

## Supplementary Material

### New approach to synthesis of nitronyl and imino nitroxides based on $S_N^H$ methodology

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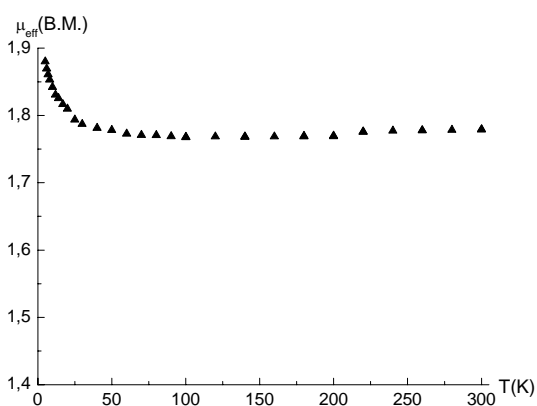
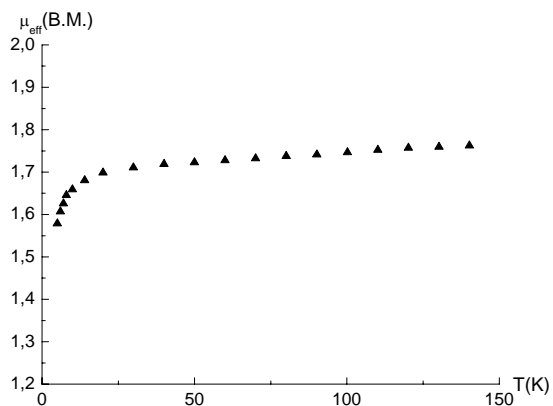
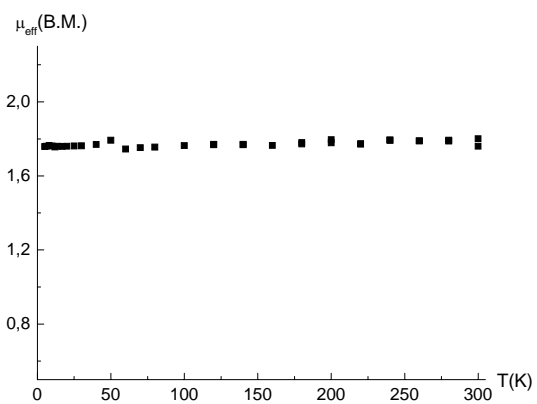
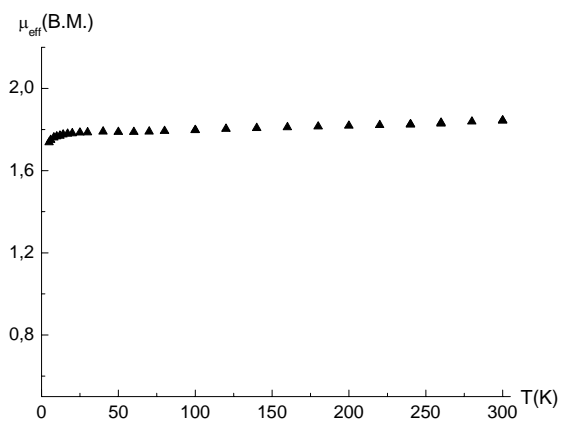
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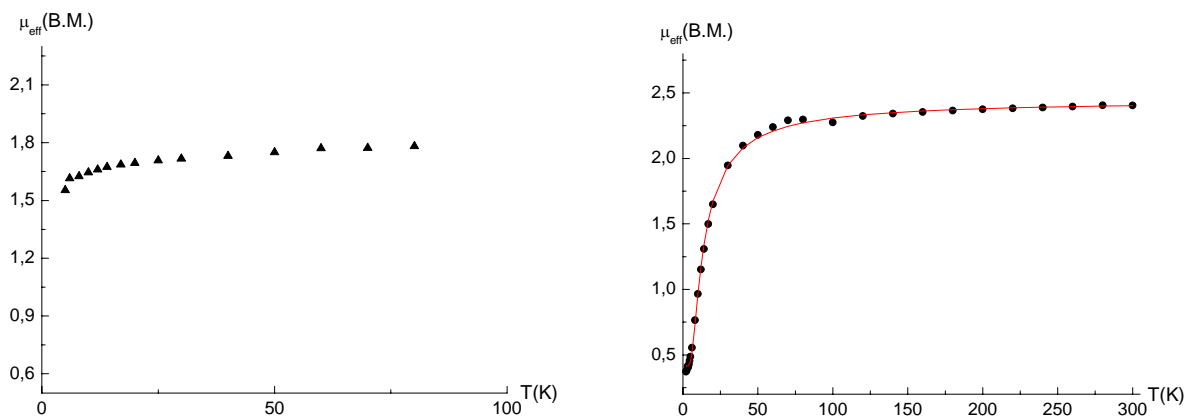
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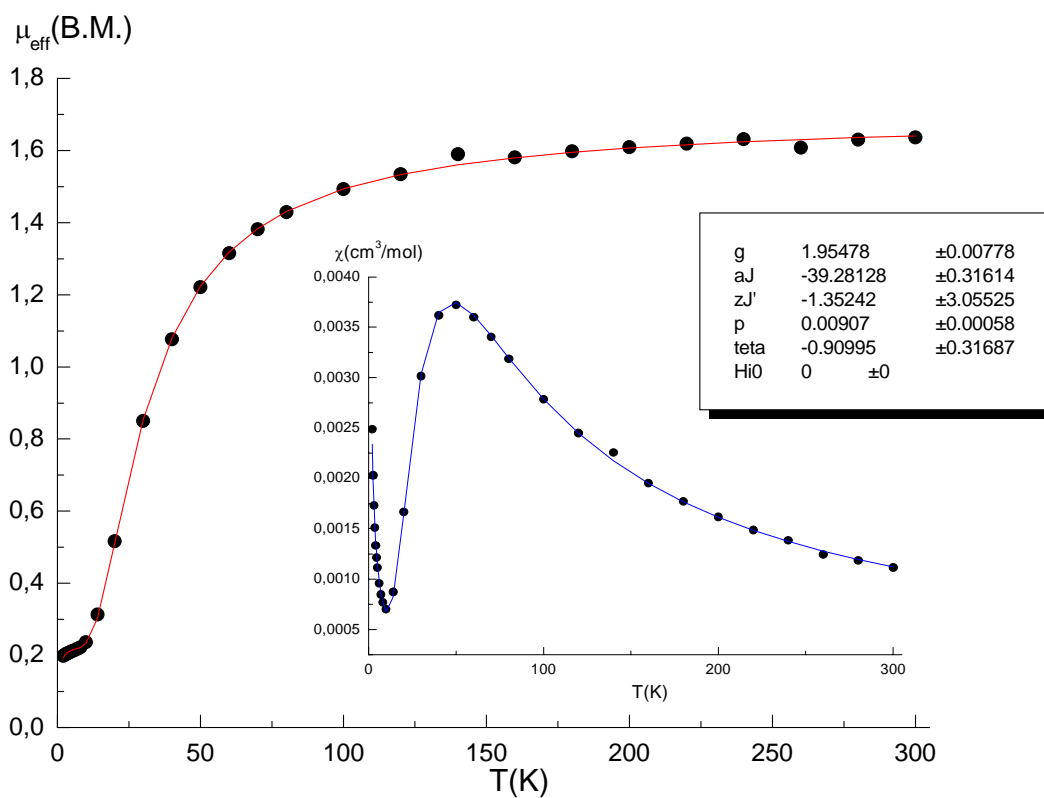
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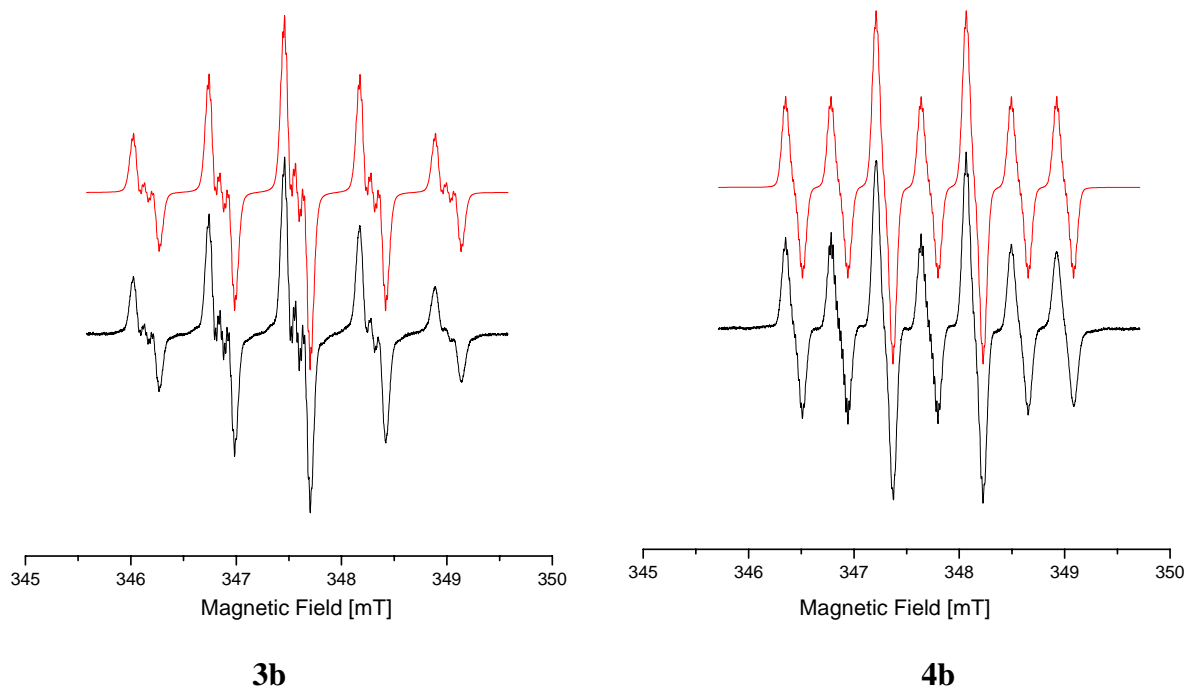
**3a****4a****Figure S1.** Dependences of  $\mu_{\text{eff}}(T)$  for **3a** and **4a**.**3b****4b****Figure S2.** Dependences of  $\mu_{\text{eff}}(T)$  for **3b** and **4b**.



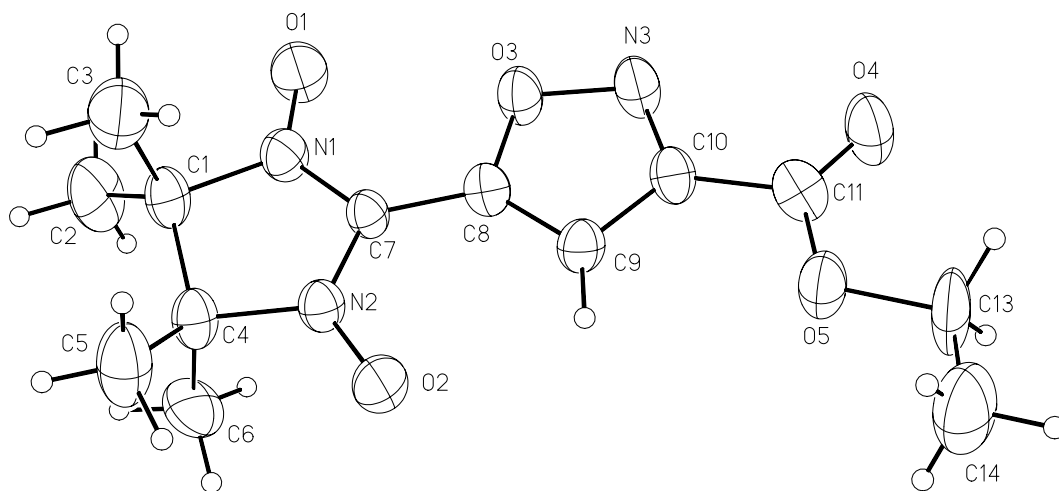
**Figure S3.** Dependences of  $\mu_{\text{eff}}(T)$  for **6b** and **13**.



**Figure S4.** Dependence of  $\mu_{\text{eff}}(T)$  for **5**.



**Figure S5.** ESR spectra of **3b** and **4b** (bottom trace) and the result of its modeling (top trace).



**Figure S6.** Molecule structure of **11**.

**Table.** Selected bond lengths (Å) and angles (deg) for **11**

O(1)-N(1)	1.276(4)	N(2)-C(4)	1.496(5)	O(5)-C(13)	1.472(4)
N(1)-C(7)	1.350(5)	O(3)-C(8)	1.364(5)	C(7)-C(8)	1.426(5)
N(1)-C(1)	1.501(5)	O(3)-N(3)	1.404(4)	C(8)-C(9)	1.350(5)
C(1)-C(4)	1.547(6)	N(3)-C(10)	1.314(5)	C(9)-C(10)	1.412(5)
N(2)-O(2)	1.273(4)	O(4)-C(11)	1.188(5)	C(10)-C(11)	1.493(6)
N(2)-C(7)	1.349(5)	O(5)-C(11)	1.325(5)	C(13)-C(14)	1.412(6)
O(1)-N(1)-C(7)	125.5(4)	C(11)-O(5)-C(13)	116.2(4)	N(3)-C(10)-C(9)	112.6(4)
O(1)-N(1)-C(1)	122.9(4)	N(2)-C(7)-N(1)	109.3(4)	N(3)-C(10)-C(11)	118.3(5)
C(7)-N(1)-C(1)	111.4(4)	N(2)-C(7)-C(8)	122.7(4)	C(9)-C(10)-C(11)	129.1(5)
O(2)-N(2)-C(7)	125.1(4)	N(1)-C(7)-C(8)	128.0(5)	O(4)-C(11)-O(5)	126.3(5)
O(2)-N(2)-C(4)	122.7(4)	C(9)-C(8)-O(3)	109.6(4)	O(4)-C(11)-C(10)	124.6(5)
C(7)-N(2)-C(4)	111.8(3)	C(9)-C(8)-C(7)	132.3(5)	O(5)-C(11)-C(10)	109.0(5)
C(8)-O(3)-N(3)	108.7(3)	O(3)-C(8)-C(7)	118.1(4)	C(14)-C(13)-O(5)	109.1(4)
C(10)-N(3)-O(3)	104.9(4)	C(8)-C(9)-C(10)	104.2(4)		