RESEARCH INTERESTS


Major research areas

(a) Fundamental studies of complex materials of natural and synthetic origins and their applications in nanotechnology, energy, environment, and medical science.

(b) Investigation of visible light, electron, ion, X-ray, atomic force properties and their interactions with materials for advancing imaging and analysis technology from micrometer to pico-meter scale.

(c) Physical examination of structure and properties of organic-inorganic (soft-hard) interfaces of nanostructured materials.

(d) Interface of materials, biology, microscopy hardware, and imaging software to push the boundaries of interdisciplinary education and research.

Selected works