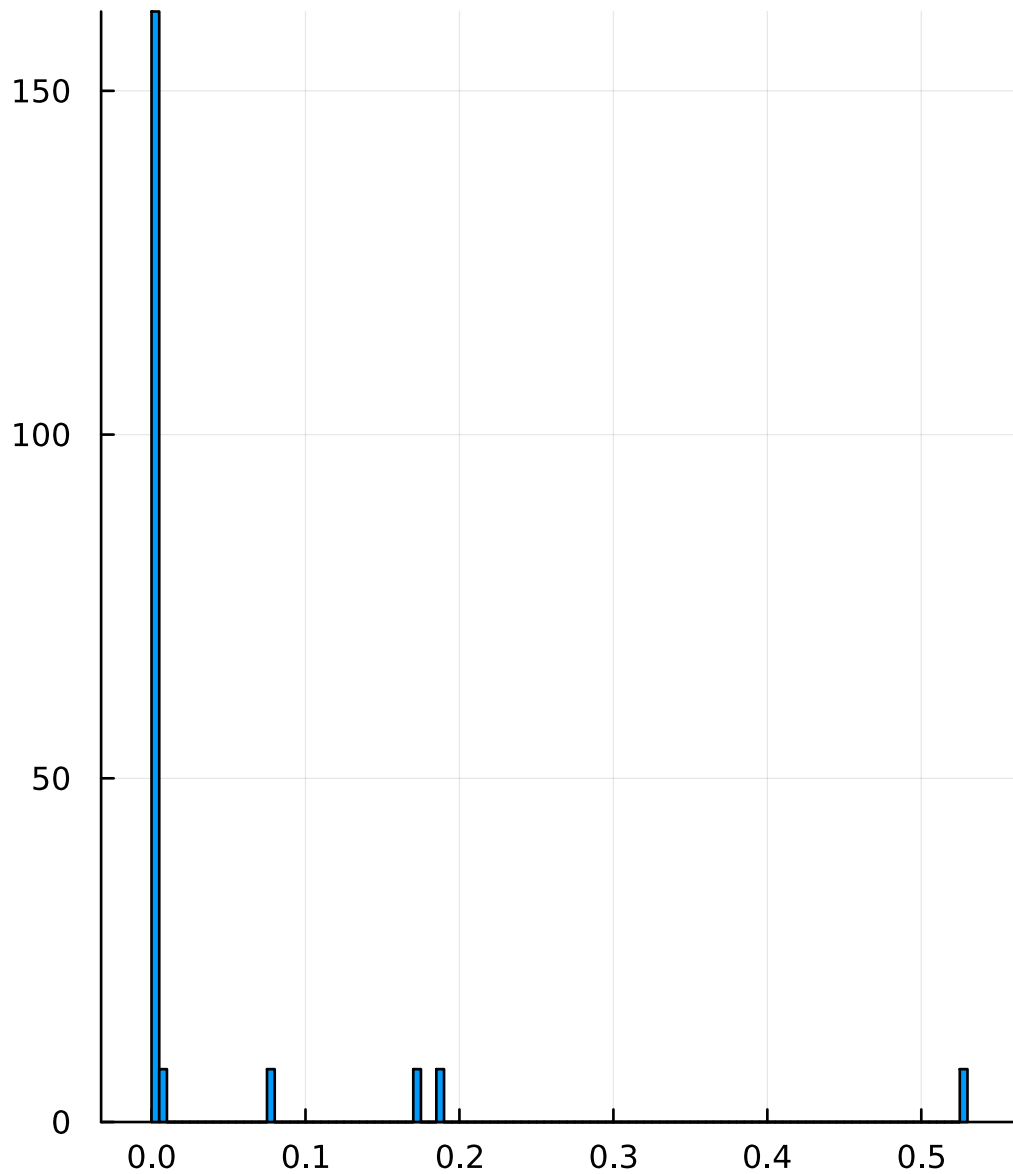From 3000 simulations

Energy Distribution, step=5

Energy Distribution, step=25