

## Supplementary Information

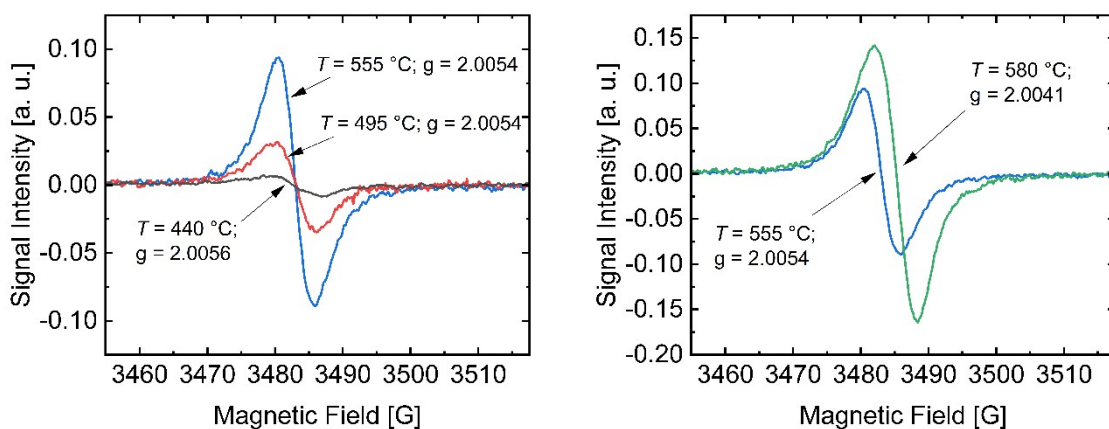


Figure S1: a) ESR spectra of the a-Si:H films of the “ESR” series deposited with pure trisilane. Spin-densities determined by the spectra are shown in Figure 4. b) ESR spectra of an a-Si:H film deposited with 2 % trisilane in comparison with a film deposited with pure silane. The deposition temperature and the g-value determined by the spectra are given in the graph.

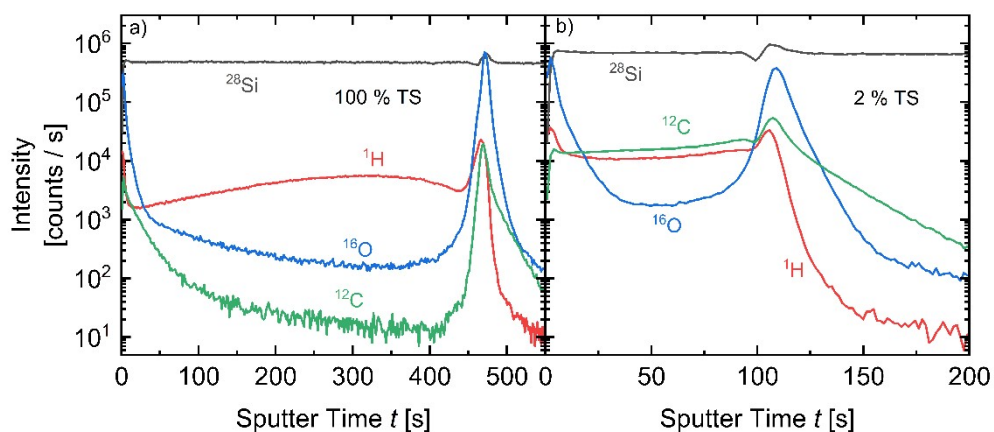


Figure S2: Silicon, hydrogen, carbon, and oxygen SIMS profiles of APCVD films deposited at 440 °C with a TS concentration of a) 100 % and b) 2 % diluted in cyclooctane.