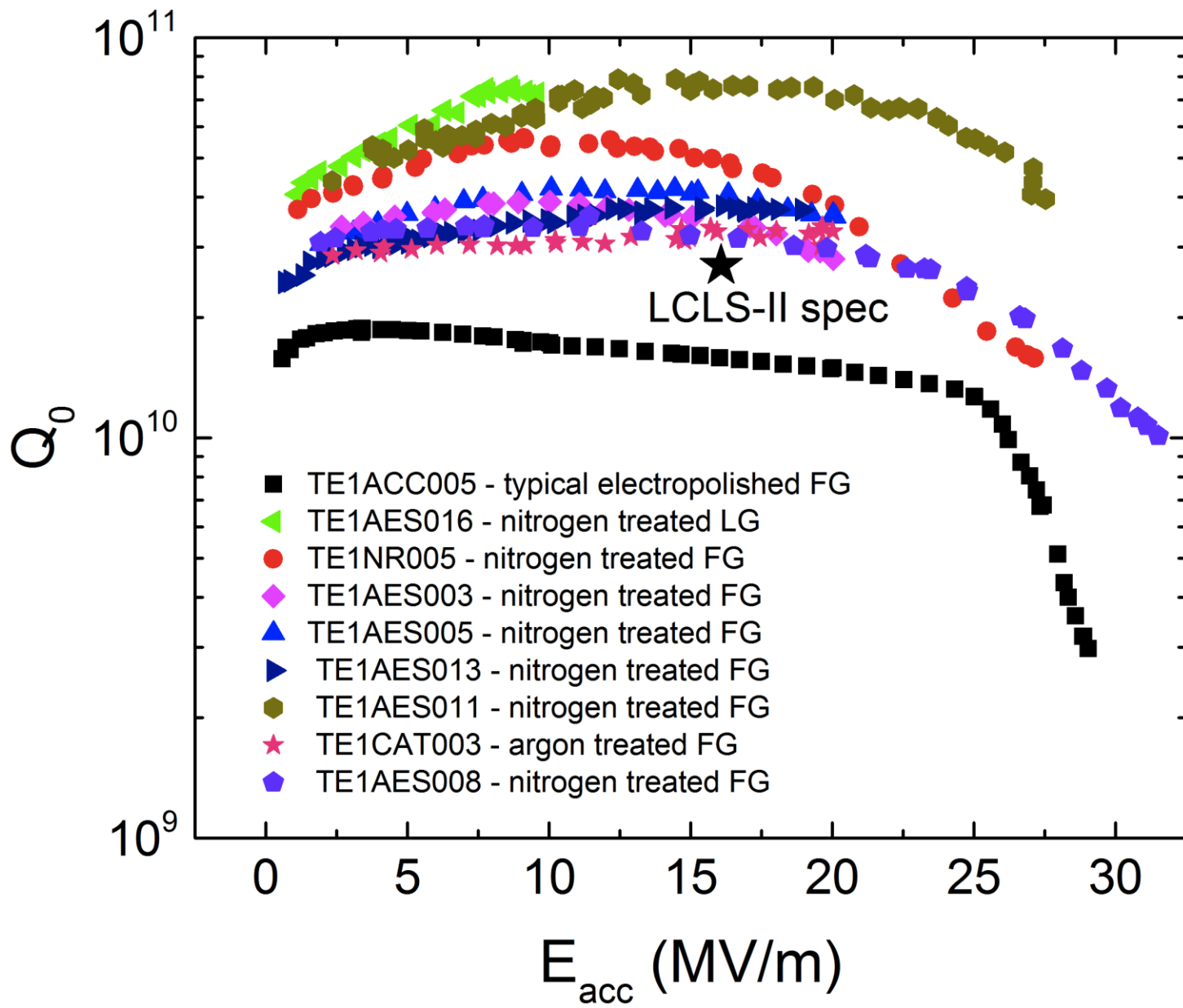




# Ongoing studies

- Cavity effort primarily focused on high Q at mid field
- Optimization of nitrogen doping treatment for LCLS-II
- Understanding of how residual resistance varies as a function of cooldown, for cavities of different surface treatment (EP, BCP, 120C bake, nitrogen bake)



# Higher quench fields seen for nitrogen doping

- Reached several times 30 MV/m with higher than typical Q, range  $2.7-6e10$  at quench (1.3GHz, 2K)
- Possible (suspected) source of early quench: oxygen
- Will study nature of the quenches and if change in bake parameters can push quench even further

