

Complete List of publications

Journal papers

1. K. Dana, Sk. A. Rakib, S. Sinhamahapatra, Effect of oxide additives on densification of terracotta, *Applied Clay Science*, 245 (2023) 107147.
2. S. Sinhamahapatra, P. Das, K. Dana, H.S. Tripathi, Magnesium Aluminate Spinel: Structure, Properties, Synthesis and Applications, *Transactions of the Indian Ceramic Society*, 81 (2022) 97-120.
3. S. Sinhamahapatra, C. Ghosh, H.S. Tripathi, S. Mukhopadhyay, Effect of Yb_2O_3 and TiO_2 on reaction sintering and properties of magnesium aluminate spinel, *Ceram. Int.*, 47 (2021) 27372-27385.
4. C. Ghosh, S. Sinhamahapatra, H.S. Tripathi, U. Sarkar, Reverse flotation of natural magnesite and process optimization using response surface methodology, *Transactions of the Indian Ceramic Society*, 79 (2020) 23-29.
5. 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.
6. 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.
7. 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.
8. 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.
9. C. Ghosh, S.K. Singh, S. Sinhamahapatra, Fused magnesia aggregate from Indian magnesite through plasma processing, *Indoceram of AIPMA*, 4 (2017) 33-36.
10. 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.

11. 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.
12. 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.
13. 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.
14. 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.
15. S. Sinhamahapatra, S. Duttagupta, S.N. Misra, Thermal behaviour of clay minerals of Indian origin, *Indoceram of AIPMA*, 3 (2015) 41-43.
16. M. Nath, V.P. Reddy, S. Sinhamahapatra, A. Ghosh, H.S. Tripathi, K. Dana, Effect of Alumina Reactivity on the Densification and Properties of $\text{Al}_2\text{O}_3\text{-Cr}_2\text{O}_3$ Refractories, *International Journal of Applied Ceramic Technology*, 12 (2015) 608-613.
17. 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.
18. 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.
19. K. Dana, S. Sinhamahapatra, H.S. Tripathi, A. Ghosh, Refractories of Alumina-Silica System, *Transactions of the Indian Ceramic Society*, 73 (2014) 1-13.
20. S. Sinhamahapatra, S.K. Das, Some Studies on Dehydroxylation-Rehydration Phenomenon of Kaolin of Indian Origin, *CFI-Ceramic Forum International*, 90 (2013) E29-+.

Paper/ poster presentations:

1. A. Konar, B. Haldar, S. Chakraborty, M. Adhikary, S. Sinhamahapatra, H.S. Tripathi, P.S. Kongar, P. Dasari, C. Selvaraj, Preparation and Corrosion Study of Refractory Pot for SLS Glass Melting, International conference on exploring the emerging world of ceramics & glass, CSIR-CGCRI, Kolkata & The Indian Ceramic Society, 2023.
2. P. Das, S. Sinhamahapatra, V.P. Reddy, H.S. Tripathi, Effect of Nano Carbon Sources on the Thermal, Mechanical, and Thermo-Mechanical Properties of Low Carbon MgO-C Refractory, International conference on exploring the emerging world of ceramics & glass, CSIR-CGCRI, Kolkata & The Indian Ceramic Society, Kolkata, 2023.
3. S. Sinhamahapatra, K. Dana, V.P. Reddy, H.S. Tripathi, Evolution of the Non-Stoichiometric Spinel Phase During Reaction Sintering of MgO-Al₂O₃ System, International conference on exploring the emerging world of ceramics & glass, CSIR-CGCRI, Kolkata & The Indian Ceramic Society, Kolkata, 2023.
4. S. Sinhamahapatra, V.P. Reddy, S. Pasari, K. Dana, H.S. Tripathi, Refractory raw materials: Problems and prospects, REFIS 4.0 International Conference on Future of Refractories in Iron & Steel Industries Indian Institute of Metals, Bokaro Chapter, Bokaro Steel City, India, 2022, pp. 7-13.
5. V.P. Reddy, G. Debnath, P. Das, S. Sinhamahapatra, K. Dana, H.S. Tripathi, Magnesia based basic ramming mass for quality steel production in induction furnace, 14th India International Refractories Congress (IREFCON 2022), Indian Refractory Makers Association, Kolkata, India, 2022.
6. C. Ghosh, S. Sinhamahapatra, H.S. Tripathi, Beneficiation of Indian magnesite using reverse flotation: Optimization of process parameters using RSM, 14th India International Refractories Congress (IREFCON 2022), Indian Refractory Makers Association, Kolkata, India, 2022.
7. K.H. Shaikh, C. Ghosh, K. Dana, S. Sinhamahapatra, H.S. Tripathi, Reaction sequence of the system Al-O-Si-N-C, International Virtual Conference on "Advances in Ceramics & Cement Technologies: Materials & Manufacturing- IvaCCT, Indian Ceramic Society, Karnataka Chapter, Kalaburagi, India, 2021.
8. 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”, Indian Ceramic Society, Kolkata Chapter & CSIR-CGCRI, Kolkata, Kolkata, 2020.
9. 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”, Indian Ceramic Society, Kolkata Chapter & CSIR-CGCRI, Kolkata, Kolkata, 2020.
 10. 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.
 11. 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.
 12. 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.
 13. 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.
 14. 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.
 15. 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.
 16. 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.
 17. C. Ghosh, S. Pasari, A. Ghosh, S. Sinhamahapatra, "Plasma fused magnesium aluminate spinel from Indian natural magnesite", ICAET-2016, Kolkata,2016.

18. 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.
19. 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.
20. 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.
21. 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 the Indian Ceramic Society, Agra,2011.
22. 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
23. 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.

Book Chapter

1. A. Ghosh, S. Sinhamahapatra, H.S. Tripathi, Refractories as Advanced Structural Materials for High Temperature Processing Industries, in: D. Bhattacharjee, S. Chakrabarti (Eds.) Future Landscape of Structural Materials in India, Springer Nature, Singapore, India, 2022, pp. 279-292.