

Band gap tuning based on adjustable stiffness of local resonators

Alimohammadi, Hossein; Vassiljeva, Kristina; HosseinNia, Hassan; Petlenkov, Eduard META 2023 Paris - France : The 13th International Conference on Metamaterials, Photonic Crystals and Plasmonics : proceedings 2023 / p. 1743-1744 : ill https://metaconferences.org/META23/files/meta23_proceedings.pdf

Bandgap dynamics in locally resonant metastructures : a general theory of internal resonator coupling

Alimohammadi, Hossein; Vassiljeva, Kristina; HosseinNia, S. Hassan; Petlenkov, Eduard Applied Sciences (Switzerland) 2024 / art. 2447 <https://doi.org/10.3390/app14062447> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Enhancing bandgap depth in locally resonant metastructures via notch-filtered piezoelectric actuation

Alimohammadi, Hossein; Vassiljeva, Kristina; HosseinNia, S. Hassan; Petlenkov, Eduard 2024 IEEE International Conference on Industrial Technology (ICIT) 2024 <https://doi.org/10.1109/ICIT58233.2024.10540976> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

An evolutionary field theorem : evolutionary field optimization in training of power-weighted multiplicative neurons for nitrogen oxides-sensitive electronic nose applications

Alagoz, Baris Baykant; Simsek, Ozlem Imik; Ari, Davut; **Tepljakov, Aleksei; Petlenkov, Eduard; Alimohammadi, Hossein** Sensors 2022 / art. 3836 <https://doi.org/10.3390/s22103836> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Exploring internally coupled resonator's dynamics and spatial variability in metamaterials for vibration suppression

Alimohammadi, Hossein; Vassiljeva, Kristina; HosseinNia, S. Hassan; Petlenkov, Eduard Active and Passive Smart Structures and Integrated Systems XVII 2024 / art. 1294614 <https://doi.org/10.1117/12.3024067> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Exploring the real-world challenges and efficacy of internal coupling in metastructures : an experimental perspective

Alimohammadi, Hossein; Vassiljeva, Kristina; HosseinNia, S. Hassan; Ellervee, Peeter; Petlenkov, Eduard 2024 International Conference on Electrical, Computer and Energy Technologies (ICECET) 2024 <https://doi.org/10.1109/ICECET61485.2024.10698725> [Article at Scopus](#)

Gray box time variant clogging behaviour and pressure drop prediction of the air filter in the HVAC system

Alimohammadi, Hossein; Vassiljeva, Kristina; Petlenkov, Eduard; Thalfeldt, Martin; Mikola, Alo; Kull, Tuule Mall; Köse, Ahmet E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 10002 <https://doi.org/10.1051/e3sconf/202124610002> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Harvesting energy and stability insights in internally coupled resonator systems

Alimohammadi, Hossein; Vassiljeva, Kristina; HosseinNia, S. Hassan; Petlenkov, Eduard Proceedings, IEEE 18th International Conference on Advanced Motion Control, AMC2024, February 28-March 1, 2024 2024 / p. 1-6 : ill <https://doi.org/10.1109/AMC58169.2024.10505680>

A NARX model reference adaptive control scheme: Improved disturbance rejection fractional-order PID control of an experimental magnetic levitation system

Alimohammadi, Hossein; Alagoz, Baris Baykant; Tepljakov, Aleksei; Vassiljeva, Kristina; Petlenkov, Eduard Algorithms 2020 / p. 1-27 <https://doi.org/10.3390/a13080201> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nonlinear dynamics in PEH for enhanced power output and vibration suppression in metastructures

Alimohammadi, Hossein; Vassiljeva, Kristina; HosseinNia, S. Hassan; Petlenkov, Eduard Nonlinear Dynamics 2024 / p. 12941 - 12963 <https://doi.org/10.1007/s11071-024-09739-w> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Piezoelectric compensation of structural damping in metamaterial beams: stability and performance analysis

Alimohammadi, Hossein; Vassiljeva, Kristina; HosseinNia, S. Hassan; Ellervee, Peeter; Petlenkov, Eduard Active and Passive Smart Structures and Integrated Systems XVIII 2024 / art. 129460J, 11 p. : ill <https://doi.org/10.1117/12.3024120> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Predict the remaining useful life in HVAC filters using a hybrid strategy

Alimohammadi, Hossein; Vassiljeva, Kristina; Petlenkov, Eduard; Kull, Tuule Mall; Thalfeldt, Martin CLIMA 2022: the 14th REHVA HVAC World Congress, 22nd – 25th May in Rotterdam, The Netherlands 2022 / p. 1-8 <https://doi.org/10.34641/clima.2022.273>

Stability analysis and energy harvesting in lumped parameter systems with internally coupled resonators

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