AUTO-AI

Physical Evidence Identification Robot

OR-GAI8000



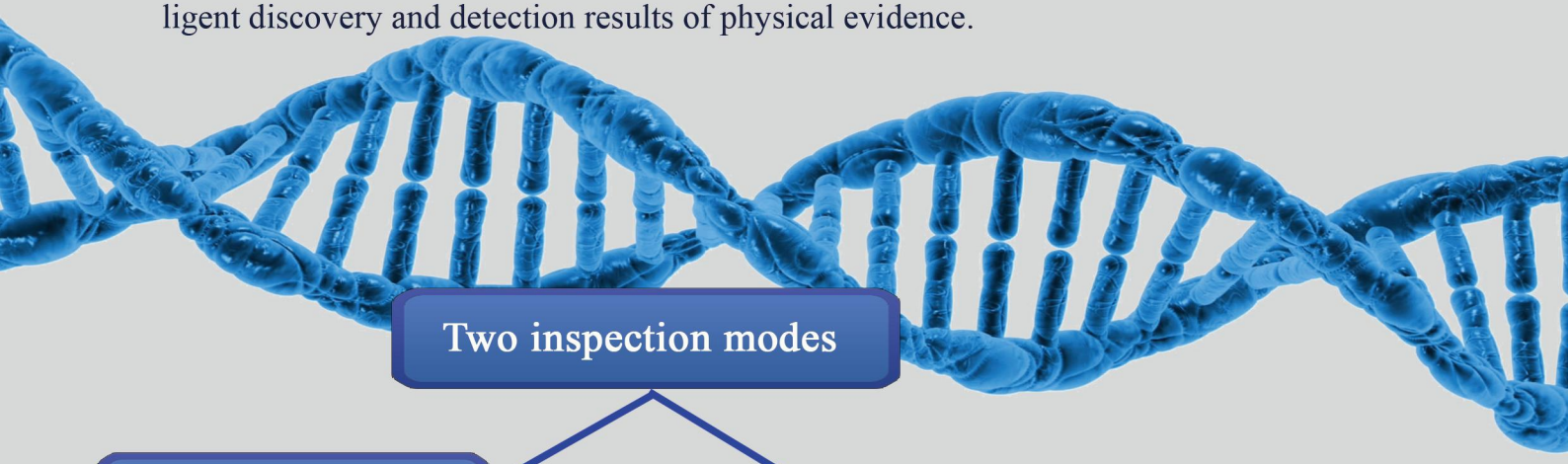
Introduction

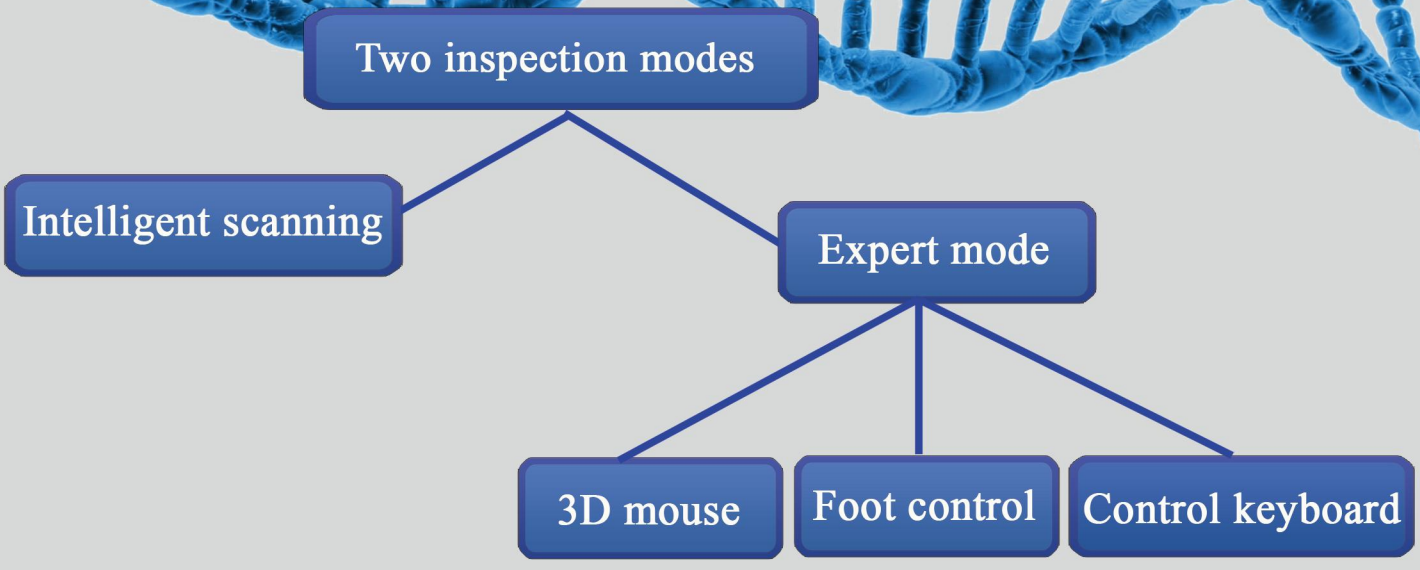
A.This system is a fluorescent compound forensics laboratory workstation of trace DNA,biological stains, fingerprints, blood and other evidence, which can realize the automatic operation of DNA shed cells searching and locating.

B.The workstation can carry out the initial check and re-check, disinfect, attitude change and other operations in the running track. To set the scanning area in the software to carry out automatic scanning mass detection.

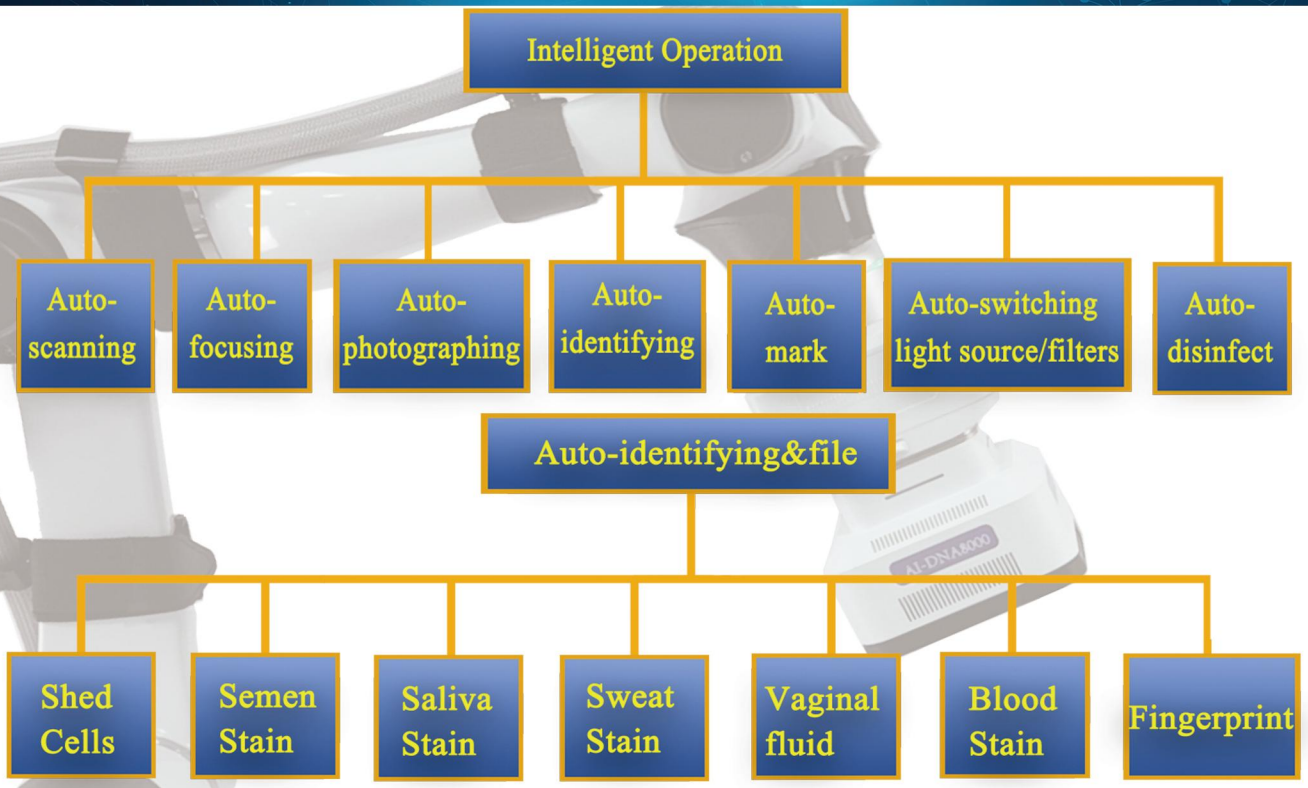
C.Built-in software can automatically file document of different kinds of evidence like florescence of DNA shed cells,biological stains, fingerprints, blood traces or finger prints. It solves the problem that DNA laboratory personnel have to search each material evidence manually, which is not easy to identify, low efficiency, and difficult to interpret accurately.

D.Two inspection modes, intelligent scanning and expert mode, automatically present the intelligent discovery and detection results of physical evidence.









Control Center:

Control robot intelligent operation, six-axis Cartesian motion and light sources and filters control

Data Processing Center (DPC):

Image processing storage center, AI computing center, automatic identification

Image Acquisition Center:

Visual evidences collection; Image acquisition and data transmission, light source mode

Equipment Cabinet:

Power management system, network equipment, data communications equipment, control hardware equipment, security system, etc





Function

01 Initial Inspection: The robot arm can move back and forth in the user-specified detection area according to the scope of the field of vision (achieve up and down autofocus) detection, take photos of the identified DNA shed cells, biological markings, fingerprints, blood and other fluorescence.

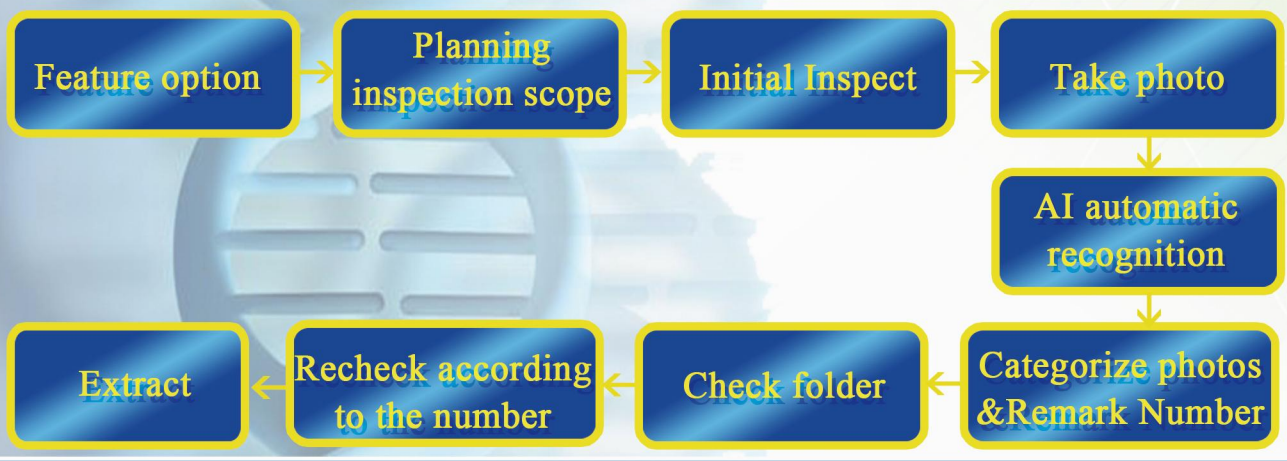
02 Recheck: After the fluorescent evidence is identified in the path of the initial inspection, the number of the evidence photo is input to the operating interface, and the robot will run to the physical evidence photo, which can be manually recheck, identified and extracted.

03 The fully functional DNA evidence intelligent workstation can be flipped and moved in any attitude, and is basically not limited by the shape of the detected evidence.

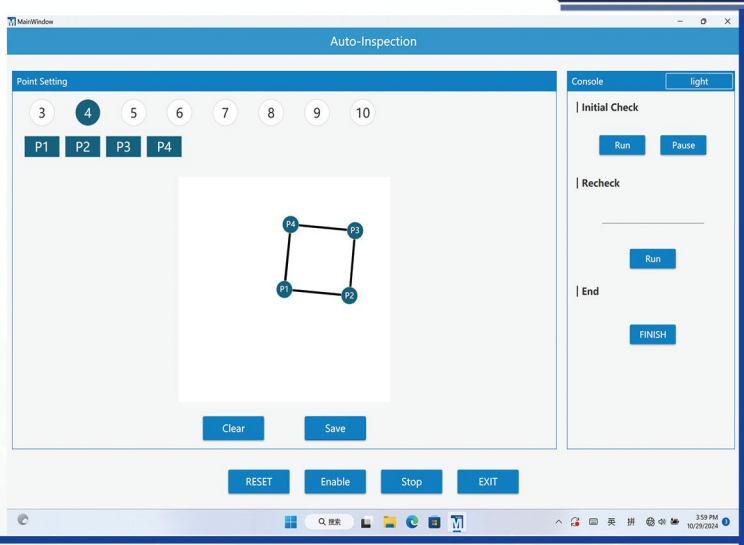
04 Anti-collision alarm settings are provided to avoid damage to material evidence caused by misoperation.

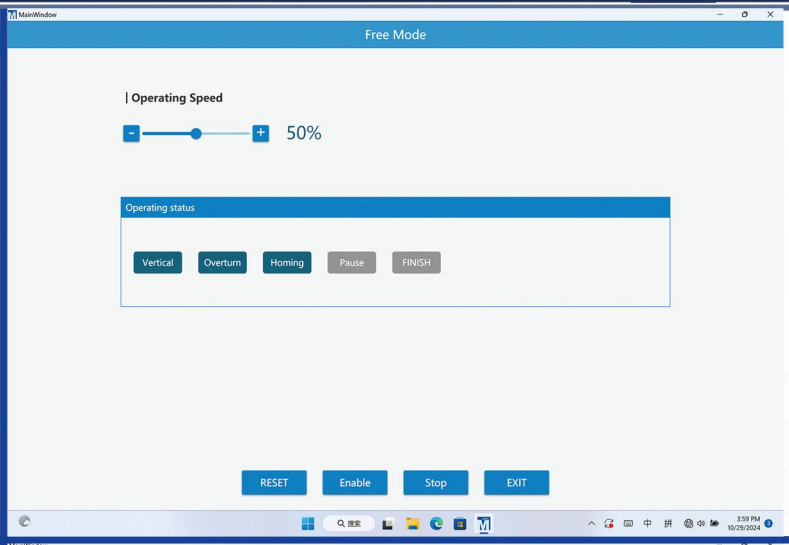
05 High-precision autofocus imaging technology, achieve automatic search, red dot positioning identification.

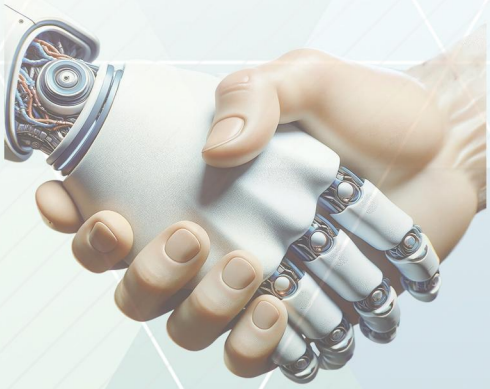
06 Automatically switch the filter according to the choice of excitation light source, or manually switch the filter according to shed cells,biological traces, fingerprints,etc., to the discovery of more DNA evidence.

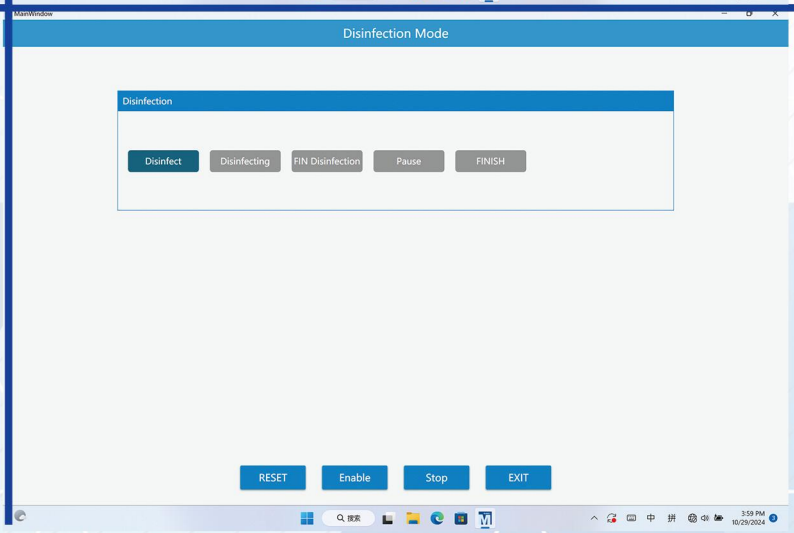


Routing Inspection Operation Interface







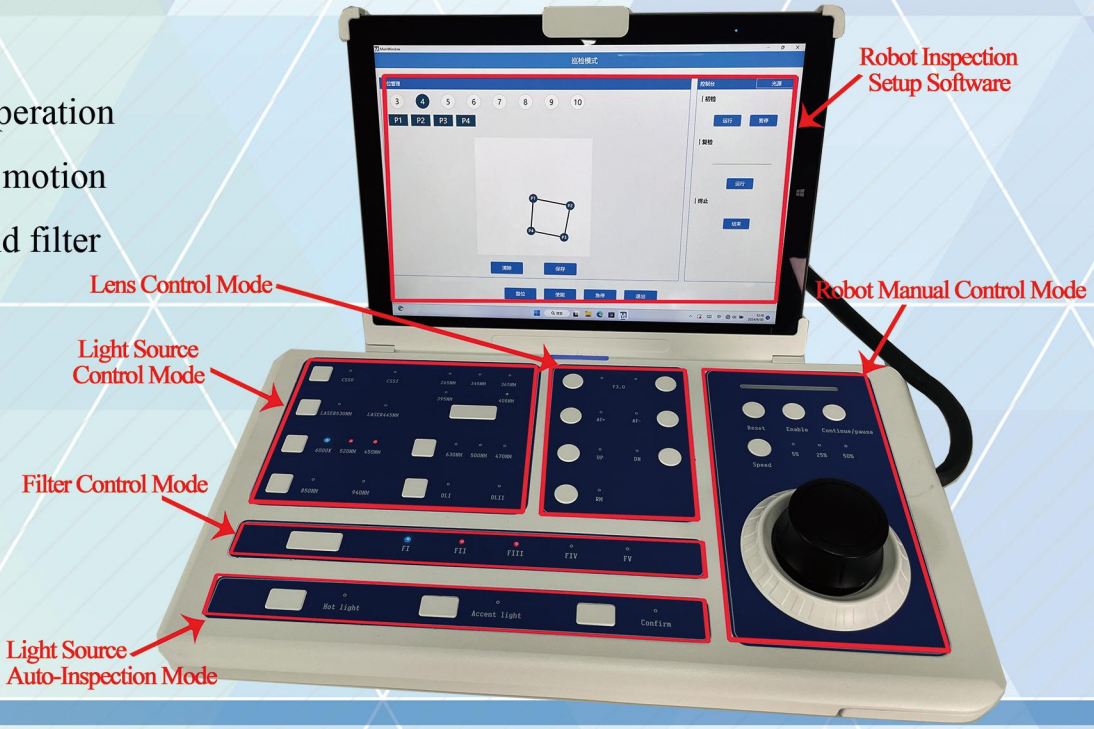


Control Center

Control robot intelligent operation

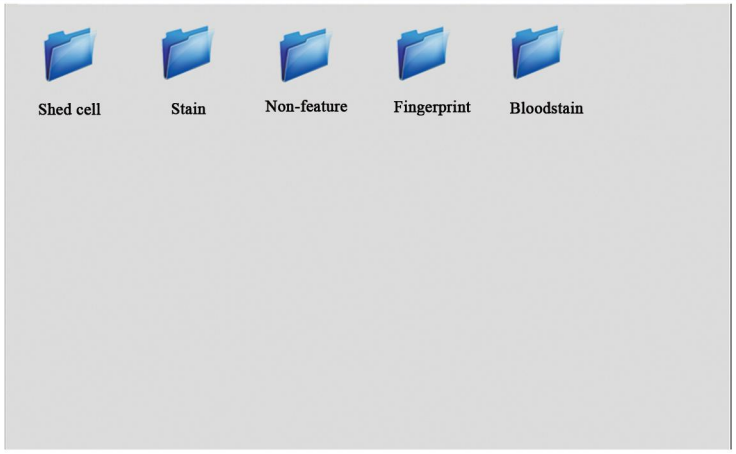
Control six-axis Cartesian motion

Control the light source and filter



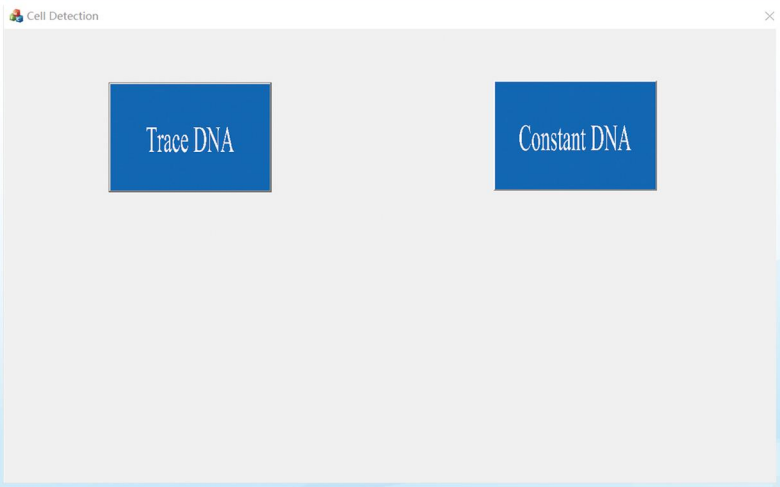
Data Proccssing Center Interface

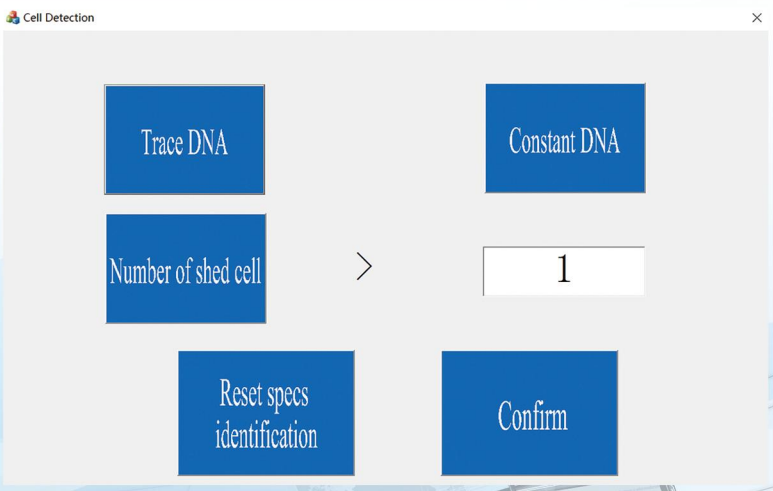




Functions: Image setting, brightness/exposure control, white balance, gallery, photo, video, preview enlarge, exit

Image Settings: Fluorescence/monochrome switching, connecting camera, inverting colors in monochrome, color settings, image processing







Data Processing Center (DPC):

Image processing storage center

AI computing center

Automatic identification processing

Feature

a Direct search and display, precise extraction of DNA shed cells.

b Direct display of saliva, semen stains, urine traces , fingerprints and other biological materials.

c Free from external ambient light interference, not require reagent.

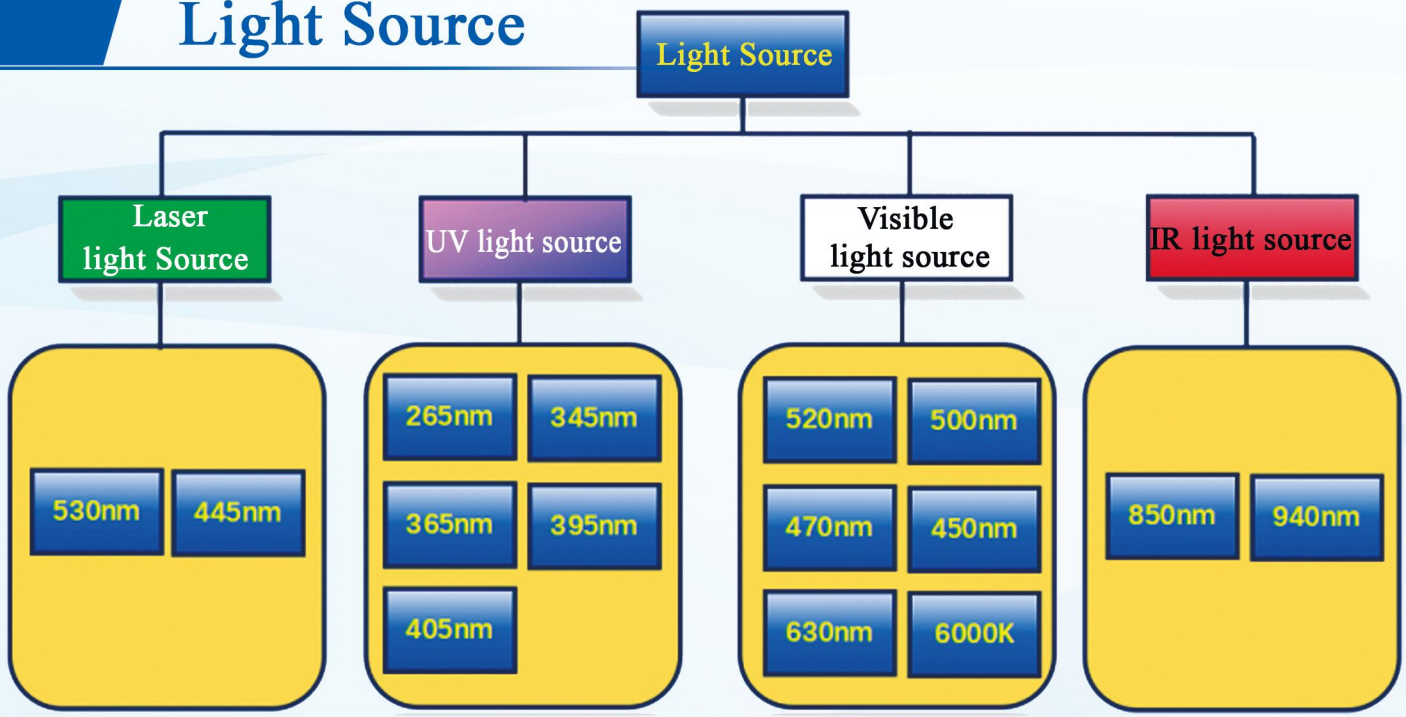
d Non-touch physical evidence, DNA shed cells fluorescence display, to prevent DNA shed cells contamination.

e High object distance, easy to interpret and extract DNA shed cells, fluorescent stains, fingerprints, blood, etc.

f 3D mouse, foot control, light source and filter combination to achieve expert mode, manual composite, extraction and other operations.

g The motion trajectory can be translated along the X, Y, and Z axes, and rotated around the RX, RY, and RZ axes in the motion range, which can realize the search of the direction of movement under any attitude.

Light Source

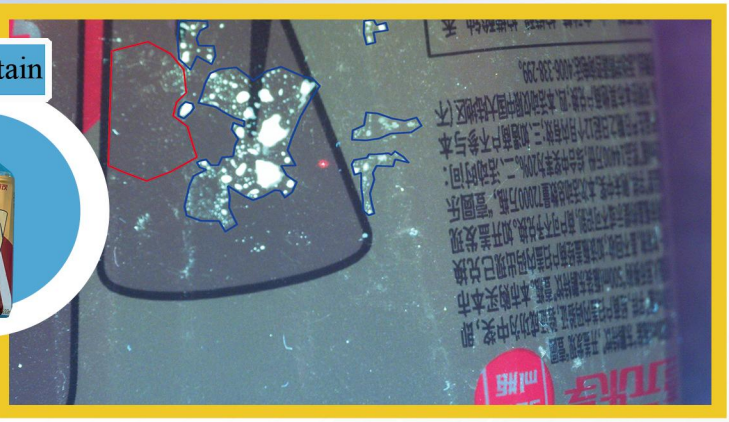


Recognition And Contrast Display

Sweat Stain







Palmprint

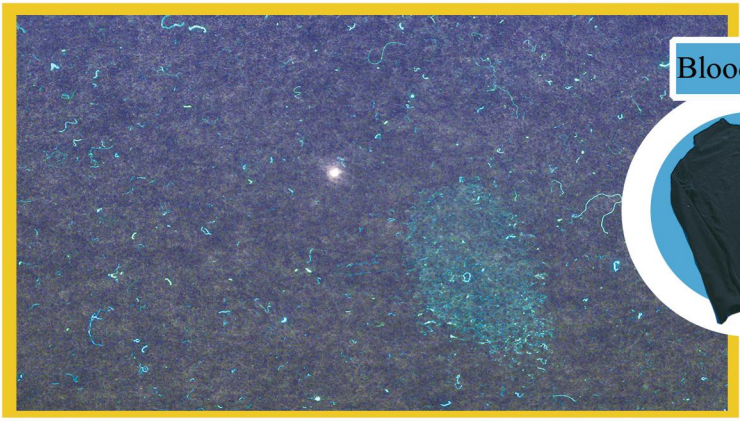


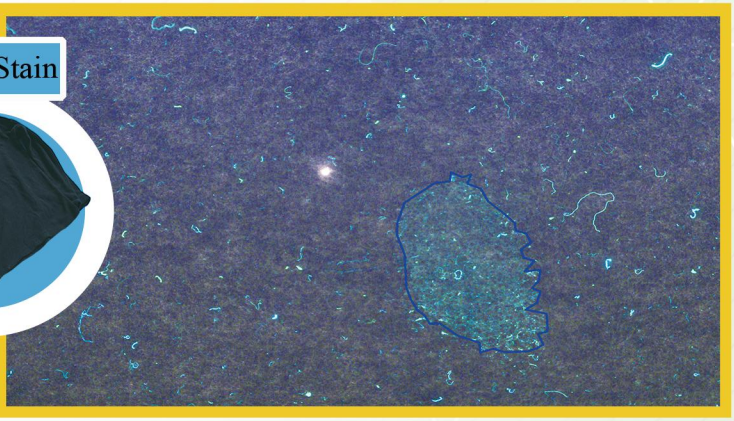




Blood Stain

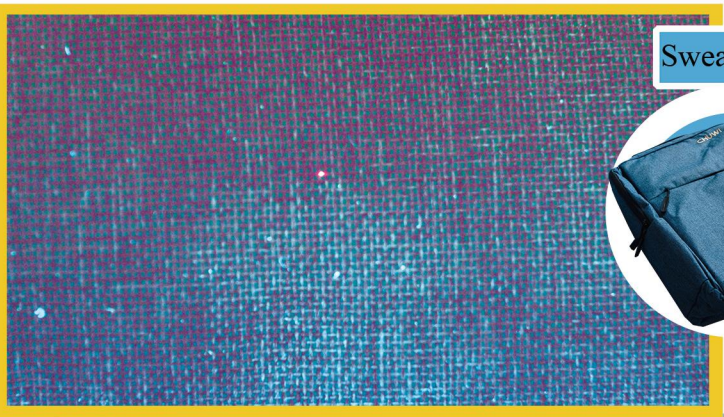


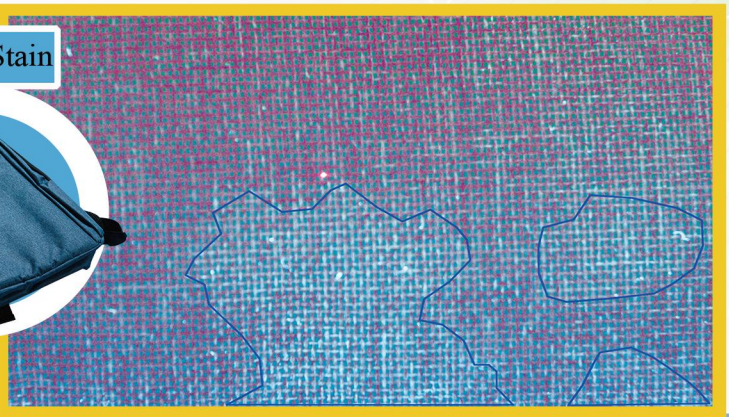




Sweat Stain





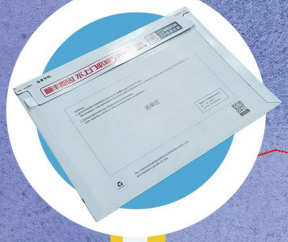


Recognition And Contrast Display

Shed Cells



Fingerprint



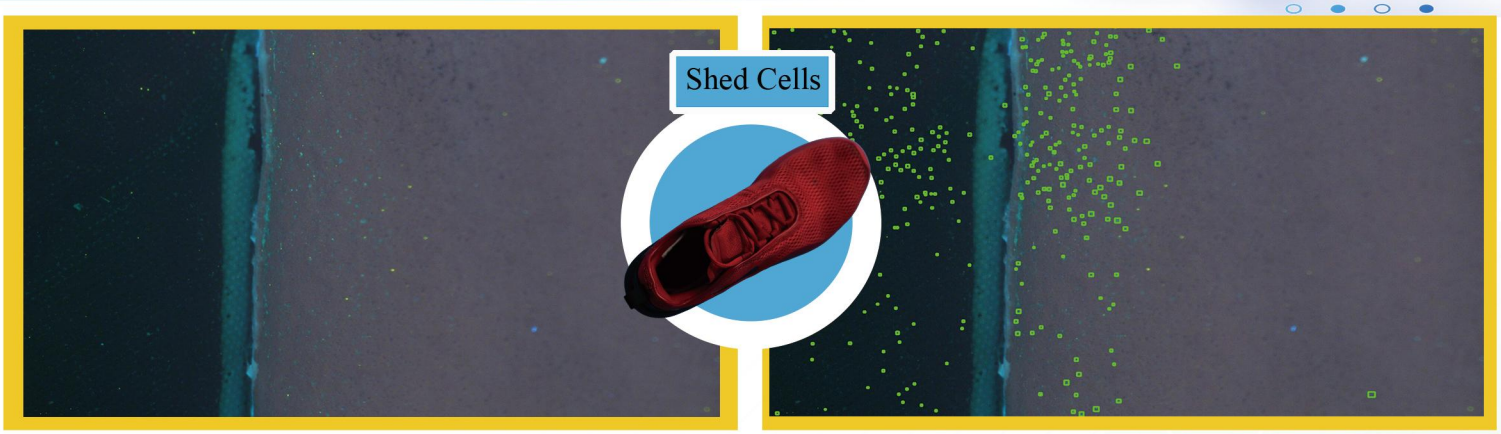
Blood Stain

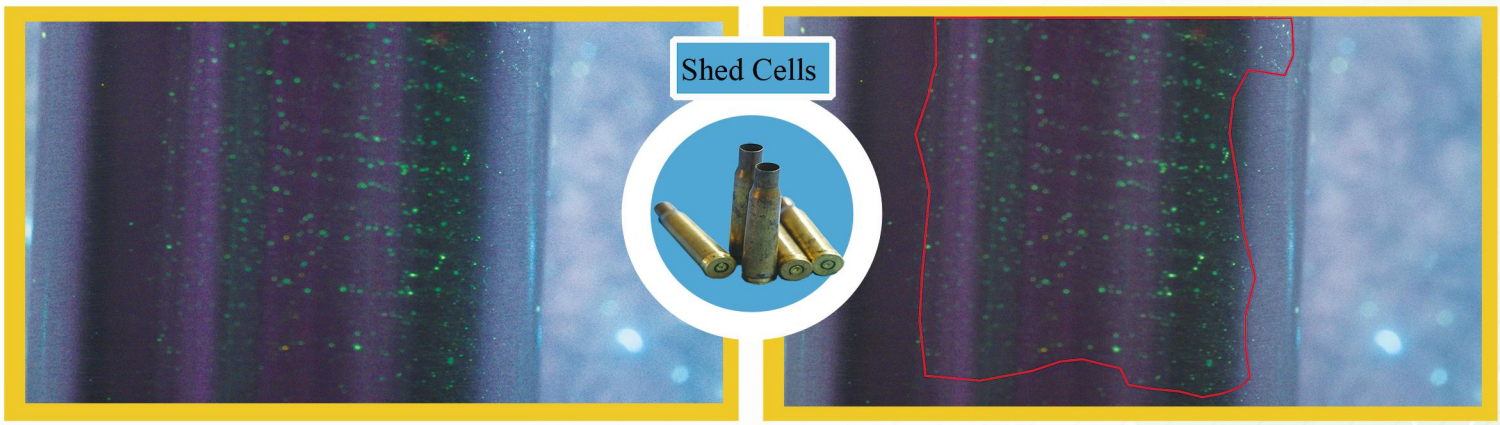


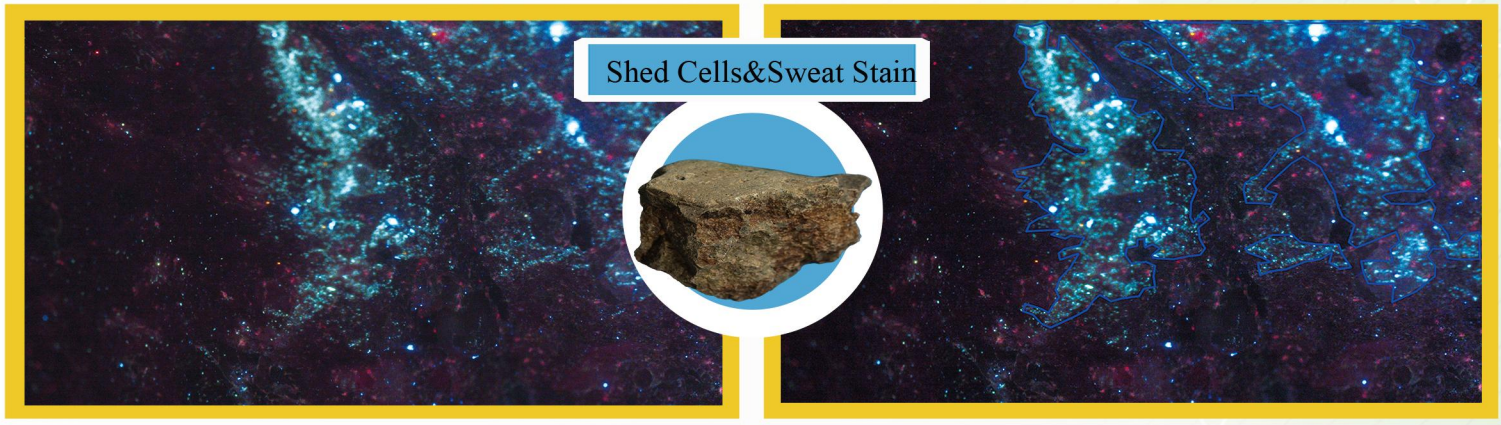
Semen Stain

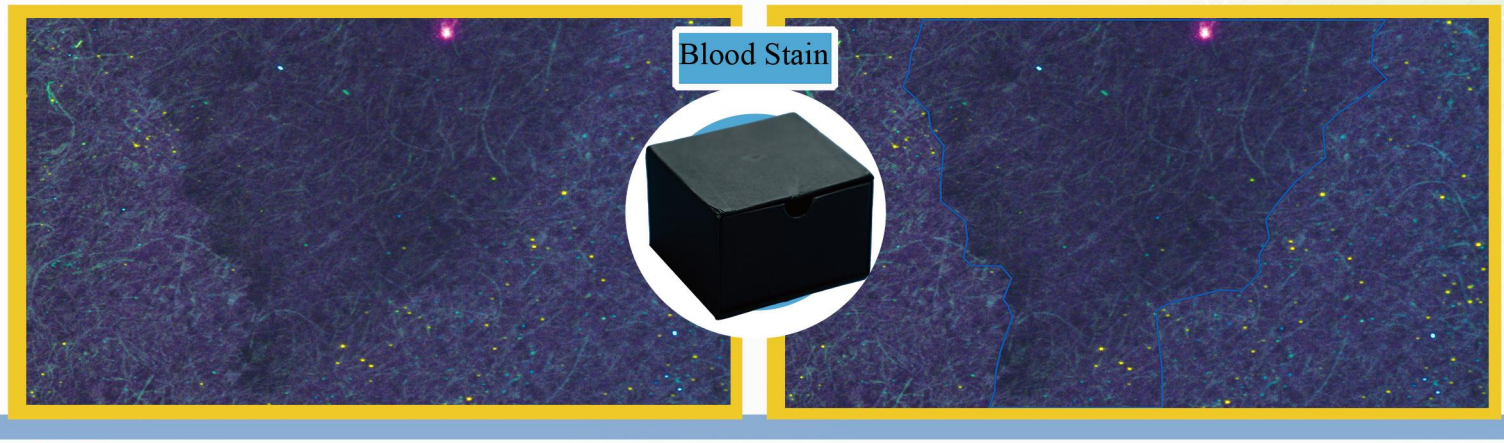


Recognition And Contrast Display

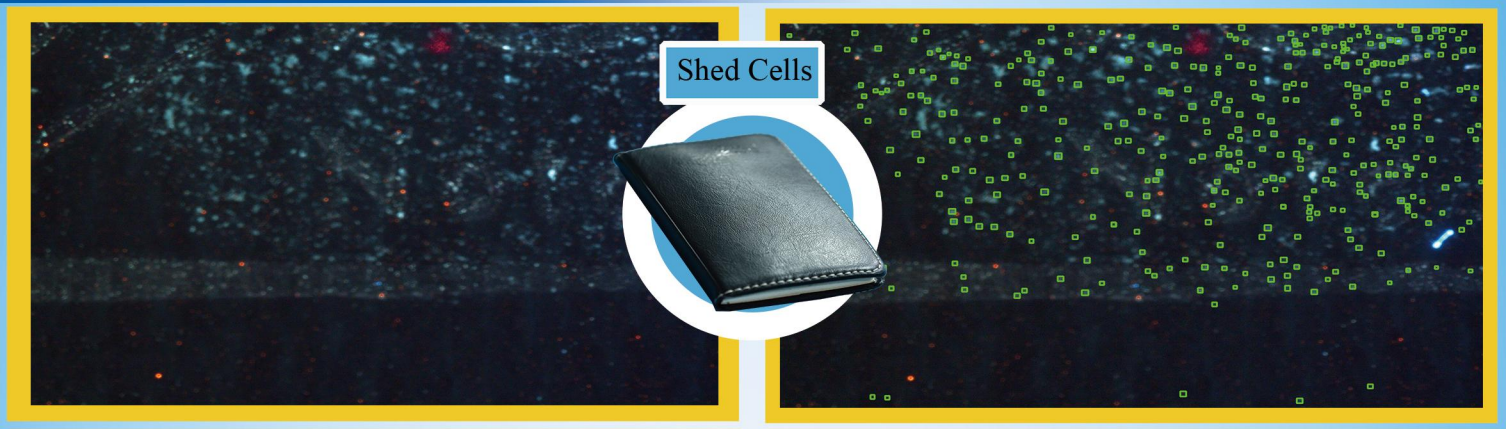


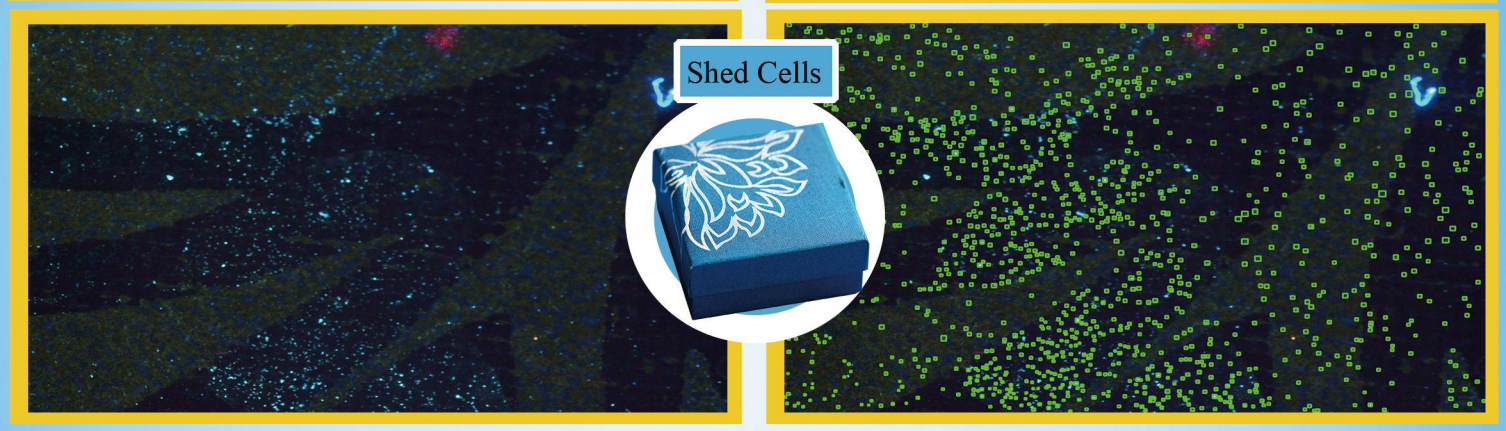


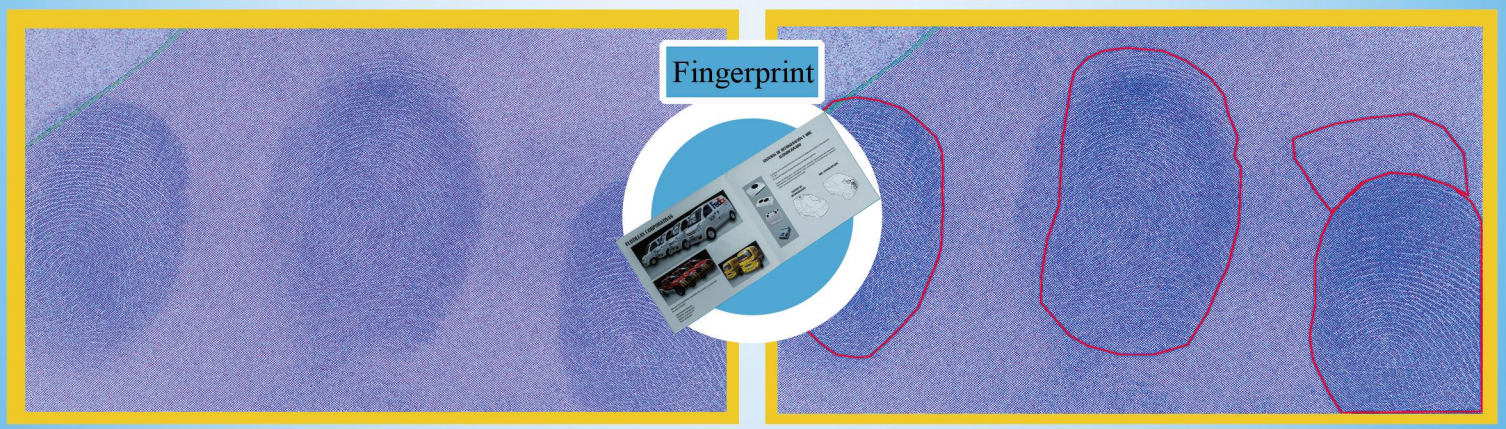




Recognition And Contrast Display









MOVEED



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