

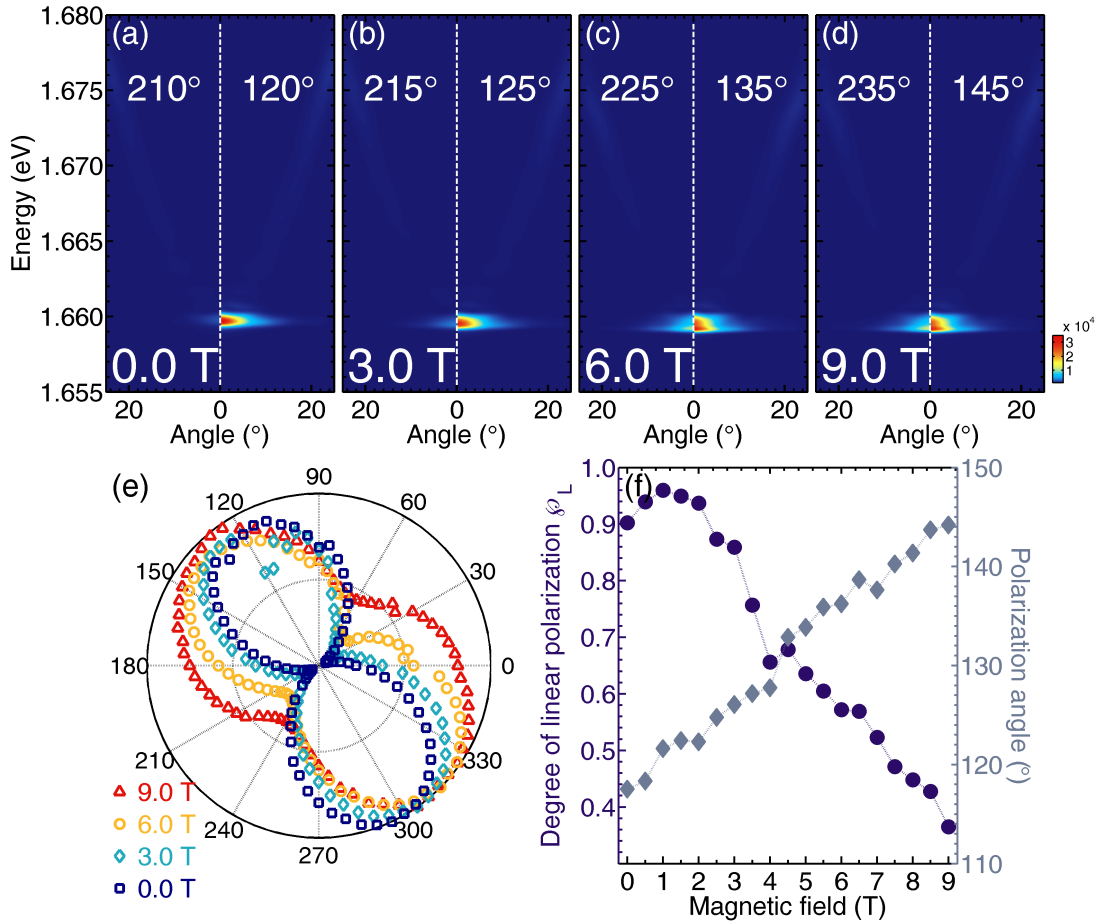
Supplementary Information for Spin polarized semimagnetic exciton-polariton condensate in magnetic field

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Supplementary Figure 1. Polarization properties of the condensate in external magnetic field. A highly linearly polarized condensate at 0 T, changes to elliptically-polarized condensate after applying external magnetic field. (a–d) Angle resolved PL maps detected in two perpendicular linear polarizations for increasing magnetic field at constant excitation power $P_{ex} = 1.5 P_{Th}$. (e) Normalized condensate emission intensity dependence on the angle of the linear polarization analyzer. (f) Degree of linear polarization and angle of the linear polarization plane as a function of magnetic field. Lines through experimental points are to guide the eye. The angle of the linear polarization plane rotates by 27° between 0 and 9 T. This effect we assign to the Faraday rotation in the quantum wells, which is additionally enhanced by the multiple reflections inside the cavity.