

Fatores de Impacto de Periódicos Científicos

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Aqui é explicado como calcular os fatores de impacto dos periódicos científicos. O objetivo é mostrar de forma didática como aplicar a equação do fator de impacto e seu uso é ilustrado com um exemplo real. Fatores de impacto são determinantes na avaliação da qualidade da produção científica de pesquisadores e dos programas de pós-graduação *Stricto Sensu*.

Estude o texto “Artigos Científicos. Fatos e Fatores de Impacto” disponível no link: https://azevedolab.net/resources/Artigos_cient%C3%ADficos.pdf .

Após o estudo do texto, responda as questões no final da apresentação.



IF_{XXXX} : fator de impacto de um dado periódico no ano XXXX

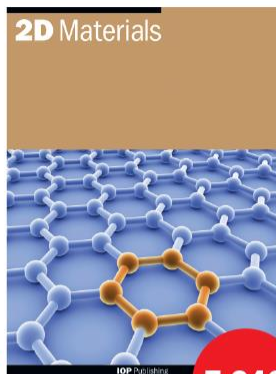
$$IF_{XXXX} = \frac{N}{P}$$

N: número total de citações que artigos de um dado periódico publicados no biênio anterior ao ano XXXX receberam no ano XXXX

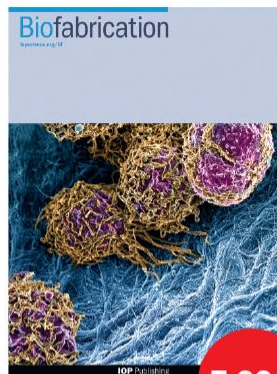
P: número total de artigos publicados de um dado periódico no biênio anterior ao ano XXXX



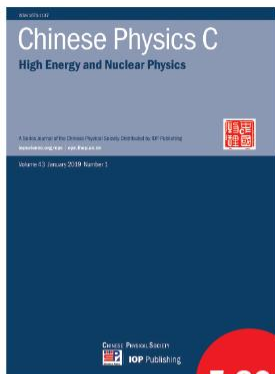
8.374



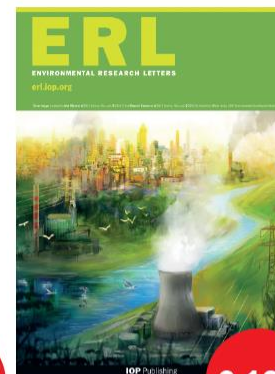
7.343



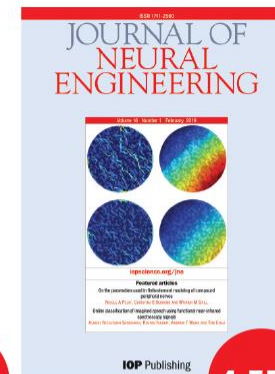
7.236



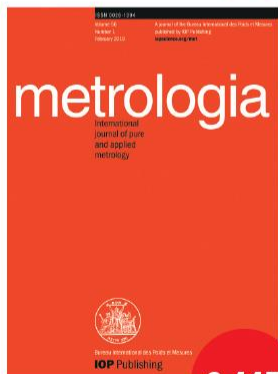
5.861



6.192



4.551



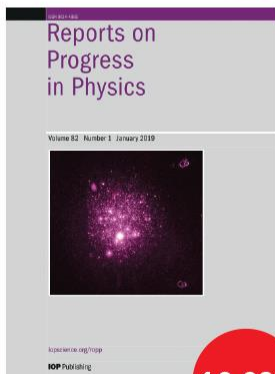
3.447



4.128



3.022



16.620



4.612

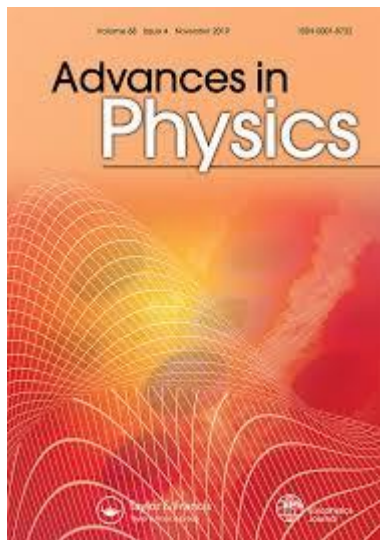


3.543

Cálculo do fator de impacto do periódico *Advances in Physics* para o ano de 2007.

N: número total de citações que artigos do periódico *Advances in Physics* publicados no biênio 2005-2006 receberam no ano 2007 = **201**

P: número total de artigos publicados no periódico *Advances in Physics* no biênio 2005-2006 = **21**



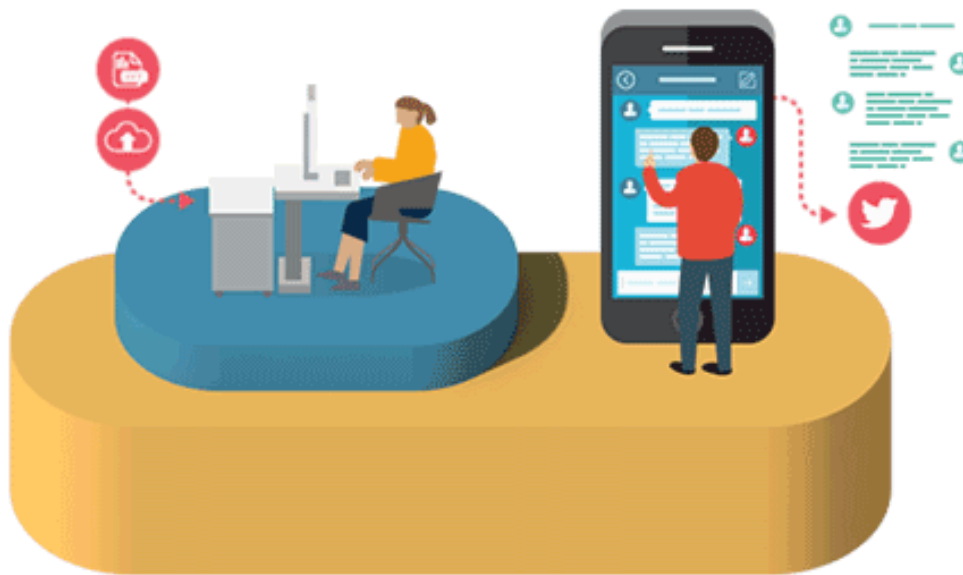
$$IF_{2007} = \frac{N}{P} = \frac{201}{21} = 9,571$$

Assim, o fator de impacto de 2007 (*2007 Journal Citation Reports (JCR) impact factors*) (liberado em 2008) para o periódico *Advances in Physics* é **9,571**.

Impact Factor 2018 (JCR Released in 2019)

Rank	Journal Title	Impact factor 2018 (Released in 2019)
1	CA: A Cancer Journal for Clinicians	223.679
2	Nature Reviews Materials	74.449
3	The New England Journal of Medicine	70.67
4	The Lancet	59.102
5	Nature Reviews Drug Discovery	57.618
6	Chemical Reviews	54.301
7	Nature Energy	54
8	Nature Reviews Cancer	51.848
9	Nature Reviews Immunology	44.019
10	Nature Reviews Genetics	43.704

Liao Y-M. Top 500 Journals in 2019 (JCR Journal Impact Factor Released in 2019). Disponível em: <https://www.researchgate.net/publication/333972052_Top_500_Journals_in_2019_JCR_Journal_Impact_Factor_Released_in_2019>. Acessado em 06 de junho de 2020.

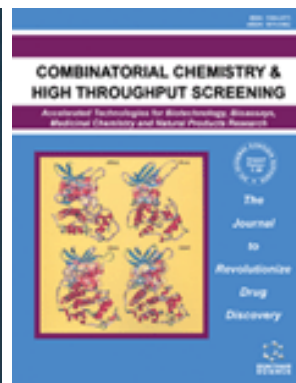
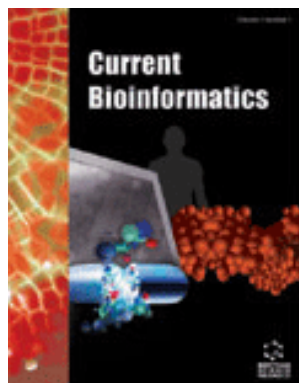
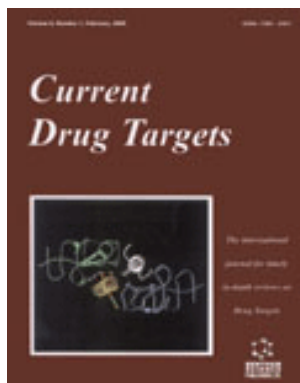


- 1) Diferencie os parâmetros índice h e número de citações.
- 2) Cite três periódicos científicos indexados juntos ao *Web of Science*.



Prof. Azevedo is Frontiers Section Editor (Bioinformatics and Biophysics) of the Current Drug Targets, section editor (Bioinformatics in Drug Design and Discovery) of the Current Medicinal Chemistry, section editor (Combinatorial/Medicinal Chemistry) for the Combinatorial Chemistry & High Throughput Screening, member of the editorial board of Current Bioinformatics, and editor of Docking Screens for Drug Discovery (Methods of Molecular Biology)(Springer Nature). He is also member of the editorial board of PeerJ, PeerJ Physical Chemistry, Organic & Medicinal Chemistry International Journal, and section editor in chief (Bioinformatics) of the Bioengineering International. He graduated in Physics (BSc in Physics) from the University of São Paulo (USP) in 1990. He completed a Master Degree in Applied Physics also from the USP (1992), working under the supervision of Prof. Yvonne P. Mascarenhas, the founder of crystallography in Brazil. His dissertation was about X-ray crystallography applied to organometallics compounds (De Azevedo Jr. et al., 1995). During his PhD, he worked under the supervision of Prof. Sung-Hou Kim (University of California, Berkeley), on a split Ph.D. program with a fellowship from Brazilian Research Council (CNPq)(1993-1996). His PhD was about the crystallographic structure of CDK2 (De Azevedo Jr. et al., 1996). His current position is coordinator of the Structural Biochemistry Laboratory at Pontifical Catholic University of Rio Grande do Sul (PUCRS). His research interests are interdisciplinary with two major emphases: molecular simulations and protein-ligand interactions. He published over 190 scientific papers about protein structures and computer models to assess intermolecular interactions involving biomolecules and potential ligands (H-index: 37, RG Index > 41.0). These publications have over 4900 citations in the Web of Science (Publons h-index: 37), more than 5600 citations in the Scopus (h-index: 41), and over 7100 citations in the Google Scholar (h-index: 44).

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The screenshot shows the Facebook profile page for 'Azevedolab'. At the top, there is a navigation bar with the Facebook logo and login fields for 'Email ou telefone' and 'Senha', with an 'Entrar' button and a link for 'Esqueceu uma conta?'. On the left, a sidebar menu lists: 'Página inicial', 'Sobre', 'Fotos', 'Website', 'Vídeos', 'Publicações', and 'Comunidade'. The main content area features a large 'Fotos' section with a schematic flowchart titled 'Schematic Flowchart for Application of Bioinformatics Tools to Discover Drugs Against COVID-19'. The flowchart details a process starting from 'Protein Structures of SARS-CoV-2' and 'Selection of Targets of SARS-CoV-2', moving through 'Machine Learning' (involving IC50 and 3D structures), 'Molecular Docking', 'Virtual Screening' (using ZINC database), and 'Selection of the Best Hits (Potential New Drugs Against COVID-19)'. It also references 'Protein-Ligand Binding Affinity Databases' and 'MOAD'. Below the flowchart are three smaller images: a book cover for 'TOP DOWNLOADED PAPER 2019-2019' by Walter Filgueira de Azevedo, Jr., a book cover for 'CHEMICAL BIOLOGY & DRUG DESIGN', and a movie poster for 'ALIEN'. To the right of the main content, there are sections for 'Azevedolab' (Ciência, tecnologia e engenharia em Porto Alegre, Rio Grande do Sul, Sempre aberto), 'Comunidade' (97 pessoas curtiram isso, 97 pessoas estão seguindo isso), and 'Sobre' (Pontifical Catholic University of Rio Grande do Sul (PUCRS) (5,61 km), 90619-900 Porto Alegre, Rio Grande do Sul, Como chegar, +55-53535555, azevedolab.net, Ciência, tecnologia e engenharia).

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Cross J. Impact factors - the basics. The E-Resources Management Handbook. Disponível em: <<https://www.uksg.org/sites/uksg.org/files/19-Cross-H76M463XL884HK78.pdf>>. Acessado em 06 de junho de 2020.

Dennis D. How to Read Scientific Papers Quickly & Efficiently. Disponível em: <<https://medium.com/@drewdennis/how-to-read-scientific-papers-quickly-efficiently-e7030c4018fa>>. Acessado em 06 de junho de 2020.

Liao Y-M. Top 500 Journals in 2019 (JCR Journal Impact Factor Released in 2019). Disponível em: <https://www.researchgate.net/publication/333972052_Top_500_Journals_in_2019_JCR_Journal_Impact_Factor_Released_in_2019>. Acessado em 06 de junho de 2020.

SCI® Journal Citation Reports®: a bibliometric analysis of science journals in the ISI® database. Philadelphia: Institute for Scientific Information, Inc.®, 1993.