

Cs₂Te Photocathode for the TTF Injector II,
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S. VALERI⁺ - High quantum efficiency (QE) (10÷15%
@ 254 nm) cesium telluride (Cs₂Te) photocathodes has
been produced on different substrata. Photoemitter
preparation procedure, gas exposition poisoning and
rejuvenation effects have been investigated both from
the photoemissive properties point of view (e.g. QE vs.
λ and vs. gas exposition) and by using electron
spectroscopy techniques as AES and XPS. A Cs₂Te
preparation system for the TTF injector II is under
construction and it will be operative within summer
1996 at Fermilab where it will prepare photocathodes
for the TTF injector II gun prototype. Moreover we are
implementing the apparatus used at Milano for the
R&D activity on photocathodes with a 250 fs Nd-glass
high power laser and a new UHV analysis chamber:
both will be used for electron spectroscopy analysis and
optical measurement as angle resolved photoemission
and time response.

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