Projection Microscopy, Field Emission and Field Ion Microscopy
R. Gomer, Field Emission and Field Ionization (Harvard University Press, 1961), pp. 1-9, 32-42. A bit murky at times, but otherwise a reasonable review of field emission of electrons.


G. Ehrlich, Physics Today, June 1981, pp. 44. Brief survey of early results obtained with FIM.


A.T. Hubbard (Editor), *Surface Imaging and Visualization* (CRC, Boca Raton 1995).

An overview of lots of techniques.


A brief review of atom-probe field ion microscopy.


Appearance energy spectroscopy of field ions.


Surface Diffusion of Metal Atoms and Clusters Directly Observed


Tunneling and Field Ionization


**Scanning Tunneling Microscopy**

*The Beginnings of the Technique*


R. Young, I. Ward, and F. Scire, Rev. Sci. Inst. **43**, 999 (1972). Description of Topgraphiner, the early version of STM.


*For More Current Examples:*

Proc. Intl. Conference on STM.


Also Topical Conference on Nanometer Scale Properties of Surfaces and Interfaces, JVST **8**, 3577 (1990).


P. Avouris and I.-W. Lyo, ibid, Chap. 16, Studying Surface Chemistry Atom-by-Atom Using the STM.

J. S. Murday and R. J. Coulton, ibid, Chap 15. Techniques for measuring at the nanometer scale.


Also G. M. McClelland, ibid, Chapt. 18, Tribology on the Atomic Scale.
determination of surface structure by STM.
in STM and ATM.
Observation of forces in STM.
metallic adhesion using the Scanning Tunneling Microscope.

23
Spectroscopy with the STM.
STM: A Critical Review.
NATO Advanced Institute on Basic Concepts in Scanning Tunneling Microscopy and
atoms.