

Supplementary Material:

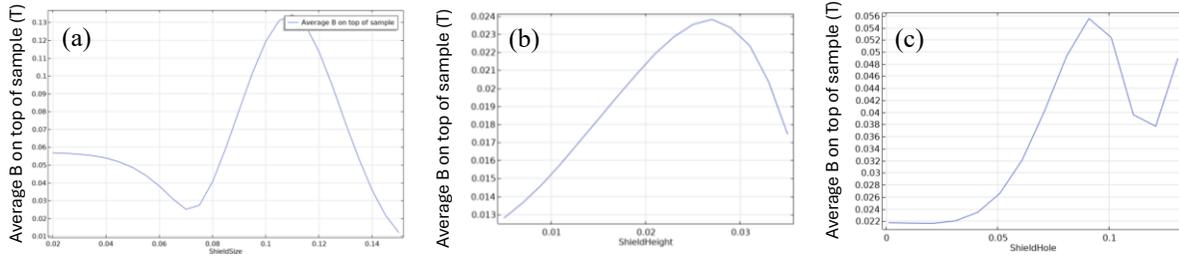


Figure 1: Magnetic field at the sample surface for different shielding configurations.

- (a) Variation of average magnetic flux density for different shield sizes.
- (b) Influence of shield height on the magnetic field at the sample position.
- (c) Effect of shield aperture diameter (hole radius) on the residual magnetic field above the sample.

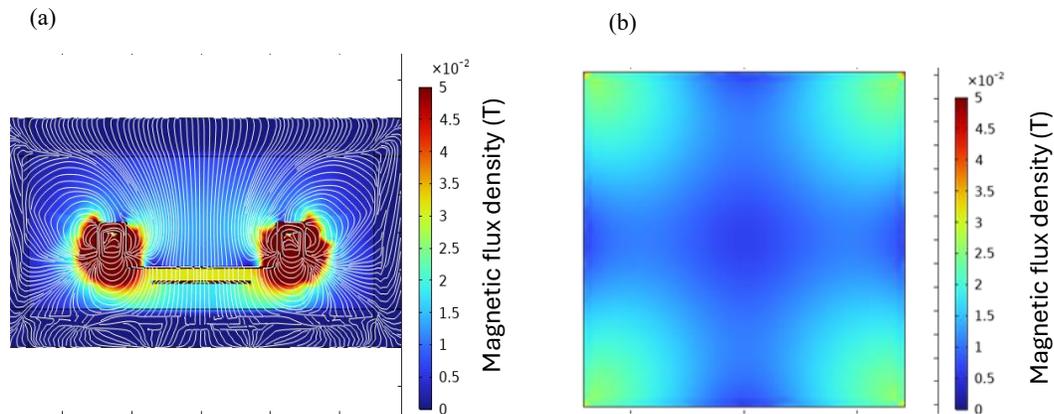


Figure 2: Example of 3D magnetic field simulation results.

- (a) Simulated magnetic flux distribution shown in a cross-sectional view of the PEALD chamber.
- (b) Corresponding magnetic field distribution on the surface of the sample, illustrating the spatial uniformity achieved with the optimized shielding design.