

Electronic Supplementary Information

Room temperature ferromagnetism in new diluted magnetic semiconductor AlN:Mg Nanowires

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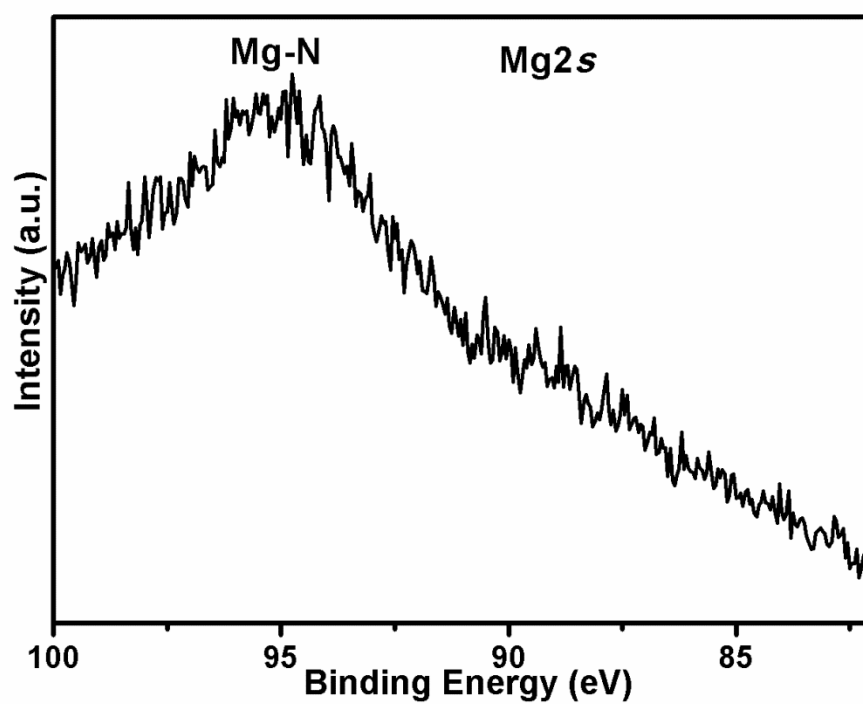


Fig. S1 XPS spectra of AlN:Mg nanowires, showing the Mg 2s core level peak.

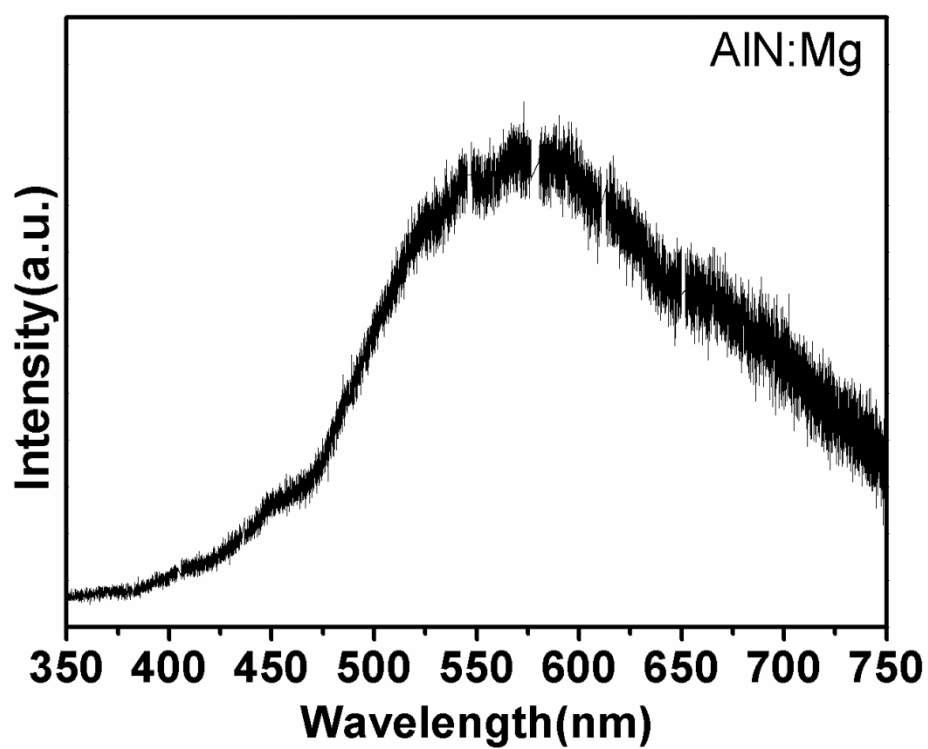


Fig. S2 Photoluminescence of AlN:Mg nanowires.

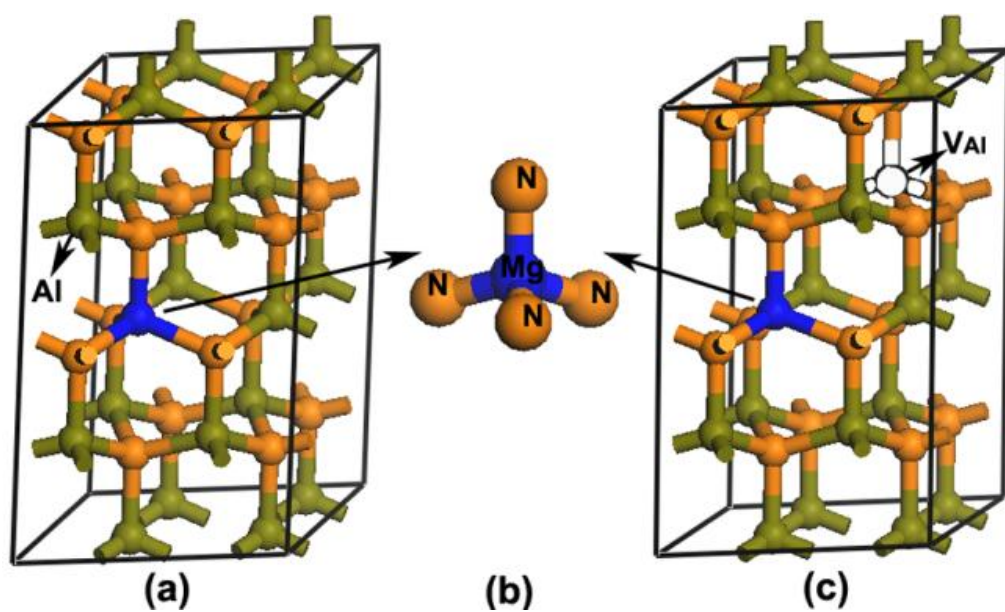


Fig. S3 The crystal structure of AlN:Mg: (a) and (b) the absence and the presence of Al vacancies, respectively, and (c) MgN₄ tetrahedra.