

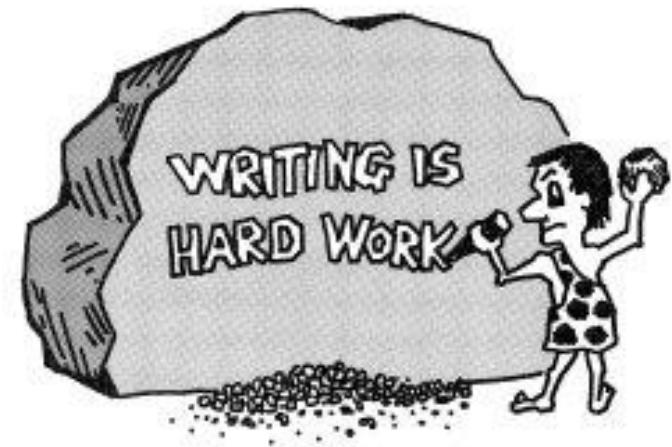


VJU
Vietnam Japan University
VNU since 1906

Scientific writing & Publishing

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*Dept. of
Climate change and Development*





TEACHING CONTENT AND EVALUATION

TEACHING CONTENT

- Part 1: Scientific journals and articles (Concepts and Evaluations)
- Part 2: Do and Don't in scientific writing
- Part 3: Master's thesis structure and format
- Part 4: Introduce some research orientations for Master's thesis

EVALUATION

- Attendance: 10%
- Mid-term exam: 30%
- Final exam: 60%

Q1. What are differences between two PAPERS you have in your hands?

- Format
- General Content

Q2. Which one is a Scientific Paper (Manuscript)?

A Novel Coronavirus from Patients with Pneumonia in China, 2019

Na Zhu, Ph.D., Dingyu Zhang, M.D., Wenling Wang, Ph.D., Xingwang Li, M.D., Bo Yang, M.S., Jingdong Song, Ph.D., Xiang Zhao, Ph.D., Baoying Huang, Ph.D., Weifeng Shi, Ph.D., Roujian Lu, M.D., Peihua Niu, Ph.D., Faxian Zhan, Ph.D., *et al.*, for the China Novel Coronavirus Investigating and Research Team

Article Figures/Media Metrics

17 References 132 Citing Articles

Summary

In December 2019, a cluster of patients with pneumonia of unknown cause was linked to a seafood wholesale market in Wuhan, China. A previously unknown betacoronavirus was discovered through the use of unbiased sequencing in samples from patients with pneumonia. Human airway epithelial cells were used to isolate a novel coronavirus, named 2019-nCoV, which formed a clade within the subgenus sarbecovirus, Orthocoronavirinae subfamily. Different from both MERS-CoV and SARS-CoV, 2019-nCoV is the seventh member of the family of coronaviruses that infect humans. Enhanced surveillance and further investigation are ongoing. (Funded by the National Key Research and Development Program of China and the

February 20, 2020
N Engl J Med 2020; 382:727-733
DOI: 10.1056/NEJMoa2001017
Chinese Translation 中文翻译

Related Articles

EDITORIAL FEB 20, 2020
Another Decade, Another Coronavirus
S. Perlman

NEJM
CareerCenter

PHYSICIAN JOBS MARCH 5, 2020

BBC Coronavirus alert: Over half a million Brits at risk of death amid COVID-19 spread

CORONAVIRUS could kill more than half a million Britons should the epidemic continue to spread across the UK, England's Chief Medical Officer Chris Whitty warned.

By AURORA BOSOTTI

PUBLISHED: 08:48, Wed, Mar 4, 2020 | UPDATED: 09:10, Wed, Mar 4, 2020

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7 

Coronavirus: Expert outlines the possible UK 'mortality rate'



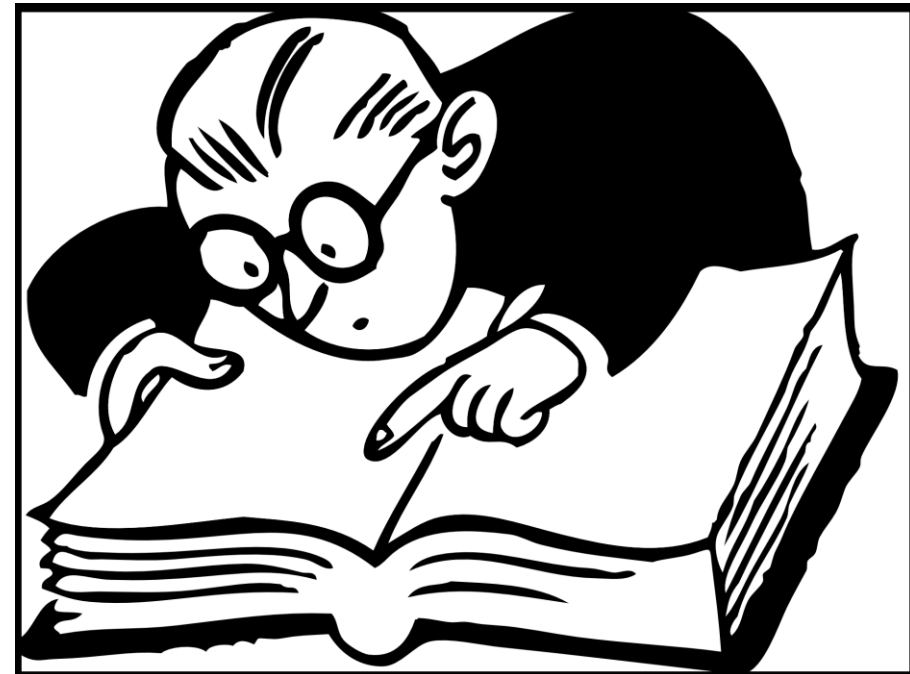
Q3. What is a scientific paper?

A written and published report describing **original** research results

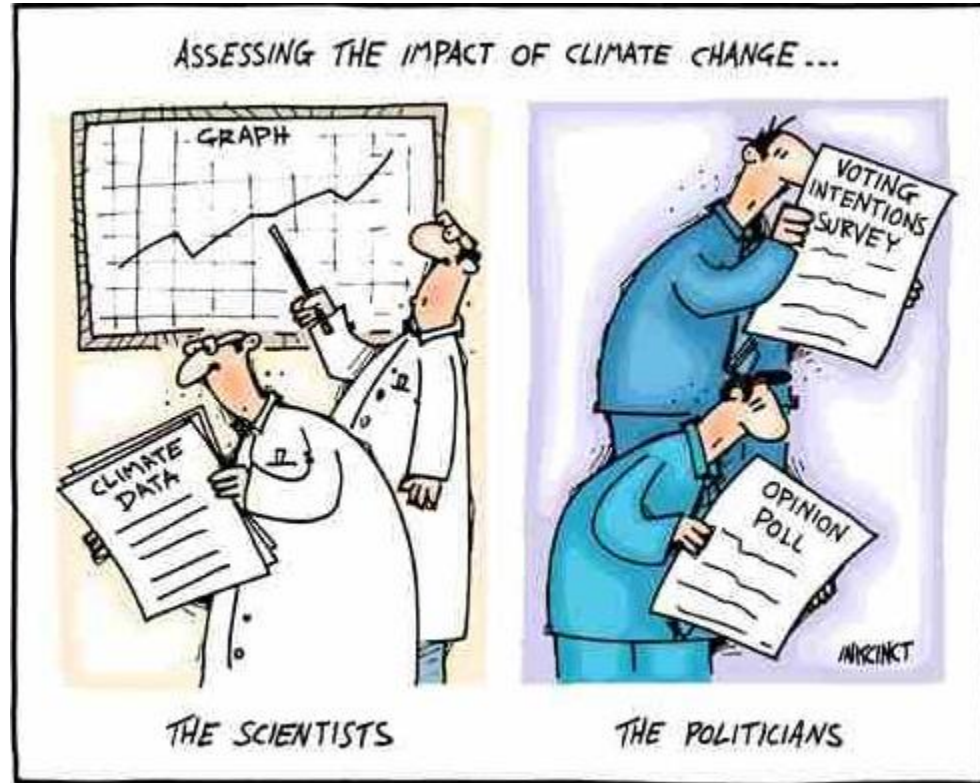
Q4. Who are the audiences?



The referees, who help the journal editor decide whether a paper is suitable for publication



Other scientists or readers.



Past

- * 1650 – 1950: 60.000 Journals (Price, 1961)
- * 1966: Systematic peer review was first introduced by John Maddox
- * 2004: 250.000 Journals/ of which 21.000 were refereed (Dalen and Klamer, 2005)
- * Annual growth rate of publication: 3.25 % (Mabe 2003)
- * 2000 ... → : Many “Open Access Journal”

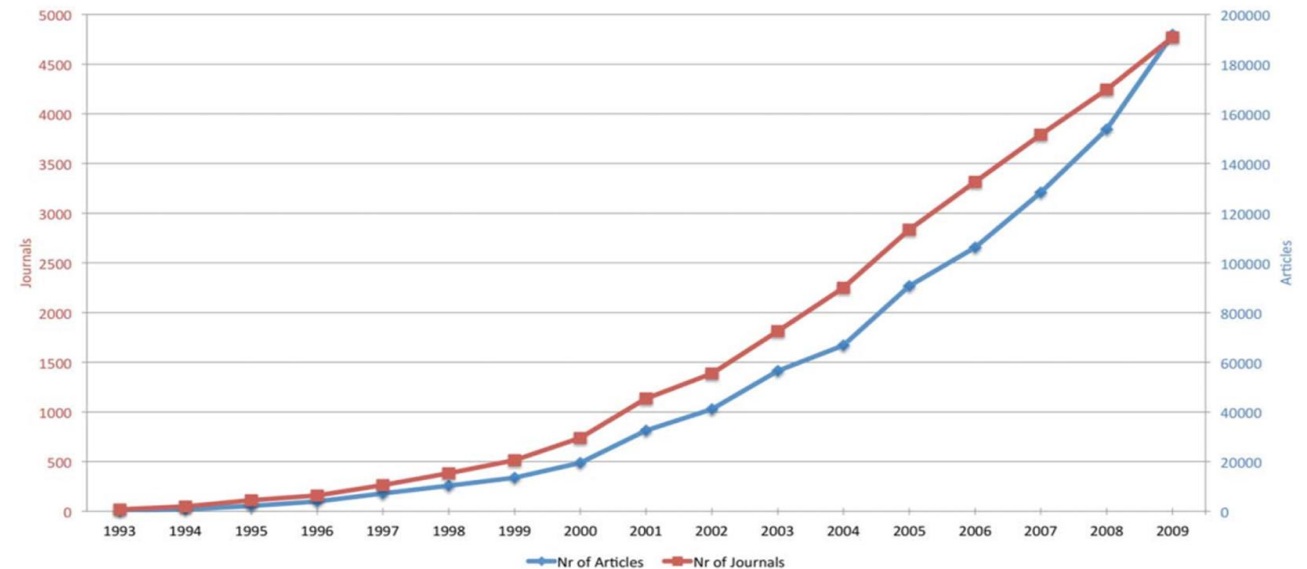


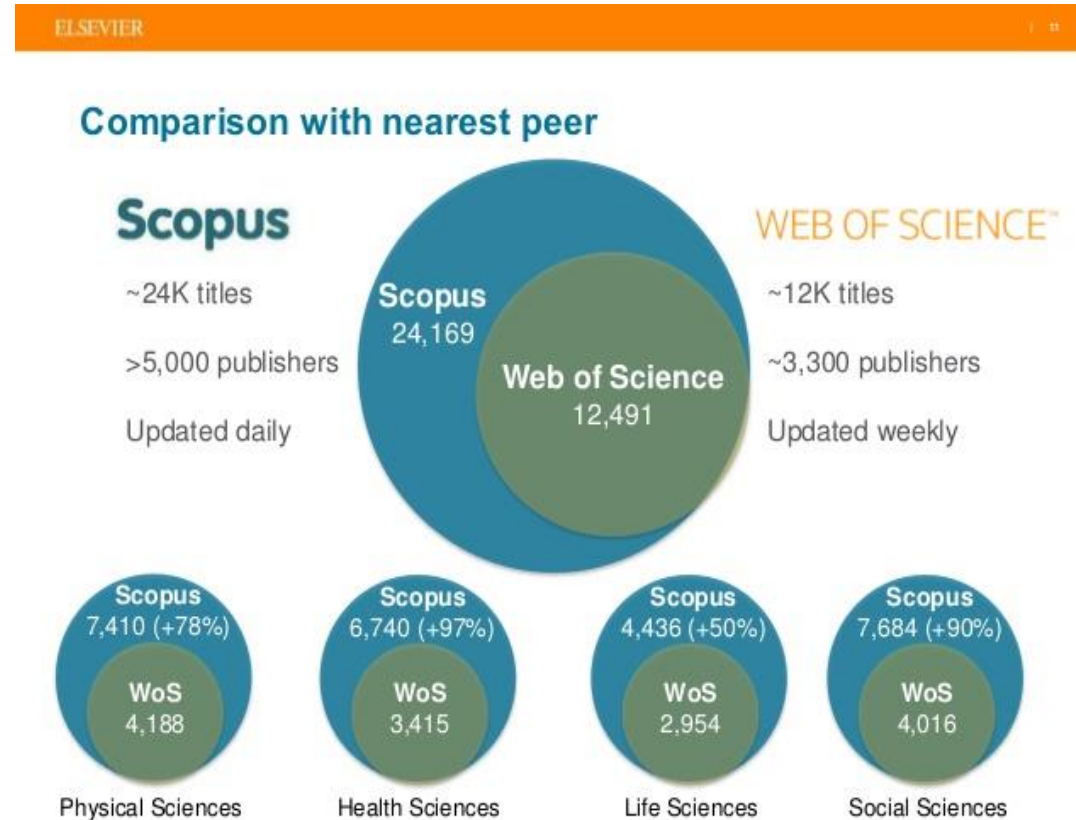
Figure 2. The development of open access publishing 1993–2009.
doi:10.1371/journal.pone.0020961.g002

ISI vs. Scopus

Web of Science (WOS), products from “Thomson Reuters Institute of Scientific Information” (ISI),

created by Eugene Garfield in 1960s

10,000 journals



Source: Web of Science Real Facts, Web of Science title list and Scopus' own data (April 2014)

Scopus, officially named SciVerse Scopus, has introduced by Elsevier

introduced by Elsevier in November 2004

20,500 peer-reviewed journals

1200 Open Access journals



ISI vs. Scopus

WEB OF SCIENCE

1.If you use “Web of Science”, you will be asked to login.

<https://mjl.clarivate.com/home?PC=D>

Social Sciences Citation Index

SSCI

ISI database

CSI

Science Citation Index

<https://mjl.clarivate.com/home?PC=K>

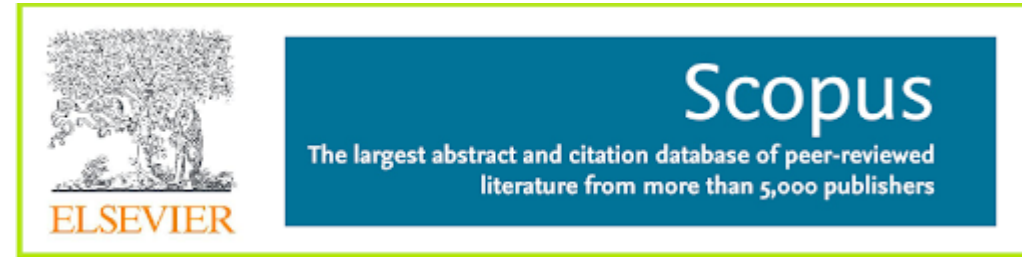
<https://mjl.clarivate.com/home?PC=H>

AHCI

Arts and Humanities Citation Index

Scopus Database

<https://www.scopus.com/sources.uri>



Use Scopus database to check CiteScore, CiteScore Trend, Quartile of These Journals

1) Remote Sensing of Environment

2) Geology

3) Soil Biology and Biochemistry

4) Social Philosophy and Policy

Use ISI database to check CiteScore, CiteScore Trend, Quartile of These Journals

How to measure a scientific journal?

Citation



Journal Impact Factor (IF)

IF: is a measure of the frequency with which the average article in a journal has been cited in a particular year..

The 2010 IF of a journal is calculated as follows:

$$JIF_{2010} = A/B$$

where

A = the number of times the articles published in that journal in 2008 and 2009, were cited by articles in indexed journals during 2010.

B = the total number of “citable items” published by that journal in 2008 and 2009.

Journal Impact Factor ⓘ

Cites in 2013 to items published in:	2012 = 229	Number of items published in:	2012 = 27
	2011 = 1		2011 = 0
	Sum: 230		Sum: 27

$$\text{Calculation: } \frac{\text{Cites to recent items}}{\text{Number of recent items}} = \frac{230}{27} = \mathbf{8.519}$$

5-Year Journal Impact Factor ⓘ

Cites in {2013} to items published in:	2012 = 229	Number of items published in:	2012 = 27
	2011 = 1		2011 = 0
	2010 = 1		2010 = 0
	2009 = 0		2009 = 0
	2008 = 0		2008 = 0
	Sum: 231		Sum: 27

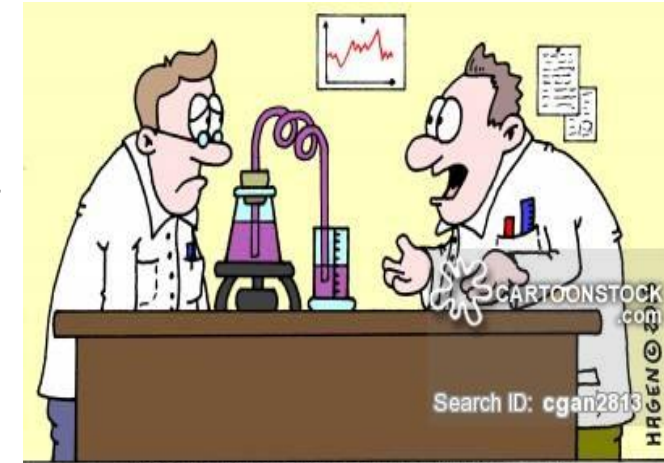
$$\text{Calculation: } \frac{\text{Cites to recent items}}{\text{Number of recent items}} = \frac{231}{27} = \mathbf{8.556}$$

How to measure a scientist?

h-indexed score

based on the number of publications they have published and their citation rates

The h-index is calculated by counting the number of



She didn't want to go out with you even though you told her you had a h-index of 37!
Boy I don't understand women!

Ex. What is H-index of this researcher?

Publication	Number of citation
1	33
2	30
3	20
4	15
5	7
6	6
7	5
8	4

Paper	Number of citations
Paper 1	101
Paper 2	86
Paper 3	77
Paper 4	56
Paper 5	16
Paper 6	12
Paper 7	8
Paper 8	4
Paper 9	4
Paper 10	1

} **h = 7**



Why international journal?

- International readership
- Natural law has no political borders
- There is no national science (but there are national interests)
- To make available own results for other scientists
- No published results = completely lost work, time & money

For scientists themselves

- Natural law has no political borders
- To attract attention to own studies
- To get satisfaction from own work
- To finish the work

On the next level

- To affect development of science according to own image.

Why Not To Publish in poor Journals?

- * One material is allowed to publish once only!
(- but is possible to publish various part of one study)
- * Your paper will be read very seldom
 - Low citations
 - Low response to your work

- * But is possible if:
 - You look how to increase the level of the journal
→ good paper
- * If other Journal(s) rejects your manuscript

Predatory open-access publishing

Real journal	“Fake” journal
Journal of Economics and Finance (Springer)	Journal of Finance and Economics
Journal of Engineering Technology (American Society for Engineering Education)	GSTF Journal of Engineering Technology



Options for Paper submission

Editor's invitation to write a paper

- Review
- Original paper

- * Preparation of Original paper
- * Participation in conferences
→ paper in a special issue
- * Preparation of Short Communication

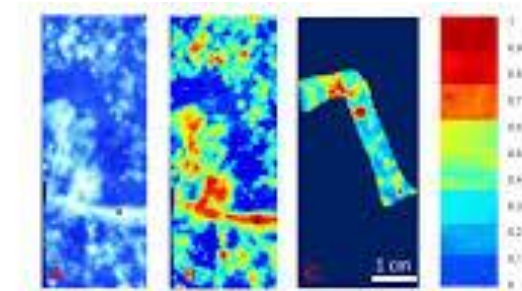
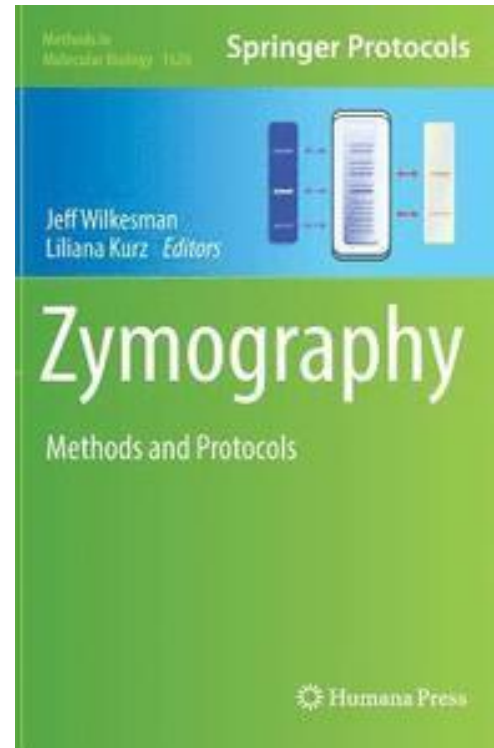
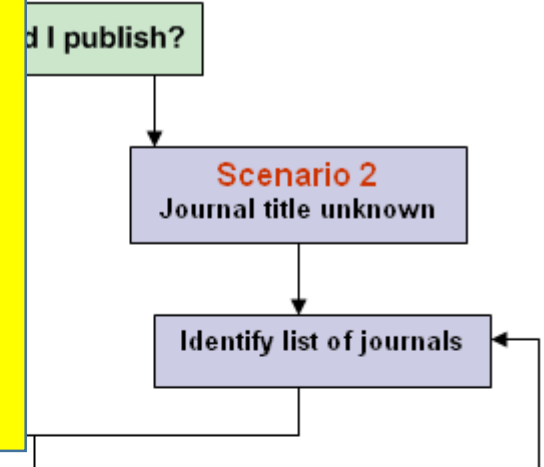


Fig. 5. An example of phosphatase activity (MUF-phosphate). A) initial zymogram of soil surface and biopore edges; B) zymogram of soil surface and biopore edges after image processing; C) zymogram of inside biopore after image processing. Side colormap is proportional to the calibration line of MUF substrate. Red color demonstrated high color intensity (high activity) and blue shows low color intensity (low activity). Asterisk (*) shows another source of hotspots i.e. root.



Ex. Define the suitable journal based on the provided journal list below?

1. Global Change Biology
2. Journal of Materials Science
3. Journal of Land Degradation & Development
4. Journal of Economics and Finance
5. Journal of Plant Nutrition



• Manuscripts

Effect of Silicon on Plant Growth and Mineral Nutrition of Maize Grown Under Water-Stress Conditions

Soil aggregates as biogeochemical reactors and implications for soil-atmosphere exchange of greenhouse gases—A concept

Remittances and economic growth in Africa, Asia, and Latin American-Caribbean countries: a panel unit root and panel cointegration analysis

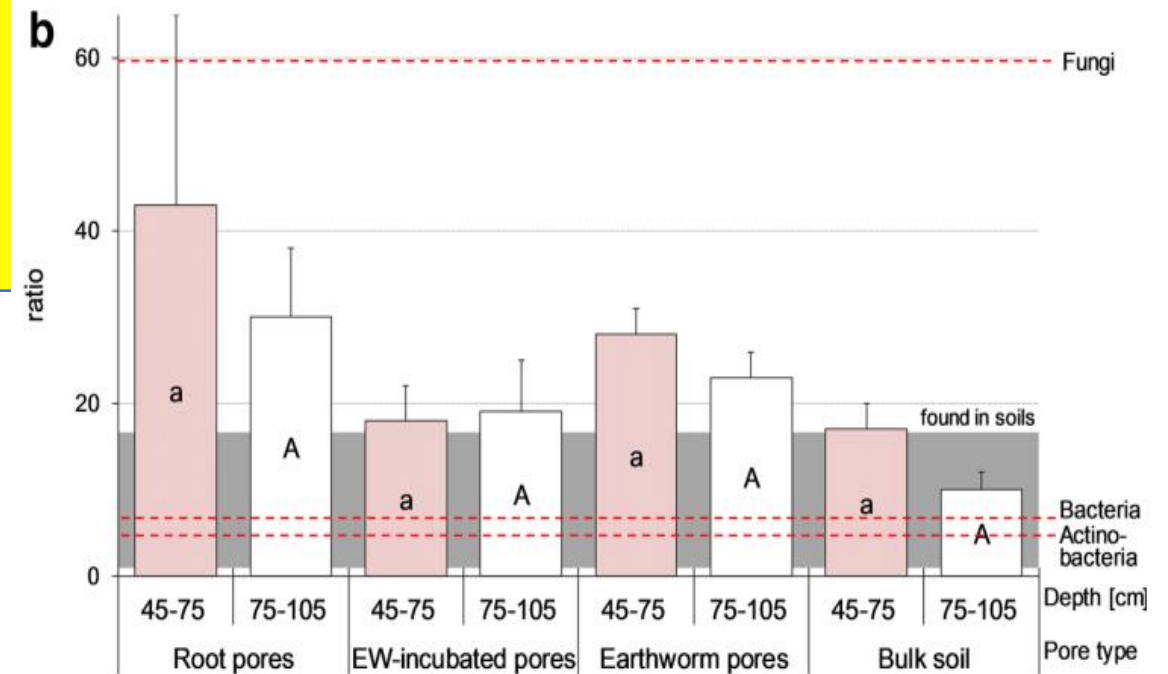
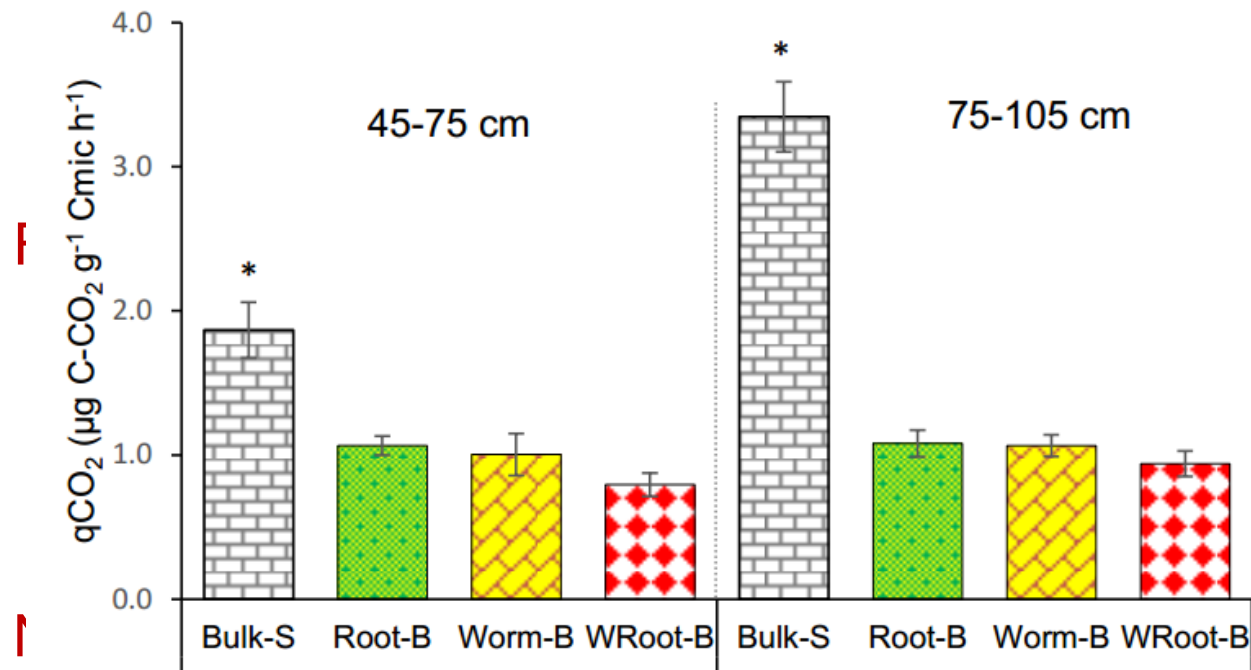
Evaluating the potential of Bayesian networks for desertification assessment in arid areas of Iran

A facile route to synthesize boron-doped g-C₃N₄ nanosheets with enhanced visible-light photocatalytic activity

Prerequisites for international publications

Scientific

- New Ex Compare the requirements of publications between 2 journals



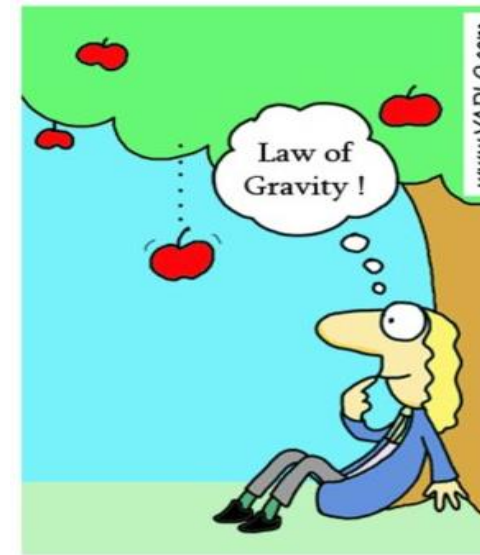
- Good nerves

Results' preparation:

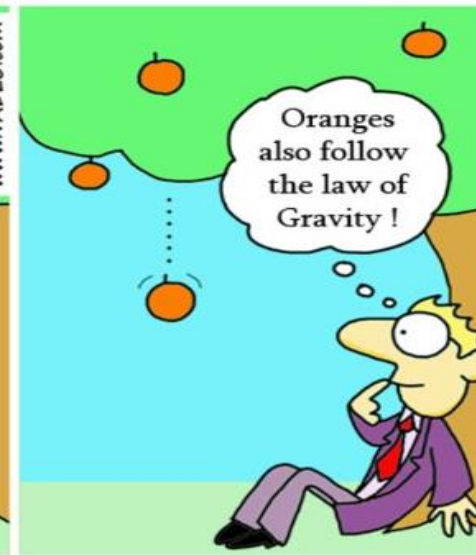
Use all of your brain to develop the topic

- Objectives
- Main hypotheses
- Collect all results
- Present All possible results as graphs/figures
- Left only the BEST
Choose only that focused on the objective and confirming/rejecting hypotheses (3-6 figures)
- Make the results easy to understand for the non-professionals
- Write ALL results as ONE sentence – central message → This is the title

- Make a story



High impact factor



Low impact factor



Thank You

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