Figure 8.1: XRD spectrum of zircon
Figure 8.2: XRD-spectrum of pure zirconia.
Appendix A

Spectrum 3: XRD spectrum of zircon alkali fused. One mole of zircon d ≈ 9.0 μm was fused with two moles of sodium hydroxide at 600°C for 336 hours with intermediate milling after every 24 hours.
Appendix A

Spectrum 4: XRD spectrum of zircon alkali fused. A mole of zircon $d \approx 9.0 \, \mu m$ was fused with two moles of sodium hydroxide at 650°C for 336 hours with intermediate milling after every 24 hours.
Appendix A

Spectrum 5: XRD spectrum of zircon alkali fused. A mole of zircon $d \approx 9.0\ \mu m$ was fused with two moles of sodium hydroxide at $700^\circ C$ for 336 hours with intermediate milling after every 24 hours.
Appendix A

![XRD spectrum of zircon alkali fused. A mole of zircon d ≈ 9.0 μm was fused with one mole of sodium hydroxide at 750°C for 336 hours with intermediate milling after every 24 hours.](image)

Spectrum 6: XRD spectrum of zircon alkali fused. A mole of zircon d ≈ 9.0 μm was fused with one mole of sodium hydroxide at 750°C for 336 hours with intermediate milling after every 24 hours.
Appendix A

Spectrum 7: XRD spectrum of zircon alkali fused. A mole of zircon $d \approx 9.0 \, \mu m$ was fused with two moles of sodium hydroxide at 750°C for 336 hours with intermediate milling after every 24 hours.
Appendix A

Spectrum 8: XRD spectrum of zircon alkali fused. A mole of zircon $d \approx 9.0 \, \mu m$ was fused with four moles of sodium hydroxide at 750$^\circ$C for 336 hours with intermediate milling after every 24 hours.
Appendix A

Spectrum 9: XRD spectrum of zircon alkali fused. A mole of zircon d ≈ 9.0 μm was fused with two moles of sodium hydroxide at 850°C for 336 hours with intermediate milling every 24 hours.
Appendix A

Spectrum 10: XRD spectrum of zircon alkali fused. A mole of zircon $d \approx 9.0 \mu m$ was fused with four moles of sodium hydroxide at $850^\circ C$ for 336 hours with intermediate milling every 24 hours.
Appendix A

Spectrum 11: XRD spectrum of zircon alkali fused. A mole of zircon $d \approx 9.0$ $\mu$m was fused with six moles of sodium hydroxide at $850^\circ$C for 336 hours with intermediate milling every 24 hours [16].
Appendix A

Spectrum 12: XRD spectrum of sodium carbonate.
Appendix A

Spectrum 13: XRD spectrum of zircon alkali fused. A mole of zircon d ≈ 9.0 μm was fused with two moles of sodium hydroxide at 850°C for one hour without intermediate milling.
Appendix A

Spectrum 14: XRD spectrum of zircon alkali fused. A mole of zircon $d \approx 9.0$ µm was fused with two moles of sodium hydroxide at 850°C for one hour with intermediate milling.
Appendix A

Spectrum 15: XRD spectrum of zircon alkali fused. A mole of zircon d ≈ 9.0 μm was fused with one mole of sodium hydroxide at 850°C for 48 hours with intermediate milling.
Appendix A

Spectrum 16: XRD spectrum of zircon alkali fused. A mole of zircon $d = 9.0$ μm was fused with two moles of sodium hydroxide at 850°C for two hours with intermediate milling at one hour.
Appendix A

Spectrum 17: XRD spectrum of zircon alkali fused. A mole of zircon d ≈ 9.0 μm was fused with two moles of sodium hydroxide at 850°C for four hours with intermediate milling at two hours.