

# **CURRICULUM VITAL (November, 2020)**

## **Dr. Igor Lashkevych (*Lashkevich in some papers*)**

**i32555@gmail.com**

### **Born in Ukraine, Ternopil**

#### **INVESTIGATION**

- Doctor's degree in the field of the physicist of semiconductors and dielectrics
- Postdoctorate in Physics (Thermal and charge transport in semiconductors).
- **23** JCR articles.
- **7** articles in the national journals.
- **13** proceedings.
- **30** resumes for conferences.
- **81** citas.

#### **SNI: Level 1**

#### **Director of the following PROJECTS**

2010-2011	The theory of the Peltier effect that takes into account nonequilibrium charge carriers	SIP 20100331 20110197
2012-2013	Electromotive thermoelectric force in bipolar semiconductors and structures of semiconductors, taking into account the presence of nonequilibrium charge carriers	SIP 20120696 20130542
2014	Influence of both nonequilibrium carriers and temperature on transport of heat and electrical charges in nondegenerate semiconductors in linear approximation with respect to perturbation	SIP 20140620
2015	The influence of both concentration and energy nonequilibria on Ohm's law for a bipolar semiconductor.	SIP 20150577
2017	Flujo de energía y distribución de la temperatura en un semiconductor no degenerado aislado emparedado entre los dos termostatos con diferentes temperaturas	SIP 20170700

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# 1. DATES OF WORK

1.1. Name of the occupying position \_\_\_\_\_ Postgraduate  
1.2. Institution, department \_\_\_\_ Ternopil' pedagogical national university  
Department of Physics and Method of teaching of physics  
1.3. Antiquity \_\_\_\_\_ **11/1997-11/2000**  
1.4. Place of labor \_\_\_\_ Street Kryvonosa, 2, Ternopil', Ukraine, 246027  
1.5. Phone, email \_\_\_\_\_ (+380)352533612, [rector@ecolab.ternopil.ua](mailto:rector@ecolab.ternopil.ua)

2.1. Name of the occupying position \_\_\_\_\_ Schoolmaster  
2.2. Institution, department \_\_\_\_\_ Ternopil' technical lyceum «Svitlo»  
2.3. Antiquity \_\_\_\_\_ **08/1998-08/2001**  
2.4. Place of labor \_\_\_\_ Street 15 Kvitnya, 33, Ternopil', Ukraine, 246001  
2.5. Phone, email \_\_\_\_\_ (+380)352432872

3.1. Name of the occupying position \_\_\_\_\_ Professor  
3.2. Institution, department \_\_\_\_ Ternopil' medical university, Department of Informatics and Physics  
3.3. Antiquity \_\_\_\_\_ **09/2001-01/2003**  
3.4. Place of labor \_\_\_\_ Street Maydan Voli, 1, Ternopil', Ukraine, 246001  
3.5. Phone, email \_\_\_\_\_ (+380)352524492

4.1. Name of the occupying position \_\_\_\_\_ Professor  
4.2. Institution, department \_\_\_\_ Ternopil' national pedagogical university  
Department of Physics and Method of teaching of physics  
4.3. Antiquity \_\_\_\_\_ **02/2003- 10/2007**  
4.4. Place of labor \_\_\_\_ Street Kryvonosa, 2, Ternopil', Ukraine, 246027  
4.5. Phone, email \_\_\_\_\_ (+380)352533612, [rector@ecolab.ternopil.ua](mailto:rector@ecolab.ternopil.ua)

5.1. Name of the occupying position \_\_\_\_\_ Postdoctoral researcher  
5.2. Institution, department \_\_\_\_ Department of Physics, CINVESTAV-IPN,  
5.3. Antiquity \_\_\_\_\_ **11/2007- until these days**  
5.4. Place of labor \_\_\_\_ Apdo. Postal 14-740, 07000, M xico, Distrito Federal, M xico  
5.5. Phone, email \_\_\_\_\_ (52)5540184522, [i32555@gmail.com](mailto:i32555@gmail.com)

6.1. Name of the occupying position .....Maestro  
6.2. Institution, department .....Ciencias B asicas (F sica y Matem tica),  
UPIITA - IPN,  
6.3. Antiquity.....**1/08/2009-**  
6.4. Place of labor \_\_\_\_\_ Av. Instituto Politecnico Nacional No. 2580,  
Colonia Barrio La Laguna Ticoman,  
Delegacion Gustavo A. Madero,  
C.P. 07340 Mexico D.F.  
6.5. Phone, email .....(52) 57296000 ext. 56807  
[dir.upiita@ipn.mx](mailto:dir.upiita@ipn.mx)

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## **2. ACADEMIC FORMATION**

### **1. Doctorate (PhD):**

*Institution:* Chernivtsi national university (Chernivtsi, Ukraine)

*Specialty:* Doctorate of Philosophy in the area of physics of semiconductors and dielectrics

*Date of obtaining of degree:* 08.06.2005

*Title of thesis:* Temperature waves in isotropic homogeneous and partially-homogeneous semiconductors and insulators at bulk absorption of harmonic modulated light

### **2. Master**

*Institution:* Ternopil' state pedagogical university (Ternopil', Ukraine)

*Specialty:* Schoolmaster of Physics, Mathematics and Informatics

*Date of obtaining of degree:* 13.06.1997

*Title de thesis:* Electron and phonon thermal waves in bounded semiconductors

### **3. Post Doctorate in Physics of transport phenomena in semiconductors**

*Institution:* .....Centro de Investigaciyn y Estudios Avanzados del I.P.N. (CINVESTAV)  
Mйxico, D.F.

*Date of obtaining of degree:* .....**30.10.2008**

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### 3. COURSE OF TEACHING

#### Course of Teaching in Ukraine

General Physics.....	(09.2001-12.2002)
Higher Mathematics.....	(09.2001-12.2001) and (09.2002-12.2002)
Mathematical statistics.....	(01.2002-12.2002)
Molecular physics.....	(02.2003-05.2003) and (09/2006-12/2006), and (01/2007-05/2007)
Physics of Solids.....	(02.2003-05.2003) and (02.2004-05.2004), and (02.2005-05.2005), and (02.2006-05.2006), and (02.2007-05.2007)
Preparation of Students on the International and National Physical Olympiads.....	(09.2003-12.2003) and (09.2004-12.2004), and (09.2005-12.2005), and (09/2007-10/2007)
Classical mechanics.....	(09.2003-12.2003) and (09.2004-12.2004), and (09.2005-12.2005), and (09/2006-12/2006)
Quantum mechanics.....	(09.2003-12.2003) and (09.2004-12.2004), and (09.2005-12.2005), and (09/2006-12/2006)
Quantum physics.....	(09.2003-12.2003) and (09.2004-12.2004), and (09.2005-12.2005)
Electromagnetism .....	(01.2004-05.2004) and (01.2005-05.2005), and (01.2006-05.2006)
Optics.....	(09.2005-12.2005) and (09/2006-12/2006), and (09/2007-10/2007)
Mechanics.....	(09/2006-12/2006) and (01/2007-05/2007)

#### Course of Teaching in Instituto Politécnico Nacional

Periodo	Grupo	Asignatura	Horas (semestre)
2PL/19-20	002 DTA	Seminario departamental II	36
	007 DTA	Seminario departamental VII	36
	1TV4	Cálculo multivariante	108
1PL/19-20	005 DTA	Seminario departamental V	36
	1TV3	Ecuaciones diferenciales	81
	1TV3	Cálculo multivariante	108
2PL/18-19	015 DTA	Fenómenos de transporte avanzado	108
1PL/18-19	002 DTA	Seminario departamental II	36
	1BV2	Álgebra lineal	81
	1BM2	Cálculo vectorial	108
2PL/17-18	006 DTA	Seminario departamental VI	36
	1TV2	Álgebra lineal	108
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<i>1PL/17-18</i>	<i>003 DTA</i> <i>1MM4</i> <i>1MV3</i>	<i>Seminario departamental II</i> <i>Cálculo vectorial</i> <i>Álgebra lineal y números complejos</i>	<i>36</i> <i>108</i> <i>81</i>
<i>2PL/16-17</i>	<i>004 DTA</i> <i>1BM2</i> <i>1MM3</i> <i>1MV1</i>	<i>Seminario departamental IV</i> <i>Fund. de física para la Inginería</i> <i>Álgebra lineal y números complejos</i> <i>Cálculo diferencial e integral</i>	<i>36</i> <i>108</i> <i>81</i> <i>108</i>
<i>1PL/16-17</i>	<i>003 DTA</i> <i>1BV4</i> <i>1MM2</i> <i>1MV1</i> <i>1TV2</i>	<i>Seminario departamental</i> <i>Álgebra lineal</i> <i>Álgebra lineal y números complejos</i> <i>Álgebra lineal y números complejos</i> <i>Ecuaciones diferenciales</i>	<i>36</i> <i>81</i> <i>81</i> <i>81</i> <i>81</i>
<i>2PL/15-16</i>	<i>A16-003 DTA</i> <i>1BM4</i> <i>2BV1</i> <i>1TM6</i> <i>1TM6</i>	<i>Seminario departamental III</i> <i>Cálculo Dif. e Int.</i> <i>Ecuaciones diferenciales</i> <i>Fundamentos de Física</i> <i>Cálculo multivariante</i>	<i>36</i> <i>108</i> <i>27</i> <i>54</i> <i>108</i>
<i>1PL/15-16</i>	<i>1MM9</i> <i>1MV5</i> <i>1MV3</i> <i>002 DTA</i> <i>003 DTA</i>	<i>Cálculo vectorial</i> <i>Cálculo vectorial</i> <i>Cálculo vectorial</i> <i>Seminario departamental I</i> <i>Seminario departamental II</i>	<i>108</i> <i>54</i> <i>108</i> <i>36</i> <i>36</i>
<i>2PL/14-15</i>	<i>1BV4</i> <i>1BV3</i> <i>1BM1</i> <i>1BV1</i> <i>002 DTA</i> <i>003 DTA</i>	<i>Cálculo Dif. e Int.</i> <i>Bioestadística</i> <i>Álgebra lineal</i> <i>Álgebra lineal</i> <i>Seminario departamental II</i> <i>Seminario departamental III</i>	<i>54</i> <i>54</i> <i>81</i> <i>81</i> <i>36</i> <i>36</i>
<i>1PL/14-15</i>	<i>1BM2</i> <i>1BM2</i> <i>1MV4</i> <i>1MV4</i>	<i>Cálculo vectorial</i> <i>Cálculo vectorial (Taller)</i> <i>Cálculo vectorial</i> <i>Cálculo vectorial (Taller)</i>	<i>54</i> <i>54</i> <i>54</i> <i>54</i>
<i>2PL/13-14</i>	<i>003 DTA</i> <i>004 DTA</i> <i>005 DTA</i> <i>1BV1</i> <i>1MV9</i>	<i>Seminario departamental III</i> <i>Seminario departamental IV</i> <i>Seminario departamental V</i> <i>Álgebra lineal y números complejos</i> <i>Ecuaciones diferenciales</i>	<i>36</i> <i>36</i> <i>36</i> <i>81</i> <i>81</i>
<i>1PL/13-14</i>	<i>1BV1</i> <i>1MV7</i> <i>1MM6</i> <i>1MV2</i> <i>1TM4</i> <i>2TV1</i> <i>2TV4</i>	<i>Álgebra lineal (Taller)</i> <i>Cálculo Dif. e Int. (Taller)</i> <i>Ecuaciones diferenciales</i> <i>Cálculo vectorial (Taller)</i> <i>Electromagnetismo (Lab)</i> <i>Métodos numéricos (Lab)</i> <i>Óptica (Lab)</i>	<i>27</i> <i>54</i> <i>81</i> <i>54</i> <i>54</i> <i>27</i> <i>27</i>
<i>2PL/12-13</i>	<i>1TV2</i> <i>1MM2</i> <i>1MM2</i>	<i>Ecuaciones diferenciales</i> <i>Cálculo vectorial</i> <i>Cálculo vectorial (Taller)</i>	<i>81</i> <i>54</i> <i>54</i>
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<i>2PL/11-12</i>	<i>1TM2</i> <i>1TV1</i> <i>1TV3</i>	<i>Ecuaciones diferenciales</i> <i>Ecuaciones diferenciales</i> <i>Lab. De electromagnetismo</i>	<i>81</i> <i>81</i> <i>54</i>
<i>2PL/10-11</i>	<i>1MM5</i> <i>1MM5</i>	<i>Cálculo vectorial</i> <i>Taller de Cálculo vectorial</i>	<i>54</i> <i>54</i>

	<i>1MM2</i> <i>1MM2</i> <i>003 DTA</i>	<i>Cálculo Dif. e Int.</i> <i>Taller de Cálculo Dif. e Int.</i> <i>Fenómenos de transporte avanzado</i>	<i>12</i> <i>12</i> <i>108</i>
<i>1PL/10-11</i>	<i>1BM2</i>	<i>Cálculo vectorial</i>	<i>54</i>
	<i>1BM2</i>	<i>Taller de Cálculo vectorial</i>	<i>54</i>
	<i>1MM6</i>	<i>Cálculo vectorial</i>	<i>54</i>
	<i>1MM6</i>	<i>Taller de Cálculo vectorial</i>	<i>54</i>
<i>2PL/09-10</i>	<i>2M2M</i>	<i>Cálculo vectorial</i>	<i>54</i>
	<i>2M2M</i>	<i>Taller de Cálculo vectorial</i>	<i>54</i>
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	<i>3BM1</i>	<i>Laboratorio de T. electromagnética</i>	<i>36</i>
<i>1PL/09-10</i>	<i>1B1M</i>	<i>Cálculo Dif. e Int.</i>	<i>54</i>
	<i>1B1M</i>	<i>Taller de Cálculo Dif. e Int.</i>	<i>54</i>
	<i>1T1M</i>	<i>Cálculo Dif. e Int.</i>	<i>81</i>
	<i>1T1M</i>	<i>Taller de Cálculo Dif. e Int.</i>	<i>27</i>
	<i>1T2M</i>	<i>Cálculo Dif. e Int.</i>	<i>81</i>
	<i>1T2M</i>	<i>Taller de Cálculo Dif. e Int.</i>	<i>27</i>
	<i>3BV4</i>	<i>Matemáticas V (Probabilidad y Procesos Estocásticos)</i>	<i>72</i>

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## 4. FORMATION OF STUDENTS

### 1. A. Zhukavych

Degree: \_\_\_\_\_ Master

Institution: \_\_\_\_\_ Ternopil' National Pedagogical University (Ternopil', Ukraine)

Title of Thesis: \_\_ "Practical preparation of students on the curriculum of statistical physics and its methodical maintenance"

Date: \_\_\_\_\_ June of 2004

### 2. G. Konopeljsjka

Degree: \_\_\_\_\_ Master

Institution: \_\_\_\_\_ Ternopil' National Pedagogical University (Ternopil', Ukraine)

Title of Thesis: \_\_ "The Ectric and Thermic responses of half-infinite electron semiconductor upon the laser irradiation at its bulk intrinsic absorption"

Date: \_\_\_\_\_ June of 2005

### 3. G. Braslavych

Degree: \_\_\_\_\_ Master

Institution: \_\_\_\_\_ Ternopil' National Pedagogical University (Ternopil', Ukraine)

Title of Thesis: \_\_ "The features of dependence of contact temperature between semiconductors on a current"

Date: \_\_\_\_\_ June of 2006

### 4. O. Skrynyk

Degree: \_\_\_\_\_ Master

Institution: \_\_\_\_\_ Ternopil' National Pedagogical University (Ternopil', Ukraine)

Title of Thesis: \_\_ "The features of dependence of contact temperature between semiconductors from EMF"

Date: \_\_\_\_\_ June of 2006

5. R. Yakubovych

Degree: \_\_\_\_\_ Master

Institution: \_\_\_\_\_ Ternopil' National Pedagogical University (Ternopil', Ukraine)

Title of Thesis: \_ "Nonconventional renewed energy sources, condition and prospects of their use in Ukraine"

Date: \_\_\_\_\_ June of 2006

6. Ye. Fuk

Degree: \_\_\_\_\_ Master

Institution: \_\_\_\_\_ Ternopil' National Pedagogical University (Ternopil', Ukraine)

Title of Thesis: \_ "Optimization of Peltier's module by its parameters and electrical current"

Date: \_\_\_\_\_ June of 2007

7. A. Maksymyshyn

Degree: \_\_\_\_\_ Master

Institution: \_\_\_\_\_ Ternopil' National Pedagogical University (Ternopil', Ukraine)

Title of Thesis: \_ "The elements of interesting physics as mean of forming of cognitive interest in pupils of basic school"

Date: \_\_\_\_\_ June of 2007

8. SIEWE KAMEGNI André

Degree: \_\_\_\_\_ Doctor

Institution: \_\_\_\_\_ Instituto Politécnico Nacional (Ciudad de México, México)

Title of Thesis: \_ "Fuerza termo-electromotriz en un semiconductor bipolar tomando en cuenta calor de recombinación de los portadores de carga fuera de equilibrio (temperatura no lineal con respecto a posición) y existencia de dos diferentes cuasi-niveles de Fermi para electrones y huecos."

Date: \_\_\_\_\_ In progress: The initial date is January 2020

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## 5. PUBLICATIONS

### 5.1 JCR Publications

1. G.N.Logvinov, Yu.G.Gurevich, **I.M.Lashkevich**, Electron Thermal Waves in Submicron Semiconductors, Applied Surface Science, vol.199, Issues 1-4, p.312-318, (2002).  
ISSN: 0169-4332 (Holland), *Impact Factor:* 2.711,  
DOI [http://dx.doi.org/10.1016/S0169-4332\(02\)00884-X](http://dx.doi.org/10.1016/S0169-4332(02)00884-X)
2. Yuri Gurevich, Georgi Logvinov, and **Igor Lashkevich**, Boundary conditions in theory of photo-thermal processes in solids, Review of Scientific Instruments, Vol.74, No 1, p.589-591 (2003).  
ISSN: 0034-6748 (USA), *Impact Factor:* 1.614,  
DOI <http://dx.doi.org/10.1063/1.1515894>
3. G.N. Logvinov, Yu.G. Gurevich, **I.M. Lashkevich**, Surface Heat Capacity and Surface Heat Impedance. Application to Theory of Thermal Waves. Japan Journal of Applied Physics, Part1, Vol. 42, No. 7A, p.4448-4452 (2003).

ISSN: 0021-4922 (Japan), *Impact Factor: 1.127*,  
DOI <http://dx.doi.org/10.1143/JJAP.42.4448>

4. Yuriy Gurevich, Georgiy Logvinov, and **Igor Lashkevich**, Effective Thermal Conductivity: Application to Photothermal Experiments for the Case of Bulk Light Absorption, *Physica Status Solidi (b)*, **241**, No 6, p.1286-1298 (2004).  
ISSN: 0370-1972 (Germany), *Impact Factor: 1.48*,  
DOI <http://dx.doi.org/10.1002/pssb.200301993>
5. G.N. Logvinov, J.E. Velázquez, **I.M. Lashkevych**, Yu.G. Gurevich, Heating and cooling in semiconductor structures by an electric current, *Applied Physics Letters*, **89**, No 9, p. 092118-1–092118-3 (2006).  
ISSN: 0003-6951 (USA), *Impact Factor: 3.569*,  
DOI <http://dx.doi.org/10.1063/1.2345033>
6. G.N. Logvinov, Miguel Irisson Cruz, **I.M. Lashkevich**, J.E. Velázquez, Yu.G. Gurevich, Boundary Conditions in Theory of Photothermal Processes, *Brazilian Journal of Physics*, Vol. 36, No 3B, p. 1097-1100 (September, 2006).  
ISSN: 0103-9733 (Brazil), *Impact Factor: 0.810*,  
DOI <http://dx.doi.org/10.1590/S0103-97332006000600079>
7. Yu.G. Gurevich, **I.M. Lashkevich**, F.A. Serrano Orozco, G.N. Logvinov, Two-Temperature Approach to the Thermoelectric Cooling Problem, *Revista Mexicana de Física*, Vol. **S53**, No 7, pp. 203-207 (2007).  
ISSN: 0035-001X (Mexico), *Impact Factor: 0.339*,  
[http://rmf.smf.mx/pdf/rmf-s/53/7/53\\_7\\_203.pdf](http://rmf.smf.mx/pdf/rmf-s/53/7/53_7_203.pdf)
8. **I. M. Lashkevich**, O. Angeles Fragoso, Yu. G. Gurevich, Thin-film thermoelectric cooling, *Technical Physics*, Vol. **54**, No 2, pp. 289-297 (2009).  
ISSN: 1063-7842 (USA), *Impact Factor: 0.524*,  
DOI <http://dx.doi.org/10.1134/S1063784209020200>
9. **Igor Lashkevych**, Carlos Cortes, Yuri G. Gurevich, Physics of thermoelectric cooling: alternative approach, *Journal of Applied Physics*, Vol. **105**, No 5, pp. 053706-1–053706-5 (2009).  
ISSN: 0021-8979 (USA), *Impact Factor: 2.276*,  
DOI <http://dx.doi.org/10.1063/1.3086629>
10. Yu. G. Gurevich, and **I. Lashkevych**, Non-typical temperature distribution in p-n structure under thermoelectric cooling, *International Journal of Thermal Sciences*, Vol. **48**, No 11, 2080-2084. (2009).  
ISSN: 1290-0729 (France), *Impact Factor: 2.629*,  
DOI <http://dx.doi.org/10.1016/j.ijthermalsci.2009.03.004>
11. **I. Lashkevych**, O. Angeles Fragoso, Yu. G. Gurevich, Peculiarities of thermoelectric cooling in p-n structures, *International Journal of Thermophysics*, Vol. **30**, No 2, pp. 635-647 (2009).  
ISSN: 0195-928X (USA), *Impact Factor: 0.963*,  
DOI <http://dx.doi.org/10.1007/s10765-008-0543-5>
12. Yu. G. Gurevich, **I. Lashkevich** and G. Gonzalez de la Cruz, Effective thermal parameters of layered films: An application to pulsed photothermal techniques, *International Journal of Heat and Mass Transfer*, Vol. **52**, No 19-20, pp. 4302-4307 (2009).  
ISSN: 0017-9310 (USA), *Impact Factor: 2.383*,  
<http://dx.doi.org/10.1016/j.ijheatmasstransfer.2009.03.068>

- 13.** **Igor Lashkevych** and Yury G. Gurevich, Boundary Conditions for Thermoelectric Cooling in p-n Junction, Int. J. Thermophys., **32**(5), pp. 1086-1097 (2011).  
ISSN: 0195-928X (USA), *Impact Factor: 0.963*,  
DOI <http://dx.doi.org/10.1007/s10765-011-0969-z>
- 14.** **Igor Lashkevych**, Oleg Titov, and Yuri G. Gurevich, Recombination and temperature distribution in Semiconductors, Semiconductor Science and Technology, Vol. **27**, pp. 055014-055020 (2012).  
ISSN: 0268-1242 (United Kingdom), *Impact Factor 2.190*,  
DOI <http://dx.doi.org/10.1088/0268-1242/27/5/055014>
- 15.** Yuri G. Gurevich, **Igor Lashkevych**, Sources of Fluxes of Energy, Heat, and Diffusion Heat in a Bipolar Semiconductor: Influence of Nonequilibrium Charge Carriers, Int. J. Thermophys., Vol. **34**(2), pp. 341-349, (2013).  
ISSN: 0195-928X, *Impact Factor 0.963*,  
DOI <http://dx.doi.org/10.1007/s10765-013-1416-0>
- 16.** Yuri G. Gurevich, **Igor Lashkevych**, Interaction of the Thermal and Concentration Nonequilibriums in a Bipolar Semiconductor: Linear Transport Phenomena, Int. J. Thermophys., Vol. **35**(2), pp. 375-381, (2014).  
ISSN: 0195-928X, *Impact Factor 0.963*  
DOI <http://dx.doi.org/10.1007/s10765-014-1611-7>
- 17.** Yuri G. Gurevich, **Igor Lashkevych**, Energy and Concentration Nonequilibriums in the Theory of Thermoelectric Processes, J Electron Mater, Vol. **44**(6), pp. 1456-1459 (2015).  
Print ISSN: 0361-5235, *Impact Factor 1.798*,  
DOI <http://dx.doi.org/10.1007/s11664-014-3412-y>
- 18.** **I. Lashkevych**, O.Yu. Titov, and Yu.G. Gurevich, New Perspectives For Photoelectric Phenomena, Lithuanian Journal of Physics, Vol. **55**, No. 4, pp. 342–351 (2015).  
ISSN: 1648-8504, *Impact Factor 0.625*,  
DOI: <http://dx.doi.org/10.3952/physics.v55i4.3233>
- 19.** **Igor Lashkevych**, Yuri G. Gurevich, Energy flux in semiconductors: Interaction of thermal and concentration nonequilibriums, International Journal of Heat and Mass Transfer **92**, 430–434 (2016).  
ISSN: 0017-9310, *Impact Factor: 2.383*,  
DOI <http://dx.doi.org/10.1016/j.ijheatmasstransfer.2015.09.005>
- 20.** **Igor Lashkevych**, Yuri G. Gurevich, Linear Electrical Conductivity of a Bipolar Semiconductor: Heating and Recombination, Int J Thermophys, Vol. **37**, 1 (2016).  
ISSN: 0195-928X, *Impact Factor 0.963*,  
DOI: <http://dx.doi.org/10.1007/s10765-015-2019-8>
- 21.** **Igor Lashkevych**, Oleg. Yu. Titov, Ohm's Law for a Bipolar Semiconductor: The Role of Carrier Concentration and Energy Nonequilibria, J Electron Mater, Vol. **46**, No. 1, pp. 585-595 (2017).  
ISSN: 0361-5235 (print version), *Impact Factor 1.491 (2015)*.  
DOI: <http://dx.doi.org/10.1007/s11664-016-4927-1>

- 22. Igor Lashkevych**, Oleg Yu. Titov and Yuri G. Gurevich, Response to “Comment on I. Lashkevych, O.Yu. Titov, and Yu.G. Gurevich, Ohm’s Law for a Bipolar Semiconductor: The Role of Carrier Concentration and Energy Nonequilibria, J. Electron. Mater., 46, 585 (2017)”, J Electron Mater, Vol. 47, No. 1, pp. 901-902 (2018).  
 ISSN: 0361-5235 (print version), *Impact Factor 1.579 (2017)*.  
 DOI: <http://dx.doi.org/10.1007/s11664-017-5905-y>
- 23. Igor Lashkevych**, J. E. Velázquez, Oleg. Yu. Titov, Yuri G. Gurevich, Special Important Aspects of the Thomson Effect, J Electron Mater, Vol. 47, No. 6, pp. 3189-3192 (2018). ISSN: 0361-5235 (print version), *Impact Factor 1.579 (2017)*.  
 DOI: <http://dx.doi.org/10.1007/s11664-018-6205-x>

[Contents](#)

## 5.2 Publications in national journals

1. M.N.Kasyanchuk, **I.M.Lashkevych**, G.M.Logvinov, Two-Temperature Thermal Waves in Bounded Semiconductors, Naukovi Zapysky TNPU, Series: Mathematics and Physics, No1(11), p.58-63 (1998) (Ternopil’, Ukraine) (in Ukrainian).
2. M.N.Kasyanchuk, **I.M.Lashkevych**, Nonstationary electron and phonon temperatures in nondegenerate semiconductors of submicron thickness, Physics and chemistry of solid state, Vol. 1, p. 49-54 (2000.). (in Ukrainian)  
 ISSN: 1729-4428 (Ukraine),  
[http://www.pu.if.ua/inst/phys\\_chem/start/pcss/vol1/number1/e000101.htm#a05](http://www.pu.if.ua/inst/phys_chem/start/pcss/vol1/number1/e000101.htm#a05)
3. Yu.G.Gurevich, **I.M.Lashkevich**, G.N.Logvinov, Effective Thermal Conductivity of Two-Layer Structures in Photothermal Phenomena, Science Messenger of Chernivtsi State University: Physics and Electronics, No.133, p.5-13 (2002), (Ukraine) (in ukrainian).
4. Viktor Matsyuk, **Igor Lashkevych**, Fundamentality of probability regularities and oportunities of learning them by means of new information technologies, Naukovi Zapysky TNPU, Series: Pedagogics, No. 1, pp. 186-190 (2011) (Ternopil, Ukraine) (in ukrainian).
5. Viktor Matsyuk, **Igor Lashkevych**, Didactics features of use of new information technologies and electronic textbooks during the study of physics at school, Lat. Am. J. Phys. Educ., 5(2), pp. 360-367 (2011).  
 ISSN: 1870-9095 (Mexico),  
[http://www.lajpe.org/june11/7\\_LAJPE\\_527\\_Igor\\_Lashkevich\\_Preprint\\_corr\\_f.pdf](http://www.lajpe.org/june11/7_LAJPE_527_Igor_Lashkevich_Preprint_corr_f.pdf)
6. **Igor Lashkevych**, Yuri G. Gurevich, Temperature distribution in a p-n thermoelectric module: Quadratic approximation with respect to an electrical current, Superficies y Vacío, Vol. 24(3), pp. 81-87 (septiembre, 2011).  
 ISSN: 1665-3521 (Mexico),  
[http://smcsyy.fis.cinvestav.mx/supvac/24\\_3/SV2438111.pdf](http://smcsyy.fis.cinvestav.mx/supvac/24_3/SV2438111.pdf)
7. **Lashkevych I**, Titov O., Gurevich G. Yu., Salazar Laureles J. L., Transient heating of solids of finite size under bulk absorption of a light pulse, Superficies y Vacío, Vol. 25(4), pp. 209-213, (December, 2012).

## 5.3 Proceedings

1. Yu. G. Gurevich, G. Gonzalez de la Cruz, G. N. Logvinov, **I. M. Lashkevich**, Photothermal Effects in Semiconductor Films, Proceedings of Conference “VII International Conference of Physics and Technology of Thin Films”, Ivano-Frankovsk, Ukraine, October, 1999, p.139.
2. M. N. Kasyanchuk, **I. M. Lashkevych**, Nonstationary thermodiffusion processes in two-layers structures, Proceedings of 2d International Smakula’s symposium «Fundamental and applied problems of modern physics», Ternopil’, Ukraine, p.46-47 (2000) (in ukrainian).
3. Yu. G. Gurevich, G. N. Logvinov, G. Gonzalez de la Cruz, **I. M. Lashkevich**, Nonstationary Thermo-E.M.F. in Photothermal Phenomena, ICT2000, Cardiff, Wales, Proceedings of 19th International Conference on Thermoelectrics, pp. 412-415 (2000).
4. Yu. G. Gurevich, **I. M. Lashkevych**, G. N. Logvinov, Minimal Temperature of Thermoelectric Cooling: Adiabatic Approximation, ICT2006, Vienna, Austria, Proceedings of 25th International Conference on Thermoelectrics, pp. 260-263 (2006).
5. **I. Lashkevych**, O. Angeles Fragoso, Yu. G. Gurevich, Enfriamiento termoelectrico en peliculas delgadas, 6<sup>th</sup> Congreso Internacional en Innovacion y Desarrollo Tecnologico, Book of Proceedings pp. 1-5 (Cuernavaca, Morelos., Mexico, 8 - 10 octuber 2008).
6. **I. Lashkevych**, Y.G. Gurevich, Temperature distribution in a p-n structure: electrical current quadratic approximation, IV International Conference on Surfaces, Materials and Vacuum, , Book of Proceedings, pp. 49-50 (Puerto Vallarta, Jalisco, Mexico, 26-30 September, 2011).
7. Yu. G. Gurevich, **I. Lashkevych**, Fluxes and Sources of Fluxes of Energy, Heat, and Diffusion Heat in Semiconductors, V International Conference on Surfaces, Materials and Vacuum, Book of Proceedings, pp. 47-48 (Tuxtla Gutíérrez, Chiapas, Mexico, September 24-28, 2012).
8. Yu.G. Gurevich, **I. Lashkevych**, Transport of Heat and Electricity in p-n Semiconductor Structures, 9<sup>th</sup> International Conference on Electrical Engineering, Computing Science and Automatic Control, Book of Proceedings, pp. 418-421 (Mexico City, Mexico, September 26-28, 2012).
9. **I. Lashkevych**, Yu.G. Gurevich, Influence of Recombination on the Energy and Heat Balance Equations for a Bipolar Semiconductor, Proceedings of 10th International Conference on Electrical Engineering, Computing Science and Automatic Control, Mexico City, Mexico, pp. 431-434 (September 30-Octobre 4, 2013).
10. Gurevich Yu.G. and **Lashkevych I.**, Influence of Recombination on the Thermal Conduction in Bipolar Semiconductors and Semiconductor Structures, Proceedings of 10<sup>th</sup> International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, Orlando, Florida, USA, pp. 1447-1452 (Julio 14-26, 2014).
11. Yuri G. Gurevich and **Igor Lashkevych**, Influence of Nonequilibrium Temperature and Charge Carriers on the Ohm’s Law in a Bipolar Semiconductor, Proceedings of 11th International Conference

on Electrical Engineering, Computing Science and Automatic Control (CCE) Ciudad del Carmen, Campeche. Mexico, pp. 418-421 (September 29–October 3, 2014).

12. Yuri G. Gurevich and **Igor Lashkevych**, Brief Overview of Electrons' Cooling in p-n Structure under Thermoelectric Phenomenon, Proceedings of 12th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE) Mexico, City. Mexico, pp. 521-526 (October 28-30, 2015).

13. **Igor Lashkevych**, Yuri G. Gurevich, Correct Thomson Heat, Proceedings of International Science-Practice Conference "Preparation of Future Teachers of Physics, Chemistry, Biology and Natural Sciences in the Context of the Requirement of a New Ukrainian School" Original name in Ukrainian: "Підготовка майбутніх учителів фізики, хімії, біології та природничих наук у контексті вимог нової української школи", Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil, Ukraine (20-21 May 2019).

url: [https://www.researchgate.net/publication/333882081\\_Correct\\_Thomson\\_Heat](https://www.researchgate.net/publication/333882081_Correct_Thomson_Heat)

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## 5.4 International and national congresses and seminars

1. Name of event
2. Place and date of celebration
3. Presentation work (Authors, title)

1.1. XVII International Conference on Thermoelectrics, Program&Abstracts.

1.2. Nagoya, Japan, May 24-28, 1998, International Thermoelectric Society.

1.3.G.N.Logvinov,M.N.Kasyanchuk, **I.M.Lashkevich**, Yu.G.Gurevich, G.Gonzalez de la Cruz, Thermal Waves in Semiconductors and Semiconductor Films, p.34.

2.1. International School-Conference “Actual Problems in Semiconductors”, Abstracts.

2.2.Drogobich,Ukraine, June 23-30, 1999. Institute of Semiconductors of Ukraine Academy of Science, Institute of Physics of Ukraine Academy of Science.

2.3. M.N.Kasyanchuk, **I.M.Lashkevich**, Yu.G.Gurevich, G.N.Logvinov, Nonstationary Electron and Phonon Thermodiffusion in Semiconductors, p.80 (in Ukrainian).

3.1. 15-th European Conference on Thermophysical Properties, Book of Abstracts.

3.2. Wurzburg,Germany, September 5-9,1999, University of Wurzburg and ZAE Bayern.

3.3.Yu.G.Gurevich,G.Gonzalez de la Cruz, M.N.Kasyanchuk, **I.M.Lashkevich**, G.N.Logvinov, The Theory of the Photothermal Processes in Semiconductors: Two-Temperature Model, p.230.

4.1. VII International Conference of Physics and Technology of Thin Films, Abstracts

4.2. Ivano-Frankovsk,Ukraine,1999, Precarpathian University named after V. Stefanyk.

4.3.Yu.G.Gurevich,G.Gonzalez de la Cruz, G.N.Logvinov, **I.M.Lashkevich**, Photothermal Effects in Semiconductor Films, p.139.

5.1.29-th Winter School on Molecular and Quantum Acoustics

5.2. Gliwicw,Poland,2000

5.3.G.Gonzalez de la He Cruz, Yu.G.Gurevich, G.N.Logvinov, M.N.Kasyanchuk, **I.M.Lashkevich**, Selfconsistent Electron and Phonon Thermal Waves in Semiconductors, p.59

6.1. XI International Conference on Photoacoustic and Photothermal Phenomena

6.2. Kyoto, Japan, June 25-29, 2000

6.3.Yu.G.Gurevich,G.N.Logvinov,G.G.de la Cruz, M.N.Kasyanchuk, **I.M.Lashkevich**, The Interacted Electron and Phonon Thermal Waves in Semiconductors, p.P-02-10.

- 7.1. Fourteenth Symposium on Thermophysical Properties, preliminary Program and Registration  
 7.2. Boulder, CO USA, June 25-30,2000, National Institute of Standards and Technology.
- 7.3. G.Gonzalez de la Cruz, Yu.G.Gurevich, G.N.Logvinov and N.Munoz Aguirre, P.Rodriguez, **I.M.Lashkevich**, The General Approach to Study Effective Thermal Parameters in Two-Layer Structure Under Photothermal Experiment,p.25.
- 8.1. VIII International Conference on the Physics and Technology of Thin Films, Materials of Conference.  
 8.2. Ivano-Frankivsk-2001, Ukraine.  
 8.3. Yu.G.Gurevich, **I.M.Lashkevich**, G.N.Logvinov, Influence of Surface Heat Capacity on Transfer of Thermal Waves in Semiconductors,p.14.
- 9.1. 12-th International Conference on Photoacoustic and Photothermal Phenomena, Abstract Book.  
 9.2. Toronto, Canada, June 23-27, 2002, Toronto University.  
 9.3. Yu.G.Gurevich, G.N.Logvinov, and **I.M.Lashkevich**, Boundary Conditions in Theory of Photo-Thermal Processes in Semiconductors, p.147.
- 10.1. Therminic. International Workshop on Thermal Investigations of Ics and Systems, Programm 2002.  
 10.2. Madrid, Spain, 1-4 October, 2002.  
 10.3. G.N.Logvinov, Y.G.Gurevich, **I.M.Lashkevich**, Boundary Conditions in Nonstationary Heat Processes, Program, 2002.
- 11.1. II Ukrainian Scientific Conference on Semiconductor Physics.  
 11.2. Chernivtsi-Vizgnitsa, Ukraine, 20-24 September 2004.  
 11.3. **Lashkevich I.M.**, Gurevich Yu.G., Logvinov G.N., Effective Electric, Thermal, and Optic Parameters of Inhomogeneous Solid states, Books of Abstracts, p.406-407, 2004 (in ukrainian).
- 12.1. 13-th ICPPP, International Conference on Photoacoustic and Photothermal Phenomena  
 12.2. Rio de Janeiro-Brazil  
 12.3. Yuri Gurevich, Georgiy Logvinov, Jose Luis Cuevas, and **Igor Lashkevich**,  
 Effective Thermal and Optic Parameters of Two-Layer Structures for the Case of Bulk Light Absorption, Book of abstracts, p.030-08, 2004.
- 13.1. ECTP. 17-th European Conference on Thermophysical Properties  
 13.2. September 5-8, 2005, Bratislava, Slovakia  
 13.3. Yu.G.Gurevich, G.N.Logvinov, **I.M.Lashkevich**, Surface heat impedance in photothermal phenomena, Book of Abstracts, p.291, 2005.
- 14.1. 25-th ICT, International Conference on Thermoelectrics  
 14.2. August 6-10, 2006, Vienna, Austria  
 14.3. Yu. G. Gurevich, **I. M. Lashkevich**, G. N. Logvinov, Minimal temperature of thermoelectric cooling: adiabatic approximation, Book of Abstracts, p. B05-2, 2006.
- 15.1. 14-th ICPPP, International Conference on Photoacoustic and Photothermal Phenomena  
 15.2. January 6-9, 2007, Cairo, Egypt  
 15.3. Yu. G. Gurevich, **I. M. Lashkevich**, G. N. Logvinov, The General Approach to Determinate the Effective Thermal Parameters of Two-Layer Structures in Photothermal Phenomena, Book of Abstracts, p. 64, 2007.
- 16.1. 28<sup>th</sup> annual Meeting, International Conference on Materials, Surface and Vacuum 2008  
 16.2. 29 of September – 3 of October of 2008, Veracruz, Veracruz, Mexico  
 16.3. Yu. G. Gurevich, **I. Lashkevych**, The peculiarities of thermoelectric cooling in p-n diodes  
 Book of Abstracts, pp. 307-308.
- 17.1. Symposium 11, COMPOSITE AND HYBRID MATERIALS 2009  
 17.2. 19 of august – .....  
 17.3. Yu. G. Gurevich, **I. Lashkevich** and G. Gonzalez de la Cruz, Heating of Two-Layer Systems With A Laser Pulse  
 Book of Abstracts, pp. ....
- 18.1. 30-th INTERNATIONAL CONFERENCE ON SURFACES MATERIALS AND VACUUM  
 18.2. September 27th -October 1st, 2010, Playa Paraiso, Riviera Maya, Q. Roo. M x i c o  
 18.3. Yury G. Gurevich, **Igor Lashkevych**, Boundary conditions for thermoelectric cooling (heating) in p-n junction  
 Book of Abstracts, pp. 171-172, 2010.

- 19.1. 16-th International Conference On Photoacoustic And Photothermal Phenomena  
 19.2. November 27th - December 1st, Mérida, Yucatan, México  
 19.3. **Igor Lashkevych**, G. Gonzales de la Cruz, Yury G. Gurevich, Propagation of heat in electron semiconductors and effective parameters under pulsed optical experiments  
 Book of Abstracts, p. 178, 2011.
- 20.1. 9<sup>th</sup> International Conference on Electrical Engineering, Computing Science and Automatic Control  
 20.2. September 26-28, 2012, Mexico City, Mexico  
 20.3. Yu.G. Gurevich, **I. Lashkevych**, Transport of Heat and Electricity in p-n Semiconductor Structures  
 Book of Abstracts, p. 95, 2012.
- 21.1. 10th International Conference on Electrical Engineering, Computing Science and Automatic Control  
 21.2. September 30-Octubre 4, 2013, Mexico City, Mexico  
 21.3. **I. Lashkevych**, Yu.G. Gurevich, Influence of Recombination on an Energy and Heat Balance Equations for a Bipolar Semiconductor, Book of Abstracts, p. 125, 2013.
- 22.1 10<sup>th</sup> International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics  
 22.2 Julio 14-26, 2014, Orlando, Florida, USA  
 22.3 Gurevich Yu.G. and **Lashkevych I.**, Influence of Recombination on the Thermal Conduction in Bipolar Semiconductors and Semiconductor Structures, Book of Abstracts, 2014.
- 23.1 International Conference on Thermoelectrics – ICT2014  
 23.2. Julio 6-10, 2014, Nashville, Tennessee, USA  
 23.3 Yuri G. Gurevich and **Igor Lashkevych**, Energy and Concentration Nonequilibriums in the Theory of Thermoelectric Processes, Book of Abstracts, 2014.
- 24.1 XXIII International Materials Research Congress  
 24.2 Agosto 17 – 21, 2014, Cancun, Mexico  
 24. **Igor Lashkevych**, Yuri G. Gurevich, Interdependency of the Energy and Concentration Nonequilibriums in a Bipolar Semiconductor (Invited Talk)
- 25.1 VII International Conference on Surfaces Materials and Vacuum  
 25.2 October 6-10, 2014, Ensenada, Baja California, Mexico  
 25.3 **Igor Lashkevych**, Yuri G. Gurevich, Temperature Distribution in Semiconductors in the Process of Electric Charge Transport, Book of Abstract, 2014.
- 26.1 19th SYMPOSIUM ON THERMOPHYSICAL PROPERTIES  
 26.2 Boulder, CO, USA June 21-26, 2015, Organized By: National Institute of Standards and Technology and Joint ASME-AIChE Committee on Thermophysical Properties  
 26.3 **Igor Lashkevych**, Yuri G. Gurevich, Linear Electrical Conductivity of a Bipolar Semiconductor: Recombination and Heating, Book of Abstract, 2015, [http://thermosymposium.nist.gov/pdf/Abstract\\_2339.pdf](http://thermosymposium.nist.gov/pdf/Abstract_2339.pdf)
- 27.1 VIII International Conference on Surfaces, Materials and Vacuum  
 27.2 September 21 -25, 2015 - Puebla, Puebla, Mexico, Organized By: Sociedad Mexicana de Ciencia y Tecnología de Superficies y Materiales A. C.  
 27.3 **Igor Lashkevych**, Yuri G. Gurevich, Electrical resistance of a bipolar semiconductor in a linear Ohm law, Book of Abstract, 2015.
- 28.1 12th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE),  
 28.2 October 28-30, 2015- Mexico, City. Mexico, Organized By: Computing Science and Automatic Control (CCE)  
 28.3 **Igor Lashkevych**, Yuri G. Gurevich, Brief Overview of Electrons' Cooling in p-n Structure under Thermoelectric Phenomenon, Book of Abstract, 2015.
- 29.1 IX International Conference on Surfaces, Materials and Vacuum  
 29.2 September 26 -30, 2016 - Mazatlán, Sinaloa, México, Organized By: Sociedad Mexicana de Ciencia y Tecnología de Superficies y Materiales A. C.  
 29.3 **Igor Lashkevych**, Energy flux in a semiconductor sandwiched between two thermostats with different temperatures, Book of Abstract, 2016.
- 30.1. International Conference on Thermoelectrics – ICT2017  
 30.2. 30 July - 3 August 2017, Pasadena, CA, USA

## 6. NUMBER OF CITATIONS 81

1. Gurevich Y.G., **Lashkevych I.**, *Sources of fluxes of energy, heat, and diffusion heat in a bipolar semiconductor: Influence of nonequilibrium charge carriers*, International Journal of Thermophysics, 34 (2) , pp. 341-349 (2013)  
<http://dx.doi.org/10.1007/s10765-013-1416-0>

Is cited by:

1. Titov, O.Yu., Velazquez-Perez, J.E., Gurevich, Yu.G.  
Mechanisms of the thermal electromotive force, heating and cooling in semiconductor structures (2015) International Journal of Thermal Sciences, 92, pp. 44-49.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84923336090&partnerID=40&md5=64b8e411525b85f5bdefe30551de03a6>  
DOI: 10.1016/j.sse.2008.04.037  
SOURCE: Scopus
2. Lee, S.-L., Cheng, C.-H., Ku, C.-H., Hsu, Y.  
Influence of cooling rate on alternating current light-emitting diode with multiple quantum wells (2015) International Journal of Heat and Mass Transfer, 85, pp. 455-462.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84923311646&partnerID=40&md5=0cb26ccf6bb4c1d55858671fa7deeebe>  
DOI: 10.1016/j.ijheatmasstransfer.2015.02.002  
SOURCE: Scopus
3. Gurevich, Y.G., Velázquez-Pérez, J.E.  
The role of non-equilibrium charge carriers in thermoelectric cooling (2013) Journal of Applied Physics, 114 (3), art. no. 033704, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84880823915&partnerID=40&md5=f8561fe43c1075a7166c11ca213ace2f>  
DOI: 10.1063/1.4813514  
SOURCE: Scopus
4. S. Manikandan, S.C. Kaushik and K. Anusuya,  
Thermodynamic Modelling and Analysis of Thermoelectric Cooling System,  
Proceedings of 2016 International Conference on Energy Efficient Technologies for Sustainability (ICEETS), 7-8 April 2016, St. Xavier's Catholic College of Engineering, Chunkankadai, Nagercoil, Tamilnadu, Nagercoil, India.  
<http://ieeexplore.ieee.org/document/7583838/metrics>
5. Gurevich Y G and Velazquez-Perez J E 2014,  
Peltier Effect in Semiconductors (John Wiley & Sons, Inc.), pp. 1-21  
ISBN 9780471346081,  
<http://dx.doi.org/10.1002/047134608X.W8206>

2. **Lashkevych I.**, Titov O., Gurevich Y.G.,  
*Recombination and temperature distribution in semiconductors*, Semiconductor Science and Technology, 27 (5) , art. no. 055014 (2012).  
<http://dx.doi.org/10.1088/0268-1242/27/5/055014>

Is cited by:

6. Titov, O.Y., Bulat, L.P., Gurevich, Y.G.  
Nature of the Thermoelectric Power in Bipolar Semiconductors  
(2016) International Journal of Thermophysics, 37 (8), art. no. 86, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84978134247&partnerID=40&md5=8a36323f41d314d5e4c728e2553f9a64>  
DOI: 10.1007/s10765-016-2094-5  
SOURCE: Scopus
7. Gurevich, Y.G., Velázquez-Pérez, J.E.  
The role of non-equilibrium charge carriers in thermoelectric cooling  
(2013) Journal of Applied Physics, 114 (3), art. no. 033704, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84880823915&partnerID=40&md5=f8561fe43c1075a7166c11ca213ace2f>  
DOI: 10.1063/1.4813514  
SOURCE: Scopus
8. Gurevich Y G and Velazquez-Perez J E 2014,  
Peltier Effect in Semiconductors (John Wiley & Sons, Inc.), pp. 1-21  
ISBN 9780471346081,  
<http://dx.doi.org/10.1002/047134608X.W8206>

3. **Lashkevych I.**, Gurevich Y.G.,  
*Boundary conditions for thermoelectric cooling in p-n junction*  
International Journal of Thermophysics, 32 (5), pp. 1086-1097 (2011).

Is cited by:

9. Chavez, R., Angst, S., Hall, J., Stoetzel, J., Kessler, V., Bitzer, L., Maculewicz, F., Benson, N., Wiggers, H., Wolf, D., Schierning, G., Schmehel, R.  
High temperature thermoelectric device concept using large area PN junctions  
(2014) Journal of Electronic Materials, 43 (6), pp. 2376-2383.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84901934510&partnerID=40&md5=98a934685ea2bc899a5268a6bb9dac5f>  
DOI: 10.1007/s11664-014-3073-x  
SOURCE: Scopus
10. Gurevich Y G and Velazquez-Perez J E 2014,  
Peltier Effect in Semiconductors (John Wiley & Sons, Inc.), pp. 1-21  
ISBN 9780471346081,  
<http://dx.doi.org/10.1002/047134608X.W8206>

4. Gurevich Yu.G., **Lashkevych I.**, *Non-typical temperature distribution in p-n structure under thermoelectric cooling*,  
International Journal of Thermal Sciences, 48 (11) , pp. 2080-2084. (2009)

Is cited by:

11. Titov, O.Yu., Salazar Laureles, J.L., Gurevich, Yu.G., Hot phonons and electrons in semiconductors, Superficies y Vacio, 28 (2), pp. 33-39. (2015)  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84946761456&partnerID=40&md5=18e37be0c930559b983e54d68f16f017>  
SOURCE: Scopus
12. Wang, L.Q., Zhou, L., Fan, H.T.  
Design of cooling system for infrared CCD camera used to monitor burden surface of blast furnace based on thermoelectric coolers  
(2013) Applied Mechanics and Materials, 419, pp. 778-783.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84886698491&partnerID=40&md5=a5ce8e6f93ce488856f48b39a8e4ac0e>  
DOI: 10.4028/www.scientific.net/AMM.419.778  
DOCUMENT TYPE: Conference Paper  
SOURCE: Scopus

13. Meng, F., Chen, L., Sun, F.  
Performance prediction and irreversibility analysis of a thermoelectric refrigerator with finned heat exchanger  
(2011) Acta Physica Polonica A, 120 (3), pp. 397-406. Cited 9 times.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-80052238256&partnerID=40&md5=e2df44fe14397ecdc238308ef0fd51e0>  
SOURCE: Scopus
14. Meng, F., Chen, L., Sun, F.  
Effects of heat reservoir temperatures on the performance of thermoelectric heat pump driven by thermoelectric generator  
(2010) International Journal of Low-Carbon Technologies, 5 (4), pp. 273-282.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-79551715982&partnerID=40&md5=e04ea85b746a2efd9a415036c0f0500f>  
DOI: 10.1093/ijlct/ctq036  
SOURCE: Scopus
15. Meng, F.K., Chen, L.G., Sun, F.R.  
Extreme working temperature differences for thermoelectric refrigerating and heat pumping devices driven by thermoelectric generator  
(2010) Journal of the Energy Institute, 83 (2), pp. 108-113.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-77953190227&partnerID=40&md5=96f65df8948ed03f72c8b9e4266515d0>  
DOI: 10.1179/014426010X12682307291506  
SOURCE: Scopus
16. Gurevich Y G and Velazquez-Perez J E 2014,  
Peltier Effect in Semiconductors (John Wiley & Sons, Inc.), pp. 1-21  
ISBN 9780471346081,  
<http://dx.doi.org/10.1002/047134608X.W8206>

5. Gurevich Yu.G., Lashkevich I., Gonzalez de la Cruz G., *Effective thermal parameters of layered films: An application to pulsed photothermal techniques*, International Journal of Heat and Mass Transfer, 52 (19-20) , pp. 4302-4307 (2009)

Is cited by:

17. Gonzalez De La Cruz, G., Gurevich, Y.G.  
Heat transfer in two-layered systems excited by a pulsed laser  
(2012) International Journal of Thermal Sciences, 51 (1), pp. 1-6.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-80054684137&partnerID=40&md5=5991b24b00fe8b440694dbdde3511c9>  
DOI: 10.1016/j.ijthermalsci.2011.08.020  
SOURCE: Scopus
18. Hickson, R.I., Barry, S.I., Mercer, G.N., Sidhu, H.S.  
Finite difference schemes for multilayer diffusion  
(2011) Mathematical and Computer Modelling, 54 (1-2), pp. 210-220.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-79955466421&partnerID=40&md5=d3a07b9708852bc360896d353c345093>  
DOI: 10.1016/j.mcm.2011.02.003  
SOURCE: Scopus
19. Gonzalez De La Cruz, G., Gurevich, Yu.G.  
The effect of electron-phonon energy exchange on thermal pulse propagation in semiconductors  
(2011) Semiconductor Science and Technology, 26 (2), art. no. 025011,  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-79751478478&partnerID=40&md5=878809aea7d5dca39372a614bb24c956>  
DOI: 10.1088/0268-1242/26/2/025011  
SOURCE: Scopus

6. **Lashkevych I.**, Angeles Fragoso O., Gurevich Yu.G., *Peculiarities of thermoelectric cooling in p-n structures*, International Journal of Thermophysics, 30 (2) , pp. 635-647, (2009).

Is cited by:

20. Ghiasvand, A.R., Pirdadeh-Beiranvand, M.  
Cooling/heating-assisted headspace solid-phase microextraction of polycyclic aromatic hydrocarbons from contaminated soils  
(2015) *Analytica Chimica Acta*, 900, pp. 56-66.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84960425418&partnerID=40&md5=c0ccb7339869cfeb15f29916bdff69da>  
DOI: 10.1016/j.aca.2015.10.016  
SOURCE: Scopus
21. Sabzyan, H., Safari, R.  
Intramolecular thermoelectric-like effects in field-effect molecular nanoelectronic devices  
(2012) *EPL*, 99 (6), art. no. 67005, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84867511662&partnerID=40&md5=738524464229de0195ee3f9a3f26e11f>  
DOI: 10.1209/0295-5075/99/67005  
SOURCE: Scopus
22. Zhang, M., Bi, J., Yang, C., Li, D., Piao, X.  
Gas-purged headspace liquid phase microextraction system for determination of volatile and semivolatile analytes  
(2012) *Journal of Analytical Methods in Chemistry*, 1 (1), art. no. 709656, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84865040300&partnerID=40&md5=c70c9571610e174282500f75f05715c2>  
DOI: 10.1155/2012/709656  
SOURCE: Scopus
23. Gurevich Y G and Velazquez-Perez J E 2014,  
Peltier Effect in Semiconductors (John Wiley & Sons, Inc.), pp. 1-21  
ISBN 9780471346081,  
<http://dx.doi.org/10.1002/047134608X.W8206>

7. **Lashkevych I.**, Cortes C., Gurevich Y.G., *Physics of thermoelectric cooling: Alternative approach*  
Journal of Applied Physics, 105 (5) , art. no. 053706 (2009)

Is cited by:

24. Safari, R., Sabzyan, H.  
Detailed mapping of intramolecular energy transfer in field-effect single-molecule nanoelectronic devices  
(2014) *Journal of the Iranian Chemical Society*, 11 (6), pp. 1513-1532.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84910659984&partnerID=40&md5=34e8aa8bc4cbf4d1031b97aea337a462>  
DOI: 10.1007/s13738-014-0421-y  
SOURCE: Scopus
25. Gurevich, Y.G., Velázquez-Pérez, J.E.  
The role of non-equilibrium charge carriers in thermoelectric cooling  
(2013) *Journal of Applied Physics*, 114 (3), art. no. 033704, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84880823915&partnerID=40&md5=f8561fe43c1075a7166c11ca213ace2f>  
DOI: 10.1063/1.4813514  
SOURCE: Scopus
26. Hameed, A.H., Kafafy, R.  
Uniform and non-uniform thermoelement subject to lateral heat convection  
(2013) *International Journal of Thermophysics*, 34 (3), pp. 538-552.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84878717135&partnerID=40&md5=73e9302ab3c4d15fad029910928f74a7>  
DOI: 10.1007/s10765-013-1426-y  
SOURCE: Scopus
27. Lee, J., Asheghi, M., Goodson, K.E.  
Impact of thermoelectric phenomena on phase-change memory performance metrics and scaling  
(2012) *Nanotechnology*, 23 (20), art. no. 205201.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84860516656&partnerID=40&md5=a9e626dab9f4d55ff6b0c9f319e84b3d>

DOI: 10.1088/0957-4484/23/20/205201

SOURCE: Scopus

28. Muscato, O., Di Stefano, V.  
Local equilibrium and off-equilibrium thermoelectric effects in silicon semiconductors  
(2011) Journal of Applied Physics, 110 (9), art. no. 093706.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-81355163350&partnerID=40&md5=6dac3bb7a4f6cd0569a390c862c3f482>  
DOI: 10.1063/1.3658016  
SOURCE: Scopus
29. Meng, F., Chen, L., Sun, F.  
Effects of heat reservoir temperatures on the performance of thermoelectric heat pump driven by thermoelectric generator  
(2010) International Journal of Low-Carbon Technologies, 5 (4), pp. 273-282.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-79551715982&partnerID=40&md5=e04ea85b746a2efd9a415036c0f0500f>  
DOI: 10.1093/ijlct/ctq036  
SOURCE: Scopus
30. Velázquez-Pérez, J.E., Gurevich, Yu.G.  
Current-voltage characteristic of a p-n junction: Problems and solutions  
(2010) 2010 27th International Conference on Microelectronics, MIEL 2010 - Proceedings, art. no. 5490525, pp. 91-94.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-77955200498&partnerID=40&md5=aaff914209cb1a2c902fb6410ff2f2cb>  
DOI: 10.1109/MIEL.2010.5490525  
DOCUMENT TYPE: Conference Paper  
SOURCE: Scopus
31. Yuri G. Gurevich Miguel Melendez Lira,  
Fenomenos de contacto y sus aplicaciones en celdas solares,  
Fondo De Cultura Econymica, Instituto De Ciencia Y Tecnologna Del Distrito Federal, Míxico (2010).
32. F. Meng, L. Chen, and F. Sun,  
Performance Prediction and Irreversibility Analysis of a Thermoelectric Refrigerator with Finned Heat Exchanger  
Acta Physica Polonica A , Vol. 120, No 3, pp. 397-406 (2011).  
<http://przyrbwn.icm.edu.pl/APP/PDF/120/a120z3p07.pdf>
33. J. E. Velazquez Perez, Y. G. Gurevich,  
The role of non-equilibrium charge carriers in thermoelectric cooling,  
Book of abstract, 8th European Conference on Thermoelectrics, p. 27 (Sept. 22-24, 2010, Como, Italy).
34. Gurevich Y G and Velazquez-Perez J E 2014,  
Peltier Effect in Semiconductors (John Wiley & Sons, Inc.), pp. 1-21  
ISBN 9780471346081,  
<http://dx.doi.org/10.1002/047134608X.W8206>
35. J. E. Velazquez-Perez, Yu. G. Gurevich,  
Revision of the Basic Equations in the Photoelectric Effect Theory,  
Book of Abstracts of the XVIII International Materials Research Congress,Cancun, Mexico, 16–21 August, 2009, p. S19-11.
36. J. E. Velazquez-Perez, Oleg Yu. Titov, Yuri G. Gurevich,  
Theory for the Voltage-Current Characteristic of a p-n Junction: Problem and Solutions,  
Hand-Held Program of the 8th International Caribbean Conference on Devices, Circuits and Systems, Playa del Carmen, Mexico, Marzo 14–17, 2012.
37. O.Yu. Titov, Yu.G. Gurevich, Thermoelectric Heating And Cooling In Semiconductor Structures: Nonequilibrium Charge Carriers. (Review), Journal of Thermoelectricity, No. 3, pp. 14-22 (2014).  
[http://jt.inst.cv.ua/jt\\_2014\\_03\\_en.pdf](http://jt.inst.cv.ua/jt_2014_03_en.pdf)
8. Orozco F.A.S., Logvinov G.N., Gurevich Yu.G., Lashkevych I.M., Two-temperature approach to the thermoelectric cooling problem, Revista Mexicana de Fisica, 53 (7) , pp. 203-207 (2007).

Is cited by:

38. Safari, R., Sabzyan, H.  
Detailed mapping of intramolecular energy transfer in field-effect single-molecule nanoelectronic devices

- (2014) Journal of the Iranian Chemical Society, 11 (6), pp. 1513-1532.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84910659984&partnerID=40&md5=34e8aa8bc4cbf4d1031b97aea337a462>  
DOI: 10.1007/s13738-014-0421-y  
SOURCE: Scopus
39. Yu. Gurevich and A. Ortiz,  
Two-temperature approximation theory of thermo-emf in bipolar semiconductors,  
Journal of Physics D: Applied Physics, No. 41, pp. 065410-1–065410-6 (2008).  
<http://www.iop.org/EJ/abstract/0022-3727/41/6/065410>
9. Logvinov G.N., Velazquez J.E., Lashkevych I.M., Gurevich Yu.G., *Heating and cooling in semiconductor structures by an electric current*, Applied Physics Letters, 89 (9), art. no. 092118 (2006).
- Is cited by:
40. Apertet, Y., Goupil, C.  
On the fundamental aspect of the first Kelvin's relation in thermoelectricity  
(2016) International Journal of Thermal Sciences, 104, pp. 225-227. Cited 1 time.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84957811368&partnerID=40&md5=40b7dbbe4de3ce7bb96938f4af639362>  
DOI: 10.1016/j.ijthermalsci.2016.01.009  
SOURCE: Scopus
41. Volovichev, I.N., Gurevich, Yu.G.  
Mechanisms of charge carriers nonequilibrium in transport processes in bipolar semiconductors  
(2016) Current Applied Physics, 16 (2), pp. 191-196.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84950112784&partnerID=40&md5=a72eee793a484d0de7e062b263eb21dc>  
DOI: 10.1016/j.cap.2015.11.013  
SOURCE: Scopus
42. Gurevich, Y.G., Velázquez-Pérez, J.E.  
The role of non-equilibrium charge carriers in thermoelectric cooling  
(2013) Journal of Applied Physics, 114 (3), art. no. 033704, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84880823915&partnerID=40&md5=f8561fe43c1075a7166c11ca213ace2f>  
DOI: 10.1063/1.4813514  
SOURCE: Scopus
43. Hameed, A.H., Kafafy, R.  
Uniform and non-uniform thermoelement subject to lateral heat convection  
(2013) International Journal of Thermophysics, 34 (3), pp. 538-552.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84878717135&partnerID=40&md5=73e9302ab3c4d15fad029910928f74a7>  
DOI: 10.1007/s10765-013-1426-y  
SOURCE: Scopus
44. Hao, F., Fang, D.N., Li, J.Y.  
Thermoelectric transport in heterogeneous medium: The role of thermal boundary resistance  
(2012) EPJ Applied Physics, 58 (3), art. no. 30901.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84863624447&partnerID=40&md5=7744372d842c9fb900ccafb03d522ca5>  
DOI: 10.1051/epjap/2012120076  
SOURCE: Scopus
45. Velázquez-Pérez, J.E., Gurevich, Yu.G.  
Current-voltage characteristic of a p-n junction: Problems and solutions  
(2010) 2010 27th International Conference on Microelectronics, MIEL 2010 - Proceedings, art. no. 5490525, pp. 91-94.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-77955200498&partnerID=40&md5=aaff914209cb1a2c902fb6410ff2f2cb>  
DOI: 10.1109/MIEL.2010.5490525  
DOCUMENT TYPE: Conference Paper  
SOURCE: Scopus

46. Huang, S., Wu, H., Fan, B., Zhang, B., Wang, G.  
A chip-level electrothermal-coupled design model for high-power light-emitting diodes  
(2010) Journal of Applied Physics, 107 (5), art. no. 054509.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-77949759630&partnerID=40&md5=c55db55357d725a2d95742abbfa603a5>  
DOI: 10.1063/1.3311564  
SOURCE: Scopus
47. Ahmetoglu, M., Kaynak, G., Shamirzaev, S., Gulyamov, G., Gulyamov, A., Dadamirzaev, M.G., Boydedayev, S.R., Aprailov, N.  
To the theory of electromotive force generated in potential barrier at ultrahigh frequency field  
(2009) International Journal of Modern Physics B, 23 (15), pp. 3279-3285.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-68049139432&partnerID=40&md5=78eba6631ce9925be0487c1138fc77c0>  
DOI: 10.1142/S0217979209053084  
SOURCE: Scopus
48. Gurevich, Yu.G., Logvinov, G.N., Fragoso', O.A., Del Rio V., J.L.  
Lowest temperature at thermoelectric cooling  
(2007) 2007 4th International Conference on Electrical and Electronics Engineering, ICEEE 2007, art. no. 4345042, pp. 369-372.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-49749085576&partnerID=40&md5=eb92f7c5e1415145d6b1db73e2615b47>  
DOI: 10.1109/ICEEE.2007.4345042  
DOCUMENT TYPE: Conference Paper  
SOURCE: Scopus
49. González, A., Del Río Valdés, J.L., Fragoso, O.A., Logvinov, G.  
Minimal cooling temperature in the single-stage thermoelectric modules  
(2007) Revista Mexicana de Fisica, 53 (7), pp. 189-193.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-41149129186&partnerID=40&md5=171cb885d184f9905bf011fd05c096d7>  
SOURCE: Scopus
50. Gurevich Yu. G.  
Novel approach for thermoelectricity  
6th Europeao Conference on ThermoeIectrics JuIy 2-4, 2008 -Paris France, pp. O-08-1-O-08-4  
<http://ect2008.icmpe.cnrs.fr/Contributions/O-08-Gurevich.pdf>
51. G. N. Logvinov, Oscar Angeles Fragoso, Yu. G. Gurevich,  
Principios de termodinamica fuera de equilibrio en teoria de fenomenos termoelectricos y electrotermicos,  
Superficies y Vacho, Vol. 20, No 2, pp. 17-23 (junio de 2007) (en español)  
[http://www.fis.cinvestav.mx/~smcsyv/supyvac/20\\_2/SV2021707.pdf](http://www.fis.cinvestav.mx/~smcsyv/supyvac/20_2/SV2021707.pdf)
52. B. Fan, H. Wu, Y. Zhao, Y. Xian, B. Zhang and G. Wang, "Thermal Study of High-Power Nitride-Based Flip-Chip Light-Emitting Diodes," in IEEE Transactions on Electron Devices, vol. 55, no. 12, pp. 3375-3382, Dec. 2008.  
doi: 10.1109/TED.2008.2006534  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4674557&isnumber=4674544>
53. J. Audelo Gonzalez, J.L. del Río Valdes, O. Angeles Fragoso, G.Logvinov,  
Minimal cooling temperature in the single-stage thermoelectric modules,  
Revista Mexicana de Fisica, No. S53(7), P. 189-193 (2007), (Mexico).  
[http://rmf.fciencias.unam.mx/pdf/rmf-s/53/7/53\\_7\\_189.pdf](http://rmf.fciencias.unam.mx/pdf/rmf-s/53/7/53_7_189.pdf)
54. J. E. Velazquez Perez, Y. G. Gurevich,  
The role of non-equilibrium charge carriers in thermoelectric cooling,  
Book of abstract, 8th European Conference on Thermoelectrics, p. 27 (Sept. 22-24, 2010, Como, Italy).
55. Rackiene, Roma ; Virbalis, Juozapas Arvydas,  
Application of peltier effect for body cooling system integrated in the clothes,  
Conference: 2nd International Conference on Electrical and Control Technologies (ECT-2007) Location: Kaunas,  
LITHUANIA Date: MAY 03-04, 2007  
Sponsor(s): Kaunas Univ Technol; IFAC Comm Natl Lithuanian Org; Lithuanian Elect Assoc  
Source: ECT 2007: ELECTRICAL AND CONTROL TECHNOLOGIES, PROCEEDINGS Pages: 221-224  
Published: 2007
56. S. Molina-Valdovinos, Yu.G. Gurevich,  
Nonlinear charge transport in bipolar semiconductors due to electron heating,

- Physics Letters A 380 (2016) 2021–2024  
<http://dx.doi.org/10.1016/j.physleta.2016.04.022>
57. Gurevich Y G and Velazquez-Perez J E 2014,  
 Peltier Effect in Semiconductors (John Wiley & Sons, Inc.), pp. 1-21  
 ISBN 9780471346081,  
<http://dx.doi.org/10.1002/047134608X.W8206>
  58. J. E. Velazquez-Perez, Yu. G. Gurevich,  
 Revision of the Basic Equations in the Photoelectric Effect Theory,  
 Book of Abstracts of the XVIII International Materials Research Congress, Cancun, Mexico, 16–21 August, 2009, p. S19-11.
  59. Yu. G. Gurevich,  
 Thin-Film Thermoelectric Cooling,  
 Program of the XII International Conference on Physics and Technology of Thin Films and Nanosystems, Ivano-Frankivsk, Ukraine, 18–23 May, 2009, p. 26–27.
  60. O.Yu. Titov, Yu.G. Gurevich, Thermoelectric Heating And Cooling In Semiconductor Structures: Nonequilibrium Charge Carriers. (Review), Journal of Thermoelectricity, No. 3, pp. 14-22 (2014).  
[http://jt.inst.cv.ua/jt\\_2014\\_03\\_en.pdf](http://jt.inst.cv.ua/jt_2014_03_en.pdf)
10. Gurevich Y., Logvinov G., **Lashkevich I.**, *Effective thermal conductivity: Application to photothermal experiments for the case of bulk light absorption*, Physica Status Solidi (B) Basic Research, 241 (6) , pp. 1286-1298 (2004).

Is cited by:

61. Tlamani-Amador, J., Pérez-Rodríguez, F. ,  
 Effective thermal parameters for a bilayer  
 (2008) Journal of Applied Physics, 104 (9), art. no. 093535, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-56349085203&partnerID=40&md5=839af95a487b9bef9945bdb92bfea01>  
 DOI: 10.1063/1.3007991  
 SOURCE: Scopus
11. Logvinov G.N., Gurevich Yu.G., **Lashkevich I.M.**, *Surface heat capacity and surface heat impedance: An application to theory of thermal waves*, Japanese Journal of Applied Physics, Part 1: Regular Papers and Short Notes and Review Papers, 42 (7 A) , pp. 4448-4452 (2003).

Is cited by:

62. Gonzalez De La Cruz, G., Gurevich, Yu.G.  
 Carrier heating and electron-phonon energy exchange effects on nonlinear transport phenomena in semiconductor films  
 (2013) Journal of Applied Physics, 113 (2), art. no. 023504, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84872702877&partnerID=40&md5=e2d66370a9fdbdf4cee54fd0699281af>  
 DOI: 10.1063/1.4773345  
 SOURCE: Scopus
63. Gonzalez De La Cruz, G., Gurevich, Yu.G  
 Heat transport across metal-semiconductor (dielectric) structure under steady state conditions  
 (2012) International Journal of Heat and Mass Transfer, 55 (15-16), pp. 4264-4268.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84861531800&partnerID=40&md5=1dbaf596f3db1eb8c26b10e31dbe633>  
 DOI: 10.1016/j.ijheatmasstransfer.2012.03.068  
 SOURCE: Scopus
64. Brylinski, C.  
 Accounting for Heat Transfer Problems in the Semiconductor Industry  
 (2009) Topics in Applied Physics, 118, pp. 367-386.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84883136793&partnerID=40&md5=fff30fa9c6ccd33b3f23dd8a3715c499>  
 DOI: 10.1007/978-3-642-04258-4\_12  
 SOURCE: Scopus

65. Gurevich, Yu.G., Logvinov, G.N.  
 Theory of thermoelectric cooling in semiconductor structures  
 (2007) Revista Mexicana de Fisica, 53 (5), pp. 337-349.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-40449089718&partnerID=40&md5=753573cc64ede4c9d2cacd3f42c7e292>  
 DOCUMENT TYPE: Review  
 SOURCE: Scopus
66. Logvinov, G.N., Gurevich, Yu.G., Del Rio Valdés, J.  
 New physical interpretation of thermoelectric cooling in semiconductor structures  
 (2006) Brazilian Journal of Physics, 36 (3 B), pp. 952-955.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-33845440388&partnerID=40&md5=b098ec50a454e3a4424b824ee78c8955>  
 DOCUMENT TYPE: Conference Paper  
 SOURCE: Scopus
67. Gurevich, Yu.G., Logvinov, G.N.  
 Physics of thermoelectric cooling  
 (2005) Semiconductor Science and Technology, 20 (12), .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-27844489504&partnerID=40&md5=b72d29db5ab2d0ff372f80011270f890>  
 DOI: 10.1088/0268-1242/20/12/R01  
 DOCUMENT TYPE: Review  
 SOURCE: Scopus
68. Gurevich, Yu.G., Logvinov, G.N., Oscar, A.F.  
 Physical principles of barrierless thermoelectric cooling  
 (2005) Physica Status Solidi (B) Basic Research, 242 (9), pp. 1763-1766.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-22944433493&partnerID=40&md5=141f20fe21a1d151735e673b8fe49090>  
 DOI: 10.1002/pssb.200461831  
 DOCUMENT TYPE: Conference Paper  
 SOURCE: Scopus
69. Provider: John Wiley & Sons, Ltd  
 Gurevich, Yu. G., Lohvinov, H., Cruz-Irisson, M., Titov, O., Espejo-López, G., Volovichev, I.  
 Electric current of hot electrons in semiconductor thin films, Phys. stat. sol. (c), Vol. 1(S1) pp. 1610-1642 (2004)  
<http://dx.doi.org/10.1002/pssc.200404887>  
 DOI: 10.1002/pssc.200404887
70. Fernando Adan Serrano Orozco,  
 Enfoque de dos temperaturas como una aproximación al problema del enfriamiento termoelectrico,  
 Tesis que para obtener el grado de: Maestro en ciencias de ingeniería en microelectrónica, ESIME-IPN  
 (Noviembre, 2007).
71. Gurevich Y G and Velazquez-Perez J E 2014,  
 Peltier Effect in Semiconductors (John Wiley & Sons, Inc.), pp. 1-21  
 ISBN 9780471346081,  
<http://dx.doi.org/10.1002/047134608X.W8206>
12. Gurevich Y., Logvinov G., **Lashkevich I.**, Boundary conditions in theory of photothermal processes in solids, Review of Scientific Instruments, 74 (1 II), pp. 589-591 (2003).
- Is cited by:
72. Lascoup, B., Perez, L., Autrique, L.  
 Defect localization based on modulated photothermal local approach  
 (2014) Composites Part B: Engineering, 65, pp. 109-116.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84906948699&partnerID=40&md5=55c2d56fd33af5afdd5279a6d49a5fee>  
 DOI: 10.1016/j.compositesb.2013.12.012  
 SOURCE: Scopus
73. Lascoup, B., Perez, L., Autrique, L., Crinière, A.  
 On the feasibility of defect detection in composite material based on thermal periodic excitation  
 Composites Part B: Engineering, 45 (1), pp. 1023-1030.

- <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84869507020&partnerID=40&md5=03419f4e8f934a2846a0e9aeba00b92e>  
 DOI: 10.1016/j.compositesb.2012.07.020  
 SOURCE: Scopus
74. Gonzalez De La Cruz, G., Gurevich, Yu.G.  
 Carrier heating and electron-phonon energy exchange effects on nonlinear transport phenomena in semiconductor films  
 (2013) Journal of Applied Physics, 113 (2), art. no. 023504, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84872702877&partnerID=40&md5=e2d66370a9fdbdf4cee54fd0699281af>  
 DOI: 10.1063/1.4773345  
 SOURCE: Scopus
75. Gonzalez De La Cruz, G., Gurevich, Yu.G.  
 Heat transport across metal-semiconductor (dielectric) structure under steady state conditions  
 (2012) International Journal of Heat and Mass Transfer, 55 (15-16), pp. 4264-4268.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84861531800&partnerID=40&md5=1dbaf596f3db1eb8c26b10e31dbe633>  
 DOI: 10.1016/j.ijheatmasstransfer.2012.03.068  
 SOURCE: Scopus
76. Crinière, A., Lascoup, B., Perez, L., Autrique, L.  
 Defect detection based on thermal periodic excitation  
 (2012) ECCM 2012 - Composites at Venice, Proceedings of the 15th European Conference on Composite Materials, .  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84904015818&partnerID=40&md5=4fba74c7eda94ecf13a34ad4b07a6ba0>  
 DOCUMENT TYPE: Conference Paper  
 SOURCE: Scopus
77. Muñoz Aguirre, N., Martínez Pérez, L., Garibay-Febles, V., Lozada-Cassou, M.  
 Influence of the solid-gas interface on the effective thermal parameters of a two-layer structure in photoacoustic experiments  
 (2004) Journal of Physics D: Applied Physics, 37 (1), pp. 128-131.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-0347133534&partnerID=40&md5=288193f69b0fc7b230c1c3ac7b4d1eca>  
 DOI: 10.1088/0022-3727/37/1/021  
 SOURCE: Scopus
78. Yu. G. Gurevich, G. Gonzalez de la Cruz,  
 Pulsed Photothermal Techniques: Effective Thermal Parameters of Layered Films,  
 Book of Abstracts, 15th International Conference on Photoacoustic and Photothermal Phenomena, Leuven, Belgium, July 19–23, 2009, p. 285.

13. **Igor Lashkevych**, Yuri G. Gurevich, Energy flux in semiconductors: Interaction of thermal and concentration nonequilibriums, International Journal of Heat and Mass Transfer **92**, 430–434 (2016).  
 ISSN: 0017-9310, Impact Factor: 2.383,  
 DOI <http://dx.doi.org/10.1016/j.ijheatmasstransfer.2015.09.005>

Is cited by:

79. S. Molina-Valdovinos, Yu.G. Gurevich,  
 Nonlinear charge transport in bipolar semiconductors due to electron heating,  
 Physics Letters A 380 (2016) 2021–2024,  
<http://dx.doi.org/10.1016/j.physleta.2016.04.022>
14. **I. M. Lashkevich**, O. Angeles Fragoso, Yu. G. Gurevich, Thin-film thermoelectric cooling,  
 Technical Physics, Vol. 54, No 2, pp. 289-297 (2009).  
 ISSN: 1063-7842 (USA), Impact Factor: 0.524,  
 DOI <http://dx.doi.org/10.1134/S1063784209020200>
80. V.S. Fedoreiko, M.I. Rutylo, I.B. Lutsyk, R.I. Zahorodnii,  
 Thermoelectric modules application in heat generator coherent systems,

Scientific bulletin of National Mining University, No. 6, pp. 111-116 (2015). (in ukrainian)  
<http://www.nvngu.in.ua/index.php/en/monographs-and-innovations/innovative-projects/1012-engcat/archive/2014/contents-no-6-2014/electrical-complexes-and-systems/2868-thermoelectric-modules-application-in-heat-generator-coherent-systems>

15. Viktor Matsyuk, Igor Lashkevych, Didactics features of use of new information technologies, and electronic textbooks during the study of physics at school, Lat. Am. J. Phys. Educ., 5(2), pp. 360-367 (2011).  
ISSN: 1870-9095 (Mexico),  
[http://www.lajpe.org/june11/7\\_LAJPE\\_527\\_Igor\\_Lashkevich\\_Preprint\\_corr\\_f.pdf](http://www.lajpe.org/june11/7_LAJPE_527_Igor_Lashkevich_Preprint_corr_f.pdf)

Is cited by:

81. Narcyz Roztocki, Heinz Roland Weistroffer,  
Information and Communication Technology in Transition Economies: An Assessment of Research Trends,  
Information Technology for Development, Vol. 21(3), pp. 1-35 (2015).  
<http://dx.doi.org/10.1080/02681102.2014.891498>

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## 7. GRANTS

The Individual Grant of International Science Foundation (SOROS), USA, 1996.  
The numbers of a concession №GSU052317.

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## 8. DISTINCTIONS

- 1) The certificate for creative assiduous activity, for significant achievements in the field of teaching and education of the Ukrainian youth and in case of a professional holiday of "The Day of education workers". Management of education of the Ternopol city council, Ternopol', Ukraine, 2000.
- 2) The certificate for appropriate preparation of pupils, for prize-winning places by them in All-Ukrainian Olympiad on physics in the city, region, and state. The board and the trade-union committee of Open Society "Vatra", Ternopol', Ukraine, 05/25/2000.
- 3) The certificate for appropriate preparation of lyceum students who have won prize-winning places on I - IV stages All-Ukrainian Olympiad from physics. Management of technical lyceum «Svitlo», Ternopol', Ukraine, 05/25/2000.
- 4) The certificate for successes in pedagogical work and teaching and educational process of pupils. Management of technical lyceum «Svitlo», Ternopol', Ukraine, 1999.
- 5) The certificate for active participation and successes in research work, Ternopol' National Pedagogical institute, Ukraine, 05/15/1997.
- 6) The certificate for active research, investigation, creative work, and initiation of this activity in reorganization of the Ukrainian state, Management on family and youth affairs of the Ternopol' regional state administration, Ukraine, 1997.
- 7) The diploma for the first place in All-Ukraine Olympiad on physics of students of pedagogical High schools, The Ministry of education of Ukraine, Ukraine, 04/11/1996.
- 8) The diploma for active participation in work of student's scientific conference at Drogobych state pedagogical institute, Drogobych State Pedagogical University, Ukraine, 04/09/1996.
- 9) The diploma of the first degree. Winner All-Ukrainian students' Olympiad on the specialty of "Physicist". The Ministry of Education of Ukraine, 1995/1996 studying year.
- 10) The diploma for the first place in All-Ukraine Olympiad on physics among the students of pedagogical High schools, Drogobych State Pedagogical University, Ukraine, 04/19/1995.
- 11) The diploma of the second degree of All-Ukraine Olympiad of young physicists, The Ministry of education of Ukraine, 03/29/1992.

- 12) The diploma of the participant of All-Ukraine physics olympiad, The Ministry of education of Ukraine, 03/29/1991.

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## 9. USEFUL SKILLS

*Programming languages:*.....Pascal, y Basic

*Used engineering packages:*.....MapleV, Matematica.

*Languages:*.....English, Spanish, Ukraine, Russian

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