

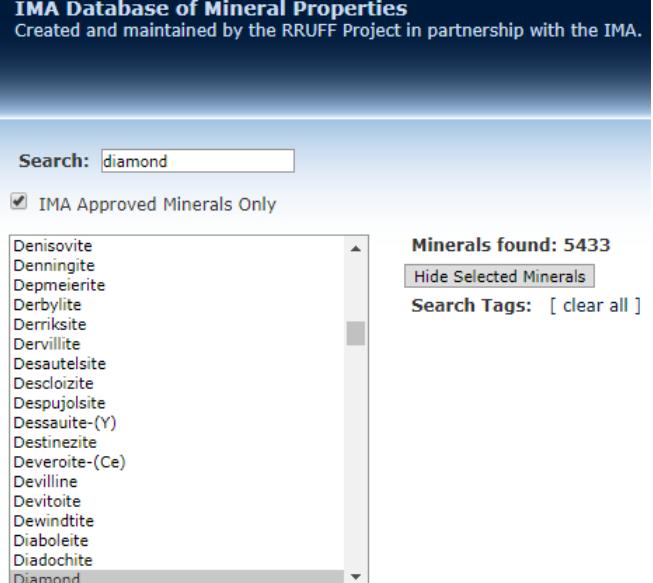
# Basic use of IMA Database of Mineral Properties

**IMA Database of Mineral Properties**  
Created and maintained by the RRUFF Project in partnership with the IMA.

Search:   IMA Approved Minerals Only

- Denisovite
- Denningite
- Depmeierite
- Derbylite
- Derricksite
- Dervilleite
- Desautelsite
- Descloizite
- Despujolsite
- Dessaute-(Y)
- Destinezite
- Deveroite-(Ce)
- Devilline
- Devitoite
- Dewindtite
- Diabolite
- Diadochite
- Diamond

Minerals found: 5433



# Search interface

<http://rruff.info/ima/>

## 1. Find all vanadium oxide minerals

The screenshot shows the RRUFF search interface. At the top left is a search bar and a checkbox for "IMA Approved Minerals Only". Below that is a list of minerals found: Karelianite, Oxyvanite, Paramontroseite, and Shcherbinaite. A red box highlights this list. At the bottom, there are search tags: "V,O" in the "ALL OF:" field, and "all" in the "NONE OF:" field. A red box highlights these fields. Below the tags is a "Chemistry Includes" section with a "Clear Chemistry" button and a "Exclude all non-selected" link. A red box highlights the "Exclude all non-selected" link. At the very bottom are lists of chemical elements.

## 2. Select "Cell parameters" from top right

The screenshot shows the RRUFF search interface with the "Cell Parameters" checkbox selected in the top right corner. A red box highlights this checkbox. Below it is a navigation bar with buttons for HOM, AMCSD, RRUFF, and REFERENCES. Red arrows point from the text "HOM -> PDF listing of the properties" to the HOM button and from "Click AMCSD for a CIF file of the selected mineral" to the AMCSD button.

## 3. Selecting a mineral from the search results on the left (Karelianite, Oxyvanite, ...) gives a list of structure information on the right.

	mineral name	chemistry	a	b	c	$\alpha$	$\beta$	$\gamma$	crystal system	space group
Autofill	Karelianite	V <sub>2</sub> O <sub>3</sub>	4.952	4.952	14.002	90	90	120	hexagonal	R̄3c
Autofill	Karelianite	V <sub>2</sub> O <sub>3</sub>	4.9521	4.9521	14.0024	90	90	120	hexagonal	R̄3c
Autofill	Karelianite	V <sub>2</sub> O <sub>3</sub>	4.9322	4.9322	13.991	90	90	120	hexagonal	R̄3c
Autofill	Karelianite	V <sub>2</sub> O <sub>3</sub>	4.9199	4.9199	13.9787	90	90	120	hexagonal	R̄3c
Autofill	Karelianite	V <sub>2</sub> O <sub>3</sub>	4.9018	4.9018	13.969	90	90	120	hexagonal	R̄3c
Autofill	Karelianite	V <sub>2</sub> O <sub>3</sub>	5.46	5.46	5.46	53.82	53.82	53.82	hexagonal	R̄3c

# Export options

On the left search panel, below the periodic table, you can export further information about the found minerals as follows:

- 1) Check the Export Options you want to have (the order of the items may be bit different from the figure below)
- 2) Click "View in table format"

**Export Options** Hide

Mineral Name (plain)  RRUFF Chemistry (plain)  Mineral Name (HTML)  
 RRUFF Chemistry (concise)  IMA Chemistry (plain)  IMA Chemistry (concise)  
 RRUFF Chemistry (HTML)  IMA Chemistry (HTML)  
 Chemical Elements  Structural Groupname  
 RRUFF IDs  Fleischers Groupname  
 IMA Number  IMA Status  
 Database ID  Status Notes

Country  Year First Published

**DOWNLOAD CSV** **VIEW IN TABLE FORMAT** **VIEW AS BULLETED LIST**



Mineral Name	RRUFF Chemistry (plain)	Country of Type Locality	Year First Published
Karelianite	$V^{3+}O_3$	Finland	1963
Oxyvanite	$V^{3+}V^{4+}O_5$	Russia	2008
Paramontroseite	$V^{4+}O_2$	USA	1955
Shcherbinaite	$V^{5+}O_5$	Russia	1971

# Cell parameter search

First click **Clear Chemistry** in the periodic table.

Then scroll down to Cell Parameter Search Controls

**Cell Parameter Search Controls**

Use Search Controls

Crystal system: **tetragonal** Lattice: **L**

Point group: **4/m2/m2/m** Space group: **P4/mmm** SG List

a:  b:  c:  1% Tol

a:  β:  γ:  10% Tol

volume:

Use Literature  Use RRUFF  Use AMCSD

**Search Entire List** **Reset**

**Useful if you need to find minerals with certain crystal symmetry and cell parameters**

mineral name	chemistry
Arsenohauchecornite	
Bortnikovite	$[(\text{Pd}_{3.822}\text{Pt}_{0.145})_{3.967}\text{Cu}_{2.998}(\text{Zn}_{0.857}\text{Fe}_{0.177})_{1.034}]$
Ferronickelplatinum	(Ni.5 Fe.5) Pt
Hauchecornite	Bi1.3 Sb.7 Ni9 S8
Linzhiiite	FeSi <sub>2</sub>
Linzhiiite	Fe Si2
Linzhiiite	Fe Si2
Linzhiiite	Fe Si2
Macedonite	Pb Ti O3
Muirite	Ba10 (Ca2 Mn Ti) Si8 O32 Cl8 H12
Muirite	Ba9.5 Ca3.5 Ti Si8 O36 Cl4 H12
Potarite	Hg Pd
Tellurohauchecornite	
Tetraferroplatinum	Fe Pt
Tetrataenite	Fe Ni
Tulameenite	(Cu.5 Fe.5) Pt