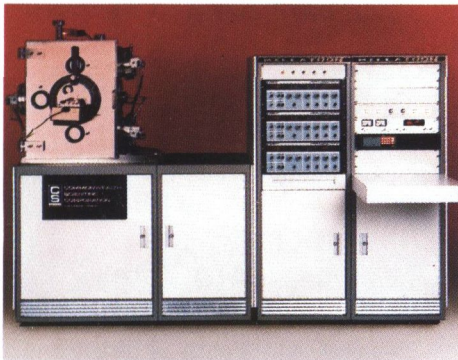


Ion Beam Codeposition of *Superconducting* and Semiconducting Thin Films for High Technology Applications beyond the 1990s'



Please visit Booth No. 309 at the MRS Show in San Diego, April 25-27



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500 Pendleton Street
Alexandria, Virginia 22314
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Fax: 703/548-7405 Tlx: 824 454

Features

- Independent control of ion beam energy, current and incidence angle
- Extended lifetime filaments for oxygen ion source
- Control film stoichiometry
- Full computer control
- Expansion ports to link further processing systems
- Annealing of films in situ, with growth control by an (optional) RHEED unit
- Optional special windows for external laser treatment of film surface

Applications

- Superconducting high Tc films
- Classical high-temperature oxide films
- Semiconducting films: Al₂O₃, SiO₂, Si₃N₄, ITO, CdO...
- Buffer and oxide tunnel layers

System Design

- Three independent ion sources for sputter deposition
- One ion source for etching, precleaning and oxygen assist deposition
- All ion sources are reactive gas compatible (i.e. H, N₂, O₂, etc.)
- Up to 12 target materials for sequential deposition
- Rotating, high-temperature substrate stage
- Other similar custom designs available

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TAKE THE "WAIT AND SEE" OUT OF YOUR X-RAY WORK.



THE DIXIE

DIGITAL INTENSITY X-RAY IMAGE ENHANCER system brings real time x-ray imaging to your lab. With a full 40mm diameter input window and up to 200,000 gain. You can see immediately what film gives you later.

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