# CURRICULUM VITAE

## Assoc. Prof. Ing. Ondřej Jankovský, Ph.D.

**Personal information**

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| Date of birth | May 17, 1987 |
| Place of birth | Prague |
| SCOPUS ID | 56373239700 |
| ORCID ID | 0000-0002-3501-8943 |
| RESEARCHER ID | AAZ-4792-2020 |

**Education**

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|---|---|
| 2011 – 2015 | University of Chemistry and Technology Prague, Ph.D. degree, Faculty of Chemical Technology, Department of Inorganic chemistry |
| 2009 – 2011 | University of Chemistry and Technology Prague, Master's degree, Faculty of Chemical Technology, Department of Inorganic chemistry |
| 2006 – 2009 | University of Chemistry and Technology Prague, Bachelor's degree, Faculty of Chemical Technology, Department of Inorganic chemistry |

**Work history**

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|---|---|
| 2021 | Internship, TU Bergakademie Freiberg, Professorship of Ceramics, Refractories and metal-ceramic Composites, 3 months, project CRC 920 |
| 2019 – present | University of Chemistry and Technology Prague, Department of Inorganic chemistry, position: associate professor |
| 2018 | Internship, TU Bergakademie Freiberg, Institute of Ceramic, Glass and Construction Materials, 6 months, Alexander von Humbold foundation |
| 2017 | Internship, TU Bergakademie Freiberg, Institute of Ceramic, Glass and Construction Materials, 3 months, project CRC 920 |
| 2015 – 2018 | University of Chemistry and Technology Prague, Department of Inorganic chemistry, position: assistant professor |
| 2013 – 2015 | University of Chemistry and Technology Prague, Department of Inorganic chemistry, position: researcher |
| 2013 – present | The Czech Ceramic Society: secretary/vice-president |

**Languages**

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|---|---|
| German | A1 |
| English | C1 |
| Czech | C2, native speaker |

**Summary of publication activity**

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|---|---|
| **162** | Publications indexed in WOS |
| **27** | *h*-index (WOS) |
| **19** | Patents and utility models |
| **2300** | Total citations (WOS) |
| **5** | Journal covers and frontispieces |
| **4** | Books or book chapters |

**Teaching and mentoring**

Teaching Chemical calculations, Chemistry: Seminar Laboratories - General and Inorganic Chemistry I and II, Advanced laboratories - Chemistry and Technology of Materials, Advanced laboratories - Inorganic chemistry

Mentoring and co-supervising 20 students of bachelor, master or PhD degree

**Membership on boards of journals and in societies**

Czech Ceramic Society – Vice-president (http://www.silikaty.cz/)
Czech Chemical Society (http://csch.cz/en/home/)
Ceramics-Silikáty (editorial board)
Materials (editorial board)
Applied Sciences (editorial board)

**Awards and scholarship**
Stipendium of Emil Votocek (2013, 2014 and 2015 for excellent students)
Young Scientist Award (2016 - The Czech Ceramic Society)
Josef Hlavka Award (2016 – Foundation Nadání Josefa, Marie a Zdeňky Hlávkových)
Alexander von Humboldt Foundation (6 months in 2018)
Young Scientist Award ECerS (2021)

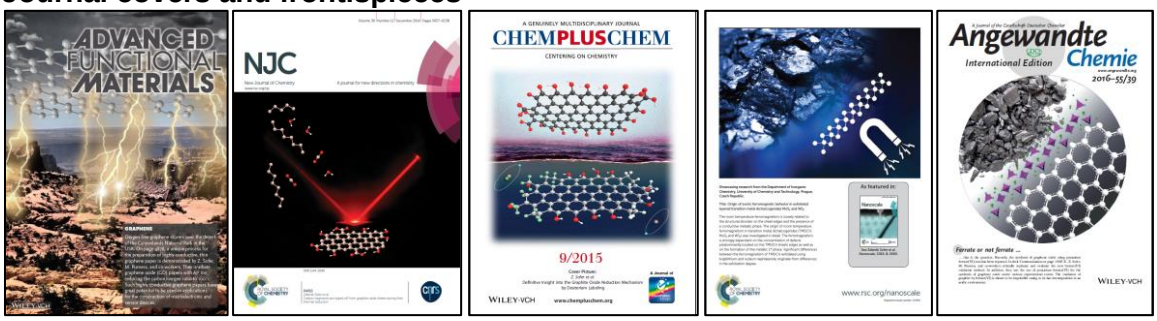
**Principal investigator (applicant) of research projects**
**(funding approx. 1 mil EUR)**

1) GA17-02815S, GAČR 2017-2019, Czech Science Foundation
2) TK01030200, TACR THÉTA 2018-2024, Technology Agency of the Czech Republic
3) GA19-00262S, GAČR 2019-2021, Czech Science Foundation
4) GA20-01866S, GAČR 2020-2022, Czech Science Foundation
5) TJ04000022, TACR ZETA 2020-2022, Technology Agency of the Czech Republic
6) 7x PIGA/VIGA/IGA, Internal grants of UCT Prague

**Participation in projects (team member)**
**(funding approx. 50 mil EUR)**

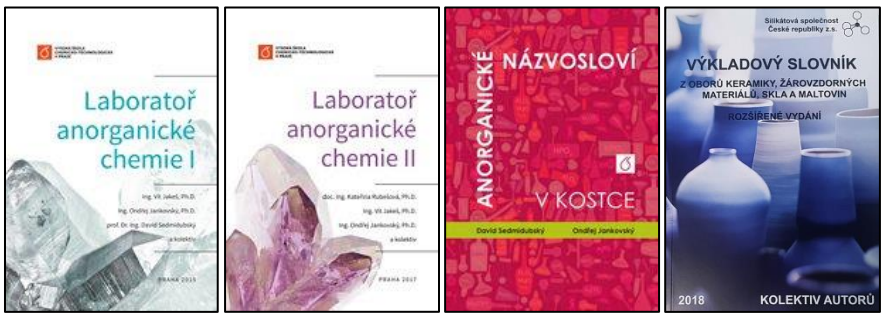
FR-TI1/497, IAAX01220701, P108/12/1170, GA13-17538S, GA13-20507S, GA15-09001S, TH01010567, GA16-05167S, FV10522, TH02010822, CRC 920-169148856, GA17-13161S, GA17-11456S, CZ.02.1.01/0.0/0.0/15_003/0000444, TJ01000072, TH03020348, FV40201, GA20-03253S, CZ.2.17/3.1.00/34283, CZ.02.2.69/0.0/0.0/16_015/0002374, GA21-11313S

**Journal covers and frontispieces**




**Books, textbooks, scripts**

1. V. Jakeš, O. Jankovský, D. Sedmidubský, Laboratories - General and Inorganic Chemistry I (Czech), ISBN: 978-80-7080-941-9, 2015, 133 pages.
2. K. Rubešová, V. Jakeš, O. Jankovský, Laboratories - General and Inorganic Chemistry II (Czech), ISBN: 978-80-7080-983-9, 2017, 181 pages.
3. D. Sedmidubský, O. Jankovský, Inorganic nomenclature (Czech), ISBN: 978-80-7592-058-4, 2020, 56 pages.
4. M. Buriánek, L. Čtrnáctá, E. Hejnová, O. Jankovský, et al., Glossary in the fields of ceramics, refractory materials, glass and mortars (Czech), ISBN:978-80-02-02795-9, 2018.



**List of publications with impact factor ($J_{imp}$)**

1. M. Míka, L. Pína, M. Landová, O. Jankovský, R. Kačerovský, L. Šveda, R. Havlíková, R. Hudec, V. Maršiková, A. Inneman, Glass and silicon foils for X-Ray space telescope mirrors, *Ceram.-Silikáty*, 2011, **55**, 418–424.
2. J. Hejtmánek, K. Knížek, M. Maryško, Z. Jirák, D. Sedmidubský, O. Jankovský, Š. Huber, P. Masschelein, B. Lenoir, Magnetic and magnetotransport properties of misfit cobaltate $Ca_3Co_{3.93}O_{9+\delta}$ *J. Appl. Phys.*, 2012, **111**, 07D715.
3. D. Sedmidubský, V. Jakeš, O. Jankovský, J. Leitner, Z. Sofer, J. Hejtmánek, Phase equilibria in Ca–Co–O system, J*. Solid State Chem.*, 2012, **194**, 199–205.
4. O. Jankovský, D. Sedmidubský, Z. Sofer, P. Šimek, J. Hejtmánek, Thermodynamic behavior of $Ca_3Co_{3.93+x}O_{9+\delta}$ ceramics, *Ceram.-Silikáty*, 2012, 56, 139–144.
5. P. Šimek, Z. Sofer, D. Sedmidubský, O. Jankovský, J. Hejtmánek, M. Maryško, M. Václavů, M. Mikulics, Mn doping of GaN layers grown by MOVPE, *Ceram.-Silikáty*, 2012, **56**, 122–126.
6. L. Nádherný, Z. Sofer, D. Sedmidubský, O. Jankovský, M. Mikulics, ZnO thin films prepared by spray-pyrolysis technique from organo-metallic precursor, *Ceram.-Silikáty*, 2012, **56**, 117–121.
7. Z. Sofer, D. Sedmidubský, Š. Huber, P. Šimek, F. Šaněk, O. Jankovský, E. Gregorová, R. Fiala, S. Matějková, M. Mikulics, Rapid thermal synthesis of GaN nanocrystals and nanodisks, *J. Nanopart. Res.*, 2013, **15**, 1411–1417.
8. O. Jankovský, D. Sedmidubský, Z. Sofer, Phase diagram of the pseudobinary system Bi–Co–O, *J. Eur. Ceram. Soc.*, 2013, **33**, 2699–2704.
9. O. Jankovský, D. Sedmidubský, Z. Sofer, J. Čapek, K. Růžička, Thermal properties and homogenity range of $Bi_{24+x}Co_{2-x}O_{39}$ ceramics, *Ceram.-Silik.*, 2013, **57**, 83–86.
10. Š. Huber, Z. Sofer, L. Nádherný, O. Jankovský, P. Šimek, D. Sedmidubský, M. Maryško, Synthesis and magnetic properties of Zn spinel ceramics, *Ceram.-Silik.*, 2013, **57**, 162–166.
11. O. Jankovský, D. Sedmidubský, Z. Sofer, K. Rubešová, K. Růžička, P. Svoboda, Oxygen non-stoichiometry and thermodynamic properties of $Bi_2Sr_2CoO_{6+\delta}$ ceramic *J. Eur. Ceram. Soc.*, 2014, **34**, 1219–1225.
12. O. Jankovský, D. Sedmidubský, Z. Sofer, J. Leitner, K. Růžička and P. Svoboda, Heat capacity, enthalpy and entropy of $Sr_{14}Co_{11}O_{33}$and $Sr_6Co_5O_{15}$, *Thermochim. Acta*, 2014, **575**, 167–172.
13. O. Jankovský, P. Šimek, D. Sedmidubský, S. Matějková, Z. Janoušek, F. Šembera, M. Pumera, Z. Sofer, Water-soluble highly fluorinated graphite oxide, *RSC Advances*, 2014, **4**, 1378–1387.
14. Z. Sofer, O. Jankovský, P. Šimek, L. Soferová, D. Sedmidubský, M. Pumera, Highly hydrogenated graphene via active hydrogen reduction of graphene oxide in the aqueous phase at room temperature, *Nanoscale*, 2014, **6**, 2153–2160.
15. O. Jankovský, P. Šimek, D. Sedmidubský, S. Huber, M. Pumera, Z. Sofer, Towards highly electrically conductive and thermally insulating graphene nanocomposites: $Al_2O_3$–graphene *RSC Advances*, 2014, **4**, 7418–7424.
16. O. Jankovský, D. Sedmidubský, K. Rubešová, Z. Sofer, J. Leitner, K. Růžička, P. Svoboda, Structure, non-stoichiometry and thermodynamic properties of $Bi_{1.85}Sr_2Co_{1.85}O_{7.7-\delta}$, ceramics, *Thermochim. Acta*, 2014, **582**, 40–45.
17. P. Šimek, Z. Sofer, O. Jankovský, D. Sedmidubský, M. Pumera, Oxygen-Free Highly Conductive Graphene Papers, *Adv. Funct. Mater.*, 2014, **24**, 4878–4885.
18. O. Jankovský, P. Šimek, K. Klímová, D. Sedmidubský, S. Matějková, M. Pumera, Z. Sofer, Towards graphene bromide: bromination of graphite oxide, *Nanoscale*, 2014, **6**, 6065–6074.
19. V. Bartůněk, Š. Huber, D. Sedmidubský, Z. Sofer, P. Šimek, O. Jankovský, CoO and $Co_3O_4$ nanoparticles with a tunable particle size, *Ceram. Int.*, 2014, **40**, 12591–12595.
20. C. H. A. Wong, O. Jankovský, Z. Sofer, M. Pumera, Vacuum-assisted microwave reduction/exfoliation of graphite oxide and the influence of precursor graphite oxide, *Carbon*, 2014, **77**, 508–517.

21. T. Hlásek, K. Rubešová, V. Jakeš, O. Jankovský, J. Oswald, Infrared luminescence in $Er^{3+}$:$Yb_3Al_5O_{12}$ bulk ceramics prepared by sol–gel method *J. Eur. Ceram. Soc.*, 2014, **34**, 3779–3782.
22. Z. Sofer, O. Jankovský, P. Šimek, K. Klímová, A. Macková, M. Pumera, Uranium- and Thorium-Doped Graphene for Efficient Oxygen and Hydrogen Peroxide Reduction, *ACS Nano*, 2014, **8**, 7106–7114.
23. C. S. Lim, C. K. Chua, Z. Sofer, O. Jankovský, M. Pumera, Alternating Misfit Layered Transition/Alkaline Earth Metal Chalcogenide $Ca_3Co_4O_9$ as a New Class of Chalcogenide Materials for Hydrogen Evolution *Chem. Mater.*, 2014, **26**, 4130–4136.
24. O. Jankovský, Š. Huber, D. Sedmidubský, L. Nádherný, T. Hlásek, Z. Sofer, Towards highly efficient thermoelectrics: $Ca_3Co_4O_{9+\delta} \cdot n\ CaZrO_3$ composite, *Ceram.-Silikáty*, 2014, **58**, 106–110.
25. O. Jankovský, D. Sedmidubský, Š. Huber, P. Šimek, Z. Sofer, Synthesis, magnetic and transport properties of oxygen-free CrN ceramics, *J. Eur. Ceram. Soc.*, 2014, **34**, 4131–4136.
26. O. Jankovský, Š. Hrdličková Kučková, M. Pumera, P. Šimek, D. Sedmidubský, Z. Sofer, Carbon fragments are ripped off from graphite oxide sheets during their thermal reduction, *New J. Chem.*, 2014, **38**, 5700–5705.
27. Z. Sofer, P. Šimek, D. Sedmidubský, O. Jankovský, P. Beran, M. Pumera, Neutron diffraction as a precise and reliable method for obtaining structural properties of bulk quantities of graphene, *Nanoscale,* 2014, **6**, 13082–13089.
28. P. Šimek, D. Sedmidubský, K. Klímová, Š. Huber, P. Brázda, M. Mikulics, O. Jankovský, Z. Sofer, Synthesis of InN nanoparticles by rapid thermal ammonolysis, *J. Nanopart. Res.*, 2014, **16**, 2805–2816.
29. L. Nádherný, O. Jankovský, Z. Sofer, J. Leitner, Ch. Martin, D. Sedmidubský, Phase equilibria in the Zn–Mn–O system, *J. Eur. Ceram. Soc.*, 2015, **35**, 555–560
30. O. Jankovský, D. Sedmidubský, J. Vítek, P. Šimek, Z. Sofer, Phase diagram of the Sr–Co–O system, *J. Eur. Ceram. Soc.*, 2015, **35**, 935–940.
31. P. Šimek, K. Klímová, D. Sedmidubský, O. Jankovský, M. Pumera, Zdeněk Sofer, Towards graphene iodide: Iodination of graphite oxide, *Nanoscale*, 2015, **7**, 261–270.
32. O. Jankovský, D. Sedmidubský, Z. Sofer, J. Luxa, V. Bartůněk, Simple synthesis of $Cr_2O_3$ nanoparticles with a tunable particle size, *Ceram. Int.*, 2015, **41**, 4644–4650.
33. O. Jankovský, Z. Sofer, J. Vítek, P. Šimek, K. Růžička, P. Svoboda, D.Sedmidubský, Structure, oxygen non-stoichiometry and thermal properties of $(Bi_{0.4}Sr_{0.6})Sr_2CoO_{5-\delta}$, *Thermochim. Acta*, 2015, **600**, 89–94.
34. O. Jankovský, D. Sedmidubský, P. Šimek, Z. Sofer, P. Ulbrich, V. Bartůněk, Synthesis of MnO, $Mn_2O_3$ and $Mn_3O_4$ nanocrystal clusters by thermal decomposition of manganese glycerolate, *Ceram. Int.*, 2015, **41**, 595–601.
35. Ch. K. Chua, Z. Sofer, Ch. S. Lim, O. Jankovský, M. Pumera, Misfit-layered $Bi_{1.85}Sr_2Co_{1.85}O_{7.7-\delta}$ for hydrogen evolution reaction: Beyond van der Waals heterostructures, *ChemPhysChem,* 2015, **16**, 769–774.
36. O. Jankovský, P. Šimek, M. Nováček, J. Luxa, D. Sedmidubský, M. Pumera, A. Macková, R. Mikšova and Z. Sofer , Use of deuterium labelling—evidence of graphene hydrogenation by reduction of graphite oxide using aluminium in sodium hydroxide, *RSC Adv.*, 2015, **5**, 18733–18739.
37. O. Jankovský, Z.Sofer, J. Vítek, P. Šimek, K. Růžička, S. Mašková and D. Sedmidubský, Thermodynamic properties of tubular cobaltite $Bi_{3.7}Sr_{11.4}Co_8O_{29-\delta}$ , *Thermochim. Acta*, 2015, **605**, 22–27.
38. Ch. S. Lim, L. Wang, Ch. K. Chua, Z. Sofer, O. Jankovský, M. Pumera, High temperature superconducting materials as bifunctional catalysts for hydrogen evolution and oxygen reduction, *J. Mater. Chem. A*, 2015, **3**, 8346–52.
39. Ch. K. Chua, Z. Sofer, P. Šimek, O. Jankovský, K. Klímová, S. Bakardjieva, Š. Hrdličková Kučková, M. Pumera, Synthesis of Strongly Fluorescent Graphene Quantum Dots by Cage-Opening Buckminsterfullerene, *ACS Nano*, 2015, **9**, 2548.

40. O. Jankovský, P. Šimek, K. Klímová, D. Sedmidubský, M. Pumera, Z. Sofer, Highly selective removal of $Ga^{3+}$ ions from $Al^{3+}/Ga^{3+}$ mixtures using graphite oxide, *Carbon*, 2015, **89**, 121–129.
41. Z. Sofer, O. Jankovský, P. Šimek, D. Sedmidubský, J. Šturala, J. Kosina, R. Mikšová, A. Macková, M. Mikulics, M. Pumera, Insight into the Mechanism of the Thermal Reduction of Graphite Oxide: Deuterium-Labeled Graphite Oxide is the Key, *ACS Nano*, 2015, **9**, 5478–5485.
42. O. Jankovský, Z. Sofer, J.Vítek, M. Nováček, T. Hlásek, D. Sedmidubský, Phase equilibria in the Bi-Sr-Co-O system: towards the material tailoring of thermoelectric cobaltites, *J. Eur. Ceram. Soc.*, 2015, **35**, 3005–3012.
43. O. Jankovský, P. Šimek, J. Luxa, D. Sedmidubský, I. Tomandl, A. Macková, R. Mikšová, P. Malinský, M. Pumera and Z. Sofer, Definitive insight in the Graphite oxide reduction mechanism *via* deuterium labeling, *ChemPlusChem,* 2015, **80**,1399 –1407.
44. Z. Sofer, O. Jankovský, A. Libánská, P. Šimek, J. Luxa, D. Sedmidubský, A. Macková, R. Mikšová, M. Pumera, Definitive proof of graphene hydrogenation by Clemmensen reduction: use of deuterium labeling, *Nanoscale*, 2015, **7**, 10535–10543.
45. V. Mazánek, O. Jankovský, J. Luxa, D. Sedmidubský, Z. Janoušek, F. Šembera, M. Mikulics, Z. Sofer, Tuning of Fluorine Content in Graphene: Towards Large Scale Production of Stoichiometric Fluorographene, *Nanoscale*, 2015, **7**, 13646-13655.
46. O. Jankovský, D. Sedmidubský, P. Šimek, K. Klímová, D. Bouša, Ch. Boothroyd, A. Macková, Z. Sofer, Separation of thorium ions from wolframite and scandium concentrates using graphene oxide, *Phys. Chem. Chem. Phys.*, 2015, **17**, 25272-25277.
47. D. Bouša, O. Jankovský, D. Sedmidubský, J, Šturala, M. Pumera, Z. Sofer, Mesomeric effect of graphene modified by diazonium salts: substituent type and position influences its properties, *Chem. Eur. J.*, 2015, **21**, 17728 – 17738.
48. J. Mokrý, O. Jankovský, J. Luxa, D. Sedmidubský, Heat capacity, entropy, oxygen non-stoichiometry and magnetic properties of cobalt sillenite $Bi_{24}Co_2O_{39-\delta}$, *Thermochim. Acta,* 2015, **619**, 26–31.
49. Ch. S. Lim, Z. Sofer, O. Jankovský, H. Wang, M. Pumera, Electrochemical properties of layered SnO and PbO for energy applications, *RSC Adv.*, 2015, **5**, 101949–101958
50. J. Luxa, O. Jankovský, D. Sedmidubský, R. Medlín, M. Maryško, M. Pumera, Z. Sofer, Origin of exotic ferromagnetic behavior in exfoliated layered transition metal dichalcogenides $MoS_2$ and $WS_2$, *Nanoscale*, 2016, **8**, 1960-1967.
51. D. Bouša, J. Luxa, D. Sedmidubský, Š. Huber, O. Jankovský, M. Pumera, Z. Sofer, Nanosized graphane (C1H1.14)n by hydrogenation of carbon nanofibers by Birch reduction method, *RSC Adv.*, 2016, **6**, 6475-6485.
52. O. Jankovský, A. Libánská, D. Bouša, D. Sedmidubský, S. Matějková, Z. Sofer, Partially Hydrogenated Graphene Materials Exhibit High Electrocatalytic Activities Related to Unintentional Doping with Metallic Impurities, *Chem. Eur. J.*, 2016, **22**, 8627 –8634 (highlighted in ChemistryViews)
53. O. Jankovský, J. Kovařík, J. Leitner, K. Růžička, D. Sedmidubský,Thermodynamic properties of stoichiometric lithium cobaltite $LiCoO_2$, *Thermochim. Acta*, 2016, **634**, 26.
54. T. Hlásek, V. Polák, K. Rubešová, V. Jakeš, P. Nekvindová, O. Jankovský, D. Mikolášová, J. Oswald, Sol–gel-derived planar waveguides of $Er^{3+}$:$Yb_3Al_5O_{12}$ prepared by a polyvinylpyrrolidone-based method, *J. Sol-Gel Sci.,* 2016, **80**, 531-537.
55. V. Bartůněk, D. Průcha, M. Švecová, P. Ulbrich, Š. Huber, D. Sedmidubský, O. Jankovský, Ultrafine ferromagnetic iron oxide nanoparticles: Facile synthesis by low temperature decomposition of iron glycerolate, *Mater. Chem. Phys.*, **180**, 2016, 272.
56. Z. Sofer, J. Luxa, O. Jankovsky, D. Sedmidubsky, T. Bystron, M. Pumera, Synthesis of Graphene Oxide by Oxidation of Graphite with Ferrate(VI) Compounds: Myth or Reality?, *Angew. Chem. Int. Ed.*, 2016, **55**, 11965 –11969
57. D. Bouša, J. Luxa, V. Mazánek, O. Jankovský, D. Sedmidubský, K. Klímová, M. Pumera, Z. Sofer, Toward graphene chloride: chlorination of graphene and graphene oxide, *RSC Adv.*, **6**, 2016, 66884–66892.

58. O. Jankovský, P. Marvan, M. Nováček, J. Luxa, V. Mazánek, K. Klímová, D. Sedmidubský, Z, Sofer, Synthesis procedure and type of graphite oxide strongly influence resulting graphene properties, *Appl. Mat. Today*, 2016, **4**, 45–53.
59. J. Fořt, M. Pavlíková, M. Záleská, Z. Pavlík, A.Trník, O. Jankovský, Preparation of puzzolana active two component composite for latent heat storage, *Ceram.-Silikáty* 2016, **60**, 291–298.
60. O. Jankovský, M. Nováček, J. Luxa, D. Sedmidubský, V. Fila, M. Pumera, Z. Sofer, The new member of graphene family - graphene acid, *Chem. Eur.*, 2016, **22***,* 17416-17424 (highlighted in ChemistryViews).
61. Š. Huber , O.Jankovský , D. Sedmidubský, J. Luxa, K.Klímová, J.Hejtmánek, Z. Sofer, Synthesis, structure, thermal, transport and magnetic properties of VN ceramics *Ceram. Int.,*2016, **42**, 18779-18784.
62. O. Jankovský, V. Mazánek, K. Klímová, D. Sedmidubský, J. Kosina, M. Pumera, Z. Sofer, Simple Synthesis of Fluorinated Graphene: Thermal Exfoliation of Fluorographite, *Chem. Eur. J.*, 2016, **22***,* 17696-17703.
63. K. Klímová, M. Pumera, J. Luxa, O. Jankovský, D. Sedmidubsky, S. Matějková, Z. Sofer, Graphene Oxide Sorption Capacity Towards Elements over the Whole Periodic Table – a Comparative Study, *J. Phys. Chem. C*, 2016, **120**,24203–24212.
64. O. Jankovský, M. Lojka, M. Nováček, J. Luxa, D. Sedmidubský, M. Pumera, J. Kosina, Z. Sofer, Reducing emission of carcinogenic by-products in the production of thermally reduced graphene oxide, *Green Chem.*, 2016, **18**, 6618-6629.
65. J. Pinc, O. Jankovský, V. Bartůněk, Preparation of manganese oxide nanoparticles by thermal decomposition of nanostructured manganese carbonate, *Chem. Pap.*, 2017, **71**, 1031–1035.
66. M. Pižl , O. Jankovský, P. Ulbrich, N. Szabo, I. Hoskovcova, D. Sedmidubský, V. Bart ůněk, Facile preparation of nanosized yttrium oxide by the thermal decomposition of amorphous Schiff base yttrium complex precursor, *J. Organomet. Chem.*, 2017, **830**, 146-149.
67. V. Bartůněk, Š. Huber, J. Luxa, Z. Sofer, M. Kuchař, K. Dobrovolný, O. Jankovský, Facile Synthesis of Magnetic Cobalt Nano-foam by Low-temperature Thermal Decomposition of Cobalt Glycerolate, *Micro & Nano Letters*, 2017, **12**, 278 – 280.
68. M. Nováček, O.Jankovský, J. Luxa, D. Sedmidubský, M. Pumera, V. Fila, M. Lhotka, K. Klímová, S. Matějková, Z. Sofer, Tuning of graphene oxide composition by multiple oxidations for carbon dioxide storage and capture of toxic metals, *J. Mater. Chem. A*, 2017, **5**, 2739-2748.
69. O. Jankovský, M. Nováček, J. Luxa, D. Sedmidubský, M. Boháčová, M. Pumera, Z. Sofer, Concentration of Nitric Acid Strongly Influences Chemical Composition of Graphite Oxide, *Chem. Eur. J.*, 2017, **23**, 6432-6440.
70. O. Jankovský, M. Lojka, J. Luxa, D.Sedmidubský, O.Tomanec, R.Zbořil, M.Pumera, Z. Sofer, Selective Bromination of Graphene Oxide by the Hunsdiecker Reaction, *Chem. Eur. J.*, 2017, **23**, 10473–10479.
71. O. Jankovský, V. Rach, D. Sedmidubský, Š. Huber, P. Ulbrich, M. Švecová, V. Bartůněk, Simple synthesis of free surface nanostructured spinel $NiFe_2O_4$ with a tunable particle size, *J. Alloy. Comp.,* 2017, **723**, 58-63.
72. O. Jankovský, Z. Sofer, J. Kovařík, K. Růžička, J. Leitner, D. Sedmidubský, Thermodynamic properties of misfit cobaltite $[Bi_{2-x}Ca_2O_4][CoO_2]_{1.7}$. *Thermochim. Acta,* 2017, **656**, 129-134.
73. O. Jankovský, M. Pavlíková, D. Sedmidubský, D. Bouša, M. Lojka, J. Pokorný, M. Záleská, Z.Pavlík, Study on pozzolana activity of wheat straw ash as potential admixture for blended cements, *Ceramics-Silikáty*, 2017, **61**, 327-339.
74. O. Jankovský, A. Jiříčková, J. Luxa, D. Sedmidubský, M. Pumera, Z. Sofer, Z.. Fast Synthesis of Highly Oxidized Graphene Oxide, *ChemistrySelect*, 2017, **2**, 9000-9006.
75. O. Jankovský, M. Lojka, J. Luxa, D. Sedmidubský, M. Pumera, Z. Sofer, Introduction of sulfur to graphene oxide by Friedel-Crafts reaction, *FlatChem* 2017, **6**, 28-36.

76. O. Jankovský, D. Sedmidubský, Phase equilibria modelling in Bi–Sr–Co–O system—Towards crystal growth and melt-assisted material processing, *J. Eur. Ceram. Soc.*, 2018, **38**, 131-135.
77. M. Záleská, M. Pavlíková, Z. Pavlík, O. Jankovský, J. Pokorný, V. Tydlitát, P. Svora, R. Černý, Physical and chemical characterization of technogenic pozzolans for the application in blended cements, *Constr. Build. Mater.* 2018, **160**, 106–116.
78. J. Leitner, V. Bartůněk, D. Sedmidubský, O. Jankovský, Thermodynamic properties of nanostructured ZnO, *Appl. Mater. Today* 2018, 10, 1–11.
79. M. Záleská, Z. Pavlík, M. Pavlíková, L. Scheinherrová, J. Pokorný, A. Trník, P. Svora, J. Fořt, O. Jankovský, Z. Suchorab, R. Černý, Biomass ash-based mineral admixture prepared from municipal sewage sludge and its application in cement composites, *Clean Technol. Environ. Policy,* 2018, **20**, 159–171
80. O. Jankovský, F. Antončík, T. Hlásek, V. Plecháček, D. Sedmidubský, Š. Huber, M. Lojka, V. Bartůněk, Synthesis and properties of $YBa_2Cu_3O_{7-\delta}$ – $Y_2Ba_4CuWO_{10.8}$ superconducting composites, *J. Eur. Ceram. Soc.*, 2018, **38,** 2541-2546.
81. V. Bartůněk, D. Sedmidubský, D. Bouša, O. Jankovský, Production of pure amorphous silica from wheat straw ash, *Green Mater.*, 2018, **6**, 1-5.
82. M. Záleská, M. Pavlíková, O. Jankovský, J. Pokorný, Z. Pavlík, Lightweight Concrete Made With Waste Expanded Polypropylene-Based Aggregate And Synthetic Coagulated Amorphous Silica, *Ceramics-Silikáty*, 2018, **62** (3) 221-232.
83. D. Bousa, V. Mazanek, D. Sedmidubsky, O. Jankovsky, M. Pumera, Z. Sofer, Hydrogenation of Fluorographite and Fluorographene: an Easy Way to Produce Highly Hydrogenated Graphene, *Chem. Eur. J.*, 2018, **24**(33) 8350-8360.
84. E. Storti, O. Jankovský, P. Colombo, Ch. G. Aneziris, Effect of heat treatment conditions on magnesium borate fibers prepared via electrospinning, *J. Eur. Ceram. Soc.*, 2018, **38**, 4109-4117.
85. O. Jankovský, E. Storti, K. Moritz, B. Luchini, A. Jiříčková, Ch. G. Aneziris, Nano-functionalization of carbon-bonded alumina using graphene oxide and MWCNTs, *J. Eur. Ceram. Soc.*, 2018, 38 (14) 4732-4738
86. M. Pižl, O. Jankovský, M. Guricová, I. Hoskovcová, D. Sedmidubský, V.Bartůněk, Mixed Yttrium–Ytterbium–Erbium Schiff Base Complex as a Model Precursor for Mixed Nanosized Rare Earths Oxides, *J. Cluster. Sci.,* 2018, **29**, 549–553.
87. M. Záleská, M. Pavlíková, J. Pokorný, O. Jankovský, Z. Pavlík, R. Černý, Structural, mechanical and hygrothermal properties of lightweight concrete based on the application of waste plastics, *Constr. Build. Mater.* 2018, **180**, 1–11.
88. M. Záleská, M. Pavlíková, O. Jankovský, M. Lojka, A. Pivák, Z. Pavlík, Experimental Analysis of MOC Composite with a Waste-Expanded Polypropylene-Based Aggregate, *Materials,* 2018, **11**(6), 931-936.
89. J. Leitner, D. Sedmidubský, O. Jankovský, Effect of ZnO Nanosizing on its Solubility in Aqueous Media, *Micro Nano Let.*, 2018, **13**(11),1585 – 1589.
90. V. Bartůněk, D. Sedmidubský, Š. Huber, M. Švecová, P. Ulbrich, O. Jankovský, Synthesis and Properties of Nanosized Stoichiometric Cobalt Ferrite Spinel, *Materials* 2018, **11**(7), 1241.
91. O. Jankovský, E. Storti, G. Schmidt, S. Dudczig, Z. Sofer, Ch. G. Aneziris, Unique Wettability Phenomenon of Carbon-bonded Alumina with Advanced Nanocoating, *Applied Materials Today*, 2018, **13**, 24-31.
92. M. Lojka, O. Jankovský, D. Sedmidubsky, V. Mazanek, D. Bouša, M. Pumera, S. Matějková, Z. Sofer, Synthesis and Properties of Phosphorous and Sulfur Co-Doped Graphene , *New J. Chem*., 2018, **42**(19), 16093-16102.
93. M. Pavlíková, J. Pokorný, O. Jankovský, M. Záleská, M. Vavro, K. Souček, Z. Pavlík, The effect of the sodium sulphate solution exposure on properties and mechanical resistance of different kinds of renders, *Ceramics Silikaty*, 2018, **62** (4), 311-324.
94. M. Pavlíková, L. Zemanová, J. Pokorný, M. Záleská, O. Jankovský, M. Lojka, D. Sedmidubský, Z. Pavlík, Valorization of Wood Chips Ash as an Eco-Friendly Mineral Admixture in Mortar Mix Design, *Waste Management*, 2018, **80**, 89-100.

95. K. Rubešová, T. Thoř, V. Jakeš, D. Mikolášová, J. Maixner, O. Jankovský, J. Cajzl, L. Nádherný, A. Beitlerová, M. Nikl, Lanthanide-doped $Y_2O_3$ – The Photoluminescent and Radioluminescent Properties of Sol-Gel Prepared Samples, *Ceramics-Silikáty*, 2018, **62** (4), 411-417.
96. V. Bartůněk, P. Ulbrich, J. Pinc, D. Sedmidubský, O. Jankovský, Fine fluorite nanoparticles synthesized from biomass ash, *Journal of Fluorine Chemistry*, 2018, **216**, 112–117.
97. T. Hlásek, Y. Shi, J. H. Durrell, A. R. Dennis, D. K. Namburi, V. Plecháček, K. Rubešová, D. A. Cardwell, O. Jankovský, Cost-effective Isothermal Top-Seeded Melt-growth of Single-domain YBCO Superconducting Ceramics, *Solid State Sciences*, 2019, **88**, 74-80.
98. V. Doležal, L. Nádherný, K. Rubešová, V. Jakeš, A. Michalcová, O. Jankovský, M. Poupon, $LaMgAl_{11}O_{19}$ synthesis using non-hydrolytic sol-gel methods, *Ceram. Int.*, 2019, **45**, 1233-11240.
99. M. Pavlíková, L. Zemanová, M. Záleská, J. Pokorný, M. Lojka, O. Jankovský, Z. Pavlík, Z, Ternary Blended Binder for Production of a Novel Type of Lightweight Repair Mortar, *Materials*, 2019, **12**(6), 996.
100. O. Jankovský, V. Bartůněk, F. Antončík, A. Jiříčková, A. M. Lauermannová, M. Záleská, M. Pavlíková, J. Pokorný, Z. Pavlík, Wood chips ash processing and its utilization in magnesium phosphate cement composites, *Ceramics Silikaty*, 2019, **63** , 267-276.
101. K. Jilkova, M. Mika, P. Kostka, F. Lahodny, P. Nekvindova, O. Jankovsky, R. Bures, M. Kavanova, Electro-optic glass for light modulators, *Journal of Non-Crystalline Solids*, 2019, **518**, 51-56
102. V. F. Rahhal, M. A. Trezza, A. Tironi, C. C. Castellano, M. Pavlíková, J. Pokorný, E. F. Irassar, O. Jankovský, Z. Pavlík, Complex characterization and behaviour of sintered ceramic waste powder-Portland cement system, *Materials*, 2019, **12**, 1650.
103. M. Pavlíková, L. Zemanová, J. Pokorný, M. Záleská, O. Jankovský, M. Lojka, Z. Pavlík, Influence of wood-based biomass ash admixing on the structural, mechanical, hygric, and thermal properties of air lime mortars, *Materials*, 2019, **12,** 2227.
104. M. Lojka, B. Lochman, O. Jankovský, A. Jiříčková, Z. Sofer, D. Sedmidubský, Synthesis, composition and properties of partially oxidized graphite oxides, *Materials*, 2019, **12**, 2367.
105. E. Storti, O. Jankovský, D. Sedmidubský, S. Dudczig, Ch. G. Aneziris, Filter coatings based on combination of nanomaterials for steel melt filtration, *Adv. Eng. Mater.*, 2019, 1900457.
106. M. Záleská, Z. Pavlík, D. Čítek, O. Jankovský, M. Pavlíková, Eco-friendly concrete with scrap-tyre-rubber-based aggregate - properties and thermal stability, *Construction and Building Materia*ls 2019, **225**, 709–722
107. F. Antončík, D. Sedmidubský, A. Jiříčková, M. Lojka, T. Hlásek, K. Růžička and O. Jankovský, Thermodynamic properties of stoichiometric non-superconducting phase $Y_2BaCuO_5$, *Materials*, 2019, **12** (19), 3163.
108. V. Bartůněk, J. Luxa, D. Sedmidubský, T. Hlásek, and O. Jankovský, Microscale and Nanoscale Pinning Centres in Single-domain REBCO Superconductors, *J Mater. Chem C*, 2019, **7**, 13010 – 13019.
109. J. Leitner, D. Sedmidubský, O. Jankovský, Size and shape dependent solubility of CuO nanostructures, *Materials*, 2019, **12** (20), 3355.
110. M. Záleská, M. Pavlíková, O. Jankovský, M. Lojka, F. Antončík, A. Pivák, Z. Pavlík, Influence of Waste Plastic Aggregate and Water-Repellent Additive on the Properties of Lightweight Magnesium Oxychloride Cement Composite, *Appl. Sci.*, 2019, **9**, 5463.
111. K. Skrbek, O, Jankovský, D. Sedmidubský, V. Bartůněk, Flame aerosol transport method for assembling $CeO_2$-$SiO_2$ nanocomposites, Ceram. Int., 2020, **46** (4), 5495-5499.
112. F. Antončík, M. Lojka, T. Hlásek, V. Bartůněk, I. Valiente, J. Pérez-Díaz and O. Jankovský, Radial and axial stiffness of superconducting bearings based on YBCO single-domain bulks processed with artificial holes, Supercond. Sci. Technol. 2020, **33**, 045010.

113. M. Lojka, O. Jankovský, A.Jiříčková, A.-M. Lauermannová, F. Antončík, D. Sedmidubský, Z. Pavlík, M. Pavlíková, Thermal Stability and Kinetics of Formation of Magnesium Oxychloride Phase $3Mg(OH)_2 \cdot MgCl_2 \cdot 8H_2O$, Materials, Materials 2020, **13**(3), 767.
114. A. Jiříčková, M. Lojka, A.-M. Lauermannová, F. Antončík, D. Sedmidubský, M. Pavlíková, M. Záleská, Z. Pavlík, O. Jankovský, Synthesis, Structure and Thermal Stability of Magnesium Oxychloride $5Mg(OH)_2 \cdot MgCl_2 \cdot 8H_2O$, Appl. Sci. 2020, **10**, 1683.
115. O. Jankovský, M. Lojka, A.-M. Lauermannová, F.Antončík, M. Pavlíková, Z. Pavlík, D. Sedmidubský, Carbon dioxide uptake by MOC-based materials Appl. Sci. 2020, Appl. Sci. 2020, **10**, 2254
116. O. Jankovský, M.Lojka, A. Jiříčková, Ch. G. Aneziris, E. Storti, D. Sedmidubský, Carbon-bonded alumina filters coated by graphene oxide for water treatment, Materials 2020, **13**, 2006.
117. F. Antončík, M. Lojka, T. Hlásek, I.Valiente-Blanco, J.L. Perez-Diaz, O. Jankovský, Artificially perforated single-grain YBCO bulks: Dependence of superconducting properties on the bulk thickness, *Journal of the American Ceramic Society*, 2020, **103**, 5169-5177.
118. A. Pivák, M. Pavlíková, M.Záleská, M. Lojka, O. Jankovský, Z. Pavlík, MOC Composites with Silica Filler and Coal Fly Ash Admixture, *Materials* 2020, **13**, 2537.
119. A-M. Lauermannová, M. Lojka, F. Antončík, D. Sedmidubský, M. Pavlíková, Z. Pavlík, O.Jankovský, Magnesium oxybromides MOB-318 and MOB-518: brominated analogues of magnesium oxychlorides, *Appl. Sci.* 2020, **10(11)**, 4032.
120. J. Leitner, D. Sedmidubský, M. Lojka, O. Jankovský, The effect of nanosizing on the oxidation of partially oxidized copper nanoparticles, *Materials* 2020, **13(12)***,* 2878.
121. A. Pivák, M. Pavlíková, M. Záleská, M. Lojka, A.-M.Lauermannová, O. Jankovský, Z. Pavlík, Low-Carbon Composite Based on MOC, Silica Sand and Ground Porcelain Insulator Waste, *Processes*, 2020, **8**, 829.
122. O. Jankovský, M. Lojka, A.-M. Lauermannová, F. Antončík, M. Pavlíková, M. Záleská, Z. Pavlík, A. Pivák and D. Sedmidubský, Towards novel building materials: high-strength nanocomposites based on graphene, graphite oxide and magnesium oxychloride, *Appl. Mater. Today*, 2020, **20**, 100766.
123. F. Antončík, O. Jankovský, T. Hlásek, V. Bartůněk, Nanosized pinning centers in the rare earth-barium-copper-oxide thin-films superconductors, *Nanomaterials*, 2020, **10**, 1429.
124. K. Skrbek, V. Bartůněk, M. Lojka, D. Sedmidubský, O. Jankovský, Synthesis and characterization of the properties of ceria nanoparticles with a tunable particle size for the decomposition of chlorinated pesticides, *Appl. Sci.* 2020, **10,** 5224.
125. M. Lojka, F. Antončík, D. Sedmidubský, T. Hlásek, J. Wild, J. Pavlů, O. Jankovský, V. Bartůněk, Phase-stable segmentation of BSCCO high-temperature superconductor into micro-, meso-, and nano-size fractions, *J. Mater. Res. Technol., 2020, **9**, 12071-12079.*
126. M. Pavlíková, A. Pivák, M. Záleská, O. Jankovský, P. Reiterman, Z. Pavlík, Magnesium Oxychloride Cement Composites Lightened with Granulated Scrap Tires and Expanded Glass, *Materials* 2020, **13**, 4828.
127. A.-M. Lauermannová, I. Paterová, J. Patera, K. Skrbek, O. Jankovský, V. Bartůněk, Hydrotalcites in construction materials, *Appl. Sci.* 2020, **10,** 7989.
128. A.-M. Lauermannová, F. Antončík, M. Lojka, O. Jankovský, M. Pavlíková, A. Pivák, M. Záleská, Z. Pavlík, The Impact of Graphene and Diatomite Admixtures on Performance and Properties of High-performance Magnesium Oxychloride Cement Composites, *Materials* 2020, **13**, 5708.
129. F. Antončík, M. Lojka, T. Hlásek, D. Sedmidubský, O. Jankovský, V. Bartůněk*, The effective synthesis of large volumes of the ultrafine $BaZrO_3$ nanoparticles, *Materials Chemistry and Physics* 2021, **259**, 124047.
130. M. Lojka, A.-M. Lauermannová, D. Sedmidubský, M. Pavlíková, M. Záleská, Z. Pavlík, A. Pivák, O. Jankovský*, Magnesium oxychloride cement composites with MWCNT for the construction applications, *Materials*, 2021, **14**, 484**.**
131. A.-M. Lauermannová, M. Lojka, O. Jankovský, I. Faltysová, M. Pavlíková, A. Pivák, M. Záleská and Z. Pavlík*, High-performance Magnesium oxychloride composites with silica

sand and diatomite, *Journal of Materials Research and Technology*, 2021, **11**, 957-969**.** GA19,

132. A.-M. Lauermannová, M. Lojka, M. Pavlíková, A. Pivák, M. Záleská, Z. Pavlík, O. Zmeškal and O. Jankovský*, Graphene- and graphite oxide-reinforced magnesium oxychloride cement composites for the construction use, *Ceramics-Silikaty*, 2021, **65** (1), 38-47.
133. A.-M. Lauermannová, I. Faltysová, M. Lojka, F. Antončík, D. Sedmidubský, Z. Pavlík, M. Pavlíková, M. Záleská, A. Pivák, O. Jankovský, Regolith-based magnesium oxychloride composites doped by graphene: novel high-performance building materials for lunar constructions, *FlatChem*, 2021, **26**, 100234.
134. A.Pivák, M. Pavlíková, M. Záleská, M. Lojka, A.-M. Lauermannová, I. Faltysová, O. Jankovský, Z. Pavlík*, Foam Glass Lightened Sorel's Cement Composites Doped with Coal Fly Ash, *Materials*, 2021, **14**, 1103.
135. F. Antončík*, M. Lojka, T. Hlásek, J. Skočdopole, D. Sedmidubský and O. Jankovský, Influence of RE-based liquid source (RE=Sm, Gd, Dy, Y, Yb) on EuBCO/Ag superconducting bulks, *IEEE Transactions on Applied Superconductivity*, 2021, **31**(5), 6800505.
136. J. Skočdopole, M. Lojka, T. Hlásek, F. Antončík, O. Jankovský and L. Kalvoda, Transport coefficients in Y-Ba-Cu-O system for Ionized Jet Deposition method, *IEEE Transactions on Applied Superconductivity*, 2021, **31**(5), 6600703.
137. M. Lojka, T. Hlásek, F. Antončík, J.Skočdopole and O. Jankovský, Effect of target density on the surface morphology of Y-Ba-Cu-O thin films prepared by Ionized Jet Deposition, *IEEE Transactions on Applied Superconductivity*, 2021, **31**(5), 6600505.
138. M. Záleská, M. Pavlíková, A. Pivák, Š. Marušiak, O. Jankovský, A.-M. Lauermannová, M. Lojka, F. Antončík, Z. Pavlík, MOC Doped with Graphene Nanoplatelets: The Influence of the Mixture Preparation Technology on its Properties, *Materials*, 2021, **14**(6), 1450.
139. M. Záleská, M. Pavlíková, A. Pivák, A.-M. Lauermannová, O. Jankovský, Z. Pavlík, Lightweight vapor-permeable plasters for building repair – detailed experimental analysis of the functional properties, *Materials* 2021, **14**, 2613.
140. M. Pavlíková, A. Kapicová, A. Pivák, M. Záleská, M. Lojka, O. Jankovský, Z. Pavlík*, Zeolite lightened repair renders: effect of binder type on properties and salt crystallization resistence, *Materials* 2021, **14**, 3760.
141. K. Skrbek, O. Jankovský, M. Lojka, F. Antončík, V. Bartunek*, Synthesis of nanosized $LaFeAl_{11}O_{19}$ hexaaluminate by mixed metal glycerolate method, *Ceramics international*, 2021, **47** (21), 29653-29659.
142. F. Antončík, M. Lojka, D. Sedmidubský and O. Jankovský*, High-density YBCO Targets for Sputtering with Defect-free Microstructure Prepared by Novel Infiltration Method, *J. Eur. Ceram. Soc.*, 2021, **41**, 7077-7084.
143. M. Pavlíková*, M. Záleská, A. Pivák, O. Jankovský, A.-M. Lauermannová, M. Lojka, F. Antončík, and Zbyšek Pavlík, MOC-Diatomite Composites Filled with Multi-Walled Carbon Nanotubes, *Material*s, 2021, **14**, 4576.
144. A.-M. Lauermannová, M. Lojka, O. Jankovský, I. Faltysová, D. Sedmidubský, M. Pavlíková, A. Pivák, M. Záleská, Š. Marušiak and Z. Pavlík, The influence of graphene specific surface on material properties of MOC-based composites for construction use, *Journal of Building Engineering*, 2021, **43**, 103193.
145. A.-M. Lauermannová, M. Lojka, J. Sklenka, M. Záleská, M.Pavlíková, A. Pivák, Z. Pavlík, O.Jankovský, Magnesium oxychloride-graphene composites: towards high strength and water resistant materials for construction industry, *FlatChem*, 2021, **29**, 100284.

**Patents (PP and PUV)**

1. M. Míka, L. Pína, R. Hudec, R. Havlíková, L. Švéda, O. Jankovský, Způsob tepelného tvarování křemíkových plátků pro přesnou rentgenovou optiku, PP 2012 – 18, CZ304298B6.
2. M. Míka, P. Voláková, V. Verner, R. Verner, B. Klápště, O. Jankovský, Způsob stanovení eutektické a/nebo kritické teploty biomasového popela elektrickými prostředky a zařízení k tomuto stanovení, PP 2012 – 391, CZ304048B6.
3. M. Míka, P. Voláková, V. Verner, R. Verner, B. Klápště, O. Jankovský, Ochranná vrstva pro zamezení nalepování biomasového popela na vnitřní žáruvzdornou vyzdívku spalovacího kotle, PP 2012 – 390, CZ304113B6.
4. M. Míka, L. Pína, R. Hudec, R. Havlíková, L. Švéda, O. Jankovský, Tepelně tvarované křemíkové plátky pro přesnou rentgenovou optiku, PP 2012 – 17, CZ304312B6.
5. M. Míka, P. Voláková, V. Verner, R. Verner, B. Klápště, O. Jankovský, Způsob zamezení spékání biomasového paliva přídavkem aditiva, PP 2012 – 392, CZ304964B6.
6. O. Jankovský, Z. Sofer, D. Sedmidubský, P. Šimek, Vysokoteplotní termoelektrická baterie ze směsného oxidu kobaltu a nitridu chromitého, PUV 2012 – 25608, CZ23684U1.
7. M. Míka, L. Pína, R. Hudec, R. Havlíková, L. Švéda, O. Jankovský, Tepelně tvarované křemíkové plátky pro přesnou rentgenovou optiku, PUV 2012 – 25473, CZ23543U1.
8. O. Jankovský, Š. Huber, F. Šaněk, Z. Sofer, D. Sedmidubský, Prostorové uspořádání vysokoteplotních termoelektrických modulů pro regeneraci energie, PUV 2012 – 25501, CZ23526U1.
9. O. Jankovský, Z. Sofer, D. Sedmidubský, F. Šaněk, Š. Huber, Vysokoteplotní termoelektrický materiál typu p na bázi směsného oxidu kobaltu a vápníku, PUV 2012 – 25693, CZ23819U1.
10. M. Míka, P. Voláková, V. Verner, R. Verner, B. Klápště, O. Jankovský, Směsné biomasové palivo s přídavkem aditiva, PUV 2012 – 26209, CZ24034U1.
11. M. Míka, P. Voláková, V. Verner, R. Verner, B. Klápště, O. Jankovský, Zařízení ke stanovení eutektické a/nebo kritické teploty biomasového popela, PUV 2012 – 26207, CZ24033U1.
12. M. Míka, P. Voláková, V. Verner, R. Verner, B. Klápště, O. Jankovský, Zařízení pro spalování biomasy s ochrannou vrstvou zamezující nalepování popela na žáruvzdornou vyzdívku spalovacího kotle, PUV 2012 – 26206, CZ24032U1.
13. O. Jankovský, Z. Sofer, D. Sedmidubský, P. Šimek, Termoelektrický materiál $Ca_3Co_{3,93\pm x}O_{9+d}$ typu p o velmi vysoké, PUV 2012 – 27131, CZ25159U1.
14. O. Jankovský, Z. Sofer, D. Sedmidubský, T. Hlásek, Termoelektrický materiál $Bi_{2-x}Sr_2Co_{1,82}O_{7+d}$ typu p o velmi vysoké, PUV 2013 – 27538, CZ25362U1.
15. T. Hlásek, O. Jankovský, V. Bartůněk, J. Plecháček, D. Sedmidubský, V. Plecháček, Keramická podložka z oxidu ytterbitého o vysoké hustotě pro růst monokrystalů YBCO, PUV 2018-35638, CZ32908U1.
16. T. Hlásek, O. Jankovský, V. Bartůněk, J. Plecháček, D. Sedmidubský, V. Plecháček, Monokrystal YBCO s předdefinovanou 3D mikroporozitou, PUV 2018-35639, CZ32909U1.
17. M. Dendisová, V. Bartůněk, K. Dobrovolný, M. Švecová, J. Luxa, K. Skrbek, A. Jiřičková, M. Žák, Z. Vencelides, O. Jankovský, Granulát složený z nanočástic oxidu ceričitého pro čištění vod od halogenovaných organických polutantů, PUV 2018-35758 CZ33386U1
18. V. Bartůněk, O. Jankovský, D. Sedmidubský, K. Skrbek, B. Jurásek, F. Antončík, M. Lojka, Polštářkový filtr pro ochranu před kapénkovou infekcí pro opakované použití, PUV 2020-37569, CZ34528U1
19. O. Jankovský, V. Bartůněk, M. Lojka, F. Antončík, A.-M. Lauermannová, K. Skrbek, I. Faltysová, J. Sklenka, M. Žák, J. Šugár, J. Kozánková, J. Kubíková, Keramický kompozitní dekontaminační filtr povlakovaný nanoobjekty, PUV 2021-38636, CZ35078U1.

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