



Europass Curriculum Vitae

Personal information



First name(s) / Surname(s)	Petrica Cristea
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E-mail(s)	pcristea@fizica.unibuc.ro, pcristea@gmail.com
Nationality	Romanian
Date of birth	28 June 1956
Gender	Male

Work experience

Dates	January 2019 →
Occupation or position held	Director of Department (Electricity, Solid-State Physics, Biophysics)
Main activities and responsibilities	Lead, manage and develop the department to ensure it achieves the highest possible standards of excellence in all its activities. Setting and advancing the academic strategy of the Department in line with Faculty and University strategic plans and direction. Develop and sustain appropriate structures for management, consultation, decision-making and communication with staff and students. Taught courses on: Applications of Nanoelectronics in Biology, (PhD and MS level), Molecular Dynamics (PhD and MS level), Electricity and Magnetism (graduate level).
Name and address of employer	<i>University of Bucharest, Faculty of Physics,</i> 405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)
Type of business or sector	Education
Dates	October 2018 → December 2018
Occupation or position held	Dean Interim
Main activities and responsibilities	Coordinating the development of and implementing the Faculty's Vision and Goals Statement. Leading the Faculty efforts toward achieving University goals. Leading, and coordinating college strategic planning and curriculum development.
Name and address of employer	<i>University of Bucharest, Faculty of Physics</i> 405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)
Type of business or sector	Education
Dates	March 2016 → October 2018
Occupation or position held	Director of Department (Electricity, Solid-State Physics, Biophysics)
Main activities and responsibilities	Lead, manage and develop the department to ensure it achieves the highest possible standards of excellence in all its activities. Setting and advancing the academic strategy of the Department in line with Faculty and University strategic plans and direction. Develop and sustain appropriate structures for management, consultation, decision-making and communication with staff and students. Taught courses on: Applications of Nanoelectronics in Biology, (PhD and MS level), Molecular Dynamics (PhD and MS level), Electricity and Magnetism (graduate level).
Name and address of employer	<i>University of Bucharest, Faculty of Physics</i> 405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)
Type of business or sector	Education
Dates	01 January 2006 → March 2016
Occupation or position held	Associate Professor
Main activities and responsibilities	Designed and taught courses on: Nanometric Devices (PhD and MS level), Applications of Nanoelectronics in Biology, (PhD and MS level), Molecular Dynamics (PhD and MS level), Electricity and Magnetism (graduate level). Tutored undergraduate and MS thesis on Electricity and Magnetism and Electronic Devices.
Name and address of employer	<i>University of Bucharest, Faculty of Physics</i> 405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)
Type of business or sector	Education
Dates	1 Jul 02 - 31 Dec 05
Occupation or position held	Postdoctoral Research Associate
Main activities and responsibilities	Development of modeling software (including theory) dedicated to materials modeling and process simulations in nuclear fuels. Design and implementation of numerical methods and codes for modeling of nonstoichiometric metal oxides, thermochemistry of oxygen defects, oxygen and heat diffusion in nuclear fuels. Design and implementation of numerical methods for simulating the phase diagram of complex binary systems.
Name and address of employer	<i>University of California - Los Alamos National Laboratory</i> NM 87545 Los Alamos (United States)

Type of business or sector	Research
Dates	August 2000 - 30 June 2002
Occupation or position held	Associate Professor
Main activities and responsibilities	Designed and taught courses on Materials for Electronics (graduate level), Nanometric Electronics and Devices (MS level). Studied the 2 DEG Properties in GaAs/AlxGa1-xAs Systems, Resonant Tunneling in GaAs/AlxGa1-xAs Double and Triple-Barrier Structures, Quantum Point Contacts (QPC): Au/(Au, Pt, Al, Pb), Pt/(Pt, Al, Pb), Al/(Al, Pb). Tutored over 30 undergraduate and MS thesis on Electricity and Magnetism and Electronic Devices.
Name and address of employer	<i>University of Bucharest, Faculty of Physics</i> 405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)
Type of business or sector	Education
Dates	10/1991 - 08/2000
Occupation or position held	Lecturer
Main activities and responsibilities	Taught courses on Electricity and Magnetism (graduate level), Solar Cells Technology. Designed numerical methods and codes for modeling of GaAs/Al(x)Ga(1-x)As heterojunction transistors. Studied the microstructural properties of vacuum deposited thin layers, investigated the electron irradiation effect on semiconductor thin layers, implemented methods for processing of thin layer Au (Al, Pt)/GaAs Schottky barrier diodes.
Name and address of employer	<i>University of Bucharest, Faculty of Physics</i> 405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)
Type of business or sector	Education
Dates	10/1987 - 10/1991
Occupation or position held	Assistant Professor
Main activities and responsibilities	Supervised students and organized the experimental work in laboratories. Taught Electricity and Magnetism and Experimental Techniques in Physics. Experimentally studied the Cu(2-x)S/CdS Solar Cells and the evolution of thin layers microstructure under high-energy electron irradiation.
Name and address of employer	<i>University of Bucharest, Faculty of Physics</i> 405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)
Type of business or sector	Education
Dates	September 1981 - October 1987
Occupation or position held	Technical Staff Member
Main activities and responsibilities	Head of X-Ray and SEM/TEM Laboratory, 4/1985-6/1987. Studied the technology and the properties of manganese-zinc ferrites for power applications. Used DTA/DTD, BET, XRD, and SEM/TEM.
Name and address of employer	<i>ROFEP SA, Urziceni</i> Bucuresti - Buzau, 925300 Urziceni (Romania)
Type of business or sector	Manufacturing and Research

Education and training

Dates	1989 - 1997
Title of qualification awarded	Ph.D. in Physics
Principal subjects / occupational skills covered	Numerical Modeling of Nanometric Devices
Name and type of organisation providing education and training	<i>University of Bucharest - Faculty of Physics (Faculty)</i> 405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)
Dates	15 September 1980 - 15 June 1981
Title of qualification awarded	M.S. Electron Physics
Principal subjects / occupational skills	Physics of Heterojunction Solar Cells

covered

Name and type of organisation providing education and training: University of Bucharest, Faculty of Physics
405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)

Dates: 15 September 1976 - 15 June 1980

Title of qualification awarded: **B.Sc**

Principal subjects / occupational skills covered: Physics

Name and type of organisation providing education and training: *University of Bucharest, Faculty of Physics*
405 / Atomistilor, RO - 077125 Bucharest - Magurele (Romania)

Personal skills and competences

Other language(s)

Self-assessment
European level ()*

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C2	Proficient user
B1	Independent user	C1	Proficient user	A2	Basic User	A2	Basic User	A1	Basic User

(*) [Common European Framework of Reference \(CEF\) level](#)

Social skills and competences

- Well developed team spirit and the ability to adapt to multicultural environments, gained through my work experience abroad.
- Good communications skills gained during my experience as a teacher.

Technical skills and competences

- Developed modeling software (including theory)
- Designed and implemented numerical methods for simulating the phase diagram of complex binary systems.
- Performed advanced, finite element simulations of coupled heat conduction, species diffusion and thermal expansion in nuclear fuel elements.
- Developed modeling software dedicated to self-consistent simulations of AlGaAs/GaAs interfaces and 2DEG systems, including HEMT transistors and multibarrier systems.
- Performed experimental validation of models and simulations using X-ray diffraction (XRD), Differential Thermal Analysis (DTA), Differential Scanning Calorimetry (DSC) and Scanning Electron Microscopy (SEM) on various materials/systems such as: BaFe12O19, SrFe12O19, NiZn, LiTiZn, and MnZn based ferrites, CdS, Cu2S, GaAs, Si, Si/Al, Si/Au, Ge/Al, Ge/Au, GaAs/Al, GaAs/Au.
- Designed and taught courses on Electricity and Magnetism (graduate level), Nanometric Devices (PhD and MS level), Applications of Nanoelectronics in Biology, (PhD and MS level), Molecular Dynamics (PhD and MS level).
- Supervised and trained the students representing Romania at the International Physics Olympiads and contests.

Computer skills and competences

Mathcad, Mathematica, Scilab, OriginPro, FlexPDE, WinGreen, Dynamics Solver, NanoEngineer, COMSOL, Microsoft Office tools, LaTeX

Driving licence(s)

B

Additional information

PROFESSIONAL MEMBERSHIPS

- American Physical Society, APS (Condensed Matter Physics, Materials Physics).
- New York Academy of Sciences, NYAS.
- The Minerals, Metals & Materials Society, TMS.
- European Physical Society, EPS.
- Romanian Physical Society, RPS.

- Balkan Physics Union, BPU.

JOURNAL REVIEWER / REFEREE

- Solid State Electronics (Elsevier).
- Journal of Physics and Chemistry of Solids (Elsevier).
- Modeling and Simulation in Materials Science and Engineering, MSMSE (IOP).
- International Journal of Heat and Mass Transfer (Elsevier).
- Journal of Optoelectronics and Advanced Materials, JOAM (INOE & INFM).
- Romanian Reports in Physics (Romanian Academy).
- Romanian Journal of Physics (Romanian Academy).
- Annals of Bucharest University. Series: Physics.

Annexes

SELECTED PUBLICATIONS

Papers

- B. Mihaila, M. Stan, J. C. Ramirez, A. Zubelewicz, and P. Cristea, "Simulations of Coupled Heat Transport, Oxygen Diffusion, and Thermal Expansion in UO₂ Nuclear Fuel Elements", Journal of Nuclear Materials, **394** (2-3), 182 (2009).
- M. Cruceru, D. Bartos, I. Cruceru, G. Carageorghiolopol, O. G. Dului, A. Barborica, P. Cristea, C. M. Niculae, R. C. Bobulescu, "A coordinate sensitive detector for particles generated in high energy reactions", Romanian Reports in Physics, Vol. **61**, **3**, 513 (2009).
- M. Stan, B. Mihaila, A. Zubelewicz, J. C. Ramirez, and P. Cristea, "Simulation of Heat and Oxygen Transport in a Nuclear Fuel Element", Theory, Simulation, and Computation (ADTSC), Science Highlights, 2008, **148** (2008).
- M. Stan, S. Rudin, J. Wills, B. P. Uberuaga, S. M. Valone, S. Hu, and P. Cristea "Models and Simulations of UO₂ Fuel Materials Properties", Theory, Simulation, and Computation (ADTSC), Science Highlights, 2008, **144** (2008).
- M. Stan, J. C. Ramirez, P. Cristea, B. P. Uberuaga, S. Srivilliputhur, C. Deo, S. Y. Hu, S. P. Rudin, and J. M. Wills, "Models and Simulations of Nuclear fuels Properties", Journal of Alloys and Compounds, **444**, **415** (2007) (Review paper).
- P. Cristea, M. Stan, and J. C. Ramirez, "Point Defects and Oxygen Diffusion in Fluorite-Type Oxides", Journal of Optoelectronics and Advanced Materials, **9**(6), 1750 (2007).
- J. C. Ramirez, M. Stan, and P. Cristea, "Simulations of Heat and Oxygen Diffusion in UO₂ Nuclear Fuel Rods", Journal of Nuclear Materials, **359**, 174 (2006).
- P. Cristea and M. Stan "Oxygen Diffusivity in CeO_{2-x}", TMS Letters, **2**, 91 (2005).
- M. Stan and P. Cristea, "Defects and Oxygen Diffusion in PuO_{2-x}", Journal of Nuclear Materials, **344**, 213 (2005).
- M. Stan and P. Cristea, "Thermochemistry of Defects and Oxygen Diffusion in PuO_{2-x}", Transactions of the American Nuclear Society, **91**, 491 (2004).
- I. Spanulescu and P. Cristea, "Nanometric Devices", Scientific Bulletin, Vol. **1**, **1**, 15 (2000). (Anniversary issue dedicated to honour Leo Esaki's contribution to the development of new quantum structures)
- P. Cristea, S. Spanulescu, I. Secareanu, and I. Spanulescu, "S-Matrix Approach for Resonant Tunneling in Double and Triple GaAs/AlGaAs Barrier Structures", Balkan Physics Letters **6**(2), 113 (1998)
- P. Cristea, "Resonant Tunneling in GaAs/Al(Y)Ga(1-Y)As Triple-Barrier Structures under Uniform Transverse Magnetic Field", Romanian Reports in Physics, Vol. **50**, No. 7-8-9, 641(1998)
- P. Cristea, I. Spanulescu, I. Secareanu, V. Ruxandra, S. Spanulescu, and N. Baltateanu, "Electron irradiation effect on vacuum-evaporated CdS thin layers", Journal of Materials Science Letters **12**, 1467 (1993)
- L. Stanculea, J. Neamtu, M. Feder, E. Segal, P. Cristea, and L. Gal, "Considerations on the sintering of manganese-zinc ferrite for power applications", Journal of Materials Science Letters **11**, 961 (1992)
- M. Feder, G. Catoiu, M. Catoiu, E. Segal, and P. Cristea, "Sintering of LiTiZn ferrite with low saturation magnetization", Journal of Materials Science Letters **6**, 1201 (1987)
- M. Feder, G. Catoiu, M. Catoiu, E. Segal, M. Enescu, and P. Cristea, "Considerations on nickel-zinc ferrite preparation", Journal of Materials Science Letters **4**, 1485 (1985)

Technical REPORTS (international databases)

- B. Mihaila, J. Ramirez, P. Cristea and M. Stan, "Thermal Expansion of UO_2+x Nuclear Fuel Rods from a Model Coupling Heat Transfer and Oxygen Diffusion", Los Alamos National Laboratory Tech. Report, LA-UR:-08-04952, New Mexico, USA (2008) (<http://www.osti.gov>).
- P. Cristea and M. Stan, "Thermochemistry of Defects and Oxygen Diffusion in PuO_{2-x} and UO_2+x ", Los Alamos National Laboratory Report, LA-UR: 04-6020, New Mexico, USA (2004).
- P. Cristea and M. Stan, "Oxygen Diffusion in Nonstoichiometric Cerium Dioxide", Los Alamos National Laboratory Report, LA-UR: 04-5196, New Mexico, USA (2004).
- P. Cristea and M. Stan, "Thermochemistry of Defects and Oxygen Diffusion in Ceria. Preliminary Extension to Plutonia", Los Alamos National Laboratory Report, LA-UR: 03-7597, 2003, USA (2003).

Invited lectures

- R.V. Ghita, C. Logofatu, C.C. Negrilă, Petrica Cristea, "Aspects of GaSb Active Device Technology", The 9th International Conference on Advanced Materials, ROCAM 2017, Bucharest, ROMANIA.
- M. Stan, B. Mihaila, Di Yun, Zhi-Gang Mei, and P. Cristea, "Heterogeneity Effects on the Thermal Conductivity of UO_2+x ", 2013 TMS Annual Meeting & Exhibition, March-3-7, 2013, San Antonio, Texas, U.S.A.
- P. Cristea, M. Stan, and Zhi-Gang Mei, "Thermodynamic and Kinetic Properties of Non-Stoichiometric Nuclear Fuels", The 7th International Conference on Advanced Materials, ROCAM 2012, August 28-31, 2012, Brasov, ROMANIA.
- M. Stan, B. Mihaila, P. Cristea, S. Hu, and J. C. Ramirez, "Discovery and Design of Materials for Energy Applications", Romanian Conference on Advanced Materials ROCAM 2009, August 25-28, Brasov, Romania.
- M. Stan, B. Mihaila, D. A. Korzekwa, P. Cristea, and J. C. Ramirez, "Computational Design of Advanced Nuclear Fuels", Multiscale Materials Modeling MMM 2008, October 27-31, Tallahassee, Florida, U.S.A.
- M. Stan, P. Cristea, S. Y. Hu, B. Mihaila, S. M. Valone, A. D. Andersson, L. A. Morales, K. J. McClellan, and J. C. Ramirez, "Thermodynamics of Advanced Oxide Nuclear Fuels", Materials Science and Technology Conference, Oct. 5-9, 2008, Pittsburgh, PA, U.S.A.
- M. Stan, B. Mihaila, S. M. Valone, A. D. Andersson, K. J. McClellan, L. Morales, S. D. Conradson, S. P. Rudin, J. M. Wills, P. Cristea, and J. C. Ramirez, Models and Simulations of Advanced Oxide Fuels, Nuclear Energy Capability Review, Los Alamos National Laboratory, May 12-16, 2008
- M. Stan, B. Mihaila, S. M. Valone, A. D. Andersson, K. J. McClellan, L. Morales, S. D. Conradson, S. P. Rudin, J. M. Wills, P. Cristea, and J. C. Ramirez, "Thermodynamic Models of Actinide Oxides" Materials Capability Review, Los Alamos National Laboratory, April 28 – May 1, 2008, U.S.A.
- M. Stan, S. Y. Hu, B. Mihaila, P. Cristea, and J. C. Ramirez, "Multiscale Simulation of Thermo-mechanical Processes in Irradiated Fission-Reactor Materials", Computational Materials Science Network (CMSN) Symposium, Salt Lake City, UT, Sept. 13-15, 2007, U.S.A.
- M. Stan, J.C. Ramirez and P.Cristea, "Thermodynamics Of Nuclear Fuel Materials", High Temperature Materials Chemistry conference, HTMC, Vienna, Austria, Sept. 18-22, 2006.
- M. Stan, J. C. Ramirez, P. Cristea, B. P. Uberuaga, S. Srivilliputhur, C. Deo, S. Y. Hu, S. P. Rudin, and J. M. Wills, "Models and Simulations of Nuclear Fuel Materials Properties", Plutonium Futures – The Science 2006, July 9–13, 2006, Asilomar Conference Grounds, Pacific Grove, California, U.S.A.
- M. Stan, J. C. Ramirez, and P. Cristea, "Thermodynamic Models and Simulations of Nuclear Fuel Materials", E-MRS Conference, Nice, France, May 29-June 1, 2006.
- M. Stan, P. Cristea, S. M. Valone, B. P. Uberuaga, M. I. Baskes, C. Deo, and J. C. Ramirez "Models and Simulations of Thermodynamic Properties of Actinide Based Materials", MST Division Review, March 1-3, 2005, Los Alamos, New Mexico, U.S.A.
- P. Cristea, "The Science of Imperfect Materials", University of New Mexico UNM, LASS Lectures, Rm. 612, July 6, 2004, Los Alamos, New Mexico, U.S.A.
- P. Cristea, S. Spanulescu, I. Secareanu, and I. Spanulescu, "S-Matrix Approach for Resonant Tunneling in Double and Triple GaAs/AlGaAs Barrier Structures", 3rd General Conference of the Balkan Physical Union (BPU-3), 2-5 Sept., Cluj-Napoca, 1997, Romania.

Recent Conferences & Workshops

- R.V. Ghita, D Pantelica, C. Logofatu, C. C. Negrila, Petrica Cristea, L. Fara, "Features of Si+Implanted n-GaSb (100) Photosensitive Structure", EU PVSEC 2017, 33rd European PV Solar Energy Conference and Exhibition, Amsterdam, The Netherlands, 2017.
- Zhi-Gang Mei, M. Stan, P. Cristea, and D. Andersson, "Defects and diffusion in $UO_{2\pm x}$ by quantum mechanics and statistical thermodynamic approaches", 2013 TMS Annual Meeting & Exhibition, March-3-7, 2013, San Antonio, Texas, U.S.A.
- M. Stan, B. Mihaila, S. Y. Hu, J. C. Ramirez, and P. Cristea, "Models and Simulations of Nuclear Fuels: Results and Strategy", Materials Models and Simulations for Nuclear Fuels (MMSNF-8) Workshop, Oct. 19-21, 2009, Albuquerque, New Mexico, U.S.A.
- M. Stan, C. R. Stanek, B. P. Uberuaga, B. Mihaila, S. M. Valone, A. D. Andersson, P. Cristea, S. Y. Hu, J. C. Ramirez, V. Tikare, P. Turchi, and M. Samaras, "Computer Simulations for Nuclear Energy Applications", High Speed Computing Conference, Salishan Lodge, April 27-30, 2009, Gleneden Beach, Oregon, U.S.A.
- M. Stan, S. Y. Hu, B. Mihaila, P. Cristea, and J. C. Ramirez, "Mesoscale Models and Simulations of Nuclear Fuels", Computational Materials Science Network (CMSN) Project on Multiscale Simulation of Thermo-mechanical Processes in Irradiated Fission-Reactor Materials", March 11-12, 2009, Univ. of Florida, FL., U.S.A.
- P. Cristea and M. Stan, "Analytical Model of Defect Configurational Entropy of PuO_{2-x} and CeO_{2-x} ", MRS Spring Meeting, Symposium NN: Actinides IV Basic Science, Applications, and Technology, March 25-28, 2008, San Francisco, California, U.S.A.
- P. Cristea and M. Stan, "Simulations of Coupled Heat and Oxygen Diffusion in Porous Urania Fuel", Materials Models and Simulations for Nuclear Fuels (MMSNF-6) workshop, Tokyo, Japan, Dec. 14-15, 2007.
- M. Stan, J. C. Ramirez, P. Cristea, S. Y. Hu, C. Deo, B. P. Uberuaga, S. Srivilliputhur, S. P. Rudin, and J. M. Wills, "Models and Simulations of Nuclear Fuel Materials Properties", Materials Capability Review, Los Alamos National Laboratory, Los Alamos, NM, May 15-18, 2007.
- P. Cristea, M. Stan, and J. C. Ramirez, "Point Defects and Oxygen Diffusion in Fluorite-Type Oxides", Romanian Conference on Advanced Materials ROCAM 2006, September 11-14, Bucharest-Magurele, Romania
- M. Stan, J.C. Ramirez, P. Cristea, M.I. Baskes, S.M. Valone, and Z. Hu, "Thermodynamics of Roses-Toward Predictive Thermodynamic Models and Simulations", THERMO International 2006, Sixteenth Symposium on Thermophysical Properties, Nineteenth International Conference on Chemical Thermodynamics, Sixty-First Calorimetry Conference, July 30 – August 4, 2006, University of Colorado Boulder, Colorado, U.S.A.
- M. Stan, J. C. Ramirez and P. Cristea, "Materials models and fuel performance simulations", Proceedings of the Materials Models and Simulations for Nuclear Fuels, MMSNF-5, June 1-2, 2006, Novotel Nice Centre, Nice, France
- J. C. Ramirez, M. Stan, and P. Cristea, "Simulations of Heat and Oxygen Diffusion in UO_{2+x} Nuclear Fuel Rods", Proceedings of the Materials Models and Simulations for Nuclear Fuels, MMSNF-5, June 1-2, 2006, Novotel Nice Centre, Nice, France
- M. Stan, J.C. Ramirez, and P. Cristea, "Thermodynamic Models and Simulations of Nuclear Fuel Materials", USAE-MRS IUMRS ICEM 2006, SYMPOSIUM N: Nuclear Materials and Materials for Fusion, Spring Meeting, May 29 – June 2, 2006, Strasbourg, France
- J. C. Ramirez, P. Cristea, and M. Stan, "Finite element modeling of heat and oxygen atom diffusion in nuclear fuel rods", American Physical Society APS Meeting, March 13-17, 2006, Baltimore, Maryland, USA
- P. Cristea and Marius Stan, "Thermochemistry of Point Defects in PuO_{2-x} ", 2006 TMS Annual Meeting and Exhibition, Point Defects in Materials Symposium, March 12-16, 2006, San Antonio, Texas, USA
- P. Cristea and M. Stan, "Oxygen Diffusion in $UO_{2\pm x}$ " Proceedings of the Materials Modeling and Simulations for Nuclear Fuels, MMSNF-4 Workshop, Nov. 17-18, 2005, Washington, D.C., USA
- J.C. Ramirez, P. Cristea, S. Y. Hu, M. Stan, and M. I. Baskes, "Incorporating Atomistic and Phase Field Calculations into Heat, Oxygen, and Helium Transport Simulations in Nuclear Fuel Rods", Proceedings of the Materials Modeling and Simulations for Nuclear Fuels, MMSNF-4 Workshop, Nov.

17-18, 2005, Washington, D.C., USA

- J.C. Ramirez, P. Cristea, and M. Stan, "Modeling heat and oxygen atom diffusion in nuclear fuel rods with FEMLAB", Proceedings of the FEMLAB Conference, October 23-25, 2005, Boston, MA, USA

- J. C. Ramirez, P. Cristea, and M. Stan, "Simulations of Heat Transfer and Oxygen Diffusion in UO₂ Fuels", Proceedings of the Materials Science and Engineering for Nuclear Fuels Workshop, October 26-27, 2005, Los Alamos, New Mexico, USA

- B. P. Uberuaga, M. Stan, C. Deo, P. Cristea, S. G. Srivilliputhur, S. Rudin, J. Wills, and T. Patten, "Multi-Scale Models of Defects and Oxygen Diffusion in Oxide Fuels", Proceedings of the Materials Science and Engineering for Nuclear Fuels Workshop, October 26-27, 2005, Los Alamos, New Mexico, USA.

- M. Stan, J. C. Ramirez, P. Cristea, C. S. Deo, B. P. Uberuaga, S. Srivilliputhur, S. P. Rudin, and J. M. Wills, "Models and Simulations in Support of Nuclear Fuels", AFCI Semi-Annual Meeting, Sept. 21-23, 2005, Arlington, VA, USA