Electronic Supplementary Material (ESI) for ChemComm.
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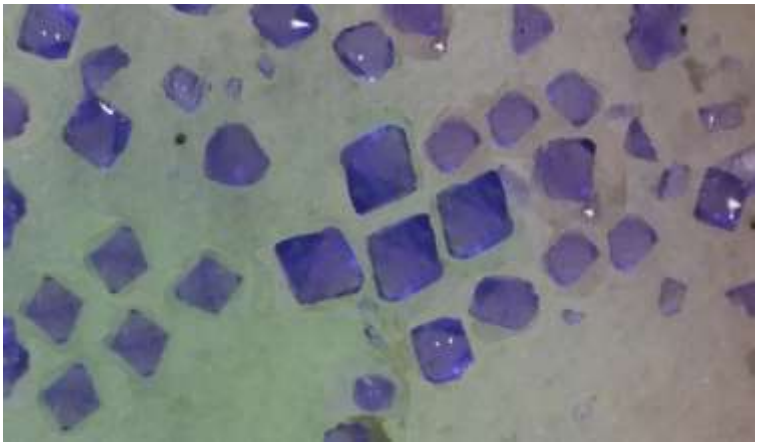
Suplementary Materials



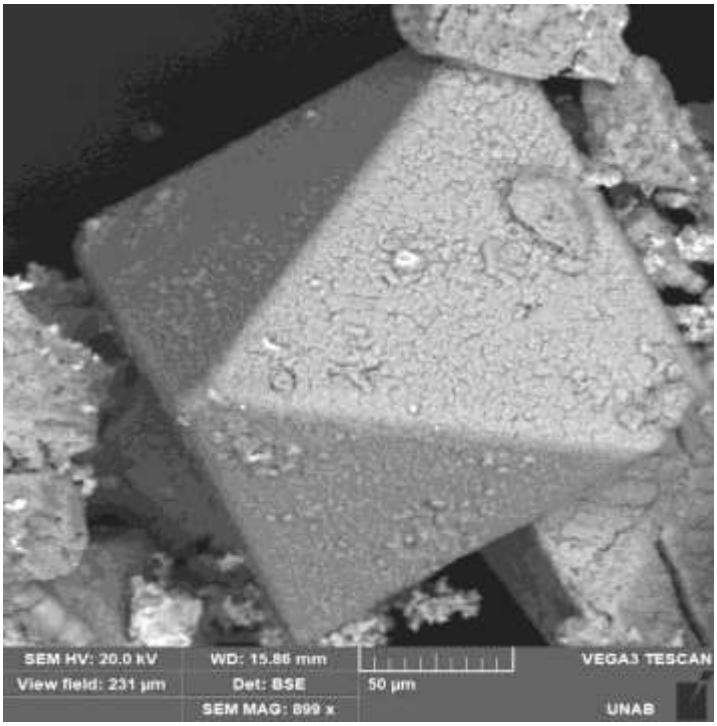
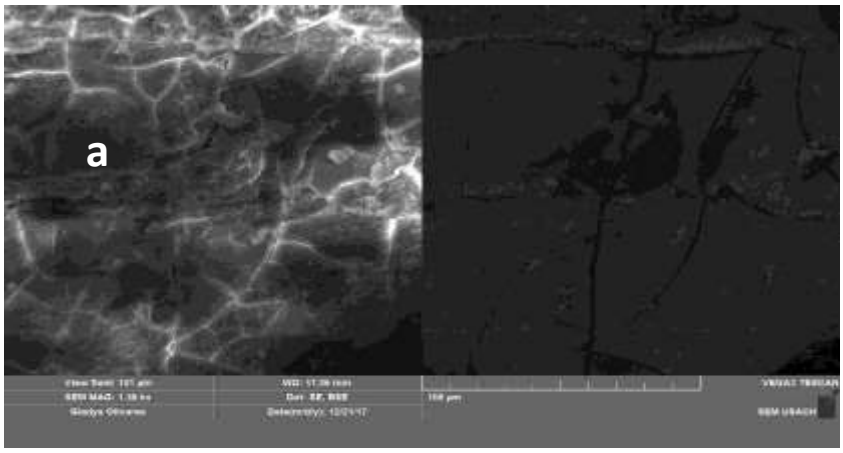
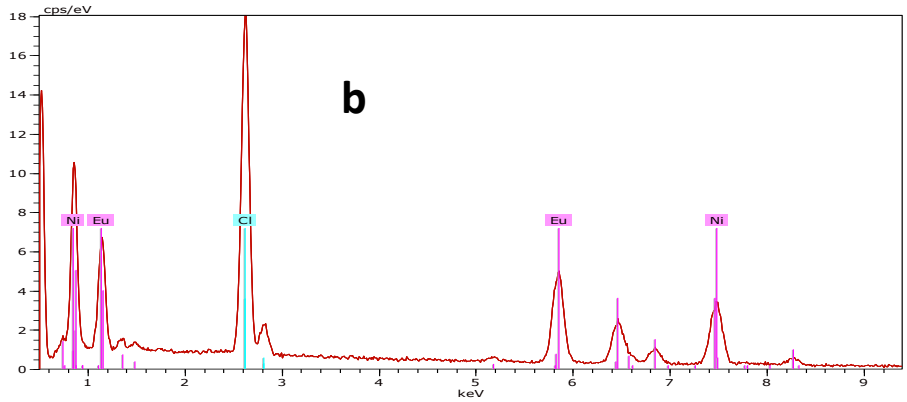


Figure S1: Images of the crystal obtained for $Ni_2[LnCl_6]$

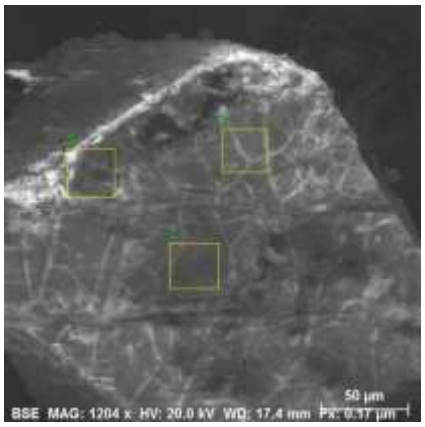




Spectrum: Acquisition 2596

El	AN	Series	unn. C [wt.%]	norm. C [wt.%]	Atom. C [at.%]	Error (1 Sigma) [wt.%]
Cl	17	K-series	17.93	30.52	54.06	0.64
Ni	28	K-series	15.41	26.21	28.05	0.47
Eu	63	M-series	25.43	43.27	17.88	1.62
		Total:	58.77	100.00	100.00	

Figure S2a: Genearal EDS spectra of $Ni_2[EuCl_6]$



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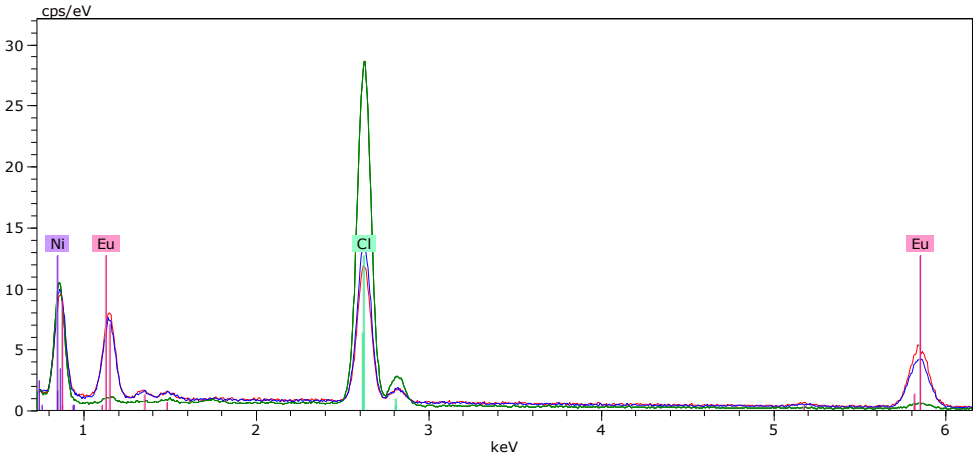

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3	Date:12/21/2017 10:15:45 AM	HV:20.0kV	Puls th.:9.83kcps

Norm. mass percent (%)	**Cl**	**Ni**	**Eu**
Mean value:	**35.54**	**24.23**	**40.23**
Sigma:	15.95	7.51	23.43
Sigma mean:	9.21	4.34	13.53

Figure S2b: Localized EDS spectra of $Ni_2[EuCl_6]$

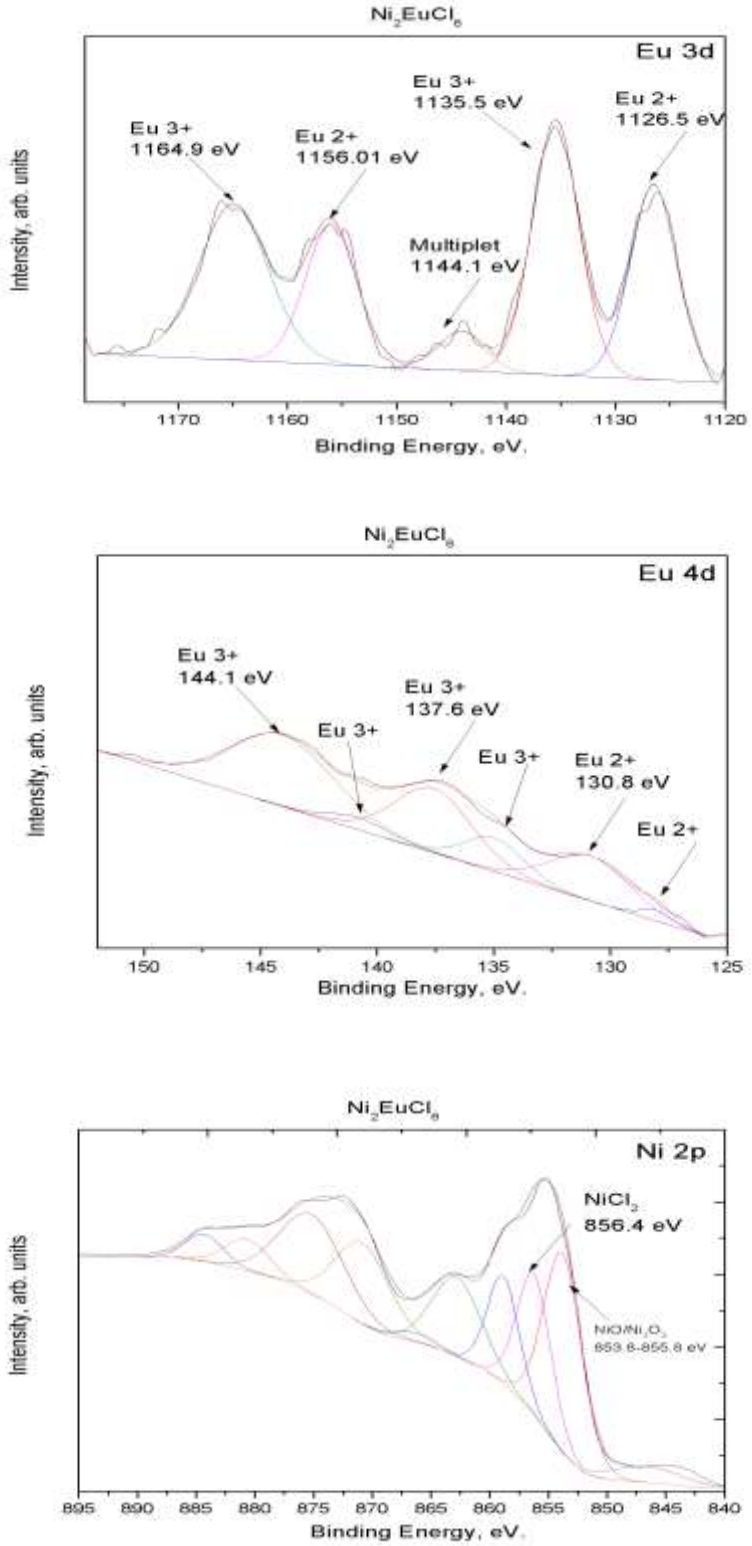

Figure S3: XPS spectra of $Ni_2[EuCl_6]$

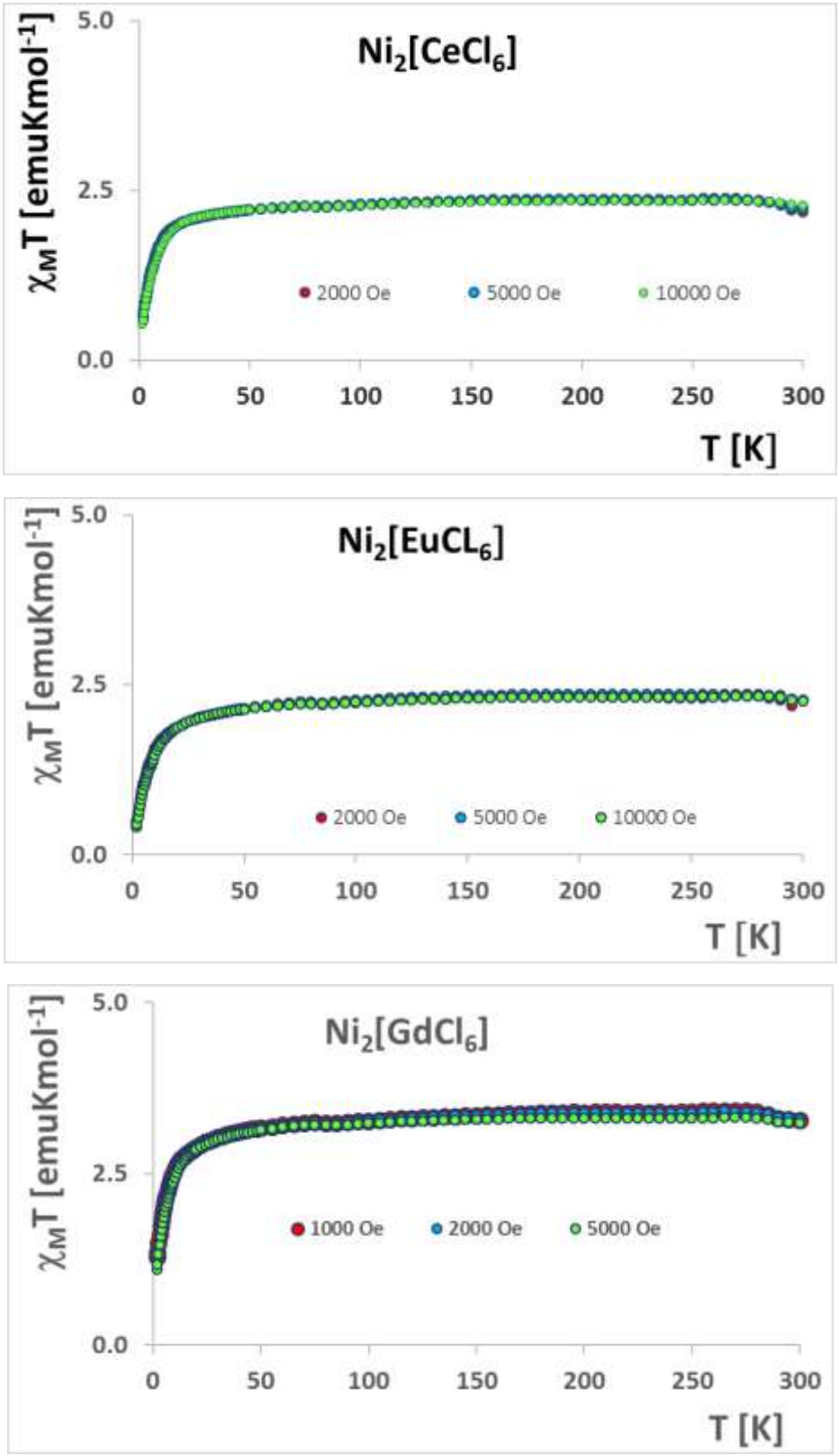

Figure S4: $\chi_M T$ vs T plots of **1**, **2** and **3** at different applied fields