

Einführung Fe-C System

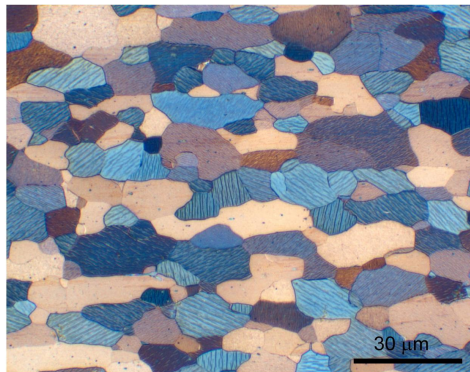
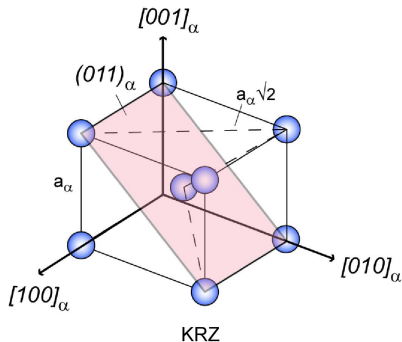
Dr. Dipl.-Ing. M.Sc. D.E.A. L. Samek, Prof. für Metallkunde

FH-Wels

Februar 2021

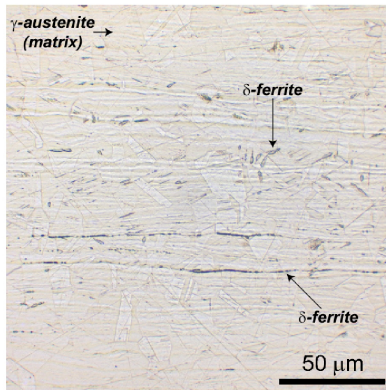
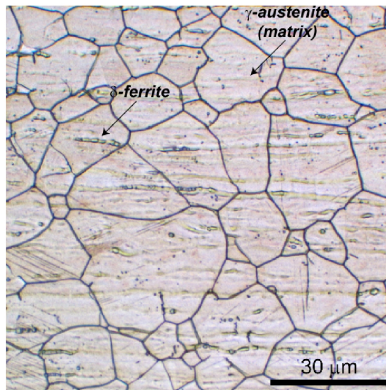
1. Gefügearten

- α -Ferrit, *KRZ*, Symbol: α
Sym. $Im-3m$ (229)



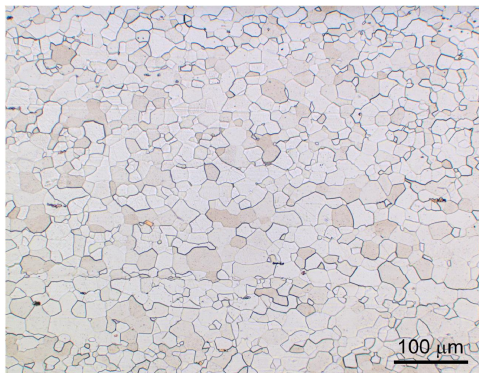
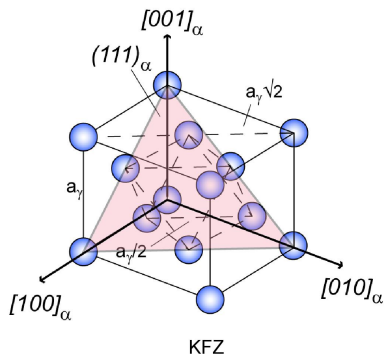
1. Gefügearten

- δ -Ferrit, KRZ, Symbol: δ
Sym. Im-3m (229)



1. Gefügearten

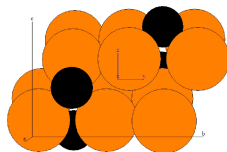
- Austenit, *KFZ*, Symbol: γ
Sym. Fm-3m (225)



1. Gefügearten

- Zementit

- Eisencarbid, Fe_3C (θ), kristalline, metastabile Verbindung (Struktur: $oP16$, $D0_{11}$, $Pnma$, 62)
- Parameter $a = 0,4514 \text{ nm}$, $b = 0,5080 \text{ nm}$, $c = 0,6734 \text{ nm}$
- Zementit Struktur (links) und Gefüge von kugeligen Zementit in ferritischer Matrix



Fe_3C - compound, along $\langle 100 \rangle$

