

## Dresden electron beam ion trap: Status report and next developments

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The Dresden EBIT is a room-temperature EBIT producing highly charged ions for x-ray spectroscopy as well as for materials modifications and other applications. In the past we have demonstrated the production of ions such as  $\text{Ar}^{18+}$ ,  $\text{Fe}^{26+}$ ,  $\text{Kr}^{35+}$ ,  $\text{Xe}^{46+}$ , and  $\text{Ir}^{67+}$ . Here we give a report on the further development of this ion source to increase the electric trap capacity involving the production of a greater amount of highly charged ions. © 2006 American Institute of Physics.

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