The reflection (𝝙R/𝝙𝞴), transmission (𝝙Т/𝝙𝞴), and absorption spectra modulated by wavelength of GaSe crystals had been investigated at 10-300K and compared with the luminescence spectra. The parameters of excitonic series for С1-V1 zones were determined. Exciton parameters, including longitudinal-transverse splitting of the fundamental state of excitonic polaritons were determined. The doublet presence of the transversal excitonic polariton mode (𝛚Т) was discovered. The fundamental (n=1) and excited states (n=1,3..Eg) of two new exciton series caused by the C2-V1 and С3-V1 zones had been determined, and the parameters of the exciton series were calculated. The up-conversion of luminescence from high-energy excitonic levels (Е > 3eV) was studied. The electrons are resonantly excited from V1(G1) towards C1(G6) and C2(G5) zones with a further transition to higher energy levels С3-С6 and the luminescence from the excitonic levels of C3-С6 zones towards valence zones. The zone model in the center of Brillouin zone was constructed based on the obtained data.