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Sommario/riassunto	The methods of time-efficient simulation of surface-excited wave propagation in plate-like multilayered composites are presented. The mathematical model of wave propagation in laminated plate based on the elasticity theory is transformed and then solved in wavenumber-frequency domain. The numerical methods for computation of inverse transform in time-space domain are developed and used for analysis of wave and energy propagation phenomena occurring in composite plates due to surface excitation.