

CURRICULUM VITAE



PERSONAL DATA

Name: **Pedro-Antonio Prieto-Pulido**
Date, Place of birth: June 29th, 1951 - Bogotá, Colombia
Work address: Department of Physics,
Universidad del Valle,
Ciudad Universitaria Meléndez
A.A. 25360 Cali, Colombia
Phone: (57-2) 333 4917, 339 4610
Fax: (57-2) 339 3237
E-Mail: pprieto@calima.univalle.edu.co
Homes address: Cra. 80A N^o 13A-29 Apt. 101-Torre 5
Cali, Colombia
Phone: (57-2) 333 5657 315 591 5119
E-Mail: prietogomez@telesat.com.co

EDUCATION

- 1974 **Physicist** - Universidad Nacional de Colombia- Bogotá, Colombia
- 1978 **Magister Scientiae**. Universidad Nacional de Colombia, Bogotá, Colombia
- 1982 **Dr. rer. nat.** RW-Technische Hochschule-Aachen, Germany
- 1988 **Post-Doc** Research Center-Jülich and SIEMENS-Perlach, Germany
- 1998 **Post-Doc** UCSD San Diego, California USA

PRESENT EMPLOYMENT AND DUTIES

Full Professor, Department of Physics. Universidad del Valle-Cali, since 1986
Thin Films Group Director. Universidad del Valle-Cali, Colombia, 1982-2005
Director Excellence Center for Novel Materials Since 2005

HONORS

- Doctoral Thesis: *Magna Cum Laude*. 1982
- *Alexander von Humboldt Postdoc* fellow, Germany 1988-1989
- "*Profesor Distinguido*" - Universidad del Valle Medal, Colombia - 1990
- "*Medalla Ciudades Confederadas*", Government of *Valle del Cauca* Medal, Colombia - 1993
- Member of Colombian Academy of Science (*Miembro Correspondiente*, Academia Colombiana de Ciencias Físicas Exactas y Naturales) – April 1997
- "*Profesor Honorario*", Universidad del Valle Colombia - 1997
- *Simon Guggenheim Fellow*, Guggenheim Memorial Foundation, USA - 1997
- "*2000-APS Fellow*", American Physical Society " *For forefront research in the Josephson effect in high temperature superconductors and outstanding contributions to the development of physics in Latin America* "
- *G-77 United Nations Group Award for Science Technology and Innovation:*

" For his outstanding contributions to the physics of Superconductivity and Magnetism, especially for innovative research in Magnetic and Superconducting Properties of Thin Films and Heterostructures, and for the development of Novel Hard-Coating Materials"

ACADEMIC EXPERIENCE

Since 1982 - Professor at The Physics Department, Universidad del Valle, Cali, Colombia

- Graduate Thesis Direction 23

ADMINISTRATIVE EXPERIENCE

- Member of the Colombian National Council of Basic Sciences at COLCIENCIAS, Colombia 1993-1995 and 2002- Today
- Member of the Directive Council of the Latin American Council of Physics CLAF, Rio de Janeiro Brazil, as Colombian representative 2000-2004
- Dean of the Science Faculty of Universidad del Valle Oct. 2000 Oct. 2003
- Member of The CONACES: Mathematics Physics and engineering Council
- Director of the Excellence Center for Novel Materials ECNM 2005

RESEARCH EXPERIENCE

- 1 Since 2005 Director of Director of the Excellence Center for Novel Materials ECNM
- Since 1982 - Director of the Thin films Research Group at the Physics Department, Universidad del Valle, Cali, Colombia
- Mai 1988 – July 1989 Research Center-Jülich and SIEMENS-Research and Development Center - Perlach, Germany, as AvH-Fellow
- 1994 March to August - Invited Professor Universidad Complutense de Madrid, Spain, as sabbatical Year
- 1998 - University of California San Diego, California USA, as Guggenheim Fellow

Publications:

International Refereed Journals	84
National Refereed Journals	29
Refereed Proceedings	18
Patents	2

Talks at national and International Meetings

Invited	14
Contributed.....	120

SCIENTIFIC SOCIETIES MEMBERSHIP

- Colombian Physical Society (Sociedad Colombiana de Física Since 1974:
 - * **Vice-president** 1989-1991; 1991-1993
 - * **President** 1993-1995, 1995 -1997, 1999 - 2001
 - * EDITOR of "*Revista Colombiana de Física*" 2001 – today
- Federación Latinoamericana de Sociedades de Física (Latin American Federation of Physical Societies):
 - * **General Secretary** 1995 - 1998

- American Physical Society Since 1985
- Colombian Association for Science Progress ACAC. Since 1984
- Colombian Academy for the Nature, Physical and Mathematical Sciences:
"Miembro Correspondiente". Since 1996
- The American Association for the Advancement of Science. AAAS Since 2003
- American Association of Physics Teachers AAPT Since 2002

RESEARCH PROJECTS

- 2003-2005: *Nanoscale characterization of ferroelectric thin films* Research project COLCIENCIAS-Universidad del Valle (UNIVALLE) - **DIRECTOR**
- 2000-2002: *Electronic properties of ferroelectric epitaxial thin films*. Research project COLCIENCIAS-UNIVALLE **DIRECTOR**
- 1998: *Transport properties of magnetic dots*. Department of Physics (Thin films research group), University of California San Diego USA
- 1996 -2000: "*Development of hard coatings* "; Project of the *Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo* (CYTED)- Material Sciences-Thin Films Section CYTED-VIII.7 - **DIRECTOR**
- 1996-1999: "*Development of electronic devices based on HTc-superconducting thin films*": Research project COLCIENCIAS-UNIVALLE - **DIRECTOR**
- 1990 - 1997 "*Growth and characterization of hard coatings on steels*"; research project UNIVALLE – Corporación Universitaria Autónoma de Occidente (CUAO)
- 1995-1996 "*Study of optical properties on HTc superconducting thin films*"; research project COLCIENCIAS-Universidad de Antioquia - UNIVALLE
- 1990-1991 "*Production and characterization of superconducting tunnel diodes*"; research grant TWAS-Trieste, Italy - **DIRECTOR**
- 1989-1995 "*Production, characterization and analysis of HT_c thin films*"; research project COLCIENCIAS-UNIVALLE - **DIRECTOR**
- 1988-1989 **Post-doc** Fellowship Alexander von Humboldt Foundation. "*Development of HTc Superconducting Thin Films*" SIEMENS-Munich-Perlach, and FZ-Jülich, Germany
- 1984-1988 "*Assembling of a glow-discharge system for the production of a-Si solar cells*"; research project COLCIENCIAS-UNIVALLE - **DIRECTOR**
- 1982-1984 "*Amorphous Al_xCu_{1-x} thin films production and characterization*"; research project COLCIENCIAS-UNIVALLE - **DIRECTOR**
- 1979-1982 "*Small angle neutron scattering on G-P zones in Al-Cu alloys*". **Doctoral thesis**, Solid State Division - Research Center KFA-Jülich, Germany
- 1976-1978 "*Production of SiO₂ and MgF₂ capacitors and EPR analysis*". **Magister thesis**, Universidad Nacional - Bogotá, Colombia

RESEARCH VISITS

- 2001 – November: "*Unconventional infrared properties of high T_c thin films: temperature and doping effects*"; ESPCI - Laboratoire de Physique du Solide (by Nicole Bontemps), **University of Paris – France**; within France-Colombia ECOS-NORD program
- 1998 – January to December: Properties of Magnetic dots, Department of Physics, University of California San Diego; **San Diego CA USA**, as Guggenheim Fellow.
- 1997 May to June: "*Properties of SQUID sensors*"; Solid State Division - **Research Center-Jülich, Germany**
- 1996 - May to August: "*Growth of HTc heterostructures by a three-target sputtering system*"; Solid State Division - **Research Center-Jülich, Germany**
- 1995 August: "*Growth of HTc heterostructures*" Institute of Materials Research, **Universidad Nacional Autónoma de México (UNAM), México**

- 1995 February-March: "HTc thin films deposition on Sapphire with buffer layer". Laboratoire de physique des solides de Bellevue **CNRS Paris, France**
- 1993 May-July "Production and characterization of $Ba_{1-x}K_xBiO_3$ epitaxial thin films by a high pressure rf-sputtering process". Solid State Division - **Research Center-Jülich, Germany**
- 1991 May-July "Production of HT_c films by a high temperature sputtering process". Solid State Division - **Research Center-Jülich, Germany**
- 1990 June-August "Growth and Properties of $YBa_2Cu_3O_7/PrBa_2Cu_3O_7$ Heterostructures". Solid State Division - **Research Center-Jülich, Germany**
- 1987 January-March "Production and characterization of a-Si:H thin films by a glow discharge process". Institute of Physics - **Universidad de Campinas, Campinas, Brazil**
- 1986 April to June "Production and characterization of sputtered a-SiN_x:F thin films". Solid State Division - **Research Center-Jülich, Germany**

SCIENTIFIC CONFERENCES

- 2006 **International Conference on Thin Film and Coatings ICTFC-2006**, San Diego, California USA May 1-5
March Meeting; National Physical Conference of the American Physical Society, Baltimore, USA, March 13-17
Meeting Alexander von Humboldt Foundation "Contribution of Humboldtians to Research and Development in Andean Countries: Towards an Interdisciplinary Network " Lima Peru March 8-10
- 2005 **Program Review Air Force Program** July San Diego CA.
March Meeting; National Physical Conference of the American Physical Society Los Angeles CA. March 21-25
Deutsche Physikalische Tagung " Physics since Einstein" Berlin Germany March 4 -9
- 2004 * **International Workshop on Multifunctional Materials II**, Invited Talk Huatulco Mexico October 17-21
 * **International Centre on Advanced Materials (Centro Internacional de Materiales Avanzados CIAM) Conference**, Invited Talk, Valparaiso, Chile Mayo 3-7
 * **International Conference on Thin Film and Coatings ICTFC-2004**, San Diego, California USA Abril 23-27
 * **March Meeting; National Physical Conference of the American Physical Society**, Montreal, Quebec, Canadá, March 23-27
- 2003 * **Latin-American Conference on Surface Science and its Applications, (LACSSA-2003)** Pucón, Chile December 8-19
 * **March Meeting; National Physical Conference of the American Physical Society**, Austin, Texas, March 3-7
- 2002 * **Workshop on Nano magnetism**, Valparaiso, Chile, December 8-12 **Invited talk**
 * **Pan American Study Institute – Science and Technology of Ferroelectric Materials**, Rosario, Argentina, September 30 – October 11. **Invited Talk**
 * **March Meeting; National Physical Conference of the American Physical Society**, Indianapolis, Indiana, USA, March 18-23

- 2001 * **Colombian Physics Meeting (XIX Congreso Nacional de Física)**, Universidad Nacional de Colombia, Manizales, Colombia October 4-8 – **Member Organizing Committee**
- * **Latin American Symposium on Surface Science and Thin Films SLAFS - 2001**; San José, Costa Rica, July 8-12
 - * **5th Workshop on Hard Coatings (V Taller de Recubrimientos Duros y Aplicaciones Industriales)**, Cali, Colombia. February 22-24 - **Member Organizing Committee**
 - * **March Meeting National Physical Conference of the American Physical Society**, Seattle, Washington, March 16-20
- 2000 * **4th Workshop on Hard Coatings (IV Taller de Recubrimientos Duros)**, Centro Nacional de Alta Tecnología "CENAT" San José, Costa Rica, June 18 – 21 - **Member Advisory Committee**
- * **6th International Conference Materials and Mechanisms of Superconductivity and High Temperature Superconductors**, Houston, Texas, February 20-25
- 1999 * **15th Latin American Symposium on Solid State Physics (XV Simposio Latinoamericano de Física del Estado Sólido)**, Cartagena, Colombia. November 1-5 - **Member of the Scientific Program Committee**
- * **3rd Workshop on Hard Coatings (III Taller de Recubrimientos Duros)**, sponsored by CYTED, Cartagena, Colombia, October 28-30 - **Member Organizing Committee**
 - * **11th International Conference of Thin Films (ICTF)**, Cancún-México, August 30- September 3
 - * **Workshop on Superlattices and Microstructures**, Cancún, México, August 27-29 – **Member of the Scientific Program Committee**
 - * **Colombian Physics Meeting, (XVIII Congreso Nacional de Física)**, Universidad Nacional de Colombia, Bogotá, Colombia – June 27-30 - **Member Advisory Committee**
 - * **March Meeting: National Physical Conference of the American Physical Society**; Atlanta, Georgia, March 20-25
- 1998 * **3rd Colombian Seminar on Condensed Matter (Tercera Escuela Nacional de Física de la Materia Condensada)**, Armenia, Colombia, September 20-24 - **Member Advisory Committee**
- * **Applied Superconductivity Conference**, Palm Spring, California, USA. September 3-7
 - * **Workshop on Experimental Techniques on Hard Coatings (Taller de Técnicas Experimentales Aplicadas a los Recubrimientos Duros)**, sponsored by CYTED, Ensenada – México, May 3 - 8 - **Member of the Program Committee**
 - * **25th Anniversary International Conference on Metallurgical Coatings and Thin Films**, San Diego-California, April 27-May 1st
 - * **March Meeting: National Physical Conference of the American Physical Society**; Los Angeles, California, Marzo 20-25
- 1997 * **Colombian Physics Meeting (XVII Congreso Nacional de Física)**, Medellín, June 23-27 - **Member of the Program Committee**
- * **2nd Workshop on Hard Coatings**, sponsored by CYTED, Medellín, June 20-22 - **Member Organizing Committee**
 - * **International Conference on Mechanics and Material of the High Temperature Superconductivity M2SHTS-96**, Peking, China. February 28 - March 4

- 1996 * **European Conference on Surface Science ECOSS-96**, Salamanca, Spain, Sept. 23-27
- * **2nd Colombian Seminar on Condensed Matter (Segunda Escuela Nacional de Física de la Materia Condensada)**, Santafé de Bogotá, September 16-20 – **Invited talk**
- * **International Workshop on the Characterization of Thin Films CYTED**, sponsored by CYTED, Mérida, Venezuela, June 12 – 21 - **Member Advisory Committee**
- 1995 * **First Workshop on Hard Coatings (I Taller de Recubrimientos Duros)**, sponsored by CYTED), Cali, Colombia, November 28-30 - **Member Organizing Committee**
- * **International Conference on Advanced Materials CAM-95**; Cancún, México, August 27 – September 1st. **Invited talk**
- * **Colombian Physics Meeting (XVI Congreso Nacional de Física)**, Universidad del Valle, Cali, Colombia. June 26-30 - **Member Organizing Committee**
- 1994 * **Canadian American and Mexican Physics Meeting CAM 94**, Cancún, México, September 26 – 30
- * **8th Latin American Symposium on Surface Science and Applications (CLACSA-8)**, Cancún, México, September 19-23
- * **Summer school (Cursos de Verano) "El Escorial"** of the Universidad Complutense, El Escorial, Spain. July 11-15 – **Invited talk**
- * **International Conference on Materials and Mechanisms of The Superconductivity and High Temperature Superconductivity M²S-HTSC IV**, Grenoble, France, July 5-9
- * **14th General Conference on Condensed Matter GCCMD-14**, Madrid, Spain, March 28-31
- 1993 * **Colombian Physics Meeting (XV Congreso Nacional de Física)**, Universidad del Quindío, Armenia, Colombia, September 6-10 - **Member Advisory Committee**
- 1992 * **12th Latin American Symposium on Solid State Physics XII-SLAFES**, Pichidangui, Chile. November 22-27
- * **7th Latin American Symposium on Surface Science SLAFS-7**. Bariloche, Argentina, November 15-20
- * **Applied Superconductivity Conference ASC'92**. Chicago, Illinois - USA. August 23- 28
- * **Colombian School on Theoretical Physics ENAFIT-92**. del Valle, Cali, Colombia. July 2-9 - **Invited talk**
- * **13th Winter Meeting on Low Temperature Physics WMLTP-13**. Cuernavaca, México. January 15-28 - **Invited talk**
- 1991 * **Colombian Physics Meeting (XIV Congreso Nacional de Física)**, Universidad del Atlántico, Barranquilla, Colombia. September 2-6 – **Invited talk**
- * **International Conference on Materials and Mechanisms of The Superconductivity and High Temperature Superconductivity M²S-HTSC**, Kanazawa, Japan, July 22-26
- 1990 * **11th European Conference on Surface Science**, Salamanca, Spain Oct 4-11
- * **Meeting On High T_C Superconducting Thin Films**, SIEMENS-Munich, Germany. May 15 - **Invited talk**

- 1989 * **Colombian Physics Meeting (XIII Congreso Nacional de Física)**, Universidad Nacional de Colombia, Bogotá, Colombia. August 20-31 - **Invited talk**
- * **4th Meeting Solid State Scientific Council**, Research Center KFA-Jülich, Germany, April 19-20. **Invited talk**
- * **Meeting on HT_C Materials**, KFA-Philips, Jülich Germany. February 4-5 - **Invited talk**
- * **German Meeting on HT_C Materials**. Karlsruhe, Germany. January 18 - **Invited talk**
- * **Symposium on HT_C Superconductors**. ABB Heidelberg, Germany, January 16-17
- 1988 * **ILA-Meeting on Solid State**, Research Center-KFA Jülich, Germany, December 5-6
- 1987 * **10th Latin American Symposium On Solid State Physics SLAFES-10**. La Habana, Cuba. Nov 28-Dec 4
- * **Colombian Physics Meeting (XII Congreso Nacional de Física)**, Universidad del Cauca, Popayán, Colombia. August 15-19
- * **3rd Brazilian School on Semiconductors**, Campinas, Brazil. February 18-29
- 1986 * **International Course on Semiconductors Physics and their Applications**, ACIF, Bogotá June 15-26 **Invited talk**
- 1985 * **Colombian Physics Meeting (XI Congreso Nacional de Física)**, Universidad Industrial de Santander, Bucaramanga, Colombia. August 18-23
- * **Latin-American School of Physics ELAF-85**, Cali, Colombia. July 3-7. **Member of the Scientific Program Committee**
- * **3rd Workshop on Surface Science**, Sonora, Mexico. May 5-9
- 1984 * International Course on Vacuum Physics - ACIF, Bogotá, Colombia December 3-7. **Lecturer**
- * **3rd Latin American Symposium on Surface Science**, San José, Costa Rica. Sep 24-28
- 1983 * **Colombian Physics Meeting (X Congreso Nacional de Física)**, Universidad de Nariño, Pasto, Colombia. August 22-26
- * **1st Brazilian School on Semiconductors**, Unicamp-Campinas-Brazil. February 16-18
- 1982 * **2nd Colombian Microelectronic Conference**, Universidad del Valle - Cali, Colombia. Nov.29-Dec.3. **Lecturer**
- * **2nd Latin-American Symposium on Surface Science**, Puebla, México. October 4-8
- * **German Physics Congress**, Münster, Germany. March 25-30
- 1977 * **Colombian Physics Meeting (VII Congreso Nacional de Física)**, Universidad de Cartagena, Cartagena, Colombia. October 4-8
- 1975 * **Colombian Physics Meeting (VII Congreso Nacional de Física)**, Universidad Industrial de Santander, - Bucaramanga, Colombia. July 23-30

GRADUATE THESIS DIRECTION

1. " Deposition of B₄C / BCN / c-BN multilayered thin films for improvements of cutting tools" Doctoral Thesis Gilberto Bejarano –2005 – **Cum Laude**

2. "*Growth of PZT-Ferroelectric thin films and the dependence of electrical properties with the material of the electrodes*"; Doctoral Thesis Jaime Alberto Osorio –2003 – **Cum Laude**
3. "*Growth and Characterization of CNx Hard Coating Films*"; Doctoral Thesis Nelly Cecilia Alba de Sánchez – 2002
4. "*Study of growth mechanisms in epitaxial superconducting thin films*"; Doctoral Thesis Aminta Mendoza (associated director) – 2001 – **Magna Cum Laude**
5. "*Study of Hall effect in magnetic thin films of LMCO*"; Magister Thesis – Paula Andrea Vivas – 2001 - **Cum Laude**
6. "*Effect of Silver on the Transport Properties of Grain Boundary YBCO Josephson junctions*"; Doctoral Thesis Gilberto Bolaños – 2000 – **Magna Cum Laude**
7. "*Development of Josephson junctions based on Bi₂Sr₂CaCu₂O_{8+δ} and Bi₂Sr₂YCu₂O_{8+δ} epitaxial thin films*"; Wilson Lopera Muñoz - 1998 - **Cum Laude**
8. "*Study of Photo response in grain boundary-Josephson Junctions*"; Jaime Alberto Osorio - 1998
9. "*Study on Photo response effects in oxygen deficient content of YBCO epitaxial thin films*"; Doctoral thesis, Doris Giratá (1997) - **Cum Laude**
10. "*Growth and analysis of Superconductor/Insulator/Superconductor trilayer structures*"; Doctoral Thesis, Manuel Chacón - 1996 - Cum Lauda
11. "*HT_C Heterostructures Based on Bi₂₂₁₂ Superconducting Thin Films*". Doctoral Thesis, Eval José Baca – 1996 – Magna Cum Laude - First Doctoral thesis development completely in Universidad del Valle and in Colombia
12. "*Preparation of TiN on steels by a sputtering method*"; Magister Thesis, Nelly Alba – 1994
13. "*In-Situ production of BiSrCaCuO thin films by Sputtering*". Magister Thesis, César. Barrero - 1992
14. "*Production and Characterization Of YBa₂Cu₃O₇/PrBa₂Cu₃O₇/YBa₂Cu₃O₇ heterostructures*". Magister Thesis, Diógenes Araújo - 1992
15. "*Effect of the Silver on the superconducting properties of Bi-Sr-Ca-Cu-O thick films*". Magister Thesis, Gilberto Bolaños - 1991
16. "*A bidimensional model for HT_C superconductors*". Magister Thesis, Jesús Calero - 1990
17. "*Electronic properties of amorphous double barriers*". Magister Thesis, Liliana Tirado – 1988
18. "*Determination of the density of states in the gap in a-Si:H thin films by space charge current limited method*"; Ancizar Flórez, 1988
19. "*Determination of the dielectric constants in a-Si:H thin films*". Magister Thesis, Fabian Jurado - 1986
20. "*Determination of $\mu\tau$ in Al/a-Si:H/Au Schottky barriers*". Magister Thesis, Guillermo Erazo – 1986
21. "*Electrical properties of a-Si thin films*". Magister Thesis, Andrés Rosales - 1985
22. "*Posthydrogenation effects on the electrical properties of a-Si thin films*". Magister Thesis, Guido López - 1985
23. "*Determination of the optical constants in evaporated a-Si thin films*". Magister Thesis, Jesús Tabares - 1984
24. "*Study of the resistivity in Al_{1-x}Cu_x amorphous thin films*", Luis Fernando Castro, Magister Thesis - 1982

SCIENTIFIC PUBLICATIONS

International Refereed Journals

1. J. Realpe, A. Cortes, E. Delgado, W. Lopera, and **P. Prieto**: "Analysis of hysteresis measurements in epitaxial SRO/PZT/Pt capacitor structures" *Ferroelectrics* Vol **335** 233-240 (2006).
2. G. Campillo, M. E. Gomez, A. Berger, A. Hoffmann, R. Escudero, **P. Prieto** "Influence of Ferromagnetic Thickness on Structural and Magnetic Properties of Exchange-Biased Manganite Superlattices"; *J. Appl. Phys.* **99** 08C106 (2006)
3. W. Saldarriaga, E. Baca, **P. Prieto**, O. Morán, K. Grube, D. Fuchs and R. Schneider "Field geometry dependence of magnetotransport in epitaxial $La_{2/3}Ca_{1/3}MnO_3$ thin films"; *Physica B* **381** 274–279 (2006).
4. H. Riascos, G. Zambrano, **P. Prieto** "Spectroscopic analysis of a Pulsed-Laser Deposition system for fullerene-like CN_x film production" *Plasma Chem Plasma Process* **26**:277–291 (2006).
5. H. Riascos , J. Neidhardt , G.Z. Radnóczy, J. Emmerlich , G. Zambrano , L. Hultman , **P. Prieto** "Structure and properties of pulsed-laser deposited carbon nitride thin films"; *Thin Solid Films* **497** 1 – 6 Review Article (2006).
6. G. Bejarano, J. M. Caicedo, E. Baca, **P. Prieto** A.G. Balogh, S. Enders, "Deposition of B_4C / BCN / c -BN multilayered thin films by r.f. magnetron sputtering" *Thin Solid Films* 494 53 – 57 (2006).
7. Javier López, Diego Echeverry, Gustavo Zambrano, Luis F. Castro and **P. Prieto**. "Gas Temperature Determination of an a.c. Arc Discharge at Atmospheric Pressure in Air Using a Mach-Zehnder Interferometer" *IEEE Transactions on Plasma Science* Vol. 34 No 1 115-120 (2006).
8. F. Perez , K. Gross , E. Baca , W. Saldarriaga , **P. Prieto** , M.E. Gomez , O. Morán,, R. Hott , K. Grube , D. Fuchs , R. Schneider "Superconducting and ferromagnetic properties of epitaxial $YBa_2Cu_3O_{7-\delta}/La_{2/3}Ca_{1/3}MnO_3$ bilayers" *Physica C* 432 275–280 (2005).
9. O. Morán, W. Saldarriaga, **P. Prieto**, and E. Baca "Anisotropic magnetotransport in epitaxial $La_{2/3}Ca_{1/3}MnO_3$ thin films grown by dc-sputtering" *phys. stat. sol. (a)* **195**, No. z, zzz–zzz (2005)
10. J. Roa-Rojas, D. A. Landínez Téllez, and **P. Prieto** " Phase-glass scaling near the coherence transition in granular $HoBa_2Cu_3O_{7-d}$ superconducting thin films " *phys. stat. sol. (b)* 242, No. **9**, 1797–1801 (2005)
11. J. M. Caicedo, G. Bejarano, G. Zambrano, E. Baca, O. Morán, and **P. Prieto**, "Cubic and hexagonal boron-nitride (c -BN / h -BN) thin films deposited *in situ* by r.f. magnetron sputtering" *phys. stat. sol. (b)* **242**, No. 9, 1920–1923 (2005)
12. E. Delgado, A. Cortes, W. Lopera, J. Osorio, and **P. Prieto**, "Tunneling and ferroelectric properties of SRO/PZT/Pt, Au capacitor structures", *phys. stat. sol. (b)* **242**, No. 9, 1902–1905 (2005)
13. F. Perez, E. Baca, W. Saldarriaga, L. F. Castro, M. E. Gomez, **P. Prieto**, H. Shi and D. Lederman "Electrical and magnetic properties of $La_{2/3}Ca_{1/3}MnO_3/YBa_2Cu_3O_{7-d}/La_{2/3}Ca_{1/3}MnO_3$ trilayers", *J. Appl. Phys.* **97**, 10B115 (2005)
14. E. Baca, a W. Saldarriaga, **P. Prieto**, O. Morán R. Hott, K. Grube, D. Fuchs, and R. Schneider "Evidence of elastic tunneling in planar $YBa_2Cu_3O_{7-d}$

- d/La_{1/3}Ca_{2/3}MnO₃/La_{2/3}Ca_{1/3}MnO₃ junctions*" ; J. Appl. Phys. **97**, 10C922 s2005d (2005)
15. G. Campillo, A. Hoffmann M. E. Gomez and **P. Prieto**, "Exchange bias and magnetic structure in modulation-doped manganite superlattices" J. Appl. Phys. **97**, 10K104 s (2005)
 16. G. A. Mendoza, O. Guzmán, H. Ariza–Calderón and **P. Prieto** "Influence of a nonmagnetic dilution on the magnetic properties of aZn_xCd_{1-x}Cr₂S₄ system by means of microwave magnetic resonance"; J. Appl. Phys. **97**, 10A507 s (2005).
 17. O. Arnache, D. Giratá, F. Pérez, **P. Prieto**, W. Lopera; "Electrical and structural properties of Ce_{0.9}CoFe₃Sb₁₂ thermoelectric thin films" Solid State Communications **133** 324-346 (2005)
 18. H. Riascos, G. Zambrano, **P. Prieto**; "Plasma Characterization of Pulsed-Laser Ablation Process Used for Fullerene-like CN_x Thin Film Deposition" Brazilian Journal of Physics, vol. **34**, no. 4B, 1583-1586 (2004)
 19. H. Riascos G. Zambrano, **P. Prieto**, M. Arroyave, A. Devia, H. Galindo "Correlation between plasma characterization and growth of fullerene-like CN_x thin films deposited by pulsed laser ablation"; Surface & Coatings Technology **188–189** (2004) 617– 622 (2004)
 20. O. Morán R. Hott, K. Grube, D. Fuchs, and R. Schneider E. Bacca, W. Saldarriaga, and **P. Prieto** "Correlation of conductivity and magnetization in epitaxial La_{2/3}Ca_{1/3}MnO₃ thin films"; Jour. App. Phys. **95** (11) 6239-6244 (2004).
 22. Z. Sefrioui, D. Arias, C. Leon, and J. Santamaría E. M. Gonzalez and J. L. Vicent and **P. Prieto**; "Zero-magnetic-field dynamic scaling in Bi₂Sr₂CaCu₂O₈ thin films" Phys. Rev **B70**, 064502 (2004)
 23. E. Baca, F. Pérez, K. Gross, **P. Prieto**, O. Morán, R. Hott, " Proximity effect in oxide superconductor/ferromagnet films" Ann. Phys. 13, 1-2 93-94 (2004)
 24. O. Morán, D. Fuchs, R. Hott, K. Grube, R. Schneider, E. Baca **P. Prieto**, "Correlation of the electrical transport in epitaxial La_{1/3}Ca_{2/3}MnO₃ thin films with magnetization " Ann. Phys. 13 1-2 85-86 (2004)
 25. **P. Prieto** , M. E. Gómez, G Campillo, A. Berger, E. Baca, R. Escudero, F. Morales" Exchange-coupling effect and magneto transport properties in epitaxial La_{2/3}Ca_{1/3}MnO₃/La_{1/3}Ca_{2/3}MnO₃ superlattices" A Physica Status Solidi A- Applied Research. **201,10**, p.2343 - 2346, (2004)
 26. J. G. Ramírez, F. Pérez, M. E. Gómez and **P. Prieto** " Statistical Study of AFM-images on Manganite Thin Films" Physica Status Solidi C., **V1, n.S1**, p.13 - 16, (2004)
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