

Control of iron content in synthetic olivine single crystals

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Control of iron content in synthetic olivine single crystals is not an easy task. Here, however, we are able to control iron content in olivine single crystals as large as 3000 carats using CZ method with iridium crucible. In this study, iron contents of starting materials are 1, 3, 5 and 10 % in Fe/(Mg+Fe) ratio. We will show as-grown olivine single crystals, and report the results of EPMA, X-ray and optical analysis.

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