Lattice parameters:

450-2h: 3.61328

As-transformed:

**Structure 1**

Phase name Austenite

R-Bragg 9.945

Spacegroup Fm-3m

Scale 0.01204(43)

Cell Mass 223.387

Cell Volume (Å^3) 47.491(23)

Wt% - Rietveld 20.57(60)

Crystallite Size

Cry Size Lorentzian (nm) 26(42)

Strain

Strain G 1.25(27)

Crystal Linear Absorption Coeff. (1/cm) 2361.8(11)

Crystal Density (g/cm^3) 7.8108(37)

Preferred Orientation Spherical Harmonics

Order 8

k00 1

k41 -0.153(24)

k61 -0.011(34)

k81 -0.056(36)

PV\_MOD peak type: a + b Tan(Th) + c / Cos(Th)

FWHM a 0(16)

b 0.0(98)

c 0(18)

Lorentzian mix a 0(30)

b 0(20)

c 0(37)

Lattice parameters

a (Å) 3.62134(58)

Site Np x y z Atom Occ Beq

Fe1 4 0.00000 0.00000 0.00000 Fe 1 1

**Structure 2**

Phase name Ferrite

R-Bragg 3.374

Spacegroup Im-3m

Scale 0.1856(17)

Cell Mass 111.693

Cell Volume (Å^3) 23.8037(73)

Wt% - Rietveld 79.43(60)

Crystallite Size

Cry Size Lorentzian (nm) 0(2000000)

Strain

Strain G 1.095(21)

Crystal Linear Absorption Coeff. (1/cm) 2356.00(73)

Crystal Density (g/cm^3) 7.7917(24)

Preferred Orientation Spherical Harmonics

Order 8

k00 1

k41 0.216(45)

k61 -0.196(32)

k81 -0.384(34)

PV\_MOD peak type: a + b Tan(Th) + c / Cos(Th)

FWHM a 0.00(37)

b 0.53(26)

c 0.00(45)

Lorentzian mix a 0.9(35)

b 0.3(35)

c 0.1(35)

Lattice parameters

a (Å) 2.87661(30)

Site Np x y z Atom Occ Beq