



Polarization coherent anti-Stokes Raman scattering microscopy

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Abstract

We report polarization coherent anti-Stokes Raman scattering (P-CARS) microscopy that allows vibrational imaging with high sensitivity and spectral selectivity. The nonresonant background signals from both Raman scatterers and the solvent are efficiently suppressed in P-CARS microscopy. We demonstrate P-CARS imaging of unstained cells based on the contrast of the protein amide I band.

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