Resource Summary Report

Generated by dkNET on Apr 25, 2025

PetDB

RRID:SCR_002209
Type: Tool

Proper Citation

PetDB (RRID:SCR_002209)

Resource Information

URL: http://www.earthchem.org/petdb

Proper Citation: PetDB (RRID:SCR_002209)

Description: Accepts and provides access to geochemical and petrological data for ocean floor igneous and metamorphic rocks, (whole rock, volcanic, glass, mineral, and melt inclusion analyses), and mantle and lower-crustal xenolith samples. Data are compiled primarily from the published literature. Authors are encouraged to submit their datasets and databases to EarthChem.

Abbreviations: PetDB

Synonyms: PetDB - the Petrological Database

Resource Type: database, data or information resource

Keywords: petrological, geochemical, chemical, isotopic, mineralogical, rock, mineral, melt inclusion, igneous, metamorphic, ocean floor, mid-ocean ridge, basalt, abyssal, peridotite, xenolith, petrology, mantle

Funding: NSF

Resource Name: PetDB

Resource ID: SCR_002209

Alternate IDs: nlx_154723

Record Creation Time: 20220129T080212+0000

Record Last Update: 20250425T055248+0000

Ratings and Alerts

No rating or validation information has been found for PetDB.

No alerts have been found for PetDB.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 18 mentions in open access literature.

Listed below are recent publications. The full list is available at dkNET.

Yu Z, et al. (2025) Deep mantle earthquakes linked to CO2 degassing at the mid-Atlantic ridge. Nature communications, 16(1), 563.

Munch FD, et al. (2024) Deep mantle plumes feeding periodic alignments of asthenospheric fingers beneath the central and southern Atlantic Ocean. Proceedings of the National Academy of Sciences of the United States of America, 121(46), e2407543121.

Timmerman S, et al. (2023) Sublithospheric diamond ages and the supercontinent cycle. Nature, 623(7988), 752.

Aulbach S, et al. (2022) Evidence for oxygen-conserving diamond formation in redox-buffered subducted oceanic crust sampled as eclogite. Nature communications, 13(1), 1924.

Liu CZ, et al. (2022) Archean cratonic mantle recycled at a mid-ocean ridge. Science advances, 8(22), eabn6749.

Weiss Y, et al. (2021) Helium in diamonds unravels over a billion years of craton metasomatism. Nature communications, 12(1), 2667.

Li H, et al. (2021) Basalt derived from highly refractory mantle sources during early Izu-Bonin-Mariana arc development. Nature communications, 12(1), 1723.

Garçon M, et al. (2021) Episodic growth of felsic continents in the past 3.7 Ga. Science advances, 7(39), eabj1807.

Zhang Y, et al. (2021) Serpentinite-derived slab fluids control the oxidation state of the subarc mantle. Science advances, 7(48), eabj2515.

Yu X, et al. (2020) Non-mantle-plume process caused the initial spreading of the South China Sea. Scientific reports, 10(1), 8500.

Belay IG, et al. (2019) Origin of ocean island basalts in the West African passive margin without mantle plume involvement. Nature communications, 10(1), 3022.

Chen S, et al. (2019) Molybdenum systematics of subducted crust record reactive fluid flow from underlying slab serpentine dehydration. Nature communications, 10(1), 4773.

Ranaweera LV, et al. (2018) Circa 1 Ga sub-seafloor hydrothermal alteration imprinted on the Horoman peridotite massif. Scientific reports, 8(1), 9887.

Ge R, et al. (2018) Remnants of Eoarchean continental crust derived from a subducted proto-arc. Science advances, 4(2), eaao3159.

Liu C, et al. (2017) Geochemical and mineralogical evidence that Rodinian assembly was unique. Nature communications, 8(1), 1950.

Zhang GL, et al. (2016) Interactions of the Greater Ontong Java mantle plume component with the Osbourn Trough. Scientific reports, 6, 37561.

Cheng H, et al. (2016) Jurassic zircons from the Southwest Indian Ridge. Scientific reports, 6, 26260.

Hoernle K, et al. (2015) How and when plume zonation appeared during the 132?Myr evolution of the Tristan Hotspot. Nature communications, 6, 7799.