Abstract Submitted
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Surface-enhanced Raman mapping of chemical hot spots DMITRI VORONINE, Texas A&M University — Surface-enhanced Raman spectroscopy (SERS) and atomic force microscopy (AFM) are used for simultaneous chemical-topographic mapping of Raman hot spots on dielectric, semiconductor and metal surfaces. Raman signals enhanced by electromagnetic and chemical mechanisms are separated. Several approaches of nanoscale surface analysis are compared. Future experimental advances for spatiotemporal imaging of surface dynamics using ultrafast lasers and multiple tips are discussed.

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