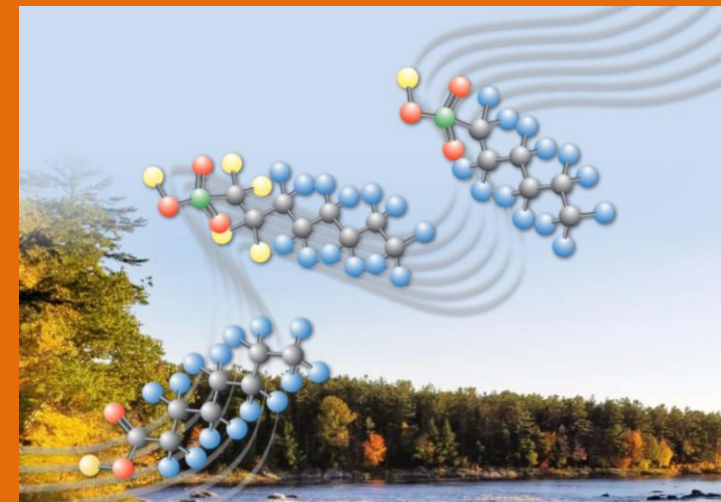


Introduction to Chemistry Library Research for Juniors : An Overview | 25 September 2023



Emily C. Wild

Chemistry, Geosciences and Environmental Studies Librarian

<https://pubs.usgs.gov/publication/pp1802K>

<https://pubs.usgs.gov/publication/cir1490>

My Bio



Emily C. Wild

ewild@princeton.edu

<https://library.princeton.edu/staff/ewild>

Princeton University Library, 2018-Present

Chemistry, Geosciences and Environmental Studies Librarian

Subject Specialist & Selector for Chemistry, Geosciences, Environment, Energy (contact me directly)

LinkedIn: <https://www.linkedin.com/in/emilycwild/>

ORCID: <https://orcid.org/0000-0001-6157-7629>

U.S. Geological Survey employee 1995/1996 to 2018:

<https://web.archive.org/web/20170716130801/https://www.usgs.gov/staff-profiles/emily-wild>

Denver, Colorado : 2008-2018 - Librarian (Physical Scientist) for Water, Geology, Geography, Biology

NH-VT & MA-RI: 1996-2008 - Hydrologist: Water Use, Surface Water, Groundwater, Water Quality, Coastal Waters, Hydrogeology, Bibliographic Databases

[Emily C. Wild \(0000-0001-6157-7629\) - ORCID](https://orcid.org/0000-0001-6157-7629)

Other IDs >

Scopus Author ID: 7005382800

ResearcherID: AAA-6920-2019

The screenshot shows the ORCID iD profile for Emily C. Wild. At the top left is the ORCID logo with the tagline "Connecting research and researchers". On the top right, there are links for "SIGN IN/REGISTER" and a language dropdown set to "English". A search bar is also present. The profile header includes the ORCID iD icon, the URL "https://orcid.org/0000-0001-6157-7629", and the name "Emily C. Wild". A "Printable version" link is in the top right corner. The profile is divided into several sections: "Emails" (ewild@princeton.edu), "Websites & social links" (listing Princeton University Library, Chemistry Databases and Library Guide, Geosciences Databases and Library Guide, Environment Databases, Energy Databases, LinkedIn, and Threads), and "Other IDs" (listing Scopus Author ID: 7005382800 and ResearcherID: AAA-6920-2019). The "Biography" section contains two paragraphs of text describing her roles at Princeton University Library and the U.S. Geological Survey Library, and her work as a hydrologist. The "Activities" section is partially visible, showing "Employment (3)" with a "Sort" option. The current employer listed is "Princeton University: Princeton, New Jersey, US".

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[Emily C Wild - Google Scholar](#)

Rhode Island Water Use and Availability, 1995-99 = 7 publications

Emily Wild Rhode Island Water Use and Availability, 1995-99 = 6 publications

Current:

Estimated water use and availability in the
South Coastal Drainage Basin, southern
Rhode Island, 1995-99

Emily C Wild, Mark T Nimiroski

US Geological Survey (2004-5288), 2005

Edited:

Estimated water use and availability in the
South Coastal Drainage Basin, southern
Rhode Island, 1995-99

Emily C Wild

US Department of the Interior, US Geological Survey
4(4), 2005



Estimated Water Use and Availability in the South Coastal Drainage Basin, Southern Rhode Island, 1995-99

By Emily C. Wild and Mark T. Nimiroski

Prepared in cooperation with the Rhode Island Water Resources Board

Scientific Investigations Report 2004-5288

<https://pubs.usgs.gov/sir/2004/5288/>

Generative AI, Text – Chemistry

FAQ: Should I trust AI or Chemistry Librarians?



[Turning ChatGPT into a 'chemistry assistant' - American Chemical Society \(acs.org\)](#)

[ChatGPT Chemistry Assistant for Text Mining and the Prediction of MOF Synthesis | Journal of the American Chemical Society \(acs.org\)](#)

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Princeton University Library

Peter B. Lewis Library - Lewis Science Library <https://library.princeton.edu/>



2008 - <https://facilities.princeton.edu/projects/peter-b-lewis-library-2008>

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Library Catalog v. Web Search

[Search results for Lithium Dendrite | Princeton University Library](#)



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Lithium Dendrite

Catalog (19) Articles+ Library Archives Art Museum Collections Maps and Geographic Data (2)

Catalog

[In situ observations of lithium dendrite growth / Owen Crowther.](#)

Manuscript
Crowther, Owen, 1980-2009.
ReCAP » LD1237.5D 2009 .C
ReCAP » FC33- 86,139

[Rational Design of Nanostructured Polymer Electrolytes and Solid-Liquid Interphases for Lithium Batteries \[electronic resource\] / by Snehashis Choudhury.](#)

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Lithium Dendrite

Li-dendrites are electrode surface protrusions that grow under activation and deposit on the electrode's flat surface during the diffusion process.
From: [Journal of Energy Storage, 2022](#)

Related terms:
[Polysulfide](#), [Lithium](#), [Lithium-Ion Batteries](#), [Lithium-Sulfur Batteries](#), [Separators](#), [Solid Electrolyte Interphase](#), [Flux Density](#), [Lithium Metal Anode](#), [Lithium Metal Battery](#), [Lithium Ion](#)

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Electrolytes for Lithium-Ion and Lithium Metal Batteries

Hao Jia, ... Wu Xu, in [Encyclopedia of Energy Storage](#) 2022


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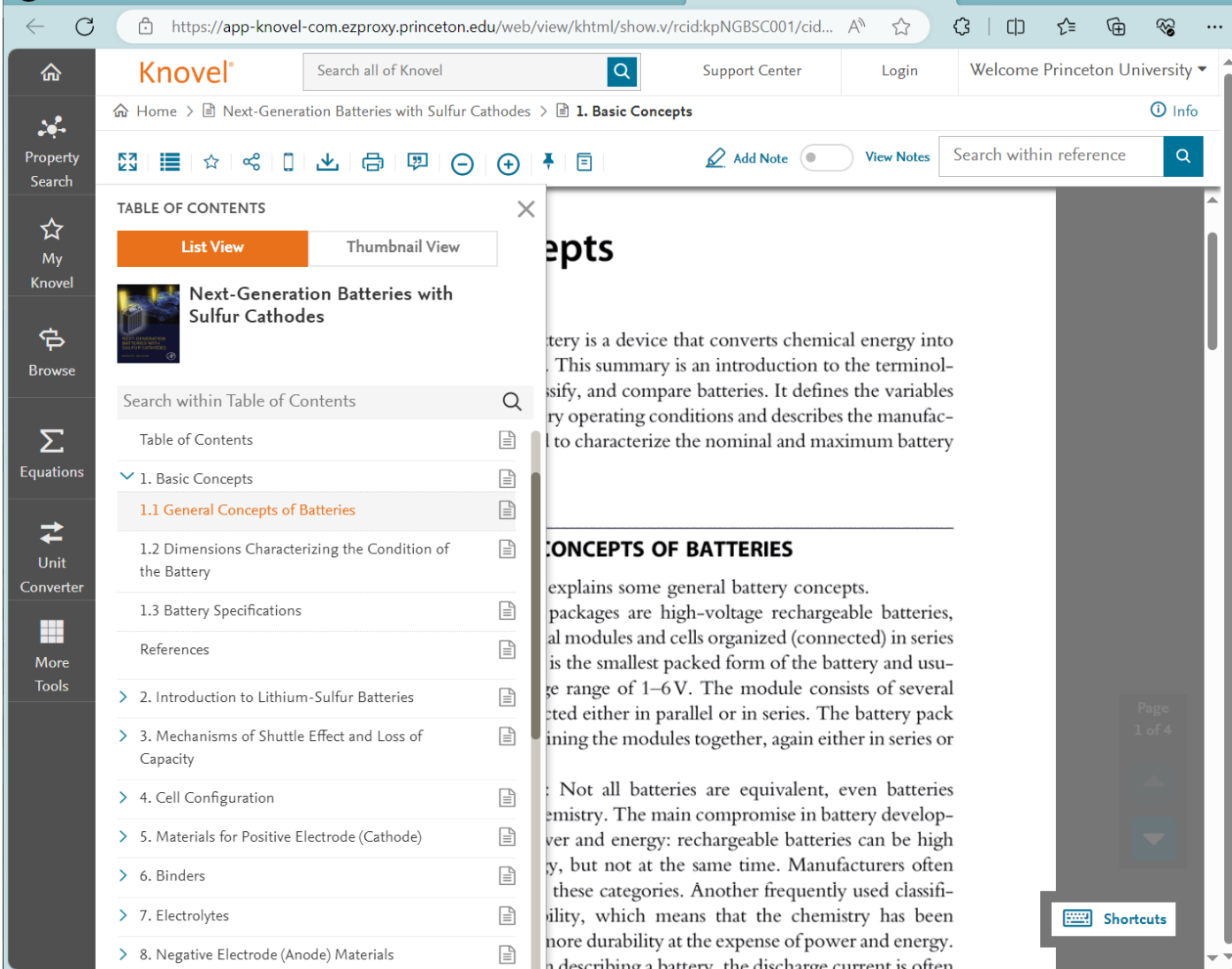


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[1. Basic Concepts - Knovel \(princeton.edu\)](#)



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TABLE OF CONTENTS

- Table of Contents
- 1. Basic Concepts
 - 1.1 General Concepts of Batteries
 - 1.2 Dimensions Characterizing the Condition of the Battery
 - 1.3 Battery Specifications
 - References
- 2. Introduction to Lithium-Sulfur Batteries
- 3. Mechanisms of Shuttle Effect and Loss of Capacity
- 4. Cell Configuration
- 5. Materials for Positive Electrode (Cathode)
- 6. Binders
- 7. Electrolytes
- 8. Negative Electrode (Anode) Materials

Concepts

Battery is a device that converts chemical energy into... This summary is an introduction to the terminology, classify, and compare batteries. It defines the variables, operating conditions and describes the manufacturing to characterize the nominal and maximum battery

CONCEPTS OF BATTERIES

explains some general battery concepts. packages are high-voltage rechargeable batteries, al modules and cells organized (connected) in series is the smallest packed form of the battery and usage range of 1–6 V. The module consists of several ctected either in parallel or in series. The battery pack ining the modules together, again either in series or

Not all batteries are equivalent, even batteries emistry. The main compromise in battery develop- over and energy: rechargeable batteries can be high y, but not at the same time. Manufacturers often these categories. Another frequently used classifi- bility, which means that the chemistry has been ore durability at the expense of power and energy. n describing a battery, the discharge current is often

Page 1 of 4

Shortcuts

Library Catalog

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Author Bucur, Claudiu B. [Browse]

Format Book

Language English

Edition 1st ed. 2018.

Published/Created Cham : Springer International Publishing : Imprint: Springer, 2018.

Description 1 online resource (XIII, 67 p. 20 illus., 13 illus. in color.)

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Author Bucur, Claudiu B. [Browse]

Format Book

Language English

Published/Created Cham, Switzerland : Springer, [2018]

Description xiii, 67 pages ; 24 cm.

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[Search Results - USGS Publications Warehouse](#)

The screenshot shows the USGS Publications Warehouse search interface. The search term "Lithium" has been entered, resulting in 304 results. The first result is a report titled "Data summary report: Unregulated contaminants monitoring project" by Jane de Lambert, Alycia Overbo, Steve Robertson, and Sarah M. Elliott, published in 2023. The second result is "Streamlined approach for assessing embedded consumption of lithium and cobalt in the United States" by Elisa Alonso, David G. Pineault, and Nedal T. Nassar, published in 2023 in the Journal of Industrial Ecology. The third result is "One hundred years of cobalt production in the Democratic Republic of the Congo" by Andrew L. Gulley, published in 2022 in Resources Policy.

The screenshot shows the "Lithium Statistics and Information" page from the USGS National Minerals Information Center. The page provides an overview of lithium supply and demand, along with navigation links for Home, Commodities, Countries, Materials Flow, US States, NMIC Seminars, Data, Multimedia, Publications, News, Connect, and About. It also features a "Subscribe" section for email notifications, a "Contacts" section for Brian Jaskula, and "Annual Publications" and "Mineral Commodity Summaries" for Lithium, with PDF format options and year ranges (1996-2023 for annual publications, 1994-2012 for summaries).

Critical Minerals - Lithium

[Australia, Canada and US Unify Critical Minerals Data | U.S. Geological Survey \(usgs.gov\)](https://www.usgs.gov)

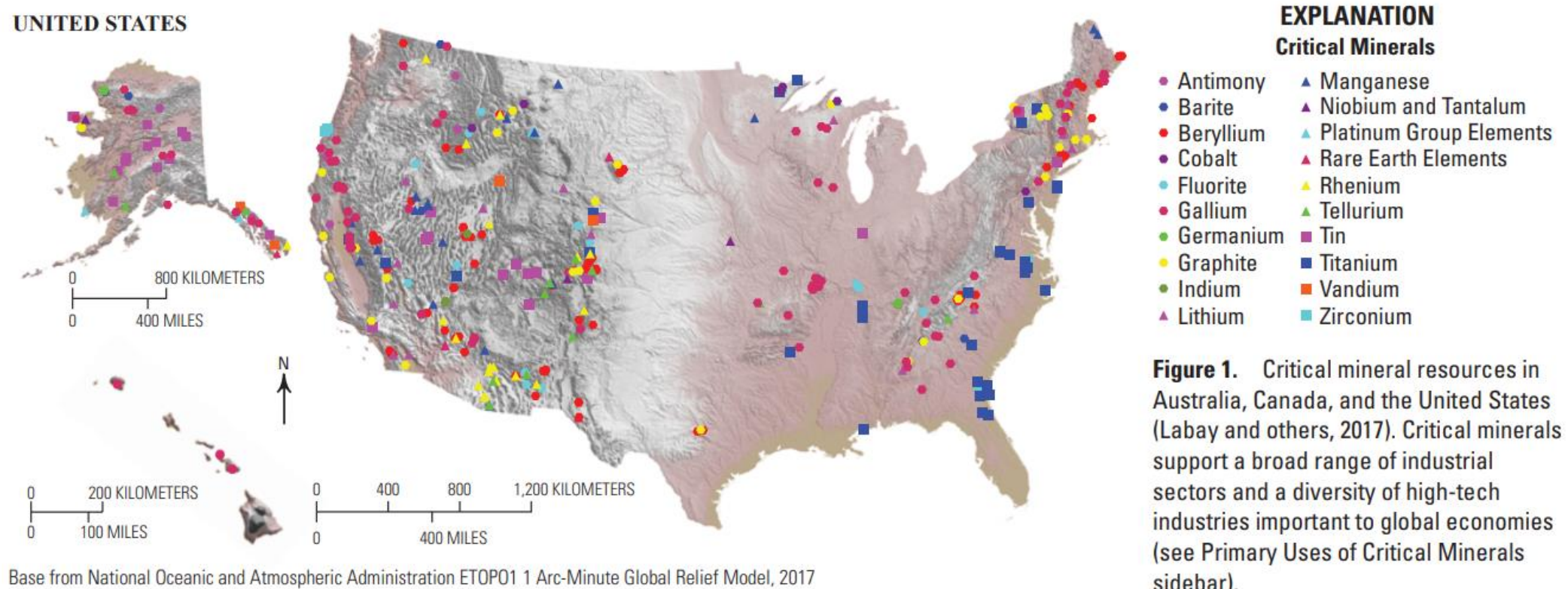


Figure 1. Critical mineral resources in Australia, Canada, and the United States (Labay and others, 2017). Critical minerals support a broad range of industrial sectors and a diversity of high-tech industries important to global economies (see Primary Uses of Critical Minerals sidebar).

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Consists of several chemical data handbooks from Chapman & Hall/CRC.

Encyclopedia of Polymer Science and Technology

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Detailed index covering organic and inorganic chemistry. Includes patents. Provides access to chemical reactions and physical, chemical and bioactivity data 1772+

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Starting Point

Considers and critically reviews methods from journals, books, and patent literature and presents important synthetic methods for all classes of organic compounds. Web version covers former Houben-Weyl treatise (1952-2003) and its continuation title, Science of Synthesis (2001+). Critically reviews chemical reaction literature with emphasis on functional group conversions.

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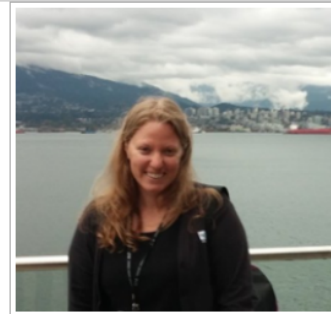
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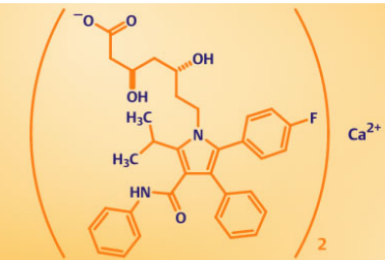
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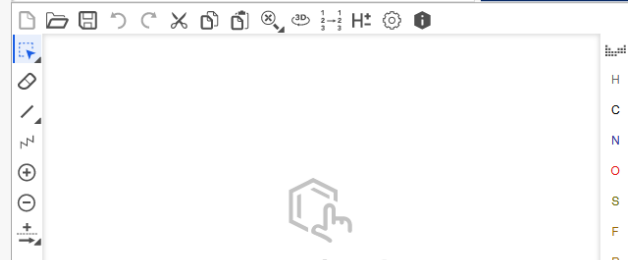
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1 Results

[Remdesivir](#)

Remdesivir

Synonyms: GS-5734; prodrug of GS-441524

ATC: -

Use: antiviral; RNA polymerase inhibitor against Ebola and Corona virus

Chemical name: (S)-2-Ethylbutyl 2-(((S)-((2R,3S,4R,5R)-5-(4-aminopyrrolo[2,1-f][1,2,4]triazin-7-yl)-5-cyano-3,4-dihydroxytetrahydrofuran-2-yl)methoxy)phenoxy)phosphoryl)amino) propanoate

Formula: C₂₇H₃₅N₅O₉P

MW: 602.59 g/mol

CAS-RN: 1809249-37-3

InChI Key: RWWYLEGWBNMMLJ.YSOARWBDSA-N

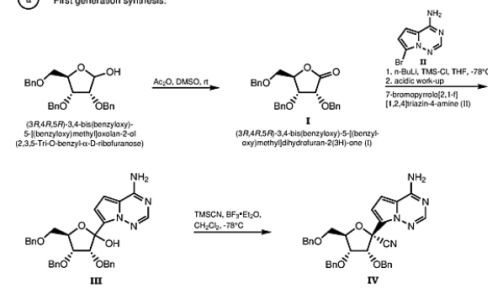
InChI: InChI=1S/C27H35N5O9P/c1-4-18[5-2]13-38-26(36)17(3)32-42(37,41-19-9-7-6-8-10-19)39-14-21-23(34)24(35)27(15-28,40-21)22-12-11-20-25(29)30-16-31-33(20)22/h6-12,16-18,21,23-24,34-35H,4-5,13-14H2,1-3H3,(H,32,37)(H2,29,30,31)/t17-,21+,23+,24+,27-,42-/m0/s1

Substance Classes

- > 1,2,4-Triazines
- > Pyrroles
- > Phosphates
- > Ribosides and Deoxyribosides
- > Nitriles (Cyanides)

Synthesis Path

ⓐ First generation synthesis:



(3R,4R,5R)-3,4-bis(benzyloxy)-5-(benzyloxymethyl)isoxazol-2-yl (2,3,5-Tri-O-benzyloxy-D-ribofuranose)
I
II
III
IV

(3R,4R,5R)-2-(4-aminopyrrolo[2,1-f][1,2,4]
(2R,3R,4R,5R)-2-(4-aminopyrrolo[2,1-f][1,2,4]

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The screenshot displays the CHEMnetBASE interface for the CRC Handbook of Chemistry and Physics, 104th Edition. The left sidebar contains a table of contents with categories like Introduction, Elements and Their Isotopes, and Atomic Structure and Spectroscopy Data. The main content area shows the 'INTRODUCTION' section for 'Atomic Structure and Spectroscopy Data'. The text describes the data tables provided, including electronic structure, ionization energy, and electron affinity. The page is identified as 'Page 1 of 1'.

CHEMnetBASE CRC Handbook of Chemistry and Physics 104th Edition

Section: 2 | Introduction | ?

Page 1 of 1

INTRODUCTION

Atomic Structure and Spectroscopy Data

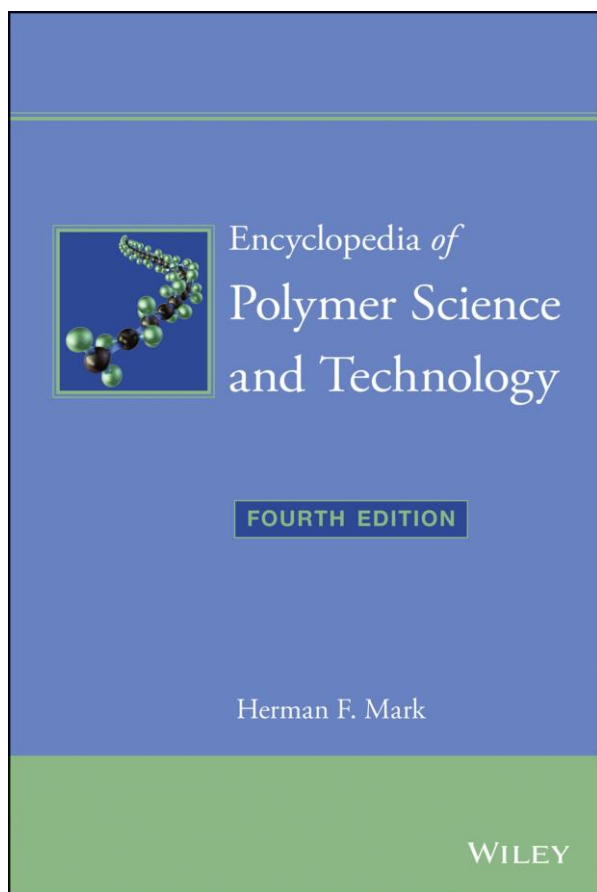
This section contains several data tables about the atomic elements, including their electronic structure and atomic spectroscopy measurements. Information on removing (ionization) and adding (electron affinity) electrons is included as are data on the polarization of an atomic element in an electric field. Some of these properties were among the first to be measured accurately. These properties continue to play an important role in understanding complex physical processes as well as for modeling all types of plasmas.

Page 1 of 1

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Johanna A. Vandenbrande, James R. Brown, Anastasia S. Arrington, Timothy E. Long

First published: 27 July 2023 | <https://doi-org.ezproxy.princeton.edu/10.1002/0471440264.pst399.pub2>

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Abstract

Water-soluble polymers (WSPs) represent a diverse class of macromolecules, and this diversity arises from the breadth of functionality derived from both natural and synthetic sources. Nature provides abundant WSPs through biosynthetic pathways in plants, animals, and fungi, and biological processes yield precisely controlled and well-defined structures. Polymer chemists strive to develop synthetic methods that mimic the precision of natural processes. Monomers that are derived from petroleum feedstocks together with naturally sourced monomers provide a rich catalog of WSP precursors. Monomer structure, reactivity, concentration, sequence control, and reaction conditions influence polymeric microstructures, solubility, and aqueous solution structure. This article provides an overview of WSP fundamentals and highlights recent advancements in natural, nonionic, ionic, associative, and high-performance WSPs. Recent advances in the design and performance of WSPs have critically improved the technological impact of filtration processes, water purification, drilling efficiency, and pharmaceutical applications. From modulating the rheological and filtration properties to establishing novel drug delivery systems through controllable self-assembly, WSPs represent a critical

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 - (Het)Arene/Alkene Cross-Dehydrogenative Coupling for $C(sp^2)-C(sp^2)$ Bond Formation
 - Alkene/Alkene Cross-Dehydrogenative Coupling for $C(sp^2)-C(sp^2)$ Bond Formation
 - (Het)Arene/Alkane Cross-Dehydrogenative Coupling for $C(sp^2)-C(sp^3)$ Bond Formation
 - C-C Bond Formation in Flow Systems Through Cross-Dehydrogenative Coupling
 - C-C Bond Formation through Cross-Dehydrogenative Coupling in Natural Product
- Functional Groups**
 - X-C≡X, X=C=X, X₂C=X, CX₄ Compounds
 - Nitriles, Isocyanides, and Derivatives
 - Acid Halides, Carboxylic Acids, Esters, Anhydrides, Peroxy Acids
 - Amides and Derivatives, Peptides, Lactams
 - Thio-, Seleno-, and Tellurocarboxylic Acids, Imidic Acids, Ortho Acids
 - Ketenes
 - Ketene Acetals, Yne-X Compounds
 - Aldehydes
 - Ketones
 - Heteroatom Analogues of Aldehydes and Ketones
 - Quinones and Heteroatom Analogues
- Heterenes**
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 - Fused Five-Membered Heterenes with One Heteroatom
 - Five-Membered Heterenes with One Chalcogen and One Additional Heteroatom
 - Five-Membered Heterenes with Two Nitrogen or Phosphorus Atoms
 - Five-Membered Heterenes with Three or More Heteroatoms
 - Six-Membered Heterenes with One Chalcogen
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Text-and-Data-Mining (TDM) Thieme Chemistry content

Success in Digital Chemistry today depends on data quality. Thieme and its curated knowledge database **Science of Synthesis (SoS)** is able to provide chemical reaction and structure data in Organic Synthetic Chemistry to an unprecedented level of accuracy. Research organizations, academic institutions and companies are using machine-learning (ML) and artificial intelligence (AI) techniques to explore scientific data, train algorithms and create knowledge from datasets as part of text-and-data mining (TDM). Thieme Chemistry can help support you with this task by providing highly standardized and structured organic synthesis information, including XML, .cdx and SDF/RDF files.

Science of Synthesis/Thieme data prove their accelerating potential in a fruitful collaboration with IBM Research

In 2018 IBM launched the RXN for Chemistry cloud platform to help synthetic organic chemists in predicting the outcome of chemical reactions using an artificial intelligence (AI) model, called Molecular Transformer. Earlier in 2021 IBM Research and Thieme Chemistry incorporated expert synthesis data from Thieme's curated digital publication source on organic chemistry – **Science of Synthesis** – into RXN for Chemistry.

Initial results show that Thieme-trained models predict correct reactions approximately three times better for forward prediction and nine times better for retrosynthesis against baseline models when tested on Science of Synthesis chemistry.*

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Remdesivir

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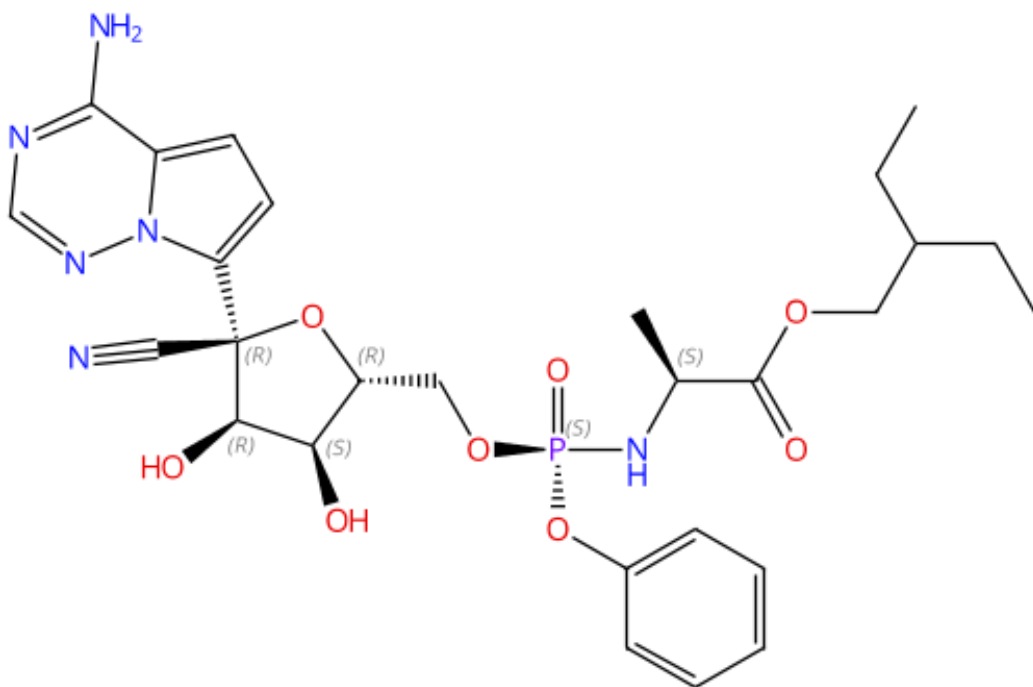
[Prev](#) (1 of 1) [Next](#)

CAS Registry Number: 1809249-37-3

References (4,967)

Reactions (747)

Suppliers (65)



Absolute stereochemistry shown.

C₂₇H₃₅N₆O₈P

L-Alanine, *N*-[(*S*)-hydroxyphenoxyphosphinyl]-, 2-ethylbutyl ester, 6-ester with 2-*C*-(4-aminopyrrolo[2,1-*f*][1,2,4]triazin-7-yl)-2,5-anhydro-D-altroneitrile (ACI)



Key Physical Properties	Value	Condition
Molecular Weight	602.58	-
Melting Point (Experimental)	89.4-90.4 °C	-
Density (Predicted)	1.47±0.1 g/cm ³	Temp: 20 °C; Press: 760 Torr
pKa (Predicted)	12.00±0.70	Most Acidic Temp: 25 °C

[Experimental Properties](#) | [Spectra](#)

[Expand All](#) | [Collapse All](#)

Other Names and Identifiers

Canonical SMILES

N#CC1(OC(COP(=O)(OC=2C=CC=C2)NC(C(=O)OCC(CC)CC)C(O)C1O)C3=CC=C4C(=NC=NN43)N

Isomeric SMILES

C(#N)[C@]1(O[C@H](COP(OC2=CC=CC=C2)(N[C@H](C(OCC(CC)CC)=O)C)=O)[C@@H](O)[C@H]1O)C=3N4C(=CC3)C(N)=NC=N4

InChI

InChI=1S/C27H35N6O8P/c1-4-18(5-2)13-38-26(36)17(3)32-42(37,41-19-9-7-6-8-10-19)39-14-21-23(34)24(35)27(15-28,40-21)22-12-11-20-25(29)30-16-31-33(20)22/h6-12,16-18,21,23-24,34-35H,4-5,13-14H2,1-3H3,(H,32,37)(H2,29,30,31)/t17-,21+,23+,24+,27-,42-/m0/s1

InChI Key

RWWYLEGWBNMMLJ-YSOARWBDSA-N

10 Other Names for this Substance

Remdesivir

(*S*)-2-Ethylbutyl 2-(((*S*)-(((2*R*,3*S*,4*R*,5*R*)-5-(4-aminopyrrolo[2,1-*f*][1,2,4]triazin-7-yl)-5-cyano-3,4-dihydroxytetrahydrofuran-2-yl)methoxy)(phenoxy)phosphoryl)amino)propanoate

2-Ethylbutyl (2*S*)-2-(((*S*)-(((2*R*,3*S*,4*R*,5*R*)-5-(4-aminopyrrolo(2,1-*f*)[1,2,4]triazin-7-yl)-5-cyano-3,4-dihydroxytetrahydrofuran-2-



Feedback

CAS SciFinder[®] References lithium

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References search for "lithium"

Substances Reactions Citing Knowledge Graph Save and Alert

Filtering: Document Type: Patent X Clear All Filters

273,338 Results Sort: Relevance View: Partial Abstract

1

Protective lithium ion conducting ceramic coating for lithium metal anodes

By: Bates, John B.
United States, US5314765 A 1994-05-24 | Language: English, Database: CAPlus

In a battery including a cathode, a lithium anode and an electrolyte between the anode and cathode, a thin-film of lithium phosphorus oxynitride is used to coat the anode and sep. it from the electrolyte. A preliminary layer of lithium nitride may be coated on the anode before the lithium phosphorous oxynitride is coated on the anode so that separation of the anode and electrolyte is further enhanced. By coating the lithium anode with this material lay-up, the life of the battery is lengthened and the performance of the battery is enhanced.

PatentPak Full Text

Substances (3) Reactions (0) Citing (67) Citation Map

2

Cathodes for secondary lithium-sulfur batteries

By: Chu, May-ying
United States, US5686201 A 1997-11-11 | Language: English, Database: CAPlus

The cathodes are active S-based composite cathodes including active S, an electronic conductor with the active S so that electrons can move between the active S and the electronic conductor, and an ionic conductor mixed with the active S so that ions can move between the ionic conductor and the active S. These materials are provided in a manner allowing ≥10% of the active-S to be available for

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Search Within Results

Document Type

- Journal (437K)
- Patent (273K)
- Review (24K)
- Biography (51)
- Book (250)
- [View All](#)

Substance Role

- Uses (57K)
- Properties (13K)
- Process (9,128)
- Preparation (4,852)
- Reactant or Reagent (3,353)
- [View All](#)

Language

- Chinese (140K)
- Japanese (60K)
- English (38K)

CAS SciFinder[®] References uranium

← Return to Home

References search for "uranium"

Substances Reactions Citing Knowledge Graph Save and Alert

231,428 Results Sort: Relevance View: Partial Abstract

1

Geomicrobiology of uranium

By: Suzuki, Yohey; Banfield, Jillian F.
Reviews in Mineralogy (1999), 38, 393-432 | Language: English, Database: CAPlus

A review with many references

Full Text Substance (1) Reactions (0) Citing (95) Citation Map

2

Uranium in river water

By: Palmer, M. R.; Edmond, J. M.
Geochimica et Cosmochimica Acta (1993), 57(20), 4947-55 | Language: English, Database: CAPlus

The concentration of dissolved uranium has been determined in over 250 river waters from the Orinoco (Amazon) and Ganges (India) basins. The U concentrations are largely determined by dissolution of limestones, although weathering of black shales represents an important addnl. source in some basins. In shield terrains, the level of dissolved U is transport limited. Data from the Amazon indicate that floodplains do not represent a significant source of U in river waters. In addition, the authors have determined dissolved U levels in forty rivers from around the world and coupled these data with...

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Full Text Substance (1) Reactions (0) Citing (149) Citation Map

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Search Within Results

Document Type

- Journal (184K)
- Patent (16K)
- Review (8,638)
- Biography (22)
- Book (493)
- [View All](#)

Substance Role

- Occurrence (46K)
- Process (36K)
- Properties (18K)
- Analytical Study (17K)
- Preparation (13K)
- [View All](#)

Language

- English (157K)
- Chinese (20K)
- Undetermined (18K)

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Results for "remdesivir" New Edit

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14,326 Documents

Structure : as drawn View Results >

Titles, Abstracts, Keywords : "remdesivir"

Edit in Query Builder Create Alert

Preview Results

6 Commercial Substances

Structure : as drawn View Results >

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Quick search Query builder **Results** Retrosynthesis History

14,33 K Preview Search

14,326 Documents 50,673 Substances, 31,976 Reactions, 654 Targets

Limit To Exclude Export Publication Year Bioactivity Visualization

- Analysis and Applicability Comparison of Single Current Regulator Methods of PMSM Under Square-Wave Mode** Cited 1 times

Zhang, Di; Zhou, Minglei; Wang, Chenchen; You, Xiaojie [IEEE Transactions on Industrial Electronics, 2024, vol. 71, # 2, p. 1410 - 1420]

Abstract Index Terms Full Text

Abstract hit: {...and q-axis voltage(SQCR-RDV and SQCR-RQV) methods respectively. More than that, the issue of...}
- COVID-19: a wreak havoc across the globe** Cited 4 times

Rehman, Heena; Ahmad, Md Iftexhar [Archives of Physiology and Biochemistry, 2023, vol. 129, # 1, p. 82 - 94]

Abstract Index Terms Substances (4) Full Text

Abstract hit: {...hydroxychloroquine and remdesivir. Along with the medicines, some countries are using convalescent plasma...}
- COVID-19 Wounds: Unusual Lower Extremity Bullae** Cited 6 times

Zinder, Roman; Andrews, Carolyn; Cristallo, Jessica; Flattau, Anna [International Journal of Lower Extremity Wounds, 2023, vol. 22, # 1, p. 130 - 134]

Abstract Index Terms Full Text

Index Terms hit: {...piperacillin plus tazobactam, remdesivir, steroid...}
- Chasing COVID-19 chemotherapeutics without putting the cart before the horse** Cited 3 times

Rannard, Steven P.; McDonald, Tom O.; Owen, Andrew [British Journal of Clinical Pharmacology, 2023, vol. 89, # 1, p. 421 - 423]

Index Terms Full Text

Index Terms hit: {...lopinavir plus ritonavir, remdesivir...}
- Pharmacokinetics under the COVID-19 storm** Cited 8 times

Pilla Reddy, Venkatesh; El-Khateeb, Eman; Jo, Heeseung; Giovino, Natalie; Lythgoe, Emily; Sharma, Shringi; Tang, Weifeng; Jarnel, Masoud; Rastomi-Hodjegan, Amin [British Journal of Clinical Pharmacology, 2023, vol. 89, # 1, p. 158 - 186]

Abstract Index Terms Substances (8) Full Text

Index Terms hit: {...lopinavir plus ritonavir, remdesivir, ritonavir...}
- Massive hemoptysis due to Aspergillus-related pulmonary artery pseudoaneurysm in a patient with COVID-19 pneumonia** Cited 3 times

Baeza; Romera; Fortuño [Medicina Intensiva, 2023, vol. 47, # 3, p. 184 - 185]

Index Terms Full Text

Index Terms hit: {...methylprednisolone, remdesivir, tocilizumab...}

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Lithium Dendrite v. “Lithium Dendrite”

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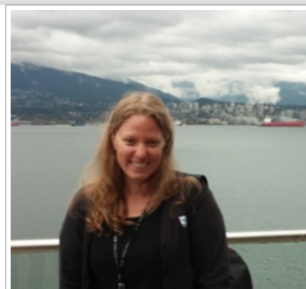
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Identifier(s)

Compound name

DOI

Authors

Journal

Publication details Year Volume Page

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Chemistry Library Research Guide

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Major Database: KnowItAll U spectra database

Major Database: Science of Synthesis

CAS Registry Number

Chemical and Physical Properties of Substances

Specialized Chemistry Sources

Chemical Information Sources

Welcome to the Research Guide for Chemistry

This guide will assist you in conducting library research and in using the Princeton University Library resources and services. Use the tabs to start exploring the variety of tools and resources to assist you with your research. If you have any questions about doing basic or in-depth library research relating to chemistry, please contact me.

Thank you, and enjoy the day!

Emily

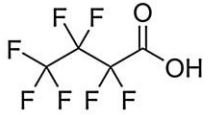
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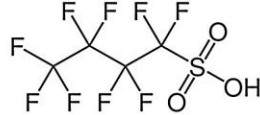
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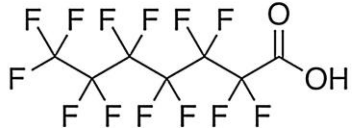
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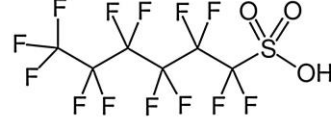
Perfluorobutanoic acid (PFBA)



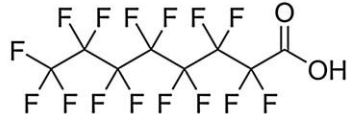
Perfluorobutane sulfonic acid (PFBS)



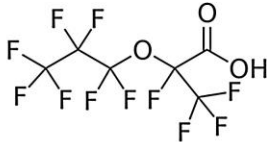
Perfluoroheptanoic acid (PFHpA)



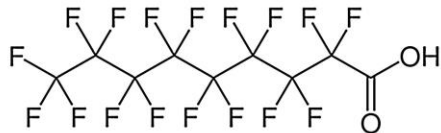
Perfluorohexane sulfonic acid (PFHxS)



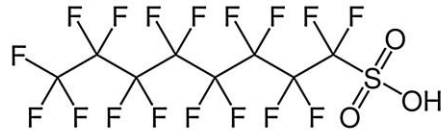
Perfluorooctanoic acid (PFOA)



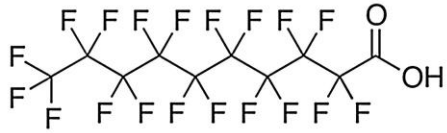
Hexafluoropropylene oxide dimer acid (HFPO-DA or GenX)



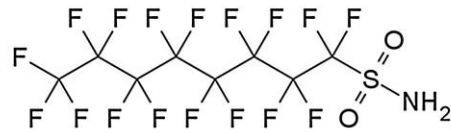
Perfluorononanoic acid (PFNA)



Perfluorooctane sulfonic acid (PFOS)



Perfluorodecanoic acid (PFDA)



Perfluorooctanesulfonamide (PFOSA)

IUPAC Periodic Table of the Elements

1 H hydrogen 1.008 ± 0.0002	2 He helium 4.0026 ± 0.0001											13 B boron 10.81 ± 0.02	14 C carbon 12.011 ± 0.002	15 N nitrogen 14.007 ± 0.001	16 O oxygen 15.999 ± 0.001	17 F fluorine 18.998 ± 0.001	18 Ne neon 20.180 ± 0.001
3 Li lithium 6.94 ± 0.06	4 Be beryllium 9.0122 ± 0.0001											13 Al aluminum 26.982 ± 0.001	14 Si silicon 28.085 ± 0.001	15 P phosphorus 30.974 ± 0.001	16 S sulfur 32.06 ± 0.02	17 Cl chlorine 35.45 ± 0.01	18 Ar argon 39.95 ± 0.16
11 Na sodium 22.990 ± 0.001	12 Mg magnesium 24.305 ± 0.002	3 Sc scandium 44.956 ± 0.001	4 Ti titanium 47.867 ± 0.001	5 V vanadium 50.942 ± 0.001	6 Cr chromium 51.996 ± 0.001	7 Mn manganese 54.938 ± 0.001	8 Fe iron 55.845 ± 0.002	9 Co cobalt 58.933 ± 0.001	10 Ni nickel 58.693 ± 0.001	11 Cu copper 63.546 ± 0.003	12 Zn zinc 65.38 ± 0.02	31 Ga gallium 69.723 ± 0.001	32 Ge germanium 72.630 ± 0.008	33 As arsenic 74.922 ± 0.001	34 Se selenium 78.971 ± 0.008	35 Br bromine 79.904 ± 0.003	36 Kr krypton 83.798 ± 0.002
19 K potassium 39.098 ± 0.001	20 Ca calcium 40.078 ± 0.004	21 Sc scandium 44.956 ± 0.001	22 Ti titanium 47.867 ± 0.001	23 V vanadium 50.942 ± 0.001	24 Cr chromium 51.996 ± 0.001	25 Mn manganese 54.938 ± 0.001	26 Fe iron 55.845 ± 0.002	27 Co cobalt 58.933 ± 0.001	28 Ni nickel 58.693 ± 0.001	29 Cu copper 63.546 ± 0.003	30 Zn zinc 65.38 ± 0.02	49 In indium 114.82 ± 0.01	50 Sn tin 118.71 ± 0.01	51 Sb antimony 121.76 ± 0.01	52 Te tellurium 127.60 ± 0.01	53 I iodine 126.90 ± 0.01	54 Xe xenon 131.29 ± 0.01
37 Rb rubidium 85.468 ± 0.001	38 Sr strontium 87.62 ± 0.001	39 Y yttrium 88.906 ± 0.001	40 Zr zirconium 91.224 ± 0.001	41 Nb niobium 92.906 ± 0.001	42 Mo molybdenum 95.95 ± 0.01	43 Tc technetium [97]	44 Ru ruthenium 101.07 ± 0.02	45 Rh rhodium 102.91 ± 0.01	46 Pd palladium 106.42 ± 0.01	47 Ag silver 107.87 ± 0.01	48 Cd cadmium 112.41 ± 0.01	81 Tl thallium 204.38 ± 0.01	82 Pb lead 207.2 ± 1.1	83 Bi bismuth 208.98 ± 0.01	84 Po polonium [209]	85 At astatine [210]	86 Rn radon [222]
55 Cs caesium 132.91 ± 0.01	56 Ba barium 137.33 ± 0.01	57-71 lanthanoids	72 Hf hafnium 178.49 ± 0.01	73 Ta tantalum 180.95 ± 0.01	74 W tungsten 183.84 ± 0.01	75 Re rhenium 186.21 ± 0.01	76 Os osmium 190.23 ± 0.03	77 Ir iridium 192.22 ± 0.01	78 Pt platinum 195.08 ± 0.02	79 Au gold 196.97 ± 0.01	80 Hg mercury 200.59 ± 0.01	113 Nh nihonium [286]	114 Fl flerovium [289]	115 Mc moscovium [290]	116 Lv livermorium [293]	117 Ts tennessine [294]	118 Og oganeson [294]
87 Fr francium [223]	88 Ra radium [226]	89-103 actinoids	104 Rf rutherfordium [261]	105 Db dubnium [268]	106 Sg seaborgium [269]	107 Bh bohrium [270]	108 Hs hassium [277]	109 Mt meitnerium [277]	110 Ds darmstadtium [281]	111 Rg roentgenium [282]	112 Cn copernicium [285]	113 Nh nihonium [286]	114 Fl flerovium [289]	115 Mc moscovium [290]	116 Lv livermorium [293]	117 Ts tennessine [294]	118 Og oganeson [294]



57 La lanthanum 138.91 ± 0.01	58 Ce cerium 140.12 ± 0.01	59 Pr praseodymium 140.91 ± 0.01	60 Nd neodymium 144.24 ± 0.01	61 Pm promethium [145]	62 Sm samarium 150.36 ± 0.02	63 Eu europium 151.96 ± 0.01	64 Gd gadolinium 157.25 ± 0.03	65 Tb terbium 158.93 ± 0.01	66 Dy dysprosium 162.50 ± 0.01	67 Ho holmium 164.93 ± 0.01	68 Er erbium 167.26 ± 0.01	69 Tm thulium 168.93 ± 0.01	70 Yb ytterbium 173.05 ± 0.01	71 Lu lutetium 174.97 ± 0.01
89 Ac actinium [227]	90 Th thorium 232.04 ± 0.01	91 Pa protactinium 231.04 ± 0.01	92 U uranium 238.03 ± 0.01	93 Np neptunium [237]	94 Pu plutonium [244]	95 Am americium [243]	96 Cm curium [247]	97 Bk berkelium [247]	98 Cf californium [251]	99 Es einsteinium [253]	100 Fm fermium [257]	101 Md mendelevium [258]	102 No nobelium [259]	103 Lr lawrencium [262]

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Applied Chemistry' –
August 2023

eTOC Alert 'Pure and
Applied Chemistry' – July
2023

CATEGORIES

IUPAC PERIODIC TABLE OF THE
ELEMENTS AND ISOTOPES (IPTEI) FOR
THE EDUCATION COMMUNITY

1 Mar 2019

*post revised 18 June 2019*

The IUPAC Periodic Table of the Elements and Isotopes (IPTEI) for the Education Community co-authored by N. E. Holden, T. B. Coplen, J. K. Böhlke, L. V. Tarbox, J. Benefield, J. R. de Laeter, P. G. Mahaffy, G. O'Connor, E. Roth, D. H. Tepper, T. Walczyk, M. E. Wieser, S. Yoneda and published in *Pure and Applied Chemistry*, 90(12), 1833–2092 (2018) is an authoritative resource for the educational community. See <https://doi.org/10.1515/pac-2015-0703>.

<https://iupac.org/iptei/>

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Norman E. Holden, Tyler B. Coplen, John K. Böhlke, Lauren V. Tarbox, Jacqueline Benefield, John R. de Laeter, Peter G. Mahaffy, Glenda O'Connor née Singleton, Etienne Roth, Dorothy Tepper, Thomas Walczyk, Michael E. Wieser, Shigekazu Yoneda
2018, *Pure and Applied Chemistry* (90) 1833-2092

The IUPAC (International Union of Pure and Applied Chemistry) Periodic Table of the Elements and Isotopes (IPTEI) was created to familiarize students, teachers, and non-professionals with the existence and importance of isotopes of the chemical elements. The IPTEI is modeled on the familiar Periodic Table of the Chemical Elements. The...

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<https://www.usgs.gov/news/national-news-release/tap-water-study-detects-pfas-forever-chemicals-across-us>

Emily was the USGS Hydrologist that pulled all the data for Leslie this publication

<https://pubs.usgs.gov/publication/sir20085227>

Emily was the USGS Librarian (Physical Scientist) for this publication

“Nationwide reconnaissance of contaminants of emerging concern in source and treated drinking waters of the United States”

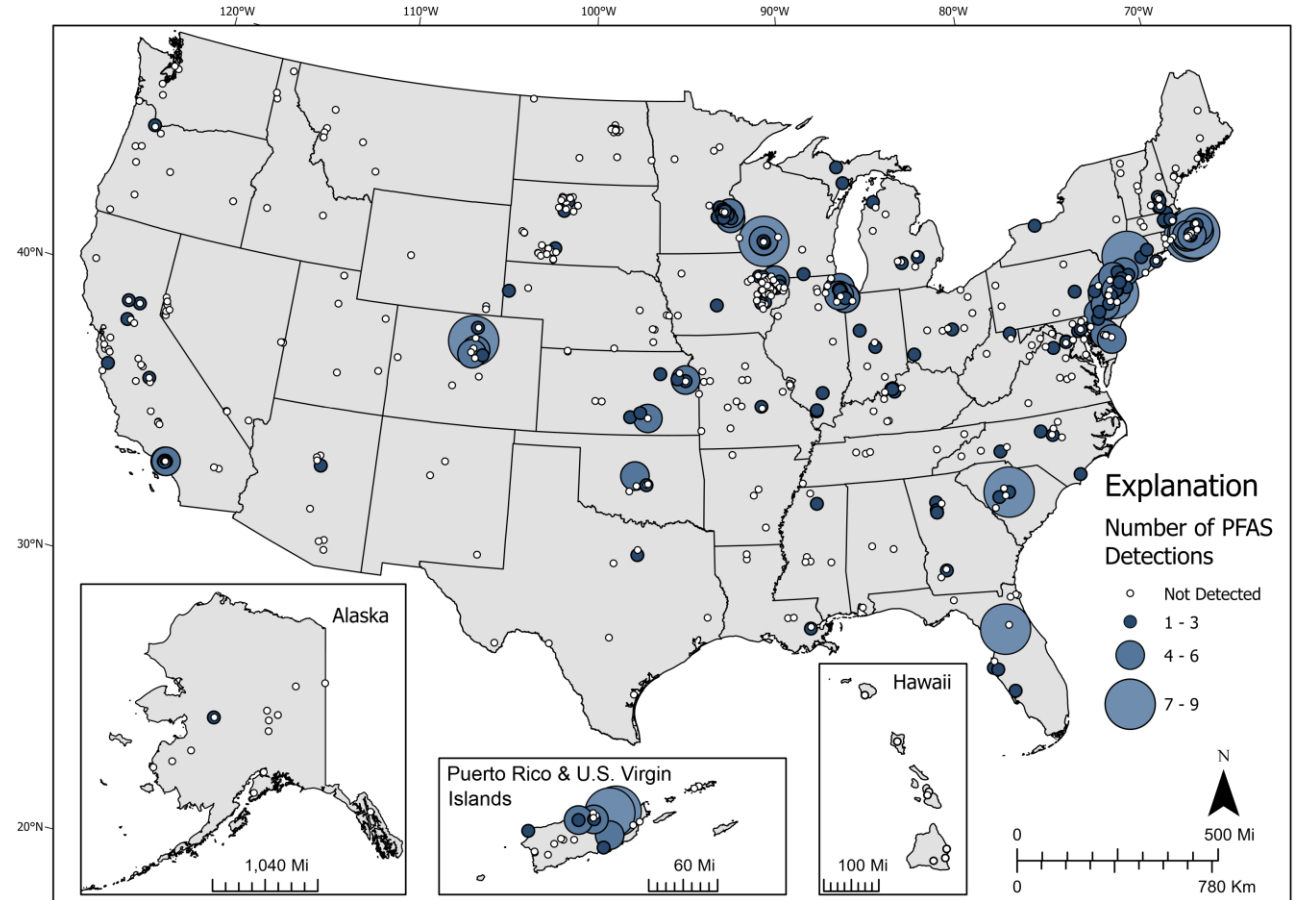
<https://pubs.usgs.gov/publication/70189315>

Recommended reading

“Contaminants of emerging concern in the environment: Where we have been and what does the future hold?”

<https://pubs.usgs.gov/publication/70201175>

Per- and Polyfluoroalkyl Substances (PFAS) in Select U.S. Tapwater Locations



Map represents all sampling locations not the only locations where PFAS was observed.

Thank You!

Upcoming virtual workshops...

**Introduction to Environmental Studies Library Research :
Uranium Mining and Nuclear Energy**
September 29 at 2:30 pm <https://libcal.princeton.edu/event/11050593>

**Introduction to Geosciences Library Research : Critical Minerals
by Land and Sea (and Space?)**
October 6 at 2:30 pm <https://libcal.princeton.edu/event/11050701>

**Introduction to Geosciences Library Research : Water Resources
by Surface-Water Basins and Groundwater Aquifers**
November 3 at 2:30 pm <https://libcal.princeton.edu/event/11050754>

**Introduction to Chemistry Library Research : Critical Minerals and
Earth Abundant Elements**
November 10 at 2:30 pm <https://libcal.princeton.edu/event/11050900>

**Introduction to Environmental Studies Library Research: Water
Use and Availability**
December 8 at 2:30 pm <https://libcal.princeton.edu/event/11059361>

**Introduction to Geosciences Library Research : Earthquakes,
Hurricanes, Volcanoes, and Wildfires**
December 15 at 2:30 pm <https://libcal.princeton.edu/event/11059477>

