Brief Bio-data

Dr. G. Suresh Kumar Ph.D.

Assistant Professor & Head
Department of Physics
K.S. Rangasamy College of Arts and Science (Autonomous)
Tiruchengode 637215

Research Expertise

- Nanomaterials, Biomaterials
- Supercapacitors, Photocatalyst
- Waste Utilization, Bioimaging
- Drug Delivery Systems

Publications

- Articles in Scopus/WoS : 76
- Articles in Proceedings : 07
- Patent Published : 01

Citation & Index

- Total Citation : 1994
- h-index : 26
- i-10 index : 50

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Namakkal 637 215

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Scopus Id: 55430366400
Researcher Id: H-7246-2013
Google Scholar Id: y0Z5sosAAAAJ

Work Experience

- **Assistant Professor & Head**

  Department of Physics (PG & Research), K.S. Rangasamy College of Arts and Science (Autonomous), Tiruchengode 637215, Namakkal

  2014 - till date (10 Years)

  Engaged in academic endeavors, administrative responsibilities & conducting comprehensive research

Education

- **Ph.D. (Physics)**

  Periyar University, Salem | 2009-2014

- **M.Phil. (Physics)- 79.60 %**

  Periyar University, Salem | 2008-2009

- **M.Sc. (Physics) - 77.79 %**

  Periyar University, Salem | 2006-2008

- **B.Sc. (Physics) - 71.75 %**

  Govt. Arts College, Salem | 2003-2006

Fellowships/Awards/Recognitions

- **Senior Research Fellowship** by Council for Scientific and Industrial Research (CSIR), India.
- **Junior Research Fellowship** by the Department of Science and Technology (DST), India
- **Thesis Grant** by Council for Scientific and Industrial Research (CSIR), India.
- **Associate Editor** for Frontiers Materials (Glass and Ceramics Section)
- **Guest Editor** in Materials Today: Proceedings, Elsevier and Magnetochemistry, MDPI.
- **Reviewer** in Elsevier, Wiley, Springer, RSC, ACS Journals (50+)
- **Best Young Scientist Award** from Pearl Foundation, Madurai in National Conference on SMART SUMMIT-2017, India.
- **Best Paper Award** at 7th International Conference on Recent Innovations in Modern Science and Technology held at KPRIET during 9-11, January 2024.
- **University Rank Holder** at M.Sc., Physics.
- **Won First Prize** in "FESTOPHYS 2007" held at Gandhigram Rural University, Dindigul, Tamilnadu on 14-2-2007.
- **Won Second Prize** in "EINSTEINIA 100" InterCollegiate Quiz held at Government Arts College, Dharmapuri on 30-12-2005.

Membership in Professional Body

- Life member – **Society for Biomaterials and Artificial Organs**
- Life member – **Materials Research Society of India**
- Life member – **Indian Physics Association**

International Research Collaborators

- **Dr. Evgeny Kolesnikov,** National University of Science and Technology "MISiS", Russia
- **Dr. N. Van Minh,** Duy Tan University, VietNam
- **Dr. Mohd. Shkir,** King Khalid University, Saudi Arabia
- **Dr. Gopalu Karunakaran,** Seoul National University of Science and Technology, South Korea

Sponsored Project Completed

- **Investigation on hydroxyapatite based magnetic/ luminescent bifunctional nanomaterials for biomedical applications (as a PI)**

  Sponsor: UGC | 2 years | Rs. 2,20,000/-

- **Rare earth-doped calcium phosphate nanoparticle for simultaneous optical and magnetic resonance imaging (as a Mentor)**

  Sponsor: TNSCST | 6 months | Rs. 7,500/-

- **Fabrication of hydroxyapatite coated iron oxide magnetic nanoparticles using spray pyrolysis for hyperthermia treatment (as a Mentor)**

  Sponsor: TNSCST | 6 months | Rs. 10,000/-

Sponsored Conference/Events Organized

- **Hands-on Training on Sky Observation and Future STI in Space Station**

  Sponsor:TNSCST & NCSTC | 05.10.2023 & 06.10.2023 | Rs. 20,000/-

- **International Conference of Emerging Materials and Modeling (ICEMM 2019)**

  Sponsor: BRNS | 7-9 January 2019 | Rs. 50,000/-

Articles in Scopus/WoS Indexed Journals: 76

- S.R. Priyan, **G. Suresh Kumar,** K. Lalithambigai, M. Shkir, A. Khan, R. Ramesh, G. Arumugam, Microwave-assisted sol-gel synthesis of mesoporous NiO-decorated silica nanostructures utilizing biogenic silica source for supercapacitor applications, J. Alloys Compd. 976 (2024) 173206., **Impact factor- 6.2.**

- V. Mahalingam, M. Sivaraju, **G. Suresh Kumar,** K. Lalithambigai, S.R. Priyan, M.M. Alam, Synergistic effect of silica/polypyrrole nanocomposites synthesized by hydrothermal method using rice husk as a silica source for corrosion protection, Mater. Chem. Phys. 313 (2024) 128752. **Impact factor- 4.6.**

- V. Mahalingam, M. Sivaraju, **G. Suresh Kumar,** K. Lalithambigai, N.V. Minh, M.A. Manthrammel, M. Shkir, Synergistic effect of α-alumina integrated silica ceramic nanocomposites prepared using waste beverage cans and rice husk for corrosion protection application, J. Alloys Compd. 990 (2024) 174381. **Impact factor- 6.2.**

- S.R. Priyan, **G. Suresh Kumar,** S. Surendhiran, M. Shkir, Size-controlled synthesis of mesoporous silica nanoparticles using rice husk by microwave-assisted sol–gel method, Int J. Appl. Ceram. Technol. 20 (2023) 2807–2816. **Impact factor- 2.1.**

- G. Karunakaran, E.-B. Cho, K. Thirumurugan, **G. Suresh Kumar,** E. Kolesnikov, S. Boobalan, Antibacterial mesoporous Sr-doped hydroxyapatite nanorods synthesis for biomedical applications, Adv. Nano Res. 14 (2023) 507–519. **Impact factor- 5.7.**

- D. Indhira, A. Aruna, K. Manikandan, M.F. Albeshr, A.F. Alrefaei, R. Vinayagam, A. Kathirvel, S.R. Priyan, **G. Suresh Kumar**, R. Srinivasan, Antimicrobial and photocatalytic activities of selenium nanoparticles synthesized from Elaeagnus indica leaf extract, Processes 11 (2023). **Impact factor- 3.5.**

- G. Karunakaran, E.-B. Cho, **G. Suresh Kumar,** E. Kolesnikov, S.K. Govindaraj, K. Mariyappan, S. Boobalan, CTAB enabled microwave-hydrothermal assisted mesoporous Zn-doped hydroxyapatite nanorods synthesis using bio-waste Nodipecten nodosus scallop for biomedical implant applications, Environ. Res. 216 (2023) 114683. **Impact factor- 8.3.**

- K. Kandasamy, S. Surendhiran, K.S.G. Jagan, **G. Suresh Kumar,** Y.A.S. Khadar, P. Rajasingh, Green synthesis of CdS Quantum dots for photocatalytic and anti-corrosive applications in aqueous media, Appl. Surf. Sci. Adv. 13 (2023) 100364. **Impact factor- 6.2.**

- M.C. Shibu, M.D. Benoy**, G. Suresh Kumar,** J. Duraimurugan, V. Vasudevan, M.Shkir, O. AL-Otaibi, Hydrothermal-assisted synthesis and characterization of MWCNT/copper oxide nanocomposite for the photodegradation of methyl orange under direct sunlight, Diam. Relat. Mater. 134 (2023) 109778. **Impact factor- 4.1.**

- P. V. Truong, N. V. Bo, N. V. Minh, N.V. Anh, **G. Suresh Kumar,** M. Shkir, Investigation of corrosion and wear resistance of PEO coated D16T aluminium alloys in the marine tropical climate conditions, Mater. Chem. Phys. 290 (2022) 126587. **Impact factor- 4.6.**
- C. Jayakrishnan S.R. Sheeja, J. Duraimurugan, S. Prabhu, R. Ramesh, **G. Suresh Kumar,** K.G. Subhash, M. Shkir, M.R. Pallavolu, Synthesis of dumbbell-shaped ZnO nanostructures for energy storage and photocatalytic dye degradation applications, Mater. Technol. 37 (2022) 3006–3016. **Impact factor- 3.1.**
- M.C. Shibu, M.D. Benoy, S. Shanavas, J. Duraimurugan, **G. Suresh Kumar,** K M.A. Haija, P. Maadeswaran, T. Ahamad, Q. V. Le, S.M. Alshehri, Synthesis and characterization of SnO2/rGO nanocomposite for an efficient photocatalytic degradation of pharmaceutical pollutant: Kinetics, mechanism and recyclability, Chemosphere 307 (2022) 136105, **Impact factor- 8.8.**
- K.G. Subhash, M.D. Benoy, J. Duraimurugan, S. Prabhu, R. Siranjeevi, R. Ramesh, **G. Suresh Kumar,** M. Shkir, Synergistic effect of NiS/g-C3N4 nanocomposite for high-performance asymmetric supercapacitors, Inorg. Chem. Commun. 142 (2022) 109719. **Impact factor- 3.8.**
- P. Agalya, S. Cholan, K.M. Prabu, **G. Suresh Kumar,** K G. Karunakaran, M. Shkir, E. Kolesnikov, S. Ramalingam, Ultrasonic assisted in situ mineralization of hydroxyapatite nanoparticles in the presence of drug molecule: An insight on biowaste derived materials for the local drug delivery, Inorg. Chem. Commun. 143 (2022) 109788. **Impact factor- 3.8.**
- P. Agalya, **G. Suresh Kumar,** K.M. Prabu, S. Cholan, G. Karunakaran, J. Hakami, M. Shkir, S. Ramalingam, One-pot ultrasonic-assisted synthesis of magnetic hydroxyapatite nanoparticles using mussel shell biowaste with the aid of trisodium citrate, Ceram. Int. 48 (2022) 28299–28307, **Impact factor- 5.2.**
- T.P. Vijayakumar, M.D. Benoy, J. Duraimurugan, **G. Suresh Kumar,** M. Shkir, P. Maadeswaran, A.S. Kumar, K.A.R. Kumar, Hydrothermal synthesis of CuO/g-C3N4 nanosheets for visible-light driven photodegradation of methylene blue, Diam. Relat. Mater. 121 (2022) 108735. **Impact factor- 4.1.**

- D. Muthu, **G. Suresh Kumar,** M. Gowri, M. Prasath, V. Viswabaskaran, V.S. Kattimani, E.K. Girija, Rapid synthesis of eggshell derived hydroxyapatite with nanoscale characteristics for biomedical applications, Ceram. Int. 48 (2022) 1326–1339. **Impact factor- 5.2.**
- P. Araichimani, K.M. Prabu, **G. Suresh Kumar,** G. Karunakaran, S. Surendhiran, M. Shkir, H.E. Ali, Synthesis of Fe3O4-decorated SiO2 nanostructure using rice husk as a source by microwave combustion for the development of a magnetically recoverable adsorbent, Ceramics International 48 (2022) 10339–10345. **Impact factor- 5.2.**
- M.C. Shibu, M.D. Benoy, S. Shanavas, M.A. Haija, J. Duraimurugan, **G. Suresh Kumar,** T. Ahamad, P. Maadeswaran, Q.V. Le, White LED active α-Fe2O3/rGO photocatalytic nanocomposite for an effective degradation of tetracycline and ibuprofen molecules, Environ. Res. 212 (2022) 113301. **Impact factor- 8.3.**
- C. Jayakrishnan, S.R. Sheeja, J. Duraimurugan, S. Prabhu, R. Ramesh, **G. Suresh Kumar,** P. Maadeswaran, Mohd. Shkir, Photo electro chemical properties and photocatalytic degradation of methyl orange dye by different ZnO nanostructures, J. Mater. Sci: Mater. Electro. 33 (2022) 9732 – 9742. **Impact factor- 2.8.**
- K.S.T. Tran, N.N. Dinh, N.P.H. Nam, N. Van Minh, **G. Suresh Kumar,** N. Huynh, Carbon fibers from cellulosic precursor for thermal insulation: an insight into the effect of stabilization and carbonization conditions on the synthesis, Nanobiotechnology Reports 17 (2022) 372 – 379. **Impact factor- 0.7.**
- M.C. Shibu, M.D. Benoy, S. Shanavas, M.A. Haija, J. Duraimurugan, **G. Suresh Kumar,** T.P. Vijayakumar, P. Maadeswaran, R. Acevedo, S. Haseena, Hydrothermal synthesis of ZnO/C microflowers for photocatalytic degradation of organic pollutants under visible light irradiation: kinetics, mechanism and recyclability, J. Mater. Sci.: Mater. Electron. 33 (2022) 9412 – 9424. **Impact factor- 2.8.**
- T.P. Vijayakumar, M.D. Benoy, J. Duraimurugan, **G. Suresh Kumar,** S. Shanavas, P. Maadeswaran, R. Ramesh, A.S. Kumar, R. Acevedo, A comparative study on visible-light-driven photocatalytic activity of CdO nanowires and g-C3N4/CdO hybrid nanostructure, J. Mater. Sci.: Mater. Electron. 33 (2022) 8635 – 8643. **Impact factor- 2.8.**

- V. Ganesan, G. Meiyazhagan, M. Devaraj, S. Kandasamy, P. Manogaran, **G. Suresh Kumar,** G. Raji, V.S. Kattimani, E.K. Girija, Repurposing the antibacterial activity of etoposide-a chemotherapeutic drug in combination with eggshell-derived hydroxyapatite, ACS Biomaterials Science and Engineering 8 (2022) 682 – 693. **Impact factor- 5.8.**

- D. Indhira, M. Krishnamoorthy, F. Ameen, S.A. Bhat, K. Arumugam, S. Ramalingam, S.R. Priyan, **G. Suresh Kumar,** Biomimetic facile synthesis of zinc oxide and copper oxide nanoparticles from Elaeagnus indica for enhanced photocatalytic activity, Environ. Res. 212 (2022) 113323. **Impact factor- 8.3.**

- G. Karunakaran, E.-B. Cho, **G. Suresh Kumar,** E. Kolesnikov, K.G. Sudha, K. Mariyappan, A. Han, S.S. Choi, Citric acid-mediated microwave-hydrothermal synthesis of mesoporous F-doped HAp nanorods from bio-waste for biocidal implant applications, Nanomaterials 12 (2022). **Impact factor- 5.3.**

- S. Haseena, N. Jayamani, S. Shanavas, J. Duraimurugan, M.A. Haija, **G. Suresh Kumar,** A.S. Kumar, T. Prabhuraj, P. Maadeswaran, R. Acevedo, Bio-synthesize of photocatalytic Fe2O3 nanoparticles using Leucas aspera and Jatropha podagrica leaf extract for an effective removal of textile dye pollutants, Optik 249 (2022)**. Impact factor- 4.1.**

- P. Araichimani, K.M. Prabu, **G. Suresh Kumar,** G. Karunakaran, S. Surendhiran, M. Shkir, S.A. Faify, Rice husk-derived mesoporous silica nanostructure for supercapacitors application: a possible approach for recycling bio-waste into a value-added product, Silicon 14 (2022) 10129 – 10135. **Impact factor- 3.4.**

- T.P. Vijayakumar, M.D. Benoy, J. Duraimurugan, **G. Suresh Kumar,** M. Shkir, P. Maadeswaran, R. Srinivasan, S. Prabhu, R. Ramesh, S. Haseena, Investigation on photocatalytic activity of g-C3N4 decorated α-Fe2O3 nanostructure synthesized by hydrothermal method for the visible-light assisted degradation of organic pollutant, Diam. Relat. Mater. 125 (2022). **Impact factor- 4.1.**

- P. Agalya, T. Saravanan, **G. Suresh Kumar,** S. Cholan, G. Karunakaran, N. Van Minh, Surfactant-assisted microwave synthesis of luminescent/magnetic bifunctional hydroxyapatite nanorods for dual-model imaging, Optik 225 (2021) 165564. **Impact factor- 3.1.**
- G. Karunakaran, E.-B. Cho, K. Thirumurugan, **G. Suresh Kumar,** E. Kolesnikov, S. Boobalan, G. Janarthanan, M.M. Pillai, S. Rajendran, Mesoporous Mn-doped hydroxyapatite nanorods obtained via pyridinium chloride enabled microwave-assisted synthesis by utilizing *Donax variabilis* seashells for implant applications, Materials Science and Engineering: C 126 (2021) 112170. **Impact factor- 7.9.**
- **G. Suresh Kumar,** R. Srinivasan, G. Karunakaran, E. Kolesnikov, M. Kim, D.Y. Karpenkov, Microwave-assisted combustion synthesis of soft ferromagnetic spinel MFe2O4 (M= Ni, Mg, Zn) nanoparticles using Citrus limon fruit extract as a fuel, Applied Physics A 127 (2021) 546. **Impact factor- 2.7.**
- P. Araichimani, **G. Suresh Kumar,** K.M. Prabu, G. Karunakaran, N. Van Minh, E. Kolesnikov, M. V Gorshenkov, Amorphous silica nanoparticles derived from biowaste via microwave combustion for drug delivery, Int. J. Appl. Ceram. Technol. 18 (2021) 583 – 589. **Impact factor- 2.1.**
- R. Vijayan, R. Srinivasan, **G. Suresh Kumar,** N. Surumbarkuzhali, S. Prabhu, R. Ramesh, G. Karunakaran, E. Kolesnikov, M. Kim, Synthesis of silver-integrated silica nanostructures using rice hulls and their electrochemical performance for supercapacitor application, Journal of Materials Science: Materials in Electronics 32 (2021) 17534 – 17544. **Impact factor-2.8.**
- G. Karunakaran, E.-B. Cho, **G. Suresh Kumar,** E. Kolesnikov, A. Dmitry, S. Ali, Microwave-assisted synthesis of superparamagnetic mesoporous Co-doped hydroxyapatite nanorods for various biomedical applications, Ceramics International 47 (2021) 8642 – 8652. **Impact factor- 5.2.**
- T.P. Vijayakumar, M.D. Benoy, J. Duraimurugan, **G. Suresh Kumar,** S. Shanavas, P. Maadeswaran, R. Acevedo, Effect of g-C3N4 on structural, optical, and photocatalytic properties of hexagonal cylinder-like twinned ZnO microcrystals prepared by the hydrothermal method, Journal of Materials Science: Materials in Electronics 32 (2021) 24095 – 24106. **Impact factor-2.8.**

- G. Karunakaran, E.-B. Cho, D. Kuznetsov, **G. Suresh Kumar,** Editorial: Design and applications of metal- and metal oxide-based antibacterial materials, Front. Mater. 8 (2021). **Impact factor- 3.2.**

- P. Agalya, **G. Suresh Kumar,** R. Srinivasan, K.M. Prabu, G. Karunakaran, S. Cholan, E. Kolesnikov, M. Kim, Hydroxyapatite-based antibacterial bio-nanomaterials: an insight into the synthesis using mussel shell as a calcium source, physicochemical properties, and nanoindentation characteristics, Appl. Phys. A Mater. Sci. Process 127 (2021) 589. **Impact factor- 2.7.**

- D. Muthu, **G. Suresh Kumar,** V.S. Kattimani, V. Viswabaskaran, E.K. Girija, Optimization of a lab scale and pilot scale conversion of eggshell biowaste into hydroxyapatite using microwave reactor, Ceram. Int. 46 (2020) 25024–25034, **Impact factor- 5.2.**

- P. Araichimani, K.M. Prabu, **G. Suresh Kumar,** G. Karunakaran, N. Van Minh, S. Karthi, E.K. Girija, E. Kolesnikov, Rare-earth ions integrated silica nanoparticles derived from rice husk via microwave-assisted combustion method for bioimaging applications, Ceram. Int. 46 (2020) 18366–18372**. Impact factor- 5.2.**

- R. Vijayan, **G. Suresh Kumar,** G. Karunakaran, N. Surumbarkuzhali, S. Prabhu, R. Ramesh, Microwave combustion synthesis of tin oxide-decorated silica nanostructure using rice husk template for supercapacitor applications, Journal of Materials Science: Materials in Electronics 31 (2020) 5738–5745. **Impact factor- 2.8.**

- J. Duraimurugan, **G. Suresh Kumar,** S. Shanavas, R. Ramesh, R. Acevedo, P.M. Anbarasan, P. Maadeswaran, Hydrothermal assisted phytofabrication of zinc oxide nanoparticles with different nanoscale characteristics for the photocatlytic degradation of Rhodamine B, Optik 202 (2020) 163607**. Impact factor- 3.1.**

- R. Govindan, S. Karthi, **G. Suresh Kumar,** E.K. Girija, Development of Fe3O4 integrated polymer/phosphate glass composite scaffolds for bone tissue engineering, Mater Adv. 1 (2020) 3466 – 3475. **Impact factor- 5.**

- G. Karunakaran, E.-B. Cho, **G. Suresh Kumar,** E. Kolesnikov, G. Janarthanan, M.M. Pillai, S. Rajendran, S. Boobalan, K.G. Sudha, M.P. Rajeshkumar, Mesoporous Mg-doped hydroxyapatite nanorods prepared from bio-waste blue mussel shells for implant applications, Ceramics International 46 (2020) 28514 – 28527. **Impact factor- 5.2.**

- G. Karunakaran, M. Jagathambal, **G. Suresh Kumar,** E. Kolesnikov, Hylotelephium telephium flower extract-mediated biosynthesis of CuO and ZnO nanoparticles with promising antioxidant and antibacterial properties for healthcare applications, JOM 72 (2020) 1264 – 1272. **Impact factor- 2.6**

- G. Karunakaran, E.-B. Cho, **G. Suresh Kumar,** E. Kolesnikov, D.Y. Karpenkov, J. Gopinathan, M.M. Pillai, R. Selvakumar, S. Boobalan, M. V Gorshenkov, Sodium dodecyl sulfate mediated microwave synthesis of biocompatible superparamagnetic mesoporous hydroxyapatite nanoparticles using black Chlamys varia seashell as a calcium source for biomedical applications, Ceramics International 45 (2019) 15143 – 15155. **Impact factor- 5.2.**

- G. Karunakaran, **G. Suresh Kumar,** E.-B. Cho, Y. Sunwoo, E. Kolesnikov, D. Kuznetsov, Microwave-assisted hydrothermal synthesis of mesoporous carbonated hydroxyapatite with tunable nanoscale characteristics for biomedical applications, Ceram. Int. 45 (2019) 970 – 977. **Impact factor- 5.2.**

- J. Duraimurugan, **G. Suresh Kumar,** P. Maadeswaran, S. Shanavas, P.M. Anbarasan, V. Vasudevan, Structural, optical and photocatlytic properties of zinc oxide nanoparticles obtained by simple plant extract mediated synthesis, Journal of Materials Science: Materials in Electronics 30 (2019) 1927 – 1935. **Impact factor-2.8.**

- S. Shanavas, J. Duraimurugan, **G. Suresh Kumar,** R. Ramesh, R. Acevedo, P.M. Anbarasan, P. Maadeswaran, Ecofriendly green synthesis of ZnO nanostructures using Artabotrys Hexapetalu and Bambusa Vulgaris plant extract and investigation on their photocatalytic and antibacterial activity, Materials Research Express 6 (2019) 105098. **Impact factor- 2.3.**

- G. Karunakaran, E.-B. Cho, **G. Suresh Kumar,** E. Kolesnikov, G. Janarthanan, M.M. Pillai, S. Rajendran, S. Boobalan, M.V. Gorshenkov, D. Kuznetsov, Acorbic acid-assisted microwave synthesis of mesoporous Ag-doped hydroxyapatite nanorods from biowaste seashells for implant applications, ACS Applied Bio Materials 2 (2019) 2280 – 2293. **Impact factor- 4.7.**
- D. Muthu, M. Gowri, **G. Suresh Kumar,** V.S. Kattimani, E.K. Girija, Repurposing of antidepression drug sertraline for antimicrobial activity against Staphylococcus aureus: a potential approach for the treatment of osteomyelitis, New J. Chem. 43 (2019) 5315 – 5324. **Impact factor- 3.3.**
- V. Ganesan, M. Devaraj, **G. Suresh Kumar,** V.S. Kattimani, E.K.Girija, Eggshell derived mesoporous biphasic calcium phosphate for biomedical applications using rapid thermal processing, Int. J. Appl. Ceram. Technol. 16 (2019) 1932–1943. **Impact factor-2.1.**
- J. Duraimurugan, **G. Suresh Kumar,** M. Venkatesh, P. Maadeswaran, E.K. Girija, Morphology and size controlled synthesis of zinc oxide nanostructures and their optical properties, Journal of Materials Science: Materials in Electronics 29 (2018) 9339 – 9346. **Impact factor-2.8.**
- **G. Suresh Kumar,** D. Muthu, G. Karunakaran, S. Karthi, E.K. Girija, D. Kuznetsov, Curcuma longa tuber extract mediated synthesis of hydroxyapatite nanorods using biowaste as a calcium source for the treatment of bone infections, J Sol-gel Sci. Technol. 86 (2018) 610 – 616. **Impact factor-2.5.**
- G. Karunakaran, M. Jagathambal, **G. Suresh Kumar,** M. Venkatesh, E. Kolesnikov, D. Kuznetsov, Hollow MgNi1.4Zn0.6/CaCu2.79Fe4.21O12 nanocomposite synthesis via ultrasonic high-temperature spray pyrolysis, Journal of the American Ceramic Society 101 (2018) 3761 – 3766. **Impact factor-3.9.**
- **G. Suresh Kumar,** G. Karunakaran, E.K. Girija, E. Kolesnikov, N.V. Minh, M.V Gorshenkov, D. Kuznetsov, Size and morphology-controlled synthesis of mesoporous hydroxyapatite nanocrystals by microwave-assisted hydrothermal method, Ceram. Int. 44 (2018) 11257 – 11264. **Impact factor-5.2.**

- **G. Suresh Kumar,** S. Rajendran, S. Karthi, R. Govindan, E.K. Girija, G. Karunakaran, D. Kuznetsov, Green synthesis and antibacterial activity of hydroxyapatite nanorods for orthopedic applications, MRS Communication 7 (2017) 183 – 188. **Impact factor- 1.9.**

- G. Karunakaran, N. Van Minh, Y. Konyukhov, E. Kolesnikov, M. Venkatesh, **G. Suresh Kumar,** A. Gusev, D. Kuznetsov, Effect of Si, B, Al2O3 and ZrO2 nano-modifiers on the structural and mechanical properties of Fe+0.5% C alloy, Archives of Civil and Mechanical Engineering 17 (2017) 669 – 676. **Impact factor- 4.4.**

- T. Ruthradevi, J. Akbar, **G. Suresh Kumar,** A. Thamizhavel, G.A. Kumar, R.K. Vatsa, G.C. Dannangoda, K.S. Martirosyan, E.K. Girija, Investigations on nickel ferrite embedded calcium phosphate nanoparticles for biomedical applications, J. Alloys. Compd. 695 (2017) 3211 – 3219, **Impact factor- 6.2.**

- **G. Suresh Kumar,** E.K. Girija, M. Venkatesh, G. Karunakaran, E. Kolesnikov, D. Kuznetsov, One step method to synthesize flower-like hydroxyapatite architecture using mussel shell bio-waste as a calcium source, Ceram. Int. 43 (2017) 3457 – 3461. **Impact factor- 5.2.**

- G. Karunakaran, M. Jagathambal, M. Venkatesh, **G. Suresh Kumar,** E. Kolesnikov, A. Dmitry, A. Gusev, D. Kuznetsov, Hydrangea paniculata flower extract-mediated green synthesis of MgNPs and AgNPs for healthcare applications, Powder Technol. 305 (2017) 488 – 494. **Impact factor- 5.2.**

- S. Karthi, **G. Suresh Kumar,** G.A. Kumar, D.K. Sardar, C. Santhosh, E.K. Girija, Microwave assisted synthesis and characterizations of near infrared emitting Yb/Er doped fluorapatite nanoparticles, J Alloys Compd. 689 (2016) 525 – 532. **Impact factor- 6.2.**

- S. Karthi, **G. Suresh Kumar,** A. Thamizhavel, E.K. Girija, Biocompatible luminomagnetic hydroxyapatite nanoparticles for dual model bioimaging, J. Bionanosci.10 (2016) 267 – 274.

- M. Venkatesh, **G. Suresh Kumar,** S. Viji, S. Karthi, E.K. Girija, Microwave assisted combustion synthesis and characterization of nickel ferrite nanoplatelets, Modern Electronic Materials 2 (2016) 74–78.

- **G. Suresh Kumar,** T. Sivakumar, S. Karthi, R. Govindan, E.K. Girija, Fish scale derived nanocrystalline hydroxyapatite: a potential candidate for orthopedic applications, Journal of Bionanoscience 10 (2016) 140–144.

- **G. Suresh Kumar,** J. Akbar, R. Govindan, E.K. Girija, M. Kanagaraj, A novel rhombohedron-like nickel ferrite nanostructure: microwave combustion synthesis, structural characterization and magnetic properties, Journal of Science: Advanced Materials and Devices 1 (2016) 282–285. **Impact factor-8.**

- G. Vasugi, **G. Suresh Kumar,** A. Thamizhavel, E.K. Girija, Removal of reactive textile dyes using carbonate substituted nanocrystalline hydroxyapatite, Journal of Bionanoscience 10 (2016) 38–46.

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Participation in Conferences/workshops/ Seminars/FDP/Online Courses

- Paper Presented in Conferences: 15
- Conference/Seminar/Workshop attended: 20
- FDP/Refresher Courses : 5
- Coursera/NPTEL Course Completed : 3

Academic Responsibilities Undertaken

- Head, Department of Physics (PG & Research)
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- Member of Student Grievance Cell
- Co-ordinator for International Collaboration
- Member of Academic Council
- Member of Academic Audit
- SPOC for NGO scholarship