

#### **Additively manufactured mesostructured MoSi<sub>2</sub>-Si<sub>3</sub>N<sub>4</sub> 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  
<https://doi.org/10.1016/j.jallcom.2022.167589> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Bio-inspired TiB<sub>2</sub>-TiB-TiN lattices by selective laser melting**

Liu, Le; Minasyan, Tatevik; Kamboj, Nikhil; Aydinyan, Sofiya; Hussainova, Irina Materials Letters 2020 / art. 128337  
<https://doi.org/10.1016/j.matlet.2020.128337> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Combustion synthesis and consolidation of Ni-W nanocomposite material**

Zakaryan, Marieta; Aydinyan, Sofiya; Kharatyan, Suren Ceramics in modern technologies 2019 / p. 67-74  
<https://doi.org/10.29272/cmt.2018.0007>

#### **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  
<https://doi.org/10.3390/ma16041490> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Combustion synthesis of MAX phases: microstructure and properties inherited from the processing pathway**

Aydinyan, Sofiya Crystals 2023 / art. 1143 <https://doi.org/10.3390/cryst13071143> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Combustion synthesis of MoSi<sub>2</sub> based composite and selective laser sintering thereof**

Minasyan, Tatevik; Aghayan, Marina; Liu, Le; Aydinyan, Sofiya; Kollo, Lauri; Hussainova, Irina; Rodriguez, Miguel Angel Journal of the European Ceramic Society 2018 / p. 3814-3821 : ill <https://doi.org/10.1016/j.jeurceramsoc.2018.04.043> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Combustion synthesis of nanoscale boron and silicon carbides**

Zakaryan, Marieta; Amirkhanyan, Narine; Kirakosyan, Hasmik; Zurnachyan, Alina; Aydinyan, Sofiya 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](http://2022.cimtec-congress.org/focused-session-ca-11_1)

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

Kirakosyan, Hasmik; Nazaretyan, Khachik; Beglaryan, Hayk; Ivanov, Roman; Hussainova, Irina; Aydinyan, Sofiya Proceedings of the Estonian Academy of Sciences 2025 / p. 260-265 <https://doi.org/10.3176/proc.2025.2.31>

#### **DTATG study of NiO Reduction by Mg+C combined reducer**

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[https://www.ester.ee/record=b1300031\\*est](https://www.ester.ee/record=b1300031*est)

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

Aydinyan, Sofiya; Minasyan, Tatevik; Kirakosyan, Hasmik; Aghayan, Marina; Hussainova, Irina; Kharatyan, Suren ECerS 2017 : 15th Conference & Exhibition of the European Ceramic Society, July 9-13, 2017, Budapest, Hungary : Book of abstracts 2017 / p. 48 <https://static.akcongress.com/downloads/ecers/ecers2017-abstract-book.pdf>

#### **Fabrication of Cu-W nanocomposites by integration of self-propagating high-temperature synthesis and hot explosive consolidation technologies**

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#### **High pressure high temperature consolidation of ZrC based ceramic composites**

Minasyan, Tatevik; Aydinyan, Sofiya; Liu, Lei; Cygan, Slawomir; Hussainova, Irina [2018 World Congress on Powder Metallurgy (WORLDPM2018), Beijing, China, 16-18 September 2018 2018 / p. [515-518] : [USB]

#### **High-entropy (Ti<sub>0.4</sub>Ta<sub>0.4</sub>V<sub>0.4</sub>Nb<sub>0.4</sub>Cr<sub>0.4</sub>)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-ba.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)<sub>2</sub>-based composite through selective laser melting of a MoSi<sub>2</sub>-30 wt.% AlSi10Mg mixture**

**Minasyan, Tatevik; Aydinyan, Sofiya;** Toyserkani, Ehsan; **Hussainova, Irina** Materials 2020 / art. 3720 ; 13 p  
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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; **Aydinyan, 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>

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**Aydinyan, Sofiya;** Kharatyan, Suren; **Hussainova, Irina** Crystals 2022 / art. 59 <https://doi.org/10.3390/cryst12010059> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**The interaction pathway in the mechano-ultrasonically assisted and carbon-nanotubes augmented nickel-aluminum system**

Nazaretyan, Khachik; Kirakosyan, Hasmik; **Volobujeva, Olga; Aydinyan, Sofiya** Metals 2022 / art. 436  
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**Joint reduction of NiO + WO<sub>3</sub> oxides by combined Mg/C reducer. Synergetic effect**

Zakaryan, Marieta; Nazaretyan, K.; **Aydinyan, Sofiya;** Kharatyan, Suren XV International Symposium on Self-Propagating High Temperature Synthesis, September 16-20, 2019 2019 / p. 546-548 : ill  
[http://www.ism.ac.ru/events/SHS2019/doc/abstract\\_shs2019.pdf](http://www.ism.ac.ru/events/SHS2019/doc/abstract_shs2019.pdf)

**Joint reduction of NiO/WO<sub>3</sub> pair and NiWO<sub>4</sub> by Mg + C combined reducer at high heating rates**

Zakaryan, Marieta; Nazaretyan, Khachik; **Aydinyan, Sofiya;** Kharatyan, Suren Metals 2021 / art. 1351, 13 p. : ill  
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**Kinetic highlights of the reduction of silver tungstate by Mg + C combined reducer**

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**Lattice of MoSi<sub>2</sub>/Si<sub>3</sub>N<sub>4</sub> by selective laser melting**

**Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya; Kollo, Lauri; Aghayan, Marina; Hussainova, Irina** European Powder Metallurgy Association : proceedings : 14 – 18 October 2018, Bilbao, Spain 2018 / art. 3993050 [USB] <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018-proceedings-usb>

**Magnesio-carbothermal reduction of CuWo<sub>4</sub>/MeO nanostructured precursors & synthesis of W/Cu composite materials**

Zakaryan, Marieta; Kirakosyan, Hasmik; Abovyan, L.; **Aydinyan, Sofiya;** Kharatyan, Suren Chemical Journal of Armenia 2017 / p. 450-461 <http://chemistry.asj-oa.am/id/eprint/7826>

**The mechanism of joint reduction of MoO<sub>3</sub> and CuO by combined Mg/C reducer at high heating rates**

Kirakosyan, Hasmik; Nazaretyan, Khachik; **Aydinyan, Sofiya;** Kharatyan, Suren Journal of composites science 2021 / art. 318, 20 p. : ill <https://doi.org/10.3390/jcs5120318> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Mesoporous fibrous silicon nitride by catalytic nitridation of silicon**

**Minasyan, Tatevik; Liu, Le; Aghayan, Marina; Rodriguez, Miguel Angel; Aydinyan, Sofiya; Hussainova, Irina** Progress in natural science: materials international 2019 / p. 190-197 : ill <https://doi.org/10.1016/j.pnsc.2019.03.017> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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

**Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya; Hussainova, Irina** XVI Conference and Exhibition Of The European Ceramic Society : abstract book 2019 / p. 80

**Microstructure and high temperature tribological behaviour of self-lubricating Ti-TiB<sub>x</sub> 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

**Microwave synthesis of B<sub>4</sub>C nanopowder for subsequent spark plasma sintering**

Davtyan, D.; Mnatsakanyan, R.A.; **Liu, Le; Aydinyan, Sofiya; Hussainova, Irina** Journal of materials research and technology 2019 / p. 5823-5832 : ill <https://doi.org/10.1016/j.jmrt.2019.09.052> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Mo-Cu pseudoalloys by combustion synthesis and spark plasma sintering**

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

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**MoSi2 based composites by selective laser melting**

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

Kirakosyan, Hasmik; Nazaretyan, Khachatur; Kirakosyan, Khachatur; Tumanyan, M.E.; **Aydinyan, Sofiya;** Kharatyan, Suren Chemical Journal of Armenia 2017 / p. 11-19 : ill <http://chemistry.asj-oa.am/id/eprint/7782>

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

Nazaretyan, Khachik; Kirakosyan, Hasmik; **Aydinyan, Sofiya;** Kharatyan, Suren SHS 2017 : XIV International Symposium On Self-Propagating High Temperature Synthesis, September 25-28, 2017, Tblisi, Georgia : Book of Abstracts 2017 / p. 175-176 : ill [http://mmi.ge/uploads/files/2017-10/1507298270\\_book-of-abstracts-shs-2017.pdf](http://mmi.ge/uploads/files/2017-10/1507298270_book-of-abstracts-shs-2017.pdf)

**A new synthesis pathway for molybdenum carbide nanopowder by solution combustion**

Kirakosyan, Hasmik; Nazaretyan, Khachik; **Aydinyan, Sofiya;** Tumanyan, Manvel; Kharatyan, Suren The International Conference Dedicated to the 50th Anniversary of Self-Propagating High Temperature Synthesis (SHS-50) : proceedings = Международная конференция СВС-50, приуроченная к 50-летию юбилею научного открытия Явление волновой локализации автотормозящихся твердофазных реакций... : сборник материалов 2017 / p. 35–36 : ill <http://www.ism.ac.ru/events/SHS-50/abstracts.pdf>

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

Zakaryan, Marieta; **Aydinyan, Sofiya;** Kharatyan, Suren Abstracts : 14th International Ceramics Congress 2018 / CB-10.2:L03 [http://2018.cimtec-congress.org/abstracts\\_focused\\_session\\_cb-10](http://2018.cimtec-congress.org/abstracts_focused_session_cb-10)

**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**

Aghajanyan, Anush; Timotina, Marina; Manutsyan, Tatevik; Harutyunyan, Ani; Ginovyan, Mikayel; Schubert, Robin; **Aydinyan, Sofiya;** Trchounian, Karen; Gabrielyan, Lilit; Gabrielyan, Liana Scientific Reports 2025 / art. 16637 <https://doi.org/10.1038/s41598-025-01023-0>

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

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**Novel approach for the synthesis and sintering of TiB2-Si3N4 ceramic composite**

**Liu, Le; Minasyan, Tatevik; Aydinyan, Sofiya; Hussainova, Irina** European Powder Metallurgy Association : proceedings : 14 – 18 October 2018, Bilbao, Spain 2018 / art. 3987173 [USB] <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018-proceedings-usb>

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**Minasyan, Tatevik; Liu, Le; Aghayan, Marina; Kollo, Lauri; Kamboj, Nikhil Kumar; Aydinyan, Sofiya; Hussainova, Irina** Ceramics international 2018 / p. 13689-13694 : ill <https://doi.org/10.1016/j.ceramint.2018.04.208> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Novel pathway for the combustion synthesis and consolidation of boron carbide**

Zakaryan, Marieta; Zurnachyan, Alina; Amirkhanyan, Narine; Kirakosyan, Hasmik; **Antonov, Maksim;** Rodriguez, Miguel Angel; **Aydinyan, Sofiya** Materials 2022 / art. 5042 <https://doi.org/10.3390/ma15145042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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 TiB<sub>2</sub>/TiN composites by selective laser sintering [Online resource]**

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**Parametric study on in situ Laser powder bed fusion of Mo(Si<sub>1-x</sub>Al<sub>x</sub>)<sub>2</sub>**

**Minasyan, Tatevik; Aydinyan, Sofiya;** Toyserkani, Ehsan; **Hussainova, Irina** Materials 2020 / art. 4849, 17 p. : ill <https://doi.org/10.3390/ma13214849> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**The preparation of high-entropy refractory alloys by aluminothermic reduction process**

Kirakosyan, Hasmik; Nazaretyan, Khachik; Kharatyan, Anahit; **Aydinyan, Sofiya** Modern materials and manufacturing 2023 2024 / art. 040012 <https://doi.org/10.1063/5.0189206> [Conference proceedings at Scopus](#) [Article at Scopus](#)

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**Reaction pathway in the WO<sub>3</sub>-NiO-Mg-C system. DTA/TG study**

Zakaryan, Marieta; Niazyan, O.; **Aydinyan, Sofiya;** Kharatyan, Suren Chemical Journal of Armenia 2019 / p. 223-232 <http://chemistry.asj-oa.am/id/eprint/7944>

**Reduction mechanism of WO<sub>3</sub> + CuO mixture by combined Mg/C reducer : non-isothermal conditions - high heating rates**

**Aydinyan, Sofiya;** Nazaretyan, Khachatur; Zargaryan, A.G.; Tumanyan, M.E.; Kharatyan, Suren Journal of thermal analysis and calorimetry 2018 / p. 261–269 : ill <https://doi.org/10.1007/s10973-018-6985-5> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Selective laser melting of ceramic composites**

**Aydinyan, Sofiya; Liu, Le; Minasyan, Tatevik; Hussainova, Irina** XVI Conference and Exhibition Of The European Ceramic Society : abstract book 2019 / p. 22

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

**Minasyan, Tatevik; Aydinyan, Sofiya;** Kharatyan, Suren SHS 2017 : XIV International Symposium On Self-Propagating High Temperature Synthesis, September 25-28, 2017, Tbilisi, Georgia : Book of Abstracts 2017 / p. 155–156 : ill [http://mmi.ge/uploads/files/2017-10/1507298270\\_book-of-abstracts-shs-2017.pdf](http://mmi.ge/uploads/files/2017-10/1507298270_book-of-abstracts-shs-2017.pdf)

**Selective laser melting of Ti/cBN composite**

**Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya; Antonov, Maksim; Hussainova, Irina** 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. 257-262 : ill <https://www.scientific.net/KEM.799.257> [https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est) <https://doi.org/10.4028/www.scientific.net/KEM.799.257> [Conference proceeding at Scopus](#) [Article at Scopus](#)

**Selective laser melting of TiB<sub>2</sub>-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]**

**Aydinyan, Sofiya; Liu, Le; Hussainova, Irina** Abstracts : 14th International Ceramics Congress 2018 / CB-10.2:L06 [http://2018.cimtec-congress.org/abstracts\\_focused\\_session\\_cb-10](http://2018.cimtec-congress.org/abstracts_focused_session_cb-10)

**Selective laser sintering of combustion synthesized titanium diboride based composites**

**Liu, Le; Minasyan, Tatevik; Aydinyan, Sofiya; Hussainova, Irina** European Powder Metallurgy Association : proceedings : 14 – 18 October 2018, Bilbao, Spain 2018 / art. 3987459 [USB] <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018-proceedings-usb>

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

**Amirkhanyan, Narine; Kirakosyan, Hasmik; Zakaryan, Marieta; Zurnachyan, Alina; Aydinyan, Sofiya** EC-SILICONF2 : The 2nd European Conference on Silicon and Silica Based Materials, Hungary, October 4-8, 2021 2021 / p. 118

**SHS produced TiB<sub>2</sub>-Si powders for selective laser melting of ceramic-based composite**

**Liu, Le; Aydinyan, Sofiya; Minasyan, Tatevik; Hussainova, Irina** Applied sciences 2020 / art. 3283, 12 p. : ill <https://doi.org/10.3390/app10093283> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **SHS reprocessing of copper oxide waste into copper powder**

Mahmoudi, H. A.; Abovyan, L.S.; **Aydinyan, Sofiya**; Kharatyan, Suren International Journal of Self-propagating High-temperature Synthesis 2019 / p. 233–238 : ill <https://doi.org/10.3103/S1061386219040095> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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**

**Aydinyan, Sofiya**; **Hussainova, Irina**; 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](http://2022.cimtec-congress.org/focused-session-ca-11_1)

### **Sintering behavior of ZrC-TiC-MoSi<sub>2</sub> ceramic composite [Online resource]**

**Minasyan, Tatevik**; **Aydinyan, Sofiya**; **Liu, Le**; Cygan, Slawomir; **Hussainova, Irina** Explosive Production of New Materials : Science, Technology, Business, and Innovations 2018 / p. 148-150 : ill [http://www.ism.ac.ru/events/EPNM2018/EPNM2018\\_BookofPapers.pdf](http://www.ism.ac.ru/events/EPNM2018/EPNM2018_BookofPapers.pdf) <http://dx.doi.org/10.30826/EPNM18-052>

### **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](http://2022.cimtec-congress.org/focused-session-ca-11_1)

### **Solution combustion synthesis of MnFeCoNiCu and (MnFeCoNiCu)<sub>3</sub>O<sub>4</sub> high entropy materials and sintering thereof**

**Aydinyan, Sofiya**; Kirakosyan, Hasmik; Sargsyan, Armen; **Volobujeva, Olga**; Kharatyan, Suren Ceramics International 2022 / p. 20294-20305 : ill <https://doi.org/10.1016/j.ceramint.2022.03.310> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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Kirakosyan, Hasmik; Nazaretyan, K.T.; Mnatsakanyan, R.A.; **Aydinyan, Sofiya**; Kharatyan, Suren Journal of nanoparticle research 2018 / art. 214, 11 p. : ill <https://doi.org/10.1007/s11051-018-4312-5> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Spark plasma sintering of combustion synthesized TiB<sub>2</sub>-Si composite**

**Liu, Le**; **Aydinyan, Sofiya**; **Minasyan, Tatevik**; **Baroninš, Janis**; **Antonov, Maksim**; Kharatyan, Suren; **Hussainova, Irina** Ceramics in modern technologies 2019 / p. 59-66 <https://doi.org/10.29272/cmt.2018.0009>

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Mnatsakanyan, R.; Davtyan, D.; **Minasyan, Tatevik**; **Aydinyan, Sofiya**; **Hussainova, Irina** Materials letters 2021 / art. 129163, 5 p. : ill <https://doi.org/10.1016/j.matlet.2020.129163> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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**Minasyan, Tatevik**; Kirakosyan, Hasmik; **Aydinyan, Sofiya**; **Liu, Le**; **Hussainova, Irina**; Kharatyan, Suren Explosive Production of New Materials : Science, Technology, Business, and Innovations 2018 / p. 151-153 : ill [http://www.ism.ac.ru/events/EPNM2018/EPNM2018\\_BookofPapers.pdf](http://www.ism.ac.ru/events/EPNM2018/EPNM2018_BookofPapers.pdf) <http://dx.doi.org/10.30826/EPNM18-053>

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Zakaryan, Marieta; **Aydinyan, Sofiya**; Kharatyan, Suren Explosive Production of New Materials : Science, Technology, Business, and Innovations 2018 / p. 298-300 : ill [http://www.ism.ac.ru/events/EPNM2018/EPNM2018\\_BookofPapers.pdf](http://www.ism.ac.ru/events/EPNM2018/EPNM2018_BookofPapers.pdf) <http://dx.doi.org/10.30826/EPNM18-103>

### **Synthesis of Ti<sub>2</sub>AlC MAX phase and Ti<sub>2</sub>C MXene by activated combustion**

**Aydinyan, Sofiya** Ceramics international 2024 / p. 12263-12269 <https://doi.org/10.1016/j.ceramint.2024.01.130> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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**Aydinyan, Sofiya; Minasyan, Tatevik; Liu, Le;** Cygan, Slawomir; **Hussainova, Irina** 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. 125-130 : ill [https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est) <https://www.scientific.net/KEM.799.125> <https://doi.org/10.4028/www.scientific.net/KEM.799.125> Conference proceeding at Scopus Article at Scopus

**ZrC-TiC-MoSi<sub>2</sub> ceramic composite by spark plasma sintering**

**Hussainova, Irina; Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya** Journal of Physics: Conference Series 2020 / art. 012028 <https://doi.org/10.1088/1742-6596/1527/1/012028> Conference Proceedings at Scopus Article at Scopus Article at WOS

**The mechanism of WO<sub>3</sub>(MoO<sub>3</sub>) & CuO coreduction by combined Mg/c reducer at non isothermal conditions**

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**The preparation of TiC/TiN composites by selective laser melting**

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**Tribological behavior of Ni-based self-lubricating claddings containing sulfide of nickel, copper, or bismuth at temperatures up to 600 °C**

**Kumar, Rahul, 1993-;** Torres, Hector; **Aydinyan, Sofiya; Antonov, Maksim;** Varga, Markus; **Hussainova, Irina;** Rodrlguez Ripoll, Manel Surface and coatings technology 2023 / art. 129270, 14 p. : ill <https://doi.org/10.1016/j.surfcoat.2023.129270> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Ultrahigh pressure spark plasma sintering of ZrC-TiC-MoSi<sub>2</sub> and ZrC-TiC-Si<sub>3</sub>N<sub>4</sub> composites [Online resource]**

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**Термическое и кинетическое сопряженные реакций при самораспространяющемся высокотемпературном синтезе материалов**

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