Supplementary information

Femtosecond Double-Pulse Laser Ablation and Deposition of Co-Doped ZnS Thin Films

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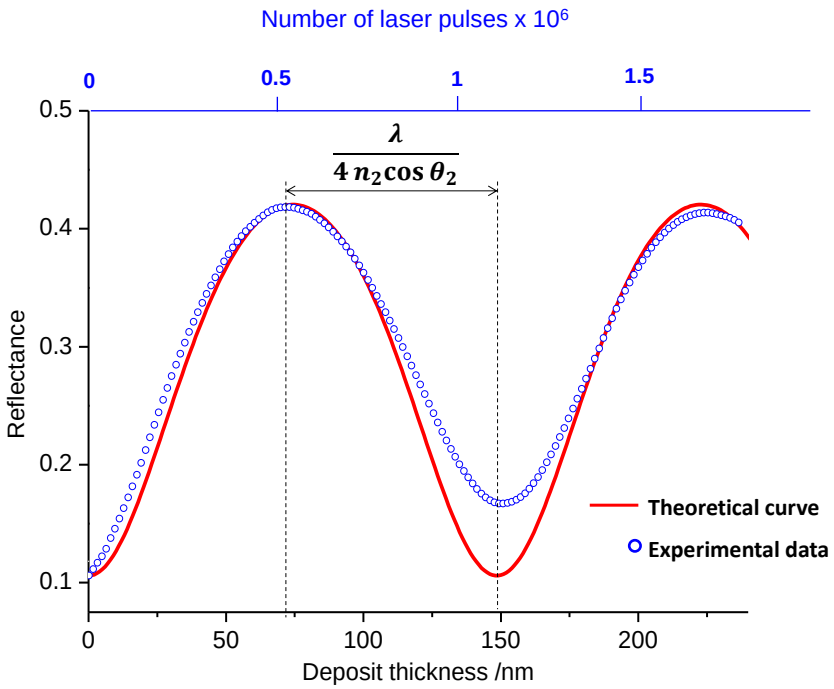
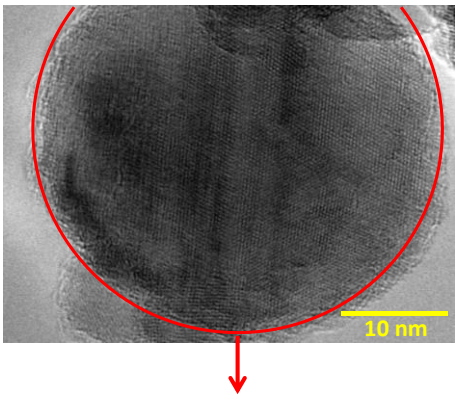


Figure S1. Variation of the reflectance as a function of the deposit thickness. The red line represents the theoretical reflectance curve expected for an incidence angle $\theta_1 = 82.7°$. The blue circles represent the experimental reflectance data obtained during the deposition of Co/ZnS on a silicon substrate by DP ablation at $\Delta t = 2$ ps using a fluence of 0.8 J cm^{-2} for each individual pulse.



	S	Co	Zn
Atomic %	45.7	1.6	52.8

Figure S2. TEM image of an individual crystalline nanoparticle analysed by EDX. The red circle delimitates the approximate area analyzed. In the table, the corresponding atomic percentage of S, Co and Zn found in the nanoparticle is given. The deposit was obtained by PLD with DP irradiation at an interpulse delay of 300 ps and $2x10^6$ pulses.