

Adaptation of Laboratory tests for the assessment of wear resistance of drill-bit inserts for rotary-percussive drilling of hard rocks

Saai, Afaf; Bjorge, Ruben; Dahl, Filip; **Antonov, Maksim** Wear 2020 / art. 203366, 10 p. : ill <https://doi.org/10.1016/j.wear.2020.203366> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ageing of kesterite solar cells 1 : Degradation processes and their influence on solar cell parameters

Neubauer, Christian; Samiepour, Ali; Oueslati, Souhaib; Danilson, Mati; Meissner, Dieter Thin solid films 2019 / p. 595-599 : ill <https://doi.org/10.1016/j.tsf.2018.11.043> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ageing of kesterite solar cells 2 : Impact on photocurrent generation

Samiepour, Ali; Neubauer, Christian; Oueslati, Souhaib; Mikli, Valdek; Meissner, Dieter Thin solid films 2019 / p. 509-513 : ill <https://doi.org/10.1016/j.tsf.2018.11.044> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Assessment of abrasive powder behaviour during impact-abrasive wear of PCD elements

Gomon, Dmitri; Auriemma, Fabio; **Antonov, Maksim** Wear 2019 / p. 151-161 : ill <https://doi.org/10.1016/j.wear.2019.03.024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Characterization of tetrahedrite Cu₁₀Cd₂Sb₄S₁₃ monograin materials grown in molten CdI₂ and LiI

Ghisani, Fairouz; Timmo, Kristi; Altosaar, Mare; Mikli, Valdek; Pilvet, Maris; Kaupmees, Reelika; Krustok, Jüri; Grossberg, Maarja; Kauk-Kuusik, Marit Thin solid films 2021 / art. 138980 <https://doi.org/10.1016/j.tsf.2021.138980> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative study of perhydropolysilazane protective films

Shmagina, Elizaveta; Danilson, Mati; Mikli, Valdek; Bereznev, Sergei Surface engineering 2022 / p. 769-777 : ill <https://doi.org/10.1080/02670844.2022.2155445> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of absorber surface modification on the optoelectronic properties of Cu₂CdGeSe₄ solar cells

Li, Xiaofeng; Pilvet, Maris; Timmo, Kristi; Grossberg, Maarja; Danilson, Mati; Mikli, Valdek; Kauk-Kuusik, Marit Thin solid films 2020 / art. 137822, 7 p. : ill <https://doi.org/10.1016/j.tsf.2020.137822> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of cBN content and additives on sliding and surface fatigue wear of spark plasma sintered Al₂O₃-cBN composites

Kumar, Rahul, 1993-; **Antonov, Maksim**; Klimczyk, Piotr; Mikli, Valdek; Gomon, Dmitri Wear 2022 / art. 204250 <https://doi.org/10.1016/j.wear.2022.204250> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of electrode covering composition on the microstructure, wear, and economic feasibility of Fe-C-Cr manual arc-welded hardfacings

Jankauskas, Vytenis; Katinas, Egidijus; Laskauskas, Arturas; **Antonov, Maksim**; Varnauskas, Valentinas; Gedzevičius, Irmantas; Aleknevičienė, Vilija Coatings 2020 / art. 294, 19 p. : ill <https://doi.org/10.3390/coatings10030294> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of germanium incorporation on the properties of kesterite Cu₂ZnSn(S,Se)₄ monograins

Oueslati, Souhaib; Grossberg, Maarja; **Kauk-Kuusik, Marit**; Mikli, Valdek; Ernits, Kaia; Meissner, Dieter; Krustok, Jüri Thin solid films 2019 / p. 315-320 : ill <https://doi.org/10.1016/j.tsf.2018.11.020> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of laser heat treatment on Al_xTi_{1-x}N-based PVD coatings, deposited on carbon and tool steel substrates

Surženkov, Andrei; Viljus, Mart; **Antonov, Maksim**; Kübarsepp, Jakob; Juhani, Kristjan; Kulu, Priit; Vagiström, Heinar; Jankauskas, Vytenis; Leišys, Rimtautas; Bendikiene, Regita; Adoberg, Eron; Peetsalu, Priidu; **Mere, Arvo**; **Gregor, Andre** Surface and coatings technology 2022 / art. 128771 <https://doi.org/10.1016/j.surfcoat.2022.128771> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The effect of temperature and sliding speed on friction and wear of Si₃N₄, Al₂O₃, and ZrO₂ balls tested against AlCrN PVD coating

Antonov, Maksim; Afshari, Hossein; Baroninš, Janis; Adoberg, Eron; Raadik, Taavi; Hussainova, Irina Tribology international 2018 / p. 500-514 : ill <https://doi.org/10.1016/j.triboint.2017.05.035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effects of selenisation temperature on photoluminescence and photoluminescence excitation spectra of

ZnO/CdS/Cu₂ZnSnSe₄/Mo/glass

Sulimov, Mikhail A.; Yakushev, M. V.; Marquez-Prieto, J.; **Krustok, Jüri** Thin solid films 2019 / p. 146-151 : ill <https://doi.org/10.1016/j.tsf.2019.01.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrodeposited ZnO morphology transformations under the influence of SeO₂ additive: Rods, disks, nanosheets network

Gromōko, Inga; Dedova, Tatjana; Polivtseva, Svetlana; Kois, Julia; Puust, Laurits; Sildos, Ilmo; **Mere, Arvo**; **Krunks, Malle** Thin

solid films 2018 / p. 10-15 : ill <https://doi.org/10.1016/j.tsf.2017.12.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Enhanced photocatalytic activity of chemically deposited ZnO nanowires using doping and annealing strategies for water remediation

Gaffuri, Pierre; **Dedova, Tatjana**; Appert, Estelle; **Danilson, Mati**; **Oja Acik, Ilona** Applied surface science 2022 / art. 152323 <https://doi.org/10.1016/j.apsusc.2021.152323> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Erosion studies of the iron boride coatings for protection of tubing components in oil production, mineral processing and engineering applications

Medvedovski, Eugene; **Antonov, Maksim** Wear 2020 / art. 203277, 8 p. : ill <https://doi.org/10.1016/j.wear.2020.203277> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Erosive wear resistance of nature-inspired flexible materials

Kumar, Rahul, 1993-; **Antonov, Maksim**; **Holovenko, Yaroslav**; **Surženkov, Andrei** Tribology letters 2020 / art. 51, 8 p. : ill <https://doi.org/10.1007/s11249-020-01296-8> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Friction studies of metal surfaces with various 3D printed patterns tested in dry sliding conditions

Holovenko, Yaroslav; **Antonov, Maksim**; **Kollo, Lauri**; **Hussainova, Irina** Proceedings of the Institution of Mechanical Engineers. Part J, Journal of engineering tribology 2018 / p. 43-53 <https://doi.org/10.1177/1350650117738920> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Gradient microstructure in tantalum formed under the wear track during dry sliding friction

Kommel, Lembit; **Põdra, Priit**; **Mikli, Valdek**; **Omranpour Shahreza, Babak** Wear 2021 / art. 203573, 7 p. : ill <https://doi.org/10.1016/j.wear.2020.203573> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High temperature tribological properties of Al₂O₃/NCD films investigated under ambient air conditions

Podgurski, Vitali; **Yashin, Maxim**; **Jõgiaas, Taivo**; **Viljus, Mart**; **Alamgir, Asad**; **Danilson, Mati**; **Bogatov, Andrei** Coatings 2020 / art. 175, 13 p. : ill <https://doi.org/10.3390/coatings10020175> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-temperature oxidation resistance and tribological properties of Al₂O₃/ta-C coating

Alamgir, Asad; **Bogatov, Andrei**; **Jõgiaas, Taivo**; **Viljus, Mart**; **Raadik, Taavi**; **Kübarsepp, Jakob**; **Sergejev, Fjodor**; **Lümkemann, Andreas**; **Kluson, Jan**; **Podgurski, Vitali** Coatings 2022 / art. 547 <https://doi.org/10.3390/coatings12040547> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-temperature tribological performance of Al₂O₃/a-C:H:Si coating in ambient air

Podgurski, Vitali; **Alamgir, Asad**; **Yashin, Maxim**; **Jõgiaas, Taivo**; **Viljus, Mart**; **Raadik, Taavi**; **Danilson, Mati**; **Sergejev, Fjodor**; **Lümkemann, Andreas**; **Kluson, Jan**; **Sondor, Jozef**; **Bogatov, Andrei** Coatings 2021 / art. 495, 15 p. : ill <https://doi.org/10.3390/coatings11050495> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-temperature tribological performance of hard multilayer TiN-AlTiN/nACo-CrN/AlCrN-AlCrO-AlTiCrN coating deposited on WC-Co substrate

Alamgir, Asad; **Yashin, Maxim**; **Bogatov, Andrei**; **Viljus, Mart**; **Traksmaa, Rainer**; **Sondor, Jozef**; **Lümkemann, Andreas**; **Sergejev, Fjodor**; **Podgurski, Vitali** Coatings 2020 / art. 909, 10 p. : ill <https://doi.org/10.3390/coatings10090909> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

HVOF sprayed Fe-Based wear-resistant coatings with carbide reinforcement, synthesized in situ and by mechanically activated synthesis

Tkachivskyi, Dmytro; **Juhani, Kristjan**; **Surženkov, Andrei**; **Kulu, Priit**; **Antonov, Maksim**; **Goljandin, Dmitri** Coatings 2020 / art. 1092, 15 p. : ill <https://doi.org/10.3390/coatings10111092> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Kesterite monograins for solar cells and water splitting applications

Oueslati, Souhaib; **Pilvet, Maris**; **Grossberg, Maarja**; **Kauk-Kuusik, Marit**; **Krustok, Jüri**; **Meissner, Dieter** Thin solid films 2021 / art. 138981 <https://doi.org/10.1016/j.tsf.2021.138981> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Microstructure and high temperature tribological behaviour of self-lubricating Ti-TiB_x composite doped with Ni-Bi

Kumar, Rahul, 1993-; **Torres, Hector**; **Aydinyan, Sofiya**; **Antonov, Maksim**; **Varga, Markus**; **Rodríguez Ripoll, Manel**; **Hussainova, Irina** Surface and coatings technology 2022 / art. 128827 <https://doi.org/10.1016/j.surfcoat.2022.128827> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mild steel tribology for circular economy of textile industries

Hussain, Abrar; **Podgurski, Vitali**; **Goljandin, Dmitri**; **Antonov, Maksim**; **Basit, Muhammad Abdul**; **Ahmad, Tahir** Tribology in Industry 2021 / p. 552-560 <https://doi.org/10.24874/ti.1050.02.21.04> [Journal metrics at Scopus](#) [Article at Scopus](#)

Nickel oxide films by chemical spray : effect of deposition temperature and solvent type on structural, optical, and surface properties

Chen, Zengjun; Dedova, Tatjana; Oja Acik, Ilona; Danilson, Mati; Krunks, Malle Applied surface science 2021 / art. 149118
<https://doi.org/10.1016/j.apsusc.2021.149118> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optical and photoelectric properties of nanolamellar structures obtained by thermal annealing of InSe plates in Zn vapours

Untila, Dumitru; Evtodiev, Igor; Caraman, Iuliana; Spalatu, Nicolae; Dmitroglou, Liliana; Caraman, Mihail Physica status solidi (a) : applications and materials science 2018 / art. 1700434, p. 1-7 : ill <https://doi.org/10.1002/pssa.201700434> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optical and structural properties of orthorhombic and tetragonal polymorphs of Cu₂CdGeSe₄

Grossberg, Maarja; Raadik, Taavi; Krustok, Jüri; Kauk-Kuusik, Marit; Timmo, Kristi; Kaupmees, Reelika; Mikli, Valdek; Mere, Arvo Thin solid films 2018 / p. 44-47 <https://doi.org/10.1016/j.tsf.2018.09.031> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Performance of polyimide and PTFE based composites under sliding, erosive and high stress abrasive conditions

Kumar, Rahul, 1993-; Malaval, Bastien; Antonov, Maksim; Zhaoc, Gai Tribology international 2020 / art. 106282
<https://doi.org/10.1016/j.triboint.2020.106282> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photoelectrochemical properties and band positions of Cd-substituted tetrahedrite Cu₁₀Cd₂Sb₄S₁₃ monograin materials grown in molten CdI₂ and LiI

Ghisani, Fairouz; Timmo, Kristi; Altosaar, Mare; Oueslati, Souhaib; Pilvet, Maris; Kauk-Kuusik, Marit Thin Solid Films 2022 / art. 139030 <https://doi.org/10.1016/j.tsf.2021.139030> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Properties of Cu-Sb-Se thin films deposited by magnetron co-sputtering for solar cell applications

Penežko, Aleksei; Kauk-Kuusik, Marit; Volobujeva, Olga; Grossberg, Maarja Thin solid films 2021 / art. 139004
<https://doi.org/10.1016/j.tsf.2021.139004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Pyrite as prospective absorber material for monograin layer solar cell

Kristmann, Katriin; Altosaar, Mare; Raudoja, Jaan; Krustok, Jüri; Pilvet, Maris; Mikli, Valdek; Grossberg, Maarja; Danilson, Mati; Raadik, Taavi Thin Solid Films 2022 / art. 139068 : ill <https://doi.org/10.1016/j.tsf.2021.139068> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Raman spectroscopy for reliability assessment of multilayered AlCrN coating in tribo-corrosive conditions [Online resource]

Baroninš, Janis; Antonov, Maksim; Bereznev, Sergei; Raadik, Taavi; Hussainova, Irina Coatings 2018 / art. 229, 12 p. : ill
<https://doi.org/10.3390/coatings8070229> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Residual stresses on various PVD hard coatings on tube and plate substrates

Lille, Harri; Ryabchikov, Alexander; Peetsalu, Priidu; Lind, Liina; Sergejev, Fjodor; Mikli, Valdek; Kübarsepp, Jakob Coatings 2020 / art. 1054, 11 p <https://doi.org/10.3390/coatings10111054> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Saturn-shaped ice burst pattern and fast basal binding of an ice-binding protein from an Antarctic bacterial consortium

Kaleda, Aleksei; Haleva, Lotem; Sarusi, Guy Langmuir 2019 / p. 7337-7346 : ill <https://doi.org/10.1021/acs.langmuir.8b01914> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sliding wear performance of in-situ spark plasma sintered Ti-TiBw composites at temperatures up to 900 °C

Kumar, Rahul, 1993-; Antonov, Maksim; Liu, Lei; Hussainova, Irina Wear 2021 / art. 203663, 9 p.: ill
<https://doi.org/10.1016/j.wear.2021.203663> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Solid particle erosion of refractories : A critical discussion of two test standards

Varga, Markus; Antonov, Maksim; Tumma, Mike Wear 2019 / p. 552-561 : ill <https://doi.org/10.1016/j.wear.2018.12.062> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structural and electrical characterisation of high-k ZrO₂ thin films deposited by chemical spray pyrolysis method

Oluwabi, Abayomi Titilope; Acik, Ilona Oja; Katerski, Atanas; Mere, Arvo; Krunks, Malle Thin Solid Films 2018 / p. 129 - 136
<https://doi.org/10.1016/j.tsf.2018.07.035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study of Cu₂CdGeSe₄ monograin powders synthesized by molten salt method for photovoltaic applications

Kauk-Kuusik, Marit; Li, Xiaofeng; Pilvet, Maris; Timmo, Kristi; Grossberg, Maarja; Raadik, Taavi; Danilson, Mati; Mikli, Valdek; Altosaar, Mare; Krustok, Jüri; Raudoja, Jaan Thin solid films 2018 / p. 15-19 <https://doi.org/10.1016/j.tsf.2018.09.025> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study of the structure and optoelectronic properties of Cu₂Ge(SexS_{1-x})₃ microcrystalline powders

Li, Xiaofeng; Timmo, Kristi; Grossberg, Maarja; Pilvet, Maris; Kaupmees, Reelika; Krustok, Jüri; Muska, Katri; Mikli, Valdek; Kauk-Kuusik, Marit Thin solid films 2022 / art. 139053, 6 p. : ill <https://doi.org/10.1016/j.tsf.2021.139053> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synthesis and optical properties of Ga₂O₃ nanowires grown on GaS substrate

Leontie, Liviu; Sprincean, Veaceslav; Untila, Dumitru; Spalatu, Nicolae Thin solid films 2019 / art. 137502, 6 p. : ill <https://doi.org/10.1016/j.tsf.2019.137502> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

ZnO/NiO heterostructures with enhanced photocatalytic activity obtained by ultrasonic spraying of a NiO shell onto ZnO nanorods

Chen, Zengjun; Dedova, Tatjana; Spalatu, Nicolae; Maticiu, Natalia; Rusu, Marin; Katerski, Atanas; Oja Acik, Ilona; Unold, Thomas; Krunks, Malle Colloids and surfaces A : physicochemical and engineering aspects 2022 / art. 129366 <https://doi.org/10.1016/j.colsurfa.2022.129366> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Temperature dependent optical and electrical characterization of SnS/CdS solar cell

Raadi, Taavi; Spalatu, Nicolae; Krustok, Jüri; Josepson, Raavo; Grossberg, Maarja Thin Solid Films 2022 / art. 139069 <https://doi.org/10.1016/j.tsf.2021.139069> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The cost-effective deposition of ultra-thin titanium(IV) oxide passivating layers for improving photoelectrochemical activity of SnS electrodes

Kois, Julia; Polivtseva, Svetlana; Bereznev, Sergei Thin solid films 2019 / p. 152-156 : ill <https://doi.org/10.1016/j.tsf.2018.12.047> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The impact resistance of highly densified metal alloys manufactured from gas-atomized pre-alloyed powders

Rahmani Ahranjani, Ramin; Antonov, Maksim; Prashanth, Konda Gokuldoss Coatings 2021 / art. 216, 14 p. : ill <https://doi.org/10.3390/coatings11020216> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tribological properties of selective laser melted Al₁₂Si alloy

Rathod, H.J.; Nagaraju, T.; Prashanth, Konda Gokuldoss; Ramamurthy, U. Tribology international 2019 / p. 94-101 : ill <https://doi.org/10.1016/j.triboint.2019.04.038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

UVA-induced antimicrobial activity of ZnO/Ag nanocomposite covered surfaces

Visnapuu, Meeri; Rosenberg, Merilin; Truska, Egle; Nõmmiste, Ergo; Šutka, Andris; Kahru, Anne; Rähn, Mihkel; Vija, Heiki; Orupõld, Kaja; Kisand, Vambola; Ivask, Angela Colloids and Surfaces B: Biointerfaces 2018 / p. 222-232 <https://doi.org/10.1016/j.colsurfb.2018.05.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)