



| | |
|---|---|
| Title: | Tuning of Bistability, Thermal Stability of the Metastable States, and Application Prospects in the C3-Symmetric Designs of Multiple Azo(hetero)arenes Systems |
| Authors: | Gupta, Debapriya (/jspui/browse?type=author&value=Gupta%2C+Debapriya)<br>Gaur, Ankit Kumar (/jspui/browse?type=author&value=Gaur%2C+Ankit+Kumar)<br>Kumar, Pravesh (/jspui/browse?type=author&value=Kumar%2C+Pravesh)<br>Kumar, Himanshu (/jspui/browse?type=author&value=Kumar%2C+Himanshu)<br>Mahadevan, Anjali (/jspui/browse?type=author&value=Mahadevan%2C+Anjali)<br>Devi, Sudha (/jspui/browse?type=author&value=Devi%2C+Sudha)<br>Roy, Saonli (/jspui/browse?type=author&value=Roy%2C+Saonli)<br>Venkataramani, Sugumar (/jspui/browse?type=author&value=Venkataramani%2C+Sugumar) |
| Keywords: | C3-Symmetric<br>Metastable States |
| Issue Date: | 2021 |
| Publisher: | Wiley |
| Citation: | Chemistry – a European Journal, 27(10), 3463–3472. |
| Abstract: | Light-responsive molecular systems with multiple photoswitches in C3-symmetric designs have enormous application potential. The design part of such molecular systems is critical due to its influence in several properties associated with the photoswitches. In order to tune, and in the evaluation of the design–property relationship, we synthesized 18 tripodal systems with variations in the core, linkers, connectivity, and azo(hetero)arene photoswitches. Through extensive spectroscopic and computational studies, we envisaged the factors controlling near-quantitative photoisomerization in both the directions (bistability) and the thermal stability of the metastable states. Furthermore, we also evaluated the impact of designs in obtaining reversible photo-responsive sol-gel phase transitions, solvatochromism, photo- and thermochromism. |
| Description: | Only IISER Mohali authors are available in the record. |
| URI: | https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/chem.202004620 (https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/chem.202004620)<br>http://hdl.handle.net/123456789/4928 (http://hdl.handle.net/123456789/4928) |
| Appears in Collections: | Research Articles (/jspui/handle/123456789/9) |

Files in This Item:

| File | Description | Size | Format | |
|---|---|---|---|---|
| Need To Add…Full Text_PDF (/jspui/bitstream/123456789/4928/1/Need%20To%20Add%e2%80%a6Full%20Text_PDF) | | 15.36 kB | Unknown | View/Open (/jspui/b |

Show full item record (/jspui/handle/123456789/4928?mode=full)
(/jspui/handle/123456789/4928/statistics)