

Electronic Supplementary Information (ESI)

**Jilin Zircon – A New Natural Reference Material
for Microbeam U-Pb Geochronology and Hf-O
Isotopic Analysis**

**Tao Luo,^a Qiuli Li,^b Xiaoxiao Ling,^b Yang Li,^b Chuan Yang,^c Hanlin Wang,^a
Xiaoping Xia,^d Shaobing Zhang,^e Lei Xu,^b Xiaoming Liu,^f Xiaodong Deng,^a
Zhaochu Hu,^{*,a}**

^a *State Key Laboratory of Geological Processes and Mineral Resources, China
University of Geosciences, Wuhan, 430074, PR China (*E-mail: zchu@vip.sina.com)*

^b *State Key Laboratory of Lithospheric Evolution, Institute of Geology and
Geophysics, Chinese Academy of Sciences, Beijing, 100029, China*

^c *NERC Isotope Geosciences Laboratory, British Geological Survey, Keyworth, NG12
5GG, UK*

^d *State Key Laboratory of Isotope Geochemistry, Guangzhou Institute of
Geochemistry, Chinese Academy of Sciences, Guangzhou 510640, China.*

^e *CAS Key Laboratory of Crust-Mantle Materials and Environments, School of Earth
and Space Sciences, University of Science and Technology of China, Hefei, 230026,
China*

^f *Key Laboratory of Continental Dynamics, Department of Geology, Northwest
University, Xi'an, 710069, China.*

*** Corresponding author: zchu@vip.sina.com**

Submitted to Journal of Analytical Atomic Spectrometry

Table captions

Table S1 Summary of U-Pb, Hf and O isotope compositions of commonly used zircon reference materials.

Table S2 Trace element results of the Jilin zircon.

Table S3 U-Pb isotopic data of Jilin zircon obtained with CA-ID-TIMS.

Table S4 SIMS U-Pb dating results for Jilin zircon.

Table S5 LA-ICP-MS U-Pb dating results for Jilin zircon.

Table S6 Hafnium isotopic composition of Jilin zircon.

Table S7 Oxygen isotopic data of Jilin zircon.