

ID	Název	Navrhovatel	Fakulta	Mentor	Rožpočet	Počet bodů	pořadí
7678	Visible-light-powered hematite microrobots with self-assembly and reconfigurable capabilities for efficient degradation of microplastics	Peng Xia	CEITEC VUT	Pumera Martin, prof. RNDr., Ph.D.	479 160,00 Kč	30	1.
7732	Simulation assisted design and optimisation of a plasma source based on a birdcage resonator for air-breathing electric propulsion systems	Juřík Karel, Ing.	FEKT	Drexler Petr, doc. Ing., Ph.D.	479 160,00 Kč	30	1.
7756	Estimating the Electron Density in Laser-induced Plasma using Mach-Zehnder Interferometry	Mohan Megha	CEITEC VUT	Požizka Pavel, doc. Ing., Ph.D.	479 160,00 Kč	30	1.
7769	Hemostatic antibacterial wound dressing for accelerated blood stop and skin regeneration	Sedlář Marian, Ing.	CEITEC VUT	Vojtová Lucy, doc. Ing., Ph.D.	670 824,00 Kč	30	1.
7649	Long-term trends of brain excitability in epilepsy	Mívalt Filip, Ing., M.Sc.	FEKT	Ronzhina Marina, Ing., Ph.D.	670 824,00 Kč	29,5	5.
7755	Research on passive assessment of speech and voice disorders in patients with Parkinson's disease	Kováč Daniel, Ing.	FEKT	Mekyska Jiří, Ing., Ph.D.	479 160,00 Kč	29,5	5.
7765	Amines vs. carboxyls: Study of cell behaviour on plasma-chemically prepared bioactive surfaces	Buchtelová Martina, Mgr.	CEITEC VUT	Zajíčková Lenka, doc. Mgr., Ph.D.	479 160,00 Kč	29,5	5.
7660	In Situ Electrothermal Control of Magnetic Order in a Transmission Electron Microscope	Hajduček Jan, Ing.	CEITEC VUT	Uhlíř Vojtěch, Ing., Ph.D.	670 824,00 Kč	29	8.
7711	A step towards the deepest structures inside the brain – fabrication of optical fibre probes	Stibůrek Miroslav, Ing.	FSI	Mikel Břetislav, Ing., Ph.D.	479 160,00 Kč	29	8.
7734	Study of the temperature coefficient of resistance and self-heating effect of single metal-oxide nanowires	Smíštel Petr	CEITEC VUT	Hubálek Jaromír, doc. Ing., Ph.D.	479 160,00 Kč	29	8.
7741	Thermal induced changes of organic temper in archaeological ceramics for the discovery of manufacturing process: Temperature-porosity correlation	Jaques Victory, Mgr., Ph.D.	CEITEC VUT	Zikmund Tomáš, Ing., Ph.D.	479 160,00 Kč	29	8.
7747	In-situ atomic force microscopy of catalytic reactions	Vařeka Karel, Ing.	CEITEC VUT	Bábor Petr, Ing., Ph.D.	479 160,00 Kč	29	8.
7779	Mucoadhesive injectable hydrogel carriers enriched with pro-healing protein for hard-to-heal oral wounds	Kadlecová Zuzana, Ing.	CEITEC VUT	Vojtová Lucy, doc. Ing., Ph.D.	670 824,00 Kč	29	8.
7680	Optical properties of tunable antimony trisulfide (Sb ₂ S ₃) thin films and nanostructures	Kepič Peter, Ing. Mgr.	CEITEC VUT	Ligmajer Filip, Ing., Ph.D.	670 824,00 Kč	29	8.
7719	Photopolymerization kinetics of titanium dioxide nanocomposites for SLA 3D printing and their implementation into a bio-mimetic structural design	Korčůšková Martina, Ing.	CEITEC VUT	Lepcio Petr, Ing., Ph.D.	670 824,00 Kč	28,5	15.
7659	Improving seat comfort by semi-active control of magnetorheological damper	Šebesta Karel, Ing.	FSI	Strecker Zbyněk, Ing., Ph.D.	862 488,00 Kč	28	16.
7731	Research in the field of fiber optic monitoring systems using advanced data processing techniques	Ružička Michal, Ing.	FEKT	Münster Petr, doc. Ing., Ph.D.	670 824,00 Kč	28	16.
7743	Optimization of novel PEDOT based hydrogels for biomedical applications	Malečková Romana, Ing.	FCH	Weiter Martin, prof. Ing., Ph.D.	479 160,00 Kč	28	16.
7746	Biotechnological potential of mixed co-culture of red yeasts and microalgae to produce multifunctional high-value biomass and its components.	Holub Jiří, Ing.	FCH	Márová Ivana, prof. RNDr., CSc.	1 054 152,00 Kč	28	16.
7757	Development of a novel versatile method for optical crack length measurement automation using digital image correlation and artificial intelligence	Šcerba Bořek, Ing.	FSI	Návrat Tomáš, doc. Ing., Ph.D.	670 824,00 Kč	28	16.
7761	Lumbar Intervertebral Fusion: Novel approach to evaluate the success of spinal surgery based on X-ray Micro Computed Tomography data.	Lázňovský Jakub, Ing.	CEITEC VUT	Kaiser Jozef, prof. Ing., Ph.D.	479 160,00 Kč	28	16.
7782	Phase Identification of the Partially Oxidized Surfaces of Hematite α -Fe ₂ O ₃ (0001)	Kumar Nishant	CEITEC VUT	Čechal Jan, doc. Ing., Ph.D.	479 160,00 Kč	28	16.
7772	Dynamic Magnetic Resonance Imaging via Unfolded Algorithm	Mokřý Ondřej, Ing.	FEKT	Rajmíc Pavel, doc. Mgr., Ph.D.	670 824,00 Kč	28	16.
7714	Development of an analog computer with hybrid analog-digital components for accurate modeling of chaotic systems	Rujal Miroslav, Ing.	FEKT	Petržela Jiří, doc. Ing., Ph.D.	479 160,00 Kč	27,5	24.
* 7661	The strategy for wire arc additive manufacturing of overhangs	Slavíček Jakub, Ing.	FSI	Koutný Daniel, doc. Ing., Ph.D.	479 160,00 Kč	27,5	25.
					14 662 296,00 Kč		
7728	Direct growth and characterization of 2D single crystals of MXenes	Jadhao Pranjal, M.Tech.	CEITEC VUT	Šíkola Tomáš, prof. RNDr., CSc.	479 160,00 Kč	27,5	26.
7754	The effect of non-thermal plasma on humic substances solutions and their possible use in agriculture	Čechová Ludmila, Ing.	FCH	Krčma František, prof. RNDr., Ph.D.	670 824,00 Kč	27,5	27.
7780	Deep learning-based high-throughput morphology of glomeruli in renal disease research via X-ray computed microtomography	Matula Jan, Ing.	CEITEC VUT	Kaiser Jozef, prof. Ing., Ph.D.	479 160,00 Kč	27,5	28.
7699	Color filters based on structural colors with the possibility of external switching	Rovenská Katarína, Ing.	CEITEC VUT	Ligmajer Filip, Ing., Ph.D.	479 160,00 Kč	27	29.
7721	Electron tweezers – a new tool for nanoworld	Ukropcová Iveta, Ing.	FSI	Bábor Petr, Ing., Ph.D.	479 160,00 Kč	27	29.
7733	Smart polygon for analysis, testing and implementation of Vehicle-to-grid and Smart Substation concepts	Ruzs Martin, Ing.	FEKT	Mlýnek Petr, doc. Ing., Ph.D.	862 488,00 Kč	27	29.
7753	Friction effects in uniaxial compression of concrete cylinders	Štředulová Monika, Bc.	FAST	Eliáš Jan, doc. Ing., Ph.D.	479 160,00 Kč	27	29.
7767	Development of lithographic process and probing of functional properties of quasi-one-dimensional structures.	Citterberg Daniel, Ing.	CEITEC VUT	Kolibal Miroslav, doc. Ing., Ph.D.	479 160,00 Kč	27	29.
7739	Specification of types of the urbanized area in the Czech Republic and their evaluation using multicriteria analysis	Kotrla Jakub, Ing.	FAST	Guzdek Adam, Ing. arch., Ph.D.	862 488,00 Kč	27	29.
7762	Improving control strategy of photovoltaic power plant with battery energy storage system in future grids	Dvořáček Jiří, Ing.	FEKT	Drápela Jiří, prof. Ing., Ph.D.	670 824,00 Kč	27	29.
7763	Valorization of grape pomace into antimicrobial scaffolds	Vostrejš Pavel, Ing.	FCH	Kovalčík Adriána, doc. Ing., Ph.D.	670 824,00 Kč	27	29.
7663	Electroluminescent devices with tip-enhanced luminescence	Červinka Ondřej, Ing.	CEITEC VUT	Šíkola Tomáš, prof. RNDr., CSc.	479 160,00 Kč	26,5	37.
7668	Cold sintering: A new energy efficient approach for electroceramic densification?	Valášek Daniel, Ing.	CEITEC VUT	Salomon David, doc. Ing., Ph.D.	670 824,00 Kč	26,5	37.
7669	Snake-like robot for pipe-line exploration and inspection	Holoubek Tomáš, Ing.	FSI	Matoušek Radomil, doc. Ing., Ph.D.	1 054 152,00 Kč	26,5	37.
7698	Self-propelled micromotor based on Graphene Quantum Dots for 'On-the-fly' Optical Biosensing of DNA	Jyoti Jyoti, M.Tech.	CEITEC VUT	Pumera Martin, prof. RNDr., Ph.D.	479 160,00 Kč	26,5	37.
7708	Methodology for the design and assessment of advanced energy efficient buildings with custom software support for Building Information Modelling (BIM).	Průša David, Ing.	FAST	Šuhajda Karel, doc. Ing., Ph.D.	670 824,00 Kč	26,5	37.
7766	Automatic Segmentation of Atrial Intracardiac Electrograms	Ředina Richard, Ing.	FEKT	Ronzhina Marina, Ing., Ph.D.	479 160,00 Kč	26,5	37.
7688	Research on the possibility of influencing the flow around rotors by their surface treatment	Vacula Jiří, Ing.	FSI	Novotný Pavel, doc. Ing., Ph.D.	670 824,00 Kč	26,5	37.
7751	Biotechnological co-production of alginate and polyhydroxyalkanoates by Azotobacter vinelandii using waste materials	Černayová Diana, Ing.	FCH	Obruča Stanislav, doc. Ing., Ph.D.	862 488,00 Kč	26,5	37.
7716	Development and testing of methods for the analysis of selected microplastics from car transport	Kameníková Eliška, Ing.	FCH	Kučerík Jiří, prof. Ing., Ph.D.	862 488,00 Kč	26	45.
7736	Advance quantification of influence of a bi-material interface with the thermally affected area on material properties	Doubek Pavel, Ing.	FAST	Seitl Stanislav, doc. Ing., Ph.D.	479 160,00 Kč	26	45.
7748	Smart Liposomal Nanovehicles for Targeted Cancer Silencing	Vojníková Michaela, Ing.	CEITEC VUT	Heger Zbyněk, doc. Mgr., Ph.D.	670 824,00 Kč	26	45.
7650	Automation of experimental modal analysis of impellers for hydrogen technologies	Kučera Ondřej, Ing.	FSI	Pištek Václav, prof. Ing., DrSc.	479 160,00 Kč	26	45.
7710	Design of rainwater harvesting, accumulation and treatment system	Balko Marek, Ing.	FSI	Rudolf Pavel, doc. Ing., Ph.D.	862 488,00 Kč	25,5	49.
7718	Optimizing HPC composition for ballistic protection	Šuleková Nikola, Ing.	FCH	Šoukal František, doc. Ing., Ph.D.	670 824,00 Kč	25,5	49.
7750	Deep learning method for bearing diagnosis using fault signatures	Rekem Jakub, Ing.	FSI	Štětina Josef, prof. Ing., Ph.D.	670 824,00 Kč	25,5	49.
7778	Test rig designed for research and development of gear engagement in the field of automotive applications in terms of NVH	Czakó Alexander, Ing.	FSI	Štětina Josef, prof. Ing., Ph.D.	670 824,00 Kč	25,5	49.
7724	Development of optimization approaches for ancillary services in power engineering	Pluskal Jaroslav, Ing.	FSI	Šomplák Radovan, Ing., Ph.D.	670 824,00 Kč	25	53.
7737	Polymeric Hollow Fibre Membrane Distillation Module	Strunga Alan, Mgr.	FSI	Raudenský Miroslav, prof. Ing., CSc.	1 054 152,00 Kč	24,5	54.
7658	Development of a test rig for determining material and stiffness parameters in tension, compression, bending, shear, and torsion.	Láštík Daniel, Ing.	FSI	Pištek Václav, prof. Ing., DrSc.	479 160,00 Kč	24,5	54.
7639	Improving the quality of additively manufactured thin-wall parts with a focus on biomedical implants made of magnesium alloy WE43	Jaroš Jan, Ing.	FSI	Koutný Daniel, doc. Ing., Ph.D.	670 824,00 Kč	24,5	54.
7781	Design of the Industry-driven Protocol for Data Transmissions in Next-generation Networks	Možný Radek, Ing.	FEKT	Mašek Pavel, Ing., Ph.D.	670 824,00 Kč	24	57.
7664	Fault identification in industrial technologies using neural networks	Ježek Michal, Ing.	FSI	Šťastný Jiří, prof. RNDr. Ing., CSc.	958 320,00 Kč	24	57.
7744	Research of the peculiar space applications grease-lubricated bearings behaviour at slow-speed torque	Černošník Mikuláš, Ing.	FSI	Koštal David, Ing., Ph.D.	766 656,00 Kč	23,5	59.
7749	Analysis of the dynamic behavior of buildings in relation to the requirements of changes in the state of the indoor environment	Baroň Alexandr, Ing.	FAST	Hirš Jiří, prof. Ing., CSc.	479 160,00 Kč	23,5	59.
7648	Contact starvation control using electro-excited ionic liquids	Foltýn Jan, Ing.	FSI	Svoboda Petr, doc. Ing., Ph.D.	958 320,00 Kč	23,5	59.

7759	Impact of interactions between different kinds of twin boundaries on (101 ²) twin growth in Mg alloys	Verma Ritu, M.Tech.	CEITEC VUT	Šíkola Tomáš, prof. RNDr., CSc.	479 160,00 Kč	22	62.
7713	Measurement of signal propagation into vehicle and building in millimeter wave band	Závorka Radek, Ing.	FEKT	Prokeš Aleš, prof. Ing., Ph.D.	479 160,00 Kč	21	63.
7717	Inexpensive agricultural biowaste and its use in energy conversion in households: economics, fuel analysis, environmental impact.	Linda Jakub, Ing.	FSI	Pospíšil Jiří, doc. Ing., Ph.D.	1 054 152,00 Kč	20	64.
7662	Synthesis, Properties and Application Perspective of Soluble Tungsten Complexes for Nanoparticulate Functional Coatings	Chittoory Valli Kamala Laxmi Rao	CEITEC VUT	Dzik Petr, doc. Ing., Ph.D.	670 824,00 Kč	20	64.
7715	Machine learning models for anomaly detection in photonic networks	Tomašov Adrián, Ing.	FEKT	Horváth Tomáš, Ing., Ph.D.	670 824,00 Kč	20	64.
7709	Investigation of PVDF/carbon composites with tunable properties	Pisarenko Tatiana, Ing.	FEKT	Sobola Dinara, doc. Mgr., Ph.D.	670 824,00 Kč	19,5	67.
7745	Research and Development of Modern Industrial IoT Methods Applied to a Smart Home System	Dvorský Petr, Ing.	FEKT	Bradáč Zdeněk, doc. Ing., Ph.D.	862 488,00 Kč	18,5	68.
7764	Software for thrombus detection and analysis in head CT scans	Nemček Jakub, Ing.	FEKT	Jan Jiří, prof. Ing., CSc.	670 824,00 Kč	18	69.
7758	Effect of humic and fulvic acids on the corrosion behaviour of magnesium alloy AZ91.	Šomanová Pavlína, Ing.	FCH	Doskočil Leoš, Ing., Ph.D.	479 160,00 Kč	21	pod hranici thresholdu
7602	Cyber Security for The IoT Using Raspberry and Arduino Microcontrollers.	Shujairi Murtadha Mohsin Hadi	FEKT	Škorpil Vladislav, doc. Ing., CSc.	479 160,00 Kč	13	pod hranici thresholdu
7770	A Novel Nanorattle Gold base Electrochemical Biosensor in Detection of SirT 2 Enzyme	Garehbaghi Sanam, MEng., M.Sc.	CEITEC VUT	Richter Lukáš, RNDr., Ph.D.	479 160,00 Kč	10,5	pod hranici thresholdu

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