be sensitive to our parameters. This observation should not be a surprise since when we manipulate the phonon spectrum, the thermal scattering cross sections are changed, which results in the variation of the up-scattering and thus the thermal flux[5, 4]. We believe monitoring the thermal absorption rate with detectors could bring in another constraint besides the ones used in this paper.

Also, the temporal impact of varying phonon spectrum of ZrH_x in applications such as pulse experiments should be investigated and corresponding calibration work should be done for TRIGA reactors.

Acknowledgments

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