

Curriculum Vitae Mauro Giovannini

Department of Chemistry and Industrial Chemistry

University of Genoa

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Education

1997-2000 Ph.D. in Science and Technology (grade: Excellent), TU Wien (Austria)

Synthesis, structure and physical properties of ternary compounds in the R-R'-Mg and R-T-In systems (R, R' = rare earths, T = transition metals)

Supervisor: Professor G. Hilscher

1990-1992 Master in Science and Technology of Materials (grade: 50/50), Uni. Genoa (Italy)

Influence of rare-earth elements on properties of technological interest in light alloys

1988 BSc + MSc in Physics University of Genoa

Positions

2017-to date Associate Professor, Department of Chemistry and Industrial Chemistry, Univ. Genoa

2014-to date Member of the Committee for International Relations of the Univ. Genoa

2000-2016 Assistant Professor, Department of Chemistry and Industrial Chemistry, Univ. Genoa

1990-1999 Technical Officer, Department of Chemistry and Industrial Chemistry, Univ. Genoa

1988-1989 Teacher of electronics in high schools

International leadership

International Projects

- 2005-2008 Member of the **Management Committee** of the **International Project COST**, action P16 "Emergent Behavior in Correlated Matter";
- 2009-2010 **Scientific Coordinator** for the Italian

side of a bilateral Project of Scientific and Technological Cooperation Italia-Argentina CNR-CONICET: with the title “Influence of chemical composition on the ground state of heavy fermions in intermetallic compounds of cerium”;

- 2009-2011 **Scientific Coordinator** for the Italian side of a bilateral Project of Scientific and Technological Cooperation Italia-Slovak Republic;
- 2014-2016 **Scientific Coordinator** of the Italian team of the MAE bilateral project Italy-Argentina titled “ Synthesis and study of magnetically frustrated systems with high anisotropy”
- 2022-to date **Scientific Coordinator** for the WP-TARGETS of the international project NUMEN (Target system design and production; Radiation damage study; Cooling system design; Study of dissipation; Deposition techniques)

Chairman positions at International Conferences

- **Chairman** of the **International Conference 43th** Journees des Actinides April 2013 Sestri Levante, Italy
- **Chairman** of the **International Conference 51st** Journees des Actinides April 2022 Santa Margherita Ligure, Italy

Editorial board positions

- 2011-2017: Member of the **Editorial Board** of ISRN Material Science
- 2020-to date: Member of the **Editorial Board** of the journal Metals, MDPI (impact factor: 2.9)

Scientific advisory board positions

- Member of the **Advisory Board** of the International Conference on Low Temperature Physics LT27 Buenos Aires, Argentina, August 2014;
- Member of the **Advisory Board** of the International Conference Journees des Actinides; 2014-2016 and 2022-to date

Research Interest

- Intermetallic compounds in strongly correlated electron system
- Magnetism in frustrated systems
- Compound formation and compositional phase diagrams of ternary systems
- Graphene Multilayers for heat dissipation: synthesis and characterization
- Targets for experiments of nuclear physics

Referee for International projects

- Referee of research projects of DFG (Deutsche Forschungs-Gemeinschaft).
- Referee of research projects of Czech Republic Science Foundation.

External Referee for PhD

University of Johannesburg

Referee for International journals

Communications Materials (Nature), Communications Physics (Nature), Chemistry of Materials (ACS), Journal of Applied Physics (AIP), Intermetallics, Journal of Alloys and Compounds, Materials and Design, Journal of Magnetism and Magnetic Materials, Materials Chemistry and Physics, Journal of Solid State Chemistry, Journal of Physics:Materials.

Participation to International Conferences and Schools

Several invited talks at conferences and schools (2 plenary and 1 semi-plenary), besides many oral contributions at international conferences.

Publications

100 articles in peer-reviewed journals (H-index: 22) + 9 publications on international books reporting critical assessments of phase diagrams, 1 book chapter

List of peer-reviewed papers

- 1) M.Giovannini, R.Marazza, A.Saccone, R.Ferro;
Isothermal section from 50 to 75 at.% Mg of the ternary system Y-La-Mg;
J.Alloys Compd. 203 (1994) 177-180.
- 2) M.Giovannini, A.Saccone, R.Ferro;
Phase relationships at 500°C in the Y-Pr-Mg system;
J.Alloys Compd. 220 (1995) 167-173.
- 3) M.Giovannini, A.Saccone, R.Marazza, R.Ferro;
The isothermal section at 500°C of the Y-La-Mg ternary system;
Metall. Mat. Trans.(A) 26A (1995) 5-10.
- 4) H. Flandorfer, A. Kostikas, P. Rogl, C. Godart, M. Giovannini, A. Saccone, R. Ferro;
On the magnetic and valence properties of Ce-Mg-Y compounds;
J. Alloys Comp. 240 (1996) 116-123.
- 5) D.Kaczorowski, M.Giovannini, R.Hauser, H. Michor, E.Bauer, G. Hilscher;
Field and pressure studies of Ce₂Pd₂In;
Czech.J.Phys. 46 (1996), Suppl. S4, 2063-2064.
- 6) A.Saccone, D. Macciò, M. Giovannini, S. Delfino;
The praseodymium-gold system;
J. Alloys Compd. 247 (1997) 134-140.
- 7) H. Flandorfer, M. Giovannini, A. Saccone, P. Rogl, R. Ferro;
The Ce-Mg-Y system;
Metall. Mat. Trans.(A) 28A (1997) 265-276.
- 8) M. Giovannini, A. Saccone, H. Flandorfer, P. Rogl, R. Ferro;
On the systematics of phase equilibria in complex magnesium-rare earth systems:
Gd-Y-Mg system;
Z. Metallkd. 88 (1997) 372-378.
- 9) R. Ferro, A. Saccone, S. Delfino, D. Macciò, M. Giovannini;
Alloying behaviour of the rare earth metals with manganese;
Powder Metallurgy 3/4 (1997) 1-12.
- 10) M Giovannini, H. Michor, E. Bauer, G. Hilscher, P. Rogl, R. Ferro;
Structural chemistry, magnetism and thermodynamic properties of R₂Pd₂In;
J. Alloys Comp. 280 (1998) 26-38.

- 11) M. Giovannini, A. Saccone, R. Ferro;
The isothermal section at 450°C of the Yb-Pr-Mg system;
Intermetallics 7 (1999) 909-916.
- 12) M.R. Pinasco, E. Cordano, M. Giovannini;
X-ray diffraction and microstructural study of some PFM
precious metal dental alloys under different metallurgical conditions;
J. Alloys Compd. 289 (1999) 289-298.
- 13) M. Giovannini, H. Michor, E. Bauer, G. Hilscher, P. Rogl, T. Bonelli, F. Fauth,
P. Fischer, T. Hermannsdörfer, L. Keller, W. Sikora, A. Saccone, R. Ferro;
Effect of nonstoichiometry on the transition from ferromagnetism to antiferromagnetism
in the ternary indides $Ce_{1.95}Pd_{2+2x}In_{1-x}$ and $Ce_{2+x}Pd_{1.85}In_{1-x}$;
Phys. Rev. B 61 (2000) 4044-4053.
- 14) T. Hermannsdörfer, P. Fischer, G. Böttger, L. Keller, M. Giovannini, E. Bauer;
Magnetic ordering in the rare-earth intermetallic compounds Tb_2Pd_2In and Ho_2Pd_2In ;
Physica B 276-278 (2000) 702-703.
- 15) P. Fischer, T. Hermannsdörfer, T. Bonelli, F. Fauth, L. Keller, E. Bauer, M. Giovannini;
Antiferromagnetic rare-earth ordering in the intermetallic compounds R_2Pd_2In ($R = Pr, Nd$);
J. Phys.: Condens. Matter 12 (2000) 7089-7098.
- 16) M. Giovannini, E. Bauer, H. Michor, G. Hilscher, A. Galatanu, A. Saccone, P. Rogl;
Characterization and physical properties of the indides Yb_2T_2In ($T = Cu, Pd, Au$);
Intermetallics 9 (2001) 481-485.
- 17) E. Bauer, Ch. Paul, St. Berger, S. Majumdar, H. Michor, M. Giovannini, A. Saccone,
A. Bianconi;
Thermal conductivity of superconducting MgB_2 ;
J. Phys.: Condens. Matter 13 (2001) L487-L493.
- 18) A. Bianconi, D. Di Castro, S. Agrestini, G. Campi, N. L. Saini, A. Saccone, S. De Negri
M. Giovannini;
A superconductor made by a metal heterostructure at the atomic limit tuned at the
shape resonance: MgB_2 ;
J. Phys.: Condens. Matter 13 (2001) 7383-7390.
- 19) S. Agrestini, D. Di Castro, M. Sansone, N. L. Saini, A. Saccone, S. De Negri, M. Giovannini,
M. Colapietro, A. Bianconi;
High T_c superconductivity in a critical range of micro-strain and charge density in diborides
J. Phys.: Cond. Matter 13, (2001) 11689
- 20) A. Bianconi, S. Agrestini, D. Di Castro, G. Campi, G. Zangari, N. L. Saini, A. Saccone,
S. De Negri, M. Giovannini, G. Profeta, A. Continenza, G. Satta, S. Massida, A. Cassetta,
A. Pifferi, M. Colapietro;
Scaling of the critical temperature with the Fermi temperature in diborides;

Phys. Rev. B 65 (2002) 174515-1 174515-5.

- 21) D. Di Castro, S. Agrestini, G. Campi, A. Cassetta, M. Colapietro, A. Congeduti, A. Continenza, S. De Negri, M. Giovannini, S. Massida, M. Nardone, A. Pifferi, P. Postorino, G. Profeta, A. Saccone, N.L. Saini, G. Satta, A. Bianconi;
The amplification of the superconducting T_c by combined effect of tuning of the Fermi level and the tensile micro-strain in $Al_{1-x}Mg_xB_2$;
Europhys. Lett. 58 (2002) 278-284.
- 22) S. Agrestini, D. Di Castro, M. Sansone, N. L. Saini, A. Bianconi, A. Saccone, S. De Negri, M. Giovannini, M. Colapietro;
Anisotropic thermal expansion in diborides as a function of micro-strain
Int. J. Mod. Phys. B 17, 812 (2003).
- 23) E. Bauer, St. Berger, S. Gabani, G. Hilscher, H. Michor, Ch. Paul, M. Giovannini, A. Saccone, C. Godart, P. Bonville, Y. Aoki, H. Sato;
Non-Fermi-liquid features of novel Yb_2Pd_2In
Acta Physica Polonica B, 34 (2003) 367-370.
- 24) M. Giovannini, A. Saccone, P. Rogl, R. Ferro,
The isothermal section at 750 °C of the Ce-Pd-In system
Intermetallics 11 (2003) 197-205.
- 25) D. Eyidi, O. Eibl, T. Wenzel, K.G. Nickel, M. Giovannini, A. Saccone,
Phase analysis of superconducting polycrystalline MgB_2
Micron 34 (2003) 85-96.
- 26) M. Giovannini, A. Saccone, S. Delfino, P. Rogl,
A comparative investigation of isothermal sections of Rare Earth-Pd-In systems
Intermetallics 11 (2003) 1237-1243.
- 27) S. Agrestini, A. Bianconi, S. De Negri, M. Giovannini, A. Saccone,
The role of boron lattice expansion in superconducting diborides
Intermetallics 11 (2003) 1339-1344.
- 28) P. Carretta, M. Giovannini, M. Horvatic, N. Papinutto, A. Rigamonti,
Dynamic susceptibility and magnetic-field effect at the quantum critical point in $CeCu_{6-x}Au_x$ from Cu NQR-NMR relaxation
Phys. Rev. B Rapid Comm. 68 (2003) 220404-1, 2204404-4.
- 29) S. De Negri, D. Kaczorowski, A. Grytsiv, E. Alleno, M. Giovannini, R. Gorzelniak, P. Rogl, C. Godart, A. Saccone, R. Ferro;
 $Gd(Mn_{1-x}In_x)_2$: crystal structure and physical properties
J. Alloys Compd. 365 (2004) 58-67.
- 30) S. Agrestini, C. Metallo, M. Filippi, G. Campi, C. Sanipoli, A. Saccone, S. De Negri, M. Giovannini, A. Latini, A. Bianconi,
Advances in doping MgB_2 : tuning the Fermi level to the “shape resonance” by Sc substitution

Phys. Stat. Sol. (C) 7 (2004) 1832-1835.

- 31) E. Bauer, G. Hilscher, H. Michor, Ch. Paul, Y. Aoki, H. Sato, M. Giovannini, A. Saccone;
Evolution of ground state properties in novel $\text{Yb}_2\text{Pd}_2\text{In}_{1-x}\text{Sn}_x$
J. Magn. Magn. Mat. 272-276 (2004) 237-238.
- 32) P. Carretta, M. Giovannini, N. Papinutto, A. Rigamonti;
Magnetic field effect at the quantum critical point in $\text{CeCu}_{6-x}\text{Au}_x$ from Cu NQR-NMR relaxation
J. Magn. Magn. Mat. 272-276 (2004) 211-213.
- 33) S. Agrestini, C. Metallo, M. Filippi, G. Campi, C. Sanipoli, S. De Negri, M. Giovannini, A. Saccone, A. Latini, A. Bianconi;
Sc doping of MgB_2 : the structural and electronic properties of $\text{Mg}_{1-x}\text{Sc}_x\text{B}_2$
J. Phys. Chem. of Solids 65 (2004) 1479-1484.
- 34) S. Agrestini, C. Metallo, M. Filippi, L. Simonelli, G. Campi, C. Sanipoli, E. Liarokapis, S. De Negri, M. Giovannini, A. Saccone, A. Latini, A. Bianconi;
Substitution of Sc for Mg in MgB_2 : effects on transition temperature and Kohn anomaly
Phys. Rev. B 70 (2004) 134514-1, 134514-5.
- 35) M. Giovannini, A. Saccone, St. Müller, H. Michor, E. Bauer;
Ground state properties of the $\text{YbCu}_{5-x}\text{Au}_x$ ($0 < x \leq 1.8$) solid solution
J. Phys.: Condens. Matter 17 (2005) S877-S882.
- 36) E. Bauer, G. Hilscher, H. Michor, Ch. Paul, Y. Aoki, H. Sato, D.T. Adroja, J.G. Park, P. Bonville, C. Godart, J. Sereni, M. Giovannini, A. Saccone;
The magnetic instability of $\text{Yb}_2\text{Pd}_2(\text{In},\text{Sn})$ in a non-Fermi liquid environment
J. Phys.: Condens. Matter 17 (2005) S999-S1009.
- 37) N. Papinutto, M. J. Graf, P. Carretta, A. Rigamonti, M. Giovannini
From weakly antiferromagnetic metal to quantum criticality: NQR and μSR results for $\text{CeCu}_{6-x}\text{Au}_x$ with $0 \leq x \leq 0.8$
Physica B 359-361 (2005) 89-91.
- 38) S. De Negri, M. Giovannini, A. Saccone;
Phase relationships of the La-Ni-Mg system at 500 °C from 0 to 66.7 at% Ni
J. Alloys Compd. 397 (2005) 126-134.
- 39) V. Palmisano, S. Agrestini, G. Campi, M. Filippi, L. Simonelli, M. Fratini, S. De Negri, M. Giovannini, A. Saccone, A.N. Fitch, M. Brunelli, I. Margiolaki, A. Bianconi;
Anomalous thermal expansion in superconducting $\text{Mg}_{1-x}\text{Al}_x\text{B}_2$ system
J. of Superconductivity 18 (2005) 137-141.
- 40) M. Filippi, L. Simonelli, S. Agrestini, M. Fratini, V. Palmisano, G. Campi, C. Sanipoli, S. De Negri, M. Giovannini, A. Saccone, A. Bianconi
 T_C as a function of electron doping in Mg^{10}B_2 using Sc for Mg substitution
J. of Superconductivity 18 (2005) 67-70.

- 41) M. El-Hagary, H. Michor, S. Özcan, M. Giovannini, A. Matar, Z. Heiba, P. Kersch, M. Schönhart, E. Bauer, R. Grössinger, G. Hilscher, J. Freudenberger, H. Rosner, Phase formation and ferrimagnetism of GdCo_9Si_4 J. Phys. Condens. Matter 18 (2006) 4567-4580.
- 42) M. Giovannini, E. Bauer, G. Hilscher, R. Lackner, H. Michor, A. Saccone, Structure and Kondo properties of the novel compound CeCu_2Mg Physica B 378-380 (2006) 831-832.
- 43) P. Carretta, M. Giovannini, M.J. Graf, N. Papinutto, A. Rigamonti, K. Sullivan, On the magnetic field dependence of the susceptibility at the quantum critical point in $\text{CeCu}_{5.9}\text{Au}_{0.1}$ Physica B 378-380 (2006) 84-86.
- 44) S. De Negri, M. Giovannini, A. Saccone, Constitutional properties of the La-Cu-Mg system at 400°C Journal Alloys Compd. 427 (2007) 134-141.
- 45) S. De Negri, M. Giovannini, A. Saccone Phase relationships of the La-Ni-Mg system at 500 °C from 66.7 to 100 at% Ni J. Alloys Comp. 439 (2007) 109-113.
- 46) M. Filippi, S. Agrestini, L. Simonelli, N.L. Saini, A. Bianconi, S. De Negri, M. Giovannini, A. Saccone, X-ray Absorption Near Edge Structure (XANES) microscopy of phase separation in superconducting $\text{Mg}_{1-x}\text{Sc}_x\text{B}_2$ Spectrochimica Acta B 62 (2007) 717-719
- 47) A. Bianconi, Y. Busby, M. Fratini, V. Palmisano, L. Simonelli, M. Filippi, S. Sanna, F. Congiu, A. Saccone, M. Giovannini, S. De Negri, Controlling the Critical Temperature in $\text{Mg}_{1-x}\text{Al}_x\text{B}_2$ J. Supercond. Nov. Magn. 20 (2007) 495-501.
- 48) M. Giovannini, R. Pasero, S. De Negri, A. Saccone, $\text{Yb}(\text{Cu},\text{T})_5$ and $\text{Yb}(\text{Cu},\text{T})_{4.5}$ solid solutions (T=Ag, Au, Pd), Intermetallics 16 (2008) 399-405.
- 49) M. Giovannini, E. Bauer, G. Hilscher, H. Michor, P. Rogl, A. Saccone Effect of chemical composition on ground state properties of Ce and Yb intermetallic compounds, Journal of Optoelectronics and Advanced Materials, 10(7) (2008) 1595-1600.
- 50) E. Bauer, H. Michor, T. Muramatsu, T. Kanemasa, T. Kagayama, K. Shimizu, Y. Aoki, H. Sato, M. Giovannini Occurrence of two quantum critical points in $\text{Yb}_2\text{Pd}_2\text{Sn}$ or, Yb systems do not behave mirror-like to Ce compounds" Journal of Optoelectronics and Advanced Materials, 10(7)(2008) 1633-1638.

- 51) P. Carretta, R. Pasero, M. Giovannini, C. Baines
Magnetic-field-induced crossover from non-Fermi to Fermi liquid at the quantum critical point of $\text{YbCu}_{5-x}\text{Au}_x$
Phys. Rev B 79 (2009) 020401.
- 52) M. Giovannini, R. Pasero, A. Saccone
Phase relationships at 600 °C of the Yb-Pd-Sn system from 25 to 100 at% Yb
Intermetallics 18 (2010) 429-433.
- 53) M. Giovannini, M. Hadwig, R. Pasero, E. Bauer, G. Hilscher, M. Reissner, P. Rogl, H. Michor
Phase formation and ground state properties of CeCo_9Si_4
J.Phys.: Condens Matter 22 (2010) 135601-135608.
- 54) E. Bauer, R.T. Khan, M. Giovannini, C. Ritter
Appearance of long range magnetic order in a nonmagnetic periphery: $\text{Yb}_2\text{Pd}_2(\text{In}, \text{Sn})$
Phys. Status Solidi B 247 N.3 (2010) 717-719.
- 55) I. Čurlík, M. Reiffers, M. Giovannini, E. Gažo, J. Šebek, E. Šantavá,
Strong electronic correlations in a new Yb-based compound: YbCu_4Ni
Acta Physica Polonica A 118 (2010) 919-921.
- 56) J.G. Sereni, M. Giovannini, M. Gomez Berisso, A. Saccone,
Electron concentration effects on the Shastry-Sutherland phase stability in $\text{Ce}_{2-x}\text{Pd}_{2+y}\text{In}_{1-z}$ solid solutions; Phys. Rev. B 83 (2011) 064419.
- 57) T. Muramatsu, T. Kanemasa, T. Kagayama, K. Shimizu, Y. Aoki, H. Sato, M. Giovannini, . Bonville, V. Zlatic, I. Aviani, R. Khasanov, C. Rusu, A. Amato, K. Mydee, M. Nicklas, H. Michor, E. Bauer,
Re-entrant quantum criticality in $\text{Yb}_2\text{Pd}_2\text{Sn}$
Phys. Rev B 83 (2011) 180404(R).
- 58) P. Solokha, I. Čurlík, M. Giovannini, N.R. Lee-Hone M. Reiffers, D.H. Ryan, A. Saccone,
Structural and physical properties of the new intermetallic compound $\text{Yb}_3\text{Pd}_2\text{Sn}_2$
J. Solid State Chemistry 184 (2011) 2498-2505.
- 59) P. Lemoine, J.M. Cadogan, D.H. Ryan, M. Giovannini
The magnetic structure of EuPdSn
J. Phys. Condens. Matter 24 (2012) 236004.
- 60) I. Čurlík, M. Reiffers, M. Giovanmini,
Study of Magnetic Contribution to the Heat Capacity of YbCu_4Ni , Acta Physica Polonica A 61 012) 1-5.
- 61) I. Čurlík, S. Mat'osova, S. Il'covic, M. Reiffers, M. Giovannini, Transport and Magnetic Properties of YbCu_4Ni , Acta Physica Polonica A 122 (2012) 6-8.

- 62) H. Yamaoka, P. Thunström, N. Tsujii, I. Jarrige, K. Shimada, M. Arida, H. Iwasawa, H. Hayashi, J. Jiang, H. Namatame, M. Tanigushi, N. Hiraoka, H. Ishii, Ku-Ding Tsuei, M. Giovannini, E. Bauer,
Electronic structure and the valence state of $\text{Yb}_2\text{Pd}_2\text{Sn}$ and YbPd_2Sn studied by photoelectron and resonant x-ray emission spectroscopies *Phys. Rev. B* **86** (2012) 085137.
- 63) I. Čurlík M. Reiffers M. Giovannini, P. Solokha, A. Saccone, S. Il'kovic, D.H. Ryan,
Crystal structure and physical properties of the novel stannide $\text{Yb}_3\text{Pd}_2\text{Sn}_2$, *Journal of Physics: Conference Series* **391** (2012) 012008.
- 64) J.G. Sereni, M. Giovannini, M. Gomez Berisso, A. Saccone,
Searching for a Quantum Critical Point in Rh doped ferromagnetic $\text{Ce}_{2.15}\text{Pd}_{1.95}\text{In}_{0.9}$, *J. Phys. Conference Series* **391** (2012) 012062.
- 65) M. Zapotokov'a, I. Curlik, M. Giovannini, M. Reiffers,
Study on effect of Ge doping on CeNi_5 .
Eur. Phys. J. B **86** (2013) 129.
- 66) I. Čurlík, M. Giovannini, J. G. Sereni, M. Zapotokova, S. Gabani, M. Reiffers,
Extremely high density of magnetic excitations at $T = 0$ in $\text{YbCu}_{5-x}\text{Au}_x$.
Phys. Rev. B **90** (2014) 224409.
- 67) M. Giovannini, I. Curlik, F. Gastaldo, M. Reiffers, J.G. Sereni,
The role of crystal chemistry in $\text{YbCu}_{5-x}\text{Au}_x$,
J. Alloys Compd. **627** (2015) 20-24.
- 68) J.G. Sereni, M. Giovannini, M. Gomez Berisso, F. Gastaldo,
Non-magnetic anomaly at 1K arising in Ferromagnetic $\text{Ce}_{2.15}(\text{Pd}_{1-x}\text{Ag}_x)\text{In}_{0.9}$,
Physics Procedia **75** (2015) 390–396
- 69) J.G. Sereni, M. Giovannini, M. Gomez Berisso, F. Gastaldo,
Competition between ferromagnetism and frustrated antiferromagnetism in quasi 2D $\text{Ce}_{2.15}(\text{Pd}_{1-x}\text{Ag}_x)\text{In}_{0.9}$ alloys, *J. Phys. Condens. Matter* **28** (2016) 475601.
- 70) F. Gastaldo, M. Giovannini, A.M. Strydom, R. F. Djoumessi, I. Čurlík, M. Reiffers, P. Solokha A. Saccone, Isothermal section at 600 °C of the Yb–Pd–Sn system ($\text{Pd} \leq 75$ at%), *Journal of Alloys and Compd.* **694** (2017) 185-192.
- 71) Silvie Maskova , Khrystyna Miliyanchuk, Lev Akselrud, Itzhak Halevy, Mauro Giovannini, Ladislav Havela, Structure and properties of $\text{Tb}_2\text{Pd}_2\text{Mg}$ hydride,
Journal of Alloys Compd. **694** (2017) 201-207.
- 72) H. Michor, J. G. Sereni, M. Giovannini, E. Kampert, L. Salamakha, G. Hilscher, and E. Bauer,
Elucidating the lack of magnetic order in the heavy-fermion CeCu_2Mg , *Phys. Rev. B* **95**, (2017) 115146.

- 73) Silvie Maskova, Khrystyna Miliyanchuk, Lev Akselrud, Itzhak Halevy, Mauro Giovannini, Ladislav Havela, "Nd₂Ni₂MgH₈ hydride: synthesis, structure and magnetic properties" *Intermetallics* 87 (2017) 13.
- 74) F. Gastaldo, M. Giovannini, A. Strydom, R.F. Djoumessi, I. Čurlík, M. Reiffers, P. Solokha and A. Saccone, Structural and Physical Properties of the new Stannide Yb₃Pd₄Sn₁₃ *Acta Physica Polonica A*, 131 (2017) 1006-1008.
- 75) I. Čurlík, F. Gastaldo, M. Giovannini, A. M. Strydom, M. Reiffers, Crystal structure and magnetic properties of new Eu-Pd-Sn compounds, *Acta Physica Polonica A*, 131 (2017) 1003-1005.
- 76) Hitoshi Yamaoka, Naohito Tsujii, Michi-To Suzuki, Yoshiya Yamamoto, Ignace Jarrige, Hitoshi Sato, Jung-Fu Lin, Takeshi Mito, Jun'ichiro Mizuki, Hiroya Sakurai, Osamu Sakai, Nozomu Hiraoka, Hirofumi Ishii, Ku-Ding Tsuei, Mauro Giovannini, Ernst Bauer, *Scientific Reports* 7 (2017) 5846
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