

# What's New @ ADS

*Alberto Accomazzi, Kelly Lockhart, Jennifer Lynn Bartlett & Michael Kurtz*  
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<http://ui.adsabs.harvard.edu>

January 2024

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**ASTROPHYSICS**  
HARVARD & SMITHSONIAN



# Overview

A review of the exciting developments taking place with ADS:

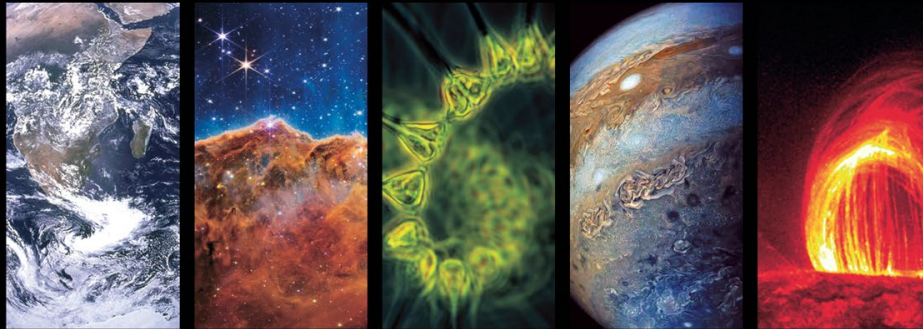
- Launch of the NASA Science Explorer (SciX) platform  
(Alberto Accomazzi)
- AI/ML initiatives at ADS  
(Kelly Lockhart)
- Using ADS in the SciX Era  
(Jennifer Lynn Bartlett & Michal Kurtz)

# The NASA Science Explorer: ADS for all NASA Science



SciX

[ [SciXplorer.org](https://SciXplorer.org) ]



QUICK FIELD: [author](#) [first author](#) [abstract](#) [year](#) [fulltext](#) 

## WELCOME TO THE SciX Digital Library



Learn more about the SciX digital library and how it can support your scientific research in this welcome video and brief user tutorial from Dr. Stephanie Jarmak.

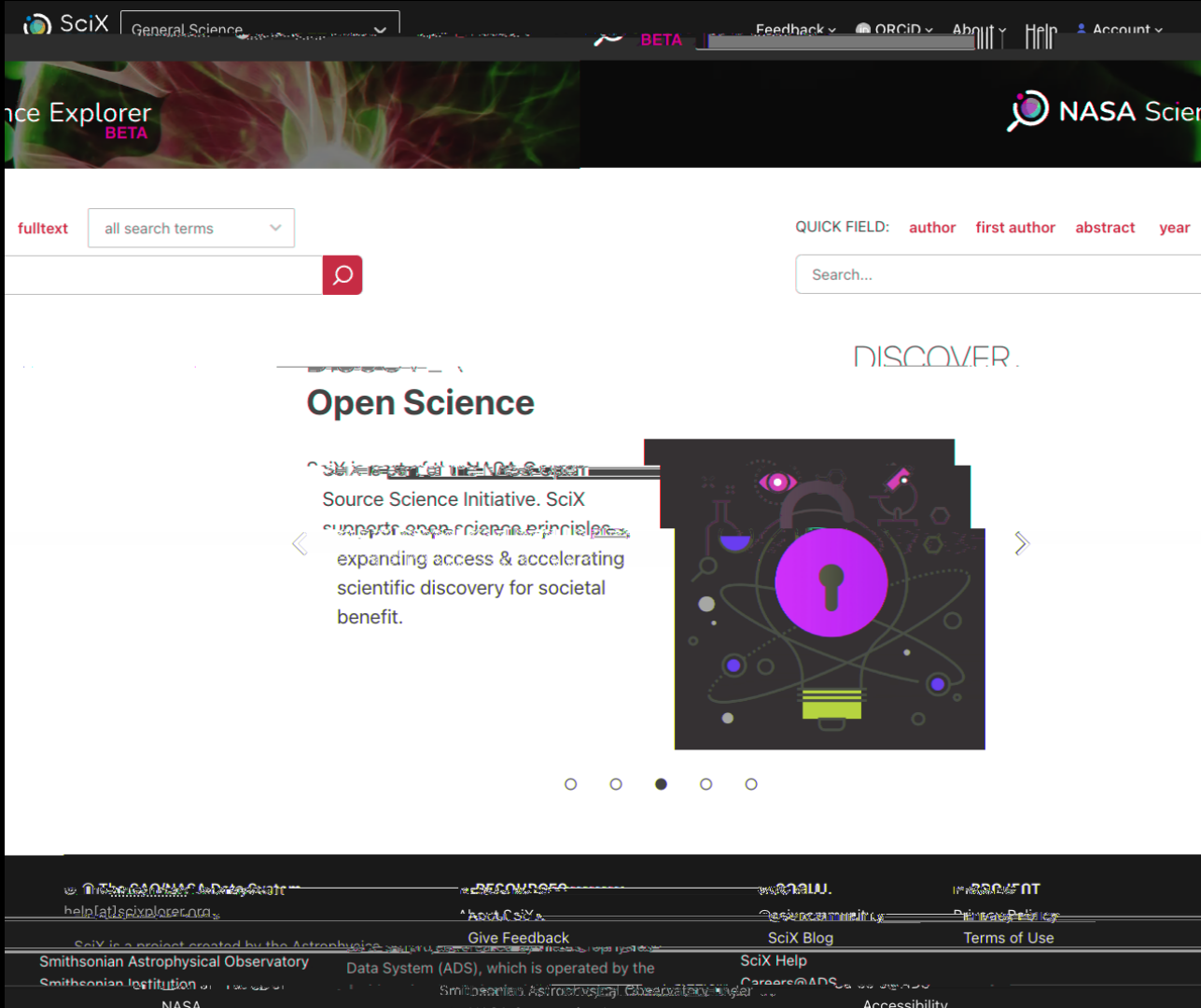


# What is the NASA Science Explorer?

SciX is a new literature portal that we just launched as part of the expansion of the NASA Astrophysics Data System (ADS) to the research disciplines funded by the NASA Science Mission Directorate: Astrophysics, Planetary Science, Heliophysics, Earth Science, Biological and Physical Sciences

# What is the NASA Science Explorer?

SciX supports NASA's Open Science efforts and enables interdisciplinary research and collaboration.

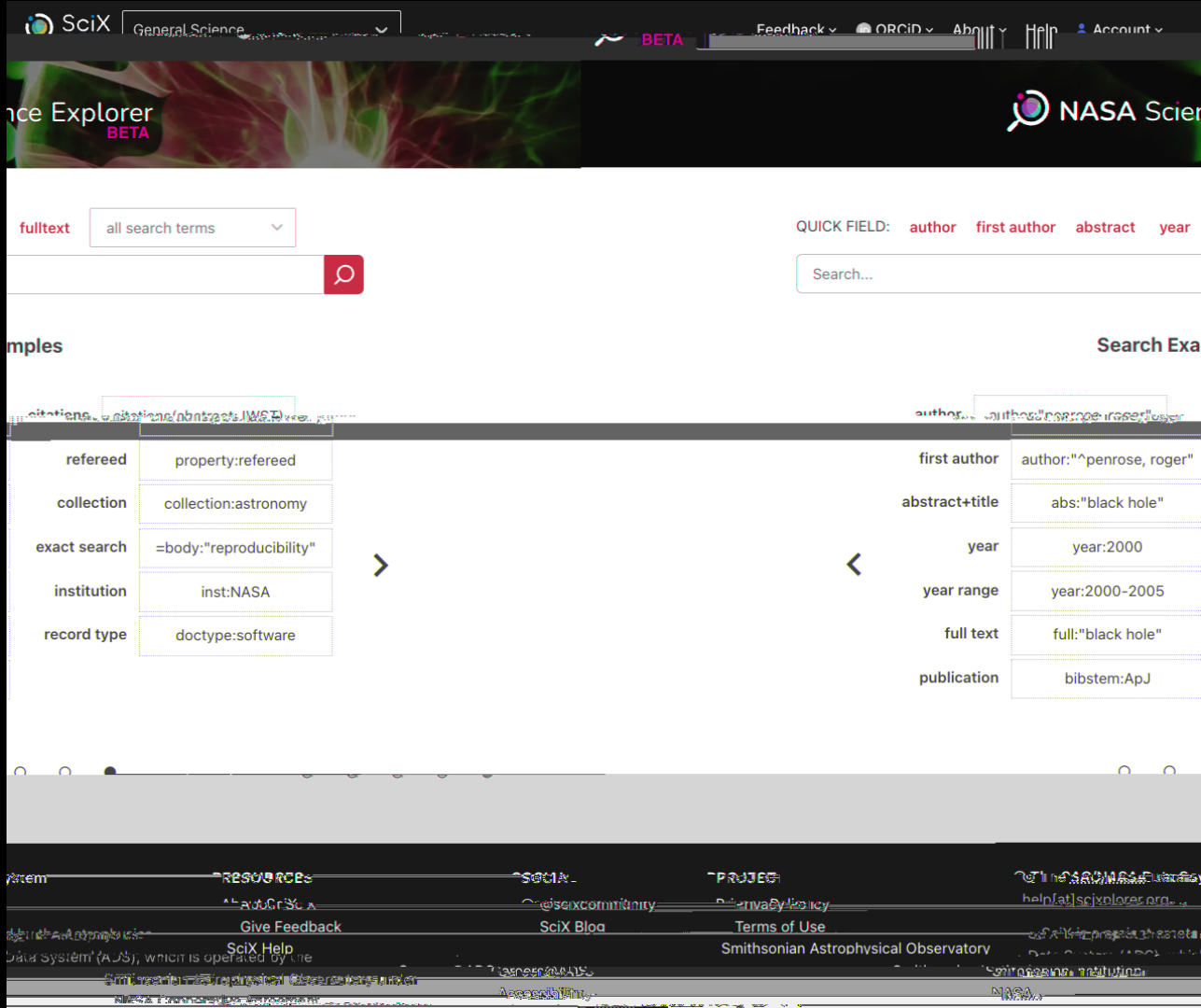


# What is the NASA Science Explorer?

The NASA Science Explorer, or SciX for short, is available as a beta release at the following website:

<https://SciXplorer.org>

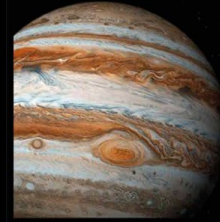
While the system is still under development, it already provides a wealth of information and functionality ready for use.



# Why the NASA Science Explorer?

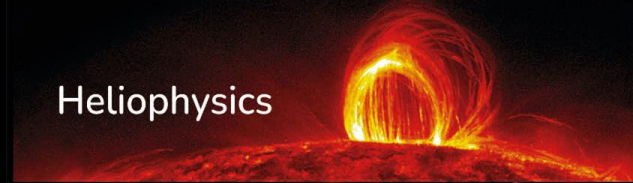
NASA's Science Mission Directorate in 2019 calls for the creation of interdisciplinary literature portal spanning across SMD in support of Open Science.

Earth Science



Planetary Science

Heliophysics



Astrophysics



Biological &  
Physical Sciences



<https://SciXplorer.org>

# Why the NASA Science Explorer?

NASA's Science Mission Directorate in 2019 calls for the creation of interdisciplinary literature portal spanning across SMD in support of Open Science.

ADS has been selected for its support of open science goals: facilitating discovery and dissemination of OA publications, data, and software by aggregating and linking them.

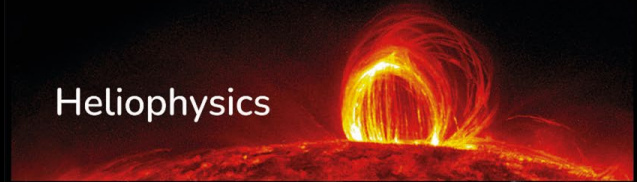
<https://SciXplorer.org>

Earth Science



Planetary Science

Heliophysics



Astrophysics



Biological &  
Physical Sciences





# Why the NASA Science Explorer?

NASA's Science Mission Directorate in 2019 calls for the creation of interdisciplinary literature portal spanning across SMD in support of Open Science.

ADS has been selected for its support of open science goals: facilitating discovery and dissemination of OA publications, data, and software by aggregating and linking them.

Over the next three years, the ADS team will be developing and expanding the **NASA Science Explorer** to include all relevant NASA SMD content.

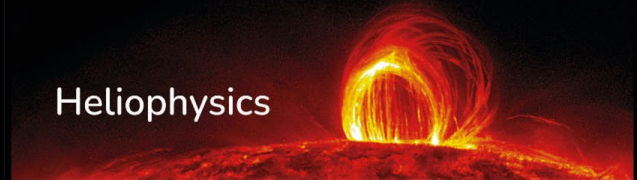
<https://SciXplorer.org>

Earth Science



Planetary Science

Heliophysics



Astrophysics

Biological & Physical Sciences



QUICK FIELD: author first author abstract year fulltext all search terms

Search... 

Search Examples

author	author:"penrose, roger"	citations	citations(abstract:JWST)
first author	author:"^penrose, roger"	refereed	property:refereed
abstract+title	abs:"black hole"	collection	collection:astronomy
year	year:2000..	exact search	=body;"reproducibility"
record type	doctype:software	full text	full:"black hole"
		publication	bibstem:ApJ

SOCIAL

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SciX Blog

PROJECT

Privacy Policy  
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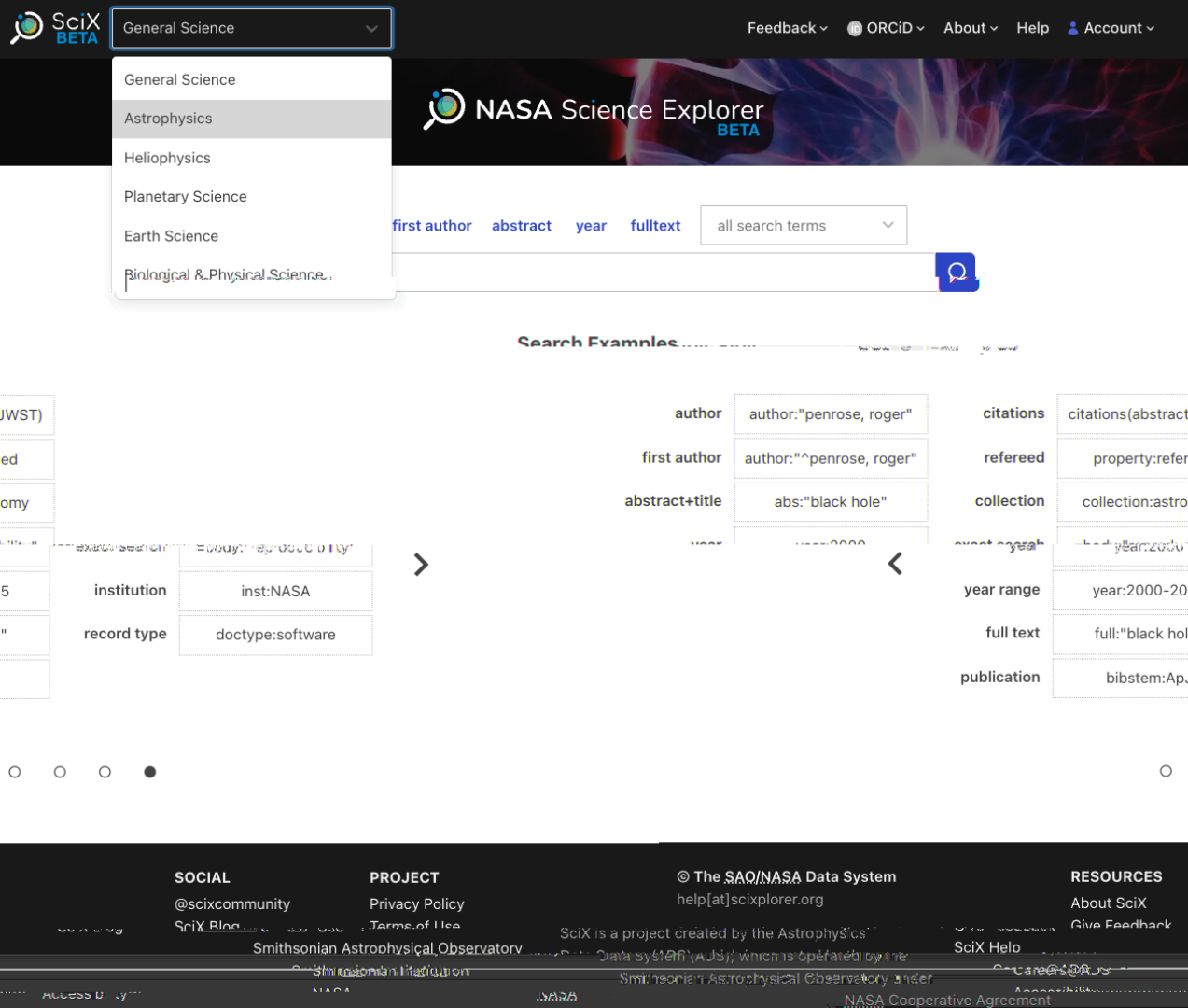
help[at]scixplorer.org

RESOURCES

About SciX  
Give Feedback

# How is it different from ADS?

SciX is built on top of the same database and API, but has a few different features:



# How is it different from ADS?

SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility

QUICK FIELD: author first author abstract year fulltext all search terms

Search... 

Search Examples

author	author:"huchra, john"	citations	citations(abstract:JWST)
first author	first author:"huchra, john"	year	year:2000
abstract+title	abs:"dark energy"	collection	collection:astronomy
year	year:2000	exact search	=body:"reproducibility"
year range	year:2000-2005	institution	inst:NASA
full text	full:"super Earth"	record type	doctype:software
publication	publication:2000	doctype:software	doctype:software

# How is it different from ADS?

SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility
- Discipline specific “skins”

Limit Query

Astronomy  Physics  General  Earth Science

Author

And Or

Smith, John A  
Smith, Jane B

Author names, enter (Last, First M) one per line.

Example Operators:

Use `-` to filter out an author. (Ex: `-Smith, John`)  
 Use `=` to restrict name expansion. For example `=Smith, Jim` will match "Smith, Jim" but not "Smith, James".  
 Surround name with `^ $` to match papers with only one particular author. (Ex: `^Smith, J$`)

[Learn More](#)

Object

And Or

M 31  
HD 187642  
Sgr A\*

SIMBAD object search, one per line.

Publication Date Start

Publication Date End

YYYY/MM

YYYY/MM

Ex: "2011/04"

Ex: "2014/12"

Title

And Or Boolean

Ex: "Content of the Future in the ADS"

# How is it different from ADS?

SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility
- Discipline specific "skins" (including the "Classic Form")

**The host galaxies of active galactic nuclei**

Kauffmann, Guinevere; Heckman, Timothy M.; Tremontj, Christ; Brinchmann, Jarle; Charlot, Stéphane; White, Simon D. M.; Ridgway, Susan E.; Brinkmann, Jon; Fukugita, Masataka; Hall, Patrick B.; [and 3 more](#)  
 2003/12 - Monthly Notices of the Royal Astronomical Society - cited: 3152

**Unified Schemes for Radio-Loud Active Galactic Nuclei**

Urry, C. Megan; Padovani, Paolo; [show list](#)  
 1995/09 - Publications of the Astronomical Society of the Pa... - cited: 4149

**Unified models for active galactic nuclei and quasars.**

Antonucci, Robert; [show list](#)  
 1993/00 - Annual Review of Astronomy and Astrophysics - cited: 3587

**Astrophysics of gaseous nebulae and active galactic nuclei**

Donald E. Ho; [show list](#); [external link](#)  
 1989/00 - Astrophysics of Gaseous Nebulae and Active Galacti... - cited: 3861

**Observational Evidence of Active Galactic Nuclei Feedback**

Fabian, A. C.; [show list](#)  
 2012/09 - Annual Review of Astronomy and Astrophysics - cited: 1974

**Astrophysics of gaseous nebulae and active galactic nuclei**

Donald E. Ho; [show list](#); [external link](#)  
 1989/00 - Astrophysics of Gaseous Nebulae and Active Galacti... - cited: 3861

**Astrophysics of gaseous nebulae and active galactic nuclei**

Donald E. Ho; [show list](#); [external link](#)  
 1989/00 - Astrophysics of Gaseous Nebulae and Active Galacti... - cited: 3861

general earthscience

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- Discipline specific “skins”
- Better handling of filters

# How is it different from ADS?

SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility
- Discipline specific “skins”
- Better handling of filters (paging, sorting & searching)

**Author**

Search [x] Count [v] [≡]

<input type="checkbox"/>	Fabian, A	573 >
<input type="checkbox"/>	Stern, D	546 >
<input type="checkbox"/>	Wang, J	492 >
<input type="checkbox"/>	Vignali, C	446 >
<input type="checkbox"/>	Brandt, W	445 >
<input type="checkbox"/>	Elvis, M	444 >
<input type="checkbox"/>	Ho, L	425 >
<input type="checkbox"/>	Mushotzky, R	407 >
<input type="checkbox"/>	Comastri, A	400 >
<input type="checkbox"/>	Urry, C	383 >

Showing 1 to 10 of 35,354 results

< Prev 1 of 3,536 Next >

QUICK FIELD: auth

AGN

Your search returned 50,0

Filters

Year(s)

1955

Author

- Fabian, A
- Stern, D
- Wang, J
- Vignali, C 446 >
- Brandt, W 445 >
- Elvis, M 444 >
- Ho, L 425 >
- Mushotzky, R 407 >
- Comastri, A 400 >
- Urry, C 383 >

Collections

- astronomy 49k
- physics 3.8k
- general 383
- earthscience 139

Antonucci, Robert; [show list](#)  
1993/00 · Annual Review of Astronomy and Astrophysics · cited: 3587

**Astrophysics of gaseous nebulae and active galactic nuclei**  
Osterbrock, Donald E.; [show list](#)  
1989/00 · Astrophysics of Gaseous Nebulae and Active Galacti... · cited: 3861

**Observational Evidence of Active Galactic Nuclei Feedback**  
Fabian, A. C.; [show list](#)  
2012/09 · Annual Review of Astronomy and Astrophysics · cited: 1974

**Astrophysics of gaseous nebulae and active galactic nuclei**  
Osterbrock, Donald E.; Ferland, Gary J.; [show list](#)  
2006/00 · Astrophysics of gaseous nebulae and active galacti... · cited: 2123

# How is it different from ADS?

SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility
- Discipline specific “skins”
- Better handling of filters
- Discipline-specific enhancements

The screenshot displays the SciX search interface. At the top, there is a search bar with the query 'mars craters' and a dropdown menu for 'all search terms'. Below the search bar, a filter for 'range: 1950-2024' is visible, along with a 'Remove all filters' button. The main search results are displayed in a list format, with each result showing a title, author information, and citation count. A sidebar on the right contains a 'Filters' section with a 'Relevance' dropdown and a 'Bulk Actions' button. Below the sidebar, there is a 'Year(s)' chart showing a distribution of results over time, and a 'Planetary Features' section with a list of features and their counts: Mars (1.5k), Crater (1.1k), and Gale (520). A dropdown menu is open over the results, showing a list of planetary features with their respective counts: Jezero (142), Eberswalde (57), Victoria (53), Eagle (47), Zunil (42), Hale (41), Endeavour (39), Vallis (586), and Planum (559).



# How is it different from ADS?

SciX is built on top of the same database and API, but has a few different features:


- Improved accessibility
- Discipline specific “skins”
- Better handling of filters
- Discipline-specific enhancements (with links to additional resources)

The screenshot displays the SciX interface for a search result. At the top, there is a navigation bar with the SciX logo and a 'BETA' label. Below the navigation bar, a search bar contains the text 'Ma'adim Vallis, Mars'. A dropdown menu on the left side of the page lists various options: Abstract, Citations, References (90), Co-Reads, Similar Papers, Volume Content, Graphics, Metrics, and Export Citation. The main content area features the title 'Ma'adim Vallis, Mars: Insights into episodic and late-stage water activity from an impact crater' by Tuhi, S.; Harish; Kimi, K. B.; Vigneshwaran, K.; Sharini, K. S.; Priya, R. K. S.; Vijayan, S. Below the title are buttons for 'Full Text Sources' and 'Other Resources'. The abstract text discusses alluvial fans on Mars and the geological history of the region. At the bottom, a metadata section provides details such as Publication Date (2022-11-00), DOI (10.1016/j.icarus.2022.115214), and Bibcode (2022icar..38715214T). It also includes keywords like Mars, Crater, Mineralogy, Water, and Astrobiology, and planetary features like Mars/Crater/Gale, Mars/Crater/Gusev, Mars/Crater/Jezero, Mars/Crater/Reuy, Mars/Terra/Terra Cimmeria, Mars/Terra/Terra Sirenum, and a link to the USGS page for this feature.

# How is it different from ADS?

SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility
- Discipline specific “skins”
- Better handling of filters
- Discipline-specific enhancements
- Improved ORCID integration

**Alberto Accomazzi**  
 0000-0002-4110-3511

**Academic Affiliation**  
 Center for Astrophysics | Harvard & Smithsonian

**Aliases**  
 No aliases found

Add new alias +

Search by alias Q

Logout from ORCID

## My ORCID Page

Learn about using ORCID with NASA SciX

Claims take up to 24 hours to be indexed in SciX

All my papers

TITLE	SOURCE	UPDATED	STATUS	ACTIONS
The Future of Astronomical Data Infrastructure: Meeting Report	NASA SciX	2 months ago	Verified	⚙️
AstroLLaMA: Towards Specialized Foundation Models in Astronomy	NASA SciX	3 months ago	Verified	⚙️
Expansion of the NASA Astrophysics Data System to Earth and Space Sciences	Crossref NASA SciX	3 months ago	Verified	⚙️
Expansion and Enhancement of FAIR Content in the ADS	Crossref NASA SciX	3 months ago	Verified	⚙️
Expansion and Enhancement of FAIR Content in the ADS	Crossref NASA SciX	3 months ago	Verified	⚙️
Best Practices for Data Publication in the Astronomical Literature	NASA SciX Crossref	3 months ago	Pending	⚙️
Expansion and Enhancement of FAIR Content in the ADS	NASA SciX	3 months ago	Verified	⚙️
Building the UAT as a Community	NASA SciX	3 months ago	Verified	⚙️
Content of the Future in the ADS	NASA SciX	3 months ago	Verified	⚙️
Automatically detecting facilities in the scientific literature using Deep Learning techniques	NASA SciX	3 months ago	Verified	⚙️
Introducing the New ADS OpenAPI Exploration Tool: Making API Access More User-Friendly	NASA SciX	3 months ago	Verified	⚙️
Asclepias: Software Citations Enter the Scholarly Literature World	NASA SciX	3 months ago	Verified	⚙️
ADS Support of Open Science in Heliophysics	NASA SciX	3 months ago	Verified	⚙️
The Earth and Space Science Knowledge Commons: Building capacity and community	NASA SciX	3 months ago	Verified	⚙️
ADS Support of Open Science in Heliophysics	NASA SciX	3 months ago	Verified	⚙️
Improving astroBERT using Semantic Textual Similarity	NASA SciX	3 months ago	Verified	⚙️
Proceedings of the first Workshop on Information Extraction from Scientific Publications	NASA SciX	3 months ago	Verified	⚙️
ADS Machine Learning and Deep Learning Efforts	NASA SciX	3 months ago	Verified	⚙️
Software Citation and Discoverability in ADS with the Citation Capture Pipeline	NASA SciX	3 months ago	Verified	⚙️
Advancing Space Science Requires NASA Support for Coordination Between the Science Mission Directorate Communities	NASA SciX	3 months ago	Verified	⚙️

# How is it different from ADS?

SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility
- Discipline specific “skins”
- Better handling of filters
- Discipline-specific enhancements
- Improved ORCID integration
- New default for search ranking (customizable)

The screenshot displays the SciX search interface. At the top, there is a search bar with the text "first.author... abstract... year... fulltext... all search terms...". Below the search bar, the results are displayed in a list format. A bar chart is visible in the background, showing the distribution of results over time. The sidebar on the right contains various filters, including "Collections" and "Refereed".

**Content of the Future in the ADS**

Accomazzi, Alberto; Henneken, Edwin A.; Grant, Carolyn S.; Thompson, Donna M.; Templeton, Matthew R.; Koch, Jennifer; Blanco-Parada, Juan Carlos; et al. *Journal of the American Astronomical Society*. 2023/04. [arXiv:2304.00001](#)

**The NASA Astrophysics Data System: Overview**

Blanton, Michael L.; Eichhorn, Guenther; Assmann, Alexander; Grant, Carolyn S.; Murray, Stephen; et al. *Astronomy and Astrophysics Supplement Series*. 2020/04. [arXiv:2004.00001](#)

**Best Practices for Data Publication in the Astronomical Literature**

Blanton, Michael L.; Evans, Janet D.; Norman, Dara; O'Mullane, William J.; Barrett, Paul; et al. *Astronomy and Astrophysics Supplement Series*. 2023/11. [arXiv:2311.00001](#)

**Astronomical Data Infrastructure: Meeting the Future of Astronomical Data Infrastructure**

Blanton, Michael L.; Evans, Janet D.; Norman, Dara; O'Mullane, William J.; Barrett, Paul; et al. *Astronomy and Astrophysics Supplement Series*. 2023/11. [arXiv:2311.00001](#)

**The Future of Astronomical Data Infrastructure: Meeting the Future of Astronomical Data Infrastructure**

Blanton, Michael L.; Evans, Janet D.; Norman, Dara; O'Mullane, William J.; Barrett, Paul; et al. *Astronomy and Astrophysics Supplement Series*. 2023/11. [arXiv:2311.00001](#)

**The NASA Astrophysics Data System: Architecture**

Accomazzi, Alberto; Eichhorn, Guenther; Kurtz, Michael J.; Grant, Carolyn S.; Murray, Stephen S.; et al. *Astronomy and Astrophysics Supplement Series*. 2020/04. [arXiv:2004.00001](#)

**The Astrophysics Data System**

Finkbeiner, Guenther; Accomazzi, Alberto; Kurtz, Michael J.; Grant, Carolyn S.; Murray, Stephen S.; et al. *Library and Information Services in Astronomy III*. 1998/00. [arXiv:9808.00001](#)

**Building astroBERT, a language model for Astronomy**

Brezzi-Frascà, Sergio; Cuaresma, Sergi; Accomazzi, Alberto; Henneken, Edwin A.; Grant, Carolyn S.; Thompson, Donna M.; Chyla, Roman; McDonald, Stephen J.; et al. *Astronomy and Astrophysics Supplement Series*. 2023/04. [arXiv:2304.00001](#)

**Report**

Blanton, Michael L.; Price-Whelan, Adrian; Rizzi, Luca; Accomazzi, Alberto; Ansdell, Megan; Bailey, David; et al. *Astronomy and Astrophysics Supplement Series*. 2023/11. [arXiv:2311.00001](#)

**Collections**

<input type="checkbox"/> astronomy	251
<input type="checkbox"/> general	47
<input type="checkbox"/> physics	26
<input type="checkbox"/> earthscience	10

**Refereed**

<input type="checkbox"/> notrefereed	236
<input type="checkbox"/> esource	172

**Article**

<input type="checkbox"/> openaccess	135
<input type="checkbox"/> nonarticle	119
<input type="checkbox"/> toc	108
<input type="checkbox"/> pubopenaccess	93

# How is SciX similar to ADS?

SciX is built on the same database and search engine, so no need to learn new search syntax or workflows:

- Type your query
- Filter the results
- Rank, analyze, visualize, refine
- Find citations, software, data products

QUICK FIELD: [author](#) [first author](#) [abstract](#) [year](#) [fulltext](#)

## WELCOME TO THE SciX Digital Library



Learn more about the SciX digital library and how it can support your scientific research in this welcome video and brief user tutorial from Dr. Stephanie Jarmak.



# What happens to ADS?

ADS is not going away!

ADS will remain accessible online in its current, familiar format. All links to ADS will remain valid forever

Classic Form
Modern Form
Paper Form

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

Q

Recommendations

**author**

**first author**

**abstract + title**

**year**

**year range**

**full text**

**publication**  ?

**citations**  ?

Search examples

**refereed**  ?

**astronomy**  ?

**exact search**

**institution**

**author count**

**record type**

**newly ingested**  ?

**eprint**  ?

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**Resources**

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- [Accessibility](#)

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- [Privacy Policy](#)
- [Terms of Use](#)
- [Smithsonian Astrophysical Observatory](#)
- [Smithsonian Institution](#)
- [NASA](#)

[Recommendations](#)
[Search examples](#)

<b>author</b>	<input type="text" value='author:"Starck, Jean-Luc"'/>	<b>refereed</b>	<input type="text" value="property:refereed"/>
<b>first author</b>	<input type="text" value='author:"^Solanki, Sami"'/>	<b>astronomy</b>	<input type="text" value="collection:astronomy"/>
<b>abstract + title</b>	<input type="text" value='abs:"dark energy"'/>	<b>exact search</b>	<input type="text" value='=body:"Intracluster medium"'/>
<b>year</b>	<input type="text" value="year:2000"/>	<b>institution</b>	<input type="text" value="inst:CfA"/>
<b>year range</b>	<input type="text" value="year:2000-2005"/>	<b>author count</b>	<input type="text" value="author_count:[1 TO 10]"/>
<b>full text</b>	<input type="text" value='full:"super Earth"'/>	<b>record type</b>	<input type="text" value="doctype:software"/>
<b>publication</b>	<input type="text" value="bibstem:ApJ"/>	<b>newly ingested</b>	<input type="text" value="entdate:[NOW-7DAYS TO NOW]"/>
<b>citations</b>	<input type="text" value="citations(abstract:JWST)"/>	<b>eprint</b>	<input type="text" value='property:"eprint_openaccess"'/>

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- [NASA](#)



# What happens to ADS?

## ADS Support will continue

Existing ADS support will continue throughout the transition, ensuring you have the assistance and resources you need whether you stick to ADS “as is” or explore SciX

[Recommendations](#)
[Search examples](#)

<b>author</b>	<input type="text" value='author:"Starck, Jean-Luc"'/>	<b>refereed</b>	<input type="text" value="property:refereed"/>
<b>first author</b>	<input type="text" value='author:"^Solanki, Sami"'/>	<b>astronomy</b>	<input type="text" value="collection:astronomy"/>
<b>abstract + title</b>	<input type="text" value='abs:"dark energy"'/>	<b>exact search</b>	<input type="text" value='=body:"Intracluster medium"'/>
<b>year</b>	<input type="text" value="year:2000"/>	<b>institution</b>	<input type="text" value="inst:CfA"/>
<b>year range</b>	<input type="text" value="year:2000-2005"/>	<b>author count</b>	<input type="text" value="author_count:[1 TO 10]"/>
<b>full text</b>	<input type="text" value='full:"super Earth"'/>	<b>record type</b>	<input type="text" value="doctype:software"/>
<b>publication</b>	<input type="text" value="bibstem:ApJ"/>	<b>newly ingested</b>	<input type="text" value="entdate:[NOW-7DAYS TO NOW]"/>
<b>citations</b>	<input type="text" value="citations(abstract:JWST)"/>	<b>eprint</b>	<input type="text" value='property:"eprint_openaccess"'/>

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- [Smithsonian Institution](#)
- [NASA](#)



# What happens to ADS?

**Astrophysics remains a key focus**

**SciX will retain a strong emphasis on astrophysics. New services will continue to be designed for astrophysics, providing models for other disciplines**

QUICK FIELD: author first author abstract year fulltext all search terms

cassini saturn

## WELCOME TO THE SciX Digital Library



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Why should I use SciX?

New Features will be developed in SciX

The SciX platform is our development focus and the place where new capabilities and new content will be rolled out



QUICK FIELD: author first author abstract year fulltext all search terms

cassini saturn

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Why should I use SciX?

Disciplinary focus in an Interdisciplinary context

We are committed to making sure the transition will increase, not decrease, research productivity and enable interdisciplinary research

## Why the NASA Science Explorer?

- All of NASA Science
- Connected to the data
- Linked to the code

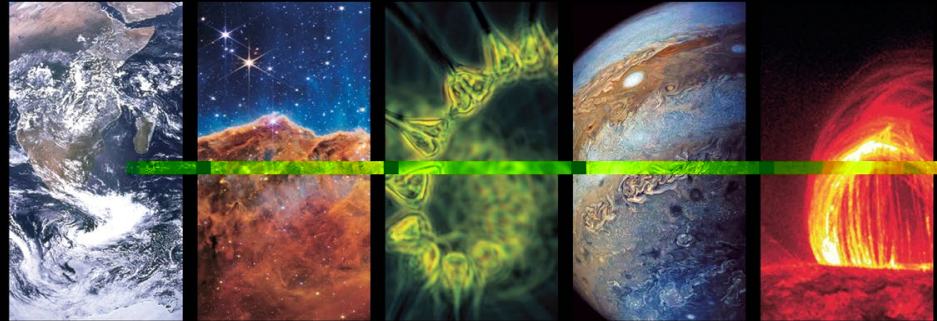
## Better than the rest...

- Open
- Trustworthy
- Complete
- Innovative
- Interdisciplinary
- Developed by scientists, for scientists



# SciX

[ [SciXplorer.org](http://SciXplorer.org) ]



# NASA Science Explorer

*Accelerating the discovery of NASA Science.*

# Thank You!



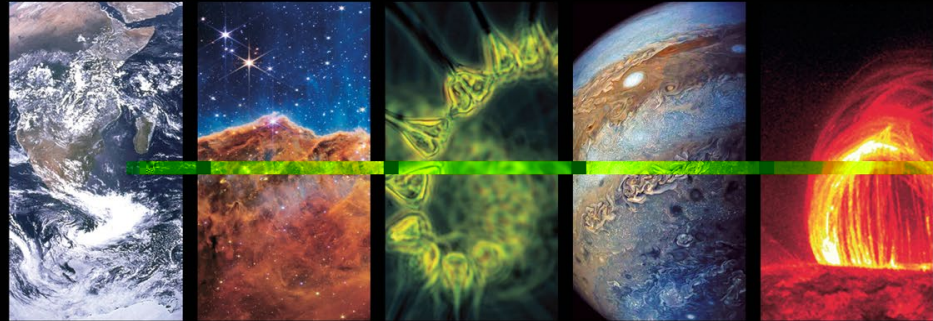
# SciX

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For more information:

<https://SciXplorer.org>  
[@SciXCommunity](#)

Visit us at booth #315



## NASA Science Explorer

*Accelerating the discovery of NASA Science.*

# Artificial Intelligence/Machine Learning Initiatives

- Machine learning datasets
  - Expert curated, publicly available, permissively licensed
- Data enrichment with machine learning pipelines
  - Planetary features
  - Automated keyword labeling
- Data discovery with large language models
  - Experimenting with a new way of searching and synthesizing information

# Machine Learning Datasets

- Created for the Workshops for Information Extraction from the Scientific Literature (WIESP, part of ACL-IJCNLP 2022, 2023)
- Manually curated by a domain expert
- Extracted from recent astrophysics articles
- Available via Hugging Face
- Datasets:
  - Detecting Entities in the Astrophysics Literature
    - Named Entity Recognition (NER) dataset
    - Used to identify and disambiguate entities (e.g. missions, organizations)
  - Function Of Citation in the Astrophysics Literature
    - Citation context dataset
    - Used to identify purpose of a citation (e.g. background, motivation)

# Data Enrichment Pipelines

Automated identification of features, keywords, or categories

- Planetary feature identification (in production)
- Unified Astronomy Thesaurus keyword, category tagging (in development)

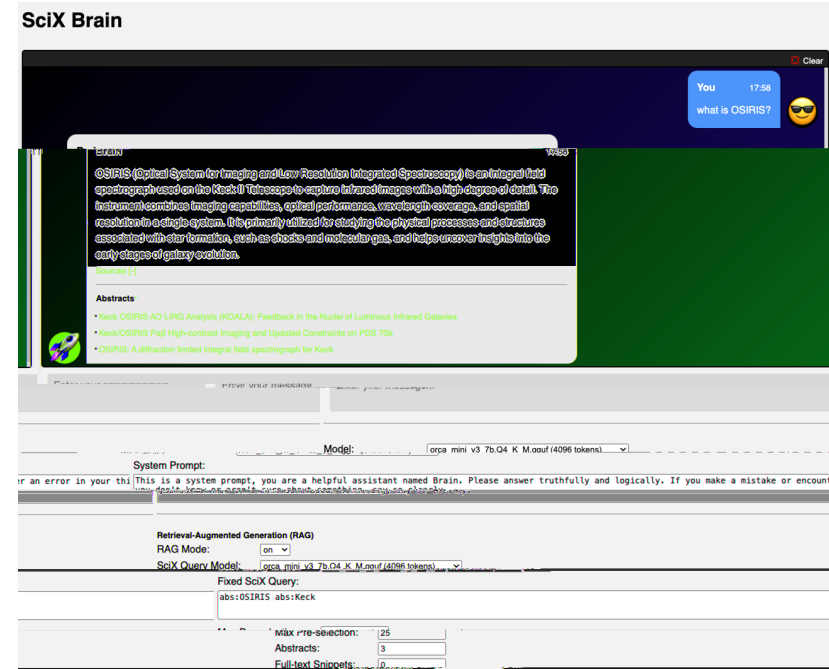
The screenshot displays a search interface for planetary features. The search path is 'Planetary Features > Mars > Crater'. A search bar contains the text 'Search (case-sensitive)'. Below the search bar, a list of features is shown with checkboxes and counts:

Crater Name	Count
<input type="checkbox"/> Gale	1k
<input type="checkbox"/> Gusev	787
<input type="checkbox"/> Jezero	253
<input type="checkbox"/> Holden	97
<input type="checkbox"/> Eagle	96
<input type="checkbox"/> Eberswalde	93
<input type="checkbox"/> Victoria	75
<input type="checkbox"/> Endeavour	62
<input type="checkbox"/> Hale	57
<input type="checkbox"/> Zunil	57

At the bottom of the list, it says 'Showing 1 to 10 of 324 results'. Navigation buttons for 'Prev', '1 of 33', and 'Next' are visible. The background shows a sidebar with various filters like 'earthscience', 'physics', 'general', 'Refereed', 'Institutions', 'Keywords', 'Publications', 'Bibgroups', 'Data', 'Publication Type', and 'Planetary Features'.

# Data Discovery: SciX Brain chatbot

- Large language model (LLM) testbed
- Experimental, restricted access
- Experiments have included:
  - Retrieval augmented generation (RAG): providing additional context via ADS queries or selected fulltext paragraphs
  - Comparison of various open-source LLMs
  - Architectures
  - Grammars
  - Natural language → structured Solr queries



The screenshot displays the SciX Brain chatbot interface. At the top, the title "SciX Brain" is visible. A user message asks "what is OSIRIS?". The chatbot's response provides a detailed description of OSIRIS (Optical System for Imaging and Low Resolution Integrated Spectroscopy) as an integral field spectrograph on the Keck II Telescope. Below the main text, there are sections for "Sources" and "Abstracts". The abstracts list three related articles: "Keck OSIRIS AO LIRG Analysis (KOALA): Feedback in the Nuclei of Luminous Infrared Galaxies", "Keck/OSIRIS Pst) High-contrast Imaging and Updated Constraints on PDS 71b", and "OSIRIS: A diffraction limited integral field spectrograph for Keck". The interface also shows a "System Prompt" area with a message: "This is a system prompt, you are a helpful assistant named Brain. Please answer truthfully and logically. If you make a mistake or encounter an error in your thi...". Below the system prompt, there are settings for "Retrieval-Augmented Generation (RAG)" and "SciX Query Model". The "SciX Query Model" is set to "abs:OSIRIS abs:Keck". At the bottom, there are input fields for "max rre-selection" (set to 25), "Abstracts" (set to 3), and "Full-text Snippets".

**Come Visit Us at Booth #315!**



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# Using ADS in the SciX Era

*Jennifer Lynn Bartlett, Michael Kurtz, and the SciX Team*

*Center for Astrophysics | Harvard & Smithsonian*

[jennifer.bartlett@cfa.harvard.edu](mailto:jennifer.bartlett@cfa.harvard.edu)

[@adsabs](#)

9 Jan 2024 | AAA Mtg 243

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

Start New Search

author:"^van de Kamp, P" X

Your search returned 304 results

# Too Much of a Good Thing

Sort Date

## AUTHORS

- van de Kamp, P 298
- Vyssotsky, A 17
- Lippincott, S 10
- Leake, B 5
- Worth, M 4

more

## COLLECTIONS

- astronomy 283
- physics 22
- earthscience 17
- general 5

## REFEREED

- refereed 208
- non-refereed 96

## INSTITUTIONS

## KEYWORDS

## PUBLICATIONS

Show highlights Show abstracts Hide Sidebars

Go To Bottom

1  2022PreR..37806607V 2022/08 cited: 1

[Origin and Provenance of Archean Keewaywin Formation clastic rocks at Sandy Lake, NW Ontario, Canada: Constraints on Archean weathering and depositional processes](#)  
van de Kamp, P. C.; James, R. S.

2  2019SedG..386...79V 2019/05 cited: 4

[Provenance, shallow to deep diagenesis, and chemical mass balance in supermature arenites and pelites, Ordovician Simpson Group, Oklahoma and Kansas, U.S.A.](#)  
van de Kamp, Peter C.

3  2016JSedR..86..683V 2016/06 cited: 16

[Potassium Distribution and Metasomatism In Pelites and Schists: How and When, Relation To Postdepositional Events](#)  
van de Kamp, Peter C.

4  2010JSedR..80..895V 2010/10 cited: 32

[Arkose, Subarkose, Quartz Sand, and Associated Muds Derived from Felsic Plutonic Rocks in Glacial to Tropical Humid Climates](#)  
van de Kamp, P. C.

5  2008CCM....56...66V 2008/02 cited: 76

[Smectite-Illite-Muscovite Transformations, Quartz Dissolution, and Silica Release in Shales](#)  
van de Kamp, Peter C.





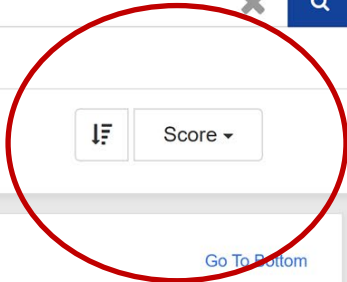
QUICK FIELD: Author First Author Abstract Year Fulltext All Search Terms

Start New Search

author:"^van de Kamp, P"

Your search returned 304 results

# Sort by Score/Relevance



- ▼ AUTHORS
  - van de Kamp, P 298
  - Vyssotsky, A 17
  - Lippincott, S 10
  - Leake, B 5
  - Worth, M 4

more

- ▼ COLLECTIONS
  - astronomy 283
  - physics 22
  - earthscience 17
  - general 5

- ▼ REFEREED
  - refereed 208
  - non-refereed 96

- > INSTITUTIONS
- > KEYWORDS
- > PUBLICATIONS

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Go To Bottom

1	<input type="checkbox"/>	1967pras.book.....V <a href="#">Principles of astrometry</a> Van De Kamp, Peter	1967	cited: 119			
2	<input type="checkbox"/>	1963AJ.....68..515V <a href="#">Astrometric study of Barnard's star from plates taken with the 24-inch Sproul refractor.</a> van de Kamp, P.	1963/09	cited: 73			
3	<input type="checkbox"/>	1969AJ.....74..757V <a href="#">Alternate dynamical analysis of Barnard's star.</a> van de Kamp, P.	1969/08	cited: 42			
4	<input type="checkbox"/>	1971ARA&A...9..103V <a href="#">The Nearby Stars</a> van de Kamp, Peter	1971	cited: 88			
5	<input type="checkbox"/>	2008CCM....56...66V <a href="#">Smectite-Illite-Muscovite Transformations, Quartz Dissolution, and Silica Release in Shales</a> van de Kamp, Peter C.	2008/02	cited: 76			
6	<input type="checkbox"/>	1975ARA&A..13..295V <a href="#">Unseen astrometric companions of stars.</a> van de Kamp, P.	1975	cited: 44			





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

← Start New Search

author:"^van de Kamp, P" ✕ 🔍

Your search returned 304 results

# Limit the collections displayed Date ▾

▼ AUTHORS

- ▶  van de Kamp, P 298
- ▶  Vyssotsky, A 17
- ▶  Lippincott, S 10
- ▶  Leake, B 5
- ▶  Worth, M 4
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▼ COLLECTIONS

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- physics 22
- earthscience 17
- general 5

▼ REFEREED

- refereed 298
- non-refereed 96

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- 1  2022PreR...37806607V 2022/08 cited: 1 📄 ☰ 📄  
[Origin and Provenance of Archean Keewaywin Formation clastic rocks at Sandy Lake, NW Ontario, Canada: Constraints on Archean weathering and depositional processes](#)  
van de Kamp, P. C.; James, R. S.
- 2  2019SedG...386...79V 2019/05 cited: 4 📄 ☰ 📄  
[Provenance, shallow to deep diagenesis, and chemical mass balance in supermature arenites and pelites, Ordovician Simpson Group, Oklahoma and Kansas, U.S.A.](#)  
van de Kamp, Peter C.
- 3  2016JSedR...86..683V 2016/06 cited: 16 📄 ☰ 📄  
[Potassium Distribution and Metasomatism In Pelites and Schists: How and When, Relation To Postdepositional Events](#)  
van de Kamp, Peter C.
- 4  2010JSedR...80..895V 2010/10 cited: 32 📄 ☰ 📄  
[Arkose, Subarkose, Quartz Sand, and Associated Muds Derived from Felsic Plutonic Rocks in Glacial to Tropical Humid Climates](#)  
van de Kamp, P. C.
- 5  2008CCM...56...66V 2008/02 cited: 76 📄 ☰ 📄  
[Smectite-Illite-Muscovite Transformations, Quartz Dissolution, and Silica Release in Shales](#)  
van de Kamp, Peter C.



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

author:"^van de Kamp, P"

Start New Search

Your search returned 283 results

Collection +astronomy

# Limit or Exclude

Date

Filter applied

Show highlights  
  Show abstracts  
  Hide Sidebars  
 [Go To Bottom](#)

AUTHORS	Count	Collection	Count	Item	Year	Cited
<input type="checkbox"/> van de Kamp, P	282	<input checked="" type="checkbox"/> astronomy	283	<input type="checkbox"/> 1988SSRv...46..380V	1988	
<input type="checkbox"/> Vyssotsky, A	17	<input type="checkbox"/> general		<input type="checkbox"/> 1987S&T...73..283V	1987/03	
<input type="checkbox"/> Lippincott, S	10	<input type="checkbox"/> physics		<input type="checkbox"/> 1986SSRv...43..211V	1986/04	cited: 19
<input type="checkbox"/> Worth, M	4			<input type="checkbox"/> 1985Ap&SS.110..103V	1985/03	cited: 1
<input type="checkbox"/> Damkoehler, J	3			<input type="checkbox"/> 1985IrAJ...17...75V	1985	
				<input type="checkbox"/> 1983nssl.conf...15V	1983/06	cited: 1

refereed   190  
 non-refereed   93  
 INSTITUTIONS  
 KEYWORDS  
 PUBLICATIONS

Collections  
1 selected

- limit to
- exclude



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

Start New Search

author:"^van de Kamp, P" X Q

Your search returned 283 results

Collection +astronomy

# Limited to Astronomy

Sort Date

Filter applied

## AUTHORS

- van de Kamp, P 282
- Vyssotsky, A 17
- Lippincott, S 10
- Worth, M 4
- Damkoehler, J 3

more

## COLLECTIONS

- astronomy 283
- general 5
- physics 2

## REFEREED

- refereed 190
- non-refereed 93

## INSTITUTIONS

## KEYWORDS

## PUBLICATIONS

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1	<input type="checkbox"/>	1988SSRv...46..380V	1988			
		<a href="#">Book Review: Dark companions of stars. / Reidel, 1986.</a>				
		van de Kamp, P.; Heintze, J. R. W.				
2	<input type="checkbox"/>	1987S&T...73..283V	1987/03			
		<a href="#">Book-Review - Dark Companions of Stars - Astrometric Comentary on the Lower End of the Main Sequence</a>				
		van de Kamp, P.				
3	<input type="checkbox"/>	1986SSRv...43..211V	1986/04	cited: 19		
		<a href="#">Dark companions of stars.</a>				
		van de Kamp, P.				
4	<input type="checkbox"/>	1985Ap&SS.110..103V	1985/03	cited: 1		
		<a href="#">Friedrich Wilhelm Bessel 1784, July 22 1846, March 17</a>				
		van de Kamp, P.				
5	<input type="checkbox"/>	1985IrAJ...17...75V	1985			
		<a href="#">Book-Review- Stellar Paths. Photographic Astrometry with long-focus instruments</a>				
		van de Kamp, Peter				
6	<input type="checkbox"/>	1983nssl.conf...15V	1983/06	cited: 1		
		<a href="#">The Fainter End of the Main Sequence</a>				
		van de Kamp, P.				





# Second Author Search



Feedback ▾

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

← Start New Search

pos(author:"van de Kamp, P", 2)



Your search returned **12** results



Date ▾

▼ AUTHORS

>  van de Kamp, P

11



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# Second Author Search 2/3



Feedback ▾

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

← Start New Search

pcs(author:"van de Kamp, P", 2)



Your search returned **12** results



Date ▾

▼ AUTHORS

>  van de Kamp, P

11



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# Second Author Search 3/3



Feedback ▾

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

← Start New Search

pos(author:"van de Kamp, P", 2)



Your search returned **12** results



Date ▾

▼ AUTHORS

>  van de Kamp, P

11



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# Search a Range of Authors



Feedback ▾

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

← Start New Search

pos(author:"Lee, J", 10, 15)



Your search returned **2,208** results

Author #14 is  
Lee, J



Date ▾

## ▼ AUTHORS

- >  Lee, J 2.1k
- >  Kim, J 426
- >  Lee, S 423
- >  Kim, S 397
- >  Kim, H 369

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1  2024IJSSC..59..184J 2024/01



[A 4-nm 16-Gb/s/pin Single-Ended PAM-4 Parallel Transceiver With Switching-Jitter Compensation and Transmitter Optimization](#)

Jin, Jahoon; Lee, Soo-Min; Min, Kyunghwan; Ju, Sodam; Lim, Jihoon; Yook, Jisu; Lee, Jihoon; Chae, Hyunsu; Kang, Kwondo; Hong, Yunji; Jeong, Yeongcheol; Park, Sung-Sik; Kim, Sang-Ho; Lee, Jongwoo; Kim, Joonsuk; Kwak, Sung Ung [show less](#)



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

pos(title:"M31",1)

Your search returned 171 results

# Position Works Generally

Sort Date

- ▼ AUTHORS
  - Quimby, R 13
  - Wheeler, J 8
  - Martin, N 6
  - Akerlof, C 5
  - Barmby, P 5
  - more
- ▼ COLLECTIONS
  - astronomy 163
  - physics 10
  - general 4
  - earthscience 2
- ▼ REFEREED
  - non-refereed 112
  - refereed 59
- INSTITUTIONS
- KEYWORDS
- PUBLICATIONS

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- 2023ApJ...955..140S 2023/10 cited: 1  
[Andromeda's Parachute: Time Delays and Hubble Constant](#)  
Shalyapin, Vyacheslav N.; Goicoechea, Luis J.; Dyrland, Karianne *and 1 more*
- 2023MNRAS.521.3527C 2023/05  
[Andromeda XXV - a dwarf galaxy with a low central dark matter density](#)  
Charles, Emily J. E.; Collins, Michelle L. M.; Rich, R. Michael *and 7 more*
- 2022S&T...144f..78M 2022/12  
[Andromeda and Friends](#)  
Manley, Patrick
- 2022AAS...24012308E 2022/06  
[Andromeda as a Stepping Stone to the Local Volume: Chemodynamics of Extragalactic Tidal Shells](#)  
Escala, Ivanna; Gilbert, Karoline; Fardal, Mark *and 4 more*
- 2022AAS...24011308G 2022/06  
[Andromeda Analogs: Analyzing the Milky Way's Strange Neighbor](#)  
Goler, Kenneth; Zasowski, Gail; Boardman, Nicholas
- 2021MNRAS.505.5686C 2021/08 cited: 29  
[Andromeda XXI - a dwarf galaxy in a low-density dark matter halo](#)  
Collins, Michelle L. M.; Read, Justin I.; Ibata, Rodrigo A. *and 6 more*





## Resources



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[jennifer.bartlett@cfa.harvard.edu](mailto:jennifer.bartlett@cfa.harvard.edu)

