

## Publications

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### Reviewed articles

**Dziewiątka K.**, Matusik J., Trenczek-Zajac A., Cempura G. (2023) TiO<sub>2</sub>-loaded nanotubular kaolin group minerals: the effect of mineral support on photodegradation of dyes as model pollutants. *Applied Clay Science*, 245, 107123.

Staszek K., Jędras A., Skalny M., **Dziewiątka K.**, Urbański K., Sordyl J., Rybka K., Manecki M. (2023) New synthetic [LREE (LREE = La, Ce, Pr, Sm), Pb]-phosphate phases. *Mineralogia*, vol.54, no.1, 2023, pp.58-68.

**Dziewiątka K.**, Matusik J., Rybka K. (2022) Simultaneous scavenging of As(V) and safranin O dye by Mg/Al LDH-zeolite heterocoagulated materials: the effect of adsorbent synthesis approach on its efficiency in static and dynamic system. *Separation and Purification Technology*, 302, 122072, 1-13.

### Conference materials

**Dziewiątka K.**, Matusik J., Kuc J. (2024) Photodegradation of zearalenone with kaolinite nanotubes-based photocatalysts: mechanisms and pathways. 11th MECC 2024: 11th Mid-European Clay Conference: Pilsen, Czech Republic, September 15–20, 2024.

**Dziewiątka K.**, Matusik J., Herber M., Hill E. H., Cempura G. (2024) Nanotubular photocatalysts based on kaolin group minerals for zearalenone degradation: key electrochemical, structural, and morphological insights. 11th MECC 2024: 11th Mid-European Clay Conference: Pilsen, Czech Republic, September 15–20, 2024

**Dziewiątka K.**, Matusik J., Kuc J., Jędras A., Bartusiak A. (2024) Exploring the mechanisms and pathways of zearalenone mycotoxin photodegradation by kaolinite nanotubes-based composites. ACS Fall 2024 Elevating Chemistry: Denver, August 18-22

**Dziewiątka K.**, Matusik J., Herber M., Hill E. H., Cempura G. (2024) Sustainable kaolinite-supported photoactive materials for enhanced photodegradation of zearalenone: in-depth assessment of physical and electrochemical properties. ACS Fall 2024 Elevating Chemistry: Denver, August 18-22

**Dziewiątka K.**, Matusik J., Cempura G. (2024) Efficient photodegradation of zearalenone: Unraveling the potential of photocatalysts based on kaolin group minerals [abstract]. EGU General Assembly 2024, Vienna, Austria, 15-19 April 2024, <https://doi.org/10.5194/egusphere-egu24-9623>

**Dziewiątka K.**, Matusik J. (2023) TiO<sub>2</sub>-loaded nanotubular materials based on kaolin group minerals as spatially confined nanoreactors for photodegradation of deoxynivalenol, EUROCLAY 2023 International Conference of European Clay Groups Association, Bari, Italy, 24-27 July 2023, pp. 71.

Matusik J., **Dziewiątka K.** (2023) Kaolinite-based nanotubes - current state of knowledge on synthesis, properties and applications. EUROCLAY 2023 International Conference of European Clay Groups Association, Bari, Italy, 24-27 July 2023, pp. 174.

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Matusik J., **Dziewiątka K.**, Cempura, G. (2023) Unraveling the structure-property relationship of adsorbents and photocatalysts derived from 2D layered materials of natural and synthetic origin. SCANDEM 2023, 73rd Annual Meeting, June 12-15, Uppsala, Sweden : Book of Abstracts. pp. 64–65.

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**Dziewiątka K.**, Matusik J. (2023) A comparative photocatalytic study of TiO<sub>2</sub>-loaded nanotubes derived from kaolin group minerals: evaluation of degradation efficiency using dyes as model pollutants. 60th Annual Meeting the Clay Minerals Society, Austin, May 20-25, 2023: Program and Abstracts. pp. 47.

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Matusik J., **Dziewiątka K.** (2023) The effect of synthesis conditions on formation and properties of kaolinite-based nanotubes. 60th Annual Meeting the Clay Minerals Society, Austin, May 20-25, 2023: Program and Abstracts. pp. 138.

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Staszek K., Jędras A., Skalny M., **Dziewiątka K.**, Urbański K., Sordyl J., Rybka K., Majka J.: Impact of Pb<sup>2+</sup> presence on precipitation of REE phosphates (analogs of rhabdophane) from aqueous solutions. EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-8801, <https://doi.org/10.5194/egusphere-egu23-8801>, 2023.

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**Dziewiątka K.**, Matusik J., Rybka K. (2022) Simultaneous removal of As(V) and safranin O dye by Mg/Al LDH-zeolite heterocoagulated materials in static and dynamic conditions. MECC'20/22: 10th Jubilee Mid-European Clay Conference, Kliczków, Poland, September 11-15, 2022: book of abstracts / eds. Górniak, K., Szydłak, T., Sęk, M., Kraków, Wydawnictwo Naukowe „Akapit”, ISBN: 978-83-65955-60-9, 35.

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Rybka K., Matusik J., **Dziewiątka K.**, Giera A., Marzec M. (2022) The characteristics of V(V) and P(V) adsorption by LDH derived from magnesite: kinetics, pH influence and competition with common anions. ICC 2022, AIPEA – XVII International Clay Conference : 25–29 July, 2022, Istanbul, Turkey: scientific research abstracts/eds. Kadir, S. et al. ; The Clay Science Society, The Clay Mineral Society, 213.

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**Dziewiątka K.**, Matusik J., Rybka K. (2022) Hydrotalcite-zeolite hetero-coagulated materials: towards materials with dual adsorption properties. ICC 2022, AIPEA – XVII International Clay Conference : 25–29 July, 2022, Istanbul, Turkey: scientific research abstracts/eds. Kadir, S. et al. ; The Clay Science Society, The Clay Mineral Society, 217.

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Rybka K., Matusik J., **Dziewiątka K.**, Giera A. (2022) As(V) scavenging from artificial and real wastewaters by mineral-derived Mg/Al and Mg/Fe LDH materials. Goldschmidt Conference 2022, 11-15 July 2022, Hawaii, USA: European Association of Geochemistry and of the Geochemical Society.

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Sordyl J., Rybka K., **Dziewiątka K.**, Jędras A., Skalny M., Staszek K., Tomczak A., Urbański K., and Manecki M. (2022) The influence of the synthesis procedure on the morphology of REE-enriched Pb-apatite (pyromorphite). EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-7905, <https://doi.org/10.5194/egusphere-egu22-7905>, 2022.

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Rybka K., Matusik J., **Dziewiątka K.**, Giera A. (2021) Mineral-based adsorbents for wastewater treatment – the kinetics study of Cr(VI) and Se(VI) adsorption in the presence of sulphates and nitrates by Mg/Al and Mg/Fe layered double hydroxides. Sustainable Minerals'21 June 21-24, 2021, online, [Falmouth : MEI Conferences].

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