

A novel purification method for high precision measurement of Ni isotopes by double spike MC-ICP-MS

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Supplementary Table 1. The results of repeated measurements for some geological reference materials

Sample name	Session	$\delta^{60}\text{Ni}$	2SD ^a	N ^b	Fe/Ni after purification	Mn/Ni after purification	Yield (%)
JP-1	1	0.17	0.06	3	< 0.01	< 0.01	93.6
	2	0.18	0.06	3	< 0.01	< 0.01	97.4
BHVO-2	1	0.02	0.02	3	< 0.01	< 0.01	99.8
	2	0.06	0.03	3	< 0.01	< 0.01	93.6
	3	0.03	0.05	3	< 0.01	< 0.01	95.8
	4	0.02	0.06	3	< 0.01	< 0.01	96.5
	5	0.04	0.01	3	< 0.01	< 0.01	92.6
	6	0.02	0.05	3	< 0.01	< 0.01	92.3
BCR-2	1	0.25	0.06 ^c	1	< 0.01	< 0.01	91.5
	2	0.18	0.06 ^c	1	< 0.01	< 0.01	93.2
	3	0.21	0.02	3	< 0.01	< 0.01	92.2
AGV-2	1	0.02	0.06 ^c	1	< 0.01	< 0.01	95.3
	2	0.03	0.02 ^c	2	< 0.01	< 0.01	101.5
GSP-2	1	0.01	0.06 ^c	1	< 0.01	< 0.01	96.8
	2	0.01	0.06	3	< 0.01	< 0.01	91.6
NOD-A-1	1	1.06	0.06	3	< 0.01	< 0.01	94.1
	2	1.00	0.05	3	< 0.01	< 0.01	92.3
NOD-P-1	1	0.30	0.06 ^c	1	< 0.01	< 0.01	94.5
	2	0.36	0.06 ^c	2	< 0.01	< 0.01	92.7
	3	0.36	0.06 ^c	1	< 0.01	< 0.01	92.2
	4	0.32	0.02	3	< 0.01	< 0.01	96.2
GSS-8	1	0.05	0.06 ^c	1	< 0.08	< 0.01	100.8
	2	0.02	0.06	3	< 0.01	< 0.01	95.6
HT-12.1 ^c	1	0.07	0.06 ^c	1	< 0.01	< 0.01	98.4
	2	0.11	0.06	3	< 0.01	< 0.01	100.8
HT-14.5 ^c	1	0.09	0.06 ^c	1	< 0.01	< 0.01	101.1
	2	0.09	0.06 ^c	2	< 0.01	< 0.01	97.1
HT-645 ^c	1	0.19	0.06 ^c	1	< 0.01	< 0.01	99.6
	2	0.14	0.06 ^c	2	< 0.01	< 0.01	96.6
GSD-7a	1	0.13	0.06 ^c	1	< 0.01	< 0.01	95.4
	2	0.17	0.06	3	< 0.01	< 0.01	93.2
GSS-9	1	0.17	0.06 ^c	1	< 0.01	< 0.01	98.2
	2	0.17	0.06 ^c	2	< 0.01	< 0.01	94.6
GSS-11	1	0.05	0.06 ^c	1	< 0.01	< 0.01	97.1
	2	0.03	0.06 ^c	1	< 0.01	< 0.01	94.3
	3	0.05	0.06 ^c	2	< 0.01	< 0.01	92.4
GSS-12	1	-0.01	0.06 ^c	1	< 0.01	< 0.01	99.6
	2	0.06	0.06 ^c	2	< 0.01	< 0.01	99.0

^a: 2SD is the abbreviation of 2 standard deviation; ^b: the times of repeated measurements for a same purified solution; ^c: the precision was represented by 0.06(2SD) as a long-term external because samples were measured independently two or one time.