

Additively manufactured mesostructured MoSi₂-Si₃N₄ ceramic lattice

Minasyan, Tatevik; Liu, Le; Holovenko, Yaroslav; Aydinyan, Sofiya; Hussainova, Irina Ceramics international 2019 / p. 9926-9933 <https://doi.org/10.1016/j.ceramint.2019.02.035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

AlCo-rich AlCoNiFe and AlCoNiFeCr high entropy alloys: Synthesis and interaction pathway at high heating rates

Nazaretyan, K.; Aydinyan, Sofiya; Kirakosyan, H.; Moskovskikh, D.; Nepapushev, A.; Kuskov, K.; Tumanyan, M.; Zargaryan, A.; Traksmay, Rainer; Kharatyan, S. Journal of alloys and compounds 2023 / art. 167589, 13 p
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Bio-inspired TiB₂-TiB-TiN lattices by selective laser melting

Liu, Le; Minasyan, Tatevik; Kamboj, Nikhil; Aydinyan, Sofiya; Hussainova, Irina Materials Letters 2020 / art. 128337
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Combustion synthesis and consolidation of Ni-W nanocomposite material

Zakaryan, Marieta; Aydinyan, Sofiya; Kharatyan, Suren Ceramics in modern technologies 2019 / p. 67-74
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Combustion synthesis and reactive spark plasma sintering of non-equiatomic coal-based high entropy intermetallics

Kuskov, Kirill Vasilevich; Nepapushev, Andrey A.; Aydinyan, Sofiya; Shaysultanov, Dmitry G.; Stepanov, Nikita D.; Nazaretyan, Khachik; Kharatyan, Suren; Zakharova, Elena V.; Belov, Dmitry S.; Moskovskikh, Dmitry O. Materials 2023 / art. 1490
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Combustion synthesis of MAX phases: microstructure and properties inherited from the processing pathway

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Combustion synthesis of MoSi₂ based composite and selective laser sintering thereof

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Combustion synthesis of nanoscale boron and silicon carbides

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Combustion synthesis of silicon carbide by magnesio-carbothermic reduction of amorphous and crystalline silica

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Fabrication of Cu-Mo composites combining SHS and SLS technologies : poster presentation

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High pressure high temperature consolidation of ZrC based ceramic composites

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High-entropy (Ti_{0.4}Ta_{0.4}V_{0.4}Nb_{0.4}Cr_{0.4})AlC MAX phase synthesized by SHS : structural, thermal, and mechanical insights

Melkonyan, S.; Zakaryan, Marieta; Grigoryan, Y.; Hussainova, Irina; Aydinyan, Sofiya; Kharatyan, Suren JTACC+V4 2025 : 4th Journal of Thermal Analysis and Calorimetry Conference & 10th V4 (Joint Czech-Hungarian-Polish-Slovak) Thermoanalytical Conference : Book of Abstracts 2025 / p. 179 <https://static.akcongress.com/downloads/jtacc/jtacc2025/jtacc2025-bo-a.pdf>

High-temperature wear performance of hBN-added Ni-W composites produced from combustion-synthesized powders

Kumar, Rahul, 1993-; Aydinyan, Sofiya; Ivanov, Roman; Liu, Le; Antonov, Maksim; Hussainova, Irina Materials 2022 / art.

In situ Mo(Si,Al)₂-based composite through selective laser melting of a MoSi₂-30 wt.% AlSi10Mg mixture

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

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Joint reduction of NiO + WO₃ oxides by combined Mg/C reducer. Synergetic effect

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Kinetic highlights of the reduction of silver tungstate by Mg + C combined reducer

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Lattice of MoSi₂/Si₃N₄ by selective laser melting

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The mechanism of joint reduction of MoO₃ and CuO by combined Mg/C reducer at high heating rates

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Mesoporous fibrous silicon nitride by catalytic nitridation of silicon

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Mesoporous fibrous silicon nitride by catalytic nitridation of silicon and selective laser melting

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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; Rodriguez 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

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Mo(Si1-x,Alx)2-based composite by reactive laser powder-bed fusion

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Nanosize molybdenum carbide preparation by sol-gel combustion synthesis with subsequent fast heating

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Nanosized molybdenum carbide synthesized by solution combustion synthesis with subsequent thermal treatment

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A new synthesis pathway for molybdenum carbide nanopowder by solution combustion

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NiO and WO3 coreduction by combined reducers Mg/C and preparation of W-Ni alloy [Online resource]

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NiO reduction by Mg plus C combined reducer at high heating rates

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A novel approach for synthesizing silver nanoparticles with antibacterial and cytotoxic activities using the leaf extract of hydroponically grown Moringa oleifera

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Novel approach for the preparation of shapes from TiB2-Si3N4 composite by selective laser melting

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Novel pathway for the combustion synthesis and consolidation of boron carbide

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A novel pathway of solution combustion synthesis of silicon carbide and SiC based composite whiskers

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A novel route for the preparation of TiB₂/TiN composites by selective laser sintering [Online resource]

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Preparation of nanosize MO₂C by combining solution combustion synthesis with subsequent F

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Reduction mechanism of WO₃ + CuO mixture by combined Mg/C reducer : non-isothermal conditions - high heating rates

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Selective laser melting of ceramic composites

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Selective Laser Melting Of Combustion Synthesized 2Mo-Cu and 3Cu-Mo Composites

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Selective laser melting of Ti/cBN composite

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Selective laser melting of TiB₂-Ti composite with high content of ceramic phase

Liu, Le; Minasyan, Tatevik; Ivanov, Roman; Aydinyan, Sofiya; Hussainova, Irina Ceramics international 2020 / p. 21128-21135 <https://doi.org/10.1016/j.ceramint.2020.05.189> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of Ti-B-Si system produced by SHS [Online resource]

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Selective laser sintering of combustion synthesized titanium diboride based composites

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Self-Propagating High-Temperature Synthesis of Silicon Carbide Using Reactions Thermokinetic Coupling Approach

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SHS produced TiB₂-Si powders for selective laser melting of ceramic-based composite

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SHS reprocessing of copper oxide waste into copper powder

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SHS-derived powders by reactions' coupling as primary products for subsequent consolidation

Aydinyan, Sofiya; Kharatyan, Suren; **Hussainova, Irina** Materials 2021 / art. 5117 <https://doi.org/10.3390/ma14175117> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

SHS-derived powders obtained by coupled reactions and thermal dilution for subsequent consolidation

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Sintering behavior of ZrC-TiC-MoSi₂ ceramic composite [Online resource]

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Sintering of silicon carbide obtained by combustion synthesis

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Solution combustion synthesis and spark plasma sintering of magnetic high entropy materials

Kirakosyan, Hasmik; Sargsyan, Armen; **Aydinyan, Sofiya**; Kharatyan, Suren CIMTEC 2022 : 15th International Ceramics Congress (June 20-24) CIMTEC 2022 : 9th Forum on New Materials (June 25-29) 2022 http://2022.cimtec-congress.org/focused-session-ca-11_1

Solution combustion synthesis of MnFeCoNiCu and (MnFeCoNiCu)₃O₄ high entropy materials and sintering thereof

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Solution combustion synthesis of nanostructured molybdenum carbide

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Spark plasma sintering of combustion synthesized TiB₂-Si composite

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Study of reduction mechanism of WO₃+CuO mixture by combined Mg/C reducer - influence of high heating rate

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Superhard B₄C-ReB₂ composite by SPS of microwave synthesized nanopowders

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