

Acoustic and thermoacoustic properties of an additive manufactured lattice structure

Di Giulio, Elio; **Auriemma, Fabio**; Napolitano, Marialuisa; Dragonetti, Raffaele The Journal of the Acoustical Society of America 2021 / art. 3878 <https://doi.org/10.1121/10.0005085> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Acoustic lumped element techniques to measure the low frequency response of porous materials

Di Giulio, Elio; Napolitano, Marialuisa; Romano, Rosario Aniello; **Auriemma, Fabio**; Dragonetti, Raffaele Proceedings of the 10th Convention of the European Acoustics Association 2023 : Forum Acusticum, September 11-15, 2023 2024 / p. 3497-3502 <https://doi.org/10.61782/fa.2023.1056>

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 performance of micro-grooved elements

Auriemma, Fabio Applied acoustics 2017 / p. 128-137 : ill <https://doi.org/10.1016/j.apacoust.2017.02.019> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Acoustic studies on porous sintered powder metals

Luppín, Janek; **Auriemma, Fabio** Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 47-52 : ill

Acoustic studies on small engine silencer elements

Kabral, Raimo; **Rämmal, Hans**; **Lavrentjev, Jüri**; **Auriemma, Fabio** SAE technical papers 2011 / [8] p. : ill

Addressing security issues in Industry 4.0 through quantum key distribution

Auriemma, Fabio; Ejmaes, Mikkel Proceedings of the Estonian Academy of Sciences 2025 / p. 175-180 <https://doi.org/10.3176/proc.2025.2.17>

Analysis and design of multifunctional laminated glass composite structures

Majak, Jüri; **Pohlak, Meelis**; **Õunapuu, Erko**; **Auriemma, Fabio**; **Rämmal, Hans**; **Saarts, Samo** 24th International Conference on Composites/Nano-Engineering : ICCE-24 : Haikou, Hainan Island, China, July 17-23, 2016 2016 / [2] p. : ill

Application of novel micro-grooved elements to small engine silencer

Auriemma, Fabio; **Rämmal, Hans**; **Lavrentjev, Jüri** SAE Technical Papers 2013 / [10] p.: ill <https://www.sae.org/publications/technical-papers/content/2013-32-9001/> <https://doi.org/10.4271/2013-32-9001> [Journal metrics at Scopus](#) [Article at Scopus](#)

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](#)

A complete acoustic analysis on the passive effect of small engine silencer elements

Kabral, Raimo; **Rämmal, Hans**; **Lavrentjev, Jüri**; **Auriemma, Fabio** Proceedings of International Congress on Sound and Vibration (ICSV18) : Rio de Janeiro, Brazil, 10 to 14 July 2011 2011

Criteria for the selection of porous cores for thermoacoustic applications

Auriemma, Fabio; Napolitano, Marialuisa; Elio Di, Giulio; Dragonetti, Raffaele INTER-NOISE and NOISE-CON Congress and Conference Proceedings 2020 / p. 119-126 <https://www.ingentaconnect.com/contentone/ince/incecp/2020/00000261/00000006/art00016>

Damping of acoustic waves in straight ducts and turbulent flow conditions

Tiikoja, Heiki; **Auriemma, Fabio**; **Lavrentjev, Jüri** SAE Technical Paper Series : 9th International Styrian Noise, Vibration & Harshness Congress : The European Automotive Noise Conference 2016 / Paper 2016-01-1816, p. 1-9 : ill <https://doi.org/10.4271/2016-01-1816> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

A double-layer acoustic absorber as potential substitute for traditional micro-perforated elements

Auriemma, Fabio Proceedings of Meetings on Acoustics 2017 / art. 030004, p. 1-11 : ill <https://doi.org/10.1121/2.0000598> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Experimental evaluation and numerical modelling residual stresses in glass panel

Majak, Jüri; **Anton, Johan**; **Õunapuu, Erko**; **Auriemma, Fabio**; **Pohlak, Meelis**; **Eerme, Martin**; **Klauson, Aleksander** 2018 International Conference on Materials Science and Manufacturing Engineering (MSME 2018) MATEC web of conferences 2019 / art. 02003, 7 p. : ill <https://doi.org/10.1051/mateconf/201925302003>

Extended investigations on micro-grooved elements - a novel solution for noise control

Auriemma, Fabio; **Rämmal, Hans**; **Lavrentjev, Jüri** SAE international journal of materials and manufacturing 2014 / p. 184-194 : ill <https://doi.org/10.4271/2013-24-0068> [Journal metrics at Scopus](#) [Article at Scopus](#)

Genetic algorithm vs finite differences in an optimization procedure including FEM with fixed mesh

Auriemma, Fabio International Conference on Numerical Analysis and Applied Mathematics (ICNAAM 2018) : Rhodes, Greece, 13–18 September 2018 2019 / art. 2116, 330006, 4 p <https://doi.org/10.1063/1.5114344> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Low frequency acoustic method to measure the complex bulk modulus of porous materials

Napolitano, Marialuisa; Di Giulio, Elio; **Auriemma, Fabio** The Journal of the Acoustical Society of America 2022 / art. 1545 <https://doi.org/10.1121/10.0009767> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Low-frequency non-reciprocal sound propagation features in thermoacoustic waveguide

Auriemma, Fabio The Journal of the Acoustical Society of America 2024 / p. 314-325 <https://doi.org/10.1121/10.0026453> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Micro-grooved elements - a novel solution for noise control

Auriemma, Fabio; Rämmal, Hans; Lavrentjev, Jüri SAE international journal of material and manufacturing 2013 / p. 599-610 : ill <https://doi.org/10.4271/2013-01-1941> [Journal metrics at Scopus](#) [Article at Scopus](#)

A new type of compact silencer for high frequency noise

Kabral, Raimo; Auriemma, Fabio; Knutsson, Magnus; Abom, Mats Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 29-35 : ill

Non-linear impedance of a new sound absorptive fibreless material title

Auriemma, Fabio; Tiikoja, Heiki MIC 2015 : 2nd International Conference on Modelling, Identification and Control : August 9-10, 2015, Paris, France 2015 / p. 195-199 : ill <http://dx.doi.org/10.2991/mic-15.2015.44>

Non-reciprocal propagation in an acoustic waveguide with a thermally graded metal lattice core

Auriemma, Fabio Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 040004 <https://doi.org/10.1063/5.0189280> [Conference proceedings at Scopus](#) [Article at Scopus](#)

A novel design for cruiser type motorcycle silencer based on micro-perforated elements

Kabral, Raimo; Rämmal, Hans; **Auriemma, Fabio**; Luppén, Janek; Kõiv, Risto; Tiikoja, Heiki; Lavrentjev, Jüri SAE technical papers 2012 https://www.researchgate.net/publication/236005547_A_Novel_Design_for_Cruiser_Type_Motorcycle_Silencer_Based_on_Micro-Perforated_Elements

Observation of nonlinear vibro-acoustic phenomena in the presence of elastic membrane with different boundary conditions

Moezzi, Reza; **Auriemma, Fabio** Euronoise 2018 Crete : conference proceedings 2018 / p. 2645-2651 : ill http://www.euronoise2018.eu/docs/papers/437_Euronoise2018.pdf

On the acoustic impedance of a fibreless sound absorptive element

Auriemma, Fabio; Tiikoja, Heiki SAE international journal of engines 2015 / p. 2268-2275 : ill <https://doi.org/10.4271/2015-24-2462> [Journal metrics at Scopus](#) [Article at Scopus](#)

Optimal holder configurations for suspended glass panels

Auriemma, Fabio; Aiello, Robert 25th International Congress on Sound and Vibration 2018 (ICSV 25) : Hiroshima Calling, Hiroshima, Japan , 8-12 July, 2018 : proceedings. Vol. 1 2018 / p. 4331-4338 <http://toc.proceedings.com/40638webtoc.pdf>

Optimized vibro-acoustic design of suspended glass panels

Aiello, Robert; **Auriemma, Fabio** Structural and multidisciplinary optimization 2018 / p. 2253–2268 : ill <https://doi.org/10.1007/s00158-018-2014-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Performance of additive manufactured stacks in a small scale thermoacoustic heat engine

Auriemma, Fabio; Holovenko, Yaroslav SAE Technical Papers 2019 / 2019-01-1534, 10 p. : ill <https://doi.org/10.4271/2019-01-1534> [Journal metrics at Scopus](#) [Article at Scopus](#)

Porous cores in small thermoacoustic devices for building applications

Auriemma, Fabio; Di Giulio, Elio; Napolitano, Marialuisa; Dragonetti, Raffaele Energies 2020 / art. 2941, 19 p. : ill <https://doi.org/10.3390/en13112941> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Static response and buckling loads of multilayered composite beams using the refined Zigzag theory and Higher-Order Haar Wavelet method

Sorrenti, M.; Di Sciava, M.; **Majak, Jüri**; Auriemma, Fabio Mechanics of composite materials 2021 / 18 p <https://doi.org/10.1007/s11029-021-09929-2> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study of a new highly absorptive acoustic element

Auriemma, Fabio Acoustics Australia 2017 / p. 411-419 : ill <https://doi.org/10.1007/s40857-017-0087-6> [Journal metrics at Scopus](#)

Use of selective laser melting for manufacturing the porous stack of a thermoacoustic engine

Auriemma, Fabio; Holovenko, Yaroslav 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. 246-251 : ill
<https://www.scientific.net/KEM.799.246> https://www.ester.ee/record=b5235278*est <https://doi.org/10.4028/www.scientific.net/KEM.799.246>
[Conference proceeding at Scopus](#) [Article at Scopus](#)

Validation of 1D and 3D analyses for performance prediction of an automotive silencer

Siano, Daniela; Auriemma, Fabio; Bozza, Fabio; **Rämmal, Hans** SAE technical papers 2011 / [14] p
https://www.researchgate.net/publication/258519244_Validation_of_1D_and_3D_Analyses_for_Performance_Prediction_of_an_Automotive_Silencer

Wear resistance analysis of duplex interpenetrating ceramic composites via in-situ vibration monitoring

Kariminejad, Arash; Auriemma, Fabio; Antonov, Maksim; Klimczyk, Piotr; Hussainova, Irina International journal of refractory metals and hard materials 2026 / art. 107454 <https://doi.org/10.1016/j.jirmhm.2025.107454>

Vibration analysis of multifunctional laminated glass panel [Online resource]

Väer, Kaur; Õunapuu, Erko; Eerme, Martin; Auriemma, Fabio; Rämmal, Hans International Conference "Functional Materials and Nanotechnologies 2017" : Tartu, Estonia in April, 24-27, 2017 : book of abstracts 2017 / p. 145
http://www.ester.ee/record=b4668793*est