



**Publishing
Connect**

Partnering with the Global Research Community

Publishing **State of the art**

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Journal Publisher
Agronomy & Remote Sensing



The Innovation Age of Publishing



Publication Process



Peer Review



Format of the Article - innovations



Access



Ethics



Data

Peer Review Evolutions

Publication and review process

- From print to digital

Nowadays ca. 80% digital



- Online submission systems

Essential for efficient, effective and fast peer review



- Mobile publishing

e.g. health care, apps



- Abstract and indexing services

Increased findability of articles and authors



Peer Review Evolutions

Publication and review process

- New peer review models
 - Open peer review
 - Pre-submission review
 - Paid peer review
 - Discussion fora
- New ways to communicate
 - E.g. Twitter, Facebook, LinkedIn
- New communities



Peer Review Evolutions

Publication and review process

- Reviewers wanted!
 - Each paper requires 2-3 reviewers
 - Increasing work pressure for researchers
 - Lack of review skills in scientifically developing countries
 - No appropriate recognition for reviews
- what is needed to ensure the future of peer-review?



**Publishing
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Partnering with the Global Research Community

Innovation

Technological innovations

Article of the Future

PDF (12 pages) E-mail Export More Display mode


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Research highlights

Abstract

1. Introduction



2. Materials and methods

2.1. Harvesting of adult worms

2.2. Preparation of biotinylated tegument proteins by labelling worms in culture

2.3. Fluorescence and electron microscopy to observe surface biotinylation

2.4. OFFGEL electrophoresis


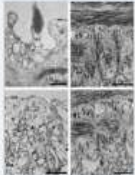
2.5. LC-MS/MS analysis

2.6. Protein identification

2.7. Bioinformatic analysis

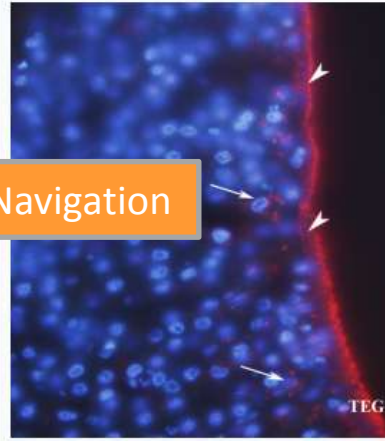
3. Results

3.1. Fate of LC-biotin probes in tegument of live schistosomes

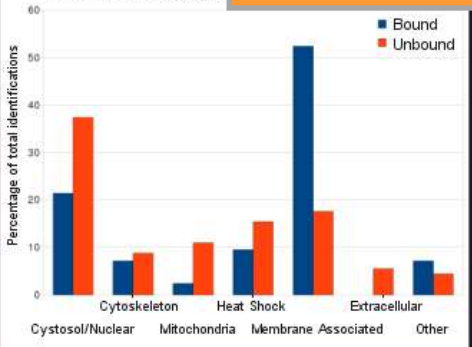



3.2. Proteomic characterisation of

- Using this technique in combination with LC-MS/MS we identified 54 proteins as putatively host-exposed in *Schistosoma japonicum*.
- Using confocal and electron microscopy, the internalization of biotin-labelled proteins was observed.



Protein identification



Category	Bound (%)	Unbound (%)
Cytosol/Nuclear	22	38
Mitochondria	8	10
Heat Shock	10	15
Membrane Associated	52	18
Extracellular	5	5
Other	8	5

Sidebar content: Proteins (54)

- Article information
- Author information (10)
- Related articles (5)
- Figures (5)
- Tables (2)
- Experimental flowcharts (4)
- Proteins (54)
- Supplementary (5)
- References (68)
- Highlight links

376 aa protein

Complete database entry (NCBI)

Subcellular Location

Cytoskeleton

Accession

AAW25537

Version

AAW25537.1 GI:56754704

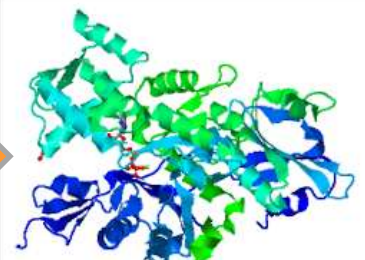
DB source

accession AY813805.1

Organism

Schistosoma japonicum E; Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea; Strigeidida; Schistosomatoidea; Schistosomatidae; Schistosoma

Similar protein (PDB.org)



Easy Navigation

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Task based browsing

Links to external sources

Google Maps

★ ScienceDirect - Carbon : Com... Article of the future

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Article outline ☒ Show thumbnails


Top

Abstract

1. Introduction

2. Materials and methods

2.1. Study areas



2.2. Sample collections

2.3. Molecular analyses

3. Results

3.1. Species distribution

Fig. 1: Map of republic of Benin showing the position of the 30 study sites within each bioclimatic area.

Legend:

Sudanian

Sudano-Guinea

Guinean

Display: Bioclimatic area

Close map

2.2. Sample collections

Mosquitoes were collected as larvae or pupae during the rainy seasons, between March and July 2006, between April and May 2007, and in October 2007. The sampling was guided by the availability and the accessibility of larvae in breeding sites of *An. gambiaes.s.l*. Larvae and pupae were stored in separate bottles for each breeding site of each locality. They were transported to the CDEP laboratory. Pre-imaginal stages were then reared to adults as follows: larvae from

Show: Article information

Acta Tropica

Volume 114, Issue 2, May 2010, Pages 116-122
doi:10.1016/j.actatropica.2010.02.001
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Article history:

Received 2009-7-21;
Received in revised form 2010-1-22;
Accepted 2010-2-1;

Keywords:

Anopheles gambiae;
Malaria;
Specie;
Molecular form;
Benin;

Article extra's:

Interactive maps:

- Figure 1

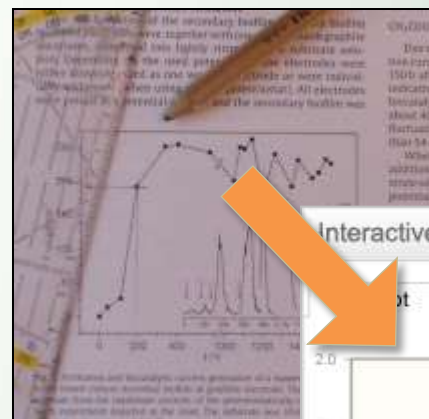
This article contains the following additional content and features:

- Author information (8)
- Related articles (5)
- Figures (2)
- Tables (2)

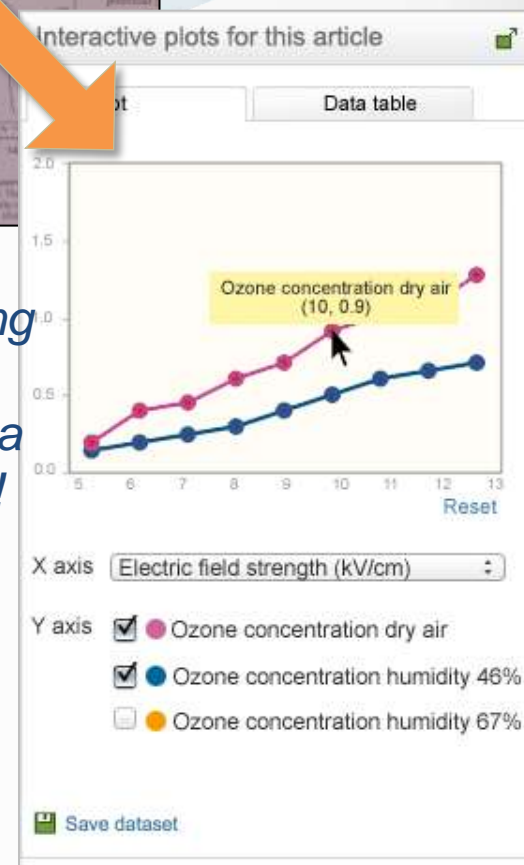
8

Interactive Plots

- Allow readers to access data that used to be “buried” in plots
- Interactive visualization capabilities
 - Data cursor
 - Switch between plot and table view
- Download data
- Works with .CSV files, easily exported from any scientific software

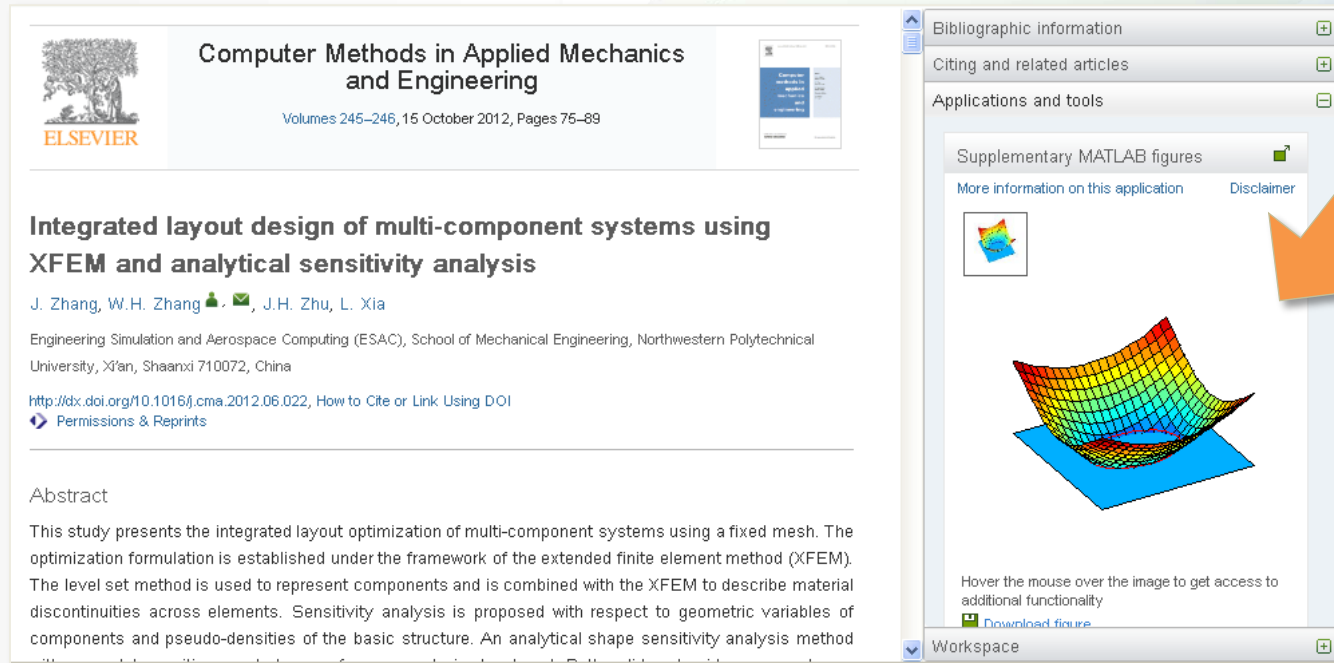


No more printing out figures to reconstruct data points by hand!



interactive figure viewer

Making plots more valuable for research



The screenshot shows a research article from the journal "Computer Methods in Applied Mechanics and Engineering" (Volume 245-246, 15 October 2012, Pages 75-89) by J. Zhang, W.H. Zhang, J.H. Zhu, and L. Xia. The article title is "Integrated layout design of multi-component systems using XFEM and analytical sensitivity analysis". The abstract describes a study on integrated layout optimization using a fixed mesh and the extended finite element method (XFEM).

Overlaid on the right side of the article is an interactive figure viewer window. It contains a 3D surface plot with a color gradient from blue to red. The viewer has a sidebar with options: "Bibliographic information", "Citing and related articles", "Applications and tools", and "Supplementary MATLAB figures". A large orange arrow points from the "Supplementary MATLAB figures" section to the 3D plot. Below the plot, there is a "Download figure" button and a "Workspace" section.

- Explore figures interactively – zoom, rotate, etc.
- Download underlying data for validation & re-use
- Works with MATLAB .FIG files

See <http://www.elsevier.com/matlab>

Interactive 3D models

Abstract

Most research data collections created or used by astronomers are intrinsically multi-dimensional. In contrast, all visual representations of data presented within research papers are exclusively two-dimensional (2D). We present a resolution of this dichotomy that uses a novel technique for embedding three-dimensional (3D) visualisations of astronomy data sets in electronic-format research papers. Our technique uses the latest Adobe Portable Document Format extensions together with a new version of the S2PLOT programming library. The 3D models can be easily rotated and explored by the reader and, in some cases, modified. We demonstrate example applications of this technique including: 3D figures exhibiting subtle structure in redshift catalogues, colour-magnitude diagrams and halo merger trees; 3D isosurface and volume renderings of cosmological simulations; and 3D models of instrumental diagrams and instrument designs.

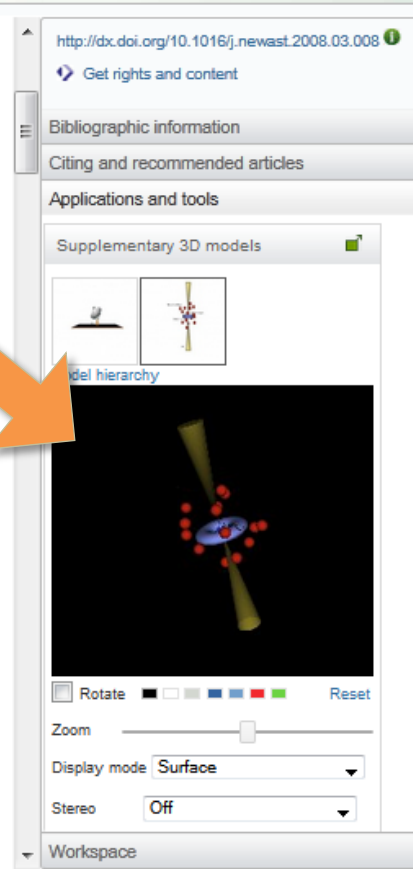
PACS

07.05.Rm; 01.30.Bb

Keywords

Methods: data analysis; Techniques: miscellaneous, surveys; Cosmology: large scale structure of

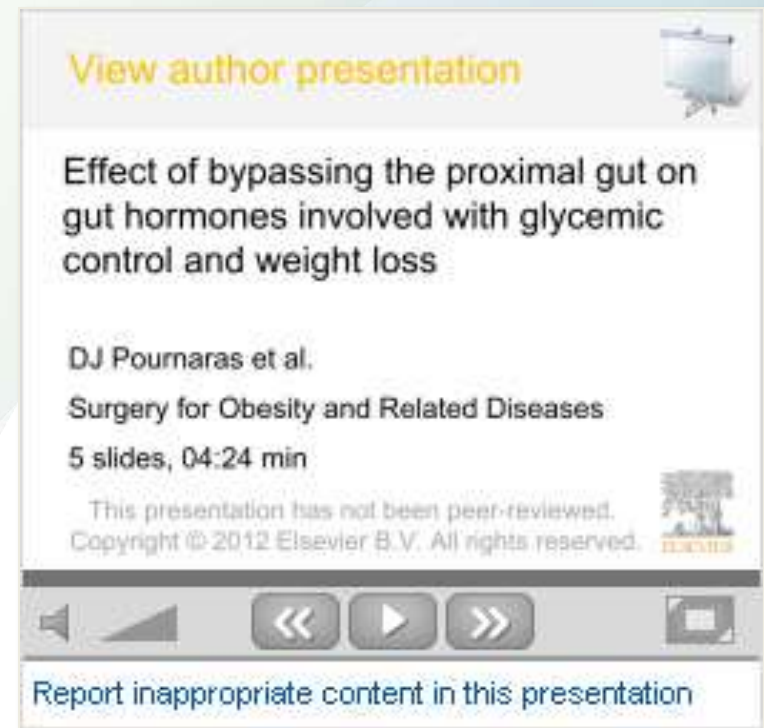
- Interactive 3D models – zoom, rotate, pan to explore model
- Stereo view (requires glasses)
- Works with author-delivered PLY, OBJ, and U3D files



AudioSlides

Authors explain their paper in their own words

- 5-minute, webcast-style presentations by the author
- Slides + voice-over recordings
- Helps readers to get unique insights into research in an attractive format
- Shown next to the article on ScienceDirect
- Online authoring tool developed by Elsevier



See <http://www.elsevier.com/audioslides>

The screenshot shows the ScienceDirect interface for a Physics Reports article. The article title is "Studies of hadronic event structure in e^+e^- annihilation from 30 to 209 GeV with the L3 detector". The sidebar on the right contains a "Data for this Article" section with a link to "More information on this application" and a "Data for this article is available at the following data repositories:" section. This section includes a "HepData" banner with the text "View reaction data from this article at the Durham Reaction Database". Below this, there is a "Workspace" section and an "Astronomical data for this article" section. The "Astronomical data" section states "Data for astronomical objects in this article is available at the following data repositories:" and features a "SIMBAD" banner with the text "SIMBAD (2 objects)". At the bottom of the sidebar, it says "In collaboration with NASA ADS, NED & SIMBAD".

- Banners linking out to data repositories
- Landing page collects data that is directly

- Banners linking out to data repositories
- Landing page collects data that is directly relevant for the article
- Enable reproducibility of research and re-use of data

See

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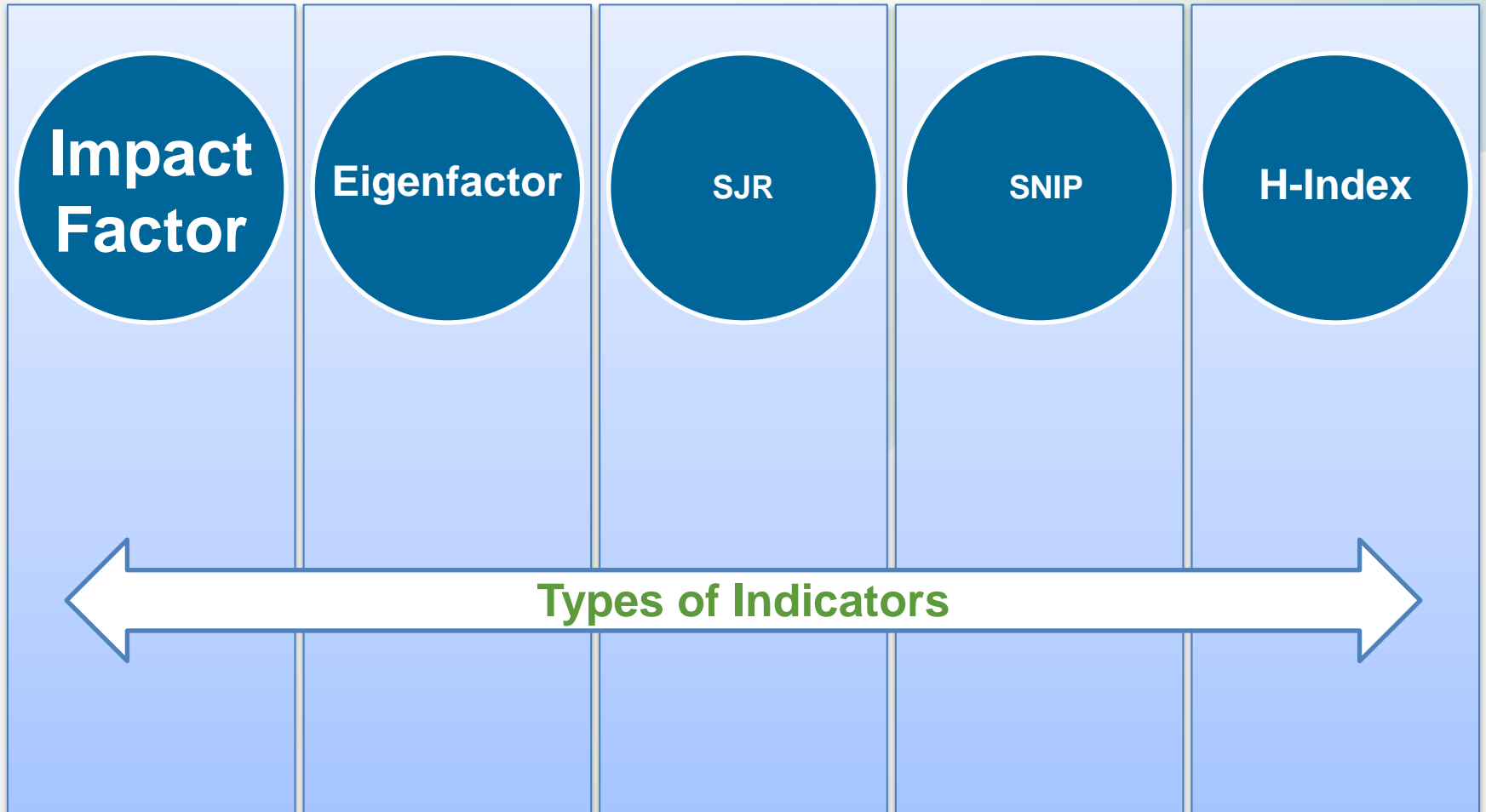


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Bibliometrics

Impact Factors and more



THE CHRONICLE OF HIGHER EDUCATION

October 14, 2005

The Number That's Devouring Science

The impact factor, once a simple way to rank scientific journals, has become an unyielding yardstick for hiring, tenure, and grants

By RICHARD MONASTERSKY

Impact Factor Press Coverage

THE WALL STREET JOURNAL.

Science Journals Artfully Try To Boost Their Rankings

June 5, 2006

By SHARON BEGLEY

Journal of Documentation

Vol. 64, Iss. 2 (2008)

Is the impact of journal impact factors decreasing?

Jan Reedijk

Leiden Institute of Chemistry, Leiden University, Leiden, The Netherlands, and

Henk F. Moed

*Centre for Science and Technology Studies (CWTS), Leiden University,
Leiden, The Netherlands*



**Impact
Factor**

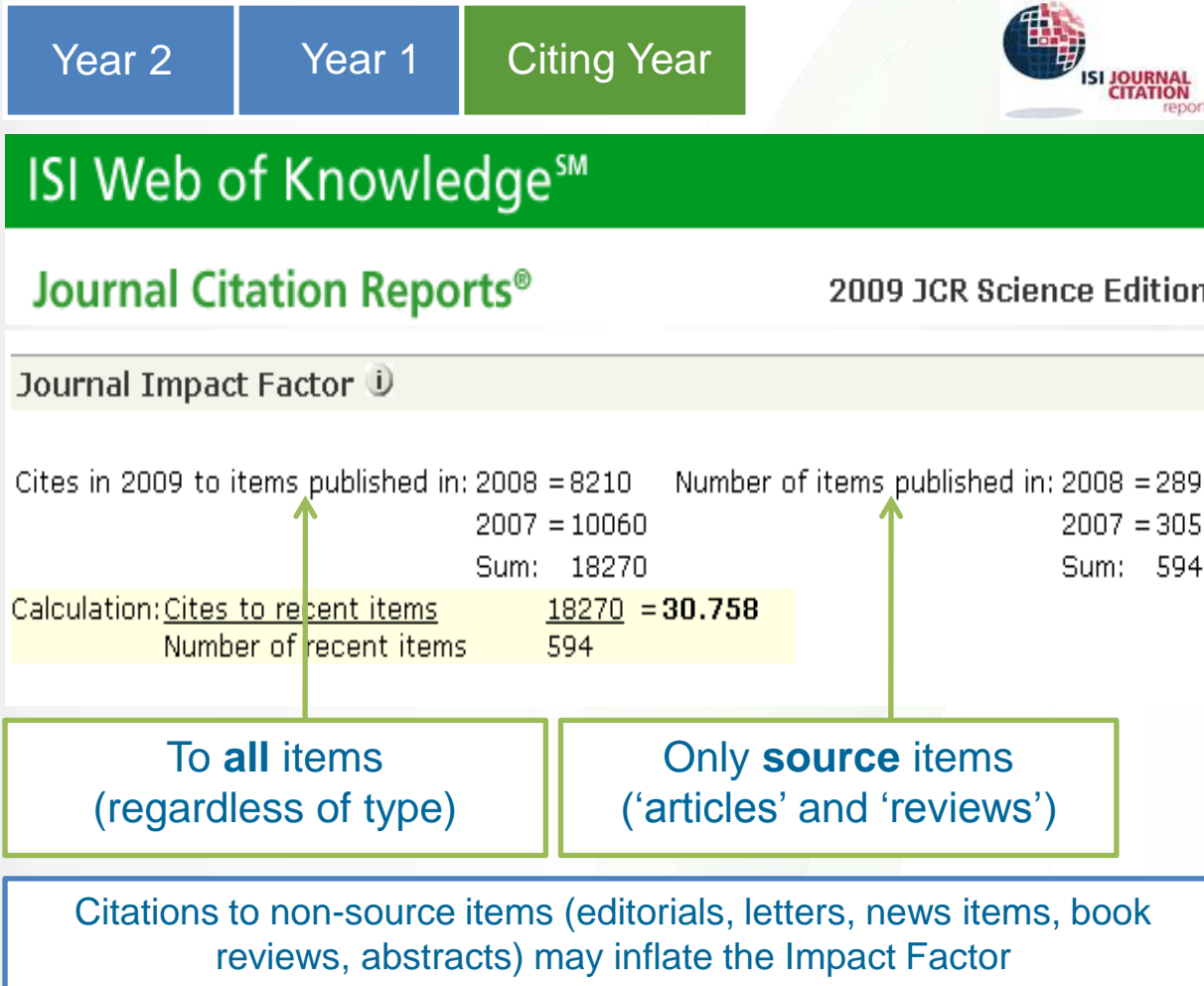
Bibliometrics Trends

Impact Factor and more

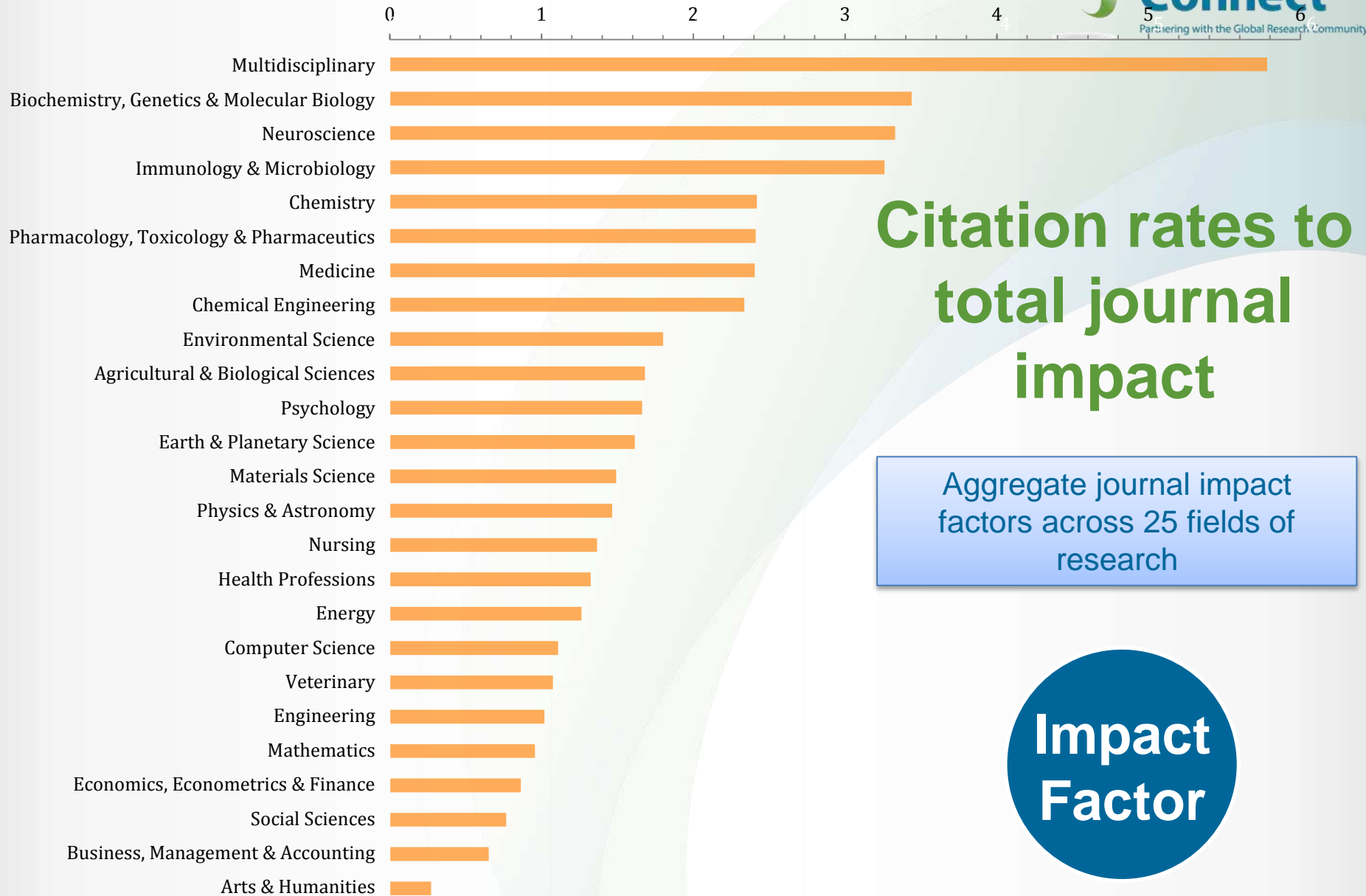
- Increasing importance of bibliometrics, e.g. impact factor, H-index, eigen factor
- Impact Factor perceived as most important
- Dedicated department for bibliometrics in publishing to advise publishers and editors on strategy to ensure highest impact factor

→ **How important is this for NASA?**

Ratio between citations and citable items published in a journal



**Impact
Factor**





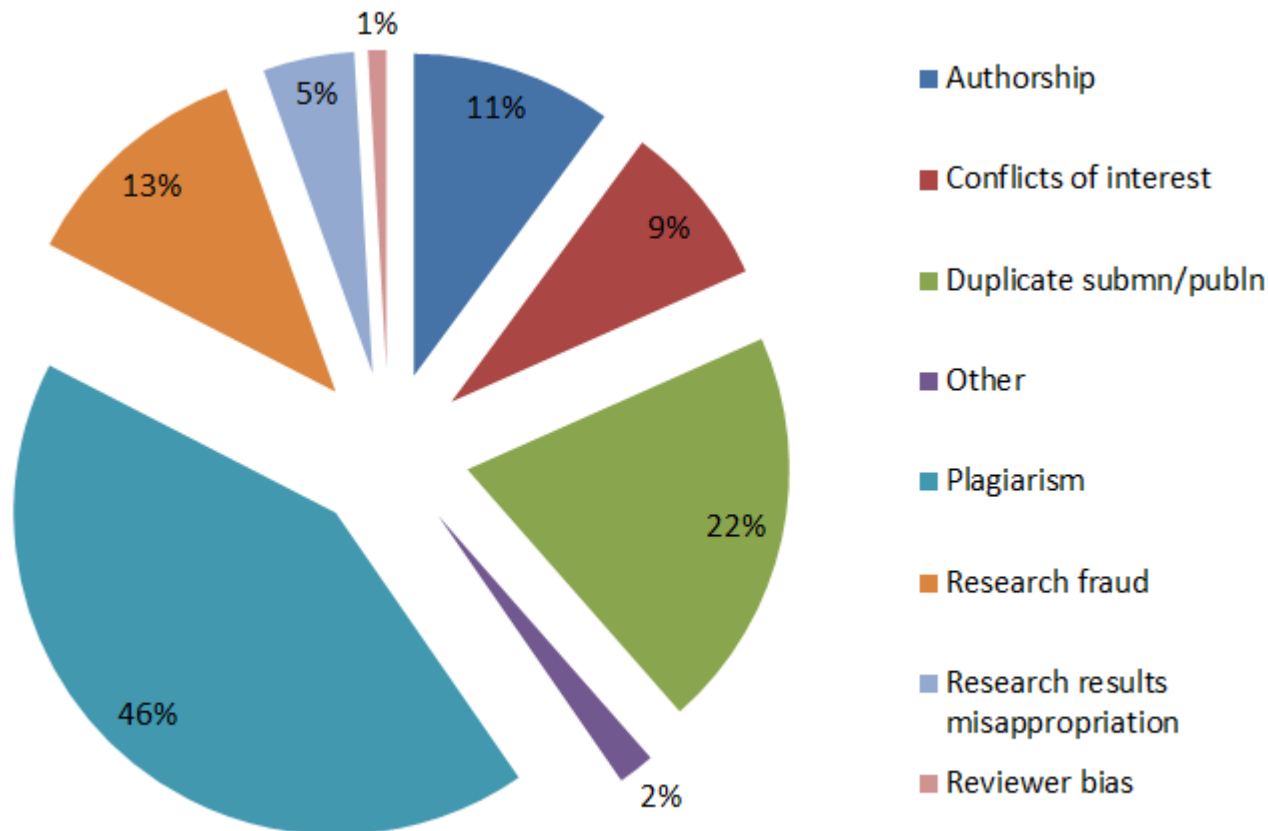
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Ethics

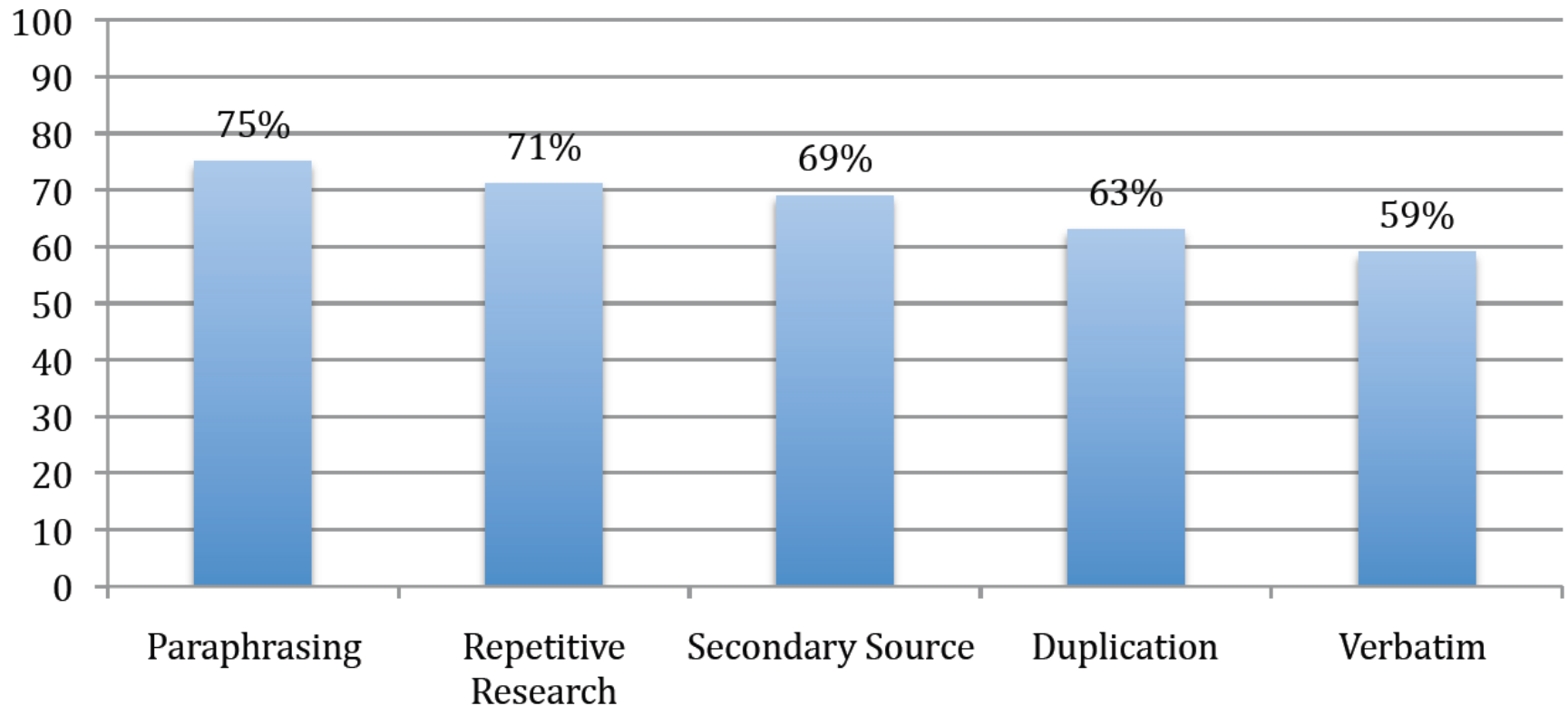
Developments and Innovation

Plagiarism high amongst ethics issues



Sample of cases reported to Elsevier Journals publishing staff in 2012

Most Common Forms of Plagiarism and Attribution Issues in Research



Peer Review Evolutions

Ethical issues

- Increase in ethical issues with increase submissions
- COPE
- Cross Check
- Educations – e.g. Author workshops



COPE

- Committee on Publication Ethics (COPE)
- Independent body that provides Codes of Conduct & training
- Many large Publishers are members of COPE
- Website with searchable database of sample cases back to 1997
publicationethics.org
- COPE arbitrates where a complainant is still unsatisfied after contacting Editor & publishing company



CrossCheck

Consists of database of published content and plagiarism-detecting software from Iparadigms

- Huge database: 31 million+ articles from 175,000+ journals and books from 240 publishers
- Software shows any similarities between the article and previously published articles, incl. a “similarity rating”





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Open Access

Open Access

An overview

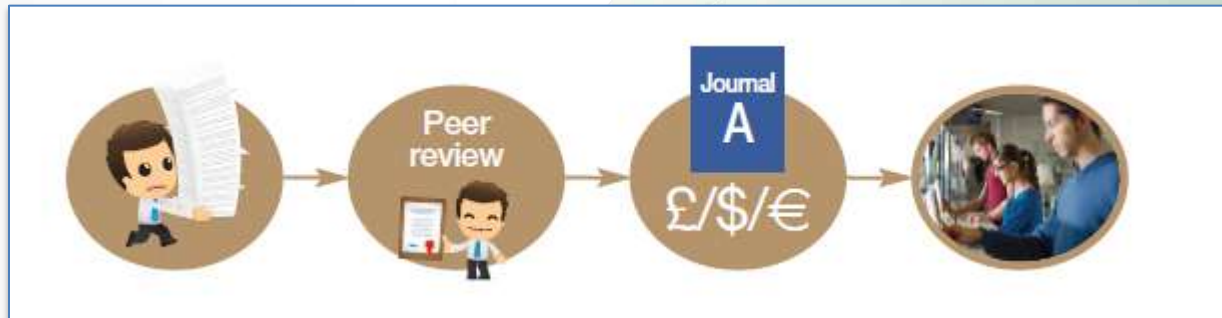
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