

Acoustic performance of an additive manufactured lattice structure

Auriemma, Fabio; Liu, Le IOP conference series : materials science and engineering 2021 / art. 012002, 5 p.: ill
<https://doi.org/10.1088/1757-899X/1140/1/012002>

Acoustic study of multi-layered microperforated elements for fibreless noise control applications

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Adhesion of AlCrN coating deposited on TiB₂/Ti composites sintered by SPS dedicated for high temperature tribological applications

Michalczewski, Remigiusz; Kalbarczyk, M.; Slomka, Z.; **Hussainova, Irina; Liu, Le; Antonov, Maksim** IOP conference series : materials science and engineering 2021 / art. 012010, 9 p <https://doi.org/10.1088/1757-899X/1140/1/012010>

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Analysis of the reciprocal wear testing of Aluminum AA1050 processed by a novel mechanical nanostructuring technique

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Bioinert ceramics scaffolds for bone tissue engineering by laser-based powder bed fusion : a preliminary review

Kamboj, Nikhil Kumar; Piili, H.; Ganvir, A.; Gopaluni, A.; Nayak, C.; Moritz, N.; Salminen, A. IOP conference series : materials science and engineering 2023 / art. 012022 <https://doi.org/10.1088/1757-899X/1296/1/012022>

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<https://doi.org/10.1088/1757-899X/660/1/012011> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Design and optimization of AlN based RF MEMS switches

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<https://doi.org/10.1088/1757-899X/362/1/012002> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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Effects of long-range forces in nonlinear dynamics of crystals : creation of defects and self-localized vibrations

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Functionally gradient Ti₆Al₄V-TiB composite produced by spark plasma sintering

Liu, Le; Ivanov, Roman; Kumar, Rahul, 1993-; **Minasyan, Tatevik; Antonov, Maksim; Hussainova, Irina** IOP conference series : materials science and engineering 2021 / art. 012004, 6 p.: ill <https://doi.org/10.1088/1757-899X/1140/1/012004>

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<https://doi.org/10.1088/1757-899X/251/1/012055>

Green eco-friendly acoustic materials

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Dedova, Tatjana; Volobujeva, Olga; Krunks, Malle; Mikli, Valdek; Gromõko, Inga; Katerski, Atanas; Mere, Arvo IOP conference series : materials science and engineering 2013 / [4] p. : ill

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The influence of carbonation process on concrete bridges and durability in Estonian practice

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The influence of high-energy ball milling and nanoadditives on the kinetics of heterogeneous reaction in Ni-Al system

Nazaretyan, Khachik; Kirakosyan, Hasmik; Ayyinyan, Sofiya; Zakaryan, Marieta; Abovyan, L. S.; Kulak, M.; Khina, B. IOP conference series : materials science and engineering 2021 / art. 012052 <https://doi.org/10.1088/1757-899X/1140/1/012052>

In-situ deposition of gold nanoparticles onto different substrates by chemical spray pyrolysis

Oja Acik, Ilona; Oyekoya, Gboyega Nathaniel; Mere, Arvo; Katerski, Atanas; Mikli, Valdek; Krunks, Malle IOP conference series : materials science and engineering 2015 / p. 1-5 : ill

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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 <http://dx.doi.org/10.1088/1757-899X/175/1/012064>

Isothermal oxidation of SLM fabricated Mo(Si_{1-x}Al_x)₂-based composite

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Laanearu, Janek; Borodinecs, Anatolijs; Rimeika, M.; Palm, B. IOP conference series : materials science and engineering 2017 / art. 012054, p. 1-9 : ill <https://doi.org/10.1088/1757-899X/251/1/012054>

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Simulations of propane and butane gas sensor based on pristine armchair graphene nanoribbon

Rashid, Muhammad Haroon; **Koel, Ants**; **Rang, Toomas** IOP conference series : materials science and engineering 2018 / art. 012001, 8 p <https://doi.org/10.1088/1757-899X/362/1/012001> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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Murumaa, Lea; **Ševtšenko, Eduard**; **Karaulova, Tatjana**; **Mahmood, Kashif**; **Popell, Janek** IOP conference series : materials science and engineering 2021 / art. 012041, p. 1–12 <https://doi.org/10.1088/1757-899X/1140/1/012041>

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Sardar, Jagannath; Mäeorg, Uno; Krasnou, Illia; Baddam, Vikram; Gudkova, Viktoria; Krumme, Andres; Savest, Natalja; Tarasova, Elvira; Viirsalu, Mihkel IOP conference series : materials science and engineering 2016 / p. 1-5 : ill <http://dx.doi.org/10.1088/1757-899X/111/1/012021>

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Gromōko, Inga; Dedova, Tatjana; Krunks, Malle; Sõritski, Vitali; Mere, Arvo; Mikli, Valdek; Unt, Tarmo; Oja Acik, Ilona IOP conference series : materials science and engineering 2015 / p. 1-5 : ill <http://dx.doi.org/10.1088/1757-899X/77/1/012012>

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Tähemaa, Toivo; Sarkans, Martinš; Sarand, Inga; Pohlak, Meelis; Niidas, Aadu; Saarna, Mart IOP conference series : materials science and engineering 2021 / art. 012046, 6 p. : ill <https://doi.org/10.1088/1757-899X/1140/1/012046>

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Kulu, Priit; Goljandin, Dmitri; Traksmäa, Rainer; Kaljuvee, Tiit; Gregor, Andre IOP conference series : materials science and engineering 2021 / art. 012028, 7 p. : ill <https://doi.org/10.1088/1757-899X/1140/1/012028>

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