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CORRIGENDUM

Corrigendum: High throughput computational screening for 2D ferromagnetic materials: the critical role of anisotropy and local correlations (2D Mater. 6 045018)

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Table 1. List of 2D magnetic insulating materials with positive exchange coupling $J$ and positive spinwave gap $\Delta$. Structure denotes the prototypical crystal structure and $S$ is the spin carried by each magnetic atom. The critical temperature $T_C$ is obtained from equation 5 of the original manuscript. The top part of the table contains dynamically and thermodynamically stable materials. The lower part of the table contains materials that are not expected to be stable in their pristine form but exhibit high critical temperatures.

<table>
<thead>
<tr>
<th>Formula</th>
<th>Structure</th>
<th>$J$ [meV]</th>
<th>$\Delta$ [meV]</th>
<th>$S$ [\hbar]</th>
<th>$T_C$ [K]</th>
</tr>
</thead>
<tbody>
<tr>
<td>FeCl$_2$</td>
<td>MoS$_2$</td>
<td>15.2</td>
<td>0.056</td>
<td>2.0</td>
<td>208</td>
</tr>
<tr>
<td>CuCl$_3$</td>
<td>BiI$_3$</td>
<td>15.3</td>
<td>0.058</td>
<td>1.0</td>
<td>37</td>
</tr>
<tr>
<td>CrI$_3$</td>
<td>BiI$_3$</td>
<td>2.3</td>
<td>0.96</td>
<td>1.5</td>
<td>35</td>
</tr>
<tr>
<td>CoCl$_2$</td>
<td>CdI$_2$</td>
<td>2.0</td>
<td>0.058</td>
<td>1.5</td>
<td>31</td>
</tr>
<tr>
<td>CrBr$_3$</td>
<td>BiI$_3$</td>
<td>2.0</td>
<td>0.23</td>
<td>1.5</td>
<td>23</td>
</tr>
<tr>
<td>MnO$_2$</td>
<td>CdI$_2$</td>
<td>0.54</td>
<td>0.31</td>
<td>1.5</td>
<td>19</td>
</tr>
<tr>
<td>NiCl$_2$</td>
<td>CdI$_2$</td>
<td>7.2</td>
<td>0.001</td>
<td>1.0</td>
<td>14</td>
</tr>
<tr>
<td>CrCl$_3$</td>
<td>BiI$_3$</td>
<td>1.4</td>
<td>0.033</td>
<td>1.5</td>
<td>13</td>
</tr>
<tr>
<td>RuCl$_2$</td>
<td>MoS$_2$</td>
<td>18.7</td>
<td>2.3</td>
<td>2.0</td>
<td>606</td>
</tr>
<tr>
<td>RuBr$_2$</td>
<td>MoS$_2$</td>
<td>16.1</td>
<td>1.77</td>
<td>2.0</td>
<td>509</td>
</tr>
</tbody>
</table>

In the original manuscript a small error in the calculation of exchange coupling constants was introduced due to different versions of the code being used for ferromagnetic and anti-ferromagnetic configurations. The error also propagated into the calculated spin-wave gaps and critical temperatures, which was summarized in Table 2 of the original manuscript. This only affected PBE calculations, but not the PBE+U calculations. In Table 1 we provide the corrected values. Except for MnO$_2$ all values are in close proximity to the ones reported in the original manuscript. For MnO$_2$ the corrected value for the critical temperature is 19 K, which is much lower than the value of 63 K reported previously.

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