

LIST OF SYMBOLS

θ_T	Thermal stress.
Δ_α	Difference in thermal expansion coefficient of film and substrate.
ν_F	Poisson ratio of film material.
Δ_T	Difference between the temperature of film during deposition and after deposition.
E_S	Young's modulus of substrate.
ν	Poissons ratio for the substrate.
d_S	Substrate thickness.
d_F	Film thickness.
P_m	Packing density.
n_f	Refractive index of film.
n_m	Refractive index of bulk material.
ϕ_R	Phase change on reflection.
ϕ_T	Phase change on transmission.
Δ	Phase difference.
Ψ	Arc tangent of amplitude attenuation ratio.
Ψ_i, Ψ_r	Arctangent of the amplitude of incident and reflected components.
E_a^p	Amplitude of p component of incident light in air.
E_a^s	Amplitude of s component of incident light in air.
R_a^p	Amplitude of p component of reflected light in air.
R_a^s	Amplitude of s component of reflected light in air.
ρ	Reflectivity.
δ_i^p, δ_i^s	Phases of p and s components respectively of the incident wave.

δ_r^p, δ_r^s	Phases of p and s components respectively of the reflected wave.
R^p	Total reflection coefficient of p component.
R^s	Total reflection coefficient of s component.
r_{af}^p	Fresnel reflection coefficient of p component for the boundary between a and f.
r_{af}^s	Fresnel reflection coefficient of s component for the boundary between a and f.
r_{fs}^p	Fresnel reflection coefficient of p component for the boundary between f and s.
r_{fs}^s	Fresnel reflection coefficient of s component for the boundary between f and s.
d	Fringe displacement.
D	Distance between fringes.
λ	Wavelength of light.
σ_A	Adhesion.
S	Stress.
P	Polariser angle.
A	Analyzer angle.
Q	Quarter wave plate angle.
δ	Relative retardation of quarter wave plate.
$\delta\Delta$	Change in Δ i.e., $\Delta_{\text{final}} - \Delta_{\text{initial}}$.
$\delta\psi$	Change in ψ i.e., $\psi_{\text{final}} - \psi_{\text{initial}}$.