

## ***Dr. K. C. SEKHAR***

UGC-Assistant Professor,  
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Central University of Tamil Nadu,  
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### ***Academic Qualifications:***

#### **2005-2009: Ph.D. (Physics)**

Department of Physics, Indian Institute of Technology Roorkee, Roorkee 247 667, India.  
**Thesis Title:** “*Studies on ferroelectric and switching properties of sodium nitrite-polymer composite film*”

#### **2001-2003: M.Sc. [Physics]**

Percentage marks/ CGPA: 72

Department of Physics, Acharya Nagarjuna University, Nagarjuna Nagar, Andhra Pradesh, India.

### ***Positions Held:***

#### **UGC - Assistant Professor:** (July 2015 – Present)

School of Basic and Applied Sciences,  
Central University of TamilNadu, Thiruvarur, Tamil Nadu.

#### **Post-Doctoral Fellow:** (December 2010 – June 2015)

Department of Physics, University of Minho, Braga, Portugal.

#### **Post-Doctoral Fellow:** (November 2009 – July 2010)

Department of Material Science & Engineering, Yonsei University, Seoul, Republic of Korea

### ***Academic awards / Honors / Fellowships / Achievements:***

- DST SERB Project No: ECR/2017/000068 – Evaluation of the project (Grade -Very good).
- Outstanding reviewer – Journal of Alloys and Compounds, Oct. 2018.
- Young Faculty Award received from Venus International Foundation Chennai, India on July 9th 2016.
- Selected as UGC-Assistant Professor (Physics) under UGC- Faculty recharge programme through the national selection process.
- Post-Doctoral Fellowship from Fundao para a Cincia e a Tecnologia (FCT), Ministerio da Cincia, Portugal, from Dec. 2010 to Nov. 2013
- BK21 Postdoctoral fellowship from Yonsei University, Seoul, Korea from Nov. 2009 - Jul. 2010

- Senior Research Fellowship from Council for Scientific and Industrial Research, Govt. of India, from Oct. 2008 to Oct. 2009
- IITR Institute Fellowship from Ministry Human Resources & Development, Govt. of India, from Aug. 2005 - Sep. 2008, India.
- Best poster award in Brain Korea (BK) poster contest, held on 10<sup>th</sup> February 2010 Yonsei University, Korea.

#### Research Interest:

- Ferroelectric Materials
- Functional nanomaterials
- Thin films and Heterostructures
- Electronic and Magnetic Materials
- Semiconductor Physics
- Polymer Composites

#### Research Guidance:

<i>Ph.D.</i>	<i>IMSc project</i>	<i>Internships</i>
Awarded – 02	Completed – 26	03
Ongoing – 03	Ongoing – Nil	

#### Funded Projects:

- No.F.4-5(59-FRP)/2014(BSR) “Functional nanomaterials for memory applications” UGC-Start up grant, 6 lakhs (2017-2019) (principal investigator) – **Completed**
- ECR/2017/000068 “Novel memristors based on lead free ferroelectric-semiconductor heterostructures” DST-SERB, 46.20 lakhs (2017-2020) (principal investigator) – **Completed [Evaluation of the project (Grade - Very good)]**

#### Journal Publications: (*h index: 20, i10 index: 46*)

### 2023

1. Muhassinah Tasneem, J Gokulakrishnan, **KC Sekhar**, S Sathish, Koppole Kamakshi, Effect of SrTiO<sub>3</sub> buffer layer on electrical, ferroelectric memory, and polarization reversal studies of spin-coated ferroelectric 0.6Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub>-0.4(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub> thin film in MFIS structure, 51, 91-97, (2023)(**I.F:2.856**).  
<https://doi.org/10.1016/j.cap.2023.05.005>
2. Muhassinah Tasneem, Carlos RP Monteiro, NS Kiran Kumar, JPB Silva, **KC Sekhar**, K Kamakshi, M Pereira, Thickness-dependent microstructure, resistive switching, ferroelectric, and energy storage properties of pulsed laser deposited 0.85[0.6Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub>-0.4(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub>]-0.15SrTiO<sub>3</sub> thin films, **Ceramics International**, 49(12), 20756-20762, (2023)(**I.F:5.532**).  
<https://doi.org/10.1016/j.ceramint.2023.03.207>
3. NS Kiran Kumar, AR Jayakrishnan, JPB Silva, **KC Sekhar**, Effect of MgO doping on energy storage and electrocaloric properties of ferroelectric 0.6Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>) O<sub>3</sub>-0.4 (Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub> ceramics, **Materials Today Communications**, 35, 105754, (2023)(**I.F:3.662**).  
<https://doi.org/10.1016/j.mtcomm.2023.105754>

4. J Kaarthik, C Kaushiga, G Sradha, Nayak Ram, Salla Gangi Reddy, **KC Sekhar**, Annapureddy Venkateswarlu, Improvement of energy storage density and energy harvesting performance of amphoteric Pr ion-modified lead-free Ba<sub>0.85</sub>Ca<sub>0.15</sub>Ti<sub>0.9</sub>Zr<sub>0.1</sub>O<sub>3</sub> (BCZT) ceramics, **Journal of Alloys and Compounds**, 943, 169069, (2023)(**I.F:6.371**).  
<https://doi.org/10.1016/j.jallcom.2023.169069>
5. AR Jayakrishnan, José Pedro Basto Silva, K Kamakshi, D Dastan, V Annapureddy, M Pereira, **KC Sekhar**, Are lead-free relaxor ferroelectric materials the most promising candidates for energy storage capacitors?, **Progress in Materials Science**, 132, 101046, (2023)(**I.F:48.165**).  
<https://doi.org/10.1016/j.pmatsci.2022.101046>
6. Ampattu R Jayakrishnan, Anuj Kumar, Sahana Druvakumar, Rosmin John, Meera Sudeesh, Venkata Sreenivas Puli, José PB Silva, Maria JM Gomes, **Koppole C Sekhar**, Inorganic ferroelectric thin films and their composites for flexible electronic and energy device applications: current progress and perspectives, **Journal of Materials Chemistry C**, 11, 827-858, (2023)(**I.F:8.067**).  
<https://doi.org/10.1039/D2TC04424B>
7. J Gokulakrishnan, **KC Sekhar**, Kamakshi Koppole, Green synthesized Ag/rGO embedded flexible cotton SERS substrate for detection of methylene blue (Under revision).

## **2022**

8. Rugmini Radhasaran, Angitha Sathyan, Rathish Kumar Sivaraman, Sathish Sugumaran, Koppole Kamakshi, **Koppole Chandra Sekhar**, Sensing, Antimicrobial and Photothermal Activity of Ultra-Stable Colloidal Copper Nanoparticles, **Plasmonics**, 17, 2521–2531 (2022)(**I.F:3.000**).  
<https://doi.org/10.1007/s11468-022-01742-4>
9. A Sulthan Ibrahim, P Anbarasu, R Mahendran, K Rajendran, **KC Sekhar**, S Sathish, Facile synthesis of cobalt sulfide/carbon nanotube composites as a low-cost Pt-free counter electrode for dye-sensitized solar cells (DSSCs), **Diamond and Related Materials**, 130, 109440, (2022)(**I.F:3.806**).  
<https://doi.org/10.1016/j.diamond.2022.109440>
10. A Sulthan Ibrahim, Kevin V Alex, M Bhakya Latha, K Kamakshi, S Sathish, José Pedro Basto Silva, **KC Sekhar**, Effect of the thickness on the photocatalytic and the photocurrent properties of ZnO films deposited by spray pyrolysis, **Discover Materials**, 2,10, (2022).  
<https://doi.org/10.1007/s43939-022-00031-5>
11. Gokulakrishnan, Kevin Varghese Alex, **Koppole C Sekhar**, Kamakshi Koppole, Highly Sensitive, Cost-Effective, and Flexible SERS Substrate Based on Green Synthesized GO/rGO for Pesticide Detection, **ChemistrySelect**, 7, (2022)(**I.F:2.307**).  
<https://doi.org/10.1002/slct.202200348>
12. S Sugumaran, TA Divya, RK Sivaraman, CS Bellan, **KC Sekhar**, MF Jamlos, Structure, morphology and I–V characteristics of thermally evaporated LaAlO<sub>3</sub> nanostructured thin films, **Journal of Materials Science: Materials in Electronics**, 33, 9085–9100, (2022)(**I.F:2.800**).  
<https://doi.org/10.1007/s10854-021-07139-z>
13. José Pedro Basto Silva, **KC Sekhar**, RF Negrea, JL MacManus-Driscoll, L Pintilie, Progress and perspective on different strategies to achieve wake-up-free ferroelectric hafnia and zirconia-based thin films, **Applied Materials Today**, 26, 101394, (2022)(**I.F:8.663**).  
<https://doi.org/10.1016/j.apmt.2022.101394>

14. J. P. Silva, **K. C. Sekhar**, R. F. Negrea, C. Ghica, D. Dastan, M. J. Gomes, Ferroelectric properties of ZrO<sub>2</sub> films deposited on ITO-coated glass. **Ceramics International**, 48(5),6131-6137, (2022)(**I.F:5.532**).  
<https://doi.org/10.1016/j.ceramint.2021.11.152>

## 2021

15. José PB Silva, Raluca F Negrea, Marian C Istrate, Sangita Dutta, Hugo Aramberri, Jorge Íñiguez, Fábio G Figueiras, Corneliu Ghica, **Koppole C Sekhar**, Andrei L Kholkin, Wake-up Free Ferroelectric Rhombohedral Phase in Epitaxially Strained ZrO<sub>2</sub> Thin Films, **ACS Applied Materials & Interfaces**, 13(43), 51383–51392, (2022)(**I.F:10.383**).  
<https://doi.org/10.1021/acsami.1c15875>
16. A.R. Jayakrishnan, J.P.B.Silva, K.Kamakshi, A.Venkateswarlu, **K.C.Sekhar**, Semiconductor/relaxor 0-3 type composites as an innovative strategy to enhance the energy storage properties of 0.6Ba<sub>(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub></sub>-0.4(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub> ferroelectric relaxor ceramics" manuscript number: JALCOM-D-20-07321, **Journal of Science: Advanced Materials and Devices** (2021)(**I.F:7.382**)  
<https://www.sciencedirect.com/science/article/pii/S2468217920300861?via%3Dihub>
17. José PB Silva, **Koppole C. Sekhar**, Hao Pan, Judith L MacManus-Driscoll, Mário Pereira, Advances in Dielectric Thin Films for Energy Storage Applications, Revealing the Promise of Group IV Binary Oxides, **ACS Energy Letters** 6, 2208-2217,(2021) (**I.F: 23.991**)  
<https://pubs.acs.org/doi/abs/10.1021/acsenergylett.1c00313>
18. T Garg, V Annapureddy, **K.C. Sekhar**, DY Jeong, N Dabra, JS Hundal, Dielectric Properties and Phase Stabilization of PVDF Polymer in (1– x) PVDF/xBCZT, **Composite Films, Journal of Electronic Materials** 50 (10), 5567-5576, (2021) (**I.F: 2.047**)  
<https://link.springer.com/article/10.1007/s11664-021-09075-4>

## 2020

19. Tarun Garg, Venkateswarlu Annapureddy, **KC Sekhar**, Dae-Yong Jeong, Navneet Dabra, Jasbir S Hundal, Modulation in polymer properties in PVDF/BCZT composites with ceramic content and their energy density capabilities, **Polymer Composites**, 1-12, (2020)(**I.F:3.531**).  
<https://doi.org/10.1002/pc.25795>
20. Jose PB Silva, **Koppole C Sekhar**, Katerina Veltruska, Vladimir Matolin, Raluca F Negrea, Corneliu Ghica, Marcelo JS Oliveira, Joaquim Agostinho Moreira, Mario Pereira, Maria JM Gomes, HfO<sub>2</sub>–Al<sub>2</sub>O<sub>3</sub> Dielectric Layer for a Performing Metal–Ferroelectric–Insulator–Semiconductor Structure with a Ferroelectric 0.5Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub>-0.5(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub> Thin Film, **ACS Applied Electronic Materials**, 2(9), 2780-2787, (2020)(**I.F:4.494**).  
<https://doi.org/10.1021/acsaelm.0c00480>
21. K V.Alex, P. T. Pavai, R. Rugmini, M. S. Prasad, K Kamakshi, **K,C,Sekhar**, Green Synthesized Ag Nanoparticles for Bio-Sensing and Photocatalytic Applications, **ACS omega**, 5(22), 13123–13129, (2020) (**I.F:4.132**)  
<https://pubs.acs.org/doi/10.1021/acsomega.0c01136>
22. K Kamakshi, JPB Silva, NSK Kumar, **KC Sekhar**, M Pereira, Robust resistive switching performance of pulsed laser deposited SiC/Ag/SiC tri-layer thin films deposited on a glass substrate, **MRS Communications** 10, 353-358 (2020)(**I.F:1.950**).  
<https://link.springer.com/article/10.1557%2Fmrc.2020.34>
23. A. R. Jayakrishnan, K. V. Alex, A. T. Tharakan, K. Kamakshi, J. P. B. Silva, M. S. Prasad, **K. C. Sekhar**, M. J. M. Gomes, Barium-doped zinc oxide thin films as highly efficient and reusable photocatalysts, **ChemistrySelect**, 5, 2824-2834 (2020)(**I.F:2.307**).

<https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/slct.201904943>

24. A. R. Jayakrishnana, P. V. K. Yadava, J. P. B. Silva, K. C. Sekhar, Microstructure tailoring for enhancing the energy storage performance of  $0.98[0.6\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3-0.4(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3]-0.02\text{BiZn}_{1/2}\text{Ti}_{1/2}\text{O}_3$  ceramic capacitors, **Journal of Science: Advanced Materials and Devices**, 5, 119-124 (2020) (I.F:7.382)  
<https://www.sciencedirect.com/science/article/pii/S2468217919302382?via%3Dihub>
25. J. P. B. Silva, J. M. B. Silva, K. C. Sekhar, H. Palneedi, M. C. Istrate, R. F. Negrea, C. Ghica, A. Chahboun, M. Pereira, M. J. M. Gomes, Energy storage performance of ferroelectric  $\text{ZrO}_2$  film capacitors: effect of  $\text{HfO}_2:\text{Al}_2\text{O}_3$  dielectric insert layer, **Journal of Materials Chemistry A**, 8 (28), 14171-14177 (2020) (IF: 14.511).  
<https://pubs.rsc.org/en/content/articlelanding/2020/ta/d0ta04984k>
26. J. P. B. Silva, E. M. F. Vieira, J. M. B. Silva, K. Gwozd, F. Figueiras, K. Veltruská, V. Matolin, C. Istrate, C. Ghica, K. C. Sekhar, A. Kholkin, L. Goncalves, A. Chahboun, M. Pereira, Perovskite ferroelectric thin film as an efficient interface to enhance the photovoltaic characteristics of  $\text{Si}/\text{SnO}_x$  heterojunctions, **Journal of Materials Chemistry A**, 11314-11326 (2020). (IF: 14.511).  
<https://doi.org/10.1039/D0TA02198A>

## 2019

27. K. V. Alex, A. Prabhakaran, A. R. Jayakrishnan, K. Kamakshi, J. P. B. Silva, K. C. Sekhar, Charge coupling enhanced photocatalytic activity of  $\text{BaTiO}_3/\text{MoO}_3$  heterostructures, **ACS Applied Materials & Interfaces**, 11, 40114-40124 (2019) (IF: 10.383).  
<https://pubmed.ncbi.nlm.nih.gov/31577112/>
28. AR Jayakrishnan, Kevin V Alex, Athul Thomas, JPB Silva, K Kamakshi, Navneet Dabra, KC Sekhar, J Agostinho Moreira, MJM Gomes, Composition dependent  $x\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3-(1-x)(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$  bulk ceramics for high energy storage applications, **Ceramics International**, 45 (5), 5808-5818, (2019) (I.F:5.532)  
<https://www.sciencedirect.com/science/article/pii/S0272884218331675?via%3Dihub>
29. K.V.Alex, AR Jayakrishnan, A. Kumar, A.S.Ibrahim, K.Kamakshi, J.P.B.Silva, K C. Sekhar, M.J.M.Gomes, Substrate temperature induced effect on microstructure, optical and photocatalytic activity of ultrasonic spray pyrolysis deposited  $\text{MoO}_3$  thin films **Materials Research Express**, 6 066421 (2019) (I.F:2.300)  
<https://iopscience.iop.org/article/10.1088/2053-1591/ab0f7a>
30. J.P. B. Silva, J.M. B. Silva, M. J. S. Oliveira, T. Weingärtner, K.C. Sekhar, M. Pereira, Maria J. M. Gomes, High-Performance Ferroelectric-Dielectric Multilayered Thin Films for Energy Storage Capacitors, **Advanced Functional Materials**, 29 (6), 1807196, (2019) (I.F:19.924)  
<https://onlinelibrary.wiley.com/doi/abs/10.1002/adfm.201807196>
31. A. R. Jayakrishnan, K. V. Alex, K. Kamakshi, J. P. B. Silva, K. C. Sekhar, M. J. M. Gomes, Enhancing the dielectric relaxor behavior and energy storage properties of  $0.6\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3-0.4(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$  ceramics through the incorporation of paraelectric  $\text{SrTiO}_3$ , **Journal of Materials Science: Materials in Electronics**, 30, 19374-19382 (2019) (IF: 2.779)  
<https://www.springerprofessional.de/en/enhancing-the-dielectric-relaxor-behavior-and-energy-storage-pro/17245038>

## 2018

32. JMB Silva, JPB Silva, K.C.Sekhar, M Pereira, MJM Gomes, Impact of the ferroelectric layer thickness on the resistive switching characteristics of ferroelectric/dielectric structures, **Applied Physics Letters**, 113 (10), 102904 (2018) (I.F:3.971)

<https://aip.scitation.org/doi/10.1063/1.5047853>

33. K Kamakshi, JPB Silva, **K.C. Sekhar**, J A Moreira, A Almeida, M Pereira, MJM Gomes, Substrate Temperature Effect on Microstructure, Optical, and Glucose Sensing Characteristics of Pulsed Laser Deposited Silver Nanoparticles, **Plasmonics** 13 (4), 1235-1241, 2 (2018) (**I.F:2.726**)  
<https://link.springer.com/article/10.1007/s11468-017-0625-y>
34. JPB Silva, **K C Sekhar**, F Cortés-Juan, RF Negrea, AC Kuncser, JP Connolly, C Ghica, J A Moreira, Ferroelectric photovoltaic characteristics of pulsed laser deposited  $0.5\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3-0.5(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3/\text{ZnO}$  heterostructures, **Solar Energy**, 167, 18-23,(2018) (**I.F:7.188**)  
<https://www.sciencedirect.com/science/article/abs/pii/S0038092X18303049?via%3Dihub>
35. JPB Silva, J Wang, G Koster, G Rijnders, RF Negrea, Cu Ghica, K C Sekhar, J A Moreira, Maria, JM Gomes, Hysteretic Characteristics of Pulsed Laser Deposited  $0.5\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3-0.5(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3/\text{ZnO}$  Bilayers, **ACS Applied Materials & Interfaces**, 10 (17), 15240-15249, (2018) (**I.F:10.383**)
36. M.J.S.Oliveira, J.P.B.Silva, K Veltruská, V.Matolín, **K.C.Sekhar**, J A Moreira ,M.Pereira, M.J.M.Gomes Annealing induced effect on the physical properties of ion-beam sputtered  $0.5\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3-0.5(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$  ferroelectric thin films, **Applied Surface Science**, 443, 354-360 (2018) (**I.F:7.392**)  
<https://pubs.acs.org/doi/10.1021/acsami.8b01695>

## **2017**

37. J. P. B. Silva, F. L. Faita, K. Kamakshi, **K. C. Sekhar**, J. A. Moreira, A. Almeida, M. Pereira, A. A. Pasa, and M. J. M. Gomes, Enhanced resistive switching characteristics in Pt/BaTiO<sub>3</sub>/ITO structures through insertion of HfO<sub>2</sub>:Al<sub>2</sub>O<sub>3</sub> (HAO) dielectric thin layer, **Scientific Reports (Nature)**, 7, 46350 (2017) (**I.F: 4.997**)  
<https://www.nature.com/articles/srep46350>
38. A. K. Kunti, **K.C. Sekhar**, Mario Pereira, M. J. M. Gomes, S. K. Sharma, Oxygen partial pressure induced effects on the microstructure and the luminescence properties of pulsed laser deposited TiO<sub>2</sub> thin films, **AIP advances**, 7(1), 015021, (2017) (**I.F:1.697**)  
<https://aip.scitation.org/doi/10.1063/1.4973721>
39. J.P.B. Silva, M.Vorokhta, F.Dvorak, **K.C.Sekhar**, V.Matolín, J.Agostinho Moreira, M.Pereira, M.J.M.Gomes, Unraveling the resistive switching effect in ZnO/0.5Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub>-0.5(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub> heterostructures, **Applied Surface Science** , 400, 453-460 (2017) (**I.F:7.392**).  
<https://www.sciencedirect.com/science/article/abs/pii/S0169433216328094?via%3Dihub>
40. J.P.B.Silva, K.Kamakshi, **K.C. Sekhar**, X.R. Nóvoa, E.C. Queirós, J.Agostinho Moreira, A. Almeida, M. Pereira, P.B. Tavares, M.J.M. Gomes, Light controlled resistive switching and photovoltaic effects in ferroelectric 0.5 Ba (Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub>-0.5 (Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub> thin films, **Journal of the European Ceramic Society**, 37, 583-591 (2017) (**I.F:6.364**).  
<https://www.sciencedirect.com/science/article/abs/pii/S0955221916305052>

## **2016**

41. J.P.B. Silva, K. Kamakshi, **K.C. Sekhar**, E.C. Queirós, J. A. Moreira, A. Almeida, M Pereira, P.B. Tavares, M.J.M. Gomes, Resistive switching in ferroelectric lead-free 0.5 Ba (Zr<sub>0.2</sub>Ti<sub>0.8</sub>) O<sub>3</sub>-0.5 (Ba<sub>0.7</sub>Ca<sub>0.3</sub>) TiO<sub>3</sub> thin films, **Journal of Physics D: Applied Physics**, 49, 335301 (2016) (**I.F: 3.409**).  
<https://iopscience.iop.org/article/10.1088/0022-3727/49/33/335301>

42. A.K. Kunti, **K.C. Sekhar**, M. Pereira, M.J.M. Gomes, S.K. Sharma, Synthesis, Structural and Luminescence Studies of Pyrochlore Phase Free TiO<sub>2</sub>: Dy<sup>3+</sup> Produced by Solid-state Reaction Method, **International Journal of Applied Ceramic Technology**, 13, 1139-1148 (2016) (I.F:2.328).  
<https://www.readcube.com/articles/10.1111%2Fijac.12573>
43. H.R. Choi, **K.C. Sekhar**, A.R. Jo, Y.S. Cho, Dielectric Characteristics of UV-Curable CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> Composite Thick Film Capacitors on Cu Foils, **International Journal of Applied Ceramic Technology**, 13, 685-689 (2016) (I.F:2.328).  
<https://ceramics.onlinelibrary.wiley.com/doi/full/10.1111/ijac.12545>
44. K. Kamakshi, JPB Silva, **K.C. Sekhar**, G. Marslin, J. A. Moreira, A. Almeida, M. Pereira, MJM Gomes, Influence of substrate temperature on the properties of pulsed laser deposited silver nanoparticle thin films and their application in SERS detection of bovine serum albumin, **Applied Physics B: Lasers and Optics**, 122, 108 (2016) (I.F:2.171).  
<https://link.springer.com/article/10.1007/s00340-016-6385-0>
45. J.P.B. Silva, K. Kamakshi, **K.C. Sekhar**, J. A. Moreira, A. Almeida, M. Pereira, M.J.M. Gomes, Ferroelectric polarization and resistive switching characteristics of ion beam assisted sputter deposited BaTiO<sub>3</sub> thin films, **Journal of Physics and Chemistry of Solids**, 92, 7–10 (2016) (I.F:4.383).  
<https://www.infona.pl/resource/bwmetal.element.elsevier-4028ed8d-e9d9-3db1-8f50-01955faacb5b>
46. J.P.B. Silva, K. Kamakshi, **K.C. Sekhar**, M. Pereira, M. J. M. Gomes, J. A. Moreira, A. Almeida, Light-controlled resistive switching in laser-assisted annealed Ba<sub>0.8</sub>Sr<sub>0.2</sub>TiO<sub>3</sub> thin films, **Physica Status Solid A: Application & Material Science**, 213, 1082-1087 (2016) (I.F:2.170).  
<https://onlinelibrary.wiley.com/doi/10.1002/pssa.201532636>

## **2015**

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