

## **Stöfflerite, (Ca,Na)(Si,Al)<sub>4</sub>O<sub>8</sub> in the hollandite structure: A new high-pressure polymorph of anorthite from martian meteorite NWA 856**

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### **ABSTRACT**

We present the crystal structure, composition, and occurrence of stöfflerite, the naturally occurring Ca-aluminosilicate with hollandite-type structure. Stöfflerite is a high-pressure polymorph of anorthite and an approved mineral. The type material was found in the shergottitic martian meteorite Northwest Africa 856. Type stöfflerite (Sto<sub>60</sub>Lin<sub>40</sub>) assumes space group *I4/m* with unit-cell dimensions  $a = 9.255(1)$  Å,  $c = 2.742(3)$  Å,  $V = 235.1(2)$  Å<sup>3</sup>, and  $Z = 2$ .

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