Chose your equipment wisely!

### Metal Deposition at IITBNF

#### Sputtering
1. Not good for Lift off
2. Good Step Coverage
3. High Temperature Material ok.
4. Less radiation Damage
5. Plasma Damage/Contamination
6. Alloys are doable.
7. Good for ohmic but not Schottky Diodes
8. May be porous

#### Evaporation - Ebeam
1. Good for lift off
2. Best Purity
3. Poor step coverage
4. High Temperature Material ok.
5. Radiation Damage Sensitive
6. Alloys are difficulty

#### Evaporation - Thermal
1. Good for lift off
2. Simple, Consistent, and Reliable
3. Poor step coverage
4. Limited Materials [No high temperature]
5. Alloys are difficult

<table>
<thead>
<tr>
<th>Sputtering</th>
<th>Evaporation-Ebeam</th>
<th>Evaporation- Thermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nordiko Sputter [Gold C.]</td>
<td>4TEBE (GaN) [clean]</td>
<td>In Thermal Evaporator</td>
</tr>
<tr>
<td>AMAT PVD Al [Semi clean a]</td>
<td>NCPRE 4TEBE [Semi clean b]</td>
<td></td>
</tr>
<tr>
<td>AMAT PVD Ti [Semi clean a]</td>
<td>New 6TEBE [Not yet arrived]</td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

1. For chosen equipment please check substrates, targets and materials allowed with access policy, from Equipment Status page under Online Modules tab on CEN website.