

**Electronic Supplementary Information : Multiple iodide
autocatalysis paths of chemo-hydrodynamical patterns in the
Briggs-Rauscher Reaction**

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1. Fig. S1-S3

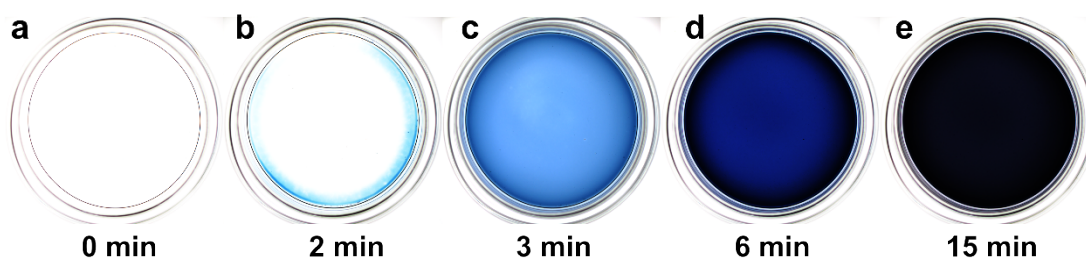


Fig. S1 Evolution of spatiotemporal patterns in the BR reaction system with a cover. The initial conditions are the same as that in the Fig. 1.

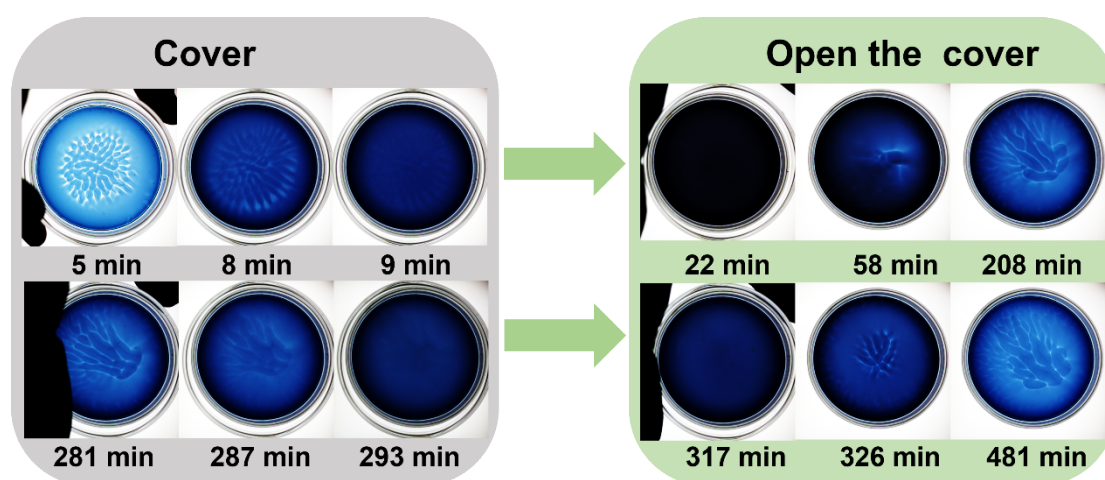


Fig. S2 Evolution of spatiotemporal patterns in the BR reaction system when the Petri dish is covered and then the cover is removed. The initial conditions are the same as that in the Fig. 1.

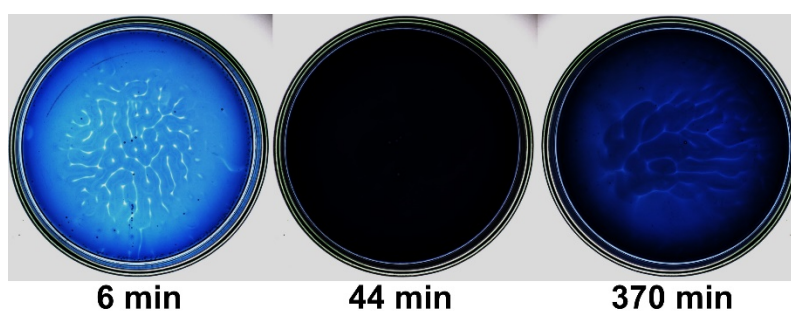


Fig. S3 Evolution of spatiotemporal patterns at $R = 0.1$ in the BR reaction system in the dark. Layer thickness is 3.0 mm, $[H_2O_2]_0 = 1.12$ M, $[KIO_3]_0 = 0.0234$ M, $[H_2SO_4]_0 = 0.0313$ M, $[CH_2(COOH)_2]_0 = 0.00234$ M, $[Mn^{2+}]_0 = 0.8$ mM. The snapshots were taken at 6 min, 44 min, and 370 min with opening the LED background light.

2. Video description

Video S1

Evolution of spatiotemporal patterns with $R = 0.15$ in the BR reaction system.

Video S2

Evolution of spatiotemporal patterns in the BR reaction system with a cover.

Video S3

Evolution of spatiotemporal patterns in the BR reaction system with different $[\text{Mn}^{2+}]_0$.

Video S4

Evolution of spatiotemporal patterns with different R values in the BR reaction system.

Video S5

Evolution of spatiotemporal patterns with different light intensities in the BR reaction system.

Video S6

Evolution of spatiotemporal patterns in the $\text{H}_2\text{O}_2 - \text{I}^-$ reaction system.

Video S7

Evolution of spatiotemporal patterns in the BL reaction system.