

LIST OF PUBLICATIONS AND INVITED TALKS (1978-2024)

Prof. Ana Proykova, PhD, Doctor of Sciences (Doctor-Habil),
St. Kliment Ohridski University of Sofia

I. Published opinions of the SCENIHR (2009-2013) and the SCHEER (2013-today) – scientific committees of the European Commission, DG Health and Food Safety:

EC-1) Scientific Basis for the Definition of the Term “nanomaterial”

Jim Bridges, Kenneth Dawson, Wim de Jong, Thomas Jung, Ana Proykova, Qasim Chaudhry, Ruth Duncan, Eric Gaffet, Keld Alstrup Jensen, Wolfgang Kreyling, Bernadette Quinn

© European Union 2010

ISSN 1831-4783 ISBN 978-92-79-12757-1 doi:10.2772/39703 ND-AS-09-004-EN-N

EC-2) Opinion on the Environmental and Health Risks Posed by Depleted Uranium (2010)

Wolfgang Dekant, Pim De Voogt, Borut Peterlin, Marco Vighi, Pier Roberto Danesi, Victor Meineke, Ana Proykova

ISSN 1831-4775 ISBN 978-92-79-12754-0 doi:10.2772/3253 ND-AR-09-005-EN-N

EC-3) Health effects of security scanners for passenger screening (based on X-ray technology) (2012)

Anssi Auvinen, Thomas Jung, Ana Proykova, Denis Bard, Richard Paynter, Geraldine O'Reilly, Christoph Hoeschen, Peter O'Neill

ISSN 1831-4783 ISBN 978-92-79-26316-3 doi:10.2772/87426 ND-AS-12-004-EN-N

EC-4) Health Effects of Artificial Light (2012)

Mats-Olof Mattsson, Thomas Jung, Ana Proykova, Francine Behar-Cohen, Frank de Gruijl, James Ferguson, Johnni Hansen, Harry Moseley, Georges Zissis

ISSN 1831-4783 ISBN 978-92-79-26314-9 doi:10.2772/8624 ND-AS-12-002-EN-N

EC-5) Nanosilver: safety, health and environmental effects and role in antimicrobial resistance

Philippe Hartemann, Peter Hoet, Ana Proykova, Teresa Fernandes, Anders Baun, Wim De Jong, Juliane Filser, Arne Hensten, Carsten Kneuer, Jean-Yves Maillard, Hannu Norppa, Martin Scheringer, Susan Wijnhoven

© European Union, 2013

ISSN:1831-4783 ISBN: 978-92-79-30132-2 doi: 10.2772/76851 ND-AS-13-002-EN-N

{cited in Silver Nanoparticles in the Environment, edited by Jingfu Liu, Guibin Jiang Springer 9783662460702, April 2015}

EC-6) Addressing the New Challenges for Risk Assessment (2013) (SCCS, SCHER, SCENIHR)

© European Union, 2013

ISSN 2315-0106 ISBN 978-92-79-31206-9 doi:10.2772/37863 ND-AZ-13-002-EN-N

EC-7) Opinion on Synthetic Biology I: Definition

Theo Vermeire, Michelle Epstein, Philippe Hartemann, Ana Proykova, Luis Martinez Martinez, Teresa Fernandes, Qasim Chaudhry, Suresh Chandra Rastogi, Rainer Breitling, Camille Delebecque, Timothy Gardner, Katia Pauwels, James Philp, Markus Schmidt, Eriko Takano

© European Union, 2014

ISSN 1831-4783 ISBN 978-92-79-30136-0 doi:10.2772/76553 ND-AS-13-006-EN-N

EC-8) Position Statement on emerging and newly identified health risks to be drawn to the attention of the European Commission (SCENIHR) (2014)
ISSN 1831-4783 ISBN 978-92-79-55011-9 Doi:10.2875/996348 EW-AS-16-001-EN-N
http://ec.europa.eu/health/scientific_committees/emerging/docs/scenih_r_s_002.pdf

EC-9) Guidance on the Determination of Potential Health Effects of Nanomaterials Used in Medical Devices, Igor Emri, Philippe Hartemann, Ana Proykova, Konrad Rydzynski, Jim Bridges, Lars Bjursten, Wim De Jong, Robert Geertsma, Arne Hensten, Nils Gjerdet
© European Union, 2015

ISSN 1831-4783 ISBN 978-92-79-35590-5 doi: 10.2772/41391 ND-AS-14-001-EN-N

EC-10) Opinion on Synthetic Biology II: Risk assessment methodologies and safety aspects

Theo Vermeire, Michelle Epstein, Philippe Hartemann, Ana Proykova, Luis Martinez Martinez, Teresa Fernandes, Qasim Chaudhry, Suresh Chandra Rastogi, Rainer Breitling, Camille Delebecque, Timothy Gardner, Katia Pauwels, James Philp, Markus Schmidt, Eriko Takano

© European Union, 2015

ISSN 1831-4783 ISBN 978-92-79-43916-2 doi:10.2772/63529 ND-AS-14-004-EN-N

http://ec.europa.eu/health/scientific_committees/emerging/docs/scenih_r_o_048.pdf

EC-11) Opinion on Synthetic Biology III: Risks to the environment and biodiversity related to synthetic biology and research priorities in the field of synthetic biology (64 pages)

3 December 2015 (ISSN 2315-0106; ISBN 978-92-79-54973-1 doi:10.2875/590512 EW-AZ-16-001-EN-N)

Theo Vermeire, Michelle Epstein, Philippe Hartemann, Ana Proykova, Luis Martinez Martinez, Teresa Fernandes, Qasim Chaudhry, Suresh Chandra Rastogi, Rainer Breitling, Camille Delebecque, Timothy Gardner, Katia Pauwels, James Philp, Markus Schmidt, Eriko Takano

https://ec.europa.eu/health/sites/health/files/scientific_committees/emerging/docs/scenih_r_o_050.pdf

EC-12) Opinion on Biological effects of ultraviolet radiation relevant to health with particular reference to sunbeds for cosmetic purposes (17 November 2016)

<https://publications.europa.eu/en/publication-detail/-/publication/cbca2f2a-024a-11e7-8a35-01aa75ed71a1/language-en>

© European Union, 2016

ISSN 2467-4559 doi:10.2875/26719 ISBN 978-92-79-65684-2 EW-CA-17-002-EN-N

https://ec.europa.eu/health/sites/health/files/scientific_committees/scheer/docs/scheer_o_003.pdf

Ana Proykova, Theodoros Samaras, Rodica Mariana Ion, Pieter Jan Coenraads, Claire Beausoleil, Jean-Francois Doré, Rudiger Greinert, Philippe Hartemann, Norbert Leitgeb, Lesley Rushton, Greet Schoeters

EC-13) Opinion on Biological effects of UV-C radiation relevant to health with particular reference to UV-C lamps (2 February 2017) Theodoros Samaras, Ana Proykova, Renate Krätke, Rodica Mariana Ion, Pieter Jan Coenraads, Lesley Rushton, Norbert Leitgeb
© European Union, 2017

ISSN 2467-4559 doi:10.2875/569379 ISBN 978-92-79-80132-7 EW-CA-18-005-EN-N

https://ec.europa.eu/health/sites/health/files/scientific_committees/scheer/docs/scheer_o_002_0.pdf

EC-14) Guidance on the structure and content of SCHEER Opinions and statements (23 February 2017) Ana Proykova, Philippe Hartemann, Emanuela Testai, Theo Vermeire, Renate Krätke, Alena Bartonova, Claire Beausoleil, Teresa Fernandes, Jan Linders, Greta Schoeters

https://ec.europa.eu/health/sites/health/files/scientific_committees/scheer/docs/scheer_o_006.pdf

ISSN 2467-4559 ISBN 978-92-79-80076-4 doi:10.2875/31271 EW-CA-18-001-EN-N

EC-15) Potential risks to human health of Light Emitting Diodes (LEDs) (Preliminary 6 July 2017) (Final 6 June 2018)

Ana Proykova, Theodoros Samaras, Rodica Mariana Ion, Ellen Bruzell, Jean-François Doré, Massimo Nicolò, John O'Hagan, Celia Sánchez-Ramos, Linda van Kerkhof

https://ec.europa.eu/health/sites/health/files/scientific_committees/scheer/docs/scheer_o_011.pdf

DOI: 10.13140/RG.2.2.24119.62885

EC-16) Emerging Issues and the Role of the SCHEER, Position Paper (2018, 5-6 June) © European Union, 2018

ISSN 2467-4559 doi:10.2875/33037 ISBN 978-92-76-00232-1 EW-CA-19-004-EN-N

EC-17) Memorandum on weight of evidence and uncertainties, (26 June 2018) Ana Proykova, Renate Krätke, Roberto Bertolini, Teresa Borges, Raquel Duarte-Davidson, Demosthenes Panagiotakos, Rémy Slama, Marian Scott, Emanuela Testai, Theo Vermeire, Marco Vighi, Alena Bartonova, Claire Beausoleil, Teresa Fernandes, Jan Linders, Greta Schoeters, Philippe Hartemann

ISSN 2467-4559 doi:10.2875/386011 ISBN 978-92-76-00233-8 EW-CA-19-005-EN-N

DOI: 10.13140/RG.2.2.10697.85604

EC-18) Statement on emerging health and environmental issues (2018) The SCHEER adopted this statement by written procedure on 20 December 2018, published 2019-02-22

ISSN 2467-4559 doi:10.2875/840266 ISBN 978-92-76-00231-4 EW-CA-19-003-EN-N

EC-19) [Final Opinion on the safety of breast implants in relation to anaplastic large cell lymphoma](#) [Abstract](#)

Adopted on 26 March 2021

EC-20) [Final Opinion on Electronic cigarettes](#) [Abstract](#) Adopted on 16 April 2021

EC-21) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Chlorpyrifos Search, Adopted on 15-16 June 2022

EC-22) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Carbamazepine, Adopted on 20 May 2022

EC-23) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" - Bifenthrin Search , Adopted on 6 May 2022

EC-24) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Azithromycin, Adopted on 6 May 2022

EC-25) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Clarithromycin, Adopted on 6 May 2022

EC-26) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Esfenvalerate, Adopted on 25 March 2022

EC-27) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Permethrin, Adopted on 25 March 2022

EC-28) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" - Deltamethrin Search for available translations of the preceding link EN... Adopted on 25 March 2022

EC-29) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Thiamethoxam, Adopted on 25 March 2022

EC-30) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Thiacloprid, Adopted on 25 March 2022

EC-31) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Clothianidin, Adopted on 25 March 2022

EC-32) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Acetamiprid, Adopted on 25 March 2022

EC-33) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" - 17-Alpha-Ethinylestradiol (EE2), Beta-Estradiol (E2) and Estrone (E1) Adopted on 1 March 2022

EC-34) Scientific Opinion on "Draft Environmental Quality Standards for Priority Substances under the Water Framework Directive" – Erythromycin, Adopted on 28 February 2022

EC-35) Statement II on emerging health and environmental issues (2022) Adopted on **13 January 2022**

EC-36) Opinion of the Scientific Committee on health, environmental and emerging risks on the safety of titanium dioxide in toys, **Jan 2024**, v.146 REGULATORY TOXICOLOGY AND PHARMACOLOGY, 105527, Q1, in TOXICOLOGY. in SCIE edition 13/106,

II. Peer-reviewed publications in English:(1978-2021)

1. A. Proykova, A. Minkova, B. Slavov, Ts. Bonchev, **Bulg. J. Phys.** V (1978),3, p.248-258: **not in WoS ISSN 1310-0157 (print) ISSN:1314-2666 (on line)"** A Monte Carlo Calculation of the Energy and Angular Distribution of 19.6 keV Conversion Electrons in Thin Foils".2. A. Proykova, **Nucl. Instr. Meth.** v.160 (1979),2,p.321:"*Depth Selection by Means of Scattered Electrons: Monte Carlo Calculation of Energy Distribution*"

ISSN=0168-9002 [https://doi.org/10.1016/0029-554X\(79\)90610-4](https://doi.org/10.1016/0029-554X(79)90610-4)

Q1 in instrumentations; Q3 in Physics; IF(1997)=0.89 citations of the article 18

3. A. Proykova, **Bulg. J. Phys.** VI(1979),1,p.28:"*Electron Scattering in Thin Foils*"**ISSN 1310-0157 (print) ISSN:1314-2666 (on line)**
4. A. Proykova, **J.Phys.D**, v.12 (1979) p.87: "*A Monte Carlo Calculation of the angular distribution of muons in lead*"
JOURNAL OF PHYSICS D-APPLIED PHYSICS ISSN: 0022-3727
Q2; (1997); IF(1997)=1.095.
5. A. Proykova, **Nucl.Instr.Meth.** v.174(1980),p.327:"*Conversion electron penetration through metallic and oxidized thin layers*"**ISSN=0168-9002**
Q1 in instrumentations; Q3 in Physics; IF(1997)=0.89 citations of the article
6. A. Proykova, **J.Phys.D**, v.13, pp.291-305 (1980):"*An analysis of scattering processes of conversion electrons in solid layers*" ISSN: 0022-3727
Q2; (1997); IF(1997)=1.09
7. P. Topalov and A. Proykova, **Nucl.Instr.and Meth. in Phys. Res. A236** (1985), p.142:"*Angular Conversion Electron Mossbauer Spectroscopy(ACEMS) - a method for surface layer study*" ISSN=0168-9002
Q1 in instrumentations; Q3 in Physics; IF(1997)=0.89
8. A. Proykova, **Nucl. Instr. Meth. A254** (1987),p.611:"*Determination of Detecting System Response Function*" **ISSN=0168-9002**
Q1 in instrumentations; Q3 in Physics; IF(1997)=0.89
9. D.L. Balabanski, A. Proykova, P.S. Kamenov, *The Time-dependence of Resonantly Filtered Recoilless Gamma-radiation – an approach to the Numerical Problem*, **NUCL INSTRUM METH B 16:** (4-5) 434-438 JUN 1986
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTION ISSN: 0168-583X
Q1 in instrumentations; Q4 in Physics; IF(1997)=1.016
10. A. Proykova, K. Christova, T.Christov,N.Nenov, D.Kolev , **Int. Journal Appl. Rad. Isotope**, v.42, No3.pp. 279-283"*Radiation Field from a Large Cylindrical Source*" (1991).
APPLIED RADIATION AND ISOTOPES ISSN: 0969-8043
Q2(1997) in Nucl Sci&Techn IF(1997) = 0.464
11. A. Proykova, *Selected Applications of Mossbauer Radiation (invited paper)*,
Rad. Phys. Chem. 41, No.4/5(1993) 705-724. [https://doi.org/10.1016/0969-806X\(93\)90319-P](https://doi.org/10.1016/0969-806X(93)90319-P)
RADIATION PHYSICS AND CHEMISTRY ISSN: 0969-806X
PERGAMON-ELSEVIER SCIENCE LTD
Q2(1997) in Nucl Sci&Techn IF(1997) = 0.483
12. A. Proykova, N.Nankoff and Laszlo Grenacs, *A Model for Initial Ionization and Charge Fluctuations in ^{12}B and ^{16}N Ions Generated in Nuclear Muon Capture*, **Bulg.J. Phys. v.22**, No.1,2 (1995). **ISSN 1310-0157 (print) ISSN:1314-2666 (on line)**
13. A. Proykova and Laszlo Grenacs, *Optimization of the Recoil-Direction-Sensitive Target for Muon Capture*, **Nucl. Instr. Meth. A** 362 (1995)234.
Q1(1997) IF(1997)=0.89 ISSN=0168-9002
14. Abela R., Bodek, K., Boeni, P., Foroughi, F., Grenacs, L., Jarczyk, L., Kystrin, S., Lang, J., Mueller, R., Navert, S., Naviliat Cuncic, O., **Proykova, A.**, Smyrski, J., Sromicki, J., Stephan, E., Stzalkowski A., Zejma, J., Zipper, W., *Optimization Study for a measurement of polarization observables in mu(-)capture on nuclei*, **Helvetica Physica Acta v.68**, No.2, p.223 (1995)**Q3 (2000) IF(1997) = 0.355**;
HELVETICA PHYSICA ACTA ISSN: 0018-0238

15. Bee, C.P., Conti D., Hardi, M., Kystrin, S., Lang, J., Naviliat Cuncic, O., Sromicki, J., Stephan, E., Bodek, K., Smyrski, J., Stzalkowski A., Zejma, J., Grenacs, L., Abela R., Boeni, P., Foroughi, F., Zipper, W., **Proykova, A.**, *Polarimetry of N-16 (g.s.) produced in mu(-) capture on O-16 nuclei*, **Acta Polonica B**, v.28, No.1, p.1659 (1997) ISSN 05877-4254 **Q3**; ; IF(1997) =0.458 **Physica**
16. A. Proykova and R.S. Berry, *Analogues in Clusters of Second-Order Phase Transitions?*, **Z Phys. D**, v. 40, p.215 (1997)
ZEITSCHRIFT FUR PHYSIK D-ATOMS MOLECULES AND CLUSTERS
ISSN: 0178-7683
Q3 (1997) IF(1997) = 1.581
17. K. Ball, R.S. Berry, R. Kunz, F.-Y Li, **A. Proykova**, D. Wales, *From Topographies to Dynamics on Multidimensional Potential Energy Surfaces of Atomic Clusters*, **Science**, 271(1996) 963.**Q1**; SCIENCE ISSN: 0036-8075 eISSN: 1095-9203
AMER ASSOC ADVANCEMENT SCIENCE
(retrieved June 15 2017: citing 170 in Web of Science; 169 in Scopus)
18. R.A.Radev, A.Proykova, F.Y.Li and R.S.Berry, *Orientalional Order-Disorder Phase Transitions in Plastic Molecular Clusters: Projection of Three- Dimensional Distributions onto a Two- Dimensional Surface*, **J. Chem. Phys.** v.109, No.9, Sep.1, p. 3596 (1998)**Q1**; IF= 3.147 JOURNAL OF CHEMICAL PHYSICS ISSN: 0021-9606 AMER INST PHYSICS
19. R.Radev, A. Proykova, R.S.Berry, *Visualisation of the Orientalional Order-Disorder Phase Transitions in Plastic Molecular Clusters*, **Internet Journal of Chemistry** ISSN: 1099-8292 (Aug.1998) <http://www.ijc.com/articles/1998v1/36>

RoMEO: This is a RoMEO **green** journal

20. Ana I. Proykova, Rossen A. Radev, *One Dimensional Random Walk as a Statistical Test of Random Number Generators*, **Ann.Rep.** v.90 p.161 (1998) **not in WoS**
21. Ana Proykova and Peter Michailov, Entropy-driven phase transitions in 2D, **Computers in Physics**, Computing in Science & Engineering (CiSE) (1998) **ISSN: 1521-9615 eISSN: 1558-366X** IEEE COMPUTER SOC
http://physics.clarku.edu/cise/hard_disks/results.html
Q4(1999) IF(2002) = 0.795
22. A.Proykova, R. Radev, Feng-Yin Li, R.S.Berry, *Structural Transformations in Small Molecular Clusters*, **J. Chem. Phys.** v.110, No. 8, p. 3887-3896 (1999)
Q1; IF(1999) = 3.289
23. Ana Proykova and R. Stephen Berry, *Surface Effects in Order-Disorder Transformation in Molecular Clusters*, **Eur. Phys. J. D** v.9, p.445 (1999).
EUROPEAN JOURNAL OF PHYSICS ISSN: 0143-0807 eISSN: 1361-6404
Q3(2003) IF(2003) = 0.503
24. Ana Proykova, *How to improve a random number generator*, **Comp. Phys. Comm.** 124 (2000) 125-131.COMPUTER PHYSICS COMMUNICATIONS ISSN: 0010-4655
ELSEVIER SCIENCE BV PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS
Q 1 in computer science; Q2 in Physics; IF(2000)=1.09

25. P.Michailov and A.Proykova, *Two-dimensional melting*, **Internet J. Chem.**ISSN: 1099-8292 <http://www.ijc.com/articles/1999v2/22>
26. R.Stephen Berry and Ana Proykova, *New Insights into Phase Transitions from Cluster Behaviour*, in **Cluster and Nanostructure Interfaces**, Ed. P. Jena, S.N. Khana, B.K. Rao, (World Scientific 2000) p.663 (ISBN 981-02-4219-0).
27. A. Proykova, *Dynamics of Temperature Driven Phase Transitions*, **Bussei Kenkyu** (Kyoto), v. 76 (2001) p.62-66.
28. A. Proykova, D. Nikolova, and R.S. Berry, Symmetry in Order-Disorder Changes of Molecular Clusters, **Phys.Rev.B** 65,085411 (2002) 15 Feb. issue 8: <http://xxx.lanl.gov/physics/9911049>
PHYSICAL REVIEW B ISSN: 0163-1829Q1(2002) IF=3.327
29. A. Proykova, S. Pisov, R. Radev, P. Mihailov, I. Daykov, and R.S.Berry, *Dynamical Phase Coexistence of Molecular Nano-clusters: Kinetics versus Thermodynamics*, **Nanoscience& Nanotechnology**, p.18-20 (Heron Press Science Series, Sofia 2001) (ISBN 954-580-097-6).
30. A. Proykova, *The Role of Metastable States in the Temperature Driven Phase Changes of Molecular Nanoclusters*, **Nanoscience& Nanotechnology**, p.12-14 (Heron Press Science Series, Sofia 2001).
31. R. Radev and A. Proykova, *Parallel J-W Monte Carlo Simulations of Thermal Phase Changes in Finite-size Systems*, "**Meetings in Physics @ University of Sofia**", v.2, p.24 (Heron Press Science Series, Sofia 2001). (ISBN 954-580-108-5)
32. I. Daykov and A. Proykova, *Cluster Size Dependence of the Temperature Interval of Coexisting Phases Observed in Plastic Molecular Clusters*, "**Meetings in Physics @ University of Sofia**", v.2, p.31(Heron Press Science Series, Sofia 2001).
33. S. Pisov and A. Proykova, *Dynamical Coexistence of Different Phases in Isolated Molecular Clusters: Influence of the Molecular Size*, "**Meetings in Physics @ University of Sofia**", v.2, p.43 (Heron Press Science Series, Sofia 2001).
34. A. Proykova, S. Pisov and R.S. Berry, *Dynamical Coexistence of Phases in Molecular Clusters*, **J. Chem. Phys.** v. 115, 8 Nov. p.8583-8591 (2001).**Q1**; IF(2001) JOURNAL OF CHEMICAL PHYSICS,ISSN: 0021-9606 AMER INST PHYSICS
35. A. Proykova, L. Roussenova and D. Stauffer, *Nucleation of Market Shocks in Sornette-Ide model*, **Quantative Finance** 3, p. 95 (2003)
QUANTITATIVE FINANCE ISSN: 1469-7688 eISSN: 1469-7696
Q3 IF=0.818
http://xxx.lanl.gov/list/cond_matt/0110124/
36. S. Pisov and A. Proykova, *Charge Dependence of Temperature-Driven Phase Transitions of Molecular Nanoclusters: Molecular Dynamics Simulation*, **Comp. Phys. Comm.** v. 147/1-2 pp. 238-241 (2002) <http://xxx.lanl.gov/list/physics/020355>
Q1 in Computer Science ; IF(2002)= 1.204
37. R. Radev and A. Proykova, *Parallel J-W Monte Carlo Simulations of Thermal Phase Changes in Finite-size Systems*, **Comp. Phys. Comm.** v. 147/1-2 pp.242-245 (2002) <http://xxx.lanl.gov/list/physics/0203057>

Q1 in Computer Science ; IF(2002)= 1.204

38. A. Proykova, S. Pisov, R. Radev, P. Mihailov, I. Daykov, and R.S.Berry, *Temperature Induced Phase Transformations of Molecular Nanoclusters*, **Vacuum**, v.68/1 pp.87-96 (2002). VACUUM ISSN: 0042-207X PERGAMON-ELSEVIER SCIENCE LTD

Q 2 (2002) IF=0.723

39. A. Proykova, *The Role of Metastable States in the Temperature Driven Phase Changes of Molecular Nanoclusters*, **Vacuum**, v.68/1 pp.97-104 (2002). **Q 2 (2002) IF=0.723**

40. A. Proykova and D. Stauffer, *Social Percolation and the Influence of Mass Media*, **Physica A**, vol 312/1-2 pp 300-304, (2002). <http://xxx.lanl.gov/list/cond-mat/0203375>

PHYSICA A ISSN: 0378-4371

Q2 IF=1.369

41. S. Pisov and A. Proykova, Optimization of Molecular Clusters Configurations using a Genetic Algorithm, "**Meetings in Physics @ University of Sofia**", v. 3, p.40 (Heron Press Science Series, 2002). (ISBN 954-580-120-4). <http://xxx.lanl.gov/list/physics/020955>

42. E. Daykova, A. Proykova, I. Ohmine, *Statistical Calculations of Entropy of Methane Clathrate*, in "**Meetings in Physics @ University of Sofia**", v. 3, p.44 (Heron

Press Science Series, 2002). (ISBN 954-580-120-4). 43. Iovka Dragieva and Ana Proykova, *Bond Strengths of Diatomic Molecules in Nanoscale Materials*, p. 13 in **Nanoscience & Nanotechnology'03**, eds. E. Balabanova and I. Dragieva, (Heron Press Science Series, Sofia 2003) (ISBN 954-580-139-5.) 44. A. Proykova, S. Pisov, I.

Dragieva, J. Chelikowski, *DFT Calculations of Optimized Structures of Some Coordination Compounds*, p.17, **Nanoscience & Nanotechnology**, (Heron Press Science Series, Sofia 2003) (ISBN 954-580-139-5).

45. [Dietrich Stauffer](#) and [Ana Proykova](#), *Cellular Automata Simulation of Medication-Induced Autoimmune Diseases*, **Physica A :Statistical Mechanics and Its Applications**, v.331, p.545-551(2004). <http://xxx.lanl.gov/list/cond-mat/0306723>

PHYSICA A ISSN: 0378-4371 **Q2; IF=1.369 (2004)**

46. E. Daykova and A. Proykova, *Can small free methane clusters exhibit phase-like transitions?*, "**Meetings in Physics @ University of Sofia**", v.4, p.32, (Heron Press Science Series, 2003) (ISBN 954-580-138-7).

<http://xxx.lanl.gov/abs/physics/0312098>

47. [Ana Proykova](#) and [Dietrich Stauffer](#), Classical simulations of magnetic structures for chromium clusters: size effects, **Central European Journal of Physics**, v.3,

No.2, pp.209-220 (2005) <http://xxx.lanl.gov/list/cond-mat/0310240> ISSN 1644-3608 **Q4; IF(2005)=0.524**

48. Ana Proykova and Boris Karadjov, *A Model for Randomly Correlated Deposition*

<http://xxx.lanl.gov/abs/cond-mat/0312047> 49. A. Proykova, I.P. Daykov, R. Stephen Berry, *Second- and First-Order Phase Transitions in Molecular Nanoclusters*, *Adventures in Chemical Physics: A Special Volume of Advances in Chemical Physics* (ISSN: 0065-2385), Volume 132, 131-150, 2005.

Q2, IF(2003)=2.105

50. A. Proykova and H.Iliev, *Simulated Stress and Stretch of SWCNT*, **SIMS2004** eds. Brian Elmegaard, Jon Sparring, Kenny Erleben, Kim Sorensen, pp.273-279 (Copenhagen, 2004) (ISBN 87-7475-316 9)

51. Hristo Iliev and Ana Proykova, Mechanically Induced Defects in Single-Wall Carbon Nanotubes, "**Meetings in Physics @ University of Sofia**", vol.5, pp.87-91 (2004). (ISBN 954-580-166-2)

52. E. Daykova and A. Proykova, *A PECULIAR STRUCTURE OF FREE METHANE CLUSTERS AT LOW TEMPERATURES*, "**Meetings in Physics @ University of**

- Sofia**", v.5, pp.69-75(Heron Press Science Series, Sofia 2004) (ISBN 954-580-166-2).
53. A. Proykova, *Simulation Techniques (Monte Carlo, Molecular Dynamics, DFT) for nanosized systems*, in **Nanoscale Magnetic Oxides & Bio-World**, eds. I. Nedkov and Ph.Tailhades, p.215-224 (Heron Press Sofia 2004)(ISBN: 954-580-156-5)
54. Ana Proykova, *Molecular Dynamics simulation of gas adsorption and absorption in Nanotubes*, in Carbon Nanotubes: from Basic Research to Nanotechnology, Springer, Series: [NATO Science Series II: Mathematics, Physics and Chemistry](#), pp.187-207, Vol. 222 eds. Popov, Valentin N.; Lambin, Philippe (Eds.) (2006)
55. Hristo Iliev, Ana Proykova and Feng Yin-Li, *Carbon nanotubes with vacancies under external mechanical stress and electric field*, in Carbon Nanotubes: from Basic Research to Nanotechnology, Springer, Series: [NATO Science Series II: Mathematics, Physics and Chemistry](#), p.213, Vol. 222, eds. Popov, Valentin N.; Lambin, Ph. 2006, ISBN: 1-4020-4572-7
56. Evgeniya Daykova, Stoyan Pisov, and Ana Proykova, *First-principle and Molecular Dynamics simulation of methane adsorption on graphene*, in Carbon Nanotubes: from Basic Research to Nanotechnology, Springer, Series: [NATO Science Series II: Mathematics, Physics and Chemistry](#), p.209, Vol. 222, eds. Popov, Valentin N.; Lambin, Philippe (Eds.) 2006, ISBN: 1-4020-4572-7 <http://perso.fundp.ac.be/~vpopov/Table-of-Contents.pdf>
57. Ana Proykova and RS Berry (**invited topical review**) *Insights into Phase Transitions from Phase Changes of Clusters*, **J. Phys. B: At. Mol. Opt. Phys.** **39** (2006) R167-R202 **ISSN: 0953-4075 eISSN: 1361-6455 IOP PUBLISHING LTD Q1** (2006); IF=2.024
58. Kalin Arsov and Ana Proykova, *Antiferromagnetic versus Non-Collinear Arrangement of Chromium Clusters of Various Sizes*, **Nanoscience & Nanotechnology**, pp. 23-26 (Heron Press Science Series, Sofia 2006)
59. A. Proykova, *Topology of the potential energy surface and the origin of phase changes in finite atomic clusters*, **CP899**, American Institute of Physics, p.69 (2007)
60. H.S. Iliev, F.Y. Li, H.F. Lu, A.. Proykova, *Modulation of band-structure of defective single-wall carbon nanotubes under a transverse electric field*, **CP899, American Institute of Physics**, p.718 (2007) {978-E0-7354-0404-5/07}
61. D.Stauffer, A.Proykova, K.Lampe, *Monte Carlo Simulation of Age-Dependent Host-Parasite Relations*. **PHYSICA A** (2007) 384, 397 **ISSN: 0378-4371 Q2**; IF(2007)=1.43
62. A. Proykova, H. Iliev, F.Y.Li, *Useful vacancies in Single Wall Carbon Nanotubes*, **ECS Transactions** - Phoenix, AZ, Volume 13, "Carbon Nanotubes and Nanostructures: Applications and Devices" (2008)
63. H.Iliev, A. Proykova, *The useful defects in carbon nanotubes: from order to chaos*, **Meetings in Physics @ University of Sofia**, v.8, pp. 11-15 (Heron Press Science Series 2007) ISBN-13: 978-954-580-244-7
64. A. Proykova, *Challenges of Computations at the Nanoscale*, **Journal of Computational and Theoretical Nanoscience**, vol.7, No.9, p.1806-1813, 2010 (**Special Issue: Technology Trends and Theory of Nanoscale Devices for Quantum Applications**) **ISSN: 1546-1955 (Print): EISSN: 1546-1963 (Online) Q3**
65. V. Antonov, D. Borisova, S. Pisov, A. Proykova, BAND GAP DEPENDENCE ON CARBON NANOTUBE DIAMETERS AND VACANCY DENSITY IN SINGLE WALL CARBON NANOTUBES, **Nanoscience & nanotechnology**, v. 11, pp.17-19 (2010)
66. H. Iliev nd A. Proykova, CHIRALITY INFLUENCE ON TRANSITION METAL ADSORPTION ON SINGLE WALL CARBON NANOTUBES WITH VACANCIES, **Nanoscience & nanotechnology**, v. 11, pp.12-15 (2010)
67. Dobrina Borisova, Vladislav Antonov, Ana Proykova, "Hydrogen Sulfide Adsorption on a Defective Graphene", *Int Journal of Quantum Chemistry* (Article first published online: 24 MAR 2012 **IJQC** 113(6) (2013) 786–791 DOI: 10.1002/qua.24077) **ISSN: 0020-7608 eISSN: 1097-461X WILEY Q4**; IF(2013) = 1.166

68. Antonov, V., Borisova, D., Proykova, A., IJQC 113(6) (2013) 792–796 (Article first published online: 24 MAR 2012) "Vacancy Spatial Distribution Causes Different Magnetism in Graphene", DOI: 10.1002/qua.24078)

ISSN: 0020-7608 eISSN: 1097-461X WILEY

Q4; IF(2013) = 1.166

69. Philippe Hartemann, Peter Hoet, Ana Proykova, Teresa Fernandes, Anders Baun, Wim De Jong, Juliane Filser, Arne Hensten, Carsten Kneuer, Jean-Yves Maillard, Hannu Norppa, Martin Scheringer, Susan Wijnhoven, Nanosilver: Safety, health and environmental effects and role in antimicrobial resistance, *Materials Today*, volume 18, Number 3, April 2015, pp.122-123, <https://www.sciencedirect.com/science/article/pii/S1369702115000619>

Q1 (2015) IF = 17.793

70. S. Pisov, V. Antonov, A. Proykova, MAGNETIC PROPERTIES OF GRAPHENE WITH VACANCIES - OPEN QUESTIONS, *Nanoscience & Nanotechnology* ISSN:1313-8995, 09/2014

71. Matthias G Wacker, Ana Proykova, Gustavo M Santos, Dealing With Nanosafety Around The Globe - Regulation vs. Innovation, *International Journal of Pharmaceutics* 509 (2016) 95-106

Q1; Impact factor: 3.862 (2017) ISSN: 0378-5173 (print); 1873-3476 (web)

INTERNATIONAL JOURNAL OF PHARMACEUTICS ISSN: 0378-5173

ELSEVIER SCIENCE BV PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

72. Wim H De Jong, Demosthenes Panagiotakos, Ana Proykova, Theodoros Samaras, Mark W Clemens, Daphne De Jong, Ingrid Hopper, Hinne A Rakhorst, Fabio Santanelli di Pompeo, Suzanne D Turner, *Regul Toxicol Pharmacol.* 2021 Jun 30;125:104982. doi: 10.1016/j.yrtph.2021.104982.

73. Desislava Dimova, Stoyan Pisov, Nikolay Panchev, Miroslava Nedyalkova, Sergio Madurga, Ana Proykova, Insight into electric field-induced rupture mechanism of water-in-toluene emulsion films from a model system, 17 May 2017, in *The Journal of Chemical Physics* (Vol.146, Issue 19)

<http://scitation.aip.org/content/aip/journal/jcp/146/19/10.1063/1.4983163>

DOI: 10.1063/1.4983163 Q1 (2017) IF=3.164

JOURNAL OF CHEMICAL PHYSICS ISSN: 0021-9606 AMER INST PHYSICS

74. Desislava Dimova, Stoyan Pisov, Nikolay Panchev, Ana Proykova, The role of canonical ensemble in predicting toluene film structure under external electric field, *Nanoscience & Nanotechnology: Nanostructured material, application and innovation transfer*, v17. No.1, pp.14-18 (2017) ISSN:1313-8995

75. Desislava Dimova, Stoyan Pisov, Ana Proykova, Magnetism Of Bilayer Graphene With Vacancies, *Advanced Materials Proceedings*, Volume 2, Issue 12, Page 779-782, Year 2017 | DOI: 10.5185/amp.2017/914

<https://www.vbripress.com/amp/public/image/Article/1594124017779-782.pdf>

76. WH De Jong, D Panagiotakos, A Proykova, T Samaras, MW Clemens, ... *Regulatory Toxicology and Pharmacology* 125,104982 DOI:10.1016/j.yrtph.2021.104982

77. WH De Jong, T Borges, RM Ion, R Kraetke, D Panagiotakos, A Proykova, T Samaras, E Testai, T Vermeire, *Regulatory toxicology and pharmacology* 111, 104546
1 (2020)

III. Articles in books/proceedings

78. Ana Proykova, Digital Infrastructures Interaction with Humanities Infrastructures, p.167 in *STAY TUNED TO THE FUTURE, IMPACT OF THE RESEARCH*

INFRASTRUCTURES FOR SOCIAL SCIENCES AND HUMANITIES, edited by Bente Maegaard and Riccardo Pozzo with Alberto Melloni and Matthew Woollard as co-editors, LEO S. OLSCHKI EDITORE (2019), ISBN 978 88 222 6643 9

79. A. Proykova, *Gas adsorption on/in carbon tubes*, **Proceedings of the NATO ASI on Carbon Nanotubes: From Basic Research to Nanotechnology**, 25 May, 2005, Sozopol (BG) Book of materials

<http://www.fundp.ac.be/~vpopov/nato-asi-2005.htm>

80. A. Proykova, *Time scales in Molecular Dynamics. Ab-initio Molecular Dynamics and coarse graining techniques*, **Proceedings of the NATO ASI on Carbon Nanotubes: From Basic Research to Nanotechnology**, 27 May, 2005, Sozopol (BG) Book of materials <http://www.fundp.ac.be/~vpopov/nato-asi-2005.htm>

80a. A. Proykova, *Diffusion of the adsorbed gases*, **Proceedings of the NATO ASI on Carbon Nanotubes: From Basic Research to Nanotechnology**, 31 May, 2005, Sozopol (BG) <http://www.fundp.ac.be/~vpopov/nato-asi-2005.htm>

81. A. Proykova, *Advanced Methods for Modeling of Nanoscale systems*, Proceedings of the Third Workshop on Nanoscience and nanotechnology, Nov.29-30,2001.

82. I. Iliev, S. Pisov, A. Proykova, HIGH PERFORMANCE COMPUTING FOR NANOSCIENCE AND NANOTECHNOLOGY (technical report), Nanoscience & Nanotechnology (ISSN:1313-8995), 18, № 2, pp.39-41, eds. E. Balabanova, E. Mileva, Sofia, 2018

83. Ana Proykova, HOW WILL CLOUD SERVICES CHANGE UNDER THE GDPR IN 2020, (КАК ЩЕ СЕ ПРОМЕНИ ПОТРЕБЛЕНИЕТО НА ОБЛАЧНИТЕ УСЛУГИ В УСЛОВИЯ НА GDPR ПРЕЗ 2020 Г.) pp.51-56, Сборник доклади, Тринадесета Национална конференция Образованието и изследванията в информационното общество, 5 ноември 2020, Пловдив, ISSN 2534-8663

84. Стоян Писов и Ана Пройкиова, КОНТЕЙНЕРИ ВЪВ ВИСОКОПРОИЗВОДИТЕЛНИ ИЗЧИСЛИТЕЛНИ КЛЪСТЕРИ – КАЗУСИ, pp.57-63, Сборник доклади, Тринадесета Национална конференция “Образованието и изследванията в информационното общество”, 5 ноември 2020, Пловдив, ISSN 2534-8663

85. Иво Илиев и Ана Пройкиова, ОПТИМИЗИРАНЕ НА КОНТЕЙНЕРИ ЗА ПАРАЛЕЛЕН КЛЪСТЕР, pp.64-67, Сборник доклади, Тринадесета Национална конференция Образованието и изследванията в информационното общество, 5 ноември 2020, Пловдив, ISSN 2534-8663

86. Ralitsa Dimitrova, Ana Proykova, Четиринадесета Национална конференция “Образованието и изследванията в информационното общество”, 27-28.09.2021

IV. Book Chapters

87. A.Proykova, Preface to the Nanometrology Report, 128 p. (2006) DOI: 10.13140/RG.2.1.2375.2404

eds. Witold Łojkowski, Rasit Turan, Ana Proykova,

<http://nanoparticles.org/pdf/nanometrology.pdf>

88. Roman Pielaszek, Witold Łojkowski, Hubert Matysiak, Tomasz Wejrzanowski, Agnieszka Opalinska, Robert Fedyk, Andrzej Burjan, Ana Proykova, Hristo Iliev, Chapter 5: Characterisation of particle size in nanopowders and bulk nanocrystalline

materials in Nanometrology Report (2006)

89. Theresa Burke · Richard Leach · Rob Boyd · Mark Gee · Debdulal Roy · Andrew Yacoot ·

- Hans Ulrich-Danzebrink · Thorsten Dziomba · Ludger Koenders · Laura E. Depero · Kim Carneiro · Kai Dirscherl · Valérie Morazzani · Jukka Lausmaa · Leslie Pendrill · Allan Pidduck · Gert Roebben · Alfonso Sánchez · Wolfgang E S Unger · Ana Proykova
European Nanometrology 2020 (June **2010**) DOI: 10.13140/RG.2.1.1996.4882
90. A. Proykova, in *Nanotechnology in Aerospace*, February **2007**, contributions to chapter 7: 'Environment, Health and Safety Aspects', chapter 8: 'Ethical, Legal and Social Aspects' in <http://www.nanowerk.com/news/newsid=1541.php>

V. Lectures published in books

91. I. Dragieva, A. Proykova, *The Art of Chemical Bond Creation for Synthesis and Application of Nanoscale Materials*, pp.21- 33, lecture 2 in **Introduction to Nanotechnology**, eds. J. Dusza and I. Dragieva (Heron Press Science Series 2006) (ISBN-13: 978-954-580-265-2)
92. A. Proykova, *Modeling of Nanoclusters at Finite Temperatures*, pp.113-140, lecture 6 in **Introduction to Nanotechnology**, eds. J. Dusza and I. Dragieva (Heron Press Science Series 2006) (ISBN-13: 978-954-580-265-2)
93. A. Proykova, *Simulation Techniques for Nanosized systems: Monte Carlo, Molecular Dynamics, Density Functional Theory*, pp. 165-181, lecture 8 in **Introduction to Nanotechnology**, eds. J. Dusza and I. Dragieva (Heron Press Science Series 2006) (ISBN-13: 978-954-580-265-2)

VI. Invited lectures and talks

94. Ana Proykova, **Dynamics of nanoclusters - Understanding the Stability of Matter**, **16.03.2019**, Sofia – 130 anniversary of Faculty of Mathematics and Informatics
95. **Ralitsa Dimitrova**, Ana Proykova, A model of the ion irradiation of supported graphene, Sofia – 130 anniversary of Faculty of Mathematics and Informatics, 16.03.2019
96. H. Iliev, A. Proykova, **Модел на адсорбция на метални кълъстери върху дефектни нанотръби**, **16.03.2019**, Sofia – 130 anniversary of Faculty of Mathematics and Informatics
97. Ana Proykova, [Mechanical properties of Single Wall Carbon Nanotubes](http://cluster.phys.uni-sofia.bg/anap/talks.php), (invited talk, the National University of Singapore, February, 6,2004) <http://cluster.phys.uni-sofia.bg/anap/talks.php>
98. A. Proykova "National Centre on Nanotechnology (NCNT)", (plenary talk at the 1st NanoForum Workshop: Nanomaterials and Applications, Sinaia, Romania, October 5-7th, 2003 <http://www.nanoforum.org/events/workshop>
99. Ana Proykova, Gas adsorption on/in carbon tubes, <http://www.fundp.ac.be/~vpopov/nato-asi-2005.htm> (under Presentations)
100. Ana Proykova, Time-scales in Molecular Dynamics. Ab-initio (quantum) Molecular Dynamics and coarse graining techniques <http://www.fundp.ac.be/~vpopov/nato-asi-2005.htm> (under Presentations)
101. Ana Proykova, Diffusion of the adsorbed gases <http://www.fundp.ac.be/~vpopov/nato-asi-2005.htm> (under Presentations)
102. A. Proykova, *Dynamics of Temperature Driven Phase Transitions*, (**invited talk**)
103. Ana Proykova (ソフィア大物理) Dynamics of Temperature Driven Phase Transitions 柳尾朋洋 (東大総合文化) クラスタ構造転移における集団運動とカオス
 Workshop on " Dynamical Problems on Rugged Potential Energy Surfaces: Scrutiny of the Middle Regime between Mechanical Determinism and Stochastic Processes", Nara, Japan, 13-14 Nov., 2000. <http://www2.kobe-u.ac.jp/~tamiki/seminar/Nara-report2000.htm>
104. A. Proykova, *The Role of Metastable States in the Temperature Driven Phase Transformations of Molecular Nanoclusters*, (**invited**)

- talk) Nineteenth Bulgarian- Greek Symposium on Physics of Semiconductors, December 15,2000.
105. Ana Proykova, “*Thermodynamics of systems with few degrees of freedom*” (**invited talk**) at the UNESCO-ROSTE funded conference on Fundamental Problems and New Perspectives in Thermodynamics February 17 - 21 2002. http://www.cism.it/cgi/course_info_main.cgi?title=Fundamental+Problems+and+New+Perspectives+in+Thermodynamics&year=2002
<http://www.fys.ku.dk/~andresen/GRC/invitedtalks.html>
106. A. Proykova, TEMPUS project (1997) (lecture course on Statistical methods in Nuclear Physics - Part I, and Simulations in Nuclear and Statistical Physics Part II)
107. Ana Proykova, *Self- and Induced Organization of Nanoparticles* (**keynote lecture** The 1st NanoForum Workshop: Nanomaterials and Applications, Sinaia, Romania, October 5-7th, (2003). <http://www.nanoforum.org/events/workshop/Proykova.pdf>
108. Ana Proykova, pp.3; 5-9; 12-18 <http://www.euspen.eu/page1418/Resources/Modelling-Simulation-Proceedings> (2011) (ISBN:978-0-9566809-6-9)
109. A. Proykova in European Nanometrology Strategy Paper, pp.127-139 “Modeling and simulations for nanometrology” (09.06.2011)
<http://www.nano.org.uk/files/home/european-nanometrology.pdf>
110. Conference Paper: **Modeling and Simulation: Nanometrology Status and Future Needs Within Europe** Publication Date: January 2011 Author(s): **Ana Proykova, Markus Baer, Jorgen Garnaes, Carl Frase, Ludger Koenders**
 DOI: 10.13140/2.1.3331.5840
111. Conference presentation: Potential Health Risks Linked to Artificial Lights, Co-authors: Mats-Olof Mattsson, Thomas Jung, Ana Proykova, Francine Behar-Cohen, Frank de Gruijl, James Ferguson, Johnni Hansen, Harry Moseley, Georges Zissis
 DOI: 10.13140/RG.2.1.1515.0807
112. Ana Proykova, GENDER SUMMIT 2012, Brussels, Conference presentation *Unconventional Thinking – along the road less travelled*, DOI: 10.13140/RG.2.2.11329.61283
113. Clusters of molecules and people: Ana Proykova at TEDx (Mladost) Women 2013
<https://www.youtube.com/watch?v=AuM3mo0J9IU> (in Bulgarian)
114. Ana Proykova (key speech), TIMMED 2016, Timisoara, Romania
http://www.umft.ro/data_files/documente-atasate-evenimente/2727/timmed_202016_20-20conference_20program.pdf
115. MODERATOR: Prof. Ana Proykova, Faculty of Physics, University of Sofia
<http://events.idg.bg/en/2016/3D/agenda> organizer ICT media, 9 June 2016: 3D printing – synergy between theory and practice Session 1: Theory, trends and analyses
116. Ana Proykova (invited talk), Nanomaterials in medical devices – a challenge in transferring the knowledge of new materials
<http://e-university.tu-sofia.bg/e-conf/index.php?r=180> 18th International Workshop on Nanoscience and Nanotechnology, NANO 2016, 18 - 19 November 2016,
117. Ana Proykova (chair and invited talk on Artificial Light in connection with the UNESCO Year of the Light 2015)
<http://e-university.tu-sofia.bg/e-conf/?konf=57&kliuch=arhivNANO2015> 17th International Workshop on Nanoscience and Nanotechnology, NANO 2015, 27 - 28 November 2015)
118. Ana Proykova (Invited talk): Order-disorder transitions in finite-size clusters of objects
<http://www.brijuni-conference.irb.hr/program14.html> The Brijuni Conference Self organizing matter and emergence, 25-30 August, 2014
119. Ana Proykova (keynote talk) SIZE-DEPENDENT EMERGENCE OF CRYSTALLINITY IN MOLECULAR CLUSTERS, Seventh National Crystallographic Symposium with International Participation 3-5 October 2018, Sofia, Bulgaria DOI: 10.13140/RG.2.2.27720.16641

120. Ana Proykova (invited lecture at the Karoll Foundation 7.11.2018) Public funding of scientific research - how to choose? how to get it? DOI: 10.13140/RG.2.2.13603.71203
121. Ana Proykova Opening Talk NANO 2018: **Magnetic moments in a graphene sheet with vacancies generated by proton-beam bombardment**, D. Dimova, S. Pisov, A. Proykova, Book of abstracts NANO-2018 DOI 10.13140/RG.2.2.14298.39361

VII. Publications on science policy (in Bulgarian) 122. Ana Proykova, *Visions of Aliens*, SuperM, May (1999)

123. Ana Proykova, European Week of Science (*Европейска седмица на науката, 3-9 Ноември 2003*), НАУКА (Science) (Union of the Bulgarian Scientists) p.56, No.6 (2003) http://www.usb-bg.org/Bg/Nauka_En_6%6003.htm (ISSN 0861 3362)
124. Ana Proykova, *"Women in Physics" International Conference*, NAUKA (Science) (Union of the Bulgarian Scientists), No..2, p.34 (2002)
125. Ana Proykova, New Books (review), NAUKA(Science) (Union of the Bulgarian Scientists), No.4, p. 66 (2000)

126. Ana Proykova, *The Challenges of Bachelor Education in Bulgarian Universities – Sad Thoughts and Little Hope*, NAUKA(Science) (Union of the Bulgarian Scientists), N.3, p. 31 (2000)

127. Ана **Proykova**, Penka Lazarova – Кариера във физиката – ‘да’ или ‘не’ за жените в България (Career in Physics – „yes” or „no” for the Bulgarian women) in Сборник от доклади на конференция с международно участие “The researcher as a factor for the development of the knowledge society”, 28-29.11.2005, Sofia, Bulgaria, pp.72-77 www-it.fmi.uni-sofia.bg/REKS/pub/ProceedingsREKS.pdf

128. Ана Proykova, *Desire to create (Желанието да създаваш е по-силно от това да потребяваш*, AZBUKI (Национален седмичник за образование и наука, брой 46 (636), стр.1 и стр.3, 12-18 Ноември 2003.

129. Ана Proykova, RESEARCH DATA ALLIANCE. DATA, DATA – BIG DATA! AND WHAT? pp.6-9, НАУКА – кн. 5/2020, том XXX, Издание на Съюза на учените в България

130. Ана Proykova, The New Technologies - a Challenge for High-tech Societies, НАУКА – кн. 3/2021, стр.16-19, том XXXI. Издание на Съюза на учените в България

VIII. Publications on science policy (in English)

131. A. Proykova, The Monte Carlo Group Research and International Activities in Nanoscience, **Advances in Bulgarian Science**, issue 4 (2007) pp.21-25, NACID (ISSN 1312-6164) EBSCO AN MFS:31821023

132. A. Proykova and Angela di Virgillio, Report on the Third Conference “Women in Physics” held in Seoul, Korea, Oct. 2008, Europhysics News, v.40 p. 8 (2009)

133. A.Proykova, Globalization, Education, and Science in Globalization and Cultural Differences, Proceedings of the Fourth Fulbright Conference, Sofia, May 19-21, (Bulgarian-American Fulbright Commission Press) p. 57-61 (2000).

134. A. Proykova, INTERNATIONALIZATION OF EDUCATION in: EDUCATION AND CIVIL SOCIETY IN THE POST-TOTALITARIAN WORLD, Third Fulbright Conference Dedicated to the 5th Anniversary of the Bulgarian Fulbright Commission, Sofia, May 14-17, (1998).

135. A. Proykova, A Link in the Long Chain of the World Cultures in: UNDERSTANDING DIFFERENCES AND BUILDING BRIDGES, The Second Fulbright Conference Dedicated to the 50th Anniversary of the Fulbright Program, Sofia, May 16-19, 1996
136. A. Proykova “National Centre on Nanotechnology (NCNT)”, (oral presentation at the 1st NanoForum Workshop: Nanomaterials and Applications, Sinaia, Romania, October 5-7th, 2003 <http://www.nanoforum.org/events/workshop>
137. A. Proykova, Women in Physics in Bulgaria – Statistics and Challenges, **American Institute of Physics Conference Proceedings**, v. 1119, pp.89-90 (2009)
138. A. Proykova, “Two-in-one” could be beneficial for the European research infrastructures, *Il Nuovo Saggiatore*, Vol. 27, anno 2011, no. 1-2 , p.71 <http://www.sif.it/SIF/en/portal/attivita/saggiatore/econtents> <http://prometeo.sif.it/papers/online/sag/027/01-02/pdf/01-indice.pdf>
139. A. Proykova, Women in Physics in Bulgaria–Enhancing Research, WOMEN IN PHYSICS: 4th IUPAP International Conference on Women in Physics. AIP Conference Proceedings, Volume 1517, pp. 80-81 (2013).140. A. Proykova, *Il Nuovo Saggiatore*, vol. 28, No.6, November-December 2012, p. 66. <http://prometeo.sif.it/papers/online/sag/028/05-06/pdf/01-indice.pdf>
141. A. Proykova, *The second European gender summit 2012 – agenda for excellence*, e-EPS, <http://www.epsnews.eu/2012/12/2nd-gender-summit-2012/>
142. A. Proykova, *National, Regional, and European Physical Societies*, Scientific and Human Legacy of Julius Wess, August 27-28, 2011, Hotel “Lepenski Vir”, Donji Milanovac, Serbia <http://www.slideshare.net/seenet/a-proykova-national-regional-and-european-physical-societies>
143. A. Proykova, EPS Emmy Noether Distinction for Women in Physics <http://www.epsnews.eu/2013/02/eps-noether-distinction/>
144. Rumiana Dimova (RD) is winner of the Spring 2014 EPS Emmy Noether distinction for Women in Physics. This interview was taken in June 2014 by Ana Proykova (AP), member of the Equal Opportunity Committee of the EPS. http://www.mpikg.mpg.de/th/people/dimova/other_files/ePN2014-45-4%20RD%20interview.pdf
145. A. Proykova, The Status of Women in Physics in Bulgaria, *American Institute of Physics Conference Proceedings*, v.628, p.137 (2002) (ISBN 0-7354-0074-1)
146. A. Proykova, Women-physicists in Bulgaria in Another Transition Period, **American Institute of Physics Conference Proceedings**, v. 795, p. 101 (2005) (ISBN 0-7354-0278-7; ISSN 0094-243-X)
147. Ana Proykova , What is smart specialization? CEI EPS Second workshop on Promotion of Physics in the CEI Countries and Integrating Access to Research Infrastructures in Europe Sofia University, 24.11.2014 <https://www.slideshare.net/seenet/what-is-smart-specialization-ana-proykova>

148. Liezel Frick, Reinhard Jahn, G. Kuchumova, William (Bill) Mahoney, Susan Porter, Ana Proykova, Ronel Steyn, Marc Torka, Aya Yoshida, Shannon Mason, Impact of Changes in Doctoral Education. Institutional dimension: meso and micro level
https://www.doctoral-education.info/dl/Workgroup-2_Institutional-Changes-in-Doctoral-Education.pdf

Revisiting Forces and Forms of Doctoral Education Worldwide, 5-6 September 2019, Herrenhausen Palace in Hanover/Germany

149. A. Proykova, Knowledge production and certification, http://europa.eu.int/comm/research/conferences/2004/univ/pdf/speech_ana_projkova_en.pdf

150. A. Proykova, The National Program on Nanoscience and Nanotechnologies (2005-2007) a part of the EU-FP6-Theme 3 & FP7-Theme 4 “Nanoscience, Nanotechnologies, Materials and New Production Technologies – NMP”, **Advances in Bulgarian Science**, issue 4 (2007) pp.31-33, NACID (ISSN 1312-6164) Accession Number: 31821023

IX. Publications in Bulgarian Journals (in Bulgarian) 151. Ana Proykova, *Parallel computing vs. Clusters of Computers*, Computer for You, (1997)

152. Ana Proykova, *Nanosized materials and their properties*, Physics, No.5, p.2 (1999)

153. Ana Proykova and Iwao Ohmine, *Water - ordinary and enigmatic*, Physics, No.1 (2001) p.9

154. Ana Proykova and Iwao Ohmine, *From the Big Bang to the Water molecule*, NAUKA (Science) (Union of the Bulgarian Scientists) кн. 5/2002 г.

X. Text book (in Bulgarian)

155. Ana Proykova, *Lecture Notes on Atomic and Nuclear Physics* (1988), Sofia University Publishing House

XI. Translations into Bulgarian 156. R.S. Berry (tr. A. Proykova) , *How Good is the Bohr Model*, Physics World, No.4 p.1(1995)

157. Leo Kadanoff (tr. A. Proykova), Physics World, No. p.(1996)

158. Williams, *Nuclear and Particle Physics* ,Oxford University Press (1991) (textbook tr. by A. Proykova, R. Tsenov and S. Gabrakov), University of Sofia Press (2000)

XII. Annual Reports 159. **The Catholic University of Louvain, Belgium**

Th. Delbar, J.-S. Graulich, P. Leleux, X. Morelle, A. Proykova, *Measurements of stopping powers and charge state distribution*, p.42 <http://www.fynu.ucl.ac.be/librairie/rapports/cyclone/1997/cyclone97.pdf>

160. Paul Scherrer Institute (Switzerland)

R.Abela, K. Bodek, P.Boeni, F.Foroughi, L.Grenacs, L.Jarczyk, St.Kystrin, J.Lang, R.Muller, S.Navert, O.Naviliat-Cuncic, A.Proykova, J.Smyrski, J.Sromicki, E.Stephan, A.Strzalkowski, J.Zajma, W.Zipper, *Optimization Study for Measurements of Time-Even Correlations in Muon Capture on Nuclei*, **R-93-03**, Zurich-PSI-Louvain-Cracow-Katowice-Sofia

161. Paul Scherrer Institute (Switzerland) K. Bodek, P.Boeni, F.Foroughi, L.Grenacs, L.Jarczyk, St.Kystrin,

J.Lang, R.Muller, S.Navert, O.Naviliat-Cuncic, A.Proykova, J.Smyrski, J.Sromicki, E.Stephan, A.Strzalkowski, J.Zajma, W.Zipper, *Measurements of Time-Even Correlations in Muon Capture on Nuclei*, **R-95-08**, Zurich-PSI-Louvain-Cracow-Katowice-Sofia

- XIII. Abstracts - International Conferences and Meetings (1995-2022)**
- A-1. R. Stephen Berry, Ralph E. Kunz, David J. Wales, Keith Ball, Ana Proykova, and Feng-Yin Li, *"Topographies and Dynamics of Multidimensional Potential Surfaces of Atomic Clusters"*, The University of Chicago, The Technical University of Berlin, Cambridge University, USA. IV International Conference on Advanced Materials, Cancun, Mexico, August 27th - September 1st, 1995.
- A-2. Feng-Yin Li, R.S. Berry, A. Proykova, in *Book of Abstracts of MWTCC*, May 12-16, Evanston, USA(1995). A-3. A. Proykova and R.S. Berry, *Analogues in Clusters of Second-Order Phase Transitions?* in *Book of Abstracts of ISSPIC-8*, Jun 29-Jul 6, Copenhagen, Denmark (1996). A-4. Rossen A. Radev, Ana Proykova, Feng-Yin Li and R. Stephen Berry, *A Method for Projecting the Spatial Distribution of Highly Symmetrical Molecules onto a Two Dimensional Surface*, in *Book of Abstracts of TAMC2*, September 15-20, Lake Geneva, Wisconsin(1996) A-5. Ana Proykova, *Fractal Trajectories of Charged Particles Passing through Matter*, in *Book of Abstracts of Symposium on Radiation Measurements and Applications* (Ninth in Series), May 11-14, The University of Michigan, Ann-Arbor, Michigan, USA (1998 Contact: Symposium Secretary, 3034 Phoenix Memorial Laboratory, Ann Arbor, Michigan, 48109-2100.
- A-6. Ana Proykova and R. Stephen Berry, *Finite-Size Scaling Analysis of Simulated Structural Phase Transitions in Plastic Molecular Clusters*, in *Book of Abstracts of ISSPIC-9*, September 1-5, Lausanne, Switzerland (1998)
- A-7. Ana Proykova and R. Stephen Berry, *Surface Effects in Order-Disorder Transformation in Molecular Clusters*, in *Book of Abstracts of ISSPIC-9*, September 1-5, Lausanne, Switzerland (1998)
- A-8. Ana Proykova, Ivan Daykov, Feng Yin Li, and R. Stephen Berry, *Constant Temperature Molecular Dynamics Simulations of Structural Transformations Observed in Nanoclusters*, in *Book of Abstracts of CCP-98* (Conference on Computational Physics) September 2-5, Granada, Spain (1998) 'Modelling Collective Phenomena in Complex System", European Physical Society, vol. 22F (1998)
- A-9. Ana Proykova and Rossen Radev, *How to Improve a Random Number Generator*, in *Book of Abstracts of CCP-98* (Conference on Computational Physics) September 2-5, Granada, Spain (1998) 'Modelling Collective Phenomena in Complex System", European Physical Society, vol. 22F (1998) A-10. Dessislava Nikolova and Ana Proykova, *A SHORT-TIME MEMORY IN SMALL ONE-DIMENSIONAL SYSTEMS*, in *Book of Abstracts of CCP-98* (Conference on Computational Physics), September 2-5, Granada, Spain (1998) 'Modelling Collective Phenomena in Complex System", European Physical Society, vol. 22F (1998) A-11. Ana Proykova, *Finite-Size Scaling Analysis of Simulated Phase Transitions in Small Systems*, in *Book of Abstracts of the Eighteenth International Workshop on Nuclear Theory*, Rila Mountains, Bulgaria, June 7-12, 1999 A-12. A. Proykova and D. Nikolova, *A short-time memory in small one- dimensional systems*, VIth Latin-Amreican Workshop on Nonlinear Phenomena, LAWN'99 A-13. A. Proykova, D. Nikolova, P. Michailov, B. Kolarov, 'Memory Effects and Phase Transitions in Low-Dimensional Nanosystems", *Proceedings of the Meeting on Nanotechnology and Science*, p.18, May, 1999, Sofia, Bulgaria A-14. A. Proykova, R. Radev, I. Daykov, S. Klenov, *'Theoretical Study of Critical Behavior of Nanoclusters'*, *Proceedings of the Meeting on Nanotechnology and Science*, p.17, May, 1999, Sofia, Bulgaria
- A-15. R. Stephen Berry and Ana Proykova, *New Insights into Phase Transitions from Cluster Behaviour*, Richmond, USA, October 1999 A-16. A. Proykova, I. Daykov, and R. S. Berry, *Broken Ergodicity as a Signal of Phase Changes in Small Systems*, Int. Thermo Symposium organized by the American Engineering Society and The University of Ljubliana (Bled, 11-14 June, 2000) A-17. A. Proykova and S. Pisov,

DYNAMICAL PHASE COEXISTENCE IN ISOLATED NANOSIZED CLUSTERS, BPU-4, August 22-24, V. Tarnovo, Bulgaria (2000). A-18. A. Proykova and R. Radev, "Optimized Monte Carlo Simulation of Phase Transition in Rigid-Molecule Clusters", in Book of Abstracts of CCP-2000 (Conference on Computational Physics) September, Granada, Spain (2000) A-19. Ana Proykova, TOPOGRAPHIES AND DYNAMICS OF MULTIDIMENSIONAL POTENTIAL SURFACES OF MOLECULAR CLUSTERS, BPU-4, August 22-24, V. Tarnovo, Bulgaria (2000) A-20. A. Proykova, *Stable Structures in Atomic Clusters*, Nineteenth International Workshop on Nuclear Theory, Rila Mountains, Bulgaria, June 11-19, 2000. A-21. A. Proykova, *The Role of Metastable States in the Temperature Driven Phase Transformations of Molecular Nanoclusters*, Nineteenth Bulgarian-Greek Symposium on Physics of Semiconductors, December 15, 2000.

A-22. A. Proykova, INTERNATIONALIZATION OF EDUCATION in: EDUCATION AND CIVIL SOCIETY IN THE POST-TOTALITARIAN WORLD, Abstracts of the Third Fulbright Conference Dedicated to the 5th Anniversary of the Bulgarian Fulbright Commission, Sofia, May 14-17, (1998).

A-23. Ana Proykova and Iovka Dragieva, *Understanding Assembling and Self-Organization of Metallic Boron Nanoparticles on Atomic Level*, ISSPIC10, Atlanta, October, 2000 A-24. Ana Proykova, Rossen Radev, Danail Vassilev, R. S. Berry, *Monte Carlo Walking on Potential Surfaces with Weakly Connected Sub-Regions*, ISSPIC10, Atlanta, Oct. 2000.

A-25. E. Daykova and A. Proykova, *The Influence of Hydrophobic Guest Molecules on the Hydrogen Bond Network in Water Clusters*, Seminar of New Material for the Industry", Sofia 31 May, 2001. A-26. Ana Proykova, *Memory effects in one-dimensional systems*, *Applied Non-Linear Dynamics* (From Semiconductors to Information Technologies), Thessaloniki, Greece 27-30 Aug., 2001. P-40 in **LOW DIMENSIONAL SYSTEMS** <http://skiathos.physics.auth.gr/nld/shed.html> A-27. B. Karadjov and A. Proykova, *A Model for Random Correlated Deposition*, *Applied Non-Linear Dynamics* (From Semiconductors to Information Technologies), Thessaloniki, Greece 27-30 Aug., 2001. P-41 in **APPLIED CHAOS THEORY** <http://skiathos.physics.auth.gr/nld/shed.html> A-28. S. Pisov and A. Proykova, *Charge Dependence of Temperature-Driven Phase Transitions of Molecular Nanoclusters: Molecular Dynamics Simulation*, CCP2001 (Conference on Computational physics), 5-8 Sep. 2001, Aachen, Germany *Publication Series of the John von Neuman Institute for Computing (NIC Series)*, v. 8, B 21 (2001) <http://www.fz-juelich.de/nic-series/Volume8/nic-serie-band8.pdf>

A-29. R. Radev and A. Proykova, *Parallel J-W Monte Carlo Simulations of Thermal Phase Changes in Finite-size Systems*, CCP2001 (Conference on Computational physics), 5-8 Sep. 2001, Aachen, Germany *Publication Series of the John von Neuman Institute for Computing (NIC Series)*, v. 8, B22 (2001) <http://www.fz-juelich.de/nic-series/Volume8/nic-serie-band8.pdf>

A-30. A. Proykova, S. Pisov and R. S. Berry, *Symmetry in order-disorder phase changes of molecular clusters*, 222-nd national meeting of the American Chemical Society, Chicago, August 26 - Thursday, August 30, 2001. <http://hackberry.chem.trinity.edu/PHYS/fall2001.html> A-31. A. Proykova, L. Russenova, D. Stauffer, *Scale of Market Shocks in a Transition Economy* (Applications of Physics in Financial Analysis 3), London, UK, Dec. 5-7, 2001; Editors: P. Richmond, R. Hill, European Physical Society, v. 25K, p.A45, (2001). A-32. A. Proykova and A. Marinov in: Proc. Third International Symposium on Radiation Physics, Sept. 30-Oct. 4, Ferrara (Italy) (1985) "Transport of fast electrons through radiation sources" A-33. I. Dragieva and A. Proykova, *The Art of Chemical Bond Creation*, Joint COST-Action Workgroup Meeting on Individual and Assembled Nanoparticles and Quantum Dots, 25-27 April, 2002, Leuven, Belgium A-34. A. Proykova, Optimization Procedures

for Generating Isomer Structures of Molecular Nanoclusters, Joint COST-Action Workgroup Meeting on Individual and Assembled Nanoparticles and Quantum Dots, 25-27 April, 2002, Leuven, Belgium

A-35. Iovka Dragieva, Ana Proykova and Kenneth Klabunde, *The Art of Chemical Bond Creation in Nanoscale Materials*, in Book of Abstracts of the Conference on Nanoscience, Orlando, June 17, (2002).

A-36. Ana Proykova, Stoyan Pisov, Iovka Dragieva, Self-Organization of Nanosized Clusters: a Spontaneous Ordering of Matter, ISSPIC11, Starsburg (France), Sept. 2002.

A-37. Iovka Dragieva and Ana Proykova, Bond Strengths of Diatomic Molecules in Nanoscale Materials, Workshop COST523: Nanomaterials, Sevilla, 2-7 Oct. 2002. [HYPERLINK "http://www.icmse.cartuja.csic.es/cost/poster.htm"](http://www.icmse.cartuja.csic.es/cost/poster.htm) <http://www.icmse.cartuja.csic.es/cost/poster.htm>

A-38. Ana Proykova, *Density Functional theory and its applications in nanopowders (invited talk)*, 4th Workshop on Nanomaterials, Sofia, 18-20 Oct. 2002.

A-39. Ana Proykova, Stoyan Pisov and Iovka Dragieva, *DFT Calculations of Optimized Structures of Some Coordination Compounds*, 4th Workshop on Nanomaterials, Sofia, 18-20 Oct. 2002.

A-40. Evgeniya Daykova, Rossen Radev and Ana Proykova, *Monte Carlo and Molecular Dynamics Simulations of Solid Methane Phase Transitions*, 4th Workshop on Nanomaterials, Sofia, 18-20 Oct. 2002.

A-41. Stoyan Pisov and Ana Proykova, *Genetic Algorithm and its applications for cluster optimizations*, 4th Workshop on Nanomaterials, Sofia, 18-20 Oct. 2002.

A-42. Ana Proykova, *Simulation Techniques (Monte Carlo, Molecular Dynamics, DFT) for nanosized systems (invited lecture)* EPS funded **PESC Exploratory Workshop on** Microwave and optical behaviour of nanogranular ferroxides (powders, fluids and composites). High frequency characterisation and biomagnetic applications, Sofia 21-24 Sep. 2003.

A-43. Ana Proykova, *Self- and Induced Organization of Nanoparticles (keynote lecture)* at The 1st NanoForum Workshop: Nanomaterials and Applications, Sinaia, Romania, October 5-7th, 2003 <http://www.nanoforum.org/events/workshop/Proykova.pdf>

A-44. Ana Proykova, *"Thermodynamics of systems with few degrees of freedom"* (invited lecture) at the UNESCO-ROSTE funded conference on Fundamental Problems and New Perspectives in Thermodynamics February 17 - 21 2002. http://www.cism.it/cgi/course_info_main.cgi?title=Fundamental+Problems+and+New+Perspectives+in+Thermodynamics&year=2002 <http://www.fys.ku.dk/~andresen/GRC/invitedtalks.html>

A-45. Ana Proykova, Gordon Research Conference on Molecular & Ionic Clusters, Centre Paul Langevin, Aussois, France 5-10 Sep. 2004. <http://www.grc.uri.edu/programs/2004/molionic.htm>

A-46. A. Proykova and H. Iliev, *Simulated Stress and Stretch of SWCNT*, SIMS2004, Copenhagen, Sep. 22-24 2004. <http://www.sims2004.mek.dtu.dk/>

A-47. Hristo Iliev and Ana Proykova, Temperature dependence of sorption rates of assorted molecules on carbon nanotubes, TNT-2003, Salamanca, Spain, 15-19 Sept 2003.

A-48. E. Daykova and A. Proykova, Dimers, Trimers, and Tetramers as Possible Building Blocks of Free Methane Clusters, p.53, Abstracts of the Sixth Workshop on Nanoscience & Nanotechnology, November 24-27, 2004, Sofia, Bulgaria.

A-49. A. Proykova, Advanced computational techniques (Monte Carlo, Molecular Dynamics, Density Functional Theory) for nanosized systems. Temperature-driven Processes in Nanoclusters Governed by Short- and/or Long-Range Potentials', NENAMAT Summer School „Advanced Nanotechnologies, Testing, Production and Application of Nanoscale Materials“, Primorsko, BULGARIA, June 1-7, 2005 <http://www.nenamat.org/about.htm>

A-50. A. Proykova (invited talk) Analogues of Second Order Phase Transitions, records of

The Third Gordon Conference on "Modern Developments in Thermodynamics."
April 18 - 23, 1999 (Il Ciocco, Italy) <http://www.grc.uri.edu/programs/1999/thermo.htm>

A-51. A. Proykova, Second IUPAP International Conference on Women in Physics – abstract: Women Physicists in Bulgaria in Another Transition Period, May 23-25 2005, Rio de Janeiro, Brazil <http://www.cbpf.br/~women-physics/>

A-52. Hristo Iliev, Feng Yin-Li and Ana Proykova, *Carbon nanotubes with vacancies under external mechanical stress and electric field*, in Book of materials on NATO-ASI "Carbon Nanotubes: From Basic Research to Nanotechnology", 27 May, 2005, Sozopol(BG) <http://www.fundp.ac.be/~vpopov/nato-asi-2005.htm>

A-53. Evgeniya Daykova, Stoyan Pisov, and Ana Proykova, *First-principle and Molecular Dynamics simulation of methane adsorption on graphene*, in Book of materials on NATO-ASI "Carbon Nanotubes: From Basic Research to Nanotechnology", 27 May, 2005, Sozopol(BG) [HYPERLINK "http://www.fundp.ac.be/~vpopov/nato-asi-2005.htm"](http://www.fundp.ac.be/~vpopov/nato-asi-2005.htm)

A-54. Ana Proykova, Stoyan Pisov, Iovka Dragieva, *The Role of Precursor Symmetry on the Self-Organization of Nanoparticles Produced in Borohydrate reduction*, TNT-2003, Salamanca, Spain, 15-19 Sept 2003.

A-55. Evgeniya Daykova, Stoyan Pisov, and Ana Proykova, *Methane molecule adsorption on SWCNT or a carbon sheet* (24-26 November, 2005) Sofia: 7th workshop on nanoscience & nanotechnology

A-56. Kalin Arsov and Ana Proykova, *Antiferromagnetic versus non-collinear arrangement of chromium clusters of various sizes*, (24-26 November, 2005) Sofia: 7th workshop on nanoscience & nanotechnology

A-57. H.S. Iliev, F.Y. Li, H.F. Lu, A. Proykova, *Modulation of band-structure of defective single-wall carbon nanotubes under a transverse electric field*, BPU6 (22-26.08.2006) Istanbul, Turkey

A-58. A. Proykova, *Topology of the potential energy surface and the origin of phase changes in finite atomic clusters*, BPU6 (22-26.08.2006) Istanbul, Turkey

A-59. A. Proykova, *Temperature Driven Oriented Order of Molecular Clusters in Nanoscale*, **Shedding Light on the Nanoworld: Ordered and Disordered Nanostructures**, International Workshop, 24-28.09.2006, Sunny beach, Bulgaria

A-60. A. Proykova in: Workshop on Exotic Atoms in Condensed Matter, Erice, Italy, May-1990 : "*Negative muons slowing down in homogeneous metal layers*"

A-61. A. Proykova in: Proc. Fifth International Symposium on Radiation Physics, June 10-14, Dubrovnik(Yugoslavia)(1991)

A-62. Ana Proykova and Boris Karadjov, *Conditional Deposition of Particles on a Surface – a Fractal versus Non-fractal Dimension of the Percolating Clusters*, **STATPHYS 23**, the 23rd International Conference on Statistical Physics of the International Union for Pure and Applied Physics (IUPAP), **Genova, Italy, from July 9 to 13, (2007)**

A-63. A. Proykova, H. Iliev, F.Y. Li, *Useful vacancies in Single Wall Carbon Nanotubes*, **213 ECS 213, Phoenix, AZ (MAY 18-23), (2008)** "Carbon Nanotubes and Nanostructures: Applications and Devices", USAA-64. A. Proykova, *Self- and Induced-Organization of Metallic Nanoparticles:*

Computational Models and Experimental Observations, Ukraina, June (2008)

A-65. V. Antonov, H. Iliev, S. Pisov, A. Proykova, *Band Gap Modification in Defective Carbon Nanotubes*. 6th International Conference on Nanosciences &

Nanotechnologies, Thessaloniki, Greece, 13- 15 July 2009

A-66. H. Iliev, V. Antonov, S. Pisov, A. Proykova, *Au Adsorption on Defective Single Wall Carbon Nanotubes*, 6th International Conference on Nanosciences & Nanotechnologies, Thessaloniki, Greece, 13- 15 July 2009

A-67. A. Proykova, S. Pisov, H. Iliev, *Platinum Clusters Collisions with Single Wall Carbon*

Nanotubes, The Fourth International Symposium "Atomic Cluster Collisions: structure and dynamics from the nuclear to the biological scale" (ISACC 2009) Ann Arbor, Michigan, USA, July 14 - 18, 2009 A-68. A.Proykova, Modeling Physical Processes at the Nanoscale – Insight into Self-Organization of Small Systems, **American Institute of Physics Conference Proceedings**, v. 1119, p.237 (2009)A-69. Vladislav Antonov, Dobrina Borisova, Stoyan Pisov, Ana Proykova Band Gap

Dependence on Carbon Nanotube Diameters and Vacancy Density in Single Wall Carbon Nanotubes, HYPERLINK "<http://www.irc-cosim.uni-sofia.bg/events/conferences/11th-workshop-nanoscience-nanotechnology>" **11th WORKSHOP NANOSCIENCE & NANOTECHNOLOGY** (Bulgaria, Varna, Faculty of Dental Medicine Medical University, 01 Oct 2009 - 03 Oct 2009)

A-70. Hristo Iliev, A. Proykova, Chirality influence on transition metal adsorption on single wall

carbon nanotubes, HYPERLINK "<http://www.irc-cosim.uni-sofia.bg/events/conferences/11th-workshop-nanoscience-nanotechnology>" **11th WORKSHOP NANOSCIENCE & NANOTECHNOLOGY** (Bulgaria, Varna, Faculty of Dental Medicine Medical University, 01 Oct 2009 - 03 Oct 2009)

A-71. Dobrina Borisova, Vladislav Antonov and Ana Proykova,

HYPERLINK "<http://www.irc-cosim.uni-sofia.bg/events/conferences/12th-international-workshop-nanoscience-nanotechnology>" **12th International Workshop NANOSCIENCE & NANOTECHNOLOGY** (Varna Technical University, Varna, Bulgaria, 26-27.11.2010)

A-72. **A. Proykova:** The Nanoscience in 2010: how does fundamental research translate into

technology HYPERLINK "<http://www.irc-cosim.uni-sofia.bg/events/conferences/12th-international-workshop-nanoscience-nanotechnology>" **12th International Workshop NANOSCIENCE & NANOTECHNOLOGY** (Varna Technical University, Varna, Bulgaria, 26-27.11.2010)

A-73. D. Borisova, V. Antonov, and A. Proykova, Hydrogen sulphide adsorption on a defective graphene, 14th Intern. Conf. on the Applic. of Density Functional Theory in Chemistry and Physics, Athens, Greece (2011)

A-74. V.Antonov. D.Borisova and A. Proykova, Defective graphene – what is it good for? 14th

Intern. Conf. on the Applic. of Density Functional Theory in Chemistry and Physics, Athens, Greece (2011)

A-75. **A. Proykova** *Overview of the FP7-NMP calls in 2012*, 13th International Workshop

NANOSCIENCE & NANOTECHNOLOGY, 25-26.11.2011, Sofia University

A-76. V. Antonov, D. Borisova, A. Proykova, Induced Magnetism in Defective Graphene, 13th

International Workshop NANOSCIENCE & NANOTECHNOLOGY, 25-26.11.2011, Sofia University

A-77. A. Proykova, *Science and quality of life*, International conference on Women entrepreneurship and the challenges of Europe 2020, Aula Magna University of Sofia, 30 Oct. 2012

A-78. A. Proykova, *Thermodynamics of clusters*, 240-SYMPOSIUM, September 12-16, 2012, The University of Chicago, USA

A-79. A. Proykova, Pisov, Antonov, Iliev, *Magnetism in Defective Graphene and Collision of Platinum Nanoclusters with Perfect and Defective Single Wall Carbon Nanotubes*,

NANOSCIENCE & NANOTECHNOLOGY, 22-23.11.2012, Technical University -

Sofia

A-80. A. Proykova, Pisov, Antonov *Induced magnetism in defective graphene*, IV crystallographic symposium, November 1-3, 2012, Chemical University Sofia

A-81. Stoyan Pisov, Vladislav Antonov, Ana Proykova *Non-collinear magnetic moments in graphene with vacancies*, ImagineNANO, GRAPHENE 2013, April 23-26, Bilbao,

- SpainA-82. Ana Proykova, Widespread use of nanoparticles – effects on human health and environment, Nanoforum, Sep 18-20, 2013, Rome
- A-83. Ana Proykova, *From Ada Byron to the Biocomputer*, April 19, 2013
- A-84. Ana Proykova, *Lab-on-the-chip: unknown known*, February 18, 2013, Sofia University
- A-85. Stoyan Pisov, Ana Proykova, *Magnetic Properties of Graphene with Vacancies - Open Questions*, NANOSCIENCE & NANOTECHNOLOGY, 21-22.11.2013
- A-86. A. Proykova, *Order-disorder transitions in finite-size clusters of objects*, Brijuni conference "Self-organizing matter and emergence" August 25-30, 2014
- A-87. D. Dimova, S. Pisov, A. Proykova, *Magnetism of bilayer graphene with vacancies*, Nanoscience & Nanotechnology, November 7-8, 2014
- A-88. A. Proykova, *Potential Health Risks Linked to Artificial Lights*, International Conference on Nanoscience & Nanotechnology, 27 November 2015
- A-89. D. Dimova¹, S. Pisov¹, N. Panchev², A. Proykova¹, THE ROLE OF CANONICAL ENSEMBLE IN PREDICTING THE TOLUENE FILM STRUCTURE UNDER EXTERNAL ELECTRIC FIELD, International Conference on Nanoscience & Nanotechnology, 17-18 November 2016
- A-90. A. Proykova, *Nanomaterials in medical devices – a challenge in transferring the knowledge of new materials*, 18th International Conference on Nanoscience and Nanotechnology, 17-18 .11.2016
- A-91. R. Radev and A. Proykova, A DIAGNOSTIC METHOD FOR STRUCTURAL PHASE TRANSITIONS IN MOLECULAR CLUSTERS, Proceedings of "Meeting of Young Researchers in Physics", December 17th, 1999, Sofia, Bulgaria (CINTI No.) (4 pages)
- A-92. A. Proykova, *Self-Organization of Metallic Nanoparticles: Experimental Observation vs. Computational Models*, THE THIRD INTERNATIONAL BALKAN WORKSHOP ON APPLIED PHYSICS (3rd IBWAP 2002) JUNE 26-28, 2002, Targoviste, Romania. http://idranap.nipne.ro/events/2002/BWAP02/3rdIBWAP2002_2.htm
- A-93. A. Proykova, Magnetism of bilayered graphene, European Advanced Materials Congress, 22-24.08.2017, Stockholm, Sweden
<https://www.vbripress.com/eamc/pages/publications>
- A-94. A. Proykova, Risk Governance of Engineered Nanomaterials, NANO'2017, 19th International conference Nanoscience & nanotechnology, UCTM, Sofia 24-25.11.2017
DOI: 10.13140/RG.2.2.23511.57769
- A-95. A. Proykova, Opening Ceremony Talk, , NANO'2017, 19th International conference Nanoscience & nanotechnology, UCTM, Sofia 24-25.11.2017, Book of abstracts
DOI: 10.13140/RG.2.2.23623.80804
- A-96. D. Dimova, S. Pisov, A. Proykova, Size-effects in computations of the induced magnetism in graphene layers with defects, NANO-2017, Book of abstracts
DOI:10.13140/RG.2.2.23623.80804
- A-97. A. Proykova, Report from the Bulgarian Presidency Flagship Conference on Research Infrastructures, 2nd ERIC Forum: 19-20 April, 2018, Hosted by the UK in Oxford
DOI10.13140/RG.2.2.10625.35680
- A-98. A. Proykova, Regulatory challenges, Nano and Micro Formulations, 13-14 March 2018, Berlin, Germany
- A-99. A. Proykova, Ethical aspects of bionanotechnology, The Shape of Things to Come: A Post-Human World in the Post-Truth Era, 25th Fulbright anniversary, Sofia, April 13, 2018
DOI10.13140/RG.2.2.16800.48649
- A-100. Ralitsa Dimitrova and Ana Proykova, Proton-radiation induced vacancies in graphene, 20th International Conference on Nanoscience and Nanotechnology, Sofia 8-10.11.2018, Book of Abstracts p.13
DOI: 10.13140/RG.2.2.31075.60969
- A-101. Dessislava Dimova, Stoyan Pisov, Ana Proykova, Magnetic moments in a

- graphene sheet with vacancies generated by proton-beam bombardment, 20th International Conference on Nanoscience and Nanotechnology, Sofia 8-10.11.2018, Book of Abstracts, p.16, DOI: 10.13140/RG.2.2.31075.60969
- A-102. Stay tuned to the future. An international conference on the impact of research infrastructures for social sciences and humanities – Bologna, 24-25 January 2018 <http://www.fscire.it/wp-content/uploads/2018/02/Ana-Proykova.pdf>
DOI: 10.13140/RG.2.2.13859.96807
- A-103. Ana Proykova, Evgeniya Daykova, Rossen Radev and Alexander Marinov, Low-temperature transformations of free methane clusters, Proceedings of the Conference on Applied Physics, Plovdiv, Nov.8, 2002.
- A-104. Ana Proykova, Bond type and bond length in nano-sized systems (In Memory of my friend and colleague Prof. Iovka Dragieva), 21st International conference on Nanoscience and Nanotechnology, Sofia 21-22.11.2019, Book of Abstracts.
- A-105. Nano fundamentals for dreamer-engineers, M. Aladjov, V.Videkov, A.Proykova, 21st International conference on Nanoscience and Nanotechnology, Sofia 21-22.11.2019, Book of Abstracts.
- A-106. ESFRI Research Infrastructures and EOSC: How do they tango? 'ESFRI RIs and EOSC Workshop' (London, 30.01.2019). Interview with Proykova Ana <https://www.youtube.com/watch?v=TcSB8jul3g4>
- A-107. A. Proykova, "Determination of the Detecting System Response Function" Proceedings of the Sixth Symposium on X- and gamma ray sources and applications, May 21-23, Michigan (USA) (1985)
- A-108. A. Proykova and A. Marinov, "Transport of fast electrons through radiation sources" in: Proceedings of the Third International Symposium on Radiation Physics, Sept.30-Oct.4, Ferrara (Italy)(1985)
- A-109. A. Proykova, "Negative muons slowing down in homogeneous metal-layers" in: Proceedings of the Workshop on Exotic Atoms in Condensed Matter, Erice, Italy, May-1990
- A-110. A. Proykova, "Charge fluctuations of ions", in: Proc. Fifth International Symposium on Radiation Physics, June 10-14, Dubrovnik (Yugoslavia) (1991)
- A-111. Ana Proykova, "arXiv medium as a prerequisite of open access as an important component of open science", CERN-UNIGE Workshop on Innovations in Scholarly Communication, 6-10.09.2021, OAI12, session "The future of open science"
- A-112. Ana Proykova, "Virtual science laboratories: will they replace the physical laboratories?", eLearning 2021, 12th international conference on e-learning, 23-24 Sep 2021, Belgrade, <https://elearning.metropolitan.ac.rs/>
- A-113. Ana Proykova, Hristo Iliev, HIGH PERFORMANCE COMPUTING AND ARTIFICIAL INTELLIGENCE CONVERGENCE, Spring Conference at FMI, SU, <https://www.fmi.bg/> 27/03 2021
- A-114. Ana Proykova, D. Stauffer, Monte Carlo Simulations of Medical Resource Allocation, 26.03.2022, Spring Summer Session at FMI, Sofia University

Interviews:

<https://forbesbulgaria.com/2022/01/19/ana-proykova-the-future-is-promising/>

01.19.2022: за Форбс България взето от Мирослав Майер по повод на 50 over 50 Forbes NY,US

https://www.dnevnik.bg/intervju/2022/02/06/4308670_prof_ana_proykova_fizik_lipsata_na_dostatuchno_jeni_v/

публикация на Андриян Георгиев, 6 февруари 2022

<https://sedemosmi.tv/etiketi/%D0%BF%D1%80%D0%BE%D1%84-%D0%B4%D1%84%D0%BD-%D0%B0%D0%BD%D0%B0-%D0%BF%D1%80%D0%BE%D0%B9%D0%BA%D0%BE%D0%B2%D0%B0/>

Вечерта на Иван Кулеков, 15 март 2022

<https://m.economy.bg/featured/view/50445/Znaem-tvyrde-malko-neshta-za-sveta-okolo-nas>

14 април 2022: за жените в науката разказва Ана Пройкива

<https://forbesbulgaria.com/2022/06/06/%D0%BC%D0%BE%D0%B6%D0%B5%D0%BC-%D0%BB%D0%B8-%D0%B4%D0%B0-%D0%B8%D0%BC%D0%B0%D0%BC%D0%B5-%D0%B5%D0%B4%D0%BD%D0%BE%D1%80%D0%BE%D0%B3-%D0%B2-%D0%B7%D0%B4%D1%80%D0%B0%D0%B2%D0%B5%D0%BE%D0%BF%D0%B0%D0%B7/>

6.06.2022 Вероника Шербанова – Healthcare summit, 31.05.2022 г.

<https://nauka.bg/r-ana-proikova-profesionalnoto-razvitie-akademichnite-sredi-nikade/>

взето от Радослав Тодоров ПУБЛИКУВАНО НОЕМВРИ 26, 2020

<https://bnr.bg/post/101397189/prof-proikova> Интервю на Таня Милушева с проф. Ана Пройкива: Най-после в Европа намира място концепцията за отворена наука публикувано на 31.12.20 в 09:32

<https://mediabricks.bg/%D0%BF%D1%80%D0%BE%D1%84-%D0%B0%D0%BD%D0%B0-%D0%BF%D1%80%D0%BE%D0%B9%D0%BA%D0%BE%D0%B2%D0%B0-%D0%BF%D1%80%D0%B5%D0%B4%D0%BF%D1%80%D0%B8%D0%B5%D0%BC%D0%B0%D1%87%D1%8A%D1%82-%D0%B2-%D0%BD%D0%B0%D1%83/>

Проф. Ана Пройкива: Предприемачът в науката търси съмишленици за постигане на научни цели, 27/08/2018, Media Bricks

<https://unite-bg.eu/bg/vodeschi-ucheni>

<https://momichetata.com/obshtestvo/krasiv-um-prof-ana-projkova-i-prelestta-na-yadrenata-fizika>

Красив ум: Проф. Ана Пройкива и прелестта на ядрената физика, Момичетата от града 17 October 2014

<https://www.24chasa.bg/Article/810340>

Високите токчета са табу в ЦЕРН

09.03.2011 12:26; 8284;

<https://www.bloombergtv.bg/a/16-biznes-start/15302-znaniyata-generator-na-inovatsii>

Знанията - генератор на иновации, Проф. Ана Пройкива, София Тех Парк, Бизнес старт, 17.03.2017

<https://nauka.bg/podcast-laboratoriyata-visokoproizvoditelni-izchisleniya-sofiya-teh-park/>

Лабораторията по Високопроизводителни изчисления – София Тех Парк

<https://nauka.bg/kakvo-izchislyavat-laboratoriyata-visokoproizvoditelni-izchisleniya-2/>



bgnauka ПУБЛИКУВАНО НА ЮЛИ 30, 2021

Сдружения:

https://ewb.bg/cv_ana_proikova Образование без прегради

<http://bcwt.bg/en/> Bulgarian Centre of Women in Technology
Technologies Empowering Women. Women Empowering Technologies