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| Authors: | Sinha, Sudeshna (/jspui/browse?type=author&value=Sinha%2C+Sudeshna) |
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| Abstract: | A novel time delayed chaotic oscillator exhibiting mono- and double scroll complex chaotic attractors is designed. This circuit consists of only a few operational amplifiers and diodes and employs a threshold controller for flexibility. It efficiently implements a piecewise linear function. The control of piecewise linear function facilitates controlling the shape of the attractors. This is demonstrated by constructing the phase portraits of the attractors through numerical simulations and hardware experiments. Based on these studies, we find that this circuit can produce multi-scroll chaotic attractors by just introducing more number of threshold values. © 2011 World Scientific Publishing Company |
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