The various Ti-based nanostructures presented good properties as adsorbents of metals from aqueous solutions of various sources; however, their application in this environmental field is not fully investigated. The future for these nanoadsorbents in this field seemed to be promising and worth to be investigated.

**NANOSTRUCTURES OBSTENTION AND TYPES**

<table>
<thead>
<tr>
<th>TiO₂</th>
<th>5-12 M NaOH 2 h</th>
<th>NANOSHEETS + Na₂TiO₂.H₂O</th>
<th>4 h</th>
<th>NANTUBE + Na₂TiO₂.H₂O</th>
<th>Orthorhombic</th>
<th>6 h</th>
<th>NANOWIRES + Na₂TiO₂·OH</th>
<th>Monoclinic</th>
<th>TiO₂</th>
<th>&gt; 15 M NaOH</th>
<th>AMORPHOUS TITANATE NANOPARTICLES</th>
</tr>
</thead>
</table>

**TITANATE-BASED NANOMATERIALS AS ADSORBENTS OF METALS FROM AQUEOUS SOLUTION**

The adsorption capacity of the titanate nanotubes for removal of copper (II) depends on the amount of Na⁺ in the nanotubes. The maximum capacity is of near 1.9 mmol/g at a pH value 5 [2].

The adsorption of Pb (II) dissolved in the solutions was investigated by several methods: macroscopic batch procedures [1].

**REFERENCES**


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