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Title:	Capturing the structural diversification upon thermal desolvation of a robust metal organic framework via a single-crystal-to-single-crystal transformation
Authors:	Kumar, Sandeep (/jspui/browse?type=author&value=Kumar%2C+Sandeep) Mandal, S.K. (/jspui/browse?type=author&value=Mandal%2C+S.K.)
Keywords:	polypyridyl-carboxylate ligand 5-(bis(pyridin-2-ylmethyl)amino)isophthalic acid single-crystal-to-single-crystal
Issue Date:	2015
Publisher:	Royal Society of Chemistry
Citation:	CrystEngComm, 17 (46) pp. 8801-8806
Abstract:	Using a new mixed polypyridyl-carboxylate ligand, a 2D neutral robust framework of Zn(ii), {[Zn(bpaipa)]·DMF·2H ₂ O} _n (1) (where H ₂ bpaipa = 5-(bis(pyridin-2-ylmethyl)amino)isophthalic acid), has been synthesized under solvothermal conditions in 71% yield. It undergoes single-crystal-to-single-crystal transformation upon thermal desolvation without a change in the topology of the framework where the desolvated structure shows an orientation change of an uncoordinated carboxylate oxygen atom and the pyridyl groups of the ligand within the pores. Both structures have been determined by single crystal X-ray analysis. Its high thermal stability (>350 °C) and framework integrity towards many solvents are also demonstrated by variable temperature powder X-ray diffraction and thermogravimetric analysis
URI:	https://pubs.rsc.org/en/content/articlelanding/2015/ce/c5ce01116g#!divAbstract (https://pubs.rsc.org/en/content/articlelanding/2015/ce/c5ce01116g#!divAbstract) http://hdl.handle.net/123456789/3037 (http://hdl.handle.net/123456789/3037)
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