

Publications

Reviewed articles

2022

Rybka, K., Matusik, J., Marzec, M. (2022) Mg/Al and Mg/Fe layered double hydroxides derived from magnesite and chemicals: The effect of adsorbent features and anions chemistry on their removal efficiency. *Journal of Cleaner Production*, 332, 130084.

Matusik, J., Koteja-Kunecka, A., Maziarz, P., Kunecka, A. (2022) Styrene removal by surfactant-modified smectite group minerals: efficiency and factors affecting adsorption/desorption. *Chemical Engineering Journal*, 428, 13084, 1-10.

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Rybka, K., Matusik, J., Slaný, M. (2021) Technical aspects of selected minerals transformation to LDH-containing materials: The structure, chemistry and affinity towards As(V). *Journal of Environmental Chemical Engineering*, 9 (6), 106792.

Wójcik-Bania, M., Matusik, J. (2021) The effect of surfactant-modified montmorillonite on the cross-linking efficiency of polysiloxanes. *Materials*, 14 (10), 2623, 1-16.

Gogoi, H., Zhang, R., Matusik, J., Leiviskä, T., Rämö, J., Tanskanen, J. (2021) Vanadium removal by cationized sawdust produced through iodomethane quaternization of triethanolamine grafted raw material. *Chemosphere*, 278, 130448, 1-9.

Rybka, K., Matusik, J., Kuligiewicz, A., Leiviskä, T., Cempura G. (2021) Surface chemistry and structure evaluation of Mg/Al and Mg/Fe LDH derived from magnesite and dolomite in comparison to LDH obtained from chemicals. *Applied Surface Science*, 538, 147923.

Matusik, J. (2021) Special issue: Layered Double Hydroxides (LDH) and LDH-based hybrid composites, *Materials*, ISSN 1996-1944, vol. 14 iss. 10 art. no. 2582, s. 1-3.

Wójcik-Bania M. (2021) Influence of the addition of organo-montmorillonite nanofiller on cross-linking of polysiloxanes – FTIR studies. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 252, 119491

Gawel R., Rogal Ł., Dąbek J., Wójcik-Bania M., Przybylski K. (2021) High temperature oxidation behaviour of non-equimolar AlCoCrFeNi high entropy alloys. *Vacuum*, 184, 109969.

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Matusik, J., Deng, Y. (2020) Fumonisin B1 interaction with Mg–Al and Mg–Fe layered double hydroxides: removal efficiency and mechanisms. *Materials*, 13 (19), 4344.

Mrówka, M., Szymiczek, M., Machoczek, T., Lenża, J., Matusik, J., Sakiewicz, P., Skonieczna, M. (2020) The influence of halloysite on the physicochemical, mechanical and biological properties of polyurethane-based nanocomposites. *Polymers/Polimery*, 65, (11-12), 784-791.

Drzewicz, P., Naglik, B., Natkaniec-Nowak, L., Dumańska-Słowik, M., Stach, P., Kwaśny, M., Matusik, J., Milovský, R., Skonieczny, J., Kubica-Bąk, D. (2020) Chemical and spectroscopic signatures of resins from Sumatra (Sarolangun mine, Jambi Province) and Germany (Bitterfeld, Saxony-Anhalt). *Scientific Reports (ISSN 2045-2322)*, 10, 18283.

Walczyk A., Karcz R., Kryściak-Czerwenka J., Napruszewska B. D., Duraczyńska D., Michalik A., Olejniczak Z., Tomczyk A., Klimek A., Bahranowski K., Serwicka E. M. (2020) Influence of dry milling on phase transformation of sepiolite upon alkali activation: implications for textural, catalytic and sorptive properties. *Materials (ISSN 1996-1944)*, 13 (18), 3936.

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Wójcik-Bania M, Stochmal E., Duraczyńska D. (2020) Silver nanoparticles deposited on polysiloxane networks as active catalysts in dye degradation. *Journal of Applied Polymer Science*, 137, e49170.

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Maziarz, P., Matusik, J., Radziszewska, A. (2019) Halloysite/zero-valent iron nanocomposites for removal of Pb(II)/Cd(II) and As(V)/Cr(VI): Competitive effects, regeneration possibilities and mechanisms. *Journal of Environmental Chemical Engineering*, 103507 (1-11).

Koteja, A., Matusik, J. (2019) Preparation of azobenzene-intercalated kaolinite and monitoring of the photoinduced activity. *Clay Minerals*, 54, 57–66.

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Maziarz, P., Matusik, J., Leiviskä, T., Strączek, T., Kapusta, C., Woch, W.M., Tokarz, W., Górniak, K. (2019) Toward highly effective and easily separable halloysite-containing adsorbents: the effect of iron oxide particles impregnation and new insight into As(V) removal mechanisms. *Separation and Purification Technology*, vol. 210, s. 390–401.

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