

Large Area Bismuth Absorbers for X-ray Microcalorimeters - C03

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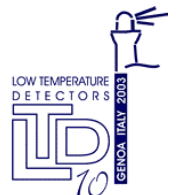


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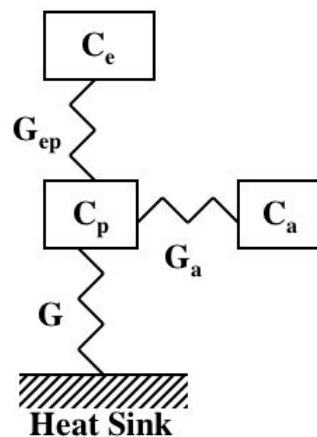
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- Thin Bi layer on Si substrate, from 1×1 mm to 2×2 mm
- Determining Bi heat capacity
 - Complex impedance measurements: $0.3 - 0.6 \text{ J K}^{-1} \text{ m}^{-3}$
 - Collan et al. (1970): $0.09 \text{ J K}^{-1} \text{ m}^{-3}$ at 100 mK
 - Neither measurement consistent with X-ray pulse data



- Position dependence of detector
 - Response varies by $\sim 4\%$ across area of 2×2 mm absorber

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