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**Areas of interest:**

Solid Oxide Fuel Cells, Transparent Ceramics, Powder Characterization, Extrusion Processing, Rheology, Chemical Vapour Deposition, Hot Isostatic Pressing, Impedance analysis, Porous Ceramics, High power polycrystalline laser ceramics

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**List of Publications**

1. New GO Mesoporous-SiO<sub>2</sub> hybrid composites and its dielectric properties with frequency and temperature  
K Santosh Kumar, Himadri Mehdi, Dhiman Banik, **M Buchi Suresh**, Pramod H Borse, Pradip Paik  
J. of Materials Chemistry and Physics 230 (2019) 337-346
2. Synthesis of graphene oxide and reduced graphene oxide using volumetric method by a novel approach without NaNO<sub>2</sub> or NaNO<sub>3</sub>  
Rajitha Gunda, **Buchi Suresh Madireddy** & Raj Kishora Dash  
Applied Nano science 8 (2018) 751-758
3. Colossal dielectric, relaxor ferroelectric, diamagnetic and weak ferromagnetic properties of NdCrO<sub>3</sub> perovskite nanoparticles  
Shanker J, **M Buchi Suresh**, D Suresh Babu  
Journal of Materials Science 54 (2018) 5595-5604
4. Effect of Ca<sup>+2</sup> addition on the properties of Ce<sub>0.8</sub>Gd<sub>0.2</sub>O<sub>2-delta</sub> for IT-SOFC

- Koteswararao P, **M Buchi Suresh**, Wani BN, PV. Bhaskara Rao, Varalaxmi P  
Materials Science and Engineering 330 (2018) 012010
5. Effect of Sm and Na substitution on dielectric properties of SrBi<sub>4</sub>Ti<sub>4</sub>O<sub>15</sub>  
U. Ravikiran, P. Sarah, **M. Buchi Suresh** & Elizabeth Zacharias  
Ferroelectrics 537 (2018) 237-245
  6. Synthesis, structural and morphological studies of Sr<sup>2+</sup> and Gd<sup>3+</sup> co-doped Ceria electrolyte system for LT-SOFC  
Koteswararao P, **Suresh MB**, Wani BN, Rao PVB, Jadhav LD  
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  7. Development of Cordierite based Reticulated Foams with Improved Mechanical Properties for Porous Burner Applications  
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  8. High temperature dielectric and complex impedance studies of dense ZnAl<sub>2</sub>O<sub>4</sub> Ceramics  
**M Buchi Suresh** and Roy Johnson  
Material science and Engineering 1[1] (2017) 1-6
  9. Effect of Mg doping and sintering temperature on structural and morphological properties of samarium doped Ceria for IT SOFC electrolyte  
Syed Ismail Ahmed, Tasneem Mohd, Amal Bahafi, **Madireddy Buchi Suresh**  
Applied Nano Science 7 (2017) 243-252
  10. Comparative evaluation of electrical conductivity of hydroxyapatite ceramics densified through ramp and hold, spark plasma sintering and post sinter hot isostatic pressing routes  
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  11. Fabrication of graphite contamination free polycrystalline transparent MgAl<sub>2</sub>O<sub>4</sub> spinel by spark plasma sintering using platinum foil  
Papiya Biswas, Dibyedu Chakraborty, **Madireddy Buchi Suresh**, Roy Johnson, M Krishna Mohan  
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  12. Quasistatic compression behavior of nickel oxide, nickel oxide:zirconia, nickel:zirconia and nickel foams  
Papiya Biswas, Pandu Ramavath, Chandana Muraleedharan Nair, **Madireddy Buchi suresh**, Nakula Ravi and Roy Johnson  
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13. Preparation, surface morphology and electrical properties of multilayer antireflection thin films  
Naidu VA, Narayana GL, Radhika K, Mridula A, **M Buchi Suresh**, Chhabra IM, Kistaiah P  
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14. Sonochemical Synthesis of Nano-Structured Hydroxyapatite with unique morphologies and Evaluation of Sintering Kinetics  
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18. Transparent magnesium aluminate spinel: a prospective biomaterial for esthetic orthodontic brackets  
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