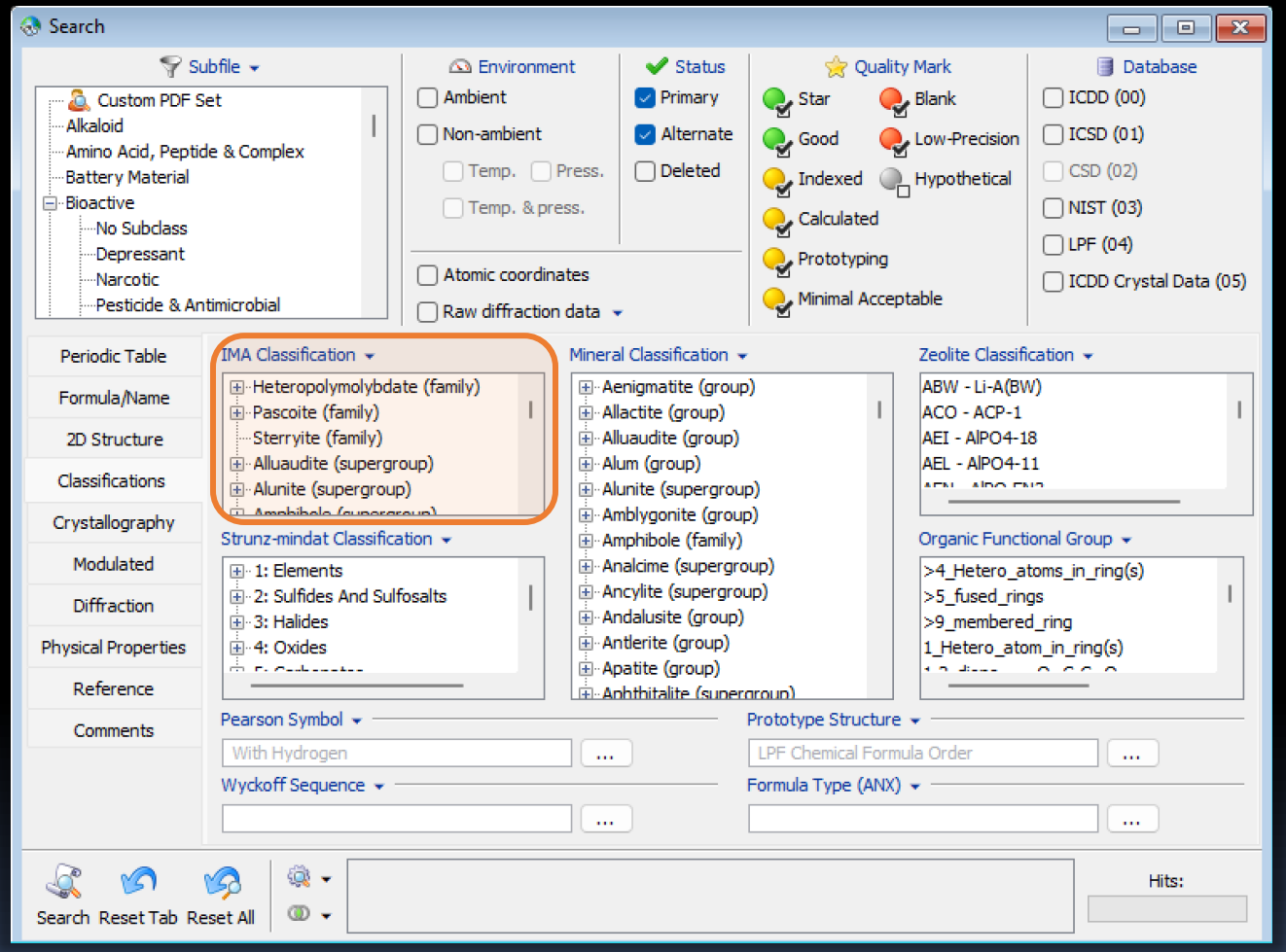
New Features for Release 2027

IMA Classification Search

Enables users to efficiently filter and explore entries by standardized mineral classification categories defined by the IMA (International Mineralogical Association)

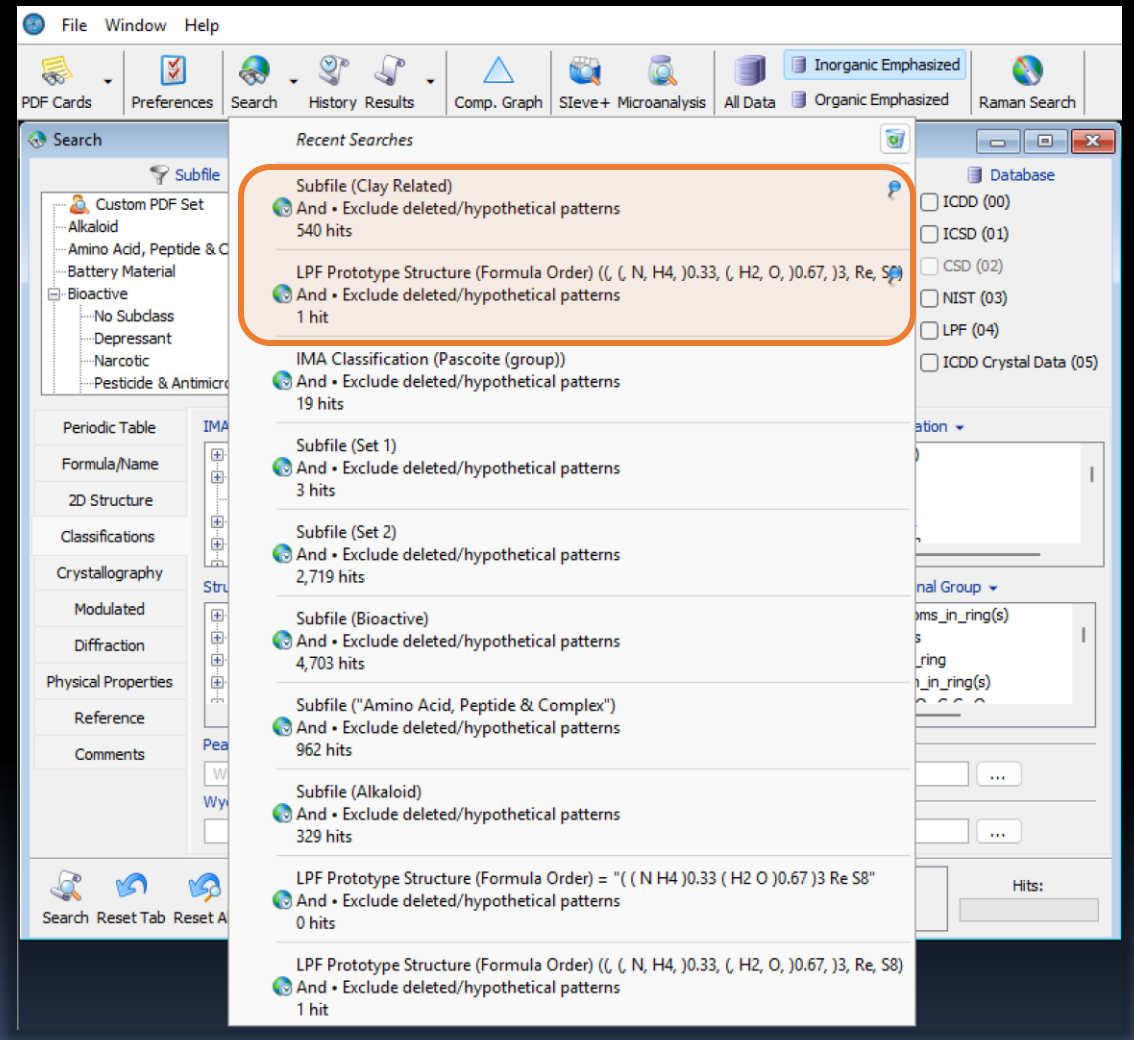


New Subfiles

- Rock-forming Minerals
  - Represent the most abundant and geologically significant minerals in the Earth's crust and constitute the principal components of igneous, sedimentary, and metamorphic rocks.
  - The rock-forming minerals subset enables users to work with a targeted dataset consisting of the primary mineral constituents of rocks, minimizing interference from accessory and minor minerals.
- Clay Related
  - Brindley & Brown
  - Interstratified
  - Oriented
  - Random
  - Related Phyllosilicates

Pin Searches to Top

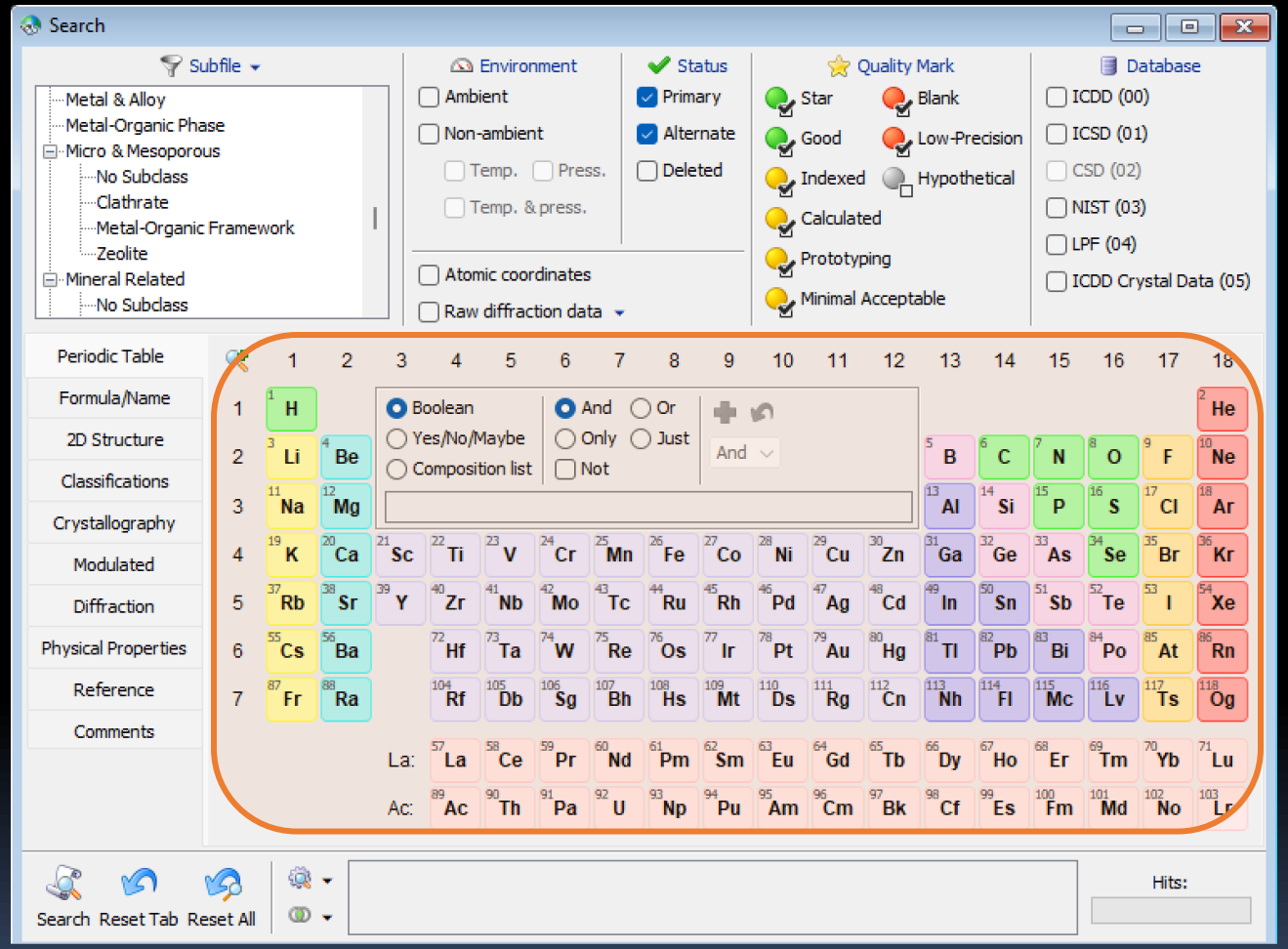
You can now pin a favorite search to the top of the recent searches drop-down menu for quick and easy access



Faster Periodic Table Searches

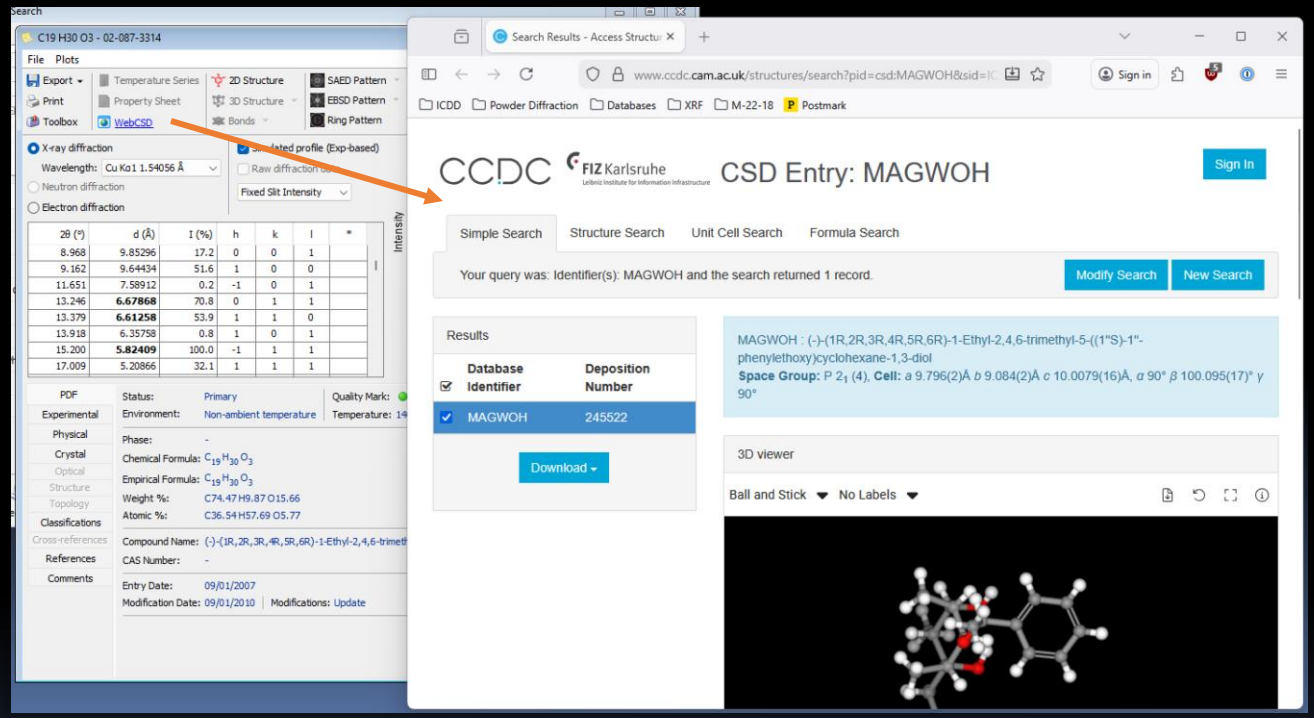
The performance of periodic table searches has been significantly improved through implementation of bitmask fields

	2026	2027
Contains H	6s	1s
Just 8 elements	5s	1s
Just 16 elements	17s	1s



Links to WebCSD

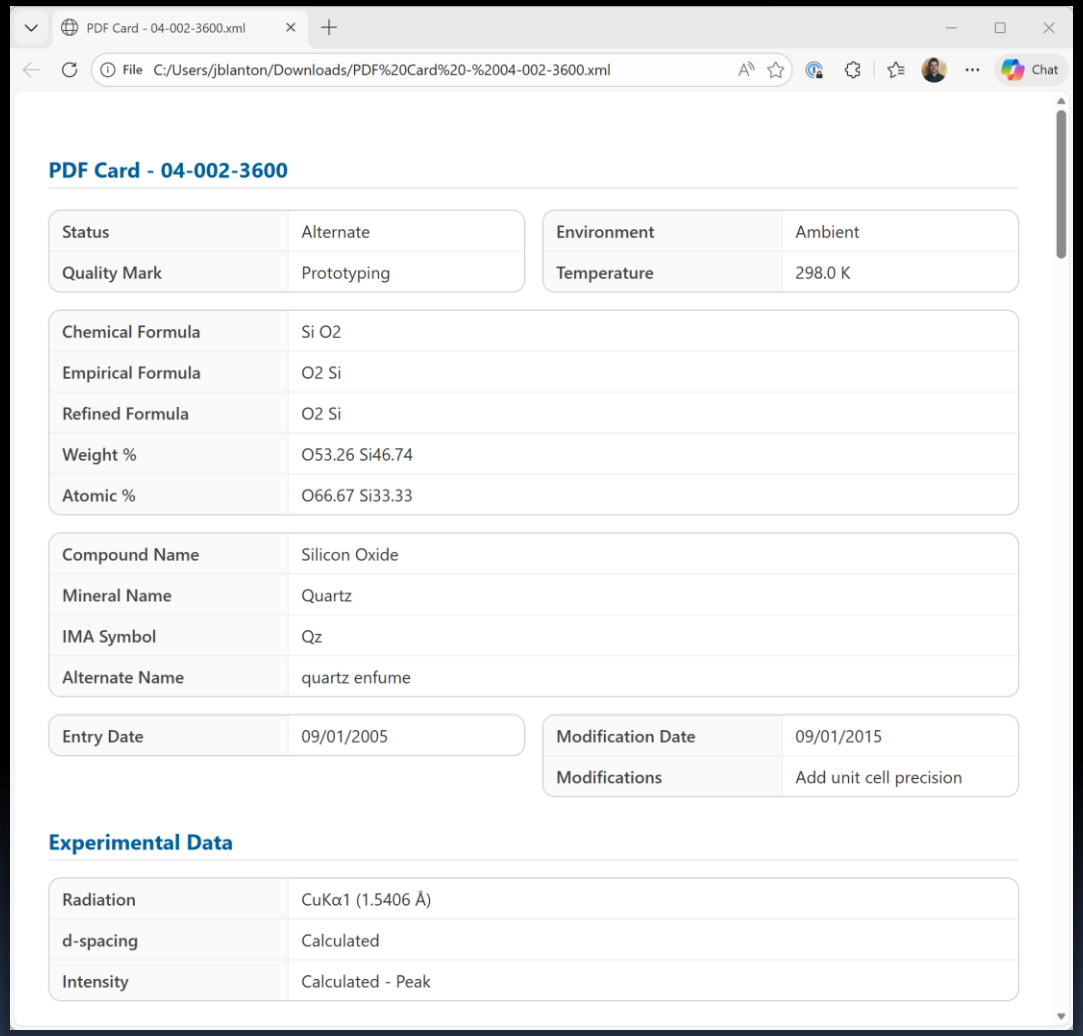
PDF entries from the CSD (02) database now have an active link to the WebCSD online platform



ICDD®
International Centre for Diffraction Data

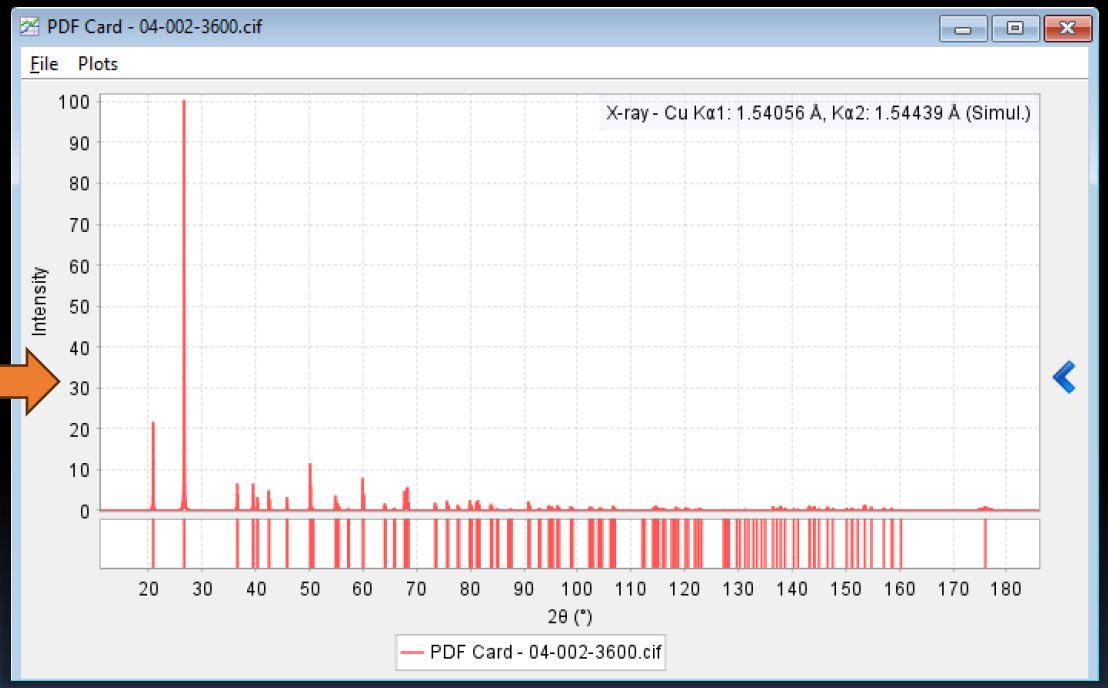
PDF Entry Export Enhancements

- PDF entries can now be exported directly as Adobe PDF files
- The XML export format has been redesigned to provide a cleaner structure and improved browser-based presentation



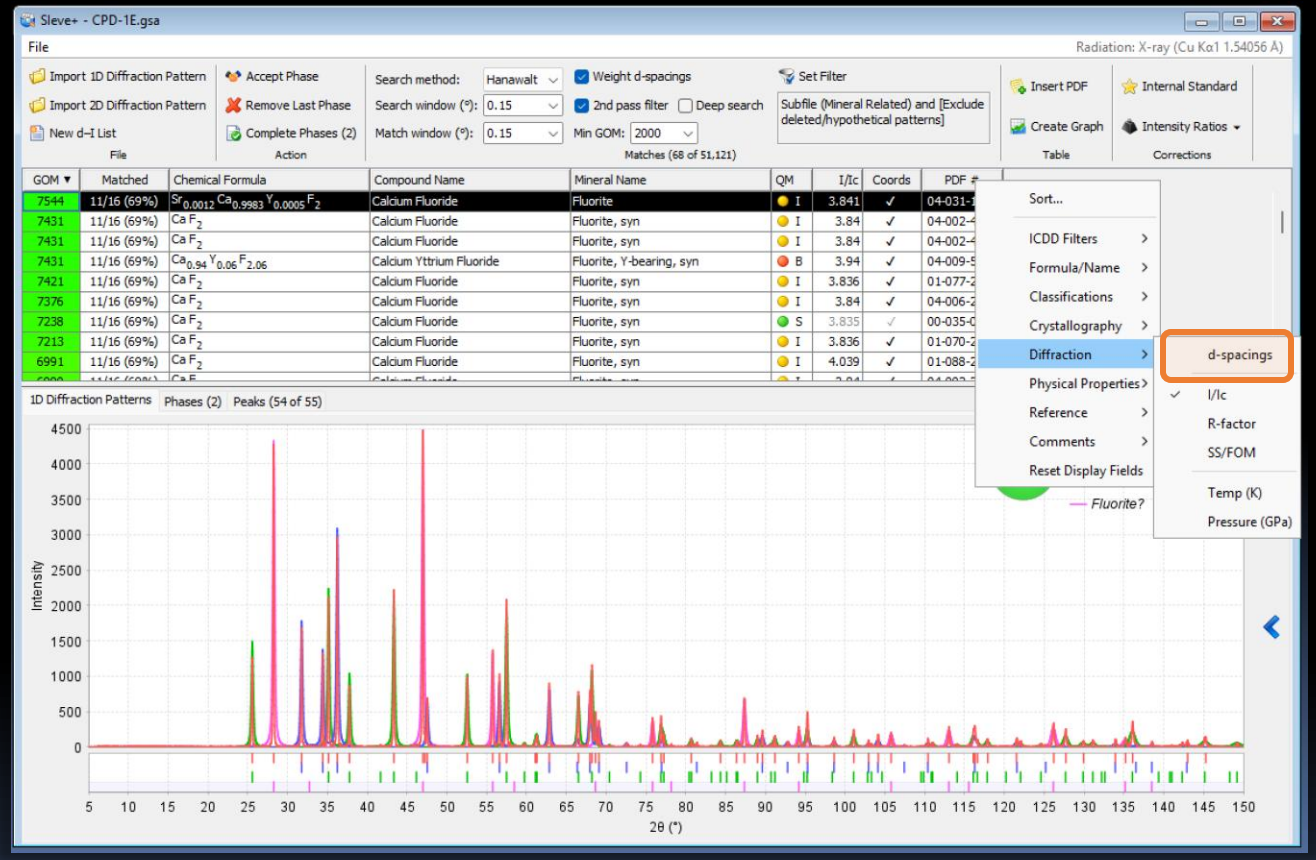
Simulate 1D Diffraction Patterns from CIF Files

```
data_04-002-3600
# Copyright 2026 International Centre for Diffraction Data. All rights reserved.

_audit_creation_date                    2026-02-19
_audit_creation_method                  'Generated by PDF-5+ 2027 null'

_chemical_name_systematic               'Silicon Oxide'
_chemical_name_mineral                  Quartz
_chemical_name_common                   'quartz enfume'
_chemical_formula_moiety                'Si O2'
_chemical_formula_sum                   'O2 Si'
_chemical_formula_weight                60.08

_cell_length_a                          4.9134
_cell_length_b                          4.9134
_cell_length_c                          5.4046
_cell_angle_alpha                       90
_cell_angle_beta                        90
_cell_angle_gamma                       120
_cell_formula_units_Z                   3
_cell_volume                            112.99
_symmetry_cell_setting                  hexagonal
_symmetry_space_group_name_H-M          P3121
_symmetry_Int_Tables_number             152
```



New Sleve+ Features

- Import NeXus (.nxs) diffraction patterns
  - HDF5 format
- Show/hide d-spacing columns in the Matches table
- Show alternate names in the graph phase list



New Raman Metadata

- **Objective** – Microscope objective used (e.g., 50×, NA value)
- **Orientation** – Orientation of the sample relative to the laser or polarization
- **Resolution** – Spectral resolution of the spectrometer (cm^{-1})
- **Exposure time** – Detector integration time per scan
- **Accumulations** – Number of scans summed/averaged to produce the final spectrum