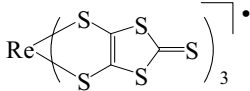
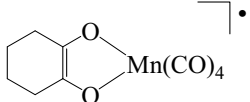
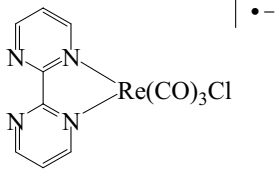
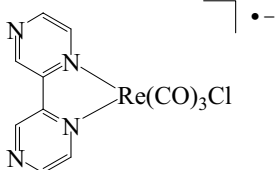
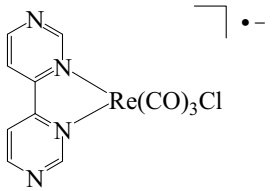
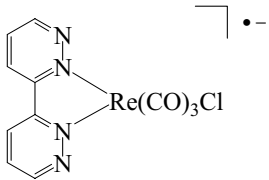
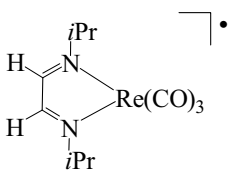
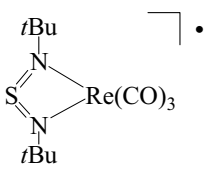
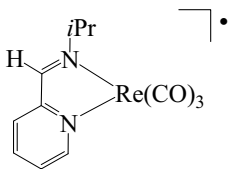
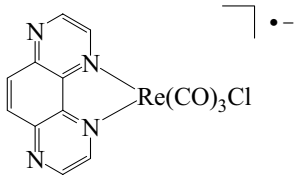
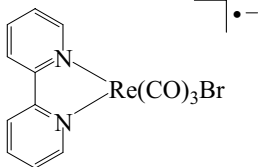
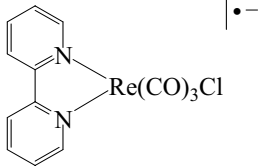
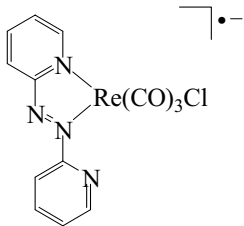
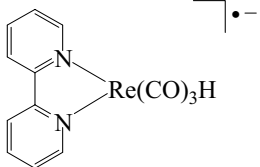
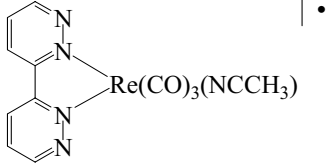
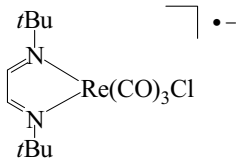
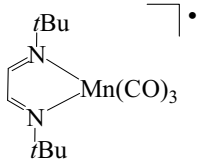
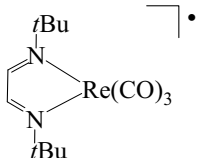
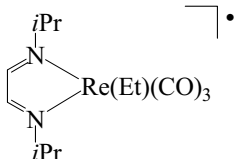
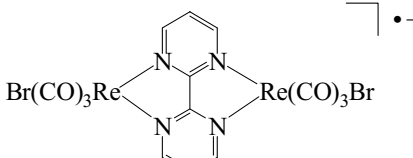
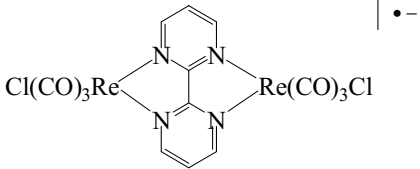
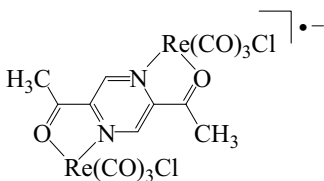
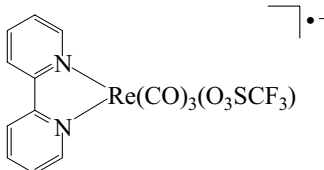
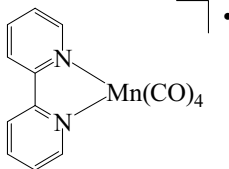
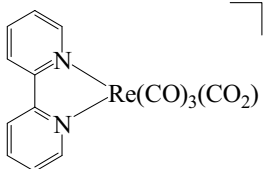


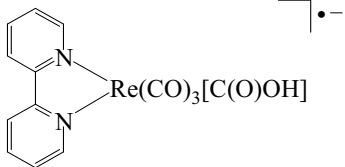
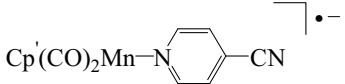
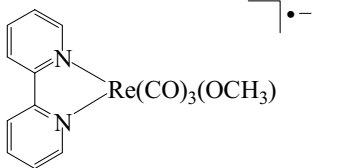
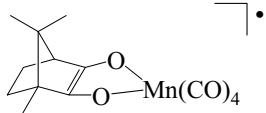
Substance	Generation / Matrix or Solvent / Method / <i>T</i> [K]	<i>g</i> -Factor / <i>a</i> -Value [mT]	Ref. / add. Ref.
3.8 Complexes of group 7 (Mn, Tc, Re)			
$[C_9ReS_{15}]^{\bullet}$ 	electrochemical oxidation powder ESR / 77	2.013	93Mat2
	electrochemistry, UV-VIS, IR and X-ray photoelectron spectroscopy, electrical conductivity		
$[C_{10}H_8MnO_6]^{\bullet}$ 	photochemical reaction THF ESR / 293 THF ESR / 213	⁵⁵ Mn: 0.515 H(3): 1.088 H(6): 1.088 H(3): 0.730 H(3): 1.460 H(6): 0.730 H(6): 1.460	92Reb
$[C_{11}H_6ClN_4O_3Re]^{\bullet-}$ 	electrochemically generated acetonitrile ESR / 250	2.0026 ^{185,187} Re: 1.00	98Ber1 96Kle
	electrochemistry, UV-VIS and IR spectroelectrochemistry		
$[C_{11}H_6ClN_4O_3Re]^{\bullet-}$ 	electrochemically generated THF ESR / RT	^{185,187} Re: 1.6	96Kle
	electrochemistry, IR spectroscopy		
$[C_{11}H_6ClN_4O_3Re]^{\bullet-}$ 	electrochemically generated THF ESR / RT	^{185,187} Re: 0.8	96Kle
	electrochemistry, IR spectroscopy		

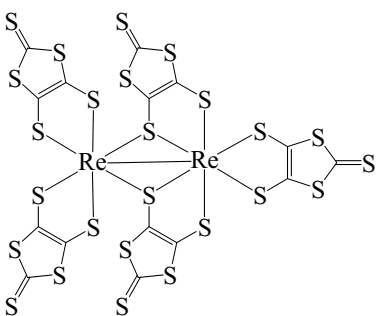
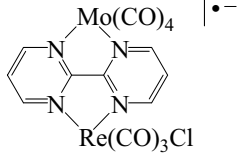
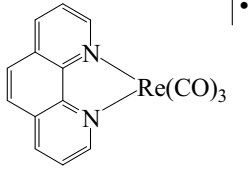
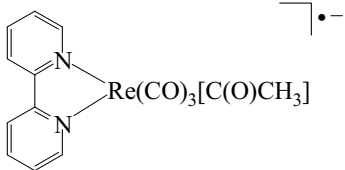
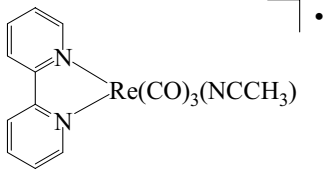
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{11}H_6ClN_4O_3Re]^{*-}$ 	electrochemically generated acetonitrile ESR / 250 electrochemistry, UV-VIS and IR spectroelectrochemistry	2.0018 $^{185,187}Re$: 1.4	98Ber1 96Kle
$[C_{11}H_{16}N_2O_3Re]^{\bullet}$ 	irradiation of corresponding dimers cyclohexane ESR / 293 toluene ESR / 203	2.0051 $^{185,187}Re$: 3.867 ^{14}N : 0.702 H(imine): 0.464 H(CH): 0.163 2.0059 $^{185,187}Re$: 3.841 ^{14}N : 0.636 H(imine): 0.4489	88And
$[C_{11}H_{18}N_2O_3ReS]^{\bullet}$ 	electrochemically generated THF ESR / RT	2.0009 $^{185,187}Re$: 2.19 ^{14}N : 0.68 / 0.50	96Kle
$[C_{12}H_{12}N_2O_3Re]^{\bullet}$ 	irradiation of corresponding dimers toluene ESR / 243	2.0051 $^{185,187}Re$: 2.814 ^{14}N : 0.554 H(imine): 0.465	88And
$[C_{13}H_6ClN_4O_3Re]^{*-}$ 	electrochemically generated acetonitrile ESR / 250 electrochemistry, UV-VIS and IR spectroelectrochemistry	2.0003 $^{185,187}Re$: 1.6	98Ber1 96Kle

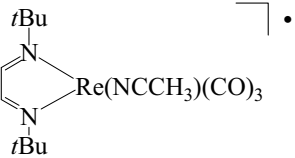
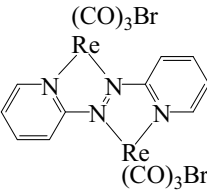
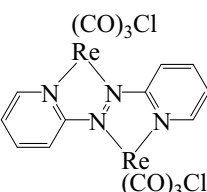
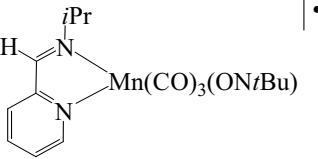
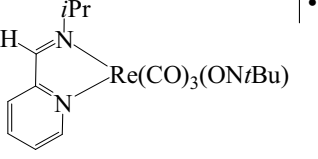
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[\text{C}_{13}\text{H}_8\text{BrN}_2\text{O}_3\text{Re}]^{\bullet-}$ 	electrochemically generated acetone ESR / 300	2.0023 ^{185,187} Re: 1.2 ^{79,81} Br: 1.0	87Kai1 90Kai1
$[\text{C}_{13}\text{H}_8\text{ClN}_2\text{O}_3\text{Re}]^{\bullet-}$ 	electrochemically generated acetone ESR / 300 electrochemistry, UV-VIS and IR spectroelectrochemistry	2.0032 ^{185,187} Re: 1.2 ^{35,37} Cl: 0.2	87Kai1 90Kai1 98Ber1 96Kle
$[\text{C}_{13}\text{H}_8\text{ClN}_4\text{O}_3\text{Re}]^{\bullet-}$ 	chemical oxidation dichloromethane or 1,2-dichloroethane ESR / 298 crystal structure, IR and UV-VIS spectroscopy, electrochemistry, spectroelectrochemistry	2.0041 ^{185,187} Re: 2.38	00Har
$[\text{C}_{13}\text{H}_9\text{N}_2\text{O}_3\text{Re}]^{\bullet-}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry	2.0029 ^{185,187} Re: 1.79	97Sch
$[\text{C}_{13}\text{H}_9\text{N}_5\text{O}_3\text{Re}]^{\bullet}$ 	electrochemically generated acetonitrile ESR / 250 electrochemistry, UV-VIS and IR spectroelectrochemistry	^{185,187} Re: 1.82	98Ber1 96Kle

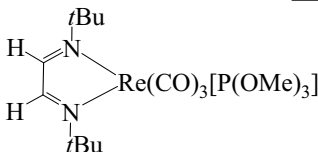
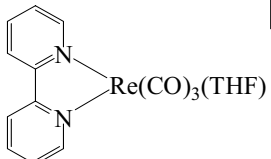
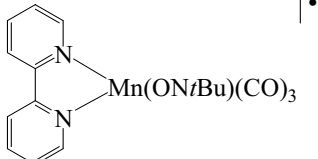
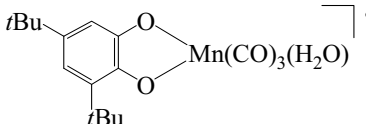
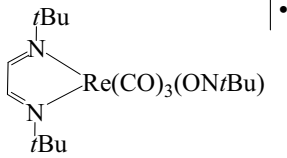
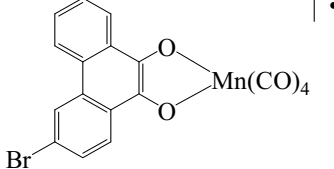
Substance	Generation / Matrix or Solvent / Method / <i>T</i> [K]	<i>g</i> -Factor / <i>a</i> -Value [mT]	Ref. / add. Ref.
$[C_{13}H_{20}ClN_2O_3Re]^{\bullet-}$ 	electrochemically generated THF ESR / RT electrochemistry, IR spectroscopy	2.0032 ^{185,187} Re: 1.9	96Kle
$[C_{13}H_{20}MnN_2O_3]^{\bullet}$ 	irradiation of corresponding dimers toluene ESR / 203	2.0046 ⁵⁵ Mn: 0.847 ¹⁴ N: 0.734 H(imine): 0.503	88And
$[C_{13}H_{20}N_2O_3Re]^{\bullet}$ 	irradiation of corresponding dimers cyclohexane ESR / 343 benzene ESR / 293 electrochemistry, IR spectroscopy	2.0046 ^{185,187} Re: 3.555 ¹⁴ N: 0.734 H(imine): 0.503 2.0036 ^{185,187} Re: 3.561 ¹⁴ N: 0.726 H(imine): 0.465	88And 96Kle
$[C_{13}H_{21}N_2O_3Re]^{\bullet-}$ 	electrochemically generated THF ESR / 293 electrochemistry, IR spectroscopy	2.0051 ^{185,187} Re: 4.87	96Ros
$[C_{14}H_6Br_2N_4O_6Re_2]^{\bullet-}$ 	electrochemically generated acetone ESR / RT electrochemistry, UV-VIS spectroscopy	2.0005 ^{185,187} Re: 1.2 ^{79,81} Br: 0.8	90Kai1

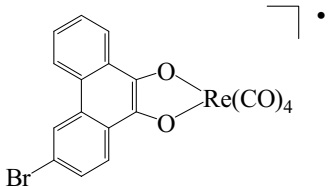
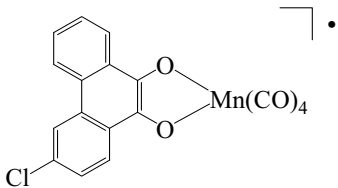
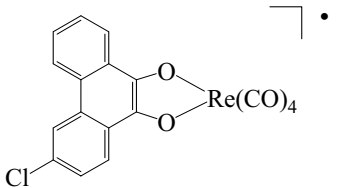
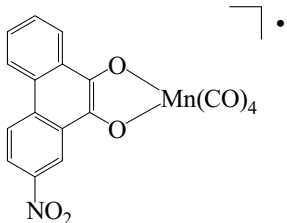
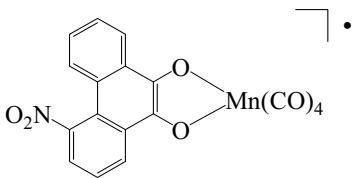
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{14}H_6Cl_2N_4O_6Re_2]^{\bullet-}$ 	electrochemically generated acetone electrochemistry, UV-VIS spectroscopy	2.0005 $^{185,187}Re$: 1.2 $^{35,37}Cl$: 0.2	90Kai1
$[C_{14}H_8Cl_2N_2O_8Re_2]^{\bullet-}$ 	chemical reaction acetonitrile ESR / 4 electrochemistry, UV-VIS and IR spectroscopy	2.0055 $g_1 = 1.9721$ $g_2 = 2.0043$ $g_3 = 2.0430$	89Bes1 89Bes2
$[C_{14}H_8F_3N_2O_6SRe]^{\bullet-}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry	2.0031 $^{185,187}Re$: 1.08	97Sch
$[C_{14}H_8MnN_2O_4]^{\bullet}$ 	reduction with sodium amalgam THF ESR / 220–260 electrochemistry, EHMO calculations	2.0018 ^{55}Mn : 0.17 ^{14}N : 0.36 $H(3)$: 0.071 $H(4)$: 0.42 $H(5)$: 0.123 $H(6)$: 0.104	94Bro
$[C_{14}H_8N_2O_3Re]^{\bullet}$ 	electrochemically generated THF ESR / RT electrochemistry, IR spectroscopy	2.0010 $^{185,187}Re$: 1.6	96Kle

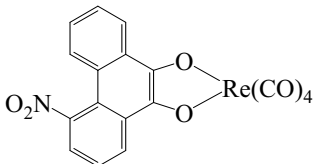
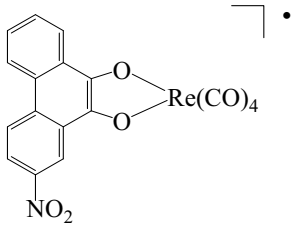
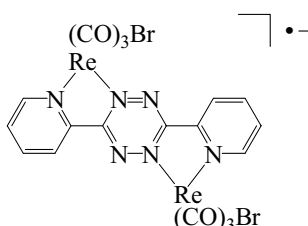
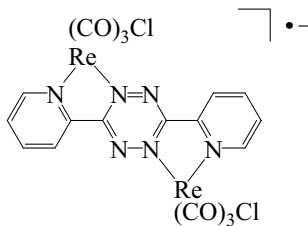
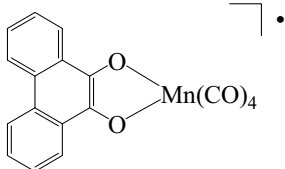
Substance	Generation / Matrix or Solvent / Method / <i>T</i> [K]	<i>g</i> -Factor / <i>a</i> -Value [mT]	Ref. / add. Ref.
$[C_{14}H_9N_2O_3Re]^{\bullet-}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry	2.0035 ^{185,187} Re: 1.14	97Sch
$[C_{14}H_{11}MnN_2O_2]^{\bullet-}$ 	reduction with potassium metal THF ESR / RT electrochemistry, UV-VIS, IR and NMR spectroscopy	2.0005 ⁵⁵ Mn: 0.655 ¹⁴ N(py): 0.725 ¹⁴ N(CN): 0.211 H: 0.154 (2H) H: 0.211 (2H)	87Gro
$[C_{14}H_{11}N_2O_4Re]^{\bullet-}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry	2.0031 ^{185,187} Re: 1.92	97Sch
$[C_{14}H_{16}MnO_6]^{\bullet}$ 	photochemical reaction toluene ESR / 293	⁵⁵ Mn: 0.369 H(1): 0.012 H(4): 0.254 H(5): 0.322 H(6): 0.301 H(7): 0.071	92Reb

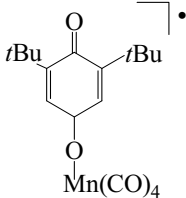
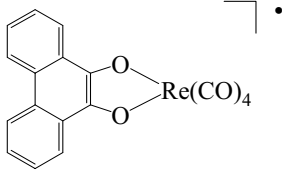
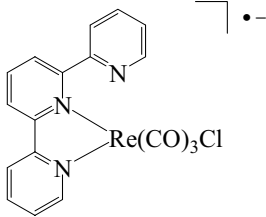
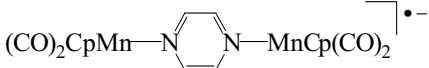
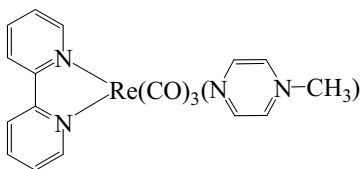
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{15}Re_2S_{25}]^{\bullet-}$ 	electrochemical oxidation powder ESR / 77 crystal structure, electrochemistry, UV-VIS and IR spectroscopy, electrical conductivity	2.01	96Mat
$[C_{15}H_6ClMoN_4O_7Re]^{\bullet-}$ 	electrochemical generation 1,2-dichloroethane ESR / 298 electrochemistry, UV-VIS spectroscopy, luminescence	2.0014 ^{185,187} Re: 1.1	91Mat1
$[C_{15}H_8N_2O_3Re]^{\bullet}$ 	irradiation of corresponding dimers toluene ESR / 203	2.0040 ^{185,187} Re: 2.088 ¹⁴ N: 0.360 H(imine): 0.299	88And
$[C_{15}H_{11}N_2O_4Re]^{\bullet-}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry	2.0024 ^{185,187} Re: 1.96	97Sch
$[C_{15}H_{11}N_3O_3Re]^{\bullet}$ 	electrochemically generated THF ESR / RT electrochemistry, IR spectroscopy	2.0033 ^{185,187} Re: 2.2	96Kle

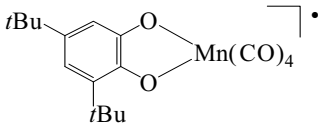
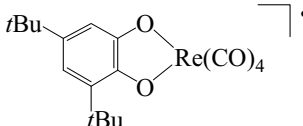
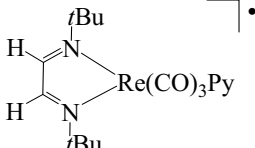
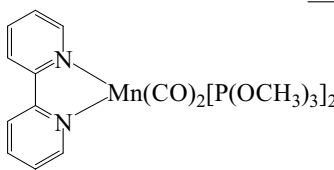
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{15}H_{23}N_3O_3Re]^{\bullet}$ 	electrochemically generated THF ESR / RT	$^{185,187}Re$: 3.72 ^{14}N : 0.73 H: 0.45	96Kle
electrochemistry, IR spectroscopy			
$[C_{16}H_8Br_2N_4O_6Re_2]^{\bullet-}$ 	electrochemically generated 1,2-dichloroethane ESR / 300	$^{185,187}Re$: 2.54 $^{79,81}Br$: 0.6	87Kai1 90Kai1
$[C_{16}H_8Cl_2N_4O_6Re_2]^{\bullet-}$ 	electrochemically generated 1,2-dichloroethane ESR / 300	$^{185,187}Re$: 2.54 $^{35,37}Cl$: 0.2	87Kai1 90Kai1
electrochemistry, UV-VIS spectroscopy			
chemical oxidation dichloromethane or 1,2-dichloroethane ESR / 298		$^{185,187}Re$ (2 Re) = 2.54	00Har
crystal structure, IR and UV-VIS spectroscopy, electrochemistry, spectroelectrochemistry			
$[C_{16}H_{21}MnN_3O_4]^{\bullet}$ 	irradiation of corresponding dimers toluene ESR / 203	^{55}Mn : 0.725 $^{14}N(NO)$: 1.455 $^{14}N(imine)$: 0.096	88And
$[C_{16}H_{21}N_3O_4Re]^{\bullet}$ 	irradiation in the presence of spin trap THF ESR / 293	$^{185,187}Re$: 3.046 $^{14}N(NO)$: 1.360	88And

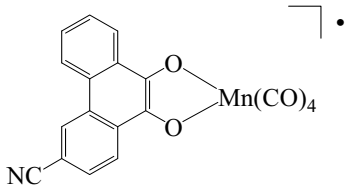
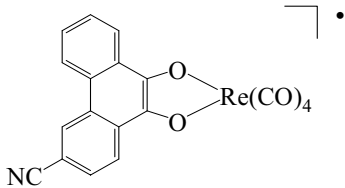
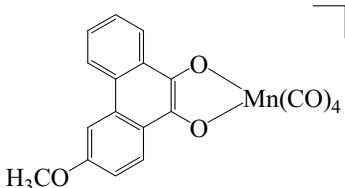
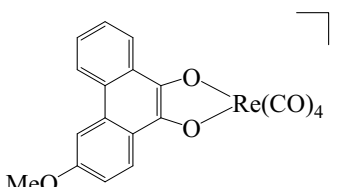
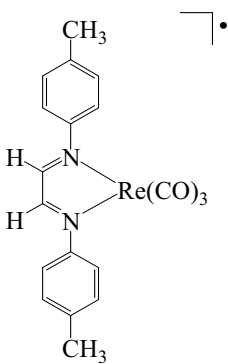
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{16}H_{29}N_2O_6PRe]^{\bullet}$ 	chemical reaction benzene ESR / 293	2.0090 $^{185,187}Re$: 3.998 ^{31}P : 3.578 ^{14}N : 0.720 H(imine): 0.448	88And
$[C_{17}H_{16}N_2O_4Re]^{\bullet}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry	2.0026 $^{185,187}Re$: 1.15	97Sch
$[C_{17}H_{17}MnN_3O_4]^{\bullet}$ 	photolysis in presence of spin trap THF ESR / RT UV-VIS and IR spectroscopy, spectroelectrochemistry	^{55}Mn : 0.653 $^{14}N(NO)$: 1.432	94Sto2
$[C_{17}H_{22}MnO_6]^{\bullet}$ 	chemical oxidation dichloromethane ESR / 230	2.0045 ^{55}Mn : 0.71 H: 0.56 H: 0.28 (H ₂ O)	95Har 96Har
$[C_{17}H_{29}N_3O_4Re]^{\bullet}$ 	irradiation in the presence of spin trap THF ESR / 293	2.0124 $^{185,187}Re$: 3.486 $^{14}N(NO)$: 1.401	88And
$[C_{18}H_7BrMnO_6]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00465 ^{55}Mn : 0.5625 H: 0.1642 (3H) H: 0.0398 (4H)	88Wan

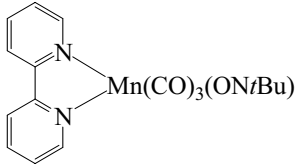
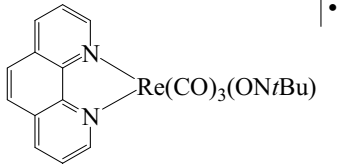
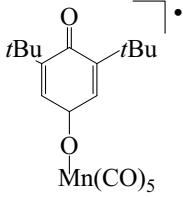
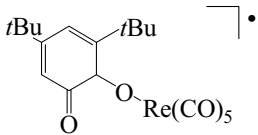
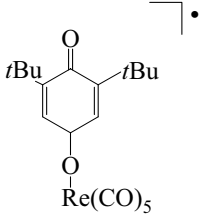
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{18}H_7BrO_6Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0039 ^{185,187} Re: 2.28	88Ho
$[C_{18}H_7ClMnO_6]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00404 ⁵⁵ Mn: 0.5595 H: 0.1670 (3H) H: 0.0403 (4H)	88Wan
$[C_{18}H_7ClO_6Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0031 ^{185,187} Re: 2.27	88Ho
$[C_{18}H_7MnNO_8]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00384 ⁵⁵ Mn: 0.6005 H: 0.1570 (4H) H: 0.0359 (3H)	88Wan
$[C_{18}H_7MnNO_8]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00384 ⁵⁵ Mn: 0.5928 H: 0.1578 (4H) H: 0.0345 (3H)	88Wan

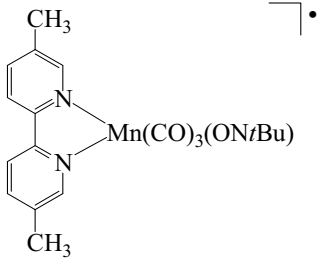
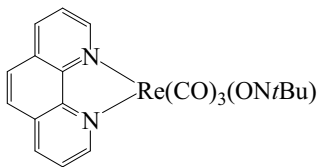
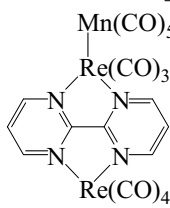
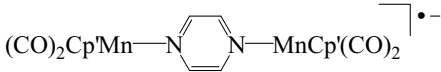
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{18}H_7NO_8Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0030 ^{185,187} Re: 2.41	88Ho
$[C_{18}H_7NO_8Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0029 ^{185,187} Re: 2.45	88Ho
$[C_{18}H_8Br_2N_6O_6Re_2]^{\bullet-}$ 	electrochemically generated 1,2-dichloroethane ESR / RT	2.0045 ^{185,187} Re: 2.2 ^{79,81} Br: 0.5	90Kai1
	electrochemistry, UV-VIS spectroscopy		
$[C_{18}H_8Cl_2N_6O_6Re_2]^{\bullet-}$ 	electrochemically generated 1,2-dichloroethane ESR / RT	2.0051 ^{185,187} Re: 2.2 ^{35,37} Cl: 0.2	90Kai1
	electrochemistry, UV-VIS spectroscopy		
$[C_{18}H_8MnO_6]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00375 ⁵⁵ Mn: 0.5501 H: 0.1692 (4H) H: 0.0414 (4H)	88Wan

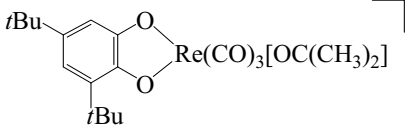
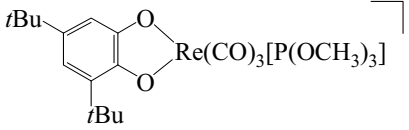
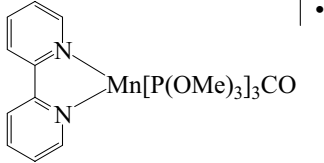
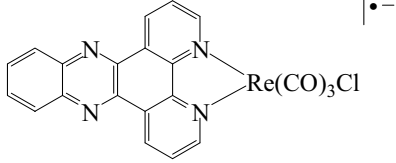
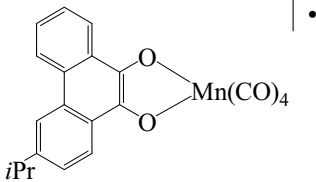
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{18}H_8MnO_6]^{\bullet}$ 	photochemically generated toluene ESR / 298	2.0038 ^{55}Mn : 0.55	86Vlc
$[C_{18}H_8O_6Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0033 $^{185,187}\text{Re}$: 2.24	88Ho
$[C_{18}H_{11}ClN_3O_3Re]^{\bullet-}$ 	electrochemically generated THF ESR / RT electrochemistry, IR spectroscopy	2.0025 $^{185,187}\text{Re}$: 1.0	96Kle
$[C_{18}H_{14}Mn_2N_2O_4]^{\bullet-}$ 	reduction with potassium metal THF ESR / 298 NMR, IR and UV-VIS spectroscopy, electrochemistry	1.9999 ^{55}Mn : 0.733 H: 0.255 ^{14}N : 0.881	86Gro
$[C_{18}H_{15}N_4O_3Re]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 250 electrochemistry, UV-VIS and IR spectroelectrochemistry	2.0044 $^{185,187}\text{Re}$: 1.98 additional coupling at 0.8	98Ber1

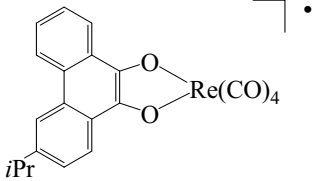
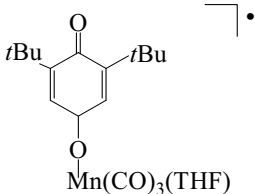
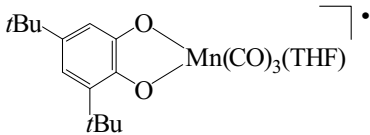
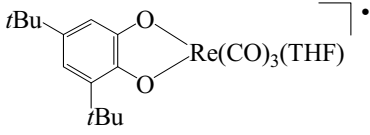
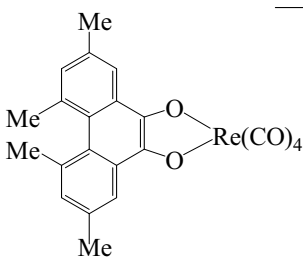
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{18}H_{20}MnO_6]^{\bullet}$ 	chemical oxidation dichloromethane ESR / RT	2.0033 ^{55}Mn : 0.71 H: 0.335	95Har 96Har
$[C_{18}H_{20}O_6Re]^{\bullet}$ 	photolysis dichloromethane ESR / RT toluene ESR / 295 THF ESR / 295	2.0022 $^{185,187}Re$: 2.82 H: 0.346 2.0022 $^{185,187}Re$: 2.82 H: 0.346 2.0022 $^{185,187}Re$: 2.80 H: 0.36	96Har 92Har 91Van
$[C_{18}H_{25}N_3O_3Re]^{\bullet}$ 	chemical reaction ESR / 293 cyclohexane ESR / 343	2.0030 $^{185,187}Re$: 3.112 $^{14}N(py)$: 0.491 $^{14}N(imine)$: 0.652 2.0028 $^{185,187}Re$: 3.180 $^{14}N(py)$: 0.531 $^{14}N(imine)$: 0.632	88And
$[C_{18}H_{26}MnN_2O_8P_2]^{\bullet}$ 	reduction with sodium amalgam THF ESR / 220–260 electrochemistry, EHMO calculations	2.0018 ^{55}Mn : 0.606 ^{31}P : 3.489 ^{14}N : 0.396 H(3): 0.08 H(4): 0.417 H(5): 0.14 H(6): 0.13	94Bro

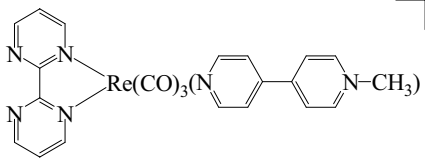
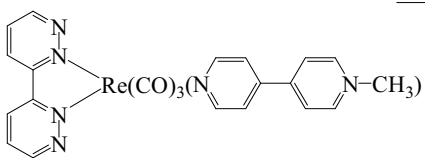
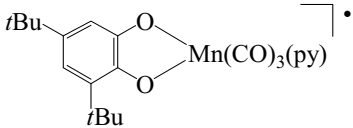
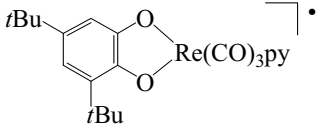
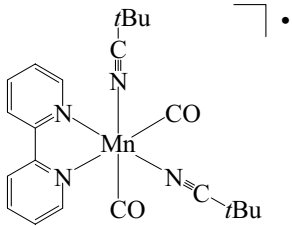
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{19}H_7MnNO_6]^\bullet$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00387 ^{55}Mn : 0.5960 H: 0.1602 (3H) H: 0.0564 (2H) H: 0.0319 (2H)	88Wan
$[C_{19}H_7NO_6Re]^\bullet$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0030 $^{185,187}Re$: 2.45	88Ho
$[C_{19}H_{10}MnO_7]^\bullet$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00392 ^{55}Mn : 0.5119 H: 0.1750 (3H) H: 0.0515 (2H) H: 0.0112 (2H) H: 0.0255 (3 H)	88Wan
$[C_{19}H_{10}O_7Re]^\bullet$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0032 $^{185,187}Re$: 2.07	88Ho
$[C_{19}H_{16}N_2O_3Re]^\bullet$ 	irradiation of corresponding dimers cyclohexane ESR / 343	2.0043 $^{185,187}Re$: 3.660 ^{14}N : 0.530 H(imine): 0.408	88And

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{19}H_{17}MnN_3O_4]^{\bullet}$ 	irradiation of corresponding dimers toluene ESR / 203	2.0102 ^{55}Mn : 0.694 $^{14}N(NO)$: 1.398 $^{14}N(imine)$: 0.089	88And
$[C_{19}H_{17}N_3O_4Re]^{\bullet}$ 	irradiation in the presence of spin trap THF ESR / 293	2.0104 $^{185,187}Re$: 2.740 $^{14}N(NO)$: 1.359	88And
$[C_{19}H_{20}MnO_7]^{\bullet}$ 	photochemically generated toluene ESR / 180 IR spectroscopy	2.0045 ^{55}Mn : 0.23	91Van
$[C_{19}H_{20}O_7Re]^{\bullet}$ 	photochemically generated toluene ESR / 193 IR spectroscopy	2.005 $^{185,187}Re$: 0.55	91Van
$[C_{19}H_{20}O_7Re]^{\bullet}$ 	photochemically generated toluene ESR / 295 THF ESR / 295 toluene ESR / 193 IR spectroscopy	2.0051 2.0052 $^{185,187}Re$: 0.15 2.006 $^{185,187}Re$: 0.19 ^{14}N : 0.48	91Van

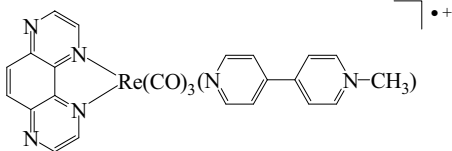
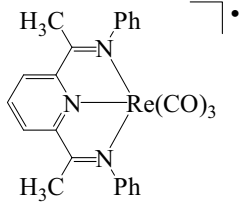
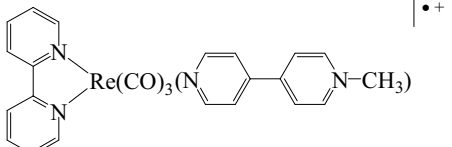
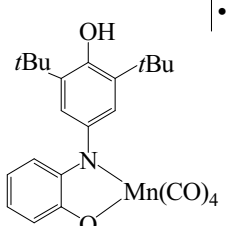
Substance	Generation / Matrix or Solvent / Method / <i>T</i> [K]	<i>g</i> -Factor / <i>a</i> -Value [mT]	Ref. / add. Ref.
$[C_{19}H_{21}MnN_3O_4]^{\bullet}$ 	irradiation of corresponding dimers toluene ESR / 203	2.0105 ⁵⁵ Mn: 0.688 ¹⁴ N(NO): 1.394 ¹⁴ N(imine): 0.098	88And
$[C_{19}H_{21}N_3O_4Re]^{\bullet}$ 	irradiation in the presence of spin trap THF ESR / 293	2.0112 ^{185,187} Re: 2.720 ¹⁴ N(NO): 1.353	88And
$[C_{20}H_6BrMnN_4O_{11}Re_2]^{\bullet-}$ 	electrochemically generated THF ESR / 293 electrochemistry, UV-VIS and IR spectroscopy and spectroelectrochemistry	1.9990 ^{185,187} Re: 2.4 ^{79,81} Br: 0.9 ⁵⁵ Mn: 0.9	95Van
$[C_{20}H_{18}Mn_2N_2O_4]^{\bullet-}$ 	reduction with potassium metal THF ESR / RT electrochemistry, UV-VIS, IR and NMR spectroscopy	1.9997 ⁵⁵ Mn: 0.747 (2 Mn) H: 0.227 (4 H) ¹⁴ N: 0.865 (2 N)	84Gro
	reduction with potassium metal THF ESR / 298 electrochemistry, UV-VIS, IR and NMR spectroscopy	1.9997 ⁵⁵ Mn: 0.750 H: 0.226 ¹⁴ N: 0.863	86Gro 87Gro

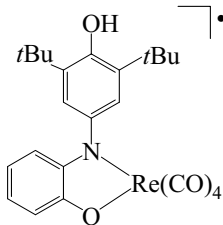
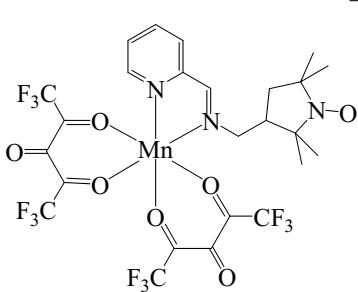
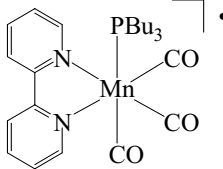
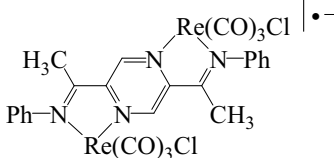
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{20}H_{26}O_6Re]^{\bullet}$ 	photolysis benzene ESR / RT	2.0046 ^{185,187} Re: 1.11	96Har
$[C_{20}H_{29}O_8PRe]^{\bullet}$ 	photolysis benzene ESR / RT	2.0020 ^{185,187} Re: 3.51 ³¹ P: 2.92	96Har
$[C_{20}H_{35}MnN_2O_{10}P_3]^{\bullet}$ 	reduction with sodium amalgam THF ESR / 220–260	2.0018 ⁵⁵ Mn: 0.676 ³¹ P: 3.043 ¹⁴ N: 0.386 H(3): 0.07 H(4): 0.437 H(5): 0.13 H(6): 0.10	94Bro
	electrochemistry, EHMO calculations		
$[C_{21}H_{10}ClN_4O_3Re]^{\bullet-}$ 	electrochemically generated dichloromethane ESR / 293	2.00346 ¹⁴ N(9,14): 0.497 H(10,13): 0.149 ¹⁴ N(4,5): 0.065 H: 0.065	99Fee
	electrochemistry, UV-VIS spectroscopy and spectroelectrochemistry		
$[C_{21}H_{14}MnO_6]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00384 ⁵⁵ Mn: 0.5368 H: 0.1688 (3H) H: 0.0765 (1H) H: 0.0385 (10H)	88Wan

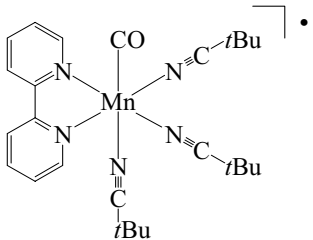
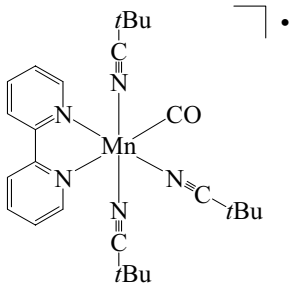
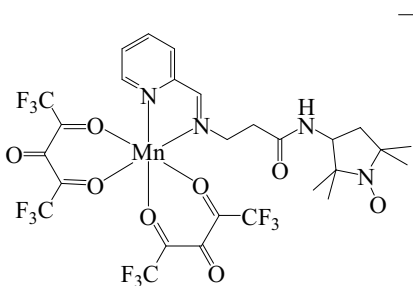
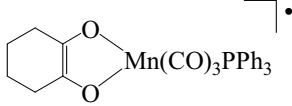
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{21}H_{14}O_6Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0030 ^{185,187} Re: 2.17	88Ho
$[C_{21}H_{16}MnO_6]^{\bullet}$ 	photochemically generated THF ESR / 298	2.0044 ⁵⁵ Mn: 0.27	86Vlc
$[C_{21}H_{28}MnO_6]^{\bullet}$ 	chemical oxidation THF ESR / RT	2.0044 ⁵⁵ Mn: 0.37 H: 0.35	96Har
$[C_{21}H_{28}O_6Re]^{\bullet}$ 	photolysis THF ESR / 295	2.0043 ^{185,187} Re: 0.75	96Har
$[C_{22}H_{16}O_6Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0033 ^{185,187} Re: 2.03	88Ho

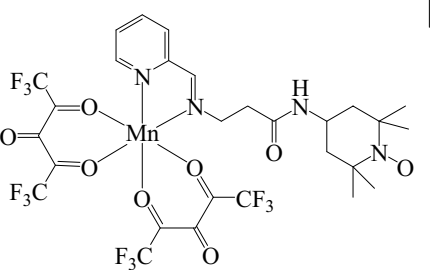
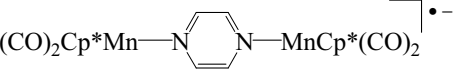
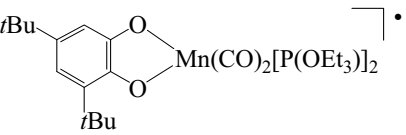
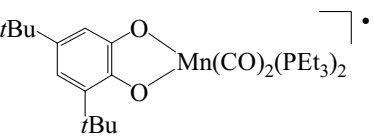
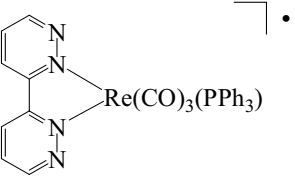
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{22}H_{17}N_4O_3Re]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 250	2.0036 ^{185,187} Re: 0.90	98Ber1
$[C_{22}H_{17}N_4O_3Re]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 250	2.0020 ^{185,187} Re: 1.12	98Ber1
$[C_{22}H_{25}MnNO_5]^{\bullet}$ 	chemical oxidation pyridine ESR / RT	2.0041 ⁵⁵ Mn: 0.61 H: 0.32 ¹⁴ N: 0.20	96Har 86Vlc 91Van
$[C_{22}H_{25}NO_3Re]^{\bullet}$ 	photolysis benzene ESR / RT	2.0038 ^{185,187} Re: 2.01	96Har
$[C_{22}H_{26}MnN_4O_2]^{\bullet}$ 	reduction with sodium amalgam THF ESR / 220–260	2.0018 ⁵⁵ Mn: 0.565 ¹⁴ N: 0.379 H(3): 0.08 H(4): 0.448 H(5): 0.12 H(6): 0.12	94Bro
electrochemistry, HMO calculations			

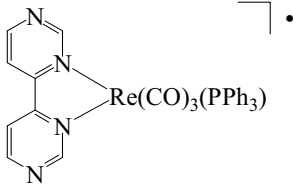
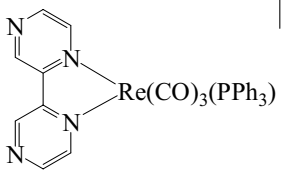
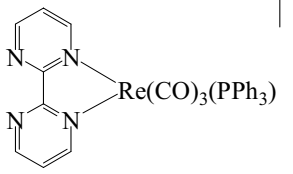
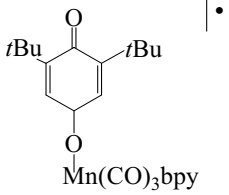
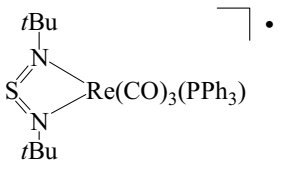
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{22}H_{26}MnN_4O_2]^{\bullet}$ 	reduction with sodium amalgam THF ESR / 220–260	2.0018 ^{55}Mn : 0.564 ^{14}N : 0.380 $H(3)$: 0.07 $H(4)$: 0.448 $H(5)$: 0.12 $H(6)$: 0.12	94Bro
	electrochemistry, HMO calculations		
$[C_{23}H_{25}N_3O_4Re]^{\bullet}$ 	irradiation in the presence of spin trap THF ESR / 293	2.0048 $^{185,187}Re$: 3.59	88And
$[C_{23}H_{27}F_{12}MnN_4O_8]^{\bullet}$ 	chemical reaction acetone ESR / 298	$g(Mn) = 2.004$ $A(Mn) = 9.1-9.3$ $g_x(NO) = 2.0086$ $g_y(NO) = 2.0062$ $g_z(NO) = 2.0032$ $A_x(NO) = 0.43$ $A_y(NO) = 0.53$ $A_z(NO) = 3.21$ $J = 1.50$ $J = 2.35$	85Mor1
$[C_{23}H_{35}NO_3Re]^{\bullet}$ 	photolysis benzene ESR / RT	2.0024 $^{185,187}Re$: 2.46	96Har

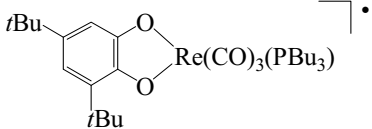
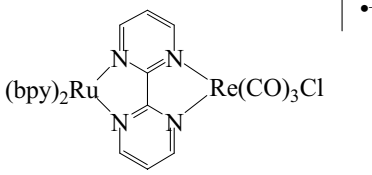
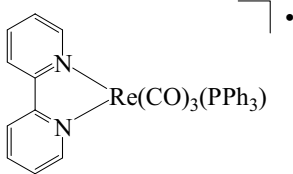
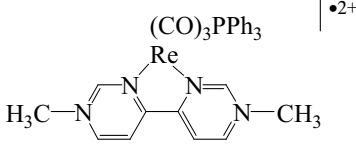
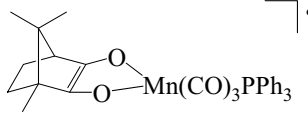
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{24}H_{17}N_6O_3Re]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 110	$g_1 = 2.0470$ $g_2 = 2.0033$ $g_3 = 1.9670$	98Ber1
electrochemistry, UV-VIS and IR spectroelectrochemistry			
$[C_{24}H_{19}N_3O_3Re]^{\bullet}$ 	photolysis cyclohexane ESR / 323	$^{185,187}Re: 2.330$ $^{14}N: 0.468$ $H(m-H \text{ at pyridine}): 0.468$	94Sto1
IR spectroscopy			
$[C_{24}H_{19}N_4O_3Re]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 250	2.0028 $^{185,187}Re: 0.92$	98Ber1
electrochemistry, UV-VIS and IR spectroelectrochemistry			
$[C_{24}H_{25}MnNO_6]^{\bullet}$ 	chemical reaction THF ESR / 293	$^{55}Mn: 1.13$ $^{14}N: 0.76$	89Pro

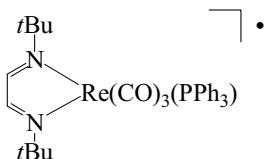
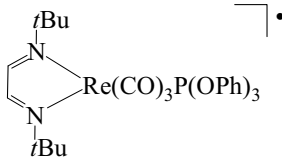
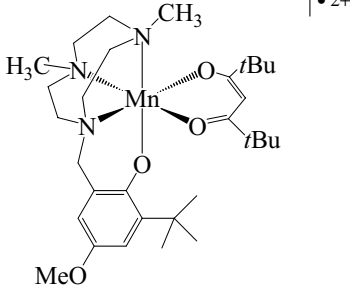
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{24}H_{25}NO_6Re]^{\bullet}$ 	chemical reaction THF ESR / 293	2.014 $^{185,187}Re$: 4.00 ^{14}N : 0.8	89Pro
$[C_{25}H_{22}F_{12}MnN_3O_7]^{\bullet}$ 	chemical reaction acetone ESR / 298 ESR / 233	$g(Mn) = 2.004$ $A(Mn) = 9.1-9.3$ $g_x(NO) = 2.0086$ $g_y(NO) = 2.0062$ $g_z(NO) = 2.0032$ $A_x(NO) = 0.43$ $A_y(NO) = 0.53$ $A_z(NO) = 3.21$ $J = 2.14$ $J = 3.74$	85Mor1
$[C_{25}H_{35}MnN_2O_3P]^{\bullet}$ 	reduction with sodium amalgam THF ESR / 220-260 electrochemistry, EHMO calculations	2.0018 ^{55}Mn : 0.18 ^{31}P : 2.55 ^{14}N : 0.355 $H(3)$: 0.075 $H(4)$: 0.42 $H(5)$: 0.11 $H(6)$: 0.11	94Bro
$[C_{26}H_{18}Cl_2N_4O_8Re_2]^{\bullet-}$ 	chemical reduction acetone ESR / 298 electrochemistry, UV-VIS spectroscopy, spectroelectrochemistry	2.0005 $^{185,187}Re$: 1.74	99Kle

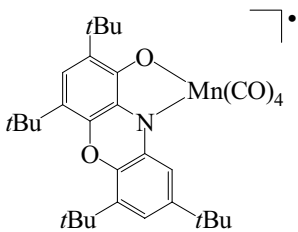
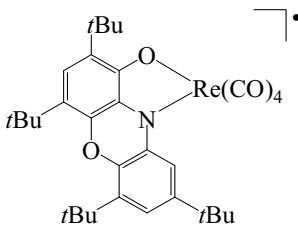
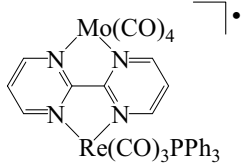
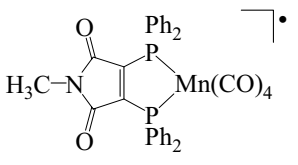
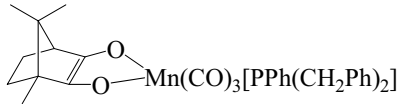
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{26}H_{35}MnN_5O]^{\bullet}$ 	reduction with sodium amalgam THF ESR / 220–260	2.0018 ^{55}Mn : 0.567 ^{14}N : 0.379 $H(3)$: 0.09 $H(4)$: 0.449 $H(5)$: 0.11 $H(6)$: 0.11	94Bro
$[C_{26}H_{35}MnN_5O]^{\bullet}$ 	reduction with sodium amalgam THF ESR / 220–260	2.0018 ^{55}Mn : 0.564 ^{14}N : 0.378 $H(3)$: 0.074 $H(4)$: 0.446 $H(5)$: 0.125 $H(6)$: 0.107	94Bro
$[C_{27}H_{25}F_{12}MnN_4O_8]^{\bullet}$ 	chemical reaction acetone ESR / 298	$g(\text{Mn}) = 2.004$ $A(\text{Mn}) = 9.1\text{--}9.3$ $g_x(\text{NO}) = 2.0086$ $g_y(\text{NO}) = 2.0062$ $g_z(\text{NO}) = 2.0032$ $A_x(\text{NO}) = 0.43$ $A_y(\text{NO}) = 0.53$ $A_z(\text{NO}) = 3.21$ $J < 0.21$	85Mor1
$[C_{27}H_{25}MnO_5P]^{\bullet}$ 	photochemical reaction THF ESR / 393	^{55}Mn : 0.640 ^{31}P : 2.475 $H(3)$: 1.020 $H(4)$: 1.020	92Reb

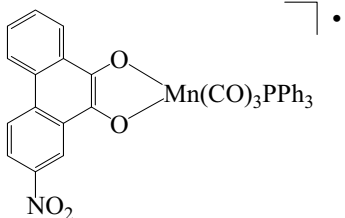
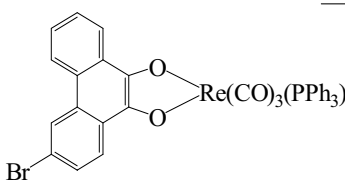
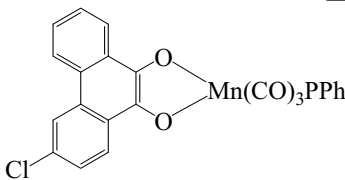
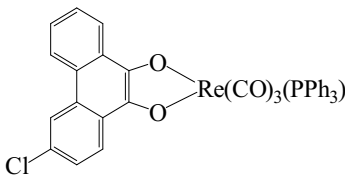
Substance	Generation / Matrix or Solvent / Method / <i>T</i> [K]	<i>g</i> -Factor / <i>a</i> -Value [mT]	Ref. / add. Ref.
$[C_{28}H_{27}F_{12}MnN_4O_8]^{\bullet}$ 	chemical reaction acetone ESR / 298 ESR / 233 data available for toluene / acetone 90.5 / 0.5 at 93 K	$g(Mn) = 2.004$ $A(Mn) = 9.1-9.3$ $g_x(NO) = 2.0086$ $g_y(NO) = 2.0062$ $g_z(NO) = 2.0032$ $A_x(NO) = 0.43$ $A_y(NO) = 0.53$ $A_z(NO) = 3.21$ $J < 0.1$ $J < 0.16$	85Mor1
$[C_{28}H_{34}Mn_2N_2O_4]^{\bullet-}$ 	reduction with potassium metal THF ESR / 298 NMR, IR and UV-VIS spectroscopy, electrochemistry	1.9994 ^{55}Mn : 0.763 H: 0.228 ^{14}N : 0.864	86Gro
$[C_{28}H_{50}MnO_{10}P_2]^{\bullet}$ 	chemical oxidation THF ESR / RT	2.0039 ^{55}Mn : 1.60 H: 0.26 ^{31}P : 5.10	96Har
$[C_{28}H_{50}MnO_4P_2]^{\bullet}$ 	chemical oxidation THF ESR / RT	2.0047 ^{55}Mn : 2.80 ^{31}P : 4.95	96Har
$[C_{29}H_{21}N_4O_3PRe]^{\bullet}$ 	electrochemically generated THF ESR / RT electrochemistry, IR spectroscopy	2.0003 $^{185,187}Re$: 3.6 ^{31}P : 3.6 $^{14}N(2)$: 0.58 H(5): 0.29	96Kle

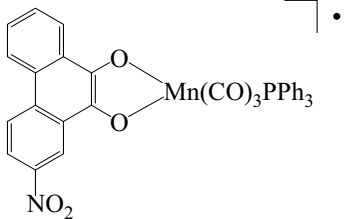
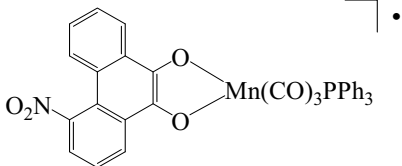
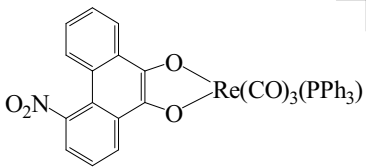
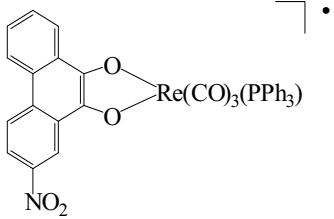
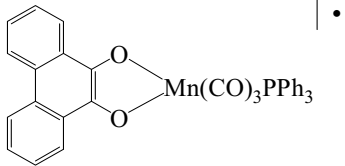
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{29}H_{21}N_4O_3PRe]^{\bullet}$ 	electrochemically generated THF ESR / RT	2.0007 ^{185,187} Re: 2.1 ³¹ P: 2.1	96Kle
$[C_{29}H_{21}N_4O_3PRe]^{\bullet}$ 	electrochemically generated THF ESR / RT	2.0010 ^{185,187} Re: 3.1 ³¹ P: 3.1 ¹⁴ N(1): 0.5 H(5): 0.5	96Kle
$[C_{29}H_{21}N_4O_3PRe]^{\bullet}$ 	electrochemically generated THF ESR / RT	2.0010 ^{185,187} Re: 2.8 ³¹ P: 2.8	96Kle
$[C_{29}H_{32}MnO_5]^{\bullet}$ 	photochemically generated toluene ESR / 295 THF ESR / 295 IR spectroscopy	2.0050 ⁵⁵ Mn: 0.096 ¹⁴ N: 0.048 ⁵⁵ Mn: 0.056 ¹⁴ N: 0.050	91Van
$[C_{29}H_{33}N_2O_3PReS]^{\bullet}$ 	electrochemically generated THF ESR / RT electrochemistry, IR spectroscopy	2.0014 ^{185,187} Re: 1.53 ³¹ P: 4.18 ¹⁴ N: 0.68	96Kle

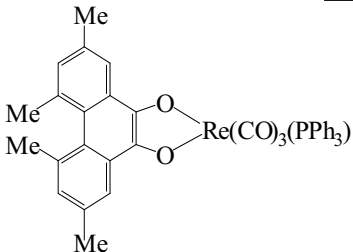
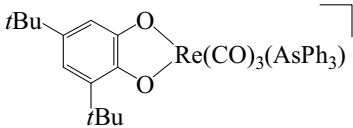
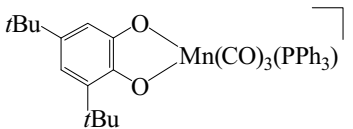
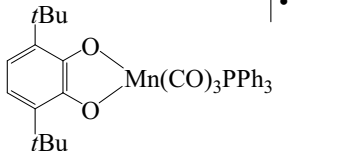
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{29}H_{47}O_5PRe]^{\bullet}$ 	photolysis benzene ESR / RT	2.0023 ^{185,187} Re: 4.04 ³¹ P: 2.69	96Har
$[C_{31}H_{22}ClN_8O_3ReRu]^{\bullet+}$ 	electrochemically generated 1,2-dichloroethane ESR / RT electrochemistry, UV-VIS spectroscopy	1.9953 ^{185,187} Re: 1.05	91Mat1
$[C_{31}H_{23}N_2O_3PRe]^{\bullet}$ 	electrochemically generated THF ESR / RT electrochemistry, IR spectroscopy	2.0018 ^{185,187} Re: 2.0 ³¹ P: 2.0	96Kle
$[C_{31}H_{27}N_4O_3PRe]^{\bullet+2}$ 	electrochemically generated acetonitrile ESR / 300	2.0013 ^{185,187} Re: 0.9 ³¹ P: 0.9 ¹⁴ N(1): 0.34 H(CH ₃): 0.34 H(2): < 0.08 N(3): 0.17 H(5): 0.17 H(6): 0.22	94Mat 90Mat1
$[C_{31}H_{31}MnO_5P]^{\bullet}$  (continued)	photochemical reaction toluene ESR / 253	species 1: ⁵⁵ Mn: 0.420 ³¹ P: 1.415 H(1): 0.012 H(4): 0.221 H(5): 0.298 H(6): 0.281 H(7): 0.064	92Reb

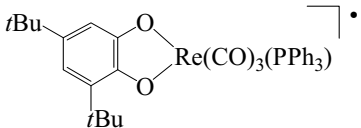
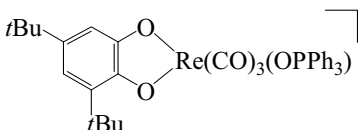
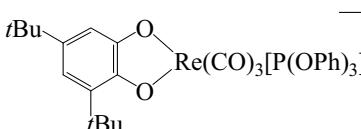
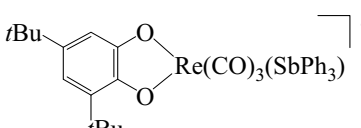
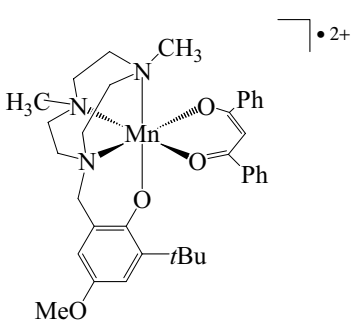
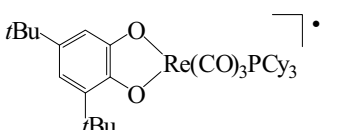
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{31}H_{31}MnO_5P]^{\bullet}$ (<i>continued</i>)		species 2: ^{55}Mn : 0.420 ^{31}P : 1.465 H(1): 0.012 H(4): 0.281 H(5): 0.333 H(6): 0.321 H(7): 0.064	
$[C_{31}H_{35}N_2O_3PRe]^{\bullet}$ 	electrochemically generated THF ESR / RT	2.0013 $^{185,187}Re$: 4.07 ^{31}P : 4.07 ^{14}N : 0.72 H: 0.44	96Kle
	photolysis benzene ESR / RT	2.0047 $^{185,187}Re$: 3.973 ^{31}P : 3.973 ^{14}N : 0.740 H: 0.445	88And
	electrochemistry, IR spectroscopy		
$[C_{31}H_{35}N_2O_6PRe]^{\bullet}$ 	chemical reaction benzene ESR / 293	2.0074 $^{185,187}Re$: 4.115 ^{31}P : 3.455 ^{14}N : 0.717 H(imine): 0.435	88And
	photolysis benzene ESR / RT	2.0006 $^{185,187}Re$: 3.90 ^{31}P : 2.60	96Har
$[C_{31}H_{53}MnN_3O_4]^{\bullet 2+}$ 	electrochemically generated dichloromethane ESR / 4	$g_x = g_y = 2.05$ $g_z = 1.85$ $a_x(Mn) = a_y(Mn) = 8.56$ $a_z(Mn) = 22.46$ $E / D = 0.33$	00Mül
electrochemistry, UV-VIS spectroscopy, resonance Raman			

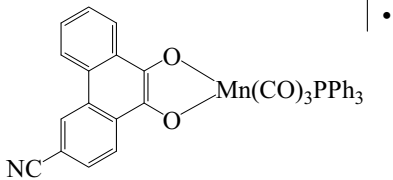
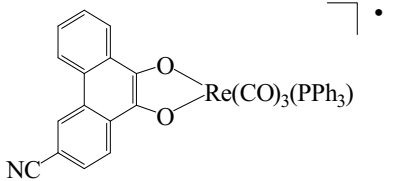
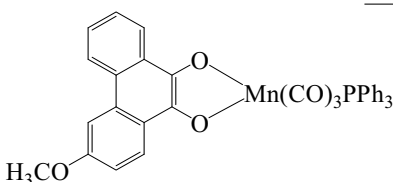
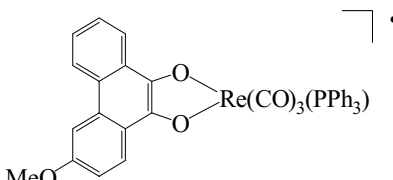
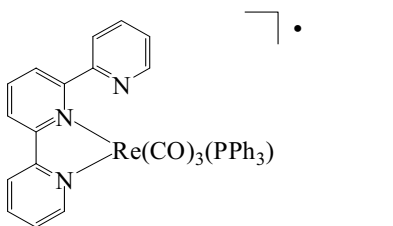
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{32}H_{39}MnNO_6]^{\bullet}$ 	chemical reaction toluene ESR / 298	^{55}Mn : 0.78 ^{14}N : 0.90 $H(3)$: 0.30 $H(7)$: 0.34 $H(9)$: 0.21	89Kar
$[C_{32}H_{39}NO_6Re]^{\bullet}$ 	chemical reaction toluene ESR / 298	^{14}N : 0.85	89Kar
$[C_{33}H_{21}MoN_7O_7PRe]^{\bullet}$ 	electrochemical generation 1,2-dichloroethane ESR / 298 electrochemistry, UV-VIS spectroscopy, luminescence	2.0022 $^{185,187}Re$: 1.7 ^{31}P : 1.7	91Mat1
$[C_{33}H_{23}MnNO_6P_2]^{\bullet}$ 	irradiation of precursor in the presence of ligand THF ESR / 298 IR spectroscopy, electrochemistry	^{31}P : 1.025	95Mey
$[C_{33}H_{35}MnO_5P]^{\bullet}$  (continued)	photochemical reaction toluene ESR / 253	species 1: ^{55}Mn : 0.431 ^{31}P : 1.648 $H(1)$: 0.012 $H(4)$: 0.226 $H(5)$: 0.298 $H(6)$: 0.271 $H(7)$: 0.064	92Reb

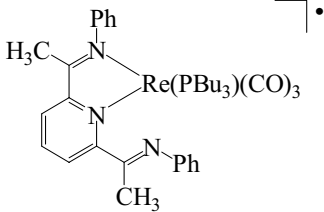
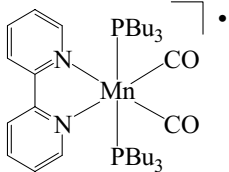
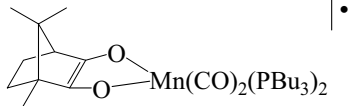
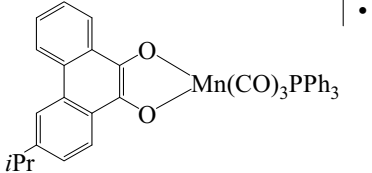
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[\text{C}_{33}\text{H}_{35}\text{MnO}_5\text{P}]^\bullet$ (<i>continued</i>)		species 2: ^{55}Mn : 0.431 ^{31}P : 1.695 H(1): 0.012 H(4): 0.271 H(5): 0.330 H(6): 0.305 H(7): 0.064	
$[\text{C}_{35}\text{H}_{22}\text{BrMnO}_5\text{P}]^\bullet$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00439 ^{55}Mn : 0.8125 ^{31}P : 2.565 H: 0.1504 (3H) H: 0.0336 (4H)	88Wan
$[\text{C}_{35}\text{H}_{22}\text{BrO}_5\text{PRe}]^\bullet$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0024 $^{185,187}\text{Re}$: 3.07 ^{31}P : 1.91	88Ho
$[\text{C}_{35}\text{H}_{22}\text{ClMnO}_5\text{P}]^\bullet$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00364 ^{55}Mn : 0.8020 ^{31}P : 2.597 H: 0.1529 (3H) H: 0.0266 (4H)	88Wan
$[\text{C}_{35}\text{H}_{22}\text{ClO}_5\text{PRe}]^\bullet$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0020 $^{185,187}\text{Re}$: 3.08 ^{31}P : 1.94	88Ho

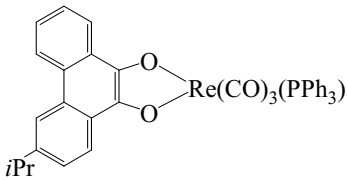
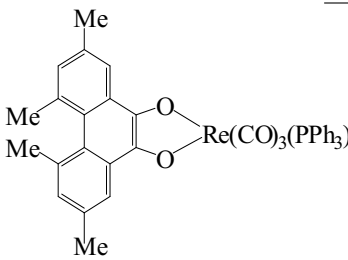
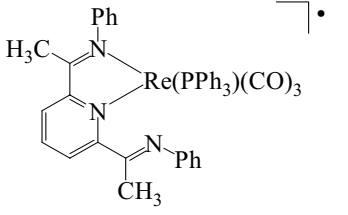
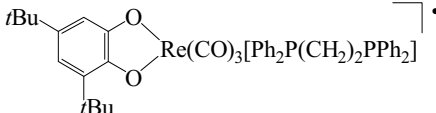
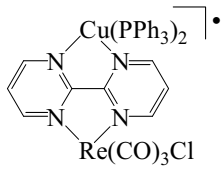
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{35}H_{22}MnNO_7P]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00358 ^{55}Mn : 0.8850 ^{31}P : 2.650 H: 0.1528 (4H) H: 0.0289 (3H)	88Wan
$[C_{35}H_{22}MnNO_7P]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00350 ^{55}Mn : 0.8776 ^{31}P : 2.689 H: 0.1435 (4H) H: 0.0256 (3H)	88Wan
$[C_{35}H_{22}NO_7PRe]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0014 $^{185,187}Re$: 3.33 ^{31}P : 2.02	88Ho
$[C_{35}H_{22}NO_7PRe]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0014 $^{185,187}Re$: 3.36 ^{31}P : 1.98	88Ho
$[C_{35}H_{23}MnO_5P]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00361 ^{55}Mn : 0.7775 ^{31}P : 2.568 H: 0.1563 (4H) H: 0.0342 (4H)	88Wan

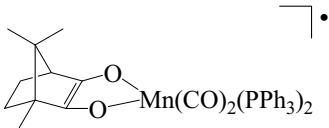
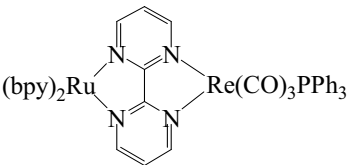
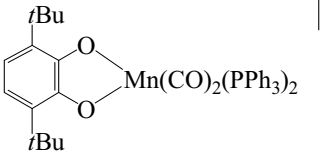
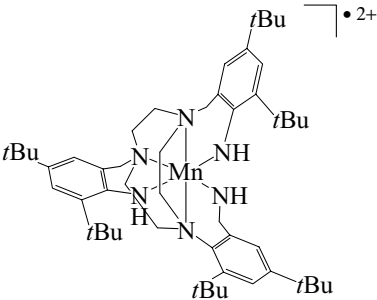
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{35}H_{23}O_5PRe]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0018 $^{185,187}Re$: 3.00 ^{31}P : 1.90	88Ho
$[C_{35}H_{35}AsO_5Re]^{\bullet}$ 	photolysis benzene ESR / RT photolysis dichloromethane ESR / RT	2.0010 $^{185,187}Re$: 3.30 As: 3.30 2.0006 $^{185,187}Re$: 3.49 As: 3.57 H: 0.3	96Har
$[C_{35}H_{35}MnO_5P]^{\bullet}$ 	chemical oxidation dichloromethane ESR / 295 chemical oxidation THF ESR / RT chemical oxidation dichloromethane ESR / RT	2.0029 ^{55}Mn : 1.0 ^{31}P : 3.35 H: 0.32 2.0029 ^{55}Mn : 0.99 H: 0.33 ^{31}P : 3.36 2.0029 ^{55}Mn : 0.99 H: 0.32 ^{31}P : 3.44	95Har 96Har
$[C_{35}H_{35}MnO_5P]^{\bullet}$ 	photochemical reaction toluene ESR / 293	^{55}Mn : 1.00 ^{31}P : 3.64 H(3): 0.30 H(4): 0.30	92Reb

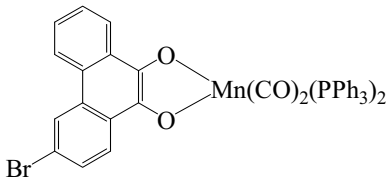
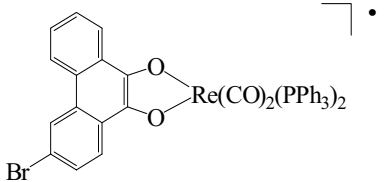
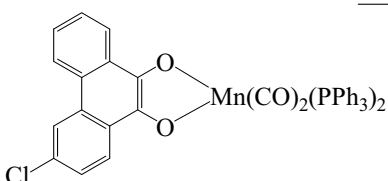
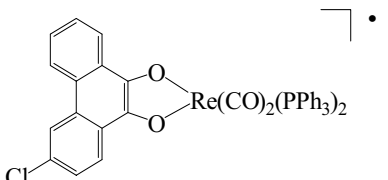
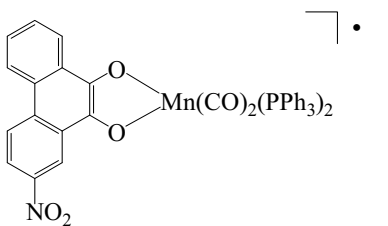
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{35}H_{35}O_5PRe]^{\bullet}$ 	photolysis benzene ESR / RT	2.0006 $^{185,187}Re$: 3.82 ^{31}P : 2.50	96Har 92Har
$[C_{35}H_{35}O_6PRe]^{\bullet}$ 	photolysis benzene ESR / RT	2.0045 $^{185,187}Re$: 0.8	96Har
$[C_{35}H_{35}O_8PRe]^{\bullet}$ 	photolysis benzene ESR / RT photolysis dichloromethane ESR / RT	2.0013 $^{185,187}Re$: 3.44 ^{31}P : 3.05 2.0012 $^{185,187}Re$: 3.36 ^{31}P : 3.33	96Har
$[C_{35}H_{35}SbO_5Re]^{\bullet}$ 	photolysis benzene ESR / RT	2.0037 $^{185,187}Re$: 3.75 ^{121}Sb : 9.37 ^{123}Sb : 5.10	96Har
$[C_{35}H_{45}MnN_3O_4]^{\bullet 2+}$ 	electrochemically generated dichloromethane ESR / 4 electrochemistry, UV-VIS spectroscopy, resonance Raman	$g_x = g_y = 2.05$ $g_z = 1.85$ $a_x(Mn) = a_y(Mn) = 9.63$ $a_z(Mn) = 22.46$ $E/D = 0.33$	00Mül
$[C_{35}H_{53}O_5PRe]^{\bullet}$ 	photolysis benzene ESR / RT	2.0016 $^{185,187}Re$: 4.09 ^{31}P : 2.33	96Har

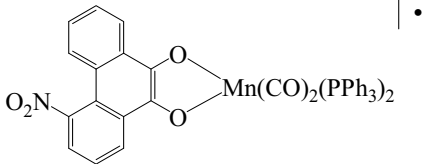
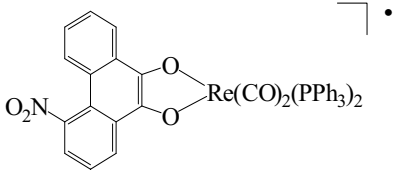
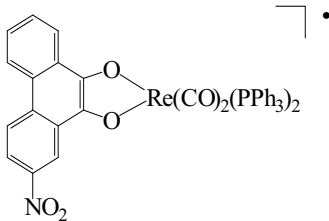
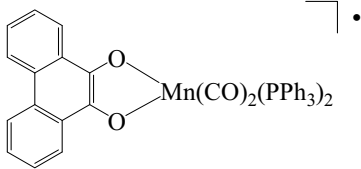
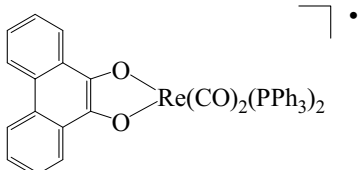
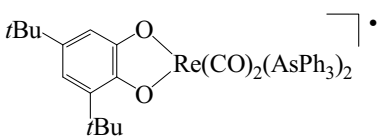
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{36}H_{22}MnNO_5P]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00341 ^{55}Mn : 0.8825 ^{31}P : 2.683 H: 0.1435 (3H) H: 0.0233 (2H)	88Wan
$[C_{36}H_{22}NO_5PRe]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0015 $^{185,187}Re$: 3.36 ^{31}P : 1.99	88Ho
$[C_{36}H_{25}MnO_6P]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00341 ^{55}Mn : 0.7226 ^{31}P : 2.425 H: 0.1601 (3H) H: 0.0388 (2H) H: 0.0184 (5H)	88Wan
$[C_{36}H_{25}O_6PRe]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0018 $^{185,187}Re$: 2.76 ^{31}P : 1.81	88Ho
$[C_{36}H_{26}N_3O_3PRe]^{\bullet}$ 	electrochemically generated THF ESR / RT electrochemistry, IR spectroscopy	2.0018 $^{185,187}Re$: 2.0 ^{31}P : 2.0	96Kle

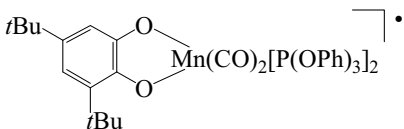
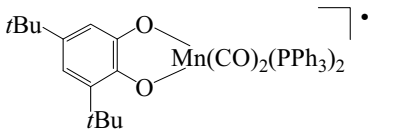
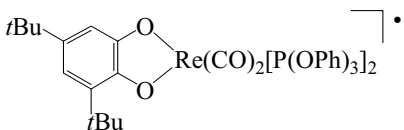
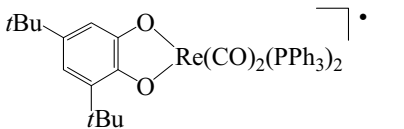
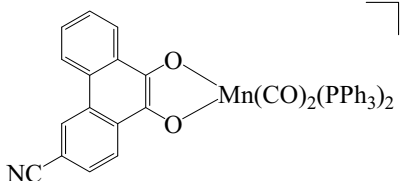
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{36}H_{46}N_3O_3PRe]^{\bullet}$ 	photolysis toluene ESR / 293 IR spectroscopy	$^{185,187}Re$: 2.730 ^{31}P : 3.010 ^{14}N : 0.445 H(m-H at pyridine): 0.445	94Sto1
$[C_{36}H_{62}MnN_2O_2P_2]^{\bullet}$ 	reduction with sodium amalgam THF ESR / 220–260 electrochemistry, EHMO calculations	2.0018 ^{55}Mn : 0.196 ^{31}P : 2.36 ^{14}N : 0.345 H(3): 0.072 H(4): 0.43 H(5): 0.12 H(6): 0.12	94Bro
$[C_{36}H_{70}MnO_4P_2]^{\bullet}$ 	photochemical reaction toluene ESR / 233	species 1: ^{55}Mn : 0.583 ^{31}P : 1.782 H(1): 0.014 H(4): 0.236 H(5): 0.291 H(6): 0.275 H(7): 0.057 species 2: ^{31}P : 1.885	92Reb
$[C_{38}H_{29}MnO_5P]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00381 ^{55}Mn : 0.7558 ^{31}P : 2.498 H: 0.1560 (3H) H: 0.0385 (4H)	88Wan

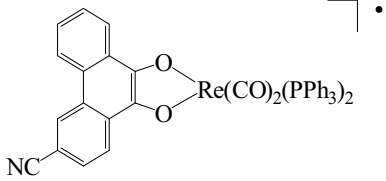
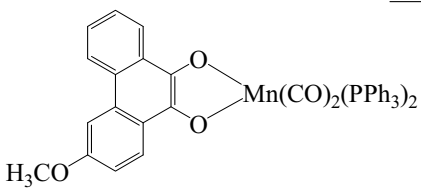
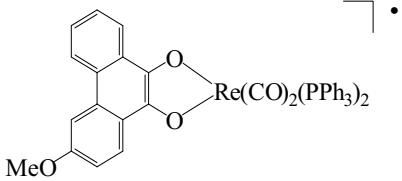
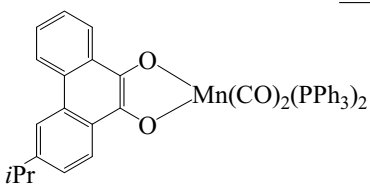
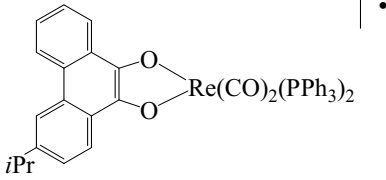
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{38}H_{29}O_5PRe]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0018 ^{185,187} Re: 2.89 ³¹ P: 1.88	88Ho
$[C_{39}H_{31}O_5PRe]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.0020 ^{185,187} Re: 2.73 ³¹ P: 2.04	88Ho
$[C_{42}H_{34}N_3O_3PRe]^{\bullet}$ 	photolysis toluene ESR / 293 IR spectroscopy	^{185,187} Re: 2.678 ³¹ P: 3.157 ¹⁴ N: 0.446 H(m-H at pyridine): 0.446	94Sto1
$[C_{43}H_{44}O_5P_2Re]^{\bullet}$ 	photolysis benzene ESR / RT	2.0009 ^{185,187} Re: 3.76 ³¹ P: 2.50	96Har
$[C_{47}H_{36}ClCuN_4O_3P_2Re]^{\bullet}$ 	electrochemical generation 1,2-dichloroethane ESR / 298 electrochemistry, UV-VIS spectroscopy, luminescence	2.0010 ^{185,187} Re: 1.1	91Mat1

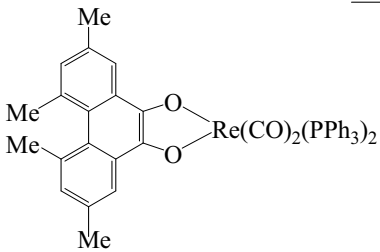
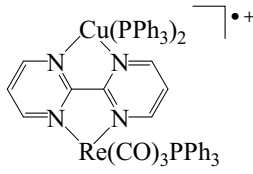
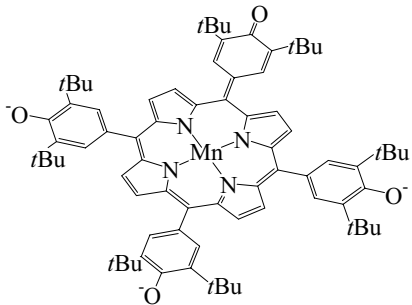
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{48}H_{46}MnO_4P_2]^{\bullet}$ 	photochemical reaction toluene ESR / 233	species 1: ^{55}Mn : 0.529 ^{31}P : 1.339 H(1): 0.014 H(4): 0.242 H(5): 0.330 H(6): 0.283 H(7): 0.064 species 2: ^{31}P : 1.377	92Reb
$[C_{49}H_{37}N_8O_3PReRu]^{\bullet+}$ 	electrochemically generated 1,2-dichloroethane	1.9944 $^{185,187}Re$: 1.9 ^{31}P : 1.7	91Matl
$[C_{50}H_{50}MnO_4P_2]^{\bullet}$ 	photochemical reaction toluene ESR / 293	^{55}Mn : 2.210 ^{31}P : 4.645 H(3): 0.225 H(4): 0.225	92Reb
$[C_{51}H_{81}MnN_6]^{\bullet 2+}$  further oxidation yields $[C_{51}H_{81}MnN_6]^{\bullet 3+}$	electrochemical generation dichloromethane ESR / 10	4–7 weak features 1.965 ^{55}Mn : 7.5	00Pen
crystal structure, electrochemistry, spectroelectrochemistry			

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{52}H_{37}BrMnO_4P_2]^{\bullet}$ 	<i>in situ</i> photolysis • benzene ESR / RT	2.00347 ^{55}Mn : 1.458 ^{31}P : 3.185 H: 0.1352 (3 H)	88Wan
$[C_{52}H_{37}BrO_4P_2Re]^{\bullet}$ 	<i>in situ</i> photolysis • benzene ESR / RT	1.9990 $^{185,187}\text{Re}$: 4.48 ^{31}P : 2.23	88Ho
$[C_{52}H_{37}ClMnO_4P_2]^{\bullet}$ 	<i>in situ</i> photolysis • benzene ESR / RT	2.00286 ^{55}Mn : 1.453 ^{31}P : 3.151 H: 0.1344 (3 H)	88Wan
$[C_{52}H_{37}ClO_4P_2Re]^{\bullet}$ 	<i>in situ</i> photolysis • benzene ESR / RT	1.9990 $^{185,187}\text{Re}$: 4.703 ^{31}P : 2.25	88Ho
$[C_{52}H_{37}MnNO_6P_2]^{\bullet}$ 	<i>in situ</i> photolysis • benzene ESR / RT	2.00289 ^{55}Mn : 1.696 ^{31}P : 3.438 H: 0.1235 (4H)	88Wan

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{52}H_{37}MnNO_6P_2]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00301 ^{55}Mn : 1.655 ^{31}P : 3.388 H: 0.1175 (4H)	88Wan
$[C_{52}H_{37}NO_6P_2Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	1.9986 $^{185,187}Re$: 4.30 ^{31}P : 2.23	88Ho
$[C_{52}H_{37}NO_6P_2Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	1.9994 $^{185,187}Re$: 4.24 ^{31}P : 2.25	88Ho
$[C_{52}H_{38}MnO_4P_2]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00298 ^{55}Mn : 1.359 ^{31}P : 3.083 H: 0.1354 (4 H)	88Wan
$[C_{52}H_{38}O_4P_2Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	1.9991 $^{185,187}Re$: 4.48 ^{31}P : 2.23	88Ho
$[C_{52}H_{50}As_2O_4Re]^{\bullet}$ 	photolysis CH ₂ Cl ₂ ESR / RT	1.9956 $^{185,187}Re$: 5.23 ^{75}As : 3.50	96Har

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{52}H_{50}MnO_{10}P_2]^{\bullet}$ 	chemical oxidation THF ESR / RT	2.0034 ^{55}Mn : 1.15 H: 0.28 ^{31}P : 4.45	96Har
$[C_{52}H_{50}MnO_4P_2]^{\bullet}$ 	chemical oxidation THF ESR / RT	2.0022 ^{55}Mn : 1.83 H: 0.30 ^{31}P : 4.21	96Har
	chemical oxidation dichloromethane ESR / RT	2.0022 ^{55}Mn : 1.79 H: 0.32 ^{31}P : 3.94	
$[C_{52}H_{50}O_{10}P_2Re]^{\bullet}$ 	photolysis benzene ESR / RT	1.9995 $^{185,187}Re$: 4.20 ^{31}P : 3.33	96Har
$[C_{52}H_{50}O_4P_2Re]^{\bullet}$ 	photolysis benzene ESR / RT	1.9962 $^{185,187}Re$: 5.98 ^{31}P : 2.94	96Har
$[C_{53}H_{37}MnNO_4P_2]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00295 ^{55}Mn : 1.713 ^{31}P : 3.411 H: 0.1220 (3 H)	88Wan

Substance	Generation / Matrix or Solvent / Method / <i>T</i> [K]	<i>g</i> -Factor / <i>a</i> -Value [mT]	Ref. / add. Ref.
$[C_{53}H_{37}NO_4P_2Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	1.9982 ^{185,187} Re: 4.50 ³¹ P: 2.33	88Ho
$[C_{53}H_{40}MnO_5P_2]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00272 ⁵⁵ Mn: 1.222 ³¹ P: 2.915 H: 0.1395 (3 H)	88Wan
$[C_{53}H_{40}O_5P_2Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	1.9993 ^{185,187} Re: 4.07 ³¹ P: 2.09	88Ho
$[C_{55}H_{44}MnO_4P_2]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	2.00260 ⁵⁵ Mn: 1.278 ³¹ P: 3.018 H: 0.1435 (3 H)	88Wan
$[C_{55}H_{44}O_4P_2Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	1.9994 ^{185,187} Re: 4.28 ³¹ P: 2.20	88Ho

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{56}H_{46}O_4P_2Re]^{\bullet}$ 	<i>in situ</i> photolysis benzene ESR / RT	1.9979 $^{185,187}Re$: 3.96 ^{31}P : 2.42	88Ho
$[C_{65}H_{51}CuN_4O_3P_3Re]^{\bullet+}$ 	electrochemical generation 1,2-dichloroethane ESR / 298 electrochemistry, UV-VIS spectroscopy, luminescence	2.0009 $^{185,187}Re$: 1.9 ^{31}P : 2.1	91Mat1
$[C_{76}H_{44}FeMnN_{13}]^{\bullet+}$ $[(TPP)Mn-N-Fe(Pc)]^{\bullet+}$	chemical oxidation THF ESR / 78 IR, Mössbauer and Raman spectroscopy	2.003	01Don
$[C_{76}H_{88}MnN_4O_4]^{\bullet}$ 	air oxidation basic dichloromethane ESR / 298 electrochemistry, UV-VIS spectroscopy	2.0088 ^{14}N : 0.111	88Mil