

- **Pulsed Laser Deposition (PLD) Conditions for SrBi<sub>4</sub>Ti<sub>4</sub>O<sub>15</sub> (SBT) Target:**

- Wave length of laser = 248 nm (KrF excimer laser)
- Pulse width = 30 ns
- Output laser energy = 2 J/cm<sup>2</sup>/shot
- Laser spot size = 3x1 mm<sup>2</sup>
- Deposition frequency = 5 Hz
- Substrate to target distance = 4 cm

Expt. No.	Temperature	Pressure
1	800	0.5
2	750	0.5
3	700	0.5
4	800	0.3
5	750	0.3
6	700	0.3
7	800	0.2
8	750	0.2
9	700	0.2

- **Annealing Condition:**

- Temperature = 700-750 °C
- Pressure = 0.5 atm
- Used gas = O<sub>2</sub>
- Time = 10-20 min

- Pt electrode will be deposited using sputtering method.
- Lower electrode to be made in (Pt/SBT/Pt/TiO<sub>2</sub>/SiO<sub>2</sub>/Si) configuration.

**Reference:**

Shan-Tao Zhang), Bo Sun, Bin Yang, Yan-Feng Chen, Zhi-Guo Liu, Nai-Ben Ming, Materials Letters 47 (2001) 334–338.