

عنوان مقاله:

Energy Dissipation Mechanism of NC-AFM: Temperature Effect Study

محل انتشار:

هجدهمین کنفرانس سالانه مهندسی مکانیک (سال: 1389)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

In this paper, the energy dissipation mechanism caused by the adhesion hysteresis in noncontact atomic force (NC-AFM) microscopy is investigated in detail with the aid of atomistic simulations. When a gold coated nano probe is brought near the Au (001) surface, the tip apexatom jumps to the surface, and simultaneously four atoms of the surface jump away from the surface to approach more to the tip apex atom. Along this line, particular attention is .dedicated to the energy loss change due to temperature effect

کلمات کلیدی: NC-AFM, hysteresis, dissipated energy,MD simulation, SC potential

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/95713

