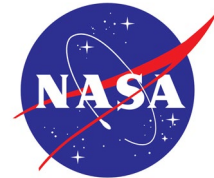


What's New @ ADS

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

January 2024

CENTER FOR
ASTROPHYSICS
HARVARD & SMITHSONIAN



Overview

A review of the exciting developments taking place with ADS:

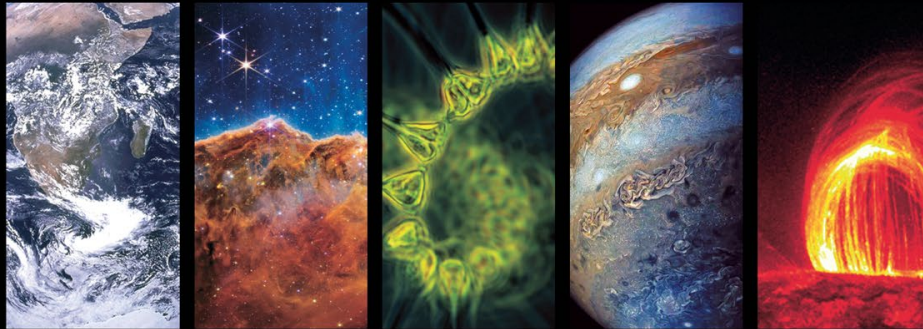
- Launch of the NASA Science Explorer (SciX) platform
(Alberto Accomazzi)
- AI/ML initiatives at ADS
(Kelly Lockhart)
- Using ADS in the SciX Era
(Jennifer Lynn Bartlett & Michal Kurtz)

The NASA Science Explorer: ADS for all NASA Science



SciX

[SciXplorer.org]



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

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

▼



DISCOVER Open Science

SciX is part of the NASA Open Source Science Initiative. SciX supports open science principles, expanding access & accelerating scientific discovery for societal benefit.



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.

QUICK FIELD: [author](#) [first author](#) [abstract](#) [year](#) [fulltext](#) all search terms ▼

Search... 🔍

Search Examples

<table style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 5px;">author</td><td style="border: 1px dashed #ccc; padding: 2px;">author:"penrose, roger"</td></tr> <tr><td style="padding: 5px;">first author</td><td style="border: 1px dashed #ccc; padding: 2px;">author:"^penrose, roger"</td></tr> <tr><td style="padding: 5px;">abstract+title</td><td style="border: 1px dashed #ccc; padding: 2px;">abs:"black hole"</td></tr> <tr><td style="padding: 5px;">year</td><td style="border: 1px dashed #ccc; padding: 2px;">year:2000</td></tr> <tr><td style="padding: 5px;">year range</td><td style="border: 1px dashed #ccc; padding: 2px;">year:2000-2005</td></tr> <tr><td style="padding: 5px;">full text</td><td style="border: 1px dashed #ccc; padding: 2px;">full:"black hole"</td></tr> <tr><td style="padding: 5px;">publication</td><td style="border: 1px dashed #ccc; padding: 2px;">bibstem:ApJ</td></tr> </table>	author	author:"penrose, roger"	first author	author:"^penrose, roger"	abstract+title	abs:"black hole"	year	year:2000	year range	year:2000-2005	full text	full:"black hole"	publication	bibstem:ApJ	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 5px;">citations</td><td style="border: 1px dashed #ccc; padding: 2px;">citations(abstract:JWST)</td></tr> <tr><td style="padding: 5px;">refereed</td><td style="border: 1px dashed #ccc; padding: 2px;">property:refereed</td></tr> <tr><td style="padding: 5px;">collection</td><td style="border: 1px dashed #ccc; padding: 2px;">collection:astronomy</td></tr> <tr><td style="padding: 5px;">exact search</td><td style="border: 1px dashed #ccc; padding: 2px;">=body:"reproducibility"</td></tr> <tr><td style="padding: 5px;">institution</td><td style="border: 1px dashed #ccc; padding: 2px;">inst:NASA</td></tr> <tr><td style="padding: 5px;">record type</td><td style="border: 1px dashed #ccc; padding: 2px;">doctype:software</td></tr> </table>	citations	citations(abstract:JWST)	refereed	property:refereed	collection	collection:astronomy	exact search	=body:"reproducibility"	institution	inst:NASA	record type	doctype:software
author	author:"penrose, roger"																										
first author	author:"^penrose, roger"																										
abstract+title	abs:"black hole"																										
year	year:2000																										
year range	year:2000-2005																										
full text	full:"black hole"																										
publication	bibstem:ApJ																										
citations	citations(abstract:JWST)																										
refereed	property:refereed																										
collection	collection:astronomy																										
exact search	=body:"reproducibility"																										
institution	inst:NASA																										
record type	doctype:software																										

< ○ ○ ○ ○ ● >

Why the NASA Science Explorer?

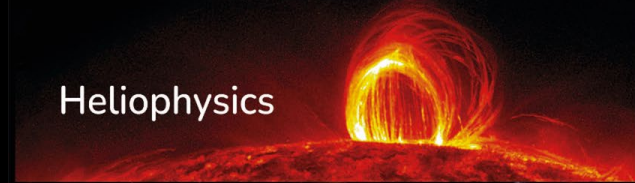
NASA's Science Mission Directorate in 2019 calls for the creation of interdisciplinary literature portal spanning across SMD in support of Open Science.

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.

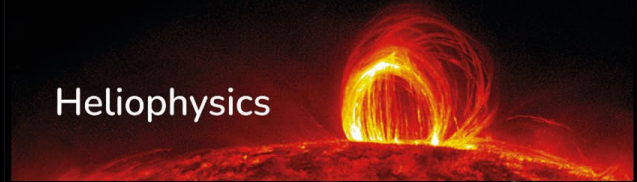
<https://SciXplorer.org>

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

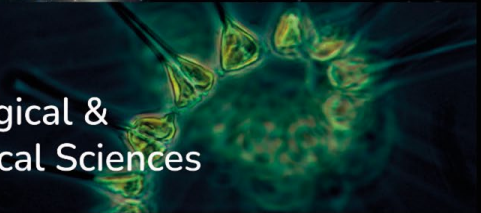
Heliophysics



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"
year range	year:2000-2005	institution	inst:NASA
full text	full:"black hole"	record type	doctype:software
publication	bibstem:ApJ		



How is it different from ADS?

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

SciX BETA

General Science

- General Science
- Astrophysics
- Heliophysics
- Planetary Science
- Earth Science
- Biological & Physical Science

Feedback ORCID About Help Account

NASA Science Explorer BETA

first author abstract year fulltext all search terms

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"
year range	year:2000-2005	institution	inst:NASA
full text	full:"black hole"	record type	doctype:software
publication	bibstem:ApJ		



© The SAO/NASA Data System

help[at]scixplorer.org

SciX is a project created by the Astrophysics Data System (ADS), which is operated by the Smithsonian Astrophysical Observatory under NASA Cooperative Agreement

RESOURCES

About SciX
Give Feedback
SciX Help
Careers@ADS
Accessibility

SOCIAL

@scixcommunity
SciX Blog

PROJECT

Privacy Policy
Terms of Use
Smithsonian Astrophysical Observatory
Smithsonian Institution
NASA

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	author:"^huchra, john"	refereed	property:refereed
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	bibstem:ApJ		



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?

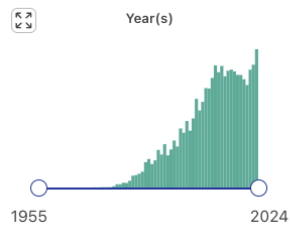
SciX is built on top of the same database and API, but has a few different features:

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

QUICK FIELD: author first author abstract year fulltext

Your search returned 50,006 results

Filters



Author

<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	>

Collections

<input type="checkbox"/> astronomy	49k
<input type="checkbox"/> physics	3.8k
<input type="checkbox"/> general	383
<input type="checkbox"/> earthscience	139

Relevance

- The host galaxies of active galactic nuclei**
Kauffmann, Guinevere; Heckman, Timothy M.; Tremonti, Christy; 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**
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

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)

The screenshot displays the SciX interface with an 'Author' search modal open. The modal contains a search bar, a 'Count' dropdown, and a list of authors with their respective counts and a right-pointing arrow. Below the list, it indicates 'Showing 1 to 10 of 35,354 results' and includes 'Prev' and 'Next' buttons. The background shows a search results page with a 'QUICK FIELD: auth' search bar, an 'AGN' filter, and a 'Filters' section with a 'Year(s)' range from 1955 to the present. The search results list includes entries like 'Antonucci, Robert' and 'Astrophysics of gaseous nebulae and active galactic nuclei'.

Author	Count
<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 >

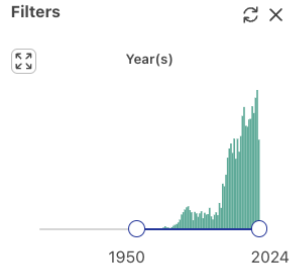
QUICK FIELD: author first author abstract year fulltext all search terms

mars craters

Your search returned 11,466 results

range: 1950-2024

Remove all filters



- Planetary Features
 - Mars 1.5k
 - Crater 1.1k
 - Gale 520
 - Gusev 366
 - Jezero 142
 - Holden 65
 - Eberswalde 57
 - Victoria 53
 - Eagle 47
 - Zunil 42
 - Hale 41
 - Endeavour 39
 - Vallis 586
 - Planum 559

Relevance

Bulk Actions Explore

- Evidence for recent volcanism on Mars from crater counts**

Hartmann, William K.; Malin, Michael; McEwen, Alfred; Carr, Michael; Soderblom, Larry; Thomas, Peter; Danielson, Edward; James, Phillip; Veveka, Joseph; [show list](#)

1999/02 · Nature · cited: 174
- The martian hemispheric dichotomy may be due to a giant impact**

Wilhelms, D. E.; Squyres, S. W.; [show list](#)

1984/05 · Nature · cited: 227
- Pseudocraters on Mars.**

Frey, H.; Lowry, B. L.; Chase, S. A.; [show list](#)

1979/12 · Journal of Geophysical Research · cited: 88
- Impact crater and basin control of igneous processes on Mars.**

Schultz, P. H.; Glicken, H.; [show list](#)

1979/12 · Journal of Geophysical Research · cited: 88
- Martian Cratering**

Hartmann, William K.; [show list](#)

1966/00 · Icarus · cited: 91
- Martian cratering 8: Isochron refinement and the chronology of Mars**

Hartmann, William K.; [show list](#)

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

[← Back to Results](#) Abstract Citations References 90 Co-Reads Similar Papers Volume Content Graphics Metrics Export Citation

Ma'adim Vallis, Mars: Insights into episodic and late-stage water activity from an impact crater

Tuhi, S. ; Harish ; Kimi, K. B. ; Vigneshwaran, K. ; Sharini, K. S. ; Priya, R. K. S. ; Vijayan, S. [show list](#)

[Full Text Sources](#)[Other Resources](#)

Alluvial fans, a form of sedimentary deposit reported on Mars, offer insight into the evolution and nature of fluvial activity on the planet. Additionally, the region's preserved mineralogy can also be used to study its hydrological history. In this context, we discuss the diverse geomorphology and mineralogy of an unnamed crater that formed on the eastern wall of Ma'adim Vallis, Mars. Ma'adim Vallis is an irregular-shaped, flat-floored valley incised due to the outflow of water from the Eridania basin. The rim of the unnamed crater is breached at multiple locations and it hosts an alluvial fan of an area ~ 50 km². The CRISM spectral signatures show Mg-rich olivine and Mg-rich smectite. Mg smectite was plausibly transported through water or formed in situ while the underneath terrain was rich in Mg olivine. The crater retention age on the ejecta of the unnamed crater is 3.7 Ga which suggests that the crater likely formed during the Noachian-Hesperian period boundary or earlier. This unnamed crater probably witnessed the last episode of water activity in the Vallis, which was most likely fed by water overflowing from a resurged early Hesperian water activity in Eridania Basin. This study substantiates episodic, late-stage water activity in Ma'adim Vallis, and the unnamed crater formed on the floodplains of the Vallis providing an excellent opportunity for future landing missions to explore astrobiological significance of the region.

Publication Icarus, Volume 387, article id. 115214.

Publication Date 2022-11-00

DOI [10.1016/j.icarus.2022.115214](https://doi.org/10.1016/j.icarus.2022.115214)

Bibcode [2022Icar..38715214T](https://ui.adsabs.org/abs/2022Icar..38715214T)

Keywords [Mars](#) [Crater](#) [Mineralogy](#) [Water](#) [Astrobiology](#)

Planetary Features [Mars/Crater/Gale](#) [Mars/Crater/Gusev](#) [Mars/Crater/Jezero](#) [Mars/Crater/Reuhl](#)
[Mars/Terra/Terra Cimmeria](#) [Mars/Terra/Terra Sirenum](#) [Go 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 (with links to additional resources)

How is it different from ADS?

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- 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:

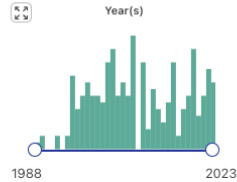
- Improved accessibility
- Discipline specific “skins”
- Better handling of filters
- Discipline-specific enhancements
- Improved ORCID integration
- New default for search ranking (customizable)

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

accomazzi

Your search returned 257 results

Filters



Author

<input type="checkbox"/> Accomazzi, A	252 >
<input type="checkbox"/> Kurtz, M	178 >
<input type="checkbox"/> Grant, C	161 >
<input type="checkbox"/> Murray, S	143 >
<input type="checkbox"/> Eichhorn, G	125 >
<input type="checkbox"/> Henneken, E	100 >
<input type="checkbox"/> Thompson, D	69 >
<input type="checkbox"/> Bohlen, E	27 >
<input type="checkbox"/> Blanco-Cuaresm...	25 >
<input type="checkbox"/> Chyla, R	20 >

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
<input type="checkbox"/> article	138
<input type="checkbox"/> openaccess	135
<input type="checkbox"/> nonarticle	119
<input type="checkbox"/> toc	108
<input type="checkbox"/> pubopenaccess	93

Relevance

Bulk Actions 

1 Content of the Future in the ADS

Accomazzi, Alberto; Henneken, Edwin A.; Grant, Carolyn S.; Thompson, Donna M.; Templeton, Matthew R.; Koch, Jennifer; Blanco-Cuaresma, Sergi; Chyla, Roman; McDonald, Stephen; Shapurian, Golnaz; [and 6 more](#)
2022/04 · Bulletin of the American Astronomical Society

 Delete Claim  

2 The NASA Astrophysics Data System: Overview

Kurtz, Michael J.; Eichhorn, Guenther; Accomazzi, Alberto; Grant, Carolyn S.; Murray, Stephen S.; Watson, Joyce M.; [show list](#)
2000/04 · Astronomy and Astrophysics Supplement Series · [cited: 104](#)

 Delete Claim  

3 Best Practices for Data Publication in the Astronomical Literature

Chen, Tracy X.; Schmitz, Marion; Mazzarella, Joseph M.; Wu, Xiuqin; van Eyken, Julian C.; Accomazzi, Alberto; Akeson, Rachel L.; Allen, Mark; Beaton, Rachael; Berriman, G. Bruce; [and 35 more](#)
2022/05 · The Astrophysical Journal Supplement Series · [cited: 9](#)

 Delete Claim  

4 AstroLLaMA: Towards Specialized Foundation Models in Astronomy

Dung Nguyen, Tuan; Ting, Yuan-Sen; Ciucă, Ioana; O'Neill, Charlie; Sun, Ze-Chang; Jabłońska, Maja; Kruk, Sander; Perkowski, Ernest; Miller, Jack; Li, Jason; [and 14 more](#)
2023/09 · arXiv e-prints

 Delete Claim  

5 The Future of Astronomical Data Infrastructure: Meeting Report

Blanton, Michael R.; Evans, Janet D.; Norman, Dara; O'Mullane, William; Price-Whelan, Adrian; Rizzi, Luca; Accomazzi, Alberto; Ansdell, Megan; Bailey, Stephen; Barrett, Paul; [and 62 more](#)
2023/11 · arXiv e-prints

 Delete Claim  

6 The NASA Astrophysics Data System: Architecture

Accomazzi, Alberto; Eichhorn, Guenther; Kurtz, Michael J.; Grant, Carolyn S.; Murray, Stephen S.; [show list](#)
2000/04 · Astronomy and Astrophysics Supplement Series · [cited: 24](#)

 Delete Claim  

7 The Astrophysics Data System

Eichhorn, Guenther; Accomazzi, Alberto; Kurtz, Michael J.; Grant, Carolyn S.; [show list](#)
1998/00 · Library and Information Services in Astronomy III · [cited: 1](#)

 Delete Claim  

8 Building astroBERT, a language model for Astronomy & Astrophysics

Grezes, Felix; Blanco-Cuaresma, Sergi; Accomazzi, Alberto; Kurtz, Michael J.; Shapurian, Golnaz; Henneken, Edwin; Grant, Carolyn S.; Thompson, Donna M.; Chyla, Roman; McDonald, Stephen; [and 7 more](#)

 Delete Claim  

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.



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

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

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What happens to ADS?

ADS is not going away!

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 in its current, familiar format. All
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[Search examples](#)

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

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



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.



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

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.



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

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NASA Science Explorer

Accelerating the discovery of NASA Science.

Thank You!



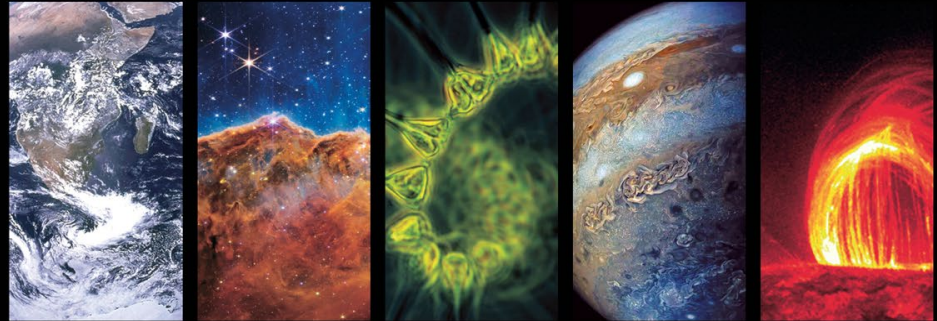
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Accelerating the discovery of NASA Science.



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)

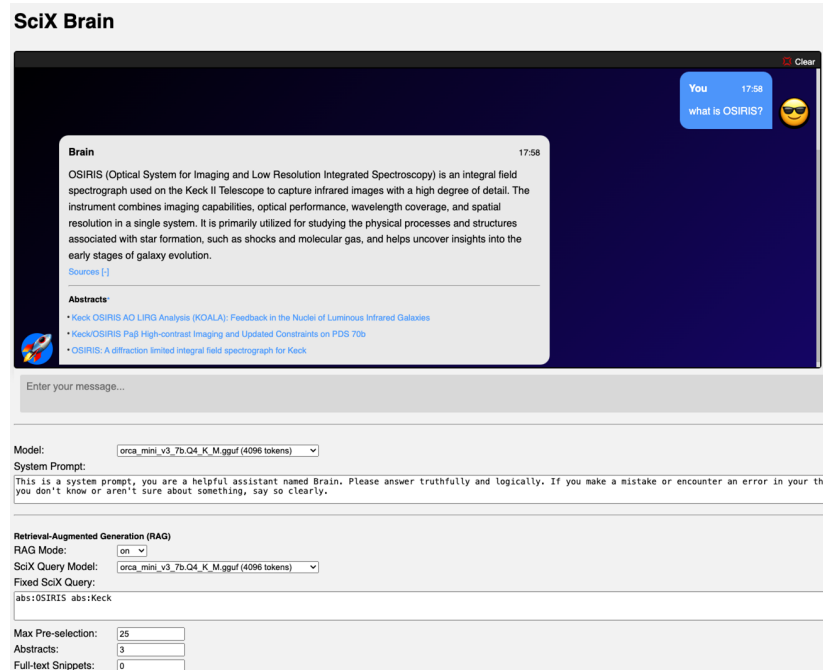
The screenshot shows a web interface with a search modal open. The modal title is "Planetary Features > Mars > Crater". It contains a search bar with the text "Search (case-sensitive)", a "Count" dropdown menu, and a list of results. The results are as follows:

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 modal, it says "Showing 1 to 10 of 324 results" and has navigation buttons: "< Prev", "1 of 33", and "Next >".

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



SciX Brain

You 17:58
what is OSIRIS? 🤖

Brain 17:58

OSIRIS (Optical System for Imaging and Low Resolution Integrated Spectroscopy) is an integral field spectrograph used on the Keck II Telescope to capture infrared images with a high degree of detail. The instrument combines imaging capabilities, optical performance, wavelength coverage, and spatial resolution in a single system. It is primarily utilized for studying the physical processes and structures associated with star formation, such as shocks and molecular gas, and helps uncover insights into the early stages of galaxy evolution.

[Sources \[\]](#)

Abstracts

- Keck OSIRIS AO LIRG Analysis (KOALA): Feedback in the Nuclei of Luminous Infrared Galaxies
- Keck/OSIRIS Pa β High-contrast Imaging and Updated Constraints on PDS 70b
- OSIRIS: A diffraction limited integral field spectrograph for Keck

Enter your message...

Model:

System Prompt:
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 th you don't know or aren't sure about something, say so clearly.

Retrieval-Augmented Generation (RAG)
RAG Mode:

SciX Query Model:

Fixed SciX Query:
abs:OSIRIS abs:Keck

Max Pre-selection:
Abstracts:
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

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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

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

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KEYWORDS

PUBLICATIONS

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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.





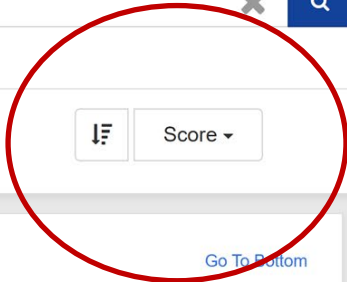
QUICK FIELD: Author First Author Abstract Year Fulltext All Search Terms

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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
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- ▼ COLLECTIONS
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 - physics 22
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 - general 5

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- > KEYWORDS
- > PUBLICATIONS

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1	<input type="checkbox"/>	1967pras.book.....V	1967	cited: 119			
		Principles of astrometry					
		Van De Kamp, Peter					
2	<input type="checkbox"/>	1963AJ.....68..515V	1963/09	cited: 73			
		Astrometric study of Barnard's star from plates taken with the 24-inch Sproul refractor.					
		van de Kamp, P.					
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		Alternate dynamical analysis of Barnard's star.					
		van de Kamp, P.					
4	<input type="checkbox"/>	1971ARA&A...9...103V	1971	cited: 88			
		The Nearby Stars					
		van de Kamp, Peter					
5	<input type="checkbox"/>	2008CCM....56...66V	2008/02	cited: 76			
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		van de Kamp, Peter C.					
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		Unseen astrometric companions of stars.					
		van de Kamp, P.					





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← Start New Search

author:"^van de Kamp, P" X 🔍

Your search returned 304 results

Limit the collections displayed

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- physics 22
- earthscience 17
- general 5

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- non-refereed 96

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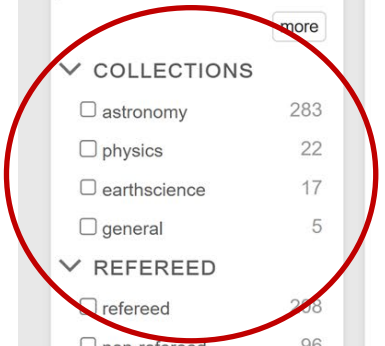
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van de Kamp, P. C.; James, R. S.
- 2 2019SedG..386...79V 2019/05 cited: 4 📄 ☰ 📄
[Provenance, shallow to deep diagenesis, and chemical mass balance in supermature arenites and pelites, Ordovician Simpson Group, Oklahoma and Kansas, U.S.A.](#)
van de 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"

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Your search returned 283 results

Collection +astronomy

Limit or Exclude

Date

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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		Book Review: Dark companions of stars. / Reidel, 1986.		
<input type="checkbox"/> Lippincott, S	10	<input type="checkbox"/> physics		van de Kamp, P.; Heintze, J. R. W.		
<input type="checkbox"/> Worth, M	4			<input type="checkbox"/> 2 1987S&T...73..283V	1987/03	
<input type="checkbox"/> Damkoehler, J	3			Book-Review - Dark Companions of Stars - Astrometric Comentary on the Lower End of the Main Sequence		
				van de Kamp, P.		
				<input type="checkbox"/> 1986SSRv...43..211V	1986/04	cited: 19
				Dark companions of stars.		
				van de Kamp, P.		
				<input type="checkbox"/> 1985Ap&SS.110..103V	1985/03	cited: 1
				Friedrich Wilhelm Bessel 1784, July 22 1846, March 17		
				van de Kamp, P.		
				<input type="checkbox"/> 5 1985IraJ...17...75V	1985	
				Book-Review- Stellar Paths. Photographic Astrometry with long-focus instruments		
				van de Kamp, Peter		
				<input type="checkbox"/> 6 1983nssl.conf...15V	1983/06	cited: 1
				The Fainter End of the Main Sequence		
				van de Kamp, P.		

Collections
1 selected

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Limited to Astronomy

Sort Date

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- Vyssotsky, A 17
- Lippincott, S 10
- Worth, M 4
- Damkoehler, J 3

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COLLECTIONS

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- general 5
- physics 2

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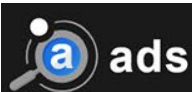
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		Book Review: Dark companions of stars. / Reidel, 1986.				
		van de Kamp, P.; Heintze, J. R. W.				
2	<input type="checkbox"/>	1987S&T...73..283V	1987/03			
		Book-Review - Dark Companions of Stars - Astrometric Comentary on the Lower End of the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





Second Author Search



Feedback ▾

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

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



Your search returned **12** results



Date ▾

▼ AUTHORS

> van de Kamp, P

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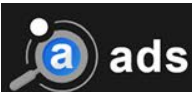
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pcs(author:"van de Kamp, P", 2)



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Date ▾

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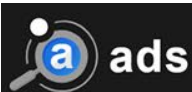
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Feedback ▾

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> van de Kamp, P

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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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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](#)



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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
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- 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
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- 2022S&T...144f..78M 2022/12
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Manley, Patrick
- 2022AAS...24012308E 2022/06
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- 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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