

Abstract Submitted  
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**The healing mechanism for excited molecules near metallic surfaces** B. BARBIELLINI, Northeastern U., P.M. PLATZMAN, Bell Labs — Radiation damage prevents the ability to obtain images from individual molecules. We suggest that this problem can be avoided for organic molecules by placing them in close proximity with a metallic surface. The molecules will then quickly dissipate any electronic excitation via their coupling to the metal surface. They may therefore be observed for a number of elastic scattering events that is sufficient to determine their structure.

[1] B. Barbiellini and P. M. Platzman, cond-mat/0506403

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