Adsorption and kinetics studies of Cr (VI) by graphene oxide and reduced graphene oxide-zinc oxide nanocomposite
Naseem, Taiba; Bibi, Fozia; Arif, Saira; Waseem, Muhammad Adnan; Haq, Sirajul; Azra, Mohamad Nor; **Liblik, Taavi**; Zekker, Ivar Molecules 2022 / art. 7152, 16 p. : ill https://doi.org/10.3390/molecules27217152 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Alumina-graphene hybrid materials for electrochemical sensing of bio-analytes = Alumiiniumoksiid-grafeenhübriidmaterjalid biovedelike elektrokeemiliseks tuvastamiseks
Taleb, Masoud 2018 https://digi.lib.ttu.ee/i/?11202

Analysing carbon based hybrid nanocomposites displaying interfacial phenomena with scanning transmission electron microscopy and related techniques
Rauwel, Protima; **Rauwel, Erwan** Microscopy and imaging science : practical approaches to applied research and education 2017 / p. 389-400 : ill http://www.microscopy7.org/

Analysis and design of graphene laminates [Online resource]
Majak, Jüri; **Kirs, Maarjus**; **Karjust, Kristo** International Conference "Functional Materials and Nanotechnologies 2017" : Tartu, Estonia in April, 24-27, 2017 : book of abstracts 2017 / p. 67 http://www.ester.ee/record=b4668793*est

Antioxidant chemistry of graphene-based materials and its role in oxidation protection technology
Qiu, Yang; Wang, Zhongying; **Külaots, Indrek** Nanoscale 2014 / p. 11744-11755 : ill

Biomass-derived graphene-like catalyst material for oxygen reduction reaction
Kaare, Kätlin; Yu, Eric; Käämbre, Tanel; Volperts, Aleksandrs; Dobele, Galina; Zhurinsh, Aivars; Niaura, Gediminas; Tamasauskaite-Tamasiunaite, Loreta; Norkus, Eugenijus; Kruusenberg, Ivar ChemNanoMat 2021 https://doi.org/10.1002/cnma.202000615

Biomechanical Features of Graphene-Augmented Inorganic Nanofibrous Scaffolds and Their Physical Interaction with Viruse
Gasik, Michael; **Ivanov, Roman**; Kazantseva, Jekaterina; Bilotsky, Yevgen; **Hussainova, Irina** Materials 2021 / art. 164 https://doi.org/10.3390/ma14010164 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Characteristic low-energy Raman modes in twisted bilayer graphene
Kahro, Tauno; Niilisk, Ahti; Rähn, Mihkel; **Grossberg, Maarja**; Alles, Harry TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p. : ill

Characterization of silicon carbide (SiC) and graphene-based novel semiconductor devices =Ränikarbiidil (SiC) ja grafeenil põhinevate uudsete pooljuhtstruktuuride karakteriseerimine
Rashid, Muhammad Haroon 2021 https://www.ester.ee/record=b5397240*est https://digikogu.taltech.ee/et/Item/a64fd50e-125c-49ad-b0a6-6ad2e01b8bfa https://doi.org/10.23658/taltech.6/2021

Chemical vapour deposition growth of graphene and carbon nanotubes on alumina
Ivanov, Roman; Anoshkin, Ilya; **Hussainova, Irina** TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

Chemical vapour deposition of graphene coating onto ceramic nanofibers substrates and applications thereof = Grafeenpinde keemiline aursadestus keraamilistele nanokiududele ja nende kasutus
Ivanov, Roman 2017 https://digi.lib.ttu.ee/i/?9128

Comparative investigation of the graphene-on-silicon carbide and CVD graphene as a basis for biosensor application
Sleptšuk, Natalja; Lebedev, Alexander A.; Eliseyev, Ilya; **Korolkov, Oleg**; **Toompuu, Jana**; **Land, Raul**; **Mikli, Valdek**; Zubov, Alexander; **Rang, Toomas** Modern Materials and Manufacturing 2019 : 12th International DAAAM Baltic Conference and 27th International Baltic Conference BALTMATTRIB 2019. Selected, peer reviewed papers from the conference Modern Materials and Manufacturing 2019 (MMM 2019), April 24-26, 2019, Tallinn, Estonia 2019 / p. 185-190 : ill https://www.ester.ee/record=b5235278*est https://www.scientific.net/KEM.799.185 https://doi.org/10.4028/www.scientific.net/KEM.799.185 Conference proceeding at Scopus Article at Scopus

Conjoined structures of carbon nanotubes and graphene nanoribbons
Krasnenko, Veera; Boltruško, Vadim; **Klopov, Mihhail**; Hižnjakov, Vladimir Physica scripta 2014 / p. 1-4 : ill

CVD nanocrystalline multilayer graphene coated 3D-printed alumina lattices
Ramírez, Cristina; **Shamshirgar, Ali Saffar**; Perez-Coll, Domingo; Osendi, María IsabeL; Miranzo, Pilar; Tewari, Girish C.; Karppinen, Maarit; **Hussainova, Irina**; Belmonte, Manuel Carbon 2023 / p. 36-46 https://doi.org/10.1016/j.carbon.2022.10.085

Design optimization of graphene laminates for maximum fundamental frequency
Majak, Jüri; **Kirs, Maarjus**; **Eerme, Martin**; **Tungel, Ernst**; **Lepikult, Toomas** Proceedings of the Estonian Academy of Sciences 2017 / p. 354-362 : ill https://doi.org/10.3176/proc.2017.4.08

Design optimization of multilayer graphene sheets
Majak, Jüri; **Eerme, Martin**; **Arak, Marti**; **Kirs, Maarjus**; **Mikola, Madis** First International Conference on Mechanics of Composites (MECHCOMP2014) : Stony Brook University, Long Island, New York, June 8-12, 2014 2014 / p. 175

Determination of carcinoembryonic antigen as a tumor marker using a novel graphene-based label-free electrochemical immunosensor
Jozghorbani, Maryam; Fathi, Mojtaba; Kazemi, Sayed Habib; **Alinejadian, Navid** Analytical biochemistry 2021 / art. 114017 https://doi.org/10.1016/j.ab.2020.114017 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Direct CVD growth of multi-layered graphene closed shells around alumina nanofibers
Ivanov, Roman; **Mikli, Valdek**; **Kübarsepp, Jakob**; **Hussainova, Irina** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATTRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 77-80 : ill http://dx.doi.org/10.4028/www.scientific.net/KEM.674.77

Directional conductivity in layered alumina
Hussainova, Irina; **Saffarshamshirgar, Ali**; **Ivanov, Roman**; **Volobujeva, Olga**; Romanov, Alexey; Gasik, Michael Current applied physics 2022 / p. 68-73 : ill https://doi.org/10.1016/j.cap.2020.06.009 Journa metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Effect of graphene nanoplatelet content on mechanical and elevated-temperature tribological performance of self-lubricating ZE10 magnesium alloy nanocomposites
Kandemir, Sinan; **Yöyler, Sibel**; **Kumar, Rahul, 1993-**; **Antonov, Maksim**; Dieringa, Hajo Lubricants 2024 / art. 52 https://doi.org/10.3390/lubricants12020052

Effects of the inclusion of armchair graphene nanoribbons on the electrical conduction properties of NN-heterojunction 4H-6H/SiC diodes
Rashid, Muhammad Haroon; **Koel, Ants**; **Rang, Toomas** Advanced Materials and Processing Technologies : 2nd International Conference on Sensors, Materials and Manufacturing (ICSMM 2018, November 19-21, 2018, Taiwan); International Conference on Materials Sciences and Nanomaterials (ICMSN 2018, July 11-13, 2018, United Kingdom) and the 2nd International Conference on Materials and Intelligent Manufacturing (ICMIM 2018, August 24-26, 2018, Japan) 2019 / p. 29–35 : ill https://doi.org/10.4028/www.scientific.net/MSF.962.29 Conference proceeding at Scopus Article at Scopus

Elastic models of defects in two-dimensional crystals
Kolesnikova, Anna; Orlova, T.; **Hussainova, Irina**; Romanov, Alexey Physics of the solid state 2014 / p. 2573-2579 : ill

Electrochemical behaviour of graphene-based materials towards ORR
Kibena-Põldsepp, Elo; Lilloja, Jaana; Merisalu, Maido; **Rauwel, Protima** BEC 16 : the 6th Baltic Electrochemistry Conference : Electrochemistry of Functional Interfaces and Materials : 15th-17th June 2016, Helsinki, Finland 2016 / p. 121

Electroconductive composite of zirconia and hybrid graphene/alumina nanofibers
Hussainova, Irina; **Drozdova, Maria**; Perez-Coll, Domingo Journal of the European Ceramic Society 2017 / p. 3713-3719 : ill https://doi.org/10.1016/j.jeurceramsoc.2016.12.033

Electroconductive oxide ceramics with hybrid graphenated nanofibers = Elektrijuhtiva oksiid-grafeenkiudkeraamika tehnoloogia ja püsivus
Drozdova, Maria 2017 https://digi.lib.ttu.ee/i/?9119 http://www.ester.ee/record=b4748247*est

Electrospinning of nanofibrous composites with cellulose acetate, ionic liquids and graphene oxide = Tselluloosatsetaadi, ioonsete vedelike ja grafeenoksiidi nanokiuliste komposiitide elektroketrus
Javed, Kashif 2019 https://digi.lib.ttu.ee/i/?12424

Evolution of Dirac cone in disclinated graphene
Rozhkov, M. A.; Kolesnikova, A. L.; **Hussainova, Irina** Reviews on advanced materials science 2018 / p. 137-142 : ill https://doi.org/10.1515/rams-2018-0057 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Explosive thermal reduction of graphene oxide-based materials : mechanism and safety implications
Qiu, Yang; Guo, Fei; Hurt, Robert; **Külaots, Indrek** Carbon 2014 / p. 215-223 : ill

Faktikontroll : Grafeenoksiidi sisaldus vaktsiinides on ülemaailmse levikuga vale, mis ka Eestis vaibuda ei taha [Võrguväljaanne]
Raudsik, Heliis epl.delfi.ee 2022 "FAKTIKONTROLL | Grafeenoksiidi sisaldus vaktsiinides on ülemaailmse levikuga vale, mis ka Eestis vaibuda ei taha "

A few-layered graphene on alumina nanofibers for electrochemical energy conversion
Hussainova, Irina; **Ivanov, Roman**; Stamatin, Serban; Anoshkin, Ilya; Skou, Eivind; Nasibulin, Albert Carbon 2015 / p. 157-164 : ill https://doi.org/10.1016/j.carbon.2015.03.004

First principles simulations of phenol and methanol detector based on pristine graphene nanosheet and armchair graphene nanoribbons
Rashid, Muhammad Haroon; **Koel, Ants**; **Rang, Toomas** Sensors 2019 / art. 2731, 14 p. : ill https://doi.org/10.3390/s19122731 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Functionally graded tunable microwave absorber with graphene-augmented alumina nanofibers
Shamshirgar, Ali Saffar; **Rojas Hernandez, Rocio Estefania**; Tewari, Girish C.; Fernandez, Jose Francisco; **Ivanov, Roman**; Karppinen, Maarit; **Hussainova, Irina** ACS applied materials & interfaces 2021 / p. 21613-21625 https://doi.org/10.1021/acsami.1c02899 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Graphene augmented nanofibers and their versatile applications
Hussainova, Irina; **Ivanov, Roman** Reviews on advanced materials and technologies 2020 / p. 9–25 https://reviewsamt.com/issues/4

Graphene covered alumina nanofibers as toughening agent in alumina ceramics
Hussainova, Irina; **Drozdova, Maria**; **Aghayan, Marina**; **Ivanov, Roman**; Perez-Coll, Domingo 13th International Ceramics Congress. Part B 2014 / p. 49-53

Graphene oxide-terminated hyperbranched amino polymer-carboxymethyl cellulose ternary nanocomposite for efficient removal of heavy metals from aqueous solutions
Kong, Qiaoping; **Preis, Sergei**; Li, Leli; Luo, Pei; Hua, Yun; Wei, Chaohai International journal of biological macromolecules 2020 / p. 581–592 : ill https://doi.org/10.1016/j.ijbiomac.2020.01.185 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Graphene-augmented nanofiber scaffolds trigger gene expression switching of four cancer cell types
Kazantseva, Jekaterina; **Ivanov, Roman**; Gasik, Michael; Neuman, Toomas; **Hussainova, Irina** ACS biomaterials science & engineering 2018 / p. 1622-1629 : ill https://doi.org/10.1021/acsbiomaterials.8b00228 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Graphene-ceramic hybrid nanofibers for ultrasensitive electrochemical determination of ascorbic acid
Taleb, Masoud; **Ivanov, Roman**; **Bereznev, Sergei**; Kazemi, Sayed Habib; **Hussainova, Irina** Microchimica acta 2017 / p. 897-905 : ill https://doi.org/10.1007/s00604-017-2085-7

Graphene-encapsulated aluminium oxide nanofibers as a novel type of nanofillers for electroconductive ceramics
Ivanov, Roman; **Hussainova, Irina**; **Aghayan, Marina**; **Drozdova, Maria**; Perez-Coll, Domingo; Rodriguez, Miguel Angel; Rubio-Marcos, Fernando Journal of the European Ceramic Society 2015 / p. 4017-4021 : ill http://dx.doi.org/10.1016/j.jeurceramsoc.2015.06.011

Hierarchically structured functional ceramic composites with graphene augmented nanofibers = Hierarhiliselt struktureeritud funktsionaalsed keraamilised komposiidid grafeenlisandiga nanokiududega
Saffarshamshirgar, Ali 2021 https://www.ester.ee/record=b5453046*est https://digikogu.taltech.ee/et/Item/13881820-10e9-4116-bf2c-440a4c2f7b9b https://doi.org/10.23658/taltech.42/2021

Hybrid graphene-ceramic nanofibre network for spontaneous neural differentiation of stem cells
Kazantseva, Jekaterina; **Hussainova, Irina**; **Ivanov, Roman**; Neumann, Toomas; Gasik, Michael Interface focus 2018 / 6 p. : ill https://doi.org/10.1098/rsfs.2017.0037 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Investigation of the graphene-on-silicon-carbide and CVD graphene as a basis for bioimpedance sensor applications : poster
Sleptšuk, Natalja; **Land, Raul**; **Toompuu, Jana**; **Lebedev, Alexander A.**; Davydov, Valery; Eliseyev, Ilya; Kalinina, Evgenia; **Korolkov, Oleg**; **Rang, Toomas** ePosters 2018 / 1 p.: ill https://cdn.technologynetworks.com/ep/pdfs/natalja-sleptsuk-a-raul-land-a-jana-toompuu-a-alexander-lebedev-b-valery-davydov-b-ilya-eliseyev-b.pdf

Layered functionally graded alumina ceramic composites
Drozdova, Maria; **Ivanov, Roman**; Rodriguez, Miguel Angel; **Hussainova, Irina** ECerS 2017 : 15th Conference & Exhibition of the European Ceramic Society, July 9–13, 2017, Budapest, Hungary : Book of abstracts 2017 / p. 227 https://static.akcongress.com/downloads/ecers/ecers2017-abstract-book.pdf

Layered structure of alumina/graphene-augmented-inorganic-nanofibers with directional electrical conductivity
Saffarshamshirgar, Ali; **Rojas Hernandez, Rocio Estefania**; **Mikli, Valdek**; **Karppinen, Maarit**; **Hussainova, Irina** Carbon 2020 / p. 634-645 https://doi.org/10.1016/j.carbon.2020.06.038 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Non-equilibrium grain boundaries with excess energy in graphene
Romanov, A. E.; Kolesnikova, A. L.; Orlova, T. S.; **Hussainova, Irina**; Bougrov, V. E.; Valiev, R. Z. Carbon 2015 / p. 223-231 : ill http://dx.doi.org/10.1016/j.carbon.2014.09.053

Phenol and methanol detector based on pristine graphene nano-sheet: a first principles study [Online resource]
Rashid, Muhammad Haroon; **Koel, Ants**; **Rang, Toomas** BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p.: ill
https://doi.org/10.1109/BEC.2018.8600982

Porous structures in stacked, crumpled and pillared graphene-based 3D materials
Guo, Fei; Creighton, Megan; Chen, Yantao; Hurt, Robert; **Külaots, Indrek** Carbon 2014 / p. 476-484 : ill

Quantifying graphitic edge exposure in graphene-based materials and its role in oxygen reduction reactions
Stamatin, Serban; **Hussainova, Irina**; **Ivanov, Roman**; Colavita, Paula E. ASC catalysis 2016 / p. 5215-5221 : ill
http://dx.doi.org/10.1021/acscatal.6b00945

Reduction-based engineering of three-dimensional morphology of Ni-rGO nanocomposite
Alinejadian, Navid; Nasirpouri, Farzad; Yus, Joaquin; Ferrari, Begona Materials Science and Engineering : B 2021 / art. 115259
https://doi.org/10.1016/j.mseb.2021.115259 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Relations between metal ion characteristics and adsorption performance of graphene oxide: A comprehensive experimental and theoretical study
Kong, Qiaoping; **Preis, Sergei**; Li, Leli; Luo, Pei; Wei, Cong; Li, Zemin; Hu, Yun; Wei, Chaohai Separation and purification technology 2020 / art. 115956 ; 8 p. : ill https://doi.org/10.1016/j.seppur.2019.115956 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

A Review on graphene-based electrospun conductive nanofibers, supercapacitors, Anodes, and cathodes for lithium-ion batteries
Javed, Kashif; **Oolo, Marco**; **Savest, Natalja**; **Krumme, Andres** Critical Reviews in Solid State and Materials Sciences 2019 / p. 427-443 : ill https://doi.org/10.1080/10408436.2018.1492367 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Spent Li-Ion battery graphite turned into valuable and active catalyst for electrochemical oxygen reduction
Liivand, Kerli; Kazemi, Maryam; **Walke, Peter**; **Mikli, Valdek**; Macdonald, Digby D.; Kruusenberg, Ivar ChemSusChem 2021 / p. 1103-1111 https://doi.org/10.1002/cssc.202002742 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Structure and energy of intercrystallite boundaries in graphene
Kolesnikova, Anna; Rozhkov, M. A.; **Hussainova, Irina** Reviews on advanced materials science 2017 / p. 91-98 http://www.ipme.ru/e-journals/RAMS/no_15217/contents.html

Thermal transport and thermoelectric effect in composites of alumina and graphene-augmented alumina nanofibers
Saffarshamshirgar, Ali; Belmonte, Manuel; Tewari, Girish C.; **Rojas Hernandez, Rocio Estefania**; Seitsonen, Jani; **Ivanov, Roman**; Karppinen, Maarit; Miranzo, Pilar; **Hussainova, Irina** Materials 2021 / art. 2242 https://doi.org/10.3390/ma14092242 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

3D alumina-graphene hybrid nanofibers as a binder‐free cathode for rechargeable Li‐S batteries
Taleb, Masoud; **Ivanov, Roman**; **Hussainova, Irina** Modern Materials and Manufacturing 2019 : 12th International DAAAM Baltic Conference and 27th International Baltic Conference BALTMATTRIB 2019. Selected, peer reviewed papers from the conference Modern Materials and Manufacturing 2019 (MMM 2019), April 24-26, 2019, Tallinn, Estonia 2019 / p. 191-196 : ill
https://www.scientific.net/KEM.799.191 https://www.ester.ee/record=b5235278*est https://doi.org/10.4028/www.scientific.net/KEM.799.191 Conference proceeding at Scopus Article at Scopus

Transverse intrinsic localized modes in monatomic chain and in graphene
Hižnjakov, Vladimir; **Klopov, Mihhail**; Šelkan, Aleksander Physics letters A 2016 / p. 1075–1081
http://dx.doi.org/10.1016/j.physleta.2016.01.011

Tunneling-percolation behavior of graphene-encapsulated whiskers as electroconductive fillers for ceramics
Hussainova, Irina; **Ivanov, Roman**; Kale, Sudhir S.; Jasiuk, Iwona Short fibre reinforced cementitious composites and ceramics 2019 / p. 131-139 https://doi.org/10.1007/978-3-030-00868-0_9 Article collection metrics at Scopus Article at Scopus

Ultra-wideband integrated graphene-based absorbers for terahertz waveguide systems
Campion, James; Xenidis, Nikolaos; Smirnov, Serguei; **Ivanov, Roman**; Oberhammer, Joachim; **Hussainova, Irina**; **Lioubtchenko, Dmitri** Advanced Electronic Materials 2022 / art. 2200106 https://doi.org/10.1002/aelm.202200106 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Wear performance of hierarchically structured alumina reinforced by hybrid graphene encapsulated alumina nanofibers
Hussainova, Irina; **Baroninš, Janis**; **Drozdova, Maria**; **Antonov, Maksim** Wear 2016 / p. 287-295 : ill
http://dx.doi.org/10.1016/j.wear.2016.09.028

Versatile graphene-alumina nanofibers for microwave absorption and EMI shielding
Saffar Shamshirgar, Ali; Alvarez, Maria Fernandez; Del Campo, Adolfo; Fernandez, Jose Francisco; Rojas Hernandez, Rocio

Estefania; Ivanov, Roman; Rosen, Johanna; **Hussainova, Irina** Carbon 2023 / art. 118057 https://doi.org/10.1016/j.carbon.2023.118057

Упругие модели дефектов в двумерных кристаллах
Kolesnikova, Anna; Orlova, T.; **Hussainova, Irina**; Romanov, Alexey Физика твердого тела 2014 / с. 2480-2485 : ил