

POSTER SECTION

1. NUCLEAR PHYSICS

- Mechanisms of nuclear reactions and structure of nuclei
- Heavy and super heavy elements: synthesis and fission
- Nuclear physics of low and medium energy, nuclear astrophysics
- Nuclear data measurement, compilation, evaluation and dissemination

2. MATERIALS SCIENCE AND RADIATION SOLID STATE PHYSICS

- Formation and evolution of defects in solids
- Structural and fuel materials of nuclear and thermonuclear facilities
- Modification of materials with the beams of plasma and charged particles
- New materials and methods of their production, nano-materials

3. ATOMIC ENERGY

- Nuclear research facilities and power plants
- Controlled thermonuclear fusion
- Safety of nuclear energy and issues of non-proliferation of nuclear materials and technologies

4. RADIATION ECOLOGY AND METHODS OF ANALYSIS

- Radioecological studies of the former nuclear test sites, risk assessment and issues of radiation monitoring
- Technologies to reduce the environmental risk of the radiation-hazardous facilities and territories, radioactive waste management
- Analytical methods in radioecology and nuclear forensics

5. NUCLEAR AND RADIATION TECHNOLOGIES IN MEDICINE, INDUSTRY AND AGRICULTURE

- Nuclear and Radiation Technologies in Medicine
- Radiation Technologies in Industry and Agriculture

1. NUCLEAR PHYSICS

- 1.1 **APPLICATION OF GEOMETROTHERMODYNAMICS TO SOME THERMODYNAMICS SYSTEMS AT FINITE BARYON DENSITY AND TEMPERATURE PREDICTED BY THE METHOD OF HOLOGRAPHIC DUALITIES**
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1.10 **EXCITATION OF ISOMERIC STATES IN REACTIONS (γ, n) AND ($n, 2n$) on ⁸¹Br and ⁸⁶Sr Nuclei**

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1.20 **ROLES OF NUCLEAR WEAK RATES ON ASTROPHYSICAL PROCESSES**

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1.24 **STUDY OF THE REACTION $^{13}\text{C}(^3\text{He},\alpha)^{12}\text{C}$ AT ENERGIES OF 50 AND 60 MeV**

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1.26 **THE EXCITATION CROSS SECTIONS OF THE ISOMERIC STATES $^{139m,g}\text{Ce}$ IN THE REACTIONS (n,2n) AND (γ ,n) ON THE ^{140}Ce NUCLEUS**

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- 1.44 **ON NON-EQUILIBRIUM HYDRODYNAMIC APPROACH AND COLLISION OF ATOMIC NUCLEI AS COLLISION OF CORTEVEGA-DE FREESE SOLITONS**
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2.2 RADIATION-CHEMICAL STRUCTURING OF HYDRATED BNK WITH PARTICIPATION OF LOW-MOLECULAR COMPOUND

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