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(57) Abstract :
IOT based real time monitoring of dust deposition on BIPV system and cleaning device comprises of a camera mote, PV panel mote, a robotic arm-based wiper mote, a temperature sensor, a microcontroller for processing information. The camera mote is capable of transferring the visuals to the microcontroller which further analyses the information regarding dust using AI. The temperature sensor detects the temperature of each panel and microcontroller process the information. On detection of dust and elevated temperature the instructions are passed to the water spray system and to the robotic arm-based mote to start cleaning.

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