

Electronic Supplementary Information

A Smart Synthesis of Gold/Polystyrene Core-Shell Nanohybrids using TEMPO Coated Nanoparticles

*Katarzyna Zawada, Waldemar Tomaszewski, Elżbieta Megiel**

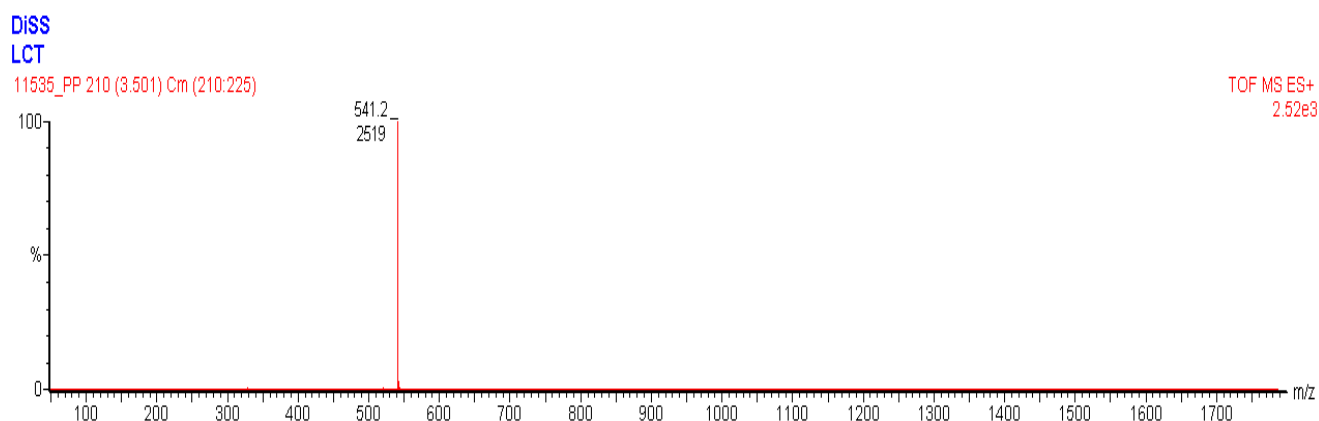


Figure S1. ESI-MS spectrum of bisnitroxide disulfide (DiSS) as a sodium ion $[M + Na]^+$.

Elemental analysis

N	C	H	S
T-AuNPs			
2.06 %	23.59%	3.57%	5.01%
AuPS6			
0.22%	75.62%	6.52%	1.51%

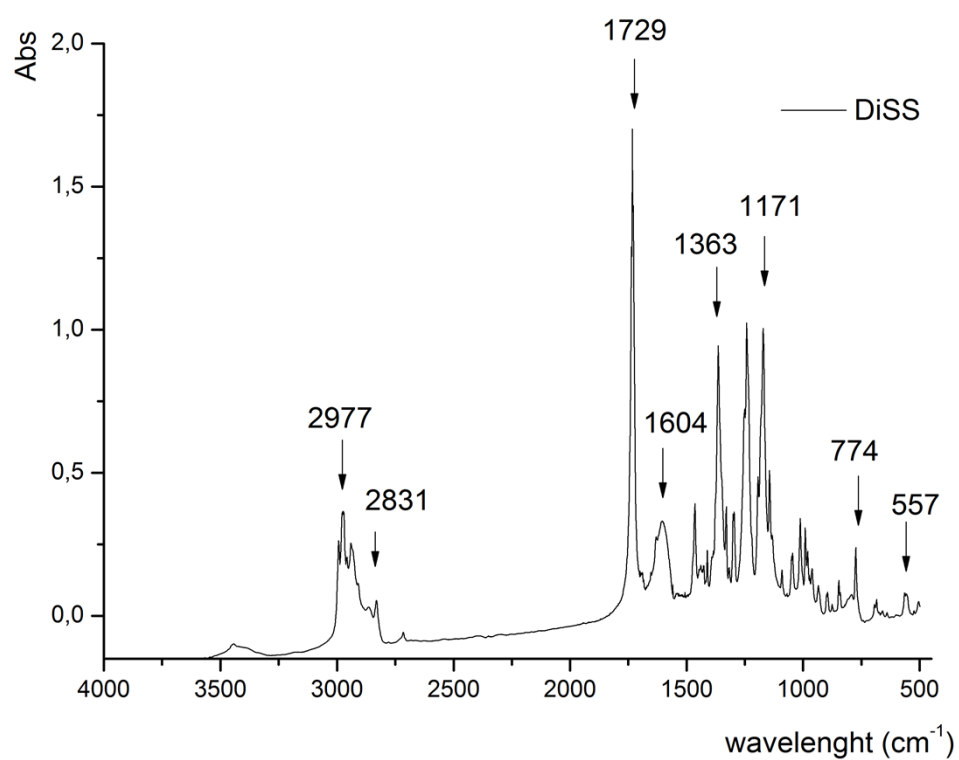


Figure S2.

FT-IR spectrum of DiSS (see Scheme 2).

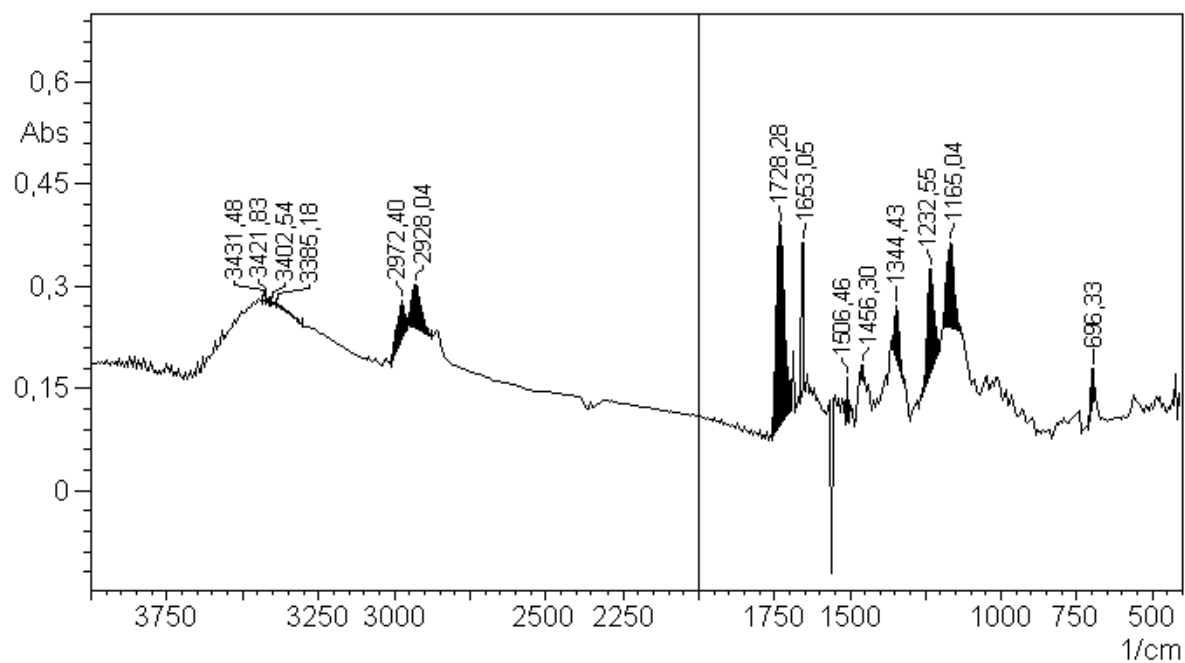


Figure S3. FT-IR spectrum of T-AuNPs.

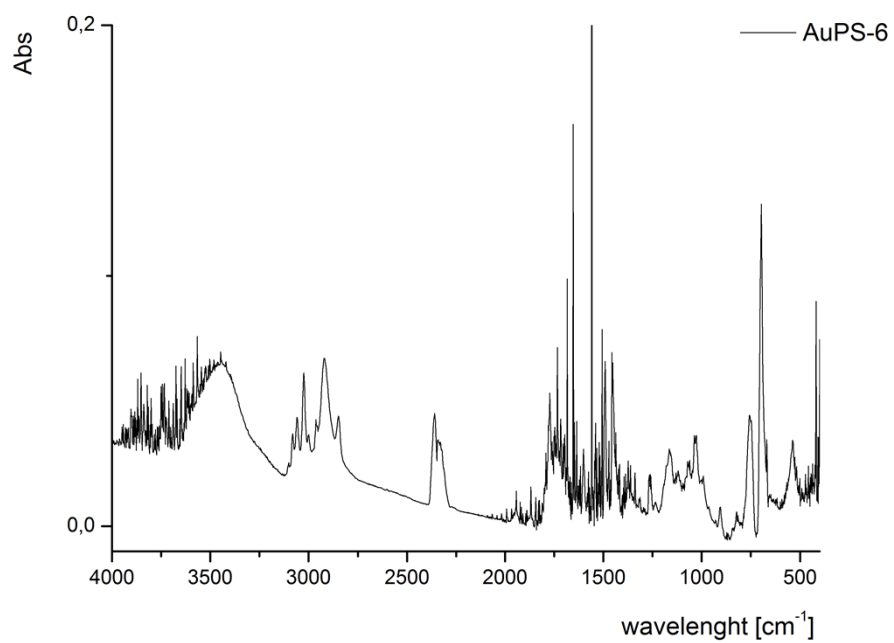


Figure S4. FT-IR spectrum of AuPS6.

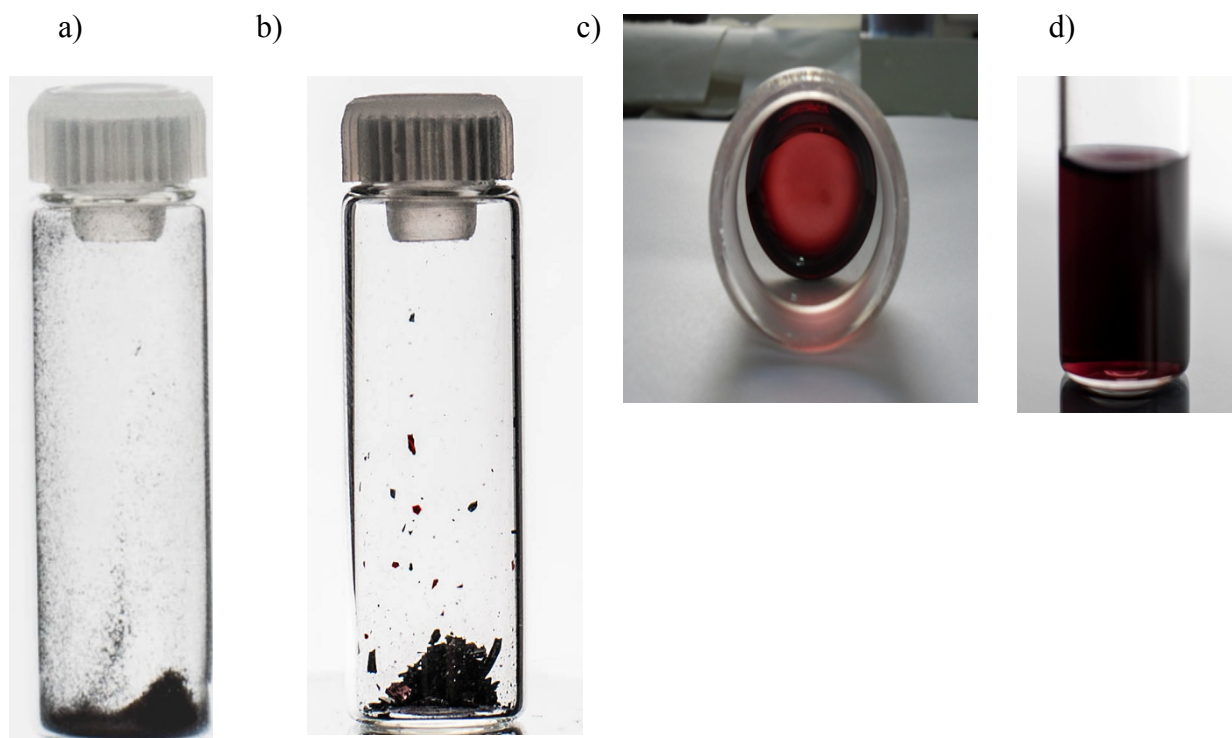


Figure S5. Pictures of T-AuNPs a) and AuPS6 in solid state b) and c) and in THF solution d).

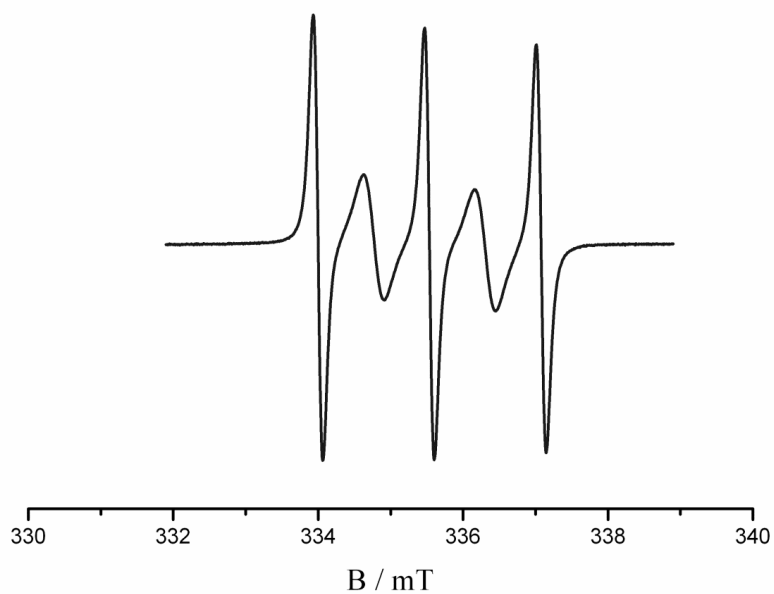


Figure S6. ESR spectrum of DiSS (see Scheme 2) in toluene solution.

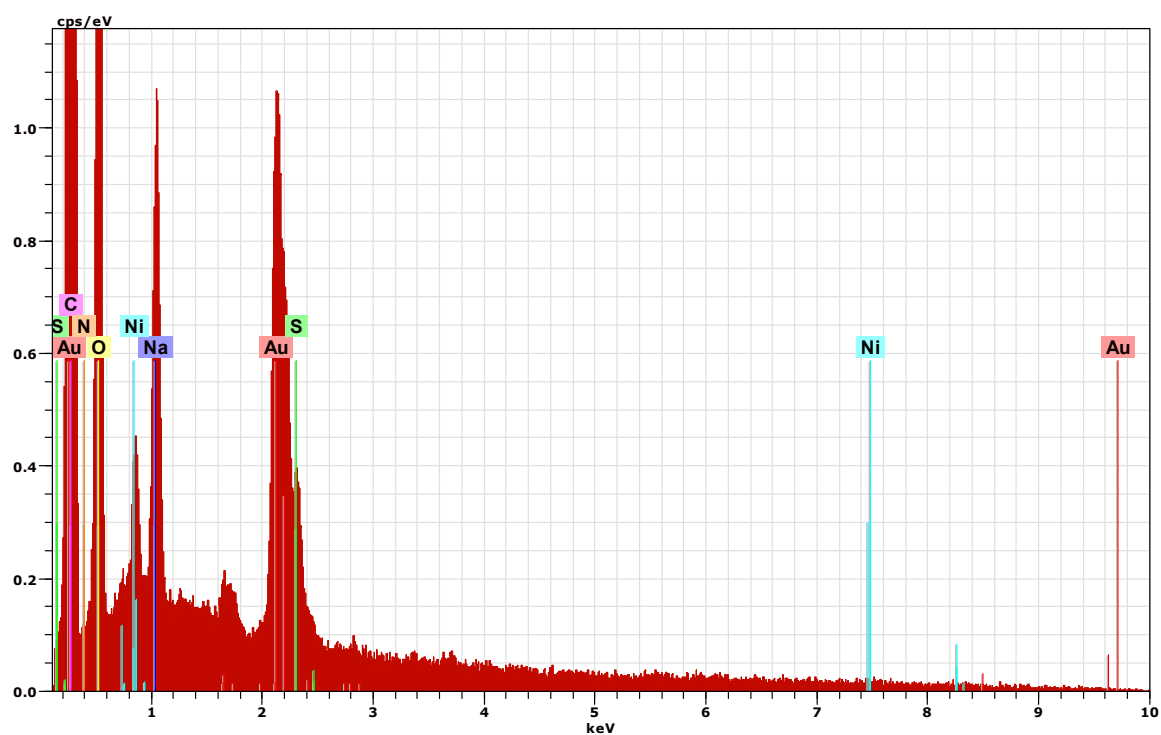


Figure S7. EDS spectrum of AuPS6.

Table S1. EDS analysis of AuPS6.

Spectrum: Acquisition

Element	Series	unn. C [wt.%]	norm. C [wt.%]	Atom. C [at.%]	Error (1 Sigma) [wt.%]
Gold	M-series	20.03	21.85	1.86	0.79
Sulfur	K-series	2.55	2.79	1.45	0.13
Sodium	K-series	2.85	3.11	2.26	0.20
Nickel	L-series	1.17	1.28	0.36	0.23
Carbon	K-series	52.05	56.78	79.05	5.87
Oxygen	K-series	11.89	12.97	13.56	1.56
Nitrogen	K-series	1.12	1.23	1.46	0.30
Total:		91.66	100.00	100.00	

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