

## <sup>45</sup>Si

The neutron-rich isotope <sup>45</sup>Si was reported for the first time in 2024 by Yoshimoto et al. in “Discovery of Neutron-Rich Silicon Isotopes <sup>45,46</sup>Si” (2024Yo09). A <sup>70</sup>Zn beam was accelerated to 345 MeV/nucleon by the accelerator complex of the RI Beam Factory (RIBF) and bombarded a 10 mm thick Be target. Projectile fragments were separated with the large-acceptance two-stage separator BigRIPS and identified with the TOF– $\Delta E - B\rho$  method. “Six <sup>45</sup>Si candidates were clearly distinguished from the other isotopes.” This discovery had been included in an annual report in 2021 by Suzuki et al. (2021SuZZ).

[2021SuZZ](#) H. Suzuki, M. Yoshimoto, N. Fukuda, H. Takeda *et al.*, REPT-RIKEN **54**, p. 2 (2021).

[2024Yo09](#) M. Yoshimoto, H. Suzuki, N. Fukuda, H. Takeda *et al.*, Prog. Theor. Exp. Phys. **2024**, 101 (2024).

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