

Essential Reading if you care about Impact Factor:

- 1) Hirsch, J.E., PNAS 102(46) (2005) 16569-16572. 'An index to quantify an individual's scientific research output.'
- 2) Davis, O., J. Am. Soc. Info. Sci. Tech. 59(13) (2008) 2186-2188. 'Eigenfactor: does the principle of repeated improvement result in better estimates than raw citation counts?'
- 3) Seglen, P.O., J. Am. Soc. Info. Sci., 43(9) (1992) 628-638. 'The Skewness of Science.'
- and
- 4) Albarrán, P., Crespo, J.A., Ortuno, I. and Ruiz-Castillo, J., Scientometrics 88 (2011) 385-397. 'The skewness of science in 219 sub-fields and a number of aggregates.'
- Plus (I like)
- 5) Balaban, A.T., Scientometrics 92 (2012) 241-247 'Positive and negative aspects of citation indices and journal impact factors.'

A must-read:

- 6) Glänzel, W. and Moed, H.F., Scientometrics 53(2) (2002) 171-193. 'Journal impact measures in bibliometric research.' Especially Table 6.

Table 6. Mean citation rate of subfields

(source year: 1996, citation window: 1996-1998)

Mechanical, civil and other engineering	1.12
Mathematics	1.46
Analytical chemistry	3.00
Solid state physics	3.06
Neurosciences	4.54

See also

- 7) Fersht, A., PNAS 106(17) (2009) 6883-6884. 'The most influential journals: impact factor and eigenfactor.'
- 8) Bollen, J., Van de Sompel, H., Hagberg, A. and Chute, R., PLOS ONE, Article No. e6022 DOI: 10.1371/journal.pone.0006022 (2009). 'A principal component analysis of 39 scientific impact measures.'
- 9) Egghe, L., Scientometrics, 69(1) (2006) 131-152. 'Theory and practise of the g-index.'
- 10) Radicchi, F., Sci. Rep. 2:815 (2012) (DOI: 10.1038/srep00815) 1-5. 'In science "there is no bad publicity": Papers criticized in comments have high scientific impact.'
- 11) Garfield, E., Scientometrics. 1(4) (1979) 359-375. 'Is citation analysis a legitimate evaluation tool?'
- 12) Franceschini, F., Galetto, M., Maisano, D. and Luca, J. Informetrics 6 (2012) 669-673. 'Further clarifications about the success-index.'