

## <sup>51</sup>Ar

Guillemaud-Mueller et al. announced the discovery of <sup>51</sup>Ar in the 1989 article “Observation of new neutron rich nuclei <sup>29</sup>F, <sup>35,36</sup>Mg, <sup>38,39</sup>Al, <sup>40,41</sup>Si, <sup>43,44</sup>P, <sup>45–47</sup>S, <sup>46–49</sup>Cl, and <sup>49–51</sup>Ar from the interaction of 55 MeV/u <sup>48</sup>Ca+Ta” (1989Gu03). A 55 MeV/u <sup>48</sup>Ca beam was fragmented on a tantalum target at GANIL and the projectile-like fragments were separated by the zero degree doubly achromatic LISE spectrometer. “[The figure] represents the two-dimensional plot (energy loss versus time-of-flight) obtained under these conditions after 40 h integration time with an average intensity of 150 enA. The new species <sup>35,36</sup>Mg, <sup>38,39</sup>Al, <sup>40,41</sup>Si, <sup>43,44</sup>P, <sup>45,46,47</sup>S, <sup>46,47,48,49</sup>Cl, and <sup>49,50,51</sup>Ar are clearly visible.”

Adapted from reference (2012Th10)

1989Gu03 D. Guillemaud-Mueller, Yu. E. Penionzhkevich, R. Anne, A. G. Artukh *et al.*, *Z. Phys. A* **332**, 189 (1989).

2012Th10 M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 933 (2012).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152”