

Jméno, příjmení, titul žadatele:

Given name, surname, academic degree of student:

Tomáš Tesař, Ing.

Seznam publikovaných prací:

List of publications:

List of author's publications related to the doctoral thesis (impacted journals)

- [I] TESAR, T., MUSALEK, R., MEDRICKY, J., KOTLAN, J., LUKAC, F., PALA, Z., CTIBOR, P., CHRASKA, T., HOUDKOVA, S., RIMAL, V., CURRY, N. Development of suspension plasma sprayed alumina coatings with high enthalpy plasma torch. *Surface and Coatings Technology*, 2017, **325**, 277–288. ISSN 02578972. Available from DOI: 10.1016/j.surfcoat.2017.06.039
Cited 22 times.
- [II] TESAR, T., MUSALEK, R., MEDRICKY, J., CIZEK, J. On growth of suspension plasma-sprayed coatings deposited by high-enthalpy plasma torch. *Surface and Coatings Technology*, 2019, **371**, s. 333–343. ISSN 02578972. Available from DOI: 10.1016/j.surfcoat.2019.01.084
Cited 5 times.
- [III] TESAR, T., MUSALEK, R., LUKAC, F., MEDRICKY, J., CIZEK, J., RIMAL, V., JOSHI, S., CHRASKA, T. Increasing α -phase content of alumina-chromia coatings deposited by suspension plasma spraying using hybrid and intermixed concepts. *Surface and Coatings Technology*, 2019, **371**, s. 298–311. ISSN 02578972. Available from DOI: 10.1016/j.surfcoat.2019.04.091
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- [IV] TESAR, T., MUSALEK, R., LUKAC, F., MEDRICKY, J., CIZEK, J., CSAKI, S., PANAK, O., DRZKOVA, M. Solution Precursor Plasma Spraying of Cr-Doped Al_2O_3 Thermochromic Coatings, *Journal of Thermal Spray Technology*, 2020, **29**, s. 199–211. ISSN 1059-9630. Available from DOI: 10.1007/s11666-019-00945-2.
Cited 1 time.

List of other author's publications (impacted journals)

- [V] MUSALEK, R., MEDRICKY, J., TESAR, T., KOTLAN, J., PALA, Z., LUKAC, F., ILLKOVA, K., HLINA, M., CHRASKA, T., SOKOLOWSKI, P., CURRY, N. Controlling Microstructure of Yttria-Stabilized Zirconia Prepared from Suspensions and Solutions by Plasma Spraying with High Feed Rates. *Journal of Thermal Spray Technology*, 2017, 26(8), 1787–1803. ISSN 10599630. Available from DOI: 10.1007/s11666-017-0622-x
Cited 13 times.
- [VI] MUSALEK, R., MEDRICKY, J., TESAR, T., KOTLAN, J., PALA, Z., LUKAC, F., CHRASKA, T., CURRY, N. Suspensions Plasma Spraying of Ceramics with Hybrid Water-Stabilized Plasma Technology. *Journal of Thermal Spray Technology*, 2017, 26(1–2), 37–46. ISSN 10599630. Available from DOI: 10.1007/s11666-016-0493-6
Cited 15 times.
- [VII] CIZEK, J., BROZEK, V., CHRASKA, T., LUKAC, F., MEDRICKY, J., MUSALEK, R., TESAR, T., SISKA, F., ANTOS, Z., CUPERA, J., MATEJKOVA, M., SPOTZ, Z., HOUDKOVA, S., KVERKA, M. Silver-Doped Hydroxyapatite Coatings Deposited by Suspension Plasma Spraying. *Journal of Thermal Spray Technology*, 2018, 27(8), s. 1333–1343. ISSN 1059-9630. Available from DOI: 10.1007/s11666-018-0767-2
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- [VIII] MEDRICKY, J., LUKAC, F., CSAKI, S., HOUDKOVA, S., BARBOSA, M., TESAR, T., CIZEK, J., MUSALEK, R., KOVARIK, O., CHRASKA, T. Improvement of mechanical properties of plasma sprayed Al_2O_3 - ZrO_2 - SiO_2 amorphous coatings by surface crystallization. *Materials*, 2019, 12(19), 3232. ISSN 19961944. Available from DOI: 10.3390/ma12193232

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- [IX] GUPTA, M., MUSALEK, R., TESAR, T. Microstructure and Failure Analysis of Suspension Plasma Sprayed Thermal Barrier Coatings. *Surface and Coatings Technology*, 2020, 382, 125218, 9 pages. Available from DOI: 10.1016/j.surfcoat.2019.125218.

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- [X] MUSALEK, R., TESAR, T., MEDRICKY, J., LUKAC, F., CHRASKA, T., GUPTA, M. Microstructures and Thermal Cycling Properties of Thermal Barrier Coatings Deposited by Hybrid Water-Stabilized Plasma Torch. *Journal of Thermal Spray Technology*, 2020, 29, s. 444-461, ISSN 15441016. Available from DOI: 10.1007/s11666-020-00990-2

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- [XI] MUSALEK, R., TESAR, T., MEDRICKY, J., LUKAC, F., LIMA, R.S. High-Temperature Cycling of Plasma Sprayed Multilayered NiCrAlY/YSZ/GZO/YAG Thermal Barrier Coatings Prepared from Liquid Feedstocks. *Journal of Thermal Spray Technology*. 2020. ISSN 15441016. Available from DOI: 10.1007/s11666-020-01107-5
- [XII] TKACHIVSKYI, D., JUHANI, K., SURZENKOV, A., KULU, P., TESAR, T., MUSALEK, R., LUKAC, F., ANTOS, J., VOSTRAK, M., ANTONOV, M., GOLJANDIN, D. HVOF sprayed Fe-based wear-resistant coatings with carbide reinforcement, synthesized in situ and by mechanically activated synthesis. *Coatings*. 2020, 10(11), 1–15. ISSN 20796412. Available from DOI: 10.3390/coatings10111092
- [XIII] MUSALEK, R., NARDOZZA, E., TESAR, T., MEDRICKY, J. Evaluation of Internal Cohesion of Multiphase Plasma-Sprayed Coatings by Cavitation Test: Feasibility Study. *Acta Polytechnica CTU Proceedings*. 2020, 27(0), 73–78. ISSN 2336-5382. Available from DOI: 10.14311/app.2020.27.0073
- [XIV] CIZEK, J., DUKOVSKY, D., MUSALEK, R., MEDRICKY, J., TESAR, T., LUKAC, F., CHRASKA, T. Suspension Spraying Tip: High Molecular Weight Solvent. *Journal of Thermal Spray Technology*, 2021, 30(5), s.1148-1158. ISSN 1059-9630. Available from DOI: 10.1007/s11666-021-01192-0

List of author's conference proceedings

- [i] MUSALEK, R., TESAR, T., STRASKY, J., CECH, J. Combined indentation testing of spark plasma sintered steels. *Key Engineering Materials*. 2015, 662, 43-46. ISSN 10139826. Available from DOI: 10.4028/www.scientific.net/KEM.662.43
- [ii] MUSALEK, R., MEDRICKY, J., TESAR, T., KOTLAN, J., LUKAC, F. Deposition of titania from solution by hybrid water-stabilized plasma torch. In: *METAL 2016 - 25th Anniversary International Conference on Metallurgy and Materials, Conference Proceedings*. 2016. ISBN 978-808729467-3.
- [iii] MUSALEK, R., MEDRICKY, J., KOTLAN, J., TESAR, T., PALA, Z., LUKAC, F., CHRASKA, T. Plasma Spraying of Suspensions with Hybrid Water-Stabilized Plasma Technology. In: *ITSC 2016: International Thermal Spray Conference and Exposition*. 2016, 1, 267–272. ISSN 1059-9630.
- [iv] MUSALEK, R., MEDRICKY, J., KOTLAN, J., TESAR, T., LUKAC, F., CTIBOR, P., ILLKOVA, K., CHRASKA, T. High feed rate plasma spraying of YSZ from various suspensions. In: *Proceedings of the International Thermal Spray Conference*. 2017, s. 36–41. ISBN 9781510858220.
- [v] MUSALEK, R., CTIBOR, P., MEDRICKY, J., TESAR, T., KOTLAN, J., LUKAC, F. Suspension plasma spraying of sub-stoichiometric titania by hybrid water/argon stabilized plasma torch. In: *METAL 2017 - 26th International Conference on Metallurgy and Materials, Conference Proceedings*. 2017. ISBN 9788087294796.
- [vi] TESAR, T., MUSALEK, R., MEDRICKY, J., CIZEK, J., LUKAC, F., CHRASKA, T. Deposition of multiphase coatings from liquid feedstock using hybrid water-stabilized (WSP-H) plasma torch. In: *Proceedings of the International Thermal Spray Conference*. 2018, s. 456–462. ISBN 9781510880405.
- [vii] MUSALEK, R., TESAR, T., MEDRICKY, J., LUKAC, F., CHRASKA, T. a M. GUPTA. Microstructures and properties of thermal barrier coatings deposited by hybrid water-stabilized plasma torch. In: *Proceedings of the International Thermal Spray Conference*. ASM International, 2019, s. 738–745. ISBN 9781510888005.

- [viii] TESAR, T., MUSALEK, R., MEDRICKY, J., CIZEK, J., LUKAC, F., CSAKI, S. CHRASKA, T. Cr-doped Al_2O_3 deposited by solution precursor plasma spraying by hybrid water-stabilized plasma torch. In: *Proceedings of the International Thermal Spray Conference*. ASM International, 2019, s. 714–719. ISBN 9781510888005.