

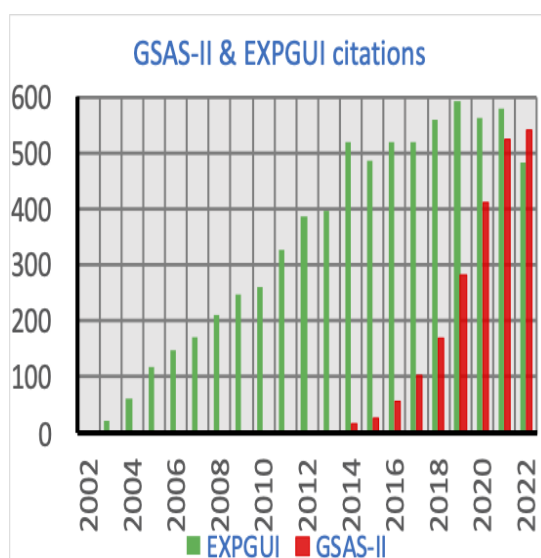
## GSAS-II in 2023

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GSAS-II is a comprehensive system for analysis of all types of crystallographic data, as well as for data visualization and powder diffraction data reduction. This year marks the tenth anniversary for the initial GSAS-II publication [Toby and Von Dreele (2013). *J. Appl. Cryst.* 46: 544-549.] It also notes the completion of the first year where GSAS-II use (noted by 542 citations in 2022) has overtaken that of our previous project GSAS/EXPGUI (with 483 citations in the same year). Like GSAS/EXPGUI, GSAS-II provides Rietveld analysis for all types of neutron and x-ray powder diffraction data, as well as combined powder/single-crystal fits, but also supports “pink beam” Rietveld with sub-picosecond datasets. GSAS-II is also of great utility for a number of less-common problems in single-crystal analysis, such as fitting twins, treatment of extinction, where multiple wavelengths are used and for combined powder/single-crystal fits. GSAS-II also offers many, many features that were not available in GSAS/EXPGUI. GSAS-II was initially made available long before much of the planned development work was completed, so it is not surprising that community uptake of the code has been gradual. However, for perhaps the past five years GSAS-II has provided all the capabilities of GSAS/EXPGUI, so it was not anticipated that until 2021 citations for both EXPGUI and GSAS-II would continue to grow. The presentation will summarize: the capabilities offered in GSAS-II; new features that have been added most recently; and some of what is being developed. Input from users is welcomed.



*Figure 1*