Evaluation of HOPG mounting possibilities for multiplexing spectrometers - DTU Orbit
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Four different methods for mounting HOPG analyzer crystals on Si holders have been evaluated in the design process of the new multiplexing spectrometer CAMEA. Contrary to neutron optics used in standard spectrometers, the new instrument concept employs a series of analyzer segments behind each other where the neutrons have to pass through the bonding compound of the different analyzer crystals. The different methods, namely screws, shellac, indium soldering and clips, have been evaluated with regards to background, transmission, cooling, activation and handling. The results presented here will give valuable input for future CAMEA-type spectrometers currently planned and designed at various neutron sources.

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