

Paper published in Journals

1. Development of Mullite Based Refractory Pot for High Lead Containing Glass Melting, S. Nag, S. Jana, M. Adhikary, S. Barik, A. Roy Chowdhury, S. Ghorui, B. Haldar, A. Ghosh, **H. S. Tripathi** and S. Mandal, *Tr. In. Ceram. Soc.* (Accepted). [**Impact Factor – 0.952**]
2. Reverse Flotation of Natural Magnesite and Process Optimization Using Response Surface Methodology, Chandrima Ghosh, Somnath Sinhamahapatra, **H S Tripathi** & Ujjaini Sarkar, *Tr. In. Ceram. Soc.* **79(1)** 23-29 (2020). [**Impact Factor – 0.952**]
3. Thermo-mechanical stability of bulk $(\text{Al}_{1-x}\text{Cr}_x)_2\text{O}_3$ solid solution, M. Nath, P. Kumar, S. Song, Y. Li, **H. S. Tripathi**, *Ceram. Int.* **45(9)**, 12411-12416 (2019) [**Impact Factor – 3.830**]
4. Effect of ZrO_2 on the densification behavior and properties of Indian magnesite, C. Ghosh, S. Sinhamahapatra & **H.S. Tripathi**, *Int. J. Appl. Ceram. Technol.* **16** (1), 410-417 (2019) [**Impact Factor – 1.762**]
5. Role of different rare earth oxides on the reaction sintering of magnesium aluminate spinel, S. Sinhamahapatra, K. Dana, S. Mukhopadhyay, **H.S.Tripathi**, *Ceram. Int.* **44**, 12411-12416 (2019) [**Impact Factor – 3.830**]
6. Enhancement of reaction-sintering of alumina-excess magnesium aluminate spinel in presence of titania, S. Sinhamahapatra, K. Dana, **H.S. Tripathi**, *Ceram. Int.* **44**, 10773-10780 (2018) [**Impact Factor – 3.830**]
7. Improvement in thermo-mechanical properties of off-grade natural magnesite by addition of Y_2O_3 , P. Kumar, M. Nath, U. Roy, A. Ghosh & **H. S. Tripathi**, *Int. J. Appl. Ceram. Technol.*, **14**, 1197–1205 (2017) [**Impact Factor - 1.762**]
8. Rationalizing the role of magnesia and titania on sintering of α -alumina; S. Lahiri; S. Sinhamahapatra; **H. S. Tripathi**; K. Dana, *Ceram. Int.* **42**, 15405-15413 (2016) [**Impact Factor – 3.830**]
9. Study of densification behaviour, microstructure Vis-À-Vis high temperature properties of commercially available Indian magnesites, P. Kumar, A. Ghosh & **H. S. Tripathi**, *Tr. Ind. Ceram. Soc.* **75(4)** 250-255 [**Impact Factor – 0.952**]
10. Kinetic modelling of solid state magnesium aluminate spinel formation and its validation, S. Sinhamahapatra; M. Samim; **H. S. Tripathi**; A. Ghosh and K. Dana, *Ceram. Int.* **42(7)**, 9204-9213 (2016) [**Impact Factor - 3.830**]
11. Thermo-mechanical properties of mullite-zirconia composites derived from reaction sintering of zircon and sillimanite beach sand: Effect of CaO, P. Kumar, M. Nath, A. Ghosh and **H. S. Tripathi**, *Transactions of Nonferrous Metals Society of China*, **26(9)**, 2397-2403 (2016) [**Impact Factor – 2.615**]
12. Densification and properties of magnesia-rich magnesium-aluminate spinel derived from natural and synthetic raw materials, S. Sinhamahapatra, **H. S. Tripathi** & Arup Ghosh, *Ceram. Int.* **42(4)**, 5148-5152 (2016) ([doi:10.1016/j.ceramint.2015.12.035](https://doi.org/10.1016/j.ceramint.2015.12.035)) [**Impact Factor - 3.830**]
13. Anomalous densification behavior of $\text{Al}_2\text{O}_3-\text{Cr}_2\text{O}_3$ system, M. Nath, P. Kumar, A.V. Maldhere, S. Sinhamahapatra, K. Dana, A. Ghosh & **H.S. Tripathi**, *Mater. Charact.* **111**, 8-13 (2016) [**Impact Factor – 3.562**]
14. Hot corrosion behaviour of $\text{Al}_2\text{O}_3-\text{Cr}_2\text{O}_3$ refractory by molten glass at 1200°C under static condition, M. Nath, A. Ghosh & **H. S. Tripathi**, *Corrosion Science*. **102**, 153-160 (2016) ([10.1016/j.corsci.2015.10.004](https://doi.org/10.1016/j.corsci.2015.10.004)). [**Impact Factor – 6.479**]
15. Some aspects of recent refractory research in India, A. V. Maldhere, **H. S. Tripathi**, A. Ghosh, *Refractories Worldforum*, **7(4)**, 49-56 (2015).
16. Effect of titania on the microstructure evolution of sintered magnesite in correlation with its properties, P. Kumar, Burhanuddin, A. Kumar, A. Ghosh, S. Sinhamahapatra & **H. S. Tripathi**, *Ceram. Int.* **41(7)**, 9003–9008, (2015). [**Impact Factor -3.830**]
17. Effect of zirconia on densification and properties of natural Indian magnesite, Burhanuddin, A. Kumar, P. Kumar, A. Ghosh, S. Sinhamahapatra & **H. S. Tripathi**, *Int. J. of Mineral Processing*, **144(10)**, 40–45 (2015). [**Impact Factor – 2.255**]

18. Enhancement of thermal shock resistance of reaction sintered mullite-zirconia composites in the presence of lanthanum oxide Materials Characterization, P. Kumar, M. Nath, A. Ghosh and **H. S. Tripathi**, *Mater. Charact.* **101**, 34–39 (2015). [**Impact Factor – 3.562**]
19. Synthesis and characterization of mullite-zirconia composites by reaction sintering of zircon flour and sillimanite beach sand, P. Kumar, M. Nath, A. Ghosh and **H. S. Tripathi**, *Bull. Mater. Sci.* **38(6)**, 1539-1544 (2015). [**Impact Factor – 1.392**]
20. Thermo-mechanical behavior of $\text{Al}_2\text{O}_3\text{-Cr}_2\text{O}_3$ refractories: Effect of TiO_2 , M. Nath and **H. S. Tripathi**, *Ceram. Int.*, **41(2B)**, 3109-3115 (2015) [**Impact Factor - 3.830**]
21. Mechanical properties of mullite–corundum composites prepared from bauxite, A. V. Maldhure, **H. S. Tripathi** and A. Ghosh, *Int. J. Appl. Ceram. Technol.*, **12(4)**, 860-866 (2015). [**Impact Factor - 1.762**]
22. Dynamic thermal study to rationalize the role of titania in reaction-sintering of magnesia-alumina system, S. Sinhamahapatra, K. Dana, A. Ghosh, V. P. Reddy and **H. S. Tripathi**, *Ceram. Int.*, **41(1B)**, 1073-1078 (2015) [**Impact Factor – 3.830**]
23. Studies on densification, mechanical, microstructural and structure–properties relationship of refractory aggregates prepared from Indian magnesite by changing lime–silica ratio, C. Ghosh, A. Ghosh, **H.S. Tripathi**, J. Ghosh, M.K. Haldar, *Ceram. Int.*, **40(10)**, 16791-798 (2014) [**Impact Factor – 3.830**]
24. Effect of alumina reactivity on the densification and properties of $\text{Al}_2\text{O}_3\text{-Cr}_2\text{O}_3$ refractories, M. Nath, V. P. Reddy, S. Sinhamahapatra, K. Dana, A. Ghosh, and **H. S. Tripathi**, *Int. J. Appl. Ceram. Technol.* **12 [3]**, 608–613 (2015). [**Impact Factor -1.762**]
25. Mullite-corundum composites from bauxite: Effect of chemical composition, Atul V. Maldhure, **H. S. Tripathi**, A. Ghosh and S. K. Das, *Tr. In. Ceram. Soc.* **73(1)** 31-36 (2014). [**Impact Factor – 0.952**]
26. Refractories of alumina-silica System, K. Dana, S. Sinhamahapatra, **H. S. Tripathi** and A. Ghosh, *Tr. In. Ceram. Soc.* **73(1)** 1-13 (2014). [**Impact Factor – 0.952**]
27. The influence of metallic antioxidants on some critical properties of magnesia-carbon refractories, P. Ray, A. Ghosh, V. P. Reddy, S. Jena, J. Ghosh, **H. S. Tripathi**, S. K. Das, A. K. Rama Rao, M. K. Haldar, *Refractories Worldforum*, **5(4)**, 69-74 (2013).
28. Raw material strategy for self sufficiency of India, G. Banerjee & **H. S. Tripathi**, *Ceramic Forum International*, **90(11-12)**, E32-E38 (2013) [**Impact Factor 0.179**]
29. Densification behaviour and properties of alumina-chrome ceramics: Effect of TiO_2 , Mithun Nath, Sandipan Sen, K. Banerjee, A. Ghosh & **H.S. Tripathi**, *Ceram. Int.* **39(1)** 227-32 (2013) [**Impact Factor – 3.830**]
30. Hot corrosion behavior of slip-cast alumina-chrome refractory crucible against molten glass, Mithun Nath, K. Dana, S. Gupta & **H.S. Tripathi**, *J. Mater. Corros.* **65(7)** 742-47 (2014) [**Impact Factor 1.259**]
31. Raw Materials strategy for self-sufficiency of India, G. Banerjee & **H S Tripathi**, *Ceramic Forum International*, **90** 51-54 (2013) [**Impact Factor – 0.179]**
32. Microstructure and properties of sintered mullite developed from Indian bauxite, **H.S. Tripathi**, A. Ghosh, M. K. Halder, B. Mukherjee & H.S. Maiti, *Bull. Mater. Sci.* **35(4)** 639–643 (2012) [**Impact Factor – 1.392**]
33. Sintering behavior and hydration resistance of reactive dolomite, A. Ghosh & **H. S. Tripathi**, *Ceram. Int.* **38** 1315-18 (2012) [**Impact Factor – 3.830**]
34. Spinelisation and properties of $\text{Al}_2\text{O}_3\text{-MgAl}_2\text{O}_4\text{-C}$ refractories: Effect of MgO and Al_2O_3 , **H. S. Tripathi** & A. Ghosh, *Ceram. Int.* **36(4)** 1189-92 (2010) [**Impact Factor – 3.830**]
35. Synthesis and densification behaviour of magnesium aluminate spinel: Effect of Dy_2O_3 , **H. S. Tripathi**, S. Singla & A. Ghosh, *Ceram. Int.* **35(6)** 2541-44 (2009) [**Impact Factor - 3.830**]
36. Sintered mullite from aluminous ore for refractory application, **H. S. Tripathi**, S. K. Das, B. Mukherjee & A. Ghosh, *Am. Ceram. Soc. Bull.* **86(5)** 9301-04 (2007). [**Impact Factor – 0.980**]
37. Synthesis and densification of lutetium pyrosilicate from lutetia and silica, **H. S. Tripathi** & V. K. Sarin, *Mat.*

Res. Bull. **42** 197-202 (2007). [**Impact Factor – 4.019**]

38. Densification and properties of lime in presence of an additive V_2O_5 , A. Ghosh, T. K. Bhattacharya, S. Maiti, B. Mukherjee **H. S. Tripathi & S. K. Das**, Ceram. Int. **30(6)** 2117-20 (2004). [**Impact Factor – 3.830**]
39. Reaction Sintering of different spinel compositions in presence of Y_2O_3 , R. Sarkar, **H. S. Tripathi**, A. Ghosh, Mater. Lett. **58(16)** 2186-91 (2004). [**Impact Factor – 3.204**]
40. Kinetics of Non-Isothermal decomposition of limestone, **H. S. Tripathi**, A. Ghosh & B. Mukherjee, Tr. In. Ceram. Soc. **63(3)** 155-58 (2004). [**Impact Factor – 0.952**]
41. Effect of compositional variation on the synthesis of magnesite-chrome composite refractories, M. K. Halder, **H. S. Tripathi**, S. K. Das & A. Ghosh, Ceram. Int. **30** 911-15 (2004). [**Impact Factor – 3.830**]
42. Development of sintered mullite from off grade sillimanite, **H. S. Tripathi**, A. Ghosh, B. Mukherjee & S. K. Das, Ind. Ceram. **24(1)** 35-38 (2004) [**Impact Factor – 0.173**]
43. Effect of Fe_2O_3 on densification and properties of lime, A. Ghosh, T. K. Bhattacharya, B. Mukherjee, **H. S. Tripathi & S. K. Das**, Ceramics-Silikaty. **47(2)** 70-74 (2003). [**Impact Factor – 0.820**]
44. Solid state sintering of lime in presence of La_2O_3 and CeO_2 , T. K. Bhattacharya, A. Ghosh, **H. S. Tripathi & S. K. Das**, Bull. Mater. Sci. **26(7)** 703-6 (2003) [**Impact Factor – 1.392**]
45. Synthesis and densification of magnesium aluminate spinel: Effect of MgO reactivity, **H. S. Tripathi**, B. Mukherjee, S. Das, M. K. Halder, S. K. Das & A. Ghosh, Ceram. Int. **29(8)** 915-18 (2003) [**Impact Factor – 3.830**]
46. Effect of sillimanite beach sand composition on mullitisation and properties of $Al_2O_3-SiO_2$ system, **H. S. Tripathi**, B. Mukherjee, S. K. Das, A. Ghosh & G. Banerjee, Bull. Mater. Sci., **26(7)** 217-20 (2003) [**Impact Factor – 1.392**]
47. Effect of alumina reactivity on the densification of reaction sintered non-stoichiometric spinel, R. Sarkar, S. Chatterjee, B. Mukherjee, **H. S. Tripathi**, M. K. Halder, S. K. Das & A. Ghosh, Ceram. Int., **29(2)** 195-98 (2003). [**Impact Factor – 3.830**]
48. Synthesis and thermo-mechanical properties of mullite-alumina composite derived from sillimanite beach sand: Effect of ZrO_2 , **H. S. Tripathi**, S. K. Das, B. Mukherjee, A. Ghosh & G. Banerjee, Ceram. Int., **27** 833-37 (2001) [**Impact Factor – 3.830**]
49. The effect of ZnO addition on the densification and properties of magnesium aluminate spinel, A. Ghosh, S. K. Das, J. R. Biswas, **H. S. Tripathi & G. Banerjee**, Ceram. Int., **26**, 605-608 (2000). [**Impact Factor – 3.830**]
50. Thermal shock behaviour of high alumina aggregates derived from sillimanite beach sand with and without Fe_2O_3 doping, **H. S. Tripathi**, S. K. Das & G. Banerjee, Ceram. Int., **26** 1-6 (2000). [**Impact Factor – 3.830**]
51. Effect of chemical composition on sintering and properties of $Al_2O_3-SiO_2$ system derived from sillimanite beach sand, **H. S. Tripathi & G. Banerjee**, Ceram. Int., **25** 19-25 (1999). [**Impact Factor – 3.830**]
52. Sintering of beach sand sillimanite: Effect of ZrO_2 , **H. S. Tripathi & G. Banerjee**, Industrial Ceramics, **19** 13-16 (1999). [**Impact Factor – 0.173**]
53. Synthesis and mechanical properties of mullite from beach sand sillimanite: Effect of TiO_2 , **H. S. Tripathi & G. Banerjee**, J. Eur. Ceram. Soc., **18** 2081-87 (1998). [**Impact Factor – 4.495**]
54. Synthesis and mechanical properties of mullite developed from beach sand sillimanite: Effect of Fe_2O_3 , **H. S. Tripathi & G. Banerjee**, Tr. Ind. Ceram. Soc., **57** 137-40 (1998). [**Impact Factor – 0.952**]
55. Effect of compaction on the kinetics of thermal dehydroxylation of fire clay, N. K. Mitra, **H. S. Tripathi & S. Maitra**, J. Ind. Chem. Soc., **70**, 507-10 (1993). [**Impact Factor – 0.204**]