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Time-resolved nanosecond fluorescence lifetime imaging and picosecond infrared spectroscopy of combretastatin A-4 in solution and in cellular systems

Bisby, RH, Botchway, SW, Greetham, GM, Hadfield, JA, MCGOWN, A, PARKER, AW, SCHERER, KM and TOWRIE, M

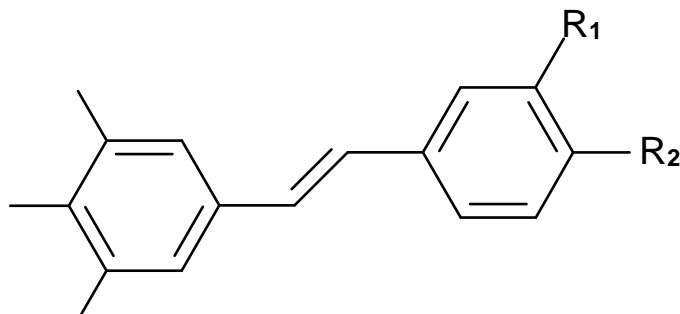
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FIGURE 1



Compound	R ₁	R ₂	log(P)	τ (ps)	φ	λ _{max} (ex)	λ _{max} (em)
<i>E</i> -CA4	-OH	-OMe	3.466	490	0.15	334	390
<i>E</i> -CA4F	-F	-OMe	4.275	810	0.29	332	392
<i>E</i> -CNCA4	-H	-CN	3.882	707	0.15	343	468
<i>E</i> -DMACA4	-H	-N(Me) ₂	4.229	360	---	328	450
<i>E</i> -ACA4	-NH ₂	-OMe	3.595	4,800	0.28	355	465

FIGURE 2

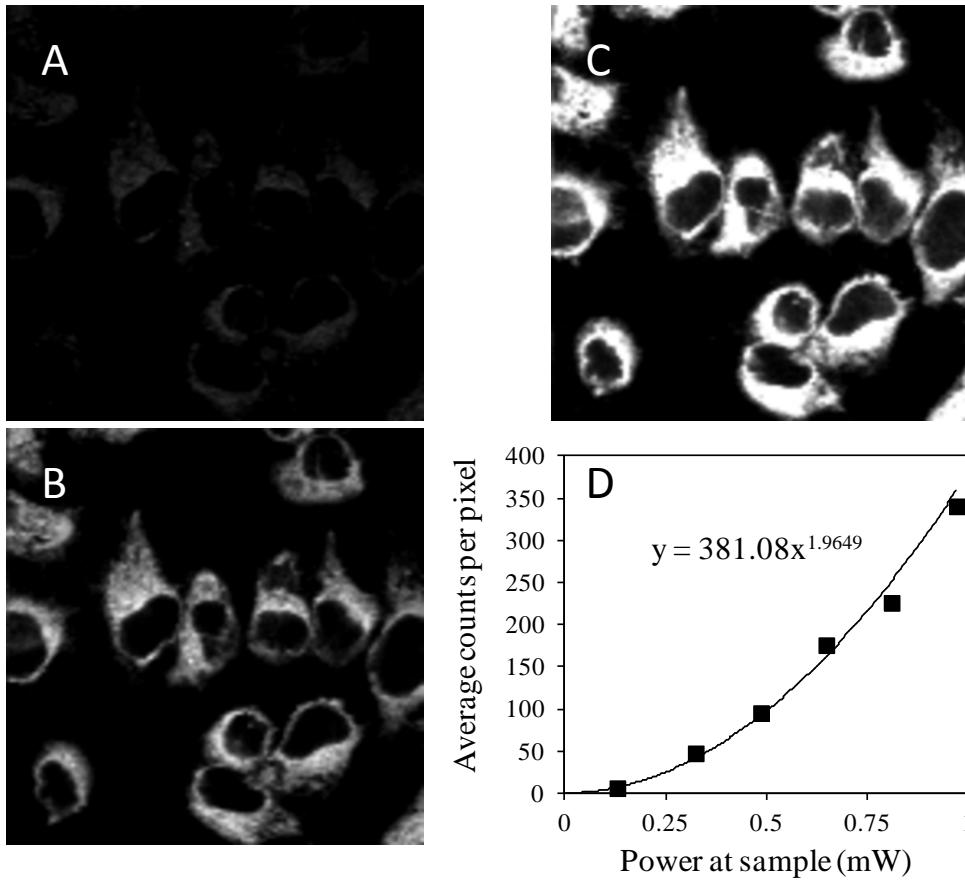


FIGURE 3

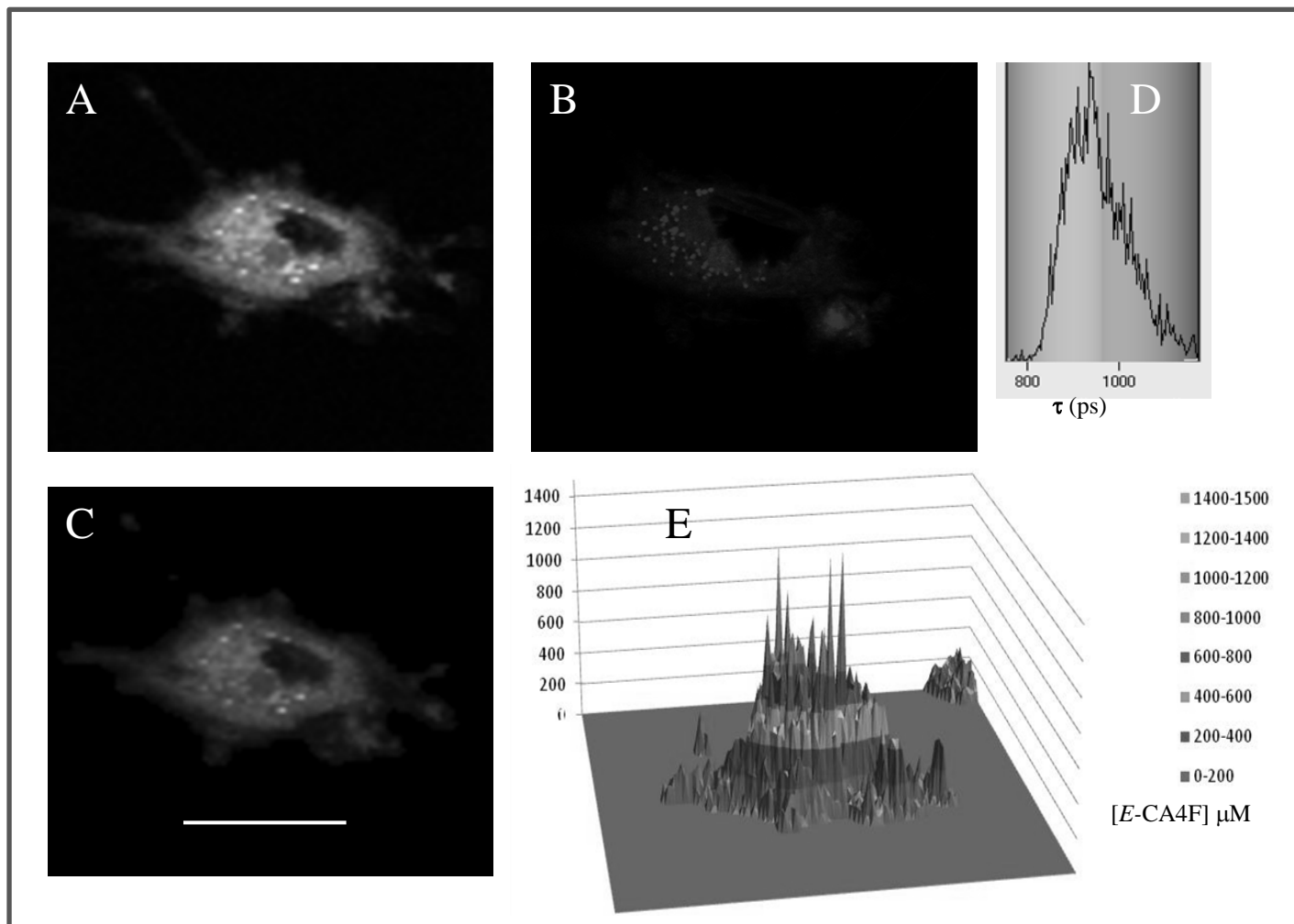
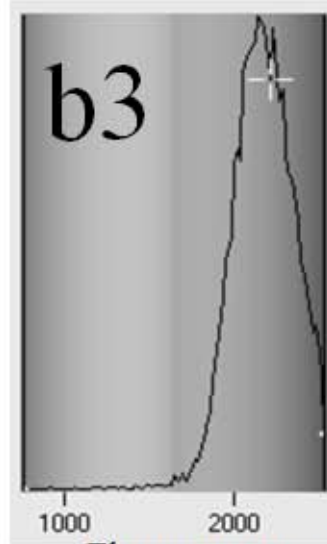
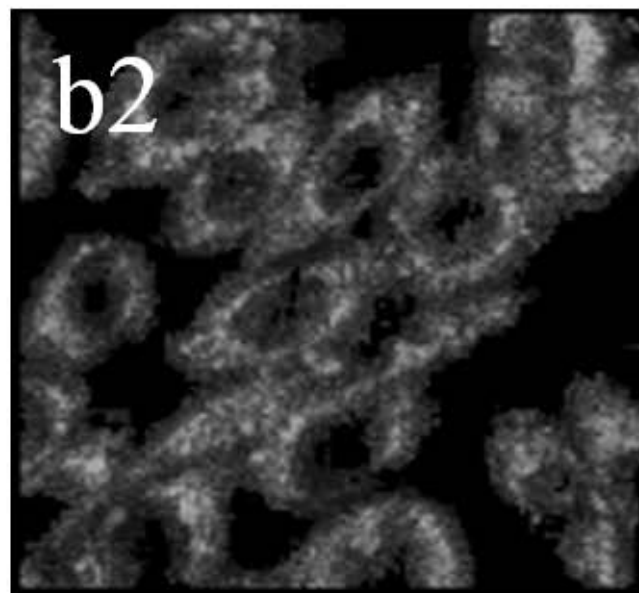
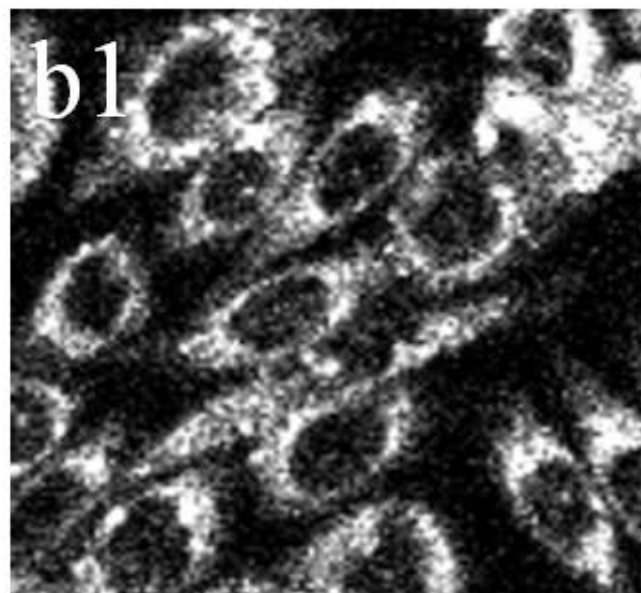
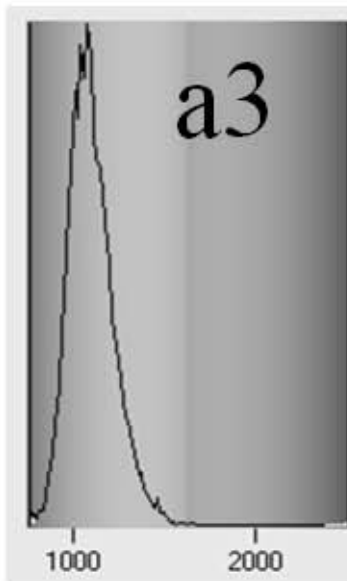
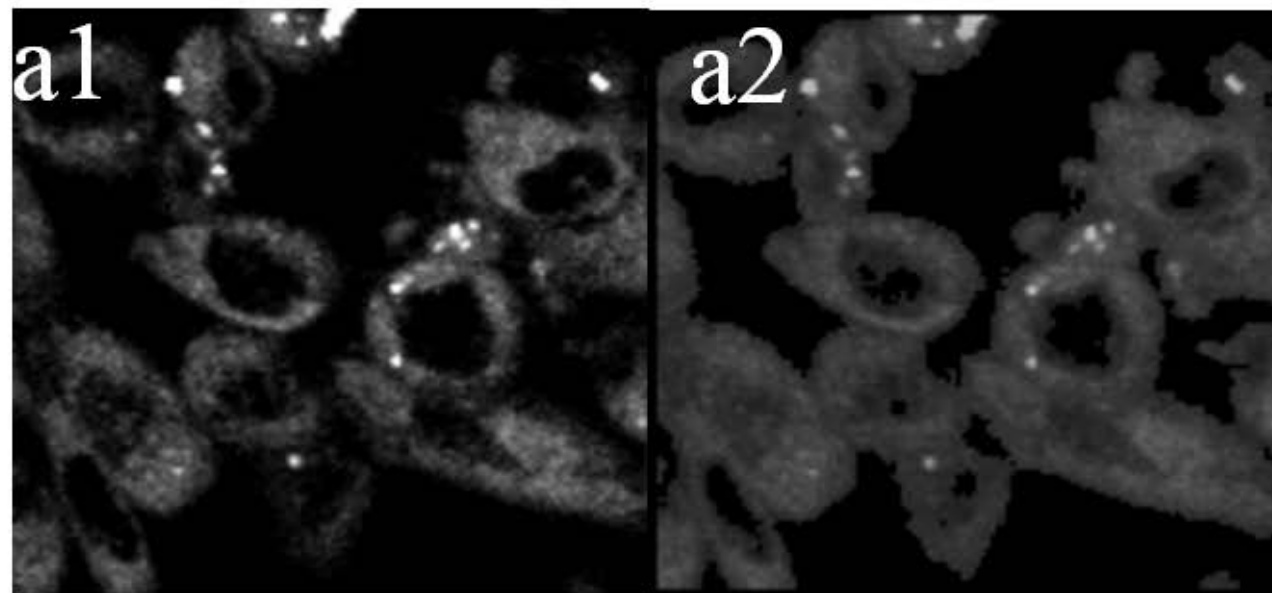


FIGURE 4



Fluorescence
lifetime (ps)

FIGURE 5

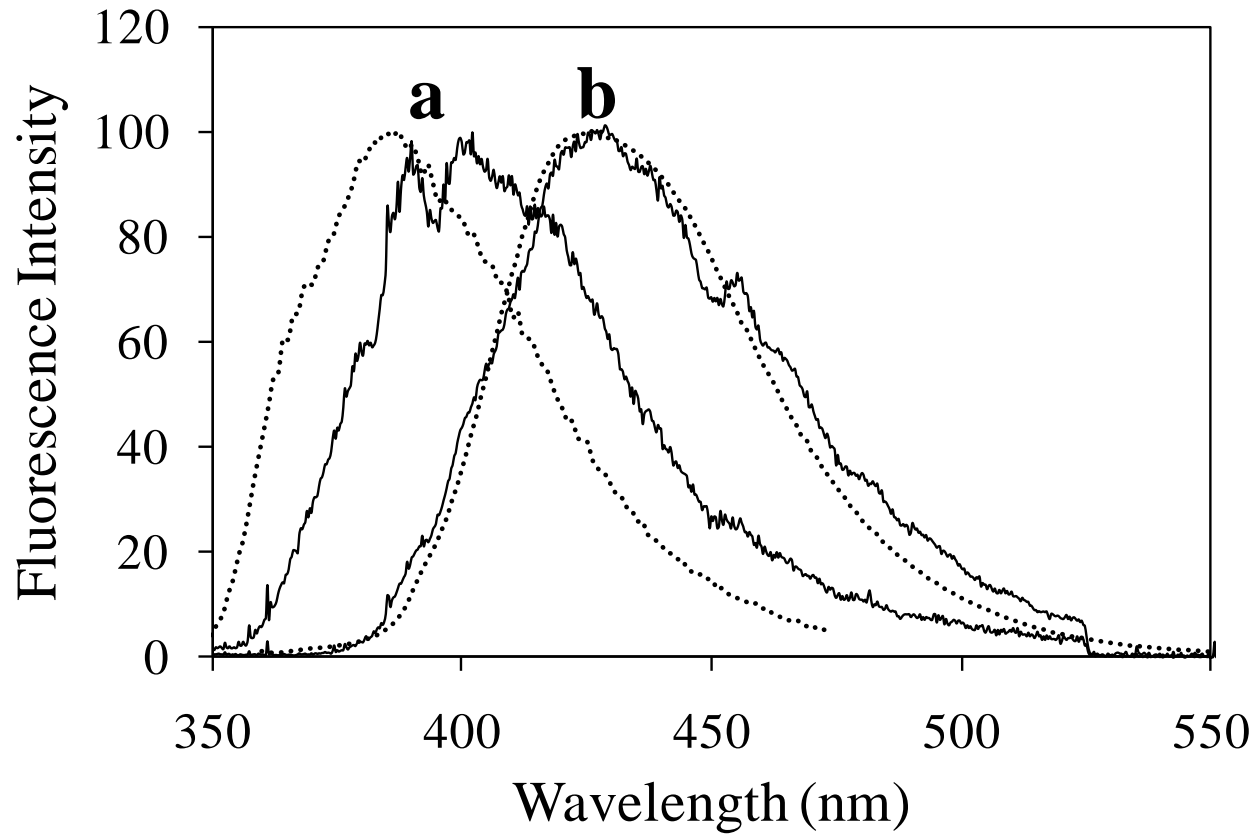


FIGURE 6

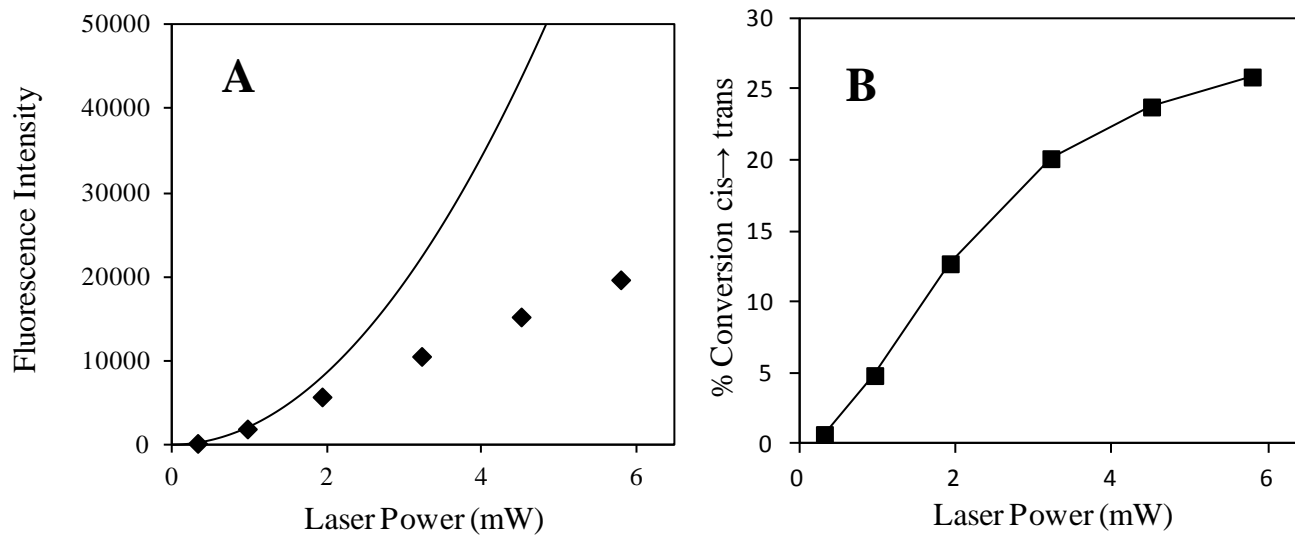
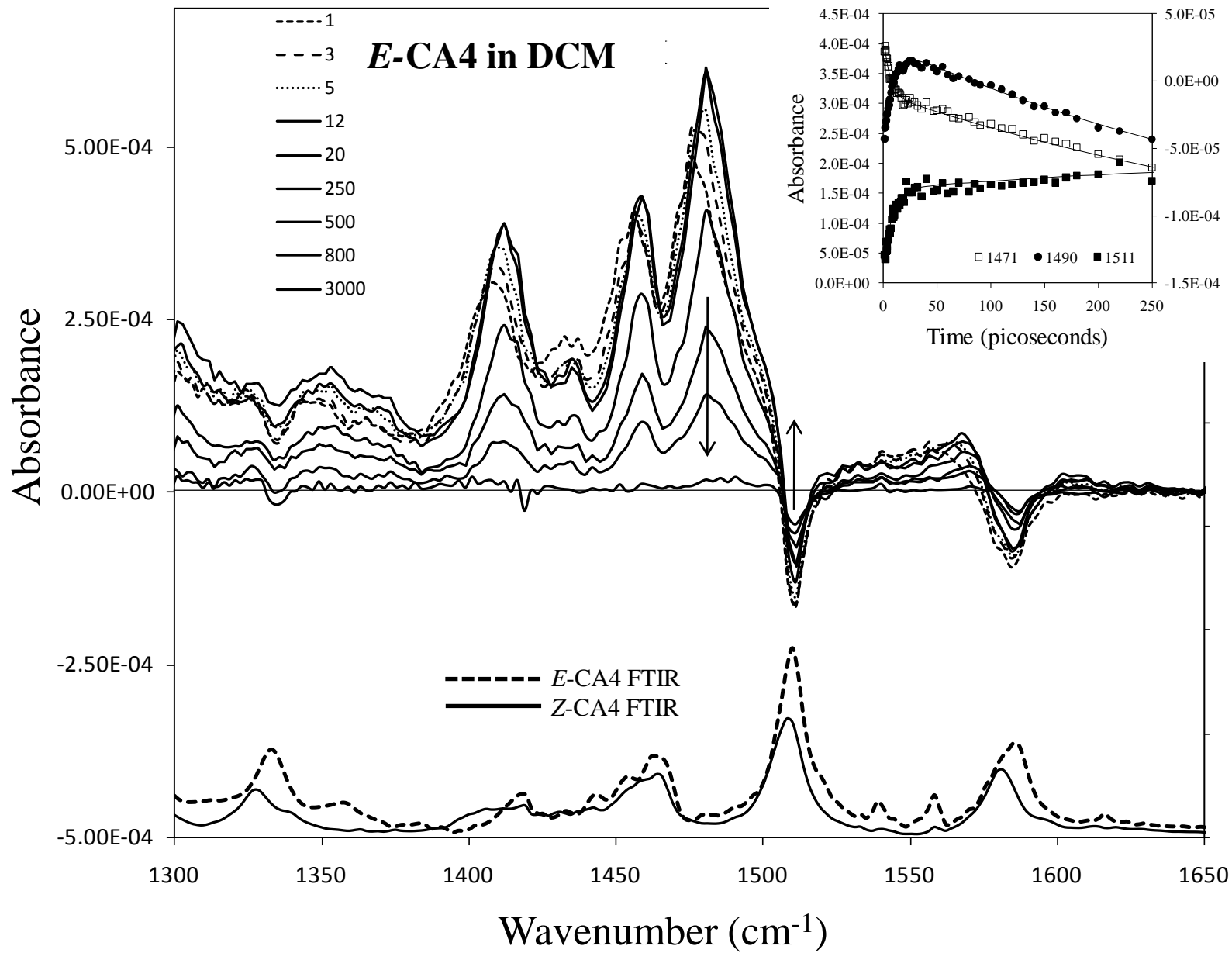


FIGURE 7



Z-CA4 in DCM

FIGURE 8

