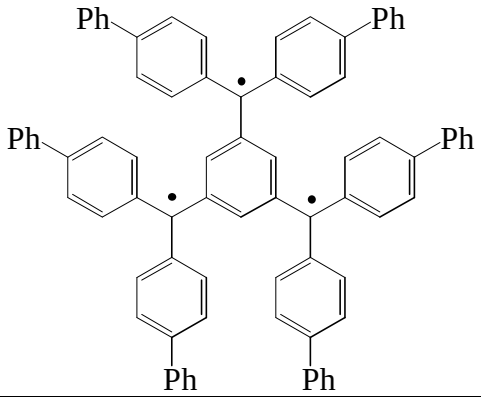
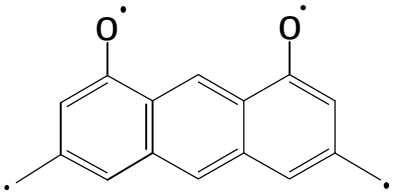
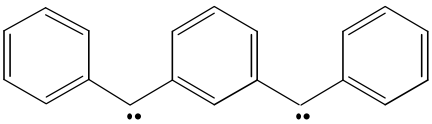
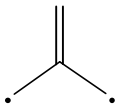
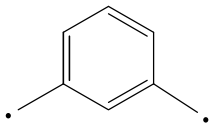
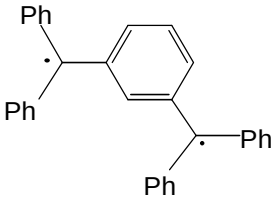
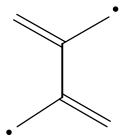
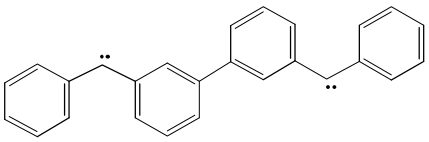
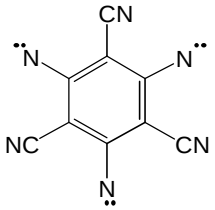
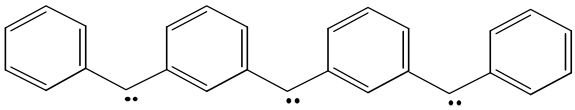
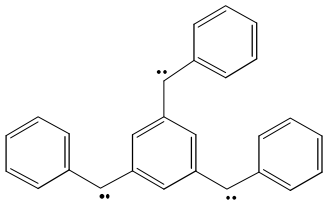
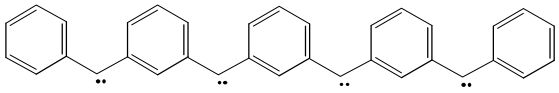
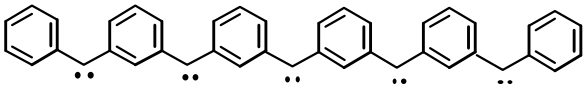
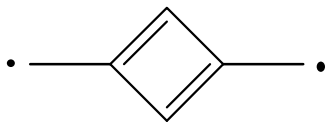
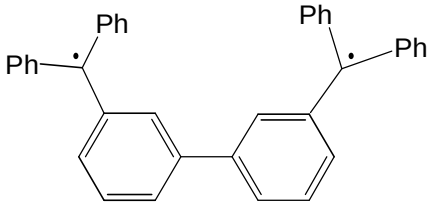
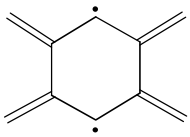
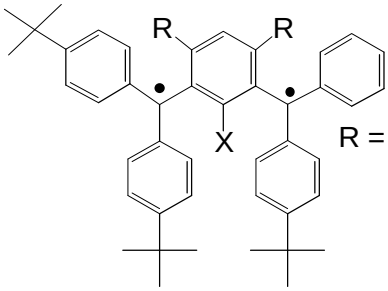
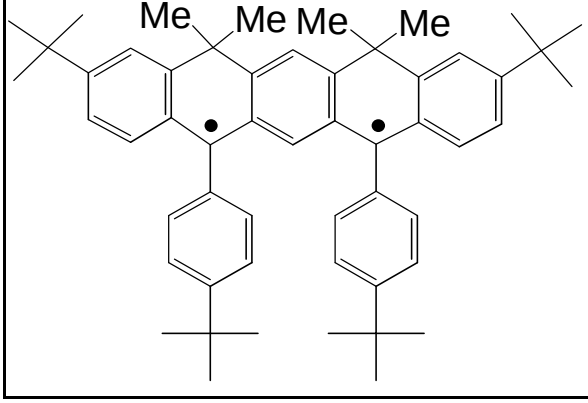
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	3/2	D=0.0041cm^{-1} E=0cm^{-1}	**1, 2, 3**
	2	D=0.01174cm^{-1} E=0.00315cm^{-1}	**4, 5**
	2	D=0.01731cm^{-1} E=0.01902cm^{-1}	**6, 7**
	1		**8, 9, 10**
	1		**11, 12, 13**
	1		**14, 15**
	1		**16～20**
	0		**21**
	3		**22**

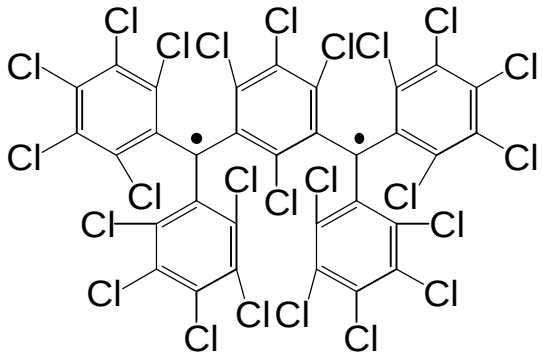
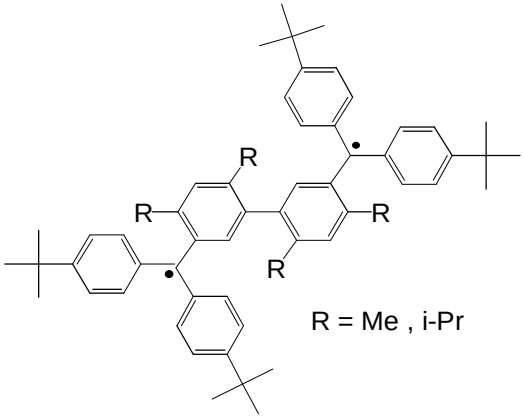
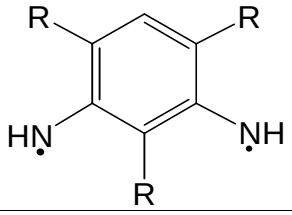
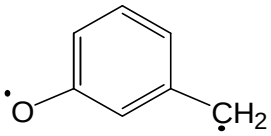
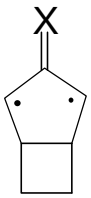
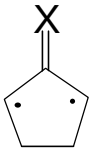
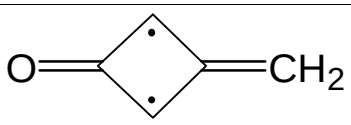
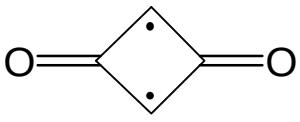
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	3	$D=0.004874cm^{-1}$ $E=0.00889cm^{-1}$	**23**
	3	$D=0.04158cm^{-1}$ $E=0.01626cm^{-1}$	**24**
	4	$D=0.03161cm^{-1}$ $E=0.00394cm^{-1}$	**25**
	5		**26**
	1		**27**
	1	$\triangle E_{ST}=0.3kcal/mol$	**28, 29**
	0		**30, 31**
 R = H , X = H Me H i-Pr H Me Me CF_3 H	1		**32, 33, 34**
	1		**32, 33, 34**

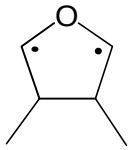
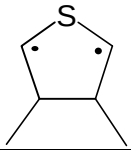
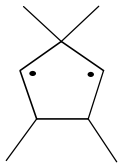
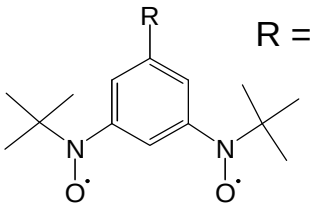
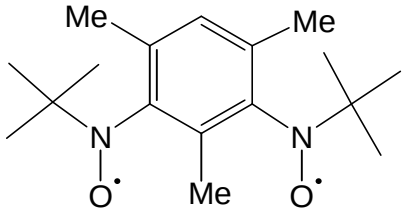
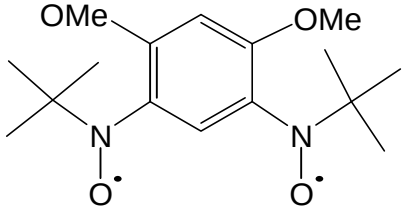
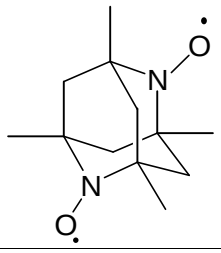
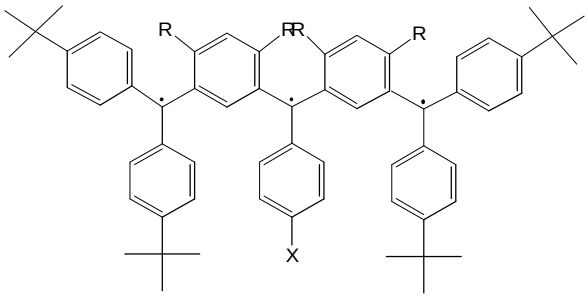
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	1		**32, 33, 34**
 R = Me , i-Pr	1	$\triangle E_{ST}$= 0.04kcal/mol (R=Me) 0.004kcal/mol (R=i-Pr)	**35**
	1		**36**
	1		**37, 38**
 X = $C(Ph)_2$, CH(Ph) , C(CN)Ph , CH(CN) , $C(CN)_2$, O	0		**39, 40, 41**
 X = $C(Me)_2$, $C(SOMe)_2$ $C(SO_2Ph)_2$	0		**39, 40, 41**
	1		**42**
	0		**43,44**

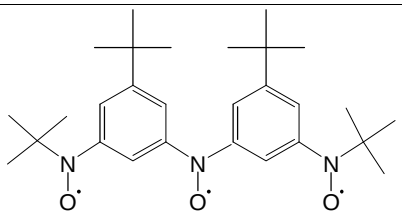
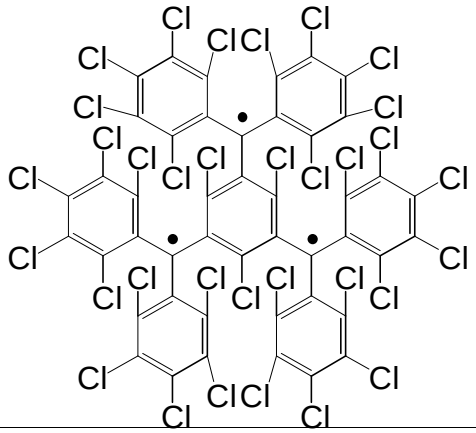
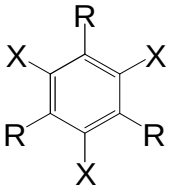
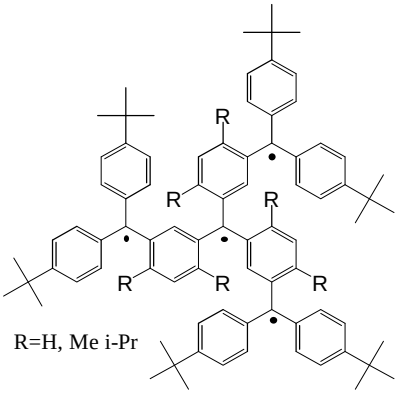
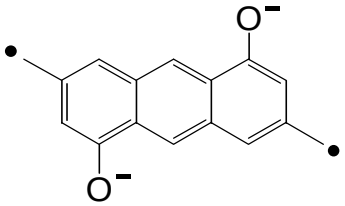
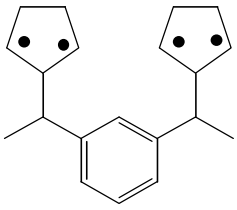
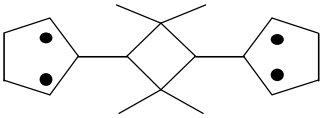
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	0		45～49
	0		45～49
	1		50, 51
 R = H , t-Bu	1	$\triangle E_{ST} > 1$kcal/mol	52, 53
	0		54
	0		55
	1		56, 57
 R = H , X = t-Bu Me , t-Bu i-Pr , t-Bu i-Pr , Ph	3/2	$\triangle E_{QD}$ 1.3kcal/mol	58

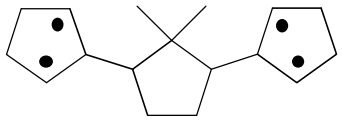
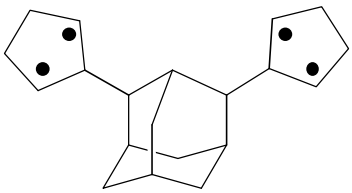
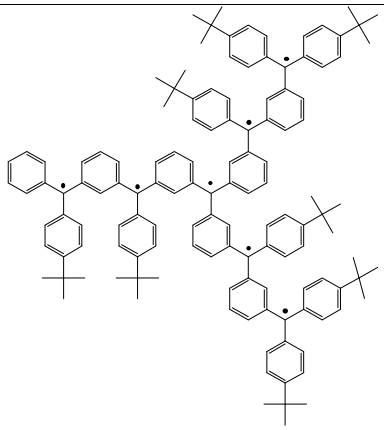
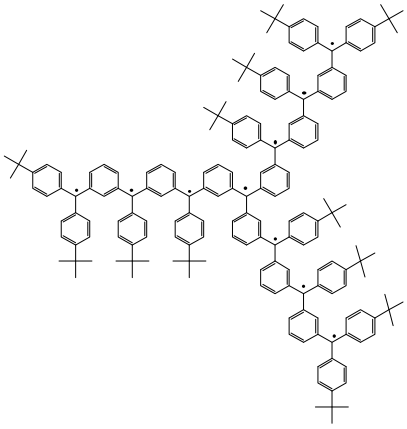
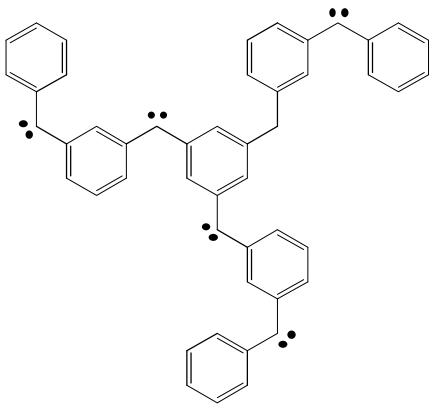
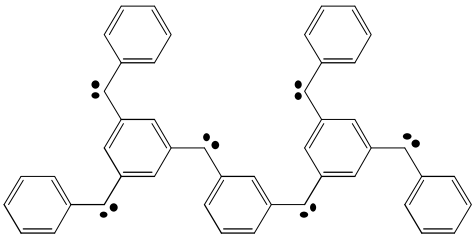
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	3/2	J 0.5kcal/mol	**59**
	3/2	J 0.6kcal/mol	**60～64**
 R=$(Ph\text{-}Ph)_2C$; X=H R=$Ph_2N^{\bullet+}$, X=H R=galvinoxyl, X=H R=nitronylnitroxide, X=H R=t-butylnitroxide, X=H, OMe R=Ph_2NN, X=CN	3/2		**65, 66**
 R=H, Me i-Pr	2		**67～70**
	0 or 1		**71, 72**
	2		**73, 74, 75**
	2		**73, 74, 75**

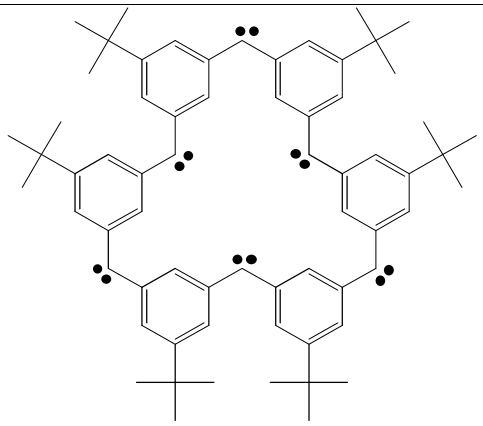
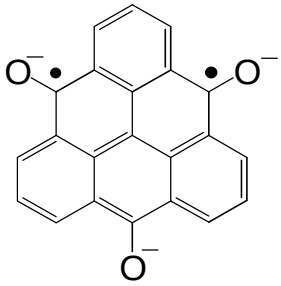
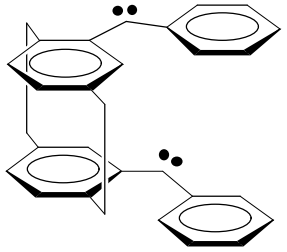
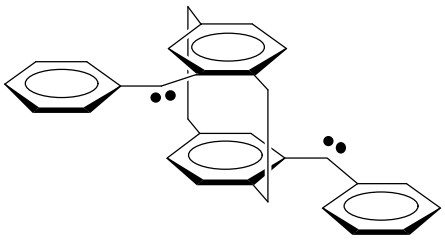
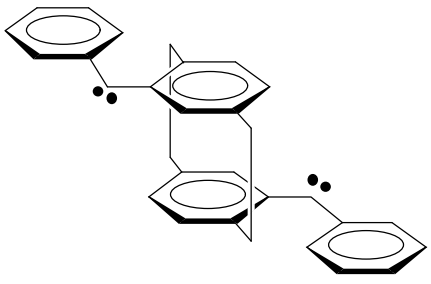
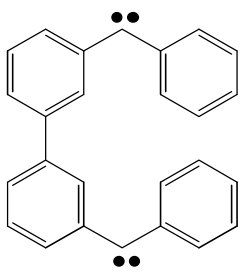
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	2		73, 74, 75
	0		73, 74, 75
	7/2		76
	5		76
	6		77,98
	6		77,98

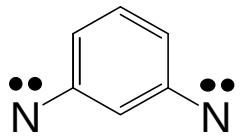
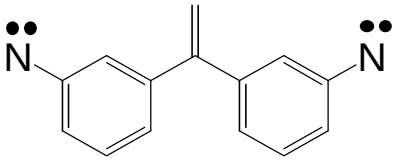
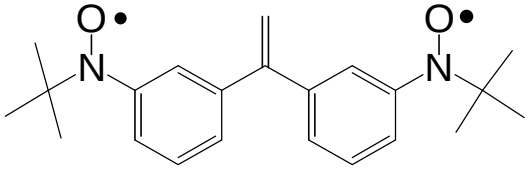
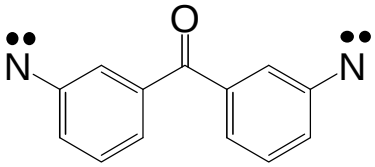
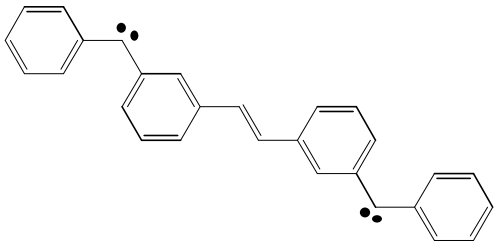
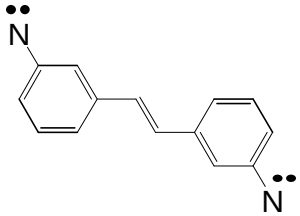
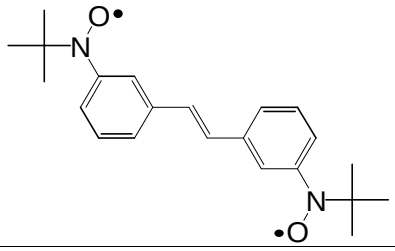
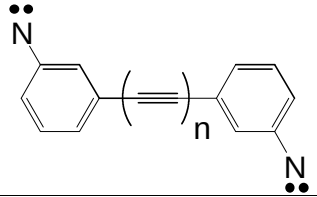
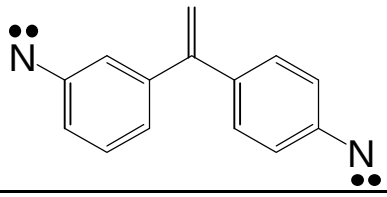
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	6		**77, 98**
	1	D=0.0064cm^{-1} E=0.0cm^{-1}	**78**
	2	$\triangle E_{QT}$=0.75kJ/mol (63cm^{-1})	**79**
	0	$\triangle E_{ST}$=1.2kJ/mol (98cm^{-1})	**79**
	2	$\triangle E_{ST}$ 60Kまでの測定	**79**
	0	$\triangle$E=340cal/mol $\triangle$E=770cal/mol	**80, 81**

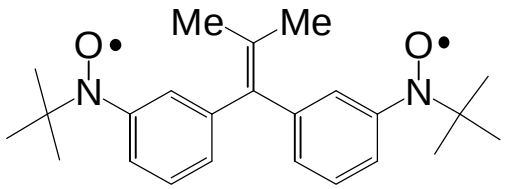
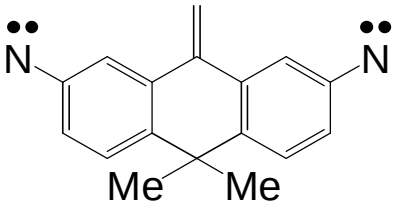
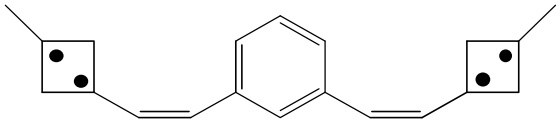
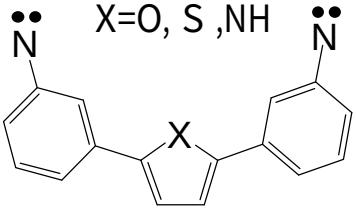
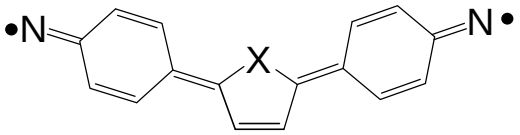
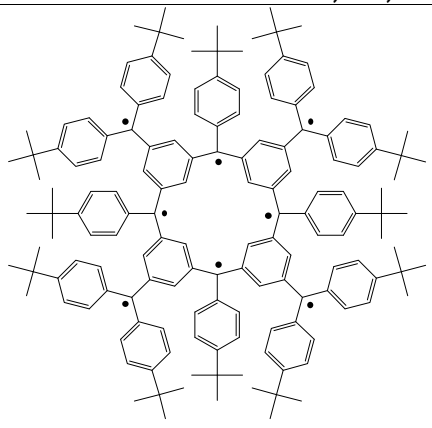
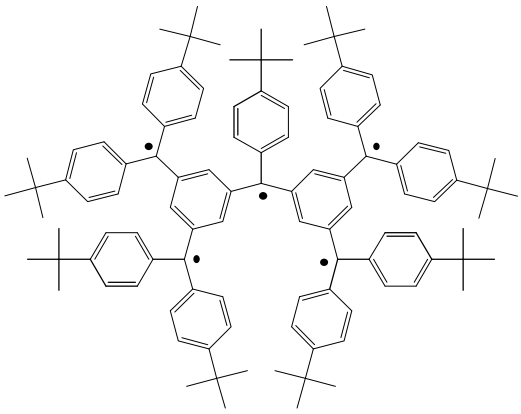
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	2		**82**
	0	△E=75cal/mol △E=85cal/mol	**83, 84**
	0	△E=5.1cal/mol	**83, 85**
	0	△E=48cal/mol	**84**
	0	△E=200cal/mol	**86**
	0	△E=240cal/mol	**87**
	0	△E=38cal/mol	**83, 85**
	n=1 0 n=2 0	△E=200cal/mol △E=100cal/mol	**88**
	0	△E=120cal/mol	**83**

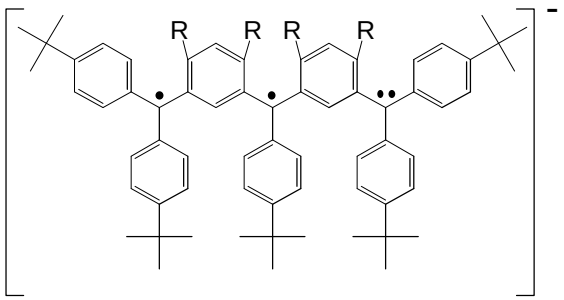
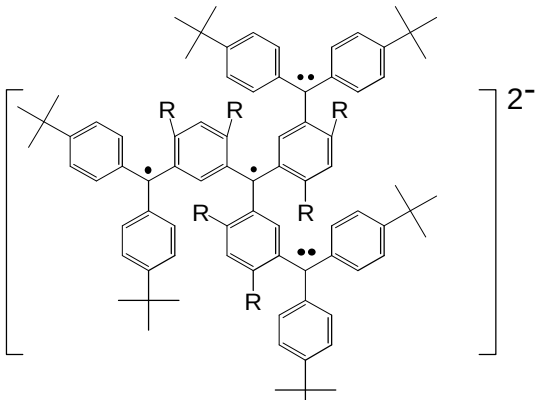
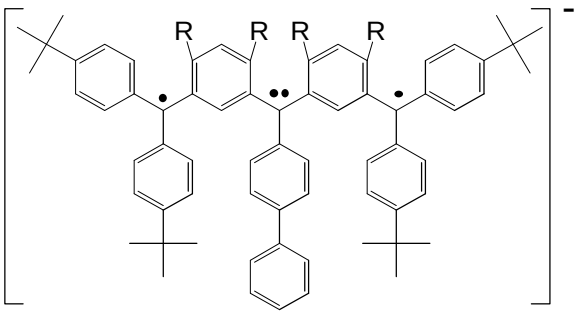
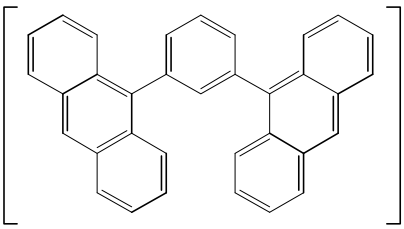
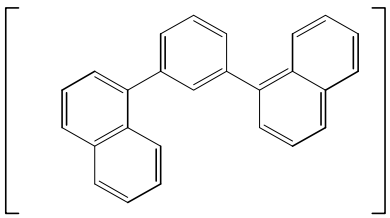
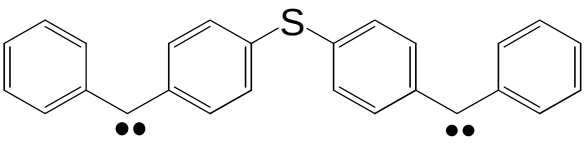
高スピン分子一覧

T. Nogami

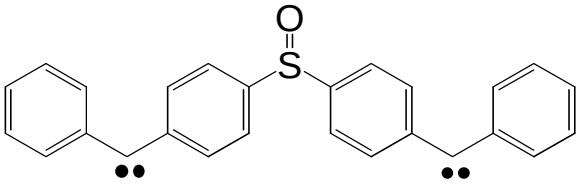
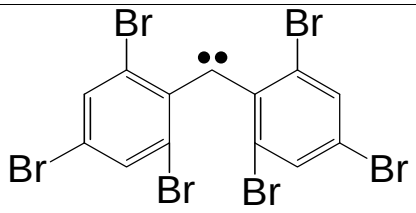
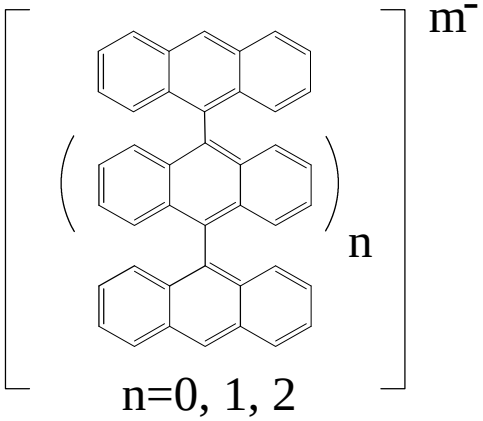
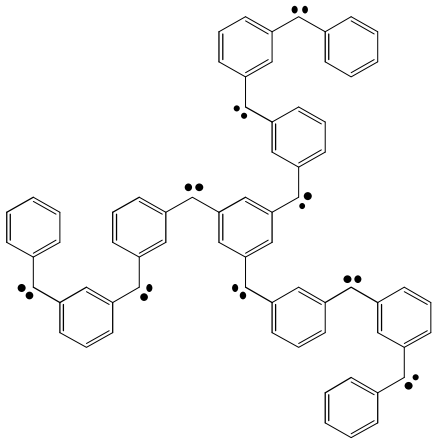
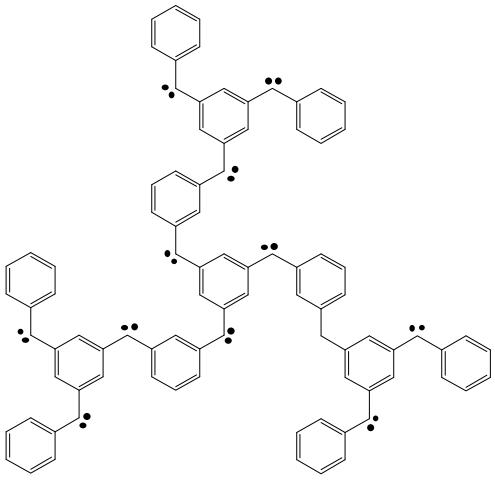
分子構造	基底状態のスピン量子数	備考	文献番号
	0	△E=9.7cal/mol	**83, 85**
	0	$\triangle E_{ST}$=810J/mol	**92**
	2		**91**
	0		**90**
	0		**90**
	4		**89**
	5/2		**89**

高スピン分子一覧

T. Nogami

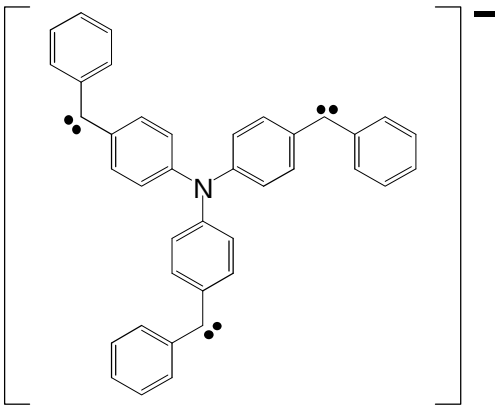
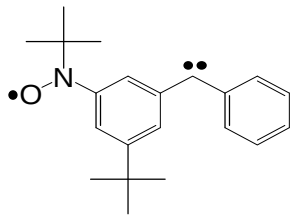
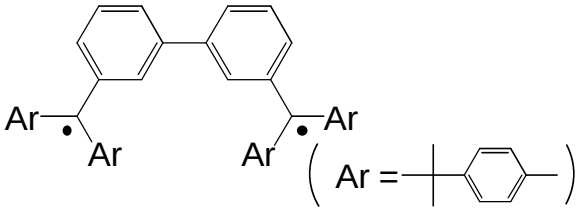
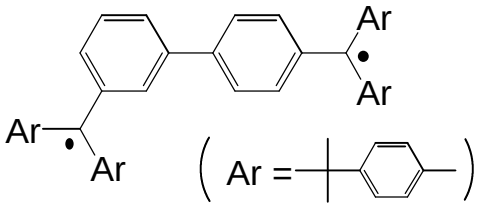
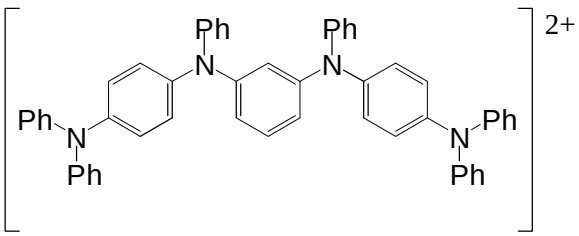
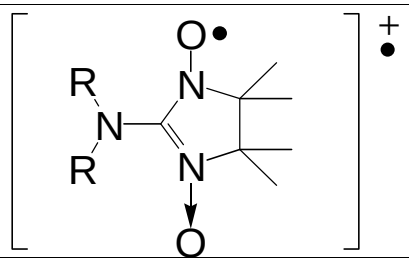
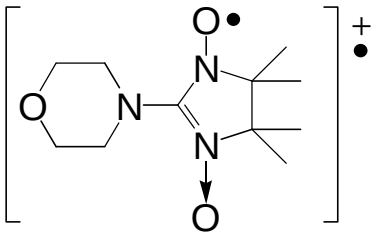
分子構造	基底状態のスピン量子数	備考	文献番号
 R=H, Me, i-Pr	1		**94**
 **R=H, Me, i-Pr**	1		**94**
	0		**94**
	1	D=0.00491cm^{-1}	**93**
	1	D=0.00660cm^{-1}	**93**
	2		**97**

高スピン分子一覧

分子構造	基底状態のスピン量子数	備考	文献番号
	0		**97**
	1		**96**
	0		**95**
	9		**102**
	7 (カルベンが部分的に消滅)		**100, 102**

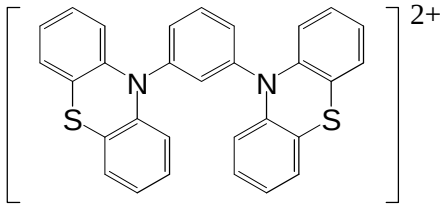
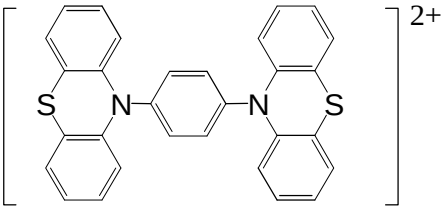
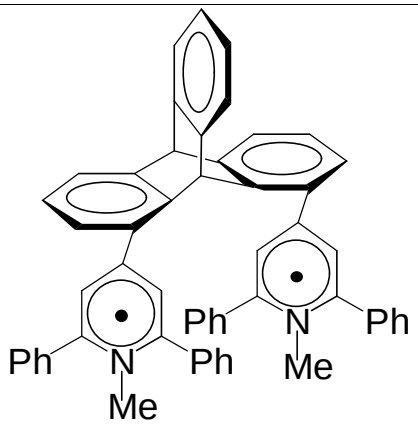
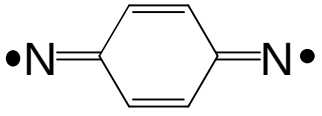
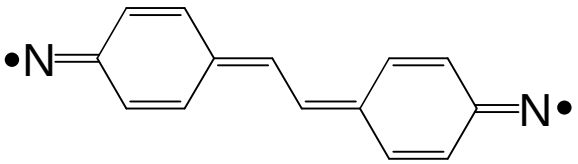
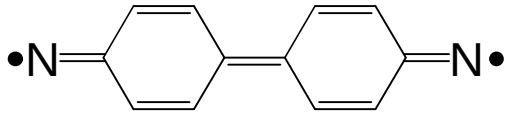
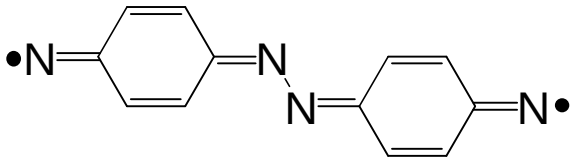
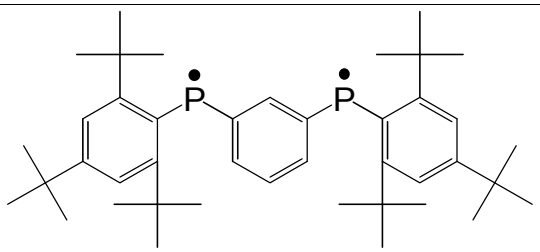
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	3/2		**101**
	3/2		**99**
	0	$\triangle E_{ST}$=0.1kcal/mol	**106**
	1		**106**
	1		**105**
	1		**104**
	1		**104**

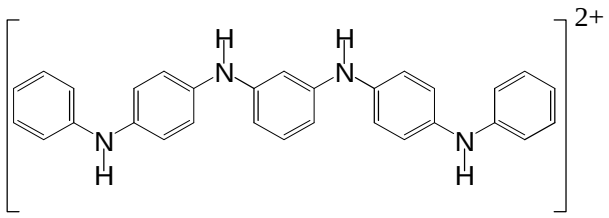
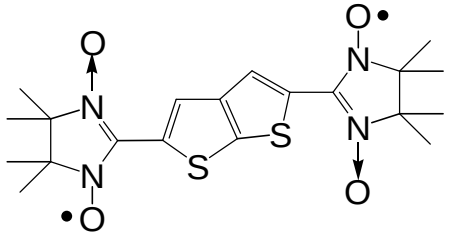
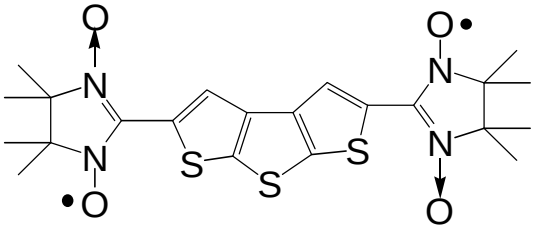
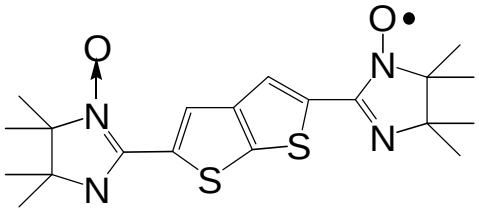
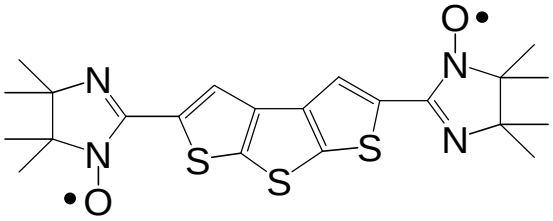
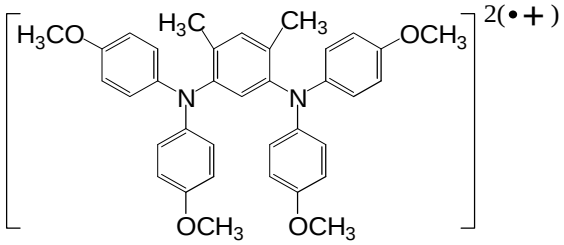
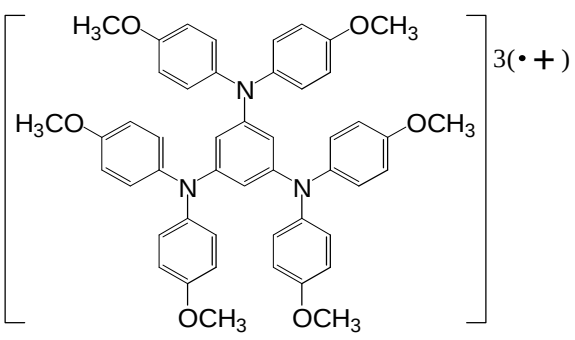
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	0	$\triangle E_{ST}$=28cal/mol	**103**
	1		**103**
	1		**111**
	0	$\triangle E_{ST}$=0.722kcal/mol D=0.169cm^{-1}	**110**
	0	$\triangle E_{ST}$=0.750kcal/mol D=0.191cm^{-1}	**110**
	0	$\triangle E_{ST}$=0.472kcal/mol D=0.123cm^{-1}	**110**
	0	$\triangle E_{ST}$=0.251kcal/mol D=0.058cm^{-1}	**110**
	1		**109**

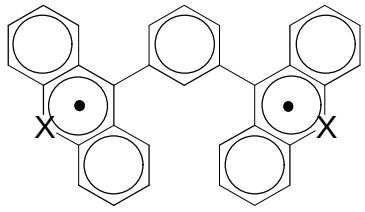
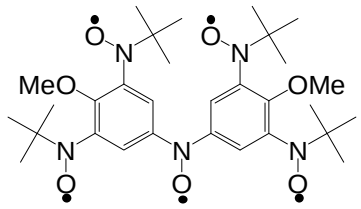
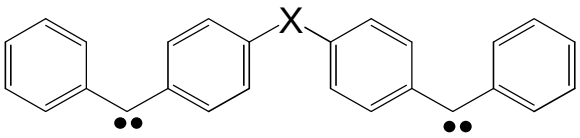
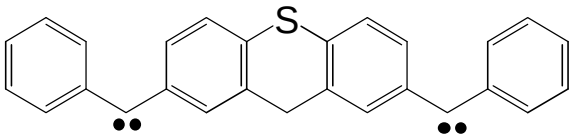
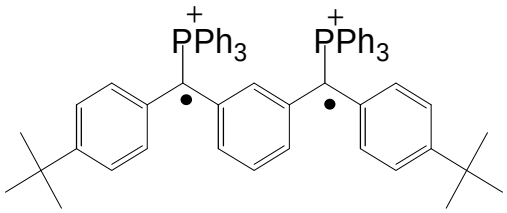
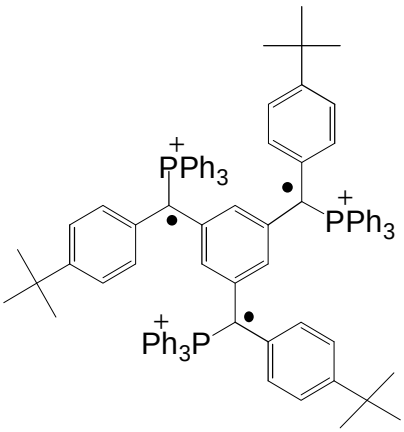
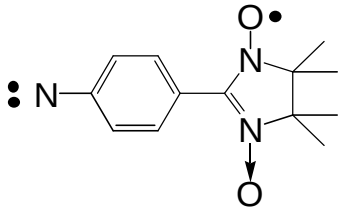
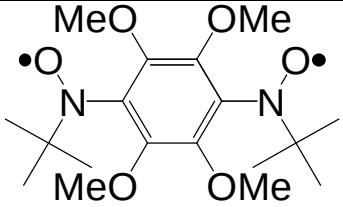
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	1	E=118MHz D=0.0MHz	**108**
	0		**107**
	0		**107**
	0	2J=-18K	**107**
	0	E_S E_T	**107**
	1		**116**
	3/2		**116**

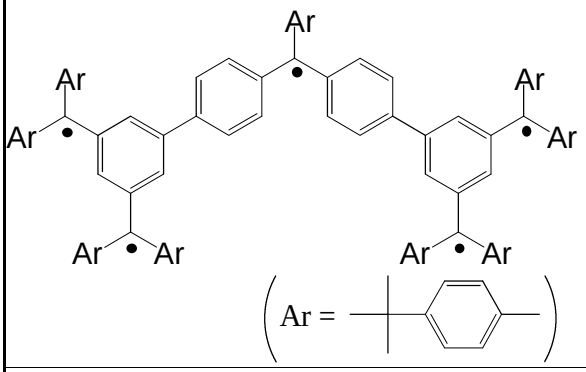
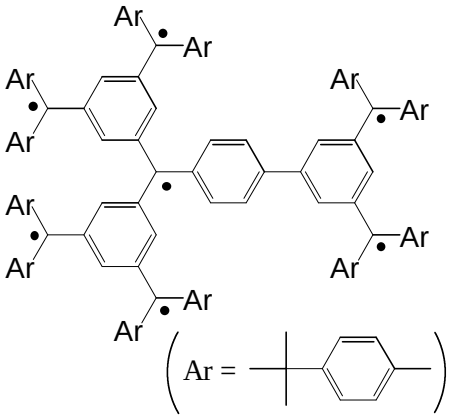
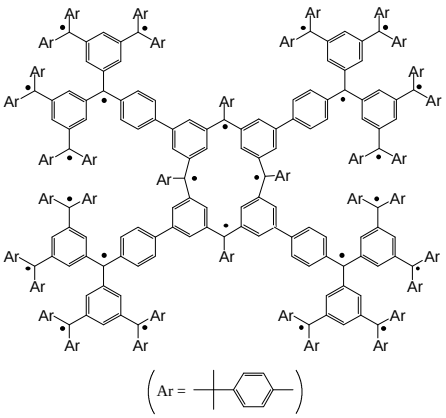
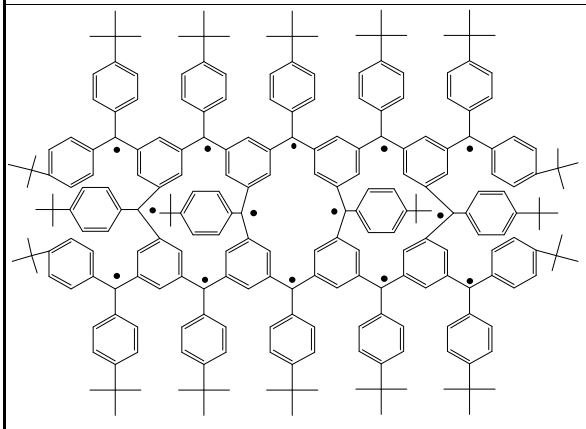
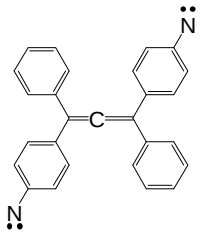
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	X=O 1 X=S 0	X=S $\triangle E_{ST}$=82cal/mol	**115**
	5/2		**114**
	X=S S=2 X=SO S=0 X=SO_2 S=0	J= 11K J=-30K J=-92K	**113**
	0	J=-21K	**113**
	1		**112**
	3/2		**112**
	3/2	$\|D\|$=0.277cm^{-1} $\|D\|$=0.003cm^{-1}	**120**
	0	$\|D\|$=0.013cm^{-1} $\triangle E_{ST}$=14.7±0.12cal/mol	**119**

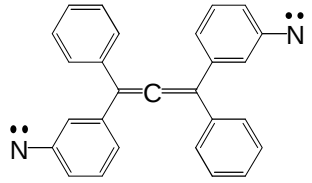
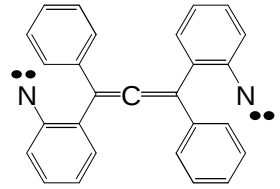
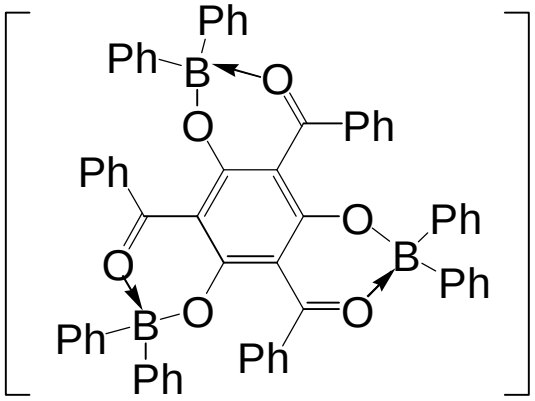
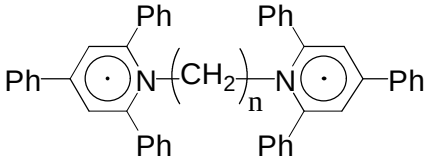
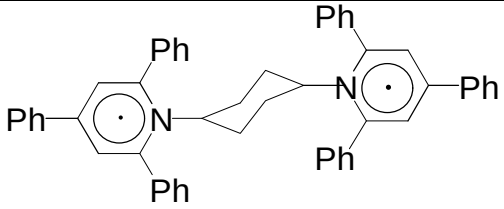
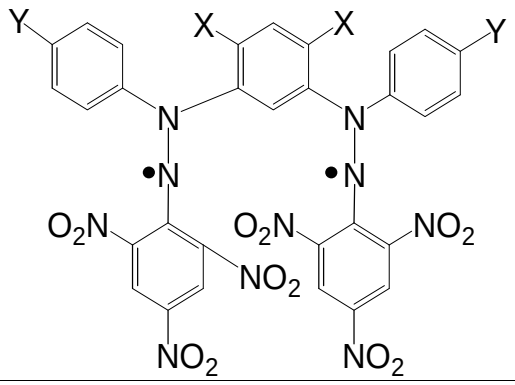
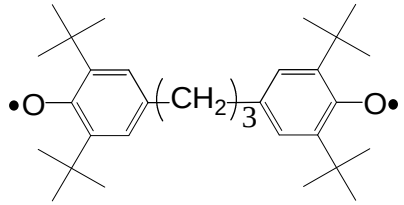
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	2.40 (測定値)		**118**
	3.28 (測定値)		**118**
	7.2 (測定値)		**118**
	6.2 (測定値)		**117**
	2		**124**

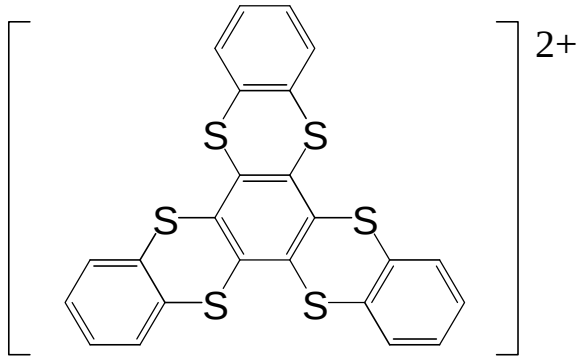
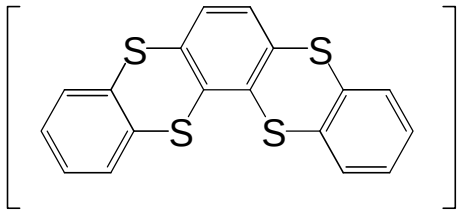
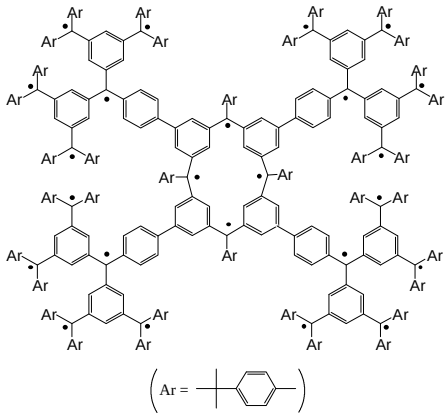
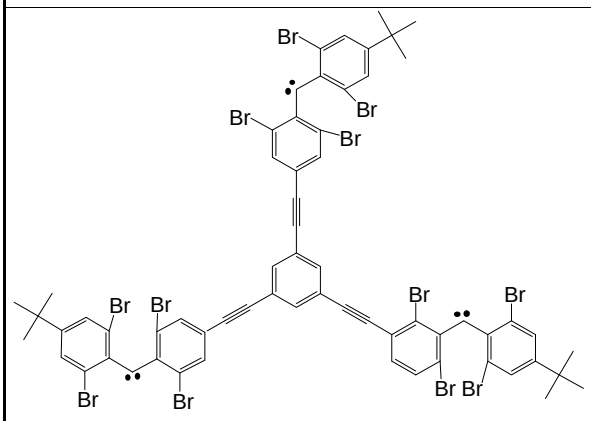
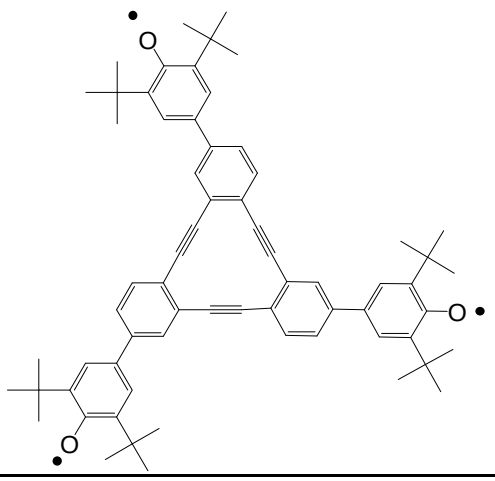
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	2		**124**
	0		**124**
	1	$\|D\|=0.014cm^{-1}$ $\|E\|=0.00cm^{-1}$	**123**
 (n= 1, 2, 3)	0	$\triangle E_{ST}>1.7kJ/mol$ (n=2) $\triangle E_{ST}<230J/mol$ (n=1, 3)	**122**
	1 or (1 and 0 縮退)		**122**
	1 or (1 and 0 縮退)	X=H, Y=H (**139**) X=H, Y=Ome (**139**) X=Me, Y=OMe(**139**) X=Me, Y=Ph (**139**) X=Me, Y=t-Bu(**121,139**)	**121, 139**
	1 or (1 and 0 縮退)		**128**

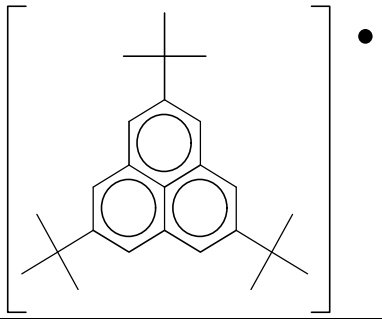
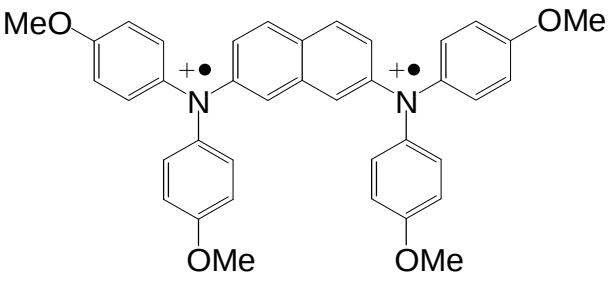
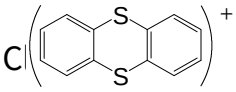
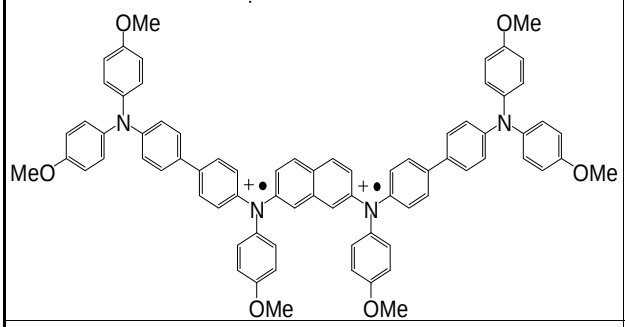
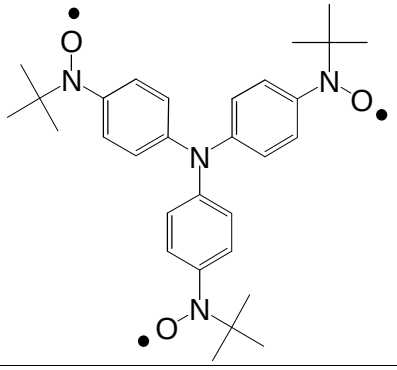
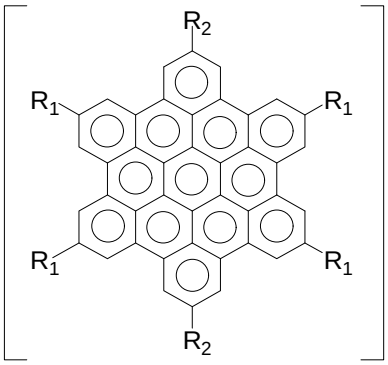
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	1	$\|D\|=0.012cm^{-1}$ $\|E\|=0.00cm^{-1}$(**127**) ESR(**140**)	**127, 140**
	0	$\|D\|=0.012cm^{-1}$ $\|E\|=0.00cm^{-1}$ $\triangle E_{ST}=35\pm2J/mol$ (**127**) ESR(**140**)	**127, 140**
	10	θ -0.03K	**126**
	3		**125**
	3/2	磁化曲線 S=3/2 (1.8～20K) J=34.9K(**129**) $2J=48cm^{-1}$ θ=-0.052K(**143**)	**129, 143**

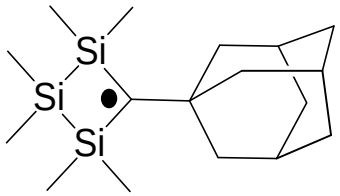
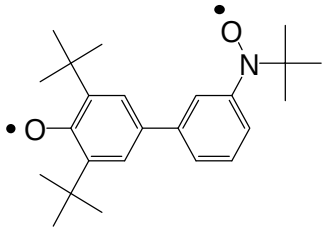
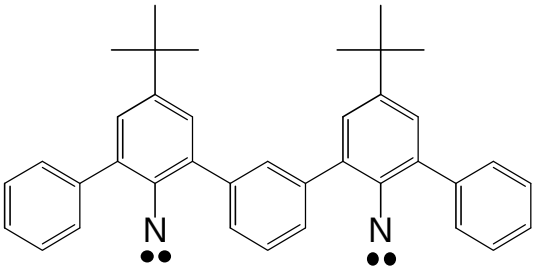
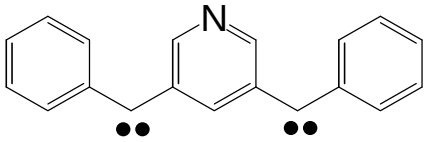
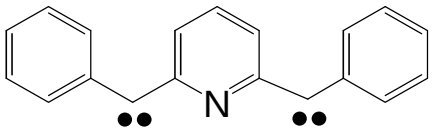
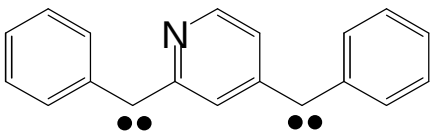
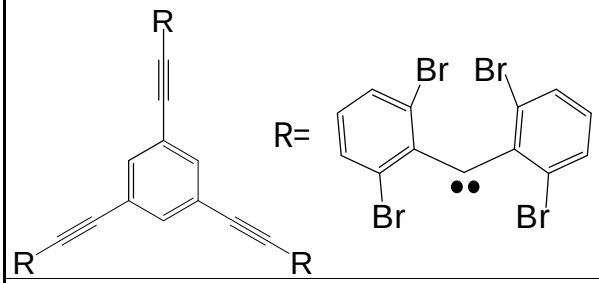
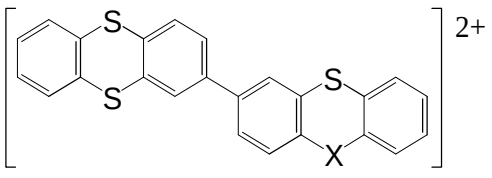
高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	1/2	結晶構造解析 ESR 磁気測定 2J=-2000K UV-vis CV	**130**
	1	ESR ΔEst=0.48eV  による酸化	**131**
	0 or 1	ESR ΔEst　0	**131**
	1/2	結晶構造解析 ESR 磁気測定	**132**
 n- 1:R_1=R_2=$C_{12}H_{25}$ 2:R_1=$C_{12}H_{25}$，R_2=t-Bu 3:R_1=R_2=t-Bu		1^{2-}:基底１重項 ΔEst=15cal/mol 1^{3-}:基底2重項 1^{4-}:基底1重項 ΔEst=20cal/mol 1^{5-}:S=1/2	**133**

高スピン分子一覧

T. Nogami

分子構造	基底状態のスピン量子数	備考	文献番号
	1/2	結晶構造解析 ESR ENDOR	**134**
		ラジカル同士相互作用なし ESR UV-vis	**135**
	2	ESR $\left\{\begin{array}{l}\lvert D\rvert=0.323\mathrm{cm}^{-1}\\ \lvert E\rvert=0.016\mathrm{cm}^{-1}\end{array}\right.$ and $\left\{\begin{array}{l}\lvert D\rvert=0.340\mathrm{cm}^{-1}\\ \lvert E\rvert=0.011\mathrm{cm}^{-1}\end{array}\right.$	**136**
	2	シス体とトランス体の 混合物	**137**
	0		**137**
	0		**137**
	3	2D-ESTN $D=-0.040\mathrm{cm}^{-1}$ $\lvert E\rvert=0.007\mathrm{cm}^{-1}$	**138**
 3^{2+}:X=S 4^{2+}:X=N-Me	3^{2+}: 0 4^{2+}: 0 or 1		**140**

高スピン分子一覧

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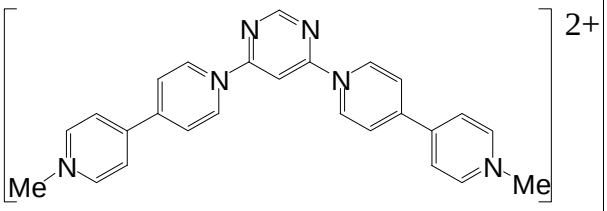
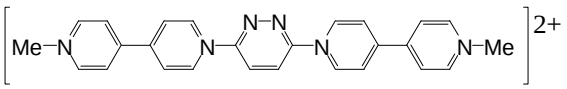
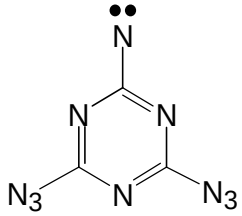
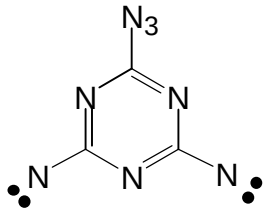
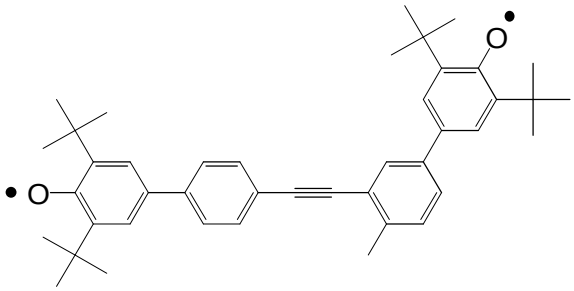
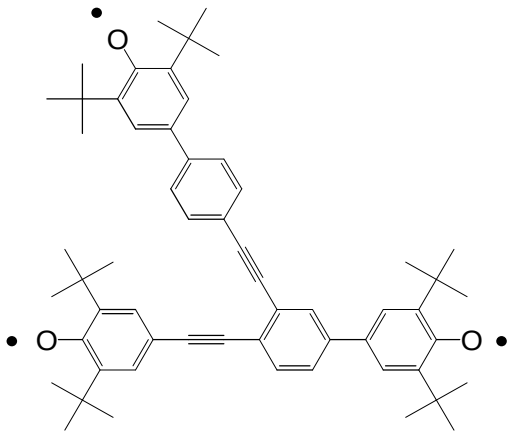
分子構造	基底状態のスピン量子数	備考	文献番号
	1	電解還元	**141**
	0	電解還元	**142**
	1	$\|D\|=1.402cm^{-1}$	**143**
	2	$\|D\|=0.280cm^{-1}$	**143**
	1	$2J=31cm^{-1}$ $\theta=-0.12K$	**143**
	3/2	$2J=31cm^{-1}$ $\theta=-0.16K$	**143**