Abstract

One of the most important pieces of evidence in forensics is physical evidence of fingerprints. In forensics, they are actually used for the person identification. They are different from person to person and don't alter even during his whole life. Their distinctive ridge shapes are what give each person's fingerprint its individuality and specificity. When someone touches something with their bare hands, fluids from their bodies are transmitted to that substrate, aiding in the improvement of prints. Different powders are used to make the fingermarks noticeable because they are not visible to the naked eye. In this study, zinc-oxide nanoparticles were created chemically and then examined using a scanning electron microscope, UV-Vis spectrometer, and particle size analyzer. After drying, the created zinc-oxide nanoparticles were employed to create latent fingermarks. A variety of non-porous surfaces were used to create latent print imprints. The prints made with ZnO nano-powder produced good first- and second-detail outcomes. The fingermarks were shot in natural light after being produced with ZnO nano-powder.