

ALD applied to conformal rare-earth coating of ZnO nanoparticles for low temperature thermal imaging applications
Rauwel, Erwan; Galeckas, Augustinas; Rauwel, Protima ECS transactions 2014 / p. 23-31 : ill <https://doi.org/10.1149/06409.0023ecst>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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/>

Application and Behavior of Nanomaterials in Water Treatment

Special issue of Nanomaterials

2019 http://www.mdpi.com/journal/nanomaterials/special_issues/nano_water <https://doi.org/10.3390/books978-3-03921-172-2>

Biocidal properties study of silver nanoparticles used for application in green housing
Küünal, Siim; **Kutti, Sander**; **Rauwel, Protima**; Guha, Mithu; Wragg, David; **Rauwel, Erwan** International nano letters 2016 / p. 191-197 : ill <https://doi.org/10.1007/s40089-016-0186-7>

Electrochemical characterisation of Co@Co(OH)₂ core-shell nanoparticles and their aggregation in solution
Xie, Ruo-Chen; Batchelor-McAuley, Christopher; **Rauwel, Erwan**; Rauwel, Protima; Compton, Richard G. ChemElectroChem 2020 / p. 4259 - 4268 <https://doi.org/10.1002/celec.202001199> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Emerging trends in nanoparticle synthesis using plant extracts for biomedical applications

Rauwel, Protima; **Rauwel, Erwan** Global journal of nanomedicine 2017 / art. 555562, p. 1-3
<http://https://juniperpublishers.com/gjn/pdf/GJN.MS.ID.555562.pdf>

Et puhast vett jätkuks tulevikus kõigile

Vill, Ants Linnaleht 2018 / lk. 4 : fot <https://dea.digar.ee/article/linnaleht/2018/05/04/10.2> [Et puhast vett jätkuks tulevikus kõigile](#)

Highlight of photocurrent generation in garbon-based nanohybrids combined with HfO₂ nanoparticles
Rauwel, Protima; Galeckas, Augustinas; Ducroquet, Frederiquet; **Rauwel, Erwan** 5th International Conference on Competitive Materials and Technology Processes : Miskolc-Lillafüred, Hungary, October 8-12, 2018 : book of abstracts 2018 / p. 166
https://www.ic-cmtp5.eu/doc/book_of_abstract_iccmtp5.pdf

Hybrid nanocomposites and ultrastable metal nanoparticles studied for the development of applications in nanomedicine, water purification and energy harvesting

Rauwel, Erwan; **Rauwel, Protima**; **Küünal, Siim**; Volobujeva, Olga; Ivask, Angela; Galeckas, Augustinas; Duqroquet, F.; Wragg, David EMN Meeting on Nanoparticles 2017 : May 9th to 13th, 2017 in San Sebastian, Spain 2017 / [1] p

Influence of the interface on the photoluminescence properties in ZnO carbon-based nanohybrids

Rauwel, Erwan; Galeckas, Augustinas; Rosario Soares, M.; **Rauwel, Protima** Journal of physical chemistry C 2017 / p. 14879-14887 : ill <https://doi.org/10.1021/acs.jpcc.7b03070> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Investigations on new carbon-based nanohybrids combining carbon nanotubes and metal oxide nanoparticles

Rauwel, Protima; Galeckas, Augustinas; **Salumaa, Martin**; Ducroquet, Frederiquet; **Rauwel, Erwan** 4th International Conference on Competitive Materials and Technology Processes : Miskolc-Lillafüred, Hungary, October 3-7, 2016 : book of abstracts 2016 / p. 250 http://www.ic-cmtp4.eu/doc/book_of_abstarct_iccmtp4.pdf

Investigations on new carbon-based nanohybrids combining carbon nanotubes, HfO₂ and ZnO nanoparticles

Rauwel, Protima; Galeckas, Augustinas; **Salumaa, Martin**; **Aasna, Andres**; Ducroquet, Frederiquet; **Rauwel, Erwan** IOP conference series : materials science and engineering 2017 / art. 012064, p. 1-5 : ill <https://doi.org/10.1088/1757-899X/175/1/012064>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Maailmale oluline avastus : Eestis tegutsevad teadlased lubavad nanofiltri abil veest kätte saada kasvõi uraani [Võrguteavik]

Alvela, Ain Maaleht 2018 <http://maaleht.delfi.ee/news/maaleht/tarbija/maailmale-oluline-avastus-eestis-tegutsevad-teadlased-lubavad-nanofiltri-abil-veest-katte-saada-kasvoi-uraani?id=81900513>

Metal oxide nanoparticles embedded in rare-earth matrix for low temperature thermal imaging applications

Rauwel, Erwan; Galeckas, Augustinas; **Rauwel, Protima**; Hansen, P.-A.; Wragg, David; Nilsen, Ola; Fjellvag, H. Materials research express 2016 / p. 1-11 : ill <https://doi.org/10.1088/2053-1591/3/5/055010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nanofiltri abil saab veest kasvõi uraani kätte

Alvela, Ain Tehnikamaailm : TM : sõidukid, elektroonika, teadus, tehnoloogia 2019 / lk. 90-91 : fot

https://www.ester.ee/record=b1073050*est

Nanomaterial synthesis and study for biomedicine and cancer treatment

Rauwel, Erwan International Conference and Exhibition on Nanomedicine and Drug Delivery : May 29-31, 2017, Osaka, Japan 2017 / [1] p

Nanomaterial synthesis and study for biomedicine and cancer treatment

Rauwel, Erwan Journal of pharmaceuticals & drug delivery research 2017 / p. 55 <http://dx.doi.org/10.4172/2325-9604-C1-020>

New methodology for the antifungal testing of surfactant-free silver metal nanoparticles for applications in green housing

Küüna, Siim; Kutti, Sander; Rauwel, Protima; Wragg, David; **Hussainova, Irina; Rauwel, Erwan** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 133-138 : ill

<https://doi.org/10.4028/www.scientific.net/KEM.674.133> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

On the early history of atomic layer deposition : most significant works and applications

Aarik, Jaan; Ahvenniemi, Esko; Akbashev, Andrew R.; **Rauwel, Erwan** 16th International Conference on Atomic Layer Deposition : 24th-27th July 2016, Dublin, Ireland 2016 / [1] p

One step synthesis of pure cubic and monoclinic HfO₂ nanoparticles : effects of temperature and ambient on the photoluminescent properties

Rauwel, Protima; Galeckas, Augustinas; Rauwel, Erwan ECS transactions 2015 / p. 19-28 <https://doi.org/10.1149/06444.0019ecst>
[Conference proceedings at Scopus](#) [Article at Scopus](#)

Optimisation of plant mediated synthesis of silver nanoparticles by common weed Plantago major and their antimicrobial properties

Küüna, Siim; Visnapuu, Meeri; **Volobujeva, Olga;** Soares Rosario, Maria; **Rauwel, Protima; Rauwel, Erwan** IOP Conference Series : Materials Science and Engineering 2019 / art. 012003 <https://doi.org/10.1088/1757-899X/613/1/012003> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Photocurrent generation in carbon nanotube/cubic-phase HfO₂ nanoparticle hybrid nanocomposites

Rauwel, Protima; Galeckas, Augustinas; **Salumaa, Martin;** Ducroquet, Frederiquet; **Rauwel, Erwan** Beilstein journal of nanotechnology 2016 / p. 1075-1085 : ill <https://doi.org/10.3762/bjnano.7.101> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Plant extract mediated synthesis of nanoparticles : chapter 14

Küüna, Siim; Rauwel, Protima; Rauwel, Erwan Emerging applications of nanoparticles and architecture nanostructures : current prospects and future trends 2018 / p. 411-446 <https://doi.org/10.1016/B978-0-323-51254-1.00014-2>

Plant mediated syntheses of silver nanoparticles using common weed (Plantago Major L.)

Küüna, Siim; Volobujeva, Olga; Rauwel, Protima; Rauwel, Erwan 10th International Conference on Biosystems Engineering 2019 : book of abstracts : May 8-10 2019 Tartu, Estonia 2019 / p. 172
http://dspace.emu.ee/xmlui/bitstream/handle/10492/4955/ABS_2019_Book_VV.pdf?sequence=1&isAllowed=y

Plant mediated synthesis of silver-based nanoparticles and their use as antimicrobial agent in environmentally-friendly applications = Taime ekstrakti abil sünteesitud hõbedal põhinevad nanoosakesed ning nende kasutus antimikroobse vahendina keskkonnasõbralikes rakendustes

Küüna, Siim 2022 <https://doi.org/10.23658/taltech.2/2022> <https://digikogu.taltech.ee/et/Item/c3a53dca-9a76-4356-810f-2d51e44cdbc5>
https://www.ester.ee/record=b5492124*est

Recent advances in nanoparticles applied to water remediation and biomedical applications

Rauwel, Erwan 5th International Conference on Competitive Materials and Technology Processes : Miskolc-Lillafüred, Hungary, October 8-12, 2018 : book of abstracts 2018 / p. 47 https://www.ic-cmtp5.eu/doc/book_of_abstract_icmtp5.pdf

Redox reactivity at silver microparticle-glassy carbon contacts under a coating of polymer of intrinsic microporosity (PIM)

He, Daping; **Rauwel, Erwan;** Malpass-Evans, Richard; Carta, Mariolino Journal of solid state electrochemistry 2017 / p. 2141-2146 : ill <https://doi.org/10.1007/s10008-017-3534-2> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Review article : recommended reading list of early publications on atomic layer deposition-outcome of the "Virtual Project on the History of ALD"

Ahvenniemi, Esko; Akbashev, Andrew R.; Ali, Saima; **Rauwel, Erwan** Journal of vacuum science & technology A : vacuum, surfaces, and films 2017 / p. 010801-1 - 010801-13 <https://doi.org/10.1116/1.4971389> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A review of the synthesis and photoluminescence properties of hybrid ZnO and carbon nanomaterials

Rauwel, Protima; Salumaa, Martin; Aasna, Andres; Galeckas, Augustinas; **Rauwel, Erwan** Journal of nanomaterials 2016 / art.

5320625, 12 p. : ill <https://doi.org/10.1155/2016/5320625> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A review on the green synthesis of silver nanoparticles and their morphologies studied via TEM

Rauwel, Protima; Küünal, Siim; Ferdov, Stanislav; Rauwel, Erwan *Advances in materials science and engineering* 2015 / p. 1-9 : ill <https://doi.org/10.1155/2015/682749> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective photocurrent generation in HfO₂ and carbon nanotube hybrid nanocomposites under Ultra-Violet and visible photoexcitations

Rauwel, Protima; Galeckas, Augustinas; Ducroquet, Frédérique; Rauwel, Erwan *Materials Letters* 2019 / p. 45 - 48 <https://doi.org/10.1016/j.matlet.2019.03.030> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Silver metal nanoparticles study for biomedical and green house applications

Rauwel, Erwan; Simon-Gracia, Lorena; Guha, Mithu; Rauwel, Protima; Küünal, Siim; Wragg, David *IOP conference series : materials science and engineering* 2017 / art. 012011, p. 1-5 : ill <https://doi.org/10.1088/1757-899X/175/1/012011> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Silver nanoparticles : synthesis, properties, and applications

Rauwel, Protima; Rauwel, Erwan; Ferdov, Stanislav; Singh, Mangala P. *Advances in materials science and engineering* 2015 / p. 1-2 <https://doi.org/10.1155/2015/624394> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Silver nanoparticles study for application in green housing

Küünal, Siim; Kutti, Sander; Guha, Mithu; Rauwel, Protima; Wragg, David; Nurk, Gunnar; Rauwel, Erwan *ECS transactions* 2015 / p. 15-24 <https://doi.org/10.0.4.125/06447.0015ecst> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Spinel alumina nanofibers synthesis via ALD coating of alumina nanofibers

Rauwel, Erwan; Nilsen, Ola; Rauwel, Protima; Galeckas, Augustinas; Wragg, David; Walmsley, John; Hussainova, Irina; Soots, Karel *WG2 workshop and 4th ALDCoE annual seminar : 23-24 May 2016, Helsinki, Finland : abstracts 2016* / [1] p. : ill

Stabilization of higher symmetry HfO₂ polymorphs as thin films and nanoparticles

Rauwel, Protima; Rauwel, Erwan *Hafnium : chemical characteristics, production and applications* 2014 / p. 77-112 : ill

Stable metal nanoparticles study for biomedical and green houses applications

Küünal, Siim; Rauwel, Erwan; Rauwel, Protima; Gracia, Lorena; Guha, Mithu; Wragg, David *4th International Conference on Competitive Materials and Technology Processes : Miskolc-Lillafüred, Hungary, October 3-7, 2016 : book of abstracts 2016* / p. 48 http://www.ic-cmtp4.eu/doc/book_of_abstract_iccmtp4.pdf

Study of the curing mechanism of metal alkoxide liquid threads for the synthesis of metal oxide fibers or microtubes

Part, Marko; Hanschmidt, Kelli; Jögi, Jakob; Rauwel, Erwan; Seisenbaeva, Gulaim A.; Kessler, Vadim G.; Tätté, Tanel *RSC advances* 2014 / p. 12545-1255 : ill <https://doi.org/10.1039/c3ra47924b> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sunlight-driven photocatalytic degradation of methylene blue with facile one-step synthesized Cu-Cu₂O-Cu₃N nanoparticle mixtures

Paredes, Patricio; Rauwel, Erwan; Wragg, David S.; Rapenne, Laetitia; Estephan, Elias; Volobujeva, Olga; Rauwel, Protima *Nanomaterials* 2023 / art. 1311 <https://doi.org/10.3390/nano13081311> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

TTÜ teadlased töötasid välja uudse veepuhastustehnoloogia ja -filtri

Mägi, Ruth *moodnekodu.delfi.ee* 2018 / fot <https://moodnekodu.delfi.ee/news/ehitus/ttu-teadlased-tootasid-valja-uudse-veepuhastustehnoloogia-ja-filtri?id=81902065>

Tuumareaktoreid tootev ettevõtte katsetab TTÜs väljatootatud veefiltrit [Võrguväljaanne]

Liive, Ronald *geenius.ee* 2018 <https://geenius.ee/rubriik/teadus-ja-tulevik/tuumareaktoreid-tootev-ettevõtte-katsetab-ttus-valjatootatud-veefiltrit/>