

Coulomb excitation 2008Sc18

| Type | Author | History Citation | Literature Cutoff Date |
|-----------------|-----------------|-------------------|------------------------|
| Full Evaluation | R. B. Firestone | NDS 127, 1 (2015) | 15-Jan-2015 |

Beam= ^{21}Ne at 1.7 MeV/nucleon, target= $^{\text{nat}}\text{Ti}$.

E=1.7 MeV/nucleon beam provided by TRIUMF-ISAC facility. Scattered beam and target particles were detected by a segmented Si detector BAMBINO, γ -rays were detected by using two TIGRESS HPGe clover detectors. Measured γ -ray yields and angular distributions. Deduced B(E2) from g.s. to first excited state using known B(E2)(\downarrow)= 0.01522 38 for first 2^+ to g.s. excitation (983.5 γ) in ^{48}Ti as a reference. GOSIA analysis of Coulomb excitation yields.

 ^{21}Ne Levels

| E(level) | J^π | Comments |
|----------|---------|----------------------------|
| 0 | $3/2^+$ | |
| 350.7 | $5/2^+$ | B(E2) \uparrow =0.0131 9 |

 $\gamma(^{21}\text{Ne})$

| E_γ | $E_i(\text{level})$ | J_i^π | E_f | J_f^π | Mult. | δ | Comments |
|------------|---------------------|-----------|-------|-----------|-------|-----------|---|
| 350.7 | 350.7 | $5/2^+$ | 0 | $3/2^+$ | M1+E2 | 0.0767 27 | B(E2)(W.u.)=25.4 17; B(M1)(W.u.)=0.1274 25 δ : Deduced from B(E2) \uparrow and $T_{1/2}$ =7.13 ps 14. |

Coulomb excitation 2008Sc18Level Scheme