Stick-like and Plate-like Crystals



The shape of the crystal is often unpredicted.

During the growth of the relative material of our previous work [1], a stick-like crystals were obtained, in contrast to the plate-like crystal we obtained before. The stick-like crystal reminds me the magnetostriction measurements using the optical fiber developed by Ikeda-san [2], former research associate of Matsuda-group. There is no reason not to try.

Unexpected magnetic-field-induced transition is found, which may deserve future study.

[1] Hajime Ishikawa et al., Journal of the Physical Society of Japan, 90, 124704 (2021).
"GdV₆Sn₆: A Multi-carrier Metal with Non-magnetic 3d-electron Kagome Bands and 4f-electron Magnetism"
[2] Akihiko Ikeda et al., Review of Scientific Instruments, 89, 096103 (2018).
"Optical filter method for high-resolution magnetostriction measurement using fiber Bragg grating under millisecond-pulsed high magnetic fields at cryogenic temperatures"