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**Fabricating graphene devices from graphite intercalation compounds** RYUTA YAGI, MIDORI SHIMOMURA, FUMIYA TAHARA, SEIYA FUKADA, Graduate School of Advanced Sciences of Matter, Hiroshima University — We report a method of making few-layer graphene flakes by mechanically exfoliating  $\text{SbCl}_5$ -graphite intercalation compounds (GICs). The number of exfoliated graphene flakes had a peculiar distribution relevant to the stage structure of GICs. The carrier doping of the few-layer graphene flakes was about two orders of magnitude smaller than that expected from the stoichiometry of the GICs. The measured electric mobility was comparable to that made from pristine graphite. The EPMA measurement showed that inhomogeneous distribution of dopant near the surface of GIC was responsible for obtaining the virtually undoped graphene. Deintercalation of dopant would expand interlayer distance of each graphene layer, and thereby layer-number of exfoliated graphene depended stage number of GIC.

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