OSP-08

Hair Growth & Density Detection Comb

Immanuel Ds*, Premkumar E, Gokulraj R, Princy Sheeba S, T Sudhakar

Department of Biomedical Engineering, School of Bio and Chemical Engineering, Sathyabama Institute of Science and Technology, Chennai, India

The research focuses on the development of an intelligent hair comb integrated with high-resolution imaging for real-time monitoring of scalp and hair health. The device is designed to measure critical parameters such as scalp temperature, moisture levels, pH balance, and hair density. These data are processed using advanced artificial intelligence algorithms trained on extensive datasets to identify early signs of conditions like dandruff and hair thinning. The proposed system offers a non-invasive and user-friendly solution, enabling individuals to monitor their hair health proactively and receive personalized care recommendations. By supporting early detection and informed decision-making, this research aims to contribute to more effective and accessible hair care management strategies.

Keywords: AI in healthcare, Hair density analysis, Intelligent hair comb, Non-invasive diagnostics, Scalp health monitoring

***Correspondance:** Immanuel Ds
immanuelktm@gmail.com