

Bi-directional Secure Communication Based on Discrete Chaotic Synchronization

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Abstract: Discrete chaotic systems are used for bi-directional secure communication. Both sides of communication keep sending signals to achieve their synchronization, and then recover the messages. However, the third side without keys cannot get useful information. Known-plaintext attack is also engaged to analyze this method, and the simulation results show that the proposed method can reach high security performance.

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Key words: bi-directional secure communication, discrete chaotic synchronization

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