COVER LETTER

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To the editor
of
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Manuscript submission
"The formation of Mg-orthocarbonate through the reaction $MgCO_3 + MgO = Mg_2CO_4$ at Earth's lower mantle P–T conditions"

To the editor of Journal of American Chemical Society,

The present work is related to the fields of Solid State Simulation, Crystallography, and Earth Sciences. The obtained results are the breakthrough in the field of Earth Sciences, and need the fast publication, as several scientific groups are actively working on synthesis and prediction of such a compounds.
Here, we decribe the finding of the new agent of the global carbon cycle, Mg-orthocarboante Mg2CO4. The result is intersting for the wide audience of earth scientists and high-pressure crystallographers.

With best regards,

Pavel N. Gavryushkin on behalf of all co-authors