

$^{243}\text{Am}(\text{n},\gamma)$:resonances **2014Me13**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 146, 387 (2017)	31-Aug-2017

2014Me13, 2014Me08: Neutrons with energy in the range between 0.7 eV and 2.5 keV from the n_TOF facility at CERN

bombarded a AmO_2 target. The target was deposited on Al backing and was encapsulated in Ti canning. Cross sections were measured using the total absorption calorimeter which consisted of 40 BaF_2 crystals. Normalization of the capture yield was performed with the SAMMY code by fitting the capture yield to previous transmission measurement of **1974Si29**. Deduced resonance parameters up to 400 eV using the Reich-Moore approximation. All resonances observed were *s*-wave. Above 43 eV resonance, the Γ_γ was fixed at 42 meV, and only the $g\Gamma_n$ has been provided by the authors in Table V.

2012Ai08: Cross section measurements at neutron energy between 0.3- 10 keV were performed using the SVZ-100 lead moderation time neutron spectrometer in Russia. *s*-wave resonance parameters between 0.3 and 20 eV for 17 resonances were analyzed and presented.

1976Be32: Transmission measurements with time of flight were performed for energies 0.4 to 35 eV at SM-2 reactor in Russia. Neutron resonance parameters were determined for the observed resonances.

1974Si29: Total neutron cross section was determined from transmission measurements in the neutron energy range of 0.5 to 1000 eV using the Oak Ridge Electron Linear Accelerator (ORELA). Neutron energies were measured by time of flight. Resonance parameters were determined for resonances up to 250 eV.

1959Co94: Total cross sections were measured for neutron energies below 15 eV using the Argonne's "fast chopper". Transmission vs. time of flight of the neutrons were determined and the resonance parameters were reported for resonances that were observed at 0.976, 1.353, 1.74, 3.42, 5.12, 6.54, 7.84, 10.3, 12.8, 13.1, and 15.3 eV.

 ^{244}Am Levels

Statistical and systematic uncertainties in meV (**2014Me13**) have been added in quadrature by the evaluator. The $g\Gamma_n$ systematic uncertainties for resonances below 43 eV are due to the background component constant in time and the sample inhomogeneities which are considered negligible for resonances above 43. However, $g\Gamma_n$ values for all these resonances have an additional 3% systematic uncertainty due to the normalization that has not been included (**2014Me13**). The normalization is the only negligible contribution to the systematic uncertainty for Γ_γ . The evaluator has included $\Gamma_\gamma = 42$ meV for resonances above 43 eV which was provided by the authors in the text (**2014Me13**).

E(level) [†]	Comments
S(n)-0.002	E(level): Subthreshold resonance considered as a fictitious level by evaluator. $g\Gamma_n=0.5735$, $\Gamma_\gamma=39$.
S(n)+0.00042	$g\Gamma_n=0.00042$, $\Gamma_\gamma=39$.
S(n)+0.00098	$g\Gamma_n=0.00643$ 9, $\Gamma_\gamma=34.4$ 12.
S(n)+0.00135	$g\Gamma_n=0.48579$ 2447, $\Gamma_\gamma=48.57$ 250.
S(n)+0.00174	$g\Gamma_n=0.11465$ 112, $\Gamma_\gamma=40.11$ 41.
S(n)+0.00313	$g\Gamma_n=0.00486$ 19, $\Gamma_\gamma=34.0$ 30.
S(n)+0.00342	$g\Gamma_n=0.1389$ 8, $\Gamma_\gamma=39.93$ 53.
S(n)+0.00384	$g\Gamma_n=0.00608$ 28, $\Gamma_\gamma=45.2$ 38.
S(n)+0.00511	$g\Gamma_n=0.1512$ 9, $\Gamma_\gamma=40.2$ 7.
S(n)+0.00654	$g\Gamma_n=0.4824$ 33, $\Gamma_\gamma=41.0$ 8.
S(n)+0.00705	$g\Gamma_n=0.0359$ 6, $\Gamma_\gamma=47.8$ 25.
S(n)+0.00784	$g\Gamma_n=0.6813$ 50, $\Gamma_\gamma=42.9$ 9.
S(n)+0.00837	$g\Gamma_n=0.00788$ 39, $\Gamma_\gamma=42$.
S(n)+0.00875	$g\Gamma_n=0.0630$ 9, $\Gamma_\gamma=45.5$ 22.
S(n)+0.00929	$g\Gamma_n=0.0745$ 10, $\Gamma_\gamma=40.3$ 21.
S(n)+0.01029	$g\Gamma_n=0.2384$ 16, $\Gamma_\gamma=53.5$ 13.
S(n)+0.01087	$g\Gamma_n=0.00769$ 49, $\Gamma_\gamma=42$.
S(n)+0.01125	$g\Gamma_n=0.1458$ 15, $\Gamma_\gamma=41.1$ 17.
S(n)+0.01166	$g\Gamma_n=0.0518$ 11, $\Gamma_\gamma=40.8$ 29.
S(n)+0.01210	$g\Gamma_n=0.0855$ 13, $\Gamma_\gamma=42.3$ 24.
S(n)+0.01285	$g\Gamma_n=1.189$ 9, $\Gamma_\gamma=43.5$ 10.

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$^{243}\text{Am}(n,\gamma)$:resonances 2014Me13 (continued) ^{244}Am Levels (continued)

E(level) [†]	Comments
S(n)+0.01312	$g\Gamma_n=0.713$ 4, $\Gamma_\gamma=46.1$ 19.
S(n)+0.01510	$g\Gamma_n=0.03001$ 117, $\Gamma_\gamma=42$.
S(n)+0.01537	$g\Gamma_n=0.6881$ 38, $\Gamma_\gamma=44.0$ 16.
S(n)+0.01618	$g\Gamma_n=0.2725$ 26, $\Gamma_\gamma=44.9$ 20.
S(n)+0.01654	$g\Gamma_n=0.0978$ 16, $\Gamma_\gamma=42$.
S(n)+0.01783	$g\Gamma_n=0.1115$ 18, $\Gamma_\gamma=42$.
S(n)+0.01812	$g\Gamma_n=0.0200$ 11, $\Gamma_\gamma=42$.
S(n)+0.01950	$g\Gamma_n=0.1089$ 20, $\Gamma_\gamma=42$.
S(n)+0.01987	$g\Gamma_n=0.0425$ 16, $\Gamma_\gamma=42$.
S(n)+0.02093	$g\Gamma_n=0.2356$ 40, $\Gamma_\gamma=42$.
S(n)+0.02107	$g\Gamma_n=0.5822$ 57, $\Gamma_\gamma=42.8$ 21.
S(n)+0.02184	$g\Gamma_n=0.0657$ 28, $\Gamma_\gamma=42$.
S(n)+0.02185	$g\Gamma_n=0.02369$ 224, $\Gamma_\gamma=42$.
S(n)+0.02258	$g\Gamma_n=0.3509$ 65, $\Gamma_\gamma=41.8$ 28.
S(n)+0.02270	$g\Gamma_n=0.5875$ 71, $\Gamma_\gamma=42.5$ 25.
S(n)+0.02440	$g\Gamma_n=0.4761$ 48, $\Gamma_\gamma=50.6$ 24.
S(n)+0.02537	$g\Gamma_n=0.0797$ 25, $\Gamma_\gamma=42$.
S(n)+0.02621	$g\Gamma_n=0.0257$ 17, $\Gamma_\gamma=42$.
S(n)+0.02670	$g\Gamma_n=0.8469$ 65, $\Gamma_\gamma=44.6$ 21.
S(n)+0.02728	$g\Gamma_n=0.2452$ 42, $\Gamma_\gamma=46.2$ 34.
S(n)+0.02867	$g\Gamma_n=0.5589$ 59, $\Gamma_\gamma=45.3$ 26.
S(n)+0.02923	$g\Gamma_n=0.3650$ 52, $\Gamma_\gamma=45.3$ 31.
S(n)+0.03006	$g\Gamma_n=0.2916$ 44, $\Gamma_\gamma=42$.
S(n)+0.03099	$g\Gamma_n=0.4023$ 57, $\Gamma_\gamma=42.6$ 32.
S(n)+0.03141	$g\Gamma_n=0.0937$ 34, $\Gamma_\gamma=42$.
S(n)+0.03234	$g\Gamma_n=0.0768$ 32, $\Gamma_\gamma=42$.
S(n)+0.03312	$g\Gamma_n=0.4816$ 66, $\Gamma_\gamma=51.5$ 33.
S(n)+0.03386	$g\Gamma_n=0.9399$ 84, $\Gamma_\gamma=40.6$ 27.
S(n)+0.03491	$g\Gamma_n=0.4928$ 65, $\Gamma_\gamma=42$.
S(n)+0.03658	$g\Gamma_n=0.4657$ 87, $\Gamma_\gamma=64$ 5.
S(n)+0.03694	$g\Gamma_n=1.1680$ 115, $\Gamma_\gamma=57$ 4.
S(n)+0.03750	$g\Gamma_n=0.0532$ 35, $\Gamma_\gamma=42$.
S(n)+0.03784	$g\Gamma_n=0.3786$ 73, $\Gamma_\gamma=54.8$ 42.
S(n)+0.03940	$g\Gamma_n=0.3007$ 62, $\Gamma_\gamma=42$.
S(n)+0.04044	$g\Gamma_n=0.0456$ 33, $\Gamma_\gamma=42$.
S(n)+0.04086	$g\Gamma_n=0.1369$ 54, $\Gamma_\gamma=42$.
S(n)+0.04117	$g\Gamma_n=0.4730$ 96, $\Gamma_\gamma=42$.
S(n)+0.04144	$g\Gamma_n=1.342$ 13, $\Gamma_\gamma=44.5$ 34.
S(n)+0.04285	$g\Gamma_n=1.493$ 14, $\Gamma_\gamma=43.5$ 32.
S(n)+0.04402	$g\Gamma_n=0.2311$ 64, $\Gamma_\gamma=42$.
S(n)+0.04524	$g\Gamma_n=0.5887$ 92, $\Gamma_\gamma=42$.
S(n)+0.04702	$g\Gamma_n=0.2125$ 67, $\Gamma_\gamma=42$.
S(n)+0.04842	$g\Gamma_n=0.2416$ 73, $\Gamma_\gamma=42$.
S(n)+0.04919	$g\Gamma_n=0.4093$ 88, $\Gamma_\gamma=42$.
S(n)+0.05011	$g\Gamma_n=0.058$ 6, $\Gamma_\gamma=42$.
S(n)+0.05114	$g\Gamma_n=0.507$ 10, $\Gamma_\gamma=42$.
S(n)+0.05203	$g\Gamma_n=0.039$ 6, $\Gamma_\gamma=42$.
S(n)+0.05292	$g\Gamma_n=1.043$ 14, $\Gamma_\gamma=42$.
S(n)+0.05358	$g\Gamma_n=0.035$ 7, $\Gamma_\gamma=42$.
S(n)+0.05387	$g\Gamma_n=0.325$ 10, $\Gamma_\gamma=42$.
S(n)+0.05439	$g\Gamma_n=0.871$ 15, $\Gamma_\gamma=42$.
S(n)+0.05462	$g\Gamma_n=0.153$ 11, $\Gamma_\gamma=42$.
S(n)+0.05574	$g\Gamma_n=0.912$ 14, $\Gamma_\gamma=42$.
S(n)+0.05719	$g\Gamma_n=0.051$ 7, $\Gamma_\gamma=42$.
S(n)+0.05857	$g\Gamma_n=0.200$ 10, $\Gamma_\gamma=42$.
S(n)+0.05895	$g\Gamma_n=0.447$ 12, $\Gamma_\gamma=42$.
S(n)+0.05980	$g\Gamma_n=0.444$ 12, $\Gamma_\gamma=42$.

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$^{243}\text{Am}(n,\gamma)$:resonances 2014Me13 (continued) ^{244}Am Levels (continued)

E(level) [†]	Comments
S(n)+0.06061	$g\Gamma_n=0.590$ 14, $\Gamma_\gamma=42.$
S(n)+0.06105	$g\Gamma_n=1.527$ 20, $\Gamma_\gamma=42.$
S(n)+0.06237	$g\Gamma_n=0.139$ 9, $\Gamma_\gamma=42.$
S(n)+0.06303	$g\Gamma_n=0.226$ 10, $\Gamma_\gamma=42.$
S(n)+0.06349	$g\Gamma_n=0.067$ 9, $\Gamma_\gamma=42.$
S(n)+0.06466	$g\Gamma_n=0.314$ 12, $\Gamma_\gamma=42.$
S(n)+0.06607	$g\Gamma_n=0.728$ 15, $\Gamma_\gamma=42.$
S(n)+0.06719	$g\Gamma_n=0.602$ 15, $\Gamma_\gamma=42.$
S(n)+0.06784	$g\Gamma_n=0.644$ 15, $\Gamma_\gamma=42.$
S(n)+0.06852	$g\Gamma_n=0.870$ 18, $\Gamma_\gamma=42.$
S(n)+0.06950	$g\Gamma_n=1.93$ 3, $\Gamma_\gamma=42.$
S(n)+0.07010	$g\Gamma_n=1.402$ 23, $\Gamma_\gamma=42.$
S(n)+0.07153	$g\Gamma_n=0.094$ 11, $\Gamma_\gamma=42.$
S(n)+0.07204	$g\Gamma_n=1.392$ 23, $\Gamma_\gamma=42.$
S(n)+0.07271	$g\Gamma_n=1.647$ 24, $\Gamma_\gamma=42.$
S(n)+0.07371	$g\Gamma_n=0.235$ 13, $\Gamma_\gamma=42.$
S(n)+0.07413	$g\Gamma_n=0.266$ 14, $\Gamma_\gamma=42.$
S(n)+0.07479	$g\Gamma_n=0.111$ 12, $\Gamma_\gamma=42.$
S(n)+0.07525	$g\Gamma_n=1.67$ 3, $\Gamma_\gamma=42.$
S(n)+0.07639	$g\Gamma_n=0.158$ 13, $\Gamma_\gamma=42.$
S(n)+0.07682	$g\Gamma_n=0.301$ 15, $\Gamma_\gamma=42.$
S(n)+0.07736	$g\Gamma_n=0.832$ 20, $\Gamma_\gamma=42.$
S(n)+0.07804	$g\Gamma_n=0.212$ 14, $\Gamma_\gamma=42.$
S(n)+0.07982 <i>I</i>	$g\Gamma_n=0.114$ 13, $\Gamma_\gamma=42.$
S(n)+0.08040	$g\Gamma_n=0.290$ 22, $\Gamma_\gamma=42.$
S(n)+0.08061	$g\Gamma_n=0.54$ 3, $\Gamma_\gamma=42.$
S(n)+0.08090	$g\Gamma_n=1.75$ 3, $\Gamma_\gamma=42.$
S(n)+0.08286	$g\Gamma_n=0.410$ 18, $\Gamma_\gamma=42.$
S(n)+0.08331	$g\Gamma_n=1.37$ 3, $\Gamma_\gamma=42.$
S(n)+0.08396	$g\Gamma_n=0.27$ 7, $\Gamma_\gamma=42.$
S(n)+0.08401	$g\Gamma_n=0.79$ 8, $\Gamma_\gamma=42.$
S(n)+0.08460	$g\Gamma_n=0.227$ 16, $\Gamma_\gamma=42.$
S(n)+0.08527	$g\Gamma_n=0.92$ 6, $\Gamma_\gamma=42.$
S(n)+0.08539	$g\Gamma_n=2.59$ 7, $\Gamma_\gamma=42.$
S(n)+0.08644	$g\Gamma_n=0.983$ 24, $\Gamma_\gamma=42.$
S(n)+0.08813	$g\Gamma_n=0.725$ 23, $\Gamma_\gamma=42.$
S(n)+0.08874	$g\Gamma_n=0.819$ 24, $\Gamma_\gamma=42.$
S(n)+0.09017	$g\Gamma_n=0.697$ 23, $\Gamma_\gamma=42.$
S(n)+0.09100	$g\Gamma_n=0.607$ 22, $\Gamma_\gamma=42.$
S(n)+0.09447	$g\Gamma_n=0.75$ 30, $\Gamma_\gamma=42.$
S(n)+0.09508	$g\Gamma_n=0.105$ 17, $\Gamma_\gamma=42.$
S(n)+0.09564	$g\Gamma_n=0.252$ 20, $\Gamma_\gamma=42.$
S(n)+0.09728	$g\Gamma_n=1.10$ 3, $\Gamma_\gamma=42.$
S(n)+0.09851	$g\Gamma_n=0.218$ 20, $\Gamma_\gamma=42.$
S(n)+0.09928	$g\Gamma_n=0.402$ 23, $\Gamma_\gamma=42.$
S(n)+0.10087	$g\Gamma_n=1.83$ 4, $\Gamma_\gamma=42.$
S(n)+0.10170	$g\Gamma_n=1.53$ 4, $\Gamma_\gamma=42.$
S(n)+0.10252	$g\Gamma_n=0.212$ 21, $\Gamma_\gamma=42.$
S(n)+0.10383	$g\Gamma_n=0.44$ 3, $\Gamma_\gamma=42.$
S(n)+0.10469	$g\Gamma_n=1.26$ 3, $\Gamma_\gamma=42.$
S(n)+0.10603	$g\Gamma_n=0.182$ 22, $\Gamma_\gamma=42.$
S(n)+0.10679	$g\Gamma_n=0.96$ 5, $\Gamma_\gamma=42.$
S(n)+0.10702	$g\Gamma_n=1.12$ 5, $\Gamma_\gamma=42.$
S(n)+0.10843	$g\Gamma_n=0.43$ 3, $\Gamma_\gamma=42.$
S(n)+0.10953	$g\Gamma_n=0.68$ 3, $\Gamma_\gamma=42.$
S(n)+0.11128	$g\Gamma_n=0.61$ 3, $\Gamma_\gamma=42.$
S(n)+0.11183	$g\Gamma_n=0.60$ 3, $\Gamma_\gamma=42.$

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$^{243}\text{Am}(\text{n},\gamma)\text{:resonances}$ **2014Me13 (continued)** ^{244}Am Levels (continued)

E(level) [†]	Comments
S(n)+0.11265	$g\Gamma_n=1.14$ 5, $\Gamma_\gamma=42.$
S(n)+0.11295	$g\Gamma_n=4.20$ 8, $\Gamma_\gamma=42.$
S(n)+0.11396	$g\Gamma_n=2.79$ 6, $\Gamma_\gamma=42.$
S(n)+0.11473	$g\Gamma_n=0.24$ 3, $\Gamma_\gamma=42.$
S(n)+0.11612	$g\Gamma_n=0.14$ 9, $\Gamma_\gamma=42.$
S(n)+0.11632	$g\Gamma_n=4.18$ 4, $\Gamma_\gamma=42.$
S(n)+0.11919	$g\Gamma_n=0.62$ 4, $\Gamma_\gamma=42.$
S(n)+0.11951	$g\Gamma_n=2.04$ 6, $\Gamma_\gamma=42.$
S(n)+0.12198	$g\Gamma_n=3.14$ 6, $\Gamma_\gamma=42.$
S(n)+0.12306	$g\Gamma_n=14.1$ 3, $\Gamma_\gamma=42.$
S(n)+0.12488	$g\Gamma_n=4.07$ 8, $\Gamma_\gamma=42.$
S(n)+0.12604	$g\Gamma_n=0.34$ 3, $\Gamma_\gamma=42.$
S(n)+0.12705	$g\Gamma_n=1.13$ 4, $\Gamma_\gamma=42.$
S(n)+0.12989	$g\Gamma_n=0.32$ 3, $\Gamma_\gamma=42.$
S(n)+0.13206	$g\Gamma_n=0.31$ 3, $\Gamma_\gamma=42.$
S(n)+0.13306	$g\Gamma_n=0.18$ 3, $\Gamma_\gamma=42.$
S(n)+0.13367	$g\Gamma_n=1.05$ 5, $\Gamma_\gamma=42.$
S(n)+0.13427	$g\Gamma_n=0.43$ 4, $\Gamma_\gamma=42.$
S(n)+0.13480	$g\Gamma_n=0.65$ 4, $\Gamma_\gamma=42.$
S(n)+0.13916	$g\Gamma_n=0.84$ 5, $\Gamma_\gamma=42.$
S(n)+0.13968	$g\Gamma_n=4.07$ 9, $\Gamma_\gamma=42.$
S(n)+0.14053	$g\Gamma_n=0.30$ 4, $\Gamma_\gamma=42.$
S(n)+0.14087	$g\Gamma_n=0.53$ 5, $\Gamma_\gamma=42.$
S(n)+0.14286	$g\Gamma_n=0.28$ 4, $\Gamma_\gamma=42.$
S(n)+0.14389	$g\Gamma_n=2.80$ 8, $\Gamma_\gamma=42.$
S(n)+0.14432	$g\Gamma_n=2.75$ 10, $\Gamma_\gamma=42.$
S(n)+0.14470	$g\Gamma_n=0.95$ 6, $\Gamma_\gamma=42.$
S(n)+0.14571	$g\Gamma_n=4.35$ 11, $\Gamma_\gamma=42.$
S(n)+0.14618	$g\Gamma_n=2.78$ 8, $\Gamma_\gamma=42.$
S(n)+0.14784	$g\Gamma_n=1.16$ 7, $\Gamma_\gamma=42.$
S(n)+0.14819	$g\Gamma_n=1.44$ 7, $\Gamma_\gamma=42.$
S(n)+0.14944	$g\Gamma_n=0.43$ 4, $\Gamma_\gamma=42.$
S(n)+0.15072	$g\Gamma_n=0.44$ 4, $\Gamma_\gamma=42.$
S(n)+0.15249	$g\Gamma_n=0.71$ 5, $\Gamma_\gamma=42.$
S(n)+0.15362	$g\Gamma_n=2.19$ 8, $\Gamma_\gamma=42.$
S(n)+0.15427	$g\Gamma_n=1.86$ 7, $\Gamma_\gamma=42.$
S(n)+0.15507	$g\Gamma_n=0.52$ 5, $\Gamma_\gamma=42.$
S(n)+0.15818	$g\Gamma_n=1.85$ 7, $\Gamma_\gamma=42.$
S(n)+0.15882	$g\Gamma_n=0.50$ 5, $\Gamma_\gamma=42.$
S(n)+0.16023	$g\Gamma_n=6.05$ 15, $\Gamma_\gamma=42.$
S(n)+0.16061	$g\Gamma_n=0.96$ 7, $\Gamma_\gamma=42.$
S(n)+0.16347	$g\Gamma_n=0.29$ 4, $\Gamma_\gamma=42.$
S(n)+0.16440	$g\Gamma_n=2.66$ 8, $\Gamma_\gamma=42.$
S(n)+0.16568	$g\Gamma_n=0.64$ 6, $\Gamma_\gamma=42.$
S(n)+0.16612	$g\Gamma_n=1.01$ 7, $\Gamma_\gamma=42.$
S(n)+0.16647	$g\Gamma_n=0.35$ 6, $\Gamma_\gamma=42.$
S(n)+0.16757	$g\Gamma_n=3.80$ 11, $\Gamma_\gamma=42.$
S(n)+0.16939	$g\Gamma_n=0.73$ 5, $\Gamma_\gamma=42.$
S(n)+0.17220	$g\Gamma_n=3.60$ 10, $\Gamma_\gamma=42.$
S(n)+0.17308	$g\Gamma_n=4.40$ 13, $\Gamma_\gamma=42.$
S(n)+0.17426	$g\Gamma_n=2.12$ 8, $\Gamma_\gamma=42.$
S(n)+0.17528	$g\Gamma_n=1.91$ 8, $\Gamma_\gamma=42.$
S(n)+0.17633	$g\Gamma_n=1.89$ 10, $\Gamma_\gamma=42.$
S(n)+0.17673	$g\Gamma_n=3.13$ 11, $\Gamma_\gamma=42.$
S(n)+0.17954	$g\Gamma_n=1.39$ 9, $\Gamma_\gamma=42.$
S(n)+0.17991	$g\Gamma_n=0.98$ 8, $\Gamma_\gamma=42.$
S(n)+0.18047	$g\Gamma_n=0.63$ 6, $\Gamma_\gamma=42.$

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$^{243}\text{Am}(\text{n},\gamma)\text{:resonances}$ **2014Me13 (continued)** ^{244}Am Levels (continued)

E(level) [†]	Comments
S(n)+0.18123	$g\Gamma_n=1.19$ 7, $\Gamma_\gamma=42.$
S(n)+0.18252	$g\Gamma_n=0.75$ 6, $\Gamma_\gamma=42.$
S(n)+0.18358	$g\Gamma_n=1.82$ 9, $\Gamma_\gamma=42.$
S(n)+0.18407	$g\Gamma_n=2.21$ 9, $\Gamma_\gamma=42.$
S(n)+0.18561	$g\Gamma_n=0.65$ 6, $\Gamma_\gamma=42.$
S(n)+0.18623	$g\Gamma_n=1.49$ 9, $\Gamma_\gamma=42.$
S(n)+0.18665	$g\Gamma_n=1.22$ 8, $\Gamma_\gamma=42.$
S(n)+0.18752	$g\Gamma_n=4.42$ 14, $\Gamma_\gamma=42.$
S(n)+0.18838	$g\Gamma_n=0.62$ 6, $\Gamma_\gamma=42.$
S(n)+0.18988	$g\Gamma_n=0.69$ 8, $\Gamma_\gamma=42.$
S(n)+0.19025	$g\Gamma_n=0.67$ 8, $\Gamma_\gamma=42.$
S(n)+0.19106	$g\Gamma_n=2.04$ 10, $\Gamma_\gamma=42.$
S(n)+0.19178	$g\Gamma_n=2.45$ 10, $\Gamma_\gamma=42.$
S(n)+0.19290	$g\Gamma_n=5.38$ 17, $\Gamma_\gamma=42.$
S(n)+0.19508	$g\Gamma_n=0.24$ 5, $\Gamma_\gamma=42.$
S(n)+0.19582	$g\Gamma_n=0.72$ 7, $\Gamma_\gamma=42.$
S(n)+0.19647	$g\Gamma_n=1.11$ 8, $\Gamma_\gamma=42.$
S(n)+0.19719	$g\Gamma_n=3.01$ 12, $\Gamma_\gamma=42.$
S(n)+0.19927	$g\Gamma_n=2.53$ 11, $\Gamma_\gamma=42.$
S(n)+0.20200	$g\Gamma_n=0.52$ 7, $\Gamma_\gamma=42.$
S(n)+0.20259	$g\Gamma_n=0.20$ 5, $\Gamma_\gamma=42.$
S(n)+0.20404	$g\Gamma_n=0.82$ 8, $\Gamma_\gamma=42.$
S(n)+0.20467	$g\Gamma_n=1.17$ 8, $\Gamma_\gamma=42.$
S(n)+0.20608	$g\Gamma_n=0.92$ 8, $\Gamma_\gamma=42.$
S(n)+0.20757	$g\Gamma_n=1.63$ 9, $\Gamma_\gamma=42.$
S(n)+0.20886	$g\Gamma_n=2.14$ 11, $\Gamma_\gamma=42.$
S(n)+0.21028	$g\Gamma_n=1.67$ 13, $\Gamma_\gamma=42.$
S(n)+0.21064	$g\Gamma_n=2.05$ 17, $\Gamma_\gamma=42.$
S(n)+0.21107	$g\Gamma_n=3.47$ 17, $\Gamma_\gamma=42.$
S(n)+0.21279	$g\Gamma_n=0.36$ 7, $\Gamma_\gamma=42.$
S(n)+0.21393	$g\Gamma_n=3.47$ 14, $\Gamma_\gamma=42.$
S(n)+0.21633	$g\Gamma_n=1.25$ 9, $\Gamma_\gamma=42.$
S(n)+0.21948	$g\Gamma_n=1.39$ 10, $\Gamma_\gamma=42.$
S(n)+0.22006	$g\Gamma_n=0.78$ 10, $\Gamma_\gamma=42.$
S(n)+0.22060	$g\Gamma_n=0.99$ 10, $\Gamma_\gamma=42.$
S(n)+0.22120	$g\Gamma_n=0.68$ 8, $\Gamma_\gamma=42.$
S(n)+0.22212	$g\Gamma_n=0.41$ 8, $\Gamma_\gamma=42.$
S(n)+0.22266	$g\Gamma_n=0.42$ 8, $\Gamma_\gamma=42.$
S(n)+0.22460	$g\Gamma_n=4.32$ 17, $\Gamma_\gamma=42.$
S(n)+0.22547	$g\Gamma_n=1.82$ 11, $\Gamma_\gamma=42.$
S(n)+0.22632	$g\Gamma_n=0.50$ 9, $\Gamma_\gamma=42.$
S(n)+0.22680	$g\Gamma_n=1.49$ 1, $\Gamma_\gamma=42.$
S(n)+0.22839	$g\Gamma_n=0.44$ 7, $\Gamma_\gamma=42.$
S(n)+0.23233	$g\Gamma_n=4.45$ 17, $\Gamma_\gamma=42.$
S(n)+0.23350	$g\Gamma_n=5.88$ 23, $\Gamma_\gamma=42.$
S(n)+0.23545	$g\Gamma_n=0.65$ 9, $\Gamma_\gamma=42.$
S(n)+0.23691	$g\Gamma_n=1.87$ 12, $\Gamma_\gamma=42.$
S(n)+0.23847	$g\Gamma_n=1.08$ 10, $\Gamma_\gamma=42.$
S(n)+0.23906	$g\Gamma_n=0.75$ 12, $\Gamma_\gamma=42.$
S(n)+0.23947	$g\Gamma_n=1.06$ 12, $\Gamma_\gamma=42.$
S(n)+0.24114	$g\Gamma_n=0.59$ 9, $\Gamma_\gamma=42.$
S(n)+0.24224	$g\Gamma_n=2.10$ 13, $\Gamma_\gamma=42.$
S(n)+0.24367	$g\Gamma_n=0.84$ 25, $\Gamma_\gamma=42.$
S(n)+0.24378	$g\Gamma_n=1.3$ 3, $\Gamma_\gamma=42.$
S(n)+0.24456	$g\Gamma_n=1.20$ 11, $\Gamma_\gamma=42.$
S(n)+0.24647	$g\Gamma_n=3.24$ 16, $\Gamma_\gamma=42.$
S(n)+0.24791	$g\Gamma_n=5.54$ 21, $\Gamma_\gamma=42.$

Continued on next page (footnotes at end of table)

$^{243}\text{Am}(\text{n},\gamma)\text{:resonances}$ **2014Me13 (continued)** ^{244}Am Levels (continued)

E(level) [†]	Comments
S(n)+0.24866	$g\Gamma_n=2.32$ 15, $\Gamma_\gamma=42.$
S(n)+0.25105	$g\Gamma_n=2.88$ 16, $\Gamma_\gamma=42.$
S(n)+0.25221	$g\Gamma_n=6.0$ 3, $\Gamma_\gamma=42.$
S(n)+0.25448	$g\Gamma_n=0.90$ 11, $\Gamma_\gamma=42.$
S(n)+0.25574	$g\Gamma_n=12.9$ 6, $\Gamma_\gamma=42.$
S(n)+0.25633	$g\Gamma_n=1.12$ 13, $\Gamma_\gamma=42.$
S(n)+0.25762	$g\Gamma_n=1.53$ 13, $\Gamma_\gamma=42.$
S(n)+0.25856	$g\Gamma_n=1.49$ 13, $\Gamma_\gamma=42.$
S(n)+0.25938	$g\Gamma_n=7.9$ 3, $\Gamma_\gamma=42.$
S(n)+0.26065	$g\Gamma_n=2.70$ 16, $\Gamma_\gamma=42.$
S(n)+0.26287	$g\Gamma_n=0.58$ 10, $\Gamma_\gamma=42.$
S(n)+0.26536	$g\Gamma_n=1.23$ 14, $\Gamma_\gamma=42.$
S(n)+0.26595	$g\Gamma_n=3.28$ 22, $\Gamma_\gamma=42.$
S(n)+0.26660	$g\Gamma_n=5.3$ 3, $\Gamma_\gamma=42.$
S(n)+0.26784	$g\Gamma_n=1.64$ 14, $\Gamma_\gamma=42.$
S(n)+0.27168	$g\Gamma_n=5.9$ 3, $\Gamma_\gamma=42.$
S(n)+0.27276	$g\Gamma_n=1.02$ 12, $\Gamma_\gamma=42.$
S(n)+0.27399	$g\Gamma_n=7.4$ 3, $\Gamma_\gamma=42.$
S(n)+0.27508	$g\Gamma_n=2.55$ 17, $\Gamma_\gamma=42.$
S(n)+0.27691	$g\Gamma_n=1.35$ 14, $\Gamma_\gamma=42.$
S(n)+0.27756	$g\Gamma_n=1.57$ 15, $\Gamma_\gamma=42.$
S(n)+0.27892	$g\Gamma_n=2.91$ 19, $\Gamma_\gamma=42.$
S(n)+0.28001	$g\Gamma_n=2.55$ 18, $\Gamma_\gamma=42.$
S(n)+0.28091	$g\Gamma_n=0.51$ 11, $\Gamma_\gamma=42.$
S(n)+0.28154	$g\Gamma_n=1.10$ 15, $\Gamma_\gamma=42.$
S(n)+0.28232	$g\Gamma_n=3.8$ 3, $\Gamma_\gamma=42.$
S(n)+0.28290	$g\Gamma_n=7.8$ 4, $\Gamma_\gamma=42.$
S(n)+0.28563	$g\Gamma_n=1.18$ 13, $\Gamma_\gamma=42.$
S(n)+0.28812	$g\Gamma_n=4.23$ 24, $\Gamma_\gamma=42.$
S(n)+0.28949	$g\Gamma_n=4.9$ 3, $\Gamma_\gamma=42.$
S(n)+0.29108	$g\Gamma_n=6.2$ 3, $\Gamma_\gamma=42.$
S(n)+0.29567	$g\Gamma_n=3.39$ 22, $\Gamma_\gamma=42.$
S(n)+0.29812	$g\Gamma_n=1.76$ 16, $\Gamma_\gamma=42.$
S(n)+0.29969	$g\Gamma_n=0.97$ 14, $\Gamma_\gamma=42.$
S(n)+0.30042	$g\Gamma_n=0.88$ 14, $\Gamma_\gamma=42.$
S(n)+0.30136	$g\Gamma_n=1.43$ 16, $\Gamma_\gamma=42.$
S(n)+0.30221	$g\Gamma_n=3.65$ 24, $\Gamma_\gamma=42.$
S(n)+0.30357	$g\Gamma_n=0.66$ 14, $\Gamma_\gamma=42.$
S(n)+0.30437	$g\Gamma_n=8.1$ 4, $\Gamma_\gamma=42.$
S(n)+0.30708	$g\Gamma_n=1.86$ 18, $\Gamma_\gamma=42.$
S(n)+0.30799	$g\Gamma_n=3.52$ 24, $\Gamma_\gamma=42.$
S(n)+0.31027	$g\Gamma_n=0.69$ 14, $\Gamma_\gamma=42.$
S(n)+0.31123	$g\Gamma_n=8.3$ 4, $\Gamma_\gamma=42.$
S(n)+0.31222	$g\Gamma_n=1.40$ 17, $\Gamma_\gamma=42.$
S(n)+0.31359	$g\Gamma_n=11.0$ 6, $\Gamma_\gamma=42.$
S(n)+0.31539	$g\Gamma_n=4.7$ 3, $\Gamma_\gamma=42.$
S(n)+0.31643	$g\Gamma_n=0.93$ 15, $\Gamma_\gamma=42.$
S(n)+0.31761	$g\Gamma_n=2.25$ 20, $\Gamma_\gamma=42.$
S(n)+0.31983	$g\Gamma_n=0.68$ 14, $\Gamma_\gamma=42.$
S(n)+0.32099	$g\Gamma_n=9.6$ 5, $\Gamma_\gamma=42.$
S(n)+0.32195	$g\Gamma_n=0.81$ 15, $\Gamma_\gamma=42.$
S(n)+0.32573	$g\Gamma_n=0.74$ 20, $\Gamma_\gamma=42.$
S(n)+0.32589	$g\Gamma_n=0.47$ 22, $\Gamma_\gamma=42.$
S(n)+0.32656	$g\Gamma_n=4.0$ 3, $\Gamma_\gamma=42.$
S(n)+0.32726	$g\Gamma_n=2.7$ 3, $\Gamma_\gamma=42.$
S(n)+0.32892	$g\Gamma_n=0.40$ 13, $\Gamma_\gamma=42.$
S(n)+0.32979	$g\Gamma_n=0.90$ 18, $\Gamma_\gamma=42.$

Continued on next page (footnotes at end of table)

$^{243}\text{Am}(\text{n},\gamma)$:resonances 2014Me13 (continued) ^{244}Am Levels (continued)

E(level) [†]	Comments
S(n)+0.33048	$g\Gamma_n=0.96$ 19, $\Gamma_\gamma=42$.
S(n)+0.33126	$g\Gamma_n=1.84$ 22, $\Gamma_\gamma=42$.
S(n)+0.33228	$g\Gamma_n=4.7$ 3, $\Gamma_\gamma=42$.
S(n)+0.33370	$g\Gamma_n=3.2$ 3, $\Gamma_\gamma=42$.
S(n)+0.33496	$g\Gamma_n=2.8$ 3, $\Gamma_\gamma=42$.
S(n)+0.33648	$g\Gamma_n=4.4$ 3, $\Gamma_\gamma=42$.
S(n)+0.33785	$g\Gamma_n=1.92$ 23, $\Gamma_\gamma=42$.
S(n)+0.33876	$g\Gamma_n=4.0$ 3, $\Gamma_\gamma=42$.
S(n)+0.34121	$g\Gamma_n=2.55$ 25, $\Gamma_\gamma=42$.
S(n)+0.34259	$g\Gamma_n=1.62$ 21, $\Gamma_\gamma=42$.
S(n)+0.34411	$g\Gamma_n=1.16$ 19, $\Gamma_\gamma=42$.
S(n)+0.34602	$g\Gamma_n=0.45$ 14, $\Gamma_\gamma=42$.
S(n)+0.34755	$g\Gamma_n=7.5$ 5, $\Gamma_\gamma=42$.
S(n)+0.34989	$g\Gamma_n=0.62$ 16, $\Gamma_\gamma=42$.
S(n)+0.35089	$g\Gamma_n=2.4$ 3, $\Gamma_\gamma=42$.
S(n)+0.35167	$g\Gamma_n=1.35$ 20, $\Gamma_\gamma=42$.
S(n)+0.35394	$g\Gamma_n=0.47$ 14, $\Gamma_\gamma=42$.
S(n)+0.35534	$g\Gamma_n=1.08$ 18, $\Gamma_\gamma=42$.
S(n)+0.35767	$g\Gamma_n=2.44$ 24, $\Gamma_\gamma=42$.
S(n)+0.36048	$g\Gamma_n=2.26$ 24, $\Gamma_\gamma=42$.
S(n)+0.36174	$g\Gamma_n=4.4$ 4, $\Gamma_\gamma=42$.
S(n)+0.36228	$g\Gamma_n=3.8$ 4, $\Gamma_\gamma=42$.
S(n)+0.36325	$g\Gamma_n=1.47$ 21, $\Gamma_\gamma=42$.
S(n)+0.36413	$g\Gamma_n=1.35$ 22, $\Gamma_\gamma=42$.
S(n)+0.36486	$g\Gamma_n=1.50$ 22, $\Gamma_\gamma=42$.
S(n)+0.36728	$g\Gamma_n=2.8$ 3, $\Gamma_\gamma=42$.
S(n)+0.36809	$g\Gamma_n=1.74$ 24, $\Gamma_\gamma=42$.
S(n)+0.36959	$g\Gamma_n=22.2$ 16, $\Gamma_\gamma=42$.
S(n)+0.37088	$g\Gamma_n=3.6$ 3, $\Gamma_\gamma=42$.
S(n)+0.37268	$g\Gamma_n=2.5$ 3, $\Gamma_\gamma=42$.
S(n)+0.37339	$g\Gamma_n=1.09$ 21, $\Gamma_\gamma=42$.
S(n)+0.37549	$g\Gamma_n=1.42$ 21, $\Gamma_\gamma=42$.
S(n)+0.37669	$g\Gamma_n=2.4$ 3, $\Gamma_\gamma=42$.
S(n)+0.37852	$g\Gamma_n=1.05$ 22, $\Gamma_\gamma=42$.
S(n)+0.37919	$g\Gamma_n=3.9$ 4, $\Gamma_\gamma=42$.
S(n)+0.38027	$g\Gamma_n=4.9$ 4, $\Gamma_\gamma=42$.
S(n)+0.38140	$g\Gamma_n=3.1$ 3, $\Gamma_\gamma=42$.
S(n)+0.38225	$g\Gamma_n=2.4$ 3, $\Gamma_\gamma=42$.
S(n)+0.38414	$g\Gamma_n=2.9$ 3, $\Gamma_\gamma=42$.
S(n)+0.38497	$g\Gamma_n=1.84$ 25, $\Gamma_\gamma=42$.
S(n)+0.38823	$g\Gamma_n=3.3$ 3, $\Gamma_\gamma=42$.
S(n)+0.38937	$g\Gamma_n=3.1$ 3, $\Gamma_\gamma=42$.
S(n)+0.39036	$g\Gamma_n=0.71$ 18, $\Gamma_\gamma=42$.
S(n)+0.39107	$g\Gamma_n=0.98$ 20, $\Gamma_\gamma=42$.
S(n)+0.39231	$g\Gamma_n=1.66$ 24, $\Gamma_\gamma=42$.
S(n)+0.39375	$g\Gamma_n=8.1$ 6, $\Gamma_\gamma=42$.
S(n)+0.39511	$g\Gamma_n=0.53$ 16, $\Gamma_\gamma=42$.
S(n)+0.39647	$g\Gamma_n=3.3$ 4, $\Gamma_\gamma=42$.
S(n)+0.39699	$g\Gamma_n=1.5$ 3, $\Gamma_\gamma=42$.
S(n)+0.39923	$g\Gamma_n=3.4$ 3, $\Gamma_\gamma=42$.

[†] S(n)(^{244}Am)+E(n), where S(n)=5367.2 keV 16 (2017Wa10), and E(n)=neutron resonance in c.m. system. Values of E(n) given here are in keV and in the lab system from 2014Me13. Conversion to c.m. system decreases energies from 0.00041 keV at the first resonance (0.00042 keV) to 0.39759 keV at the highest energy (0.39923 keV).