

Table 18.8 from (1995TI07):  $^{18}\text{O}$  – General

Reference	Description
Shell model	
Review:	
<a href="#">1988BR1P</a>	Status of the nuclear shell model
Other articles:	
<a href="#">1987CH1J</a>	Nucl. struc. calcs. using mixed-config. shell model: effective & surface $\delta$ -interactions
<a href="#">1987LE1L</a>	Low-lying non-normal parity states of $^{18}\text{O}$ & $^{18}\text{F}$ calculated in shell model + tensor force
<a href="#">1987MU16</a>	Relativistic effects in the low-energy spectra of 1s0d-shell nuclei
<a href="#">1987SH1O</a>	Validity of M-3Y force equivalent G-matrix element for s-d shell nucl. struc. calcs.
<a href="#">1988BR11</a>	Semi-empirical effective interactions for the 1s-0d shell
<a href="#">1988FI01</a>	Effective interactions for sd-shell-model calculations
<a href="#">1988HI05</a>	Effect on Gamow-Teller strength of config. mixing and p-n correl. in e-e sd-shell nucl.
<a href="#">1989GU06</a>	Hartree-Fock & shell-model charge densities calc. for $^{16,18}\text{O}$ , $^{32,34}\text{S}$ , $^{40,48}\text{Ca}$
<a href="#">1989HJ03</a>	Effective interactions through 3rd order for $A = 18$ nuclei with the Paris potential
<a href="#">1989OR02</a>	Empirical isospin-nonconserving Hamiltonians for shell-model calculations
<a href="#">1990HJ01</a>	3rd order number-conserving sets & effective interactions calc. with Bonn-Jülich potential
<a href="#">1990HJ03</a>	Choice of single-particle potential & the convergence of the effective interaction
<a href="#">1990MI01</a>	Shell model states in the $^{18}\text{O}$ three-body wave function from Faddeev formalism
<a href="#">1990SK04</a>	Study of $A = 18$ nuclei and the effective interaction in the sd shell
<a href="#">1992FR01</a>	Nuclear charge radii systematics in the sd shell from muonic atom measurements
<a href="#">1992HJ01</a>	Folded-diagram effective interactions with the Bonn meson-exchange potential model
<a href="#">1992JI04</a>	Bonn potential used to evaluate energy spectra of some light sd-shell nuclei
<a href="#">1992OS01</a>	Spin-tensor analysis of realistic shell model interactions
<a href="#">1994VE04</a>	Exp. meas. & calc. of spectroscopic factors from one-proton stripping rxns. on sd-shell nucl.
Cluster models	
<a href="#">1988KU17</a>	Microscopic boson descrip. of p-n systems applied to electron scat. from $^{18}\text{O}$ , $^{20}\text{Ne}$
<a href="#">1989FU08</a>	Microscopic multichannel calc. of the molecular dipole degree of freedom in $^{18}\text{O}$
<a href="#">1989TR18</a>	2-nucleon and 4-nucleon clusters in light & heavy nuclei
<a href="#">1990OS03</a>	Cluster-stripping reactions in the heavy-ion collisions (includes $^{14}\text{C}(^6\text{Li}, d)^{18}\text{O}$ )

Table 18.8 from (1995TI07):  $^{18}\text{O}$  – General (continued)

Reference	Description
Special states	
Review:	
<a href="#">1988BR1P</a>	Status of the nuclear shell model
<a href="#">1989RA17</a>	Compilation of exp. data on nuclear moments for ground & excited states of nucl.
Other articles:	
<a href="#">1987BL18</a>	Gogny's effective inter. used to calc. gnd. & excited states of specific spin-isospin order
<a href="#">1987CH1J</a>	Nucl. struc. calcs. using mixed-config. shell model: effective & surface $\delta$ -interactions
<a href="#">1987LE1L</a>	Non-normal parity states of $^{18}\text{O}$ & $^{18}\text{F}$ calculated in shell model + tensor force
<a href="#">1987LI1F</a>	Double delta & surface delta interactions used to calc. low-lying spectra of $^{17-22}\text{O}$
<a href="#">1987MU16</a>	Relativistic effects in the low-energy spectra of 1s0d-shell nuclei
<a href="#">1987SH1O</a>	Validity of M-3Y force equivalent G-matrix element for s-d shell nucl. struc. calcs.
<a href="#">1987VA19</a>	Microscopic analysis of excitation of first $2^+$ state of $^{18}\text{O}$ on $^{64}\text{Ni}$
<a href="#">1988KU17</a>	Microscopic boson descrip. of p-n systems applied to electron scat. from $^{18}\text{O}$ & $^{20}\text{Ne}$
<a href="#">1989FU08</a>	Microscopic multichannel calculation of the molecular dipole degree of freedom in $^{18}\text{O}$
<a href="#">1989HJ03</a>	Effective interactions through 3rd order for $A = 18$ nuclei with the Paris potential
<a href="#">1989OR02</a>	Empirical isospin-nonconserving Hamiltonians for shell-model calculations
<a href="#">1990MI01</a>	Shell model states in the $^{18}\text{O}$ three-body wave function from Faddeev formation
<a href="#">1990SK04</a>	Study of $A = 18$ nuclei and the effective interaction in the sd shell
Electromagnetic	
Review:	
<a href="#">1989RA17</a>	Compilation of exp. data on nuclear moments for ground & excited states of nucl.
<a href="#">1993EN03</a>	Strengths of $\gamma$ -ray transitions in $A = 5 - 44$ nuclei
Other articles:	
<a href="#">1987CH1J</a>	Nucl. struc. calcs. using mixed-config. shell model: effective & surface $\delta$ -interactions
<a href="#">1989FU08</a>	Microscopic multichannel calc. of the molecular dipole degree of freedom in $^{18}\text{O}$
<a href="#">1989RA16</a>	Predxns. from systematics & tabulation of $B(E2; 0_1^+ \rightarrow 2_1^+)$ values for even-even nucl.
<a href="#">1989SP01</a>	Reduced electric-octupole transition probabilities, $B(E3; 0_1^+ \rightarrow 3_1^-)$ , for even-even nucl.
<a href="#">1990NO1A</a>	Calcs. of electric quadrupole excitations in relativistic nucleus-nucleus collisions
<a href="#">1993EG04</a>	Calc. of transition probs. with angular-momentum-projected wave functions & realistic forces

Table 18.8 from (1995TI07):  $^{18}\text{O}$  – General (continued)

Reference	Description
Astrophysics	
Reviews:	
1988HU1E	Chronrules: chemical, mineralogical & isotopic constraints on theories of their origin
1989GU1L	Chemical analyses of cool stars (includes isotopic abundance ratios)
1989WH1B	Abundance ratios as a function of metallicity
1990AR10	Nuclear reactions in astrophysics
1990TH1E	Summary of topics presented at Workshop on Primordial Nucleosynthesis
1993MA1M	Review of primordial nucleosynthesis beyond the standard big bang
Other articles:	
1987BE1H	$^{12}\text{C}/^{13}\text{C}$ & $^{16}\text{O}/^{18}\text{O}$ ratios in Venus' atmosphere from high-res. 10- $\mu\text{m}$ spectroscopy
1987FA1C	$^{16}\text{O}$ excess in hibonites discredits late supernova injection origin of isotopic anomalies
1987SO1E	Interstellar shock waves related to high $^{10}\text{Be}$ & $^{18}\text{O}$ concentrations in ice cores
1987WA1F	Abundances in red giant stars: C & O isotopes in carbon-rich molecular envelopes
1988BE1B	Past solar activity & geomagnetism info. from $^{10}\text{Be}$ & $^{18}\text{O}$ concentrations in ice cores
1988BU01	Stellar reaction rates of $\alpha$ capture on light $N \neq Z$ nuclei & astrophysical implications
1988CA26	Analytic expressions for thermonuclear reaction rates involving $Z \leq 14$ nucl.
1989JI1A	Nucleosynthesis inside thick accretion disks around massive black holes
1989ME1C	Isotope abundances of solar coronal material derived from solar energetic particle meas.
1990MA1Z	Nuclear reaction uncertainties in standard & non-standard cosmologies
1990ST1G	High spatial resolution isotopic CO & CS observations of M17 SW
1990TO1F	$\text{C}^{18}\text{O}$ in the Chameleon 1 dark cloud (a nearby site of low-mass star formation)
1991KO31	$^{17}\text{O}(n, \alpha)^{14}\text{C}$ cross section measured from 25 meV to approximately 1 MeV
1991SA1F	Extragalactic $^{18}\text{O}/^{17}\text{O}$ ratios imply high-mass stars preferred in starburst systems
1992GA11	Implications of the $^{14}\text{C}(\alpha, \gamma)^{18}\text{O}$ reaction for nonstandard big bang nucleosynthesis
1992GO14	Alpha capture on $^{14}\text{C}$ from $E_{\alpha} = 1.14$ to 2.33 MeV and its astrophysical implications
1993GA1G	Secondary radioactive beams used to measure cross sections of astrophysical importance
1994BE29	Neutron capture rates of light isotopes for inhomogeneous Big Bang nucleosynthesis

### Applications

Reviews:

- 1987SE1D Progress in the field of accelerator mass spectrometry (1977 – 1987)  
 1989KU1P Production and application of stable enriched isotopes in the USSR

Table 18.8 from (1995TI07):  $^{18}\text{O}$  – General (continued)

Reference	Description
Applications – continued	
Other articles:	
1987MC1A	O isotopes in refractory stratospheric dust particles: proof of extraterrestrial origin
1987ZU1A	Oxygen isotope effect in high-temperature oxide superconductors
1988FA1A	Extreme $^{18}\text{O}$ depletion in calcite & chert clasts from Elephant Moraine (in Antarctica)
1988FI1C	Assessment of $^{18}\text{O}$ enriched water as a marker of total body water (A)
1988HI1F	Design & uses of target systems used to produce positron emitters (A)
1988HI1G	The oxygen isotope effect in $\text{Ba}_{0.625}\text{K}_{0.375}\text{BiO}_3$ (a high-temp. superconducting oxide)
1988KH06	Threshold track detectors used to study interaction of $^{18}\text{O}$ ions w/ light & heavy targets
1988MI1B	O-isotope analyses & deep-sea temp. changes: implications for rates of oceanic mixing
1988NW1A	Measurement of oil reservoir rock dispersivity by nuclear reaction analysis (A)
1989GR1F	Brachiopod calcite record of oceanic C & O isotope shifts at Permian/Triassic transition
1989NW1A	Assessment of $^{18}\text{O}$ enriched water as a marker of total body water
1989TA1Y	Separation of N & O isotopes by liquid chromatography
1990CH1I	$^{18}\text{O}$ isotope studies on redistribution of O obtained in O ion implantation
1990CO1K	Determination of $^{18}\text{O}$ concentrations in microsamples of biological fluids
1990MI15	Determination of absolute oxygen coverage by nuclear reaction analysis
1990SA1J	O isotope evidence for a stronger winter monsoon current during the last glaciation

#### Complex reactions

1986MA13	Experimental search for nonfusion yield in heavy residues emitted from $^{11}\text{B} + ^{12}\text{C}$
1987BE1I	Search for a nucleon-participant multiplicity effect on anomalous fragment production
1987BU07	Projectile-like fragments from $^{20}\text{Ne} + ^{197}\text{Au}$ – counting simultaneously emitted neutrons
1987HE1H	Search for anomalously heavy isotopes of low $Z$ nuclei
1987VA19	Microscopic analysis of excitation of first $2^+$ state of $^{18}\text{O}$ on $^{64}\text{Ni}$
1988BE56	Light nuclei formation in reactions of B & Ne ions with Ta & Th at $E = 18 - 20$ MeV/A

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Reference	Description
Complex reactions – continued	
1988BL11	Systematics of cluster-radioactivity-decay constants as suggested by microscopic calcs.
1988KH06	Threshold track detectors used to study interaction of $^{18}\text{O}$ ions w/ light & heavy targets
1988PR1C	Target & projectile mass dependence of charge pickup reactions by $\approx \text{GeV}/N$ nuclei (A)
1988UT02	Extended Serber model applied to quasi-free stripping reactions
1989GE11	Complex fragments emitted in excited states
1989SA10	Total cross sections of reactions induced by neutron-rich light nuclei
1989TE02	Dissipative mechanisms in the 120 MeV $^{19}\text{F} + ^{64}\text{Ni}$ reaction
1989YO02	Quasi-elastic & deep inelastic transfer in $^{16}\text{O} + ^{197}\text{Au}$ for $E < 10 \text{ MeV}/u$
1990LE08	Statistical equilibrium in the $^{40}\text{Ar} + ^{12}\text{C}$ system at $E/A = 8 \text{ MeV}$
1990LI1J	$Z$ dependence of Coulomb dissociation cross sections in heavy ion reactions
Antimatter	
Reviews:	
1986KO1E	Search for $\bar{p}$ -atomic X-rays at LEAR
1987GR1I	Low energy antiproton physics in the early LEAR era
1987VO1B	Interaction and annihilation of antiprotons and nuclei
1987YA1E	Summary of scattering results at LEAR & unique features of the $(\bar{p}, \bar{n})$ reaction
Other articles:	
1987AD04	Microscopic analysis of antiproton-nucleus elastic scattering
1987GR20	Widths of $4f$ antiprotonic levels in the oxygen region
1987HA1J	Widths of $4f$ antiprotonic levels in the O region using realistic nucl. wavefunctions
1988LI1O	Optical model analysis of antiproton-nucleus elastic scattering (in Chinese)
1989CH13	Phenomenological model analysis of scattering of $\approx 180 \text{ MeV}$ antiprotons from nuclei
1989HE21	Microscopic analysis of antiproton elastic scattering on even-even nuclei
1989MA24	Microscopic analysis of antiproton-nucleus inelastic scattering at $600 \text{ MeV}/c$
1992TA08	Eikonal and Glauber calculations of scattering of antiprotons on $^{18}\text{O}$ at $180 \text{ MeV}$

Table 18.8 from (1995TI07):  $^{18}\text{O}$  – General (continued)

Reference	Description
Other topics	
Review:	
<a href="#">1988BA82</a>	Use of reactions involving pions & kaons in the study of heavy hypernuclei
<a href="#">1993PE19</a>	Overview of new experimental results in meson-nucleus interactions & future opportunities
Other articles:	
<a href="#">1987BL18</a>	Gogny's effective interaction used to calc. ground & excited states of light nuclei
<a href="#">1988HI05</a>	Effect on Gamow-Teller strength of config. mixing & p-n correl. in e-e sd-shell nucl.
<a href="#">1988KA39</a>	Coulomb effects in the 4-body model of simultaneous 2n transfer induced by heavy ions
<a href="#">1988TR02</a>	Interacting boson scheme for light nuclei
<a href="#">1989BA92</a>	Evaluation of hypernucleus production cross-sections in relativistic heavy-ion collisions
<a href="#">1989OR02</a>	Empirical isospin nonconserving Hamiltonians for shell-model calculations
<a href="#">1989TA32</a>	Schmidt diagrams & configuration mixing effects on hypernuclear magnetic moments
<a href="#">1990BR13</a>	Empir. p-n interactions: global trends, configuration sensitivity & $N = Z$ enhancements
<a href="#">1990HJ01</a>	3rd order number-conserving sets & effective interactions calc. with Bonn-Jülich potential
<a href="#">1990KA1F</a>	Theoretical aspects of nuclear parity violation
<a href="#">1990SK04</a>	Study of the $A = 18$ nuclei and the effective interaction in the sd shell
<a href="#">1994CI02</a>	Specific heat and shape transitions in light sd nuclei
<a href="#">1994LU01</a>	Deep pionic bound states in a nonlocal optical potential
Ground state properties	
Review:	
<a href="#">1989RA17</a>	Compilation of exp. data on nuclear moments for ground & excited states of nucl.
Other articles:	
<a href="#">1987BL18</a>	Gogny's effective inter. used to calc. gnd. & excited states of specific spin-isospin order
<a href="#">1988GU03</a>	Charge-density distribution of 1s-1p & 1d-2s shell nuclei & filling numbers of the states
<a href="#">1989CH1P</a>	1s-0d effective interxns. of isospin triplet & $^{18}\text{Ne}$ - $^{18}\text{O}$ Coulomb displacmt. energ. (in Chin.)
<a href="#">1989GU06</a>	Hartree-Fock & shell-model charge densities calc. for $^{16,18}\text{O}$ , $^{32,34}\text{S}$ , $^{40,48}\text{Ca}$
<a href="#">1989SA10</a>	Total cross sections of reactions induced by neutron-rich light nuclei
<a href="#">1989TR18</a>	2-nucleon & 4-nucleon clusters in nuclei

Table 18.8 from (1995TI07):  $^{18}\text{O}$  – General (continued)

Reference	Description
Ground state properties – continued	
<a href="#">1990GU10</a>	Charge densities of sp- and sd-shell nuclei & occupation numbers of 2s states
<a href="#">1990LO11</a>	Self-consistent calcs. of light neutron-rich nuclei using density-functional method
<a href="#">1992FR01</a>	Behavior of nuclear charge radii systematics in the sd shell from muonic atom meas.
<a href="#">1993PA14</a>	Relativistic mean field theory; calc. binding energy, rms radii, deformation parameters
<a href="#">1993PA19</a>	Continuation of <a href="#">1993PA14</a> : effects of pairing correlation

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(A) denotes that only an abstract is available for this reference.