



Demétrio Antônio da Silva Filho

Curriculum Vitae

Personal Information

Name Demétrio Antônio da Silva Filho

Professional Address: Universidade de Brasília, Instituto de Física.

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Formal Education/Degree

- 1998 - 2003** Ph.D. in Physics
Universidade Estadual de Campinas, UNICAMP, Brasil with collaborative period at Universidade do Arizona (Advisor: Jean-Luc Brédas).
Year of degree: 2003.
Advisor: Maria Cristina dos Santos.
Scholarship from: Fundação de Amparo à Pesquisa do Estado de São Paulo ,FAPESP ,Brasil .
Keywords: Organic Semiconductors
Major Area: Exact and Earth Sciences / *Area:* Physics / *Subarea:* Atomic and Molecular Physics.
- 1996 - 1998** Master's in Physics
Universidade Federal de Pernambuco, UFPE, Brasil.
Year of degree: 1998.
Advisor: Celso Pinto de Melo.
Scholarship from: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior ,CAPES ,Brasil .
Keywords: Polarizabilities; Organic Conducting Polymers.
Major Area: Exact and Earth Sciences / *Área:* Physics / *Subarea:* Atomic and Molecular Physics.
- 1992 - 1996** Graduation Physics
Universidade Federal de Pernambuco, UFPE, Brasil.
Advisor: Prof. Celso Pinto de Melo.
Scholarship from: Fundação de Amparo à Ciência e Tecnologia do Estado de Pernambuco ,FACEPE ,Brasil .

Postdoctorate

- 2003 - 2005** Postdoctorate.
Georgia Institute of Technology, Georgia Tech, Estados Unidos.
Scholarship from: National Science Foundation, NFS ,Estados Unidos .
Major Area: Exact and Earth Sciences.
Major Area: Exact and Earth Sciences / *Área:* Physics / *Subarea:* Atomic and Molecular Physics.
- 2003 - 2003** Postdoctorate.
University of Arizona, ARIZONA, Estados Unidos.
Scholarship from: National Science Foundation, NSF ,Estados Unidos .
Major Area: Exact and Earth Sciences.
Major Area: Exact and Earth Sciences / *Área:* Physics / *Subarea:* Atomic and Molecular Physics.

Professional Experience

University of Brasilia, UnB, Brazil.

2010 - Present Type of contract: Full-Professor, Exclusive Dedication.

Georgia Institute of Technology, GEORGIA TECH, United States.

2008 - 2009 Senior Research Scientist.

Articles in Scientific Journals

1. CÂNDIDO, KAMILLA F. ; RAMALHO, SIMONE S. ; CUNHA, WILIAM F. DA ; SILVA FILHO, DEMÉTRIO A. DA . Strategies to Reduce the Computational Cost of the Ground State and the First Excited State Geometry Optimization of Organic Molecules. *Revista Virtual de Química*, v. 8, p. 356-368, 2016.
2. LIMA, IGO T. ; PRADO, ANDRIELE DA S. ; MARTINS, JOÃO B. L. ; DE OLIVEIRA NETO, PEDRO HENRIQUE ; CESCHIN, ARTEMIS M. ; da Cunha, Wiliam F. ; da Silva Filho, Demétrio A. . Improving the Description of the Optical Properties of Carotenoids by Tuning the Long-Range Corrected Functionals. *The Journal of Physical Chemistry. A*, v. 120, p. 4944-4950, 2016.
3. DE OLIVEIRA NETO, PEDRO HENRIQUE ; da Silva Filho, Demetrio A. ; RONCARATTI, Luiz Fernando ; ACIOLI, PAULO H ; E SILVA, GERALDO MAGELA . Low Temperature Seebeck Coefficients for Polaron Driven Thermoelectric Effect in Organic Polymers. *The Journal of Physical Chemistry. A*, v. 120, p. 4923-4927, 2016.
4. MOTA, ALBERTO A. R. ; CORRÊA, JOSÉ R. ; CARVALHO, PEDRO H. P. R. ; DE SOUSA, NÚBIA M. P. ; DE OLIVEIRA, HEIBBE C. B. ; GATTO, CLAUDIA C. ; da Silva Filho, Demétrio A. ; DE OLIVEIRA, ALINE L. ; NETO, BRENNO A. D. . Synthesis, Structure, Properties, and Bioimaging of a Fluorescent Nitrogen-Linked Bisbenzothiadiazole. *Journal of Organic Chemistry*, v. 81, p. 2958-2965, 2016.
5. DE SOUSA, LEONARDO EVARISTO ; RIBEIRO, LUIZ ANTONIO ; FONSECA, ANTONIO LUCIANO DE ALMEIDA ; DA SILVA FILHO, DEMÉTRIO ANTONIO . Modeling the Emission Spectra of Organic Molecules: A Competition between Franck-Condon and Nuclear Ensemble Methods. *The Journal of Physical Chemistry. A*, v. 120, p. 5380-5388, 2016.
6. MACHADO, DANIEL F. S. ; LOPES, THIAGO O. ; LIMA, IGO T. ; da Silva Filho, Demétrio A. ; DE OLIVEIRA, HEIBBE C. B. . Strong Solvent Effects on the Nonlinear Optical Properties of and Isomers from Azo-Enaminone Derivatives. *Journal of Physical Chemistry. C*, v. 120, p. acs.jpcc.6b01567-17669, 2016.
7. TAVARES, LUCIANA ; CADELANO, MICHELE ; QUOCHI, FRANCESCO ; SIMBRUNNER, CLEMENS ; SCHWABEGGER, GÜNTHER ; SABA, MICHELE ; MURA, ANDREA ; BONGIOVANNI, GIOVANNI ; FILHO, DEMÉTRIO ANTÔNIO DA SILVA ; DA CUNHA, WILIAM FERREIRA ; Rubahn, Horst-Günter ; Kjelstrup-Hansen, Jakob . Efficient Exciton Diffusion and Resonance-Energy Transfer in Multilayered Organic Epitaxial Nanofibers. *Journal of Physical Chemistry. C*, v. 119, p. 15689-15697, 2015.
8. DE OLIVEIRA NETO, PEDRO HENRIQUE ; da Silva Filho, Demétrio A. ; da Cunha, Wiliam F. ; ACIOLI, PAULO H. ; E SILVA, GERALDO MAGELA . Limit of Exciton Diffusion in Highly Ordered π -Conjugated Systems. *Journal of Physical Chemistry. C*, v. 119, p. 150819081507000-19659, 2015. Citações:1
9. RUIZ, CONSTANZA ; GARCÍA-FRUTOS, EVA M. ; da Silva Filho, Demetrio A. ; López Navarrete, Juan T. ; RUIZ DELGADO, M. CARMEN ; GÓMEZ-LOR, BERTA . Symmetry Lowering in Triindoles: Impact on the Electronic and Photophysical Properties. *Journal of Physical Chemistry. C*, v. 118, p. 5470-5477, 2014.
10. NETO, BRENNO A. D. ; H. G. DA CRUZ, EDUARDO ; H. P. R. CARVALHO, PEDRO ; CORRÊA, JOSÉ ; A. C. SILVA, DIEGO ; DIOGO, EMILAY ; SOUZA FILHO, JOSE D. ; CAVALCANTI, BRUNO ; PESSOA, CLÁUDIA ; GUIDO, BRUNA C. ; OLIVEIRA, HEIBBE C. B. ; SILVA FILHO, DEMETRIO A. ; SILVA JUNIOR, EUFRANIO . Design, synthesis and application of fluorescent 2,1,3-benzothiadiazole-triazole-linked biologically active lapachone derivatives. *New Journal of Chemistry (1987)*, v. NA, p. NA-NA, 2014.
11. DURÃES, JUSSARA A. ; da Silva Filho, Demétrio A. ; CESCHIN, ARTEMIS M. ; SALES, MARIA J. A. ; MARTINS, JOÃO B. L. . Investigation of the torsional barrier of EDOT using molecular mechanics and DFT methods. *Journal of Molecular Modeling (Print)*, v. 20, p. 2405-6, 2014.
12. Bredas, Jean-Luc ; LIMA, IGO T. ; RISKÓ, CHAD ; AZIZ, SAADULLAH ; DA SILVA FILHO, DEMETRIO . Interplay of Alternative Conjugated Pathways and Steric Interactions on the Electronic and Optical Properties of Donor-Acceptor Conjugated Polymers. *J MATER CHEM C*, v. 2, p. 8873-8879, 2014.
13. LOPES, THIAGO O. ; da Silva Filho, Demétrio A. ; LAPIS, ALEXANDRE A. M. ; DE OLIVEIRA, HEIBBE C. B. ; NETO, BRENNO A. D. . Designed non-symmetrical 4,7-pi-extended-2,1,3-benzothiadiazole derivatives: Synthesis guided by DFT predictions. *Journal of Physical Organic Chemistry (Print)*, v. 27, p. n/a-n/a, 2014.
14. FU, YAO-TSUNG ; da Silva Filho, Demetrio A. ; SINI, GJERGJI ; ASIRI, ABDULLAH M. ; AZIZ, SAADULLAH GARY ; RISKÓ, CHAD ; Brédas, Jean-Luc . Structure and Disorder in Squaraine-C 60 Organic Solar Cells: A Theoretical Description of Molecular Packing and Electronic Coupling at the Donor-Acceptor Interface. *Advanced Functional Materials (Print)*, v. 24, p. n/a-n/a, 2014.
15. da Silva Filho, Demetrio A. ; Coropceanu, Veaceslav ; Gruhn, Nadine E. ; DE OLIVEIRA NETO, PEDRO HENRIQUE ; Brédas, Jean-Luc . Intramolecular reorganization energy in zinc phthalocyanine and its fluorinated derivatives: a joint experimental and theoretical study. *Chemical Communications (London. 1996. Print)*, v. 49, p. 6069-6071, 2013.
16. DA SILVA FILHO, DEMETRIO A. ; DE OLIVEIRA NETO, PEDRO HENRIQUE ; RUIZ DELGADO, M. CARMEN ; LOPEZ NAVARRETE, JUAN T. ; Casado, Juan . Charge-transport in Organic Semiconductors: Probing High Mobility with Light. *MRS Proceedings*, v. 1568, p. mrs13-1568-kk12-05, 2013.
17. Casado, Juan ; Hernández, Víctor ; López Navarrete, Juan T. ; ALGARRA, MANUEL ; da Silva Filho, Demetrio A. ; YAMAGUCHI, SHIGEHIRO ; RONDÃO, RAQUEL ; SEIXAS DE MELO, J. SÉRGIO ; NAVARRO-FUSTER, VÍCTOR ; BOJ, PEDRO G. ; DÍAZ-GARCÍA, MARÍA A. . Amplified Spontaneous Emission in Pentathienoacene Dioxides by Direct Optical Pump and by Energy Transfer: Correlation with Photophysical Parameters. *Advanced Optical Materials*, v. 1, p. n/a-n/a, 2013.

18. RONCARATTI, Luiz Fernando ; GARGANO, R. ; OLIVEIRA NETO, P. H. ; CUNHA, Wiliam F da ; Filho DADS ; SILVA, Geraldo Magela e . Temperature-induced oscillating electric dipole in conjugated systems. *Chemical Physics Letters (Print)*, v. 539, p. 214-217, 2012.
19. Ribeiro, Luiz A. ; Oliveira Neto, Pedro H. ; da Cunha, Wiliam F. ; Roncaratti, Luiz F. ; Gargano, Ricardo ; da Silva Filho, Demetrio A. ; e Silva, Geraldo M. . Exciton dissociation and charge carrier recombination processes in organic semiconductors. *The Journal of Chemical Physics*, v. 135, p. 224901, 2011.
20. Viani, Lucas ; Olivier, Yoann ; Athanasopoulos, Stavros ; daSilvaFilho, DemetrioA. ; Hulliger, Jürg ; Brédas, Jean-Luc ; Gierschner, Johannes ; Cornil, Jérôme . Theoretical Characterization of Charge Transport in One-Dimensional Collinear Arrays of Organic Conjugated Molecules. *ChemPhysChem*, p. NA-NA, 2010.
21. Delgado, M. Carmen Ruiz ; Kim, Eung-Gun ; Filho, Demetrio A. da Silva ; Bredas, Jean-Luc . Tuning the Charge-Transport Parameters of Perylene Diimide Single Crystals via End and/or Core Functionalization: A Density Functional Theory Investigation. *Journal of the American Chemical Society (Print)*, v. 132, p. 3375-3387, 2010.
22. Oliva, María Moreno ; Pappenfus, TedM. ; Melby, JacobH. ; Schwaderer, KathrynM. ; Johnson, JaredC. ; McGee, KariA. ; daSilvaFilho, DemetrioA. ; Bredas, Jean-Luc ; Casado, Juan ; LópezNavarrete, JuanT. . Comparison of Thiophene-Pyrrole Oligomers with Oligothiophenes: A Joint Experimental and Theoretical Investigation of Their Structural and Spectroscopic Properties. *Chemistry - A European Journal*, p. n/a-n/a, 2010.
23. Pappenfus, Ted M. ; Hermanson, David L. ; Kohl, Stuart G. ; Melby, Jacob H. ; Thoma, Laura M. ; Carpenter, Nancy E. ; da Silva Filho, Demetrio A. ; Bredas, Jean-Luc . Regiochemistry of Poly(3-hexylthiophene): Synthesis and Investigation of a Conducting Polymer. *Journal of Chemical Education*, v. 87, p. 522-525, 2010.
24. Delgado, M. Carmen Ruiz ; Pigg, Kathryn R. ; da Silva Filho, D. A. ; Gruhn, Nadine E. ; Sakamoto, Youichi ; Suzuki, Toshiyasu ; Osuna, Reyes Malave ; Casado, Juan ; Hernández, Víctor ; Navarrete, Juan Teodomiro Lopez ; Martinelli, Nicolas G. ; Cornil, Jérôme ; Sánchez-Carrera, Roel S. ; Coropceanu, Veaceslav ; Brédas, J. L. . Impact of Perfluorination on the Charge-Transport Parameters of Oligoacene Crystals. *Journal of the American Chemical Society (Print)*, v. 131, p. 1502-1512, 2009.
25. Martinelli, NicolasG. ; Olivier, Yoann ; Athanasopoulos, Stavros ; RuizDelgado, Mari-Carmen ; Pigg, KathrynR. ; da Silva Filho, D. A. ; Sánchez-Carrera, RoelS. ; Venuti, Elisabetta ; DellaValle, RaffaeleG. ; Brédas, Jean-Luc ; Beljonne, David ; Cornil, Jérôme . Influence of Intermolecular Vibrations on the Electronic Coupling in Organic Semiconductors: The Case of Anthracene and Perfluoropentacene. *ChemPhysChem*, p. NA-NA, 2009.
26. Kjelstrup-Hansen, Jakob ; Norton, Joseph E. ; Filho, Demetrio A. da Silva ; Brédas, Jean-Luc ; Rubahn, Horst-Günter . Charge transport in oligo phenylene and phenylene thiophene nanofibers. *Organic Electronics*, v. 10, p. 1228-1234, 2009.
27. Martinelli, Nicolas G. ; Olivier, Yoann ; Athanasopoulos, Stavros ; RUIZ DELGADO, MARI-CARMEN ; Pigg, Kathryn R. ; da Silva Filho, Demétrio A. ; Sánchez-Carrera, Roel S. ; Venuti, Elisabetta ; DELLA VALLE, RAFFAELE G. ; Brédas, Jean-Luc ; Beljonne, David ; Cornil, Jérôme . Inside Cover: Influence of Intermolecular Vibrations on the Electronic Coupling in Organic Semiconductors: The Case of Anthracene and Perfluoropentacene (ChemPhysChem 13/2009). *ChemPhysChem (Print)*, v. 10, p. 2158-2158, 2009.
28. Koh, S. E. ; Risko, C. ; da Silva Filho, D. A. ; Kwon, O. ; Facchetti, A. ; Brédas, J.-L. ; Marks, T. J. ; Ratner, M. A. . Modeling Electron and Hole Transport in Fluoroarene-Oligothiophene Semiconductors: Investigation of Geometric and Electronic Structure Properties. *Advanced Functional Materials*, v. 18, p. 332-340, 2008.
29. Janzen, Daron E. ; VanDerveer, Donald G. ; Mehne, Larry F. ; da Silva Filho, Demétrio A. ; Brédas, Jean-Luc ; Grant, Gregory J. . Cyclometallated Pt(ii) and Pd(ii) complexes with a trithiacrown ligand. *Dalton Transactions*, p. 1872, 2008.
30. da Silva Filho, Demetrio A. ; Coropceanu, Veaceslav ; Fichou, Denis ; Gruhn, Nadine E. ; Bill, Tonja G. ; Gierschner, Johannes ; Cornil, Jérôme ; Brédas, Jean-Luc . Hole-vibronic coupling in oligothiophenes: impact of backbone torsional flexibility on relaxation energies. *Philosophical Transactions. Royal Society. Mathematical, Physical and Engineering Sciences*, v. 365, p. 1435-1452, 2007.
31. Karle, I.L. ; Butcher, R.J. ; Wolak, M.A. ; daSilvaFilho, D.A. ; Uchida, M. ; Bredas, J.-L. ; Kafafi, Z.H. . Cooperative CH... Interactions in the Crystal Structure of 2,5-Di(3-biphenyl)-1,1-dimethyl-3,4-diphenyl-silole and Its Effect on Its Electronic Properties. *Journal of physical chemistry. C*, v. 111, p. 9543-9547, 2007.
32. Coropceanu, Veaceslav ; Cornil, Jérôme ; da Silva Filho, Demetrio A. ; Olivier, Yoann ; Silbey, Robert ; Brédas, Jean-Luc . Charge Transport in Organic Semiconductors. *Chemical Reviews*, v. 107, p. 926-952, 2007.
33. Sánchez-Carrera, Roel S. ; Coropceanu, Veaceslav ; da Silva Filho, Demetrio A. ; Friedlein, Rainer ; Osikowicz, Wojciech ; Murdey, Richard ; Suess, Christian ; Salaneck, William R. ; Brédas, Jean-Luc . Vibronic Coupling in the Ground and Excited States of Oligoacene Cations. *Journal of Physical Chemistry. B*, v. 110, p. 18904-18911, 2006.
34. Valeev, Edward F. ; Coropceanu, Veaceslav ; da Silva Filho, Demetrio A. ; Salman, Seyhan ; Brédas, Jean-Luc . Effect of Electronic Polarization on Charge-Transport Parameters in Molecular Organic Semiconductors. *Journal of the American Chemical Society (Print)*, v. 128, p. 9882-9886, 2006.

35. BURAND, M ; MCGEE, K ; CAI, X ; DASILVAFILHO, D ; BREDAS, J ; DANIELFRISBIE, C ; MANN, K . Synthesis, X-ray, spectroelectrochemical, and theoretical studies of a tricyanovinyl-capped quaterthiophene: A correlation of semiconductor performance with physical properties. *Chemical Physics Letters*, v. 425, p. 251-256, 2006.
36. Cai, Xiuyu ; Burand, Michael W. ; Newman, Christopher R. ; da Silva Filho, Demetrio A. ; Pappenfus, Ted M. ; Bader, Mamoun M. ; Brédas, Jean-Luc ; Mann, Kent R. ; Frisbie, C. Daniel . N- and P-Channel Transport Behavior in Thin Film Transistors Based on Tricyanovinyl-Capped Oligothiophenes. *Journal of Physical Chemistry. B*, v. 110, p. 14590-14597, 2006.
37. Kang, Joo H. ; da Silva Filho, Demetrio ; Bredas, Jean-Luc ; Zhu, X.-Y. . Shallow trap states in pentacene thin films from molecular sliding. *Applied Physics Letters*, v. 86, p. 152115, 2005.
38. da Silva Filho, D. A. ; Kim, E.-G. ; Brédas, Jean-Luc . Transport Properties in the Rubrene Crystal: Electronic Coupling and Vibrational Reorganization Energy. *Advanced Materials (Weinheim)*, v. 17, p. 1072-1076, 2005.
39. Malagoli, M. ; Coropceanu, V. ; da Silva Filho, D. A. ; Brédas, Jean-Luc . A multimode analysis of the gas-phase photoelectron spectra in oligoacenes. *The Journal of Chemical Physics*, v. 120, p. 7490, 2004.
40. Lemaire, Vincent ; da Silva Filho, Demetrio A. ; Coropceanu, Veaceslav ; Lehmann, Matthias ; Geerts, Yves ; Piris, Jorge ; Debije, Michael G. ; van de Craats, Anick M. ; Senthikumar, Kittusamy ; Siebbeles, Laurens D. A. ; Warman, John M. ; Brédas, Jean-Luc ; Cornil, Jérôme . Charge Transport Properties in Discotic Liquid Crystals: A Quantum-Chemical Insight into Structure-Property Relationships. *Journal of the American Chemical Society*, v. 126, p. 3271-3279, 2004.
41. Marsal, P ; Avilov, I ; da Silva Filho, D.A ; Brédas, J.L ; Beljonne, D . Molecular hosts for triplet emission in light emitting diodes: A quantum-chemical study. *Chemical Physics Letters*, v. 392, p. 521-528, 2004.
42. Newman, Christopher R. ; Frisbie, C. Daniel ; da Silva Filho, Demetrio A. ; Brédas, Jean-Luc ; Ewbank, Paul C. ; Mann, Kent R. . Introduction to Organic Thin Film Transistors and Design of n-Channel Organic Semiconductors. *Chemistry of Materials*, v. 16, p. 4436-4451, 2004.
43. Chesterfield, Reid J. ; McKeen, John C. ; Newman, Christopher R. ; Ewbank, Paul C. ; da Silva Filho, Demétrio A. ; Brédas, Jean-Luc ; Miller, Larry L. ; Mann, Kent R. ; Frisbie, C. Daniel . Organic Thin Film Transistors Based on N -Alkyl Perylene Diimides: Charge Transport Kinetics as a Function of Gate Voltage and Temperature. *Journal of Physical Chemistry. B*, v. 108, p. 19281-19292, 2004.
44. da Silva Filho, Demetrio A. ; Friedlein, Rainer ; Coropceanu, Veaceslav ; Hrwall, Gunnar ; Osikowicz, Wojciech ; Suess, Christian ; Sorensen, Stacey L. ; Svensson, Svante ; Salaneck, William R. ; Brédas, Jean-Luc . Vibronic coupling in the ground and excited states of the naphthalene cation. *Chemical Communications (London)*, p. 1702, 2004.
45. Janzen, Daron E. ; Burand, Michael W. ; Ewbank, Paul C. ; Pappenfus, Ted M. ; Higuchi, Hiroyuki ; da Silva Filho, Demetrio A. ; Young, Victor G. ; Brédas, Jean-Luc ; Mann, Kent R. . Preparation and Characterization of π -Stacking Quinodimethane Oligothiophenes. Predicting Semiconductor Behavior and Bandwidths from Crystal Structures and Molecular Orbital Calculations. *Journal of the American Chemical Society*, v. 126, p. 15295-15308, 2004.
46. Cheng, Y. C. ; Silbey, R. J. ; da Silva Filho, D. A. ; Calbert, J. P. ; Cornil, J. ; Brédas, Jean-Luc . Three-dimensional band structure and bandlike mobility in oligoacene single crystals: A theoretical investigation. *The Journal of Chemical Physics*, v. 118, p. 3764, 2003.
47. DYNAROWICZTKA, P ; KITA, K ; MILART, P ; DHANABALAN, A ; CAVALLI, A ; DASILVAFILHO, D ; DOSSANTOS, M ; OLIVEIRA, O . Influence of apolar group structure on the properties of Langmuir monolayers of polyphenyl carboxylic acids. *Colloids and Surfaces. A, Physicochemical and Engineering Aspects*, v. 198-200, p. 141-150, 2002.
48. Bredas, J. L. ; J. P. Calbert ; da Silva-Filho, D. A. ; J. Cornil . Organic semiconductors: A theoretical characterization of the basic parameters governing charge transport. *PNAS. Proceedings of the National Academy of Sciences of the United States of America*, v. 99, p. 5804-5809, 2002.
49. Gruhn, Nadine E. ; da Silva Filho, Demetrio A. ; Bill, Tonja G. ; Malagoli, Massimo ; Coropceanu, Veaceslav ; Kahn, Antoine ; Brédas, Jean-Luc . The Vibrational Reorganization Energy in Pentacene: Molecular Influences on Charge Transport. *Journal of the American Chemical Society*, v. 124, p. 7918-7919, 2002.
50. Coropceanu, V. ; Malagoli, M. ; da Silva Filho, D. A. ; Gruhn, N. E. ; Bill, T. G. ; Brédas, J. L. . Hole- and Electron-Vibrational Couplings in Oligoacene Crystals: Intramolecular Contributions. *Physical Review Letters*, v. 89, p. 275503, 2002.
51. dos Santos, M ; SILVA-FILHO, D. A. . Electronic structure of 9-anthryl-oligothiophenes. *Synthetic Metals, Proceedings of ICSM'2000*, v. 121, p. 1493-1494, 2001.
52. Dynarowicz-Latka, P ; CAVALLI, A. ; SILVA-FILHO, D. A. ; Milart, P. ; dos Santos, M ; OLIVEIRA JR, O. N. . Quantitative treatment of surface potentials in Langmuir films from aromatic amphiphiles. *Chemical Physics Letters*, v. 337, p. 11-17, 2001.
53. Dynarowicz-Latka, P ; Kita, K. ; Milart, P. ; Dhanabalan, A. ; CAVALLI, A. ; SILVA-FILHO, D. A. ; OLIVEIRA JR, O. N. . Structural Modification Influences the Characteristics of Langmuir Monolayers from Aromatic Carboxylic Acids. *Journal of Colloid and Interface Science*, v. 239, p. 158-167, 2001.

54. Dynarowicz-Latka, P ; Kita, K. ; Milart, P. ; Dhanabalan, A. ; CAVALLI, A. ; da Silva-Filho, D. A. ; OLIVEIRA JR, O. N. . Langmuir monolayers from substituted aromatic carboxylic acids. *Progress in Colloid & Polymer Science*, v. 118, p. 5-10, 2001.
55. Dynarowicz-Latka, P ; CAVALLI, A. ; SILVA-FILHO, D. A. ; SANTOS, M. C. ; OLIVEIRA JR, O. N. . Dipole moments in Langmuir monolayers from aromatic carboxylic acids. *Chemical Physics Letters (Print)*, v. 326, p. 39-44, 2000.
56. Bezerra, A. G. ; GOMES, A. S. L. ; da Silva-Filho, D. A. ; ACIOLI, L. H. ; de Araujo, Cid B. ; de Melo, C. P. . Molecular hyperpolarizabilities of retinal derivatives. *Journal of Chemical Physics*, v. 111, p. 5102, 1999.
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58. BEZERRA, A.G. ; GOMES, A.S.L. ; DE ARAUJO, C.B. ; DA SILVA-FILHO, D.A. ; DE MELO, C.P. ; ATHAYDE-FILHO, A.P.F. ; DA ROCHA, G.B. ; MILLER, J. ; SIMAS, A.M. . Third-order optical nonlinearities in retinal derivatives and mesoionic compounds. *Third-order optical nonlinearities in retinal derivatives and mesoionic compounds*, v. NA, p. 308-310, 1998.

Book Published/Organized

1. Dynarowicz-Latka, P. (Org.); Kita, K. (Org.); Milart, P. (Org.); Filho, D. A. S. (Org.). 1. ed. Springer Berlin Heidelberg, 2004.

Book Chapter Published

1. da Silva Filho, D. A.; Olivier, Yoann; Coropceanu, Veaceslav; Brédas, Jean-Luc; Cornil, Jérôme. In: Zhenan Bao; Jason Locklin. (Org.). 1 ed. Boca Raton: Taylor & Francis, 2007, v. 1, p. 1-26.

Expanded Summary published in proceedings of conferences

1. BEZERRA, A.G.; GOMES, A.S.L.; DA SILVA-FILHO, D.A.; DE ARAUJO, C.B.; DE MELO, C.P. . , 1999, Baltimore. Technical Digest. Summaries of papers presented at the Conference on Lasers and Electro-Optics. Postconference Edition. CLEO '99. Conference on Lasers and Electro-Optics (IEEE Cat. No.99CH37013). v. NA. p. 265.
2. 2. DE ARAUJO, CID B.; GOMES, ANDERSON S. L.; BEZERRA, JR., ARANDI G.; da Silva-Filho, D. A.; DE MELO, CELSO P.; ATHAYDE-FILHO, A. P. F.; DA ROCHA, G. B.; MILLER, J.; SIMAS, A. M.; GUZMAN, ANGELA M. . , 1999, Cartagena de Indias. p. 12.

Academic Advisory

Academic Advisory - current

Master's Thesis

1. Carlos Alberto Moreira de Melo Neto. Begin: 2014. Dissertation (Master's in Física) - Universidade de Brasília. (Advisor).
2. Antonio Marcos Silva Santos. Begin: 2014. Dissertation (Master's in Física) - Universidade de Brasília, Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. (Advisor).

Ph.D. Thesis

1. Ana Cláudia Santos Camilo. Begin: 2015. Tese (Ph.D. in Física) - Universidade de Brasília, Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. (Advisor).
2. Tamires Lima Pereira. Begin: 2015. Tese (Ph.D. in Física) - Universidade de Brasília, Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. (Advisor).
3. Leonardo Evaristo de Sousa. Begin: 2015. Tese (Ph.D. in Física) - Universidade de Brasília, Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. (Advisor).
4. Arthur Akira Mamiya. Begin: 2015. Tese (Ph.D. in Física) - Universidade de Brasília, Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. (Advisor).

Scientific Initiation

1. Lethicia Vieira Marques. Begin: 2013 - Universidade de Brasília. (Advisor).

Academic Advisory - concluded

Master's Thesis

1. Tamires Lima Pereira. 2012. Dissertation (Master's in Physic) - Universidade de Brasília, Conselho Nacional de Desenvolvimento Científico e Tecnológico. *Advisor:* Demétrio Antônio da Silva Filho.
2. Ana Cláudia Santos Camilo. 2012. Dissertation (Master's in Physic) - Universidade de Brasília, Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. *Advisor:* Demétrio Antônio da Silva Filho.

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1. Igo Torres Lima. 2010. Thesis (Ph.D. in Physic) - Universidade de Brasília, Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. *Advisor:* Demétrio Antônio da Silva Filho.

Scientific Initiation

1. Guilherme Lucas Maciel Fernandes. 2012. Scientific Initiation - Universidade de Brasília, Conselho Nacional de Desenvolvimento Científico e Tecnológico. *Advisor:* Demétrio Antônio da Silva Filho.
2. Guilherme Ferreira. 2012. Scientific Initiation - Universidade de Brasília, Conselho Nacional de Desenvolvimento Científico e Tecnológico. *Advisor:* Demétrio Antônio da Silva Filho.
3. Walter Rodrigo Araújo Gregoldo. 2012. Scientific Initiation - Universidade de Brasília. *Advisor:* Demétrio Antônio da Silva Filho.
4. Sergio Fernandes da Silva Reis. 2012. Scientific Initiation - Universidade de Brasília, Conselho Nacional de Desenvolvimento Científico e Tecnológico. *Advisor:* Demétrio Antônio da Silva Filho.
5. Gabriel Fávero. 2010. Scientific Initiation - Universidade de Brasília. *Advisor:* Demétrio Antônio da Silva Filho.