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**Maximum non-saturating magnetoresistance in MoTe<sub>2</sub>** MAHMOUD ABDEL-HAFIEZ, ZHEHAO GU, XIAO-JIA CHEN, Center for High Pressure Science and Technology Advanced Research, Shanghai, 201203, China, CENTER FOR HIGH PRESSURE SCIENCE AND TECHNOLOGY ADVANCED RESEARCH, SHANGHAI, 201203, CHINA TEAM — The search for exotic materials with a linear magnetoresistance (MR) is one of the most challenging tasks of the condensed matter community and materials science. Here, we investigated the magnetoresistance behavior of high-quality single crystals MoTe<sub>2</sub>. A large linear non-saturating MR in a magnetic field of 60 T, was observed with a maximum at a temperature of  $T = 45$  K. The detailed field and temperature dependencies will be presented. Our results not only provide a general scaling approach for the anisotropic MR but also are crucial for correctly understanding the mechanism of the linear MR, including the origin of the remarkable “turn-on” behavior in the resistance versus temperature curve.

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