Curriculum Vitae

Dr. KRISHNA KIRAN PAWAR

Name:
Dr. Krishna K. Pawar

Email:
pawarkrish10@gmail.com

Contact No:
+91 7620565361

Postal Address:
School of Nanoscience and Technology, Shivaji University, Kolhapur; 416004

Father Name:
Kiran B. Pawar

Age:
28

Languages known:
English, Hindi, Marathi, Telagu

Scopus ID:
57195984041

ORCID ID:

https://orcid.org/0000-0002-4682-2224

Assistant Professor
School of Nanoscience and Technology
Shivaji University, Vidyanagar
Kolhapur-416 004
Maharashtra, India

Present work and Objective

Presently, working in School of nanoscience and technology, Shivaji university, Kolhapur. Aim to be associated with the Research and scientific teaching that gives me the scope to apply my knowledge and the skills in the work entrusted to me. Also, want to excel the scientific knowledge on the threshold of integrity, hardworking, learning and use my skills to fabricate commercialized product.

Research Interest

- Nanoscience, Metal oxide/sulphides thin films, Perovskites, Gas Sensor, Energy conversion & storage devices.

Research Experience and Skills

Synthesized various crystalline Nanostructures by chemical methods such as SILAR, Hydrothermal, Chemical bath deposition, deep coating, sputtering and Electrodeposition. In addition, several characterizations such as XRD, SEM, EDAX, PL, FTIR, FT-Raman, and DLS have been studied and operated from last 5 years. I have focused my work on exciting materials (O**xides, Sulphides and Perovskites etc.**) with utilization in Solid-state electrical device. Now, I am fascinating to learn theoretical as well as practical aspects of energy conversion and storage devices, Silica and Perovskites for various device level applications.

Education Qualification

Examination	Year of Passing	University/Board	Class Obtained (Percentage)
Ph. D (Physics)	June 2019	Shivaji University Kolhapur	
M.Sc. [Physics]	April- 2015	Shivaji University Kolhapur	**First Class With Distinction (71.46%)**
B. Sc [Physics]	April- 2013	Solapur University Kolhapur	**First Class With Distinction (71.04%)**
H.S.C	February- 2010	Pune Divisional Board	**First Class (67%)**
S.S.C	March- 2008	Pune Divisional Board	**First Class With (66.46%)**

Instruments handling Experience

- X-ray Powder Diffractometer (XRD)
- Scanning Electron Microscope (SEM)
- Elemental mapping with EDS
- Spectrophotometer (UV/VIS)
- Particle size analyzer with Zeta potential (DLS)
- Photoluminescence (PL)
- Fourier transform infrared spectroscopy (FTIR)
- Fourier transform Raman spectroscopy (FT-Raman)
- Solar simulator
- Contact angle meter
- Gas Sensing Instruments (Keithely electrometer)
- Autoclave
- Electrospinning
- Spray pyrolysis

Published research articles (10 International) Citations: 140, H-index: 7, i-10 Index: 4)

- T.S. Bhat, S.S. Mali, A.D. Sheikh, S.D. Korade, **K.K. Pawar**, C.K. Hong, J.H. Kim, P.S. Patil, TiO2/PbS/ZnS heterostructure for panchromatic quantum dot sensitized solar cells synthesized by wet chemical route, **Optical Materials**. (IF=2.87)

- Jasmin S. Shaikh, Navajsharif S. Shaikh, Sawanta S. Mali, Jyoti V. Patil, **Krishna K. Pawar**, Pongsakorn Kanjanaboos, Chang Kook Hong, J. H. Kim, Pramod S. Patil, Nanoarchitectures in dye sensitized solar cells: Metal oxides, Oxide Perovskites and Carbon based Materials, **nanoscale**, 2018. (IF= 7.3).

- **Krishna K. Pawar**, Vithoba L. Patil, Nilesh L. Tarwal, Namdev S. Harale, Jin H. Kim, Pramod S. Patil, Facile green synthesis of In_2O_3 cubes and its NO_2 gas sensing properties, **Journal of Material science: Materials in Electronics.** (IF= 2.346).

- Dongale, T. D, Mullani, N. B, Patil, A. M, Bagade, A. A, **Pawar, K. K**, Khot, K. V, Shinde, S. S, Patil, V. L, Vanalkar, S. A, Moholkar, A. V, Bhosale, P. N, Patil, P. S, Kamat, R. K, Mimicking the Biological Synapse Functions of Analog Memory, Synaptic Weights, and Forgetting with ZnO-Based Memristive Devices, **Journal of nanoscience and technology.** (IF= 1.7).

- **Pawar Krishna**, Desai Dhanashri, Bodake Shraddha, Patil Harshada, More, Suraj, Nimbalkar Ajay, Mali Dr. Sawanta, Hong, Chang, Kim Sung jun, Patil Pramod, Dongale Tukaram, Highly reliable multi-level resistive switching in nanoparticulated In_2O_3 thin film memristive device, **Journal of Physics D: Applied Physics.** (IF= 2.829).

- Arif D. Shaikh, Vishal Vhanalkar, Amrja Katware, **Krishna Pawar**, Pramod Patil Two-step Anti-Solvent Precipitated MAPbI3 Pellet Based Robust Room Temperature Ammonia Sensor, **Advanced Materials Technologies** (IF= 5.395).

- **Krishna K. Pawar**, Jasmin S. Shaikh, Sawanta S. Mali, Yuvraj H. Navale, Vikas B. Patil, Chang K. Hong, Pramod S. Patil, Hollow In_2O_3 microcubes for sensitive and selective detection of NO_2 gas, **Journal of Alloys and Compounds** (IF= 4.175).

- **Krishna K. Pawar**, Latika S. Chaudhary, Sawanta S. Mali, Tejasvinee S. Bhat, Arif D. Sheikh, Chang K. Hong, Pramod S. Patil, In_2O_3 nanocapsules for rapid photodegradation of Crystal violet dye under sunlight, **Journal of Colloid and Interface Science** (IF= 6.316).

- Suyog S. Mane , Sunil M.Patil, **Krishna K. Pawar,** Manjunath D. Salgaonkar, Pallavi Jagdaleae, Trupti Kamble, Mahesh Agharkar, Biogenic Synthesized Silver Nanoparticles Decorated Polypyrrole Nanotubes as Promising Photocatalyst for Methyl Violet Dye Degradation, **Materials Today: Proceedings** (IF= 3.8).

- **Krishna K. Pawar**, Sawanta S. Mali, Yuvraj H. Navale, Vikas B. Patil, Kiran K. Sharma, Chang K. Hong, Pramod S. Patil, Fabrication of enhanced sensitive and selective porous indium oxide nanocube sensor for NO2 detection, **Ceramics International**,

Ongoing work

- Metal oxide based sensors
- Perovskite based solid state electronic devices
- Mixed Halide Hybrid Perovskite
- Metal oxide composites

Taught (Experience 5 years)

- Semiconductor Physics and devices for M. Sc I (Integrated course of B.S.M.S) at School of Nanoscience and technology, Shivaji University, Kolhapur (June 2018 to till now)
- Engineering Physics for B. Tech (F.Y) at Department of technology, Shivaji University, Kolhapur (July 2017 to April 2018)
- Science at Nanoscale and Properties of Nanomaterials for B. Sc III (Integrated course of B.S.M.S) at School of Nanoscience and technology, Shivaji University, Kolhapur (June 2016 to April 2017)

Conferences/ Workshops:

- 1St in Exam, participation and presentation of project in Global Initiative of Academic s Networks **(GIAN)** organized by **IIT Kharagpur** at Indian Institute of Technology, Indore held in July 2016.
- National level Fencing Player (State level Winner)
- State level Karate and Judo Player (State level Winner)
- Applied for Hindi Praveen Exam
- Division level Handball player (Winner)
- Researcher award (25000/-) and Felicitation by Gajendra Pratishtan, Kolhapur.
- Organized National science day one week program, Shivaji University, Kolhapur (2019)

- Member, National science day one week program, Shivaji University, Kolhapur (2020)
- Organized online quiz competition on Physics and Solid state devices, Shivaji University, Kolhapur (2020)

Conferences/ workshops:

Name of the Conference/Workshop	Organizer	No. of Days	Year
International Conference on Materials Science and Ionizing Radiation Safety & Awareness (ICMSIRSA-2016)	Shivaji University, Kolhapur	Three Days	28-30 Jan 2016
Chemical sensors: Principle, technology and applications	IIT, Indore	Nine day	1-9 July 2016
Recent Trend In Nanotechnology	Sangola Mahavidyalay, Sangola	One Day	21st January, 2017
Recent Trend in Physical, Chemical and Nanoscience	L.B.S. College of Art, Science and Commerce, Satara	One Day	23rd January, 2017
Familiarization Workshop On Patent And IPR	Government of Maharashtra's Rajaram College, Kolhapur	One Day	8th February, 2017
A workshop on Solutions from synthesis to characterization	School of Nanoscience ad technology, SUK	Two day	26th March, 2018
A workshop on synthesis and characterization	School of Nanoscience ad technology, SUK	One Day	4th April, 2018

Hobbies

- Listening and singing songs
- Read books
- Cycling
- Travelling

Declaration

I hereby declare that the particulars given above are true to the best of my knowledge and belief.

Date: 08/02/2021
Place: Kolhapur

Dr. Krishna Kiran Pawar

References

Name:

Prof. Pramod S. Patil

M.Sc., Ph.D., FInstP (U.K.)

Pro-Vice-Chancellor,
DAAD & Brain Pool Fellow
Shivaji University, Kolhapur

Contacts:

Tel. (O): 0091-0231-2609230
Res.:0091-0231-6521825
Fax :0091-0231-2691533
Email:patilps_2000@yahoo.com
:psp_phy@unishivaji.ac.in