

Figure 4: (Color online). Numerically calculated (a) cavity population, (b) statistics of the emitted field, and (c) atomic population as a function of pump power, for different pure dephasing rates. (d) Effective atom-cavity coupling as a function of the pure dephasing rate (solid line), as compared to the cavity damping rate (dashed line). Parameters are:  $\kappa = 0.2g$  and  $\delta = 0$ . The inset shows the effective atom-cavity coupling as a function of  $P_x$ , for  $\delta = 0$ ,  $\gamma^* = 0$ .

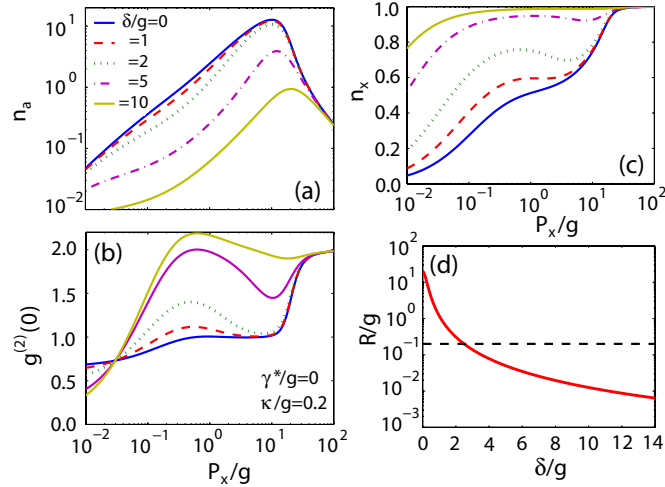


Figure 5: (Color online). Numerically calculated (a) cavity population, (b) statistics of the emitted field as a function of pump power, and (c) atomic population for different atom-cavity detunings. (d) Effective atom-cavity coupling as a function of the detuning (solid line), as compared to the cavity damping rate (dashed line). Parameters are:  $\kappa = 0.2g$  and  $\gamma^* = 0$ .