TABLE 1: IRDFF-II nuclear data contents and evaluation sources. (r) denotes renormalization. Major sources of data are K.I. Zolotarev evaluations and EAF-2010 [29], JENDL-4 [30], TENDL [25, 26], ENDF/B-VIII.0 [31], and JEFF-3.3 [32] libraries.

No.	Reaction	Reaction ID	MAT	Energy Interval	Evaluation source	Eval. Date	Consistency v2002 to v-1.05[1]	Consistency v-1.05 to IRDFF-II[2]
1	^{nat}Li(n,X)^{3}H	LiH3	300	0–60 MeV	IRDFF-II Li6H3,Li7H3	2019	–	–
2	^{nat}Li(n,X)^{4}He	LiHe4	300	0–60 MeV	IRDFF-II Li6He4,Li7He4	2019	–	–
3	^{6}Li(n,t)^{4}He	Li6t	325	0–1 MeV	IAEA STD 2017 [33]	2018	new	new
			325	1–2.75 MeV	ENDF/B-VIII.0	2018	new	new
			325	2.75–60 MeV	EAF-2010(r)	2010	new	new
4	^{6}Li(n,X)^{3}H	Li6H3	325	0–60 MeV	IRDFF-II Li6t	2019	–	–
5	^{6}Li(n,X)^{4}He	Li6He4	325	0–20 MeV	MT24–ENDF/B-VIII.0	2018	–	–
			325	20–60 MeV	EAF-2010(r) (n,2nα)	2010	–	–
			325	0–20 MeV	MT32–ENDF/B-VIII.0 (n,n')	2018	–	–
			325	20–60 MeV	EAF-2010(r) (n,nd)	2010	–	–
			325	0–60 MeV	IRDFF-II Li6t	2019	–	–
6	^{7}Li(n,X)^{4}He	Li7He4	328	0–60 MeV	MT24–ENDF/B-VIII.0	2018	–	–
			328	20–60 MeV	EAF-2010(r) (n,2nα)	2010	–	–
			328	0–20 MeV	MT25–ENDF/B-VIII.0	2018	–	–
			328	20–60 MeV	EAF-2010(r) (n,np)	2010	–	–
			328	0–20 MeV	MT33=ENDF/B-VIII.0 (n,n')	2018	–	–
			328	20–60 MeV	EAF-2010(r) (n,nα)	2010	–	–
			328	0–20 MeV	MT102–ENDF/B-VIII.0	2018	–	–
			325	20–60 MeV	EAF-2010(r) (n,γ)	2010	–	–
7	^{7}Li(n,X)^{3}H	Li7H3	328	0–20 MeV	MT33–ENDF/B-VIII.0 (n,n')	2018	–	–
			328	20–60 MeV	EAF-2010(r) (n,nα)	2010	–	–
8	^{nat}B(n,X)^{3}H	BH3	500	0–60 MeV	IRDFF-II B10H3,B11H3	2019	–	–
9	^{nat}B(n,X)^{4}He	BHe4	500	0–60 MeV	IRDFF-II B10He4,B11He4	2019	–	–
10	^{10}B(n,α)^{7}Li	B10a	525	0–1 MeV	MT107–IAEA STD 2017 [33]	2018	new	new
			525	1–60 MeV	EAF-2010(r) (n,α)	2010	new	new
11	^{10}B(n,X)^{4}He	B10He4	525	0–20 MeV	MT22–ENDF/B-VIII.0 (n,n')	2018	–	–
			525	20–60 MeV	EAF-2010(r) (n,α)	2010	–	–
			525	0–20 MeV	MT35–ENDF/B-VIII.0 (n,n')	2018	–	–
			525	20–60 MeV	EAF-2010(r) (n,d2α)	2010	–	–
			525	0–20 MeV	MT106–EAF-2010 (n,^{3}He)	2010	–	–
			525	0–60 MeV	IRDFF-II B10a	2019	–	–
12	^{10}B(n,X)^{3}H	B10H3	525	0–20 MeV	MT113–ENDF/B-VIII.0 MT700	2018	–	–
			525	20–60 MeV	EAF-2010(r) (n,t)	2010	–	–
			525	E_{th}-60 MeV	MT155–EAF-2010 (n,tα)	2010	–	–
13	^{11}B(n,X)^{3}H	B11H3	528	0–20 MeV	MT105–ENDF/B-VIII.0	2018	–	–
			528	20–60 MeV	EAF-2010(r) (n,t)	2010	–	–
			528	0–60 MeV	MT33–EAF-2010 (n,nt)	2010	–	–
14	^{11}B(n,X)^{4}He	B11He4	528	0–60 MeV	MT11–EAF-2010 (n,2nd)	2010	–	–
			528	0–20 MeV	MT22–ENDF/B-VIII.0(r) (n,nα)	2018	–	–
			528	20–60 MeV	EAF-2010(r) (n,nα)	2010	–	–
			528	0–60 MeV	MT24–EAF-2010	2010	–	–
			528	0–60 MeV	MT33–EAF-2010 (n,nt)	2010	–	–
			528	0–20 MeV	MT107–ENDF/B-VIII.0 (n,α)	2018	–	–
			528	20–60 MeV	EAF-2010(r) (n,α)	2010	–	–
			528	0–60 MeV	MT117–EAF-2010 (n,dα)	2010	–	–
15	^{19}F(n,2n)^{18}F	F192	925	E_{th}-30 MeV	RRDF-2002	2002	old	old
				30-60 MeV	TENDL-2010(r)	2010	–	old
16	^{23}Na(n,2n)^{22}Na	Na232	1125	E_{th}-60 MeV	INDC(NDS)-0705	2017	old	new
17	^{23}Na(n,γ)^{24}Na	Na23g	1125	0-20 MeV	INDC(NDS)-0705	2017	–	new
				20-60 MeV	TENDL-2010(r)	2012	–	new

[1] Column (v2002 to v-1.05) marks any change in IRDFF-v1.05 compared to IRDF-2002 as a reference up to 20 MeV.
[2] Column (v-1.05 to IRDFF-II) marks any change in IRDFF-II compared to IRDFF-v1.05 as a reference.
Consistency legend: new = new evaluation; old = unchanged; – = not present in reference.

TABLE 1: (continued). IRDFF-II nuclear data contents and evaluation sources. (r) denotes renormalization.

No.	Reaction	Reaction ID	MAT	Energy Interval	Evaluation source	Eval. Date	Consistency v2002 to v-1.05[1]	Consistency v-1.05 to IRDFF-II[2]
18	^{nat}Mg(n,X)^{24}Na	MgNa24	1200	Up to 60 MeV	IRDFF-II Mg24p	2019	–	–
				Minor channels	TENDL-2015(r)	2019	–	–
19	^{24}Mg(n,p)^{24}Na	Mg24p	1225	E_{th}-21 MeV	INDC(NDS)-0526	2008	new	old
				21-60 MeV	TENDL-2010(r)		–	old
20	^{27}Al(n,p)^{27}Mg	Al27p	1325	E_{th}-22 MeV	INDC(CCP)-0438	2004	new	old
				22-60 MeV	TENDL-2010(r)		–	old
21	^{27}Al(n,α)^{24}Na	Al27a	1325	E_{th}-30 MeV	INDC(NDS)-0546	2009	old	old
				30-60 MeV	TENDL-2010(r)		–	old
22	^{27}Al(n,X)^{24}Na	Al27Na24	1325	Up to 60 MeV	IRDFF-II Al27a	2019	–	–
				Minor channels	TENDL-2015		–	–
23	^{27}Al(n,2n)^{26g}Al	Al272g	1325	E_{th}-60 MeV	INDC(NDS)-0705	2017	–	–
24	^{28}Si(n,p)^{28}Al	Si28p	1425	E_{th}-21 MeV	INDC(NDS)-0668	2014	–	new
				21–60 MeV	TENDL-2015(r)		–	old
25	^{29}Si(n,X)^{28}Al	Si29Al28	1428	E_{th}-60 MeV	IRDFF-II Si29p	2019	–	–
				Minor channels	TENDL-2015(r)		–	–
26	^{nat}Si(n,X)^{28}Al	SiAl28	1400	E_{th}-60 MeV	IRDFF-II Si-28,29	2019	–	–
27	^{31}P(n,p)^{31}Si	P31p	1525	E_{th}-21 MeV	INDC(NDS)-0668	2014	new	old
				21–60 MeV	TENDL-2015(r)		–	old
28	^{nat}S(n,X)^{32}P	SP32	1600	E_{th}-60 MeV	IRDFF-II S32p	2019	–	–
29	^{32}S(n,p)^{32}P	S32p	1625	E_{th}-21 MeV	INDC(NDS)-0526	2008	new	old
					TENDL-2013(r)		–	old
30	^{45}Sc(n,γ)^{46}Sc	Sc45g	2125	E_{th}-21 MeV	IRDF-2002	1991	old	old
				21–60 MeV	TENDL-2010(r)		–	old
31	^{46}Ti(n,2n)^{45}Ti	Ti462	2225	E_{th}-20 MeV	INDC(CCP)-0360	1993	old	old
				20–60 MeV	TENDL-2010(r)		–	old
32	^{46}Ti(n,p)^{46}Sc	Ti46p	2225	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2010(r)		–	old
33	^{47}Ti(n,p)^{47}Sc	Ti47p	2228	E_{th}-20 MeV	RRDF-2002	2002	new	old
				20-60 MeV	TENDL-2011(r)		–	old
34	^{48}Ti(n,p)^{48}Sc	Ti48p	2231	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2010(r)		–	old
35	^{nat}Ti(n,X)^{45}Ti	TiTi45	2200	E_{th}-60 MeV	IRDFF-II Ti462	2019	–	–
				Minor channels	TENDL-2015		–	–
36	^{nat}Ti(n,X)^{46}Sc	TiSc46	2200	E_{th}-60 MeV	IRDFF-II Ti46p	2019	–	–
				Minor channels	TENDL-2015		–	–
37	^{nat}Ti(n,X)^{47}Sc	TiSc47	2200	E_{th}-60 MeV	IRDFF-II Ti47p	2019	–	–
				Minor channels	TENDL-2015		–	–
38	^{nat}Ti(n,X)^{48}Sc	TiSc48	2200	E_{th}-60 MeV	IRDFF-II Ti48p	2019	–	–
				Minor channels	TENDL-2015		–	–
39	^{51}V(n,α)^{48}Sc	V51a	2328	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2010(r)		–	old
40	^{51}V(n,X)^{48}Sc	V51Sc48	2328	E_{th}-60 MeV	IRDFF-II V51a	2019	–	–
				Minor channels	TENDL-2015		–	–
41	^{nat}Cr(n,X)^{51}Cr	CrCr51	2400	E_{th}-60 MeV	IRDFF-II	2019	–	–
				Minor channels	TENDL-2015		–	–
42	^{55}Mn(n,2n)^{54}Mn	Mn552	2525	E_{th}-60 MeV	K.I.Zolotarev	2019	new	new

[1] Column (v2002 to v-1.05) marks any change in IRDFF-v1.05 compared to IRDF-2002 as a reference up to 20 MeV.
[2] Column (v-1.05 to IRDFF-II) marks any change in IRDFF-II compared to IRDFF-v1.05 as a reference.
Consistency legend: new = new evaluation; old = unchanged; – = not present in reference.

TABLE 1: (continued). IRDFF-II nuclear data contents and evaluation sources. (r) denotes renormalization.

No.	Reaction	Reaction ID	MAT	Energy Interval	Evaluation source	Eval. Date	Consistency v2002 to v-1.05[1]	Consistency v-1.05 to IRDFF-II[2]
43	^{55}Mn(n,γ)^{56}Mn	Mn55g	2525	E_{th}-60 MeV	ENDF/B-VII.1 [34, 35]	2011	new	old
44	^{nat}Fe(n,X)^{51}Cr	FeCr51	2600	Up to 60 MeV	IRDFF-II Fe54a	2019	–	–
				Minor channels	TENDL-2015		–	–
45	^{nat}Fe(n,X)^{54}Mn	FeMn54	2600	Up to 60 MeV	IRDFF-II Fe54p	2019	–	–
				Minor channels	TENDL-2015		–	–
46	^{nat}Fe(n,X)^{56}Mn	FeMn56	2600	Up to 60 MeV	IRDFF-II Fe56p	2019	–	–
				Minor channels	TENDL-2015		–	–
47	^{nat}Fe(n,X)^{53}Fe	FeFe53	2600	Up to 60 MeV	IRDFF-II Fe542	2019	–	–
				Minor channels	TENDL-2015		–	–
48	^{54}Fe(n,2n)^{53}Fe	Fe542	2625	E_{th}-20 MeV	INDC(CCP)-0360	1993	old	old
				20-60 MeV	TENDL-2010(r)		–	old
49	^{54}Fe(n,p)^{54}Mn	Fe54p	2625	E_{th}-20 MeV	INDC(NDS)-0657	2013	new	old
				20-60 MeV	TENDL-2013(r)		–	old
50	^{54}Fe(n,α)^{51}Cr	Fe54a	2625	E_{th}-20 MeV	IRDFF-2002	2005	old	old
				20–60 MeV	TENDL-2013(r)		–	old
51	^{56}Fe(n,p)^{56}Mn	Fe56p	2631	E_{th}-20 MeV	INDC(CCP)-0438	2004	old	old
				20–60 MeV	TENDL-2011(r)		–	old
52	^{58}Fe(n,γ)^{59}Fe	Fe58g	2637	E_{th}-20 MeV	JEFF-3.1 [36]	2011	new	old
				20–60 MeV	TENDL-2011(r)		–	old
53	^{59}Co(n,2n)^{58}Co	Co592	2725	E_{th}-20 MeV	INDC(NDS)-0546	2009	new	old
				20-60 MeV	TENDL-2010(r)		–	old
54	^{59}Co(n,3n)^{57}Co	Co593	2725	E_{th}-20 MeV	INDC(NDS)-0584	2010	–	new
				20–60 MeV	TENDL-2010(r)		–	new
55	^{59}Co(n,γ)^{60}Co	Co59g	2725	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2010(r)		–	old
56	^{59}Co(n,p)^{59}Fe	Co59p	2725	E_{th}-20 MeV	INDC(NDS)-0546	2009	new	old
				20-60 MeV	TENDL-2010(r)		–	old
57	^{59}Co(n,α)^{56}Mn	Co59a	2725	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2010(r)		–	old
58	^{59}Co(n,X)^{56}Mn	Co59Mn56	2725	Up to 60 MeV	IRDFF-II Fe542	2019	–	–
				Minor channels	TENDL-2015		–	–
59	^{nat}Ni(n,X)^{57}Ni	NiNi57	2800	Up to 60 MeV	IRDFF-II Ni582	2019	–	–
				Minor channels	TENDL-2015		–	–
60	^{nat}Ni(n,X)^{58}Co	NiCo58	2800	Up to 60 MeV	IRDFF-II Ni58p	2019	–	–
				Minor channels	TENDL-2015		–	–
61	^{nat}Ni(n,X)^{60}Co	NiCo60	2800	Up to 60 MeV	IRDFF-II Ni60p	2019	–	–
				Minor channels	TENDL-2015		–	–
62	^{58}Ni(n,2n)^{57}Ni	Ni582	2825	E_{th}-20 MeV	INDC(NDS)-0657	2013	new	old
				20–60 MeV	TENDL-2013(r)		–	old
63	^{58}Ni(n,p)^{58}Co	Ni58p	2825	0–20 MeV	K.I.Zolotarev (RRDF-2002)	2002	old	old
				20–60 MeV	TENDL-2013(r)		–	old
64	^{60}Ni(n,p)^{60}Co	Ni60p	2831	E_{th}-21 MeV	INDC(NDS)-0526	2007	new	old
				21–60 MeV	TENDL-2011(r)		–	old
65	^{nat}Cu(n,X)^{60}Co	CuCo60	2900	Up to 60 MeV	IRDFF-II Cu63a	2019	–	–
				Minor channels	TENDL-2015		–	–
66	^{nat}Cu(n,X)^{62}Cu	CuCu62	2900	Up to 60 MeV	IRDFF-II Cu632	2019	–	–
				Minor channels	TENDL-2015		–	–
67	^{nat}Cu(n,X)^{64}Cu	CuCu64	2900	Up to 60 MeV	IRDFF-II Cu63g	2019	–	–

[1] Column (v2002 to v-1.05) marks any change in IRDFF-v1.05 compared to IRDF-2002 as a reference up to 20 MeV.
[2] Column (v-1.05 to IRDFF-II) marks any change in IRDFF-II compared to IRDFF-v1.05 as a reference.
Consistency legend: new = new evaluation; old = unchanged; – = not present in reference.

TABLE 1: (continued). IRDFF-II nuclear data contents and evaluation sources. (r) denotes renormalization.

No.	Reaction	Reaction ID	MAT	Energy Interval	Evaluation source	Eval. Date	Consistency v2002 to v-1.05[1]	Consistency v-1.05 to IRDFF-II[2]
				Minor channels	TENDL-2015		–	–
68	^{63}Cu(n,2n)^{62}Cu	Cu632	2925	E_{th}-20 MeV	INDC(NDS)-0526	2007	new	old
				20–60 MeV	TENDL-2011(r)		–	old
69	^{63}Cu(n,γ)^{64}Cu	Cu63g	2925	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2011(r)		–	old
70	^{63}Cu(n,α)^{60}Co	Cu63a	2925	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2011(r)		–	old
71	^{65}Cu(n,2n)^{64}Cu	Cu652	2931	E_{th}-20 MeV	INDC(NDS)-0526	2007	new	old
				20–60 MeV	TENDL-2011(r)		–	old
72	^{nat}Zn(n,X)^{64}Cu	ZnCu64	3000	Up to 60 MeV	IRDFF-II Zn64p	2019	–	new
				Minor channels	TENDL-2015		–	new
73	^{nat}Zn(n,X)^{67}Cu	ZnCu67	3000	Up to 60 MeV	IRDFF-II Zn67p	2019	–	new
				Minor channels	TENDL-2015		–	new
74	^{64}Zn(n,p)^{64}Cu	Zn64p	3025	0–20 MeV	INDC(NDS)-0526	2008	new	old
				20–60 MeV	TENDL-2011(r)		new	old
75	^{67}Zn(n,p)^{67}Cu	Zn67p	3034	E_{th}-20 MeV	INDC(NDS)-0526	2008	new	old
				20–60 MeV	TENDL-2011(r)		new	old
76	^{68}Zn(n,X)^{67}Cu	Zn68Cu67	3034	E_{th}-60 MeV	INDC(NDS)-0796	2018	–	new
77	^{75}As(n,2n)^{74}As	As752	3325	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2011(r)		–	old
78	^{89}Y(n,2n)^{88}Y	Y892	3925	E_{th}-40 MeV	INDC(NDS)-0584	2010	new	old
				40–60 MeV	TENDL-2010(r)		new	old
79	^{nat}Zr(n,X)^{89}Zr	ZrZr89	4000	Up to 60 MeV	IRDFF-II Zr902	2019	–	new
				Minor channels	TENDL-2015		–	new
80	^{90}Zr(n,2n)^{89}Zr	Zr902	4025	E_{th}-20 MeV	INDC(NDS)-0546	2009	new	old
				20–60 MeV	TENDL-2010(r)		new	old
81	^{93}Nb(n,2n)^{92m}Nb	Nb932m	4125	E_{th}-40 MeV	INDC(NDS)-0584	2010	new	old
				40–60 MeV	TENDL-2010(r)		new	old
82	^{93}Nb(n,n')^{93m}Nb	Nb93nm	4125	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2010(r)		–	old
83	^{93}Nb(n,γ)^{94}Nb	Nb93g	4125	E_{th}-20 MeV	INDC(NDS)-0657	2013	new	old
				20–60 MeV	TENDL-2013(r)		–	old
84	^{93}Nb(n,γ)^{94m}Nb	Nb93gm	4125	E_{th}-20 MeV	INDC(NDS)-0657	2013	new	old
				20–60 MeV	TENDL-2013(r)		–	old
85	^{nat}Mo(n,X)^{92m}Nb	MoNb92m	4200	Up to 60 MeV	IRDFF-II Zr902	2019	–	new
				Minor channels	TENDL-2015		–	new
86	^{92}Mo(n,p)^{92m}Nb	Mo92pm	4225	E_{th}-40 MeV	INDC(NDS)-0657	2013	new	old
				20–60 MeV	TENDL-2010(r)		–	old
87	^{103}Rh(n,n')^{103m}Rh	Rh103nm	4525	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2010(r)		–	old
88	^{109}Ag(n,γ)^{110m}Ag	Ag109gm	4731	0–60 MeV	JENDL-3.2	1994	–	old
				20–60 MeV	TENDL-2010(r)		–	old
89	^{nat}In(n,X)^{114m}In	InIn114m	4900	Up to 60 MeV	IRDFF-II In113gm	2019	–	new
				Minor channels	TENDL-2015		–	new
90	^{113}In(n,γ)^{114m}In	In113gm	4925	0–20 MeV	INDC(NDS)-0668	2015	–	old
				20–60 MeV	TENDL-2015(r)		–	old
91	^{113}In(n,n')^{113m}In	In113nm	4925	E_{th}-20 MeV	INDC(NDS)-0657	2013	new	old
				20–60 MeV	TENDL-2010(r)		–	old

[1] Column (v2002 to v-1.05) marks any change in IRDFF-v1.05 compared to IRDF-2002 as a reference up to 20 MeV.
[2] Column (v-1.05 to IRDFF-II) marks any change in IRDFF-II compared to IRDFF-v1.05 as a reference.
Consistency legend: new = new evaluation; old = unchanged; – = not present in reference.

TABLE 1: (continued). IRDFF-II nuclear data contents and evaluation sources. (r) denotes renormalization.

No.	Reaction	Reaction ID	MAT	Energy Interval	Evaluation source	Eval. Date	Consistency v2002 to v-1.05[1]	Consistency v-1.05 to IRDFF-II[2]
92	^{115}In(n,2n)^{114m}In	In1152m	4931	E_{th}-20 MeV	INDC(NDS)-0526	2008	new	old
				20–60 MeV	TENDL-2010(r)		new	old
93	^{115}In(n,n')^{115m}In	In115nm	4931	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2010(r)		–	old
94	^{115}In(n,γ)^{116m}In	In115gm	4931	0–20 MeV	INDC(NDS)-0657	2013	new	old
				20–60 MeV	TENDL-2010(r)		–	old
95	^{127}I(n,2n)^{126}I	I1272	5325	E_{th}-32 MeV	INDC(NDS)-0526	2008	new	old
				32–60 MeV	TENDL-2010(r)		new	old
96	^{139}La(n,γ)^{140}La	La139g	5728	0–20 MeV	INDC(CCP)-0431	2002	old	old
				20–60 MeV	TENDL-2010(r)		old	old
97	^{141}Pr(n,2n)^{140}Pr	Pr1412	5925	E_{th}-20 MeV	IRDF-2002	2005	old	old
				20–60 MeV	TENDL-2010(r)		–	old
98	^{169}Tm(n,2n)^{168}Tm	Tm1692	6925	E_{th}-40 MeV	INDC(NDS)-0584	2010	new	old
				40–60 MeV	TENDL-2013(r)		new	old
99	^{169}Tm(n,3n)^{167}Tm	Tm1693	6925	E_{th}-60 MeV	INDC(NDS)-0657	2013	new	old
100	^{181}Ta(n,γ)^{182}Ta	Ta181g	7328	0–20 MeV	JENDL-3.2	1994	old	old
				20–60 MeV	TENDL-2010(r)		–	old
101	^{186}W(n,γ)^{187}W	W186g	7443	0–60 MeV	ENDF/B-VII.1 [34, 37]	2009	new	old
102	^{197}Au(n,2n)^{196}Au	Au1972	7925	E_{th}-40 MeV	INDC(NDS)-0526	2008	new	old
				40–60 MeV	TENDL-2010(r)		new	old
103	^{197}Au(n,γ)^{198}Au	Au197g	7925	0–60 MeV	IAEA STD 2017 [33]	2018	new	new
104	^{199}Hg(n,n')^{199m}Hg	Hg199nm	8034	E_{th}-20 MeV	INDC(NDS)-0526	2008	new	old
				20–60 MeV	TENDL-2010(r)		new	old
105	^{204}Pb(n,n')^{204m}Pb	Pb204nm	8225	E_{th}-20 MeV	INDC(CCP)-0431	2002	new	old
				20–60 MeV	TENDL-2011(r)		new	old
106	^{209}Bi(n,2n)^{208}Bi	Bi2092	8325	E_{th}-400MeV	V.G.Pronyaev	2019	–	new
107	^{209}Bi(n,3n)^{207}Bi	Bi2093	8325	E_{th}-400MeV	V.G.Pronyaev	2019	–	new
108	^{209}Bi(n,4n)^{206}Bi	Bi2094	8325	E_{th}-400MeV	V.G.Pronyaev	2019	–	new
109	^{209}Bi(n,5n)^{205}Bi	Bi2095	8325	E_{th}-400MeV	V.G.Pronyaev	2019	–	new
110	^{209}Bi(n,6n)^{204}Bi	Bi2096	8325	E_{th}-400MeV	V.G.Pronyaev	2019	–	new
111	^{232}Th(n,f)	Th232f	9040	0–20 MeV	JENDL-4.0	2010	new	new
				20–60 MeV	IAEA CRP [35, 38]	2009	new	old
112	^{232}Th(n,γ)^{233}Th	Th232g	9040	0–60 MeV	IAEA CRP [35, 38, 39]	2009	new	old
113	^{235}U(n,f)	U235f	9228	0–60 MeV	ENDF/B-VIII.0,CIELO [40–42]	2018	new	new
114	^{238}U(n,2n)^{237}U	U2382	9237	E_{th}-30 MeV	ENDF/B-VIII.0,CIELO [40–42]	2018	new	new
				30–60 MeV	TENDL-2015(r)	2019	new	old
115	^{238}U(n,f)	U238f	9237	0–60 MeV	ENDF/B-VIII.0,CIELO [40–42]	2018	new	new
116	^{238}U(n,γ)^{239}U	U238g	9237	0–60 MeV	ENDF/B-VIII.0,CIELO [40–42]	2018	new	new
117	^{237}Np(n,f)	Np237f	9346	0–0.5 MeV	JEFF-3.3	2017	new	new
				0.5–20 MeV	IRDFF-v1.05	2012	old	new
				20–60 MeV	JENDL-4/HE	2011	new	new
					TENDL-2015(r) covariance	2019	new	new
118	^{239}Pu(n,f)	Pu239f	9437	0–60 MeV	ENDF/B-VIII.0,CIELO [40, 41]	2018	new	new
119	^{241}Am(n,f)	Am241f	9543	0–20 MeV	JENDL-3.2	1989	old	old
				20–60 MeV	JENDL-4/HE	2011	old	new
					TENDL-2015(r) covariance	2019	new	new
	Cross sections of cover materials: Both σ_{tot}, σ_{el} and σ_{abs} are tabulated							

[1] Column (v2002 to v-1.05) marks any change in IRDFF-v1.05 compared to IRDF-2002 as a reference up to 20 MeV.
[2] Column (v-1.05 to IRDFF-II) marks any change in IRDFF-II compared to IRDFF-v1.05 as a reference.
Consistency legend: new = new evaluation; old = unchanged; – = not present in reference.

TABLE 1: (continued). IRDFF-II nuclear data contents and evaluation sources. (r) denotes renormalization.

No.	Reaction	Reaction ID	MAT	Energy Interval	Evaluation source	Eval. Date	Consistency v2002 to v-1.05[1]	Consistency v-1.05 to IRDFF-II[2]
1	^{nat}B(n,tot)	Btot	500	0–20 MeV	ENDF/B-VIII.0	2018	old	new
				20–60 MeV	TENDL-2010(r)		new	
2	^{10}B(n,tot)	B10tot	525	0–20 MeV	ENDF/B-VIII.0	2018	old	new
				20–60 MeV	TENDL-2010(r)		new	
3	^{nat}Cd(n,tot)	Cdtot	4800	0–20 MeV	JEFF-3.3	2018	old	new
				20–60 MeV	TENDL-2010(r)		new	
4	^{nat}Gd(n,tot)	Gdtot	6400	0–20 MeV	ENDF/B-VII.1 [34]	2011	old	new
				20–60 MeV	TENDL-2010(r)		new	
	Damage cross sections							
1	^{nat}Si(n,1-MeV)	Si1MeV	1400	0–20 MeV	ASTM E722-14 [43]	2015	old	new
2	^{nat}Fe(n,X)dpa	FeNRTdpa-A	2600	0–20 MeV	ASTM E693-17 [44]	2017	old	new
3	^{nat}Fe(n,X)dpa	FeNRTdpa-E	2600	0–60 MeV	JEFF-3.3	2017	old	new
4	^{nat}Fe(n,X)dpa	FeNRTdpa-I	2600	0–20 MeV	IRDF-2002	2005	old	old
5	GaAs(n,1-MeV)	GaAs1MeV-A	—	0–20 MeV	ASTM E722-14 [43]	2015	old	new
	Decay data fission products (FP) from neutron-induced fission on ^{232}Th, ^{235,238}U, ^{237}Np, and ^{239}Pu							targets
1	(n,f)→^{95}Zr	FPZr95	—		JEFF-3.3, ENDF/B-VIII.0	2018	old	new
2	(n,f)→^{99}Mo	FPMo99	—		JEFF-3.3, ENDF/B-VIII.0	2018	old	new
3	(n,f)→^{103}Ru	FPRu103	—		JEFF-3.3, ENDF/B-VIII.0	2018	old	new
4	(n,f)→^{106}Ru→^{106}Rh	FPRu106	—		JEFF-3.3, ENDF/B-VIII.0	2018	old	new
5	(n,f)→^{137}Cs→^{137m}Ba	FPCs137	—		JEFF-3.3, ENDF/B-VIII.0	2018	old	new
6	(n,f)→^{140}Ba→^{140}La	FPBa140	—		JEFF-3.3, ENDF/B-VIII.0	2018	old	new
7	(n,f)→^{144}Ce	FPCe144	—		JEFF-3.3, ENDF/B-VIII.0	2018	old	new

[1] Column (v2002 to v-1.05) marks any change in IRDFF-v1.05 compared to IRDF-2002 as a reference up to 20 MeV.
[2] Column (v-1.05 to IRDFF-II) marks any change in IRDFF-II compared to IRDFF-v1.05 as a reference.
Consistency legend: new = new evaluation; old = unchanged; – = not present in reference.