

CONTENT

1. Introduction and motivation of the project

1.1 Half –metal

1.2 Hysteresis losses

2. Important of ferromagnetic CrO₂

2.1 Properties of ferromagnetic CrO₂

3: Different instrument used in the experiment

3.1 X-Ray Diffraction (XRD)

3.2 UV-visible spectroscopy

3.3 Scanning Electron Microscopy (SEM)

3.4 Fourier Transform Infrared Spectroscopy (FTIR)

4: Synthesis procedure

4.1 Synthesis of CrO₂ nanoparticles

5: Results and Discussion

5.1 X-Ray diffraction (XRD) analysis

5.2 Williamson-Hall (W-H) method

5.3 UV-visible spectroscopy

5.4 Scanning Electron Microscopy (SEM)

5.5 Fourier Transform Infrared spectroscopy (FTIR) analysis

6. Future Plan

7. Conclusion

8. References