

In the thesis, we summarize known results regarding different types of expanders, upper and lower bounds on their sizes, and their explicit constructions. From the expanders, we construct bounded-depth superconcentrators of optimal size for every depth, and we show some explicit bounded-depth superconcentrator constructions from the explicit expanders. Apart from few minor generalizations, we do not bring any new results, but we present several known bounded-depth superconcentrator constructions in one place together with all the tools needed for the constructions. As far as we know, no such survey has existed before.