

## Supplementary Information

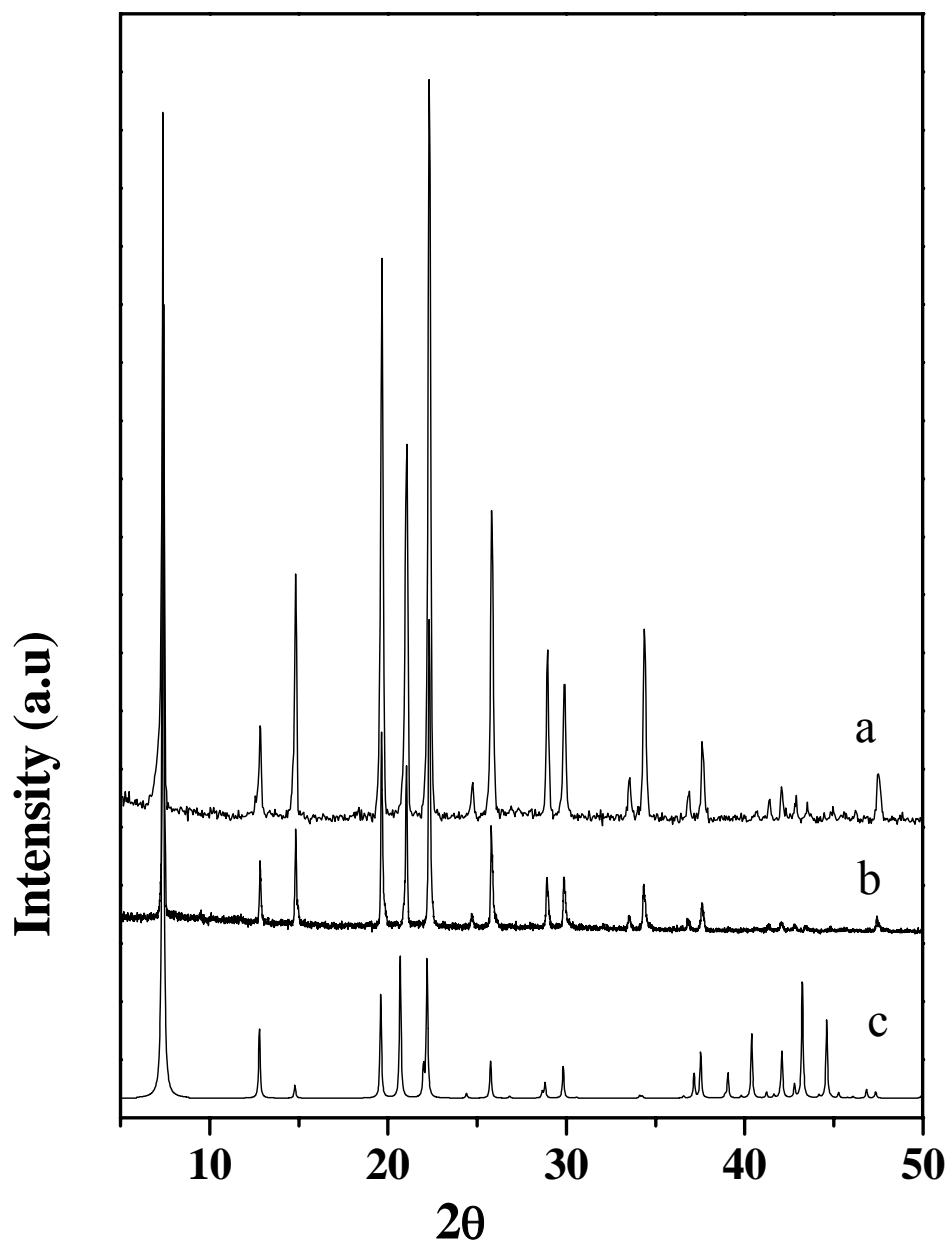


Fig. S1. Powder X-ray diffraction pattern (Cu K $\alpha$ ) for AlPO-5: (a) as prepared, (b) calcined and (c) simulated [Ref. 27].

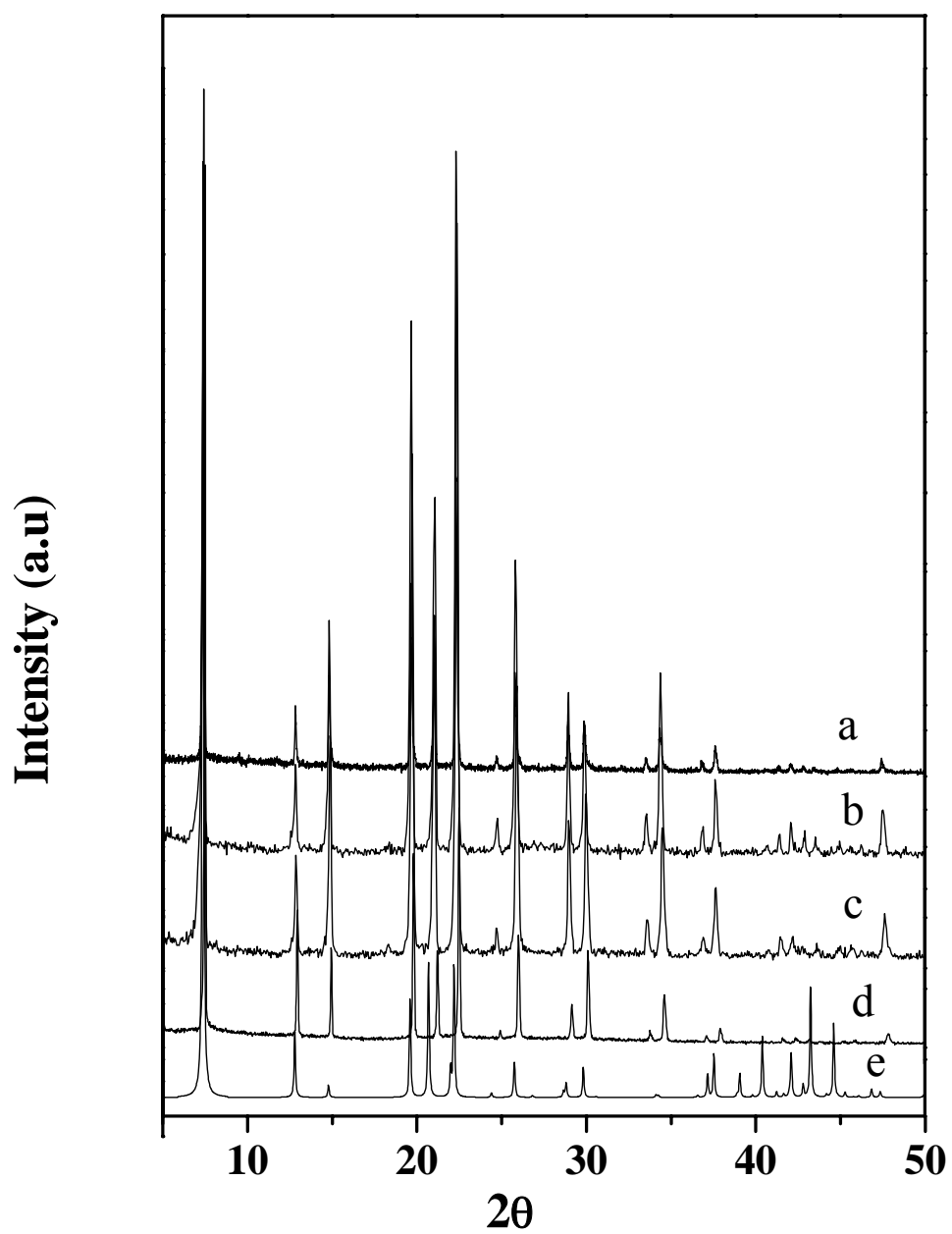


Fig. S2. Powder X-ray diffraction pattern (Cu  $K\alpha$ ) for MeAlPO-5: (a) as prepared ZnAlPO-5, (b) calcined ZnAlPO-5, (c) as prepared CoAlPO-5, (d) calcined CoAlPO-5 and (e) simulated MeAlPO-5 [Ref. 27].

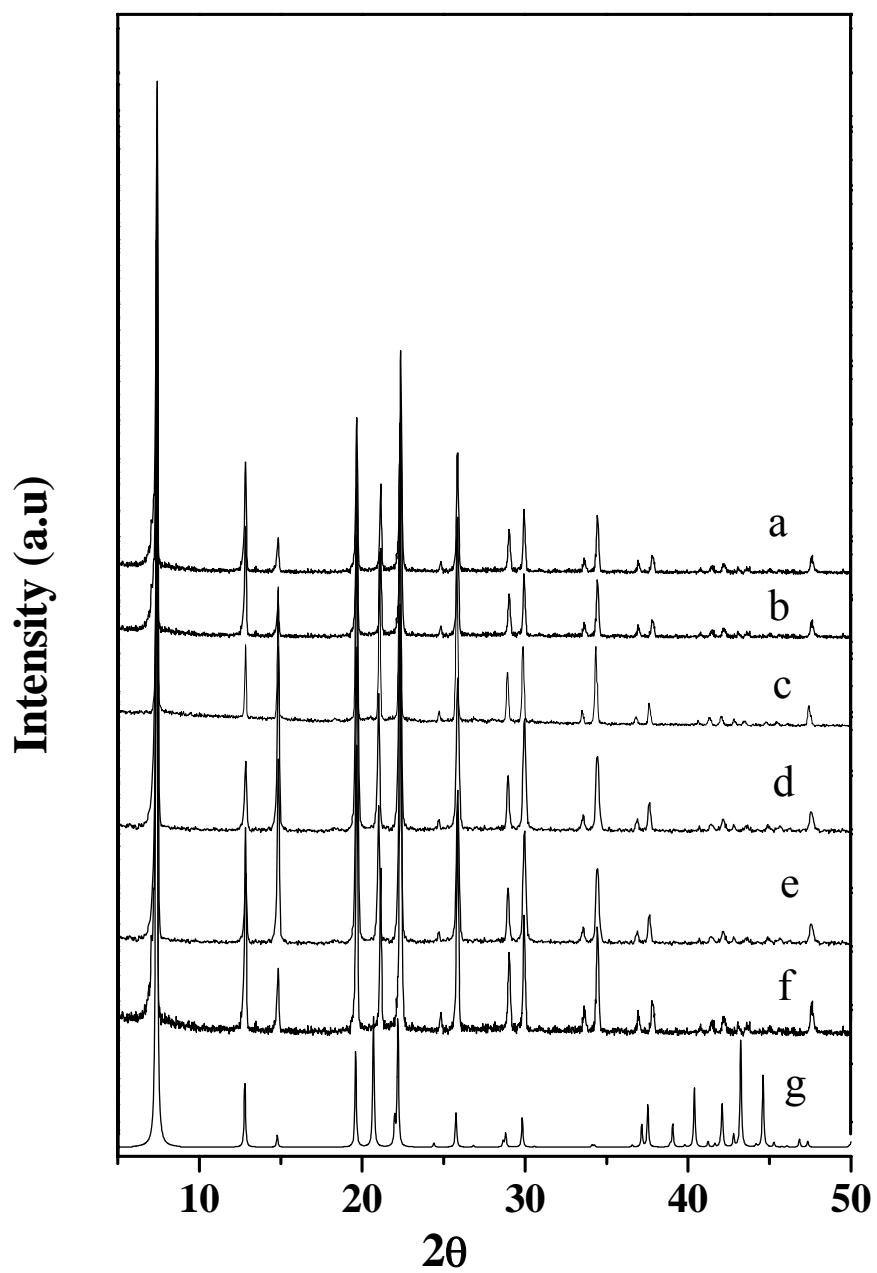


Fig. S3. Powder X-ray diffraction pattern (Cu K $\alpha$ ) for MgAlPO-5: (a) as prepared 4% doped MgAlPO-5, (b) calcined 4% doped MgAlPO-5, (c) as prepared 8% doped MgAlPO-5, (d) calcined 8% doped MgAlPO-5, (e) as prepared 12% doped MgAlPO-5, (f) calcined 12% doped MgAlPO-5 and (g) simulated [Ref. 27] MgAlPO-5.

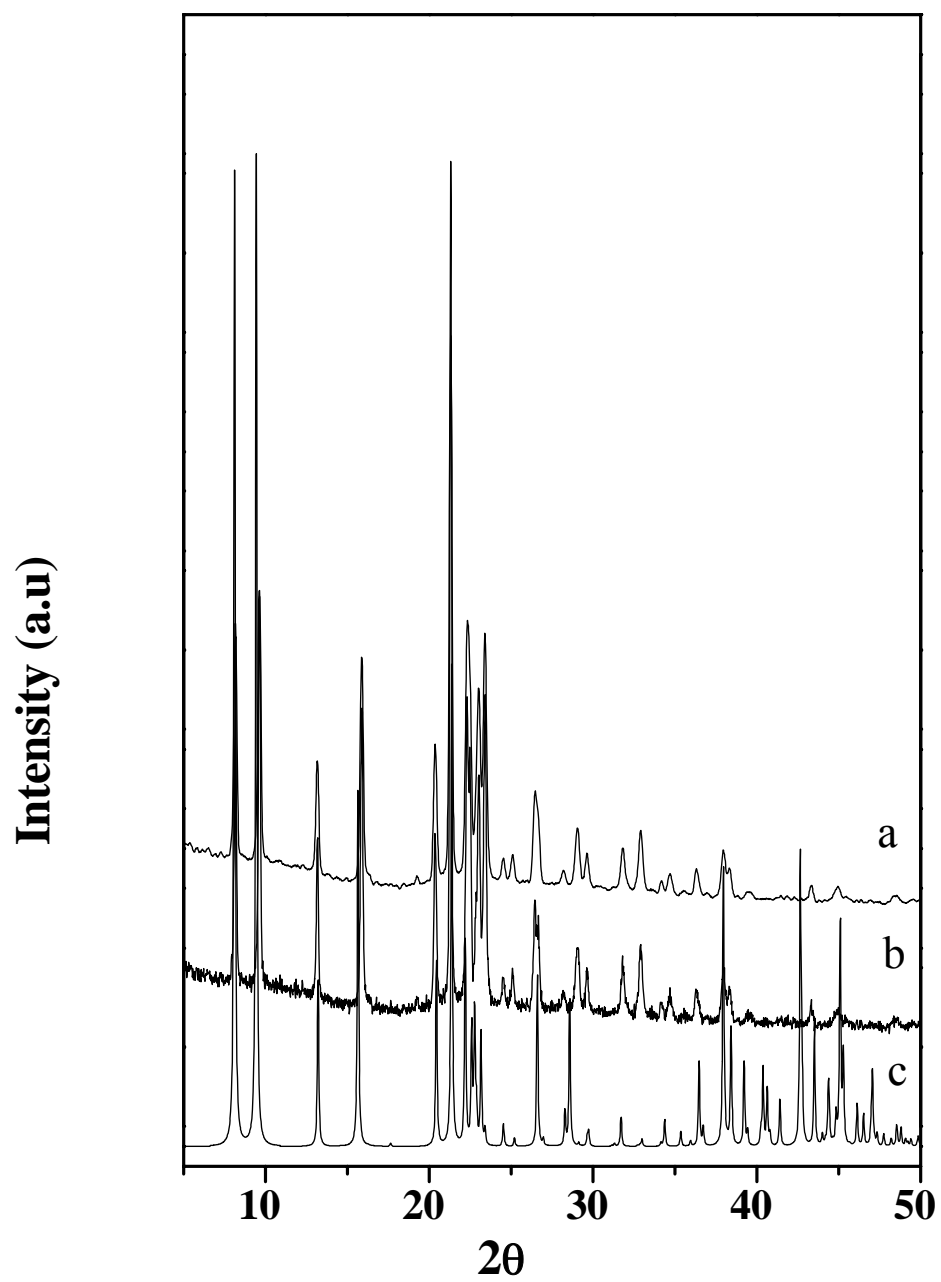


Fig. S4. Powder X-ray diffraction pattern (Cu  $K\alpha$ ) for MgAlPO-11: (a) as prepared, (b) calcined and (c) simulated [Ref. 27]

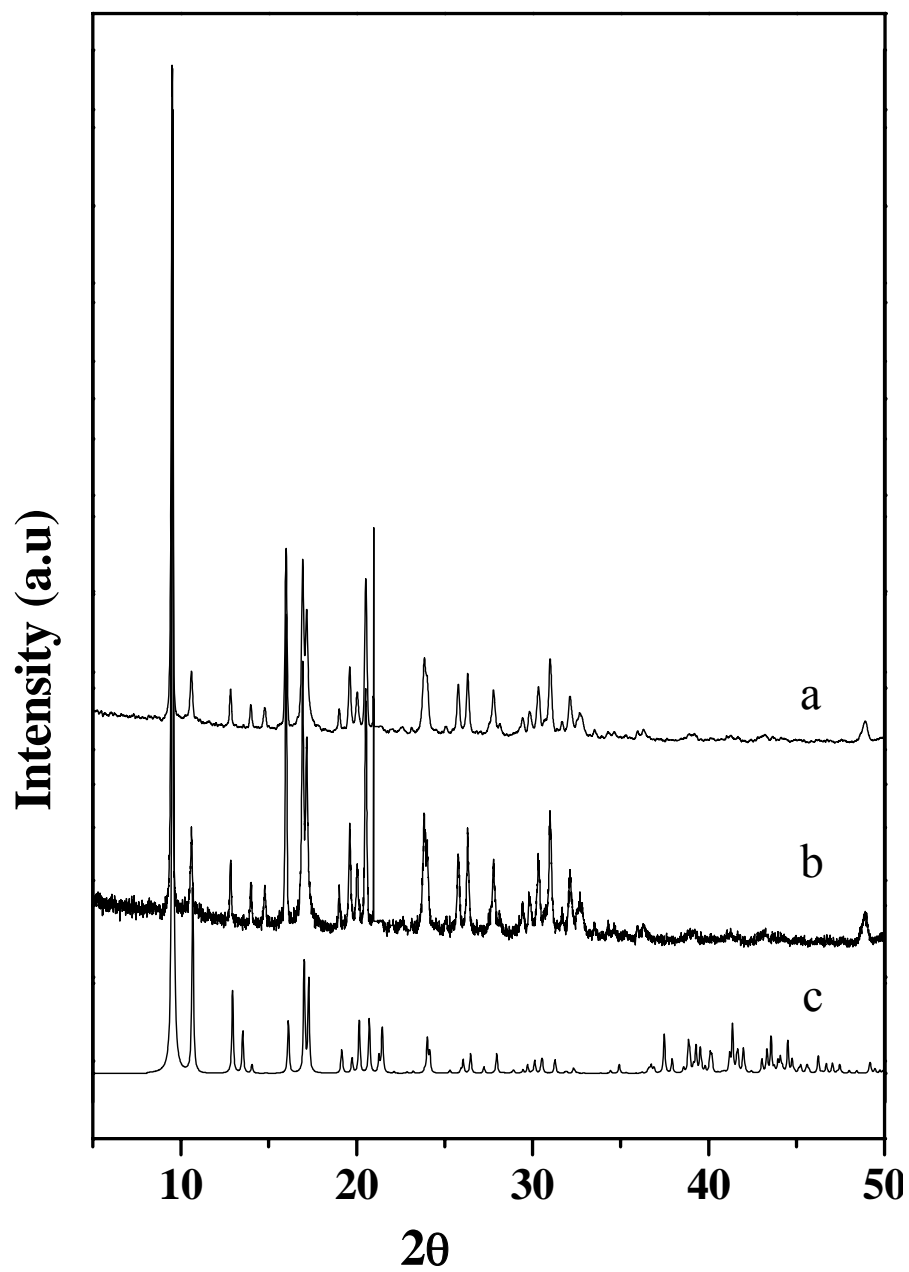


Fig. S5. Powder X-ray diffraction pattern (Cu K $\alpha$ ) for MgAlPO-18: (a) as prepared, (b) calcined and (c) simulated [Ref. 27]

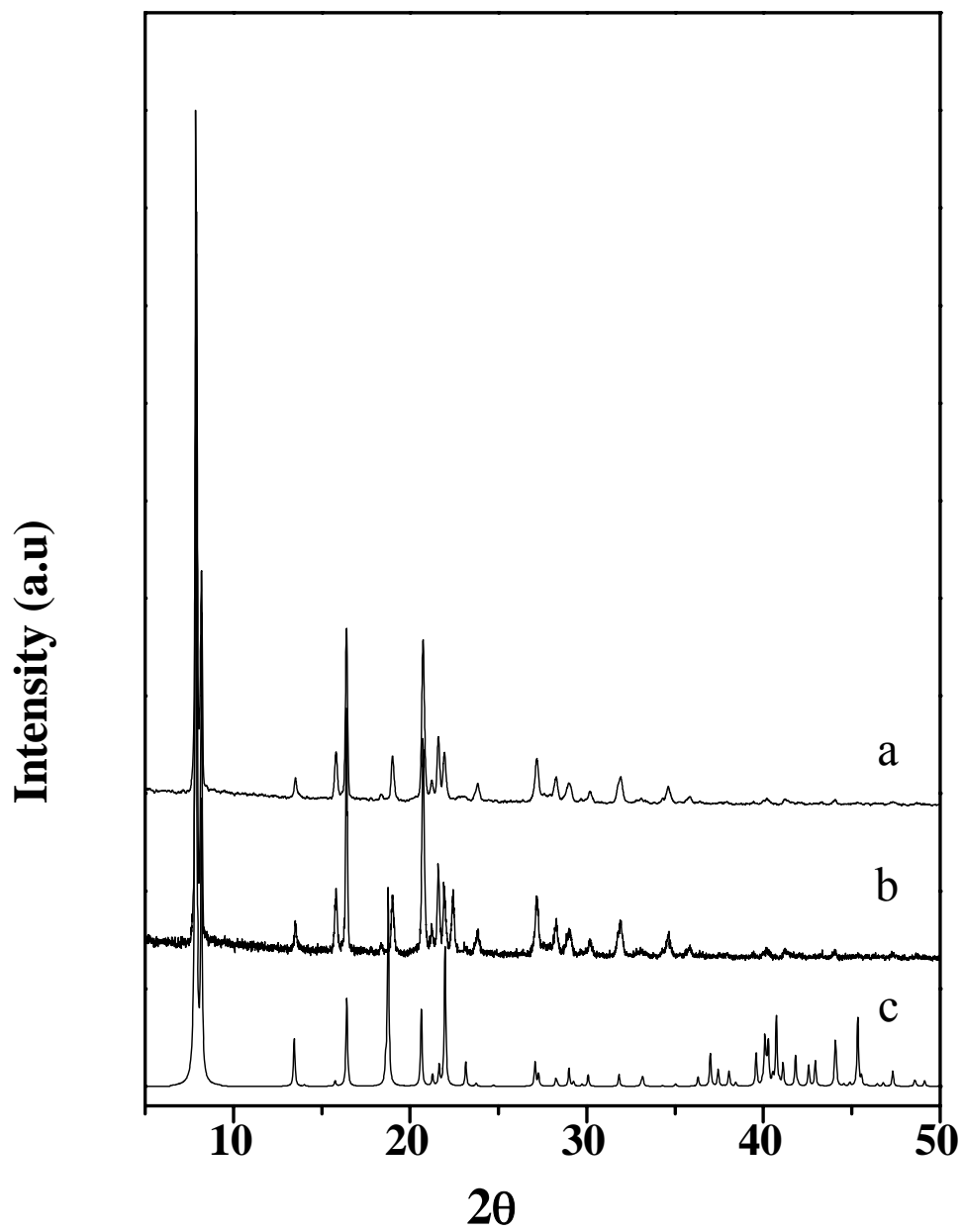


Fig. S6. Powder X-ray diffraction pattern (Cu K $\alpha$ ) for MgAlPO-36: (a) as prepared, (b) calcined and (c) simulated [Ref. 27]

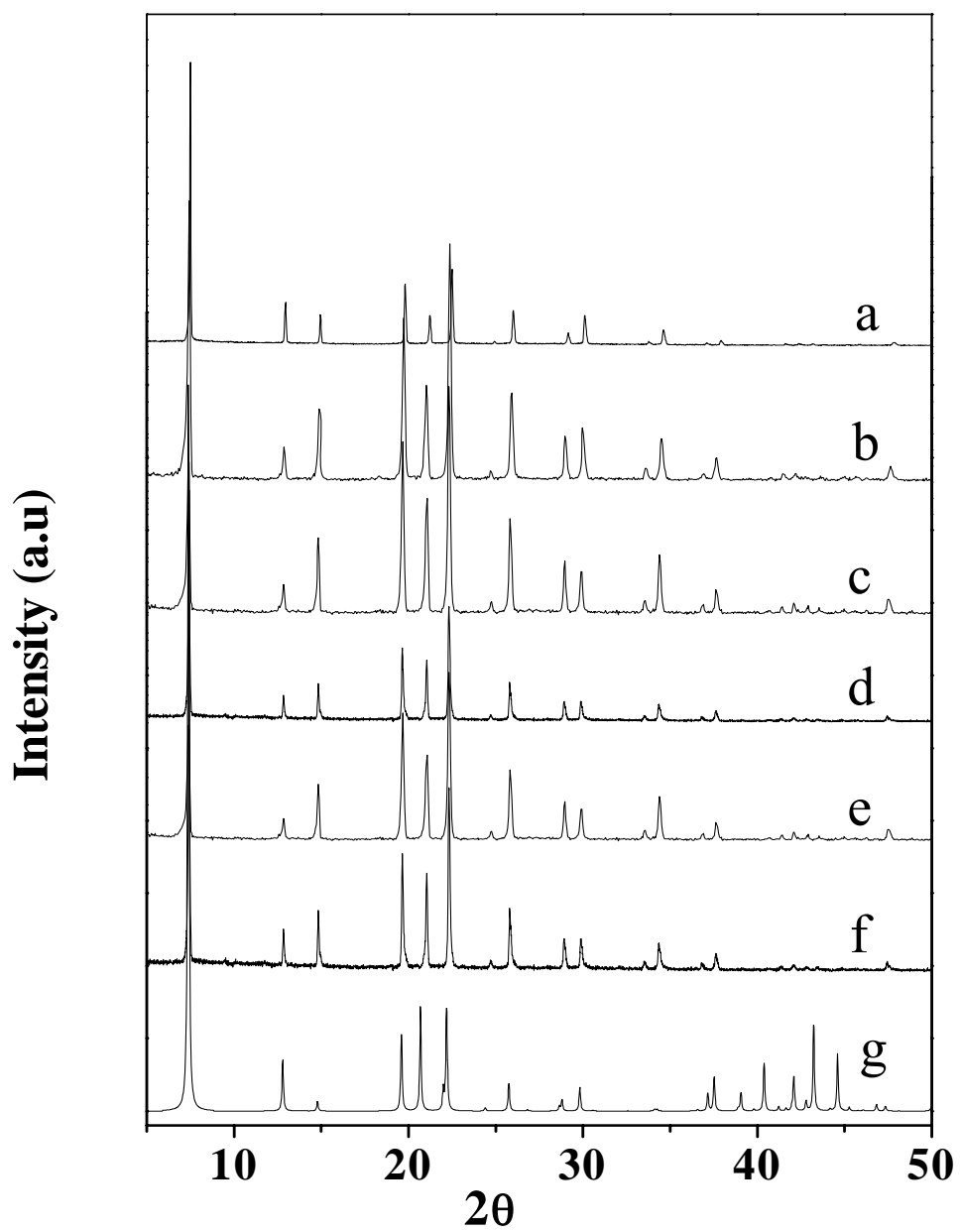


Fig. S7. Powder X-ray diffraction pattern (Cu K $\alpha$ ) for TiAlPO-5: (a) as prepared 4% doped TiAlPO-5, (b) calcined 4% doped TiAlPO-5, (c) as prepared 8% doped TiAlPO-5, (d) calcined 8% doped TiAlPO-5, (e) as prepared 12% doped TiAlPO-5, (f) calcined 12% doped TiAlPO-5 and (g) simulated [Ref. 27] TiAlPO-5.

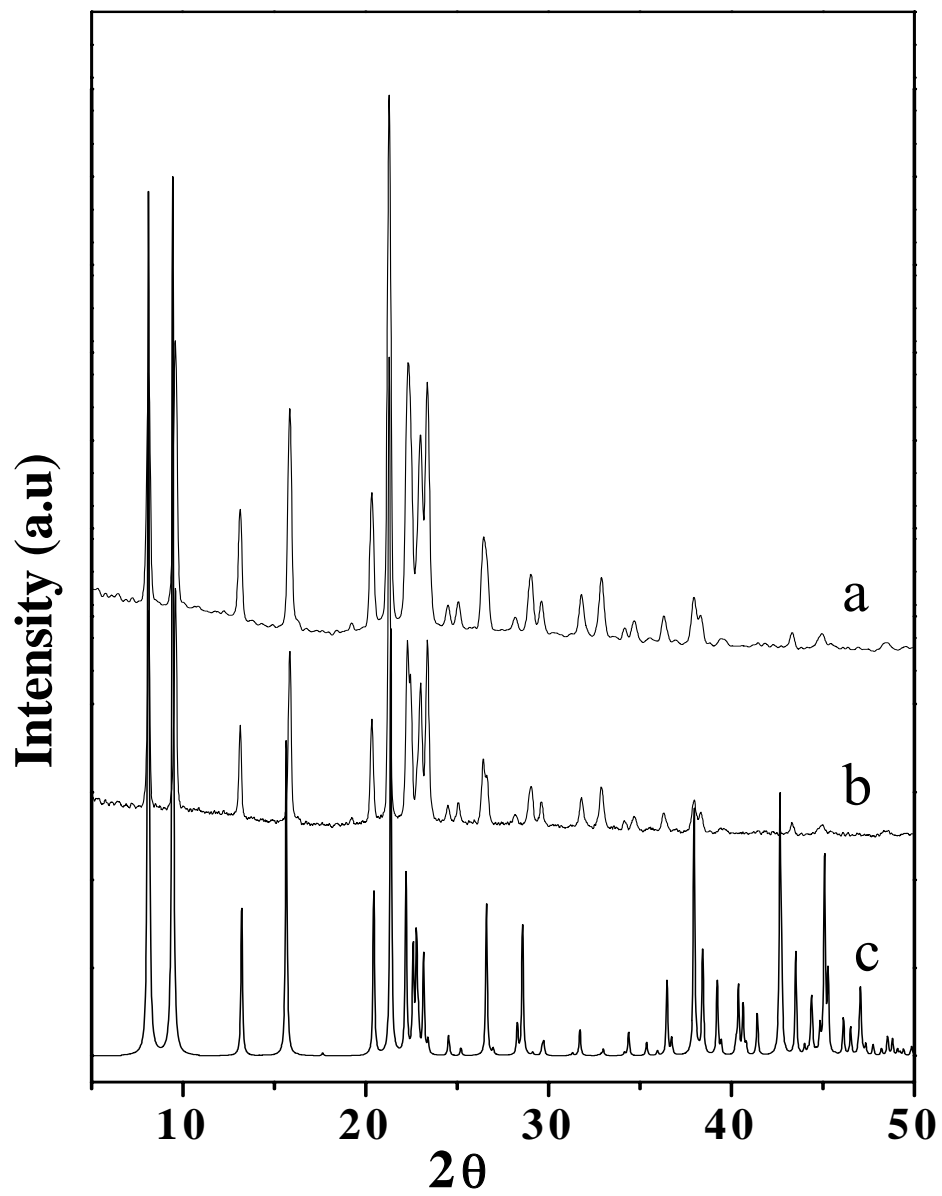


Fig. S8. Powder X-ray diffraction pattern (Cu  $K\alpha$ ) for TiAlPO-11: (a) as prepared, (b) calcined and (c) simulated [Ref. 27]



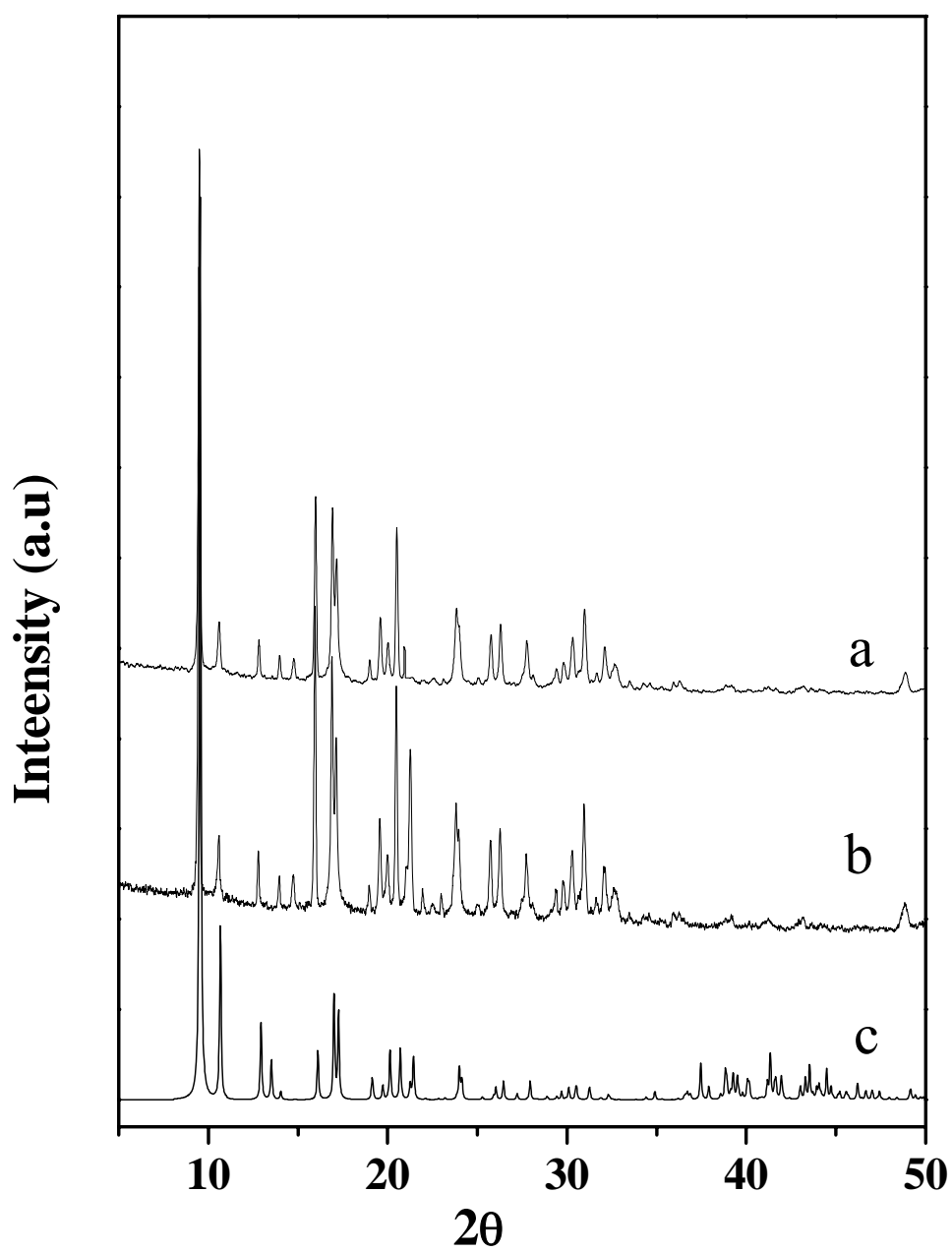


Fig. S9. Powder X-ray diffraction pattern (Cu  $K\alpha$ ) for TiAlPO-18: (a) as prepared, (b) calcined and (c) simulated [Ref. 27]

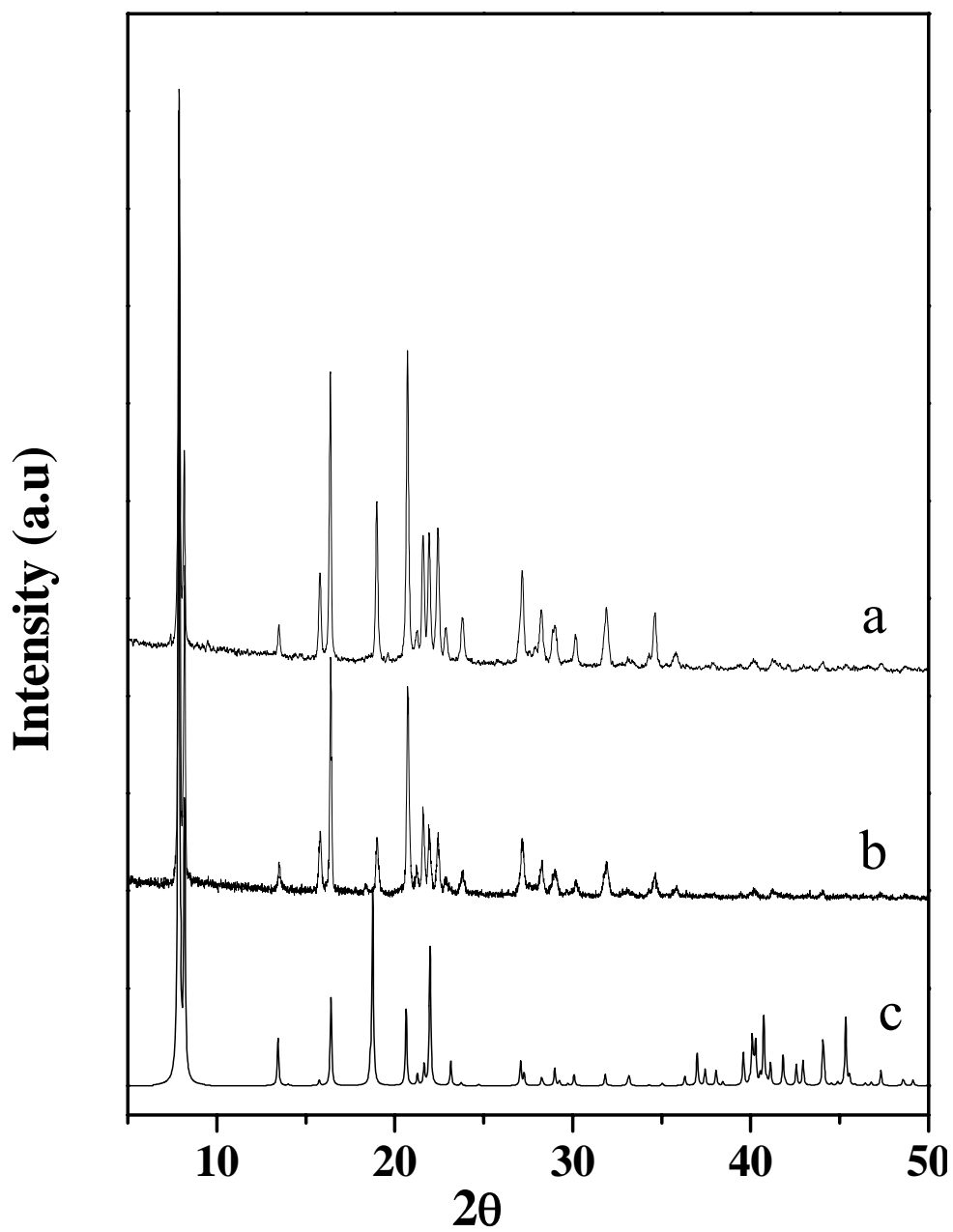


Fig. S10. Powder X-ray diffraction pattern (Cu  $K\alpha$ ) for TiAlPO-36: (a) as prepared, (b) calcined and (c) simulated [Ref. 27]