

Table Of NMR Nucleus sorted by Mass (page 1/2)

In green : NMR Nuclei nuclei observable with the PAC Solid State Spectrometers								
Isotope	Name	Spin	Frequency @ 7,05T	Frequency @ 9,4 T	Frequency @ 14,1T	Natural Abund. %	Receptivity (rel, to 13C)	Reference Sample
1 H	Hydrogen	1/2	300	400	600	99,989	5,87E+03	Me4Si
2 H	Deuterium	1	46,052	61,402	92,104	0,012	6,53E-03	(CD3)4Si
3 He	Helium	1/2	228,538	304,718	457,077	0,000	3,56E-03	He
6 Li	Lithium	1	44,148	58,864	88,297	7,590	3,79E+00	LiCl
7 Li	Lithium	3/2	116,591	155,455	233,183	92,410	1,59E+03	LiCl
9 Be	Beryllium	3/2	42,155	56,207	84,311	100,000	8,18E+01	BeSO4
10 B	Boron	3	32,231	42,975	64,462	19,900	2,32E+01	BF3.Et2O
11 B	Boron	3/2	96,252	128,336	192,504	80,100	7,76E+02	BF3.Et2O
13 C	Carbon	1/2	75,435	100,58	150,87	1,070	1,00E+00	Me4Si
14 N	Nitrogen	1	21,679	28,905	43,358	99,632	5,88E+00	CH3NO2
15 N	Nitrogen	1/2	30,41	40,547	60,821	0,368	2,25E-02	MeNO2
17 O	Oxygen	5/2	40,669	54,226	81,339	0,038	6,53E-02	D2O
19 F	Fluorine	1/2	282,282	376,376	564,564	100,000	4,90E+03	CCl3F
21 Ne	Neon	3/2	23,683	31,577	47,366	0,270	3,91E-02	Ne
23 Na	Sodium	3/2	79,356	105,808	158,711	100,000	5,45E+02	NaCl
25 Mg	Magnesium	5/2	18,365	24,487	36,73	10,000	1,58E+00	MgCl2
27 Al	Aluminum	5/2	78,171	104,227	156,341	100,000	1,22E+03	Al(NO3)3
29 Si	Silicon	1/2	59,602	79,469	119,203	4,683	2,16E+00	Me4Si
31 P	Phosphorus	1/2	121,442	161,923	242,884	100,000	3,91E+02	H3PO4
33 S	Sulfur	3/2	23,028	30,704	46,056	0,760	1,01E-01	(NH4)2SO4
35 Cl	Chlorine	3/2	29,394	39,192	58,787	75,780	2,11E+01	NaCl
37 Cl	Chlorine	3/2	24,467	32,623	48,934	24,220	3,88E+00	NaCl
39 K	Potassium	3/2	13,999	18,665	27,998	93,258	2,80E+00	KCl
40 K	Potassium	4	17,406	23,208	34,812	0,012	3,60E-03	KCl
41 K	Potassium	3/2	7,684	10,245	15,368	6,730	3,34E-02	KCl
43 Ca	Calcium	7/2	20,19	26,92	40,38	0,135	5,11E-02	CaCl2
45 Sc	Scandium	7/2	72,875	97,167	145,75	100,000	1,78E+03	Sc(NO3)3
47 Ti	Titanium	5/2	16,913	22,55	33,825	7,440	9,18E-01	TiCl4
49 Ti	Titanium	7/2	16,917	22,556	33,834	5,410	1,21E+00	TiCl4
50 V	Vanadium	6	29,911	39,881	59,822	0,250	8,18E-01	VOCl3
51 V	Vanadium	7/2	78,909	105,212	157,818	99,750	2,25E+03	VOCl3
53 Cr	Chromium	3/2	16,957	22,61	33,915	9,501	5,08E-01	K2CrO4
55 Mn	Manganese	5/2	74,368	99,157	148,735	100,000	1,05E+03	KMnO4
57 Fe	Iron	1/2	9,713	12,951	19,427	2,119	4,25E-03	Fe(CO)5
59 Co	Cobalt	7/2	71,181	94,908	142,362	100,000	1,64E+03	K3[Co(CN)6]
61 Ni	Nickel	3/2	26,808	35,744	53,616	1,140	2,41E-01	Ni(CO)4
63 Cu	Copper	3/2	79,546	106,062	159,093	69,170	3,82E+02	[Cu(CH3CN)4][ClO4]
65 Cu	Copper	3/2	85,211	113,615	170,422	30,830	2,08E+02	[Cu(CH3CN)4][ClO4]
67 Zn	Zinc	5/2	18,77	25,027	37,541	4,100	6,94E-01	Zn(NO3)2
69 Ga	Gallium	3/2	72,004	96,005	144,008	60,108	2,46E+02	Ga(NO3)3
71 Ga	Gallium	3/2	91,49	121,987	182,98	39,892	3,36E+02	Ga(NO3)3
73 Ge	Germanium	9/2	10,465	13,953	20,93	7,730	6,41E-01	(CH3)4Ge
75 As	Arsenic	3/2	51,368	68,49	102,736	100,000	1,49E+02	NaAsF6
77 Se	Selenium	1/2	57,215	76,286	114,429	7,630	3,15E+00	Me2Se
79 Br	Bromine	3/2	75,162	100,216	150,324	50,690	2,37E+02	NaBr
81 Br	Bromine	3/2	81,02	108,026	162,039	49,310	2,89E+02	NaBr
83 Kr	Krypton	9/2	11,543	15,39	23,086	11,490	1,28E+00	Kr
85 Rb	Rubidium	5/2	28,965	38,62	57,93	72,170	4,51E+01	RbCl
87 Rb	Rubidium	3/2	98,161	130,882	196,323	27,830	2,90E+02	RbCl
87 Sr	Strontium	9/2	13,001	17,335	26,003	7,000	1,12E+00	SrCl2
89 Y	Yttrium	1/2	14,701	19,601	29,401	100,000	7,00E-01	Y(NO3)3
91 Zr	Zirconium	5/2	27,889	37,185	55,778	11,220	6,29E+00	Zr(C5H5)2Cl2
93 Nb	Niobium	9/2	73,429	97,905	146,857	100,000	2,87E+03	K[NbCl6]
95 Mo	Molybdenum	5/2	19,551	26,068	39,102	15,920	3,06E+00	Na2MoO4
97 Mo	Molybdenum	5/2	19,961	26,615	39,922	9,550	1,96E+00	Na2MoO4
99 Tc	Technetium	9/2	67,525	90,033	135,05	0,000	---	NH4TcO4
99 Ru	Ruthenium	5/2	13,815	18,421	27,631	12,760	8,47E-01	K4[Ru(CN)6]
101 Ru	Ruthenium	5/2	15,484	20,645	30,968	17,060	1,59E+00	K4[Ru(CN)6]
103 Rh	Rhodium	1/2	9,559	12,746	19,119	100,000	1,86E-01	Rh(acac)3
105 Pd	Palladium	5/2	13,728	18,304	27,457	22,330	1,49E+00	K2PdCl6
107 Ag	Silver	1/2	12,143	16,191	24,287	51,839	2,05E-01	AgNO3
109 Ag	Silver	1/2	13,961	18,614	27,921	48,161	2,90E-01	AgNO3
111 Cd	Cadmium	1/2	63,646	84,862	127,293	12,800	7,27E+00	Me2Cd
113 Cd	Cadmium	1/2	66,58	88,773	133,159	12,220	7,94E+00	Me2Cd
113 In	Indium	9/2	65,597	87,463	131,195	4,290	8,88E+01	In(NO3)3

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115 Sn	Tin	1/2	98,156	130,875	196,312	0,340	7,11E-01	Me4Sn
115 In	Indium	9/2	65,738	87,651	131,476	95,710	1,99E+03	In(NO3)3
117 Sn	Tin	1/2	106,897	142,529	213,794	7,680	2,08E+01	Me4Sn
119 Sn	Tin	1/2	111,872	149,163	223,744	8,590	2,66E+01	Me4Sn
121 Sb	Antimony	5/2	71,792	95,722	143,583	57,210	5,49E+02	KSbCl6
123 Te	Tellurium	1/2	78,509	104,679	157,018	0,890	9,61E-01	Me2Te
123 Sb	Antimony	7/2	38,878	51,837	77,755	42,790	1,17E+02	KSbCl6
125 Te	Tellurium	1/2	94,649	126,199	189,299	7,070	1,34E+01	Me2Te
127 I	Iodine	5/2	60,022	80,03	120,045	100,000	5,61E+02	KI
129 Xe	Xenon	1/2	83,431	111,241	166,861	26,440	3,36E+01	XeOF4
131 Xe	Xenon	3/2	24,732	32,976	49,464	21,180	3,51E+00	XeOF4
133 Cs	Cesium	7/2	39,348	52,465	78,697	100,000	2,85E+02	CsNO3
135 Ba	Barium	3/2	29,803	39,738	59,607	6,592	1,94E+00	BaCl2
137 Ba	Barium	3/2	33,339	44,452	66,678	11,232	4,63E+00	BaCl2
138 La	Lanthanum	5	39,583	52,777	79,166	0,090	4,98E-01	LaCl3
139 La	Lanthanum	7/2	42,377	56,503	84,754	99,910	3,56E+02	LaCl3
141 Pr	Praseodymium	5/2	91,86	122,48	183,72	100,000	---	
143 Nd	Neodymium	7/2	16,35	21,8	32,7	12,200	---	
145 Nd	Neodymium	7/2	10,08	13,44	20,16	8,300	---	
147 Sm	Samarium	7/2	12,51	16,68	25,02	14,990	---	
149 Sm	Samarium	7/2	10,32	13,76	20,64	13,820	---	
151 Eu	Europium	5/2	74,58	99,44	149,16	47,810	---	
153 Eu	Europium	5/2	32,94	43,92	65,88	52,190	---	
155 Gd	Gadolinium	3/2	9,21	12,28	18,42	14,800	---	
157 Gd	Gadolinium	3/2	12,09	16,12	24,18	15,650	---	
159 Tb	Terbium	3/2	72,12	96,16	144,24	100,000	---	
161 Dy	Dysprosium	5/2	10,32	13,76	20,64	18,910	---	
163 Dy	Dysprosium	5/2	14,46	19,28	28,92	24,900	---	
165 Ho	Holmium	7/2	64,02	85,36	128,04	100,000	---	
167 Er	Erbium	7/2	8,64	11,52	17,28	22,930	---	
169 Tm	Thulium	1/2	24,87	33,16	49,74	100,000	---	
171 Yb	Ytterbium	1/2	52,498	69,997	104,996	14,280	---	
173 Yb	Ytterbium	5/2	14,463	19,284	28,926	16,130	---	
175 Lu	Lutetium	7/2	34,212	45,616	68,424	97,410	---	
176 Lu	Lutetium	7	24,393	32,524	48,786	2,590	---	
177 Hf	Hafnium	7/2	12,021	16,028	24,042	18,600	1,54E+00	
179 Hf	Hafnium	9/2	7,551	10,068	15,102	13,620	4,38E-01	
181 Ta	Tantalum	7/2	35,969	47,958	71,938	99,988	2,20E+02	KTaCl6
183 W	Tungsten	1/2	12,499	16,666	24,998	14,310	6,31E-02	Na2WO4
185 Re	Rhenium	5/2	67,574	90,098	135,148	37,400	3,05E+02	KReO4
187 Re	Rhenium	5/2	68,255	91,006	136,51	62,600	5,26E+02	KReO4
187 Os	Osmium	1/2	6,847	9,129	13,694	1,960	1,43E-03	OsO4
189 Os	Osmium	3/2	23,296	31,062	46,592	16,150	2,32E+00	OsO4
191 Ir	Iridium	3/2	5,154	6,872	10,308	37,300	6,41E-02	
193 Ir	Iridium	3/2	5,613	7,484	11,226	62,700	1,38E-01	
195 Pt	Platinum	1/2	64,49	85,987	128,981	33,832	2,07E+01	Na2PtCl6
197 Au	Gold	3/2	5,187	6,916	10,374	100,000	1,63E-01	
199 Hg	Mercury	1/2	53,732	71,643	107,465	16,870	5,89E+00	Me2Hgr
201 Hg	Mercury	3/2	19,835	26,446	39,669	13,180	1,16E+00	(CH3)2Hg
203 Tl	Thallium	1/2	171,37	228,493	342,739	29,524	3,40E+02	Tl(NO3)3
205 Tl	Thallium	1/2	173,052	230,735	346,103	70,476	8,36E+02	Tl(NO3)3
207 Pb	Lead	1/2	62,762	83,682	125,524	22,100	1,18E+01	Me4Pb
209 Bi	Bismuth	9/2	48,208	64,277	96,416	100,000	8,47E+02	Bi(NO3)2
235 U	Uranium	7/2	5,524	7,366	11,048	0,720	---	