Coatings for ET-LF

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Coating	TN (ITM+ETM) reduction factor	Absorption
aLIGO 300 K	1	<1ppm
silica/tantala 120K 1550nm	x2.4	<1ppm
silica/aSi 120K 1550nm	x4.6	~200ppm (<20ppm with UWS aSi?)
aSi/Si3N4 120K 2000nm	x8.5	~32ppm (reduction possible with UWS aSi?)
5x(silica/tantala) + aSi/Si3N4 120K	x3.2	1ppm

All cases (except aLIGO) for a 9cm beam and Si mirror.

Currently using the optical absorption of aSi deposited by ion-plating. There is scope to do considerably better in absorption with aSi deposited by UWS/Strathclyde using IBS work in progress.