

↑ Fig. 75. Section of box-like pseudomorph of **marshite** after distorted crystal of cuprite (1.7 cm) in the cerussite-limonite ore: (a) in conventional light, (b) in UV light. Private collection. Photo: Stanislav I. Pekov.



⇌ Fig. 76. Flattened blocky crystal of **marshite**, the largest iodide crystal found at the Rubtsovskoe deposit (1 × 2 × 3 cm). Specimen: *Russian Minerals Company*. Photo: Michael B. Leybov.

✧ Fig. 77. Crystals of **miersite** (up to 0.25 mm) on azurite (sample 30). Private collection. Photo: Igor V. Pekov and Anatoly V. Kasatkin.

⚡ Fig. 78. Regenerated crystals of **marshite** (sample 36). Width of image 5 mm. Private collection. Photo: Igor V. Pekov and Anatoly V. Kasatkin.

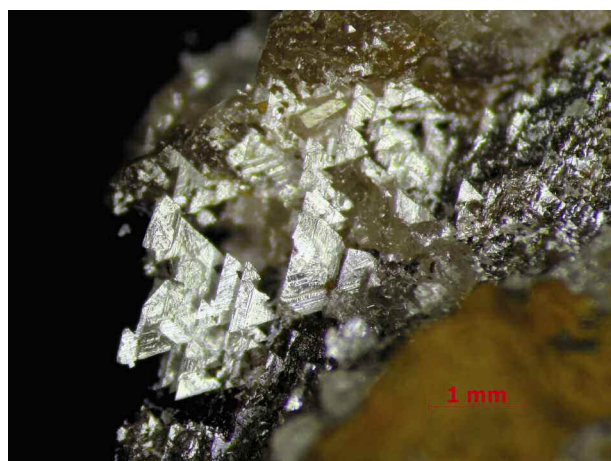
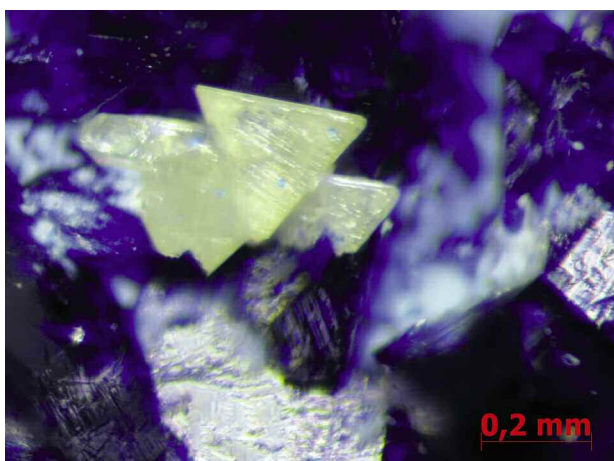
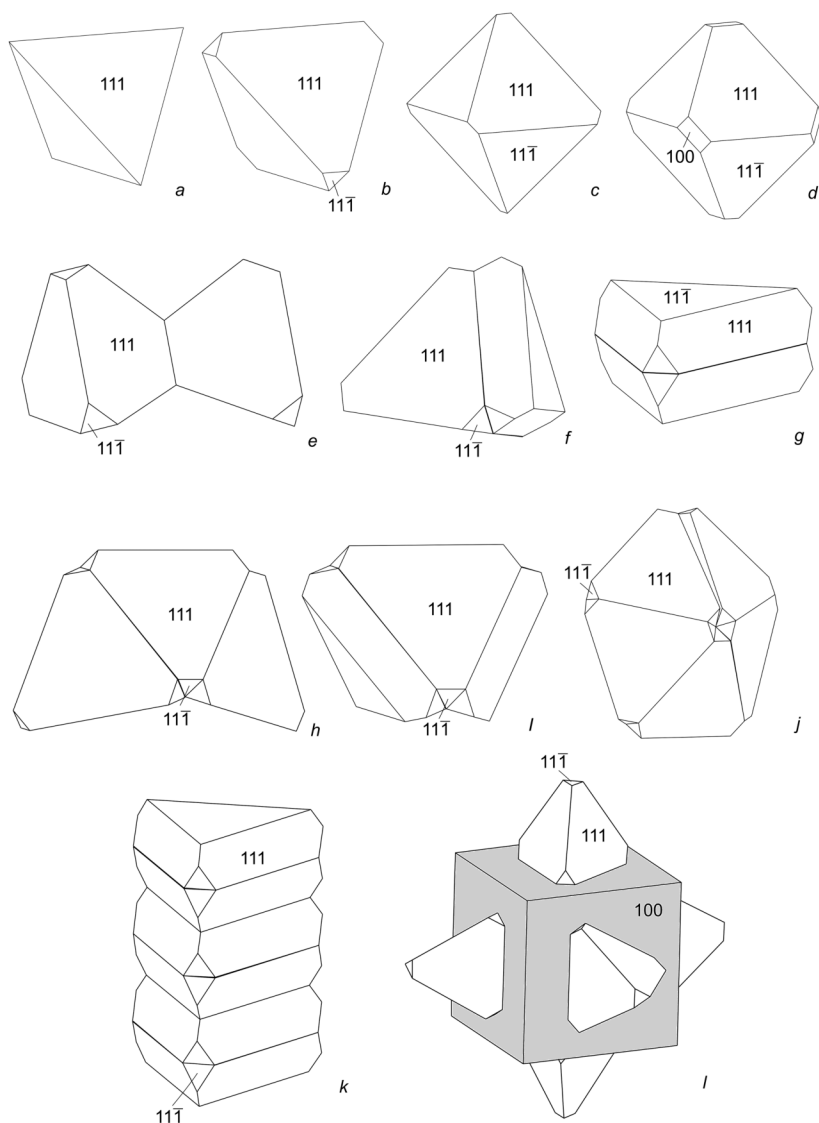


Fig. 79. Crystal morphology of **marshite** from the Rubtsovskoe deposit:
 (a-d) single crystals;
 (e-g) simple contact spinel-law twins on (111);
 (h-j) cyclic contact twins on (111);
 (k) polysynthetic contact twin on (111);
 (l) epitaxy of marshite on cubic crystal of native copper.
 Crystals of the a and d types are typical also for **miersite** from Rubtsovskoe.



The marshite-miersite series minerals are soft and in contrast to flexible, plastic iodargyrite, they are sufficiently brittle. They have perfect (110) cleavage.

Aggregates of marshite and miersite at the deposit are varied. These are crystals of differing perfection, twins and different type intergrowths, separate irregular grains and their aggregates, druses, crusts, veinlets, and nodules; in addition, marshite occurs also as pseudomorphs after other copper minerals.

Crystals of miersite and Ag-rich marshite do not exceed 1 mm in size, whereas crystals of Ag-free marshite commonly reach 0.5–1 cm. The largest individual of marshite (and generally, iodides from Rubtsovskoe) is a distorted blocky crystal of 1 x 2 x 3 cm in size (Fig. 76).