

Thermal noise limit

Parameters needed for thermal noise calculation

Description	Material	Parameter name	Value	Comment
Boltzmann constant		kb	$1.38064852 \times 10^{-23} \text{ m}^2 \text{ kg s}^{-2} \text{ K}^{-1}$	
Temperature (K)		T	300	
Poisson Ratio of substrate	Fused Silica	σ_{sb}	0.16	Fused Silica substrtae [1]
Poisson Ratio of coating	AlGaAs	σ_c	0.32	AlGaAs coating [2]
Young's modulus of substrate	Fused Silica	E_{sb}	72.7 Gpa	Fused Silica substrtae [1]

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