

Gross formula	Structure	Solvent	$\delta^3\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_9\text{Br}$		$\text{CDCl}_3$	30.5 <sup>a</sup> (C1) 29.8 <sup>a</sup> (C2) 119.9(C3) 130.7(C4) 98Vas 116.6(C5) 121.6(C6) 128.9(C7) 120.0(C8) 146.1(C2a) n.r.(C5a) 145.7(C8a) 140.1(C8b)	
$\text{C}_{12}\text{H}_9\text{Br}$		$\text{CDCl}_3$	142.6(C1) 122.6(C2) 133.1(C3) 128.7(C4) 127.3(C5) 131.3(C6) 141.1(C1') 127.6(C2'/6') 129.4(C3'/5') 127.6(C4')	89Ank
$\text{C}_{12}\text{H}_9\text{Br}$		$\text{CDCl}_3$	143.3(C1) 130.2 <sup>a</sup> (C2) 122.9(C3) 130.2 <sup>a</sup> (C4) 130.1 <sup>a</sup> (C5) 125.7(C6) 139.7(C1') 127.1(C2'/6') 128.9(C3'/5') 127.8(C4')	89Ank
$\text{C}_{12}\text{H}_9\text{Br}$		$\text{CDCl}_3$	139.0(C1) 128.9 <sup>a</sup> (C2/6) 131.9(C3/5) 121.5(C4) 140.1(C1') 126.9(C2'/6') 128.7 <sup>a</sup> (C3'/5') 127.6(C4')	89Ank
$\text{C}_{12}\text{H}_9\text{BrO}$		$\text{CDCl}_3$	153.7(C1) 115.0(C2) 133.8(C3) 125.0(C4) 128.6(C5) 120.6(C6) 156.9(C1') 118.1(C2'/6') 129.8(C3'/5') 123.4(C4')	00Hu
$\text{C}_{12}\text{H}_9\text{BrO}$		$\text{CDCl}_3$	158.4(C1) 121.7(C2) 122.8(C3) 126.1(C4) 130.8(C5) 117.8(C6) 156.4(C1') 119.4(C2'/6') 129.9(C3'/5') 124.0(C4')	00Hu
$\text{C}_{12}\text{H}_9\text{BrO}$		$\text{CDCl}_3$	156.8(C1) 120.4(C2/6) 132.7(C3/5) 115.6(C4) 156.6(C1') 119.0(C2'/6') 129.9(C3'/5') 123.7(C4')	00Hu
$\text{C}_{12}\text{H}_9\text{BrO}$		$\text{CDCl}_3$	135.2(C1) 128.3(C2) 128.6(C3) 128.2(C4) 127.5(C5) 127.8(C6) 128.7(C7) 126.4(C8) 132.2 <sup>a</sup> (C4a) 131.1(C8a) 201.0(CO) 30.0(CH <sub>3</sub> )	90Per
$\text{C}_{12}\text{H}_9\text{BrOS}$		$\text{CDCl}_3$	144.8(C1) 126.2(C2/6) 132.5(C3/5) 125.6(C4) 145.2(C1') 124.7(C2'/6') 129.5(C3'/5') 131.4(C4')	89Cha
$\text{C}_{12}\text{H}_9\text{BrO}_2\text{S}$		$\text{CDCl}_3$	134.7(C1) 121.1(C2) 131.4(C3) 135.6(C4) 127.9(C5) 128.8(C6) 139.8(C1') 128.6(C2'/6') 128.8(C3'/5') 133.4(C4')	95Per
$\text{C}_{12}\text{H}_9\text{BrO}_2\text{S}$		$\text{CDCl}_3$	143.5(C1) 130.5 <sup>a</sup> (C2) 123.2(C3) 136.3(C4) 130.9 <sup>a</sup> (C5) 126.2(C6) 140.8(C1') 127.8(C2'/6') 129.5(C3'/5') 133.6(C4')	95Per
$\text{C}_{12}\text{H}_9\text{BrO}_2\text{S}$		$\text{CDCl}_3$	140.6(C1) 129.1(C2/6) 132.5(C3/5) 128.4(C4) 141.0(C1') 127.6(C2'/6') 129.4(C3'/5') 133.4(C4')	89Cha

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_9\text{BrS}$		$\text{CDCl}_3$	138.7(C1) 123.0(C2) 132.9(C3) 127.2(C4) 127.7(C5) 129.7(C6) 132.8(C1') 133.4(C2'/6') 129.6(C3'/5') 128.4(C4')	95Per
$\text{C}_{12}\text{H}_9\text{BrS}$		$\text{CDCl}_3$	139.0(C1) 132.1(C2) 122.9(C3) 129.5(C4) 130.2(C5) 128.2(C6) 133.8(C1') 132.1(C2'/6') 129.3(C3'/5') 127.8(C4')	95Per
$\text{C}_{12}\text{H}_9\text{BrS}$		$\text{CDCl}_3$	134.8(C1) 132.1 <sup>a</sup> (C2/6) 132.0 <sup>a</sup> (C3/5) 120.8(C4) 135.4(C1') 131.4(C2'/6') 129.3(C3'/5') 127.4(C4')	87Cha
$\text{C}_{12}\text{H}_9\text{Cl}$		$\text{CDCl}_3$	140.2(C1) 132.1(C2) 131.0(C3) 128.1(C4) 126.4(C5) 129.5(C6) 139.0(C1') 127.6(C2'/6') 129.0(C3'/5') 127.2(C4')	86Yan
$\text{C}_{12}\text{H}_9\text{Cl}$		$\text{CDCl}_3$	143.3(C1) 127.9(C2) 134.8(C3) 127.3 <sup>a</sup> (C4) 130.0(C5) 125.4(C6) 140.0(C1') 127.2(C2'/6') 128.9(C3'/5') 127.4 <sup>a</sup> (C4')	86Yan
$\text{C}_{12}\text{H}_9\text{Cl}$		$\text{CDCl}_3$	139.8(C1) 128.4(C2/6) 129.0 <sup>a</sup> (C3/5) 133.6(C4) 140.2(C1') 127.1(C2'/6') 128.9 <sup>a</sup> (C3'/5') 127.6(C4')	86Yan
$\text{C}_{12}\text{H}_9\text{Cl}$		$\text{CDCl}_3$	30.6 <sup>a</sup> (C1) 29.8 <sup>a</sup> (C2) 119.3(C3) 127.2(C4) 126.7(C5) 119.2(C6) 128.7(C7) 120.0(C8) 146.0(C2a) n.r.(C5a) 145.0(C8a) 140.1(C8b)	98Vas
$\text{C}_{12}\text{H}_9\text{ClO}$		$\text{Ac-d}_6$	131.5(C1) 150.3(C2) 121.9(C3) 129.3(C4) 121.5(C5) 130.1(C6) 138.6(C1') 128.8(C2'/6') 130.0(C3'/5') 128.0(C4')	78Löt
$\text{C}_{12}\text{H}_9\text{ClO}$		$\text{Ac-d}_6$	130.8(C1) 153.7(C2) 118.2(C3) 128.6(C4) 124.8(C5) 130.8(C6) 138.1(C1') 128.7(C2'/6') 129.8(C3'/5') 127.8(C4')	78Löt
$\text{C}_{12}\text{H}_9\text{ClO}$		$\text{Ac-d}_6$	127.5(C1) 154.6(C2) 116.8(C3) 129.6(C4) 120.8(C5) 131.1(C6) 138.1(C1') 131.5(C2'/6') 128.6(C3'/5') 132.7(C4')	78Löt
$\text{C}_{12}\text{H}_9\text{ClO}$		$\text{CDCl}_3$	134.3(C1) 128.2(C2) 124.7(C3) 136.7(C4) 124.6(C5) 127.4(C6) 128.6(C7) 126.4(C8) 131.2 <sup>a</sup> (C4a) 131.0 <sup>a</sup> (C8a) 200.7(CO) 29.9(CH <sub>3</sub> )	90Per

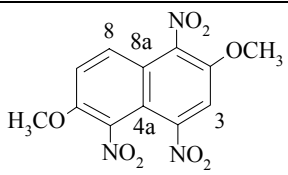
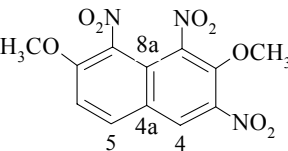
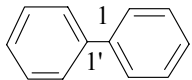
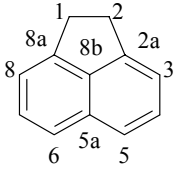
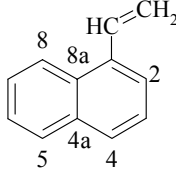
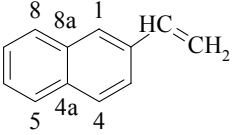
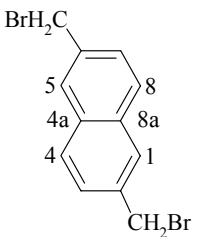
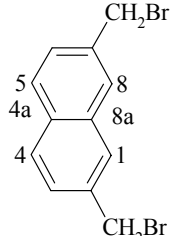
Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_9\text{ClO}$		$\text{CDCl}_3$	152.5(C1) 125.9(C2) 130.8(C3) 124.6(C4) 127.9(C5) 120.8(C6) 157.0(C1') 117.9(C2'/6') 129.7(C3'/5') 123.3(C4')  $^1J(\text{C3},\text{H3})=164.8$ $^1J(\text{C4},\text{H4})=163.1$ $^1J(\text{C5},\text{H5})=162.3$ $^1J(\text{C6},\text{H6})=162.0$ $^1J(\text{C2}',\text{H2}')=160.9$ $^1J(\text{C3}',\text{H3}')=160.3$ $^1J(\text{C4}',\text{H4}')=161.0$	95Nev
$\text{C}_{12}\text{H}_9\text{ClO}$		$\text{CDCl}_3$	158.4(C1) 118.8(C2) 135.0(C3) 123.1(C4) 130.4(C5) 116.8(C6) 156.3(C1') 119.4(C2'/6') 129.9(C3'/5') 124.0(C4')  $^1J(\text{C2},\text{H2})=166.0$ $^1J(\text{C4},\text{H4})=167.1$ $^1J(\text{C5},\text{H5})=162.0$ $^1J(\text{C6},\text{H6})=162.4$ $^1J(\text{C2}',\text{H2}')=161.0$ $^1J(\text{C3}',\text{H3}')=160.0$ $^1J(\text{C4}',\text{H4}')=160.9$	95Nev
$\text{C}_{12}\text{H}_9\text{ClO}$		$\text{CDCl}_3$	156.0(C1) 120.0(C2/6) 129.7(C3/5) 128.2(C4) 156.9(C1') 118.9(C2'/6') 129.8(C3'/5') 123.6(C4')  $^1J(\text{C2},\text{H2})=162.5$ $^1J(\text{C3},\text{H3})=165.2$ $^1J(\text{C2}',\text{H2}')=161.0$ $^1J(\text{C3}',\text{H3}')=159.7$ $^1J(\text{C4}',\text{H4}')=162.7$	95Nev
$\text{C}_{12}\text{H}_9\text{ClO}$		$\text{Ac-d}_6$	134.4(C1) 128.7(C2) 121.4(C3) 153.1(C4) 117.8(C5) 127.1(C6) 140.1(C1') 127.0(C2'/6') 129.5(C3'/5') 127.7(C4')	78Löt
$\text{C}_{12}\text{H}_9\text{ClO}$		$\text{Ac-d}_6$	131.6(C1) 128.7(C2/6) 116.6(C3/5) 158.1(C4) 140.4(C1') 128.5(C2'/6') 129.4(C3'/5') 132.6(C4')	78Löt
$\text{C}_{12}\text{H}_9\text{ClOS}$		$\text{CDCl}_3$	144.1(C1) 126.0(C2/6) 129.6 <sup>a</sup> (C3/5) 137.2(C4) 145.2(C1') 124.6(C2'/6') 129.4 <sup>a</sup> (C3'/5') 131.3(C4')	89Cha
$\text{C}_{12}\text{H}_9\text{ClO}_2\text{S}$		$\text{CDCl}_3$	140.1(C1) 129.1(C2/6) 129.6(C3/5) 139.8(C4) 141.1(C1') 127.6(C2'/6') 129.4(C3'/5') 133.4(C4')	89Cha
$\text{C}_{12}\text{H}_9\text{ClO}_2\text{S}$		$\text{CDCl}_3$	138.3(C1) 132.8(C2) 130.9(C3) 134.7(C4) 127.3(C5) 132.0(C6) 140.0(C1') 128.4(C2'/6') 128.8(C3'/5') 133.5(C4')	95Per
$\text{C}_{12}\text{H}_9\text{ClO}_2\text{S}$		$\text{CDCl}_3$	143.3(C1) 127.6(C2) 135.4(C3) 133.3(C4) 130.6(C5) 125.8(C6) 140.8(C1') 127.8(C2'/6') 129.4(C3'/5') 133.6(C4')	95Per

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_9\text{ClS}$		$\text{CDCl}_3$	132.7(C1) 133.2(C2) 129.7(C3) 127.7(C4) 127.2(C5) 130.1(C6) 136.5(C1') 133.2(C2'/6') 129.6(C3'/5') 128.3(C4')	95Per
$\text{C}_{12}\text{H}_9\text{ClS}$		$\text{CDCl}_3$	138.8(C1) 130.0(C2) 133.8(C3) 126.6(C4) 129.4(C5) 127.8 <sup>a</sup> (C6) 134.8(C1') 132.2(C2'/6') 129.4(C3'/5') 127.9 <sup>a</sup> (C4')	95Per
$\text{C}_{12}\text{H}_9\text{ClS}$		$\text{CDCl}_3$	134.6(C1) 131.9(C2/6) 129.2(C3/5) 132.9(C4) 135.0(C1') 131.2(C2'/6') 129.2(C3'/5') 127.3(C4')	87Cha
$\text{C}_{12}\text{H}_9\text{F}$		$\text{CS}_2/\text{Ac-d}_6$	30.8(C1) 27.1(C2) 155.2(C3) 117.7(C4) 125.3(C5) 122.4(C6) 127.0(C7) 120.0(C8) 126.9(C2a) 128.6(C5a) 144.8(C8a) 141.1(C8b) <sup>1</sup> $J(\text{F}, \text{C}3)=245.5$ <sup>2</sup> $J(\text{F}, \text{C}4)=25.1$ <sup>2</sup> $J(\text{F}, \text{C}2a)=17.2$ <sup>3</sup> $J(\text{F}, \text{C}2)=1.6$ <sup>3</sup> $J(\text{F}, \text{C}5)=6.9$ <sup>3</sup> $J(\text{F}, \text{C}8b)=8.3$ <sup>4</sup> $J(\text{F}, \text{C}1)=0.6$ <sup>4</sup> $J(\text{F}, \text{C}5a)=1.5$ <sup>4</sup> $J(\text{F}, \text{C}8a)=5.0$ <sup>5</sup> $J(\text{F}, \text{C}6)=1.1$ <sup>5</sup> $J(\text{F}, \text{C}8)=0.6$ <sup>6</sup> $J(\text{F}, \text{C}7)=2.8$	77Han1
$\text{C}_{12}\text{H}_9\text{F}$		$\text{CS}_2/\text{Ac-d}_6$	30.9(C1) 30.4(C2) 109.9(C3) 163.0(C4) 106.0(C5) 122.0(C6) 129.1(C7) 118.7(C8) 148.7(C2a) 131.7(C5a) 145.5(C8a) 136.2(C8b) <sup>1</sup> $J(\text{F}, \text{C}4)=245.5$ <sup>2</sup> $J(\text{F}, \text{C}3)=27.2$ <sup>2</sup> $J(\text{F}, \text{C}5)=22.7$ <sup>3</sup> $J(\text{F}, \text{C}2a)=10.2$ <sup>3</sup> $J(\text{F}, \text{C}5a)=10.8$ <sup>4</sup> $J(\text{F}, \text{C}2)=2.5$ <sup>4</sup> $J(\text{F}, \text{C}6)=5.7$ <sup>5</sup> $J(\text{F}, \text{C}1)=0.4$ <sup>5</sup> $J(\text{F}, \text{C}7)=0.7$ <sup>5</sup> $J(\text{F}, \text{C}8a)=1.3$ <sup>6</sup> $J(\text{F}, \text{C}8)=2.4$	77Han1
$\text{C}_{12}\text{H}_9\text{F}$		$\text{CS}_2/\text{Ac-d}_6$	29.9(C1) 29.9(C2) 118.7(C3) 111.3(C4) 156.2(C5) 116.1(C6) 128.2(C7) 120.3(C8) 141.0(C2a) 121.6(C5a) 145.4(C8a) 140.9(C8b) <sup>1</sup> $J(\text{F}, \text{C}5)=249.6$ <sup>2</sup> $J(\text{F}, \text{C}4)=20.5$ <sup>2</sup> $J(\text{F}, \text{C}5a)=19.2$ <sup>3</sup> $J(\text{F}, \text{C}3)=7.4$ <sup>3</sup> $J(\text{F}, \text{C}6)=0.9$ <sup>3</sup> $J(\text{F}, \text{C}8b)=6.9$ <sup>4</sup> $J(\text{F}, \text{C}2a)=3.7$ <sup>4</sup> $J(\text{F}, \text{C}7)=1.5$ <sup>4</sup> $J(\text{F}, \text{C}8a)=3.1$ <sup>5</sup> $J(\text{F}, \text{C}2)=1.5$ <sup>5</sup> $J(\text{F}, \text{C}8)=1.5$	77Han1
$\text{C}_{12}\text{H}_9\text{F}$		Ac	137.6(C1) 128.9(C2/6) 115.7(C3/5) 162.8(C4) 140.2(C1') 127.0(C2'/6') 129.1(C3'/5') 127.5(C4')	74Sch

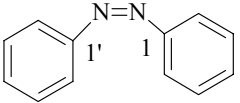
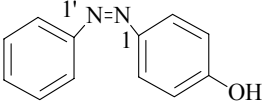
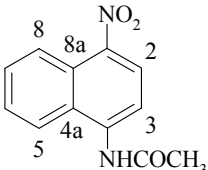
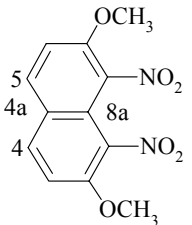
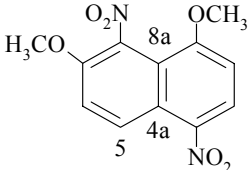
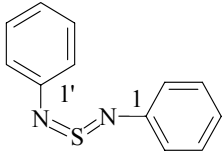
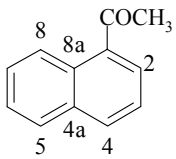
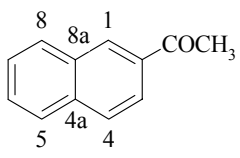
Gross formula	Structure	Solvent	$\delta^3\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_9\text{FO}$		$\text{CDCl}_3$	121.6(C1) 156.8(C2) 114.5(C3) 131.7(C4) 127.0(C5) 124.4(C6) 127.0(C7) 123.5(C8) 129.4(C4a) 129.2(C8a) 198.5(CO) 32.6(CH <sub>3</sub> )  $^1J(\text{F},\text{C}2)=245.4$ $^2J(\text{F},\text{C}1)=14.6$ $^2J(\text{F},\text{C}3)=25.6$ $^3J(\text{F},\text{C}4)=9.2$ $^3J(\text{F},\text{C}8a)=3.7$ $^4J(\text{F},\text{C}8)=5.5$	77Kit
$\text{C}_{12}\text{H}_9\text{FO}$		$\text{CDCl}_3$	131.1(C1) 130.1(C2) 108.0(C3) 161.1(C4) 120.5(C5) 126.6 <sup>a</sup> (C6) 129.0(C7) 126.2 <sup>a</sup> (C8) 123.9(C4a) 132.2(C8a) 200.0(CO) 29.5(CH <sub>3</sub> )  $^1J(\text{F},\text{C}4)=260$ $^2J(\text{F},\text{C}3)=21$ $^2J(\text{F},\text{C}4a)=16$ $^3J(\text{F},\text{C}2)=10$ $^3J(\text{F},\text{C}5)=6$ $^3J(\text{F},\text{C}8a)=5$ $^4J(\text{F},\text{C}1)=5$	90Per
$\text{C}_{12}\text{H}_9\text{FO}$		$\text{CDCl}_3$	134.0(C1) 122.8(C2) 124.8(C3) 128.1(C4) 123.1(C5) 125.3(C6) 110.4(C7) 156.3(C8) 136.0(C4a) 118.1(C8a) 202.8(CO) n.r.(CH <sub>3</sub> )  $^1J(\text{F},\text{C}8)=249.0$ $^2J(\text{F},\text{C}7)=22.0$ $^3J(\text{F},\text{C}6)=9.2$	77Kit
$\text{C}_{12}\text{H}_9\text{FO}$		$\text{CDCl}_3$	131.1(C1) 124.5(C2) 157.0(C3) 111.2(C4) 125.5(C5) 127.7(C6) 124.7(C7) 128.2(C8) 134.7(C4a) 128.2(C8a) 193.9(CO) 30.9(CH <sub>3</sub> )  $^1J(\text{F},\text{C}3)=249.0$ $^2J(\text{F},\text{C}2)=25.6$ $^2J(\text{F},\text{C}4)=22.0$ $^3J(\text{F},\text{C}4a)=9.2$ $^3J(\text{F},\text{CO})=3.7$ $^4J(\text{F},\text{CH}_3)=7.3$	77Kit
$\text{C}_{12}\text{H}_9\text{FO}$		$\text{CDCl}_3$	128.6(C1) 132.7(C2) 123.7(C3) 126.3(C4) 109.9(C5) 160.5(C6) 116.0(C7) 130.8(C8) 135.2(C4a) 128.1(C8a) 195.5(CO) 26.2(CH <sub>3</sub> )  $^1J(\text{F},\text{C}6)=249.0$ $^2J(\text{F},\text{C}5)=20.1$ $^2J(\text{F},\text{C}7)=25.6$ $^3J(\text{F},\text{C}8)=9.2$ $^3J(\text{F},\text{C}4a)=9.2$	77Kit
$\text{C}_{12}\text{H}_9\text{FOS}$		$\text{CDCl}_3$	141.0(C1) 127.0(C2/6) 116.4(C3/5) 164.0(C4) 145.2(C1') 124.4(C2'/6') 129.2(C3'/5') 131.0(C4')  $^1J(\text{F},\text{C}4)=251$ $^2J(\text{F},\text{C}3)=23$ $^3J(\text{F},\text{C}2)=9$	89Cha
$\text{C}_{12}\text{H}_9\text{FO}_2\text{S}$		$\text{CDCl}_3$	137.7(C1) 130.5(C2/6) 116.6(C3/5) 165.4(C4) 141.3(C1') 127.6(C2'/6') 129.4(C3'/5') 133.3(C4')	89Cha

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_9\text{FO}_2\text{S}$		$\text{CDCl}_3$	129.4(C1) 159.2(C2) 117.3(C3) 136.0(C4) 124.6(C5) 129.7(C6) 140.8(C1') 128.1(C2'/6') 129.1(C3'/5') 133.7(C4')  $^1J(\text{F},\text{C}2)=257.1$ $^2J(\text{F},\text{C}1)=14.0$ $^2J(\text{F},\text{C}3)=21.1$ $^3J(\text{F},\text{C}4)=8.4$ $^4J(\text{F},\text{C}5)=3.0$	95Per
$\text{C}_{12}\text{H}_9\text{FO}_2\text{S}$		$\text{CDCl}_3$	143.7(C1) 114.9(C2) 162.4(C3) 120.5(C4) 131.2(C5) 123.4(C6) 140.8(C1') 127.7(C2'/6') 129.4(C3'/5') 133.6(C4')  $^1J(\text{F},\text{C}3)=252.0$ $^2J(\text{F},\text{C}2)=24.3$ $^2J(\text{F},\text{C}4)=21.3$ $^3J(\text{F},\text{C}5)=7.7$ $^4J(\text{F},\text{C}6)=2.4$	95Per
$\text{C}_{12}\text{H}_9\text{FS}$		$\text{CDCl}_3$	122.7(C1) 161.1(C2) 151.9(C3) 124.7(C4) 133.4(C5) 129.4(C6) 134.2(C1') 130.9(C2'/6') 129.3(C3'/5') 127.3(C4')  $^1J(\text{F},\text{C}2)=246.8$ $^2J(\text{F},\text{C}1)=17.4$ $^2J(\text{F},\text{C}3)=22.3$ $^3J(\text{F},\text{C}4)=2.9$ $^3J(\text{F},\text{C}6)=9.7$	95Per
$\text{C}_{12}\text{H}_9\text{FS}$		$\text{CDCl}_3$	139.4(C1) 116.4(C2) 163.0(C3) 113.5(C4) 130.3(C5) 125.2(C6) 133.9(C1') 132.6(C2'/6') 129.5(C3'/5') 128.1(C4')  $^1J(\text{F},\text{C}3)=248.4$ $^2J(\text{F},\text{C}2)=23.3$ $^2J(\text{F},\text{C}4)=21.2$ $^3J(\text{F},\text{C}1)=8.0$ $^3J(\text{F},\text{C}5)=8.3$	95Per
$\text{C}_{12}\text{H}_9\text{FS}$		$\text{CDCl}_3$	130.3(C1) 134.0(C2/6) 116.4(C3/5) 162.3(C4) 136.6(C1') 129.9(C2'/6') 129.1(C3'/5') 126.7(C4')	87Cha
$\text{C}_{12}\text{H}_9\text{I}$		Ac	139.9(C1) 129.2(C2/6) 138.1(C3/5) 92.8(C4) 140.8(C1') 126.9(C2'/6') 129.2(C3'/5') 128.0(C4')	74Sch
$\text{C}_{12}\text{H}_9\text{NO}$		$\text{CDCl}_3$	158.8(C1) 102.9(C2) 133.6(C3) 101.2(C4) 124.2(C5) 128.4(C6) 126.2(C7) 122.4(C8) 132.9(C4a) 124.6(C8a) 118.1(CN) 55.6(OCH3)	92Per

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_9\text{NO}$		$\text{CDCl}_3$	109.6(C1) 133.0(C2) 124.0(C3) 127.6(C4) 155.8(C5) 105.2(C6) 128.9(C7) 117.1(C8) 125.3(C4a) 133.4(C8a) 118.1(CN) 55.6( $\text{OCH}_3$ )	96Sch
$\text{C}_{12}\text{H}_9\text{NO}_2$		$\text{CDCl}_3$	30.5(C1) 30.5(C2) 117.7(C3) 127.5(C4) 139.8(C5) 119.8(C6) 131.8(C7) 121.2(C8) 155.8(C2a) n.r.(C5a) 146.5(C8a) n.r.(C8b)	98Vas
$\text{C}_{12}\text{H}_9\text{NO}_2\text{S}$		$\text{CDCl}_3$	130.9(C1) 144.9(C2) 125.7(C3) 125.0(C4) 133.4(C5) 128.3(C6) 139.4(C1') 135.9(C2'/6') 130.1(C3'/5') 130.0(C4')	95Per
$\text{C}_{12}\text{H}_9\text{NO}_2\text{S}$		$\text{CDCl}_3$	140.4(C1) 123.0(C2) 148.6(C3) 120.8(C4) 129.6(C5) 134.2(C6) 132.0(C1') 133.3(C2'/6') 129.7(C3'/5') 128.9(C4')	95Per
$\text{C}_{12}\text{H}_9\text{NO}_2\text{S}$		$\text{CDCl}_3$	148.4(C1) 126.5(C2/6) 123.9(C3/5) 145.2(C4) 130.3(C1') 134.6(C2'/6') 130.0(C3'/5') 129.6(C4')	87Cha
$\text{C}_{12}\text{H}_9\text{NO}_3$		$\text{CDCl}_3$	149.7(C1) 140.8(C2) 124.9(C3) 123.9(C4) 133.4(C5) 120.1(C6) 154.9(C1') 118.6(C2'/6') 129.3(C3'/5') 122.7(C4')	74Buc
$\text{C}_{12}\text{H}_9\text{NO}_3$		$\text{CDCl}_3$	162.0(C1) 116.8(C2/6) 125.1(C3/5) 141.8(C4) 153.7(C1') 119.9(C2'/6') 129.5(C3'/5') 124.7(C4')	74Buc
$\text{C}_{12}\text{H}_9\text{NO}_3\text{S}$		$\text{CDCl}_3$	152.9(C1) 125.2(C2/6) 124.4(C3/5) 149.2(C4) 144.4(C1') 124.8(C2'/6') 129.8(C3'/5') 132.0(C4')	89Cha
$\text{C}_{12}\text{H}_9\text{NO}_4\text{S}$		$\text{CDCl}_3$	134.4(C1) 148.4(C2) 124.7(C3) 132.5(C4) 133.8(C5) 131.6(C6) 140.4(C1') 128.2(C2'/6') 129.1(C3'/5') 134.6(C4')	95Per
$\text{C}_{12}\text{H}_9\text{NO}_4\text{S}$		$\text{CDCl}_3$	143.9(C1) 122.7(C2) 148.4(C3) 127.7(C4) 130.8(C5) 134.2(C6) 140.1(C1') 128.0(C2'/6') 129.7(C3'/5') 133.1(C4')	95Per
$\text{C}_{12}\text{H}_9\text{NO}_4\text{S}$		$\text{CDCl}_3$	147.3(C1) 129.0(C2/6) 124.5(C3/5) 150.3(C4) 140.0(C1') 128.0(C2'/6') 129.7(C3'/5') 134.1(C4')	89Cha

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_9\text{N}_3\text{O}_8$		$\text{Ac-d}_6$	138.2(C1) 147.0(C2) 117.4(C3) 146.1(C4) 132.5(C5) 152.7(C6) 120.6(C7) 126.7(C8) 112.6(C4a) 121.2(C8a) 58.6,58.9(2-OCH <sub>3</sub> ,6-OCH <sub>3</sub> )	80Mec
$\text{C}_{12}\text{H}_9\text{N}_3\text{O}_8$		$\text{Ac-d}_6$	134.7(C1) 147.5(C2) 137.1(C3) 131.8(C4) 136.8(C5) 117.3(C6) 155.9(C7) 131.8(C8) 124.0(C4a) 118.8(C8a) 58.6,65.8(2-OCH <sub>3</sub> ,7-OCH <sub>3</sub> )	80Mec
$\text{C}_{12}\text{H}_{10}$		Ac	141.3(C1/C1') 127.1(C2/2'/6/6') 129.1(C3/3'/5/5') 127.5(C4/4')	74Sch
$\text{C}_{12}\text{H}_{10}$		$\text{CDCl}_3$	30.2(C1/2) 118.9(C3/8) 127.5(C4/7) 122.0(C5/6) 145.6(C2a/8a) 131.4(C5a) 139.0(C8b)	74Ozu
$\text{C}_{12}\text{H}_{10}$		$\text{CDCl}_3$	135.5(C1) 123.6(C2) 125.6(C3) 128.0(C4) 128.4(C5) 125.7(C6) 126.0(C7) 123.7(C8) 133.5(C4a) 131.0(C8a) 134.3(CH) 117.0(CH <sub>2</sub> )	91Kat
$\text{C}_{12}\text{H}_{10}$		$\text{CDCl}_3$	126.4(C1) 134.9(C2) 123.1(C3) 128.1(C4) 127.6(C5) 125.8(C6) 126.2(C7) 128.0(C8) 133.1(C4a) 133.5(C8a) 136.9(CH) 114.1(CH <sub>2</sub> )	91Kat
$\text{C}_{12}\text{H}_{10}\text{Br}_2$		$\text{CDCl}_3$	127.7(C1/5) 135.9(C2/6) 127.4(C3/7) 128.8(C4/8) 132.9(C4a/8a) 33.7(CH <sub>2</sub> )	89Ern1
$\text{C}_{12}\text{H}_{10}\text{Br}_2$		$\text{CDCl}_3$	127.9(C1/8) 135.9(C2/7) 127.5(C3/6) 128.6(C4/5) 132.7(C4a) 133.0(C8a) 33.7(CH <sub>2</sub> )	89Ern1



Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{10}\text{N}_2$		$\text{CDCl}_3$	152.5(C1/1') 122.7(C2/2'/6/6') 128.8(C3/3'/5/5') 130.7(C4/4')	72Jon
$\text{C}_{14}\text{H}_{10}\text{N}_2\text{O}$		$\text{DMSO-d}_6$	145.5(C1) 125.1(C2/6) 116.1(C3/5) 161.0(C4) 152.3(C1') 122.3(C2'/6') 129.4(C3'/5') 130.6(C4') $^1J(\text{C2}, \text{H2})=160.5$ $^1J(\text{C3}, \text{H3})=158.1$ $^1J(\text{C2}', \text{H2}')=162.4$ $^1J(\text{C3}', \text{H3}')=161.7$ $^1J(\text{C4}, \text{H4})=161.3$	81Lyč
$\text{C}_{12}\text{H}_{10}\text{N}_2\text{O}_3$		$\text{DMSO-d}_6$	141.1(C1) 122.8(C2) 116.9(C3) 139.5(C4) 124.7(C5) 126.3(C6) 129.0(C7) 122.2(C8) 124.8(C4a) 125.8(C8a) 169.0(CO) 23.5( $\text{CH}_3$ )	92Per
$\text{C}_{12}\text{H}_{10}\text{N}_2\text{O}_6$		$\text{Ac-d}_6$	132.0(C1/8) 153.5(C2/7) 113.5(C3/6) 134.8(C4/5) 123.8(C4a) 117.4(C8a) 58.1(2- $\text{OCH}_3$ , 7- $\text{OCH}_3$ )	80Mec
$\text{C}_{12}\text{H}_{10}\text{N}_2\text{O}_6$		$\text{Ac-d}_6$	157.5(C1) 107.0(C2) 126.5(C3) 140.2(C4) 127.3(C5) 118.4(C6) 150.4(C7) 135.0(C8) 121.6(C4a) 117.5(C8a) 57.5, 58.0(1- $\text{OCH}_3$ , 7- $\text{OCH}_3$ )	80Mec
$\text{C}_{12}\text{H}_{10}\text{N}_2\text{S}$		$\text{CDCl}_3$	145.5(C1/1') 123.2(C2/2'/6/6') 128.8(C3/3'/5/5') 126.6(C4/4')	76Kre
$\text{C}_{12}\text{H}_{10}\text{O}$		$\text{CDCl}_3$	135.0(C1) 128.6(C2) 124.1(C3) 132.8(C4) 128.2(C5) 126.2(C6) 127.8(C7) 125.8(C8) 133.7(C4a) 129.9(C8a) 201.3(CO) 29.7( $\text{CH}_3$ )	90Per
$\text{C}_{12}\text{H}_{10}\text{O}$		$\text{CDCl}_3$	129.9(C1) 134.2(C2) 123.7(C3) 128.2(C4) 127.6(C5) 128.2(C6) 126.5(C7) 129.4(C8) 135.4(C4a) 132.3(C8a) 197.6(CO) 26.5( $\text{CH}_3$ )	78Sei

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{10}\text{O}$		$\text{CDCl}_3$	125.0(C1) 140.5(C2) 117.7(C3) 139.4(C4) 127.3(C5) 139.4(C6) 129.1(C7) 138.5(C8) 145.0(C3a) 139.9(C8a) 195.3(CO) 29.1( $\text{CH}_3$ )	78Dra
$\text{C}_{12}\text{H}_{10}\text{O}$		$\text{CDCl}_3$	157.2(C1/1') 118.8(C2/2'/6/6') 129.7(C3/3'/5/5') 123.1(C4/4')	95Nev
$\text{C}_{12}\text{H}_{10}\text{O}$		$\text{CDCl}_3$	128.1(C1) 152.3(C2) 115.8(C3) 130.2(C4) 120.8(C5) 129.0(C6) 137.1(C1') 129.0(C2'/6') 129.0(C3'/5') 127.6(C4')	78Löt
$\text{C}_{12}\text{H}_{10}\text{O}$		$\text{Ac-d}_6$	143.3(C1) 114.5(C2) 158.6(C3) 115.1(C4) 130.6(C5) 118.9(C6) 141.8(C1') 127.6(C2'/6') 129.5(C3'/5') 128.0(C4')	78Löt
$\text{C}_{12}\text{H}_{10}\text{O}$		$\text{Ac-d}_6$	133.0(C1) 128.6(C2/6) 116.4(C3/5) 157.8(C4) 141.6(C1') 126.9(C2'/6') 129.4(C3'/5') 127.0(C4')	78Löt
$\text{C}_{12}\text{H}_{10}\text{OS}$		$\text{CDCl}_3$	145.4(C1/1') 124.6(C2/2'/6/6') 129.2(C3/3'/5/5') 130.9(C4/4')	89Cha
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{Ac-d}_6$	126.9(C1/1') 154.5(C2/2') 117.1(C3/3') 129.3(C4/4') 121.1(C5/5') 132.3(C6/6')	78Löt
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{Ac-d}_6$	133.2(C1/1') 128.0(C2/2'/6/6') 116.3(C3/3'/5/5') 157.1(C4/4')	78Löt
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CDCl}_3$	143.4(C1) 147.4(C2) 116.2(C3) 124.7(C4) 120.6(C5) 118.8(C6) 156.7(C1') 117.9(C2'/6') 129.8(C3'/5') 123.5(C4')	80Nor
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CDCl}_3$	129.4(C1) 127.8(C2) 125.1(C3) 127.9(C4) 128.4(C5) 125.5 <sup>a</sup> (C6) 126.2 <sup>a</sup> (C7) 123.3(C8) 133.5(C4a) 131.7(C8a) 177.9(CO) 39.2( $\text{CH}_2$ )	79Marl
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CS}_2/\text{Ac-d}_6$	127.0(C1) 130.4(C2) 124.7(C3) 133.4(C4) 128.7(C5) 126.4(C6) 127.8(C7) 126.2(C8) 134.1(C4a) 131.7(C8a) 166.7(CO) 51.6( $\text{OCH}_3$ )	77Han

[illegible]

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CDCl}_3$	116.2(C1) 163.7(C2) 112.3(C3) 137.4(C4) 128.2(C5) 124.5(C6) 129.6(C7) 124.8(C8) 128.3(C4a) 131.3(C8a) 191.6(CHO) 56.2(OCH <sub>3</sub> ) $^1J(\text{C3},\text{H3})=163$ $^1J(\text{C4},\text{H4})=160$ $^1J(\text{C5},\text{H5})=160$ $^1J(\text{C6},\text{H6})=161$ $^1J(\text{C7},\text{H7})=159$ $^1J(\text{C8},\text{H8})=163$ $^1J(\text{CH}_3)=145$ $^1J(\text{CHO})=180$	78Sei
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CDCl}_3$	162.4(C1) 112.9(C2) 124.4(C3) 117.6(C4) 126.9(C5) 129.4(C6) 125.3(C7) 124.5(C8) 137.0(C4a) 125.3(C8a) 202.4(CO) 26.1(CH <sub>3</sub> )	86Raz
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CDCl}_3$	114.4(C1) 164.0(C2) 119.9(C3) 136.5(C4) 129.1(C5) 123.0(C6) 127.5(C7) 123.9(C8) 128.2(C4a) 131.8(C8a) 202.7(CO) 32.0(CH <sub>3</sub> )	86Raz
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CDCl}_3$	124.6(C1) 139.6(C2) 102.8(C3) 160.5(C4) 122.2(C5) 126.0(C6) 129.2(C7) 124.6(C8) 125.2(C4a) 131.6(C8a) 192.0(CHO) 55.7(OCH <sub>3</sub> ) $^1J(\text{C2},\text{H2})=159$ $^1J(\text{C3},\text{H3})=162$ $^1J(\text{C5},\text{H5})=164$ $^1J(\text{C6},\text{H6})=161$ $^1J(\text{C7},\text{H7})=160$ $^1J(\text{C8},\text{H8})=164$ $^1J(\text{CH}_3)=145$ $^1J(\text{CHO})=172$	78Sei
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CDCl}_3$	132.5(C1) 121.1(C2) 157.3(C3) 112.2(C4) 126.0(C5) 129.0(C6) 123.3(C7) 129.0(C8) 137.9(C4a) 126.4(C8a) 202.9(CO) 26.2(CH <sub>3</sub> )	86Raz
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CDCl}_3$	130.8(C1) 125.6(C2) 157.5(C3) 106.2(C4) 126.5(C5) 129.0(C6) 124.5(C7) 129.8(C8) 137.4(C4a) 127.7(C8a) 190.0(CHO) 55.5(OCH <sub>3</sub> ) $^1J(\text{C1},\text{H1})=162$ $^1J(\text{C4},\text{H4})=159$ $^1J(\text{C5},\text{H5})=160$ $^1J(\text{C6},\text{H6})=160$ $^1J(\text{C7},\text{H7})=162$ $^1J(\text{C8},\text{H8})=159$ $^1J(\text{CH}_3)=145$ $^1J(\text{CHO})=181$	78Sei

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{10}\text{O}_2$		$\text{CDCl}_3$	134.1(C1) 132.3(C2) 123.5(C3) 127.7(C4) 106.0(C5) 160.1(C6) 119.8(C7) 131.0(C8) 138.1(C4a) 127.7(C8a) 191.8(CHO) 55.4( $\text{CH}_3$ ) $^1J(\text{C1},\text{H1})=158$ $^1J(\text{C3},\text{H3})=163$ $^1J(\text{C4},\text{H4})=161$ $^1J(\text{C5},\text{H5})=159$ $^1J(\text{C7},\text{H7})=163$ $^1J(\text{C8},\text{H8})=161$ $^1J(\text{CH}_3)=145$ $^1J(\text{CHO})=173$	78Sei
$\text{C}_{12}\text{H}_{10}\text{O}_2\text{S}$		$\text{CDCl}_3$	141.5(C1/1') 127.6(C2/2'/6/6') 129.3(C3/3'/5/5') 133.2(C4/4')	95Per
$\text{C}_{12}\text{H}_{10}\text{O}_3$		$\text{CDCl}_3$	161.0(C1) 105.1(C2) 123.9(C3) 118.0(C4) 127.0(C5) 128.8(C6) 125.1(C7) 124.0(C8) 137.0(C4a) 124.7(C8a) 170.8(CO) 51.6( $\text{OCH}_3$ )	86Raz
$\text{C}_{12}\text{H}_{10}\text{O}_3$		$\text{CDCl}_3$	104.2(C1) 164.6(C2) 119.2(C3) 136.2(C4) 128.7(C5) 123.0(C6) 127.9(C7) 125.2(C8) 128.4(C4a) 131.7(C8a) 172.3(CO) 51.6( $\text{OCH}_3$ )	86Raz
$\text{C}_{12}\text{H}_{10}\text{O}_3$		$\text{CDCl}_3$	131.8(C1) 113.8(C2) 156.5(C3) 111.6(C4) 126.0(C5) 128.0(C6) 123.2(C7) 128.8(C8) 137.8(C4a) 126.6(C8a) 169.5(CO) 51.8( $\text{OCH}_3$ )	86Raz
$\text{C}_{12}\text{H}_{10}\text{S}$		$\text{CDCl}_3$	135.7(C1/1') 130.9(C2/2'/6/6') 129.1(C3/3'/5/5') 126.9(C4/4')	95Per
$\text{C}_{12}\text{H}_{11}\text{Br}$		$\text{CDCl}_3$	127.6(C1) 134.2(C2) 126.7(C3) 128.0(C4) 126.7(C5) 136.2(C6) 128.6(C7) 127.7(C8) 133.4(C4a) 131.4(C8a) n.r.( $\text{CH}_2$ ) n.r.( $\text{CH}_3$ )	89Ern1
$\text{C}_{12}\text{H}_{11}\text{BrO}$		$\text{CDCl}_3$	154.0(C1) 105.3(C2) 125.6(C3) 121.2(C4) 122.2(C5) 126.5(C6) 127.7(C7) 126.8(C8) 125.9(C4a) 134.8(C8a) 68.1( $\text{OCH}_2$ ) 29.4( $\text{CH}_2\text{Br}$ )	96Pom

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{11}\text{BrO}$		$\text{CDCl}_3$	118.1(C1) 156.0(C2) 107.3(C3) 129.7(C4) 127.7(C5) 126.5(C6) 126.8(C7) 134.4(C8) 123.9(C4a) 129.3(C8a) 67.9( $\text{OCH}_2$ ) 29.0( $\text{CH}_2\text{Br}$ )	93Rom
$\text{C}_{12}\text{H}_{11}\text{N}$		$\text{Ac-d}_6$	29.7 <sup>a</sup> (C1) 31.2 <sup>a</sup> (C2) 120.3(C3) 110.7(C4) 76Ern1 141.3(C5) 118.1(C6) 126.6(C7) 119.6(C8) 134.5(C2a) 122.9(C5a) 146.6(C8a) 140.9(C8b)	
$\text{C}_{12}\text{H}_{11}\text{N}$		$\text{CDCl}_3$	146.8(C1) 113.8 <sup>a</sup> (C2) 142.3(C3) 117.4(C4) 129.6(C5) 114.0 <sup>a</sup> (C6) 141.3(C1') 127.0(C2'/6') 128.6(C3'/5') 127.1(C4')	91Bud
$\text{C}_{12}\text{H}_{11}\text{N}$		$\text{CDCl}_3$	131.5(C1) 128.0(C2/6) 115.4(C3/5) 145.8(C4) 141.1(C1') 128.6(C2'/6') 126.4(C3'/5') 126.2(C4')	89Bud
$\text{C}_{12}\text{H}_{11}\text{NO}$		$\text{CDCl}_3$	124.4(C1) 133.2(C2) 106.7(C3) 147.6(C4) 120.6(C5) 125.3(C6) 128.5(C7) 127.5(C8) 122.7(C4a) 132.4(C8a) 199.5(CO) 29.1( $\text{CH}_3$ )	90Per
$\text{C}_{12}\text{H}_{11}\text{NO}_2$		$\text{CDCl}_3$	148.2(C1) 130.0(C2) 128.2, 127.1, 126.5(C3, C4, C5) 136.8(C6) 130.8(C7) 121.1(C8) 132.8(C4a) 123.1(C8a) n.r.( $\text{CH}_3$ )	74Wel
$\text{C}_{12}\text{H}_{11}\text{NO}_2$		$\text{CDCl}_3$	148.1(C1) 130.3(C2) 127.3, 128.1, 127.5(C3, C4, C5) 129.0(C6) 139.0(C7) 120.3(C8) 131.0(C4a) 125.1(C8a) n.r.( $\text{CH}_3$ )	74Wel
$\text{C}_{12}\text{H}_{11}\text{NO}_4$		$\text{Ac-d}_6$	136.7(C1) 147.5(C2) 115.3(C3) 131.7(C4) 107.3(C5) 157.8(C6) 122.7(C7) 121.9(C8) 130.3(C4a) 120.9(C8a) 55.9, 57.8(2- $\text{OCH}_3$ , 6- $\text{OCH}_3$ )	80Mec

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{11}\text{NO}_4$		$\text{Ac-d}_6$	135.7(C1) 150.1(C2) 111.4(C3) 132.8(C4) 130.8(C5) 118.2(C6) 160.9(C7) 98.7(C8) 124.4(C4a) 127.2(C8a) 55.8, 57.5(2-OCH <sub>3</sub> , 7-OCH <sub>3</sub> )	80Mec
$\text{C}_{12}\text{H}_{11}\text{NO}_4$		$\text{Ac-d}_6$	158.6 <sup>a</sup> (C1) 104.0(C2) 125.3(C3) 139.7(C4) 125.3(C5) 122.4(C6) 159.8 <sup>a</sup> (C7) 102.6(C8) 122.0(C4a) 127.4(C8a) 55.8, 57.0(1-OCH <sub>3</sub> , 7-OCH <sub>3</sub> )	80Mec
$\text{C}_{12}\text{H}_{11}\text{NS}$		$\text{CDCl}_3$	114.1(C1) 148.7(C2) 115.2(C3) 131.0(C4) 118.5(C5) 137.3(C6) 136.7(C1') 126.3(C2'/6') 128.9(C3'/5') 125.3(C4')	95Per
$\text{C}_{12}\text{H}_{11}\text{N}_3$		$\text{CDCl}_3$	153.8(C1) 107.5(C2) 147.2(C3) 117.8(C4) 129.8(C5) 115.0(C6) 152.7(C1') 122.8 <sup>a</sup> (C2'/6') 129.0 <sup>a</sup> (C3'/5') 130.8(C4')	91Bud
$\text{C}_{12}\text{H}_{11}\text{N}_3$		$\text{CDCl}_3$	145.6(C1) 125.1(C2/6) 114.6(C3/5) 149.6(C4) 153.0(C1') 122.3(C2'/6') 129.0(C3'/5') 129.8(C4')	91Bud
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	130.8(C1) 132.8 <sup>a</sup> (C2) 128.8(C3) 125.5(C4) 128.3(C5) 124.3(C6) 125.4(C7) 123.5(C8) 132.2(C4a) 132.7 <sup>a</sup> (C8a) 14.4(1-CH <sub>3</sub> ) 20.6(2-CH <sub>3</sub> )	74Wil
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	133.6(C1) 128.7(C2) 134.8(C3) 125.1(C4) 127.7(C5) 125.4(C6) 124.6(C7) 123.7(C8) 133.7(C4a) 130.8(C8a) 19.1(1-CH <sub>3</sub> ) 21.5(3-CH <sub>3</sub> )	74Wil
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	132.6(C1/4) 126.1(C2/3) 124.5(C5/8) 125.2(C6/7) 132.2(C4a/8a) 19.3(CH <sub>3</sub> ) <sup>1</sup> J(C2,H2)=157 <sup>1</sup> J(C5,H5)=160 <sup>1</sup> J(C6,H6)=160 <sup>1</sup> J(CH <sub>3</sub> )=126	78Sei

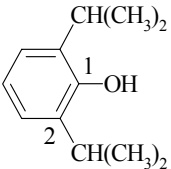
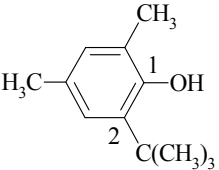
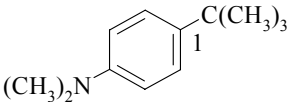
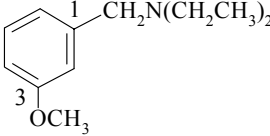
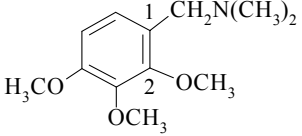
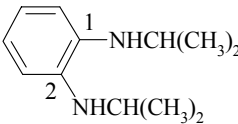
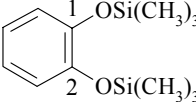
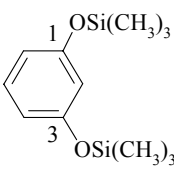
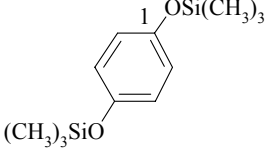
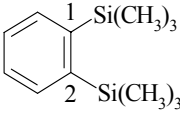
Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	134.5(C1/5) 126.2(C2/6) 125.1(C3/7) 122.2(C4/8) 132.5(C4a/8a) 19.7( $\text{CH}_3$ )	74Wil
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	133.6(C1) 125.5 <sup>a</sup> (C2) 125.3 <sup>a</sup> (C3) 125.6 <sup>a</sup> (C4) 127.3(C5) 134.7(C6) 127.6(C7) 123.7(C8) 133.7(C4a) 130.6(C8a) 19.1(1- $\text{CH}_3$ ) 21.4(6- $\text{CH}_3$ )	74Wil
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	133.8(C1) 126.4(C2) 124.4(C3) 125.9(C4) 128.1(C5) 127.4(C6) 135.0(C7) 123.0(C8) 131.7(C4a) 132.6(C8a) 19.2(1- $\text{CH}_3$ ) 21.5(7- $\text{CH}_3$ )	74Wil
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	135.2(C1/8) 129.2(C2/7) 124.8(C3/6) 127.7(C4/5) 135.4(C4a) 132.9(C8a) 25.9( $\text{CH}_3$ )	74Wil
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	127.3(C1/4) 135.2(C2/3) 126.8(C5/8) 124.8(C6/7) 132.4(C4a/8a) 20.0( $\text{CH}_3$ ) $^1J(\text{C1}, \text{H1})=156$ $^1J(\text{C5}, \text{H5})=160$ $^1J(\text{C6}, \text{H6})=160$ $^1J(\text{CH}_3)=126$	78Sei
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	126.5(C1/5) 134.3(C2/6) 128.0(C3/7) 127.0(C4/8) 131.8(C4a/8a) 21.5( $\text{CH}_3$ ) $^1J(\text{C1}, \text{H1})=156$ $^1J(\text{C3}, \text{H3})=157$ $^1J(\text{C4}, \text{H4})=159$ $^1J(\text{CH}_3)=126$	78Sei
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	126.0(C1/8) 135.1(C2/7) 127.1(C3/6) 126.9(C4/5) 129.7(C4a) 133.6(C8a) 21.7( $\text{CH}_3$ )	74Wil
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	140.3(C1) 124.9(C2) 125.7(C3) 126.4(C4) 128.8(C5) 125.4(C6) 125.7(C7) 123.8(C8) 133.9(C4a) 131.8(C8a) 25.9( $\text{CH}_2$ ) 15.1( $\text{CH}_3$ )	92Ern
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	125.6(C1) 141.8(C2) 127.1(C3) 127.8(C4) 127.6(C5) 125.0(C6) 125.8(C7) 127.4(C8) 132.0(C4a) 133.8(C8a) 29.1( $\text{CH}_2$ ) 15.6( $\text{CH}_3$ )	92Ern

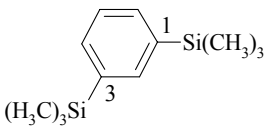
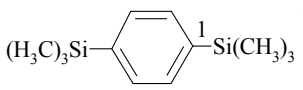


Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{12}$		$\text{CCl}_4$	126.5(C1) 136.3(C2) 114.3(C3) 146.1(C4) 125.7(C5) 136.3(C6) 120.3(C7) 133.8(C8) 136.8 <sup>a</sup> (C3a) 136.0 <sup>a</sup> (C8a) 12.8(1-CH <sub>3</sub> ) 14.3(4-CH <sub>3</sub> )	75Lli
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	124.7(C1/3) 139.5(C2) 133.2(C4/8) 120.4(C5/7) 137.3(C6) 136.9(C3a/8a) 12.7(CH <sub>3</sub> )	77Bra
$\text{C}_{12}\text{H}_{12}$		$\text{CDCl}_3$	116.0(C1/3) 133.7(C2) 146.3(C4/8) 125.2(C5/7) 134.8(C6) 137.6(C3a/8a) 24.5(CH <sub>3</sub> )	77Bra
$\text{C}_{12}\text{H}_{12}\text{O}$		$\text{CDCl}_3$	153.9(C1) 103.2(C2) 126.2(C3) 125.7(C4) 123.9(C5) 126.2(C6) 124.8(C7) 122.4(C8) 133.3(C4a) 125.7(C8a) 55.1(OCH <sub>3</sub> ) 18.8(CH <sub>3</sub> )	92Per
$\text{C}_{12}\text{H}_{12}\text{OS}$		$\text{CDCl}_3$	154.9(C1) 103.8(C2) 125.4(C3) 126.1(C4) 124.8(C5) 126.9(C6) 128.4(C7) 122.5(C8) 133.4(C4a) 125.7(C8a) 18.4(SCH <sub>3</sub> ) 55.4(OCH <sub>3</sub> )	92Per
$\text{C}_{12}\text{H}_{12}\text{O}_2$		$\text{CDCl}_3$	149.4(C1/4) 103.1(C2/3) 121.7(C5/8) 125.8(C6/7) 126.2(C4a/8a) 55.6(OCH <sub>3</sub> )	92Per
$\text{C}_{12}\text{H}_{12}\text{O}_2$		DAA	154.4(C1) 104.6(C2) 123.6(C3) 120.0(C4) 129.5(C5) 118.8(C6) 157.2(C7) 100.4(C8) 129.9(C4a) 126.4(C8a) 55.0(OCH <sub>3</sub> )	80Mec
$\text{C}_{12}\text{H}_{12}\text{O}_2$		$\text{CDCl}_3$	106.2(C1/4) 149.4(C2/3) 126.2(C5/8) 124.0(C6/7) 129.1(C4a/8a) 55.7(OCH <sub>3</sub> ) <sup>1</sup> $J$ (C1,H1)=157 <sup>1</sup> $J$ (C5,H5)=160 <sup>1</sup> $J$ (C6,H6)=160 <sup>1</sup> $J$ (CH <sub>3</sub> )=144	78Sei

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{12}\text{O}_2$		DAA	106.9(C1/5) 156.75(C2/6) 119.25(C3/7) 128.7(C4/8) 130.5(C4a/8a) 55.6(OCH <sub>3</sub> )	80Mec
$\text{C}_{12}\text{H}_{12}\text{O}_2$		DAA	106.1(C1/8) 158.9(C2/7) 116.4(C3/6) 129.6(C4/5) 124.8(C4a) 137.0(8a) 55.5(OCH <sub>3</sub> )	80Mec
$\text{C}_{12}\text{H}_{12}\text{S}$		$\text{CDCl}_3$	132.7 <sup>a</sup> (C1) 124.1(C2) 126.3(C3) 133.3 <sup>a</sup> (C4) 124.5(C5) 125.8(C6) 125.6(C7) 124.8(C8) 131.7(C4a) 132.0(C8a) 16.4(SCH <sub>3</sub> ) 19.1(CH <sub>3</sub> )	92Per
$\text{C}_{12}\text{H}_{12}\text{Si}$		$\text{CDCl}_3$	131.6(C1) 136.0(C2/6) 128.4(C3/5) 130.2(C4)	75Ngu
$\text{C}_{12}\text{H}_{13}\text{N}$		Ac-d <sub>6</sub>	151.7(C1) 114.7(C2) 126.6(C3) 123.4(C4) 129.0(C5) 126.3(C6) 125.6(C7) 124.8(C8) 135.7(C4a) 129.6(C8a) 45.2(CH <sub>3</sub> )	75Ern2
$\text{C}_{12}\text{H}_{13}\text{N}$		Ac-d <sub>6</sub>	106.9(C1) 149.5(C2) 117.1(C3) 129.2(C4) 128.0(C5) 122.5(C6) 126.7(C7) 126.9(C8) 127.7(C4a) 136.0(C8a) 40.7(CH <sub>3</sub> )	75Ern2
$\text{C}_{12}\text{H}_{14}$		$\text{CDCl}_3$	119.3(C1) 132.0(C2/6) 125.3(C3/5) 152.2(C4) 83.9(CCH) 76.4(CCH) 34.8(C) 31.2(CH <sub>3</sub> )	76Ber
$\text{C}_{12}\text{H}_{14}$		$\text{CDCl}_3$	120.0(C1/4) 141.9(C2/3/5/6) 32.4( $\alpha\text{CH}_2$ ) 25.8( $\beta\text{CH}_2$ ) <sup>1</sup> $J$ (C1,H1)=155.1 <sup>1</sup> $J$ ( $\alpha\text{CH}_2$ )=127.5 <sup>1</sup> $J$ ( $\beta\text{CH}_2$ )=126.6	78Thu
$\text{C}_{12}\text{H}_{14}$		$\text{CDCl}_3$	122.9(C1/4) 142.9(C2/3) 135.6(C5/6) 29.2(2- $\alpha\text{CH}_2$ ) 30.0(5- $\alpha\text{CH}_2$ ) 23.3(5- $\beta\text{CH}_2$ ) <sup>1</sup> $J$ (C1,H1)=157.3 <sup>1</sup> $J$ (2- $\alpha\text{CH}_2$ )=136 <sup>1</sup> $J$ (6- $\alpha\text{CH}_2$ )=124 <sup>1</sup> $J$ (6- $\beta\text{CH}_2$ )=126	78Thu
$\text{C}_{12}\text{H}_{15}\text{FO}_2$		$\text{CDCl}_3$ 220K	n.r.(C1) 156.6(C2) 106.4(C3) 130.0(C4) 107.9(C5) 158.0(C6) 209.4(CO) 44.9(C) 26.3(CH <sub>3</sub> ) n.r.(OCH <sub>3</sub> )	94Han

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{15}\text{NO}_2$		$\text{CDCl}_3$	133.1(C1) 138.1(C2/6) 119.0(C3/5) 138.2(C4) 208.3(COCH <sub>3</sub> ) 32.0(COCH <sub>3</sub> ) 169.8(NHCOCH <sub>3</sub> ) 24.0(NHCOCH <sub>3</sub> ) 19.0(2/6-CH <sub>3</sub> )	87Sal
$\text{C}_{12}\text{H}_{15}\text{NO}_5$		$\text{CDCl}_3$	103.8(C1) 159.5(C2/6) 90.9(C3/5) 163.7(C4) 127.5(CH) 148.7(C) 15.4(CH <sub>3</sub> ) 55.2(2/6-OCH <sub>3</sub> ) 55.6(4-OCH <sub>3</sub> )	81Bai1
$\text{C}_{12}\text{H}_{16}$		$\text{CCl}_4$ / $\text{CDCl}_3$	140.6(C1/2) 128.7(C3/6) 126.0(C4/5) 32.1( $\alpha\text{CH}_2$ ) 25.8( $\beta\text{CH}_2$ ) 32.1( $\gamma\text{CH}_2$ ) $^1J(\text{C3},\text{H3})=155$ $^1J(\text{C4},\text{H4})=160$	73Gün
$\text{C}_{12}\text{H}_{16}\text{O}$		Neat	134.3(C1) 128.6(C2/6) 125.5(C3/5) 156.0(C4) 196.2(CO) 26.7(COCH <sub>3</sub> ) 35.5(C) 31.4(CH <sub>3</sub> )	65Dha
$\text{C}_{12}\text{H}_{16}\text{O}$		$\text{CDCl}_3$	140.1(C1) 132.5(C2/6) 128.6(C3/5) 138.2(C4) 211.0(CO) 38.0(CH <sub>2</sub> CH <sub>3</sub> ) 7.7(CH <sub>2</sub> CH <sub>3</sub> ) 19.1(2/6-CH <sub>3</sub> ) 21.2(4-CH <sub>3</sub> )	75Lei
$\text{C}_{12}\text{H}_{16}\text{O}_2$		Neat	130.2(C1) 131.3(C2/6) 113.7(C3/5) 162.3(C4) 204.8(CO) 44.1(C) 29.0(CH <sub>3</sub> ) 55.6(OCH <sub>3</sub> )	65Dha1
$\text{C}_{12}\text{H}_{17}\text{NO}$		$\text{CDCl}_3$	134.3(C1) 133.2(C2/6) 128.0(C3/5) 137.5(C4) 171.2(CO) 37.0,33.8(NCH <sub>3</sub> ) 18.7(2/6-CH <sub>3</sub> ) 20.9(4-CH <sub>3</sub> )	75Lei
$\text{C}_{12}\text{H}_{17}\text{NO}_2$		$\text{CDCl}_3$	133.9(C1) 107.7(C2) 147.5(C3) 146.2(C4) 109.2(C5) 121.7(C6) 57.3(CH <sub>2</sub> N) 100.7(OCH <sub>2</sub> O) 46.5(CH <sub>2</sub> CH <sub>3</sub> ) 11.7(CH <sub>2</sub> CH <sub>3</sub> )	84Bar
$\text{C}_{12}\text{H}_{18}$		n.r.	132.2(C1-6) n.r.(CH <sub>3</sub> )	77Dal

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{18}$		$\text{CDCl}_3$	149.9(C1) 133.7(C2/6) 123.4(C3/5) 120.6(C4) 27.1(CH) 22.7(CH <sub>3</sub> )	72Jon
$\text{C}_{12}\text{H}_{18}\text{O}$		$\text{CDCl}_3$	151.2(C1) 136.4(C2) 124.6(C3) 127.2(C4) 128.8(C5) 124.9(C6) n.r.(C) n.r.(C-CH <sub>3</sub> ) n.r.(4-CH <sub>3</sub> ,6-CH <sub>3</sub> )	80New
$\text{C}_{12}\text{H}_{19}\text{N}$		$\text{CCl}_4$	139.0(C1) 125.5(C2/6) 112.8(C3/5) 148.5(C4) 33.6(C) 31.6(C-CH <sub>3</sub> ) n.r.(NCH <sub>3</sub> )	74Sch1
$\text{C}_{12}\text{H}_{19}\text{NO}$		$\text{CDCl}_3$	141.9(C1) 112.2 <sup>a</sup> (C2) 159.7(C3) 114.2 <sup>a</sup> (C4) 128.9(C5) 121.0(C6) 55.0(CH <sub>2</sub> N) 46.9(CH <sub>2</sub> CH <sub>3</sub> ) 11.8(CH <sub>2</sub> -CH <sub>3</sub> ) 57.6(OCH <sub>3</sub> )	84Bar
$\text{C}_{12}\text{H}_{19}\text{NO}_3$		$\text{CDCl}_3$	124.5(C1) 152.1(C2) 142.0(C3) 152.5(C4) 106.9(C5) 124.5(C6) 57.4(CH <sub>2</sub> ) 44.8(NCH <sub>3</sub> ) 55.5,60.4,60.1 (2-OCH <sub>3</sub> ,3-OCH <sub>3</sub> ,4-OCH <sub>3</sub> )	84Bar
$\text{C}_{12}\text{H}_{20}\text{N}_2$		$\text{CDCl}_3$	136.9(C1/2) 113.8(C3/6) 119.7(C4/5) 44.5(CH) 23.2(CH <sub>3</sub> )	86Bul
$\text{C}_{12}\text{H}_{22}\text{O}_2\text{Si}_2$		$\text{CCl}_4$	146.5(C1/2) 121.1 <sup>a</sup> (C3/6) 121.8 <sup>a</sup> (C4/5) 0.3(CH <sub>3</sub> )	77Sch
$\text{C}_{12}\text{H}_{22}\text{O}_2\text{Si}_2$		Neat	156.1(C1/3) 112.2(C2) 113.4(C4/6) 130.2(C5) 0.2(CH <sub>3</sub> )	77Sch
$\text{C}_{12}\text{H}_{22}\text{O}_2\text{Si}_2$		$\text{CCl}_4$	149.3(C1/4) 120.5(C2/3/5/6) 0.1(CH <sub>3</sub> )	77Sch
$\text{C}_{12}\text{H}_{22}\text{Si}_2$		Neat	145.7(C1/2) 135.4(C3/6) 128.0(C4/5) 2.0(SiCH <sub>3</sub> )	76Sch

Gross formula	Structure	Solvent	$\delta^{13}\text{C}$ [ppm] / $J$ [Hz]	Ref.
$\text{C}_{12}\text{H}_{22}\text{Si}_2$		Neat	139.1(C1/3) 138.4(C2) 134.2(C4/6) 127.5(C5) -0.7(SiCH <sub>3</sub> )	76Sch
$\text{C}_{12}\text{H}_{22}\text{Si}_2$		$\text{CCl}_4$	140.2(C1/4) 132.3(C2/3/5/6) -1.2(SiCH <sub>3</sub> )	74Sch1