

Title of Article: Analysis Of The High Temperature Superconducting Magnetic Penetration Depth Using The Bloch NMR Equations

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Abstract: The Bloch-NMR diagnostic tool has shown good efficiency not only analyzing biological and physiological properties of living tissues. The Bloch-NMR has been used in this research work to analyze the penetration depths of superconducting material and thin film. From the two well known London penetration depths, various relationships between the penetration depth and other superconducting quantities were derived (which are theoretically and experimentally valid). The major objective is to explore new ways penetration depths can be measured. A new superconducting quantity (penetration velocity) was discussed - whose relationship with other superconducting quantities were worked out for further research