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Entanglement of Formation for Quantum States

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Abstract: We investigate the entanglement of formation for a class of high-dimensional quantum mixed states. We present a kind of generalized concurrence for a class of high-dimensional quantum pure states such that the entanglement of formation is a monotonically increasing convex function of the generalized concurrence. From the monotonicity and convexity the entanglement of formation for a class of high-dimensional mixed states has been calculated analytically.

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Key words: entanglement of formation, generalized concurrence

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