

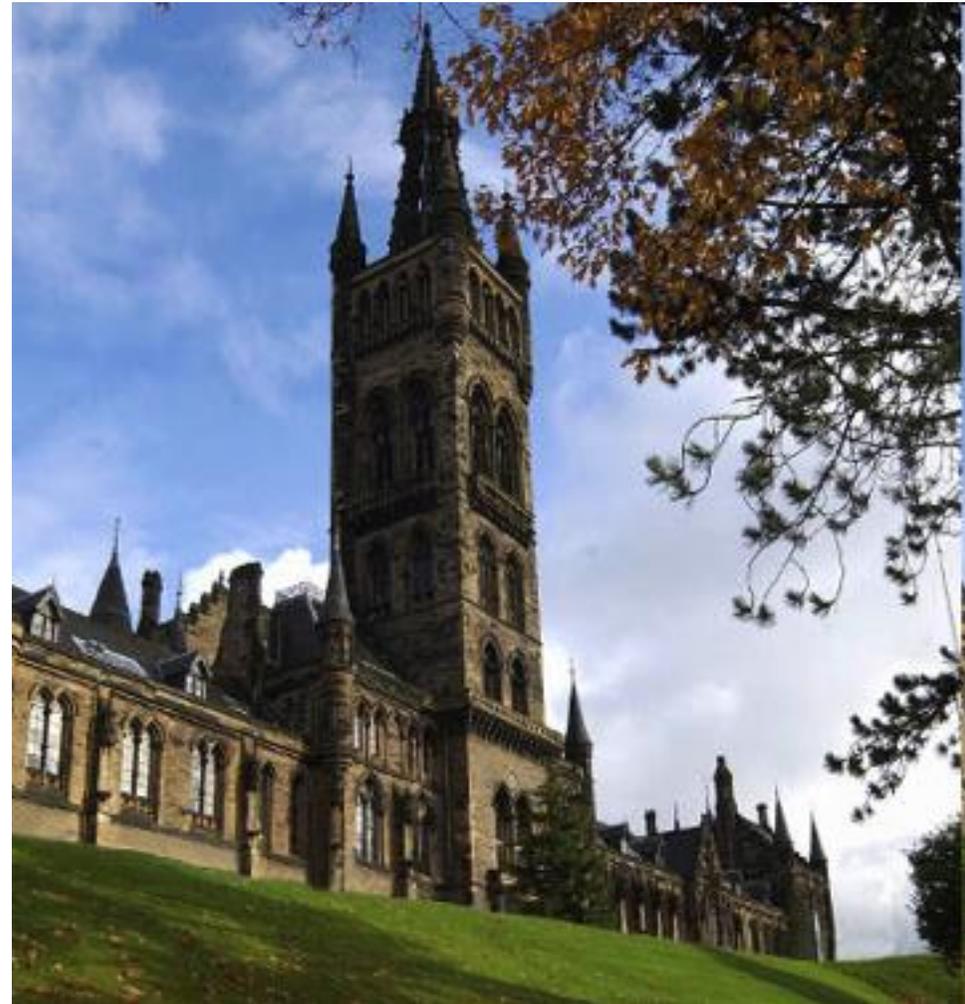
Bibliometrics at the University of Glasgow

William J Nixon
Head of Digital Library Services

Strategic Management of Research and the Role of Bibliometrics,
Prague, October 2014



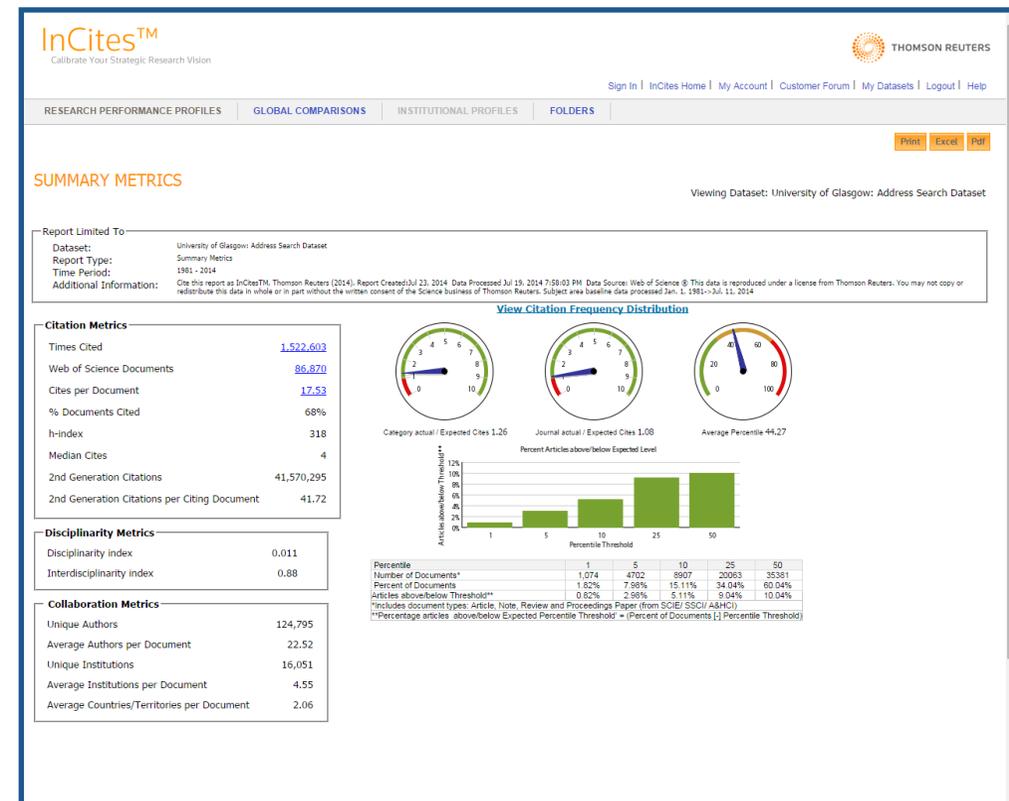
- Founded in 1451
- 2nd oldest University in Scotland (4th UK)
- 6,000+ Staff
 - 2000 Researchers
- 26K Students
 - 16K UGs / 6K PGs
- In top 1% of world universities
- 94th in THE 2015 Rankings
- In the UK's top 10 earners for research
- Rated 3rd in the UK for international student satisfaction



- Web of Science
- InCites
- Journal Citation Reports
- Scopus
- Journal and Country Rankings
- Google Scholar and tools to analyse its data, such as Publish or Perish



- Citations are normalised by discipline, date and journal
- Provides essential context for raw citation counts
- Identifies areas of strength (and weakness)
- Allows easy benchmarking with other researchers, departments and institutions
- Enables identification of potential collaborators
- Using a mix of old and new InCites



- Research Excellence Framework
- Citation data will be used by 11 panels to inform their decisions
- University carried out an internal 'mini-REF' exercise
- Library supplied citation data from InCites to relevant panels
- Citation data provided essential check in addition to peer review



REF2014
Research Excellence Framework

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Dataset: University of Glasgow: Address Search Dataset

Report Type: Source Articles Listing

Time Period: 2008 - 2013

Subject Areas: OPTICS

Additional Information: Cite this report as InCites™, Thomson Reuters (2014). Report Created: 7 Oct 2014. Data Processed 19 Jul 2014 19:58:03. Data Source: Web of Science ©. This data is reproduced under a license from Thomson Reuters. You may not copy or redistribute this data in whole or in part without the written consent of the Science business of Thomson Reuters. Subject area baseline data processed Jan. 1, 1981 -> Jul. 11, 2014.

Documents 1 - 20 of 357 Sort By: Times Cited ▼

| Times Cited | Journal Expected Citations | Category Expected Citations | Journal Actual/Expected Citations | Category Actual/Expected Citations | Percentile in Subject Area | 2012 Journal Impact Factor | Publication Year | Subject Area View Ranking | Document Type View Ranking | First Author View Ranking | Journal View Ranking | Document Title | Volume | Page |
|---------------------|----------------------------|-----------------------------|-----------------------------------|------------------------------------|----------------------------|----------------------------|------------------|--|---|--|---|---|--------|-------------|
| 185 | 46.38 | 54.69 | 3.99 | 3.38 | 0.13 | 7.98 | 2008 | OPTICS | REVIEW | FRANKE-ARNOLD, S et al. | LASER & PHOTONICS REVIEWS | Advances in optical angular momentum | 2 | 299-313 |
| 129 | 35.43 | 5.00 | 3.64 | 25.80 | 0.06 | | 2011 | OPTICS | ARTICLE | YAO, AM et al. | ADVANCES IN OPTICS AND PHOTONICS | Orbital angular momentum: origins, behavior and applications | 3 | 161-204 |
| 113 | 37.30 | 32.77 | 3.03 | 3.45 | 0.26 | 2.44 | 2009 | OPTICS | REVIEW | DENNIS, MR et al. | PROGRESS IN OPTICS, VOL 53 | Singular Optics: Optical Vortices and Polarization Singularities | 53 | 293-363 |
| 98 | 122.19 | 29.33 | 0.80 | 3.34 | 0.09 | 27.25 | 2011 | OPTICS | REVIEW | PADGETT, M et al. | NATURE PHOTONICS | Tweezers with a twist | 5 | 343-348 |
| 70 | 16.99 | 9.15 | 4.12 | 7.65 | 1.05 | 3.55 | 2008 | OPTICS | ARTICLE | GIBSON, GM et al. | OPTICS EXPRESS | Measuring the accuracy of particle position and force in optical tweezers using high-speed video microscopy | 16 | 14561-14570 |
| 68 | 16.99 | 9.15 | 4.00 | 7.43 | 1.13 | 3.55 | 2008 | OPTICS | ARTICLE | ZAIN, ARM et al. | OPTICS EXPRESS | Ultra high quality factor one dimensional photonic crystal/photonic wire micro-cavities in silicon-on-insulator (SOI) | 16 | 12084-12089 |
| 63 | 7.57 | 5.00 | 8.32 | 12.60 | 0.26 | 3.38 | 2011 | OPTICS | ARTICLE | MA, Y et al. | OPTICS LETTERS | A terahertz polarization insensitive dual band metamaterial absorber | 36 | 945-947 |

- University of Glasgow Singapore
- Identified collaborations between Glasgow and Singapore
- Identified the most highly cited Glasgow staff by Singapore researchers

BEng (Honours) in
Aeronautical Engineering
in partnership with the
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Dataset: University of Glasgow: Address Search Dataset

Report Type: Institution Ranking (citing article set)

Time Period (Citing): 2000 - 2013

Time Period: 1979 - 2013

Countries/Territories: SINGAPORE

Subject Areas: ENGINEERING, AEROSPACE, ENGINEERING, BIOMEDICAL, ENGINEERING, CHEMICAL, ENGINEERING, CIVIL ENGINEERING, ELECTRICAL & ELECTRONIC, ENGINEERING, ENVIRONMENTAL, ENGINEERING, GEOLOGICAL, ENGINEERING, INDUSTRIAL, ENGINEERING, MANUFACTURING, ENGINEERING, MARINE, ENGINEERING, MECHANICAL, ENGINEERING, MULTIDISCIPLINARY, ENGINEERING, OCEAN, ENGINEERING, PETROLEUM, PHYSICS, APPLIED, PHYSICS, ATOMIC, MOLECULAR & CHEMICAL, PHYSICS, CONDENSED MATTER, PHYSICS, FLUIDS & PLASMAS, PHYSICS, MATHEMATICAL, PHYSICS, MULTIDISCIPLINARY, PHYSICS, NUCLEAR, PHYSICS, PARTICLES & FIELDS

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Institutions 1 - 20 of 378 Sort By: Times Cited ▾

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| 1 | NATL UNIV SINGAPORE | 5,483 | 387 | 14.17 |
| 2 | NANYANG TECHNOL UNIV | 2,934 | 324 | 9.06 |
| 3 | AGCY SCI TECHNOL & RES A STAR | 2,361 | 218 | 10.83 |
| 4 | UNIV SYDNEY | 382 | 2 | 191.00 |
| 5 | QUEEN MARY UNIVERSITY OF LONDON | 309 | 2 | 154.50 |
| 6 | UNIVERSITY OF SOUTHAMPTON | 301 | 3 | 100.33 |
| 7 | RICE UNIV | 293 | 1 | 293.00 |
| 7 | UNIV STUTTGART | 293 | 1 | 293.00 |
| 9 | DUKE UNIV | 266 | 4 | 66.50 |
| 10 | UNIVERSITY OF OXFORD | 246 | 5 | 49.20 |
| 11 | JOHNS HOPKINS UNIV | 244 | 5 | 48.80 |
| 12 | MIT | 232 | 13 | 17.85 |
| 13 | PACIFIC NW NATL LAB | 229 | 1 | 229.00 |
| 14 | UNIVERSITY OF CALIFORNIA | 229 | 1 | 229.00 |

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University of Glasgow: Author Profile Dataset

This dataset contains 30,753 source articles from 80,256 authors published between 1981 and 2014. This dataset also contains 478,743 articles that have cited the 30,753 source articles in this dataset. Data updated from the Web of Science on May 19, 2014.

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| Count | Add | Authors |
|-------|-------------------|----------------------|
| 0 | + | PAAPE, DANIEL |
| 289 | + | PADGETT, MILES |
| 3 | + | PADMANABHAN, NEAL |
| 79 | + | PADMANABHAN, SANDOSH |
| 27 | + | PAGE, ANTONY |
| 48 | + | PAGE, RODERIC |
| 2 | + | PAISEY, CATRIONA |

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| 49 | + | CO - SENATE OFFICE |
| 1083 | + | COLLEGE OF ARTS |
| 17411 | + | COLLEGE OF MVLS |
| 10936 | + | COLLEGE OF SCIENCE & ENGINEERING |
| 146 | + | COLLEGE OF SCIENCE & ENGINEERING ADMIN |
| 2330 | + | COLLEGE OF SOCIAL SCIENCES |
| 30 | + | COLLEGE OF SOCIAL SCIENCES ADMIN |
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| 121 | + | COM - SCHOOL OF COMPUTING SCIENCE |

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Dataset: University of Glasgow: Author Profile Dataset

Report Type: Source Articles Listing

Time Period: 2009 - 2014

Departments: COLLEGE OF SCIENCE & ENGINEERING, COLLEGE OF SCIENCE & ENGINEERING ADMIN

Additional Information: Cite this report as InCites™, Thomson Reuters (2014). Report Created: 7 Oct 2014. Data Processed 19 May 2014 22:15:09. Data Source: Web of Science ©. This data is reproduced under a license from Thomson Reuters. You may not copy or redistribute this data in whole or in part without the written consent of the Science business of Thomson Reuters. Subject area baseline data processed Jan. 1, 1981-→ Apr. 09, 2014.

Documents 1 - 20 of 5,623 Sort By: Times Cited ▼

| Times Cited | Journal Expected Citations | Category Expected Citations | Journal Actual/Expected Citations | Category Actual/Expected Citations | Percentile in Subject Area | 2012 Journal Impact Factor | Publication Year | Subject Area View Ranking | Document Type View Ranking | First Author View Ranking | Journal View Ranking | Document Title | Volume | Page |
|----------------------|----------------------------|-----------------------------|-----------------------------------|------------------------------------|----------------------------|----------------------------|------------------|--|---|--|---|---|--------|-----------|
| 1287 | 12.28 | 4.09 | 104.80 | 314.67 | 0.00 | 4.57 | 2012 | PHYSICS, MULTIDISCIPLINARY | ARTICLE | AAD, G et al. | PHYSICS LETTERS B | Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC | 716 | 1-29 |
| 555 | 114.60 | 58.37 | 4.84 | 9.51 | 0.06 | 13.73 | 2010 | CHEMISTRY, MULTIDISCIPLINARY | REVIEW | LONG, DL et al. | ANGEWANDTE CHEMIE-INTERNATIONAL EDITION | Polyoxometalates: Building Blocks for Functional Nanoscale Systems | 49 | 1736-1758 |
| 444 | 334.00 | 39.70 | 1.33 | 11.18 | 0.01 | 1.66 | 2008 | INSTRUMENTS & INSTRUMENTATION | REVIEW | AAD, G et al. | JOURNAL OF INSTRUMENTATION | The ATLAS Experiment at the CERN Large Hadron Collider | 3 | |
| 424 | 187.48 | 71.98 | 2.26 | 5.89 | 0.18 | 13.73 | 2009 | CHEMISTRY, MULTIDISCIPLINARY | REVIEW | SENN, HM et al. | ANGEWANDTE CHEMIE-INTERNATIONAL EDITION | QM/MM Methods for Biomolecular Systems | 48 | 1198-1229 |
| 389 | 134.05 | 13.15 | 2.90 | 29.58 | 0.07 | 35.75 | 2009 | MATERIALS SCIENCE, MULTIDISCIPLINARY | ARTICLE | FAN, ZY et al. | NATURE MATERIALS | Three-dimensional nanowire-array photovoltaics on low-cost and flexible substrates | 8 | 648-653 |
| 374 | 77.40 | 54.60 | 4.83 | 6.85 | 0.07 | 13.23 | 2009 | PHYSICS, MULTIDISCIPLINARY | REVIEW | ABBOTT, BP et al. | REPORTS ON PROGRESS IN PHYSICS | LIGO: the Laser Interferometer Gravitational-Wave Observatory | 72 | |
| 325 | 10.86 | 5.38 | 29.93 | 60.41 | 0.01 | 5.32 | 2011 | BIOTECHNOLOGY & APPLIED MICROBIOLOGY | ARTICLE | EDGAR, RC et al. | BIOINFORMATICS | iChime improves sensitivity and speed of chimera detection | 27 | 2194-2200 |
| 325 | 76.35 | 15.37 | 4.26 | 21.15 | 0.09 | 23.56 | 2009 | BIOCHEMICAL RESEARCH METHODS | ARTICLE | QUINCE, C et al. | NATURE METHODS | Accurate determination of microbial diversity from 454 pyrosequencing data | 6 | 639-647 |

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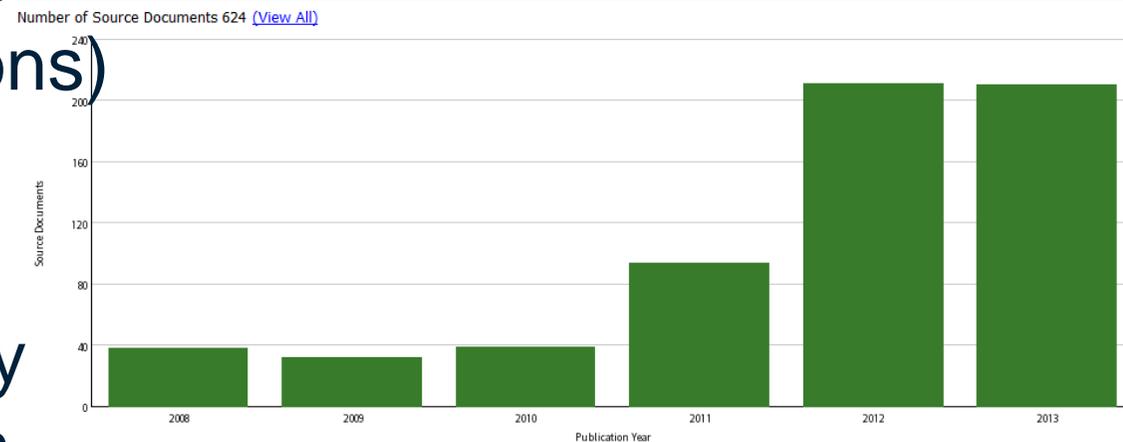
Dataset: University of Glasgow: Author Profile Dataset
Report Type: Journal Ranking
Time Period: 2008 - 2014
Departments: COLLEGE OF SCIENCE & ENGINEERING, COLLEGE OF SCIENCE & ENGINEERING ADMIN
Additional Information: Cite this report as InCites™, Thomson Reuters (2014), Report Created: 7 Oct 2014 Data Processed 19 May 2014 22:15:09 Data Source: Web of Science © This data is reproduced under a license from Thomson Reuters. You may not copy or redistribute this data in whole or in part without the written consent of the Science business of Thomson Reuters. Subject area baseline data processed Jan. 1, 1981->Apr. 09, 2014

Journals 1 - 20 of 1,619

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|------|--|-------------|--------------------------|----------------------------|-----------------------------------|------------------------------------|--------------------|
| 1 | PHYSICAL REVIEW LETTERS | 6,012 | 222 | 27.08 | 1.22 | 3.41 | 18.18 |
| 2 | PHYSICS LETTERS B | 4,265 | 146 | 29.21 | 2.64 | 5.45 | 16.47 |
| 3 | PHYSICAL REVIEW D | 3,275 | 199 | 16.46 | 1.41 | 1.79 | 31.11 |
| 4 | ANGEWANDTE CHEMIE-INTERNATIONAL EDITION | 2,313 | 54 | 42.83 | 1.23 | 2.88 | 25.89 |
| 5 | JOURNAL OF THE AMERICAN CHEMICAL SOCIETY | 1,549 | 44 | 35.20 | 1.14 | 2.39 | 18.26 |
| 6 | OPTICS EXPRESS | 1,231 | 85 | 14.48 | 1.49 | 2.56 | 24.55 |
| 7 | JOURNAL OF INSTRUMENTATION | 1,187 | 26 | 45.65 | 0.98 | 4.28 | 54.18 |
| 8 | EUROPEAN PHYSICAL JOURNAL C | 1,135 | 82 | 13.84 | 1.69 | 2.11 | 31.35 |
| 9 | CLASSICAL AND QUANTUM GRAVITY | 1,046 | 60 | 17.43 | 1.80 | 1.74 | 32.60 |
| 10 | SCIENCE | 997 | 22 | 45.32 | 0.64 | 4.60 | 7.13 |
| 11 | ASTROPHYSICAL JOURNAL | 809 | 49 | 16.51 | 1.23 | 1.81 | 42.19 |
| 12 | JOURNAL OF HIGH ENERGY PHYSICS | 780 | 100 | 7.80 | 1.02 | 1.35 | 48.80 |
| 13 | PHYSICAL REVIEW C | 715 | 43 | 16.63 | 1.62 | 3.24 | 28.40 |
| 14 | APPLIED PHYSICS LETTERS | 706 | 55 | 12.84 | 1.37 | 1.87 | 37.10 |
| 15 | NATURE MATERIALS | 676 | 4 | 169.00 | 1.61 | 15.61 | 0.58 |
| 16 | BIOINFORMATICS | 671 | 10 | 67.10 | 2.56 | 5.79 | 13.17 |

- Identification of publications which Glasgow staff have co-authored with particular countries (and institutions) for Recruitment and International Office
- Ranked data by country including times cited as well as records in WoS



*To view the source documents for a particular year click the associated bar in the chart or the year on the x axis

| Person Name or ID | Name | Rank | Web of Science Documents | Normalized Citation Impact | Times Cited | % Docs Cited |
|--|-----------------------|------|--------------------------|----------------------------|-------------|--------------|
| Organization Name: University of Glasgow | SCOTLAND | 1 | 25,833 | 1.66 | 234,402 | 58% |
| | ENGLAND | 2 | 7,203 | 2.29 | 106,813 | 71% |
| | USA | 3 | 4,312 | 3.17 | 90,209 | 74% |
| | GERMANY (FED REP GER) | 4 | 2,783 | 3.15 | 68,529 | 79% |
| | ITALY | 5 | 2,326 | 3.36 | 56,706 | 80% |
| | FRANCE | 6 | 2,070 | 3.54 | 51,470 | 79% |
| | NETHERLANDS | 7 | 1,826 | 3.68 | 50,317 | 77% |
| | CANADA | 8 | 1,806 | 3.7 | 46,878 | 78% |
| | SPAIN | 9 | 1,769 | 3.65 | 45,995 | 82% |
| | AUSTRALIA | 10 | 1,552 | 3.68 | 39,757 | 73% |
| | SWITZERLAND | 11 | 1,523 | 3.42 | 39,537 | 82% |
| | SWEDEN | 12 | 1,203 | 4.53 | 36,482 | 75% |
| | JAPAN | 13 | 1,116 | 3.19 | 27,508 | 84% |
| | RUSSIA | 14 | 1,174 | 3.14 | 27,455 | 87% |
| | POLAND | 15 | 934 | 3.61 | 23,030 | 82% |
| | DENMARK | 16 | 756 | 4.22 | 22,365 | 79% |
| | FINLAND | 17 | 600 | 3.95 | 22,046 | 86% |
| | NORWAY | 18 | 754 | 4.39 | 22,025 | 78% |
| | BELGIUM | 19 | 658 | 4.91 | 20,884 | 76% |
| | GREECE | 20 | 871 | 3.42 | 19,727 | 86% |
| | AUSTRIA | 21 | 678 | 3.98 | 18,567 | 75% |
| | CHINA MAINLAND | 22 | 881 | 3.66 | 18,264 | 80% |
| | BRAZIL | 23 | 694 | 3.81 | 17,746 | 81% |
| | ISRAEL | 24 | 509 | 4.41 | 16,365 | 82% |
| | HUNGARY | 25 | 483 | 4.24 | 15,852 | 83% |


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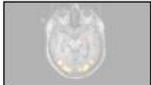
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Professor Colm Tóibín's New Novel, *Nora Webster*, Debuts in October

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Discussion: Global Governance

Lecture: The Chinese Economy – Boom or Bust

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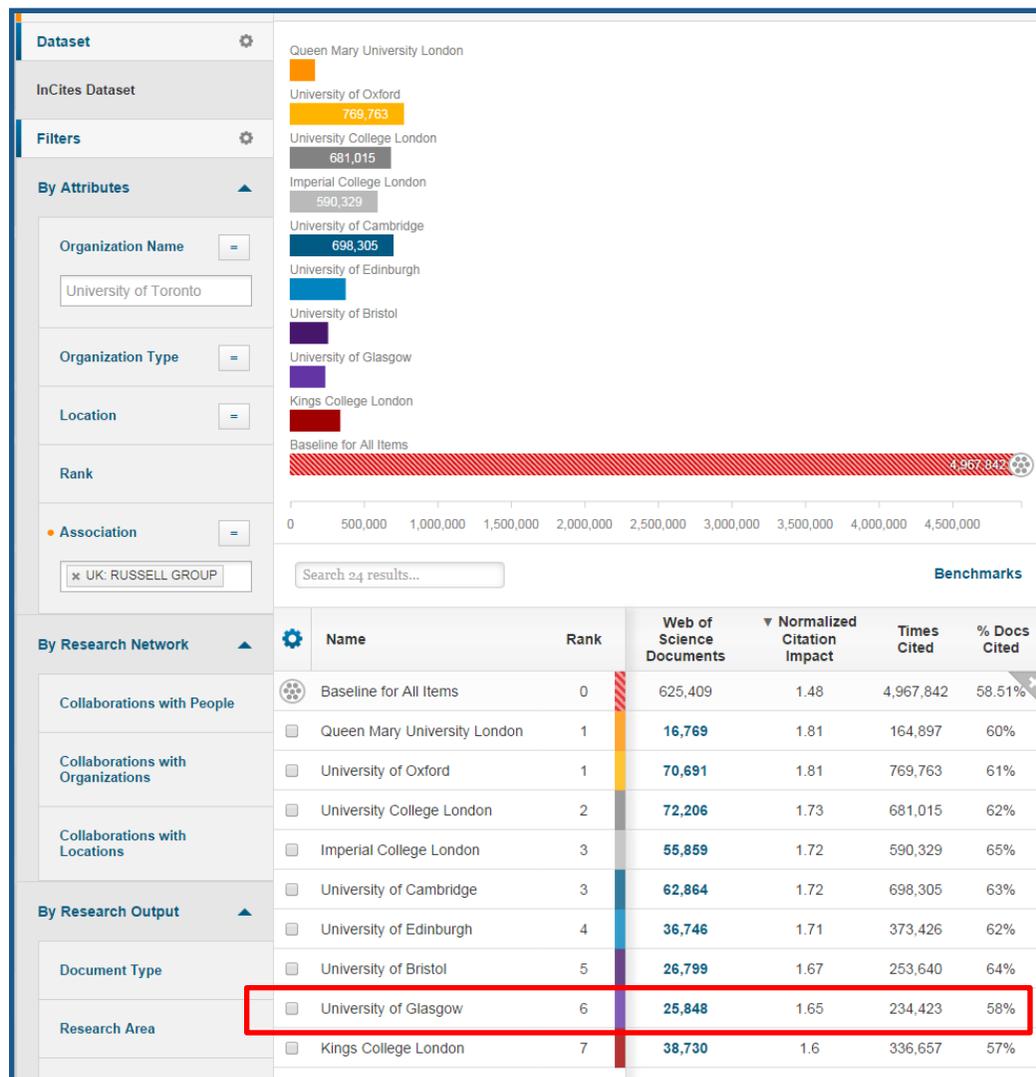
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| Journal | | | | | | |
|--------------------------|---|----|--------------|------|--------|-----|
| | <input type="checkbox"/> CNRS | 8 | 1,101 | 3.12 | 24,602 | 87% |
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| Open Access | <input type="checkbox"/> University of Michigan System | 9 | 796 | 3.7 | 24,320 | 87% |
| Thresholds ▲ | <input type="checkbox"/> Massachusetts Institute of Te... | 10 | 843 | 4.01 | 23,844 | 87% |
| | <input type="checkbox"/> University of Liverpool | 11 | 1,117 | 2.88 | 22,084 | 83% |
| Web of Science Documents | <input type="checkbox"/> University of Chicago | 12 | 805 | 3.38 | 21,238 | 88% |
| Times Cited | <input type="checkbox"/> Pennsylvania Commonwealth... | 13 | 847 | 3.33 | 20,997 | 87% |
| | <input type="checkbox"/> Pierre & Marie Curie Universit... | 14 | 845 | 3.73 | 20,700 | 86% |
| By Time ▲ | <input type="checkbox"/> Sapienza University Rome | 15 | 929 | 3.26 | 20,589 | 87% |
| | <input type="checkbox"/> United States Department of ... | 16 | 857 | 3.11 | 20,511 | 88% |
| Time Period | <input type="checkbox"/> University of Toronto | 17 | 877 | 3.66 | 20,432 | 84% |
| Update Results | <input type="checkbox"/> University of Wisconsin System | 18 | 756 | 3.38 | 20,204 | 88% |
| | <input type="checkbox"/> Imperial College London | 19 | 743 | 3.29 | 20,120 | 79% |
| | <input type="checkbox"/> Duke University | 20 | 781 | 3.67 | 19,424 | 84% |
| | <input type="checkbox"/> Max Planck Society | 21 | 777 | 3.37 | 19,200 | 83% |
| | <input type="checkbox"/> PRES University Sorbonne P... | 22 | 708 | 4.04 | 19,172 | 83% |
| | <input type="checkbox"/> University of Helsinki | 23 | 462 | 4.02 | 19,012 | 88% |
| | <input type="checkbox"/> Lund University | 24 | 543 | 4.77 | 18,870 | 82% |
| | <input type="checkbox"/> Ohio State University | 25 | 711 | 3.47 | 18,824 | 87% |
| | <input type="checkbox"/> Istituto Nazionale di Fisica Nu... | 26 | 853 | 2.87 | 18,709 | 88% |
| | <input type="checkbox"/> University of Pennsylvania | 27 | 710 | 3.68 | 18,673 | 85% |
| | <input type="checkbox"/> University of Illinois System | 28 | 674 | 3.46 | 18,296 | 88% |
| | <input type="checkbox"/> Columbia University | 29 | 525 | 4.24 | 18,152 | 82% |
| | <input type="checkbox"/> Consejo Superior de Investig... | 30 | 728 | 3.29 | 18,006 | 87% |
| | <input type="checkbox"/> University of Manchester | 31 | 978 | 3.3 | 17,734 | 79% |
| | <input type="checkbox"/> University of Washington Sea... | 32 | 474 | 5.19 | 17,731 | 82% |
| | <input type="checkbox"/> McGill University | 32 | 727 | 3.49 | 17,731 | 88% |



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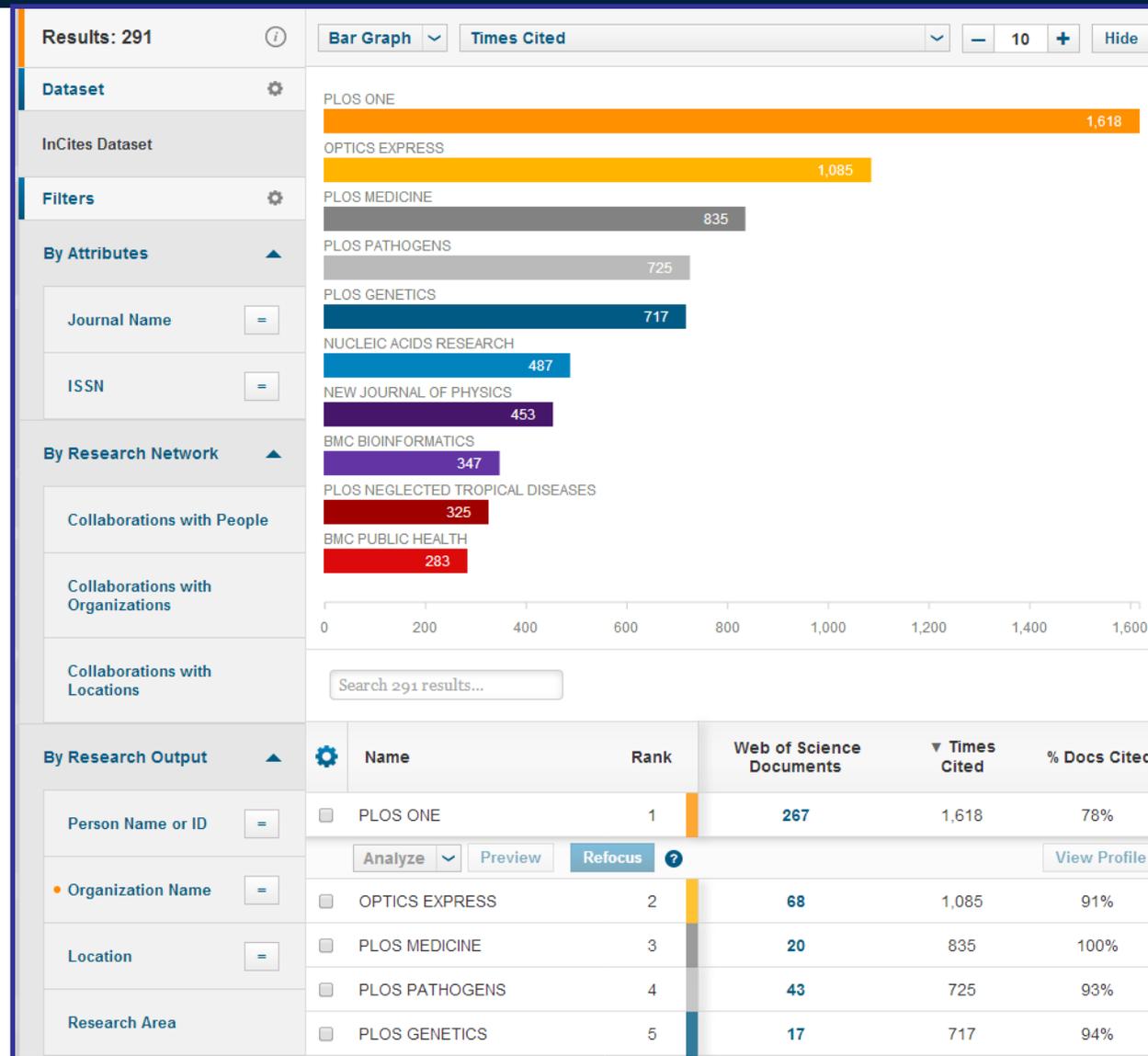
UNIVERSITY PUBLICATIONS POLICY

At the meeting of Senate on 5th June 2008 a new University Publications Policy was approved. The key aim of the new policy is to maximise the impact of the University's research by making publications as widely and freely available as possible through the University's institutional repository Enlighten. The policy will apply from the beginning of the 2008/2009 academic session.

KEY INFORMATION FOR GLASGOW AUTHORS

Enlighten also provides University of Glasgow authors with advice on how to deposit papers in the service and information on related issues such as open access publishing and complying with funding body open access policies.

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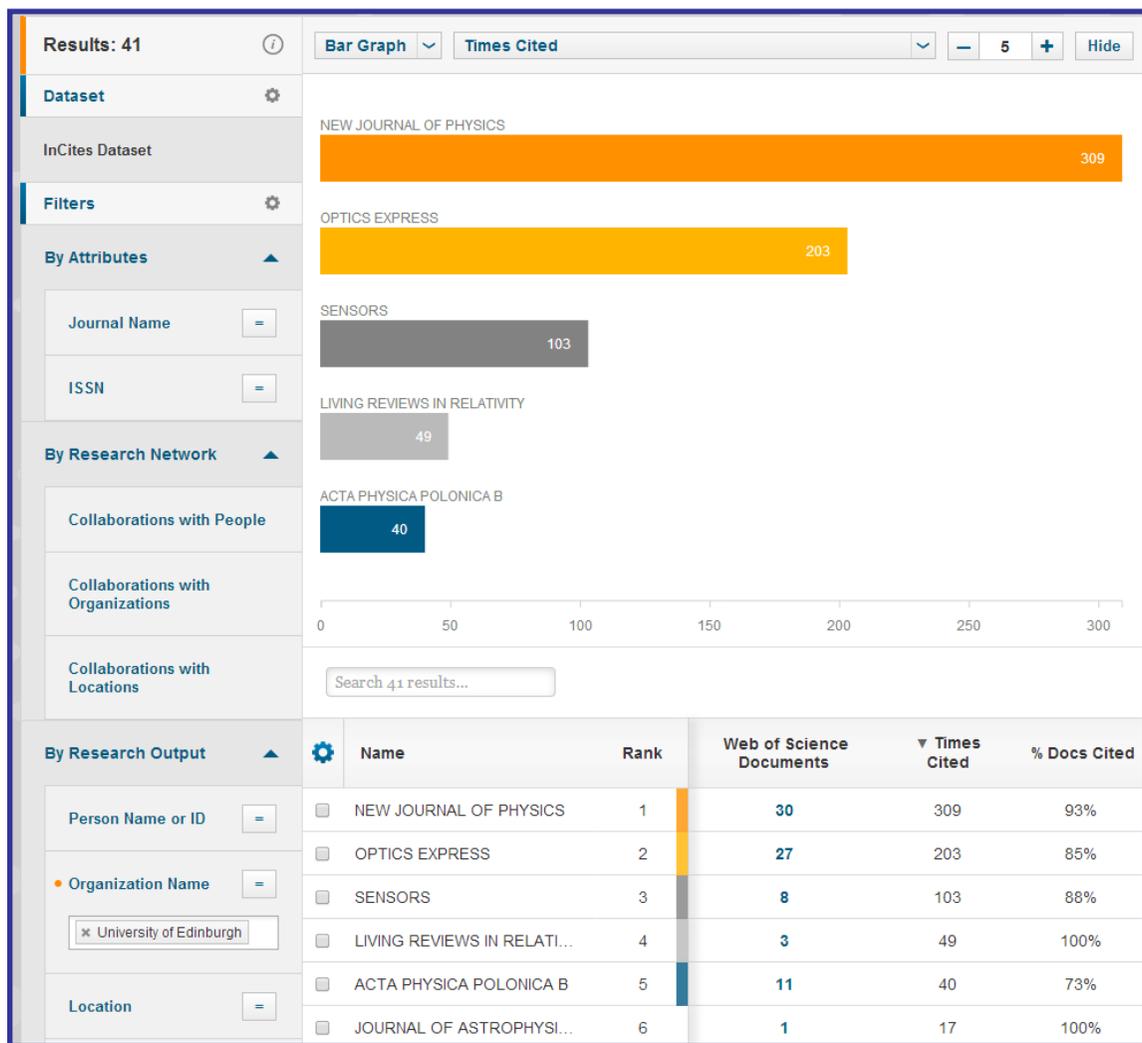
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Entropic uncertainty minimum for angle and angular momentum

Yao, A. M., Brougham, T., Eleftheriadou, E., Padgett, M. J., and Barnett, S. M. (2014) *Entropic uncertainty minimum for angle and angular momentum*. *Journal of Optics*, 16 (10). p. 105404. ISSN 2040-8978 (doi:10.1088/2040-8978/16/10/105404)



Text
97416.pdf - Published Version
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397Kb

Publisher's URL: <http://dx.doi.org/10.1088/2040-8978/16/10/105404>

Abstract

Uncertainty relations are key components in the understanding of the nature of quantum mechanics. In particular, entropic relations are preferred in the study of angular position and angular momentum states. We propose a new form of angle-angular momentum state that provides, for all practical purposes, a lower bound on the entropic uncertainty relation, $H\Phi + Hm$, for any given angular uncertainty, thus improving upon previous bounds. We establish this by comparing this sum with the absolute minimum value determined by a global numerical search. These states are convenient to work with both analytically and experimentally, which suggests that they may be of use for quantum information purposes.

| | |
|--|--|
| Item Type: | Article |
| Status: | Published |
| Refereed: | Yes |
| Glasgow Author(s) Enlighten ID: | Barnett, Professor Stephen and Brougham, Dr Thomas and Yao, Dr Alison and Padgett, Professor Miles |
| Authors: | Yao, A. M., Brougham, T., Eleftheriadou, E., Padgett, M. J., and Barnett, S. M. |
| College/School: | College of Science and Engineering > School of Physics and Astronomy |
| Journal Name: | Journal of Optics |
| Publisher: | Institute of Physics Publishing Ltd. |
| ISSN: | 2040-8978 |
| ISSN (Online): | 2040-8986 |
| Copyright Holders: | Copyright © 2014 The Authors |
| First Published: | First published in <i>Journal of Optics</i> 16(10):105404 |
| Publisher Policy: | Reproduced under a Creative Commons License |

University Staff: Request a correction | Enlighten Editors: Update this record

Altmetric

No Altmetrics are currently available for this publication.

Funder and Project Information

| Project Code | Award No | Project Name | Principal Investigator | Funder's Name | Funder Ref | Lead Dept |
|--------------|----------|--|------------------------|--|--------------|---------------------------|
| 54987 | 1 | Challenges in Orbital Angular Momentum | Miles Padgett | Engineering & Physical Sciences Research Council (EPSRC) | EP/I012451/1 | P&A - PHYSICS & ASTRONOMY |

Tools

Citation count dataset and import plug-ins v1.1.0

Sheppard, Nicholas and Gregson, Mark and Francois, Sebastien (2011) *Citation count dataset and import plug-ins v1.1.0*.

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EPrints Version: EPrints 3 > EPrints 3.2
EPrints 3 > EPrints 3.3
Date: 28 February 2011
Creators Name: Sheppard, Nicholas and Gregson, Mark and Francois, Sebastien
Department: Library eServices
Institution: Queensland University of Technology
Date Deposited: 13 Dec 2012 15:15
Last Modified: 03 May 2013 10:54
Wiki Page: [Files/Citation count dataset and import plug-ins v1.1.0](#)
Date Deposited: 13 Dec 2012 15:15

Abstract

These scripts and plug-ins enable an EPrints repository to retrieve and store citation counts from Scopus, Web of Science and Google Scholar. All citation data is stored in a dataset called 'citation', which contains a complete history of requests for citation counts. The most recent counts for any given eprint are cached in the 'scopus', 'wos' and 'gscholar' fields of that eprint so that they can be accessed from citation files and export plug-ins. Updates (December 2012): support for v3 of the WoS API, support for the updated Scopus API (view README for more details). Note that the package seems to work fine on 3.3.10.

Requirements

Importing citation counts from Scopus requires a subscription to Scopus and a developer key for the Scopus XML Search API. Importing citation counts from Web of Science requires a subscription to Web of Science and access to Web of Science Web Services Premium. The Web of Science plug-in requires SOAP::Lite to be installed from CPAN, and the Google Scholar plug-in requires WWW::Mechanize::Sleepy.

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Direct measurement of a 27-dimensional orbital-angular-momentum state vector

Malik, M., Mirhosseini, M., Lavery, M.P.J., Leach, J., Padgett, M.J., and Boyd, R.W. (2014) *Direct measurement of a 27-dimensional orbital-angular-momentum state vector*. Nature Communications, 5 . p. 3115. ISSN 2041-1723 (doi:10.1038/ncomms4115)

Full text not currently available from Enlighten.

Publisher's URL: <http://dx.doi.org/10.1038/ncomms4115>

Abstract

The measurement of a quantum state poses a unique challenge for experimentalists. Recently, the technique of 'direct measurement' was proposed for characterizing a quantum state in situ through sequential weak and strong measurements. While this method has been used for measuring polarization states, its real potential lies in the measurement of states with a large dimensionality. Here we show the practical direct measurement of a highdimensional state vector in the discrete basis of orbital angular momentum. Through weak measurements of orbital angular momentum and strong measurements of angular position, we measure the complex probability amplitudes of a pure state with a dimensionality, $d=27$. Further, we use our method to directly observe the relationship between rotations of a state vector and the relative phase between its orbital-angular-momentum components. Our technique has important applications in high-dimensional classical and quantum information systems and can be extended to characterize other types of large quantum states.

| | |
|--|--|
| Item Type: | Article |
| Status: | Published |
| Refereed: | Yes |
| Glasgow Author(s) Enlighten ID: | Lavery, Mr Martin and Boyd, Prof Robert and Padgett, Prof Miles and Leach, Mr Jonathan |
| Authors: | Malik, M., Mirhosseini, M., Lavery, M.P.J., Leach, J., Padgett, M.J., and Boyd, R.W. |
| College/School: | College of Science and Engineering > School of Physics and Astronomy |
| Journal Name: | Nature Communications |
| Publisher: | Nature Publishing Group |
| ISSN: | 2041-1723 |

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- On **1** Facebook pages

- **17** readers on Mendeley
- **0** readers on Connotea
- **0** readers on CiteULike

[View details on Altmetric's website](#)

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| Project Code | Award No | Project Name | Principal Investigator | Funder's Name | Funder Ref | Lead Dept |
|--------------|----------|--|------------------------|--|--------------|---------------------------|
| 54987 | 1 | Challenges in Orbital Angular Momentum | Miles Padgett | Engineering & Physical Sciences Research Council (EPSRC) | EP/I012451/1 | P&A - PHYSICS & ASTRONOMY |

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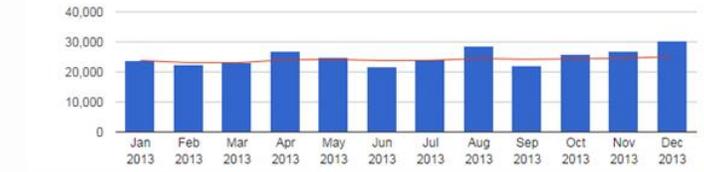
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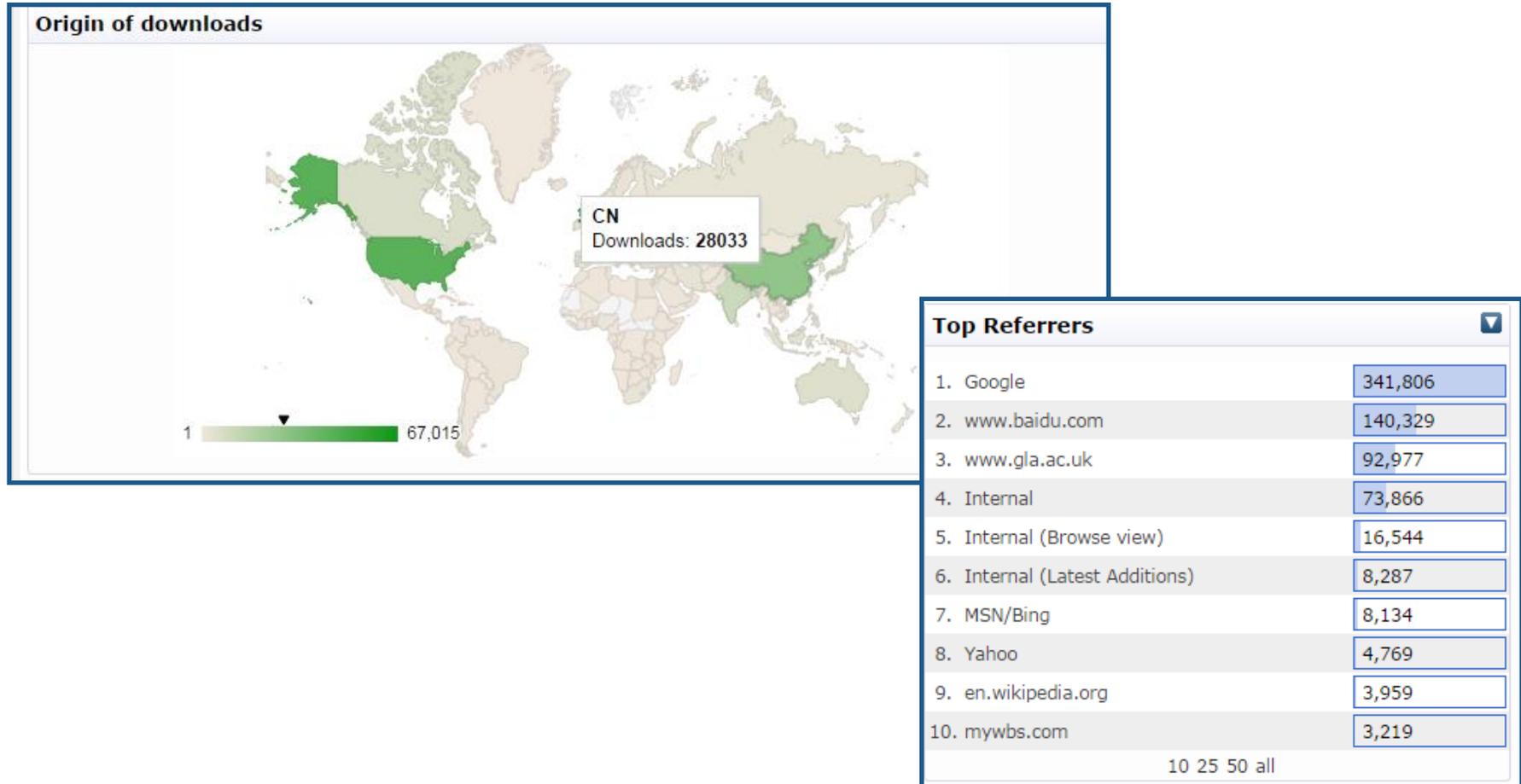
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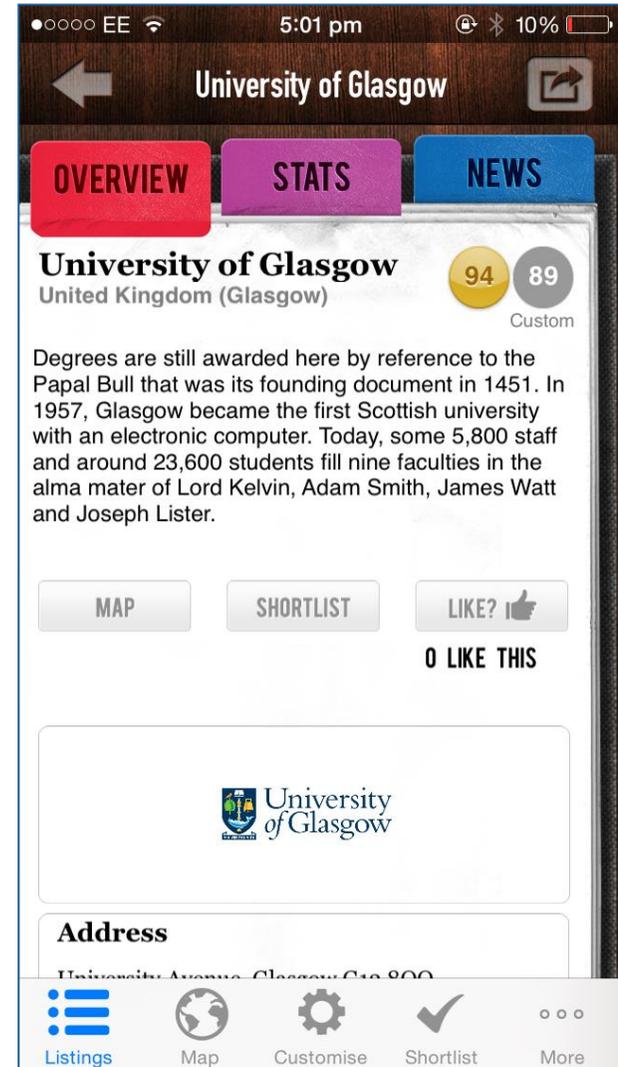
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2. Prof Timothy Miller 7,497
3. Professor Yun Li 6,159
4. Professor John Briggs 5,299
5. Professor Jeremy Bagg 4,709

10 25 50 all



THE Rankings 2015

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Degrees are still awarded here by reference to the Papal Bull that was its founding document in 1451. In 1957, Glasgow became the first Scottish university with an electronic computer. Today, some 5,800 staff and around 23,600 students fill nine faculties in the alma mater of Lord Kelvin, Adam Smith, James Watt and Joseph Lister.

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 - Training sessions for staff on new InCites
- Ongoing migration to new InCites (incl Shibboleth)
- Refresh of Glasgow author data
- Training for Library and other staff
- Altmetrics: Exploring Institutional Rankings
- ORCIDs assigned and matched with WoS (via Enlighten)

In metrics we trust? Prospects & pitfalls of new research metrics

A one-day workshop hosted by the University of Sussex, as part of the Independent Review of the Role of Metrics in Research Assessment

Tuesday 7 October 2014

Terrace Room, Conference Centre, Bramber House, University of Sussex



The quality and impacts of research are commonly assessed using a combination of peer review and a variety of quantitative metrics. The use of metrics and 'altmetrics' has developed rapidly, but is the subject of heated debate across the research community.

In April 2014, the Minister for Universities and Science asked HEFCE to undertake a review of the role of metrics in research assessment and management, to inform these debates and influence the design of the next Research Excellence Framework (REF). Details of the review can be found on the [HEFCE](#) website. The review will consider current uses of

metrics for research assessment, the robustness of metrics across different disciplines, and their potential contribution to the development of research excellence and impact. The review is being chaired by [James Wilsdon](#), Professor of Science and Democracy at the University of Sussex, and will publish its findings in the spring of 2015.

As a contribution to the work of the review, HEFCE and the Science Policy Research Unit (SPRU) at the University of Sussex are co-hosting a one-day workshop on 7 October 2014.

Culture > Music > Bob Dylan

Scientists sneak Bob Dylan lyrics into articles as part of long-running bet

Group of Swedish academics – authors of papers such as *Nitric Oxide and Inflammation: The Answer is Blowing in the Wind* – reveal 17-year bet: whoever has written most articles including Dylan quotes before going into retirement wins a lunch at a local restaurant

Sean Michaels

The Guardian, Monday 29 September 2014 07.44 BST

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Bob Dylan ... Blood on the Tracks: an insight into non-neutral cells. Photograph: The Estate of David Gahr/Getty Images

Five Swedish-based scientists have been inserting Bob Dylan lyrics into research articles as part of a long-running bet. After 17 years, the researchers revealed their race to quote Dylan as many times as possible

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- <http://www.glasgow.ac.uk>
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Thanks for your attention