

Synthesis of silver nanoparticles coupled with aromatic diselenides: greener approach, potential against glioma cells and DNA interaction

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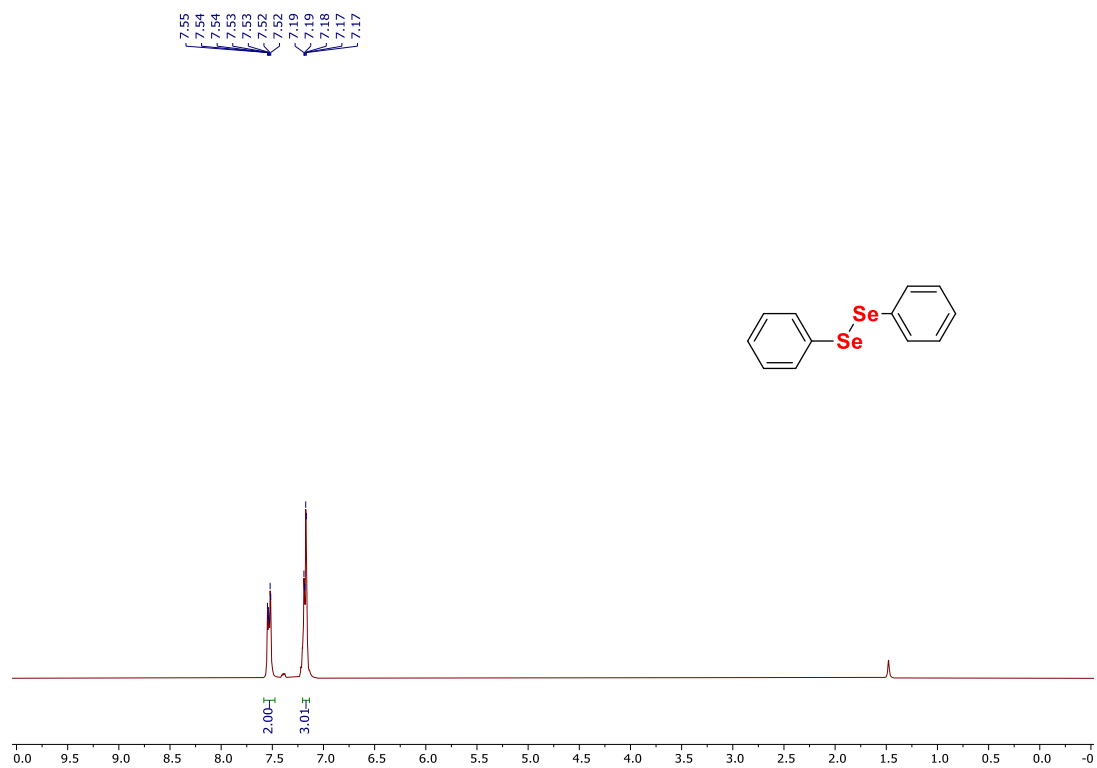
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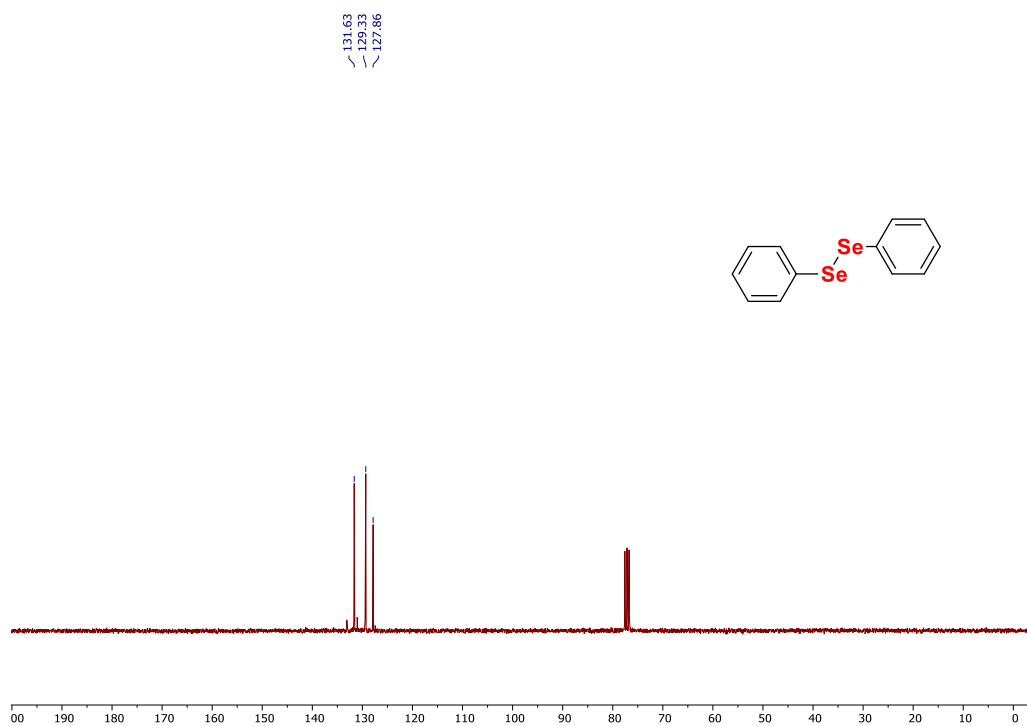
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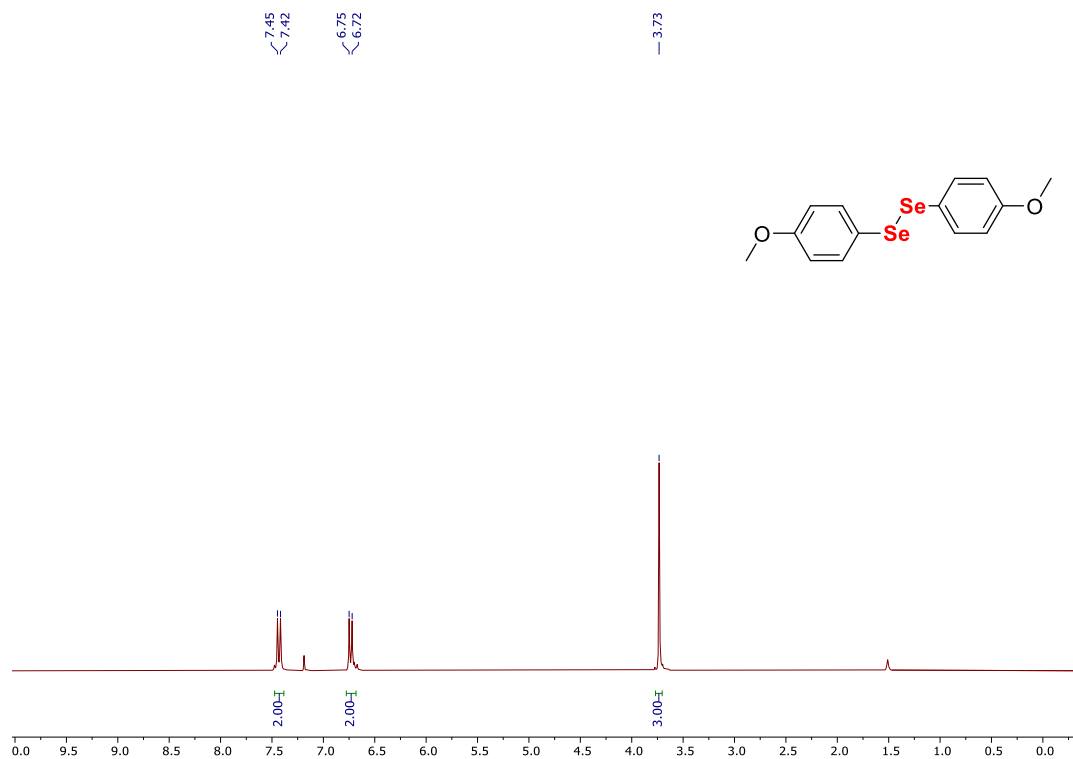
NMR Spectra



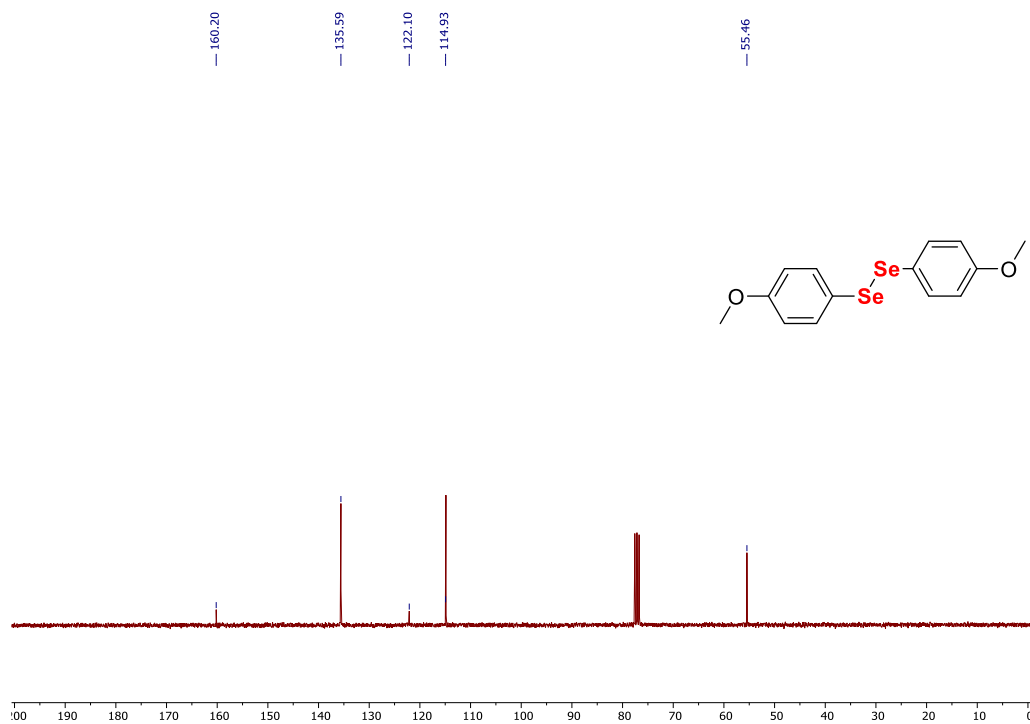
ESI Figure 1: ¹H NMR (300 MHz, CDCl₃) spectrum of diphenyl diselenide



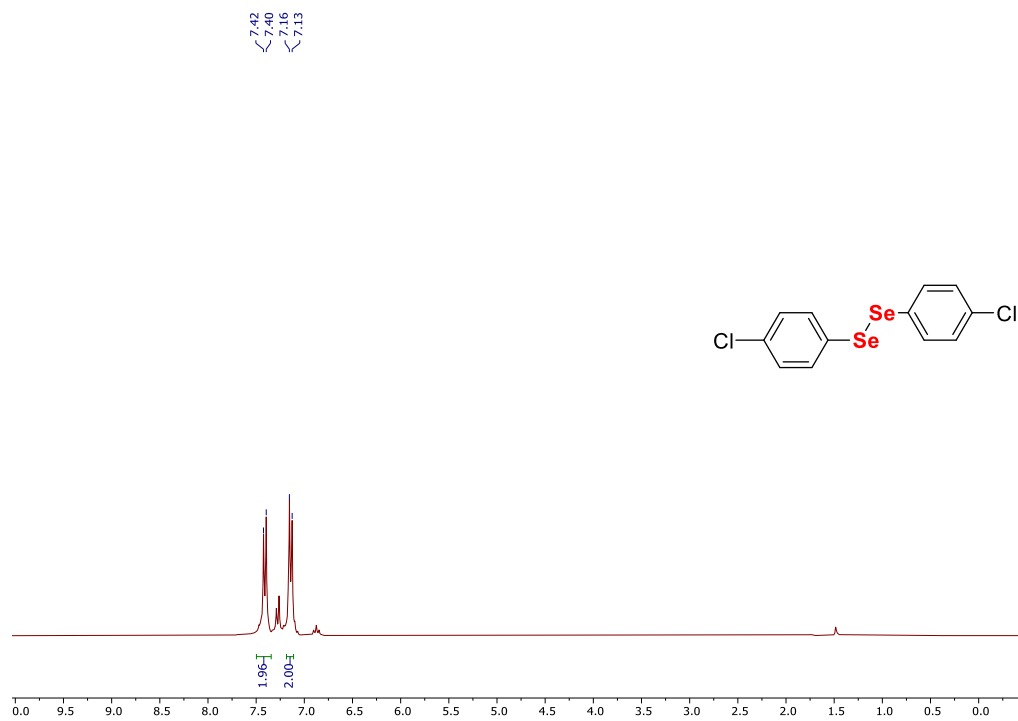
ESI Figure 2: ¹³C NMR (75 MHz, CDCl₃) spectrum of diphenyl diselenide



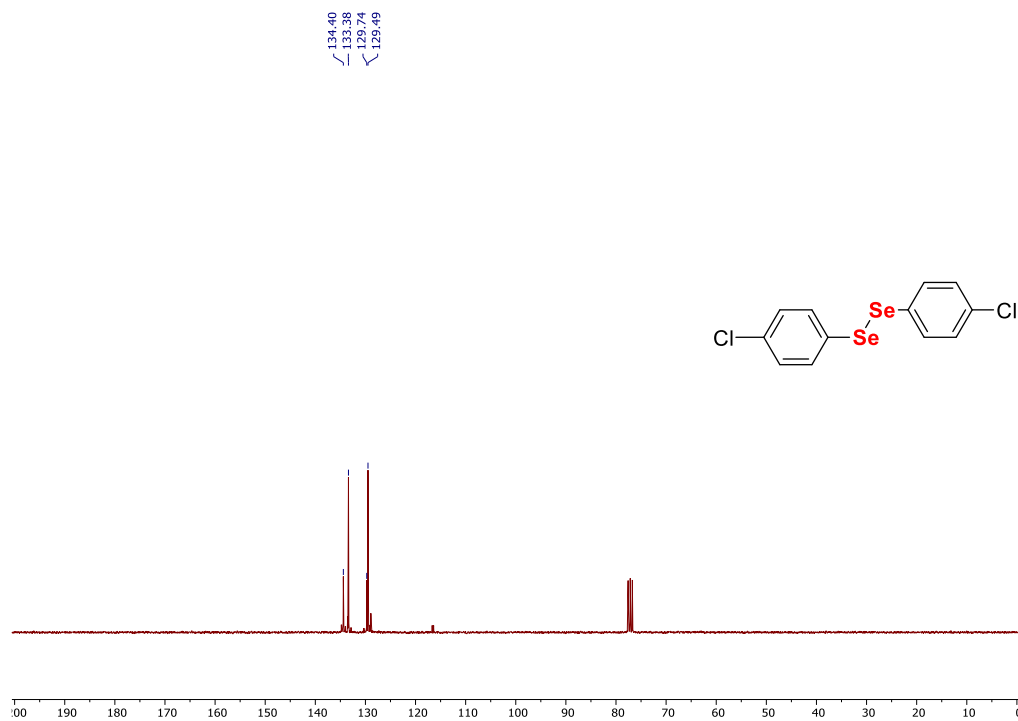
ESI Figure 3: ^1H NMR (300 MHz, CDCl_3) spectrum of *p*-chloro diphenyl diselenide



ESI Figure 4: ^{13}C NMR (75 MHz, CDCl_3) spectrum of *p*-chloro diphenyl diselenide



ESI Figure 5: ¹H NMR (300 MHz, CDCl₃) spectrum of *p*-chloro diphenyl diselenide



ESI Figure 6: ¹³C NMR (75 MHz, CDCl₃) spectrum of *p*-chloro diphenyl diselenide

ESI-Table 1: Cell viability assay by MTT in the C6 cell line. Data are expressed as mean±S.E.M. and the percentage of cell viability reduction compared to the control of each treatment

(C₆H₅Se)₂	Cell viability (mean±S.E.M.)	Cell viability reduction	A3	Cell viability % (mean±S.E.M.)	Cell viability reduction
1 μmol L⁻¹	90.65±7.97	9.35%	1 μmol L⁻¹	76.98±10.12	23.02%
5 μmol L⁻¹	99.60±2.97	0.4%	5 μmol L⁻¹	61.03±6.72	38.97%
10 μmol L⁻¹	81.79±3.02	18.21%	10 μmol L⁻¹	62.75±1.95	37.25%
25 μmol L⁻¹	95.93±1.68	4.07%	25 μmol L⁻¹	44.23±3.79	55.77%
50 μmol L⁻¹	72.52±4.87	27.48%	50 μmol L⁻¹	16.23±1.81	83.77%

<i>p</i>-Cl(C₆H₄Se)₂	Cell viability (mean±S.E.M.)	Cell viability reduction	A6	Cell viability % (mean±S.E.M.)	Cell viability reduction
1 μmol L⁻¹	96.14±4.26	3.86%	1 μmol L⁻¹	108.1±4.98	-
5 μmol L⁻¹	82.88±5.03	17.12%	5 μmol L⁻¹	67.19±4.25	32.81%
10 μmol L⁻¹	91.98±6.31	8.02%	10 μmol L⁻¹	62.22±6.28	37.78%
25 μmol L⁻¹	50.06±5.90	49.94%	25 μmol L⁻¹	25.07±5.67	74.93%
50 μmol L⁻¹	40.37±1.22	59.63%	50 μmol L⁻¹	12.48±0.36	87.52%

<i>p</i>-MeO(C₆H₄Se)₂	Cell viability (mean±S.E.M.)	Cell viability reduction (%)	A7	Cell viability % (mean±S.E.M.)	Cell viability reduction (%)
1 μmol L⁻¹	92.61±8.69	7.39%	1 μmol L⁻¹	70.22±14.28	29.78%
5 μmol L⁻¹	85.90±6.40	14.1%	5 μmol L⁻¹	60.41±13.19	39.59%
10 μmol L⁻¹	86.83±2.96	13.17%	10 μmol L⁻¹	60.19±6.31	39.81%
25 μmol L⁻¹	89.27±1.96	10.73%	25 μmol L⁻¹	39.85±7.26	60.15%
50 μmol L⁻¹	80.51±6.44	19.49%	50 μmol L⁻¹	12.51±0.13	87.49%