Materials List for:

**In Situ Monitoring of Diffusion of Guest Molecules in Porous Media Using Electron Paramagnetic Resonance Imaging**

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URL: https://www.jove.com/video/54335
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### Materials

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Catalog Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Band spectrometer</td>
<td>Bruker</td>
<td>E580</td>
<td></td>
</tr>
<tr>
<td>Spectrometer software</td>
<td>Bruker</td>
<td>Xepr 2.6b.108</td>
<td></td>
</tr>
<tr>
<td>gradient coil system</td>
<td>Bruker</td>
<td>E540 GCX2</td>
<td></td>
</tr>
<tr>
<td>imaging resonator</td>
<td>Bruker</td>
<td>TMHS 1007</td>
<td></td>
</tr>
<tr>
<td>micro-classic pipette controller</td>
<td>Brand</td>
<td>25900</td>
<td></td>
</tr>
<tr>
<td>microcapillary ringcaps 50 µl</td>
<td>Hirschmann</td>
<td>9600150</td>
<td>inner diameter 0.5 mm</td>
</tr>
<tr>
<td>EPR sample tube 2 mm inner diameter</td>
<td>Bruker</td>
<td>ER 221TUB/2</td>
<td></td>
</tr>
<tr>
<td>EPR sample tube 4 mm inner diameter</td>
<td>Bruker</td>
<td>ER 221TUB/4</td>
<td></td>
</tr>
<tr>
<td>heat-shrink tubing DERAY-IB</td>
<td>DSG-Canusa</td>
<td>2210048952</td>
<td>4.8 mm/2.4 mm, 2:1, 95 °C - 200 °C</td>
</tr>
<tr>
<td>heat gun</td>
<td>Bosch</td>
<td>PHG 600-3</td>
<td>width 12 mm</td>
</tr>
<tr>
<td>PTFE band</td>
<td>VWR</td>
<td>332362S</td>
<td>length 16 cm, diameter 1.5 cm</td>
</tr>
<tr>
<td>test tube</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>beaker</td>
<td></td>
<td></td>
<td>250 ml, height 9 cm, diameter 7 cm</td>
</tr>
<tr>
<td>capillary tube sealing</td>
<td>Fisher Scientific</td>
<td>02-678</td>
<td></td>
</tr>
<tr>
<td>pressure cooker, 3 L with trivet</td>
<td>Beem</td>
<td>Vital-X-Press V2, F1000675</td>
<td></td>
</tr>
<tr>
<td>magnetic stirrer with heating element</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ethanol (p.a.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ethanol (techn.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>syringe</td>
<td>Hamilton</td>
<td>1705</td>
<td>0.05 ml, custom length: 20 cm</td>
</tr>
<tr>
<td>Pasteur capillary pipette</td>
<td></td>
<td></td>
<td>length 23 cm</td>
</tr>
<tr>
<td>data analysis software</td>
<td>homemade</td>
<td></td>
<td>Available for download at <a href="http://www.uni-konstanz.de/drescher/software">http://www.uni-konstanz.de/drescher/software</a>. Requires Matlab.</td>
</tr>
<tr>
<td>UKON1-GEL</td>
<td>kindly provided by Prof. Sebastian Polarz, Martin Wessig and Andreas Schachtschneider</td>
<td></td>
<td>See references 16, 18, 19 for the synthesis</td>
</tr>
</tbody>
</table>