The Nanofabrication Laboratory’s capped rate structure is based on self-performed equipment use only, and applies to each individual user, per project, per month. The cap resets to zero at the first day of every month. Each tool is assigned to one of four rate categories. A user’s qualifying charges are accumulated until the cap is reached. Qualifying charges are then reduced to a percentage of the original pre-cap rate.

**Equipment/Lab Service/Product (applies to monthly cap)** | **Academic Rates**
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Equipment Level 1* | $27.95
Equipment Level 2* | $33.53
Equipment Level 3* | $53.65
Equipment Level 4* | $89.42
Full Rate Monthly Cap | $1,000.00
Post-Cap Rate percentage | 50.00%
Technical Staff Rate | $55.89
LTCC Lab (includes profilometer) | $17.38
LTCC CIP (per run + LTCC lab charge) | $22.77
PZT Coating < = 1 um | $491.00
PZT Coating > 1 um | $711.05
(100) Oriented PZT Coating < = 1 um | $546.00
(100) Oriented PZT Coating > 1 um | $766.05
Solution 120 ml 0.4 M Mn-PZT 30/70 | $670.15
Solution LNO 0.2 M for 120-150 ml | $422.53
Solution PZT 52/48 | $541.93
Training: Safety/Orientation | $74.44
Ebeam Classroom Training | $316.71
FESEM Classroom Training | $56.30
Initial training session by video | $19.35
Litho Lecture Training | $46.45
Training: Equipment Level 1 | $126.54
Training: Equipment Level 2 | $218.77
Training: Equipment Level 3 | 280.83
Training: Equipment Level 4 | 304.12

**Equipment Level 1***
- All Benches
- Ellip: Gaertner
- Four Point Probe
- Litho: BCB/PDMS Oven
- Litho: DUV Systems
- Litho: Ebeam Fracture
- Litho: Soft Lithography
- Litho: USI Prism 300 Spray Coater
- Microscopes
- Sample Prep: LatticeAx 420

**Equipment Level 2***
- ALD 150 LX & ALD Cluster
- Anneal: MRL Black Max
- Ellip: Woolam
- Etch: M4L
- Etch: Xactix XeF2 Etcher
- Litho: EVG Bonder
- Litho: EVG 620 Contact Printer
- Litho: MA/BA6
- Litho: YES 1224P CVD System
- LPCVD Oxidation Tube
- Nanometrics 8000X SE
- Particle Analyzer: Tencor 4500
- Profilometer: KLA-Tencor P16+
- RTA AG610
- RTP 600S & 810

**Equipment Level 3***
- Etch: Alcatel Oxide DRIE
- Etch: Alcatel Silicon DRIE
- Etch: PT720
- Etch: Dual Etch Versalock
- Etch: Vision 320 DRIE
- Evaporator: Lab 18
- FESEM: Leo 1530 & Merlin
- Litho: Steppers
- Litho: Laser Writer DWL66
- Sputters: CMS-18

**Equipment Level 4***
- ALD 200 & 150 LE (run)
- Cluster Tool: PECVD
- Etch: Ulvac
- Parylene & Semicore (run)
- Litho: Ebeam
- 4Wave Ion Beam Depo

All equipment is charged by the hour unless indicated otherwise.

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