

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
ФАКУЛЬТЕТ ІНОЗЕМНОЇ ФІЛОЛОГІЇ
ТА СОЦІАЛЬНИХ КОМУНІКАЦІЙ**



СОЦІАЛЬНО-ГУМАНІТАРНІ АСПЕКТИ РОЗВИТКУ СУЧАСНОГО СУСПІЛЬСТВА

**МАТЕРІАЛИ ВСЕУКРАЇНСЬКОЇ НАУКОВОЇ КОНФЕРЕНЦІЇ ВИКЛАДАЧІВ,
АСПІРАНТІВ, СПІВРОБІТНИКІВ ТА СТУДЕНТІВ**

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SAFETY OF STUDENTS DOING PARKOUR

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In recent times parkour as a kind of physical fitness has become more and more popular among youth. Parkour is not a sport that involves competition and desire to defeat the opponent. The ideology of parkour denies these principles. The main objective of the tracers (people practicing parkour) is to be able to calculate their strength and reach the desired point in space using only their body easily, naturally, organically, freely and quickly. The main idea of parkour is expressed by David Belle, the founder of this sport, the principle of "no limits, only obstacles" and all obstacles can be overcome. For tracers, daily obstacles are trees, walls, roofs, parapets and railings. In this sport the main helpers include the speed of reaction, ability to assess the situation and realization of capabilities in seconds. The quantity of fans of parkour grows every year. The huge popularity of parkour has gained among young people and adolescents. For them, parkour is a way to realize themselves, to express themselves and show themselves to others, but parkour is a potentially hazardous physical activity, so safety is one of the most important components of health of tracers. In order to minimize the risk of life you must follow these recommendations:

— Don't do parkour, if you have medical contraindications of exercise, as well as heart disease, injuries that limit the mobility of joints, spinal disease, diabetes, etc.

—Pick up equipment correctly before practicing parkour. Use training shoes with quality rubber soles and distinct protector, but the protector must not interfere with the coupling walls at the expense of unnecessary elements, like thorns positions of the feet on the support. Do not use sneakers which are hanging on a leg, causing discomfort in running and jumping. The garment must have elasticity and does not restrict movement. Many athletes love hoodies, which soothe discomfort. Running shoes must be well fixed to the leg, as well as withstand extreme load at non-standard stunts. All the clothes of the tracer should "breathe" to be free, but in no case cling. In short, the usual casual wear is a great option for parkour.

— An important role is also played by proper nutrition of a tracer. When doing parkour, body is experiencing heavy loads and with poor or unbalanced nutrition weakened body receives a large stress, resulting in the workout becoming ineffective and most traumatic.

— Tracers should not neglect qualitative workout, as exercises and elements without proper preparation of the muscles and ligaments, high risk of undesirable consequences, such as microfractures, stretching, cracks in bones, fractures, which in some cases can lead to death

—Tracers should inspect and examine the places of training in detail: structural features, quality, and the strength of obstacles. Safe place of training is one of the main components of health of a tracer.

— Fatigue is also not the last factor for having injury. Intense workouts lead to the fact that over time the muscles begin to listen less, and so a risk not to stay, not to jump or not to finish the item appears. During training it is important to assess their general condition.

— Before training tracers should take into account weather conditions such as heat, dampness, cold, fog, rain, strong wind, snow or slush, because they increase the likelihood of injury.

— Difficult trick is possible only under condition, if a person is mentally and physically prepared and fully confident that he will make it right.

— When you receive injuries in training, you must immediately seek professional medical help.

For the best protection of tracers, especially for beginners, they must follow the above recommendations. Also, it is useful to go to a special parkour school for best results, where instructors will be able to insure and teach to do tricks based on personal characteristics of each tracer. It is always important to remember the basic rule of tracers, which consists of

three axioms: "Security, Efficiency, Simplicity" regardless of the decision, to learn parkour on your own or with a coach.

CURRENT-VOLTAGE CHARACTERISTICS OF FILM MATERIALS

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On the basis of thin films the following elements of integrated circuits (IC) are made in microelectronics: film resistors; electrodes (electrode film capacitors, spiral inductors busducts, installation guides, closures MIS - transistors) contact paths and platforms; auxiliary elements. Electrical connection of metals and semiconductors with metallic conductors is performed using layered condensation and formation of ohmic contacts not rectifier, the quality of which is largely dependent on parameters and characteristics of microelectronic devices, their reliability and durability. The metal / semiconductor (Me/Sem) can be rectifying (if potential barrier between the metal and semiconductor tunnel-opaque) or ohmic (potential barrier if it is missing or tunnel-transparent to electrons).

Formation of single- and two-layer films based on metals (Fe and Pt) and semiconductor (Ge) was carried out by thermal evaporation by layering condensation. Layered film condensation and annealing systems are carried out by thermoresistive at glass ceramic substrate $T_s \cong 300$ K and annealing $T_a \cong 800$ K (Me/Me) and 1070 K (Me/Sem) for three cycles "heating \leftrightarrow cooling." The crystal structure and phase composition of the samples was investigated with the help of methods of electron microscopy (TEM-125K).

Measurement of current-voltage characteristics (CVC) film materials was conducted using circuit technology based on NILabVIEW, which has the following parameters: operating voltage range of the $\Delta U = - 20V \dots + 20V$; supply voltage 220V; protection from external factors (magnetic and electric fields, wet); temperature range: $\Delta T = +5 \dots + 40$ ° C; possibility of constructing experimental dependencies in automatic mode; research samples with the value of resistance from 10 Ohm to 10 kOhm.

The device performs the functions analog input, analog output, digital input-output, audio input, output, power supply, digital multimeter (DMM)