

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) MAGNETICS SOCIETY “MAGNETISM FOR UKRAINE 2022”
APPROVED FOR FUNDING PROJECTS

#	Project Title	PI Family Name	PI First Name	Affiliation (Leading, participating)	City/Curent location
1	Magnetic resonance spectroscopy of the HPHT synthetic diamond	Bratus	Viktor	V. Lashkaryov Institute of Semiconductor Physics, NASU and V. Bakul Institute for Superhard Materials, NASU	Kyiv
2	Features of transmission and reflection of electromagnetic waves at an interface between vacuum and lossy metamaterial with zero real part of permittivity	Bukhanko	Fedor	O.O. Galkin Donetsk Institute for Physics and Engineering, NASU	Donetsk /Kharkiv
3	Directed transport of suspended ferromagnetic nanoparticles: Theory and numerical analysis.	Denisov	Stanislav	Institute of Magnetism, NASU	Kyiv
4	Piezomagnetism and hidden magnetic order in FeSe based superconductors	Fil	Vyacheslav	B.Verkin Institute for Low Temperature Physics and Engineering, NASU and Institute for Single Crystals, NASU	Kharkiv
5	Development of a microbial test to evaluate the effect of geomagnetic field on biological systems	Gromozova	Olena	Institute of Microbiology and Virology and Taras Shevchenko National University of Kyiv	Kyiv
6	Controlling electron kinetics in 2D materials by non-uniform magnetic fields	Kukhtaruk	Serhii	V.E. Lashkaryov Institute of Semiconductor Physics, NASU	Kyiv
7	Amorphous superconducting films as a material platform for Cherenkov generation of spin waves by moving superconducting vortices and tailorable single-photon detectors	Mykhaylov	Mykhaylo	B.Verkin Institute for Low Temperature Physics and Engineering, NASU	Kharkiv
8	Magnetic and magnetotransport properties of discontinuous metal–insulator multilayers	Pazukha	Iryna	Sumy State University, MESU	Sumy
9	Chaotic magnetization dynamics in antiferromagnetic spin Hall oscillators for cryptography applications	Prokopenko	Oleksandr	Taras Shevchenko National University of Kyiv, MESU	Kyiv
10	The influence of the restructuring effect on the magnetic and magnetoelastic properties of magnetoactive elastomers	Ryabchenko	Sergiy	Institute of Physics NASU, Institute of Magnetism NASU, and National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”	Kyiv
11	Magnetic and Magnetotransport Properties of Thermostable Spin Valve Nanostructures for Flexible Sensor Applications	Shabelnyk	Yurii	Sumy State University, MESU	Sumy
12	Manipulation of magnetization textures in curved nanowires	Sheka	Denys	Taras Shevchenko National University of Kyiv	Kyiv
13	Dual-Functional Magnetic Fe ₃ O ₄ /CeO ₂ Nanocomposites as Promising Antioxidant Agents	Shlapa	Yuliia	V. I. Vernadsky Institute of General & Inorganic Chemistry, NASU	Kyiv

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14	The influence of the magnetic field on the morphology and structural characteristics of thin-film granular magnetic systems as functional elements of spintronics	Shpetnyy	Ihor	Sumy State University, MESU	Sumy
15	Equilibrium and nonequilibrium magnetic properties of high-spin quantum atomic gases	Sotnikov	Andrii	National Science Center "Kharkiv Institute of Physics and Technology", NASU	Kharkiv
16	Influence of hydrostatic pressure on the formation of ferroelectric domain structure with given properties upon phase transition	Stefanovich	Leonid	Branch for Physics of Mining Processes of the M.S. Poliakov Institute of Geotechnical Mechanics, NASU	Dnipro
17	Spin transport in 2D conducting systems with an essential spin-orbit interaction under topological phase transition.	Stepanenko	Dmitro	B.Verkin Institute for Low Temperature Physics and Engineering, NASU	Kharkiv
18	Magnetism of (Cd,Cr)Te semiconductor crystals with self-assembled Cr-related doping-induced nanoprecipitates	Stolyarchuk	Stolyarchuk	Drohobych Ivan Franko State Pedagogical University	Drohobych
19	Structure, microstructure and magnetic properties of Al-doped YIG nanomaterials	Tovstolytkin	Alexandr	Institute of Magnetism, NASU and MESU and V.I. Vernadsky Institute of General and Inorganic Chemistry	Kyiv
20	Excitation of nonlinear exchange-dominated spin waves in nanoscale magnonic waveguides	Verba	Roman	Institute of Magnetism, NASU and MESU	Kyiv
21	Valence band structure investigation in the complex magnetic III-Mn-V semiconductors	Yastrubchak	Oksana	V.E. Lashkaryov Institute of Semiconductor Physics, NASU	Kyiv
22	Laser microscopy of magnetically active superconducting meta-materials	Zhuravel	Oleksandr	B.Verkin Institute for Low Temperature Physics and Engineering, NASU	Kharkiv