Captions for the supplementary movies:

Movie 1: A comparison of the evolution of the concentration field in the vertical $x_1 - x_3$ center plane $(x_2 = 0.5l_{x_2} = \pi)$ at forcing amplitude F = 0.75 between the without rotation case F075f/ ω 0 and rotation cases F075f/ ω 48 and F075f/ ω 59.

Movie 2: A comparison of the evolution of the concentration field in the vertical $x_1 - x_3$ center plane ($x_2 = 0.5l_{x_2} = \pi$) at forcing amplitude F = 1 between the without rotation case F1f/ ω 0 and rotation cases F1f/ ω 48 and F1f/ ω 59.

Movie 3: A comparison of the evolution of the concentration field in the vertical $x_1 - x_3$ center plane ($x_2 = 0.5l_{x_2} = \pi$) at forcing amplitude F = 2 between the without rotation case F2f/ ω 0 and rotation cases F2f/ ω 48 and F2f/ ω 59.

Movie 4: A comparison of the evolution of the concentration field in the vertical $x_1 - x_3$ center plane ($x_2 = 0.5l_{x_2} = \pi$) at forcing amplitude F = 3 between the without rotation case F3f/ ω 0 and rotation cases F3f/ ω 48 and F3f/ ω 59.