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On the zero-divisor graphs of commutative semigroups. (English summary)

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Let S be a commutative semigroup with 0. The zero-divisor graph $\Gamma(S)$ of S is the graph whose vertices are nonzero zero-divisors of S, and two vertices x and y are adjacent if $xy = 0$ in S. Realization of the connections between the structures of S and $\Gamma(S)$ is one of the major problems in this area. In this paper, the authors study $\Gamma(S)$ when S is a commutative semigroup that is finitely corroborative and when $\Gamma(S)$ is complete r-partite for a positive integer r.

Reviewed by *Yonglin Cao*

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Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.