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**Mn-Cr systematics in the components of ordinary and carbonaceous chondrites.**

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The variable Cr isotopic composition of chondrites reflects mixing of various components with different nucleosynthetic signatures. Study of variation of  $\epsilon^{53}\text{Cr}$  and  $\epsilon^{54}\text{Cr}$  in chondrite components can serve as a useful tool to constrain the temporal and spatial conditions on the formation of the components. We have determined concentrations of Mn, Cr and major elements (as well as HSE, S, Se and Te abundances) in physically separated components from carbonaceous and ordinary chondrites using ICPMS. More than 50% variation in Mn/Cr is observed in separated components of Allende, Murchison and QUE-97008 with respect to bulk as well as CI chondrites. Allende CAIs have the highest Mn/Cr ~ 1.04 among all components whereas magnetic components show the lowest Mn/Cr ~ 0.24. Coupled variation between Mn/Cr and Ca/Mg, Fe/Ni and S among the components indicate that the variation in Mn/Cr is mainly because of the fractionation of Mn/Cr in different mineral phases. We propose to perform Cr isotopic studies of these components to evaluate Cr isotopic heterogeneity and the utility of  $^{53}\text{Mn}$ - $^{53}\text{Cr}$  chronometry of these components.

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