

#### **Abrasion and erosion resistance of cermets : a review**

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#### **Aluminate-based nanostructured luminescent materials : design of processing and functional properties**

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#### **Annealing of Al-Zn-Mg-Cu alloy at high pressures : evolution of microstructure and the corrosion behavior**

Suo, Chuanjun; Ma, Pan; Jia, Yandong; Liu, Xiao; Shi, Xuerong; Yu, Zhishui; Prashanth, Konda Gokuldoss Materials 2021 / art. 2076, 17 p. : ill <https://doi.org/10.3390/ma14082076> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Bioactive ceramic scaffolds for bone tissue engineering by powder bed selective laser processing : a review**

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#### **Biomechanical Features of Graphene-Augmented Inorganic Nanofibrous Scaffolds and Their Physical Interaction with Viruse**

Gasik, Michael; Ivanov, Roman; Kazantseva, Jekaterina; Bilotsky, Yevgen; Hussainova, Irina Materials 2021 / art. 164 <https://doi.org/10.3390/ma14010164> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Characterization of organosolv lignins and their application in the preparation of aerogels**

Jõul, Piia; Ho, Thi Thuy Tran; Kallavus, Urve; Konist, Alar; Leiman, Kristiina; Salm, Olivia-Stella; Kulp, Maria; Koel, Mihkel; Lukk, Tiit Materials 2022 / art. 2861 <https://doi.org/10.3390/ma15082861> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **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](#)

#### **Cubic iron core-shell nanoparticles functionalized to obtain high-performance MRI contrast agents**

Volokhova, Maria; Shugai, Anna; Tsujimoto, Masahiko; Kubo, Anna-Liisa; Telliskivi, Sven; Nigul, Mait; Uudeküll, Peep; Vija, Heiki; Bondarenko, Olesja; Adamson, Jasper; Kahru, Anne; Stern, Raivo; Seinberg, Liis Materials 2022 / art. 2228 <https://doi.org/10.3390/ma15062228> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Design of High Volume CFBC Fly Ash Based Calcium Sulphoaluminate Type Binder in Mixtures with Ordinary Portland Cement**

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#### **Effect of Annealing in Air on the Structural and Optical Properties and Efficiency Improvement of TiO<sub>2</sub>/Cu<sub>x</sub>O Solar Cells Obtained via Direct-Current Reactive Magnetron Sputtering**

Wisz, Grzegorz; Sibinski, Maciej; Labuz, Mirosław; Potera, Piotr; Ploch, Dariusz; Bester, Mariusz; Yavorskyi, Rostyslav Materials 2025 / art. 888 <https://doi.org/10.3390/ma18040888>

#### **Effect of fly-ash cenospheres on properties of clay-ceramic syntactic foams**

Rugele, Kristine; Lehmus, Dirk; Hussainova, Irina; Peculevica, Julite; Lisnanskis, Marks; Shishkin, Andrei Materials 2017 / art. 828, p. 1-17 : ill <https://doi.org/10.3390/ma10070828> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Effect of hemp fiber surface treatment on the moisture/water resistance and reaction to fire of reinforced PLA composites**

Alao, Percy Festus; Marrot, Laetitia; Kallakas, Heikko; Just, Alar; Poltimäe, Triinu; Kers, Jaan Materials 2021 / art. 4332, 17 p. : ill <https://doi.org/10.3390/ma14154332> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Effect of interlayer delay on the microstructure and mechanical properties of wire arc additive manufactured wall structures**

Singh, Shalini; Jinoop, Arackal Narayanan; Tarun Kumar, Gorlea Thrinadh Ananthvenkata; Palani, Iyamperumal Anand; Paul, Christopher R. C.; Prashanth, Konda Gokuldoss Materials 2021 / art. 4187, 13 p. : ill <https://doi.org/10.3390/ma14154187> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Effect of laser surface texturing and fabrication methods on tribological properties of Ti6Al4V/HAp biocomposites**

Sadlik, Julia; Kosinska, Edyta; Tomala, Agnieszka; Bankosz, Magdalena; Polajnar, Marko; **Kumar, Rahul**; Kalin, Mitjan; **Kravanja, Gaia**; Hribar, Luka; **Hussainova, Irina** Materials 2025 / art.2468 <https://doi.org/10.3390/ma18112468>

**The effect of prestressing and temperature on tensile strength of basalt fiber-reinforced plywood**

Löhmus, Rünno; **Kallakas, Heikko**; **Tuhkanen, Eero**; Gulik, Volodymyr; Kiisk, Madis; Saal, Kristjan; **Kalamees, Targo** Materials 2021 / art. 4701, 9 p. : ill <https://doi.org/10.3390/ma14164701> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Effect of substrate plate heating on the microstructure and properties of selective laser melted Al-20Si-5Fe-3Cu-1Mg alloy**

Ma, Pan; Ji, Pengcheng; Jia, Yandong; Shi, Xuerong; Yu, Zhishui; **Prashanth, Konda Gokuldoss** Materials 2021 / art. 330 <https://doi.org/10.3390/ma14020330> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Electroless Ni-P-MoS<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> composite coating with hard and self-lubricating properties**

Mohanty, Shalini; Jamal, Naghma; Das, Alok Kumar; **Prashanth, Konda Gokuldoss** Materials 2022 / art. 6806 <https://doi.org/10.3390/ma15196806> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Evolution of microstructure and mechanical properties of LM25–HEA composite processed through stir casting with a bottom pouring system**

Chinababu, Mekala; Krishna, Nandivelegu Naga; Sivaprasad, Katakam; **Prashanth, Konda Gokuldoss**; Bhaskara, Eluri Materials 2022 / art. 230 <https://doi.org/10.3390/ma15010230> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Fiber laser welded cobalt super alloy L605 : optimization of weldability characteristics**

Prasad, B. Hari; Madhusudhan Reddy, G.; Das, Alok Kumar; **Prashanth, Konda Gokuldoss** Materials 2022 / art. 7708 <https://doi.org/10.3390/ma15217708> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Fiber-reinforced plywood: Increased performance with less raw material**

Saal, Kristjan; **Kallakas, Heikko**; **Tuhkanen, Eero**; Just, Alar; Rohumaa, Anti; Kers, Jaan; **Kalamees, Targo**; **Löhmus, Rünno** Materials 2024 / art. 3218 <https://doi.org/10.3390/ma17133218> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Formation and characterization of stable TiO<sub>2</sub>/Cu<sub>x</sub>O-based solar cells**

Wisz, Grzegorz; Sawicka-Chudy, Paulina; **Sibinski, Maciej**; Yavorskyi, Rostyslav; Łabuz, Mirosław; Płoch, Dariusz; Bester, Mariusz Materials 2023 / art. 5683, 15 p. : ill <https://doi.org/10.3390/ma16165683> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Growth and characterization of Cu<sub>2</sub>Zn<sub>1-x</sub>Fe<sub>x</sub>SnS<sub>4</sub> thin films for photovoltaic applications**

Trifletti, Vanira; Tseberlidis, Giorgio; Colombo, Mario; Spinardi, Alberto; Luong, Sally; **Danilson, Mati**; **Grossberg, Maarja**; Fenwick, Oliver; Binetti, Simona Materials 2020 / art. 1471, 13 p. : ill <https://doi.org/10.3390/ma13061471> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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. 1252 <https://doi.org/10.3390/ma15031252> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Hot sliding wear of 88 wt.% TiB-Ti composites from SHS produced powders**

**Kumar, Rahul**, 1993-; **Liu, Le**; **Antonov, Maksim**; **Ivanov, Roman**; **Hussainova, Irina** Materials 2021 / art. 1242, 14 p.: ill <https://doi.org/10.3390/ma14051242> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**In situ Mo(Si,Al)<sub>2</sub>-based composite through selective laser melting of a MoSi<sub>2</sub>-30 wt.% AlSi<sub>10</sub>Mg mixture**

**Minasyan, Tatevik**; **Aydinyan, Sofiya**; Toyserkani, Ehsan; **Hussainova, Irina** Materials 2020 / art. 3720 ; 13 p <https://doi.org/10.3390/ma13173720> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Influence of post-UV/ozone treatment of ultrasonic-sprayed zirconium oxide dielectric films for a low-temperature oxide thin film transistor**

**Oluwabi, Abayomi Titilope**; Gaspar, Diana; **Katerski, Atanas**; **Mere, Arvo**; **Krunks, Malle**; Pereira, Luis; **Oja Acik, Ilona** Materials 2020 / art. 6, 14 p. : ill <https://doi.org/10.3390/ma13010006> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Influence of powder characteristics on processability of AlSi<sub>12</sub> alloy fabricated by selective laser melting**

Baitimerov, Rustam; Lykov, Pavel; Zhrebtsov, Dmitry; Radionova, Ludmila; Shults, Alexey; **Prashanth, Konda Gokuldoss** Materials 2018 / art. 742, 14 p. : ill <https://doi.org/10.3390/ma11050742> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Interpenetrating composites : A nomenclature dilemma**

**Prashanth, Konda Gokuldoss** Materials 2025 / art. 273 <https://doi.org/10.3390/ma18020273>

## **An Investigation into the Thermomechanical Processing and Dynamic Recrystallization Mechanisms of High-Magnesium Aluminum Alloys**

Ye, Zili; Zhou, Zixiao; Ye, Zhaolin; Wang, Zhi; Zhao, Qizhong; **Prashanth, Konda Gokuldoss** Materials 2025 / art. 2734  
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## **The investigation of the production of salt-added polyethylene oxide/chitosan nanofibers**

Varnaite-Žuravliova, Sandra; **Savest, Natalja**; Baltušnikaite-Guzaitiene, Julija; Abraitienė, Aušra; **Krumme, Andres** Materials 2024 / art. 132 <https://doi.org/10.3390/ma17010132> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Iron, cobalt, and nickel phthalocyanines tri-doped electrospun carbon nanofibre-based catalyst for rechargeable zinc-air battery air electrode**

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## **Laser powder-bed fusion of ceramic particulate reinforced aluminum alloys: a review**

**Minasyan, Tatevik**; **Hussainova, Irina** Materials 2022 / art. 2467 <https://doi.org/10.3390/ma15072467> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Metallic coatings through additive manufacturing: a review**

**Mohanty, Shalini**; **Prashanth, Konda Gokuldoss** Materials 2023 / art. 2325 : ill <https://doi.org/10.3390/ma16062325> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Microstructure and mechanical properties of Al-(12-20)Si bi-material fabricated by selective laser melting**

Zhang, Shikai; Ma, Pan; Jia, Yandong; Yu, Zhishui; Sokkalingam, Rathinavelu; Shi, Xuerong; Ji, Pengcheng; Eckert, Jürgen; **Prashanth, Konda Gokuldoss** Materials 2019 / art. 2126, 11 p. : ill <https://doi.org/10.3390/ma12132126> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **NiTi-Cu bimetallic structure fabrication through wire arc additive manufacturing**

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## **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](#)

## **Parametric study on in situ Laser powder bed fusion of Mo(Si1-x,Alx)2**

**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](#)

## **PCL/Si-doped multi-phase calcium phosphate scaffolds derived from cuttlefish bone**

Ressler, Antonia; Bauer, Leonard; Prebeg, Teodora; Ledinski, Maja; **Hussainova, Irina**; Urlic, Inga; Ivankovic, Marica; Ivankovic, Hrvoje Materials 2022 / art. 3348 <https://doi.org/10.3390/ma15093348> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Performance of ceramic-metal composites as potential tool materials for friction stir welding of aluminium, copper and stainless steel**

**Kolnes, Mart**; **Kübarsepp, Jakob**; **Sergejev, Fjodor**; **Kolnes, Märt**; **Tarraste, Marek**; **Viljus, Mart** Materials 2020 / art. 1994, 18 p. : ill <https://doi.org/10.3390/ma13081994> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **A predictive approach towards using PC-SAFT for modeling the properties of shale oil**

**Mozaffari, Parsa**; **Baird, Zachariah Steven**; **Järvik, Oliver** Materials 2022 / art. 4221 <https://doi.org/10.3390/ma15124221> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Rheological properties of MWCNT-doped titanium-oxo-alkoxide gel materials for fiber drawing**

Tätte, Tanel; **Hussainov, Medhat**; Amiri, Mahsa; Vanetsev, Alexander; Paalo, Madis; **Hussainova, Irina** Materials 2022 / art. 1186  
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## **Rheology, strength, and durability of concrete and mortar made of recycled calcium silicate masonry**

**Tuisk, Tanel**; **Ilomets, Simo**; Hain, Tiina; Kalbus, Joosep; Kalamees, Targo Materials 2024 / art. 2790  
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## **Selective laser melting of aluminum and its alloys**

Wang, Zhi; **Ummethala, Raghunandan**; Singh, Neera; **Prashanth, Konda Gokuldoss** Materials 2020 / art. 4564 : ill

**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](#)

**Sliding wear performance of AlCrN coating on TiB<sub>2</sub>/Ti composites at high temperatures**

Michalczewski, Remigiusz; Kalbarczyk, Marek; Słomka, Zbigniew; Osuch-Słomka, Edyta; Łuszcz, Maciej; **Liu, Le**; **Antonov, Maksim**; **Hussainova, Irina** Materials 2021 / art. 6771 <https://doi.org/10.3390/ma14226771> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Solid lubrication at high-temperatures - a review**

**Kumar, Rahul, 1993-**; **Hussainova, Irina**; **Rahmani Ahranjani, Ramin**; **Antonov, Maksim** Materials 2022 / art. 1695 <https://doi.org/10.3390/ma15051695> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Superior wear resistance in EBM-Processed TC4 alloy compared with SLM and forged samples**

Zhang, Weiwen; Qin, Peiting; Wang, Zhi; Yang, Chao; **Kollo, Lauri**; Grzesiak, Dariusz; **Prashanth, Konda Gokuldoss** Materials 2019 / art. 782 <https://doi.org/10.3390/ma12050782> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Synthesis of zwitterionic dopamine sulfonate coated cubic core $\alpha$ -Fe@SiO<sub>2</sub> nanoparticles and their magnetic properties analysis**

**Volokhova, Maria**; Boldin, Aleksei; Link, Joosep; Shugai, Anna; Pehk, Tõnis; Stern, Raivo; Seinberg, Liis Materials 2023 / 6 p. : ill

**Thermal transport and thermoelectric effect in composites of alumina and graphene-augmented alumina nanofibers**

**Saffarshamshirgar, Ali**; Belmonte, Manuel; Tewari, Girish C.; **Rojas Hernandez, Rocio Estefania**; Seitsonen, Jani; **Ivanov, Roman**; Karppinen, Maarit; Miranzo, Pilar; **Hussainova, Irina** Materials 2021 / art. 2242 <https://doi.org/10.3390/ma14092242> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Thermal, mechanical, and acoustic properties of polydimethylsiloxane filled with hollow glass microspheres**

Vlassov, Sergei; **Oras, Sven**; Timusk, Martin; Zadin, Veronika; Tiirats, Tauno; Sosnin, Ilya M.; Lõhmus, Rünno; Linarts, Artis; Kyriitsakis, Andreas; Dorogin, Leonid M. Materials 2022 / art. 1652 : ill <https://doi.org/10.3390/ma15051652> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Toxicity of nine (doped) rare Earth metal oxides and respective individual metals to aquatic microorganisms *Vibrio fischeri* and *Tetrahymena thermophila***

Kurvet, Imbi; **Juganson, Katre**; Vija, Heiki; Sihtmäe, Mariliis; Blinova, Irina; Syvertsen-Wiig, Guttorm; Kahru, Anne Materials 2017 / art. 754, p. 1-18 : ill <https://doi.org/10.3390/ma10070754> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Young's modulus of different illitic clays during heating and cooling stage of firing**

Hulan, Tomaš; Štubna, Igor; Ondruška, Jan; **Kaljuvee, Tiit** Materials 2020 / art. 4968, 14 p. : ill <https://doi.org/10.3390/ma13214968> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)