

Somnath Sinhamahapatra

Complete list of publications

List of papers

- [1] P. Das, S. Sinhamahapatra, K. Dana, S. Mukhopadhyay, Improvement of thermal conductivity of carbonaceous matrix in monolithic $\text{Al}_2\text{O}_3\text{-C}$ refractory composite by surface-modified graphites, *Ceramics International*, 46 (2020) 29173-29181.
- [2] C. Ghosh, S. Sinhamahapatra, H.S. Tripathi, U. Sarkar, Reverse flotation of natural magnesite and process optimization using response surface methodology, *Transaction of Indian Ceramic Society*, 79 (2020) 23-29.
- [3] S. Sinhamahapatra, K. Dana, S. Mukhopadhyay, H.S. Tripathi, Role of different rare earth oxides on the reaction sintering of magnesium aluminate spinel, *Ceramics International*, 45 (2019) 11413-11420.
- [4] C. Ghosh, S. Sinhamahapatra, H.S. Tripathi, Effect of ZrO_2 on the densification behavior and properties of Indian magnesite, *International Journal of Applied Ceramic Technology*, 16 (2019) 410-417.
- [5] S. Sinhamahapatra, K. Dana, H.S. Tripathi, Enhancement of reaction-sintering of alumina-excess magnesium aluminate spinel in presence of titania, *Ceramics International*, 44 (2018) 10773-10780.
- [6] M. Shamim, S. Sinhamahapatra, J. Hossain, S. Lahiri, K. Dana, Kinetic analysis of magnesium aluminate spinel formation: Effect of $\text{MgO}:\text{Al}_2\text{O}_3$ ratio and titania dopant, *Ceramics International*, 44 (2018) 1868-1874.
- [7] C. Ghosh, S.K. Singh, S. Sinhamahapatra, Fused magnesia aggregate from Indian magnesite through plasma processing, *Indoceram of AIPMA*, 4 (2017) 33-36.
- [8] S. Sinhamahapatra, H.S. Tripathi, A. Ghosh, Densification and properties of magnesia-rich magnesium-aluminate spinel derived from natural and synthetic raw materials, *Ceramics International*, 42 (2016) 5148-5152.
- [9] S. Sinhamahapatra, M. Shamim, H.S. Tripathi, A. Ghosh, K. Dana, Kinetic modelling of solid state magnesium aluminate spinel formation and its validation, *Ceramics International*, 42 (2016) 9204-9213.
- [10] M. Nath, P. Kumar, A.V. Maldhure, S. Sinhamahapatra, K. Dana, A. Ghosh, H.S. Tripathi, Anomalous densification behavior of $\text{Al}_2\text{O}_3\text{-Cr}_2\text{O}_3$ system, *Materials Characterization*, 111 (2016) 8-13.

- [11] S. Lahiri, S. Sinhamahapatra, H.S. Tripathi, K. Dana, Rationalizing the role of magnesia and titania on sintering of alpha-alumina, *Ceramics International*, 42 (2016) 15405-15413.
- [12] S. Sinhamahapatra, K. Dana, A. Ghosh, V.P. Reddy, H.S. Tripathi, Dynamic thermal study to rationalise the role of titania in reaction sintering of magnesia-alumina system, *Ceramics International*, 41 (2015) 1073-1078.
- [13] S. Sinhamahapatra, S. Duttagupta, S.N. Misra, Thermal behaviour of clay minerals of Indian origin, *Indoceram of AIPMA*, 3 (2015) 41-43.
- [14] M. Nath, V.P. Reddy, S. Sinhamahapatra, A. Ghosh, H.S. Tripathi, K. Dana, Effect of Alumina Reactivity on the Densification and Properties of Al_2O_3 - Cr_2O_3 Refractories, *International Journal of Applied Ceramic Technology*, 12 (2015) 608-613.
- [15] P. Kumar, Burhanuddin, A. Kumar, A. Ghosh, S. Sinhamahapatra, H.S. Tripathi, Effect of titania on the microstructure evolution of sintered magnesite in correlation with its properties, *Ceramics International*, 41 (2015) 9003-9008.
- [16] Burhanuddin, A. Kumar, P. Kumar, A. Ghosh, S. Sinhamahapatra, H.S. Tripathi, Effect of zirconia on densification and properties of natural Indian magnesite, *International Journal of Mineral Processing*, 144 (2015) 40-45.
- [17] K. Dana, S. Sinhamahapatra, H.S. Tripathi, A. Ghosh, Refractories of Alumina-Silica System, *Transactions of the Indian Ceramic Society*, 73 (2014) 1-13.
- [18] S. Sinhamahapatra, S.K. Das, Some Studies on Dehydroxylation-Rehydration Phenomenon of Kaolin of Indian Origin, *Cfi-Ceramic Forum International*, 90 (2013) E29-+.

Conference papers/ posters

- [1] S. Sinhamahapatra, K. Dana, S. Mukhopadhyay, H.S. Tripathi, "Reaction sintering of alumina-rich magnesium aluminate spinel: Effect of additives", National Seminar on "Propelling Innovations in Glass And Ceramics For Atmanirbhar Bharat", Kolkata, 2020.
- [2] C. Ghosh, S. Sinhamahapatra, U. Sarkar, H.S. Tripathi, "Studies on Salem magnesite in terms of phase modification and beneficiation", National Seminar on "Propelling Innovations in Glass and Ceramics for Atmanirbhar Bharat", Kolkata, 2020.
- [3] V.P.Reddy, P. Kumar, S. Sinhamahapatra, H.S. Tripathi, "Value added refractory aggregate from Indian bauxite through phase modification", 23rd International Conference on Non-ferrous Minerals & Metals-2019, The Lalit Great Eastern, Kolkata, 2019.
- [4] H.S. Tripathi, S. Das, P. Mukherjee, A. Nandy, S. Chakraborty, S. Sinhamahapatra, K. Dana, A. Ghosh, "Development of dry ramming mass for induction furnace enabling refining of steel", India International Refractories Congress 2018 (IREFCON, 18), New Delhi, 2018.

- [5] H.S. Tripathi, S. Sinhamahapatra, A. Ghosh, "High alumina aggregate for high temperature structural applications from Indian natural minerals ", International Conference on Alumina and Other Functional Ceramics (AOFC-2017), Kolkata, 2017
- [6] S. Sinhamahapatra, V.P. Reddy, B. Singh, A. Ghosh, H.S. Tripathi, "Alumina-spinel fired brick: Effect of aggregates", 5th International Conference on Refractories at Jamshedpur, ICRJ'17, Jamshedpur, India, 2017.
- [7] C. Ghosh, A. Ghosh, H.S. Tripathi, S. Sinhamahapatra, "Plasma assisted preparation of fused magnesium aluminate spinel from Indian magnesite", International Conference on Alumina and Other Functional Ceramics (AOFC-2017), Kolkata, 2017.
- [8] S. Chattopadhyay, S.N. Babu, S. Sinhamahapatra, "Development of cored refractory shapes for air heater of hypersonic wind tunnel", International Conference on Alumina and Other Functional Ceramics (AOFC-2017), Kolkata, 2017.
- [9] S. Sinhamahapatra, H.S. Tripathi, A. Ghosh, "Comparative evaluation of magnesium aluminate spinel aggregate synthesised from Indian natural magnesite and synthetic raw material", India International Refractories Congress 2016 (IREFCON-2016), Hyderabad, 2016.
- [10] C. Ghosh, S. Pasari, S.K. Singh, A. Ghosh, S. Sinhamahapatra, "Plasma fused magnesia refractory aggregates from Indian natural magnesite", India International Refractories Congress 2016 (IREFCON-2016), Hyderabad, 2016.
- [11] C. Ghosh, S. Pasari, A. Ghosh, S. Sinhamahapatra, "Plasma fused magnesium aluminate spinel from Indian natural magnesite", ICAET-2016, Kolkata, 2016.
- [12] H.S. Tripathi, S. Sinhamahapatra, A. Ghosh, "Indian bauxite: How processing can improve its high temperature properties", 1st International Conference on Alumina and Other Functional Ceramics (AOFC-2015), Kolkata, 2015.
- [13] A. Ghosh, S. Sinhamahapatra, M.K. Haldar, H.S. Tripathi, S.K. Das, "Refractory research & development scenario in India", India International Refractory Congress (IREFCON-2014), Kolkata, 2014.
- [14] K. Dana, S. Sinhamahapatra, H.S. Tripathi, V.P. Reddy, A. Ghosh, "Dynamic evaluation of reaction sintering in MgO-Al₂O₃ system: Effect of stoichiometry and additive", Advances In Refractory Raw Materials And Monolithic (ARMM 2013), Kolkata, 2013.
- [15] S. Sinhamahapatra, S.N. Misra, "Simultaneous DTA and TGA of clay minerals and talc for its implication in traditional ceramic industries", 75th Annual Session of Indian Ceramic Society, Agra, 2011.

- [16] S. Sinhamahapatra, B.B. Machhoya, R.M. Savsani, S.N. Misra, "Technology upgradation and development of terracotta cluster in Wankaner, Gujarat state – implemented by CGCRI, Naroda Centre, Ahmedabad", National Seminar on Recent Advances in Traditional Ceramics, 73rd Annual Session of Indian Ceramic Society, Trivandrum, 2009
- [17] S.D. Majumdar, S. Sinhamahapatra, S. Chitwadgi, M.R. Kulkarni, A.K. Kaviraj, "Utilization of industrial wastes for manufacturing of ceramic tiles", National Seminar on Pollution and Waste Management in Ceramic and Allied Industries (PWMCAI 2003) Rourkela, 2003.