

## <sup>50</sup>Co

The 1987 paper “Direct Observation of New Proton Rich Nuclei in the Region  $23 \leq Z \leq 29$  Using a 55 A·MeV <sup>58</sup>Ni Beam”, reported the first observation of <sup>50</sup>Co by Pougheon et al. ([1987Po04](#)). A 55 A·MeV <sup>58</sup>Ni was used to bombard a 50 mg/cm<sup>2</sup> nickel target at the Grand Accélérateur National d’Ions Lourds (GANIL) in Caen, France. The proton-rich fragmentation products were separated with the LISE spectrometer and identified by energy loss, time of flight, and magnetic rigidity measurements. “The following twelve isotopes were observed for the first time: <sup>56</sup>Cu, <sup>52</sup>Co ( $T_z = -1$ ); <sup>55</sup>Cu, <sup>51</sup>Co, <sup>47</sup>Mn, <sup>43</sup>V ( $T_z = 3/2$ ); <sup>52</sup>Ni, <sup>50</sup>Co, <sup>48</sup>Fe, <sup>46</sup>Mn, <sup>44</sup>Cr ( $T_z = -2$ ) and <sup>51</sup>Ni ( $T_z = -5/2$ ).” 36 events were observed for <sup>50</sup>Co.

Adapted from reference ([2010Sz02](#))

[1987Po04](#) F. Pougheon, J. C. Jacmart, E. Quiniou, R. Anne *et al.*, *Z. Phys. A* **327**, 17 (1987).

[2010Sz02](#) T. Szymanski and M. Thoennessen, *At. Data Nucl. Data Tables* **96**, 848 (2010).

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)”