

Plenary:

PL1 *Hosono H.*: Iron Pnictide Superconductors and Relevant Functional Materials

PL2 *Zach Z.*: Magnetic properties of selected MM'X-type (M=metal 3d, M'=metal 3d or 4d X=As,P,Ge,Si) intermetallics crystallize in hexagonal or orthorhombic crystal structure

PL3 *Bartolomé J.*: Exotic Magnetism in Pt and Au nanoparticles

PL4 *Skryabina N.*: Relation between microstructure/nanostructure and stress development in TM-doped Mg-based alloys

PL5 *Kanatidis M.G.*: Metallic fluxes as a powerful media for discovery of complex intermetallics

Keynotes:

KEY1 *Zhigadlo N.D.*: Improved high pressure flux growth, structural, and superconducting properties of $LnFeAsO$ ($Ln = Pr, Nd, Sm$) single crystals

KEY2 *Gil J.M.*: PAC for intermetallic hydrides

KEY3 *Wachter P.*: Cu, Pu and Fe high T_c superconductors: all the same mechanism

KEY4: *Wagner F.R.*: Metal-Metal Bonding in Transition Metal Compounds: A Direct Space Perspective

KEY5 *Steurer W.*: Complex intermetallics - simpler than you think

KEY6 *Chevalier B*: Hydrogenation and electronic state of cerium

KEY7 *Cacciamani G.*: Group 4 diboride – Ni interactions: a thermodynamic database for the B–Hf–Ni–Ti–Zr system

Orals:

SUN_O1 *Shelyapina M.G.*: Hydrogen mobility in transition metal alloys studied by 1H NMR

SUN_O2 *Zavalij I.*: Phase equilibria in the Mg-Ti-Ni system and hydrogenation properties of selected alloys

SUN_O3 *Karmakar D.*: Electronic Structure of Mineral Libethenite Series: A Minimal Model Approach

SUN_O4 *Polushkin N.*: Laser-induced transformations in solid alloys and compounds of transition elements

SUN_O5 *Ouvrard B.*: Experimental study and modeling of formation of the nanostructures in melt-spun Cu-Mg alloys

SUN_O6 *Jayaram P.* Bulk Synthesis and Structural Determination of High Mobility Multication Transparent Conducting Oxides

SUN_O7 *Pasturel M.*: Evolution of magnetic and transport properties in the Ce-Co-Ge ternary system

SUN_O8 *Maskova S.*: Magnetic properties of Tb₂Pd₂In single crystal

SUN_O9 *Gorbunov D.*: Magnetic properties of a HoFe₅Al₇ single crystal

SUN_O10 *Havela L.*: Lattice and magnetic anisotropies in Uranium intermetallic compounds

SUN_O11 *Asabina E.A.*: Complex phosphates containing elements with oxidation degrees +1 and +4

SUN_O12 *Boller H.*: Crystal Structure and Twinning of Rb₃Mo₁₄O₂₂

SUN_O13 *Antonyshyn I.*: Gallium-rich binary compounds of transition metals

SUN_O14 *Kuznetsov A.N.*: New chalcogenides based on Pd-In intermetallic fragments: structure and bonding

MON_O15 *Zvereva I.*: Photocatalytic properties of Layered Perovskite-type Titanates and Tantalates

MON_O16 *Tobola J.*: Theoretical search for *p*-type dopants in Mg₂X(X= Si, Ge, Sn) semiconductors for thermoelectricity

MON_O17 *Cichorek T.*: Intriguing physical properties of the As-based filled skutterudites

MON_O18 *Zeiringer I.*: Non-centrosymmetric *EpTMX*₃ Superconductors: Crystal Structure and Physical Properties

MON_O19 *Mukovskii Ya.*: Study of the non-stoichiometry *y* effect on magnetic and electro-transport properties of (La_{0.85}Sr_{0.15})₃MnO₃ manganite

MON_O20 *Rogl P.*: A Novel Actinoid Superconductor, ThPt₃B

MON_O21 *Pradipto A-M.*: Embedded Cluster Study of Magnetic Interactions in Cuprates

MON_022 *Dubiel SM.*: Lattice vibrations in α - and σ -phase FeCr alloys

MON_023 *Derzsi M.*: The theoretical quest for AgCl_2 in solid state: unique p-metal and not magnetic insulator...!

MON_024 *Almeida M.*: Slow magnetic relaxation in *f*-element compounds; from Lanthanide Double Chain Magnets to Uranium Single-Ion Magnets

MON_025 *Kolodziej T.*: Magnetostriction of first and second order magnetite samples and its relation to the magnetic easy axis switching

MON_026 *Ribeiro B.*: Structural and magnetic properties of pseudocubic $\text{BaFeO}_{3-\square}$ thin films produced by PI-MOCVD

MON_027 *Isobe M.*: Antiferromagnetic metal: CaCrO_3

MON_028 *Hardy V.*: Coupled valence and spin state transitions resulting from an interplay between Pr and Co in oxides

(TUE Special Session)

TUE_029 *Dshemuchadse J.*: Characteristics of complex intermetallics

TUE_030 *Frigan B.*: Low-temperature structures of ε -Al-Pd-Mn phases optimized by ab-initio methods

TUE_031 *Gille P.*: Single crystal growth of decagonal AlCoNi and its periodic approximants

TUE_032 *Ormeci A.*: Atomic interactions in aluminium-rich compounds in the binary system Al-Co

TUE_033 *Ledieu J.*: Complex metallic alloy surfaces

TUE_034 *Paschen S.*: Complex intermetallics as thermoelectrics – The case of cage compounds

TUE_035 *Feuerbacher M.*: Dislocations in Complex Metallic Alloys and Icosahedral Quasicrystals

WED_036 *Riani P.*: Experimental investigation and thermodynamic modelling of the Co-Ni-Ti system

WED_037 *Peniel M.*: The U-Mo-C Ternary diagram

WED_038 *Fokwa B.*: Crystal Chemistry, Bonding Analysis and Magnetism of MRh_6B_3 Phases: Experimental and Theoretical Investigations

WED_O39 *Monachesi P.*: Magnetic properties of Fe-ions in Transition metal substituted $\square\text{TFe}_3\text{N}$ (T=Co, Ni, Mn)

WED_O40 *Joubert J-M.*: Site preference reversal within the homogeneity domain of ternary intermetallic phases

WED_O41 *Chajec W.*: Crystal and magnetic properties of the $\text{Mn}_{2-2x}\text{Fe}_x\text{Co}_x\text{P}$ series of solid solutions

WED_O42 *Ho C.-H.*: Structural and band-edge properties of $\text{Cu}(\text{Al}_x\text{In}_{1-x})\text{S}_2$ ($0 \leq x \leq 1$) series chalcopyrite semiconductors

WED_O43 *Mori T.*: Large Effect of Subtle Building Defects on the Physical Properties of Layered “Tiling” Compounds

WED_O44 *Tsirlin A.A.*: Multiple superstructures and variable magnetism of $(\text{CuX})\text{LaNb}_2\text{O}_7$ (X = Cl, Br) oxyhalides

WED_O45 *Gaudin E.*: Structural and magnetic properties of $\text{Gd}_3\text{Co}_{2.45}\text{Si}_{1.55}$ and RE_5CoSi_2 (RE = Gd, Nd)

WED_O46 *Szymanski D.*: Magnetic properties of the $\text{MnRu}_{1-x}\text{Rh}_x\text{As}$ series

WED_O47 *Andreev A.V.*: Influence of Ru on the magnetic anisotropy of Y_2Co_{17}

WED_O48 *Sibille R.*: Metal-organic frameworks with 1D/2D magnetic subnetworks: fundamentals and potential application

WED_O49 *Chennabasappa M.*: Microstructure analysis of ageing of magnetocaloric materials

THU_O50 *Denys R.*: Synthesis of $\text{Mg}(\text{BH}_4)_2$ from MgB_2 by Reactive Ball Milling under High Hydrogen Pressure

THU_O51 *Ueda Y.*: Novel Ferromagnetic Metal-Insulator Transition in $\text{K}_2\text{Cr}_8\text{O}_{16}$ - Peierls Transition of Spinless Fermion

THU_O52 *Tencé S.*: First binary compound of cobalt and bismuth, CoBi_3 : high-pressure synthesis and superconductivity

THU_O53 *Ocko M.*: Does U dissolved in YRu_2Si_2 causes single or multi-channel Kondo effect?