CRITERIA OF GOOD RESEARCH

High-Quality Research

- Good research requires:
 - Highly ethical standards be applied.
 - All limitations be documented.
 - Data be adequately analyzed and explained.
 - All findings be presented unambiguously and all conclusions be justified by sufficient evidence.

Characteristics of Good research

- 1. Originates with a question or problem.
- 2. Requires clear articulation of a goal.
- 3. Follows a specific plan or procedure.
- 4. Often divides main problem into sub problems.
- 5. Guided by specific problem, question, or hypothesis.
- 6. Accepts certain critical assumptions.
- 7. Requires collection and interpretation of data.
- 8. Cyclical (helical) in nature.

Criteria for good research

- The aim of the research should be clearly mentioned, along with the use of common concepts.
- 2) The procedures used in the research should be adequately described, in order to permit another researcher to repeat the research for further advancement, while maintaining the continuity of what has already been done.
- 3) The researchs procedural design should be carefully planned to obtain results that are as objective as possible.
- 4) The flaws in the procedural design should be sincerely reported by the researcher to correctly estimate their effects upon the findings.
- 5) The data analysis should be adequate to reveal its significance.
- 6) The methods used during the analysis should be appropriate.
- 7) The reliability and validity of the concerned data should be checked carefully.
- 8) The conclusions are needed to be confined and limited to only those data, which are justified and adequately provided by the research.
- 9) In case, the researcher is experienced and has a good reputation in the field of research, greater confidence in research is warranted.

Criteria of good research

- Purpose should be clearly defined
- Common concepts to be used
- Explain procedure clearly for continuity
- Results should be as objective as possible
- Report with frankness
- Acknowledge, procedural flaws
- Limitations of the study

CRITERIA FOR GOOD RESEARCH

- Purpose to be clearly defined.
- Research design to be thoroughly planned.
- High ethical standards to be applied.
- Limitations to be frankly revealed.
- Adequate analysis for decision maker's needs.
- Findings to be presented unambiguously.
- Conclusions to be justified.

What Makes a Good Research?



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CRITERIA -1

Purpose of the research is clearly defined. A research study with clearly defined purpose finds a wider acceptance and acknowledgement within the research community.

CRITERIA-II

The research method should be defined in a clear manner with sufficient detail. This will allow the repetition of the study in future for further advancement, while maintaining the continuity of what has been done in the past.

CRITERIA-III

Any limitations and assumptions made by the researcher during the course of the study should be clearly highlighted in the research. This will support the findings of the research study, in case someone tries to validate the study findings.

CRITERIA-IV

to remember is that any limitations and assumptions made by the researcher during the course of the study should be clearly highlighted in the research. This will support the findings of the research study, in case someone tries to validate the study findings.

CRITERIA-5

 To be considered by the researcher is that there should be sufficient data to investigate the research topic. And the researcher should carefully check the reliability and validity of the data.

CRITERIA-6

In order to deliver a good research, a researcher should confine the conclusions to those justified by the data.

CRITERIA-7

- a good research depends a great deal on the integrity and commitment of the researcher.
- So, make sure that you adhere to these guidelines when you are carrying out your research.

GOOD RESEARCHER

Good research is systematic:

It means that research is structured with specified steps to be taken in a specified sequence in accordance with the well defined set of rules. Systematic characteristic of the research does not rule out creative thinking but it certainly does reject the use of guessing and intuition in arriving at conclusions.

Good research is logical:

This implies that research is guided by the rules of logical reasoning and the logical process of induction and deduction are of great value in carrying out research. Induction is the process of reasoning from a part to the whole whereas deduction is the process of reasoning from some premise to a conclusion which follows from that very premise. In fact, logical reasoning makes research more meaningful in the context of decision making.

Good research is empirical:

It implies that research is related basically to one or more aspects of a real situation and deals with concrete data that provides a basis for external validity to research results.

Good research is replicable:

This characteristic allows research results to be verified by replicating the study and thereby building a sound basis for decisions.

Research Ethics





Three Fundamental Principles of Research Ethics

- Respect for persons
- Beneficence
- Justice



Sadd Balance







Definition

 "research ethics" refers to a diverse set of values, norms and institutional regulations that help constitute and regulate scientific activity



9/4/2012

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PROFESSIONAL:

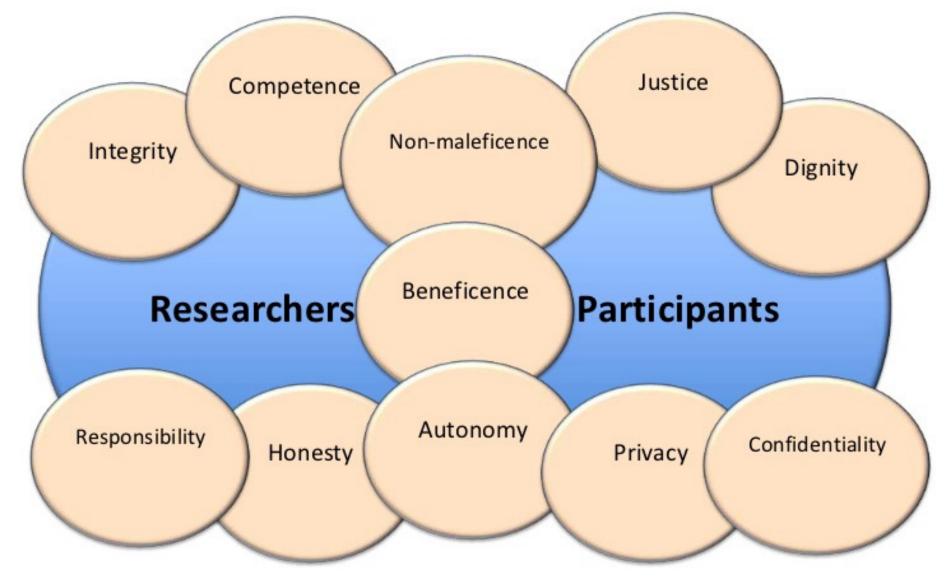
Reporting Credits Plagiarism

Ethics in Research

DATA Gathering : Voluntary participation Informed Consent No Harm PAC- Privacy, Anonymity, Confidentiality



Ethical Principles of Research



What's Research Ethics?

- It is the field of ethics that systematically analyze the ethical and legal questions raised by research involving human subjects.
- Its main focus is to ensure that the study participants are protected and, ultimately,
- that clinical research is conducted in a way that serves the needs of such participants and of society as a whole.

It works when and only when it is applied before the research is conducted



Research Ethics

- **Research ethics** involves the application of fundamental ethical principles to research.
- Research ethics is most developed as a concept in medical research, but in some form is essential for all research.
- <u>Medical and biological research</u> ethics includes the design and implementation of research involving :
 - human experimentation,
 - animal experimentation,
 - various aspects of academic scandals including scientific misconduct (such as fraud, fabrication of data and plagiarism), regulation of research, etc.
- Research in the <u>social sciences</u> presents a different set of issues than those in medical research.
 - various aspects of academic scandals including scientific misconduct (such as fraud, fabrication of data and plagiarism), regulation of research, etc.



WEB SEARCH ENGINES

- Google. No need for further introductions. ...
- Bing. ...
- Yahoo. ...
- Ask.com. ...
- AOL.com. ...
- Baidu....
- Wolframalpha....
- DuckDuckGo



Digital Object Identifier System

DOAI

DOAI (Digital Open Access Identifier) is an alternate DOI (Digital Object Identifier) that takes you to a free version

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Examples

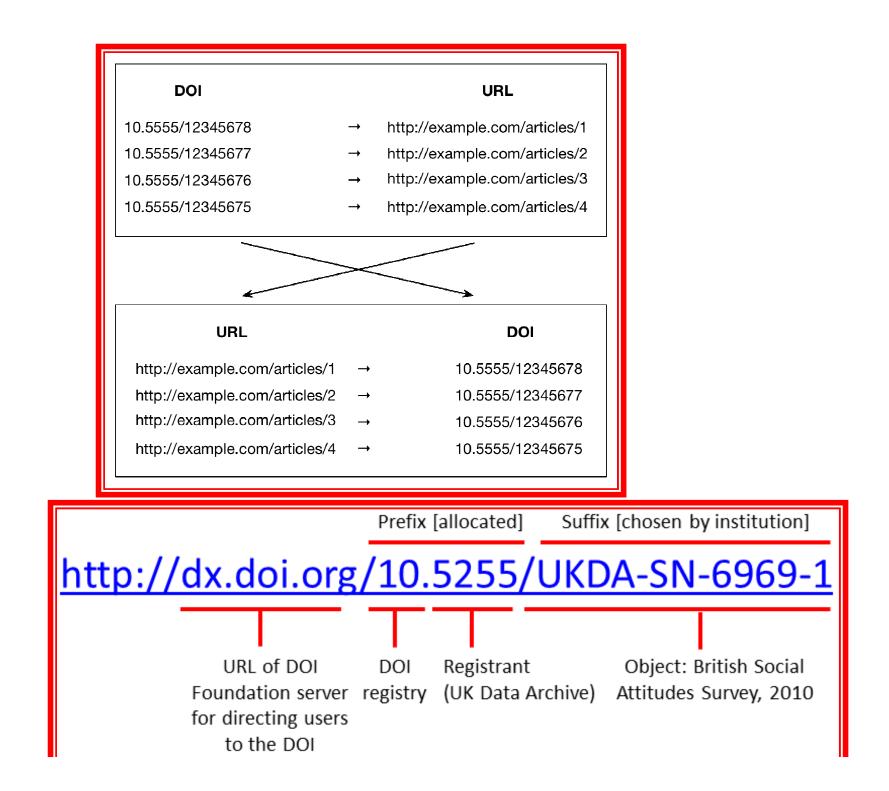
- <u>http://doai.io/10.1016/j.jalgebra.2015.09.023</u> vs
 <u>http://dx.doi.org/10.1016/j.jalgebra.2015.09.023</u>
- <u>http://doai.io/10.1139/f92-220</u> vs <u>http://dx.doi.org/10.1139/f92-220</u>

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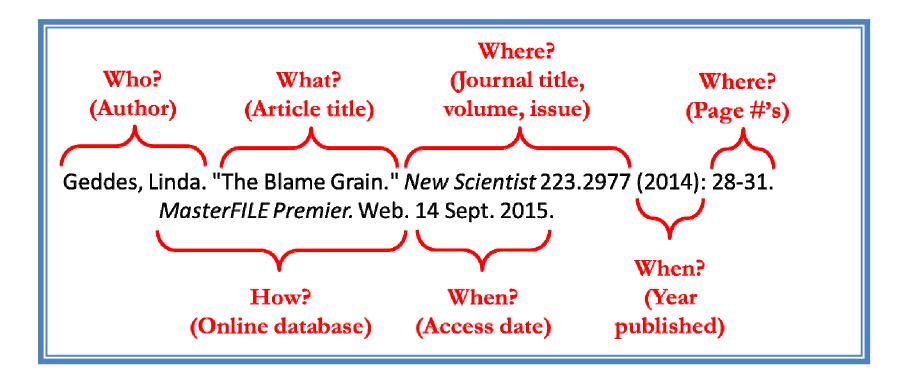
	Link to Full Text DOI # Finder DOI # Finder Look up a DOI number to complete a reference citation. Article Title * First Author (Last Name) * Last Name Submit	
	Resolve a DOI	৫ Q . Go
doi> [™] The DOI [®] System Resolve A DOI Name		
doi: 10.1177/0093854809354961 Paste the DOI into this window and click "Go." Type or paste a <u>DOI name</u> into the text box. Click Go. Your browser will take you to a Web page (URL) associated with that DOI name.		

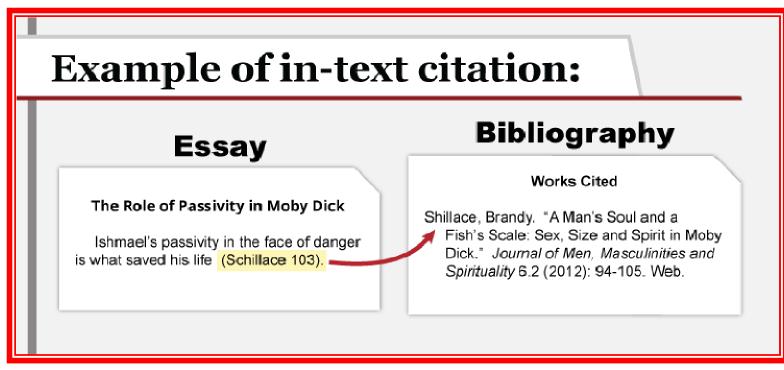


Citation, noun. (Ci 'ta 'tion)

- "The action or an act of quoting or referring to a passage, text, author, legal precedent, etc., esp. as an authority or in support of an argument; quotation."
- 2. "A cited passage, a quotation."
- "A reference providing information about where a particular quotation, text, etc., is to be found; a bibliographical reference."

Oxford English Dictionary Online





HTTP://GEOCITIES.WS/ROUT/

The oysters aren't as cheap after 5 p.m. (50 to 75 cents off), but some good deals are available if you steer away from the mainstream favorites. Effingham Inlet oysters from British Columbia, plump and briny, are the best deal. Also good: sweet and musky Barron Point and some creamy Eagle Rock oysters.

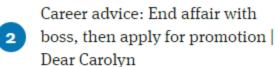
The Walrus and the Carpenter, 4743 Ballard Ave. N.W., offers happy hour 4-6 p.m. Mondays-Thursdays with halfprice oysters from 4-5 p.m., and 25 percent off oysters from 5-6 p.m. Also, \$2 off on cocktails, \$1 off on draft beer and on Muscadet (206-395-9227 or www.thewalrusbar.com).

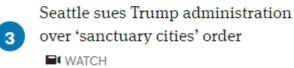
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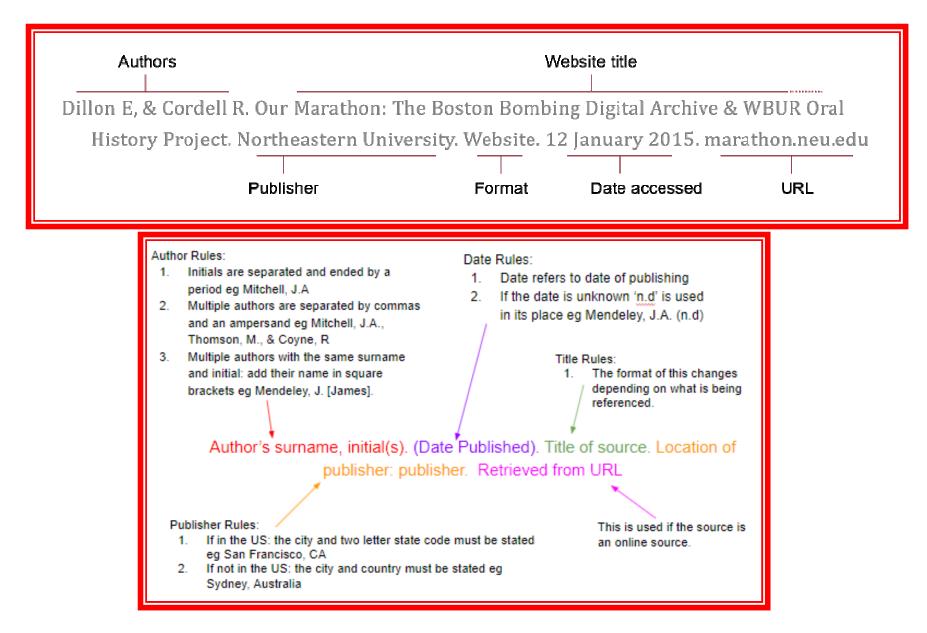
Baltimore police show jarring footage of SWAT shooting

Lucy, et thi, ce Guonino, Di (2000): Interaction of hangaage type and referent type in the
development of nonverbal classification preferences. In D. Gentner & S.
Goldin-Meadow (Eds.), Language in mind: Advances in the study of language and
thought (pp. 465-492). Cambridge, MA: MIT Press.
Lupyan, G. (2009). Extracommunicative functions of language: Verbal interference
causes selective categorization impairments. Psychonomic Bulletin & Review, 16,
711–718. doi:10.3758/PBR.16.4.711
Lupyan, G. (2012). Linguistically modulate reception and cognition: The
label-feedback hypothesis. Frontiers in Psych. pgy, 3, 1-13.
doi:10.3389/fpsyg.2012.00054
Lupyan, G., & Mirman, D. (2013). Linking language and categorization: Evidence
from aphasia. Cortex, 49, 1 104 1016 1016 1016 1006
from aphasia. Cortex, 49, 1 McWhorter, J. H. (2014). The Enclosed Citation
Nosofsky, R. M. (1986). Attention, similarity, and the identification-categorization

performance on tasks utilizing low-dimensional stimuli as these rely on more online support from language.

An earlier study (Lupyan, 2009), using verbal interference in normal populations, yielded very similar patterns of selective effects. Verbal interference disrupted categorization that was used on the ability to isolate perceptual dimensions readily amenable to verbal pattern, such as color, but not categorization that required knowledge of thematic relationships between objects (e.g., *potato* is the odd one out in the triad *potato*, *balloon*, and *cake* because the latter two are linked by the second second

The findings reviewed above, taken in conjunction with the current results, suggest more generally that when participants are used to relying on prior linguistic knowledge to make classification decisions, such as encoding features of stimuli like colors and, in this case, the aspectual proper-



Article from a Webpage

Last Name, First Name (if given). "Title of Webpage." *Website Title*. Publisher of website (often found at the bottom of the page), date of last update. Web. Date of Access. See (URL is only necessary if you think your reader won't easily be able to locate the webpage).

Example:

"Opening Night: Wit Starring Cynthia Nixon." *Broadway.com.* Broadway.com, Inc., 2012.

Web. 12 Feb. 2012.





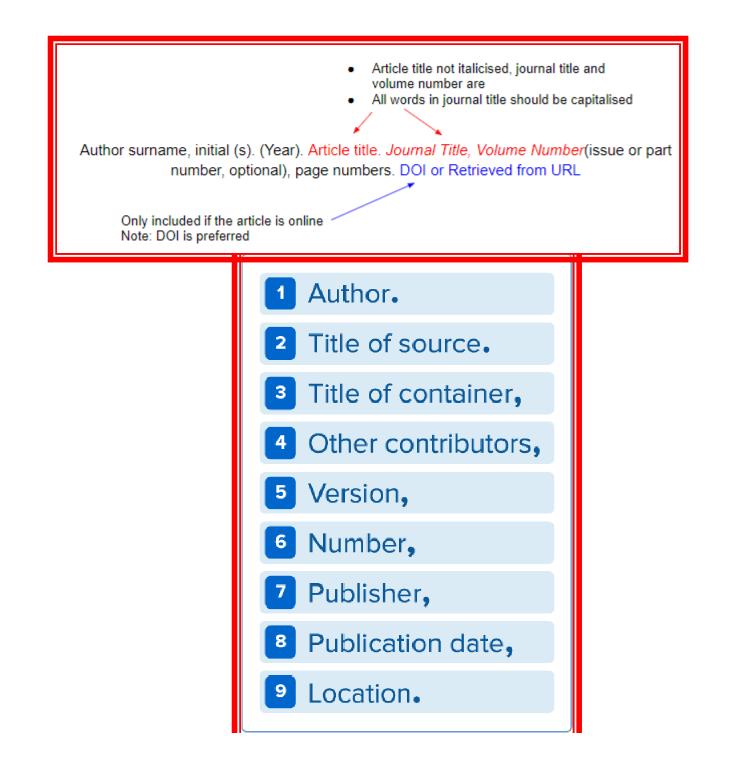
Pages of article

Journal title

Volume Issue

American Psychological Association (**APA**) citation and **format style APA** (American Psychological Association) **style** is most commonly used to cite sources within the social sciences.

The Modern Language Association (MLA) is an organization responsible for developing MLA format, often called MLA style. MLA format was developed as a means for researchers, students, and scholars in the literature and language fields to use a uniform way to format their papers and assignments.



STYLE OF CITATION

Cite						
Copy and p manager.	aste a formatted citation or use one of the links to import into a bibliography					
MLA	Souleles, Nicholas S. "Consumer response to the Reagan tax cuts." Journal of Public Economics 85.1 (2002): 99-120.					
APA	Souleles, N. S. (2002). Consumer response to the Reagan tax cuts. <i>Journal</i> of <i>Public Economics</i> , 85(1), 99-120.					
Chicago	Souleles, Nicholas S. "Consumer response to the Reagan tax cuts." Journal of Public Economics 85, no. 1 (2002): 99-120.					
Harvard	Souleles, N.S., 2002. Consumer response to the Reagan tax cuts. Journal of Public Economics, 85(1), pp.99-120.					
Vancouver	Vancouver Souleles NS. Consumer response to the Reagan tax cuts. Journal of Public Economics. 2002 Jul 31;85(1):99-120.					
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Mickalowski, K., Mickelson, M., & Keltgen, J. (2008). Apple's iPhone

launch: A case study in effective marketing. The Business Review,

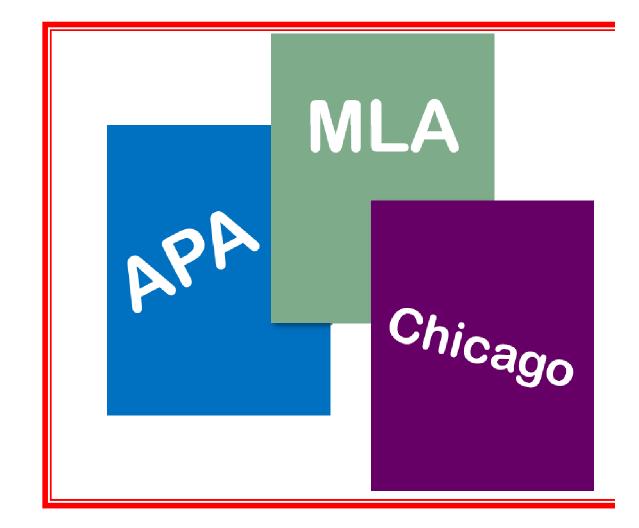
Cambridge, 9(2), 283-288. Retrieved from http://www.jaabc.com

/brc.html

APA In-text Citation (Paraphrase)

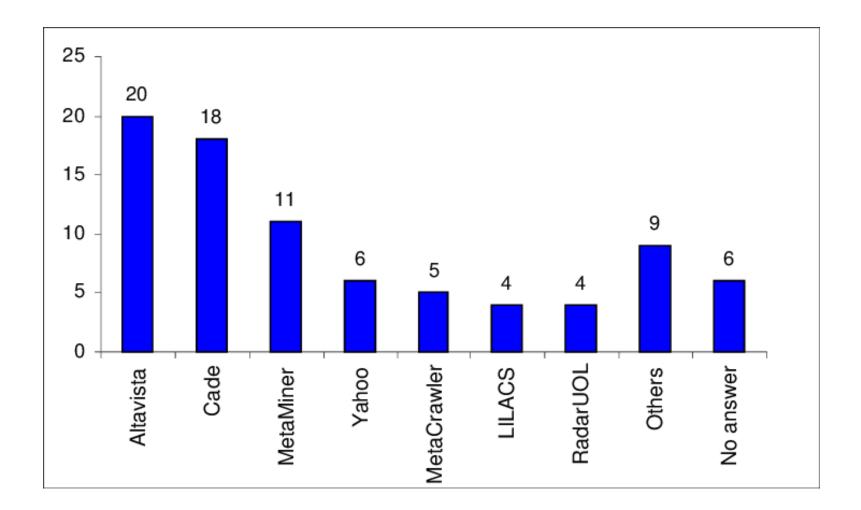
Beyoncé is a powerful role model for girls around the world. She radiates self-confidence, body positivity and shrewd business skills. In fact, she had her own strong role models that helped to development some of these qualities. The powerful women in Beyonce's early life helped her become the dominant force she is today (Taraborelli, 2015).

APA-MLA





CITATION AND IMPACT

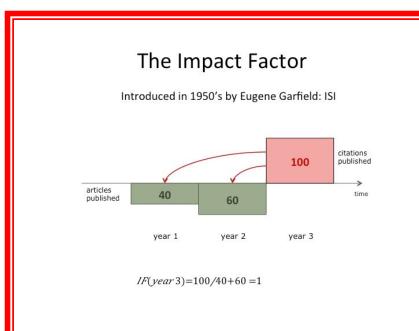


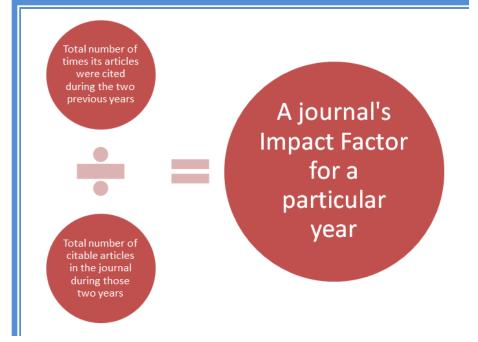
IMPACT FACTOR

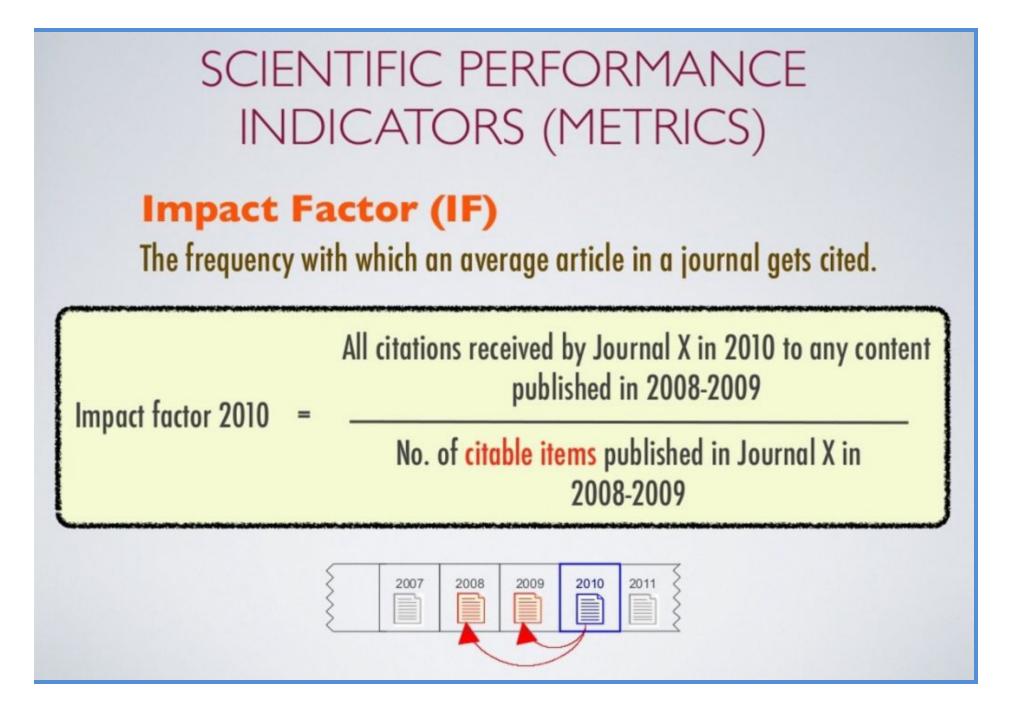
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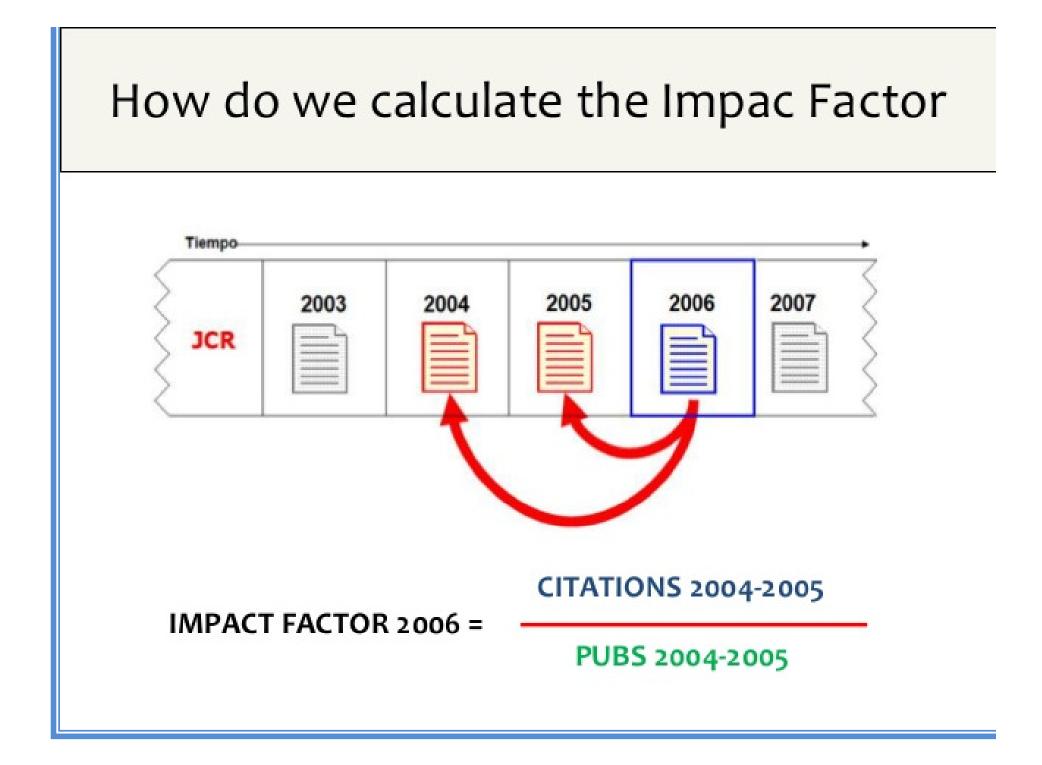
 The impact factor (IF) or journal impact factor (JIF) of an academic journal is a measure reflecting the yearly average number of citations to recent articles published in that journal. It is frequently used as a proxy for the relative importance of a journal within its field; journals with higher impact factors are often deemed to be more important than those with lower ones. The impact factor was devised by Eugene Garfield, the founder of the Institute for Scientific Information. Impact factors are calculated yearly starting from 1975 for journals listed in the *Journal Citation Reports*.

IMPACT FACTOR

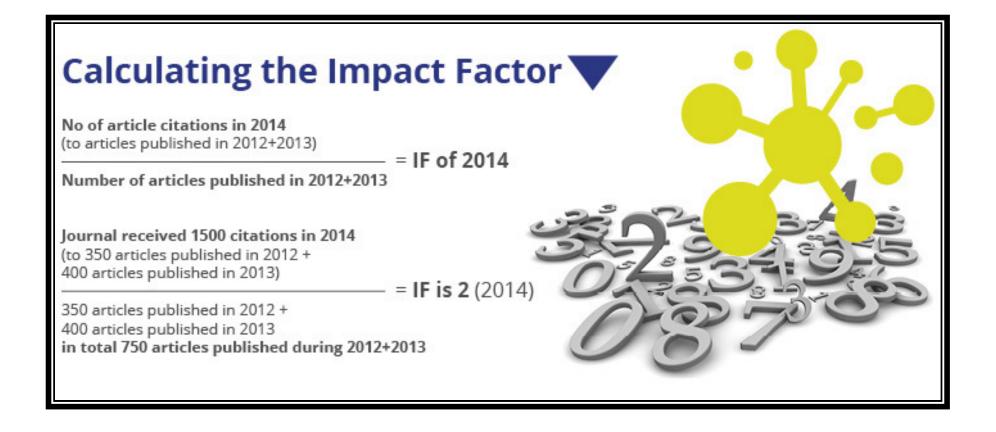


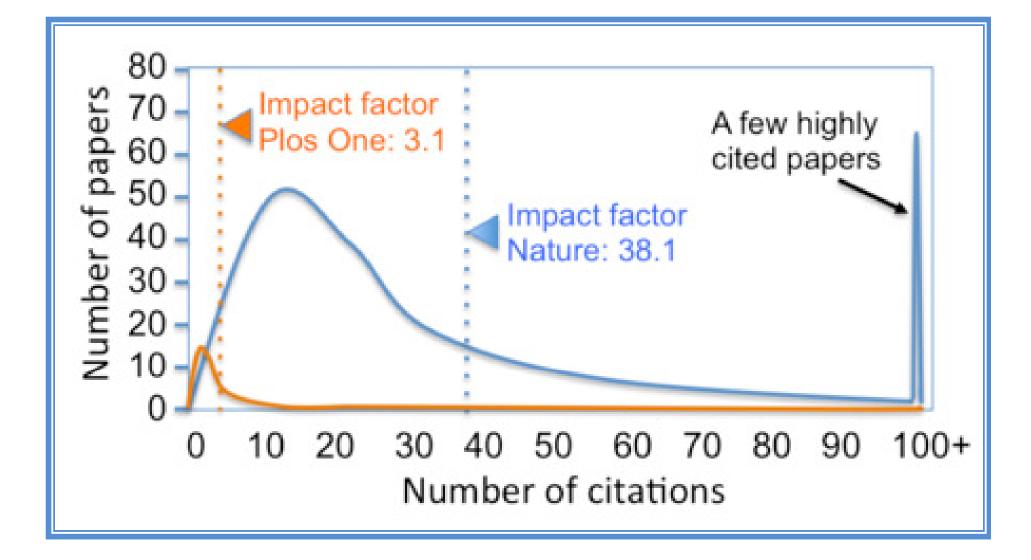




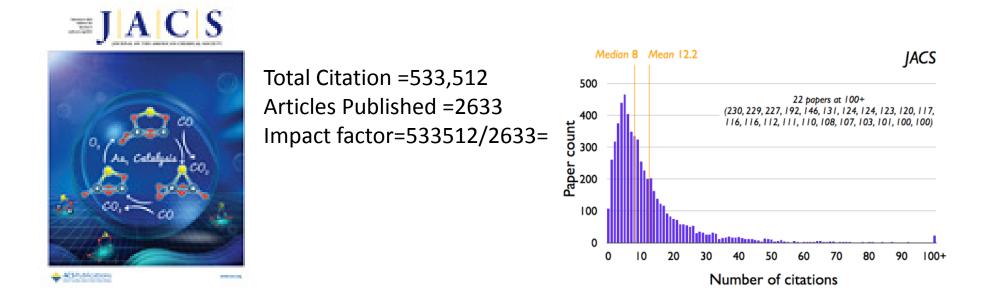


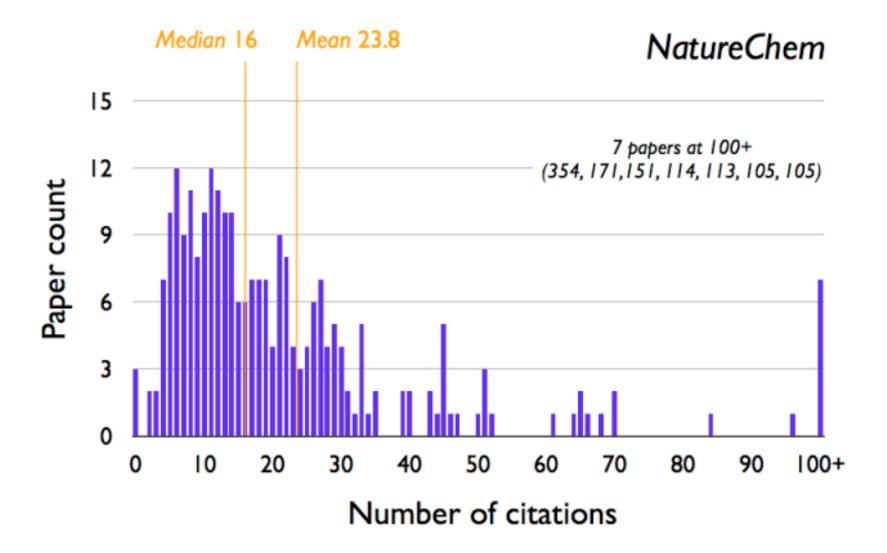
IMACT & Citation & 1/Publications





Cites in 2016	to items published in:			Number of items published in		
		2014 =			2014 = 24	
		Sum:	9352		Sum: 50	
	Cites to recent items		935	52		
Calculation=			50	= 187.04		
	Number of recent iter	ns	50			





IMPACT FACTORS

				JCR Data ()					Eigenfactor [™] Metrics Ü		
Mark	Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	<i>Eigenfactor</i> ™ Score	Article Influence™ Score
	1	GASTROENTEROLOGY	0016-5085	55276	12.899	12.432	2.528	405	7.1	0.15164	4.032
	2	HEPATOLOGY	0270-9139	41640	10.840	10.912	1.920	402	6.6	0.10590	3.065
	3	<u>GUT</u>	0017-5749	28455	9.357	9.663	2.528	180	7.2	0.07076	2.867
	4	J HEPATOL	0168-8278	17413	7.818	6.624	2.559	222	6.1	0.04699	1.867
	5	GASTROINTEST ENDOSC	0016-5107	17856	6.713	6.593	1.453	395	5.7	0.04365	1.571
	6	AM J GASTROENTEROL	0002-9270	26199	6.012	6.380	1.580	312	6.9	0.06330	1.818
	7	CLIN GASTROENTEROL H	1542-3565	5503	5.642		0.939	179	3.3	0.03310	
	8	ENDOSCOPY	0013-726X	7323	5.545	4.791	0.729	140	5.3	0.02233	1.299
	9	SEMIN LIVER DIS	0272-8087	3049	5.171	5.326	0.447	38	7.9	0.00720	1.524
	10	INFLAMM BOWEL DIS	1078-0998	4625	4.643	4.530	0.889	216	3.5	0.01883	1.169
	11	NAT CLIN PRACT GASTR	1743-4378	1024	4.520	4.917	1.750	12	3.1	0.00620	1.461
	12	ALIMENT PHARM THER	0269-2813	11831	4.357	3.825	0.879	264	5.1	0.03715	0.989
	13	CURR OPIN GASTROEN	0267-1379	1547	4.331	3.088	0.535	71	3.0	0.00811	0.957
	14	LIVER TRANSPLANT	1527-6465	8135	3.724	4.159	0.498	241	5.2	0.02548	1.060
	15	NEUROGASTROENT MOTIL	1350-1925	2899	3.568	3.509	0.827	168	3.9	0.01201	0.954
	16	J VIRAL HEPATITIS	1352-0504	2926	3.348	3.320	0.752	105	4.6	0.01088	0.977
	17	AM J PHYSIOL-GASTR L	0193-1857	13541	3.258	3.576	0.597	288	7.4	0.03623	1.154
	18	LIVER INT	1478-3223	2617	2.987	2.995	0.954	216	3.3	0.01252	0.818
	19	DIGEST LIVER DIS	1590-8658	2528	2.972	2.414	0.643	115	4.0	0.00965	0.656
	20	J GASTROENTEROL	0944-1174	3766	2.909	2.814	0.622	172	5.0	0.01294	0.803

JCR Impact Factor

JCR	HEALTH CARE	SCIENCES & SE	RVICES	MEDICAL INFO		
Year 🔻	Rank	Quartile	JIF Percentile	Rank	Quartile	JIF Percentile
2016	4/90	Q1	96.111	1/23	Q1	97.826
2015	5/88	Q1	94.886	2/20	Q1	92.500
2014	9/88	Q1	90.341	3/24	Q1	89.583
2013	4/86	Q1	95.930	1/24	Q1	97.917
2012	4/83	Q1	95.783	1/23	Q1	97.826
2011	2/76	Q1	98.026	1/23	Q1	97.826
2010	2/72	Q1	97.917	1/22	Q1	97.727
2009	2/69	Q1	97.826	2/23	Q1	93.478
2008	2/62	Q1	97.581	1/20	Q1	97.500
2007	6/57	Q1	90.351	2/20	Q1	92.500
2006	6/57	Q1	90.351	2/20	Q1	92.500

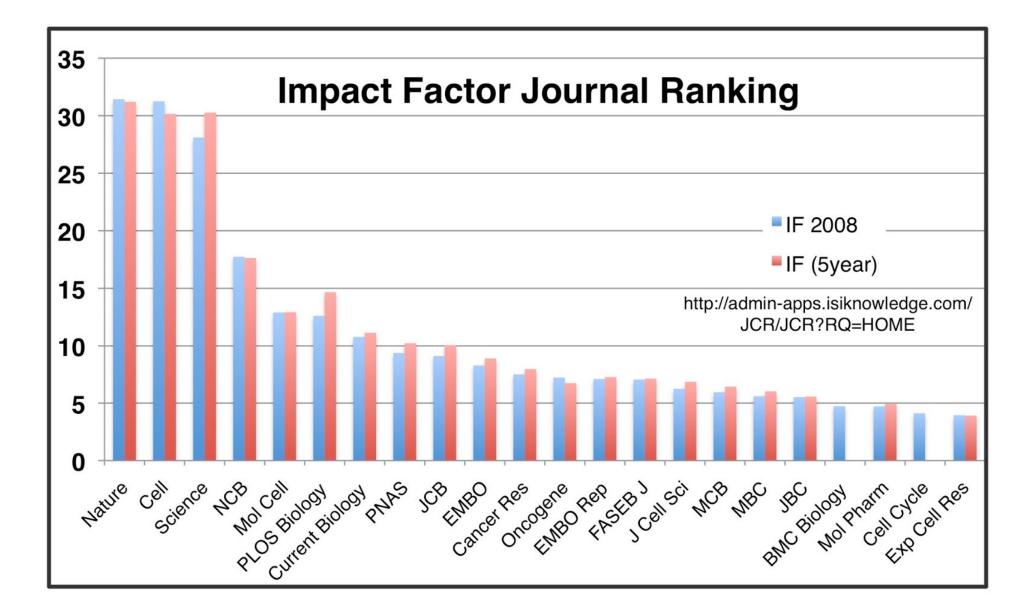


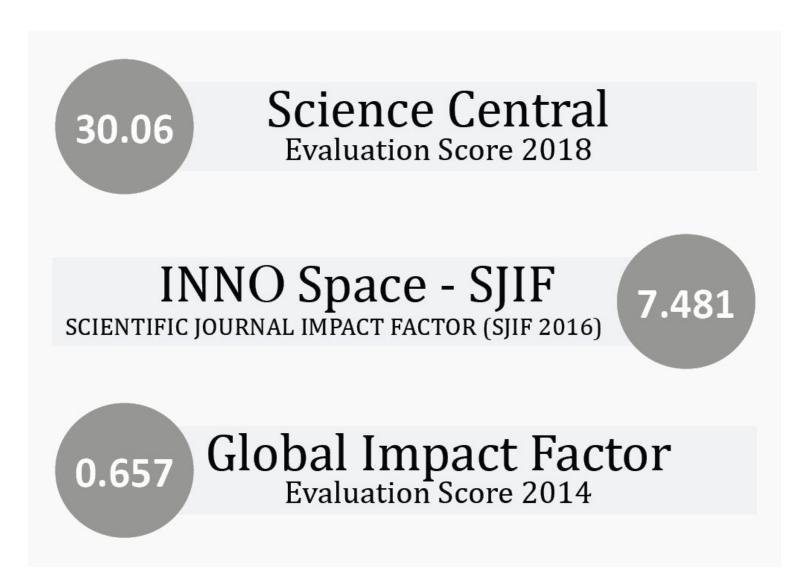
Table. Selected Biomedical Journals Ranked by Impact Factor

			Articles	Citations in 2004		
	2004		Articles	To 2002 + 2003		
Journal Title	Impact Factor	2004	2002 + 2003	Articles	Total	
Annual Review of Immunology	52.4	30	51	2674	14 357	
New England Journal of Medicine	38.6	316	744	28 696	159 498	
Nature Reviews: Cancer	36.6	79	149	5447	6618	
Physiological Reviews	33.9	35	61	2069	14671	
Nature Reviews: Immunology	32.7	80	151	4937	5957	
Nature	32.2	878	1748	56 255	363 374	
Science	31.9	845	1736	55 297	332 803	
Nature Medicine	31.2	168	318	9929	38 657	
Cell	28.4	288	627	17 800	136 472	
Nature Immunology	27.6	130	273	7531	14 063	
JAMA	24.8	351	751	18648	88 864	
Nature Genetics	24.7	191	420	10372	49 529	
Annual Review of Neuroscience	23.1	26	42	972	8093	
Pharmacological Reviews	22.8	19	49	1119	7800	
Lancet	21.7	415	1020	22 147	126 002	
Annals of Internal Medicine	13.1	189	396	5193	36 932	
Annual Review of Medicine	11.2	29	65	728	3188	
Archives of Internal Medicine	7.5	282	567	4257	26 525	
BMJ	7.0	623	1222	8601	56 807	
CMAJ	5.9	100	220	1307	6736	

SJIF







How the Journal Impact Factor is calculated

Calculation:

The journal impact factor (JIF) calculation is based over three years. For example the 2014 JIF of the journal "Nature" in this example is 41.456

Journal Impact Factor 1

Cites in 2014 to items published in: 2013 = 29753	Number of items published in: 2013 = 860
2012 = 41924	2012 = 869
Sum: 71677	Sum: 1729
Calculation: Cites to recent items 71677 =	41.456
Number of recent items 1729	

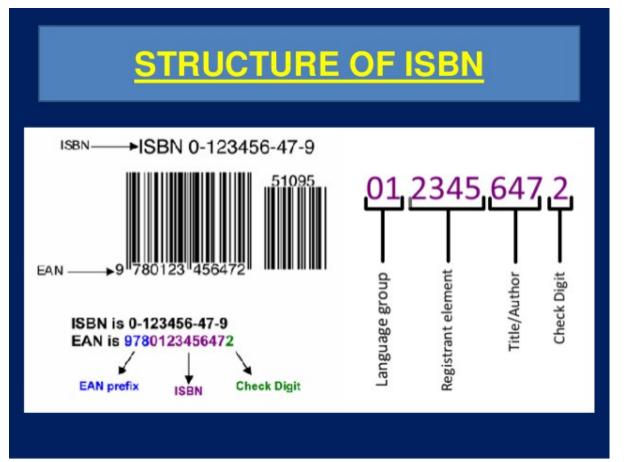


JCR, SFIF, UIF, GIF

It is a fact that Thomson Reuters' JCR Impact Factor is the most reliable and authentic one, and is the only measure that is considered for the purposes of academic evaluation. Other metrics such as the Scientific Journal Impact Factor (SJIF), Universal Impact Factor (UIF), Global Impact Factor (GIF), etc. are products of other indexing companies. Most reputable journals prefer to get indexed in JCR. Thus, as you have rightly said, for most academic purposes such as selection for academic interviews, awarding tenure, etc., SJIF will not be considered.

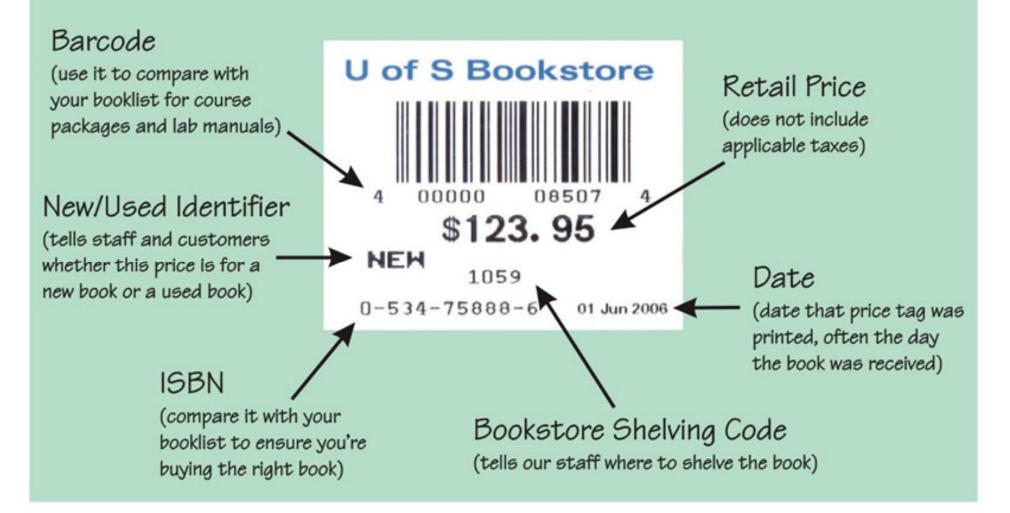
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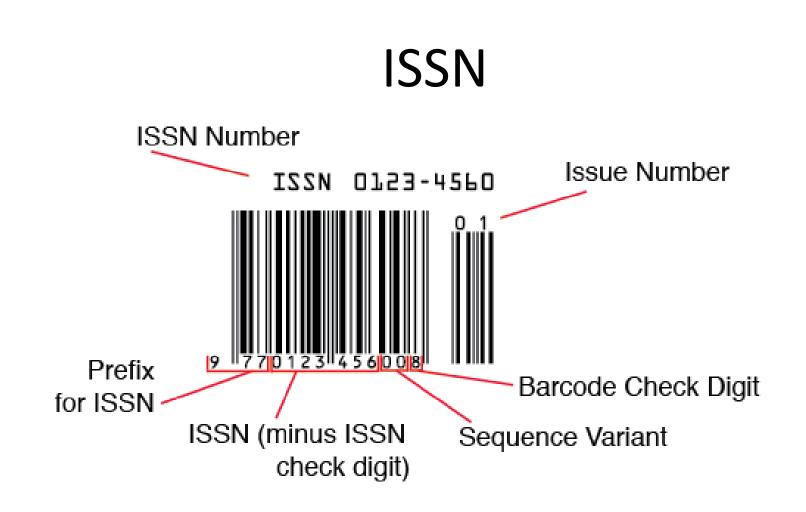
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Contact Name	Mr KPJ Gerald		
Email	kpjgerald@gmail.com		
Job Title	Under Secretary (Book Promotion)		



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Differences

ISSN

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- 8-digits
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- France and UNESCO
- Free
- Continuing resource- Serial publication- Ongoing Integrating resource
- http://www.issn.org/

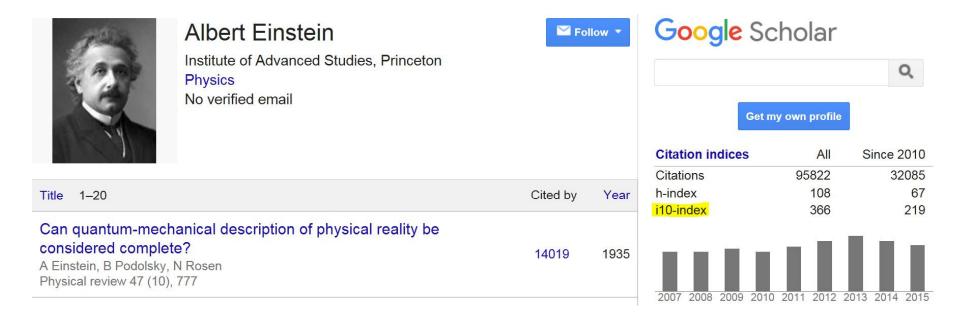
ISBN

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- Depending upon national office may be charged
- Books
- http://rrrlf.nic.in/isbn.asp

RESEARCH INEX

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- <u>Reserachgate</u>
- **Publication**
- <u>Cheminform Publications</u>
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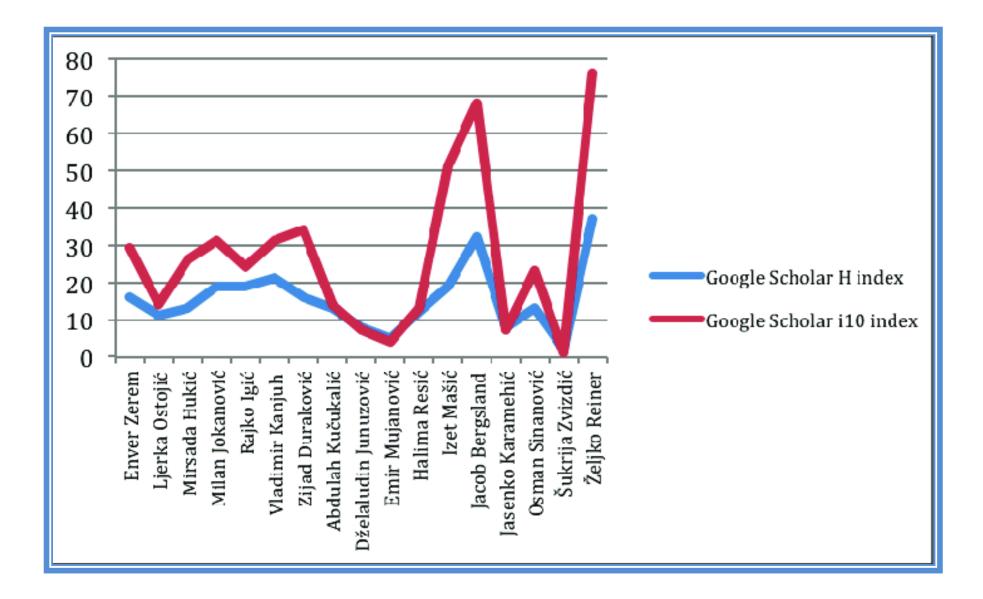
i-10 Index



https://scholar.google.com/citations?user=qe6nq4QAAAAJ&hl=en

	All	Since 2014
Citations	2029	1041
h-index	19	17
i10-index	20	19

860



i-10 Index

Google Scholar

- <u>http://scholar.google.com</u> publications & citations
- *h-index* (top *h* publications with *h* or more citations)
- *i10-index* (at least 10 citations)



Change photo

Jonathan P. Bowen

Professor of Computer Science, Birmingham City University Edit Computer Science - Software Engineering - Formal Methods - Software Testing -Museums Edit

Verified email at bcu.ac.uk Edit My profile is public Edit Link Homepage Edit

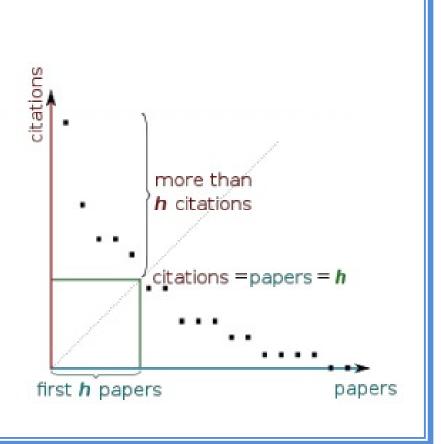


H-Index

h-index

Measured at the author level

h-index = number of papers h that have been cited h times



i10-index

Papers with 10 (or *n*) or more citations.

$$[X] = [X] =$$

i-index : $\mathbb{N} \to (\text{bag } X \to \mathbb{N})$
 $\forall n : \mathbb{N}; b : \text{bag } X \bullet$
i-index $n \ b = \#(b \triangleright (1 \dots n - 1))$

Calculate H-Index



HOW MANY TIMES EACH ARTICLE S CITED

REJECTED CANDIDATE	H-INDEX	API SCORE	CITATIONS	I-10-INDEX	IMPACT FACTOR
Gyan Singh Shekhawat	18	1,800	1,000	21	98
INTERVIEW PANELISTS	H-INDEX	API SCORE	CITATIONS	H10-INDEX	IMPACT FACTOR
Ashok K Nagawat HOD, Physics	4	-	56	1	-
Arun Arya Subject expert	9	—	397	8	-
Prof Kailash Agarwal Subject expert	6	-	101	1	-
SELECTED CANDIDATES	H-INDEX	API SCORE	CITATIONS	H10-INDEX	IMPACT FACTOR
Yogesh Joshi	9		357	6	_
Dr Seema Bahaduria	6	-	88	2	-

* API - Academic Performance Indicator

INDEXING SERVICE

Chemical Abstracts Service, Scopus, EBSCOhost, Thomson-Gale, ProQuest, PubMed, Web of Science, SwetsWise. Journal Citation Reports, it has an impact factorof 14.357 for 2017.^[3]

STUDENT CORNER

- <u>GRE</u>
- <u>TOFEL</u>
- Top University List
- <u>Fellowship Oppertunity for Students</u>