Supplemental material to "Monte Carlo code intercomparison for emitted electron spectra and energy deposition around a single gold nanoparticle irradiated by X-rays" by H. Rabus *et al.*, Radiation Measurements, 2021
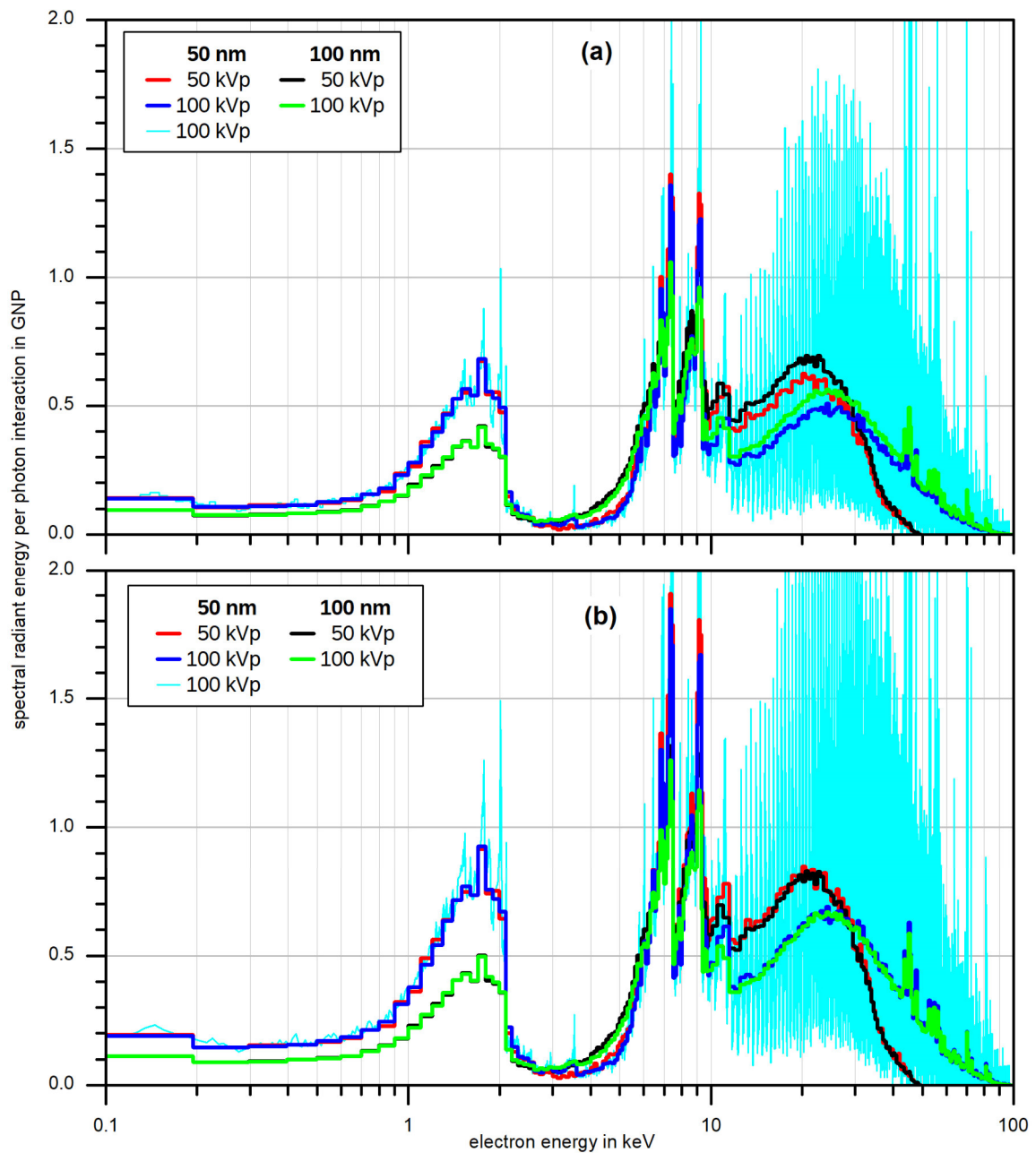

Fig. S1: Original electron spectra reported by participant T for the 50 nm GNP and 100 kVp photon spectrum (thin cyan lines) and rebinned spectra (as shown in **Fehler! Verweisquelle konnte nicht gefunden werden.**) for all combinations of GNP size and photon spectra (see legend). Data have been normalized to the number of photon interactions in the GNP expected for (a) beam diameter as defined in the exercise (GNP diameter plus 10 nm); (b) a beam radius equal to GNP radius plus 10 nm.
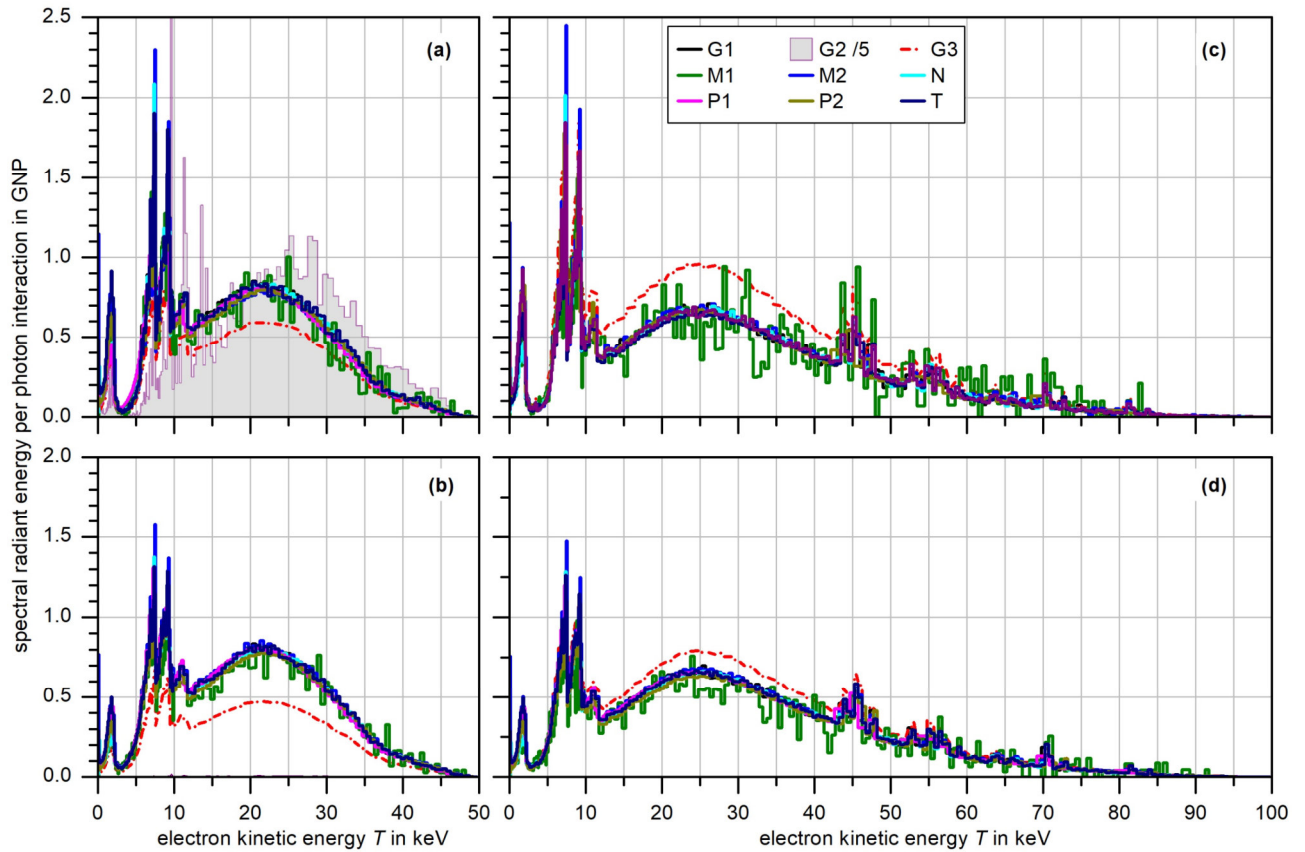
Fig. S2: Synopsis of the final radiant energy spectra of the electrons emitted from a GNP in which a photon interacts for the four cases studied in the exercise: (a) 50 kVp spectrum and 50 nm GNP, (b) 50 kVp spectrum and 100 nm GNP, (c) 100 kVp and 50 nm GNP; (d) 100 kVp spectrum and 100 nm GNP. The data of participant M1 have been multiplied by a correction factor of 11. Although the results of participants G2 (only for 50 kVp and 50 nm) and G3 failed the consistency checks, the data is included for completeness. The data of participant G2 have been divided by a factor of 5 and are shown as a shaded area rather than a dot-dashed line for better visibility. It should be noted that the *x*-axis is linear so that the area under the curves is proportional to the contribution of the respective energy range to the total energy transported by emitted electrons.
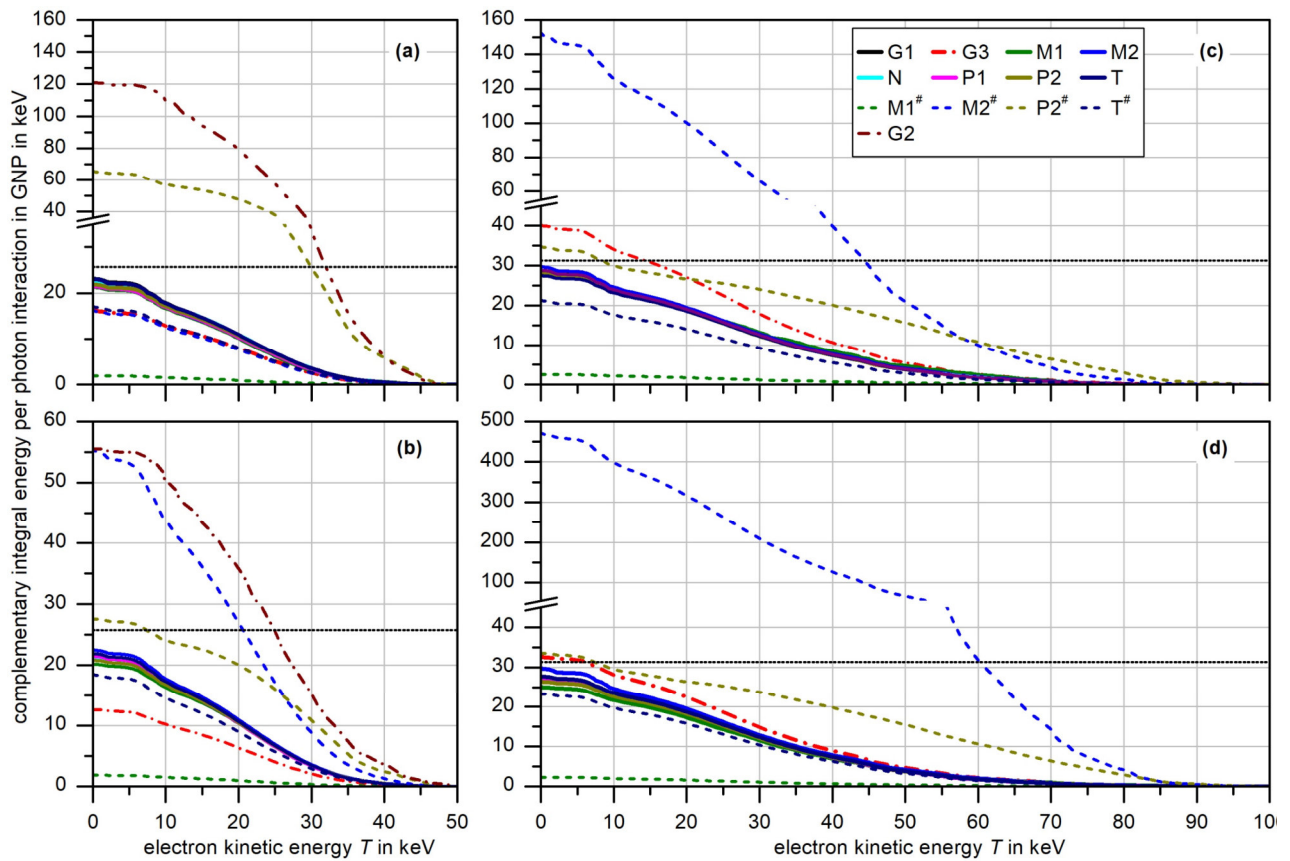
Fig. S3: Energy transported by electrons that are emitted from a GNP (in which a photon interacts) that have an energy exceeding the value plotted on the *x*-axis. The data have been derived from the reported data of participants (with their respective energy binning) for the four cases studied in the exercise: (a) 50 kVp spectrum, 50 nm GNP, (b) 50 kVp spectrum, 100 nm GNP, (c) 100 kVp, 50 nm GNP; (d) 100 kVp spectrum, 100 nm GNP. Dashed lines indicate data that have been superseded by new or corrected results. Dot-dashed lines indicate data failing the consistency checks that have not been revised.