```
ONEE = np.linspace(0.01, 10, 1000) # 1ω energy array

# The prefactor, ω^2/2ε0c^3 cos^2 θ0
PREFACTOR = (ONEE**2)/(2*EPS0*HBAR**2 * LSPEED**3 * math.cos(THETA0)**2)

nl = np.sqrt(epsl1w) # The index of refraction, nℓ = √εℓ(ω)
Nl = np.sqrt(epsl2w) # The index of refraction, Nℓ = √εℓ(2ω)

# The wave vectors, wℓ = √(εℓ(ω) − sin^2 θ0), etc.
wb1w = np.sqrt(epsb1w - (math.sin(THETA0)**2))
wb2w = np.sqrt(epsb2w - (math.sin(THETA0)**2))
wl1w = np.sqrt(epsl1w - (math.sin(THETA0)**2))
wl2w = np.sqrt(epsl2w - (math.sin(THETA0)**2))

# The Fresnel factors, r_s^lb = (wℓ − wb)/(wℓ + wb), etc.
tvls = (2*math.cos(THETA0))/(math.cos(THETA0) + wl1w)
Tvlp = (2*math.cos(THETA0)*Nl)/(math.cos(THETA0)*epsl2w + wl2w)
rvls = (math.cos(THETA0) - wl1w)/(math.cos(THETA0) + wl1w)
rlbs = (wl1w - wb1w)/(wl1w + wb1w)
Rvlp = (math.cos(THETA0)*epsl2w - wl2w)/(math.cos(THETA0)*epsl2w + wl2w)
Rlbp = (wl2w*epsb2w - wb2w*epsl2w)/(wl2w*epsb2w + wb2w*epsl2w)

# δ = 8π (d/λ0) Wℓ, φ = 4π (d/λ0) wℓ
delta = 8*math.pi*((ONEE*THICKNESS*1e-9)/(PLANCK*LSPEED))*wl2w
varphi = 4*math.pi*((ONEE*THICKNESS*1e-9)/(PLANCK*LSPEED))*wl1w

# r_s^M = (r_s^ℓb e^iφ)/(1 + r_s^vℓ r_s^ℓb e^iφ), etc.
rMs = ((rlbs*np.exp(1j*varphi))/(1 + rvls*rlbs*np.exp(1j * varphi)))
RMpav = (Rlbp*np.exp(1j*delta/2)*(2/delta)*np.sin(delta/2))*
        (1 + Rvlp*Rlbp*np.exp(1j*delta))**-1
rMpluss = 1 + rMs
RMplusp = 1 + RMpav
RMminusp = 1 - RMpav

# ΓsP = (T_p^vℓ/Nℓ) (t_s^vℓ r_s^M+)^2
GammasP = (Tvlp/Nl)*(tvls*rMpluss)**2

# rsP = −R_p^M− Wℓ sin^2 φ cos φ χ^xxx + R_p^M− Wℓ 2 sin φ cos^2 φ χ^xxy − ...
rsP = - (RMminusp*wl2w*math.sin(PHI)**2*math.cos(PHI) * XXX) \
      + (RMminusp*wl2w*2*math.sin(PHI)*math.cos(PHI)**2 * XXY) \
      - (RMminusp*wl2w*math.cos(PHI)**3 * XYY) \
      - (RMminusp*wl2w*math.sin(PHI)**3 * YXX) \
      + (RMminusp*wl2w*2*math.sin(PHI)**2*math.cos(PHI) * YYX) \
      - (RMminusp*wl2w*math.sin(PHI)*math.cos(PHI)**2 * YYY) \
      + (RMplusp*math.sin(THETA0)*math.sin(PHI)**2 * ZXX) \
      - (RMplusp*math.sin(THETA0)*2*math.sin(PHI)*math.cos(PHI) * ZXY) \
      + (RMplusp*math.sin(THETA0)*math.cos(PHI)**2 * ZYY)

# RsP = (ω^2/2ε0c^3 cos^2 θ0) |nℓ^−1 ΓsP rsP|^2
RsP = PREFACTOR * np.absolute((1/nl) * GammasP * rsP)**2
```