Supplementary materials for "Subduction-related subcontinental lithospheric mantle metasomatism and crustal thickening: origin for superchondritic Nb/Ta in mafic dykes"

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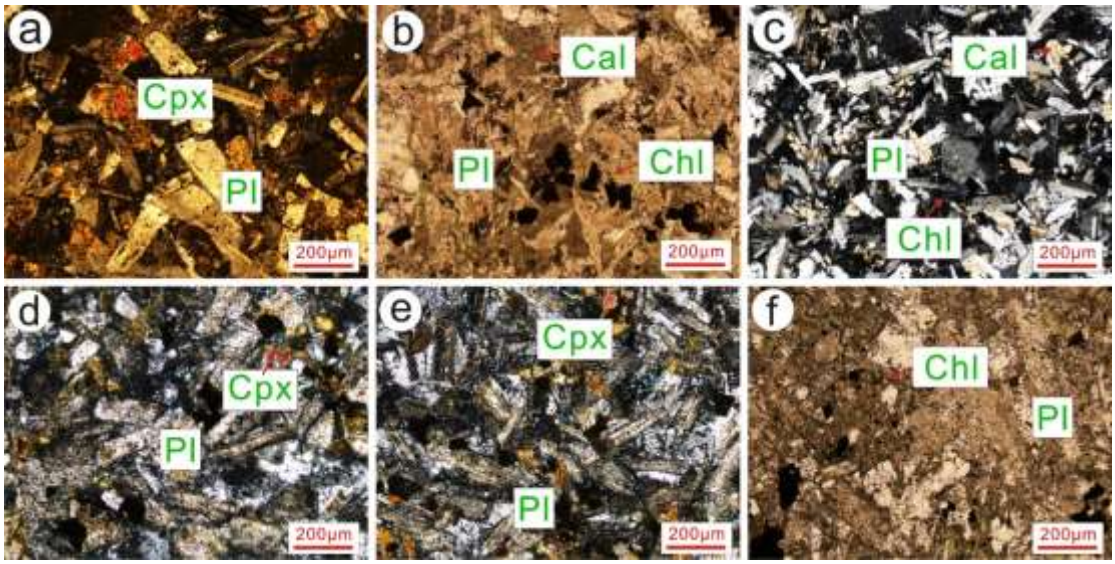
Supplementary Figure S1. Representative photomicrographs for mafic dykes in the eastern Jiangnan Orogen. Cpx, clinopyroxene; Pl, plagioclase; Chl, chlorite; Cal, calcite. (a) Photomicrograph of sample 12gys–1. (b) Thin section photomicrograph of sample 12gys–2 containing some calcite. (c) Photomicrograph of sample 14gys–1 with partly chloritization. (d) Photomicrograph of sample 14gys–2 showing anhedral clinopyroxene and altered euhedral plagioclase. (e) Photomicrograph of sample 14gys–4. (f) Photomicrograph of sample 14gys–9 showing heavy alteration of plagioclase.

Supplementary Figure S2. Mafic dykes from the eastern Jiangnan Orogen plotted in various geochemical diagrams. (a) TAS plot after Le Bas et al. (1986). (b) FeO_t/MgO versus SiO_2 diagram of Miyashiro (1974).

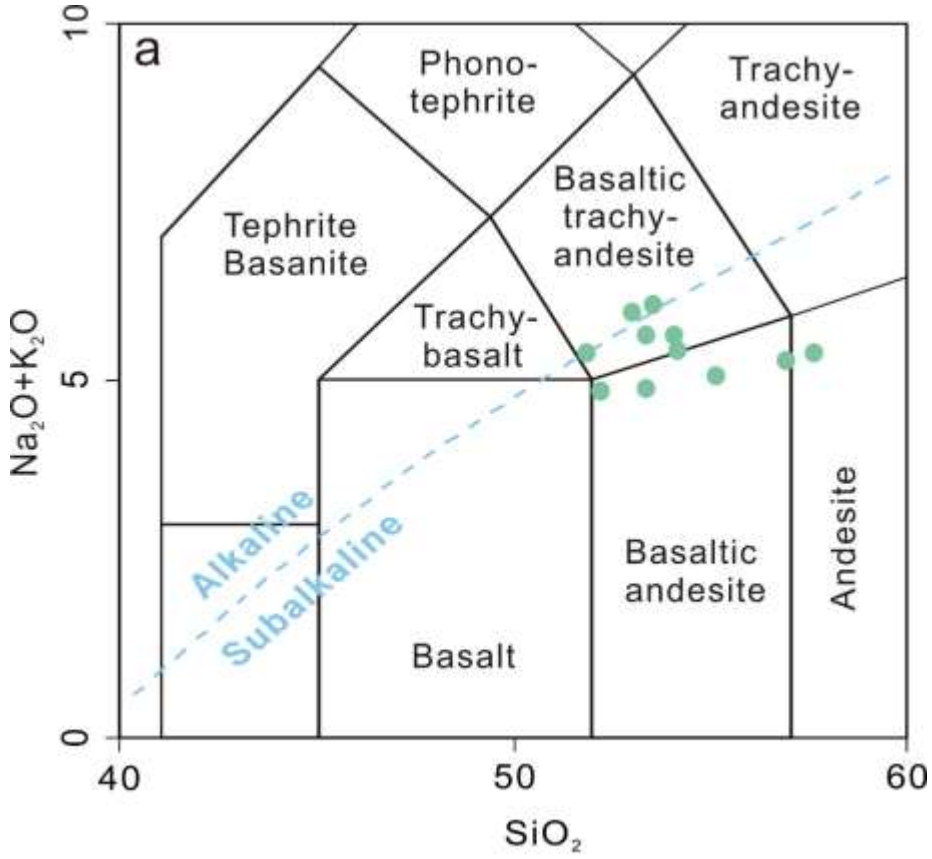
Supplementary Figure S3. Chondrite-normalized REE patterns and primitive-mantle-normalized incompatible trace element spider diagram for the mafic dykes in the eastern Jiangnan Orogen. Chondrite and primitive-mantle values are from McDonough and Sun (1995). Solid lines represent samples analyzed in this study, dotted-dashed lines represent average data for ocean-island basalt (Sun and McDonough, 1989) and continental-arc basalt (Kelemen et al., 2003).

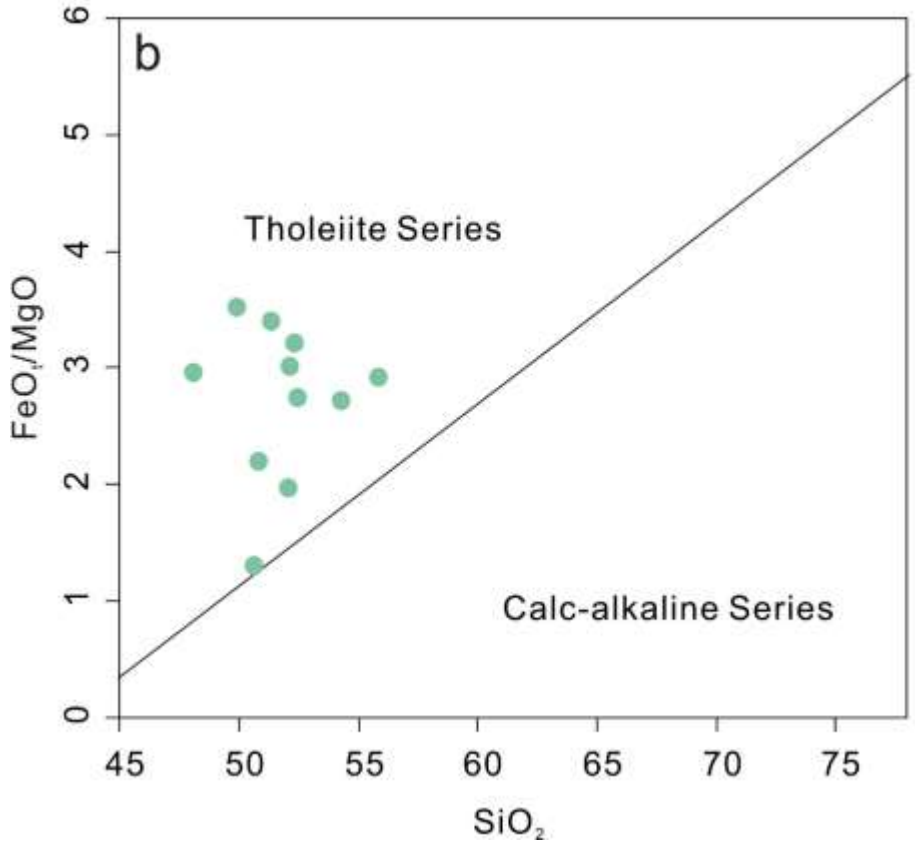
Supplementary Figure S4. LOI against Nb/Ta and La/Yb of mafic dykes in the eastern Jiangnan Orogen. No obvious correlation suggests little disturbance of Nb/Ta or La/Yb by alteration.

Supplementary figure S1

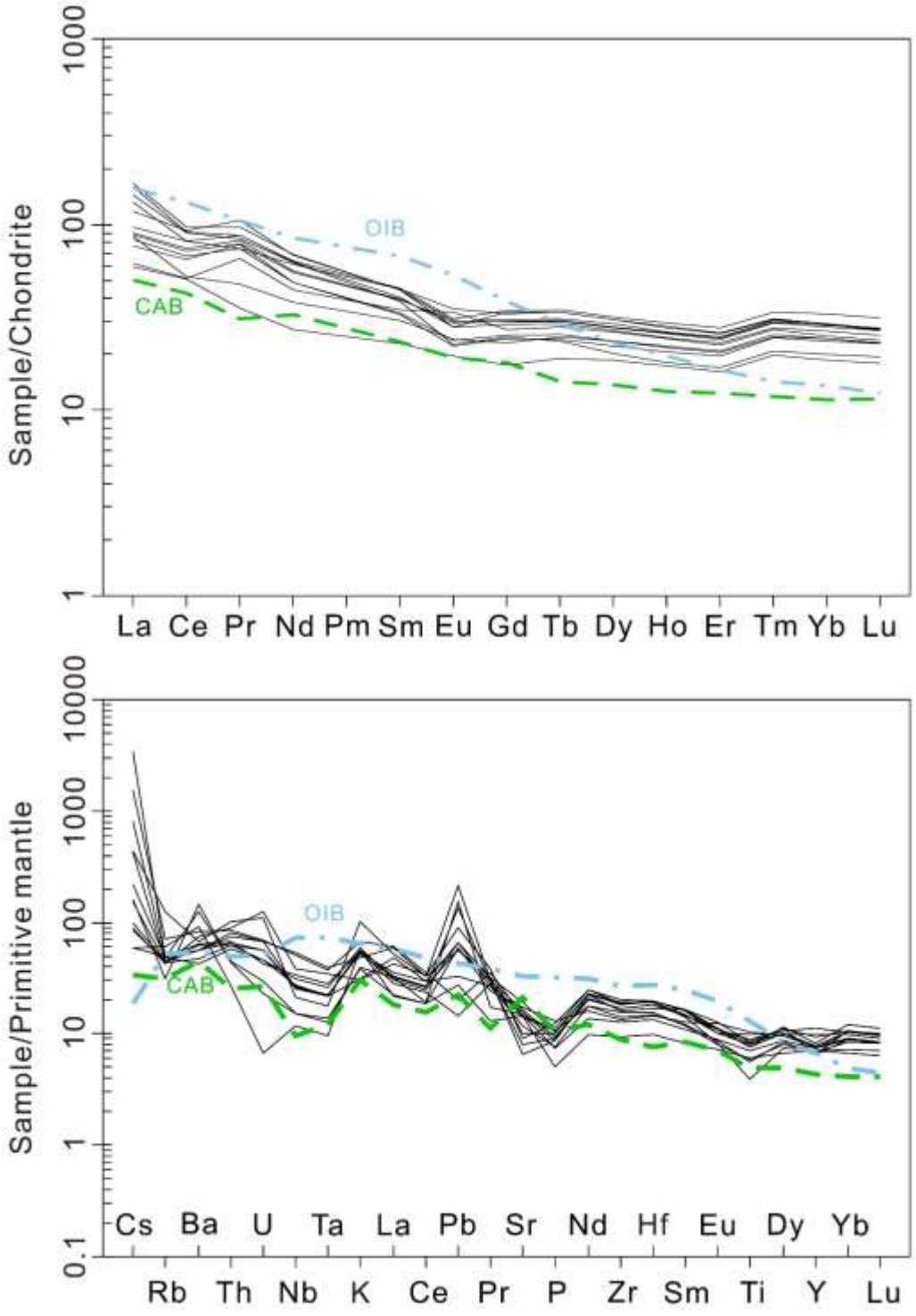


Supplementary figure S2





Supplementary figure S3



Supplementary figure S4