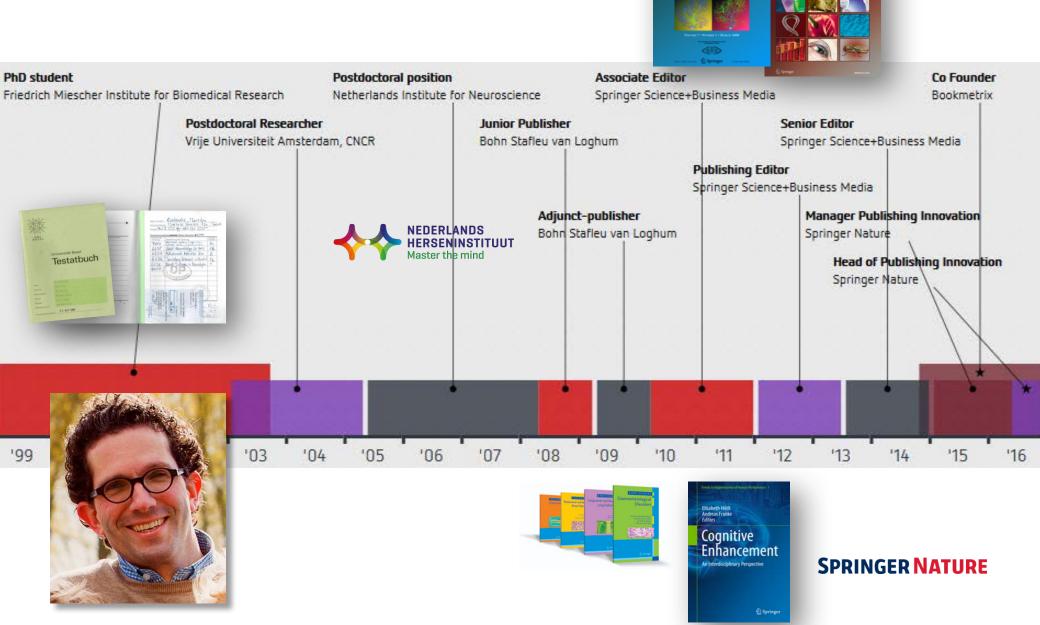
# Bookmetrix

Bookmetrix 2.0 with new metric and insights on eBook collection performance

Martijn Roelandse

SPRINGER NATURE

## My career so far



## The measurement of 'quality'

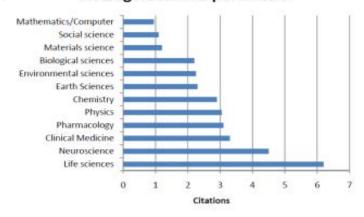


## The rise of the mega-journals

- Launched June 2006
- Biology and Medicine
- Rejection rate: 15%
- Jan 2012: Article 30.000 published
- 2010 Impact Factor: 4.351

#Arti

#### Average citations per article



Average citations per article for different disciplines, showing that citation practices differ markedly. Data from Thomson Scientific [Amin-Mabe 2000].



























# Research dissemination channels are changing rapidly to accommodate the increasing volume of scholarly literature

Article

Usage

Scholarly

Citation

Non-scholarly

Citation

**Blogs** 

**Patents** 

Social

Media

News

Policy documents



## Which article made a bigger impact?

Article with many citations



Article widely discussed in the social web



Article with lots of downloads



Article discussed on CNN



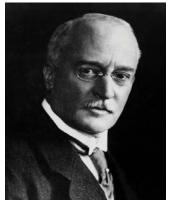




#### Altmetrics and Research Evaluation



# Research evaluations were once bespoke and performed by peers...



https://en.wikipedia.org/wiki/Rudolf Diesel







...but now research evaluations are done now routine and reliant on metrics

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## External forces are driving change

# Part 3 Section 3: Impact template and case studies (REF3a/b)

#### Definition of impact for the REF

140. For the purposes of the REF, impact is defined as an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia (as set out in paragraph 143).

141. Impact includes, but is not limited to, an effect on, change or benefit to:

- the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding
- of an audience, beneficiary, community, constituency, organisation or individuals
- in any geographic location whether locally, regionally, nationally or internationally.

 Impact includes the reduction or prevention of harm, risk, cost or other negative effects.

Changed Research Evaluation in:

- UK
- Netherlands
- Australia

2003: Berlin Declaration

2012: San Francisco DORA

2015: Leiden Manifesto

2015: The Hague Declaration



The Leiden Manifesto for research metrics



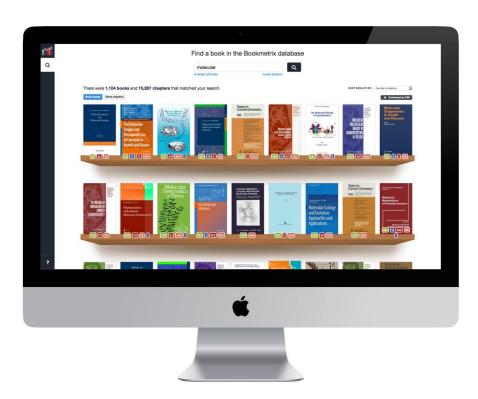
"There is a pressing need to improve the ways in which the output of scientific research is evaluated by funding agencies, academic institutions, and other parties." San Francisco Declaration on Research Assessment



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#### Journals are well covered but what about books?





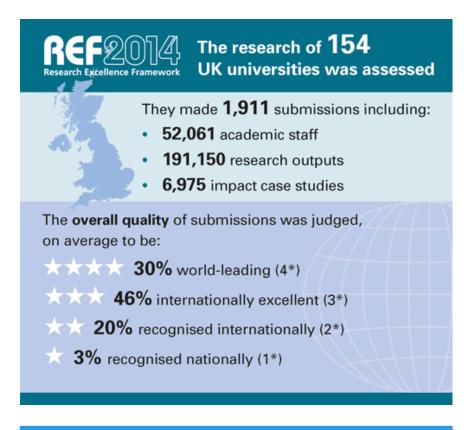


As an author I have no idea what the actual impact is of my book

**No recognition** for my book from **faculty**, university administrators or **funders** 

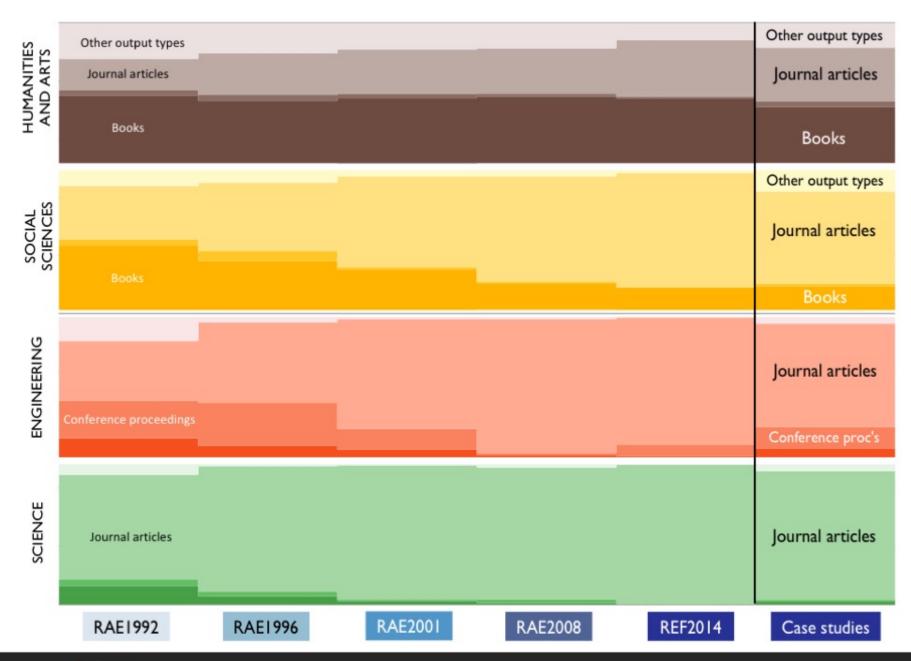
## Strong focus on journal articles in research output

190.962	Description					
10.371	Authored book					
2.133	Edited book					
14.396	Chapter in book					
154.854	Journal article					
2.750	Conference contribution					
108	Patent/published patent application					
38	Software					
159	Website content					
489	Performance					
666	Composition					
185	Design					
726	Artefact					
1.245	Exhibition					
684	Research report for external body					
25	Devices and products					
481	Digital or visual media					
358	Scholarly edition					
68	Research datasets and databases					
554	Other form of assessable output					
672	Working paper					



In 2014 SN published <u>9,509 books</u> and <u>221,005 chapters</u>

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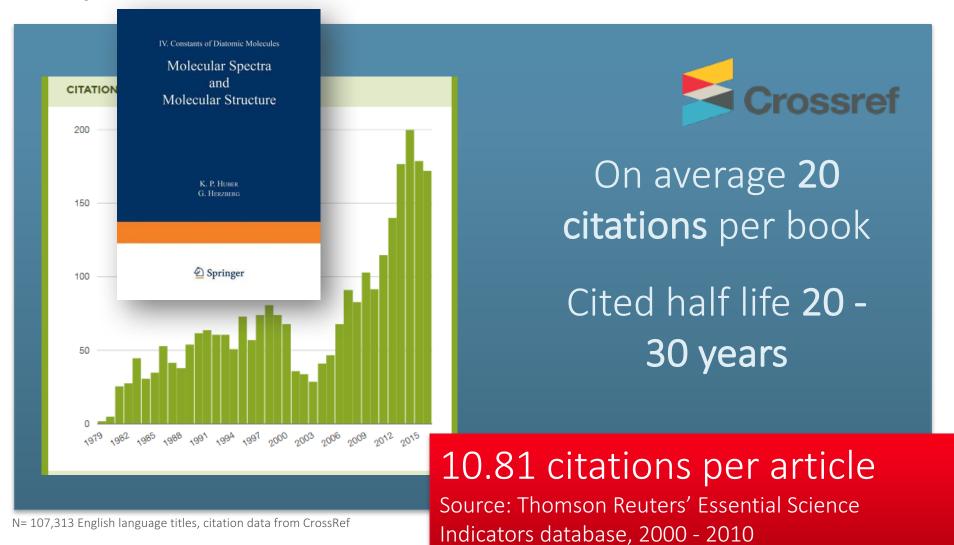


# As a publishing editor I would like to encourage authors to write more books by showing reliable metrics

Bookmetrix pulls together information about the attention paid to, use of and impact of books

Books benefit hugely from new ways of looking at attention & impact

# Traditional citation databases underestimate the impact of books



# In addition, books, like journals, are discussed online

Including archival content!

42.000 mentions
to
98.000 books
published
before 2000



# These 2016 books made an impact. In 2016.



# Our books are very much alive and used

25% of our 2016
books
have been cited
once or more in
2016

42% of our 2016 books have been mentioned online once or more in 2016

#### The Impact of the Top 5 Cited Titles:

- Azokh Cave and the Transcaucasian Corridor
   991 downloads | 8 online mentions | 88 citations
- Multidisciplinary Approaches to the Study of Ston
   2.468 downloads | 36 online mentions | 80 citation
- Landscape and Ecosystem Diversity, Dynamics and Source Zone – 2.967 downloads | 0 online mentio
- Retinal Degenerative Diseases
   11.631 downloads | 50 online mentions | 76 citat
- Behavioral Neuroscience of Motivation
   16.902 downloads | 35 online mentions | 73 citat

#### 2016

Amla Enhances Mitochondrial Spare Respiratory Capacity by Increasing Mitochondrial Biogenesis and Antioxidant Systems in a Murine Skeletal Muscle Cell Line

Journal article in Oxidative Medicine and Cellular Longevity

Phagocytosis: An Immunobiologic Process

Journal article in Immunity

Making the invisible visible

Journal article in Seminars in Cell & Developmental Biology

Microvesicles as Vehicles for Tissue Regeneration: Changing of the Guards

Journal article in Current Pathobiology Reports

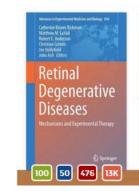
Cholesterol in the Rod Outer Segment: A Complex Role in a "Simple" System Journal article in **Chemistry and Physics of Lipids** 

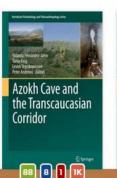
Neuroglobin: From structure to function in health and disease

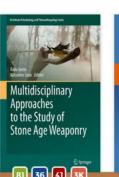
Journal article in Molecular Aspects of Medicine

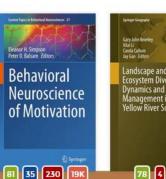
Gene and cell-based therapies for inherited retinal disorders: An update Journal article in American Journal of Medical Genetics Part C: Seminars in Medical Genetics











#### The Impact of the Top 5 Mentioned Titles







#### The Impact of the Top 5 Downloaded Titles:

- Computer Vision ECCV 2016 Workshops Amsterdam, The Netherlands, October 8-10 and 15-16, 2016, Proceedings, Part I
   544,155 downloads | 101 online mentions | 2 citations
- SFPE Handbook of Fire Protection Engineering
   270,8825 downloads | 10 online mentions | 19 citations
- 3. <u>Autonomous Driving: Technical, Legal and Social Aspects</u> **262,156 downloads** | 10 online mentions | 3 citations
- Springer Handbook of Robotics
   223,416 downloads | 54 online mentions | 8 citations
- Computer Vision ECCV 2016: 14th European Conference, Amsterdam, The Netherlands, October 11–14, 2016, Proceedings, Part I
   219,254 downloads | 7 citations





#### Open Access books

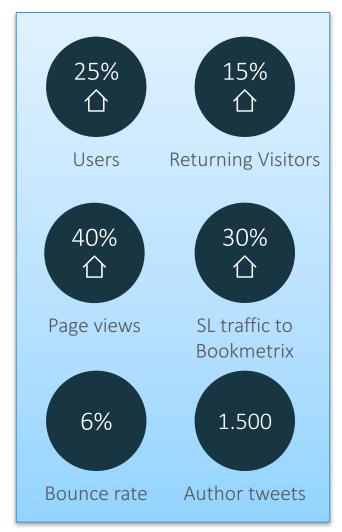
- On average, Palgrave Macmillan OA books receive 12 times the usage of non-OA titles published in the same month. (Usage November 2013 – December 2015)
- On average, Springer OA books receive 7 times the usage of non-OA titles published in the same package and year (Usage January 2013 – December 2015)

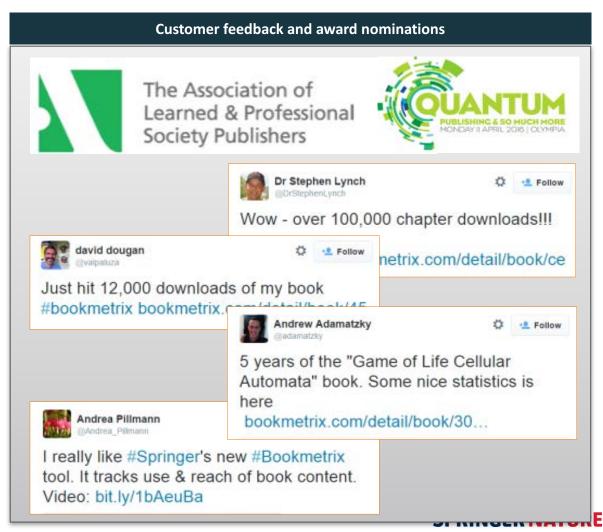


	citations	mentions	readers	downloads	reviews	
Median	0.00	0.00	3.00	6.750	0.00	Springer
	1.00	3.00	6.00	20.897	0.00	SpringerOpen
Average	4.47	0.81	20.59	15.761	0.31	Springer
	3.57	14.24	27.58	49.906	0.19	SpringerOpen



# Since launching in April 2015 engagement is growing





U GET BOOK

WHAT IS THIS?

The data shown here were

collects attention surrounding

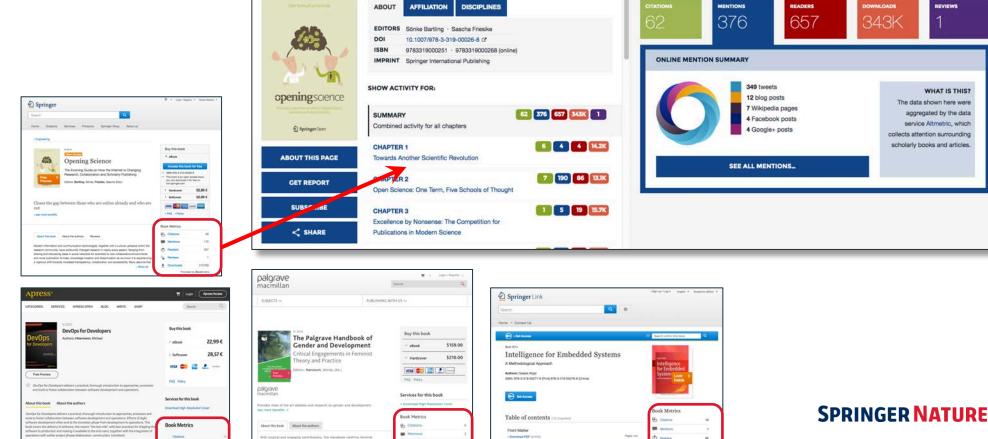
scholarly books and articles.

aggregated by the data

service Altmetric, which

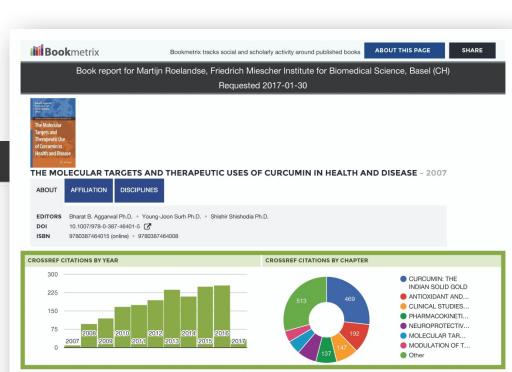
## Bookmetrix pulls together information about the attention paid to, use of and impact of books & chapters

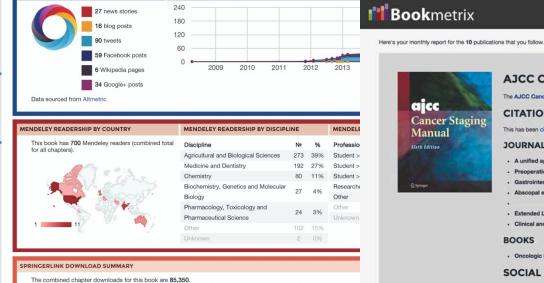
**OPENING SCIENCE - 2014** 



**Book**metrix

Return to Bookmetrix summary





2014

Bookmetrix retrieves book and chapter metadata from Springer Nature, Altmetric and Cross

aggregates the associated book and chapter metrics from a variety of data sources. F

2015

23.878

MENTIONS OVER TIME

ONLINE MENTION SUMMARY

2012

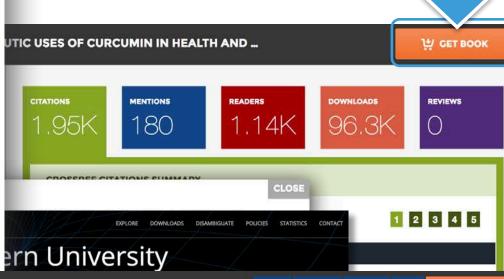
2013

14,155

ajcc **Cancer Staging** Manual With Edition

**Book**metrix

over the past months



#### AJCC CANCER STAGING MANUAL

The AJCC Cancer Staging Manual has seen the following activity in June 2017:

#### CITATIONS

This has been cited 8 times in:

#### **JOURNALS**

- · A unified approach for assessing heterogeneity in age?period?cohort model parameters using random effects
- · Preoperative 18F-FDG-PET/CT vs Contrast-Enhanced CT to Identify Regional Nodal Metastasis among Patients with Head and Neck Squamous Cell Carcinoma
- · Gastrointestinal tract carcinoma in pediatric and adolescent age: The Italian TREP project experience
- . Abscopal effect in recurrent colorectal cancer treated with carbon-ion radiation therapy: 2 case reports
- · Extended Lateral Pharyngotomy for Selected Squamous Cell Carcinomas of the Lateral Tongue Base
- · Clinical and Pathologic Predictors of Survival in Patients with Squamous Cell Carcinoma of the Hypopharynx after Surgical Treatment

#### BOOKS

· Oncologic Imaging: Bone Tumors

#### **SOCIAL MEDIA**

There have been no mentions of this book on social media this month.

#### **DOWNLOADS**

This has been downloaded 399 times



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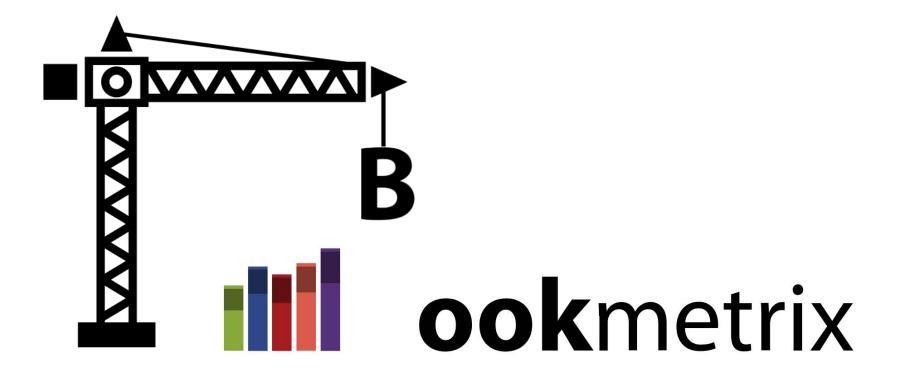
#### Frankfurter Book Fair vision – Bookmetrix 2.0

Up to now, Bookmetrix has been focused on bringing all metrics around book together in one place, mostly as an **author service**.

Now we want to change Bookmetrix to a platform focusing on book impact and discovery, where we use the metrics to help readers discover new books and institutions to assess the impact of e-book collection subscribed









**SPRINGER NATURE** 

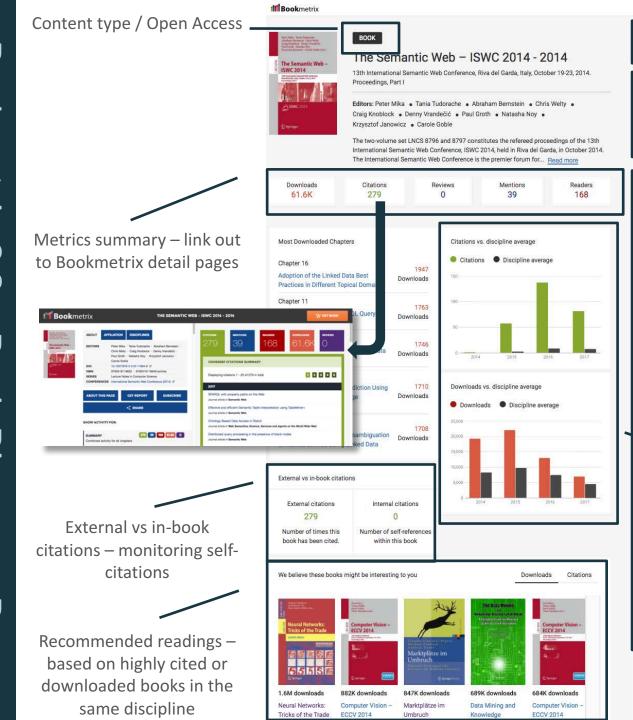








**Universal Design** 



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Download from Springer

Purchase / download link

This book is part of an e-book

Book details

Conferences International Semantic Web Conference (2014) ☑

Angeles [2]

Google, [2]

Barbara [2]

Sub-disciplines

LOC Subjects

Computer science

Artificial intelligence

Database management

Information storage and retrieva

10.1007/978-3-319-11964-9 [2]

9783319119649 (online)

9783319119632

Text processing (Computer scienc

Database Management & Information Retrieval

Lecture Notes in Computer Science

Yahoo Labs, Barcelona, Spain

Stanford University, Stanford Z University of Zurich, DDIS, Zurich, Switzerland Z

IBM Research, Yorktown Heights 2 University of Southern California, Los

VU University Amsterdam, [2]

University of California, Santa

The University of Manchester, Manchester eBook Collection highlight

– linkout to new Colleciton
pages

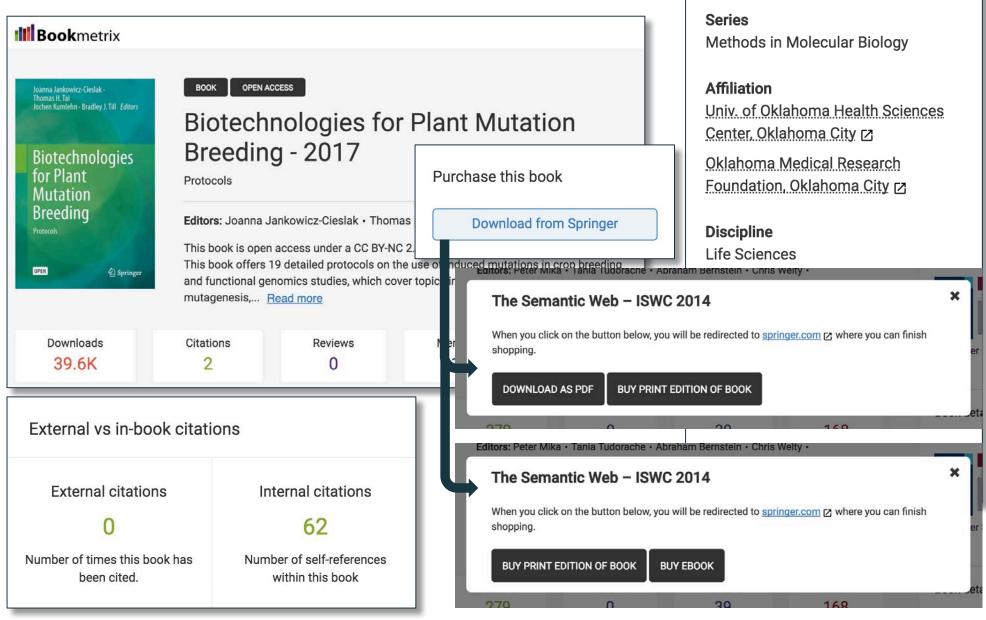
Book details – future segue to further discovery

Benchmarking citation and download data with other books published in the same discipline in the same year of publication

#### **SPRINGER NATURE**

**Book details** 

## Bookmetrix 2.0 – some highlights





Selector for year of choice

Metrics summary – only for selected year

% of books cited above average

Top performing books in selected collection and year by downloads or citations



III Bookmetrix

#### Biomedical and Life Sciences

Our lives – and livelihoods – depend on the plants, animals, and microbes of this planet. The current extent and pace of environmental change, however, threatens our very way of being. At this point, our only hope is decisive action – a movement that must be informed by research in disciplines dealing directly with life. Biomedicine and Life Sciences provide us with just that. With applications in areas such as medicine, agriculture, and biotechnology, these fields are essential to maintaining and improving the quality of life on Earth.

The Biomedicine and Life Sciences eBook Collection brings together up-to-date resources from trusted authors working around the world in all aspects of life: from patterns of infectious transmission to processes responsible for the loss of biodiversity.

Results from year: 2016 V 642 books

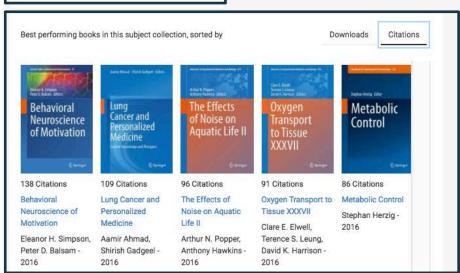
Downloads Citations Reviews Mentions Readers
5.59M 4.29K 71 4.6K 31.2K

Subject Collection performance

Collection Citation Performance

7.91
6.49

Percentage of books in this Subject Collection that are cited more than the discipline average.



SpringerLink

View on SpringerLink

Collection details

Conservation of Bats in a Changing World

Number of books
642

Top disciplines
Life Sciences
Biomedicine

Medicine

This subject collection is available on

Link out to SpringerLink

Subject collection details – future segue to further discovery

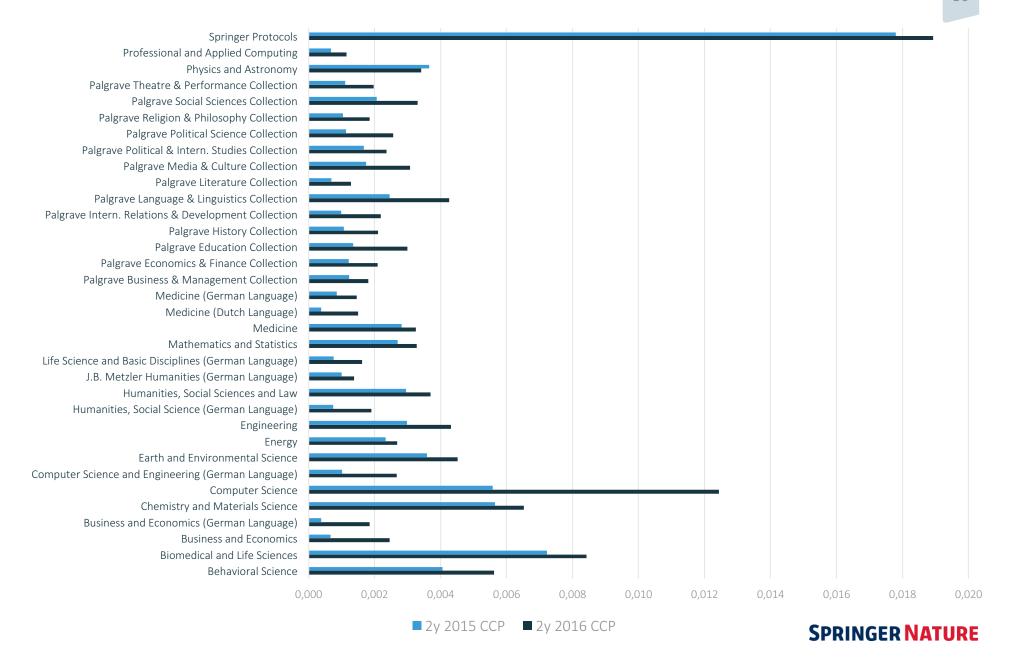
Collection Citation Performance

**GER NATURE** 

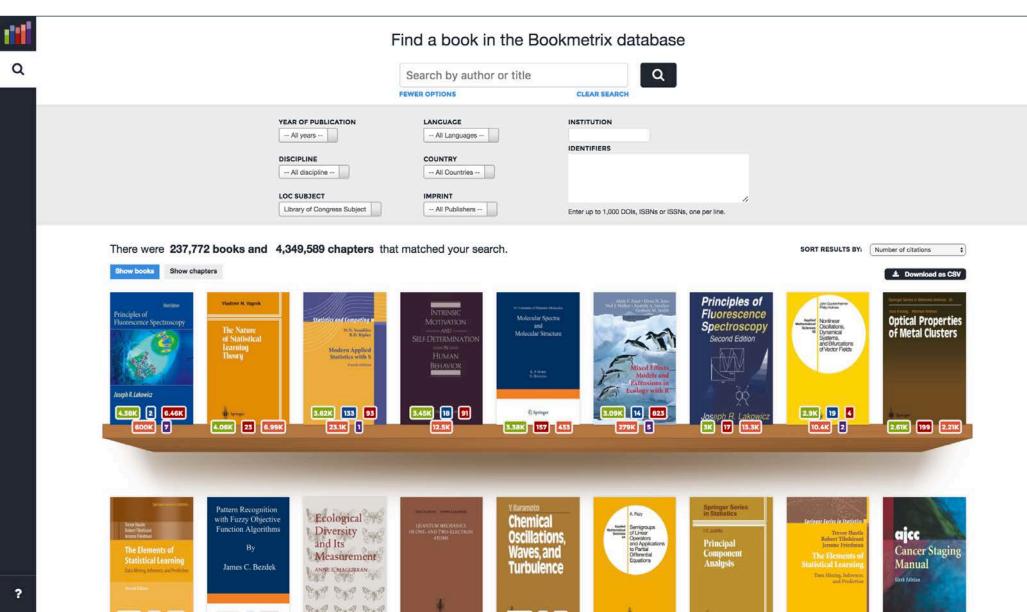
## **Collection Citation Performance (CCP)**

The **Collection Citation Performance** for 2016 is calculated as the number of citations in 2016 of books published in 2014 and 2015 (or 2011-2015 for the 5-year indicator), divided by the total number of books published in this eBook collection in the same time period.





## Bookmetrix Bookshelf – publisher dashboard



## University ranking by book output

# by the total number of books published by a given university in 2015

- University of Oxford
- 2. Ludwig Maximilian University of Munich
- 3. Rheinisch-Westfälische Technische Hochschule Aachen University
- 4. University College London
- 5. Chinese Academy of Sciences
- 6. University of Duisburg-Essen
- 7. Free University of Berlin
- 8. University of Bremen
- 9. University of Tokyo
- 10. Nanyang Technological University

# by the total number of citations (from 2015 to today) of all books published in 2015

- 1. University College London
- 2. University of Bristol
- 3. University of Erlangen-Nuremberg
- 4. University of Sheffield
- 5. Brigham and Women's Hospital
- 6. Dresden University of Technology
- 7. University of Oxford
- 8. Chinese Academy of Sciences
- 9. Vienna University of Technology
- 10. Technical University of Darmstadt

2 Springer

207

217 2.91K

72

13.6K

439

#### Impact and reach of Institutional book output



878

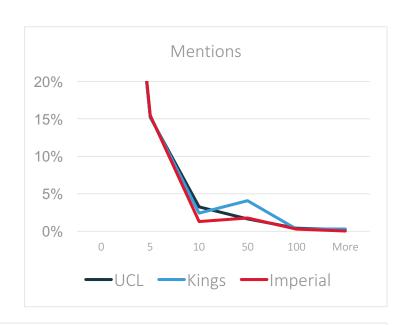
2.92K

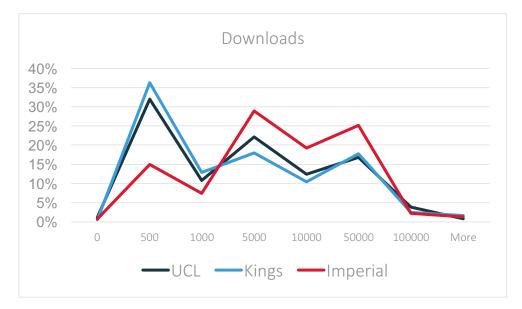
2.42K

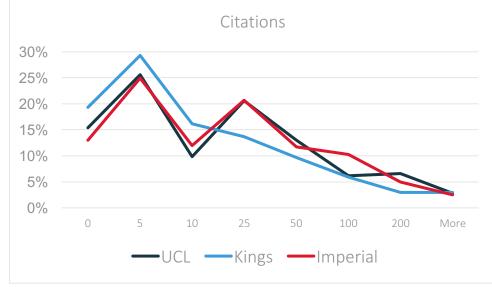
24

#### A closer look...

Average	citations	online mentions	Mendeley readers	downloads	reviews
UCL	30.6	1.6	63.3	9725.4	0.4
Kings	26.7	2.2	38.0	9331.0	0.5
Imperial	29.4	1.0	63.6	10965.2	0.2







## Further reading

- Oct 2016: Interview in Research Information article on <u>'Alternative Assessment'</u>
- Oct 2016: PCG published <u>'Increasing the Value of Scholarly Books'</u>
- August 2016: <u>Time Higher Education</u> to include books in University ranking
- July 2016: Review in Against the Grain <u>Altmetrics and Books: Bookmetrix and Other</u>
   <u>Implementations</u>
- June 2017: Interviews in Research Information on 'The Measure of Metrics'





As the scholarly publishing world adopts altmetrics, the ways in which the data is used are developing fast, reports Rebecca Pool can measure these factors pretty well."
Amid this backing, demand for
one of Altmetrics' primary products,
Altmetric Badges, continues. These
visual doughnuts' provide an instant
record of online attention, and in a recent
development, online digital repository.
Figshare, has adopted the software for its
academin repeated.

academic research.
However, Attmetric is also updating its Explorer web-based platform to reflect industry developments. Designed to provide publishers, institutions and funders with more detailed information on ordine interest, a never version will provide ordine interest, a never version will provide. used a retired in. Will pedia and of the critical media out of the critical media out of the critical media out of the critical media. The critical media out of tablevis. For dief, the adolftion of challevis in november 10 their really trying to push a message that our metrics and one doesn't replace the other. The says, "Calations EII are a good via via potating a brasi indication of the scholarly inflamous of your week, not an answers the imposing IT fluid the point in that our metrics help you get a more number point of attention and impact, and pick up information that our metrics help you get a more number point in the point in that pick up information that



PROFESSIONAL

JOBS

SUMMITS

RANKINGS

# Books to be included in World University Rankings analysis for first time

Arts and humanities research will be better represented in the 2016-17 global league table

August 22, 2016









provides a swift visualisation of articleevel altmetrics gathered for a piece of research.

research.

Crucially for EBSCO users, this means they can now use Plum Print to visualize the research impact of implical items, including articles, chapters from books and institutional repository material. And for Michaels, this adds to the increasing need to provide data on the impact research has on society. Yes more and

expect, to have more information on the engagement that is taking place around a piece of research. We will move away from a world where impact of a piece of work is targely assessed by the journal that it is published.

Books and beyond
But what if your research output isn't in
a journal, and instead, is a chapter in a
book or green a book (tself? As Martin



Stop judging books by their covers

Thank you!