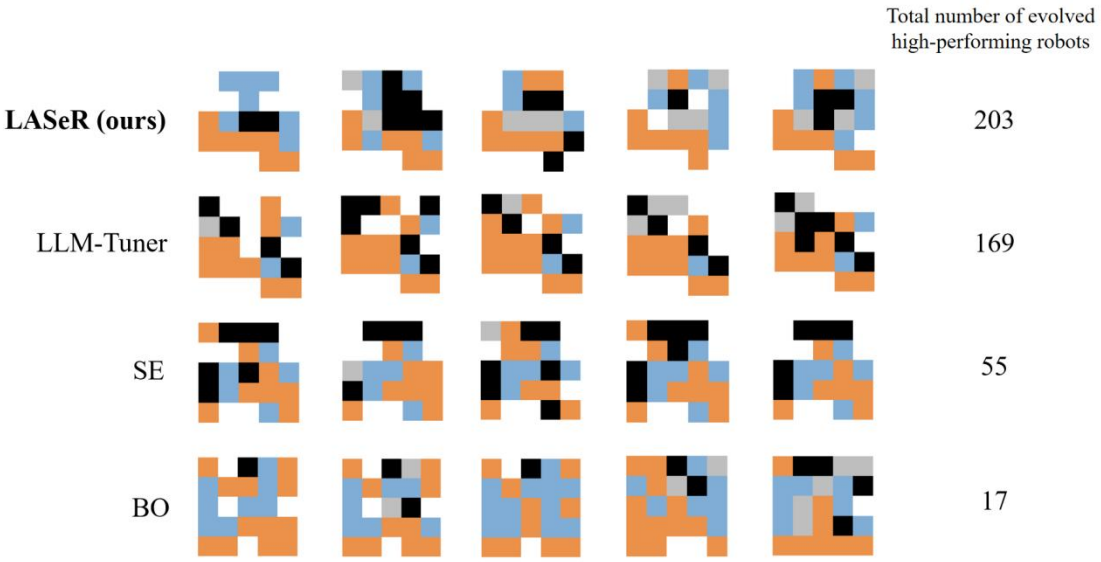
Supplementary material 8: Visualization of evolved robot designs

Following reviewers' suggestions, here we provide visualizations of robot designs evolved by LASeR and baseline algorithms. We take Pusher-v0 as an example, and randomly select five high-performing robot designs obtained by each algorithm in a single run of experiment. It can be seen from **Supplementary figure 8** that the robot designs evolved by LASeR seem to exhibit the highest level of variability. However, we would like to make two notes here. First, as we are only able to display a small fraction of robot designs, this visualization could only serve as a qualitative and intuitive verification of results presented in Section 3.2.1 in our paper, rather than a valid means of evaluation on its own. Second, as we detailed in **Supplementary material 9**, the number of evolved high-performing designs should also be taken into account when measuring morphological diversity. To this end, we believe **the quantitative results reported in Section 3.2.1 still serve as the most comprehensive and reliable evaluation of diversity**.



Supplementary figure 8. Visualizations of evolved high-performing robot designs on Pusher-v0. For each algorithm, five designs are randomly chosen for display. Annotated on the right are total numbers of high-performing designs obtained. The result of RoboGAN is absent because it fails to obtain robot designs that surpass the fitness threshold (i.e. the 90% quantile of fitnesses achieved by all algorithms).