Electronic Supplementary Information (ESI)

# Pyrene-based metal-organic framework NU-1000 photocatalysed atom-transfer radical addition for iodoperfluoroalkylation and (*Z*)selective perfluoroalkylation of olefins by visible-light irradiation

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Contents	Page
NMR Spectra of <b>3a</b>	1~2
NMR Spectra of <b>3b</b>	2~3
NMR Spectra of <b>3c</b>	4~5
NMR Spectra of <b>3d</b>	5~6
NMR Spectra of <b>3e</b>	7~8
NMR Spectra of <b>3f</b>	8~9
NMR Spectra of <b>3g</b>	10~11
HRMS Spectra of <b>3g</b>	11
NMR Spectra of <b>4h</b> and <b>4h'</b>	12~13
HRMS Spectra of <b>4h</b> and <b>4h'</b>	13
NMR Spectra of <b>3i</b>	14~15
NMR Spectra of <b>3j</b>	15~16
NMR Spectra of <b>(E)-6a</b>	16~18
NMR Spectra of <b>(Z)-6a</b>	18~19
NMR Spectra of <b>(E)-6b</b>	20~21
NMR Spectra of <b>3m</b>	22~23
HRMS Spectra of <b>3m</b>	23
NMR Spectra of <b>(Z)-7a</b>	24~25
NMR Spectra of <b>(Z)-7b</b>	26~27
NMR Spectra of <b>(Z)-7c</b>	28~29
HRMS Spectra of <b>(Z)-7c</b>	30

0



3a-<sup>13</sup>C





3b-1H



2





3b-<sup>19</sup>F





3c-13C



4





3d-1H







3d-<sup>19</sup>F







3e-13C















3f-<sup>19</sup>F







3g-13C







## 3g-HRMS (EI)







4h and 4h'-13C



# 4h and 4h'-19F



4h and 4h'-HRMS





















(*E*)-6a-<sup>1</sup>H







(*E*)-6a-<sup>19</sup>F



(E)-6a-2D-NOESY



(*Z*)-6a-<sup>1</sup>H







(*Z*)-6a-<sup>19</sup>F







(*E*)-6b-<sup>13</sup>C







(E)-6b-2D-NOESY







3m-13C







## 3m-HRMS







(Z)-7a-13C







(Z)-7a-2D-NOESY







(*Z*)-7b-<sup>13</sup>C







(Z)-7b-2D-NOESY



(*Z*)-7c-<sup>1</sup>H



(*Z*)-7c-<sup>13</sup>C











## (Z)-7c-HRMS

