

IRENI : Latest Results and Future Directions

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IRENI (Infrared Environmental Imaging) extracts a large swath of radiation (320 hor. \times 25 vert. mrad²) from the Aladdin storage ring, and homogeneously illuminates a commercial IR microscope equipped with an infrared Focal Plane Array (FPA) detector. Wide field images are collected. IRENI rapidly generates high quality, high spatial resolution data. The relevant advantages (spatial oversampling, speed, sensitivity and signal to noise ratio) will be presented and demonstrated using examples from a variety of disciplines, including formalin fixed and flash frozen tissue samples, live cells, fixed cells, paint cross sections, polymer fibers and novel nano-materials will be presented.

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