

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-graafenhübridmaterjalid biovedelike elektrokeemiliseks tuvastamiseks

Taleb, Masoud 2018 <https://digi.lib.ttu.ee/i/?11202> https://www.ester.ee/record=b5180418*est

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

Bidirectional Mo4/3CTx MXene/graphene aerogels for tailored microwave absorption

Shamshirgar, Ali Saffar; Qin, Lei; **Rojas Hernandez, Rocio Estefania**; Halim, Joseph; Fernandez, Jose F.; **Hussainova, Irina**; Rosen, Johanna ACS Applied Nano Materials 2025 / p. 1978-1990 <https://doi.org/10.1021/acsanm.4c06555>

Bifunctional oxygen electrocatalyst based on Fe, Co, and nitrogen co-doped graphene-coated alumina nanofibers for Zn-air battery air electrode

Mooste, Marek; Ahmed, Zubair; Kapitulsis, Pavels; **Ivanov, Roman**; Treshchalov, Alexey; Piirsoo, Helle-Mai; Kikas, Arvo; Kisand, Vambola; Kukli, Kaupo; **Hussainova, Irina**; Tammeveski, Kaido Applied Surface Science 2024 / art. 160024
<https://doi.org/10.1016/j.apsusc.2024.160024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biomass-derived graphene-like catalyst material for oxygen reduction reaction

Kaare, Kätlin; Yu, Eric; Käämbre, Tanel; Volperts, Aleksandrs; Dobeles, Galina; Zhurinsh, Aivars; Niaura, Gediminas; Tamasauskaitė-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 Viruses

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](#)

Boron and Fluorine Co-Doped Graphene/Few-Walled Carbon Nanotube Composite as Highly Active Electrocatalyst for Oxygen Reduction Reaction

Raudsepp, Ragle; Türk, Karl-Kalev; **Zarmehri, Ehsan**; Joost, Urmas; Rauwel, Protima; Saar, Rando; Mäeorg, Uno; Dyck, Alexaner; Bron, Michael; Chen, Zhongming; Noda, Suguru; Kruusenberg, Ivar; Tammeveski, Kaido ChemNanoMat 2024 / art. e202300546, 11 p. : ill <https://doi.org/10.1002/cnma.202300546>

Characteristic low-energy Raman modes in twisted bilayer graphene

Kahro, Tauno; Niilisk, Ahti; Rahn, 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.; Elisayev, 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, Mihail**; Hižnjakov, Vladimir Physica scripta 2014 / 4 p.: ill <https://doi.org/10.1088/0031-8949/89/04/044008> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Corrosion behavior of 17–4 PH stainless steel manufactured by laser powder bed fusion: Effect of graphene coating and heat-treatment

Maharana, P.; Sahu, D. K.; Sahoo, D.; Mallik, A.; Mishra, S.; Ramakrishna, M.; **Prashanth, Konda Gokuldoss**; Gollapudi, S. Materials today communications 2024 / art. 111098 <https://doi.org/10.1016/j.mtcomm.2024.111098> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Design optimization of graphene laminates for maximum fundamental frequency

Majak, Jüri; Kirs, Maarjus; Eerme, Martin; Tungal, Ernst; Lepikult, Toomas Proceedings of the Estonian Academy of Sciences 2017 / p. 354-362 : ill <https://doi.org/10.3176/proc.2017.4.08> https://artiklid.elnet.ee/record=b2830810*est Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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

Dichroic absorption of aligned graphene-augmented inorganic nanofibers in the terahertz regime

Xenidis, Nikolaos; Przewloka, Aleksandra; Stelmaszczyk, Kamil; Haras, Maciej; Smirnov, Serguei; Krajewska, Aleksandra; **Ivanov, Roman; Hussainova, Irina**; Oberhammer, Joachim; Skotnicki, Tomas; Mierczyk, Zygmunt; Lioubtchenko, Dmitri Applied materials today 2024 / art. 102245 <https://doi.org/10.1016/j.apmt.2024.102245> 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 <https://doi.org/10.4028/www.scientific.net/KEM.674.77> Conference Proceedings at Scopus Article at Scopus

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> Journal 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> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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. S.; **Hussainova, Irina**; Romanov, Alexey Physics of the solid state 2014 / p. 2573-2579 : ill

Electrochemical behaviour of graphene-based materials towards ORR

Kibena-Pöldsepp, Elo; Lilloja, Jaana; Merisalu, Mado; **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> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Electroconductive oxide ceramics with hybrid graphenated nanofibers = Elektri juhtiva oksiid-graafenkiudkeraamika tehnoloogia ja püsivus

Drozdova, Maria 2017 <https://digi.lib.ttu.ee/i/?91119> http://www.ester.ee/record=b4748247*est

Electrospinning of nanofibrous composites with cellulose acetate, ionic liquids and graphene oxide = Tselluloosatsetaadi, ionsete vedelike ja graafenoksiidi 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 : Graafenoksiidi sisaldus vaktsiinides on ülemaailmse levikuga vale, mis ka Eestis vaibuda ei taha [Võrguväljaanne]

Raudsik, Heliis epl.delfi.ee 2022 ["FAKTIKONTROLL | Graafenoksiidi sisaldus vaktsiinides on ülemaailmse levikuga vale, mis ka Eestis vaibuda ei taha "](https://digi.lib.ttu.ee/i/?12424)

A few-layered graphene on alumina nanofibers for electrochemical energy conversion

Hussainova, Irina; Ivanov, Roman; Stamatina, Serban; Anoshkin, Ilya; Skou, Eivind; Nasibulin, Albert Carbon 2015 / p. 157-164 : ill <https://doi.org/10.1016/j.carbon.2015.03.004> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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

Formulation and aerosol jet printing of nickel nanoparticle ink for high-temperature microelectronic applications and patterned graphene growth

McKibben, Nicholas; Curtis, Michael; Maryon, Olivia; Sawyer, Mone't; **Lazouskaya, Maryna**; Eixenberger, Josh; Deng, Zhangxian; Estrada, David ACS Applied Electronic Materials 2024 / p. 748 - 760 <https://doi.org/10.1021/acsaelm.3c01175> 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/acsaami.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/acsbomaterials.8b00228> Journal metrics at Scopus Article at Scopus Journal

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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 <https://doi.org/10.1016/j.jeurceramsoc.2015.06.011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

Nanoscale vibration analysis of graphene sheets using nonlocal elasticity theory

Majak, Jüri; Pohlak, Meelis; Eerme, Martin; Kers, Jaan Proceedings of the International Conference on Mechanics of Nano, Micro and Macro Composite Structures : 18 to 20 June 2012 2012 / [1] p

Nanoscale vibration analysis of graphene sheets using nonlogical elasticity theory

Majak, Jüri; Kirs, Maarjuss; Mikola, Madis; Heero, Marek; Herranen, Henrik ICCE 21 proceedings 2013

Nanoscale vibration analysis of orthotropic graphene sheets

Majak, Jüri; Eerme, Martin; Lepikult, Toomas; Tungal, Ernst ICCS17 : 17th International Conference on Composite Structures : Portugal 17-21 June 2013 : book of abstracts 2013

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 <https://doi.org/10.1016/j.carbon.2014.09.053> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Stamatina, Serban; **Hussainova, Irina; Ivanov, Roman;** Colavita, Paula E. ASC catalysis 2016 / p. 5215-5221 : ill <https://doi.org/10.1021/acscatal.6b00945> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reduction-based engineering of three-dimensional morphology of Ni-rGO nanocomposite

Alinejadian, Navid; Nasirpour, 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 [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 LiIS 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, Mihail**; Šelkan, Aleksander Physics letters A 2016 / p. 1075–1081 <https://doi.org/10.1016/j.physleta.2016.01.011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 <https://doi.org/10.1016/j.wear.2016.09.028> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Visualizing ribbon-to-ribbon heterogeneity of chemically unzipped wide graphene nanoribbons by silver nanowire-based tip-enhanced raman scattering microscopy

Inose, Tomoko; Toyouchi, Shuichi; Hara, Shinnosuke; Sugioka, Shoji; **Walke, Peter R.**; Oyabu, Rikuto; Fortuni, Beatrice; Peeters, Wannes; Usami, Yuki; Hirai, Kenji Small 2024 / art. 2301841, 10 p. : ill <https://doi.org/10.1002/sml.202301841> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Упругие модели дефектов в двумерных кристаллах

Kolesnikova, Anna; Orlova, T.; **Hussainova, Irina**; Romanov, Alexey Физика твердого тела 2014 / с. 2480-2485 : ил