

CITATI UKUPAN BROJ CITATA: 195

BEZ AUTOCITATA I CITATA KOAUTORA: 133

Rad:

Nenad Dj Lazarov, Vesna Borka Jovanovic, D. Borka, Predrag Jovanovic, Geodesic equations in the weak field limit of general  $f(R)$  gravity theory, *Filomat* 37(25) (2023), 8575-8581.

Citat 1

1) Abishek K. Dabre Pallavi Makode, Viscous Plane Symmetric String Cosmological Model  $f(R)$  Gravity, *Astrophysics*, 67(2) (2024) 161-177.

Rad:

Duško Borka, Vesna Borka Jovanović, Violeta N. Nikolić, Nenad Đ. Lazarov and Predrag Jovanović, Estimating the Parameters of the Hybrid Palatini Gravity Model with the Schwarzschild Precession of S2, S38 and S55 Stars: Case of Bulk Mass Distribution, *Universe* 2022, 8, 70.

Citati: 2

1) Stavrinos, P., Saridakis, E., Editorial of Modified Theories of Gravity and Cosmological Applications (2022) *Universe* 8(8),415

2) Bo Yang et al., Probing the regular hole with asymptotically Minkowski core by precessing motion of S2 star and Oj 287, the european journal physics C 84(907) (2024).

Rad

V. M. Matić, M. Milić and N. Dj. Lazarov, "A model of oxygen ordering in  $YBa_2Cu_3O_x$ . Fragmented-chain structure at  $6.5 < x < 7$ ", *Physica C* 339 (2000) 27-36.

Citati: 3

1) Ayache J Grain boundaries in high temperature superconducting ceramics

*PHILOSOPHICAL MAGAZINE* 86 (15): 2193-2239 MAY 21 2006

2) Bhalla GL, Sharma S, Malik A, et al. On the stability of  $YBa_2Cu_{3-x}Al_xO_{7-\delta}$  in water

*PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS* 384 (4): 482-490

FEB 15 2003

3) Oxygen desorption activation energy of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  obtained by thermogravimetry with different heating rates By: Zhu, ZL; Yang, DL; Guo, YQ; et al. *PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS* Volume:383 Issue: 1-2 Pages: 169-174 Article Number: PII S0921-4534(02)01318-7 Published: DEC 1 2002

Rad:

V. B. Kusigerski, V. V Spasojevic, N. Dj. Lazarov, D. S. Markovic, V. M. Matic, S. S.

Sovilj and M. Guillot, "High Magnetic Fields Study of Asymmetric Co(II) Dimmer in Octahedral Ligand Environment", *Solid State Communications* 126 (2003) 319-322.

Citati: 7

1) Garcia-Couceiro U, Castillo O, Luque A, et al. A new hydrated phase of cobalt(II) oxalate: crystal structure, thermal behavior and magnetic properties of  $\{[\text{Co}(\mu\text{-ox})(\text{H}_2\text{O})_2] \cdot 2\text{H}_2\text{O}\}_n$  *INORGANICA CHIMICA ACTA* 357 (1): 339-344 JAN 9 2004

2) Hurethouse, M.B. , Light M. E. , Price D. J. One-Dimensional Magnetism in Anhydrous, Iron and Cobalt Ternary Oxalates with Rare Trigonal-Prismatic Metal Coordination Environment *Angewandte Chemie - International Edition* 43 (4), pp. 472-475 2004

3) A novel 3D cyano-bridged mixed-valence Co-II/Co-III canted antiferromagnet constructed from defective cubanes. Synthesis, X-ray structure and magnetic properties Author(s): Rodriguez-Dieguez A, Kivekas R, Sakiyama H, et al. Source: *DALTON TRANSACTIONS* Issue: 21 Pages: 2145-2149 Published: 2007

4)  $\text{Co}(\text{C}_2\text{O}_4)(\text{HO}(\text{CH}_2)_3\text{OH})$ : An Antiferromagnetic Neutral Zigzag Chain Compound Showing Long-Range Ordering of Spin Canting Author(s): Duan ZM, Zhang Y, Zhang B, et al. Source: *INORGANIC CHEMISTRY* Volume: 47 Issue: 20 Pages: 9152-9154 Published: OCT 20 2008

5) Mennerich, C. a , Klauss, H.-H. a Wolter, A.U.B. a , Süllo, S. a , Litterst, F.J. a , Golze, C. b , Klingeler, R. b , Kataev, V. b , Büchner, B. b , Goiran, M. c , Rakoto, H. c , Broto, J.-M. c , Kataeva, O. d , Price, D.J. High field level crossing studies on spin dimers in the low dimensional quantum spin system  $\text{Na}_2\text{T}_2(\text{C}_2\text{O}_2)_3(\text{H}_2\text{O})_2$  with T = Ni, Co, Fe, Mn *NATO Science for Peace and Security Series B: Physics and Biophysics* 2008, Pages 97-124

6) Synthesis and structural characterization of two cobalt phosphites: 1-D  $(\text{H}_3\text{NC}_6\text{H}_4\text{NH}_3)\text{Co}(\text{HPO}_3)_2$  and 2-D  $(\text{NH}_4)_2\text{CO}_2(\text{HPO}_3)_3$  Author(s): Cheng CC, Chang WK, Chiang RK, et al. Source: *JOURNAL OF SOLID STATE CHEMISTRY* Volume: 183 Issue: 2 Pages: 304-309 Published: FEB 2010

7) Series of M-I[Co(bpy)(3)][Mo(CN)(8)] center dot nH(2)O (M-I = Li(1), K (2), Rb (3), Cs (4); n=7-8) Exhibiting Reversible Diamagnetic toParamagnetic Transition Coupled with Dehydration-RehydrationProcessAuthor(s): Koziel M, Podgajny R, Kania R, et al.Source: INORGANIC CHEMISTRY Volume: 49 Issue: 6 Pages: 2765-2772 Published:MAR 15 2010

Rad:

N. Dj. Lazarov, V. V Spasojevic, V. B. Kusigerski, V. M. Matic and M. Milić,"Magnetic susceptibility calculation of the dinuclear cobalt complex[Co<sub>2</sub>(ox)tpmc] (ClO<sub>4</sub>)<sub>2</sub>3H<sub>2</sub>O", Journal of Magnetic Materials 272-276 (2004) 1065-1066.

Citata 9

1) Hasegawa H Non-extensive thermodynamics of transition-metal nanoclustersPROGRESS IN MATERIALS SCIENCE 52 (2-3): 333-351 FEB-MAR 2007

2) Pruchnik FP, Dawid U, Kochel A Structure and properties of the dinuclear complex [Co<sub>2</sub>(μ-OAc)<sub>2</sub>(OAc)<sub>2</sub>(μ-H<sub>2</sub>O)(phen)<sub>2</sub>]POLYHEDRON 25 (18): 3647-3652 DEC 25 2006

3) Berry JF, Cotton FA, Liu CY, Lu T, Murillo CA, Tsukerblat BS, Villagran D, WangX, Modeling spin interactions in a cyclic trimer and a cuboidal Co<sub>4</sub>O<sub>4</sub> core with Co(II) in tetrahedral and octahedral environments , Journal of the American Chemical Society 127(13), pp. 4895-4902 (2005).

4) C. J. Ho, J. L. Her, C. P. Sun, C. C. Yang, C. L. Huang, C. C. Chou, Lu-Lin Li, K. J.Lin, W. H. Li, J. W. Lynn, and H. D. Yang, Neutron diffraction and specific heat studies on the magnetic ordering in the †Fe II□□□□Fe II,,\_ ...,ox ...2 ,,Phen ...2 ‡n molecularmagnet,PHYSICAL REVIEW B 76, 224417 (2007).

5) Wang, X.-L, Sui, F.-F., Lin, H.-Y., Zhang, J.-W. Liu, G.-C.Multifunctional cobalt(II) coordination polymers tuned by flexible bis(pyridylamide)ligands with different spacers and polycarboxylates Crystal Growth and DesignVolume 14, Issue 7, 2 July 2014, Pages 3438-3452

6) Kozlevcar, Bojan; Jakomin, Klemen; Pockaj, Marta; et al.Dinuclear Nitrate Coordination Compounds with Bis(3,5-tert-butylpyrazol-1-yl)acetateEUROPEAN JOURNAL OF INORGANIC CHEMISTRY Issue: 22 Pages: 3688-3693 Published: AUG 2015

7) Modeling Spin Interactions in a Triangular Cobalt(II) Complexwith Triaminoguanidine Ligand Framework: Synthesis, Structure,and Magnetic PropertiesBy: Plaul, Daniel; Boehme,

Michael; Ostrovsky, Serghei; et al. INORGANIC CHEMISTRY Volume: 57 Issue: 1 Pages: 106-119 Published: JAN 1 2018

8) Tounsi, N., Dupont, L., Mohamadou, A., (...), Aplincourt, M., Rogez, G. Synthesis of new Cu(II), Ni(II) and Co(II) complexes with a bis-amide ligand functionalized with pyridine moieties: Spectral, magnetic and electrochemical studies *Polyhedron* 27(18), pp. 3674-3682 (2008)

9) Arauzo, A., Bartolomé, E., Luzón, J., (...), Bartolomé, J., Turta, C.,

Slow magnetic relaxation in [CoC<sub>x</sub>APy]<sub>2</sub>·1.5H<sub>2</sub>O MOF built from ladder-structured 2D layers with dimeric SMM rungs, *Molecules* 26(18), 5626, 2021.

Rad: Nenad Dj Lazarov, Vojislav Spasojevic, V.M. Matic et al., Magnetic properties of asymmetric Co(II) dimer at low temperatures, *Revue Roumaine de Chimie* 52(11) (2007), 1027-1031.

Citat 1

1) Ana B Arauzo et al, Slow magnetic Relaxation in CoC<sub>x</sub>APy<sub>2</sub>·1.5H<sub>2</sub>O MOF Built from Ladder Structured 2D Layers with Dimeric SMM Rungs, *Molecules*, 26(18) (2021) 5626.

Rad

V. M. Matic, N. Dj. Lazarov, V. Spasojevic, M. Milic and V. Kusigerski, "A Monte Carlo study on distribution of CuO chains in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+2c</sub>", *Physica C* 421 (2005) 49-55.

Citati 1

Najafi, M.N., Tavana, A., Universality class of the structural phase transition in the normal phase of cuprate superconductors, *Physical Review E* 94(2), 022110 (2016)

Rad:

Geometric distribution of CuO chains in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+x</sub>, Author(s): Matic VM, Lazarov ND  
Source: PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, Volume: 443  
Issue: 1-2 Pages: 49-56 Published: SEP 1 2006

Citati: 1

1) Chain length probability distribution - equivalence of ASYNNNI and 1d Ising model  
Author(s): Milic M  
Source: CENTRAL EUROPEAN JOURNAL OF PHYSICS  
Volume: 6 Issue: 2  
Pages: 311-316  
Published: JUN 2008

Rad

V. M. Matic and N. Dj. Lazarov, "Impact of chain fragmentation on charge transfer scenario and two-plateaus-like behavior of  $T_c(x)$  in  $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ ", *Solid State Communications* 142 (2007) 165-168. M22

Citati 2

1) Huang, H., Jang, H., Fujita, M., (...), Liu, Y.-J., Lee, J.-S. Modification of structural disorder by hydrostatic pressure in the superconducting cuprate  $\text{YBa}_2\text{Cu}_3\text{O}_{6.73}$ , *Physical Review B* 97(17), 174508 (2018)

2) Band structure and Quantum Oscillations in  $\text{YBa}_2\text{Cu}_3\text{O}_7$ : A Local Spin Density Approximation with the On Site Coulomb Interaction Study, *Journal of Superconducting and Novel Magnetism* 26 (2013) 5-19.

Rad

V. M. Matic and N. Dj. Lazarov, "The origin of 60K plateau in  $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ ", *Journal of Physics: Condensed Matter* 19 (2007) 346230 (pp9).

Citati 1

Universality class of the structural phase transition in the normal phase of cuprate superconductors  
By: Najafi, M. N.; Tavana, A.  
*PHYSICAL REVIEW E* Volume: 94 Issue: 2  
Article Number: 022110  
Published: AUG 8 2016

Rad: Lazarov Nenad Dj., Spasojevic Vojislav V., Matic Vladimir M., Kusigerski Vladan B., Guillot Maurice., Magnetic properties of asymmetric Co(II) dimer at low temperatures, *REVUE ROUMAINE DE CHIMIE*, (2007), vol. 52 br. 11, str. 1027-1031.

Citat 1

Arauzo, A; Bartolome, E; (...); Turta, C, Slow Magnetic Relaxation in {[CoCxAPy]} 2.15 H<sub>2</sub>O}{n} MOF Built from Ladder-Structured 2D Layers with Dimeric SMM Rungs, Sep 2021 MOLECULES 26 (18)

Rad: N. Dj. Lazarov, M. M. Milic, D. A. Cucic "Effect of illumination on the superconducting transition temperature T in YBa<sub>2</sub> Cu<sub>3</sub>O<sub>6+x</sub> ", Nuclear Instruments and Methods in Physics Reserch B 279 (2012) 215-218.

Citati: 1

1) Stilp, E.; Suter, A.; Prokscha, T.; et al. Controlling the near surface superfluid density in underdoped YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+x</sub> by photo illumination SCIENTIFIC REPORTS Volume: 4 Article Number: 6250 Published: SEP 1 2014

Rad: M. M. Milic, N. Dj. Lazarov, D. A. Cucic "Study on the photo induced oxygen reordering in YBa<sub>2</sub> Cu<sub>3</sub>O<sub>6+x</sub> ", Nuclear Instruments and Methods in Physics Reserch B 279 (2012) 212-214.

Citati: 2

- 1) Stilp, E.; Suter, A.; Prokscha, T.; et al. Controlling the near surface superfluid density in underdoped YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+x</sub> by photo illumination SCIENTIFIC REPORTS Volume: 4 Article Number: 6250 Published: SEP 1 2014
- 2) Schilling A., Taking a step back and looking at the superconducting dome from a distance, Physica C, 612, (2023), 1354307.

Rad

Mirjana Milic, Vladimir M. Matic, Nenad Dj. Lazarov, The dependence of critical temperature on oxygen concentration in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+x</sub> in terms of the fragmented chain model, Central European journal of physics, 9(3), (2011), 690-697.

Citati:3

- 1) M Bellioua Mohamed Ld El Amel et al., Impact of Heat Treatments and Hole Density ( $p$ ) on the structural, electrical and superconducting properties of  $\text{LnSrBaCu}$ , Communications and Network 15(04) (2022) 83-97.
- 2) Violeta Nikolic et al.,  $\text{Fe}_3\text{O}_4$  nanoparticles as additives for gamma ray shielding: Structural and surfaces characterization, Scientific Technical Review 67(2) (2016):20-26.
- 3) Keltoum Khallouq, High Critical Temperature Superconducting Oxides of the YBCO System, Chapter in Book: Exploring High Temperature Superconducting in the YBCO System doi:10.1007/978-3-031-66238-6\_2 (2024)

#### Rad

V. M. Matic, N. Dj. Lazarov, M. Milic "A model for the quasi 60 K plateau in the  $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$  high  $T_c$ -compound", Journal of Alloys and Compounds 551 (2013)189-194.

#### Citati 2

- 1) Reiner, M., Gigl, T., Jany, R., Hammerl, G., Hugenschmidt, C. Detection and imaging of the oxygen deficiency in single crystalline  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  thin films using a scanning positron beam Applied Physics Letters 106(11),111910 (2015)
- 2) Reiner, M., Gigl, T., Jany, R., Hammerl, G., Hugenschmidt, C. Impact of oxygen diffusion on superconductivity in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  thin films studied by positron annihilation spectroscopy Physical Review B 97(14),144503 (2018)

Rad: C. Petrovic, Y Lee, T. Vogt, N. Dj. Lazarov, S. Bud'ko and P. C. Canfield, "Kondo Insulator description of spin state transition in  $\text{FeSb}$ ", Physical Review B 72(2005) 045103.

#### Citati 87

- 1) Bentien A, Madsen GKH, Johnsen S, et al. Experimental and theoretical investigations of strongly correlated  $\text{FeSb}_{2-x}\text{Sn}_x$  PHYSICAL REVIEW B 74 (20): Art. No. 205105 NOV 2006
- 2) Lukoyanov AV, Mazurenko VV, Anisimov VI, et al. The semiconductor-to-ferromagnetic-metal transition in  $\text{FeSb}_2$  EUROPEAN PHYSICAL JOURNAL B 53 (2): 205-207 SEP 2006
- 3) Muro Y, Nakamura H, Kohara T The pseudogap and anisotropic thermal expansion in  $\text{RMn}_4\text{Al}_8$  ( $R = \text{La, Y, Lu}$  and  $\text{Sc}$ ) JOURNAL OF PHYSICS-CONDENSED MATTER 18 (16): 3931-3936 APR 26 2006

- 4) Sharma RK, Sharma YK Synthesis, XRD and Fe-57 Mossbauer studies of the pseudo-binary  $\text{Fe}_{1-x}\text{Mn}_x\text{Sb}_2$  alloys INDIAN JOURNAL OF PURE & APPLIED PHYSICS 44 (4): 325-329 APR 2006
- 5) Fe-57 Mossbauer studies of pseudo-binary alloy system  $\text{Fe}_{1-y}\text{Cr}_y\text{Sb}_2$  for  $0 \leq y \leq 0.97$  at 300 K Author(s): Sharma RK, Sharma YK Source: INDIAN JOURNAL OF PURE & APPLIED PHYSICS Volume: 45 Issue: 10 Pages: 846-850 Published: 2007
- 6) Colossal Seebeck coefficient in strongly correlated semiconductor  $\text{FeSb}_2$  Author(s): Bentien A, Johnsen S, Madsen GKH, et al. Source: EPL Volume: 80 Issue: 1 Article Number: 17008 Published: 2007
- 7) Synthesis and basic properties of the filled skutterudite  $\text{SmFe}_4\text{Sb}_{12}$  Author(s): Ueda M, Kawahito Y, Tanaka K, et al. Conference Information: International Conference on Strongly Correlated Electron Systems (SCES 2007), MAY 13-18, 2007 Houston, T Source: PHYSICA B-CONDENSED MATTER Volume: 403 Issue: 5-9 Pages: 881-883 Published: APR 1 2008
- 8) Temperature-dependent correlations in covalent insulators: Dynamical mean-field approximation Author(s): Kunes J, Anisimov V Source: PHYSICAL REVIEW B Volume: 78 Issue: 3 Article Number: 033109 Published: JUL 2008
- 9) Thermoelectric and Magnetic Properties of a Narrow-Gap Semiconductor  $\text{FeGa}_3$  Author(s): Hadanoi Y, Narazu S, Avila MA, et al. Source: JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 78 Issue: 1 Article Number: 013702 Published: JAN 2009
- 10) Pressure-induced phase transitions of AX<sub>2</sub>-type iron pnictides: an ab initio study Author(s): Wu X, Steinle-Neumann G, Qin S, et al. Source: JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 21 Issue: 18 Article Number: 185403 Published: MAY 6 2009
- 11)  $\text{FeSb}_2$ : Prototype of huge electron-diffusion thermoelectricity Author(s): Sun P, Oeschler N, Johnsen S, et al. Source: PHYSICAL REVIEW B Volume: 79 Issue: 15 Article Number: 153308 Published: APR 2009
- 12) Structural study of  $\text{FeP}_2$  at high pressure Author(s): Wu X, Kanzaki M, Qin S, et al. Source: HIGH PRESSURE RESEARCH Volume: 29 Issue: 2 Pages: 235-244 Published: 2009
- 13) Thermoelectric transport properties of highly oriented  $\text{FeSb}_2$  thin films Author(s): Sun Y, Johnsen S, Eklund P, et al. Source: JOURNAL OF APPLIED PHYSICS Volume: 106 Issue: 3 Article Number: 033710 Published: AUG 1 2009
- 14) Huge Thermoelectric Power Factor:  $\text{FeSb}_2$  versus  $\text{FeAs}_2$  and  $\text{RuSb}_2$  Author(s): Sun P, Oeschler N, Johnsen S, et al. Source: APPLIED PHYSICS EXPRESS Volume: 2 Issue: 9 Article Number: 091102 Published: SEP 2009

- 15) Band structure calculations and magnetic relaxation in correlated semiconductors FeSb<sub>2</sub> and RuSb<sub>2</sub> Author(s): Gippius AA, Okhotnikov KS, Baenitz M, et al. Conference Information: 4th Moscow International Symposium on Magnetism, JUN 20-25, 2008 Moscow State Univ, Moscow, RUSSIA Source: MAGNETISM AND MAGNETIC MATERIALS Book Series: Solid State Phenomena Series Volume: 152-153 Pages: 287-290 Published: 2009
- 16) Narrow band gap and enhanced thermoelectricity in FeSb<sub>2</sub> Author(s): Sun PJ, Oeschler N, Johnsen S, et al. Source: DALTON TRANSACTIONS Volume: 39 Issue: 4 Pages: 1012-1019 Published: 2010
- 17) Orientation control and thermoelectric properties of FeSb<sub>2</sub> films Author(s): Sun Y, Zhang E, Johnsen S, et al. Source: JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 43 Issue: 20 Article Number: 205402 Published: MAY 26 2010
- 18) Thermopower of correlated semiconductors: Application to FeAs<sub>2</sub> and FeSb<sub>2</sub> Author(s): Tomczak JM, Haule K, Miyake T, et al. Source: PHYSICAL REVIEW B Volume: 82 Issue: 8 Article Number: 085104 Published: AUG 9 2010
- 19) Magnetization Process of Narrow-Gap Semiconductor FeSb<sub>2</sub> Author(s): Koyama T, Nakamura H, Kohara T, et al. Source: JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 79 Issue: 9 Article Number: 093704 Published: SEP 2010
- 20) Wien2wannier: From linearized augmented plane waves to maximally localized Wannier functions Author(s): Kunes J, Arita R, Wissgott P, et al. Source: COMPUTER PHYSICS COMMUNICATIONS Volume: 181 Issue: 11 Pages: 1888-1895 Published: NOV 2010
- 21) Herzog, A (Herzog, A.) [ 1 ] ; Marutzky, M (Marutzky, M.) [ 1 ] ; Sichel Schmidt, J (Sichel Schmidt, J.) [ 1 ] ; Steglich, F (Steglich, F.) [ 1 ] ; Kimura, S (Kimura, S.) [ 3 ] ; Johnsen, S (Johnsen, S.) [ 2 ] ; Iversen, BB (Iversen, B. B.) [ 2 ] Strong electron correlations in FeSb<sub>2</sub>: An optical investigation and comparison with RuSb<sub>2</sub> PRB Volume: 82 Issue: 24 (dec 2010) 245205
- 22) Sun, P (Sun, P.) [ 1 ] ; Sondergaard, M (Sondergaard, M.) [ 2 ] ; Sun, Y (Sun, Y.) [ 2 ] ; Johnsen, S (Johnsen, S.) [ 2 ] ; Iversen, BB (Iversen, B. B.) [ 2 ] ; Steglich, F (Steglich, F.) [ 1 ] Unchanged thermopower enhancement at the semiconductor-metal transition in Correlated FeSb<sub>2-x</sub>Te APPLIED PHYSICS LETTERS Volume: 98 Issue: 7 (feb 2011) 072105
- 23) Takahashi, H (Takahashi, Hidefumi) [ 1 ] ; Yasui, Y (Yasui, Yukio) [ 1 ] ; Terasaki, I (Terasaki, Ichiro) [ 1 ] ; Sato, M (Sato, Masatoshi) [ 1,2 ] Effects of ppm-Level Imperfection on the Transport Properties of FeSb<sub>2</sub> Single Crystals JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 80 Issue: 5 (may 2011) 054708
- 24) Sun, Y (Sun, Y.) [ 1,2 ] ; Zhang, E (Zhang, E.) [ 3,2 ] ; Johnsen, S (Johnsen, S.) [ 1,2 ] ; Sillassen, M (Sillassen, M.) [ 3,2 ] ; Sun, P (Sun, P.) [ 4 ] ; Steglich, F (Steglich, F.) [ 4 ] ; Bottiger, J (Bottiger,

J.)[ 3,2] ; Iversen, BB (Iversen, B. B.)[1,2]Growth of FeSb<sub>2</sub> thin films by magnetron sputteringTHIN SOLID FILMS Volume:519 Issue:16 (jun 2011) 5397-5402

25) Arita, M (Arita, M.)[ 1] ; Shimada, K (Shimada, K.)[ 1] ; Utsumi, Y (Utsumi, Y.)[ 2] ; Morimoto, O (Morimoto, O.)[ 1] ; Sato, H (Sato, H.)[ 1] ; Namatame, H (Namatame, H.)[ 1] ; Taniguchi, M (Taniguchi, M.)[ 1,2] ; Hadano, Y (Hadano, Y.)[ 3] ; Takabatake, T (Takabatake, T.)[ 3]Electronic structure of a narrow-gap semiconductor FeGa<sub>3</sub> investigated by photoemission and inverse photoemission spectroscopiesPRB Volume:83 Issue:24 (jun 22 2011) 245116

26) Sun, PJ (Sun, Peijie)[ 1] ; Sondergaard, M (Sondergaard, Martin)[ 2] ; Iversen, BB (Iversen, Bo B.)[ 2] ; Steglich, F (Steglich, Frank)[ 1]Strong electron correlations in FeSb<sub>2</sub>ANNALENDER PHYSIK Volume:523 Issue:8-9 (avg 2011) 612-620

27) Diakhate, MS (Diakhate, M. S.)[ 1] ; Hermann, RP (Hermann, R. P.)[ 1,2,3] ; Mochel, A (Mochel, A.)[ 1,2,3] ; Sergueev, I (Sergueev, I.)[ 4] ; Sondergaard, M (Sondergaard, M.)[ 5,6] ; Christensen, M (Christensen, M.)[ 6,7] ; Verstraete, MJ (Verstraete, M. J.)[ 1]Thermodynamic, thermoelectric, and magnetic properties of FeSb<sub>2</sub>: A combined first principles and experimental studyPRB Volume:84 Issue:12 (sep 2011) 125210

28) Takahashi, H (Takahashi, H.)[ 1] ; Okazaki, R (Okazaki, R.)[ 1] ; Yasui, Y (Yasui, Y.)[ 1] ; Terasaki, I (Terasaki, I.)[ 1]Low-temperature magnetotransport of the narrow-gap semiconductor FeSb<sub>2</sub>PRB Volume:84 Issue:20 (nov 2011) 205215

29) Datta, A (Datta, Anuja)[ 1] ; Nolas, GS (Nolas, George S.)[ 1]Synthesis and Characterization of Nanocrystalline FeSb<sub>2</sub> for Thermoelectric ApplicationsEUROPEAN JOURNAL OF INORGANIC CHEMISTRY Issue:1 (jan 2012) 55-58

30) Miao, RD (Miao, Rende)[ 1] ; Huang, GQ (Huang, Guiqin)[ 2,3] ; Fan, CH (Fan, Chunhui)[ 4] ; Bai, Z (Bai, Zhong)[ 1] ; Li, YB (Li, Yanbiao)[ 1] ; Wang, L (Wang, Liang)[ 1] ; Chen, L (Chen, Lian)[ 5] ; Song, WG (Song, Wenguang)[ 6] ; Xu, QG (Xu, Qiangui)First-principles study on the lattice dynamics of FeSb<sub>2</sub>Solid State Communication Volume:152 Issue:3 (feb 2012) 231-234

31) Napitu, BD (Napitu, B. D.)[ 1,2] ; Berakdar, J (Berakdar, J.)[ 1,3]Traces of the evolution from Mott insulator to a band insulator in the pair excitation spectraEUROPEAN PHYSICAL JOURNAL B Volume:85 Issue:2 article number 50 (feb 2012)

32) Mani, A (Mani, Awadhesh)[ 1] ; Janaki, J (Janaki, J.)[ 1] ; Satya, AT (Satya, A. T.)[ 1] ; Kumary, TG (Kumary, T. Geetha)[ 1] ; Bharathi, A (Bharathi, A.)[ 1]The pressure induced insulator to metal transition in FeSb<sub>2</sub>JOURNAL OF PHYSICS-CONDENSED MATTER Volume:24 Issue:7 article number 075601 (feb 2012)

- 33) Figueira, MS (Figueira, M. S.)[ 1 ] ; Silva-Valencia, J (Silva-Valencia, J.)[ 2 ] ;Franco, R (Franco, R.)[ 2]Thermoelectric properties of the Kondo insulator FeSb<sub>2</sub>EUROPEAN PHYSICAL JOURNAL BVolume:85 Issue:6 article number 203 (jun 2012)
- 34) Janaki, J (Janaki, J.)[ 1 ] ; Mani, A (Mani, Awadhesh)[ 1 ] ; Satya, AT (Satya,A. T.)[ 1 ] ; Kumary, TG (Kumary, T. Geetha)[ 1 ] ; Kalavathi, S (Kalavathi, S.)[1] ; Bharathi, A (Bharathi, A.)[ 1]Influence of Ni doping on the electrical and structural properties of FeSb<sub>2</sub>PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICSVolume:249 Issue:9 (sep 2012)1756-1760
- 35) Umeo, K (Umeo, K.)[ 1,2] ; Hadano, Y (Hadano, Y.)[ 2] ; Narazu, S(Narazu, S.)[ 2] ; Onimaru, T (Onimaru, T.)[ 2] ; Avila, MA (Avila, M. A.)[ 3] ;Takabatake, T (Takabatake, T.)[ 2,4]Ferromagnetic instability in a doped band gap semiconductor FeGa<sub>3</sub>PRB Volume:86 Issue:14 Article number (okt 2012)144421
- 36) Hautier, G (Hautier, Geoffroy)[ 1 ] ; Jain, A (Jain, Anubhav)[ 2 ] ; Ong, SP(Ong, Shyue Ping)[ 3]From the computer to the laboratory: materials discovery and design using first-principlescalculationsJOURNAL OF MATERIALS SCIENCEVolume:47 Issue:21 (nov 2012)7317-7340
- 37) Poffo, CM (Poffo, C. M.)[ 2] ; Souza, SM (Souza, S. M.)[ 2] ; Triches, DM(Triches, D. M.)[ 2] ; de Lima, JC (de Lima, J. C.)[ 1] ; Grandi, TA (Grandi, T. A.)[ 1] ; Polian, A (Polian, A.)[ 3] ; Gauthier, M (Gauthier, M.)[ 3]Structural and optical studies of FeSb<sub>2</sub> under high pressurePHYSICA B-CONDENSEDMATTERVolume:407 Issue:24 (dec 2012) 4686-4694
- 38) Cao, YM (Cao, Yiming)[ 1 ] ; Yuan, SJ (Yuan, Shujuan)[ 1 ] ; Liu, M (Liu,Ming)[ 1 ] ; Kang, BJ (Kang, Baojuan)[ 1 ] ; Lu, B (Lu, Bo)[ 2 ] ; Zhang, JC(Zhang, Jincang)[ 1 ] ; Cao, SX (Cao, Shixun)[ 1 ]High quality FeSb<sub>2</sub> single crystal growth by the gradient freeze techniqueJOURNAL OF CRYSTAL GROWTHVolume:363 (jan 2013) 128-131
- 39) Kuhn, G.; Mankovsky, S.; Ebert, H.; et al.Electronic structure and magnetic properties of CrSb<sub>2</sub> and FeSb<sub>2</sub> investigated via abinitio calculationsPHYSICAL REVIEW B Volume: 87 Issue: 8 Article Number: 085113 Published: FEB13 2013
- 40) Pokharel, Mani; Zhao, Huaizhou; Lukas, Kevin; et al.Phonon drag effect in nanocomposite FeSb<sub>2</sub>MRS COMMUNICATIONS Volume: 3 Issue: 1 Pages: 31-36 Published: MAR 2013
- 41) Poffo, C. M.; de Lima, J. C.; Souza, S. M.; et al.Structural, thermal, optical and photoacoustic study of nanostructured FeSb<sub>2</sub> prepared bymechanical alloyingPHYSICA B-CONDENSED MATTER Volume: 413 Pages: 47-54 Published: MAR15 2013
- 42) Takahashi, H.; Okazaki, R.; Terasaki, I.; et al.Origin of the energy gap in the narrow-gap semiconductor FeSb<sub>2</sub> revealed by highpressuremagnetotransport measurementsPHYSICAL REVIEW B Volume: 88 Issue: 16 Article Number: 165205 Published:OCT 24 2013

- 43) Brahmia, M.; Bennecer, B.; Hamidani, A. Electronic and optical properties of the orthorhombic compounds  $\text{FeX}_2$  ( $X = \text{P, As and Sb}$ ) MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS Volume: 178 Issue: 18 Pages: 1249-1256 Published: NOV 1 2013
- 44) Fuccillo, M. K.; Gibson, Q. D.; Ali, Mazhar N.; et al. Correlated evolution of colossal thermoelectric effect and Kondo insulating behavior APL MATERIALS Volume: 1 Issue: 6 Article Number: 062102 Published: DEC 2013
- 45) Sun, Peijie; Xu, Wenhui; Tomczak, Jan M.; et al. Highly dispersive electron relaxation and colossal thermoelectricity in the correlated semiconductor  $\text{FeSb}_2$  PHYSICAL REVIEW B Volume: 88 Issue: 24 Article Number: 245203 Published: DEC 23 2013
- 46) Baggetto, Loic; Hah, Hien-Yoong; Johnson, Charles E.; et al. The reaction mechanism of  $\text{FeSb}_2$  as anode for sodium-ion batteries PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 16 Issue: 20 Pages: 9538-9545 Published: 2014
- 47) Liao, Bolin; Lee, Sangyeop; Esfarjani, Keivan; et al. First-principles study of thermal transport in  $\text{FeSb}_2$  PHYSICAL REVIEW B Volume: 89 Issue: 3 Article Number: 035108 Published: JAN 8 2014
- 48) Pokharel, Mani; Zhao, Huaizhou; Modic, Kimberly A.; et al. Magnetic Properties of Hot-Pressed  $\text{FeSb}_2$  IEEE TRANSACTIONS ON MAGNETICS Volume: 50 Issue: 5 Article Number: 2400304 Published: MAY 2014
- 49) Gamza, M. B.; Tomczak, J. M.; Brown, C.; et al. Electronic correlations in  $\text{FeGa}_3$  and the effect of hole doping on its magnetic properties PHYSICAL REVIEW B Volume: 89 Issue: 19 Article Number: 195102 Published: MAY 6 2014
- 50) Mani, Awadhesh; Janaki, J.; Kumary, T. Geetha; et al. Thickness-dependent electrical resistivity evolution in  $\text{Fe}_{1-x}\text{Ni}_x\text{Sb}_2$  thin films SOLID STATE COMMUNICATIONS Volume: 194 Pages: 30-34 Published: SEP 2014
- 51) Bugaris, Daniel E.; Malliakas, Christos D.; Shoemaker, Daniel P.; et al. Crystal Growth and Characterization of the Narrow-Band-Gap Semiconductors  $\text{OsPn}_2$  ( $\text{Pn} = \text{P, As, Sb}$ ) INORGANIC CHEMISTRY Volume: 53 Issue: 18 Pages: 9959-9968 Published: SEP 15 2014
- 52) Gippius, A. A.; Baenitz, M.; Okhotnikov, K. S.; et al. Sb Magnetic Resonance as a Local Probe for the Gap Formation in the Correlated Semimetal  $\text{FeSb}_2$  APPLIED MAGNETIC RESONANCE Volume: 45 Issue: 11 Pages: 1237-1252 Published: NOV 2014

- 53) Anh Tuan Duong; Rhim, S. H.; Shin, Yooleemi; et al. Magneto-transport and thermoelectric properties of epitaxial FeSb<sub>2</sub> thin film on MgO substrate APPLIED PHYSICS LETTERS Volume: 106 Issue: 3 Article Number: 032106 Published: JAN 19 2015
- 54) Gheribi, Aimen E.; Chartrand, Patrice Effect of Grain Boundaries on the Lattice Thermal Transport Properties of Insulating Materials: A Predictive Model JOURNAL OF THE AMERICAN CERAMIC SOCIETY Volume: 98 Issue: 3 Pages: 888-897 Published: MAR 2015
- 55) Battiato, M.; Tomczak, J. M.; Zhong, Z.; et al. Unified Picture for the Colossal Thermopower Compound FeSb<sub>2</sub> PHYSICAL REVIEW LETTERS Volume: 114 Issue: 23 Article Number: 236603 Published: JUN 10 2015
- 56) Calta, Nicholas P.; Im, Jino; Rodriguez, Alexandra P.; et al. Hybridization Gap and Dresselhaus Spin Splitting in EuIr<sub>4</sub>In<sub>2</sub>Ge<sub>4</sub> ANGEWANDTE CHEMIE-INTERNATIONAL EDITION Volume: 54 Issue: 32 Pages: 9186 Published: AUG 3 2015
- 57) Grønbech, T.B.E., Tolborg, K., Svendsen, H., (...), Chen, Y.-S., Brummerstedt Iversen, B. Chemical Bonding in Colossal Thermopower FeSb<sub>2</sub> Chemistry - A European Journal 26(39), pp. 8651-8662 (2020)
- 58) Li, L., Sun, K., Kurdak, C., Allen, J.W. Emergent mystery in the Kondo insulator samarium hexaboride Nature Reviews Physics (2020) 2(9), pp. 463-479
- 59) Aliabad, H.A.R., Rabbanifar, S., Khalid, M. Structural, optoelectronic and thermoelectric properties of FeSb<sub>2</sub> under pressure: Bulk and monolayer Physica B: Condensed Matter 570, pp. 100-109 (2019)
- 60) Knyazev, Y.V., Lukoyanov, A.V., Kuz'min, Y.I., Vasundhara, M. The Structure of Electronic States in FeSb<sub>2</sub> According to Optical Spectroscopy and Band Calculations Physics of the Solid State 61(6), pp. 969-972 (2019)
- 61) Malki, S., El Farh, L. Structural, electronic and optical properties of FeSb<sub>2</sub> 2019 International Conference on Wireless Technologies, Embedded and Intelligent Systems, WITS 2019 8723802 (2019)
- 62) Malki, S., EL Farh, L. Structural and electronic properties of VSb<sub>2</sub> and FeSb<sub>2</sub> Materials Today: Proceedings 13, pp. 991-997 (2019)
- 63) Tomczak, J.M. Thermoelectricity in correlated narrow-gap semiconductors Journal of Physics Condensed Matter 30(18), 183001 (2018)
- 64) Alvarez-Quiceno, J.C., Dalpian, G.M., Fazzio, A., Osorio-Guillén, J.M. Semiclassical transport properties of IrGa<sub>3</sub>: A promising thermoelectric material Journal of Physics Condensed Matter 30(8), 085701 (2018)

- 65) Sarkar, M., Agrawal, N., Chawda, M. Hyperfine interactions in dilute Se doped  $\text{Fe}_x\text{Sb}_{1-x}$  bulk alloy *Hyperfine Interactions* 237(1), 18, pp. 1-7 (2016)
- 66) Takahashi, H., Okazaki, R., Ishiwata, S., (...), Hagiwara, M., Terasaki, I. Colossal Seebeck effect enhanced by quasi-ballistic phonons dragging massive electrons in  $\text{FeSb}_2$  *Nature Communications* 7, 12732 (2016)
- 67) Dasari, N., Mondal, W.R., Zhang, P., (...), Jarrell, M., Vidhyadhiraja, N.S. A multi-orbital iterated perturbation theory for model Hamiltonians and real material-specific calculations of correlated systems *European Physical Journal B* 89(9), 202 (2016)
- 68) Lv, Z.-L., Cui, H.-L., Wang, H., Ji, G.-F. First principles study on the electronic, elastic and vibrational properties of marcasite-type  $\text{OsP}_2$  *Computational Materials Science* 121, pp. 54-60 (2016)
- 69) Yannello, V.J., Fredrickson, D.C. Generality of the 18-n Rule: Intermetallic Structural Chemistry Explained through Isolobal Analogies to Transition Metal Complexes *Inorganic Chemistry* 54(23), pp. 11385-11398 (2015)
- 70) Botana, A.S., Quan, Y., Pickett, W.E. Disturbing the dimers: Electron and hole doping in the intermetallic insulator  $\text{FeGa}_3$  *Physical Review B - Condensed Matter and Materials Physics* 92(15), 155134 (2015)
- 72) Farhan, A., Reissner, M., Leithe-Jasper, A., Steiner, W. A high-field Mössbauer investigation on  $\text{FeSb}_2$  *Journal of Physics: Conference Series* 217(1), 012142 (2010)
- 73) Sun, P., Oeschler, N., Johnsen, S., Iversen, B.B., Steglich, F. Thermoelectric properties of the narrow-gap semiconductors  $\text{FeSb}_2$  and  $\text{RuSb}_2$ : A comparative study *Journal of Physics: Conference Series* 150, 012049 (2009)
- 74) Koyama, T., Fukui, Y., Muro, Y., (...), Nakamura, H., Kohara, T. Nuclear quadrupole resonance study of the electronic properties of the narrow-gap semiconductor  $\text{FeSb}_2$  *Physical Review B - Condensed Matter and Materials Physics* 76(7), 073203 (2007)
- 75) Madsen, G.K.H., Bentien, A., Johnsen, S., Iversen, B.B. Electronic structure in  $\text{FeSb}_2$ ,  $\text{FeAs}_2$  and  $\text{FeS}$  *International Conference on Thermoelectrics, ICT, Proceedings* 4133359, pp. 579-581 (2006)
- 76) Søndergaard, M., Johnsen, S., Sun, P., (...), Steglich, F., Iversen, B.B. Strongly Correlated Intermetallics:  $\text{FeSb}_2$ , Springer Series in Materials Science 182, pp. 71-93 (2013)

- 77) Datta, A., Nolas, G.S., Nanostructuring and Porosity in Anisotropic Thermoelectric Materials Prepared by Bottom-Up Processing, Springer Series in Materials Science 182, pp. 177-191 (2013).
- 78) Mori, T., Vaney, J.-B., Guélou, G., Failamani, F., Guo, Q., Crystal growth of intermetallic thermoelectric materials ( Book Chapter), Crystal Growth of Intermetallics pp. 217-259 (2018)
- 79) Zhang, S.-K., Xu, Y.-J., Hu, C.-E., (...), Zhu, J., Ji, G.-F., Pressure-driven change of ground state of Ce<sub>3</sub>Pd<sub>3</sub>Bi<sub>4</sub>: A DFT+DMFT study, Physical Review B, 106(20),205115, (2022)
- 80) Pickem, M., Maggio, E., Tomczak, J.M., Prototypical many-body signatures in transport properties of semiconductors, Physical Review B, 105(8),085139, (2022)
- 81) Chen, Z., Ding, X., Xu, M., Low Thermal Conductivity and Magneto-suppressed Thermal Transport in a Highly Oriented FeSb<sub>2</sub>Single Crystal, ACS Omega 6(35), pp. 22681-22687, (2021)
- 82) Zhao, C.-C., Xiao, C., When thermoelectric materials come across with magnetism, Rare Metals, 40(4), pp. 752-766, (2021)
- 83) Masaki, R., Nomoto, T., Arita, R., Origin of anomalous temperature dependence of the Nernst effect in narrow-gap semiconductors, Physical Review B, 103(4),L041202, (2021).
- 84) Deguchi, T., Matsubayashi, K., Uwatoko, Y., (...), Mitsui, Y., Koyama, K., Magnetic measurements of narrow-gap semiconductor FeSb<sub>2</sub> under high pressure, Materials Transactions, 61(8), pp. 1476-1479, (2020)
- 85) Xu, K.-J., Chen, S.-D., He, Y., (...), Devereaux, T.P., Shen, Z.-X., Metallic surface states in a correlated d-electron topological kondo insulator candidate fesb<sub>2</sub>, Proceedings of the National Academy of Sciences of the United States of America 117(27), pp. 15409-15413, (2020).
- 86) Chikina, A., Ma, J.-Z., Brito, W.H., (...), Radovic, M., Kotliar, G., Correlated electronic structure of colossal thermopower FeSb<sub>2</sub>: An ARPES and ab initio study, Physical Review Research, 2(2),023190, (2020)
- 87) Perez, C.J., Devlin, K.P., Skaggs, C.M., (...), Lapidus, S.H., Greenblatt, M., Measured and simulated thermoelectric properties of FeAs<sub>2-x</sub>Se<sub>x</sub> (x = 0.30-1.0): From marcasite to arsenopyrite structure, Materials Advances, 1(5), pp. 1390-1398, (2020)
- 88) Li, H. Wang, G. Ding, N. Qian, D. Miao, L, Spectroscopic evidence of spin-state excitation in d-electron correlated semiconductor FeSb, Proceedings of the National Academy of Sciences of the United States of America,(2024),121(28)e232119321

- 89) Rafiq, Q. Imran, M. Khan, M.T. Albaqami, M.D. Mohammad, S., Investigation of structural, electrical, magnetic, and optical properties of Cu(III) and the impact of Ag adatoms adsorption: A density functional theory study, *International Journal of Electrochemical Science*(2024),19(7)100603
- 90) Singh, P. Del Rose, T. Mudryk, Y. Pecharsky, V.K. Johnson, D.D. Designed metal-insulator transition in low-symmetry magnetic intermetallics, (2024), *Physical Review B* 109(6)064207.
- 91) Sharma, V. Oudhia, A. Sharma, M.P. Magnetic and  $^{57}\text{Fe}$  Mössbauer Studies of Fe MnSb system ( $0 \leq x \leq 0.7$ ), *Hyperfine Interactions* (2023), 244(1)12
- 92) Ehrenreich-Petersen, E. Hansen, M.F. Jeanneau, J. Tkachev, S.N. Bremholm, M. Seven- Coordinated High-Pressure Phase of CrSb and Experimental Equation of State of MSb (M = Cr, Fe, Ru, Os), (2023), *Inorganic Chemistry* (2023)62(31)pp.12203-12212
- 93) Eo, Y.S. Avers, K. Horn, J.A. Fuhrer, M.S. Paglione, J., Pressure-driven change of ground state of  $\text{Ce}_3\text{Pd}_3\text{Bi}_4$ : A DFT+DMFT study, (2023), *Physical Review B* 106(20)205115.