

Supporting Information

Volpe and Volpe 10.1073/pnas.1711371114

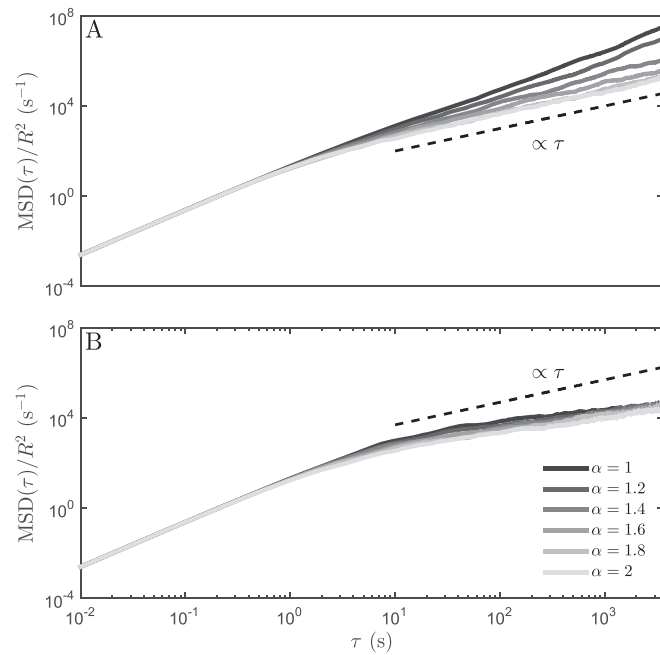


Fig. S1. Searcher's mean square displacements (MSDs) in different topographies. Average MSDs of searchers for different values of α in (A) a homogenous topography, showing superdiffusive behavior, and (B) a porous topography, showing subdiffusive behavior. The dashed lines represent diffusive behavior. Each MSD curve was obtained as an ensemble average over 100 1-h trajectories.

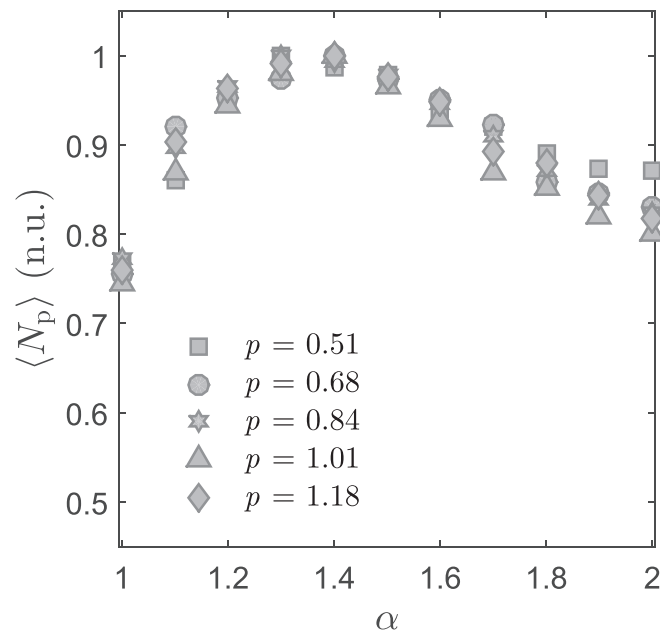


Fig. S2. Optimal search strategy in a porous topography for different densities of pores. Average number of caught targets as a function of α in normalized units (n.u.) for different pore densities p . All data collapse on the same curve. The case $p = 0.84$ corresponds to the curve in Fig. 2B. At $p = 1$, the porous structure is at percolation, and the area occupied by the pores is approximately 77% of the total area. Every curve is averaged over 1,000 1-h trajectories and normalized to its maximum value.