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Abbreviations

μ_0	permeability of the free space ($4\pi \cdot 10^{-7}$ Vs/Am)
μ_B	Bohr magneton (9.274·10-24 J/T)
$\mu_0\boldsymbol{H}$	(external) magnetic field (in Tesla)
$\boldsymbol{M}$	magnetisation (in Tesla)
$\boldsymbol{B}$	magnetic inductance (in Tesla)
$\boldsymbol{\mu}$	magnetic moment [μ_B / ion]
χ	susceptibility (Volume susceptibility, unit free in SI)
χ_{ac}	ac-susceptibility
$\boldsymbol{a}$	vector
a	norm of vector or in general a scalar
n, m	integer values 0, 1, 2,…
[u, v, w]	vector in real space
(H, K, L)	vector in reciprocal space
h, k, l	reflection with the Miller-indices hkl
{h, k, l}	cohort of symmetrical equivalent reflections
(H0L)	reciprocal plane spanned by the vectors (H, 0, 0) and (0, 0, L)
V_{EZ}	volume of the unit cell
r. l. u.	relative lattice units
RKKY	Rudermann-Kittel-Kasuya-Yosida
CEF	Crystal-Electric-Field
DM	Dzyaloshinski–Moriya
PM	paramagnetic
FM	ferromagnetic
AFM	antiferromagnetic
CEF	crystal electric field
LRO	long-range order
SRC	short-range correlation(s)
iS-LRO	incommensurate short-to-long-range order
cS-LRO	commensurate short-to-long-range order
T_N	Néel temperature
T_2	second ordering temperature
T_F	ordering temperature of the field-induced FiM phase
k_B	Boltzmann constant ($1.32\ 10^{-23}$ J/K)
H_D	magnetic field associated to equilibrium condition (in Tesla ($H_D = \mu_0 H$))
H_S	magnetic field associated to a short-to-long range ordered transition (in Tesla)
H_c	critical magnetic field of the magnetic ground state (in Tesla)
H_{c2}	magnetic field for parallel alignment of the magnetic moments (in Tesla)
ILL	Institut Laue-Langevin
LLB	Laboratoire Leon Brillouin
HZB	Helmholtz-Zentrum für Materialen und Energie Berlin
FRM-II	Forschungsneutronenquelle Heinz Maier-Leibnitz
APS	Advanced Photon Source
ESRF	European Synchrotron Radiation Facility