

7.21

Investigation of Triplet Fullerene C₇₀ EPR Lineshape under Continuous Light Illumination: Zero Field Splitting Parameters Distribution

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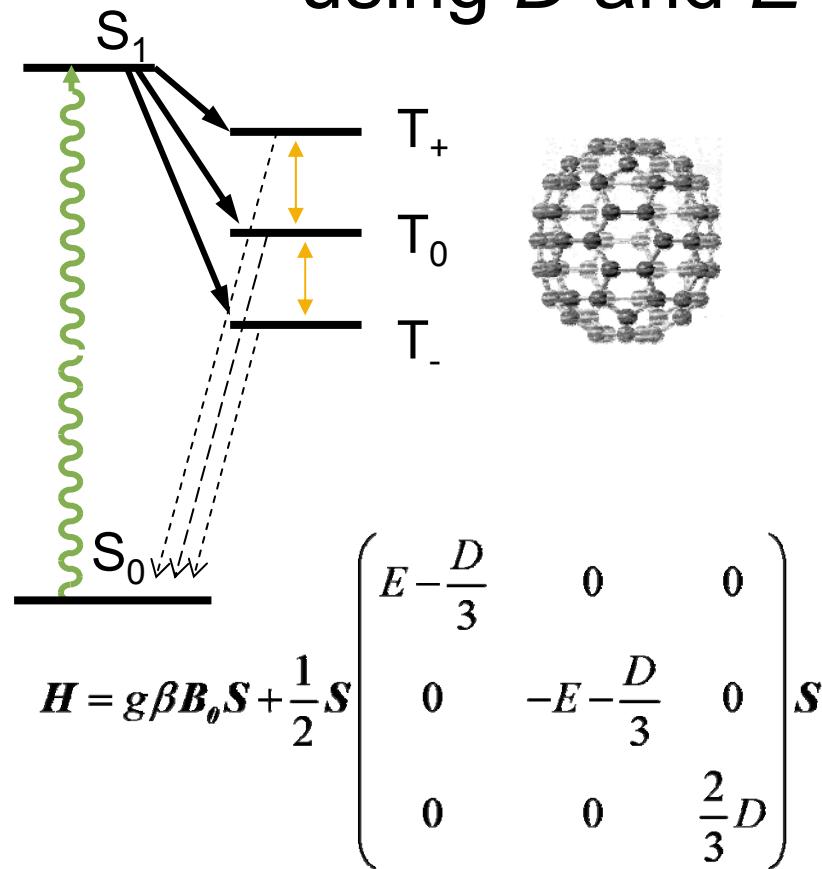


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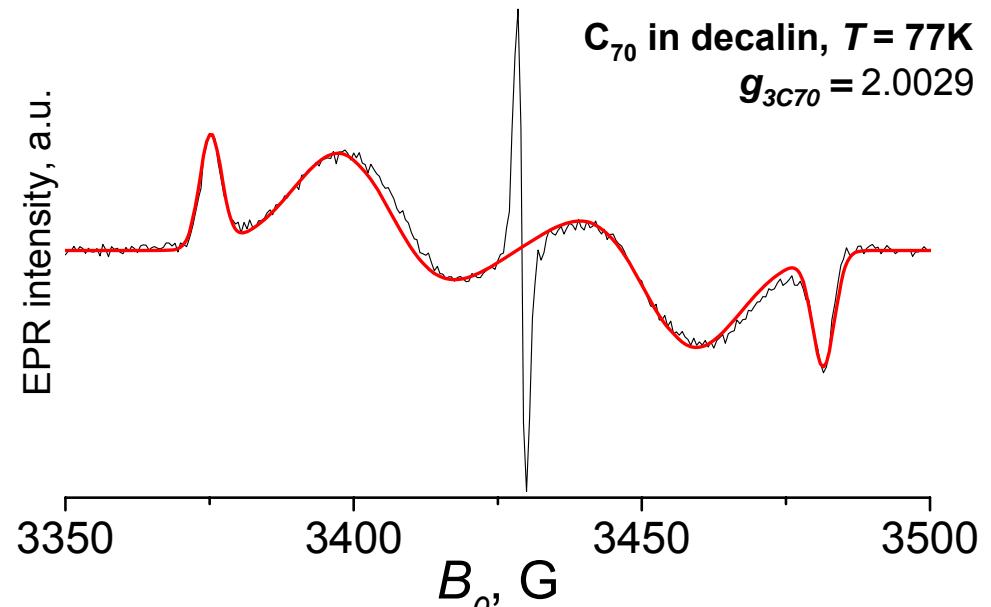
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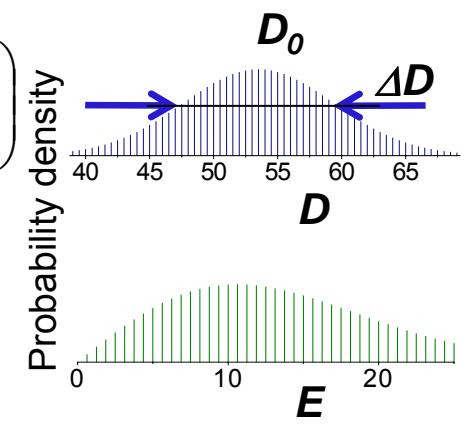
EPR lineshape of $^{3}\text{C}_{70}$ at 77K. Numerical simulation using D and E values distribution



matrix	D_0 , G	ΔD , G	E_0 , G	δ , G
decalin	53.2	2.7	8.5	2.7
o-terphenyl	53.5	4.2	15	
PMMA	51.7	7.8	14	3
polystyrene	52.7	7.1	14	

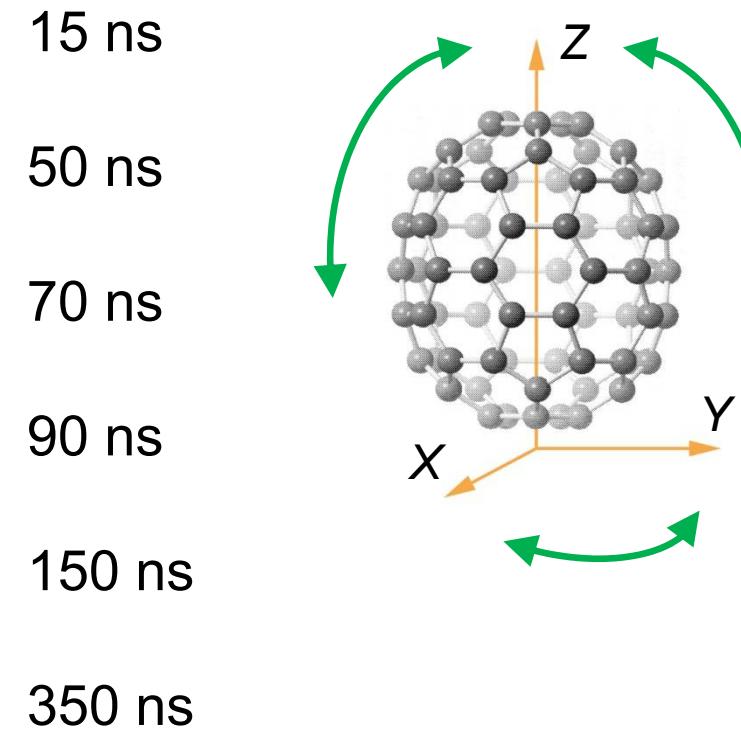
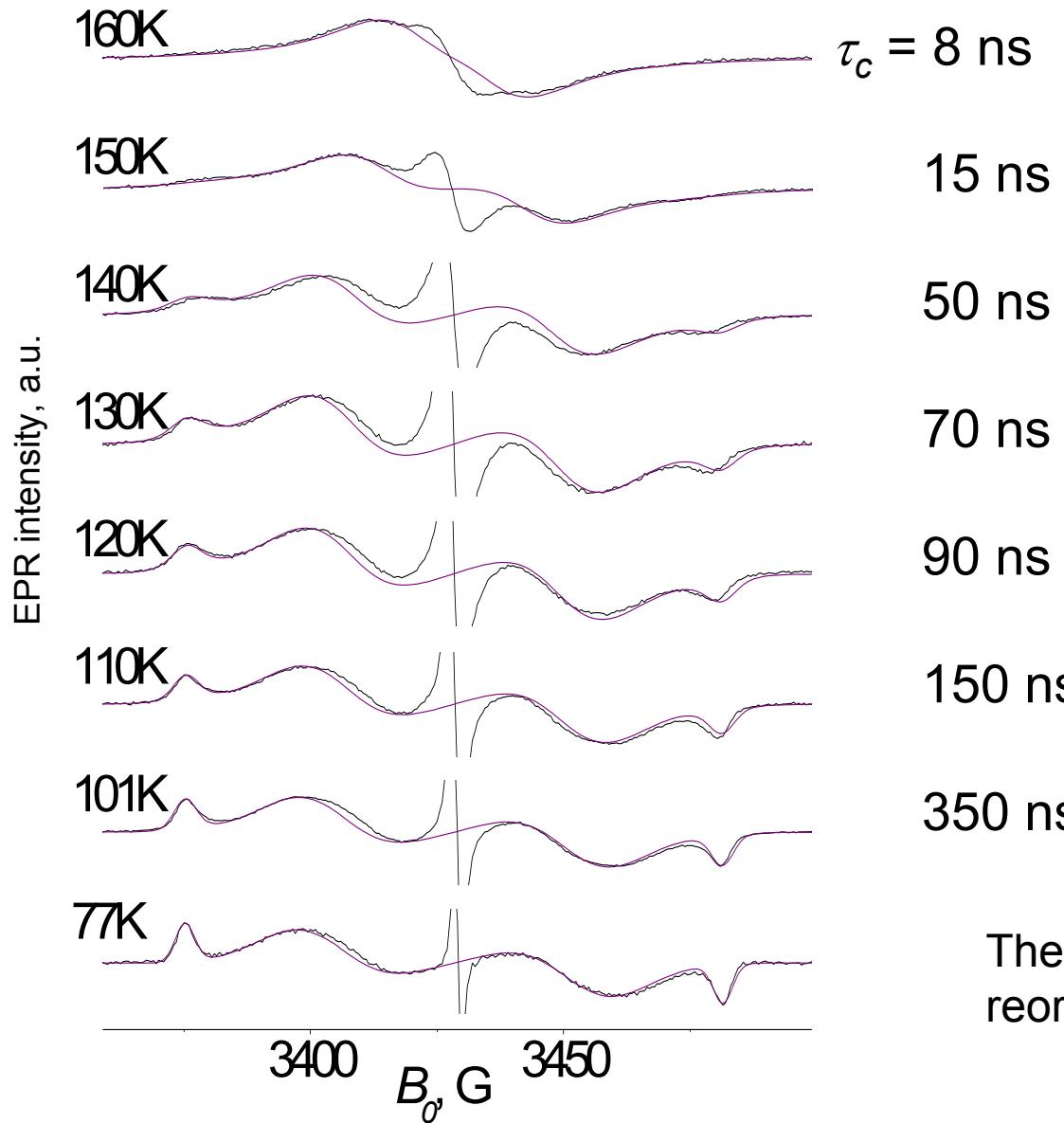


$$W_D(D) \sim \exp\left(-2 \frac{(D - D_0)^2}{\Delta D^2}\right)$$



$$W_E(E) \sim E \exp\left(-\frac{E^2}{E_0^2}\right)$$

Nanosecond reorientations of $^{3}\text{C}_{70}$ molecules in glassy decalin



The varied parameter is only
reorientation correlation time τ_c