Supporting Information

A luminescent benzothiadiazole-bridging bis(salicylaldiminato)zinc(II) complex with mechanochromism and organogelation properties

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**Figure S1.** MALDI-TOF spectrum of BTZn.

**Figure S2.** XRD patterns of various BTZn samples: (a) orange emissive solid obtained by heating the as-prepared solids at 165 °C, (b) ground solid obtained by grinding the orange emissive solid, (c) solid obtained by heating the ground sample at 125°C (d) solid prepared by heating the amorphous powder that was obtained by grinding as-prepared sample.
Figure S3. TGA (black line) and DSC (blue line) thermograms of the BTZn solids with different phases (scan rate of 10 °C min⁻¹).

Figure S4. ¹H NMR spectrum of the as-prepared solid of BTZn (500 MHz, DMSO-d₆).
Figure S5. $^1$H NMR spectrum of the heated solid of BTZn (500 MHz, DMSO-$d_6$).

Figure S6. $^1$H NMR spectrum of the CH$_2$Cl$_2$ vapor fumed solid of BTZn (500 MHz, DMSO-$d_6$).
Figure S7. TEM image of BTZn xerogel obtained from o-dichlorobenzene.

Figure S8. XRD pattern of BTZn xerogel obtained from toluene. Insets: representation of the lamello-columnar molecular arrangements of BTZn in gel state.

Table S1 Gel-forming abilities of BTZn in various organic solvents.[a]

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Hex</th>
<th>Tol</th>
<th>p-xylene</th>
<th>o-DCB</th>
<th>DCM</th>
<th>DCE</th>
<th>THF</th>
<th>MeCN</th>
<th>DMF</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTZn</td>
<td>I</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>P</td>
<td>G</td>
<td>S</td>
<td>I</td>
<td>S</td>
</tr>
</tbody>
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[a] Concentration 1 mg/mL. I: insoluble; S: soluble; G: gel; P: precipitate.