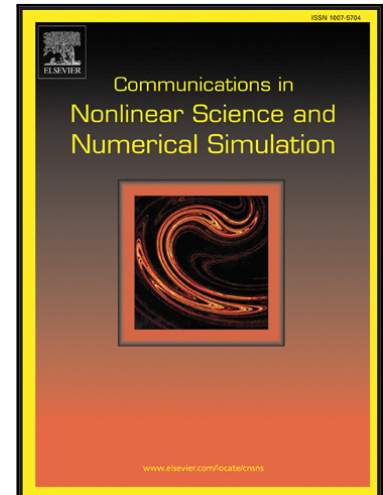


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An efficient and secure chaotic cipher algorithm for image content preservation

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Highlights:

- A new chaotic cipher algorithm for efficient and secure image content preservation is suggested, the proposal is well-suited for both standard and medical images, under just one round.
- The proposal consists of two modules, which are iteratively performed: chaotic confusion and pixel diffusion, the first module is governed by means of a nonlinear bit-level shuffling and circular-shifting, while the second module is ruled by means of an improved expanded XOR (eXOR) operation, the whole cryptosystem is controlled by the generated chaotic sequences of Logistic Tent System (LTS).
- The obtained results indicate the high performance in terms of execution-time and security level of the proposed cipher algorithm, and hence confirm its efficiency for real-time secure image transmission.

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