Using the Literature in Astrophysics as a Filter for Research Data

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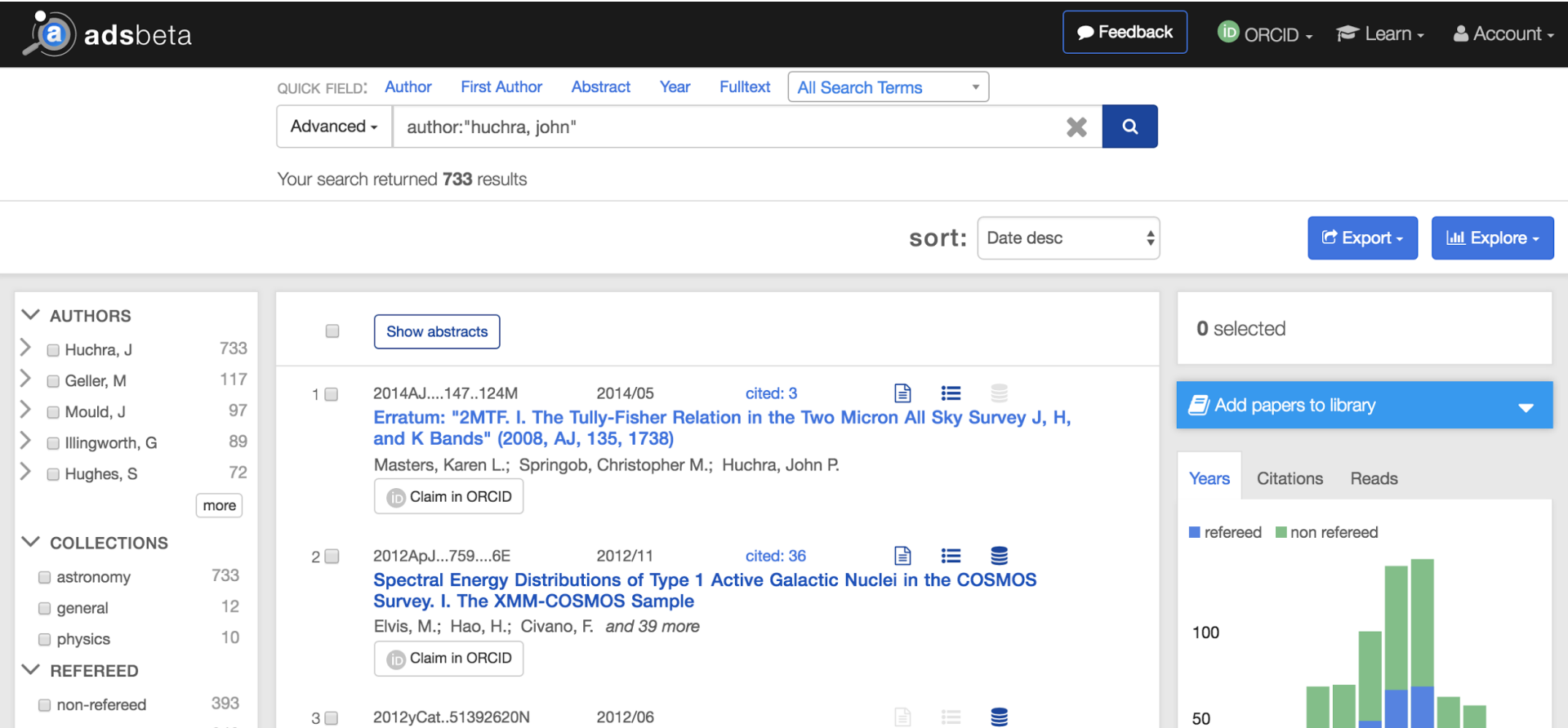
The NASA Astrophysics Data System (ADS) is the lifeblood of astronomical research.

- Disciplinary repository w/ +10M bibliographic records (in 2013)
- Used by all astronomers (10m users total)
- Search literature, citations, related datasets & metrics
- +3M full-text docs (arXiv, publishers, etc)
- Indexed by Google, ORCID integration…

If it isn’t in the ADS, it doesn’t exist!

NASA ADS (Bumblebee)



ESO Library's telbib Methodology

Scientific literature

Semi-automated search tool FUSE

Telbib database (back-end)

Tags + proIDs for telbib records

Data archive

Telbib database (front-end)

telbib Statistics

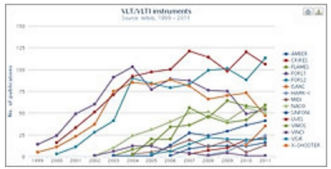
ESO Telescope Bibliography Statistics

This section provides access to **interactive graphs** of publication statistics derived from the ESO Telescope Bibliography (telbib).

In addition, there are some other ways to explore telbib metrics:

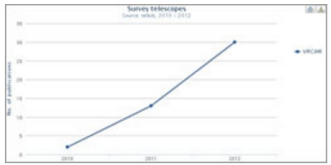
- the public interface at http://telbib.eso.org shows search results in tabular format. Whenever possible, entries include ESO program IDs that provide direct links to the data in ESO Archive. The results sets can be **exported** for further use
- using the VISUALIZE button, search results can be displayed as **animated charts** which are created on-the-fly, based on the user's queries
- an overview of statistics derived from the database can be found in the document **"Basic ESO Statistics"** which is available from the ESO Libraries homepage or directly at http://www.eso.org/sci/libraries/edocs/ESO/ESOstats.pdf

If you are interested in other metrics, contact the ESO Librarians at library@eso.org.



VLT/VLTI instruments

La Silla instruments



Survey telescopes

Exoplanet Papers in the ADS Filtered by ESO Data Links

AUTHORS
COLLECTIONS
REFEREED
KEYWORDS
PUBLICATIONS
BIB GROUPS
SIMBAD OBJECTS
DATA
ESO 767
CDS 746
NExScI 175
MAST 61
ESA 50
more
VIZIER TABLES
GRANTS
PUBLICATION TYPE

Hide highlights | Show abstracts

1 2016MNRAS.462.3616M 2016/11
The Gaia spectrophotometric standard stars survey - III. Short-term variability monitoring
Marinoni, S.; Pancino, E.; Altavilla, G. *and 14 more*
Claim in ORCID

is comparable to that of recent studies for the search of exoplanets from space (Nascimbeni et al. 2012)

2 2016MNRAS.462.1012B 2016/10
The origin of the excess transit absorption in the HD 189733 system: planet or star?
Barnes, J. R.; Haswell, C. A.; Staab, D. *and 1 more*
Claim in ORCID

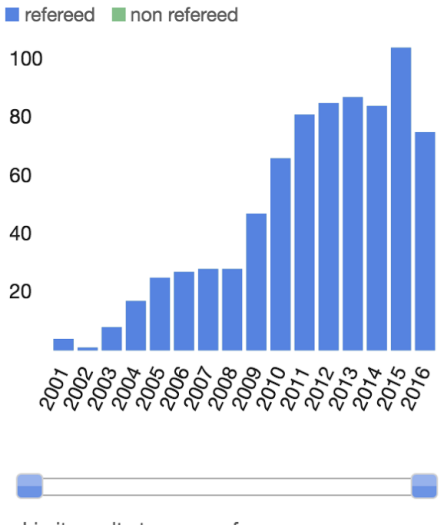
transmission spectroscopy of transiting exoplanets is notoriously difficult owing to the small signal

3 2016ApJ...830L..16B 2016/10
Misaligned Disks in the Binary Protostar IRS 43
Brinch, Christian; Jørgensen, Jes K.; Hogerheijde, Michiel R. *and 2 more*
Claim in ORCID

0 selected

Add papers to library

Years | Citations | Reads



Astrophysics Source Code Library (ASCL)

ASCL.net
Astrophysics Source Code Library

Making codes discoverable since 1999

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Welcome to the ASCL

The Astrophysics Source Code Library (ASCL) is a free online registry for source codes of interest to astronomers and astrophysicists and lists codes that have been used in research that has appeared in, or been submitted to, peer-reviewed publications. The ASCL is indexed by the SAO/NASA Astrophysics Data System (ADS) and is citable by using the unique ascl ID assigned to each code. The ascl ID can be used to link to the code entry by prefacing the number with ascl.net (*i.e.*, ascl.net/1201.001).

Most Recently Added Codes

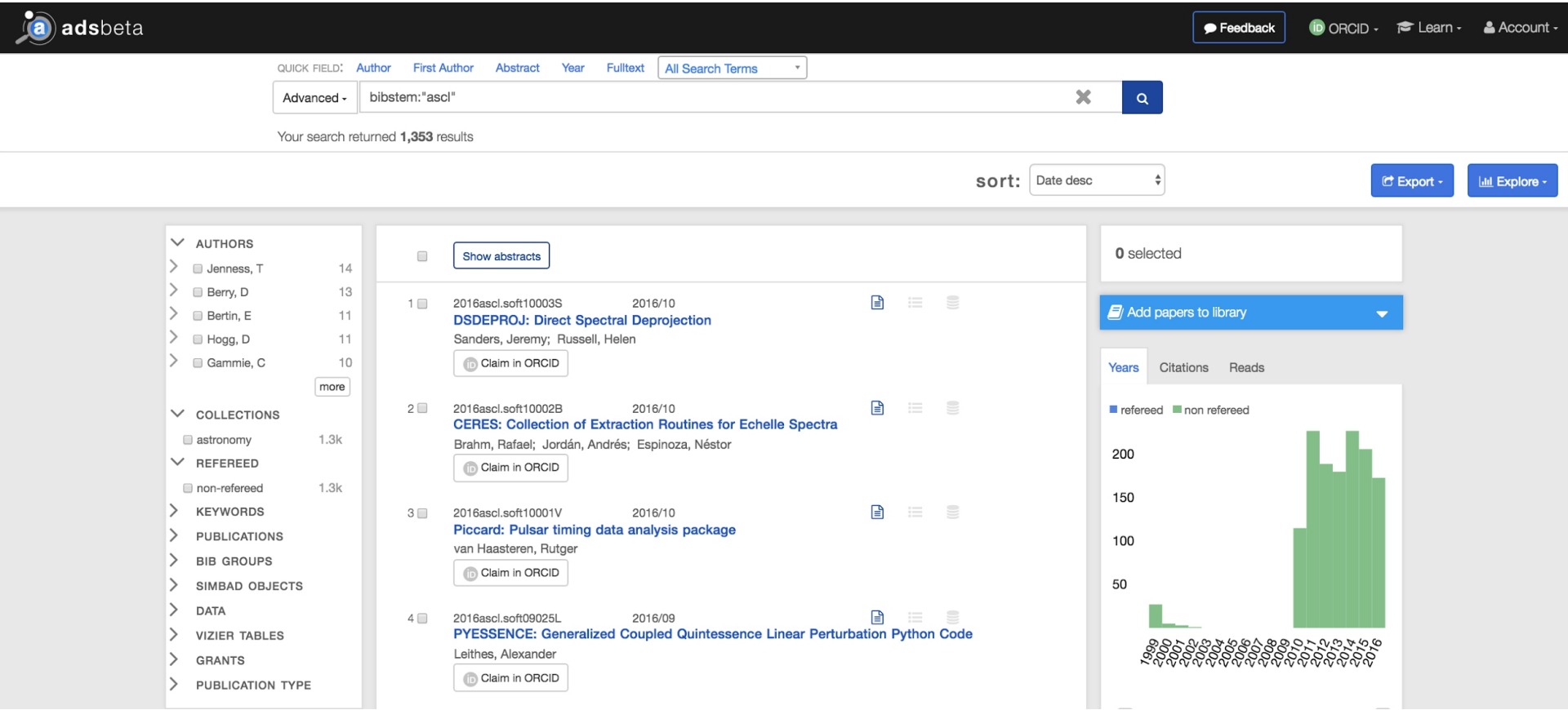
2016 Oct 31

[ascl:1610.016] PyMC3: Python probabilistic programming framework

Salvatier, John; Wiecki, Thomas V.; Fonnesbeck, Christopher

PyMC3 performs Bayesian statistical modeling and model fitting focused on advanced Markov chain Monte Carlo and variational fitting algorithms. It offers powerful sampling algorithms, such as the No U-Turn Sampler, allowing complex models with thousands of parameters with little specialized knowledge of fitting algorithms, intuitive model specification syntax, and optimization for finding the maximum a posteriori (MAP) point. PyMC3 uses Theano to compute gradients via automatic differentiation as well as compile probabilistic programs on-the-fly to C for increased speed.

ASCL in ADS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Advanced
bibstem:"ascl"
Your search returned 1,353 results
sort: Date desc
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Berry, D 13
Bertin, E 11
Hogg, D 11
Gammie, C 10
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KEYWORDS
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SIMBAD OBJECTS
DATA
VIZIER TABLES
GRANTS
PUBLICATION TYPE
Show abstracts
1 2016ascl.soft10003S 2016/10
DSDEPROJ: Direct Spectral Deprojection
Sanders, Jeremy; Russell, Helen
Claim in ORCID
2 2016ascl.soft10002B 2016/10
CERES: Collection of Extraction Routines for Echelle Spectra
Brahm, Rafael; Jordán, Andrés; Espinoza, Néstor
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3 2016ascl.soft10001V 2016/10
Piccard: Pulsar timing data analysis package
van Haasteren, Rutger
Claim in ORCID
4 2016ascl.soft09025L 2016/09
PYESSENCE: Generalized Coupled Quintessence Linear Perturbation Python Code
Leithes, Alexander
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Years Citations Reads
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150
100
50
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Linking to Other Research Objects

DATA SCIENTIST TRAINING
FOR LIBRARIANS
10

Split Function
Function
Expression
get the three middle digits from the Phone using splitbyLengths()
cells('Phone'). value.splitbyLengths(3 ,3,3)[2]
Extract the domain name from Website using split()
cells('Website'). value.split("/")[0]
DTU

DST4L @ Designing Libraries IV by Chris Erdmann

Slides: https://goo.gl/EA5HZr
Video: https://goo.gl/jMLRWT

Data Scientist Training for Librarians – re-skilling libraries for the future by Christian Lauersen

Blog Post: https://goo.gl/PSXe9E

Data Scientist Training for Librarians: A course and a community by Jeremy Guillette, James Damon

Blog Post: https://goo.gl/72pHfi

IMLS Workshop on Data Science in Libraries

- Data Scientist Training for Librarians
- Library Carpentry
- Data Science & Visualization Institute for Librarians
- …

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http://datascienceinlibraries.org/

RE-43-16-0149-16:
https://www.imls.gov/grants/awarded/re-43-16-0149-16