

Alexander Burkov

A.F.Ioffe Physical-Technical Institute of the Russian Academy of Sciences,
Polytechnicheskaya 26,
194021 Sankt-Petersburg, RUSSIA
Email: a.burkov@mail.ioffe.ru
Ph: 7 (812) 515 9173

PERSONAL:

Place of birth: Ust-Ysha, Altaj Region, USSR.
Citizenship: Russia.

EDUCATION:

1967 - 1973: Leningrad State University, Leningrad, USSR.
Diploma (Solid State Physics): January 1973.
1981 PhD (Condensed Matter): Leningrad State Polytechnic Institute.
Leningrad, USSR.
2007 Doctor of Science (Condensed Matter): A.F.Ioffe Physical-Technical Institute,
Sankt-Petersburg

EMPLOYMENT:

April 2000 - present: Senior scientist, head of research group,
A.F.Ioffe Physical-Technical Institute,
Russian Academy of Sciences,
Sankt-Petersburg, Russia.
September 1996 - March 2000: Professor, Department of Physics,
University of the Ryukyus, Okinawa, Japan.
February 1973 - August 1996: Junior Researcher, Researcher, Senior Scientist,
A.F.Ioffe Physical-Technical Institute,
Russian Academy of Sciences,
Sankt-Petersburg, Russia.

FELLOWSHIPS, AWARDS, HONORS:

- 2009–2011: grant N 09-02-01285 from Russian Foundation for Basic Research for studies of *Thermoelectric power of itinerant metamagnets: paramagnon drag and non-fermi-liquid regime in nearly magnetic metals.*
- 2006–2008: grant N 02-02-17816 from Russian Foundation for Basic Research for studies of *Electronic transport and metal–insulator phase transition in spinels CuM_2X_4 ($M=Ir, Rh$; $X=S, Se$): charge ordering and spin dimerization.*
- 2005–2007: grant N 02-02-17816 from Russian Foundation for Basic Research for studies of *Non-Fermi Liquid transport in disordered itinerant metamagnets.*

- 2002–2004: grant N 02-02-17671 from Russian Foundation for Basic Research for experimental and theoretical studies of *Magnetotransport in structurally-disordered alloys in a vicinity of ferromagnetic quantum critical point*.
- September–December, 2002: special visiting professor at Physics Department, College of Science, University of the Ryukyus, Okinawa, Japan.
- 1996 : grant N 96-02-16902 from Russian Foundation for Basic Research for experimental and theoretical studies of *Conductivity mechanisms in disordered conductors with complex electronic structure*.
- 1994–1996: grant N DMR94-06812 from National Science Foundation (USA) for joint program with Physics Department Calvin College (Grand Rapids, MI, USA, Prof. J. Van Zytveld) for experimental studies of *Electronic Properties of Liquid Metals and Alloys with strong Scattering*.
- 1994–1996: grant from scientific foundation Heraeus Stiftung (Germany) for joint research with the Institute of Solid State and Materials Science, Dresden, Germany (Prof. A. Heinrich) for experimental studies of *Thin-film transition metal silicides with special transport properties*.
- September–December, 1995: special visiting professor at Physics Department, College of Science, University of the Ryukyus, Okinawa, Japan.
- 1986–1994 principal researcher in joint program of A.F.Ioffe Physico-Technical Institute, Sankt-Petersburg, Russia and Institute of Experimental Physics, Vienna Technical University, Vienna, Austria (Prof. E.Gratz) on experimental and theoretical investigations of transport properties of rare-earth based intermetallics within the scientific cooperation between Russian Academy of Sciences and Austrian Academy of Sciences.

Visiting Appointments:

- September–December, 2002: special visiting professor at Physics Department, College of Science, University of the Ryukyus, Okinawa, Japan.
- 1994, 1995 and 1996 from January to July - Visiting scientist at Institute of Solid State and Material Science, Dresden, Germany.
- September–December, 1995: special visiting professor at Physics Department, College of Science, University of the Ryukyus, Okinawa, Japan.

SERVICE:

Referee for Physical Review Letters, Physical Review B, Solid State Physics (Russian: Fizika Tverdogo Tela).

PUBLICATIONS:

1. M.V.Vedernikov, A.T.Burkov, V.G.Dvunitkin, N.I.Moreva;
Polymorphism of Metallic Ytterbium from Data on Thermopower, Hall Effect and Electrical Resistivity;
Physics Letters **48A** (4) (1974) 293-294.
2. M.V.Vedernikov, A.T.Burkov, N.I.Moreva;
Thermopowers of Ytterbium, Samarium and Heavy Rare Earth Metals;
Eleventh Rare Earth Research Conference.
October 7-10, 1974; Traverse City, Michigan. Proceedings, Ed.: J.M.Huschke and H.A.Eick,
United States Energy Commission: Technical Information Center; Oac Ridge, Tennessee. v.1,
p.115-123.
3. М.В. Ведерников, А.Т. Бурков, Н.И. Морева, *Электрические свойства металлического Европия*. ФТТ **17(10)** (1975) 3100-3101.
4. М.В. Ведерников, А.Т. Бурков, В.Г. Двуниткин, *Транспортные свойства редкоземельных металлов*. Всесоюзная конференция по физике и химии редкоземельных полупроводников. Ленинград, 5-7 октября, 1976; Тезисы, Л., 1976, pp.9-10.
5. M.V.Vedernikov, A.T.Burkov, V.G.Dvunitkin, N.I.Moreva;
The Thermoelectric Power, Electrical Resistivity and Hall Constant of Rare-Earth Metals in Temperature Range 80-1000 K
Journal of the Less-Common Metals **52** (1977) 221-245.
6. M.V.Vedernikov, A.T.Burkov;
Present State of Experimental Knowledge on Thermopower of Metals at High Temperatures - above 77 K;
In book: *Thermoelectricity in metallic conductors* ed. by F.J.Blatt, P.A.Shroeder. Plenum Press, New-York & London, 1978, pp.71 - 90.
7. M.V.Vedernikov, A.T.Burkov, V.G.Dvunitkin, N.V.Kolomoets, *The Modern State of the Experimental Study of Thermoelectric Properties of Metals and Metallic Binary Continuous Solid Solutions at High Temperatures*. 2 International Conference on Thermoelectric Energy Conversion. Arlington, Texas, 1978. Proceedings, New York, 1978.
8. А.Т.Бурков, А.В.Чаплагин, М.В.Ведерников, *Сопряжение малогабаритных вычислительных машин "Электроника 70" и "Электроника ТЭ-16" с внешними устройствами*. Приборы и Техника Эксперимента **№4** (1978) 85-87.
9. А.Т.Бурков, М.В.Ведерников, *Автоматизация физического эксперимента с использованием ВУМС "Электроника ТЭ-16М"*. Электронная Промышленность (1979) 80.
10. А.Т. Бурков, *Устройство сопряжения настольной электронной вычислительной машины с аналоговым двухкоординатным самописцем*. Приборы и техника эксперимента **№3** (1980) 76-77.
11. А.Т. Бурков, М.В. Ведерников, *Автоматизация электрических и термоэлектрических измерений с использованием настольных компьютеров*. Метрология **№4** (1981) 53-58.

12. А.Т. Бурков, *Экспериментальное изучение анизотропии термоэдс металлов*. Труды I и II Всесоюзных школ по термоэлектричеству. 1976 и 1978; Деп. ВИНТИ, Рег. N5559-81.
13. А.Т. Бурков, М.В. Ведерников, Т.В. Никифорова, Н.Н. Рытус, *Влияние чистоты на высокотемпературные превращения в самарии*. ФТТ **25 (2)** (1983) 570-572.
14. Яшин Г.Ю., Бурков А.Т., Зюзин А.Ю., *Влияние вихревых термоэлектрических токов на точность измерения термоэдс при высоких температурах* ФТП **N9** (1983) 1694-1696.
15. Бурков А.Т., Ведерников М.В., *Высокотемпературные термоэдс и электросопротивление монокристаллического рения и их связь с электронной структурой*. ЖЭТФ **85** (1983) 1059-1061.
16. Бурков А.Т., Ведерников М.В., *Температурные зависимости термоэдс и электросопротивления празеодима и неодима в твердом и жидком состоянии*. ФТТ **26** (1984) 3673- 3676.
17. А.Т.Burkov, M.V.Vedernikov;
Temperature Dependences of Thermoelectric Power and Electrical Resistivity of Rare Earth Metals above the Melting Point;
International Conference on Electronic Structure and Properties of Rare Earth and Actinide Intermetallics. September 3-6, 1984, St.Pölten, Austria. Abstracts, AP20.
18. А.Т.Burkov, P.P.Konstantinov, M.V.Vedernikov;
High-temperature Transport Properties of High-Purity Monocrystalline Rhenium;
6 International Symposium on High-Purity Materials in Science and Technology; May 6-10, 1985, Dresden, DDR. Poster Abstracts, Part II, 374-375.
19. А.Т.Burkov, M.V.Vedernikov;
Temperature Dependencics of Thermopower of Rare-earth Metals above the Melting Points;
Physica **130B** (1985) 97-98.
20. Бурков А.Т., Двуниткин В.Г., *Простой металлический держатель для высокотемпературных измерений термоэдс и электрического сопротивления*. ПТЭ **N5** (1985) 210-211.
21. Бурков А.Т., Ведерников М.В., Еленский В.А., Ковтун Г.П. *Анизотропия термоэдс и электросопротивления рения высокой чистоты*. ФТТ **28** (1986) 785-788.
22. Бурков А.Т., Ведерников М.В., *Аномальная анизотропия высокотемпературной термоэдс бериллия*. ФТТ **28(12)** (1986) 3737-3739.
23. Бурков А.Т., Дьяконов А. М., Константинов П. П., *Система для обработки графической информации на базе микро-ЭВМ Электроника ТЗ-29*. ПТЭ N 5 (1987) 232.
24. Крылов Е.Т., Бурков А.Т., Ведерников М.В., *Особенности высокотемпературной термоэдс рения*. ФТТ **29 (10)** (1987) 3152-3154.
25. M.V.Vedernikov, A.T.Burkov, *High-temperature Thermopower of Iron and Dilute Iron-vanadium Alloys*. J.Phys.F: Met.Phys.**18** (1988) 465-467.

26. Хамраев Н.С., Константинов П. П., Бурков А.Т., Ведерников М.В., *Анизотропия постоянной Холла бериллия в интервале температур 77-1000 К.* ФТТ **30** (1988) 1235-1237
27. Константинов П. П., Ведерников М.В., Бурков А.Т., Двуниткин В.Г., Колгунов Д.А., Алексеев В.А., Лапшин Д.А., Шишков Н.В., *Постоянная Холла, термоэдс и электрическое сопротивление $YBa_2Cu_3O_{7-\delta}$ при температурах 100-450 К.* ФТТ **30** (1988) 2233-2236.
28. A.T.Burkov, M.V.Vedernikov, E.Gratz, *Thermopower and Electrical Resistivity of YCo_2 at high Temperatures.* Solid State Communications **67** (1988) 1109-1111.
29. E.Gratz, E.Bauer, S.Pöllinger, H.Nowotny, A.T.Burkov, M.V.Vedernikov, *Thermopower of some Iron-Rare earths Compounds from 4-1000 K.* Journal de Physique **C8** (Supplement au n 12) **12** (1988) 511-512.
30. V.B.Glushkova, O.N.Egorova, S.Yu.Zinoviev, V.A.Krzizhanovskaja, E.P.Savchenko, A.T.Burkov, M.V.Vedernikov, V.G.Dvunitkin, D.A.Kolgunov, P.P.Konstantinov; *Synthesys and Properties of $YBa_{2-x}Sr_xCu_3O_y$ with $x=0-0.15$;*
I All-Union Conference on Physico-Chemistry and Technology of High-temperature Superconductors. September 13-15, 1989, Moscow. Proceedings, M., Nauka, 1989, pp.129-130.
31. E.Gratz, E.Bauer, H.Nowotny, A.T.Burkov, M.V.Vedernikov;
Temperature dependencies of the electrical resistivity of $REFe_2$ compounds;
Solid State Communications **69** (1989) 1007-1010.
32. M.V.Vedernikov, P.P.Konstantinov, A.T.Burkov;
Development of Automated Techniques of Measuring of Temperature dependences of the Transport Properties of Thermoelectric Materials;
Eighth International Conference on Thermoelectric Energy Conversion. July 10-13, 1989, Nancy, France. Proceedings, pp.45-48.
33. E.Gratz, E.Bauer, H.Nowotny, A.T.Burkov, M.V.Vedernikov;
Electrical Resistivity of some Iron-Rare Earths Compounds from 4K - 1000K;
International Conference on Physics of Transition Metals. May 31- June 3, 1988, Kiev, USSR. Proceedings, Kiev, Naukova Dumka, 1989. Part 2, pp.279-282.
34. M.V.Vedernikov, V.G.Dvunitkin, A.T.Burkov;
Regularities of Electronic Transport Properties in the Binary Continuous Solid Solutions of the Transition Metals;
International Conference on Physics of Transition Metals. May 31- June 3, 1988, Kiev, USSR. Proceedings, Kiev, Naukova Dumka, 1989. Part 2, pp.283-286.
35. А.Т. Бурков, М.В. Ведерников, В.Г. Двуниткин;
Термоэдс и электрическое сопротивление иттербия при температурах 100-1500 К;
VIII Всесоюзная конференция по теплофизическим свойствам материалов, Новосибирск, 20-22 сентября, 1988. Proceedings.

36. А.Т. Бурков, В.Н. Васильев, М.В. Ведерников, П.П. Константинов, С.В. Мошкин, М.А. Кузмина;
Анизотропия термоэдс сверхпроводящего монокристалла $YBa_2Cu_3O_{7-\delta}$ при температурах 80-300 К;
 Сверхпроводимость: Физика, Химия, Технология (Sov. Journal of Superconductivity) **3** (1990) 104-108.
37. А.Т. Бурков, М.В. Ведерников, В.Г. Двуниткин, Т.И. Никифорова;
Термоэдс и электросопротивление иттербия высокой чистоты при температурах 100 - 1500 К;
 Высокочистые вещества (Sov. J. of High-purity substances) (1990) 50-53.
38. V.B. Glushkova, O.N. Egorova, S.Yu. Zinoviev, V.A. Krzizhanovskaja, E.P. Savchenko, A.T. Burkov, V.N. Vasiliev, M.V. Vedernikov, D.A. Kolgunov;
Effect of the Method of Synthesis on Electro-Physical Properties of Ceramic $YBa_2Cu_3O_x$;
 Sverchprovodimost: Fiz., Chem., Tech. (Sov. Journal of Superconductivity) **3** (1990).
39. M.V. Vedernikov, V.G. Dvunitkin, A.T. Burkov;
Thermoelectric Properties of Metallic Binary Continuous Solid Solutions;
 Reviews on thermophysical properties of matter, N5, Moscow, 1990, pp.45-92.
40. P.P. Konstantinov, V.N. Vasiliev, A.T. Burkov, V.B. Glushkova;
On Mechanism of Normal Conductivity in $YBa_2Cu_3O_y$;
 Sverchprovodimost: Fiz., Chem., Tech. (Sov. Journal of Superconductivity) **4** (1991) 295-307.
41. V.L. Kuznetsov, M.V. Vedernikov, A.V. Ditman, B.T. Melech, A.T. Burkov;
Effective Thermoelement with Thermoelectrically Passive Leg from High-temperature Superconducting Material;
 Sverchprovodimost: Fiz., Chem., Tech. (Sov. Journal of Superconductivity) **4** (1991) 616-625.
42. M.V. Vedernikov, V.L. Kuznetsov, A.V. Ditman, B.T. Melech, A.T. Burkov;
Efficient Thermoelectric Cooler with a Thermoelectrically Passive High- T_c Superconducting Leg;
 The Tenth International Conference on Thermoelectrics. University of Wales, College at Cardiff, Cardiff, UK, 10-12 September, 1991. Proceedings, ed. by D.M. Rowe, p.96-101.
43. A.T. Burkov, M.V. Vedernikov, E. Gratz;
Electrical Resistivity and Thermopower of $REAl_2$ Compounds in the Temperature Range 4.2 K- 1000 K;
 Physica **B176** (1992) 263-274.
44. A.T. Burkov, M.V. Vedernikov;
The Recent Development in Experimental Study and Physical Interpretation of Thermopower of Intermetallic Compounds;
 The 11 International Conference on Thermoelectrics. University of Texas at Arlington, Arlington, USA, 7-9 October, 1992. Proceedings.
45. A.T. Burkov, E. Bauer, E. Gratz, R. Resel;
Thermopower and Electrical Resistivity of $La_xY_{1-x}Al_2$ Alloys;
 International Conference on Physycs of Transition Metals, Darmstadt, Germany, 1992.

- Proceedings, ed. by P.M.Kubler. World Scientific Publishing Co., Pte.Ld., Singapore (1992) 387-390.
46. A.T.Burkov, E.Gratz, E.Bauer, R.Resel;
Electronic Transport Properties of $La_xY_{1-x}Al_2$ Alloys;
Journal of Alloys and Compounds **198** (1993) 117-126.
 47. K.Yagasaki, A.T.Burkov, E.Gratz;
Transport Property of $SmAg_{1-x}In_x$;
Physica **B186-188** (1993) 643-645.
 48. A.Heinrich, C.Gladun, A.Burkov, J.Schumann, D.Elefant;
Thermoelectric Properties of Si-rich Me-Si Thin -Films (Me=Cr, Fe and Ir). 2-nd
Symposium of Forschungs- und Anwendungsgemeinschaft Thermoelectric e.V. (FAT)
on Thermoelectric Materials, Technology, Applications. October 24-25, 1994. Dresden,
Germany. Proceedings, p.p.220-229.
 49. A.Heinrich, C.Gladun, A.Burkov, J.Schumann, D.Elefant;
Thermoelectric Properties and Structure of Me_xSi_{1-x} (Me=Ir, Fe, Re) Thin Films Thirteenth
International Conference on Thermoelectrics. Kansas City, August 30 - September 1,
1994. AIP Conference Proceedings 316. Ed. B.Mathiprakasam, Patriek Heenan. AIP Press,
American Institute of Physics, New York, 1995, p.p. 45-49.
 50. A.T.Burkov, A.Heinrich, M.V.Vedernikov;
Anisotropic Thermoelectric Materials. Properties and Applications. Thirteenth International
Conference on Thermoelectrics. Kansas City, August 30 - September 1, 1994. AIP Conference
Proceedings 316. Ed. B.Mathiprakasam, Patriek Heenan. AIP Press, American Institute of
Physics, New York, 1995, p. 76-80.
 51. A.T.Burkov, M.V.Vedernikov;
Thermoelectric Properties of Metallic Materials. CRC Handbook of Thermoelectrics. Ed.
D.M.Rowe. CRC Press, 1995. London, New York, Tokyo. Chapt.32, p.p.387-399.
 52. E.Gratz, R.Resel, A.T.Burkov, E.Bauer, A.S.Markosyan, A.Galatanu;
The Transport Properties of RCO_2 Compounds. J.Phys.C: Condens.Matter **7** 1995 6687-6706.
 53. A.T.Burkov, M.V.Vedernikov;
*Electrical and Thermoelectric Properties of Disordered Metallic Binary Continuous Solid
Solutions*.
In book: Condensed Matter. Disodered Solids. Ed. S.K.Srivastava and N.H.March. World
Scientific, Singapore, New Jersey, London, Hong Kong. 1995, p.p.361-424.
 54. C.Gladun, A.Burkov, A.Heinrich, W.Pitschke, J.Schumann, J.Thomas; *Phasenbildung,
Electrische Leitfähigkeit und Thermokraft in Ir_xSi_{1-x} und Re_xSi_{1-x} Schichten*
59 Physikerstagung der Deutschen Physikalischen Gesellschaft, Germany, Berlin (1995).
Physik-Verlag GmbH, Germany, Weinheim, V.Haselbarth, Bad Honnef.
 55. A.T.Burkov, E.Gratz, E.Bauer, R.Resel; *Thermopower and Electrical Resistivity of
 $Ho(Co_{1-x}Al_x)_2$ Pseudobinary Compounds*.
59 Physikerstagung der Deutschen Physikalischen Gesellschaft. Germany, Berlin. (1995).
Physik-Verlag GmbH Germany, Weinheim V.Haselbarth, Bad Honnef.

56. A.T.Burkov, C.Gladun, A.Heinrich, W.Pitschke, J.Schumann; *Structure and Transport Properties in Amorphous and Nano-Crystalline Re_xSi_{1-x} Thin Films at High Temperatures*. 14 International Conference on Thermoelectrics, Russia, Sankt-Petersburg,1995. Proceedings: A.F.Ioffe Physical-Technical Institute,Russia, Sankt-Petersburg. Ed. by M.V.Vedernikov, pp.206–209.
57. A.Heinrich, C.Gladun, A.Burkov, Y.Tomm, S.Brehme, H.Lange; *Thermopower and Electrical Resistivity of β - $FeSi_2$ Single Crystals doped with Cr, Co and Mn*. 14 International Conference on Thermoelectrics. Russia, Sankt-Petersburg, 1995. Proceedings: A.F.Ioffe Physical-Technical Institute, Russia, Sankt-Petersburg. Ed. by M.V.Vedernikov, pp.259–263.
58. R.Resel, E.Gratz, T.Nakama, M.Higa, K.Yagasaki, A.T.Burkov; *A New Kind of Gradient Heating for Thermopower Measurements at Low Temperatures and High Magnetic Fields*. 14 International Conference on Thermoelectrics. Russia, Sankt-Petersburg, 1995. Proceedings: A.F.Ioffe Physical-Technical Institute, Russia, Sankt-Petersburg. Ed. by M.V.Vedernikov, pp.354–356.
59. J.Schumann, A.Burkov, A.Heinrich, C.Gladun, W.Pitschke, *Structure and Thermoelectric Properties of Amorphous and Nanocrystalline Re_xSi_{1-x} Thin Films*. 2-nd Workshop of the European Thermoelectric Society (ETS 2). France, Nancy, 1995.
60. A.Heinrich, A.Burkov, C.Gladun, Y.Tomm, H.Lange, J.Schumann; *Thermopower and Electrical Resistivity of β - $FeSi_2$ Doped with Co, Cr and Mn*. 2-nd Workshop of the European Thermoelectric Society (ETS 2). France,Nancy, 1995.
61. A.T.Burkov, C.Gladun, A.Heinrich, W.Pitschke, J.Schumann; *Phase Formation and Transport Properties in Amorphous and Nano-Crystalline Cr_xSi_{1-x} and Re_xSi_{1-x} Thin Films*.
Journal of Non-Crystalline Solids **205-207** (1996) 737-741.
62. A.T.Burkov, D.A.Kolgunov, K.Hoag, J.Van Zytveld; *Thermopower and Electrical Resistivity of Liquid and Crystalline Dy and Ho at Temperatures 300-2000 K*.
Journal of Non-Crystalline Solids **205-207** (1996) 332-337.
63. R. Resel, E. Gratz, A.T.Burkov, T. Nakama, M. Higa, K. Yagasaki; *Thermopower Measurements in Magnetic Fields up to 17 Tesla Using toggled Heating Method*.
Review of Scientific Instruments **67** (1996) 1970-1975.
64. A. T. Burkov, A. Heinrich, C. Gladun, W. Pitschke, J. Schumann; *Structure and thermoelectric properties of nano-crystalline Re_x - Si_{1-x} thin film composites*. 15 International Conference on Thermoelectrics. Pasadena, California, USA. March 26–29, 1996. Proceedings. ISBN 0-7803-3221-0. p.p.484-490.
65. A. Heinrich, A. Burkov, C. Gladun, G. Behr, K. Herz, J. Schumann, H. Powalla; *Thermopower and electrical resistivity of undoped and Co-doped $FeSi_{2-x}$ thin films and $FeSi_2$ single crystals*. 15 International Conference on Thermoelectrics. Pasadena, California, USA. March 26–29, 1996. Proceedings. ISBN 0-7803-3221-0. p.p.57-61.

66. K.Yagasaki, T.Nakama, M.Higa, E.Sakai, A.T.Burkov, E.Gratz, E.Resel; *Thermopower of GdAl₂ with seesaw heating system*. Journal of Physical Society of Japan **65** (1996) Suppl.B 181-187.
67. G. Behr, J. Werner, G. Weise, A. Heinrich, A. Burkov, C. Gladun; *Preparation and properties of high-purity β -FeSi₂ single crystals*. Physica Status Solidi **A160** (1997) 549-556.
68. R.Kurt, W.Pitschke, A.Heinrich, J.Schumann, J.Thomas, K.Wetzig, A.Burkov; *Phase formation process of Ir_xSi_{1-x} thin films. Structure and electrical properties*. Thin Solid Films **310** 8-18 (1997).
69. T.Nakama, Y.Uwatoko, T.Kohama, A.T.Burkov, N.Mori, H.Yoshida, S.Abe, T.Kaneko, K.Yagasaki, *Pressure effect on CeRu₂*. Rev. High Pressure Sci. Technol. **7** (1998) 632-634. (Proceedings of International Conference - AIRAPT-16 and HPCJ-38 - on High Pressure Science and Technology, Kyoto, Japan, 25-29 August, 1997.)
70. A.T.Burkov, T.Nakama, T.Kohama, T.Shimoji, K.Shintani, R.Shimabukuro, K.Yagasaki; *The effect of magnetic field and Al content on resistivity and thermopower of Y(Al_xCo_{1-x})₂ alloys*. Journal of Magnetism and Magnetic Materials **177-181** (1998) 1067-1068.
71. A.T.Burkov, T.Nakama, T.Kohama, T.Shimoji, K.Shintani, R.Shimabukuro, K.Yagasaki, E.Gratz. *Contribution of spin fluctuations to the low-temperature resistivity and thermopower of YCo₂*. Journal of Magnetism and Magnetic Materials **177-181** (1998) 1069-1070.
72. T.Nakama, T.Kohama, T.Shimoji, Y.Uwatoko, T.Ohki, H.Fujii, A.T.Burkov, H.Niki, K.Yagasaki; *Thermopower of Fe₂P in magnetic fields up to 15 T*. Journal of Magnetism and Magnetic Materials **177-181** (1998) 1369-1370.
73. T.Nakama, Y.Uwatoko, T.Kohama, A.T.Burkov, Y.Yamaguchi, H.Yoshida, S.Abe, T.Kaneko, N.Mori, K.Yagasaki, *Pressure effect on superconducting transition temperature of Ce_{1-x}La_xRu₂*. Journal of Magnetism and Magnetic Materials **177-181** (1998) 425-426.
74. Burkov, A. T., A. Heinrich, C. Gladun, W. Pitschke, J. Schumann. *Effect of interphase boundaries on resistivity and thermopower of the nanocrystalline Re-Si thin film composites*. Physical Review B **58** (1998) 9644-9647.
75. A. T. Burkov, A. Heinrich, T. Nakama, W. Pitschke, J. Schumann, K. Yagasaki, *Thermoelectric Properties of Re-Si Nanocrystalline Composites*. 16 International Conference on Thermoelectrics. May 24-28, 1998, Nagoya, Japan. Proceedings. 1998, p.231-236.
76. T. Nakama, A. T. Burkov, A. Heinrich, T. Oyoshi, K. Yagasaki, *Experimental Set-Up for Thermopower and Resistivity Measurements at 100-1300K* 16 International Conference on Thermoelectrics. May 24-28, 1998, Nagoya, Japan. Proceedings. 1998, p.266-269.
77. T. Nakama, K. Shintani, K. Yagasaki, A. T. Burkov, Y. Uwatoko, *Positive Magnetoresistivity in a localized-moment ferromagnet with itinerant spin fluctuations: TmCo₂* Phys. Rev. B **60**, 511-522 (1999).
78. W. Pitschke, A. Heinrich, J. Schumann, H. Griessmann, R. Kurt, A. Burkov, *High temperature thermoelectric properties of doped iridium silicide thin films*. Eighteen International Conference of Thermoelectrics. Baltimore, USA, 29.8-02.9, 1999. AIP Proceedings, 108-112 (1999).

79. K. Yagasaki, T. Nakama, A. Burkov, *An Apparatus for Resistivity and Thermopower Measurements at High temperatures*. BUTSURI (Physics), **54**, N11, 878-883 (1999) (In Japanese).
80. A. T. Burkov, T. Nakama, M. Hedo, K. Shintani, K. Yagasaki, N. Matsumoto, S. Nagata, *Anomalous resistivity and thermopower of the spinel-type compounds CuIr_2S_4 and CuIr_2Se_4* . Phys. Rev. B **61**(15), (2000) p.10049-10056.
81. W. Pitschke, R. Kurt, A. Heinrich, J. Schumann, H. Griebmann, H. Vinzelberg, A. T. Burkov, *Structure and thermoelectric properties of binary and Fe-doped iridium silicide thin films*. J. Mater. Res. **15** (3), (2000) p. 772-782.
82. W. Pitschke, D. Hofman, A. T. Burkov, J. Schumann, A. Heinrich, *Formation of nanocrystalline Re-Si thin film composites*. Proceedings of European Powder Diffraction Conference, Barcelona 20-27 May, 2000. Published in Materials Research Forum.
83. T. Nakama, K. Shintani, M. Hedo, H. Niki, A. T. Burkov, K. Yagasaki, *Localization of Co-3d electrons in $\text{Y}(\text{Co}_{1-x}\text{Al}_x)_2$ paramagnetic alloys with itinerant spin fluctuations*. Physica **B 281&282**, 699-700 (2000).
84. A. T. Burkov, T. Nakama, K. Shintani, K. Yagasaki, N. Matsumoto, S. Nagata, *Anomalous electronic transport in CuIr_2S_4 and CuIr_2Se_4* . Physica **B 281&282**, 629-630 (2000).
85. M. Hedo, T. Nakama, A. T. Burkov, K. Yagasaki, Y. Uwatoko, H. Takahashi, T. Nakanishi, N. Mori *Pressure-induced structural-phase transition of CeRu_2* . Physica **B 281&282**, 88-89 (2000).
86. A. T. Burkov, *Thermoelectric power of metals at high temperatures*. Encyclopedia of Materials: Science and Technology. v.1 Functional Phenomena. Chpt. 7. Ed. K. H. J. Bushow. Pergamon. 2001, p.p.5548-5554.
87. K. Yagasaki, A. T. Burkov. *Magnetic Fields: Thermoelectric Power*. Encyclopedia of Materials: Science and Technology. v.1 Functional Phenomena. Chpt. 7. Ed. K. H. J. Bushow. Pergamon. 2001, pp. 4757-4761.
88. W. Pitschke, D. Hofman, J. Schumann, C. A. Kleint, A. Heinrich, A. T. Burkov. *Structure of Nanocrystalline Re-Si Thin Film Composites and Their Unusual Thermoelectric Properties*. Journal of Applied Physics **89**, 3229-3241 (2001).
89. A. T. Burkov, A. Heinrich, P. P. Konstantinov, T. Nakama, K. Yagasaki, *Experimental setup for thermopower and resistivity measurements at 100-1300 K*. Measurement Science and Technology **12** 264-272 (2001).
90. T. Nakama, A. T. Burkov, M. Hedo, H. Niki, K. Yagasaki. *Magnetotransport in $\text{Y}_{1-x}\text{Gd}_x\text{Co}_2$ pseudobinary alloys*. Journal of Magnetism and Magnetic Materials **226-230** 671-673 (2001).
91. A. T. Burkov, T. Nakama, M. Hedo, H. Niki, K. Yagasaki. *Magnetoresistivity of itinerant electron metamagnets: RCo_2 and $\text{Y}(\text{Al}_x\text{Co}_{1-x})_2$ compounds ($\text{R}=\text{Y}, \text{Lu}, \text{and Sc}$)*. Journal of Magnetism and Magnetic Materials **226-230** 677-679 (2001).
92. Pitschke W, Hofman D, Burkov AT, et al. *Formation of nanocrystalline Re-Si thin film composites* MATER SCI FORUM 378-3: 352-357 Part 1&2 (2001).

93. K. Yagasaki, T. Nakama, M. Hedo, A. T. Burkov, N. Matsumoto, S. Nagata. *Coulomb correlations and two-channel conduction in CuIr_2Se_4 compounds*. Journal of Magnetism and Magnetic Materials **226-230** 244-245 (2001).
94. A. T. Burkov, A. Yu. Zyuzin, T. Nakama, M. Hedo, K. Yagasaki. *Anomalous magnetotransport in $Y_{1-x}\text{Gd}_x\text{Co}_2$ in a vicinity of ferromagnetic transition*. A lecture at XVIII International School "New Magnetic Materials for Microelectronics June 24-28, 2002. Proceedings, Izdatelstvo MGU im. M. V. Lomonosova, Moscow 2002, p.p.620-621 (In Russian).
95. T. Nakama, M. Hedo, A. Sawada, Y. Shimoji, M. Tokumura, K. Uchima, K. Yagasaki, H. Niki, A. T. Burkov. *Thermopower of ErCo_2 in magnetic fields up to 15 T*. Physica **B 312-313** 867-869 (2002).
96. K. Yagasaki, T. Nakama, M. Hedo, K. Uchima, Y. Shimoji, N. Matsumoto, S. Nagata, H. Okada, H. Fujii, A. T. Burkov, *Transport properties of $\text{Cu}_{1-x}\text{Zn}_x\text{Ir}_2\text{S}_4$ spinel compounds*. Journal of Physics and Chemistry of Solids **63** 1051-1054 (2002).
97. M. Schneider, A. Gladun, D. Lipp, A. Handstein, H. Vinzelberg, S.-L. Drechsler, K.-H. Müller, and A. T. Burkov, *Thermoelectric power of hot-deformed MgB_2* . Physica C: Superconductivity, **388-389** (2003) 123-124.
98. A. T. Burkov, A. Yu. Zyuzin, T. Nakama, K. Yagasaki, J. Schumann, H. Vinzelberg, *Magnetotransport in $(Y_x\text{Gd}_{1-x})\text{Co}_2$ alloys near to magnetic phase boundary*. Physica **B 329-333** (2003) 543-544.
99. T. Nakama, M. Tokumura, K. Uchima, M. Hedo, Y. Uwatoko, K. Yagasaki, A. T. Burkov, *Field effect on itinerant electron magnetism of $Y_{1-x}\text{Er}_x\text{Co}_2$ compounds.*, Physica **B 329-333** (2003) 952-954.
100. A. T. Burkov, A. Yu. Zyuzin, T. Nakama, K. Yagasaki, *Disorder-induced positive magnetoresistivity in itinerant metamagnets*. Journal of Magnetism and Magnetic Materials **272-276** (2004) pp. E1081-E1082.
101. A. T. Burkov, A. Yu. Zyuzin, T. Nakama, K. Yagasaki, *Thermopower of $(Y_{1-x}\text{Gd}_x)\text{Co}_2$ alloys in a vicinity of zero-temperature magnetic phase boundary*. Journal of Magnetism and Magnetic Materials **272-276** (2004) pp. E1083-E1084.
102. T. Nakama, K. Uchima, M. Hedo, T. Fujiwara, H. Fujii, A.T. Burkov and K. Yagasaki, *The effect of magnetic field on thermopower of CeFe_2* . Journal of Magnetism and Magnetic Materials, **272-276** (2004) pp. 485-486.
103. K. Yagasaki, M. Misashi, S. Notsu, Y. Shimoji, K. Uchima, H. Niki, T. Nakama, M. Hedo, Y. Uwatoko and A.T. Burkov, *Transport properties of $Y_{1-x}\text{Ho}_x\text{Co}_2$ in magnetic field*. Journal of Magnetism and Magnetic Materials, **272-276** (2004) pp. E345-E346
104. A. T. Burkov, A. Yu. Zyuzin, T. Nakama, K. Yagasaki, *Anomalous magnetotransport in $(Y_{1-x}\text{Gd}_x)\text{Co}_2$ alloys: interplay of disorder and itinerant metamagnetism*. Phys. Rev. B **69** 144409-1-6 (2004).
105. A. T. Burkov, J. Schumann, H. Vinzelberg, T. Nakama, K. Yagasaki, *Strongly nonlinear electronic transport in Cr - Si composite films*. Journal of Applied Physics **95** 7903 (2004).

106. Fedorov,MI; Zaitsev,VK; Isachenko,GN; Eremin,IS; Gurieva,EA; Burkov,AT; Konstantinov,PP; Shabaldin,AA, *Kinetic properties of p-type $Mg_2Ge_{0.4}Sn_{0.6}$ solid solutions*. ICT 2005: 24th International Conference on Thermoelectrics. Proceedings. IEEE Volume , Issue , 19-23 June 2005 Page(s): 110 - 113.
107. K. Uchima, T. Nakama, M. Misashi, Y. Takaesu, K. Yagasaki, M. Hedо, Y. Uwatoko, A.T.Burkov, *Transport properties of $Y_{1-x}R_xCo_2$ ($R=Er, Ho$) in magnetic field*. J. Alloys Comp. **408–412** 368–370 (2006).
108. T. Nakama, Y. Takaesu, K. Yagasaki, E. Sakai, N. Kurita, M. Hedо, Y.Uwatoko, A.T.Burkov, *Pressure effect on electrical resistivity of $Y_{1-x}Gd_xCo_2$* . Physica B**378-380** (2006) 169-170.
109. K. Yagasaki, S. Notsu, Y. Takaesu, T. Nakama, E. Sakai, K. Koyama, K. Watanabe, A. T. Burkov, *X-Ray diffraction on rare earth-3d Laves phase compound $ErCo_2$ in magnetic field*. Physica B**378-380** (2006) 1089–1090.
110. A.T.Burkov, Thermoelectrics Handbook: Macro to Nano. Ed. M. Rowe. Chpt. 22, *Measurements of resistivity and thermopower: principles and practical realization*. CRC Press, Boca Raton, London, New York, 2006, p.p 1–13.
111. J. Schumann, A.T.Burkov, Thermoelectrics Handbook: Macro to Nano. Ed. M. Rowe. Chpt. 40, *Thermoelectric properties of nanocrystalline transition metal silicides*. CRC Press, Boca Raton, London, New York, 2006, pp. 1–12.
112. K. Yagasaki, T. Nakama, M. Hedо, Y. Uwatoko, Y. Shimoji, S. Notsu, K. Uchima, N. Matsumoto, S. Nagata, H. Okada, H. Fujii, H. Yoshida, H. M. Kimura, Y. Yamaguchi, A. T. Burkov, *Hopping Conductivity in $CuIr_2S_4$ Spinel Compound: I. Empirical Model for Electronic Configuration and Mechanism of Metal-Insulator Transition*. Journal of Physical Society of Japan **75** (2006) 074706-1-10.
113. М.И. Федоров, В.К. Зайцев, И.С. Еремин, Е.А. Гуриева, А.Т. Бурков, П.П. Константинов, М.В. Ведерников, А.Ю. Самунин, Г.Н. Исаченко, А.А. Шабалдин, *Кинетические свойства твердых растворов p-типа $Mg_2X_{0.4}Sn_{0.6}$ ($X=Si, Ge$)*. ФТТ **48** (2006) с. 1402-1406.
114. A.T. Burkov, A.Yu. Zyuzin, T. Nakama, Y. Takaesu, M. Takeda, K. Yagasaki, *Anomalous transport in itinerant metamagnets with structural disorder*. Journal of Magnetism and Magnetic Materials **310** (2007) e322–e324.
115. T. Nakama, Y. Takaesu, K. Uchima, K. Yagasaki, M. Hedо, Y. Uwatoko, A.T. Burkov, *Pressure effect on thermopower of $Y_{1-x}Gd_xCo_2$ alloy system*. Journal of Magnetism and Magnetic Materials **310** (2007) 1879–1881.
116. Yoshinao Takaesu, Takao Nakama, Masataka Takeda, Dai Nakamura, Masato Hedо, Katsuma Yagasaki, Yoshiya Uwatoko, Yasumasa Yamashiro and A. T. Burkov, *Pressure and magnetic field effects on electrical resistivity and thermopower of $Y_{1-x}Tb_xCo_2$ system*. Journal of Physical Society of Japan **77** (2008) N6, 064704-1-6.
117. A. T. Burkov, E. Bauer, E. Gratz, R. Resel, T. Nakama, K. Yagasaki, *Effect of static and dynamic disorder on electronic transport of RCO_2 compounds: $Ho(Al_xCo_{1-x})_2$ alloys*. Phys. Rev. B **78** (2008) 035101-1-10.

118. T. Nakama, H. Niki, D. Nakamura, Y. Takaesu, M. Hedo, K. Yagasaki, K. Uchima, E. Gratz and A. T. Burkov, *Electrical resistivity and thermopower of $ErCo_3$ under hydrostatic pressure*. Journal of Physics: Conference Series **150** (2009) 042136-1-4.
119. K. Yagasaki, T. Nakama, K. Uchima, Y. Takaesu, Y. Uwatoko, A. Burkov and M. Hedo, *Two-Magnetization Nordheim Model of Randomly Distributed Co Local Sites for the Anomalous Residual Resistivity at the Magnetic Phase Boundary of $Y_{1-x}R_xCo_2$ System (R: Rare Earth)*. Journal of Physics: Conference Series **150** (2009) 042232-1-4.
120. Исаченко, ГН; Зайцев, ВК; Федоров, МИ; Бурков, АТ; Гуриева, ЕА; Константинов, ПП; Ведерников, МВ, *Кинетические свойства твердых растворов $Mg_2Si_xSn_{1-x}$ р-типа при $x < 0.4$* . ФТТ **51** (2009) 1693-1696.
121. Isachenko, GN; Zaitsev, VK; Fedorov, MI; Burkov, AT; Gurieva, EA; Konstantinov, PP; Vedernikov, MV. *Kinetic properties of p- $Mg_2Si_xSn_{1-x}$ solid solutions for $x < 0.4$* . Phys. Solid State **51** (2009) 1796-1799.
122. А.Т.Бурков, *Неферми-жидкостной транспорт в сплавах на основе соединений RCO_2* . Сборник трудов 21 Международной конференции “Новое в магнетизме и магнитных материалах”, Москва, 28 июня-4 июля 2009 г. Физический факультет МГУ им. М.В. Ломоносова, стр. 1004-1006. ISBN 5-8279-0020-6.
123. Соломкин, ФЮ; Зайцев, ВК; Картенко, НФ; Колосова, АС; Бурков, АТ; Урюпин, ОН; Шабалдин, АА. *Структура и термоэлектрические свойства $CrSi_2$, полученного методом кристаллизации из раствора-расплава в олове*. ЖТФ **80** (2010) 157-158.
124. Uchima, K; Yonamine, S; Kinjyo, A; Takaesu, Y; Hedo, M; Nakama, T; Yagasaki, K; Burkov, AT. Electrical resistivity and thermopower of $Nd_{1-x}Tb_xCo_2$ compounds. J. Phys.: Conf. Ser., v.200, (2010) 032077-1-4.
125. Takaesu, Y; Nakama, T; Kinjyo, A; Yonamine, S; Hedo, M; Yagasaki, K; Uchima, K; Uwatoko, Y; Burkov, AT. *Effects of pressure and magnetic field on transport properties of $Y_{1-x}R_xCo_2$ alloys (R=Gd, Tb, Dy, Ho and Er)*. J. Phys.: Conf. Ser., v.215, (2010) 012039-1-4.
126. Бурков, АТ; Новиков, СВ; Смирнов, БИ; Смирнов, ИА; Sulkovski, Cz; Jezowski, A. *Коэффициент термоэдс биоуглеродных матриц сосны и композитов биоуглеродная матрица/медь*. ФТТ, т.52, 11 (2010) 2191-2194.
127. Бурков, АТ; Орлова, ТС; Смирнов, БИ; Смирнов, ИА; Misiorek, H; Jezowski, A. *Особенности поведения удельного электросопротивления композита биоуглеродная матрица сосны/медь*. ФТТ, т.52, 11 (2010) 2185-2190.
128. Solomkin, FY; Zaitsev, VK; Kartenko, NF; Kolosova, AS; Burkov, AT; Uryupin, ON; Shabalidin, AA. *Structure and thermoelectric properties of $CrSi_2$ crystallized from a tin solution-melt*. Tech. Phys., v.55, 5 (2010) 750-752.
129. Burkov, A.T. *Non-Fermi Liquid Transport in RCO_2 -Based Alloys*. Bulletin of the Russian Academy of Sciences: Physics, Vol. 74, No. 10, (2010) pp. 1392-1394.
130. Kiyoharu UCHIMA, Chojun ZUKERAN, Ai NAKAMURA, Nozomi ARAKAKI, Shota KOMESU, Masataka TAKEDA, Yoshinao TAKAESU, Heinz-Georg FLESCH, Masato HEDO, Takao NAKAMA, Katsuma YAGASAKI and Alexander T. BURKOV, *Resistivity*

and Thermopower of $Ho(Co_{1-x}Al_x)_2$ -Effects of Pressure and Magnetic Field. J. Phys. Soc. Jpn. **80** (2011) SAICHE-PSB52-1-3.

131. A.T. Burkov, T. Nakama, and K. Yagasaki, *Electronic Transport in Itinerant Metamagnets with Strong Static Disorder*. Solid State Phenomena **168-169** (2011) pp 521-524.
132. Соломкин,ФЮ; Суворова,ЕИ; Зайцев,ВК; Новиков,СВ; Бурков,АТ; Самунин,АЮ; Исаченко,ГН, *Влияние термообработки на структуру и термоэлектрические свойства $CrSi_2$* . ЖТФ, **81**, (2011) 147-149.
133. K Uchima, Y Takaesu, S Yonamine, M Takeda, M Hedo, T Nakama , K Yagasaki , Y Uwatoko and A T Burkov. *Pressure effect on transport and magnetic properties of $Nd_{1-x}Tb_xCo_2$* . Journal of Physics: Conference Series **273** (2011) 012130-1-4.
134. Burkov, A.T., Novikov, S.V., Schumann, J., *Nanocrystallization of amorphous M-Si thin film composites (M=Cr, Mn) and their thermoelectric properties*. AIP Conf. Proc. : 9TH EUROPEAN CONFERENCE ON THERMOELECTRICS: ECT2011 Date: 28-30 September 2011 Location: Thessaloniki, Greece, v.**1449** (2012) 219-222.
135. Solomkin F.Yu., Samunin A.Yu., Zaitsev V.K., Burkov A.T., Novikov S.V., Gurieva E.A., *Thermoelectric Properties of Hot-Pressed $CrSi_2$ Samples*. AIP Conf. Proc. : 9TH EUROPEAN CONFERENCE ON THERMOELECTRICS: ECT2011 Date: 28-30 September 2011 Location: Thessaloniki, Greece, v. **1449** (2012) 179-182.
136. K Uchima, M Takeda, C Zukeran, A Nakamura, N Arakaki, S Komesu, Y Takaesu1, M Hedo, T Nakama, K Yagasaki, Y Uwatoko, A T Burkov, *Transport properties of $Y_{1-x}Nd_xCo_2$ compounds*,Journal of Physics: Conference Series **400** (2012) 032107-1-4.
137. K Uchima, M Takeda, Y Takaesu, H G Flesch, M Hedo, T Nakama, K Yagasaki, Y Uwatoko, A T Burkov, *Transport properties of $Y_{1-x}Nd_xCo_2$ compounds*. Journal of Physics: Conference Series **391** (2012) 012110-1-4.
138. Masataka TAKEDA, Atsushi TERUYA, Shintaro WATANABE, Sentaro HIRAKAWA, Yuichi HIRANAKA, Ai NAKAMURA, Yoshinao TAKAESU, Kiyoharu UCHIMA, Masato HEDO, Takao NAKAMA, Katsuma YAGASAKI, Kazuyuki MATSUBAYASHI, Yoshiya UWATOKO, and Alexander T. BURKOV, *Pressure and Substitution Effects on Transport and Magnetic Properties of $Y_{1-x}R_xCo_2$ Systems with Static Magnetic Disorder*. J. Phys. Soc. Jpn. **82** (2013) 014708-1-6.
139. A.YU. SAMUNIN, V.K. ZAITSEV, P.P. KONSTANTINOV, M.I. FEDOROV, G.N. ISACHENKO, A.T. BURKOV, S.V. NOVIKOV, E.A. GURIEVA, *Thermoelectric Properties of Hot-Pressed Materials Based on $Mg_2Si_nSn_{1-n}$* . Journal of ELECTRONIC MATERIALS **42** (2013) 1676-1679.
140. S.V. Novikov, A.T. Burkov, J. Schumann, *Enhancement of thermoelectric properties in nanocrystalline M-Si thin film composites (M=Cr, Mn)*. Journal of Alloys and Compounds **557** (2013) 239-243.
141. A.T. Burkov, M. Takeda, A. Teruya, S. Watanabe, S. Hirakawa, Y. Hiranaka, A. Nakamura, M. Hedo, T. Nakama, K. Yagasaki, K. Uchima, Y. Takaesu, Y. Uwatoko, *Phase diagram and transport properties of $Y_{1-x}Nd_xCo_2$ pseudo-binary alloys*. Journal of the Korean Physical Society **62** (2013) 2080-2083.

142. T. Nakama, C. Zukeran, A. Nakamura, A. Teruya, S. Hirakawa, S. Watanabe, Y. Hiranaka, M. Takeda, M. Hedo and K. Yagasaki, Y. Takaesu and K. Uchima, A. T. Burkov, *Effect of Partial Magnetic Order on Resistivity and Thermopower of $Ho(Co_{1-x}Al_x)_2$ Alloys*. Journal of the Korean Physical Society **63** (2013)

TALKS, CONFERENCES & SCHOOLS:

1. Eleventh Rare Earth Research Conference. Traverse City, Michigan, October 7-10, 1974, (Contributed Talk).
2. 2 International Conference on Thermoelectric Energy Conversion. Arlington, Texas, 1978, (Contributed Talk).
3. X All-Union Conference *Production, Structure, Physical Properties and Application of the Refractory and Rare Metal Single-Crystals*, Moscow, March 30-April 1, 1981, (Contributed Talk).
4. International Conference on Electronic Structure and Properties of Rare Earth and Actinide Intermetallics. St.Pölten, Austria, September 3-6, 1984, (Contributed Talk).
5. 6 International Symposium on High-Purity Materials in Science and Technology. Dresden, DDR, May 6-10, 1985, (Contributed Talk).
6. All-Union Symposium on Semiconducting Materials for Thermoelectric Converters. Leningrad, USSR, 1985, (Contributed Talk).
7. IV All-Union Conference of Pedagogical Institutions on Physics of Magnetic Materials, Irkutsk, USSR, September 13-17, 1986, (Contributed Talk).
8. I Republic Conference on Solid State Physics and New Fields of its Application, Karaganda, Kazakhstan, USSR, September 8-9, 1986, (Contributed Talks).
9. XXV All-Union Conference on Low-Temperature Physics. Leningrad, USSR, October 25-27, 1988, (Contributed Talks).
10. I All-Union Conference on Physico-Chemistry and Technology of High-temperature Superconductors. Moscow, September 13-15, 1989, (Contributed Talk).
11. II All-Union Conference on the High-temperature Superconductivity. Kiev, USSR, September 25-29, 1989, (Contributed Talk).
12. Eighth International Conference on Thermoelectric Energy Conversion. Nancy, France, July 10-13, 1989, (Contributed Talk).
13. International Conference on Physics of Transition Metals. Kiev, USSR, May 31- June 3, 1988, (Contributed Talks).
14. VIII All-Union Conference on Termophysical Properties of Matter. Novosibirsk, USSR, September 20-22, 1988, (Contributed Talk).
15. Tenth International Conference on Thermoelectrics. University of Wales, College at Cardiff, Cardiff, UK, 10-12 September, 1991, (Contributed Talk).

16. The 11 International Conference on Thermoelectrics. University of Texas at Arlington, Arlington, USA, 7-9 October, 1992, (Contributed Talk).
17. International Conference on Physics of Transition Metals, Darmstadt, Germany, 1992, (Contributed Talk).
18. 2-nd Symposium of Forschungs- und Anwendungsgemeinschaft Thermoelectric e.V. (FAT) on Thermoelectric Materials, Technology, Applications. Dresden, Germany, October 24-25, 1994 (Contributed Talk).
19. Thirteenth International Conference on Thermoelectrics. Kansas City, USA, August 30 - September 1, 1994 (Contributed Talks).
20. 59 Physikerstagung der Deutschen Physikalischen Gesellschaft, Berlin, Germany, 1995 (Contributed Talks).
21. 14 International Conference on Thermoelectrics. Sankt-Petersburg, Russia, 1995 (Contributed Talks).
22. 2-nd Workshop of the European Thermoelectric Society (ETS 2). Nancy, France, 1995 (Contributed Talk).
23. Ninth International Conference on Liquid and Amorphous Metals. Chicago, IL, August 27-September 1, 1995 (Contributed Talks).
24. 15 International Conference on Thermoelectrics. Pasadena, California, USA. March 26-29, 1996 (Contributed Talks).
25. International Conference on High Pressure Science and Technology, Kyoto, Japan, 25-29 August, 1997 (Contributed Talk).
26. International Conference on Magnetism ICM-97. Cairns , Australia, July 27-August 1, 1997 (Contributed Talks).
27. 16 International Conference on Thermoelectrics. Nagoya, Japan, May 24-28, 1998 (Contributed Talks).
28. Eighteen International Conference of Thermoelectrics. Baltimore, USA, August 29 - September 02, 1999 (Contributed Talk).
29. The 51st Yamada Conference on Strongly Correlated Electron Systems (SCES99). Nagano, Japan, August 24 - 28, 1999 (Contributed Talks).
30. Japanese Physical Society Spring and Fall Meetings, 1996-2000 (Contributed Talks).
31. European Powder Diffraction Conference, Barcelona, Spain, May 20-27, 2000 (Contributed Talk).
32. International Conference on Magnetism (ICM 2000). Recife, Brazil, August 6-11, 2000 (Contributed Talk).
33. The International Conference on Strongly Correlated Electron Systems (SCES2001). August 6-10, Ann Arbor, Michigan, USA, 2001 (Contributed Talk).
34. XVIII International School *New Magnetic Materials for Microelectronics*. Moscow, Russia, June 24-28, 2002 (Contributed Talk).

35. The 23rd International Conference on Low Temperature Physics (LT23). Hiroshima, Japan, August 20-27, 2002 (Contributed Talks).
36. *Magnetotransport in $(Y_xGd_{1-x})Co_2$ alloys near to magnetic phase boundary*: Seminar, The Institute for Solid State Physics, Tokyo University, Kashiwa, Chiba, Japan, 2002 (Presentation).
37. International Conference on Magnetism (ICM 2003). Rome, Italy, July 27 -August 1, 2003 (Contributed Talks).
38. International Rare Earth Conference. Nara, Japan, November 7-12, 2004 (Contributed Talk).
39. *Thermoelectric measurements:Tools for search of new efficient materials*: Komatsu-Ioffe Institute Meeting. Sankt-Petersburg, Russia, October 24-26, 2004 (Contributed Talk).
40. International Conference on Strongly Correlated Electron Systems 2005 (SCES 05). Vienna, Austria, July 26-30, 2005 (Contributed Talks).
41. International Conference on Magnetism ICM 2006. Kyoto, Japan, August 20 - 25, 2006 (Contributed Talks).
42. 25th International Conference on Low Temperature Physics (LT25). Leiden, Netherlands, August 06 - 13, 2008 (Contributed Talk).
43. The International Conference on Magnetism 2009 (ICM 2009) Karlsruhe, Germany July 26 - 31, 2009 (contributed talks)
44. International Conference on Strongly Correlated Electron Systems (SCES 2010), Santa Fe, USA, June 27 - July 2, 2010 (Contributed Talks).
45. IV Euro-Asian Symposium "Trends in Magnetism" EASTMAG-2010, Ekaterinburg, Russia, June 28-July 2, 2010 (Contributed talk).
46. 7th International Conference on Amorphous and Microcrystalline Semiconductors, St Petersburg, Russia, June 28-July 01, 2010.
47. 9th European Conference on Thermoelectrics: Thessaloniki, September 28-30, 2011, GREECE (Contributed talk).