

## <sup>59</sup>Sc

<sup>59</sup>Sc was observed by Tarasov et al. in 2009 and described in the publication “Evidence for a change in the nuclear mass surface with the discovery of the most neutron-rich nuclei with  $17 \leq Z \leq 25$ ” (2009Ta05). <sup>9</sup>Be targets were bombarded with 132 MeV/u <sup>76</sup>Ge ions accelerated by the Coupled Cyclotron Facility at the National Superconducting Cyclotron Laboratory at Michigan State University. <sup>59</sup>Sc was produced in projectile fragmentation reactions and identified with a two-stage separator consisting of the A1900 fragment separator and the S800 analysis beam line. “The observed fragments include fifteen new isotopes that are the most neutron-rich nuclides of the elements chlorine to manganese (<sup>50</sup>Cl, <sup>53</sup>Ar, <sup>55,56</sup>K, <sup>57,58</sup>Ca, <sup>59,60,61</sup>Sc, <sup>62,63</sup>Ti, <sup>65,66</sup>V, <sup>68</sup>Cr, <sup>70</sup>Mn).”

Adapted from reference (2011Me01)

2009Ta05 O. B. Tarasov, D. J. Morrissey, A. M. Amthor, T. Baumann *et al.*, Phys. Rev. Lett. **102**, 142501 (2009).

2011Me01 D. Meierfrankenfeld, A. Bury, and M. Thoennessen, At. Data Nucl. Data Tables **97**, 134 (2011).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”