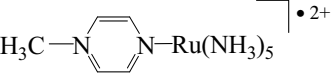
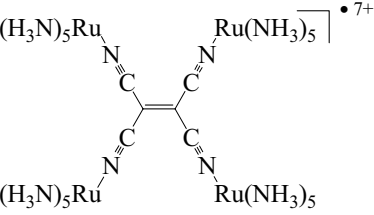
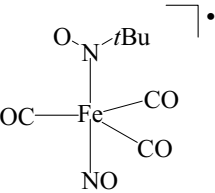
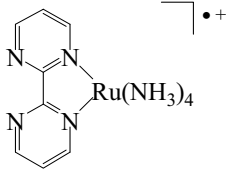
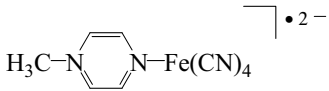
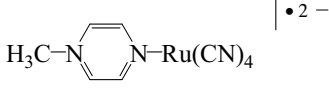
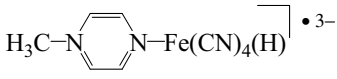
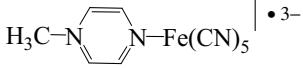
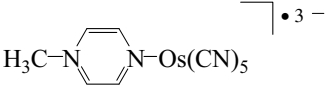
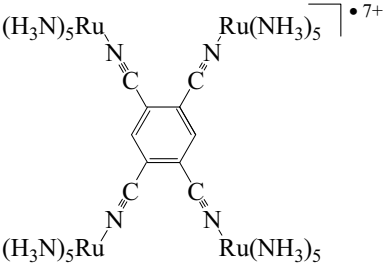
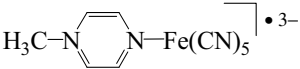
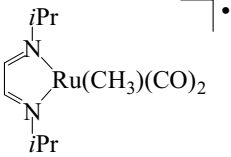
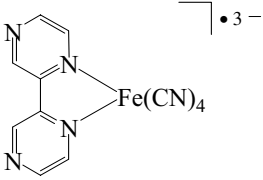
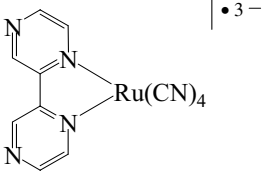
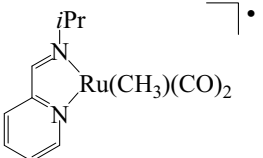
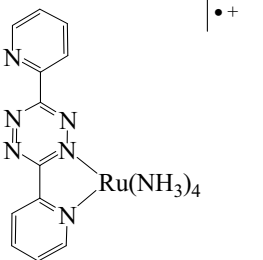
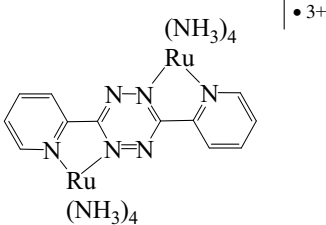
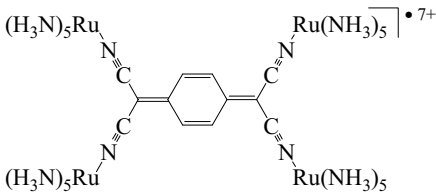
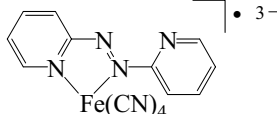
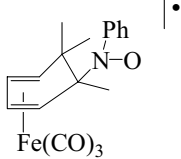
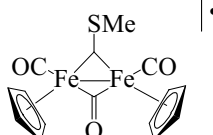
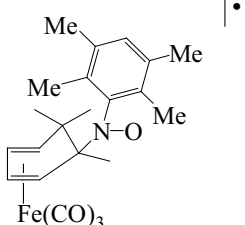


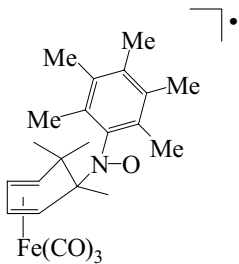
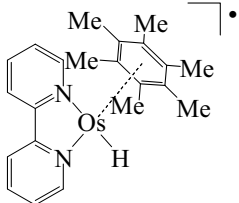
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
3.9 Complexes of group 8 (Fe, Ru, Os)			
$[\text{C}_5\text{FeN}_6\text{O}]^{\bullet 3-}$ $[\text{Fe}(\text{CN})_5(\text{NO})]^{\bullet 3-}$	electrolysis water ESR / 77 DFT calculations	$g_1 = 1.99$ $g_2 = 1.99$ $g_3 = 1.92$ ^{14}N : 2.8	01Wan
$[\text{C}_5\text{H}_{22}\text{N}_7\text{Ru}]^{\bullet 2+}$ 	electrochemically generated acetonitrile ESR / 300	2.0021 $^{99,101}\text{Ru}$: 0.580 $^{14}\text{N}(-\text{H})$: 0.683 $\text{H}(\text{CH}_3)$: 0.723 $^{14}\text{N}(-\text{CH}_3)$: 0.870 $\text{H}(2,6)$: 0.387 $\text{H}(3,5)$: < 0.180	93Pop2
$[\text{C}_5\text{N}_6\text{OOs}]^{\bullet 3-}$ $[\text{Os}(\text{CN})_5(\text{NO})]^{\bullet 3-}$	electrolysis acetonitrile ESR / 3.5 DFT calculations	$g_1 = 1.99$ $g_2 = 1.99$ $g_3 = 1.92$ ^{14}N : 3.5	01Wan
$[\text{C}_5\text{N}_6\text{ORu}]^{\bullet 3-}$ $[\text{Ru}(\text{CN})_5(\text{NO})]^{\bullet 3-}$	electrolysis acetonitrile ESR / 3.5 DFT calculations	$g_1 = 1.99$ $g_2 = 1.99$ $g_3 = 1.92$ ^{14}N : 3.8	01Wan
$[\text{C}_6\text{H}_{60}\text{N}_{24}\text{Ru}_4]^{\bullet 7+}$ 	electrochemically generated acetonitrile ESR / 3–4 electrochemistry, UV-VIS, IR and NMR spectroscopy, UV-VIS and IR spectroelectrochemistry	2.012 $g_1 = 2.003$ $g_2 = 2.003$ $g_3 = 2.029$	95Mos
$[\text{C}_7\text{H}_9\text{FeN}_2\text{O}_5]^{\bullet}$ 	chemical reaction THF ESR / 293	2.0040 ^{57}Fe : 0.17 ^{14}N : 1.69 ^{14}N : 0.065	87Bel

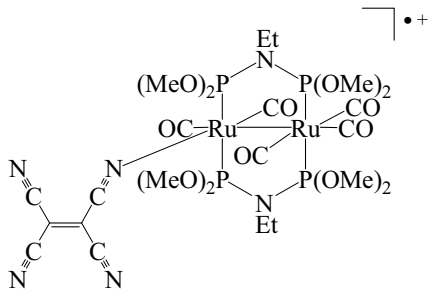
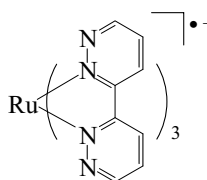
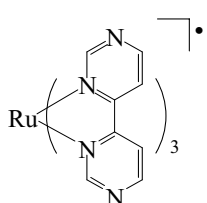
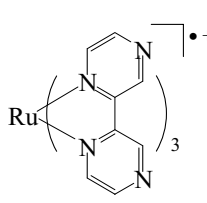
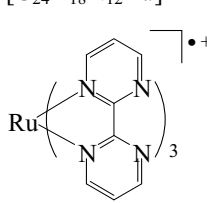
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_8H_{18}N_8Ru]^{•+}$ 	electrochemically generated acetonitrile ESR / 300 ESR / 110	1.9893 $g_{ } = 1.965$ $g_{\perp} = 2.003$	93Pop2
$[C_9H_7FeN_6]^{•2-}$ 	electrochemically generated dimethylsulfoxide ESR / 298 electrochemistry, NMR spectroscopy, UV-VIS and IR spectroelectrochemistry	2.0034 $^{14}N(1): 0.705$ $^{14}N(4): 0.811$ $H(CH_3): 0.703$ $H(2,6): 0.475$ $H(3,5): 0.084$	87Gat
$[C_9H_7N_6Ru]^{•2-}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry, NMR spectroscopy, UV-VIS and IR spectroelectrochemistry	2.0061 $^{99}Ru: 0.390$ $^{101}Ru: 0.437$ $^{14}N(1): 0.760$ $^{14}N(4): 0.895$ $H(CH_3): 0.624$ $H(2,6): 0.452$ $H(3,5): < 0.030$	87Gat
$[C_9H_8FeN_6]^{•3-}$ 	chemical reduction methanol, high pH ESR / 298 HMO calculations	2.0032 $^{14}N(1): 0.968$ $H(CH_2): 0.428$ $H(CH_3): 0.09$ $^{14}N(4): 0.690$ $H(CH_3): 0.690$	85Eat
$[C_{10}H_7FeN_7]^{•3-}$ 	chemical reduction methanol, high pH ESR / 298 HMO calculations	2.0032 $^{14}N(1): 0.821$ $H(CH_2): 0.477$ $H(CH_3): 0.102$ $^{14}N(4): 0.718$ $H(CH_3): 0.718$	85Eat

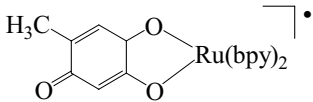
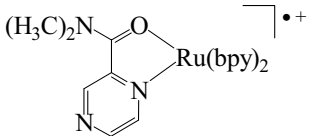
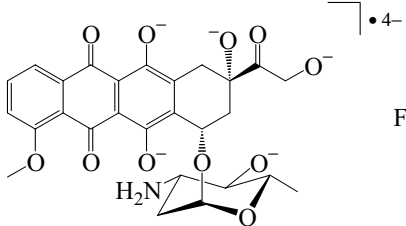
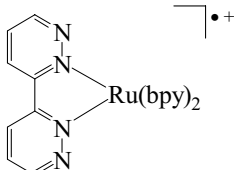
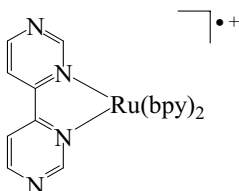
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{10}H_7N_7Os]^{\bullet 3-}$ 	electrochemically generated dimethylsulfoxide ESR / 298 electrochemistry, NMR spectroscopy, UV-VIS and IR spectro-electrochemistry	2.0157 $H(CH_3) \approx 0.550$ $H(2,6) \approx 0.550$	87Gat
$[C_{10}H_{62}N_{24}Ru_4]^{\bullet 7+}$ 	electrochemically generated dimethylformamide ESR / 3–4 electrochemistry, UV-VIS, IR and NMR spectroscopy, UV-VIS and IR spectroelectrochemistry	2.002 3.0 mT line width	95Mos
$[C_{10}H_7FeN_7]^{\bullet 3-}$ 	electrochemically generated aqueous CH_3OH -dichloromethane ESR / RT	2.0032 $H(CH_3)$: 0.718 $^{14}N(-CH_3)$: 0.821 $H(2,6)$: 0.477 $H(3,5)$: 0.102 $^{14}N(-Fe)$: 0.718	93Bru 93Pop2
$[C_{11}H_{19}N_2O_2Ru]^{\bullet}$ 	photolysis toluene ESR / 298 UV-VIS and IR spectroscopy	$^{99,101}Ru$: 0.245 $^{14}N(2\ N)$: 1.050	95Nie
$[C_{12}H_6FeN_8]^{\bullet 3-}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry, UV-VIS spectroscopy	1.9965 $^{14}N(1,1')$: 0.51 $H(3,3')$: 0.06 $^{14}N(4,4')$: 0.06 $H(5,5')$: 0.43 $H(6,6')$: 0.06	95Wal

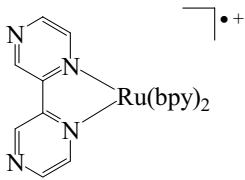
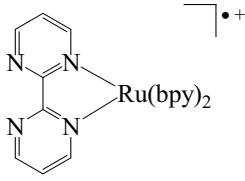
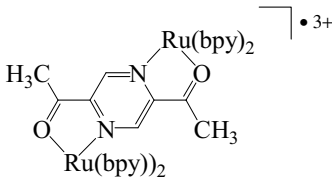
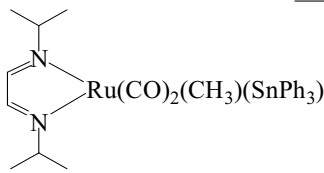
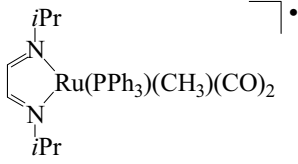
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[\text{C}_{12}\text{H}_6\text{N}_8\text{Ru}]^{\bullet 3-}$ 	electrochemically generated acetonitrile ESR / 298	1.9934 ^{101}Ru : 0.514 ^{99}Ru : 0.458 $^{14}\text{N}(1,1')$: 0.49 $\text{H}(5,5')$: 0.49	95Wal
$[\text{C}_{12}\text{H}_{15}\text{N}_2\text{O}_2\text{Ru}]^{\bullet}$ 	photolysis toluene ESR / 298	$^{99,101}\text{Ru}$: 0.470 $^{14}\text{N}(2\text{ N})$: 0.662	95Nie
$[\text{C}_{12}\text{H}_{20}\text{N}_{10}\text{Ru}]^{\bullet +}$ 	chemical reduction ethanol ESR / 300	1.9997 $^{99,101}\text{Ru}$: 0.67 $^{14}\text{N}(4\text{ N})$: 0.505	93Pop2
$[\text{C}_{12}\text{H}_{24}\text{FeN}_2\text{O}_5]^{\bullet +}$ $[\text{Fe}(\text{NO})_2(\text{THF})_3]^{\bullet +}$	chemical reaction THF ESR / 243 IR spectroscopy	2.0280 $^{14}\text{N}(2\text{ N})$: 0.25	86Bal
$[\text{C}_{12}\text{H}_{32}\text{N}_{14}\text{Ru}_2]^{\bullet 3+}$ 	reduction with cobaltocene in ethanol ethanol ESR / 300 acetonitrile ESR / 2.9	2.000 $g_{\parallel} = 2.022$ $g_{\perp} = 1.989$ 2.00 $g_1 = 1.989$ $g_2 = 1.989$ $g_3 = 2.022$	93Pop2 93Pop1 93Pop1
electrochemistry, UV-VIS and IR spectroelectrochemistry			

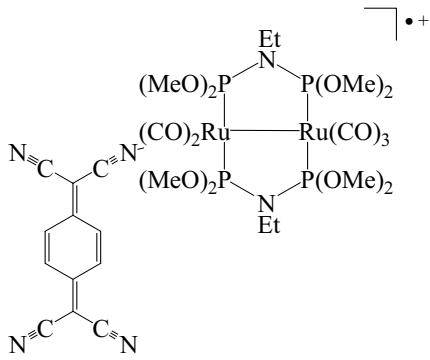
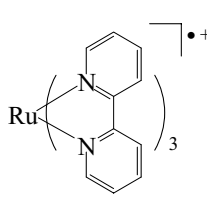
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{12}H_{64}N_{24}Ru_4]^{•7+}$ 	electrochemically generated acetonitrile ESR / 3–4 electrochemistry, UV-VIS, IR and NMR spectroscopy, UV-VIS and IR spectroelectrochemistry	2.019 5.9 mT line width	95Mos
$[C_{12}H_6FeN_8]^{•3-}$ 	electrochemically generated dimethylformamide ESR / RT ESR / 110 electrochemistry, UV-VIS spectroscopy	2.0085 $g_{ } = 2.016$ $g_{\perp} = 2.0047$	95Wal
$[C_{15}H_{12}FeNO_4]^{•}$ 	chemical reaction dichloromethane ESR / 293 acetonitrile ESR / 293	2.0067 ^{14}N : 1.12 $H(o,p)$: 0.3 $H(CH)$: 0.3 2.0067 ^{14}N : 1.12 $H(o,p)$: 0.3 $H(CH)$: 0.3	89Li
$[C_{15}H_{13}Fe_2O_3S]^{•}$ 	chemical reaction THF ESR / 183 electrochemistry, UV-VIS and IR spectroscopy	1.956	86Sch
$[C_{19}H_{20}FeNO_4]^{•}$ 	chemical reaction dichloromethane / acetonitrile ESR / 293 methylchloride / acetonitrile ESR / 293	2.0069 ^{14}N : 1.37 H : 0.42 2.0069 ^{14}N : 1.375 H : 0.36	89Li
(continued)			

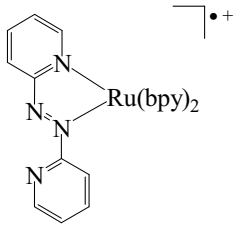
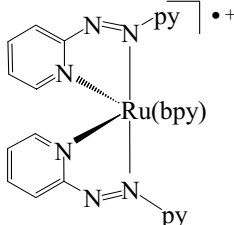
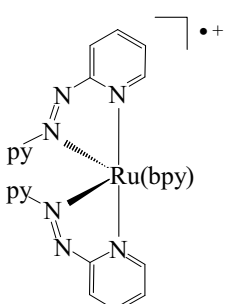
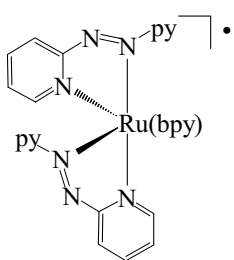
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[\text{C}_{19}\text{H}_{20}\text{FeNO}_4]^\bullet$ (<i>continued</i>)	dimethylsulfoxide / benzene ESR / 293	$g(1) = 2.0068$ $g(2) = 2.0060$ $^{14}\text{N}(1): 1.34$ $\text{H}(1): 0.33$ $^{14}\text{N}(2): 1.395$ $\text{H}(2): 1.23$	
	dimethylsulfoxide / benzene / dichloromethane / methylchloride ESR / 293	$g(1) = 2.0066$ $g(2) = 2.0061$ $^{14}\text{N}(1): 1.36$ $\text{H}(1): 0.34$ $^{14}\text{N}(2): 1.412$ $\text{H}(2): 1.25$	
$[\text{C}_{20}\text{H}_{22}\text{FeNO}_4]^\bullet$ 	chemical reaction dimethylsulfoxide / benzene ESR / 293	$g(1) = 2.0069$ $g(2) = 2.0066$ $^{14}\text{N}(1): 1.37$ $\text{H}(1): 0.4$ $^{14}\text{N}(2): 1.39$ $\text{H}(2): 1.27$	89Li
	benzene ESR / 293	$g(1) = 2.0067$ $g(2) = 2.0064$ $^{14}\text{N}(1): 1.35$ $\text{H}(1): 0.33$ $^{14}\text{N}(2): 1.38$ $\text{H}(2): 1.23$	
$[\text{C}_{22}\text{H}_{27}\text{N}_2\text{Os}]^\bullet$ 	electrochemical reduction acetonitrile ESR / 295	1.981 $^{189}\text{Os}: 2.63$ $^{14}\text{N}: 0.51$ $\text{H}(4,4'): 0.35$ $\text{H}(5,5'): 0.35$ $\text{H}(\text{Os-H}): 0.35$	94Kai
	electrochemistry		

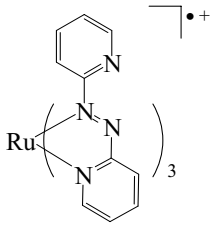
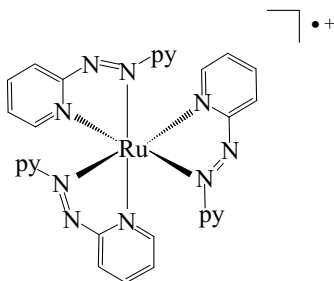
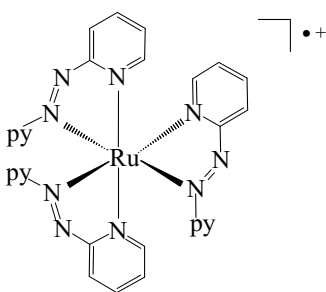
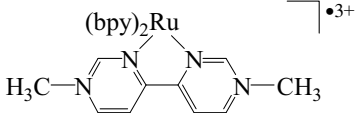
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{23}H_{34}N_4O_{13}P_4Ru_2]^{\bullet+}$ 	chemical reaction dichloromethane ESR / 300	2.00184 $^{14}N(1 N): 0.117$ $^{14}N(2 N): 0.172$ $^{14}N(1 N): 0.249$ $^{31}P(1 P): 0.430$ $^{31}P(1 P): 0.441$	92Bel
$[C_{24}H_{18}N_{12}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9964	90Kai4
$[C_{24}H_{18}N_{12}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9982	90Kai4
$[C_{24}H_{18}N_{12}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9977	90Kai4
$[C_{24}H_{18}N_{12}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9983	90Kai4

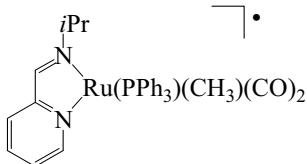
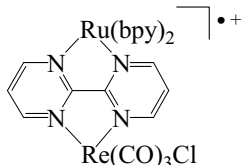
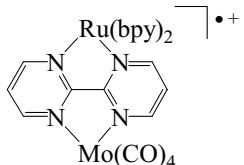
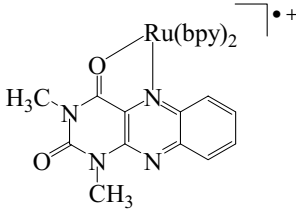
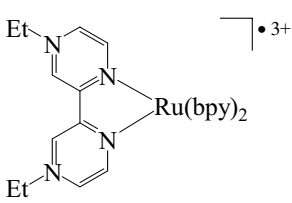
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{27}H_{21}N_4O_3Ru]^{\bullet}$ 	chemical reaction acetonitrile ESR / 300 dichloromethane ESR / 113 electrochemistry	2.0023 $^{99,101}Ru$: 0.225 $H(CH_3)$: 0.588 $H(CH)$: < 0.05 $g_1 = 2.0210$ $g_2 = 2.0032$ $g_3 = 1.9851$	93Wal
$[C_{27}H_{25}N_7ORu]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry, UV-VIS spectroscopy, NMR	1.9992	87Ern
$[C_{27}H_{29}FeNO_{11}]^{\bullet-}$ 	chemical oxidation water ESR / 77	2.34	85Zwe
$[C_{28}H_{22}N_8Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9908	90Kai4
$[C_{28}H_{22}N_8Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations ESR / 298 electrochemistry, UV-VIS spectroscopy	1.9973 ^{14}N (4 N): 0.27 H (2 H): 0.23 1.9975	90Kai4 85Ern

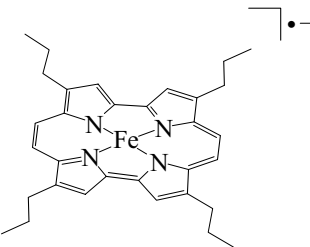
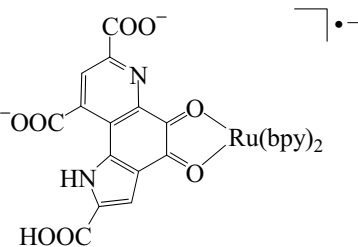
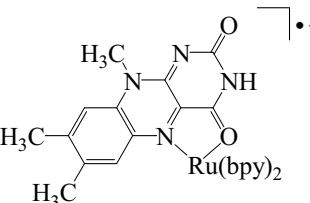
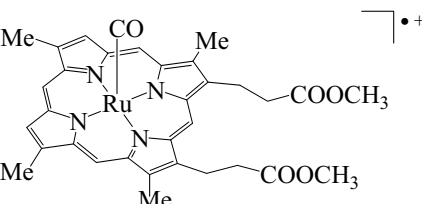
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{28}H_{22}N_8Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9910	90Kai4
$[C_{28}H_{22}N_8Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9942	90Kai4
$[C_{28}H_{24}N_6O_2Ru_2]^{\bullet 3+}$ 	chemical reduction acetone ESR / 298 ESR / 3.8 HMO calculations	1.9977 $g_1 = 1.9645$ $g_2 = 2.0027$ $g_3 = 2.0252$	89Bes2
$[C_{29}H_{32}N_2O_2RuSn]^{\bullet-}$ 	chemical reduction THF ESR / 293 UV-VIS and IR spectroelectrochemistry, electrochemistry, NMR spectroscopy	1.9986 ^{99}Ru : 0.39 ^{101}Ru : 0.43 ^{117}Sn : ~ 370 ^{119}Sn : ~ 37 ^{14}N : 0.795 H(imine): 0.362 H(CH(CH ₃) ₂): 0.269 H(Ru-CH ₃): 0.068	97Aar
$[C_{29}H_{34}N_2O_2PRu]^{\bullet}$ 	photolysis toluene ESR / 298 UV-VIS and IR spectroscopy	 $^{99,101}Ru$: 0.202 ^{31}P : 7.267 $^{14}N(2\ N)$: 0.774	95Nie

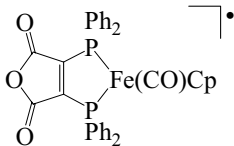
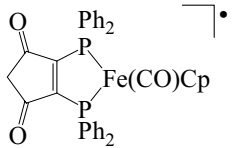
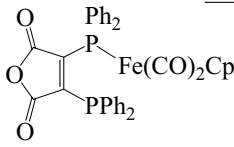
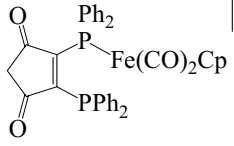
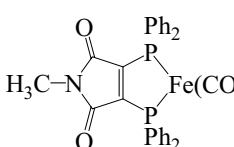
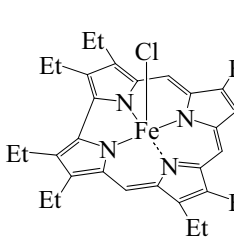
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{29}H_{38}N_4O_{13}P_4Ru_2]^{\bullet+}$ 	chemical reaction dichloromethane ESR / ENDOR / 300	2.00220 $^{14}N(1 N)$: 0.054 $^{14}N(1 N)$: 0.117 $^{14}N(2 N)$: 0.133 $^{31}P(1 P)$: 0.189 $^{31}P(2 P)$: 0.205 $H(2 H)$: 0.022 $H(2 H)$: 0.260	92Bel
$[C_{30}H_{24}N_6Os]^{\bullet+}$ $[Os(bpy)_3]^{\bullet+}$ charge = 0 charge = 1–	electrochemically generated dimethylformamide ESR / 233 dimethylformamide ESR / 133 dimethylformamide ESR / 233 dimethylformamide ESR / 133 solid ESR / 133 dimethylformamide ESR / 133	1.989 1.998 1.990 2.001 1.990 1.968	85Mor2
$[C_{30}H_{24}N_6Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9961	90Kai4

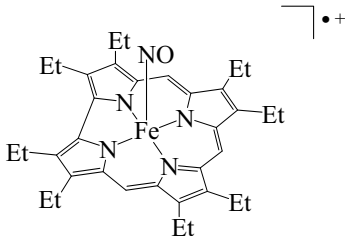
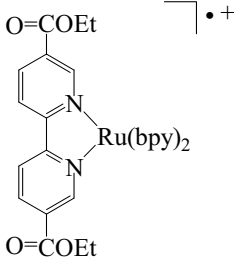
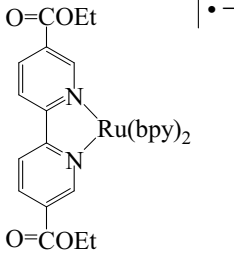
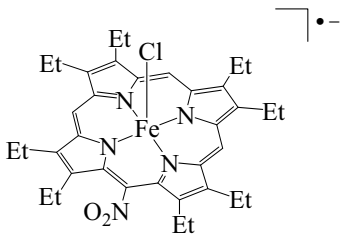
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{30}H_{24}N_8Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9978 1.9983 ^{99}Ru : 0.77 ^{101}Ru : 0.86 $^{14}N(1 N)$: 0.73	90Kai4 93Kre
$\alpha_1-[C_{30}H_{24}N_{10}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 180 electrochemistry, UV-VIS and IR spectroscopy, NMR	1.9858	93Kre 96Hei1
$\alpha_2-[C_{30}H_{24}N_{10}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry, UV-VIS and NMR spectroscopy, temperature dependent ESR data	1.998	96Hei1
$\beta-[C_{30}H_{24}N_{10}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry, UV-VIS, IR and NMR spectroscopy	1.9978	93Kre 96Hei1

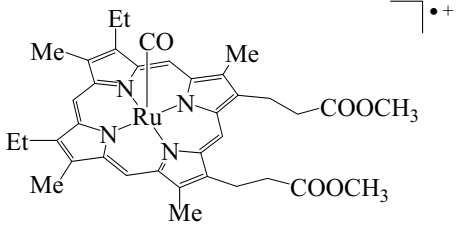
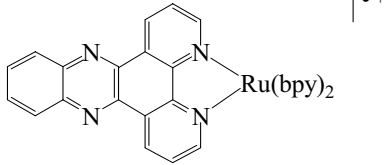
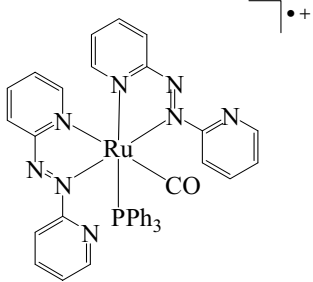
Substance	Generation / Matrix or Solvent / Method / <i>T</i> [K]	<i>g</i> -Factor / <i>a</i> -Value [mT]	Ref. / add. Ref.
$[C_{30}H_{24}N_{12}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9966	90Kai4
$fac-[C_{30}H_{24}N_{12}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry, UV-VIS and IR spectroscopy, NMR	1.9978	93Kre
$mer-[C_{30}H_{24}N_{12}Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry, UV-VIS and IR spectroscopy, NMR	1.9985	93Kre
$[C_{30}H_{28}N_8Ru]^{\bullet3+}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry	1.9963	90Kai3 94Mat

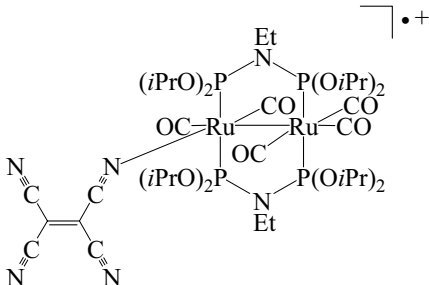
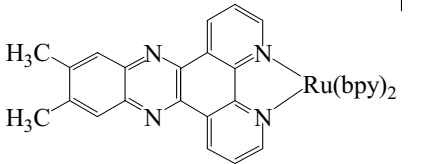
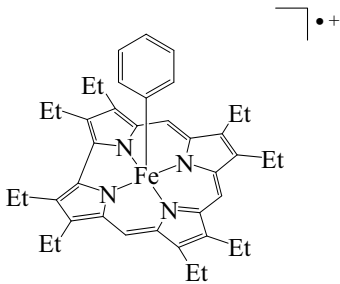
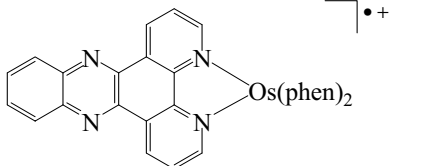
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{30}H_{30}N_2O_2PRu]^{\bullet}$ 	photolysis toluene ESR / 298 UV-VIS and IR spectroscopy	$^{99,101}Ru$: 0.303 ^{31}P : 5.211 $^{14}N(2\ N)$: 0.433 $H(imine)$: 0.120	95Nie
$[C_{31}H_{22}ClN_8O_3ReRu]^{\bullet+}$ 	electrochemically generated 1,2-dichloroethane ESR / RT electrochemistry, UV-VIS spectroscopy	1.9953 $^{185,187}Re$: 1.05	91Mat1
$[C_{32}H_{22}MoN_8O_4Ru]^{\bullet+}$ 	electrochemically generated 1,2-dichloroethane ESR / RT also electrochemistry, UV-VIS spectroscopy	1.9964 ^{14}N : 0.24	91Mat1
$[C_{32}H_{26}N_8O_2Ru]^{\bullet+}$ 	electrochemically generated THF ESR / 298 electrochemistry, NMR and IR spectroscopy, UV-VIS and IR spectroelectrochemistry	1.9990 ^{101}Ru : 0.53 ^{99}Ru : 0.47 $^{14}N(5)$: 0.80	00Hor
$[C_{32}H_{32}N_8Ru]^{\bullet3+}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry	1.9834	90Kai3

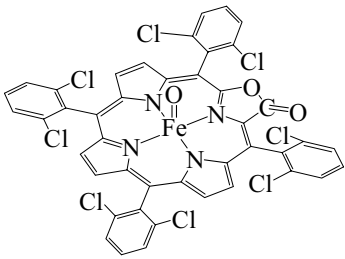
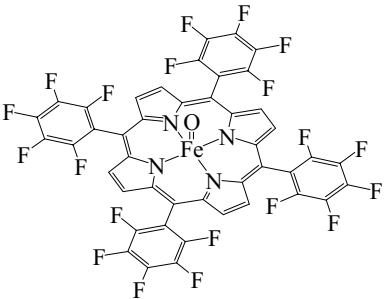
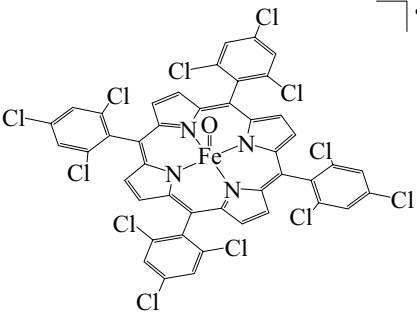
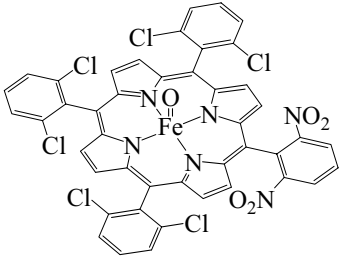
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{32}H_{36}FeN_4]^{\bullet-}$ 	electrochemically generated benzonitrile ESR / 140 electrochemistry, UV-VIS spectroscopy	2.006	98Ber2
$[C_{33}H_{20}N_6O_8Ru]^{\bullet-}$ 	electrochemically generated acetonitrile ESR / 300 adsorbed on Al_2O_3 ESR / 300 electrochemistry, UV-VIS spectroscopy	2.0048 $g_1 = 2.0210$ $g_2 = 2.0032$ $g_3 = 1.9851$	90Sch
$[C_{33}H_{28}N_8O_2Ru]^{\bullet+}$ 	electrochemically generated acetonitrile ESR / 298 electrochemistry, UV-VIS spectroscopy	2.0016	92Sch2
$[C_{33}H_{32}N_4O_5Ru]^{\bullet+}$ 	chemical oxidation with Br_2 dichloromethane ESR / 77 NMR spectroscopy	2.003	86Mor

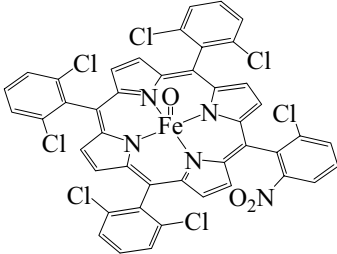
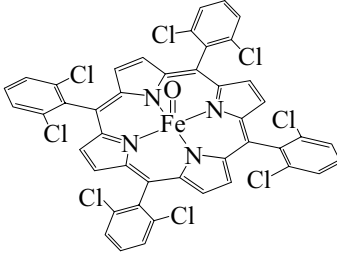
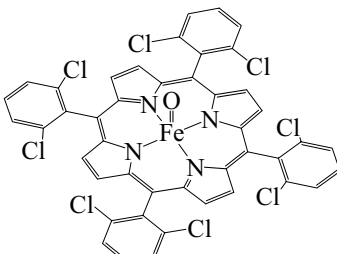
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{34}H_{25}FeO_4P_2]^{\bullet}$ 	irradiation dichloromethane ESR / 298 IR spectroscopy, electrochemistry	2.008 ^{31}P : 0.87 (2P)	95Mey
$[C_{34}H_{27}FeO_3P_2]^{\bullet}$ 	irradiation dichloromethane ESR / 298 IR spectroscopy, electrochemistry	2.004 ^{31}P : 0.93 (2P) H: 0.29 (2H)	95Mey
$[C_{35}H_{25}FeO_5P_2]^{\bullet}$ 	irradiation dichloromethane ESR / 298 IR spectroscopy, electrochemistry	2.008 $^{31}P(1)$: 0.97 $^{31}P(2)$: 0.39	95Mey
$[C_{35}H_{27}FeO_4P_2]^{\bullet}$ 	irradiation dichloromethane ESR / 298 IR spectroscopy, electrochemistry	2.004 $^{31}P(1)$: 1.05 $^{31}P(2)$: 0.44 H(1): 0.33 H(2): 0.27	95Mey
$[C_{35}H_{28}FeNO_3P_2]^{\bullet}$ 	irradiation dichloromethane ESR / 298 IR spectroscopy, electrochemistry	2.008 $^{31}P(1)$: 0.87 $^{31}P(2)$: 0.86	95Mey
$[C_{35}H_{43}ClFeN_4]^{\bullet+}$ 	electrochemically generated benzonitrile ESR / 77 electrochemistry, magnetic susceptibility, UV-VIS and Mössbauer spectroscopy	$g_1 = 2.12$ $g_2 = 2.07$ $g_3 = 2.02$	96Van

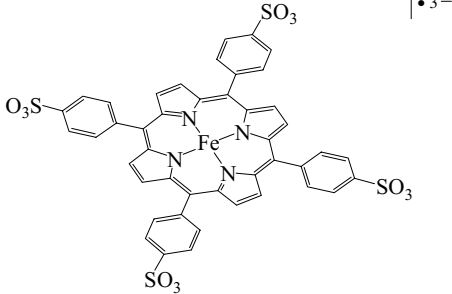
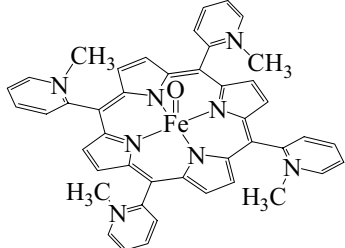
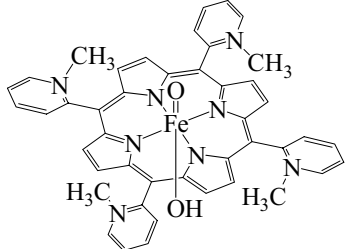
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{35}H_{43}FeN_5O]^{\bullet+}$ 	electrochemically generated benzonitrile ESR / 120 crystal structure, electrochemistry, UV-VIS, IR and NMR spectroscopy	$g_1 = 2.02$ $g_2 = 2.00$ $g_3 = 1.98$	97Aar
$[C_{36}H_{32}N_6O_4Ru]^{\bullet+}$ 	electrochemically generated dimethylformamide ESR / 300 ESR / 77 electrochemistry, UV-VIS spectroscopy	1.997 $g_{\parallel} = 1.986$ $g_{\perp} = 2.004$	87Gas
$[C_{36}H_{32}N_6O_4Ru]^{\bullet-}$ 	electrochemically generated dimethylformamide ESR / 77 electrochemistry, UV-VIS spectroscopy	$g_{\parallel} = 1.9933$ $g_{\perp} = 2.0032$	87Gas
$[C_{36}H_{43}ClFeN_5O_2]^{\bullet-}$ 	chemical reduction THF ESR / 77 NMR and UV-VIS spectroscopy	5.63 2.00	92Yam

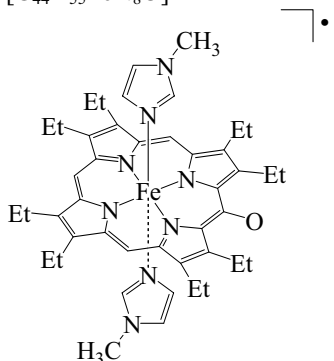
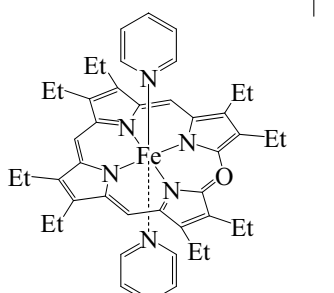
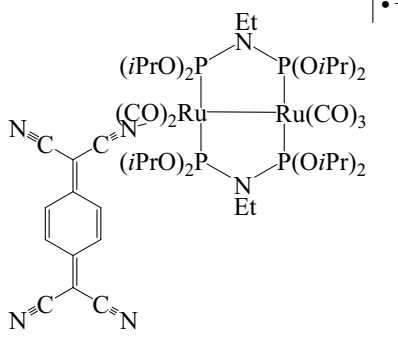
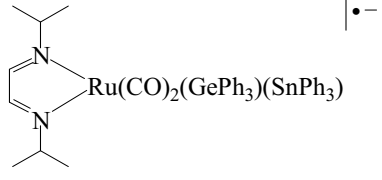
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{37}H_{40}N_4O_5Ru]^{\bullet+}$ 	chemical oxidation with Br_2 dichloromethane ESR / 77 NMR spectroscopy	2.003 ESR silent at room temperature	86Mor
$[C_{38}H_{26}N_8Ru]^{\bullet+}$ 	electrochemically generated dichloromethane ESR / 293 electrochemistry, UV-VIS spectroscopy and spectroelectrochemistry	2.00336 $^{14}N(9,14)$: 0.48 $H(10,13)$: 0.13 $^{14}N(4,5)$: 0.07 H : 0.07	99Fee
$[C_{39}H_{31}N_8OPRu]^{\bullet+}$ 	chemical reaction powder ESR / 298 ESR / 77 crystal structure, electrochemistry, UV-VIS and IR spectroscopy, magnetic measurements	2.003 1.999	00Gho 00Shi

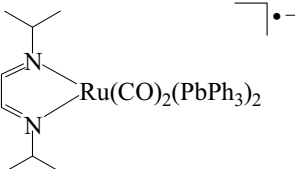
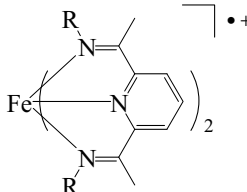
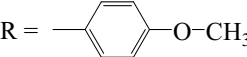
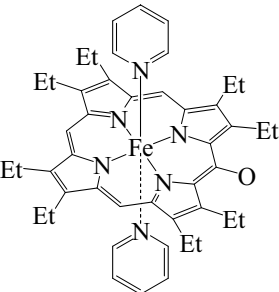
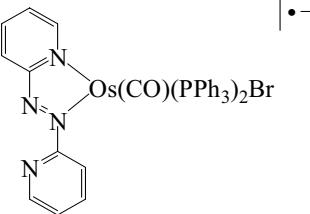
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{39}H_{66}N_4O_{13}P_4Ru_2]^{•+}$ 	chemical reaction dichloromethane ESR / 300	2.00199 $^{14}N(1 N)$: 0.117 $^{14}N(2 N)$: 0.172 $^{14}N(1 N)$: 0.251 $^{31}P(1 P)$: 0.523 $^{31}P(1 P)$: 0.536	92Bel
$[C_{40}H_{30}N_8Ru]^{•+}$ 	electrochemically generated dichloromethane ESR / 293	2.00339 $^{14}N(9,14)$: 0.47	93Fee
$[C_{41}H_{48}FeN_4]^{•+}$ 	electrochemically generated benzonitrile ESR / 77	$g_1 = 2.17$ $g_2 = 2.04$ $g_3 = 2.01$	96Van
$[C_{42}H_{26}N_8Os]^{•+}$ 	electrochemically generated acetonitrile ESR / 293	2.00395 $^{14}N(9,14)$: 0.45	99Fee

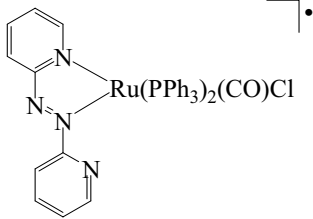
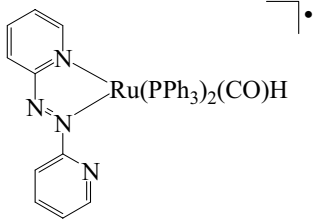
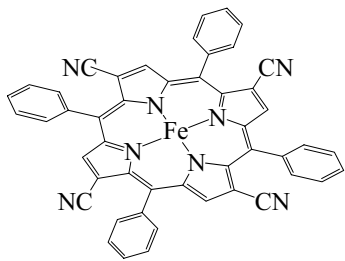
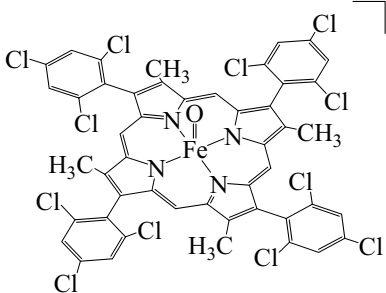
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{43}H_{18}Cl_8FeN_4O_3]^{\bullet+}$ 	chemical oxidation butyronitrile ESR / 4.2	$g_1 = 2.17$ $g_2 = 2.17$ $g_3 = 1.99$	97Jay
$[C_{44}H_8F_{20}FeN_4O]^{\bullet+}$ 	chemical oxidation dichloromethane ESR / 14	2.0	94Fuj
$[C_{44}H_{16}Cl_{12}FeN_4O]^{\bullet+}$ 	chemical oxidation dichloromethane / methanol 5:1 ESR / 14	$g_1 = 4.14$ $g_2 = 3.66$ $g_3 = 2.00$ $E / D = 0.040$	96Fuj
$[C_{44}H_{20}Cl_6FeN_6O_5]^{\bullet+}$ 	chemical oxidation dichloromethane / methanol ESR / 10	$g_{\parallel}^{\text{eff}} \approx 2$ $g_{\perp}^{\text{eff}} \approx 4$	96Jay
NMR, UV-VIS, IR and resonance Raman spectroscopy			

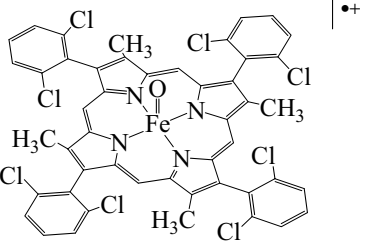
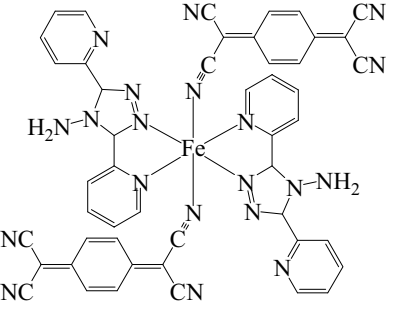
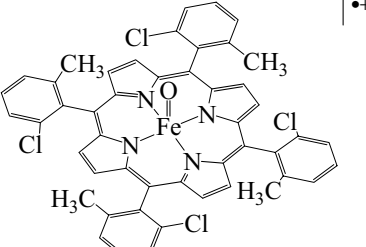
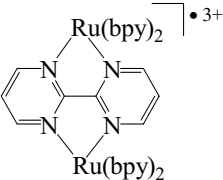
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{44}H_{20}Cl_7FeN_5O_3]^{\bullet+}$ 	chemical oxidation dichloromethane / methanol ESR / 10	$g_{\parallel}^{\text{eff}} \approx 2$ $g_{\perp}^{\text{eff}} \approx 4$	96Jay
$[C_{44}H_{20}Cl_8FeN_4O]^{\bullet+}$ 	chemical oxidation dichloromethane / methanol 6:1 ESR / 2.7–30	$g_x^{\text{eff}} = 4.26$ $g_y^{\text{eff}} = 3.62$ $g_z^{\text{eff}} = 1.98$	92Man
$[C_{44}H_{20}Cl_8FeN_4O]^{\bullet+}$ 	chemical oxidation dichloromethane / methanol 5:1 ESR / 20	$g_1 = 4.23$ $g_2 = 3.65$ $g_3 = 2.00$ $E/D = 0.048$	96Fuj
$[C_{44}H_{28}FFeN_4O]^{\bullet}$ $[Fe(O)(TPP)F]^{\bullet}$	chemical oxidation dichloromethane ESR / 5 electrochemistry, NMR spectroscopy	$g_1 = 4.2$ $g_2 = 3.9$ $g_3 = 3.5$	88Hic

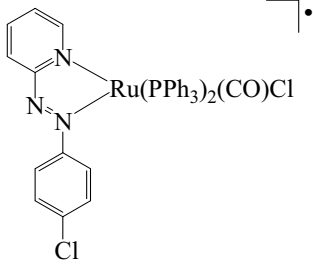
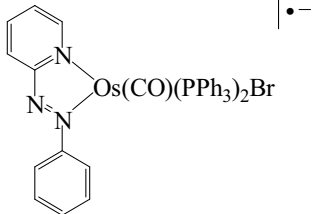
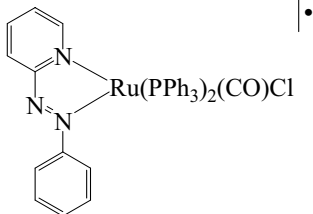
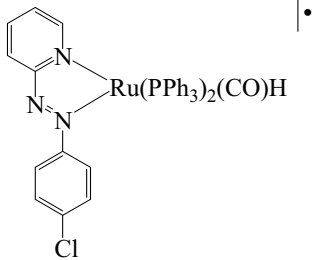
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{44}H_{30}FeN_4O_{12}S_4]^{\bullet 3-}$ 	chemical reaction solid state ESR / 423	2	97Jim
electrochemistry, NMR spectroscopy			
$[C_{44}H_{36}FeN_8O]^{\bullet +}$ 	electrochemically generated water, pH = 9.1 ESR / 120	2 (broad signal)	92Rod
electrochemistry, NMR and resonance Raman spectroscopy			
$[C_{44}H_{37}FeN_8O_2]^{\bullet}$ 	electrochemically generated water, pH = 12.1 ESR / 120	2.44 (broad signal)	92Rod
electrochemistry, NMR and resonance Raman spectroscopy			

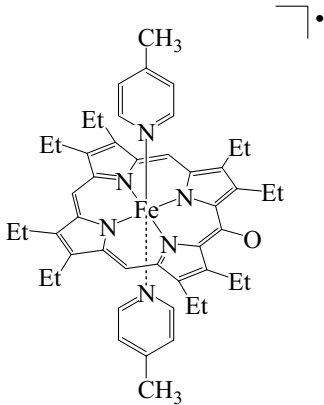
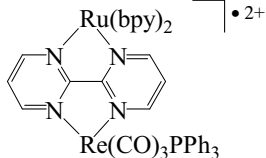
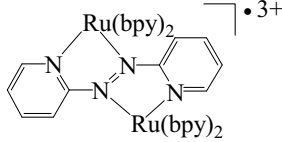
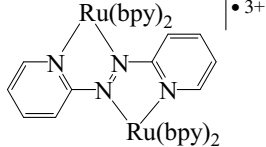
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{44}H_{55}FeN_8O]^{\bullet}$ 	chemical reaction 1-methylimidazole ESR / 77	2.53 2.28 1.66	95Mor
$[C_{45}H_{53}FeN_6O]^{\bullet}$ 	electrochemically generated dimethylformamide / pyridine ESR / 253 dimethylformamide / pyridine ESR / 77	1.981 $g_{ } = 1.935$ $g_{\perp} = 2.001$	93Taj
$[C_{45}H_{70}N_4O_{13}P_4Ru_2]^{\bullet+}$ 	chemical reaction dichloromethane ESR / ENDOR / 300	2.00222 $^{14}N(1 N): 0.055$ $^{14}N(1 N): 0.123$ $^{14}N(2 N): 0.131$ $^{31}P(1 P): 0.198$ $^{31}P(2 P): 0.203$ $H(2 H): 0.018$ $H(2 H): 0.259$	92Bel
$[C_{46}H_{44}GeN_2O_2RuSn]^{\bullet-}$ 	reduction with 1 % Na (Hg) THF ESR / 293	1.9960 $^{99}Ru: 5.7$ $^{101}Ru: 6.4$ $^{117}Sn: 317$ $^{119}Sn: 332$ $^{14}N: 8.2$ $H(imine): 3.55$ $H(CH(CH_3)_2): 3.25$	97Aar

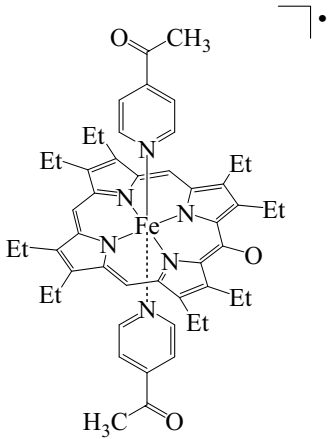
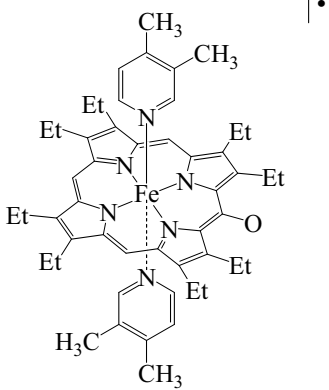
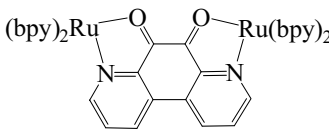
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{46}H_{44}N_2O_2Pb_2Ru]^{\bullet-}$ 	reduction with 1% Na (Hg) THF ESR / 293 UV-VIS and IR spectroelectrochemistry, electrochemistry, NMR spectroscopy	1.9919 ^{207}Pb : ~ 57 ^{14}N : ~ 0.75 H(imine): ~ 0.4 H(CH(CH ₃) ₂): ~ 0.33	97Aar
$[C_{46}H_{46}FeN_6O_4]^{\bullet+}$  R = 	electrochemically generated acetonitrile ESR / 253 crystal structure, electrochemistry, UV-VIS spectroelectrochemistry, NMR and Mössbauer spectroscopy	1.977 $g_x = 1.996$ $g_y = 1.975$ $g_z = 1.961$	00DeB
$[C_{46}H_{53}FeN_6O]^{\bullet}$ 	chemical reaction pyridine ESR / 77 NMR and UV-VIS spectroscopy	2.31 1.79	95Mor
$[C_{47}H_{38}BrN_4OOSp_2]^{\bullet-}$ 	chemical reaction polycrystalline solid ESR / 298 crystal structure, electrochemistry, NMR	2.001 1.971	00Pra

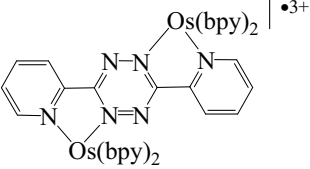
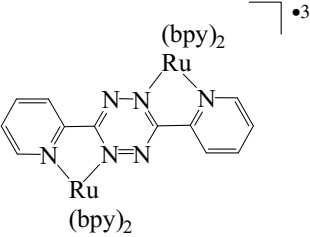
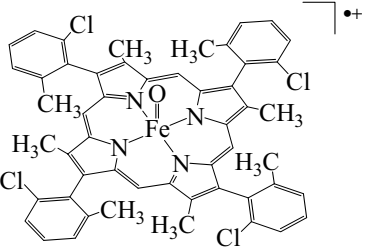
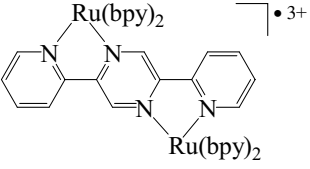
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{47}H_{38}ClN_4OP_2Ru]^{\bullet}$ 	chemical reaction powder ESR / 298 ESR / 77 electrochemistry, UV-VIS and IR spectroscopy, magnetic measurements	2.001 2.001	00Gho 00Shi
$[C_{47}H_{39}N_4OP_2Ru]^{\bullet}$ 	chemical reaction powder ESR / 298 ESR / 77 electrochemistry, UV-VIS and IR spectroscopy, magnetic measurements	2.002 2.003	00Gho 00Shi
$[C_{48}H_{24}FeN_8]^{\bullet-}$ 	chemical reduction THF ESR / 77 NMR and UV-VIS spectroscopy	$g_x = 2.032$ $g_y = 1.86$ $g_z = 2.0$	92Yam
$[C_{48}H_{24}Cl_{12}FeN_4O]^{\bullet+}$ 	chemical oxidation dichloromethane / methanol 5:1 ESR / 4	$g_1 = 3.6$ $g_2 = 1.98$	96Fuj

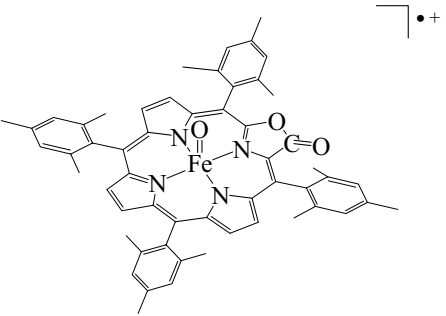
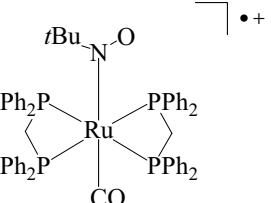
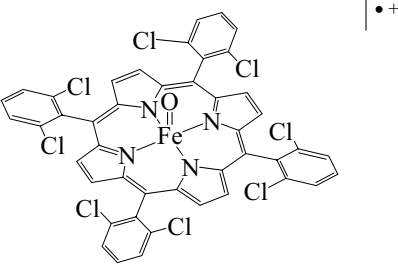
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{48}H_{28}Cl_8FeN_4O]^{\bullet+}$ 	chemical oxidation dichloromethane / methanol 5:1 ESR / 10	$g_1 = 3.6$ $g_2 = 1.98$	96Fuj
$[C_{48}H_{32}FeN_{20}]^{2\bullet}$ 	chemical synthesis crystal structure, magnetic measurements, IR and Mössbauer spectroscopy	spin crossover, ESR of Cu^{II} and Mn^{II} doped systems	96Kun
$[C_{48}H_{32}Cl_4FeN_4O]^{\bullet+}$ 	chemical oxidation dichloromethane / methanol 5:1 ESR / 14	$g_1 = 4.31$ $g_2 = 3.62$ $g_3 = 1.99$ $E / D = 0.057$	96Fuj
$[C_{48}H_{38}N_{12}Ru_2]^{\bullet 3+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9890 $^{99,101}Ru: 0.27$ $^{14}N: 0.274$ $H(5,5'): 0.44$	90Kai4 91Mat1

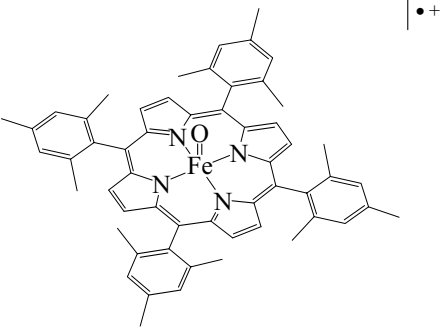
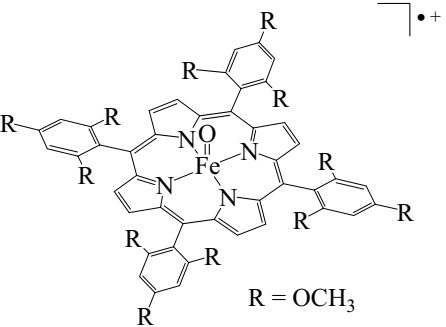
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{48}H_{38}Cl_2N_3OP_2Ru]^{\bullet}$ 	chemical reaction powder ESR / 298 ESR / 77 electrochemistry, UV-VIS and IR spectroscopy, magnetic measurements	2.000 2.000	00Gho
$[C_{48}H_{39}BrN_3OOSp_2]^{\bullet-}$ 	chemical reaction polycrystalline solid ESR / 298 crystal structure, electrochemistry, NMR	1.998 1.966	00Pra
$[C_{48}H_{39}ClN_3OP_2Ru]^{\bullet}$ 	chemical reaction powder ESR / 298 ESR / 77 crystal structure, electrochemistry, UV-VIS and IR spectroscopy, magnetic measurements	2.000 2.001	00Gho
$[C_{48}H_{39}ClN_3OP_2Ru]^{\bullet}$ 	chemical reaction powder ESR / 298 ESR / 77 electrochemistry, UV-VIS and IR spectroscopy, magnetic measurements	2.000 2.003	00Gho 00Shi

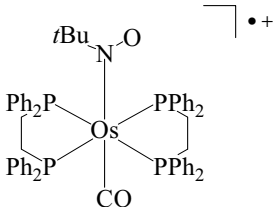
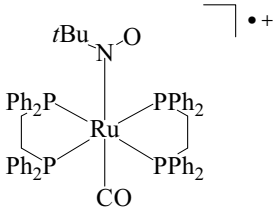
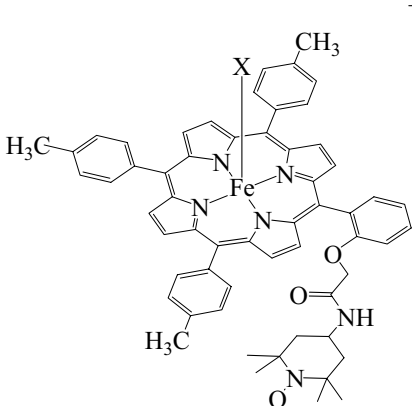
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{48}H_{57}FeN_6O]^{\bullet}$ 	chemical reaction 4-methylpyridine ESR / 77 NMR and UV-VIS spectroscopy	2.31 1.75	95Mor
$[C_{49}H_{37}N_8O_3PReRu]^{\bullet 2+}$ 	electrochemically generated 1,2-dichloroethane ESR / RT	1.9944 ^{185,187} Re: 1.9 ³¹ P: 1.7	91Mat1
$[C_{50}H_{40}N_{12}Ru_2]^{\bullet 3+}$ 	electrochemically generated acetonitrile ESR / RT	1.9984	87Kai1
$[C_{50}H_{49}N_{12}Ru_2]^{\bullet 3+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9984	90Kai4

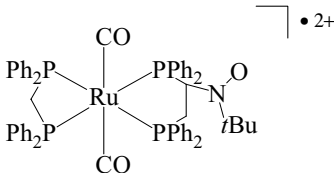
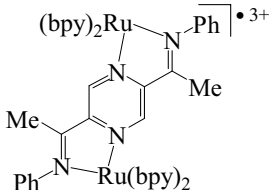
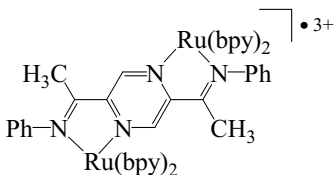
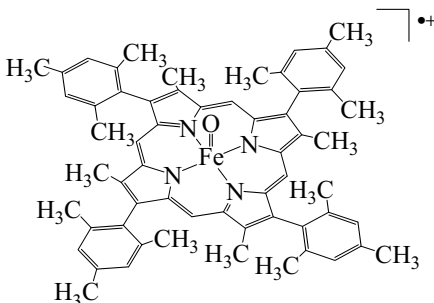
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[\text{C}_{50}\text{H}_{57}\text{FeN}_6\text{O}_3]^\bullet$ 	chemical reaction 4-acetylpyridine ESR / 77	2.20 1.90	95Mor
	NMR and UV-VIS spectroscopy		
$[\text{C}_{50}\text{H}_{61}\text{FeN}_6\text{O}]^\bullet$ 	chemical reaction 3,4-dimethylpyridine ESR / 77	2.31 1.73	95Mor
	NMR and UV-VIS spectroscopy		
$[\text{C}_{52}\text{H}_{38}\text{N}_{10}\text{O}_2\text{Ru}_2]^{\bullet 3+}$ 	electrochemically generated acetonitrile ESR / 298 1,2-dichloroethane ESR / 298 acetone ESR / 4	2.0112 2.0098 $g_1 = 2.032$ $g_2 = 2.032$ $g_3 = 1.996$	87Ern 87Ern 89Ern
	electrochemistry, UV-VIS spectroscopy, NMR		

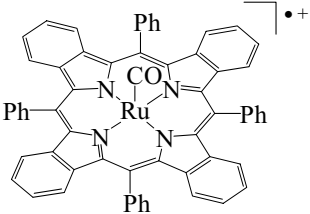
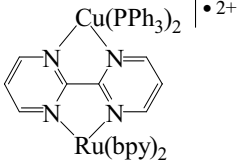
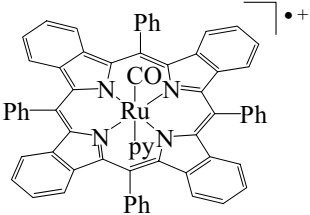
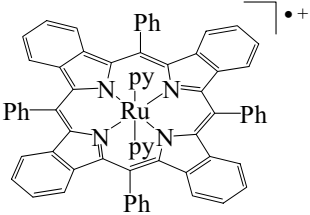
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{52}H_{40}N_{14}Os_2]^{\bullet 3+}$ 	electrochemically generated acetonitrile ESR / 3.8	1.9989	89Koh
$[C_{52}H_{40}N_{14}Ru_2]^{\bullet 3+}$ 	chemical reduction acetone ESR / 3.8 chemical reduction acetone ESR / 300 HMO calculations acetonitrile ESR / 3.8	1.9865 ^{99,101} Ru: 0.45 ¹⁴ N: 0.55 ¹⁴ N: 0.55 (coordinating) 1.9980 ^{99,101} Ru: 0.435 ¹⁴ N(4 N): 0.569 1.9980	85Kai 90Kai4 93Pop1
$[C_{52}H_{40}Cl_4FeN_4O]^{\bullet +}$ 	chemical oxidation dichloromethane / methanol 5:1 ESR / 4	$g_1 = 3.6$ $g_2 = 1.98$	96Fuj
$[C_{54}H_{42}N_{12}Ru_2]^{\bullet 3+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9896	90Kai4
$[C_{54}H_{45}FeN_2O_2P_3]^{\bullet +}$ $[Fe(PPh_3)_3(NO)_2]^{\bullet +}$	chemical reaction acetonitrile / benzonitrile ESR / 263 IR spectroscopy	2.0256 ¹⁴ N(2 N): 0.3 ³¹ P: 5.25	86Bal

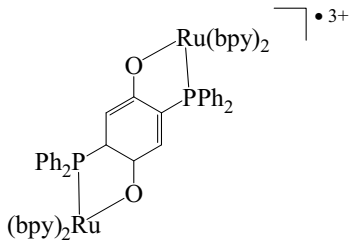
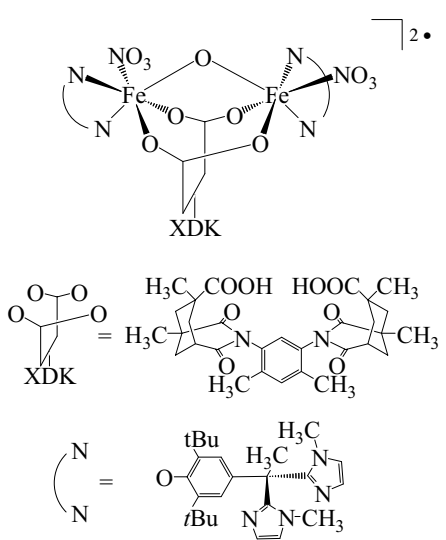
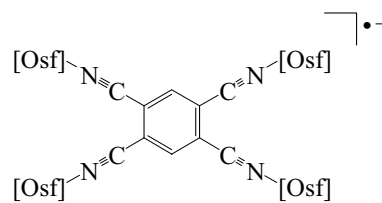
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[\text{C}_{54}\text{H}_{45}\text{FeN}_2\text{O}_5\text{P}_3]^{\bullet+}$ $[\text{Fe}[\text{P}(\text{OPh})_3]_3(\text{NO})_2]^{\bullet+}$	chemical reaction THF ESR / 243 IR spectroscopy	2.0268 $^{14}\text{N}(2\text{ N}): 0.32$ $^{31}\text{P}: 10.2$	86Bal
$[\text{C}_{55}\text{H}_{50}\text{FeN}_4\text{O}_3]^{\bullet+}$ 	chemical oxidation toluene ESR / 1.8 electrochemistry, NMR, UV-VIS and resonance Raman spectroscopy	$g_1 = 2.18$ $g_2 = 2.20$ $g_3 = 1.99$	97Jay
$[\text{C}_{55}\text{H}_{53}\text{NO}_2\text{P}_4\text{Ru}]^{\bullet+}$ 	chemical reaction dichloromethane ESR / 293	2.006 $\text{H}: 0.079$ $^{14}\text{N}: 1.340$	84Smi
$[\text{C}_{56}\text{H}_{44}\text{Cl}_8\text{FeN}_4\text{O}]^{\bullet+}$ 	chemical oxidation dichloromethane / methanol 6:1 ESR / 10 NMR, UV-VIS, resonance Raman and Mössbauer spectroscopy	$g_x^{\text{eff}} = 4.2$ $g_y^{\text{eff}} = 3.7$ $g_z^{\text{eff}} = 1.99$	92Man 93Och

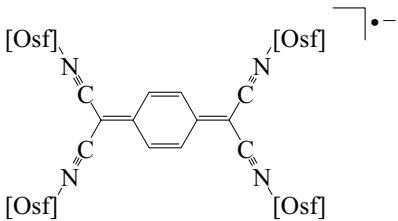
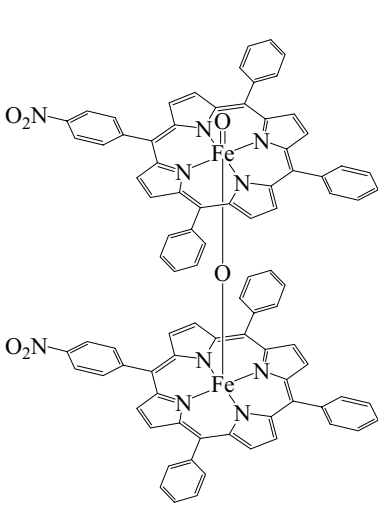
Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[\text{C}_{56}\text{H}_{52}\text{FeN}_4\text{O}]^{\bullet+}$ 	chemical oxidation benzonitrile ESR / 120	$g_{\text{eff}} = 3.5$ broad $g_{\text{eff}} = 2$ intense $g_x = 3.48$ $g_y = 3.02$ $g_z = 1.995$	96Ayo
	Mössbauer and resonance Raman spectroscopy		
	chemical oxidation dichloromethane / methanol 6:1 ESR / 2.7–30	$g_x^{\text{eff}} = 4.47$ $g_y^{\text{eff}} = 3.50$ $g_z^{\text{eff}} = 1.98$	92Man
	NMR, UV-VIS, resonance Raman and Mössbauer spectroscopy		
	chemical oxidation dichloromethane / methanol 5:1 ESR / 14	$g_1 = 4.36$ $g_2 = 3.58$ $g_3 = 1.99$ $E / D = 0.065$	96Fuj
$[\text{C}_{56}\text{H}_{52}\text{FeN}_4\text{O}_{13}]^{\bullet+}$  $\text{R} = \text{OCH}_3$	chemical oxidation dichloromethane / methanol 6:1 ESR / 2.7–30	$g_x^{\text{eff}} = 3.71$ $g_y^{\text{eff}} = 3.71$ $g_z^{\text{eff}} = 1.99$	92Man
	NMR, UV-VIS, resonance Raman and Mössbauer spectroscopy		
$[\text{C}_{56}\text{H}_{54}\text{BrFeN}_4\text{O}]^{\bullet}$ $[\text{Fe}(\text{O})(\text{TMP})\text{Br}]^{\bullet}$	chemical oxidation butyronitrile ESR / 194	$g_x = 3.643$ $g_y = 4.35$ $g_z = 1.98$	00Wol
	Mössbauer and UV-VIS spectroscopy, EXAFS		

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[\text{C}_{56}\text{H}_{54}\text{ClFeN}_4\text{O}]^{\bullet}$ $[\text{Fe}(\text{O})(\text{TMP})\text{Cl}]^{\bullet}$	chemical oxidation butyronitrile ESR / 194 Mössbauer and UV-VIS spectroscopy, EXAFS	$g_x = 3.780$ $g_y = 4.23$ $g_z = 1.999$	00Wol
$[\text{C}_{56}\text{H}_{54}\text{FeN}_4\text{O}]^{\bullet+}$ $[\text{Fe}(\text{O})(\text{TMP})]^{\bullet+}$	chemical oxidation dichloromethane or toluene ESR / 233 UV-VIS spectroscopy, electrochemistry	$g_x = 4.3$ $g_y = 3.53$ $g_z = 1.98$	00Nam
$[\text{C}_{57}\text{H}_{57}\text{NO}_2\text{OsP}_4]^{\bullet+}$ 	chemical reaction dichloromethane ESR / 293	2.006 ^{189}Os : 0.469(4) H : 0.162(6) ^{14}N : 1.384(12)	84Smi
$[\text{C}_{57}\text{H}_{57}\text{NO}_2\text{P}_4\text{Ru}]^{\bullet+}$ 	chemical reaction dichloromethane ESR / 293	2.006 ^{99}Ru : 0.287(4) ^{101}Ru : 0.417(6) H : 0.163(5) ^{14}N : 1.379(4)	84Smi
$[\text{C}_{58}\text{H}_{52}\text{FeN}_6\text{O}_3\text{X}]^{\bullet}$ 	chemical reduction toluene, $\text{X} = \text{Br}, \text{Cl}, \text{F}$ ESR / 8–120	Fe : $g_x = 6.0$ $g_y = 6.0$ $g_z = 2.0$ splitting of Fe signal due to interaction with nitroxyl unpaired electron: 17.0 mT NO : $g_x = 2.0089$ $g_y = 2.0062$ $g_z = 2.0027$ splitting of the NO signal: 50.0 mT	86Fie

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{54}H_{49}NO_3P_4Ru]^{•2+}$ 	chemical reaction dichloromethane ESR / 293	2.006 H: 1.175(3) ^{14}N : 1.054(3) ^{31}P : 1.75	84Smi
$[C_{60}H_{50}N_{12}Ru_2]^{•3+}$ 	electrochemically generated acetonitrile ESR / 300 HMO calculations	1.9980	90Kai4
$[C_{60}H_{50}N_{12}Ru_2]^{•3+}$ 	reduction with Bu_4NBH_4 acetone ESR / 298 ESR / 110 electrochemistry, UV-VIS spectroscopy, spectroelectrochemistry	1.9980 $g_x = 1.97932$ $g_y = 1.99632$ $g_z = 2.019$	99Kle
$[C_{60}H_{60}FeN_4O]^{•+}$ 	chemical oxidation dichloromethane / methanol 5:1 ESR / 4 chemical oxidation toluene / methanol 4:1 ESR / 4.2 Mössbauer spectroscopy	$g_1 = 3.6$ $g_2 = 1.98$ $g_x^{eff} = 4.47$ $g_y^{eff} = 3.50$ $g_z^{eff} = 1.98$	96Fuj 90Bil

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{61}H_{36}N_4ORu]^{\bullet+}$ 	chemical oxidation with Br_2 or I_2 dichloromethane ESR / 77 electrochemistry, UV-VIS, IR and NMR spectroscopy	2.000	97Che
$[C_{64}H_{52}CuN_8P_2Ru]^{\bullet 2+}$ 	electrochemically generated 1,2-dichloroethane ESR / RT electrochemistry, UV-VIS spectroscopy	1.9952 ^{14}N : 0.24	91Mat1
$[C_{66}H_{40}N_5ORu]^{\bullet+}$ 	chemical oxidation with Br_2 or I_2 dichloromethane ESR / 77 electrochemistry, UV-VIS, IR and NMR spectroscopy	1.999	97Che
$[C_{70}H_{44}N_6Ru]^{\bullet+}$ 	chemical oxidation with Br_2 or I_2 dichloromethane ESR / 77 electrochemistry, UV-VIS, IR and NMR spectroscopy	2.000 ESR silent at room temperature	97Che

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{70}H_{54}N_8O_2P_2Ru_2]^{•3+}$ 	electrochemically generated acetone ESR / 4 acetonitrile ESR / 298	$g_1 = 2.051$ $g_2 = 2.026$ $g_3 = 1.981$ 2.0112	89Ern
$[C_{76}H_{44}FeMnN_{13}]^{•+}$ $[(TPP)Mn-N-Fe(Pc)]^{•+}$	chemical oxidation THF ESR / 78 IR, Mössbauer and Raman spectroscopy	2.003	01Don
$[C_{80}H_{104}Fe_2N_{12}O_{17}]^{2•}$ 	reaction of iron dimer with phenoxy radical dichloromethane / THF 3:1 ESR / 10 magnetic susceptibility	2.00 no hyperfine structure	95Gol
$[C_{86}H_{65}Cl_4N_4O_4Os_4P_8]^{•-}$  $[Os] = Os(P(iPr)_3)_2(CO)(H)Cl$	electrochemically generated 1,2-dichloroethane ESR / 298 electrochemistry, magnetic data, UV-VIS and IR spectroelectrochemistry	2.0005	97Bau

Substance	Generation / Matrix or Solvent / Method / T [K]	g -Factor / a -Value [mT]	Ref. / add. Ref.
$[C_{86}H_{65}Cl_4N_4O_4Os_4P_8]^{•-}$  $[Osf] = Os(P(iPr)_3)_2(CO)(H)Cl$	electrochemically generated 1,2-dichloroethane ESR / 298 ESR / 110	2.0124 $g_{ } = 2.0065$ $g_{\perp} = 2.0160$	97Bau
$[C_{88}H_{58}Fe_2N_{10}O_6]^{•+}$ 	chemical oxidation dichloromethane ESR / 118 UV-VIS spectroscopy	2.0016	91Ass