Supporting Information

Quantitative elemental analysis of human leukemia K562 single cells by inductively coupled plasma mass spectrometry in combination with a microdroplet generator

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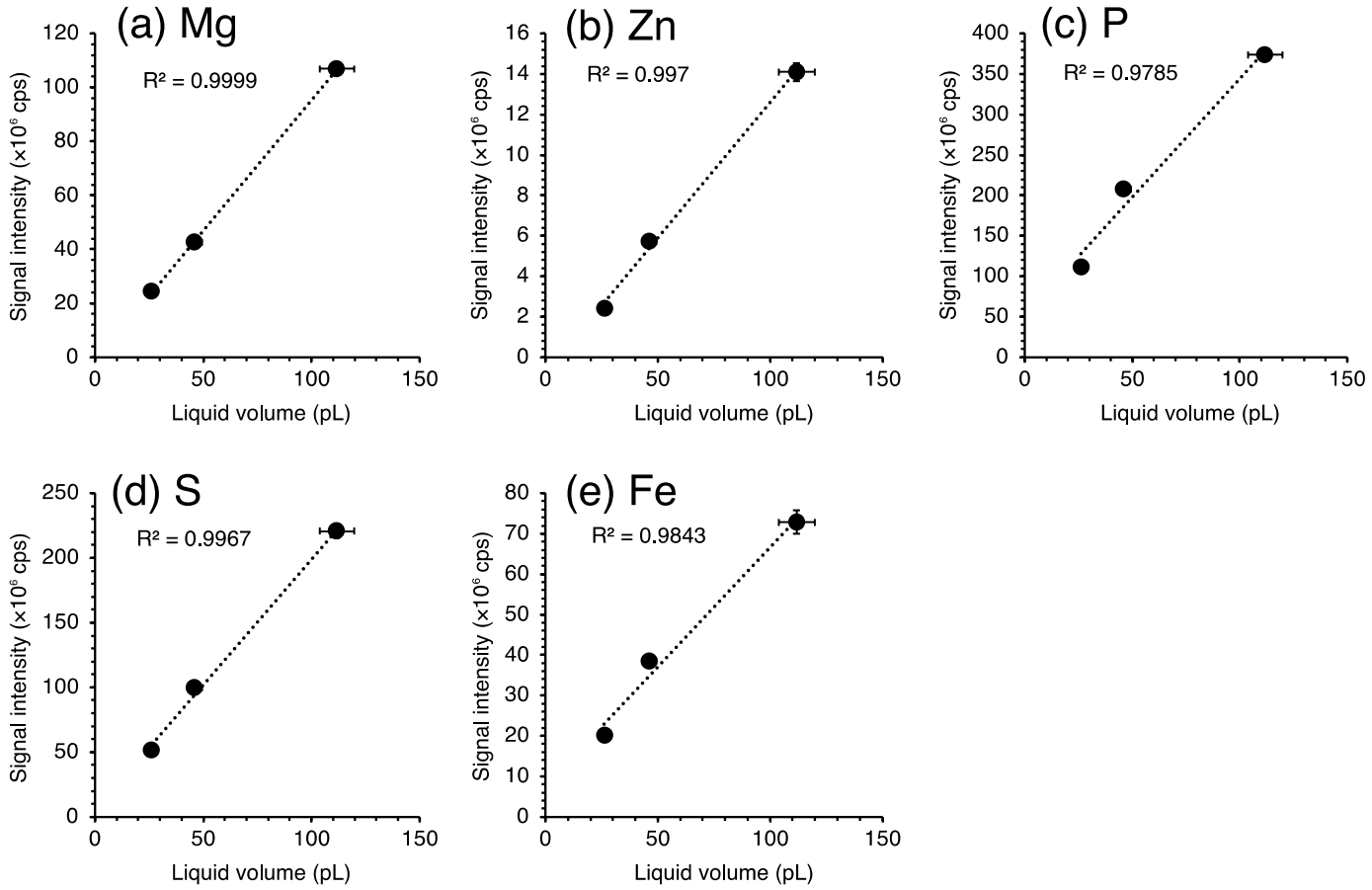

Fig. S1. Calibration curves of five essential elements obtained from differently sized droplet

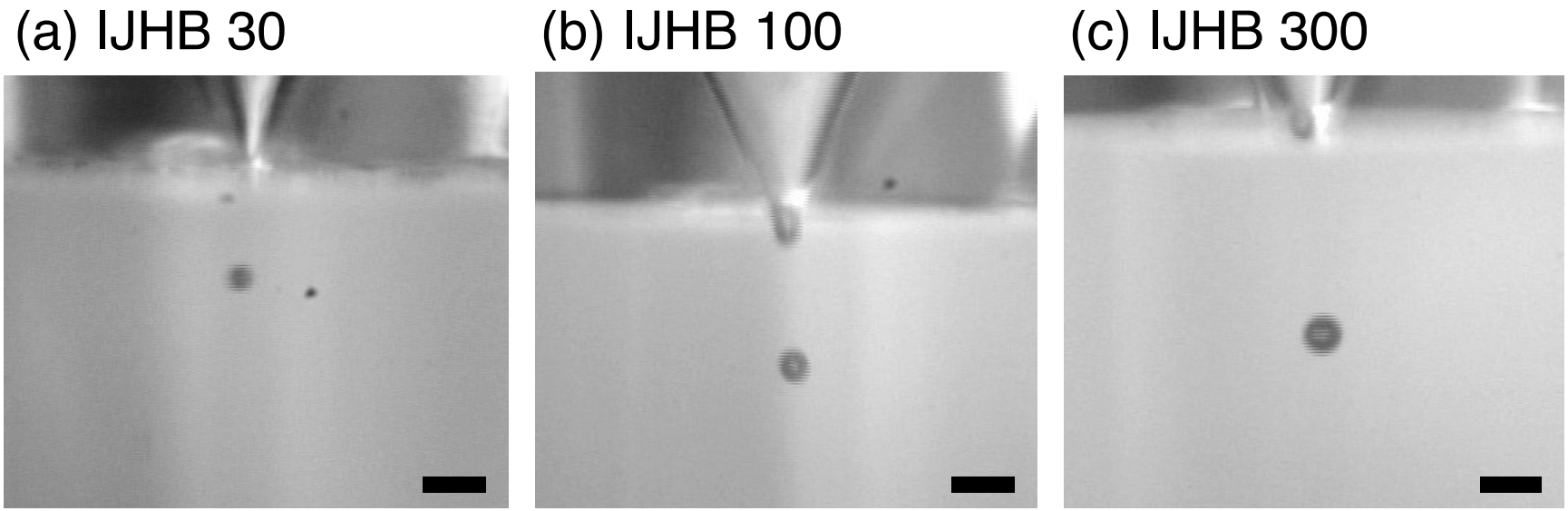

Fig. S2. Images of microdroplets generated by three μDGs
(a)IJHB 30, (b) IJHB 100, and (c) IJHB 300. Scale bar represents 100 μm.

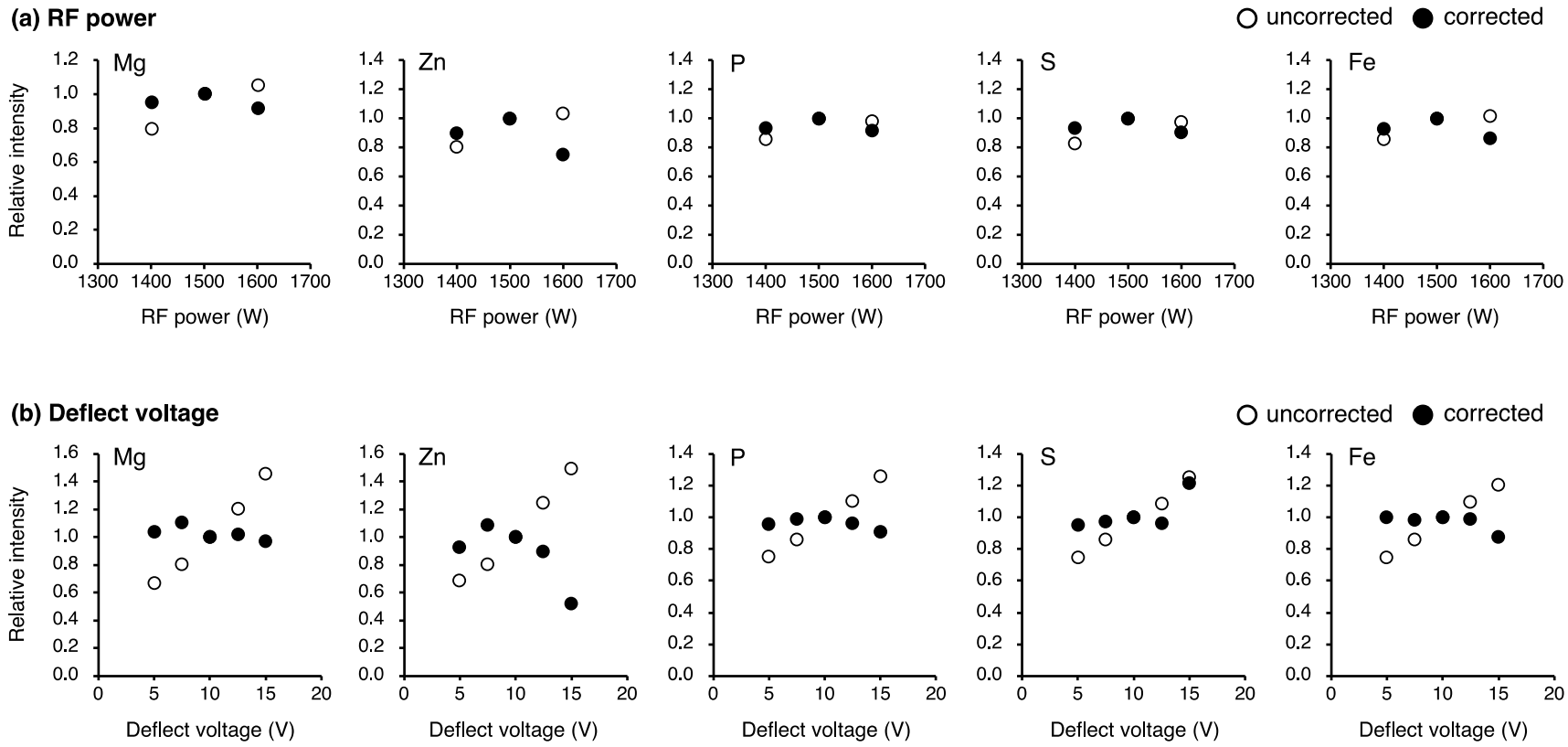

Fig. S3. Correction of instrumental sensitivity drift by the signals of standard solution introduced using a nebulizer

Signal intensity was monitored by changing (a) RF power and (b) deflect voltage. Signal intensities were normalized by the signals obtained with RF power of 1500 W for (a) and 10 V for (b). Error bars (SD) are included in each symbol.

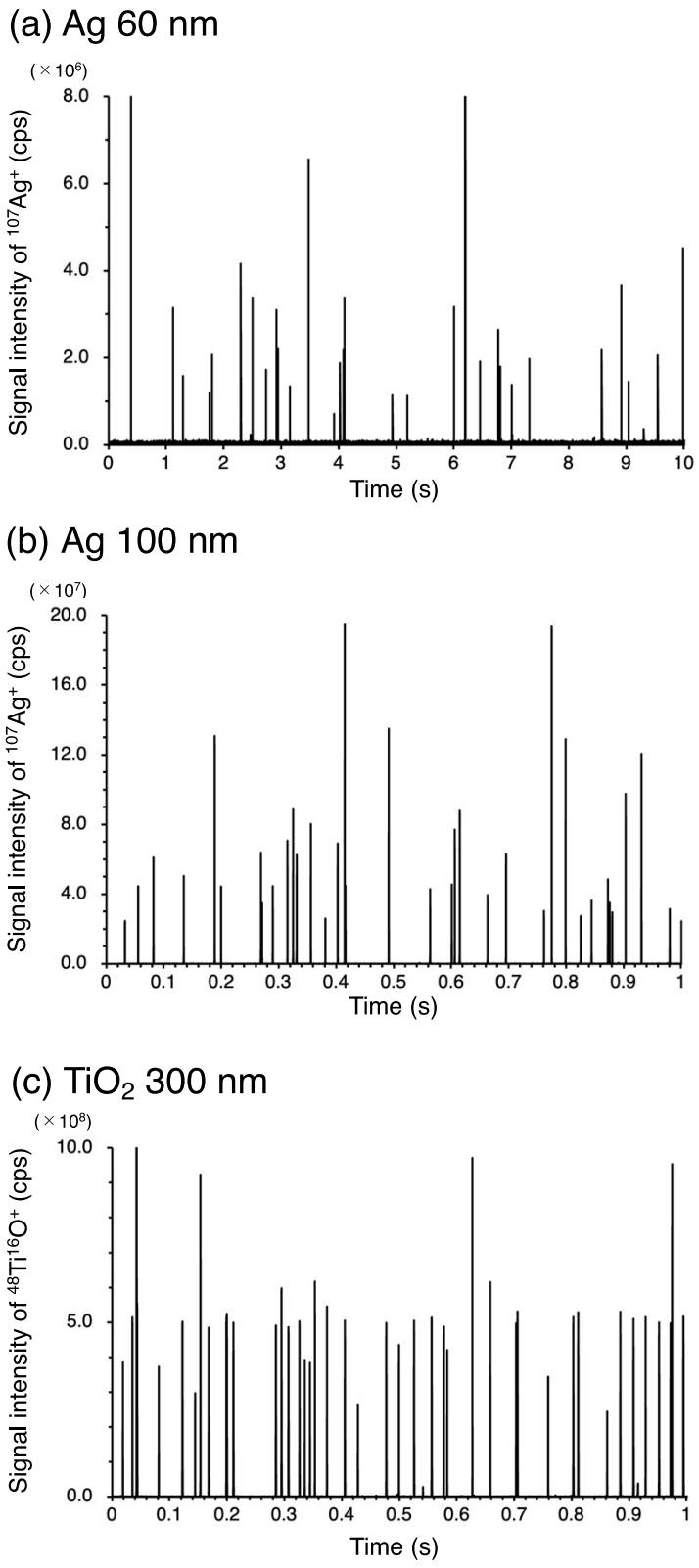

Fig. S4. Signal profiles from time-resolved analysis of Ag and TiO_2 nanoparticles

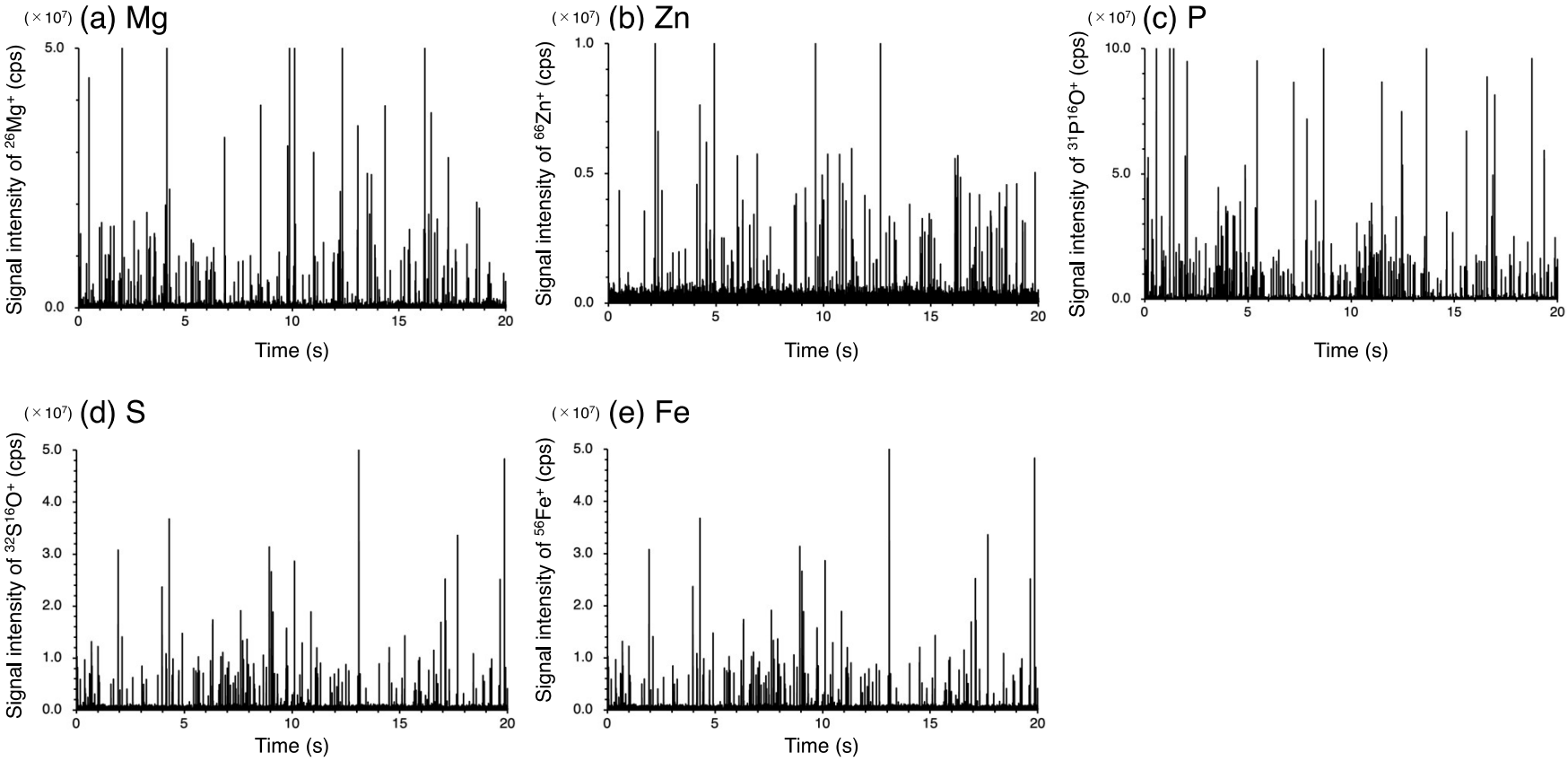

Fig. S5. Signal profiles from time-resolved analysis of yeast cells

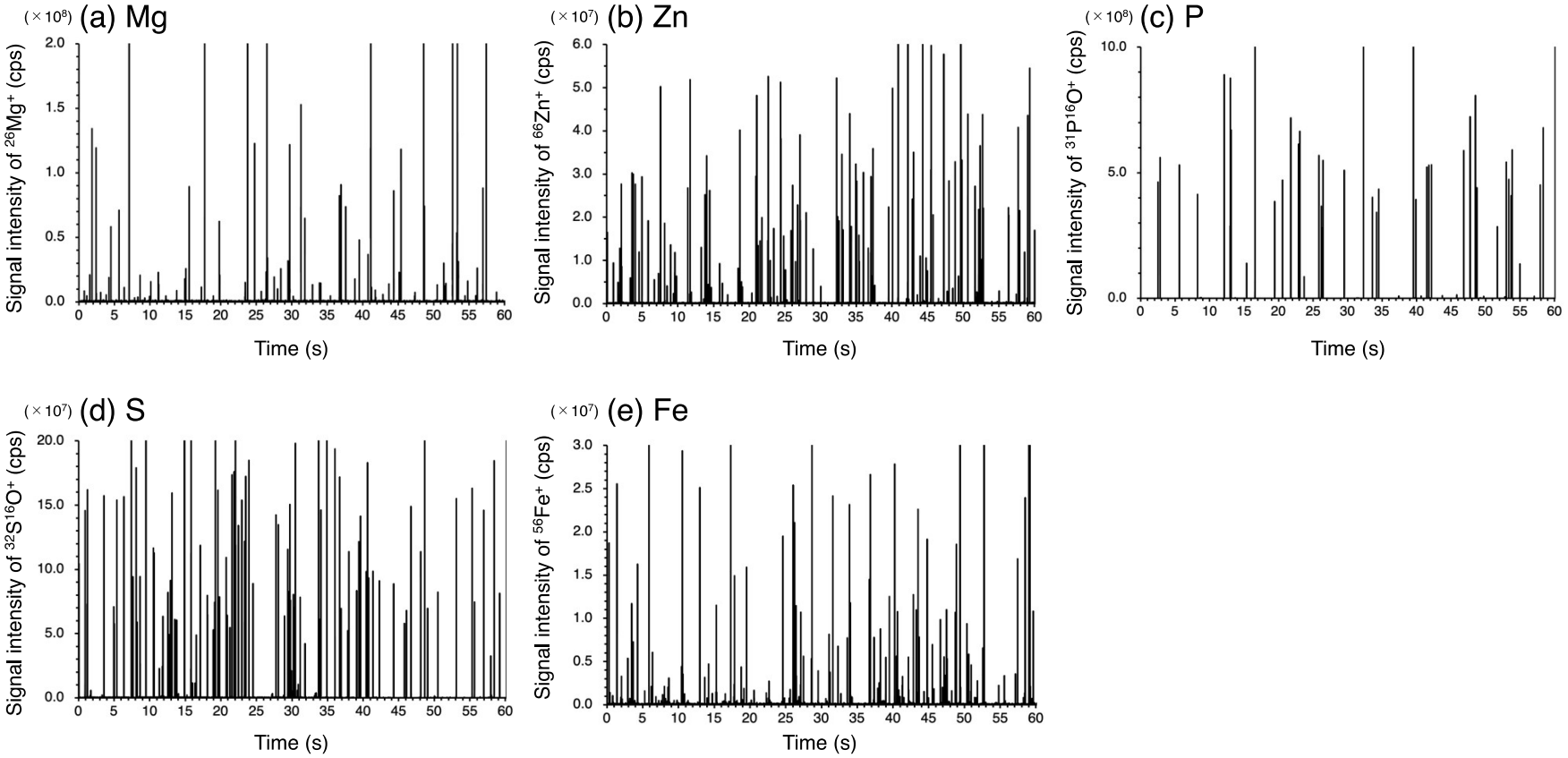

Fig. S6. Signal profiles from time-resolved analysis of K562 cells

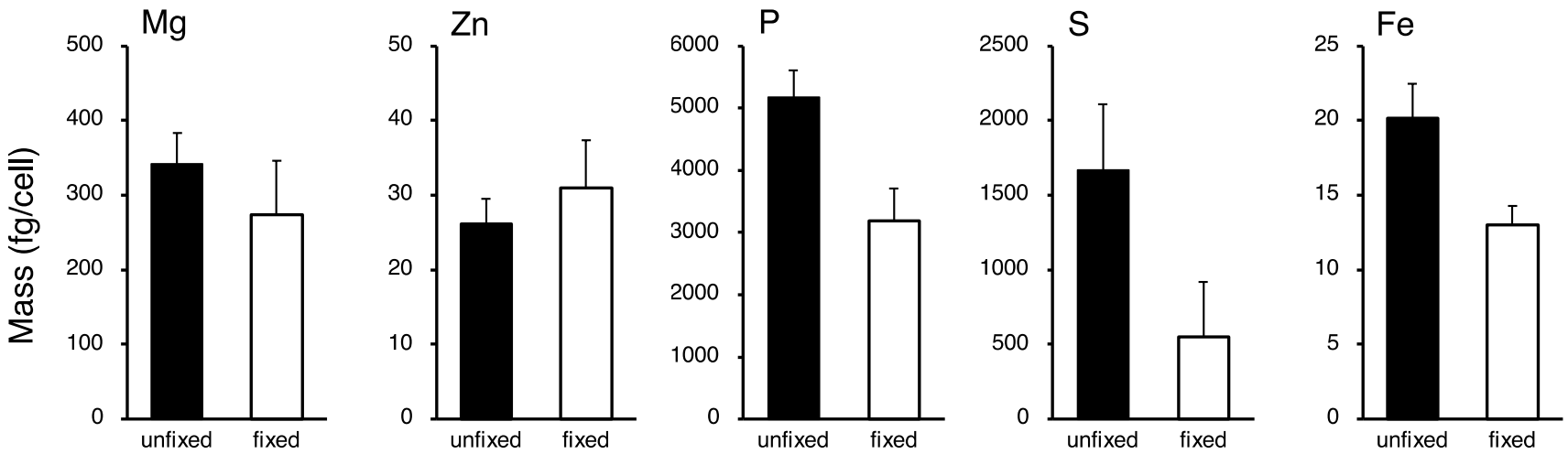

Fig. S7. Influence of chemical fixation with 70% methanol on elemental contents in K562 cells