Supplementary information

Engineering Deuterated Bacterial Cellulose via Biosynthesis for Neutron Applications

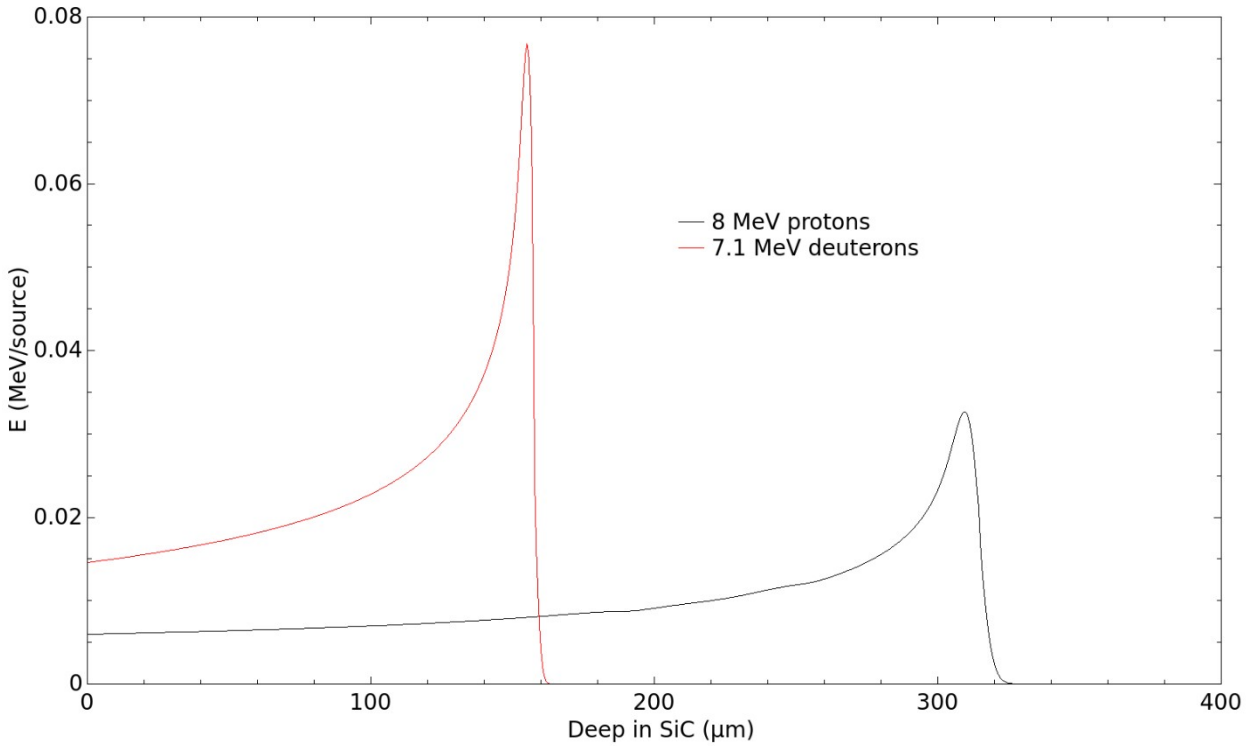
Amanda Muñoz-Juan[1&], Daniela Diaz[1], Judith Marin-Ortega[1], Nerea Murugarren[1£], Mariano Campoy-Quiles[1], Felipe Zamorano[2], Consuelo Guardiola[2], Martín Pérez[2,3¥], Anna Laromaine[1]

1. Institut de Ciència de Materials de Barcelona, ICMAB-CSIC, Campus UAB, Bellaterra 08193, Spain
2. Institute of Microelectronics of Barcelona, IMB-CNM (CSIC), Barcelona, Spain.
3. Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Buenos Aires, Argentina.

& Current position: Danish Research Institute of Translational Neuroscience - DANDRITE, Nordic-EMBL Partnership for Molecular Medicine. Aarhus University, Department of Molecular Biology and Genetics, 8000 Aarhus, Denmark.

£ Current position: Centro de Biología Molecular Severo Ochoa, CSIC-UAM, Nicolás Cabrera 1, Cantoblanco, 28049, Madrid, Spain

¥ Current position: Comisión Nacional de Energía Atómica (CNEA), Av. Bustillo 9500, San Carlos de Bariloche, Río Negro, Argentina.



Supplementary Figure 1. Simulation of the energy-deposition profile for deuterons and protons. This figure indicates a higher deposited energy density for deuterons than for protons in the detector's active region. On average, the deposited energy density

associated with deuterons is about 70% higher than that of protons within the active thickness