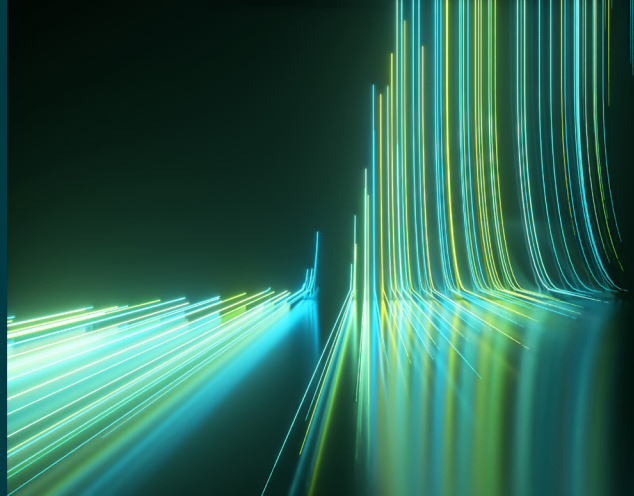


WILEY

Spectral Databases

From the leader in spectral data



Raman - American Museum of Natural History Minerals - Wiley

Spectra – 198

This database is only available as part of the KnowItAll Raman Spectral Library subscription.



Description

With over 120,000 mineral specimens and 5,000 gems, the American Museum of Natural History's (AMNH) mineral collection has been pivotal to geological research since its opening in 1869. This comprehensive Raman database has leveraged their extraordinary collection to provide high-quality reference data for mineral identification and analysis, which will provide invaluable support for applications in geology, chemistry, archaeology, and more. By digitizing the spectra obtained from highly curated mineral specimens, this database enables global access to a valuable scientific resource for researchers and industry professionals alike.



Applications

- Mineralogy
- Materials science
- Geochemistry
- Archaeology
- Forensic sciences
- Mining



Additional information

When it comes to spectral analysis, the more data you have the better. Wiley spectral databases provide much more information than simply the spectrum. Database records include the following valuable details when available:

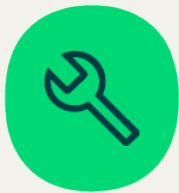
- Mineral name
- Formula
- Classification
- Crystal system
- DANA Classification
- Location
- Synonyms



Compound coverage

This database contains several mineral groups, including but not exclusive to:

- Olivinites
- Garnets
- Oxyspinels
- Apatites
- Calcites



Technique

Spectra were obtained using a WITec alpha300R confocal Raman microscope (457, 532, 633 nm) within the 150-4000 cm^{-1} region. A diffraction grating with 300 grooves/mm was used with the laser power filtered to 2.5-15 mW.



Compatibility

- Subscription includes KnowItAll ID Expert software for one-click basic spectral searches
- Optional: KnowItAll Analytical Edition (recommended for advanced analysis)
- Import spectra from most Raman instruments for direct comparison to reference spectra. For instrument compatibility, visit sciencesolutions.wiley.com/compatibility.



Trusted data from a trusted source

Wiley is the authoritative source for spectral data. Our renowned databases are processed according to rigorous protocols to ensure they are of the highest quality. Qualification procedures start at data acquisition and continue throughout the database development process. Any data acquired from trusted partners is thoroughly vetted before inclusion in our collections.