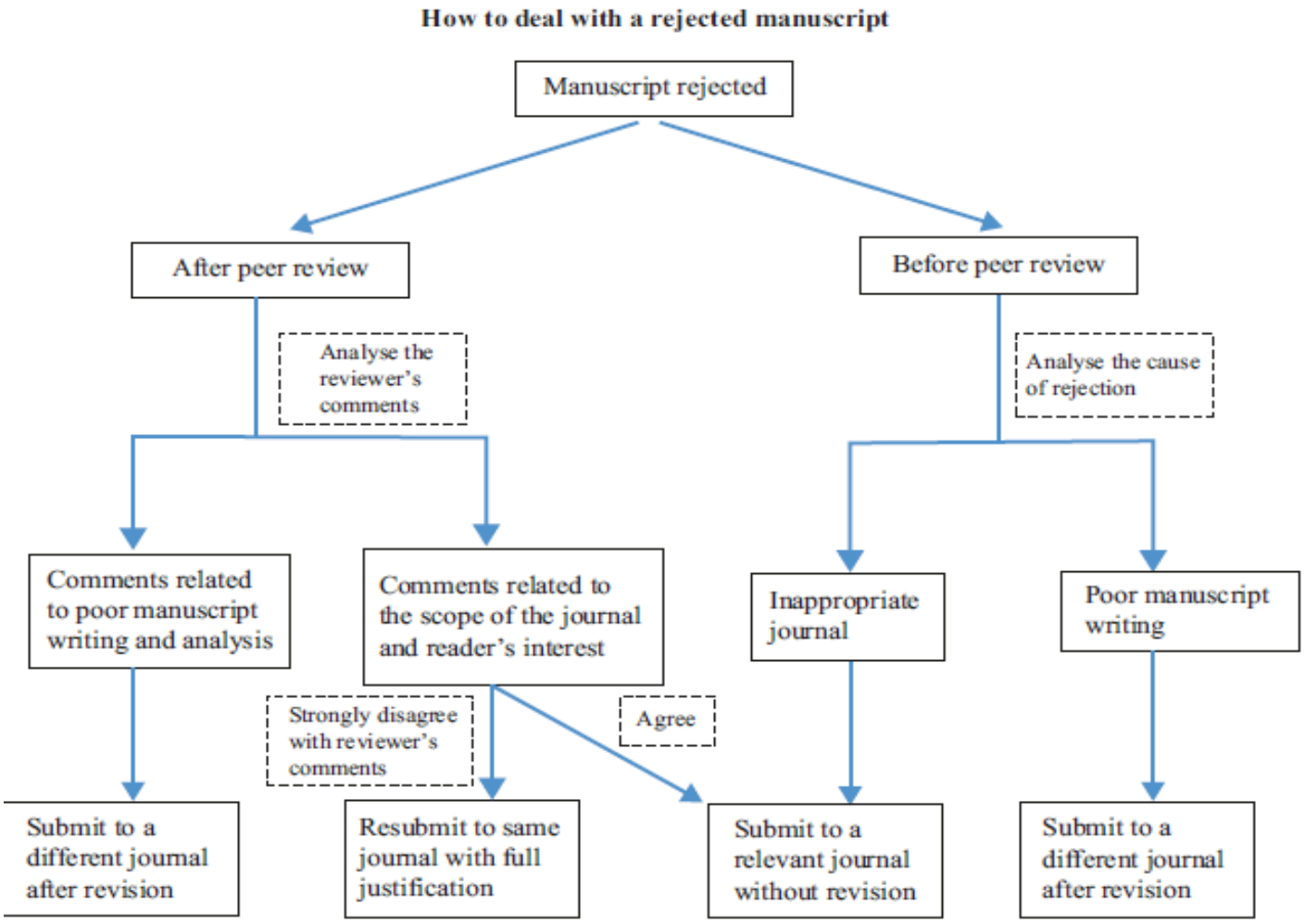


Fig. 12.1 Shows an algorithmic approach to deal with a rejected manuscript

Authorship and Contributorship

Akash Shukla and Avinash Supe

If you haven't done the work, don't put your name on it.
If you put your name on the paper, then you are stuck with it.
– CF Wooley

Types of Manuscripts

Rajive Mathew Jose and Kiruthika Sivasubramanian

As far as he can achieve it, readability is as important for the scientific writer as it is for the novelist. – Donald O. Hebb

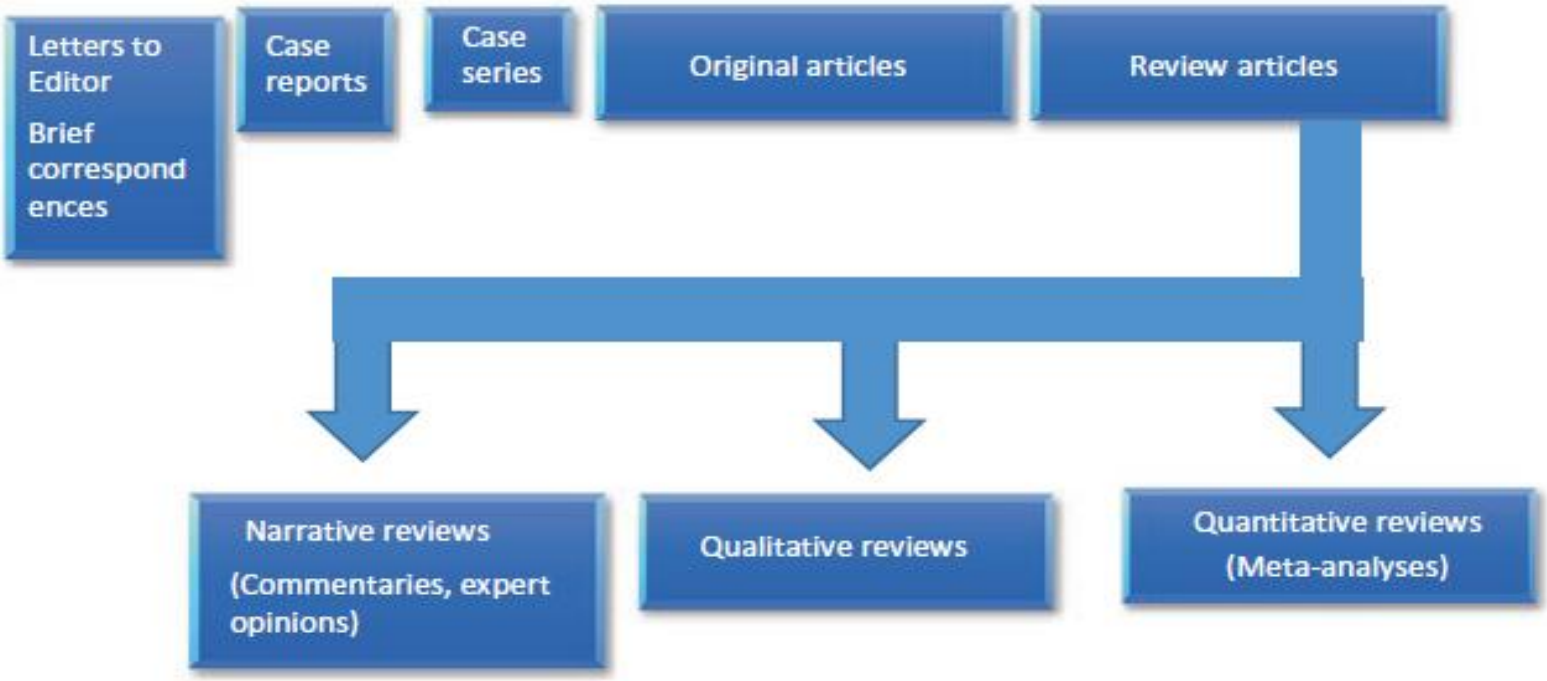


Fig. 14.1 Types of manuscripts

What Does a Reviewer Look into a Manuscript

Devinder Mohan Thappa and Malathi Munisamy

Science has a culture that is inherently cautious and that is normally not a bad thing. You could even say conservative, because of the peer review process and because the scientific method prizes uncertainty and penalises anyone who goes out on any sort of a limb that is not held in place by abundant and well-documented evidence. – Al Gore

- **Título**
- **Resumen**
- Introducción
- Metodología
- Resultados
- Discusión **Conclusiones**
- Agradecimientos
- Referencias
- Notas

- -Compartir mismos conceptos y términos
- -Repetir palabras claves
- -Deben ser textos distintos

- **Título**
- **Resumen**
- Introducción
- Metodología
- Resultados
- Discusión **Conclusiones**
- Agradecimientos
- Referencias
- Notas

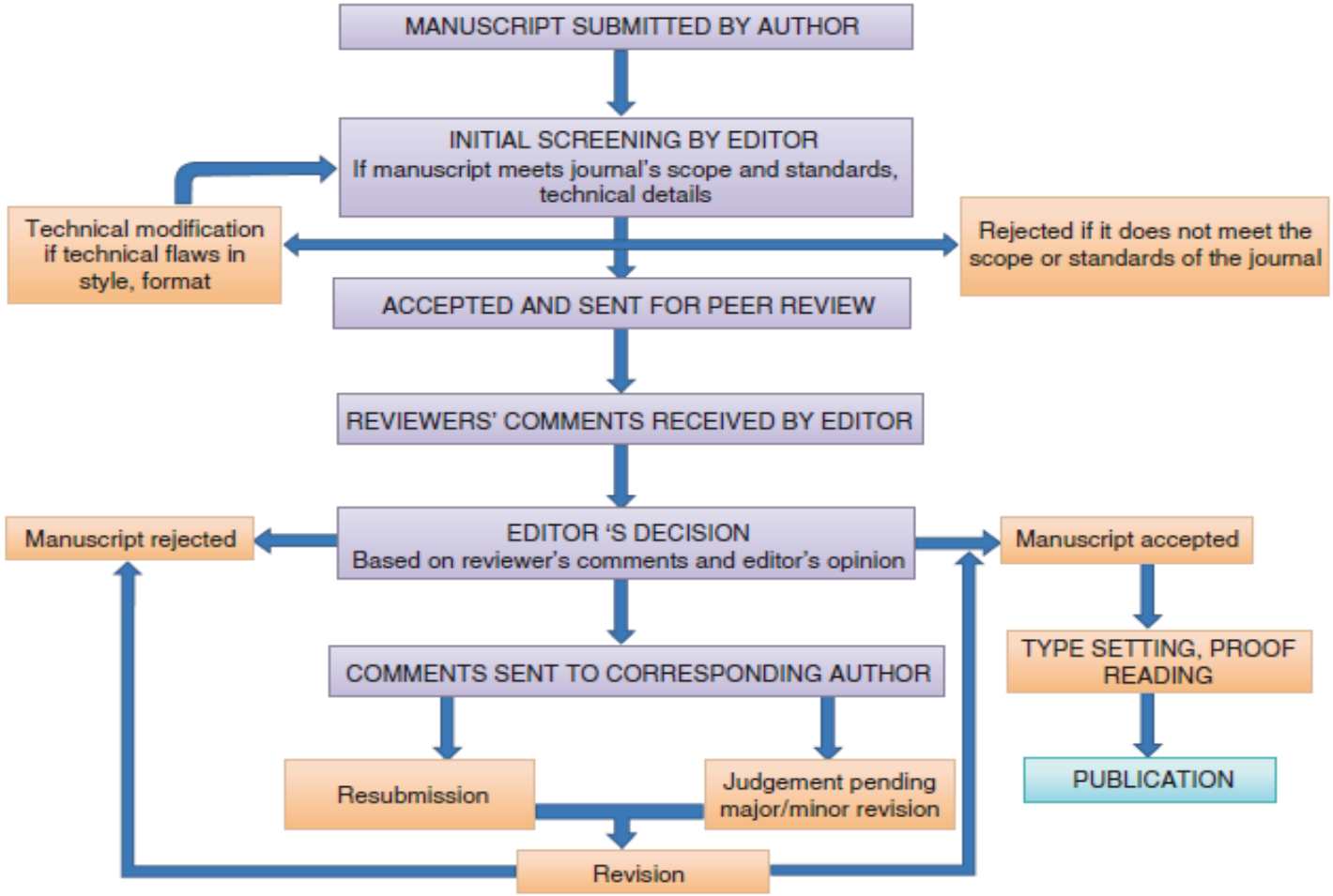
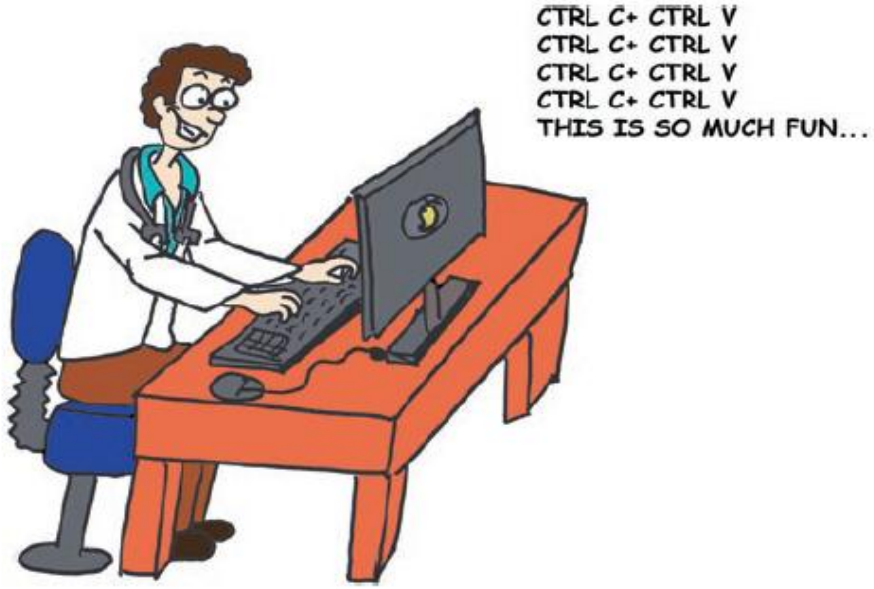


Fig. 15.1 The review process

Publishing Misconduct Including Plagiarism and Permissions

C. Adithan and A. Surendiran

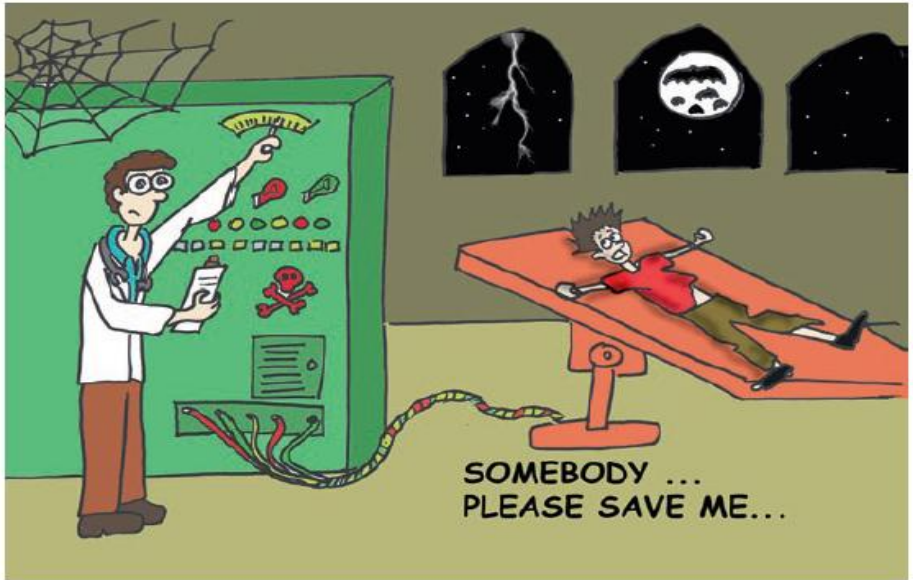
Borrowed thoughts, like borrowed money, only show the poverty of the borrower – Lady Marguerite Blessington



Ethical Dilemmas and Etiquettes of Scientific Publication

Subhash Chandra Parija, Jharna Mandal,
Dinoop Korol Poonambath, and Ajay Halder

The medical journals of this country are flooded, as we all know, with immature and sometimes apparently useless publications, and one is sometimes torn between one's desi keep it down and to let a pupil have the great value to his personality of publishing something. – Elliot Carr Cutler



ACADEMIC RANKING OF WORLD UNIVERSITIES

THE WORLD UNIVERSITY RANKINGS

Las diversas formas de Comunicar Investigación/conocimiento

Es necesario que los estudiantes asuman la responsabilidad en su formación científica.

Por tanto, actividades científicas son complementarias, y deben ser constantes.

Ciencia de frontera, o conocimiento que aun esta en desarrollo, permite la oportunidad ideal para que el estudiante se involucre y asuma su responsabilidad como parte de esta gran comunidad.

Dinámica constante

El trabajo científico, que se da a conocer es el resultado de un trabajo constante,

Saber compartir, defender, discutir, re-pensar,

→ Investigar estado del Arte, búsqueda bibliográfica pertinente
→ Discutir y tener opinión sobre el tema
→ Comunicarlo, en forma escrita y presentación.

¿Cómo fomentar esta actividad?

- → Visitas a grupos de Investigación (locales, nacionales, internacionales)
- → Entrevistas a Investigadores
- → Lectura de Artículos científicos
- → Generar búsqueda bibliográfica
- → Participación activa en ferias y congresos
- → Escritura científica (artículos)
- → Formulación de Proyectos
- → Participación en Laboratorio científico

UNIVERSIDAD SAN SEBASTIAN
VOCACIÓN POR LA EXCELENCIA

¿Como medir contribución? (Cienciometría)

- Web of Science
- Scopus/Scimago
- Shangai
- Nature Index**

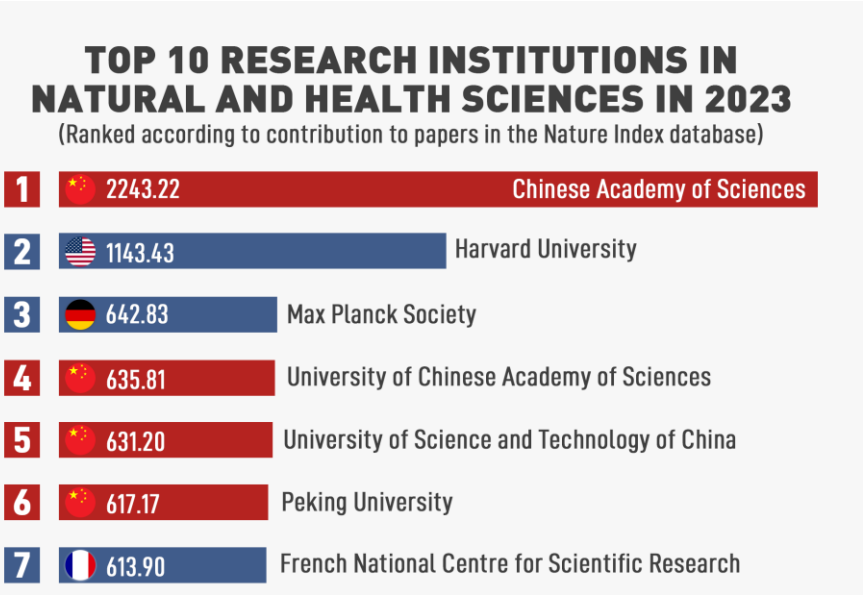
(líder en química 2015-)

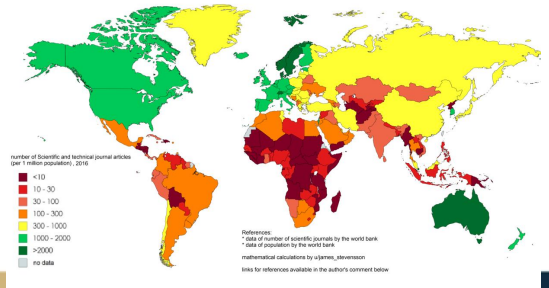
- H-factor
- Highly cited researchers
- Top 2% researchers
- Etc…

Clarivate Web of Science™

SJR
Scimago Journal & Country Rank

SHANGHAI RANKING
nature index





Estrategias de posicionamiento Nacional/Regional/Mundial

Propósito

Filosofía


EN QUÉ CONSISTE EL
MÉTODO KAIZEN
El método kaizen es un proceso oriental que invita a los individuos a no afrontar los grandes retos de un intento, sino en base a superar pequeñas metas.
NO TE INTIMIDES ANTE UNA GRAN META...
...SI PUEDES DIVIDIRLA EN PEQUEÑOS TRIUNFOS
KAI
改
CAMBIO
ZEN
善
BUENO
LOS PRINCIPIOS DEL MÉTODO
El poder de una persona se ubica en su capacidad para superar la respuesta natural al miedo.
Las pequeñas mejoras continuas son más efectivas que un cambio grande que nos pueda superar.


LAS 2 VENTAJAS PRINCIPALES DEL MÉTODO
LOS PEQUEÑOS CAMBIOS IMPLEMENTADOS ACABAN POR CONVERTIRSE EN HÁBITOS.
LAS PEQUEÑAS METAS ACUMULADAS ACABAN POR SER PERMANENTES

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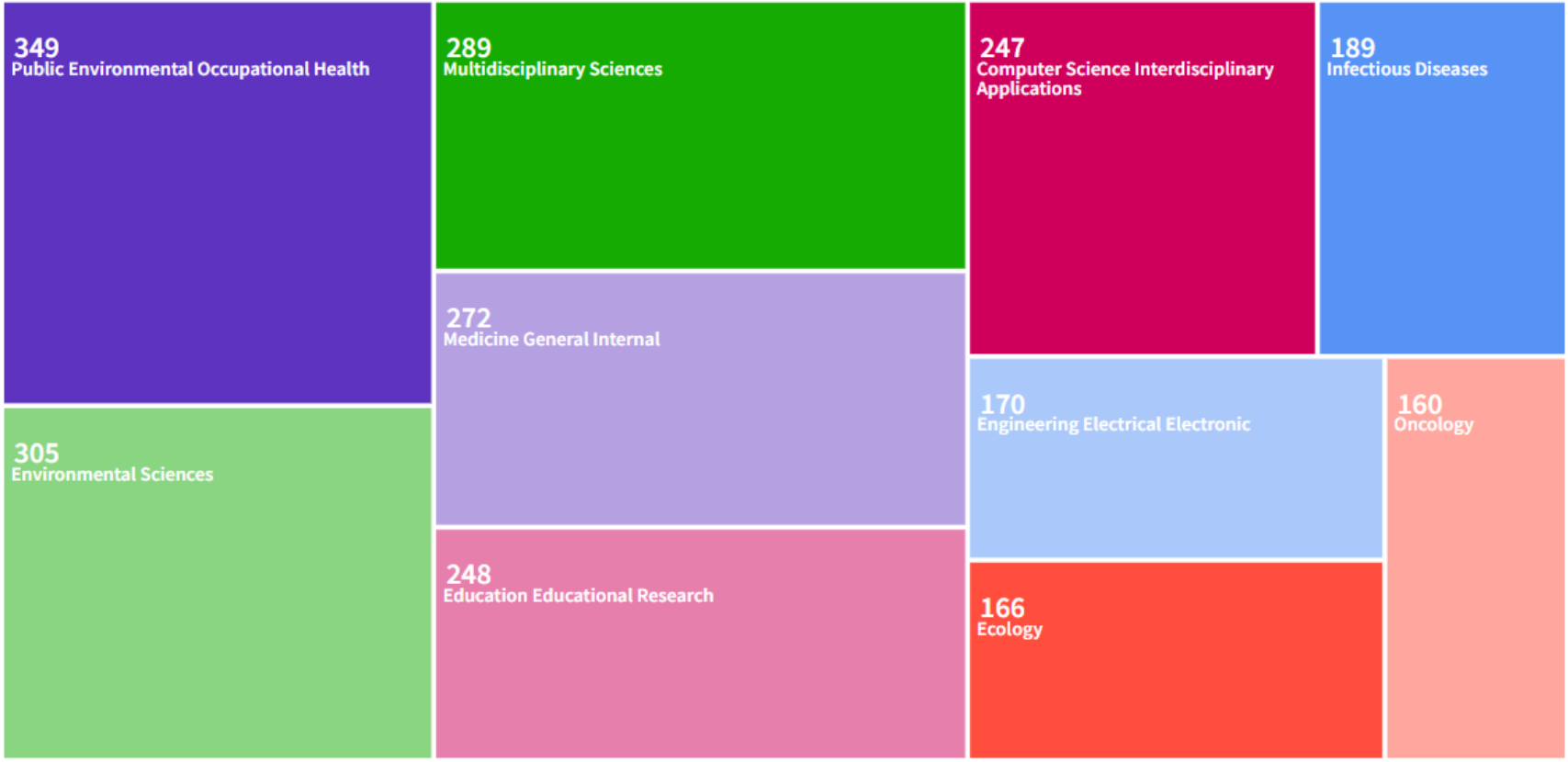
Números

Web of Science
Perú 2024: 6669 artículos



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Números

Web of Science
Perú 2024: 6669 artículos

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Números

Field: Affiliations	Record Count	% of 6669
UNIVERSIDAD NACIONAL MAYOR DE SAN MARCOS	771	11.561%
PONTIFICIA UNIVERSIDAD CATOLICA DEL PERU	684	10.256%
UNIVERSIDAD PERUANA CAYETANO HEREDIA	623	9.342%
UNIVERSIDAD CIENTIFICA DEL SUR CIENTIFICA	529	7.932%
UNIVERSIDAD SAN IGNACIO DE LOYOLA	361	5.413%
UNIVERSIDAD CESAR VALLEJO	334	5.008%
UNIVERSIDADE DE SAO PAULO	317	4.753%
UNIVERSIDAD PERUANA DE CIENCIAS APLICADAS UPC	288	4.318%
UNIVERSITY OF CALIFORNIA SYSTEM	282	4.229%
UNIVERSIDAD NACIONAL DE SAN AGUSTIN DE AREQUIPA	253	3.794%
UNIVERSIDAD CONTINENTAL	242	3.629%
HARVARD UNIVERSITY	232	3.479%
UNIVERSIDAD NACIONAL AGRARIA LA MOLINA	214	3.209%
UNIVERSIDAD TECNOLOGICA DEL PERU	209	3.134%
SEGURO SOCIAL DE SALUD DEL PERU	208	3.119%
UNIVERSITY OF TEXAS SYSTEM	200	2.999%
UNIVERSITY OF LONDON	193	2.894%
UNIVERSIDAD DE SAN MARTIN DE PORRES	171	2.564%
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	168	2.519%
HARVARD UNIVERSITY MEDICAL AFFILIATES	166	2.489%
UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO	160	2.399%
UNIVERSIDAD NACIONAL DE TRUJILLO	158	2.369%

UNIVERSIDAD SAN SEBASTIAN
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Números

UNIVERSIDAD PRIVADA DEL NORTE	158
HARVARD MEDICAL SCHOOL	148
UNIVERSITY NACIONAL DE INGENIERIA LIMA	148
UNIVERSITY OF BUENOS AIRES	141
UNIVERSIDAD RICARDO PALMA	140
UNIVERSIDADE ESTADUAL DE CAMPINAS	136
INSTITUTO NACIONAL DE ENFERMEDADES NEOPLASICAS	132
UNIVERSIDAD PERUANA UNION	131
STATE UNIVERSITY SYSTEM OF FLORIDA	122
UNIVERSIDAD DE CHILE	122
UNIVERSITY SYSTEM OF OHIO	121
YALE UNIVERSITY	118
UNIVERSIDAD NACIONAL DEL ALTIPLANO	114
UNIVERSIDAD SENOR DE SIPAN	113
UNIVERSIDAD DE LIMA	112
JOHNS HOPKINS UNIVERSITY	111
UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL	107
UNIVERSIDAD CATOLICA DE SANTA MARIA	106
CONSEJO NACIONAL DE INVESTIGACIONES CIENTIFICAS Y TECNICAS CONICET	104

Contribución

Metas iniciales

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nature index

2025 Research Leaders: Leading academic institutions

The 2025 Research Leaders are based on Nature Index data from 1 January 2024 to 31 December 2024.

Position	Institution	Share 2023	Share 2024
1	Pontifical Catholic University of Chile (PUC), Chile	12.24	13.92
2	University of Concepción (UdeC), Chile	4.80	12.06
3	Federico Santa María Technical University (UTFSM), Chile	4.70	11.17
4	University of Chile, Chile	14.07	9.36
5	Andres Bello University (UNAB), Chile	6.82	8.57
6	Universidad San Sebastián (USS), Chile	4.46	6.54
7	University of Santiago, Chile (Usach), Chile	7.48	6.43
8	University of Tarapacá (UTA), Chile	2.62	4.98
9	University of Bío-Bío (UBB), Chile	0.24	3.49
10	Catholic University of the North (UCN), Chile	4.50	3.37
13	Universidad Autónoma de Chile (UA), Chile	1.42	2.34
31	Universidad Autónoma de Chile (UA), Chile	0.34	0.56

2025 Research Leaders: Leading academic institutions in chemistry

The 2025 Research Leaders are based on Nature Index data from 1 January 2024 to 31 December 2024.

nature index

Subject

- Biological sciences
- Physical sciences
- Chemistry
- Health sciences

Position	Institution	Share 2023	Share 2024
1	Andres Bello University (UNAB), Chile	1.12	2.14
2	University of Santiago, Chile (Usach), Chile	1.61	1.77
3	Universidad San Sebastián (USS), Chile	1.39	1.27
4	University of Chile, Chile	2.70	1.26
5	University of Concepción (UdeC), Chile	0.06	1.01
6	Pontifical Catholic University of Chile (PUC), Chile	0.30	0.56
7	Federico Santa María Technical University (UTFSM), Chile	0.50	0.50
8	Universidad Autónoma de Chile (UA), Chile	0.17	0.34
9	University of Antofagasta, Chile	0.17	0.33
10	Universidad Arturo Prat (UNAP), Chile	0.33	0.22

2025 Research Leaders: Leading academic institutions in chemistry

The 2025 Research Leaders are based on Nature Index data from 1 January 2024 to 31 December 2024.

nature index

▾ Inorganic Chemistry	2	1.07
Conflicting Aromaticity in Trirhodium(I) Rosarin 2024-06-05		0.07
[Ba4@Sn56]36– as a Main-Group Second-Order Superatom. Interpenetrated Dodecahedrons as a Three-Dimensional Cluster-of-Clusters Structure 2024-05-08		1
▾ Journal of High Energy Physics	9	3.66
▾ Journal of the American Chemical Society	2	0.33
[Co3@Ge6Sn18]5–: A Giant σ-Aromatic Cluster Analogous to H3+ and Li3+ 2025-03-05		0.13
[K2(Bi@Pd12@Bi20)]4–: An Endohedral Inorganic Fullerene with Spherical Aromaticity 2024-05-08		0.2

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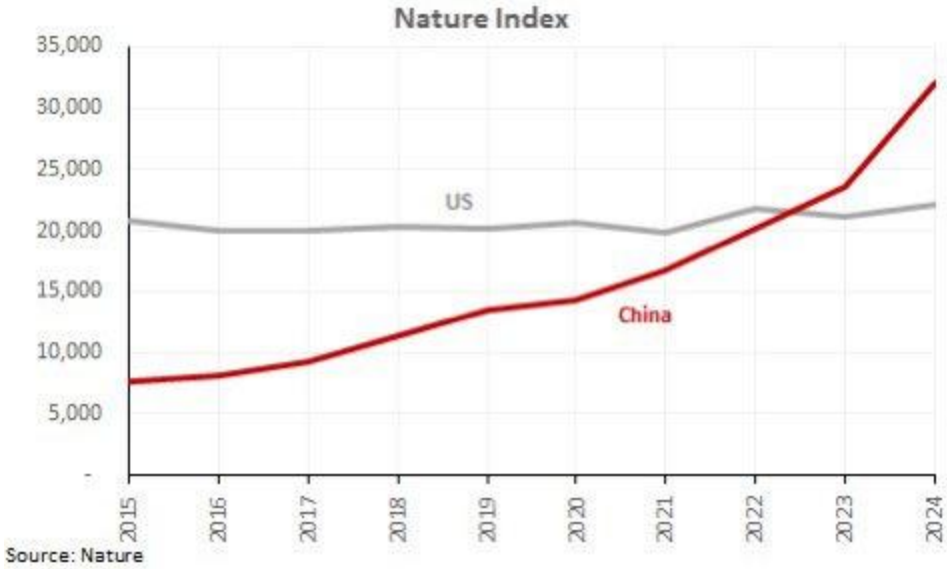
Nature Index: University Ranking		
1	Harvard University	USA
2	University of Science and Technology of China (USTC)	China
3	Zhejiang University (ZJU)	China
4	Peking University (PKU)	China
5	University of Chinese Academy of Sciences (UCAS)	China
6	Tsinghua University	China
7	Shanghai Jiao Tong University (SJTU)	China
8	Nanjing University (NJU)	China
9	Fudan University	China
10	Sun Yat-sen University (SYSU)	China
11	Sichuan University (SCU)	China
12	Stanford University	USA
13	Massachusetts Institute of Technology (MIT)	USA
14	Jilin University (JLU)	China
15	Shandong University (SDU)	China
16	Nankai University (NKU)	China
17	University of Oxford	UK
18	Wuhan University (WHU)	China
19	Huazhong University of Science and Technology (HUST)	China
20	Soochow University	China



Source: Nature

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