

Gennady Gor – Curriculum Vitae

Assistant Professor

New Jersey Institute of Technology
Dept. of Chemical and Materials Engineering
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Current Position

Assistant Professor from Sept. 2016
New Jersey Institute of Technology, Newark, NJ
Dept. of Chemical and Materials Engineering
– Organized and lead the Computational Laboratory for Porous Materials, focusing on porous materials and confined fluids, ranging from nanoporous adsorbents and polymer membranes to geological materials, like coal and shale
– Advised four Ph.D. students (one defended in 2020, one in 2021), a postdoctoral researcher, multiple undergraduate students and high-school interns
– Developed and taught two elective courses: a new graduate course on molecular modeling, and an undergraduate course on computational tools and methods
– Secured internal, industrial and federal funding, including NSF CAREER award

Postdoctoral Experience

NRC Research Associate 2014-2016
Naval Research Laboratory, Washington, DC
Center for Computational Materials Science
Supervisor: Dr. Noam Bernstein
– Developed atomistic, thermodynamic and finite-element models for deformation of nanoporous materials for applications in sensing and actuation
– Carried out modeling and experimental studies of effects of electrolyte solvents on the soft components of lithium-ion batteries
– Employed molecular modeling to study the response of nano-confined fluids to ultrasound

Postdoctoral Research Associate 2011-2014
Princeton University, Princeton, NJ
Department of Civil and Environmental Engineering
Supervisor: Professor Jean-Herve Prévost and Professor Craig B. Arnold
– Developed a poromechanical model for lithium-ion batteries separators
– Developed an algorithm and implemented multi-phase flash calculations for compositional flow of CO₂-brine mixture
– Developed analytical model predicting flow-driven fracture propagation in the caprock

Postdoctoral Research Associate 2009-2011
Rutgers University, Piscataway, NJ
Department of Chemical and Biochemical Engineering
 Supervisor: Professor Alexander V. Neimark
 – Developed thermodynamic theory of adsorption-induced deformation of mesoporous materials
 – Implemented Quenched Solid DFT for novel porous materials characterization (for Autosorb instrument, Quantachrome Inc.)
 – Developed quantum chemical and molecular models for organophosphorous chemical warfare agents and polyelectrolyte membranes
 – Developed a Monte Carlo model for simulations of adsorption in novel ordered porous materials

Education

Doctor of Philosophy in Theoretical Physics 2009
St. Petersburg State University, St. Petersburg, Russia
Department of Physics, Chair of Statistical Physics
 Thesis adviser: Professor Fedor M. Kuni, thesis title: Regularities of non-isothermal growth of liquid droplets in vapor-gas medium and isothermal growth of gas bubbles in liquid

Master of Science in Theoretical and Mathematical Physics 2006
St. Petersburg State University, St. Petersburg, Russia
Department of Physics, Chair of Statistical Physics
 Thesis adviser: Professor Alexander P. Grinin

Bachelor of Science in Physics 2003
St. Petersburg State University, St. Petersburg, Russia

Honors, Awards and Fellowships

ITMO University Micro Fellowship (Russia) 2021-2022
 Faculty Fellowship Program in Israel 2020, postponed till 2022
 NSF CAREER Award 2020
 Travel Grant for the FOA13 conference participation 2019
 Travel Grant for the FOA12 conference participation 2016
 National Research Council Associateship 2014
 Princeton CMI Best Paper Award for Postdoctoral Fellows 2013
 Best Presentation of the Session on 2012 AIChE Annual Meeting 2012
 International Association of Chemical Thermodynamics Junior Award
 “For Excellence in Thermodynamics” 2010
 Zamaraev Foundation scholarship for graduate students 2008, 2009
 Talented Youth Support Prize (Ministry of Education and Science of Russia) 2008
 Three-fold winner of Saint-Petersburg administration grant for undergraduate and graduate students (Fundamental Natural Science Award Board). 2005, 2007, 2008

Teaching

Assistant Professor from Sept. 2016

New Jersey Institute of Technology, Newark, NJ

Dept. of Chemical and Materials Engineering

Teaching core chemical engineering courses, developing and teaching graduate and undergraduate elective courses on computational methods and molecular simulations

- Online ChE 490: Python for ChemE Calculations, undergraduate elective course (Spring 2021)
- Online ChE 342: Chemical Engineering Thermodynamics II (Fall 2020)
- ChE 342: Chemical Engineering Thermodynamics II (Fall 2016, Spring 2018, Fall 2018, Spring 2019, Fall 2019, Fall 2021)
- ChE 702: Statistical Mechanics and Molecular Modeling (Spring 2017)
- ChE 775: Molecular Simulations in Chemical Engineering, graduate elective course (Spring 2020)
- ChE 491: Python for ChemE Calculations (independent study) (Spring 2019, Fall 2020)
- ChE 101: Introduction to Chemical Engineering (guest lectures) (Spring 2018, Spring 2021)

Lecturer (WSE Postdoctoral Fellow) 2012-2013

Princeton University, Princeton, NJ

Princeton Writing Center

Half-term course on writing for Princeton graduate students in Science and Engineering “WRI502: Writing an Effective Scientific Research Article” (Fall 2012)

- Teaching a weekly 3-hour seminar
- Individual conferences with graduate students

Lecturer 2006-2009

St. Petersburg State University, St. Petersburg, Russia

Department of Physics

Lecture course “Kinetics of first order phase transitions” for 1st year graduate students of Department of Statistical Physics (Fall 2006, Fall 2007, Fall 2008)

- Responsible for a weekly 3-hour lecture/seminar and final oral examination
- Modified the lesson plans
- Developed supplementary course material

Teaching Assistant 2006-2007

St. Petersburg State University, St. Petersburg, Russia

Department of Physics

- Oral examining of 3rd and 4th year students in statistical physics course

Teacher of Physics 2004-2006

Physico-Mathematical School #30, St. Petersburg, Russia

- Teaching physics in 7th and 8th grade
- Teaching class on solving physics olympiad problems

Teacher of Physics 2002-2004

Jewish School #224, St. Petersburg, Russia

- Teaching physics in 7th to 11th grade

Doctoral Dissertations Defended under Supervision

Student	Program Date	Title	Role	Employment
Max Maximov	ChemE 6/18/2021	Advances in Modeling Gas Adsorption in Porous Materials for the Characterization Applications	Primary Advisor	Senior Software Engineer at Uber Health and Central
Christopher Dobrzanski	ChemE 4/17/2020	Calculating Elastic Properties of Confined Simple Fluids	Primary Advisor	Postdoc at Rowan University

Professional Affiliation and Service

Journal Editor: *Chemical Physics Letters* (Elsevier) – Guest Editor, Special Issue on Low Temperature Molecular Physics: in Memory of Leonid Khriachtchev, co-edited with Dr. Alexandra Domanskaya-Lüttschwager and Dr. Antti Lignell, (06/2019-10/2020)

Current Opinion in Chemical Engineering (Elsevier) – Guest Editor, Special Issue (Vol. 24) “Separation Engineering: Advances in Adsorption”, co-edited with Prof. Benoit Coasne, (01/2018-07/2019)

Adsorption Science & Technology (SAGE Publications) – Associate Editor (09/2016–03/2019);

Referee: ACS Applied Nano Materials; ACS Omega; Adsorption; Applied Physics Letters; Carbon; Chemical Engineering Education; Chemical Engineering Journal; Chemical Physics Letters; Colloids and Surfaces A; Continuum Mechanics and Thermodynamics; Current Opinion in Chemical Engineering; Energy & Fuels; Extreme Mechanics Letters; Europhysics Letters; Fluid Phase Equilibria; Fuel; Geophysics; Greenhouse Gases: Science and Technology; Industrial & Engineering Chemistry Research; International Journal of Heat and Mass Transfer; Journal of Applied Physics; Journal of Chemical Physics; Journal of Mechanics and Physics of Solids; Journal of Molecular Structure; Journal of Petroleum Science and Engineering; Journal of Physics and Chemistry of Solids; Journal of Physics: Condensed Matter; Journal of Physical Chemistry; Journal of Physical Chemistry Letters; Journal of The Electrochemical Society; Langmuir; Metals; Microporous & Mesoporous Materials; Nature Communications; Proceeding of The Royal Society; SPE Journal; Transport in Porous Media;

Grant Proposal Reviewing: NSF CBET (panel and ad hoc review for Molecular Separations, Interfacial Engineering and Process Systems programs); ACS Petroleum Research Fund; DOE BES (Separations Program); DOE Office of Science Graduate Student Research; Humboldt Foundation (Germany); Technology Foundation STW (The Netherlands); National Center of Science and Technology Evaluation (Kazakhstan); Skoltech-MIT Next Generation Program (Russia); National Science Center (Poland); ANR (France)

Conference Organization:

– Organizing committee member, 14th International Conference on Fundamentals of Adsorption May 22-27, 2022, Broomfield, CO

– Session chair “Molecular and Data Science Modeling of Adsorption” 2021 AIChE Annual Meeting, November 7-11, 2021, Boston, MA, USA.

– Program Committee Member and Minisymposium organizer: “Fluids in Nanoporous Media” at Interpore-13 Meeting, May 31-June 4, 2021, online

– Session chair: “Molecular and Data Science Modeling of Adsorption” 2020 AIChE Annual Meet-

ing, November 16-20, 2020, online

– Program Committee Member and Minisymposium organizer: “Fluids in Nanoporous Media” at Interpore-12 Meeting, August 31-September 4, 2020, online

– Workshop organizer and chair “Second Molecular Simulations Workshop”, November 1, 2019, New Jersey Institute of Technology, Newark, NJ, USA

– Session chair and co-chair: “Molecular Simulations of Adsorption I” and “Molecular Simulations of Adsorption II” 2019 AIChE Annual Meeting, November 10-15, 2019, Orlando, FL, USA;

– Program Committee Member and Minisymposium organizer: “Fluids in Nanoporous Media” at Interpore-11 Meeting, May 6-10, 2019, Valencia, Spain

– Session co-chair: “Experimental Methods and Characterization of Adsorbent Materials” 2018 AIChE Annual Meeting, October 28 - November 2, 2018, Pittsburgh, PA, USA;

– Workshop organizer and chair “Molecular Simulations Workshop”, May 18, 2018, New Jersey Institute of Technology, Newark, NJ, USA;

– Program Committee Chair: CPM-8, 8th Workshop on Characterization of Porous Materials, May 6-9, Delray Beach, FL, USA;

– Minisymposium organizer “Fluids in Nanoporous Media” at Interpore-10 Meeting, May 14-17, 2018, New Orleans, LA, USA;

– Session co-chair: “Molecular Simulation of Adsorption I In Honor of Keith Gubbins 80th Birthday” 2017 AIChE Annual Meeting, October 29-November 3, 2017, Minneapolis, MN, USA;

– Session chair: Sixth Biot Conference on Poromechanics, July 9-13, 2017, Paris, France;

– Minisymposium organizer: “Fluids in Nanoporous Media” at Interpore-9 Meeting, May 8-11, 2017, Rotterdam, The Netherlands;

– Session co-chair: “Molecular Simulation of Adsorption I” 2016 AIChE Annual Meeting, November 13-18, 2016, San Francisco, CA, USA;

– Programming and scheduling: CPM-7 - The 7th International Workshop on Characterization of Porous Materials: From Angstroms to Millimeters, Delray Beach, FL, USA, May 3-6, 2015

– Judge for a best poster competition among Ph.D. students - 8th International Conference on Porous Media & Annual Meeting, May 9-12, 2016, Cincinnati, OH, USA

– Session co-chair: “Molecular Simulation of Adsorption I” and “Thermodynamics of Energy Systems” (in place of Prof. Brian Anderson) 2015 AIChE Annual Meeting, Salt Lake City, UT, USA, November 8-13, 2015

– Session organizer and chair: “Minisymposium: Fluids in Nanoporous Media” at 8th International Conference on Porous Media & Annual Meeting, May 9-12, 2016, Cincinnati, OH, USA

Member: American Institute of Chemical Engineers; International Society for Porous Media; International Adsorption Society

Outreach Activities

Mentor for high school students through several outreach programs:

Liberty Science Center “Partners in Science” program	2020, 2021
ACS Project SEED (Summer Experiences for the Economically Disadvantaged)	2017, 2018, 2019
NJIT Provost High School Summer Research Program	2017, 2018, 2019

Lectures for high-school students:

Gor, G. Y. “ChemE Profession and ChemE Research”	
Liberty Science Center summer research program Partners in Science	07/2021

Gor, G. Y. “ChemE Profession and ChemE Research” Jose Marti STEM Academy (Union City, NJ)	10/2020
Gor, G. Y. “ChemE Profession and ChemE Research” Liberty Science Center summer research program Partners in Science	07/2020
Gor, G. Y. “Molecular Modeling: a Blend of Math, Physics and Chemistry” Physico-Mathematical School #30, St. Petersburg, Russia	09/2018
Supervisor for the experimental design tour of Regional New Jersey Science Olympiad	2018

Publications

Total: 60+ publications in peer-reviewed journals, 3000+ citations, *h*-index 24 (Scholar)

* - corresponding author, underlined - students advised by G. Gor

Peer-reviewed Journals

- 63.** Kolesnikov, A; Budkov, Y. A.; **Gor, G. Y.** “Models of Adsorption-Induced Deformation: Ordered Materials and Beyond” *J. Phys. Condens. Matter* 2022, 34, 063002, DOI: 10.1088/1361-648X/ac3101
- 62.** Emelianova, A; **Gor, G. Y.*** “Molecular Simulations of Vapor-Liquid Equilibrium of Isocyanates” *J. Phys. Chem. B*, 2021, 125, 45, 12528-12538, DOI: 10.1021/acs.jpcc.1c07132
- 61.** Dobrzanski, C. D.; Gurevich, B.; **Gor, G. Y.*** “Elastic Properties of Confined Fluids from Molecular Modeling to Ultrasonic Experiments on Porous Solids”, *Appl. Phys. Rev.*, [Invited review, Editor’s Pick], 2021, 8, 021317, DOI: 10.1063/5.0024114.
- 60.** Emelianova, A; Basharova, E.; Kolesnikov, A; Villaseco Arribas, E.; Ivanova, E V.; **Gor, G. Y.*** “Force Fields for Molecular Modeling of Sarin and its Simulants: DMMP and DIMP” *J. Phys. Chem. B*, 2021, 125, 16, 4086-4098, DOI: 10.1021/acs.jpcc.0c10505.
- 59.** Kityk, A.; **Gor, G. Y.**; Huber, P. “Adsorption from Binary Liquid Solutions into Mesoporous Silica: A Capacitance Isotherm on 5CB Nematogen/Methanol Mixtures” *Mol. Phys.*, 2021, e1909160, DOI: 10.1080/00268976.2021.1909160.
- 58.** Maximov, M. A.; Molina, M.; **Gor, G. Y.*** “The Effect of Interconnections on Gas Adsorption in Materials with Spherical Mesopores: a Monte Carlo Simulation Study” *J. Chem. Phys.*, 2021, 154, 114706, DOI: 10.1063/5.0040763.
- 57.** Ludescher, L.; Morak, R.; Braxmeier, S.; Balzer, C.; Putz, F.; Busch, S.; Hüsing, N.; Reichenauer, G.; **Gor, G. Y.**; Paris, O. “Adsorption-induced deformation of hierarchical organized carbon materials with ordered, non-convex mesoporosity” *Mol. Phys.*, 2021, e1894362, DOI: 10.1080/00268976.2021.1894362.
- 56.** Kolesnikov, A; Budkov, Y. A.; **Gor, G. Y.** “Adsorption-Induced Deformation of Mesoporous Materials with Corrugated Cylindrical Pores” *J. Chem. Phys.* 2020, 153, 194703, DOI: 10.1063/5.0025473
- 55.** Ivanova, E V.; Khalizov, A. F.; **Gor, G. Y.*** “Kinetic Model for Competitive Condensation of Vapor between Concave and Convex Surfaces in a Soot Aggregate” *Aerosol Sci. Technol.* 2021, 55(3), 302-315. DOI: 10.1080/02786826.2020.1846677

54. Kolesnikov, A.; Budkov, Y. A.; **Gor, G. Y.*** “Density Functional Theory Model for Adsorption-Induced Deformation of Mesoporous Materials with Non-Convex Pore Geometry” *J. Phys. Chem. C* 2020, 124, 37, 20046-20054, DOI: 10.1021/acs.jpcc.0c03963
53. Emelianova, A.; Maximov, M. A.; **Gor, G. Y.*** “Solvation Pressure in Spherical Mesopores: Macroscopic Theory and Molecular Simulations” *AIChE J.* 2020, e16542, DOI: 10.1002/aic.16542
52. Dobrzanski, C. D.; Corrente, N. J.; **Gor, G. Y.*** “Compressibility of Simple Fluid in Cylindrical Confinement: Molecular Simulation and Equation of State Modeling” *Ind. Eng. Chem. Res.*, 2020, 59(17), 8393-8402. DOI: 10.1021/acs.iecr.0c00693
51. Ludescher, L.; Braxmeier, S.; Balzer, C.; Reichenauer, G.; Putz, F.; Hüsing, N.; **Gor, G. Y.***; Paris, O. “Capillary Bridge Formation between Hexagonally Ordered Carbon Nanorods” *Adsorption* 2020, 26(4), 563-578, DOI: 10.1007/s10450-020-00215-6
50. Corrente, N. J.; Dobrzanski, C. D.; **Gor, G. Y.*** “Compressibility of Supercritical Methane in Nanopores: a Molecular Simulations Study” *Energy & Fuels*, 2020, 34(2), 1506-1513 DOI: 10.1021/acs.energyfuels.9b03592
49. Maximov, M. A.; Galukhin, A. V.; **Gor, G. Y.*** “Pore Size Distribution of Silica Colloidal Crystals from Nitrogen Adsorption Isotherms” *Langmuir* 2019, 35(47), 14975-14982 DOI: 10.1021/acs.langmuir.9b02252
48. Ludescher, L.; Morak, R.; Balzer, C.; Waag, A. M.; Braxmeier, S.; Putz, F.; Busch, S.; **Gor, G. Y.**; Neimark, A. V.; Hüsing, N.; Reichenauer, G.; Paris, O. “In-situ small-angle neutron scattering investigation of adsorption-induced deformation in silica with hierarchical porosity” *Langmuir* 2019, 35(35), 11590-11600, DOI: 10.1021/acs.langmuir.9b01375
47. Sun, Y.; Gurevich, B.; **Gor, G. Y.*** “Modeling elastic properties of Vycor glass saturated with liquid and solid adsorbates” *Adsorption* 2019, 25(5), 973-982 DOI: 10.1007/s10450-019-00123-4
46. Balzer, C.; Waag, A. M.; Putz, F.; Hüsing, N.; Paris, O.; **Gor, G. Y.**; Neimark, A. V.; Reichenauer, G. “Mechanical Characterization of Hierarchical Structured Porous Silica by in-situ Dilatometry Measurements during Gas Adsorption” *Langmuir* 2019, 35(8), 2948-2956, DOI: 10.1021/acs.langmuir.8b03242
45. Galukhin, A. V.; Bolmatenkov, D.; Emelianova, A.; Zharov, I.; **Gor G. Y.**, “Porous Structure of Silica Colloidal Crystals”, *Langmuir* 2019, 2019, 35(6), 2230-2235, DOI: 10.1021/acs.langmuir.8b03476
44. Maximov, M. A.; **Gor, G. Y.*** “Molecular Simulations Shed Light on Potential Uses of Ultrasound in Nitrogen Adsorption Experiments” *Langmuir* 2018, 34(51), 15650-15657 DOI: 10.1021/acs.langmuir.8b02909
43. Chen, C.; Enekwizu, O. Y.; Fan, X.; Dobrzanski, C. D.; Ivanova, E. V.; Ma, Y.; **Gor, G. Y.**; Khalizov, A. F. “A single parameter for predicting the morphology of atmospheric black carbon” *Environ. Sci. Technol.* 2018, 52(24), 14169-14179 DOI: 10.1021/acs.est.8b04201
42. Yurikov, A.; Lebedev, M.; **Gor, G. Y.**; Gurevich, B. “Sorption-Induced Deformation and Elastic Weakening of Bentheim Sandstone” *J. Geophys. Res. Solid Earth* 2018, 123(10), 8589-8601 DOI: 10.1029/2018JB016003
41. **Gor, G. Y.***; Huber, P.; Weissmüller, J. “Elasto-Capillarity in Nanopores: Sorption Strain from the Actions of Surface Tension and Surface Stress” *Phys. Rev. Materials* 2018, 2, 086002. DOI: 10.1103/PhysRevMaterials.2.086002
40. Dobrzanski, C. D.; Maximov, M. A.; **Gor, G. Y.*** “Effect of Pore Geometry on the Compressibility of a Confined Simple Fluid” *J. Chem. Phys.* 2018, 148, 054503. DOI: 10.1063/1.5008490
39. **Gor, G. Y.***; Gurevich, B. “Gassmann Theory Applies to Nanoporous Media” *Geophys. Res. Lett.*, 2018, 45(1), 146-155. DOI: 10.1002/2017GL075321

38. Balzer, C.; Waag, A. M.; Gehret, S.; Reichenauer, G.; Morak, R.; Ludescher, L.; Paris, O.; Putz, F.; Elsaesser, M.; Husing, N.; Bernstein, N.; **Gor, G. Y.***; Neimark, A. V. “Adsorption-induced deformation of hierarchically-structured mesoporous silica - effect of local anisotropy”, *Langmuir* 2017, 33 (22), p. 5592-5602. DOI: 10.1021/acs.langmuir.7b00468
37. **Gor, G. Y.*** Huber, P.; Bernstein, N. “Adsorption-Induced Deformation of Nanoporous Materials - a Review” *Appl. Phys. Rev.* 2017, 4, 011303 [Invited review]. DOI: 10.1063/1.4975001

Publications prior joining NJIT

36. **Gor, G. Y.*** Siderius, D. W.; Shen, V. K.; Bernstein, N. “Modulus-Pressure Equation for Confined Fluids” *J. Chem. Phys.* 2016, 145, 164505. DOI: 10.1063/1.4965916
35. Balzer, C.; Cimino, R.; **Gor, G. Y.**; Neimark, A. V.; Reichenauer, G. “Deformation of microporous carbons during N₂, Ar, and CO₂ adsorption: Insight from the density functional theory” *Langmuir* 2016, 32 (21), p. 8265-8274. DOI: 10.1021/acs.langmuir.6b02036
34. **Gor G. Y.*** and Bernstein N., “Adsorption-Induced Surface Stresses of the Water/Quartz Interface: *Ab Initio* Molecular Dynamics Study” *Langmuir* 2016, 32 (21), p. 5259-5266. DOI: 10.1021/acs.langmuir.6b00923
33. **Gor G. Y.*** and Bernstein N. “Revisiting Bangham’s Law of Adsorption-Induced Deformation: Changes of Surface Energy and Surface Stress”, *Phys. Chem. Chem. Phys.* 2016, 18, 9788-9798. DOI: 10.1039/C6CP00051G
32. **Gor, G. Y.***; Siderius, D. W.; Rasmussen, C. J.; Krekelberg, W. P.; Shen, V. K; Bernstein, N. “Relation Between Pore Size and the Compressibility of a Confined Fluid”, *J. Chem. Phys.*, 2015, 143, 194506. DOI: 10.1063/1.4935430
31. **Gor, G. Y.***; Bertinetti, L.; Bernstein, N.; Hofmann, T.; Fratzl, P.; Huber, P. “Elastic Response of Mesoporous Silicon to Capillary Pressures in the Pores”, *Appl. Phys. Lett.* 2015, 106, 261901. DOI: 10.1063/1.4923240.
30. **Gor, G. Y.***; Cannarella, J.; Leng, C. Z.; Vishnyakov, A.; Arnold, C. B. “Swelling and Softening of Lithium-Ion Batteries Separators in Electrolyte Solvents”, *J. Power Sources* 2015, 294, p. 167-172. DOI: 10.1016/j.jpowsour.2015.06.028
29. **Gor, G. Y.*** “Adsorption Stress Changes the Elasticity of Liquid Argon Confined in a Nanopore”, *Langmuir* 2014, 30 (45), p. 13564-13569. DOI: 10.1021/la503877q
28. **Gor, G. Y.***; Cannarella, J.; Prévost, J. H.; Arnold, C. B. “A Model for the Behavior of Battery Separators in Compression at Different Strain/Charge Rates”, *J. Electrochem. Soc.* 2014, 161(11), F3065-F3071. DOI: 10.1149/2.0111411jes
27. Cannarella, J.; Liu, X.; Leng, C.; Sinko, P.; **Gor, G. Y.**; Arnold, C. B. “Mechanical Properties of a Battery Separator under Compression and Tension”, *J. Electrochem. Soc.* 2014, 161(11), F3117-F3122. DOI: 10.1149/2.0191411jes
26. Cao, Q.; **Gor, G. Y.***; Krogh-Jespersen, K.; Khriachtchev, L. “Non-Covalent Interactions of Nitrous Oxide with Aromatic Compounds: Spectroscopic and Computational Evidence for the Formation of 1:1 Complexes” *J. Chem. Phys.* 2014, 140, 144304. DOI: 10.1063/1.4870516
25. **Gor, G. Y.***; Stone, H. A.; Prévost, J. H. “Fracture Propagation Driven by Fluid Outflow from a Low-permeability Aquifer” *Transport Porous Med.* 2013, 100, p. 69-82. DOI: 10.1007/s11242-013-0205-3
24. **Gor, G. Y.***; Paris, O.; Prass, J.; Russo, P. A.; Ribeiro Carrott, M. L. M.; Neimark, A. V. “Adsorption of n-Pentane on Mesoporous Silica and Adsorbent Deformation” *Langmuir* 2013, 29 (27), p. 8601-8608. DOI: 10.1021/la401513n
23. Landers, J.; **Gor, G. Y.**; Neimark, A. V. “Density Functional Theory Methods for Characterization of Porous Materials (Review)” *Colloids Surf. A* 2013, 437, p. 3-32.

DOI: 10.1016/j.colsurfa.2013.01.007

22. Gor, G. Y.; Elliot, T. R.; Prévost, J. H. “Effects of Thermal Stresses on Caprock Integrity During CO₂ Storage” *Int. J. Greenhouse Gas Control* 2013, 12, p. 300-309.

DOI: 10.1016/j.ijggc.2012.11.020

21. Lee, M.-T.; Vishnyakov, A.; **Gor, G. Y.**; Neimark, A. V. “Interactions of Sarin with Polyelectrolyte Membranes: A Molecular Dynamics Simulation Study” *J. Phys. Chem. B* 2013, 117(1), p. 365-372. DOI: 10.1021/jp308884r

20. Pollock, R. A.; **Gor, G. Y.**; Walsh, B. R.; Fry, J.; Ghampson, I. T.; Melnichenko, Y. B.; Kaiser, H.; DeSisto, W. J.; Wheeler, M. C.; Frederick, B. J. “The Role of Liquid vs. Vapor Water in the Hydrothermal Degradation of SBA-15” *J. Phys. Chem. C* 2012, 116 (43), p. 22802-22814.

DOI: 10.1021/jp303150e

19. **Gor, G. Y.**; Rasmussen, C. J.; Neimark, A. V. “Capillary Condensation Hysteresis in Overlapping Spherical Pores: Monte-Carlo Simulations Study” *Langmuir* 2012, 28 (33), p. 12100-12107. DOI: 10.1021/la302318j

18. Cychosz, K. A.; Guo, X.; Fan, W.; Cimino, R.; **Gor, G. Y.**; Tsapatsis, M.; Neimark, A. V.; Thommes, M. “Characterization of the Pore Structure of Three-Dimensionally Ordered Mesoporous Carbons Using High Resolution Gas Sorption” *Langmuir* 2012, 28 (34), p. 12647-12654 . DOI: 10.1021/la302362h

17. Rasmussen, C. J., **Gor, G. Y.**, Neimark, A. V. “Monte Carlo Simulation of Cavitation in Pores with Non-wetting Defects” *Langmuir* 2012, 28 (10), p. 4702-4711. DOI: 10.1021/la300078k

16. **Gor, G. Y.**; Thommes, M.; Cychosz, K.; Neimark, A. V. “Quenched Solid Density Functional Theory Method for Characterization of Mesoporous Carbons by Nitrogen Adsorption” *Carbon* 2012, 50 (4), 1583-1590. DOI: 10.1016/j.carbon.2011.11.037

15. **Gor, G. Y.**; Tapio, S.; Domanskaya, A. V.; Räsänen, M.; Nemukhin, A. V.; Khriachtchev, L. “Matrix-isolation Study of Phenol-Water Complex and Phenol Dimer” *Chem. Phys. Lett.* 2011, Vol. 517 (1-3), p. 9-15. DOI: 10.1016/j.cplett.2011.09.089

14. Lee, M.-T.; Vishnyakov, A.; **Gor, G. Y.**, Neimark, A. V. “Interactions of Phosphororganic Agents with Water and Components of Polyelectrolyte Membranes” *J. Phys. Chem. B* 2011, Vol. 115 (46), p. 13617-13623. DOI: 10.1021/jp207469h

13. **Gor, G. Y.**, Neimark, A. V. “Adsorption-Induced Deformation of Mesoporous Solids: Macroscopic Approach and Density Functional Theory” *Langmuir* 2011, Vol. 27 (11), p. 6926-6931. DOI: 10.1021/la201271p

12. Vishnyakov, A.; **Gor, G. Y.**; Lee M.-T.; Neimark, A. V. “Molecular Modeling of Organophosphorous Agents and their Aqueous Solutions” *J. Phys. Chem. A* 2011, Vol. 115 (20), p. 5201-5209. DOI: 10.1021/jp200509u

11. **Gor, G. Y.**, Neimark, A. V. “Adsorption-Induced Deformation of Mesoporous Solids” *Langmuir* 2010, Vol. 26 (16), p. 13021-13027. DOI: 10.1021/la1019247

10. Grinin, A. P.; **Gor, G. Y.**; Kuni, F. M. “On the Theory of Aerosol Particle Growth: Non-Steady Transport Problems” *Atmos. Res.* 2011, 101(3), 503-509 DOI: 10.1016/j.atmosres.2010.10.007

9. **Gor, G. Y.**, Kuchma, A. E. “Steady-state composition of a two-component gas bubble growing in a liquid solution: self-similar approach” *J. Chem. Phys.* 2009, Vol. 131, 234705.

DOI: 10.1063/1.3276708.

8. Grinin, A. P., Kuni, F. M., **Gor, G. Y.** “The rate of nonsteady gas bubble growth in liquid supersaturated with gas” *J. Mol. Liq.* 2009, Vol. 148, No. 1, p. 32-34. DOI: 10.1016/j.molliq.2009.06.002

7. **Gor, G. Y.**, Kuchma, A. E. “Dynamics of gas bubble growth in a supersaturated solution with Sievert’s solubility law” *J. Chem. Phys.* 2009, Vol. 131, 034507 . DOI: 10.1063/1.3176896

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5. Grinin, A. P.; Kuni, F. M.; **Gor, G. Y.** “Theory of Nonsteady Diffusion Growth of a Gas Bubble in a Supersaturated Solution of Gas in Liquid” *Colloid Journal* 2009, 71(1), 46-54. DOI: 10.1134/S1061933X09010050
4. Grinin, A. P.; **Gor, G. Y.**; Kuni, F. M. “Self-Similar Solution of a Nonsteady Problem of Nonisothermal Vapour Condensation on a Droplet Growing in Diffusion Regime” *J. Phys. Chem. C* 2008, 112(48), 19069-19079. DOI: 10.1021/jp806903s
3. Grinin, A. P.; **Gor, G. Y.**; Kuni, F. M. “Self-Similar Theory of Non-isothermal Condensation of Vapor on a Growing Drop in Vapor-Gas Mixture” *Colloid Journal* 2008, 70(2), 158-167. DOI: 10.1134/S1061933X08020075
2. Zhuvikina, I. A.; **Gor, G. Y.**; Grinin, A. P. “Statistical Approach to the Description of Homogeneous Nucleation in the Vapor-Gas Medium: Effects of the Heat of Phase Transition” *Colloid Journal* 2005, 67(6), 710-717. DOI: 10.1007/s10595-005-0153-x
1. Grinin, A. P.; Zhuvikina, I. A.; **Gor, G. Y.** “Non-Steady-State Temperature Field of the Vapor-Gas Mixture in the Vicinity of a Growing Droplet: Balance of the Heat of Phase Transition” *Colloid Journal* 2005, 67(3), 295-303. DOI: 10.1007/s10595-005-0096-2

Book Chapters

- 1b. **Gor, G. Y.**; Dobrzanski, C. D.; Emelianova, A. Chapter “Thermodynamic Fingerprints of Nanoporous Materials on the Fluids Confined in their Pores” in “*Soft Matter under Confinements and at Interfaces*”, Ed. Huber, P., World Scientific Publishing, 2020, p. 227-258. DOI: 10.1142/9789811217968_0007

Conference Publications

- 5c. **Gor, G. Y.** “Bulk Modulus of Not-So-Bulk Fluid” *Poromechanics VI* (Proceedings of the Sixth Biot Conference on Poromechanics) 2017, 465-472 Ed. by Matthieu Vandamme; Patrick Dangla; Jean-Michel Pereira; and Siavash Ghabezloo DOI: 10.1061/9780784480779.057 [peer reviewed]
- 4c. **Gor, G. Y.**; Chen, C.; Khalizov, A. F. Kinetic Model for Condensation-Induced Restructuring of Atmospheric Soot *Agglomerates Report Series in Aerosol Science* vol. 200, P. 345-348 (Proceedings of the 20th International Conference on Nucleation and Atmospheric Aerosols) Eds: Halonen, R.; Nikandrova, A.; Kontkanen, J.; Enroth, J. A. & Vehkamäki, H.
- 3c. **Gor, G. Y.**; Prévost, J. H. Effect of CO₂ Injection Temperature on Caprock Stability *Energy Procedia* 2013 Vol. 37 p. 3727-3732 Proceeding of GHGT-11 Conference. Ed. by Tim Dixon and Kenji Yamaji DOI: 10.1016/j.egypro.2013.06.267
- 2c. **Gor, G. Y.**; Kuchma, A. E.; Kuni, F. M. Gas Bubble Growth Dynamics in a Supersaturated Solution: Henry’s and Sievert’s Solubility Laws *Nucleation Theory and Applications* Ed. by J. W. P. Schmelzer, G. Roepke and V. B. Priezhev JINR Dubna, 2011, P. 213-233. <http://arxiv.org/pdf/1205.5471>
- 1c. Grinin, A. P.; **Gor, G. Y.**; Kuni, F. M. Non-steady Theory of Heat Effects at Droplet Diffusional Growth *Nucleation Theory and Applications* Ed. by J. W. P. Schmelzer, G. Roepke and V. B. Priezhev JINR Dubna, 2008, P. 81-96

Presentations

Invited and Keynote Presentations at Conferences and Workshops

17. **Gor, G. Y.** “Compressibility of Adsorbed Water from Molecular Simulations”, Invited talk at the Dubinin Adsorption Conference, October 18-22, 2021, IPCE RAS, Moscow, Russia.
16. **Gor, G. Y.** “Fluctuations in Confined Fluid from Molecular Simulation and their Relation to Experiments”, Invited talk at the CECAM Workshop “Recent progress in the statistical mechanics of solutions through Kirkwood-Buff integrals and related approaches”, September 20-22, 2021, Dijon, France.
15. **Gor, G. Y.** “Compressibility of Nitrogen in Nanopores” Invited talk at the 24th Annual NECZA (North-East Corridor Zeolite Association) Meeting, December 4, 2020, Philadelphia, PA, USA, online.
14. **Gor, G. Y.** “Molecular Modeling of Organophosphorus Compounds Revisited” Invited presentation at the “International Conference on Computer Simulation in Physics and beyond”, October 12-16, 2020, Moscow, Russia, online.
13. **Gor, G. Y.** “Compressibility of Nanoconfined Fluids: Relating Atomistic Modeling to Ultrasonic Experiments” Invited presentation at the Workshop on “Atomistic Simulations for Industrial Needs”, August 5-7, 2020, NIST, USA, online.
12. **Gor, G. Y.** “Compressibility of Simple Fluids in Nanopores and its Effect on Wave Propagation in Fluid-Saturated Porous Media” Invited presentation at the Workshop on Molecular and Mesoscale Modeling, Skolkovo Institute of Science and Technology, January 15, 2020, Moscow, Russia.
11. **Gor, G. Y.** “Kinetic Model for Condensation-Induced Restructuring of Atmospheric Soot Aggregates” Invited talk at the International Conference “Mechanisms and Non-Linear Problems of Nucleation and Growth of Crystals and Thin Films” July 01-05, 2019, St. Petersburg, Russia.
10. **Gor, G. Y.** “Compressibility of Confined Simple Fluid from an Equation of State and Molecular Simulation” Plenary lecture at the XXII International Conference on Chemical Thermodynamics in Russia, June 19-23, 2019, St. Petersburg, Russia.
9. **Gor, G. Y.** “Elastic Properties of Simple Fluids in Mesopores” Invited lecture at the Japan Adsorption Conference, May 21-23, 2019, Chiba, Japan.
8. **Gor, G. Y.** “Molecular basis for ultrasonic characterization of nitrogen-saturated nanoporous materials” Invited presentation at the 1st Symposium on Acoustics of Nanoporous Materials at the February 19, 2019, Salford University, Manchester, UK.
7. **Gor, G. Y.** “Adsorption-induced deformation: solvation pressure and surface stress approaches” Invited keynote presentation at the XIX Workshop on the Characterization of Fine and Porous Solids “Sorptions Induced Deformation of Solids: Swelling and Shrinkage”, November 13-14, 2018, Niedernhausen, Germany.
6. **Gor, G. Y.** “Adsorption-Induced Mechanical Stresses: Effects on the Solid and on the Fluid”, Keynote presentation, V International Conference on Colloid Chemistry and Physicochemical Mechanics, September 14, 2018, St. Petersburg, Russia.
5. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption in Nanoporous Materials” Invited keynote lecture, International Symposium “Smart materials”, July 1-6, 2018, Suzdal, Russia.
4. **Gor, G. Y.** “Modeling Adsorption-Induced Stresses in Nanoporous Materials” Invited tutorial lecture, Summer School “Modeling of Smart Materials”, July 1-6, 2018, Suzdal, Russia.
3. **Gor, G. Y.** “What can we learn about elasticity of nanoporous material from elasticity of fluid in its pores?” Invited presentation, Workshop on Deformation of Hierarchical and Anisotropic

Porous Solids by Fluid Adsorption (DIANA), July 17, 2017, Montanuniversität Leoben, Leoben, Austria.

2. **Gor G. Y.** “Revisiting Bangham’s Law: Changes of Surface Energy and Surface Stress”, Invited presentation, Workshop on Deformation of Hierarchical and Anisotropic Porous Solids by Fluid Adsorption (DIANA), June 16, 2016, Bavarian Center for Applied Energy Research, Würzburg, Germany.

1. **Gor G. Y.** “Modeling the Adsorption-Induced Stresses and Strains in Porous Materials”, Invited presentation, Workshop on Deformation of Hierarchical and Anisotropic Porous Solids by Fluid Adsorption (DIANA), July 7, 2015, University of Salzburg, Salzburg, Austria.

Lectures and Seminars

44. **Gor, G. Y.**, “Coupling Adsorption and Mechanics in Nanoporous Materials” The Department of Physics Seminar Series at **ITMO University**, St. Petersburg, Russia (October 22, 2021).

43. **Gor, G. Y.** “Compressibility of Nanoconfined Fluids”, The Soft Materials Coffee Hour, **Princeton University**, online (January 28, 2021).

42. **Gor, G. Y.** “Oral Assessments in the Undergraduate Engineering Courses: Example of Chemical Engineering Thermodynamics”, Institute for Teaching Excellence Workshop, **New Jersey Institute of Technology**, online (January 13, 2021).

41. **Gor, G. Y.** “Compressibility of Subcritical and Supercritical Fluids Confined in Nanopores”, Chemical and Petroleum Engineering graduate seminar series, **The University of Kansas**, online (September 24, 2020).

40. **Gor, G. Y.** “Compressibility of Subcritical and Supercritical Fluids Confined in Nanopores” Seminar in the Department of Physics, Polymer Physics Division, **Moscow State University**, Moscow, Russia (January 16, 2020).

39. **Gor, G. Y.** “Adsorption-Induced Deformation of Nanoporous Materials” Seminar organized by the Center for Design, Manufacturing, and Materials (CDMM) and the Center for Computational and Data-Intensive Science and Engineering (CDISE), **Skolkovo Institute of Science and Technology**, Moscow, Russia (January 14, 2020).

38. **Gor, G. Y.** “Compressibility of Simple Fluids Confined in Nanopores” Seminar within the Department of Chemical and Biomolecular Engineering seminar series at **Ohio University**, Athens, OH, USA (October 21, 2019).

37. **Gor, G. Y.** “Compressibility of Simple Fluids Confined in Nanopores” Seminar at Curtin/CSIRO Geophysics Seminars at **Curtin University**, Perth, WA, Australia (June 04, 2019).

36. **Gor, G. Y.**, “Elastic Properties of Confined Fluids Probed by Ultrasound and by Molecular Simulations” Seminar at the Department of Physics at **University of Barcelona**, Barcelona, Spain (May 3, 2019).

35. **Gor, G. Y.** “Elastic Properties of Confined Fluids Probed by Ultrasound and by Molecular Simulations” Seminar at **ExxonMobil Research and Engineering Company**, Annandale, NJ, USA (April 17, 2019).

34. **Gor, G. Y.** “Compressibility of Simple Fluids Confined in Nanopores” Seminar within the seminar series of the Chemistry Department, **Rutgers University Newark**, Newark, NJ, USA (February 28, 2019).

33. **Gor, G. Y.** “Compressibility of Simple Fluids Confined in Nanopores” Seminar within the seminar series of the Chemical Engineering Department, **City College of New York**, New York, NY, USA (February 25, 2019).

32. **Gor, G. Y.** Tutorial on “Modeling Adsorption-Induced Deformation in Nanoporous Materials” at the Earth Science and Engineering Department, **King Abdullah University of Science and Technology**, Thuwal, Saudi Arabia (October 04, 2018).
31. **Gor, G. Y.** “Elastic Properties of Fluids in Nanoporous Media: Molecular Simulation Insight” Seminar within the Earth Science and Engineering Graduate Seminar series, **King Abdullah University of Science and Technology**, Thuwal, Saudi Arabia (October 04, 2018).
30. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption in Nanoporous Materials” (seminar) **Edgewood Chemical Biological Center**, Aberdeen Proving Ground, MD, USA (August 30, 2018).
29. **Gor, G. Y.** “Compressibility of Fluids Confined in Nanopores” **St. Petersburg State University**, Acoustics Laboratory, Physics Faculty, St. Petersburg, Russia (June 27, 2018).
28. **Gor, G. Y.** “On the Problem of Condensation-Induced Restructuring of Soot Agglomerates” **St. Petersburg State University**, Department of Statistical Physics, St. Petersburg, Russia (October 24, 2017).
27. **Gor, G. Y.** “How to Interpret Ultrasonic Experiments on Fluid-Saturated Nanoporous Media?” Applied Mathematics Colloquium Series, NJIT’s **Department of Mathematical Sciences**, NJIT, Newark, NJ, USA (October 06, 2017).
26. **Gor, G. Y.** “Compressibility of the fluids confined in the nanopores” **DuPont Experimental Station**, Wilmington, DE, USA (July 28, 2017).
25. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption by Nanoporous Materials” **St. Petersburg State Technological Institute**, St. Petersburg, Russia (March 15, 2017).
24. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption by Nanoporous Materials” **Institute of Problems of Mechanical Engineering Russian Academy of Sciences (IPME RAS)**, St. Petersburg, Russia (March 13, 2017).
23. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption by Nanoporous Materials” Molecular Physics Department, **MEPhI**, Moscow, Russia (March 10, 2017).
22. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption by Nanoporous Materials”, **St. Petersburg State University**, Department of Physics, Chair of Statistical Physics, St. Petersburg, Russia (June 21, 2016)
21. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption by Nanoporous Materials”, **St. Petersburg State University**, Department of Chemistry, Physical Chemistry Division, St. Petersburg, Russia (June 21, 2016).
20. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption by Nanoporous Materials” **Technical University Hamburg-Harburg**, SFB 986 Materials Science Colloquium, Harburg, Germany (May 25, 2016)
19. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption by Nanoporous Materials” **George Mason University**, Computational Materials Science Center Colloquia Series, Fairfax, VA, USA (April 11, 2016).
18. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption by Porous Materials” **Princeton University**, Dept. of Civil and Environmental Engineering, Princeton, NJ, USA (January 6, 2016).
17. **Gor, G. Y.** “Mechanical Effects of Fluids Adsorption by Porous Materials” **New Jersey Institute of Technology**, Dept. of Chemical, Biological and Pharmaceutical Engineering, Newark, NJ, USA (December 15, 2015).
16. **Gor, G. Y.** “Adsorption-Induced Stresses and Strains in Nanoporous Materials” Computational Soft Matter Seminar Series, **National Institute of Standards and Technology**, Gaithersburg, MD, USA (October 28, 2015)

15. Gor, G. Y. “High-Pressure Effects in Nano-Confined Fluids” **Bavarian Center for Applied Energy Research**, Würzburg, Germany (July 9, 2015).
14. Gor, G. Y. “Modeling the Adsorption-Induced Stresses and Strains in Porous Materials” **Hamburg University of Technology**, Institute of Materials Physics and Technology, Hamburg-Harburg, Germany (July 3, 2015).
13. Gor, G. Y. “Adsorption-Induced Deformation: Thermodynamics and Mechanics at the Nanoscale” **New Jersey Institute of Technology**, Dept. of Chemical, Biological and Pharmaceutical Engineering, Newark, NJ, USA (March 23, 2015).
12. Gor, G. Y. “Mechanical Effects of Fluids Sorption by Porous Materials” **Micromeritics Instrument Corporation**, Norcross, GA, USA (March 13, 2015).
11. Gor, G. Y. “Mechanical Properties of Porous Polymer Separator for Lithium-Ion Batteries” **ETH Zurich**, Dept. of Information Technology and Electrical Engineering, Laboratory for Nanoelectronics, Zurich, Switzerland (May 19, 2014).
10. Gor, G. Y. “Modeling Porous Materials for Energy Applications” **TU Delft**, 3mE Department, Delft, The Netherlands (May 16, 2014).
9. Gor, G. Y. “Mechanical Properties of Lithium-Ion Batteries Separator in Electrolyte Solvent” **U.S. Naval Research Laboratory**, Center for Computational Materials Science, Washington, DC, USA (February 27, 2014).
8. Gor, G. Y. “On the Mechanics of Lithium-Ion Batteries: Poroelastic and Viscoelastic Behavior of Battery Separators” **Moscow State University**, Dept. of Chemistry, Physical Chemistry Division, Moscow, Russia (December 16, 2013)
7. Gor, G. Y. “Deformation by Adsorption: From Molecular Sieves to Shale Gas Recovery” **Skolkovo Institute of Science and Technology**, Moscow, Russia (December 12, 2013).
6. Gor, G. Y. “Deformation by Adsorption: From Molecular Sieves to Shale Gas Recovery” **Massachusetts Institute of Technology**, SkTech/MIT Initiative, Cambridge, MA, USA (August 30, 2013).
5. Gor, G. Y. “Mechanical Response of Porous Materials to Adsorption” **DuPont Experimental Station**, Wilmington, DE, USA (July 19, 2013).
4. Gor, G. Y. “Use of Density Functional Theory for Characterization of Porous Materials” **St. Petersburg State University**, Department of Physics, Chair of Statistical Physics, St. Petersburg, Russia (June 14, 2011).
3. Gor, G. Y. “Application of DFT models for studies of nanoporous materials” **Chiba University**, Graduate School of Science, Chiba, Japan (July 30, 2010).
2. Gor, G. Y. “Application of DFT models for studies of nanoporous materials” **National Institute for Material Science**, Tsukuba, Japan (August 06, 2010).
1. Gor, G. Y. “Adsorption Deformation of Mesoporous Materials” **St. Petersburg State University**, Department of Physics, Chair of Statistical Physics, St. Petersburg, Russia (April 23, 2010).

Presentations at Conferences and Workshops

The speaker is marked with an asterisk. PL – plenary, O – oral, P – poster

103. (O) Emelianova, A.*; Basharova, E.; Kolesnikov, A.; Villaseco Arribas, E.; Ivanova, E. V.; Gor, G. Y. “Revisiting the Trappe Force Field for Organophosphorus Compounds: Sarin, DMMP, and DIMP” 2021 AIChE Annual Meeting, November 7-11, 2021, Boston, MA, USA.
102. (O) Gor, G. Y.* “Oral Exams in Undergraduate Cheme Thermo Taught Online” 2021 AIChE Annual Meeting, November 7-11, 2021, Boston, MA, USA.

101. (P) Ogbebor, J.*; **Gor, G. Y.** “Effect of Nanoporous Confinement on the Compressibility of Water: A Molecular Simulation Study” 2021 AIChE Annual Meeting, November 7-11, 2021, Boston, MA, USA.
100. (P) Ogbebor, J.; **Gor, G. Y.** “Compressibility of Water Confined in Carbon Nanopores Via Molecular Dynamics Simulations” URI Summer Research Symposium, NJIT, Newark, NJ, July 29-30, 2021.
99. (P) Tews, V.*; Emelianova, A.; **Gor, G. Y.** “Hybrid Monte Carlo-Molecular Dynamics Scheme for Simulating Adsorption-Induced Deformation in Spherical Pores” URI Summer Research Symposium, NJIT, Newark, NJ, July 29-30, 2021.
98. (P) Winay, N.*; **Gor, G. Y.** “Numerical Solution for the Non-Steady-State Growth of a Gas Bubble in a Supersaturated Solution with Capillary Forces” URI Summer Research Symposium, NJIT, Newark, NJ, July 29-30, 2021.
97. (O) Maximov, M. A.*; Galukhin, A. V.; **Gor, G. Y.** “Pore Size Distribution of Silica Colloidal Crystals from Nitrogen Adsorption Isotherms”, 2020 AIChE Annual Meeting, November 16-20, 2020, online
96. (O) Emelianova, A.*; Maximov, M. A.; **Gor, G. Y.** “Application of Derjaguin-Broekhoff-De Boer Theory and Molecular Simulation for Calculation of Solvation Pressure in Spherical Mesopores”, 2020 AIChE Annual Meeting, November 16-20, 2020, online
95. (O) Corrente, N. J.; Dobrzanski, C. D.; **Gor, G. Y.*** “Compressibility of Supercritical Methane in Nanopores: A Molecular Simulation Study”, 2020 AIChE Annual Meeting, November 16-20, 2020, online
94. (O) Kolesnikov, A.; **Gor, G. Y.*** “Density Functional Theory Model for Adsorption-Induced Deformation of Materials with Non-Convex Pore Geometry”, 2020 AIChE Annual Meeting, November 16-20, 2020, online
93. (O) Ivanova, E. V.; Khalizov, A. F.; **Gor, G. Y.** “Model for Competitive Condensation of Supersaturated Vapor on a Soot Aggregate”, American Association for Aerosol Research, 38th Annual Conference (October 5-9, 2020).
92. (O) Kolesnikov, A. I.; **Gor, G. Y.*** “Density Functional Theory Model for Adsorption-Induced Deformation of Materials with Convex Pore Walls”, Interpore-12 Meeting, August 31-September 4, 2020, online
91. (P) Zhao, C.*; Emelianova, A.; **Gor, G. Y.** “Solvation Pressure of a Confined Square-Well Fluid” 34th Annual Partners in Science Research Symposium, August 19, 2020, Liberty Science Center, online
90. (P) Sivaraman, A.*; Maximov, M. A.; **Gor, G. Y.** “Isothermal Elastic Modulus of a Square-Well Fluid in a Nanopore” 34th Annual Partners in Science Research Symposium, August 19, 2020, Liberty Science Center, online
89. (O) Emelianova, A.*; **Gor, G. Y.** “Adsorption-Induced Deformation of Faujasite Zeolites: Molecular Simulation Study”, 2019 AIChE Annual Meeting, November 10-15, 2019, Orlando, FL, USA.
88. (O) Maximov, M. A.*; **Gor, G. Y.** “Pore Size Estimation from Ultrasonic Measurements during Nitrogen Adsorption Experiment”, 2019 AIChE Annual Meeting, November 10-15, 2019, Orlando, FL, USA
87. (O) Dobrzanski, C. D.*; Corrente, N.; **Gor, G. Y.** “Modeling Compressibility of Confined Fluids Via Molecular Simulation and Equation of State”, 2019 AIChE Annual Meeting, November 10-15, 2019, Orlando, FL, USA.
86. (O) Emelianova, A.*; **Gor, G. Y.** “Adsorption-Induced Deformation of Faujasite Zeolites: Molecular Simulation Study”, 2nd Molecular Simulation Workshop, New Jersey Institute of Tech-

nology, November 1, 2019, Newark, NJ, USA.

85. (O) Maximov, M. A.*; **Gor, G. Y.** “Pore Size Estimation from Ultrasonic Measurements during Nitrogen Adsorption Experiment”, 2nd Molecular Simulation Workshop, New Jersey Institute of Technology, November 1, 2019, Newark, NJ, USA.

84. (O) Dobrzanski, C. D.*; Corrente, N.; **Gor, G. Y.** “Modeling Compressibility of Confined Fluids Via Molecular Simulation and Equation of State”, 2nd Molecular Simulation Workshop, New Jersey Institute of Technology, November 1, 2019, Newark, NJ, USA.

83. (P) Valencia, J.*; Dobrzanski, C. D.; **Gor, G. Y.** “Molecular Simulation of Confined Fluid in Atomistically Rough Nanopore” 33rd Annual Partners in Science Research Symposium, August 22, 2019, Liberty Science Center, Jersey City, NJ, USA.

82. (P) Laddah, S.*; Emelianova, A.; **Gor, G. Y.** “Assessment of Sandstone Nanoporosity and its Role for the Adsorption-Induced Deformation” Provost High School Summer Research Symposium, August 5, 2019, NJIT, Newark, NJ, USA.

81. (P) Molina, M.; Maximov, M. A.; **Gor, G. Y.*** “Integrated Solid-Fluid Interaction Potential for Modeling Gas Adsorption in Templated Mesoporous Carbons” 12th International Undergraduate Research Symposium, August 1, 2019, NJIT, Newark, NJ, USA.

80. (O) Maximov, M. A.; **Gor, G. Y.*** “Molecular Simulations Shed Light on Potential Uses of Ultrasound in Nitrogen Adsorption Experiments” 13th Fundamentals of Adsorption Conference (FOA-13), May 26-31, 2019, Cairns, Australia.

79. (P) Dobrzanski, C. D.*; Corrente, N.; **Gor, G. Y.** “Compressibility of confined simple fluid from an equation of state and molecular simulation”, 16th Annual Conference on Frontiers in Applied and Computational Mathematics (FACM'19), May 23-24, 2019, NJIT, Newark, NJ, USA

78. (O) Yurikov, A.; Lebedev, M.; **Gor, G. Y.***; Gurevich, B. “The Effect of Water Adsorption on Deformation and Elastic Properties of Bentheim Sandstone”, Interpore-11 Meeting, May 6-10, 2019, Valencia, Spain.

77. (P) Dobrzanski, C. D.; Corrente, N.*; **Gor, G. Y.** “Compressibility of confined simple fluid from an equation of state and molecular simulation”, 2019 AIChE Mid-Atlantic Student Regional Conference, April 5-7, 2019, Pennsylvania State University, State College, PA, USA.

76. (P) Dobrzanski, C. D.*; Corrente, N.; **Gor, G. Y.** “Compressibility of confined simple fluid from an equation of state and molecular simulation”, Workshop Transport in Disordered Environments, January 23-25, 2019, Princeton, NJ, USA

75. (P) Maximov, M. A.*; **Gor, G. Y.** “Ultrasound propagation in fluid-saturated nanoporous media” Workshop Transport in Disordered Environments, January 23-25, 2019, Princeton, NJ, USA

74. (P) Emelianova, A.*; **Gor, G. Y.** “Monte Carlo simulation of adsorption in synthetic faujasite zeolites” The 22nd Annual Meeting of Northeast Corridor Zeolite Association (NECZA), December 14, 2018, Philadelphia, PA, USA.

73. (P) Maximov, M. A.*; **Gor, G. Y.** “Molecular Simulations Shed Light on Potential Uses of Ultrasound in Nitrogen Adsorption Experiments”, The 22nd Annual Meeting of Northeast Corridor Zeolite Association (NECZA), December 14, 2018, Philadelphia, PA, USA.

72. (O) Ivanova, E. V.; Khalizov, A. F.; **Gor, G. Y.*** “The Competition between Surface and Capillary Condensation of Vapors on Soot Aggregates”, October 28 - November 2, 2018, Pittsburgh, PA, USA

71. (O) Enekwizu, O. Y.*; Chen, C.; **Gor, G. Y.**; Dobrzanski, C. D.; Khalizov, A. F. “The Impact of Vapor Supersaturation on the Morphology, Mixing State and Optical Properties of Atmospheric Soot”, October 28 - November 2, 2018, Pittsburgh, PA, USA

70. (O) Dobrzanski, C. D.*; **Gor, G. Y.** “Temperature Dependence of the Elastic Moduli of Confined Liquid Argon”, October 28 - November 2, 2018, Pittsburgh, PA, USA.
69. (P) Maximov, M.A.*; **Gor, G. Y.** “Analysis of Ultrasonic Measurements during Nitrogen Adsorption Experiments” 1st North American Symposium on Dynamic Vapor Sorption Science, September 18, 2018, Philadelphia, PA, USA.
68. (P) Valencia, J.*; **Gor, G. Y.** “Predicting the Vapor Pressures for Low-Volatile Organic Compounds” Provost High School Summer Internship Poster Symposium, August 3, 2018, NJIT, Newark, NJ, USA
67. (P) Lyandres, Z.*; **Gor, G. Y.** “Analysis of Structure of Nanoconfined Fluids and Relation to the Elastic Properties” Provost High School Summer Internship Poster Symposium, August 3, 2018, NJIT, Newark, NJ, USA
66. (P) Corrente, N.*; **Gor, G. Y.** “Molecular Dynamics Simulations Study of Confinement Effects on Compressibility and Heat Capacity of Fluids”, Undergraduate Summer Research Symposium at NJIT, July 27, 2018, Newark, NJ, USA
65. (O) Emelianova, A.*; **Gor, G. Y.;** “Macroscopic Adsorption Models Based on Integrated Interatomic Potentials”, NJIT Molecular Simulations Mini-Workshop, May 18, 2018, Newark, NJ, USA
64. (O) Dobrzanski, C. D.*; **Gor, G. Y.;** “Molecular simulations of temperature effects on elastic moduli and heat capacities of confined fluids”, NJIT Molecular Simulations Mini-Workshop, May 18, 2018, Newark, NJ, USA
63. (O) Maximov, M. A.*; **Gor, G. Y.;** “Kinetic Monte Carlo methods for calculation of fluid phase equilibria”, NJIT Molecular Simulations Mini-Workshop, May 18, 2018, Newark, NJ, USA
62. (P) Maximov, M. A.; **Gor, G. Y.*;** “Analysis of Ultrasonic Measurements during Nitrogen Adsorption Experiments”, Interpore-10, 10th International Conference on Porous Media & Annual Meeting, May 14-17 2018, New Orleans, USA
61. (P) Emelianova, A.; **Gor, G. Y.*;** “Predictions of Solvation Pressure in Mesopores Based on Saam-Cole Theory”, Interpore-10, 10th International Conference on Porous Media & Annual Meeting, May 14-17 2018, New Orleans, USA
60. (O) **Gor, G. Y.*;** Gurevich, B.; “Gassmann Equation for Nanoporous Media”, Interpore-10, 10th International Conference on Porous Media & Annual Meeting, May 14-17 2018, New Orleans, USA
59. (P) Maximov, M. A*.; **Gor, G. Y.;** “Analysis of Ultrasonic Measurements during Nitrogen Adsorption Experiments”, CPM-8, 8th Workshop on Characterization of Porous Materials, May 6-9, Delray Beach, FL, USA
58. (P) Emelianova, A.*; **Gor, G. Y.;** “Predictions of Solvation Pressure in Mesopores Based on Saam-Cole Theory”, CPM-8, 8th Workshop on Characterization of Porous Materials, May 6-9, Delray Beach, FL, USA
57. (O) **Gor, G. Y.*;** Gurevich, B.; “How to Interpret Ultrasonic Measurements on Fluid-Saturated Nanoporous Solids?” CPM-8, 8th Workshop on Characterization of Porous Materials, May 6-9, Delray Beach, FL, USA
56. (P) Dobrzanski, C. D.*; **Gor, G. Y.** “Calculation of elastic properties of argon confined in nanopores of various morphologies using grand canonical Monte Carlo” 2017 Annual Meeting of the APS Mid-Atlantic Section, November 3-5, 2017, Newark, NJ, USA
55. (P) Maximov, M. A.*; **Gor, G. Y.** “Argon Adsorption in Three-Dimensional Ordered Mesoporous (3DOm) Carbons: Monte Carlo Molecular Simulation Study” 2017 Annual Meeting of the APS Mid-Atlantic Section, November 3-5, 2017, Newark, NJ, USA

54. (PL) Dobrzanski, C. D. and **Gor, G. Y.*** “Compressibility of Argon Confined in Nanopores: Effect of the Pore Geometry” 2017 AIChE Annual Meeting, October 29-November 3, 2017, Minneapolis, MN, USA
53. (O) **Gor, G. Y.***; Chen, C.; Khalizov, A. F. “Analytical Model for Vapor Condensation on Soot Agglomerates” 2017 AIChE Annual Meeting, October 29-November 3, 2017, Minneapolis, MN, USA [identified as the best presentation of the session]
52. (O) **Gor, G. Y.*** “Fluctuations of number of particles in the fluid confined in a nanopores” 5th Russian conference “Metastable States and Fluctuation Phenomena” October 17-19, 2017, Yekaterinburg, Russia
51. (P) Munoz, M.*; **Gor, G. Y.** “Analysis of Atomistic Structures of Adsorbed Argon Using Python” Provost High School Summer Internship Poster Symposium, August 4, 2017, NJIT, Newark, NJ, USA
50. (P) Lyandres, Z.*; **Gor, G. Y.** “Study of ordering in carbon-benzene system using Python” Provost High School Summer Internship Poster Symposium, August 4, 2017, NJIT, Newark, NJ, USA
49. (P) Roxas, A.-C.*; **Gor, G. Y.** “Surface Stresses Induced by Polycyclic Aromatic Hydrocarbon Condensation on Carbon Surface: Molecular Dynamics Simulation”, Undergraduate Summer Research Symposium at NJIT, July 25, 2017
48. (O) **Gor, G. Y.*** “Bulk Modulus of Not-So-Bulk Fluid” Sixth Biot Conference on Poromechanics, July 9-13, 2017, Paris, France
47. (O) **Gor, G. Y.***; Chen, C.; Khalizov, A. F. “Kinetic model for condensation-induced restructuring of atmospheric soot agglomerates”), 20th International Conference on Nucleation and Atmospheric Aerosols (ICNAA 2017), June 25-30, 2017, Helsinki, Finland
46. (O) **Gor, G. Y.*** “Elastic Properties of Confined Fluids and their Application for Characterization of Porous Materials” COPS-XI, 11th International Symposium on the Characterization of Porous Solids, May, 14-17, 2017, Avignon, France
45. (P) Balzer, C.*; Waag, A. M.; Gehret, S.; Reichenauer, G.; Putz, F.; Hüsing, N.; Morak, R.; Ludescher, L.; Paris, O.; Bernstein, N.; **Gor, G. Y.**; Neimark, A. V. “Adsorption-Induced Deformation of Hierarchically Organized Porous Silica – Effect of Pore Level Anisotropy” COPS-XI, 11th International Symposium on the Characterization of Porous Solids, May, 14-17, 2017, Avignon, France
44. (O) Balzer, C.*; Reichenauer, G.; Cimino, R. T.; **Gor, G. Y.**; Neimark, A. V. “Structural and Mechanical Characterization of Carbon Xerogels by Gas Adsorption with in-situ Dilatometry” COPS-XI, 11th International Symposium on the Characterization of Porous Solids, May, 14-17, 2017, Avignon, France
43. (P) Dobrzanski, C. D.* and **Gor, G. Y.** “Effect of pore geometry on the compressibility of confined simple fluids” Interpore-9, 9th International Conference on Porous Media & Annual Meeting, May 8-11, 2017, Rotterdam, The Netherlands;
42. (O) **Gor, G. Y.*** “Elasticity of Fluid in Solvophilic and Solvophobic Confinement” Interpore-9, 9th International Conference on Porous Media & Annual Meeting, May 8-11, 2017, Rotterdam, The Netherlands;
41. (O) **Gor, G. Y.***; Chen, C.; Khalizov, A. F. “A Simple Analytical Model for Predicting the Mixing State of Soot Aggregates in Relation to Condensing Vapor Supersaturation” 35th Northeast Regional Meeting on Kinetics and Dynamics, January 28, 2017, NJIT, Newark, NJ, USA
40. (O) **Gor, G. Y.***; Siderius, D. W.; Shen, V. K.; Bernstein, N. “Compressibility of Confined Fluid and Its Dependence on Pressure” 2016 AIChE Annual Meeting, November 13-18, 2016, San Francisco, CA, USA

- 39.** (O) **Gor, G. Y.***; Balzer, C.; Waag, A.; Bernstein, N.; Neimark, A. V.; Hüsing, N.; Paris, O.; Reichenauer, G. “Adsorption-Induced Deformation of Hierarchical Mesoporous Structures: Stresses Normal to the Pore Walls and Along the Pore Walls” 2016 AIChE Annual Meeting, November 13-18, 2016, San Francisco, CA, USA
- 38.** (O) **Gor, G. Y.***; Siderius, D. W.; Rasmussen, C. J.; Shen, V. K.; Bernstein, N. “Relation Between Pore Size and the Compressibility of Confined Argon: a Monte Carlo Simulation Study”, 12th International Conference on the Fundamentals of Adsorption (FOA12), May 29-June 3, 2016, Fridrichshafen, Germany
- 37.** (O) **Gor, G. Y.***; Bernstein, N. “Adsorption-Induced Deformation: Swelling and Shrinking”, Interpore-8, 8th International Conference on Porous Media & Annual Meeting, May 9-12, 2016, Cincinnati, OH, USA
- 36.** (P) **Gor, G. Y.***; Bertinetti, L.; Bernstein, N.; Hofmann, T.; Fratzl, P.; Huber, P. “Elastic Response of Mesoporous Silicon to Capillary Pressures in the Pores”, Interpore-8, 8th International Conference on Porous Media & Annual Meeting, May 9-12, 2016, Cincinnati, OH, USA
- 35.** (O) **Gor, G. Y.***; Siderius, D. W.; Rasmussen, C. J.; Krekelberg, W. P.; Shen, V. K.; Bernstein, N. “Extracting Information about Pore Sizes from Ultrasonic Experiments”, 2015 AIChE Annual Meeting, Salt Lake City, UT, USA, November 8-13, 2015
- 34.** (O) **Gor, G. Y.***; Bernstein, N. “Adsorption-Induced Surface Stresses Based on Electronic Structure DFT Calculations”, 2015 AIChE Annual Meeting, Salt Lake City, UT, USA, November 8-13, 2015
- 33.** (O) **Gor, G. Y.*** “Elasticity of a Simple Fluid Confined in a Nanopore”, Interpore-7, 7-th International Conference on Porous Media & Annual Meeting, Padova, Italy, May 18-21, 2015
- 32.** (P) **Gor, G. Y.*** “Relation Between the Pore Size and Elastic Modulus of Adsorbed Fluid”, CPM-7 - The 7th International Workshop on Characterization of Porous Materials: From Angstroms to Millimeters, Delray Beach, FL, USA, May 3-6, 2015
- 31.** (O) **Gor, G. Y.*** “Elasticity of Simple Fluids Confined in Nanopores”, 2014 AIChE Annual Meeting, Atlanta, GA, USA, November 16-21, 2014
- 30.** (O) Balzer, C.; Cimino, R. T.; **Gor, G. Y.***; Neimark, A. V.; Reichenauer, G. “Sorption-Induced Deformation of Carbon Micropores Studied By in-Situ Dilatometry and Density Functional Theory”, 2014 AIChE Annual Meeting, Atlanta, GA, USA, November 16-21, 2014
- 29.** (P) **Gor, G. Y.***; Cannarella, J.; Liu, X.; Leng, C.; Prévost, J. H.; Arnold, C. B. “Mechanical Properties of Porous Polymer Separator for Lithium-Ion Batteries”, 2014 AIChE Annual Meeting, Atlanta, GA, USA, November 16-21, 2014
- 28.** (O) **Gor, G. Y.***; Liu, X.; Cannarella, J.; Prévost, J. H.; Arnold, C. B. “Poromechanics of a Lithium-Ion Battery Separator”, 225th ECS Meeting, Orlando, FL, USA, May 11-15, 2014
- 27.** (P) **Gor, G. Y.***; Liu, X.; Cannarella, J.; Prévost, J. H.; Arnold, C. B. “Poroelastic Behavior of a Lithium-Ion Battery Separator”, Princeton E-affiliates Annual Meeting, Princeton, NJ, USA, November 15, 2013
- 26.** (O) **Gor, G. Y.***; Prévost, J. H. “CO₂ Leaks From Geological Storage: Geomechanics, Fluid Flow and Phase Transitions” 2013 AIChE Annual Meeting, San Francisco, CA, USA, November 3-8, 2013
- 25.** (PL) **Gor, G. Y.***; Paris, O.; Prass, J.; Neimark, A. V. “Deformation of Mesoporous Silica Induced by n-Pentane Adsorption: Theory and SAXS Experiment” 11th International Conference on the Fundamentals of Adsorption, Baltimore, MD, USA, May 19-24, 2013.
- 24.** (P) **Gor, G. Y.***; Neimark, A. V. “Adsorption-Induced Deformation of Mesoporous Solids” 16th Northeast Corridor Zeolite Association Annual Meeting NECZA 2012, University of Pennsylvania, Philadelphia, PA, USA, December 14, 2012

23. (P) **Gor, G. Y.***; Prévost, J. H. “Effect of CO₂ injection temperature on caprock stability” International Conference on Greenhouse Gas Technologies, Kyoto, Japan, November 18-22, 2012
22. (O) **Gor, G. Y.***; Prévost, J. H. “Assessing the Role of Thermal Stresses in Caprock Integrity During CO₂ Storage” 2012 AIChE Annual Meeting, Pittsburgh, PA, USA, October 28-November 2, 2012 [**Best Presentation of the Session**]
21. (P) **Gor, G. Y.***; Balzer C., Reichenauer G., Neimark A. V. “Modeling of Xerogel Deformation upon Nitrogen Sorption” CPM-6 - The 6th International Workshop on Characterization of Porous Materials: From Angstroms to Millimeters, Delray Beach, FL, USA, April 29 - May 2, 2012
20. (P) **Gor, G. Y.***; and Prévost J. H. “Effects of thermal stresses on caprock integrity during CO₂ storage” 11th CMI Annual Meeting, Princeton, NJ, USA, April 17-18, 2012
19. (O) **Gor, G. Y.***; Rasmussen C. J., Neimark A. V. “Monte-Carlo Simulation of the Capillary Condensation Hysteresis In Overlapping Spherical Cavities” 2011 AIChE Annual Meeting, Minneapolis, MN, USA, October 16-21, 2011
18. (O) **Gor, G. Y.***; Thommes M., Neimark A.V. “QSDFE Method for Characterization of Mesoporous Carbons” 2011 AIChE Annual Meeting, Minneapolis, MN, USA, October 16-21, 2011
17. (P) **Gor, G. Y.***; Neimark A.V. “Adsorption-Induced Deformation of Mesoporous Solids” 25th European Symposium on Applied Thermodynamics, St. Petersburg, Russia, June 24-27, 2011
16. (P) **Gor, G. Y.***; Neimark A.V. “Adsorption-Induced Deformation of Mesoporous Solids” Workshop Adsorption in Compliant Solids: Theory, Simulation, and Experiments, Paris, France, June 09-11, 2011
15. (P) **Gor, G. Y.***; Thommes M., Neimark A.V. “Pore size analysis of advanced mesoporous carbons by QSDFE” 9th International Symposium on the Characterisation of Porous Solids - COPS 9, Dresden, Germany, June 05-08, 2011
14. (O) **Gor, G. Y.***; Neimark A.V. “Expansion and Contraction of Mesoporous Adsorbents: Macroscopic Approach and Density Functional Theory” 2010 AIChE Annual Meeting, Salt Lake City, UT, USA, November 7-12, 2010
13. (O) **Gor, G. Y.***; Neimark A.V. “Thermodynamics of Adsorption-Induced Deformation of Mesoporous Solids” 21st IUPAC International Conference on Chemical Thermodynamics, Tsukuba, Japan, August 1-6, 2010
12. (O) **Gor, G. Y.***, Neimark A.V. “Coupling Adsorption and Deformation: Thermodynamic Approach” 103rd Statistical Mechanics Conference, Rutgers University, USA, May 9-11, 2010
11. (O) **Gor, G. Y.***, Kuchma A. E. “Bubble Growth in Supersaturated Solutions: Dissociation of Solute Molecules” XIVth Research Workshop “Nucleation Theory and Applications”. Dubna, Russia, April 1-30, 2010
10. (O) **Gor, G. Y.***, Grinin A. P., Kuni F. M. “Non-steady Problem of Non-isothermal Vapor Condensation on a Growing Droplet” 18th International Conference “Nucleation and Atmospheric Aerosols”. Prague, Czech Republic, August 10-14, 2009
9. (O) Kuchma A. E., **Gor, G. Y.***, Kuni F. M. “Gas Bubble Growth Dynamics after its Nucleation in Supersaturated Solutions” XIIIth Research Workshop “Nucleation Theory and Applications”. Dubna, Russia, April 1-30, 2009
8. (O) Kuchma A. E., Kuni F. M., **Gor, G. Y.*** “Nonsteady diffusion growth of a gas bubble in strongly supersaturated liquid-gas solution with account taken for Laplace forces” International Workshop “V. A. Fock’s Readings: Problems of Modern Physics”, St. Petersburg, Russia, December 22-23, 2008
7. (O) Grinin A.P., Kuni F.M., **Gor, G. Y.*** “Nonsteady Theory of Gas Bubble Diffusion Growth in Supersaturated Gas Solution” III International Conference on Colloid Chemistry and

Physicochemical Mechanics, Moscow, Russia, June 24-28, 2008

6. (O) Grinin A. P., Kuni F. M., **Gor, G. Y.*** Non-Steady Effect of Rapid Increase of Bubble Growth Rate with the Increase of Solution Supersaturation 4-th International Conference Physics of Liquid Matter: Modern Problems, Kyiv, Ukraine, May 23-26, 2008

5. (O) Kuni F. M., Grinin A. P., **Gor, G. Y.*** “Gas Bubble Diffusional Growth in a Supersaturated Solution: Non-Steady Theory” XIIth Research Workshop “Nucleation Theory and Applications”. Dubna, Russia, April 1-30, 2008

4. (O) **Gor G. Y.***, Grinin A.P., Kuni F.M. “Self-similar Diffusion Growth of a Bubble in the Solution With Arbitrary Gas Solubility: Accounting for the Movement of Solvent Caused by a Bubble” IV Russian conference “Metastable States and Fluctuation Phenomena”. Yekaterinburg, Russia, 16-18 October 2007

3. (O) Grinin A. P., **Gor G. Y.***, Zhuvikina I. A. “Heat Release Effects in the Kinetics of Homogeneous Nucleation. Nearest-Neighbour Drop Approximation” XIth Research Workshop “Nucleation Theory and Applications”. Dubna, Russia, April 1-30, 2007

2. (O) **Gor G. Y.***, Zhuvikina I. A., Grinin A. P. “Hydrodynamic Effect of the Moving Boundary of the Nucleus in the Kinetics of Growth of New Phase Particles” Xth Research Workshop “Nucleation Theory and Applications”. Dubna, Russia, April 1-30, 2006

1. (O) Grinin A.P., Zhuvikina I.A., **Gor G. Y.*** Self consistent diffusion and heat-transfer problems in a vicinity of the growing drop. The balances of the condensing substance and of the phase transition III Russian conference “Metastable States and Fluctuation Phenomena”. Yekaterinburg, Russia, October 18-20, 2005