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Effect of mechanical activation on the electrochemical characteristics of manganese oxides Mn_mO_{m+1} (m = 1, 2, 3)

© **Andrey V. Fetisov**,[1]* **Galina A. Kozhina**,[1]*+ **Alexandr N. Ermakov**,[4]*
Vadim B. Fetisov,[5]* **Konstantin Yu. Shunyaev**,[2] **Alexey B. Shubin**,[2]
Sophia A. Petrova,[3] and **Robert G. Zakharov**[3]

[1] *Laboratory of statics and kinetics of processes;* [2] *Laboratory of Analytical Chemistry;*
[3] *Laboratory of Physical Chemistry of metallurgical melts. Institution of the Russian Academy of Sciences Institute of Metallurgy, Ural Branch of Russian Academy of Sciences. Amundsen St., 101. Ekaterinburg, 620016. Russia.* [1)] *Phone: +7 (343) 267-88-87. E-mail: fetisovav@mail.ru; Phone: +7 (343) 232-91-19. E-mail: gakozhina@mail.ru;* [2)] *Phone: +7 (343) 267-91-86. E-mail: shun@ural.ru*;
[3)] *Phone: +7 (343) 232-90-05. E-mail: danaus@mail.ru.ru*
[4] *Department of Food Engineering. Ural State University of Economics. 8th March St., 62. Ekaterinburg, 620219. Russia. Phone: +7 (343) 251-96-66. E-mail: erman78@rambler.ru*
[5] *Laboratory of Physical Chemistry of Melts in Metallurgy. Institute of Metallurgy, Ural Branch of Russian Academy of Sciences. Amundsen St., 101. Ekaterinburg, 620016. Russia. Phone: +7 (343) 232-90-05. E-mail: danaus@mail.ru*

*Supervising author; +Corresponding author

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Abstract

The effect of mechanical treatment on the electrochemical properties of manganese oxides MnO_2, Mn_2O_3, Mn_3O_4 has been studied by the method of cyclic voltammetry. It has been shown that in addition to grinding the mechanical processing changes the state of the oxide. It has been found that depending on the composition (m) of Mn_mO_{m+1}, different parameters that characterize the new state of mechanically activated oxide are responsible for change in the electrochemical behavior.