

# New ADS Functionality for the Curator

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*@aaccomazzi*

LISA VIII - 8 June 2017



# Who is ADS?

- [Alberto Accomazzi](#), PI & Program Manager
- [Michael J. Kurtz](#), Project Scientist
- [Carolyn S. Grant](#), Data Ingest and Curation
- [Edwin A. Henneken](#), System Development and Operations
- [Donna M. Thompson](#), Data Curation Librarian
- [Roman Chyla](#), System Architecture and Development
- [Steve McDonald](#), System Development and Operations
- [Tim Hostetler](#), User Interface and Front-end Development
- [Sergi Blanco-Cuaresma](#), Back-End Software Development (pipelines)
- [Golnaz Shapurian](#), Back-End Software Development (applications)
- [Taylor Shaulis](#), System Operations and Cloud Computing
- [TBD](#), Curation Support
- [TBD](#), API, ORCID, and User Support

# ADS's mission

- Maintain a comprehensive, timely and complete database of the scholarly literature in Astronomy & Astrophysics
- Provide discovery services to support research in Astrophysics and related fields
- Promote the use of NASA Astrophysics data by integrating bibliographies and links to data products generated by NASA missions and hosted by NASA archives
- Provide services for curators and librarians involved in maintaining bibliographies, linking literature and data products, measuring impact
- Interface with publishers and the community to facilitate the implementation of agency policy ... related to Open Access publishing
- Make its efforts in software development freely available under an open-source software license

# What ADS Aggregates

- We harvest and merge bibliographic data from multiple sources (arXiv, CrossRef, publishers, [Astronomy archives](#), ASCL, Zenodo communities)
- We enrich metadata via text-mining of the fulltext sources (extract references, acknowledgments, keywords, plots and images)
- We generate and maintain citation and usage networks
- We cross-correlate content (arXiv & published paper, translations, re-publications, [VizieR catalogs](#), [observing proposals](#))
- We collect and maintain [external links](#) to publishers, [archives](#) (SIMBAD, VizieR, NED, MAST, ESO, etc.)
- We incorporate [bibliographies](#) from [institutes](#) and [archives](#)
- We collect and index ORCID data and claims
- We curate content by fixing problems in response to community input

# Bibliographic groups in ADS

- **Institutional** bibliographies, highlighting scientific output from research center or project
- “**Telescope**” bibliographies, identifying papers related to their data products
- About 30 bibliographic groups so far, over 330K records
- Help with scientific evaluation of projects and institutions, but also useful in disambiguation

ALMA	ISO	ROSAT
ARI	IUE	SDO
CfA	JCMT	SMA
CFHT	Keck	Spitzer
Chandra	Leiden	Subaru
ESO	LPI	Swift
Gemini	Magellan	UKIRT
Herschel	NOAO	USNO
HST	NRAO	XMM

# ADS System Evolution

## NASA Recommendations

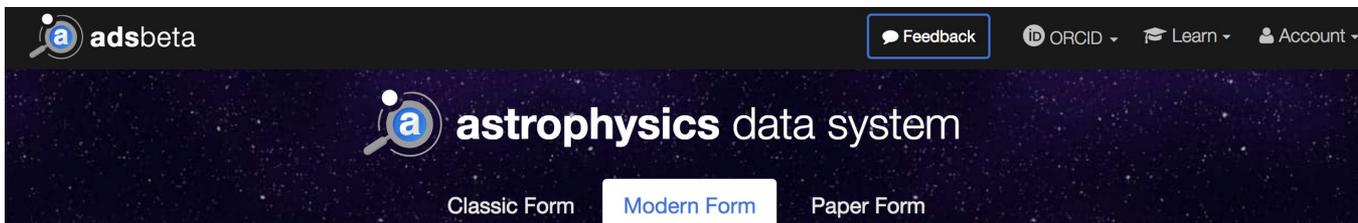
- 1992 [ADS Classic](#): Custom-built search, limited to metadata fields (title, authors, abstract)
- 2011 ADS Labs [Streamlined Search](#): a new “skin” over ADS Classic, introduces facets (filters) of top N results for query refinement and selection
- 2013 ADS [Labs 2.0](#): Invenio-based metadata store, new search engine, full-text search functionality, scalable facets over collections, API
- 2015 ADS [Bumblebee](#): mongoDB data store, microservices API, client-side dynamic page loading, responsive design, cloud platform

*“New interface”  
“wheat from chaff”  
(2008)*

*“10-year plan”  
“keep competitive edge”  
(2011)*

*“complete transition”  
“improve services”  
“release new interface”  
(2015)*

# What's buzzing at ADS? Bumblebee!



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 **astrophysics** data system

[Classic Form](#) [Modern Form](#) [Paper Form](#)

QUICK FIELD: [Author](#) [First Author](#) [Abstract](#) [Year](#) [Fulltext](#) [All Search Terms](#)

Advanced

<b>author</b>	author:"huchra, john"	<b>citations</b>	citations(author:"huchra, j") ?
<b>first author</b>	author:"^huchra, john"	<b>references</b>	references(author:"huchra, j") ?
<b>abstract + title</b>	abs:"dark energy"	<b>reviews</b>	reviews("gamma-ray bursts") ?
<b>year</b>	year:2000		
<b>year range</b>	year:2000-2005	<b>refereed</b>	property:refereed ?
<b>full text</b>	full:"gravitational waves"	<b>astronomy</b>	database:astronomy ?
<b>publication</b>	bibstem:ApJ ?	<b>OR</b>	abs:(planet OR star) ?



Use a classic ADS-style form

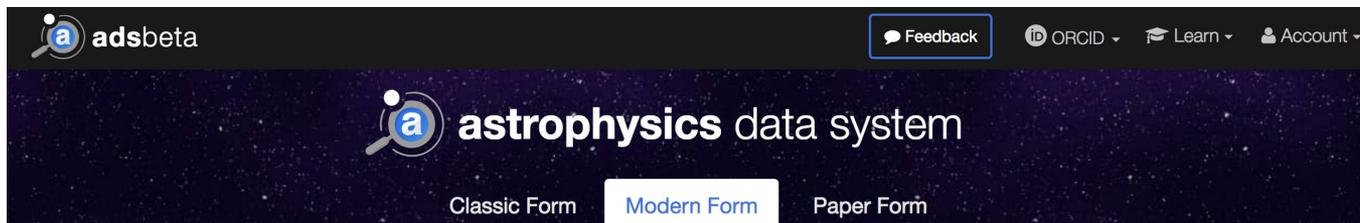


Learn more about searching the ADS



Access ADS data with our API

# What's buzzing at ADS? Bumblebee!



The screenshot shows the top navigation bar of the Astrophysics Data System (ADS) website. On the left is the 'adsbeta' logo. On the right are links for 'Feedback', 'ORCID', 'Learn', and 'Account'. Below this is a dark banner with the 'astrophysics data system' logo and three tabs: 'Classic Form', 'Modern Form' (which is selected), and 'Paper Form'.

QUICK FIELD: [Author](#) [First Author](#) [Abstract](#) [Year](#) [Fulltext](#) [All Search Terms](#)

Advanced

<b>author</b>	author:"huchra, john"	<b>citations</b>	citations(author:"huchra, j") ?
<b>first author</b>	author:"^huchra, john"	<b>references</b>	references(author:"huchra, j") ?
<b>abstract + title</b>	abs:"dark energy"	<b>reviews</b>	reviews("gamma-ray bursts") ?
<b>year</b>	year:2000		
<b>year range</b>	year:2000-2005	<b>refereed</b>	property:refereed ?
<b>full text</b>	full:"gravitational waves"	<b>astronomy</b>	database:astronomy ?
<b>publication</b>	bibstem:ApJ ?	<b>OR</b>	abs:(planet OR star) ?

<https://ui.adsabs.harvard.edu>

# ADS Classic vs. Bumblebee: search form

SAO/NASA ADS Astronomy Query Form for Alberto Accomazzi

[Sitemap](#) [What's New](#) [Feedback](#) [Basic Search](#) [Preferences](#) [FAQ](#) [HELP](#)

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Databases to query:  Astronomy  Physics  arXiv e-prints

Authors: (Last, First M. one per line)  SIMBAD  NED  ADS Objects

Exact name matching  Object name/position search

Require author for selection  Require object for selection

( OR  AND  simple logic) (Combine with:  OR  AND)

Publication Date between  and   
(MM) (YYYY) (MM) (YYYY)

Enter Title Words  Require title for selection  
(Combine with:  OR  AND  simple logic  boolean logic)

Enter Abstract Words/Keywords  Require text for selection  
(Combine with:  OR  AND  simple logic  boolean logic)

Return  items starting with number

[ADSLabs Full Text Search: Search within articles](#)

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astrophysics data system

Classic Form **Modern Form** Paper Form

QUICK FIELD: [Author](#) [First Author](#) [Abstract](#) [Year](#) [Fulltext](#) [All Search Terms](#)

Advanced - author:"accomazzi, a"

author	author:"huchra, john"	citations	citations(author:"huchra, j")
first author	author:"^huchra, john"	references	references(author:"huchra, j")
abstract + title	abs:"dark energy"	reviews	reviews("gamma-ray bursts")
year	year:2000		
year range	year:2000-2005	refereed	property:refereed
full text	full:"gravitational waves"	astronomy	database:astronomy
publication	bibstem:ApJ	OR	abs:(planet OR star)

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adshelp[at]cfa.harvard.edu [Is ADS down? \(or is it just me...\)](#)

# ADS Classic vs. Bumblebee: search results

SAO/NASA Astrophysics Data System (ADS)

Query Results from the ADS Database [Go to bottom of page](#)

Retrieved 200 abstracts, starting with number 1. Total number selected: 313. Total citations: 23327

#	Bibcode Authors	Cites Title	Date	List of Links Access Control Help
1	<a href="#">2001ApJ...553..47F</a> Freedman, Wendy L.; Madore, Barry F.; Gibson, Brad K.; Ferrarese, Laura; Kelson, Daniel D.; Sakai, Shoko; Mould, Jeremy R.; Kennicutt, Robert C., Jr.; Ford, Holland C.; Graham, John A.; and 5 coauthors	2235.000 Final Results from the Hubble Space Telescope Key Project to Measure the Hubble Constant	05/2001	<a href="#">A</a> <a href="#">Z</a> <a href="#">E</a> <a href="#">E</a> <a href="#">L</a> <a href="#">X</a> <a href="#">D</a> <a href="#">R</a> <a href="#">C</a> <a href="#">S</a> <a href="#">N</a> <a href="#">U</a> <a href="#">H</a>
2	<a href="#">1986ApJ...302L...1D</a> de Lapparent, V.; Geller, M. J.; Huchra, J. P.	802.000 A slice of the universe	03/1986	<a href="#">A</a> <a href="#">Z</a> <a href="#">E</a> <a href="#">G</a> <a href="#">D</a> <a href="#">R</a> <a href="#">C</a> <a href="#">S</a> <a href="#">N</a> <a href="#">U</a> <a href="#">H</a>
3	<a href="#">1983ApJS...52...89H</a> Huchra, J.; Davis, M.; Latham, D.; Tonry, J.	733.000 A survey of galaxy redshifts. IV - The data	06/1983	<a href="#">A</a> <a href="#">Z</a> <a href="#">E</a> <a href="#">G</a> <a href="#">D</a> <a href="#">R</a> <a href="#">C</a> <a href="#">S</a> <a href="#">N</a> <a href="#">U</a> <a href="#">H</a>
4	<a href="#">1982ApJ...257..423H</a> Huchra, J. P.; Geller, M. J.	589.000 Groups of galaxies. I - Nearby groups	06/1982	<a href="#">A</a> <a href="#">Z</a> <a href="#">E</a> <a href="#">G</a> <a href="#">D</a> <a href="#">R</a> <a href="#">C</a> <a href="#">S</a> <a href="#">N</a> <a href="#">U</a> <a href="#">H</a>
5	<a href="#">1994ApJ...427..628F</a> Freedman, Wendy L.; Hughes, Shaun M.; Madore, Barry F.; Mould, Jeremy R.; Lee, Myung Gyoon; Stetson, Peter; Kennicutt, Robert C.; Turner, Anne;	495.000 The Hubble Space Telescope Extragalactic Distance Scale Key Project. I: The discovery of Cepheids and a new distance to M81	06/1994	<a href="#">A</a> <a href="#">Z</a> <a href="#">E</a> <a href="#">G</a> <a href="#">D</a> <a href="#">R</a> <a href="#">C</a> <a href="#">S</a> <a href="#">N</a> <a href="#">U</a> <a href="#">H</a>

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QUICK FIELD: Author First Author Abstract Year Fulltext All Search Terms

Advanced - author:huchra, john\* redshift

Your search returned 418 results

sort: Date desc [Export](#) [Explore](#)

0 selected [Add papers to library](#)

Years Citations Reads

■ refereed ■ non-refereed

Limit results to papers from 1973 to 2012 [Apply](#)

**AUTHORS**

- Huchra, J 418
- Geller, M 105
- Mould, J 48
- Illingworth, G 44
- Macri, L 39

**COLLECTIONS**

- astronomy 418
- physics 4
- general 3

**REFEREED**

- referenced 237
- non-refereed 181

**KEYWORDS**

- PUBLICATIONS
- BIB GROUPS
- SIMBAD OBJECTS
- DATA
- VIZIER TABLES
- GRANTS
- PUBLICATION TYPE

1 [2012ApJ...759...6E](#) 2012/11 cited: 37 [PDF](#) [HTML](#) [BIB](#)  
Spectral Energy Distributions of Type 1 Active Galactic Nuclei in the COSMOS Survey. I. The XMM-COSMOS Sample  
Elvis, M.; Hao, H.; Civano, F. and 39 more  
from a small number of AGNs (29 radio-quiet and 18 radio-loud AGNs); (3) the sample only covers a low redshift

2 [2012yCat...21990026H](#) 2012/06 [PDF](#) [HTML](#) [BIB](#)  
VizieR Online Data Catalog: The 2MASS Redshift Survey (2MRS) (Huchra+, 2012)  
Huchra, J. P.; Macri, L. M.; Masters, K. L. and 17 more  
VizieR Online Data Catalog: The 2MASS Redshift Survey (2MRS) (Huchra+, 2012)

3 [2012ApJS...199...26H](#) 2012/04 cited: 195 [PDF](#) [HTML](#) [BIB](#)  
The 2MASS Redshift Survey—Description and Data Release  
Huchra, John P.; Macri, Lucas M.; Masters, Karen L. and 17 more  
The 2MASS Redshift Survey—Description and Data Release  
We present the results of the 2MASS Redshift Survey (2MRS), a ten-year project to map the full  
1976; Smoot et al. 1977; Cheng et al. 1979), the first large redshift surveys were begun (cf. Davis

4 [2011MNRAS...413.2906D](#) 2011/06 cited: 61 [PDF](#) [HTML](#) [BIB](#)  
Local gravity versus local velocity: solutions for  $\beta$  and non-linear bias  
Davis, Marc; Nusser, Adi; Masters, Karen L. and 3 more  
(Two Micron All Sky Survey) redshift survey (2MRS), yields a prediction of the flows given the cosmological density parameter,

# ADS Classic vs. Bumblebee: detailed view

SAO/NASA ADS Astronomy Abstract Service

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- On-line Data
- References in the article
- Citations to the Article (2235) (Citation History)
- Refereed Citations to the Article
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**Title:** Final Results from the Hubble Space Telescope Key Project to Measure the Hubble Constant

**Authors:** Freedman, Wendy L.; Madore, Barry F.; Gibson, Brad K.; Ferrarese, Laura; Kelson, Daniel D.; Sakai, Shoko; Mould, Jeremy R.; Kennicutt, Robert C., Jr.; Ford, Holland C.; Graham, John A.; Huchra, John P.; Hughes, Shaun M. G.; Illingworth, Garth D.; Macri, Lucas M.; Stetson, Peter B.

**Affiliation:** AA(The Observatories, Carnegie Institution of Washington, Pasadena, CA 91101.), AB(The Observatoires, Carnegie Institution of Washington, Pasadena, CA 91101; NASA/IPAC Extragalactic Database, California Institute of Technology, Pasadena, CA 91125.), AC(Centre for Astrophysics and Supercomputing, Swinburne University of Technology, Hawthorn, Victoria 3122, Australia.), AD(Rutgers University, New Brunswick, NJ 08854.), AE(Department of Terrestrial Magnetism, Carnegie Institution of Washington, 5241 Broad Branch Road NW, Washington, DC 20015.), AF(National Optical Astronomy Observatories, PO Box 26732, Tucson, AZ 85726.), AG(Research School of Astronomy and Astrophysics, Australian National University, Weston Creek Post Office, Weston, ACT, Australia 2611.), AH(Steward Observatory, University of Arizona, Tucson, AZ 85721.), AI(Department of Physics and Astronomy, Bloomberg 501, Johns Hopkins University, 3400 North Charles Street, Baltimore, MD 21218.), AJ(Department of Terrestrial Magnetism, Carnegie Institution of Washington, 5241 Broad Branch Road NW, Washington, DC 20015.), AK(Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138.), AL(Institute of Astronomy, Madingley Road, Cambridge CB3 0HA, UK.), AM(Lick Observatory, University of California, Santa Cruz, CA 95064.), AN(Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138.), AO(Dominion Astrophysical Observatory, Herzberg Institute of Astrophysics, National Research Council, 5071 West Saanich Road, Victoria, BC V8X 4M6, Canada; Guest User, Canadian Astronomy Data Centre, which is operated by the Herzberg Institute of Astrophysics, National Research Council of Canada.)

**Publication:** The Astrophysical Journal, Volume 553, Issue 1, pp. 47-72. ([ApJ Homepage](#))

**Publication Date:** 05/2001

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**VIEW**

- Abstract**
- Citations (2517)
- References (158)
- Co-Reads
- Graphics
- Metrics

**EXPORT**

- in BibTeX
- in AASTeX
- in EndNote

## Final Results from the Hubble Space Telescope Key Project to Measure the Hubble Constant

[Show affiliations](#)

Freedman, Wendy L.; Madore, Barry F.; Gibson, Brad K.; Ferrarese, Laura; Kelson, Daniel D.; Sakai, Shoko; Mould, Jeremy R.; Kennicutt, Robert C., Jr.; Ford, Holland C.; Graham, John A.; Huchra, John P.; Hughes, Shaun M. G.; Illingworth, Garth D.; Macri, Lucas M.; Stetson, Peter B.

We present here the final results of the Hubble Space Telescope (HST) Key Project to measure the Hubble constant. We summarize our method, the results, and the uncertainties, tabulate our revised distances, and give the implications of these results for cosmology. Our results are based on a Cepheid calibration of several secondary distance methods applied over the range of about 60-400 Mpc. The analysis presented here benefits from a number of recent improvements and refinements, including (1) a larger LMC Cepheid sample to define the fiducial period-luminosity (PL) relations, (2) a more recent HST Wide Field and Planetary Camera 2 (WFPC2) photometric calibration, (3) a correction for Cepheid metallicity, and (4) a correction for incompleteness bias in the observed Cepheid PL samples. We adopt a distance modulus to the LMC (relative to which the more distant galaxies are measured) of  $\mu_0(\text{LMC})=18.50\pm 0.10$  mag, or 50 kpc. New, revised distances are given for the 18 spiral galaxies for which Cepheids have been discovered as part of the Key Project, as well as for 13 additional galaxies with published Cepheid data. The new calibration results in a Cepheid distance to NGC 4258 in better agreement with the maser distance to this galaxy. Based on these revised Cepheid distances, we find values  $(\text{in km s}^{-1} \text{ Mpc}^{-1})$  of  $H_0=71\pm 2$  (random) $\pm 6$  (systematic) (Type Ia supernovae),  $H_0=71\pm 3\pm 7$  (Tully-Fisher relation),  $H_0=70\pm 5\pm 6$  (surface brightness fluctuations),  $H_0=72\pm 9\pm 7$  (Type II supernovae), and  $H_0=82\pm 6\pm 9$  (fundamental plane). We combine these results for the different methods with three different weighting schemes, and find good agreement and consistency with  $H_0=72\pm 8 \text{ km s}^{-1} \text{ Mpc}^{-1}$ . Finally, we compare these results with other global methods for measuring  $H_0$ . Based on observations with the

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**DATA PRODUCTS**

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- SIMBAD objects (133)
- Archival Data (2)

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**SUGGESTED ARTICLES**

- [Star Formation Thresholds in Galactic Disks \(Martin, +\)](#)

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# ADS Classic vs. Bumblebee: search

ORCID search	<i>orcid:0000-0002-4110-3511</i>
Data search	<i>data:(CXO or XMM) and data:HST</i>
Search full-text	<i>full:(HST or JWST)</i>
Acknowledgments	<i>ack:ADS</i>
Affiliation search	<i>aff:(Harvard or HCO or SAO or Smithsonian)</i>
Filtering by citation impact	<i>HST and citation_count:[10 TO 99999]</i>
Positional searches	<i>pos(aff:SAO, 2)</i>
Citation search	<i>citations(author:"Kurtz, M")</i>
Remove self-citations	<i>citations(author: "Kurtz, M") -author:"Kurtz, M"</i>

For more information, please see: <http://adsabs.github.io/help/search/search-syntax/>

# Scalable metrics for any query

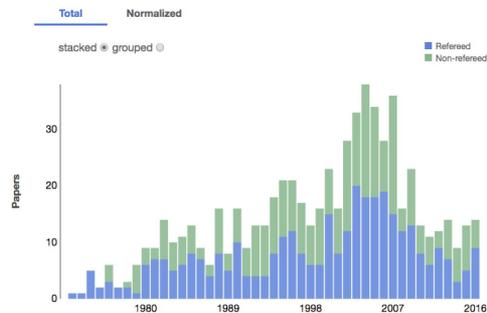
Find the number of all refereed astronomy papers published since 1960, the number of papers which were cited at least once, their total citation count, the average citation count per paper, the H index for the collection

The screenshot shows the ADSbeta search interface. At the top, the search bar contains 'Advanced - year:1960-2017' and a search button. Below the search bar, it states 'Your search returned 938,677 results'. The interface includes a sidebar with filters for 'Collection' (astronomy) and 'Property' (+property:refereed). The main area displays a list of search results, including titles like 'Model depiction of the atmospheric flows of radioactive cesium emitted from the Fukushima Daiichi Nuclear Power Station accident' and 'Flare Observations'. On the right, a statistics sidebar shows '0 selected' papers, 'Add papers to library' button, and a chart for 'Citations' with a total of 20,834,515 citations and an H-index of 833. The chart shows a steep decline in citation counts over time, with a y-axis from 1k to 10k and an x-axis from 0 to 2,000+ papers.

# Detailed metrics for collections

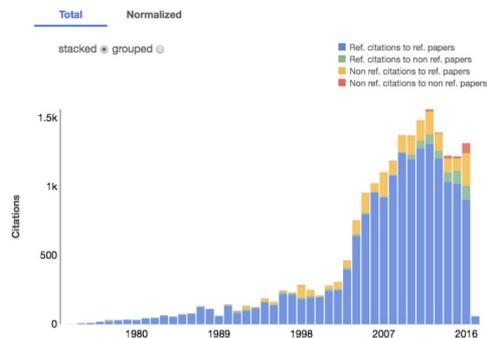
## Papers

	Totals	Refereed
Number of papers	649	350
Normalized paper count	237.6	98.8



## Citations

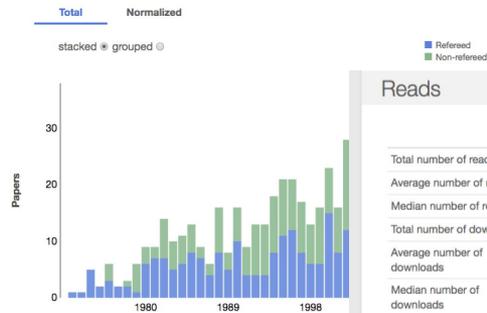
	Totals	Refereed
Number of citing papers	11490	10906
Total citations	19993	19094
Number of self-citations	1830	1744
Average citations	30.8	54.6
Median citations	4	17
Normalized citations	2409.0	2283.7
Refereed citations	17738	17019
Average refereed citations	27.3	48.6
Median refereed citations	3	15
Normalized refereed citations	2182.3	2070.8



# Detailed metrics for collections

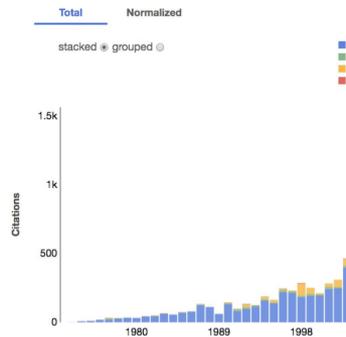
## Papers

	Totals	Refereed
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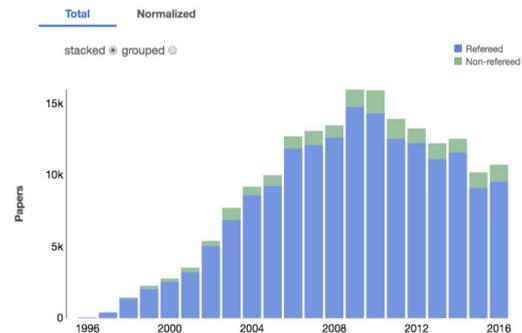
## Citations

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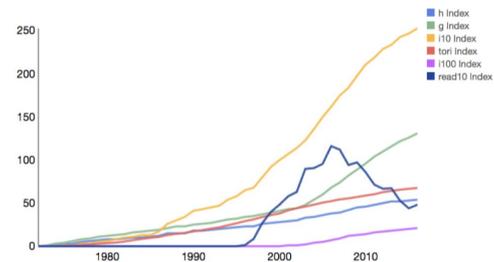
## Reads

	Totals	Refereed
Total number of reads	186844	170973
Average number of reads	289.2	488.5
Median number of reads	88.5	265
Total number of downloads	99471	94901
Average number of downloads	154.0	271.1
Median number of downloads	43	43



## Indices

	Totals	Refereed
h-index	54	54
m-index	1.2	1.2
g-index	132	129
i10-index	253	243
i100-index	21	20
tori index	67.6	64.0
riq index	182	177
read10-index	481.8	397.9



# Network Visualizations

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QUICK FIELD: [Author](#) [First Author](#) [Abstract](#) [Year](#) [Fulltext](#) [All Search Terms](#)

Advanced - [Bulk query](#) (title:"exoplanet" year:2016 AND read\_count:[10 TO 50])

Your search returned 54 results

sort: Date desc

[Export](#) [Explore](#)

Currently viewing data for 54 papers.

Filter current search: X clear

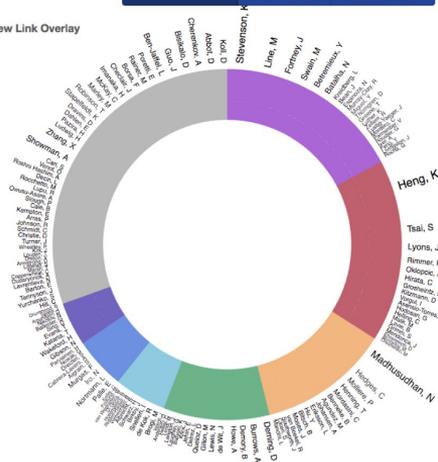
Change to first  papers (max is 54) [Submit](#)

select an author or group of authors in the visualization below and click the "add to filter" button



Size wedges based on: [Author Occurrences](#) [Paper Citations](#) [Paper Downloads](#)

View Link Overlay



[Summary](#) [Detail](#)

## Author Network

This network visualization finds groups of authors within your search results. You can click on the segments to view the papers connected with a group or a particular author.

Group Activity Over Time (measured in papers published)

Not enough data to show a graph: All papers are from the year 2016

[Learn more about the author network.](#)

If you are interested in seeing the author network for another author, you can do that directly by clicking on the author in the ring visualization, then clicking the button at the top.

You can zoom and drag the visualization to reposition it.

# Network Visualizations

adsbeta

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QUICK FIELD: Author First Author Abstract Year Fulltext All Search Terms

Advanced - Bulk query (title:"exoplanet" year:2016 AND read\_count:[10 TO 50])

Your search returned 54 results

Currently viewing data for 54 papers.

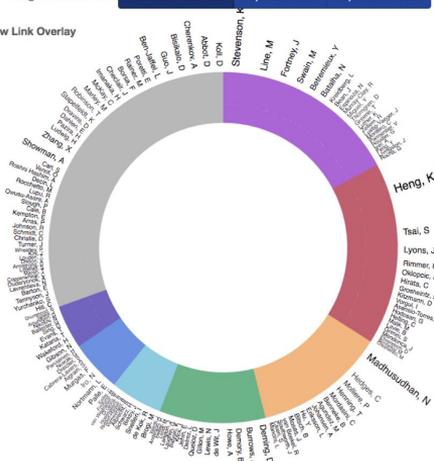
Filter current search: X clear

Change to first 10 papers (max is 54) Submit

select an author or group of authors in the visualization below and click "add to filter" button

Size wedges based on: Author Occurrences Paper Citations Paper Downloads

View Link Overlay



## Author Network

This network visualization finds groups of results. You can click on the segments with a group or a particular author.

Group Activity Over Time (measured in papers) Not enough data to show a graph: All papers

[Learn more about the author network.](#)

If you are interested in seeing the authors you can do that directly by clicking on the visualization, then clicking the button

You can zoom and drag the visualization

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QUICK FIELD: Author First Author Abstract Year Fulltext All Search Terms

Advanced - (title:"exoplanet" year:2016 AND read\_count:[10 TO 50])

Your search returned 201 results

Currently viewing data for 201 papers.

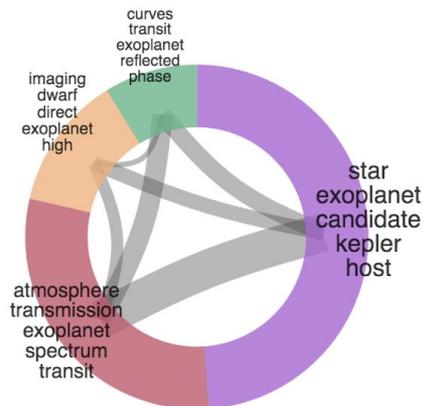
Filter current search: X clear

Change to first 10 papers (max is 201) Submit

Group 2

Size wedges based on: Number of Papers Paper Citations Paper Downloads

Summary Detail



Group 2: atmosphere, code, transmission, transit, spectrum, exoplanet

Remove group from filter

This group consists of 54 papers, which have been cited, in total, 249 times.

Top papers from this group include:

- A continuum from clear to cloudy hot-Jupiter exoplanets without primordial water depletion; *Sing, David K.* (64 citations)
- Characterizing Transiting Exoplanet Atmospheres with JWST; *Greene, Thomas P.* (20 citations)
- Repeatability and Accuracy of Exoplanet Eclipse Depths Measured with Post-cryogenic Spitzer; *Irigoin, James G.* (14 citations)
- Detection of H<sub>2</sub>SUB=2-/SUB-O and Evidence for TiO/VO in an Ultra-hot Exoplanet Atmosphere; *Evans, Thomas M.* (14 citations)
- Carbon Dioxide in Exoplanetary Atmospheres: Rarely Dominant Compared to Carbon Monoxide and Water in Hot, Hydrogen-dominated Atmospheres; *Heng, Kevin* (12 citations)
- Rotation and Winds of Exoplanet HD 189733 b Measured with High-dispersion Transmission Spectroscopy; *Broggi, M.* (12 citations)
- Quantifying and Predicting the Presence of Clouds in Exoplanet Atmospheres; *Stevenson, Kevin B.* (10 citations)
- A map of the large day-night temperature gradient of a super-Earth exoplanet; *Demory, Brice-Olivier* (10 citations)
- Characterizing Rocky and Gaseous Exoplanets with 2 m Class Space-based Coronagraphs; *Robinson, Tyler D.* (7 citations)
- The GTC exoplanet transit spectroscopy survey. II. An overly large

# Paper analytics

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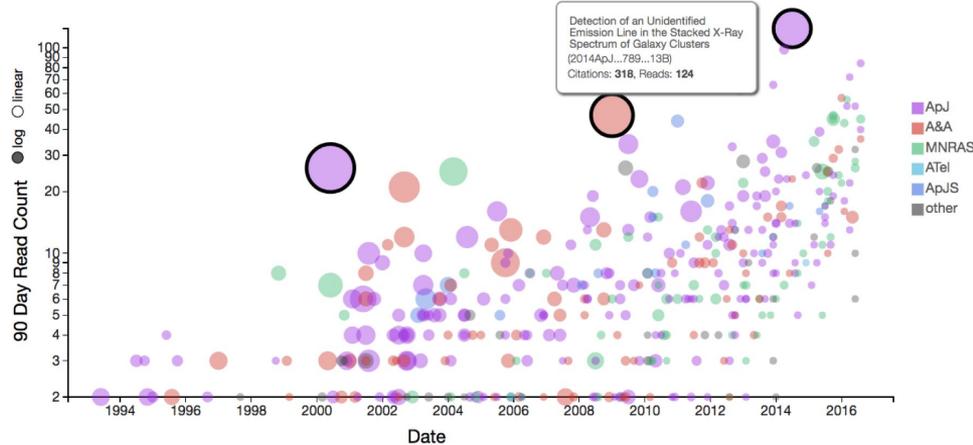
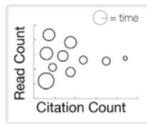
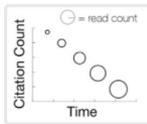
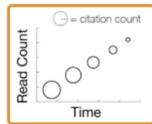
QUICK FIELD: [Author](#) [First Author](#) [Abstract](#) [Year](#) [Fulltext](#) [All Search Terms](#)

Advanced - object:M31

Your search returned 556 results

Data  HEASARC  
Data  CXO  
Data  XMM

sort: Date desc



# Paper analytics

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QUICK FIELD: [Author](#) [First Author](#) [Abstract](#) [Year](#) [Fulltext](#) [All Search Terms](#)

Advanced - object:M31

Your search returned 556 results

Data HEASARC Data CXO Data XMM

sort: Date d

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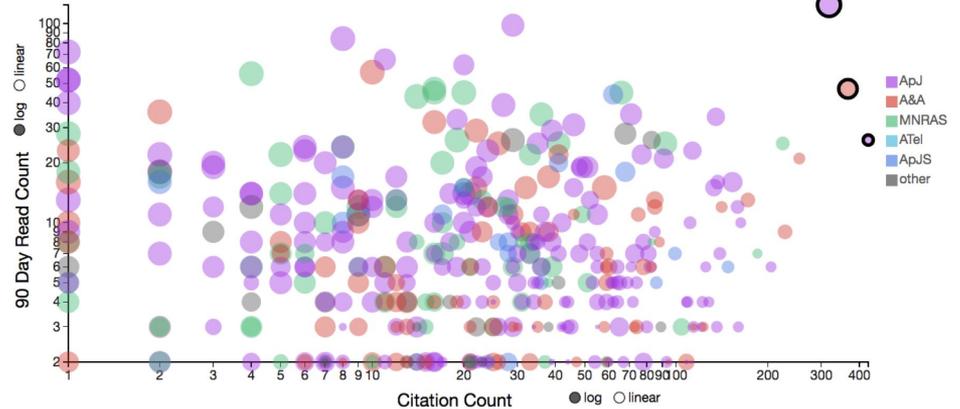
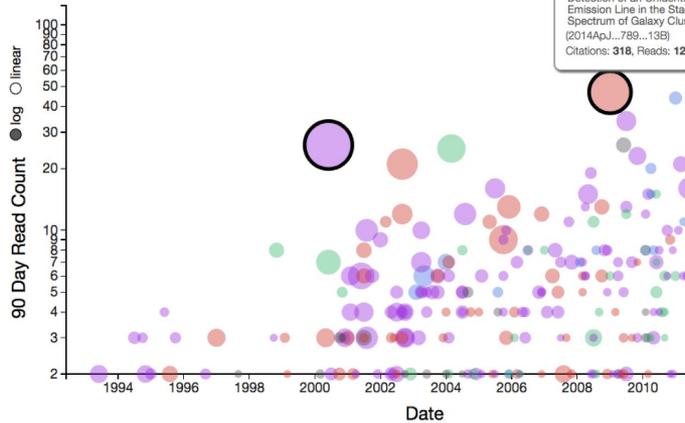
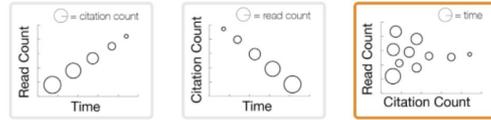
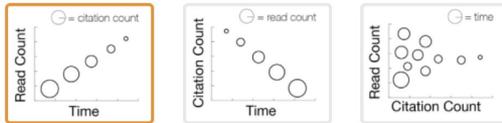
QUICK FIELD: [Author](#) [First Author](#) [Abstract](#) [Year](#) [Fulltext](#) [All Search Terms](#)

Advanced - object:M31

Your search returned 556 results

Data HEASARC Data CXO Data XMM

sort: Date desc [Export](#) [Explore](#)



# Integration of ORCID Claiming

- Once in ADS, works can be claimed in ORCID using our user interface
- Enable ORCID mode, authenticate with the ORCID API, and send claims to it
- Claims are also locally indexed and therefore findable in our system
- This works for all content types available in ADS

adsbeta

Feedback ORCID Learn Account

QUICK FIELD: Author First Author Abstract Year Fulltext

Advanced database:astronomy

Your search returned 17,281 results with 12,094 total citations

Pubtype software Pubtype catalog

AUTHORS

- Bus, S 1.3k
- Binzel, R 1.3k
- Larson, S 509
- Hill, R 414
- Kowalski, R 404

more

COLLECTIONS

- astronomy 17.2k
- physics 1

REFEREED

- non-refereed 14.7k
- refereed 2.5k

KEYWORDS

PUBLICATIONS

BIB GROUPS

SIMBAD OBJECTS

Show abstracts

1 1976RC2...C.....0D 1976 cited: 2391  
Second reference catalogue of bright galaxies  
de Vaucouleurs, G.; de Vaucouleurs, A.; Corwin, J. R.

In ORCID

2 1953GCRV..C.....0W 1953 cited: 764  
General catalogue of stellar radial velocities.  
Wilson, Ralph Elmer

In ORCID

3 2003yCat.2246...0C 2003/06 cited: 737  
VizieR Online Data Catalog: 2MASS All-Sky Catalog of Point Sources  
(Cutri+ 2003)  
Cutri, R. M.; Skrutskie, M. F.; van Dyk, S. and 22 more

Claim in ORCID

Signed in to ORCID as Alberto Accomazzi

ORCID Mode off on

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refereed non refereed

1898-1898 1899-1911 1912-1924 1925-1927 1928-1930 1931-1963 1964-1976 1977-1989 1990-2002 2003-2015 2016-2017

# ADS Bumblebee: API Access

```
$ pip install ads
```

```
Successfully installed ads-0.11.3 pbr-1.8.1 requests-2.8.1 six-1.10.0 werkz
```

```
$ ipython
```

```
In [1]: import ads
```

```
In [2]: ads.config.token = 'irb2uumWFSy1Z9cIDIN06WvtsP'
```

```
In [3]: res = ads.SearchQuery(q="author:accomazzi", sort="citation_count")
```

```
In [4]: for paper in res:
```

```
...:     print(paper.bibcode, paper.title, paper.citation_count)
```

```
...:
```

```
(u'2000A&AS..143...41K', u'The NASA Astrophysics Data System: Overview', 64)
```

```
(u'2001ASPC..238..321D', u"ADS's Dexter Data Extraction Applet", 24)
```

```
(u'2000A&AS..143..111G', u'The NASA Astrophysics Data System: Data holdings', 20)
```

```
(u'2000A&AS..143...85A', u'The NASA Astrophysics Data System: Architecture', 20)
```

```
(u'2000A&AS..143...61E', u'The NASA Astrophysics Data System: The search engine and its
```

# Rollout Plan

- Build out Bumblebee to achieve feature parity with ADS Classic  
(add features to search interface and corresponding microservices)
- Provide a more reliable user experience  
(minimize usability problems and search errors)
- Achieve content currency parity with ADS Classic  
(improve data migration pipeline to new data store)
- Increase system capacity to match expected load from ADS Classic users  
(2 orders of magnitude increase)
- Deprecate use of ADS Classic on January 1st, 2018  
(but keep system running and up-to-date)
- Discontinue use of the ADS Classic search engine on January 1st, 2019  
(but continue support all existing URLs and services via redirections)

# What does this mean for you?

- If you have not taken advantage of the new search features of Bumblebee, you should definitely take a look and learn more about them. It's worth it!
- If you are using queries to ADS Classic in your automated workflow, consider switching to our new API
- If you have been providing proposals, bibliographic data, links, collections to ADS, nothing needs to change as they will exist in Bumblebee
- Please encourage scientists at your institution to use the new system! We will do our best to spread the news but librarians are ideal advocates for this
- The new ADS platform is ORCID-aware, so you should also encourage your users/staff to take advantage of it and use ADS to claim their papers in ORCID
- We are continuously evaluating our priorities and milestones, please let us know if you find missing content or functionality in our new system

# New Capabilities and Opportunities

- We have developed a bibliography tool using a workflow based on Google sheets. This provides an easy way to create a bibliography via ADS without coding! See poster by James Damon
- We are working with AAS and Zenodo to better support discovery and citation of software packages in astronomy, so that code can be properly acknowledged in scholarly publications. See poster by Gus Muench
- We are interested in incorporating curated ORCID datasets from trusted sources, plan to work with the CfA library first to incorporate ORCIDs in conjunction with their bibliography ingest. See poster by Donna Thompson
- Want to be FAIR? Think ADS! Your data will be much more discoverable if it's linked from the literature (or even fully indexed in ADS)

# For More Information

- ADS Bumblebee:

<https://ui.adsabs.harvard.edu>

- ADS API:

<https://github.com/adsabs/adsabs-dev-api>

- ADS help and support:

<http://adsabs.github.io/help/>

[adshelp@cfa.harvard.edu](mailto:adshelp@cfa.harvard.edu)

- ADS news:

<http://adsabs.github.io/blog/>

[@adsabs](#)

- ADS users group:

<http://adsabs.harvard.edu/adsug.html>

**Merci!**