Saurabh S. Soni, **Ph. D.** **soni_b21@yahoo.co.in**

Professor, Department of Chemistry, Sardar Patel University,
Vallabh Vidyanagar – 388 120, Gujarat, INDIA
Phone : +91-9898945456

Curriculum Vitae

Personnel Information :

D. O. B. : **22nd January 1977**
Gender : **Male**
Nationality : **Indian**

Current areas of Research :

- Aqueous polymer gel based electrolyte for rechargeable metal ion batteries.
- Fabrication/Development of highly efficient and low cost Dye Sensitized Solar Cell (DSSC) using mesoporous titanium dioxide templated by block copolymers.
- Synthesis of Bronsted Ionic Liquids and their activity in various organic reactions.
- Self-assembly and association behavior of amphiphilic block copolymers and their interactions with various additives like ionic liquids, non-electrolytes etc.

Educational Qualifications :

Post Doctoral Fellowship (2005 – 2006)	Laboratoire des Physique E'tate Condense, Universite du Maine, Le Mans, France
Doctor of Philosophy in Chemistry (1999 – 2003)	P. G. Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar
Master of Science (Physical Chemistry) (1997 – 1999) First class with distinction (72.3%)	P. G. Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar
Bachelor of Science (1994 – 1997) First class (68%)	V. P. & R. P. T. P. Science College, Vallabh Vidyanagar

Title of Post Doctoral Research : "*Synthesis, Characterization and Photocatalytical Activities of TiO_2 mesoporous thin films templated by Block Copolymers"*

Title of Ph. D. Thesis : *"Surface Activity and Phase Behavior of Amphiphilic Copolymers in Aqueous Solutions"*

Awards and Honors :

- Received "GSA-Dr. A. K. Shah Best Paper award – 2018,2020, 2021" from Gujarat Science Academy.
- Recipient of "Sardar Patel Research Award – 2018" (Cash Prize of Rs. 10,000/-).
- Honored with ***INSA-CAS Bilateral Scientist Exchange Programme – 2018*** for visiting CHINA for the period of 4 weeks

- Received "**IAAM Scientist Medal – 2017**" for out standing work in the area of nanoscience and technology from International Association of Advanced Materials, Sweden.
- Received "**Young Scientist Award**", DST, New Delhi
- Awarded three years (2015-2018) membership of "**American Chemical Society**"
- **Most cited article** (J Mol. Catal. A, 2012) during the year 2011 – 2012 (Elsevier Publication)
- **Best Research Paper** (Langmuir 2010) Award (Price of Rs. 11,000/-) by Community Science Centre, Rajkot, INDIA
- **1st Rank holder** at M. Sc. Physical Chemistry (1999), SPU

Membership :

- Associate Fellow of Gujarat Science Academy (GSA) from April 2019.
- Member of "**American Chemical Society, USA**" for the period of 2015-2018)
- Life member "**Neutron Scattering Society of India**"
- Life member of "**Society of Material Chemistry of India**"
- Life member of "**Indian Society for Radiation and Photochemical Sciences"**
- Member of **"Board of Studies for Chemistry, S. P. University, V. V. Nagar**
- Member of **"University & Industry Interaction Cell (UIIC)"**

Research Projects :

SR. NO.	TITLE	FUNDING AGENCY	PERIOD	GRANT/ AMOUNT MOBILIZED (RS.)
1.	Development of High Efficiency, Low Cost Dye Sensitized Solar Cell	DST, New Delhi	July 2009- August 2012	Rs. 20,43,508/-
2.	Influence of Micellar Morphology on Conductivity of Polymer Gel Electrolytes	UGC-DAE, Mumbai	1st April 2012 – 31st March 2015	Rs. 5,92,000/-
3.	Development of porous functionalized metal oxides and their application in metal ion removal	UGC, New Delhi	1st July 2012 – 30st June 2015	Rs. 10,35,000/-
4.	Development of Water Based Polymer Gel Electrolytes for Advanced Devices	SERB-DST, New Delhi	1st April 2013 – 31st March 2016	Rs. 25,40,800/-
5.	Scaling up of the dye sensitized solar cell fabrication	DST, New Delhi	1st September 2014- 31st August 2016	Rs. 87,58,816/-
6.	Colored fluorescent conducting oligomers/monomers for Dye Sensitized Solar Cells (PI : Prof. Dr. N. Sekar & Co-PI : Dr. S. S. Soni)	DST, New Delhi	1st August 2016 for three years	Rs. 88,78,099/-
7.	Effect of various metal salts on micelles of Amphiphilic Block Copolymers for Energy Storage Applications	UGC-DAE CSR, Mumbai	1st April 2018 onwards	Rs. 6,50,000/-

Teaching Experience

- Worked as Adhoc Lecturer in Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar during the period 7th July 2003 to 7th September 2003. ***(For Post Graduate Students)***
- Worked as Lecturer in Gyanyagna College of Pure Applied Sciences, Kalawad Road, Rajkot from September 2003 - July 2006. (***For Undergraduate Students***)
- Worked as Assistant Professor in Physical Chemistry at Department of Chemistry, Sardar Patel University, Vallabh Vidynagar, India from July 2006 – Oct. 2016. ***(For Post Graduate Students).***
- Working as Professor in Chemistry at Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar since Oct. 2016. ***(For Post Graduate Students).***

Research Experience (Including Foreign Institutes):

- Worked as a Project Assistant in a IUC-DAEF, BARC, Mumbai sponsored research project at Department of Chemistry, Sardar Patel University for more than three years from August 1999 to March 2003.
- Worked as a "**Post Doctoral Research Fellow**" at Universite du Maine, Le Mans, France during May 2005 to July 2006.
- As a "**Visiting Scientist**" at Research School of Chemistry, Australian National University (ANU), Canberra, Australia during November 2005 – December 2005.
- Selected as "**Visiting Professor Scheme**" to visit **Universite du Maine, France** during for the period of one month (June – July 2009).
- Visited **IMMM, Universite Du Maine, Le Mans, FRANCE** as a **Visiting Professor** for the period of the one month. i.e. 22nd Sept. 2014 – 22nd Oct. 2014.
- Visited **QIBEBT, Chinese Academy of Science, CHINA under INSA-CAS Bilateral Scientist Exchange Programme – 2018** for the period of 4 weeks (i.e. from 10th May 2018 – 8th June 2018).

No. of Ph. D. Students :

Degree Awarded **: 06** Currently Working **: 02**

List of Patent: **(No. of Patent = 01)**

1. Substituted Carbazole based Dyes for Dye Solar Cells and other Optoelectronic devices.
   Inventors : Kishan B. Faladu and ***Saurabh SONI***
   Patent file no. 2609/MUM/2013 dated 7th August 2013 (Accepted in April 2018)

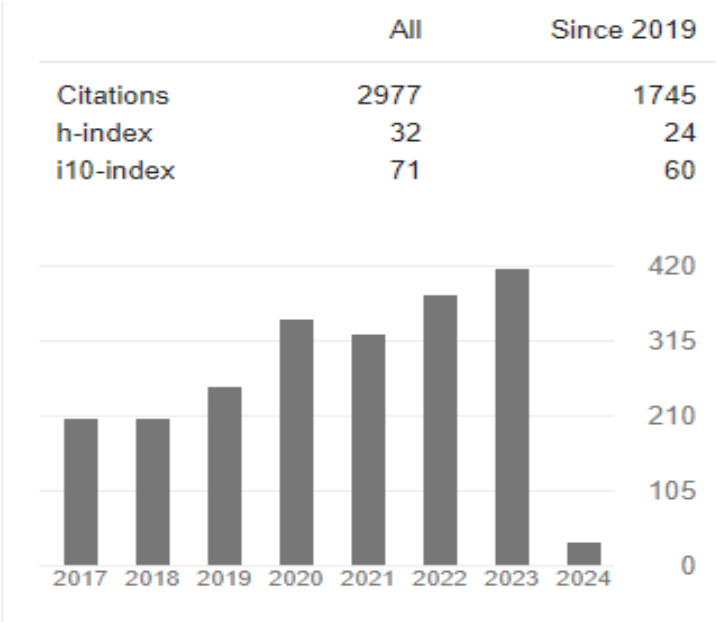
2. A Crystalline Reduced Graphene Oxide for Amplified Light Transmission and Dust Repellent Coating.
   Inventers : Karan Surana and ***Saurabh S. Soni***
   Patent Application no. 202321020087 dated 22nd March 2023

List of Book Chapter : **(No. of book chapters = 04)**

Sr.No	Title	Author's Name	Publisher	Year of Publication
01	Quasi-Solid-State Electrolytes for Lithium-Ion Batteries (Chapter 5)	Hiren K. Machhi, Keval K. Sonigara, ***Saurabh S. Soni***	CRC Press, Taylor & Francis Group	March 2021

	(ISBN:9780367701444) (eBook ISBN9781003144816) Title of Book : Ceramic and Specialty Electrolytes for Energy Storage Devices Eds.: Prasanth Raghavan, Jabeen Fatima			
02	Aqueous Electrolytes for Lithium and Sodium Ion Batteries (Chapter 9) (ISBN:9780367701444) (eBook ISBN9781003144816) Title of Book : Ceramic and Specialty Electrolytes for Energy Storage Devices Eds.: Prasanth Raghavan, Jabeen Fatima	***Saurabh S. Soni,*** Jyoti Prasad	CRC Press, Taylor & Francis Group	March 2021
03.	Role of metal oxides as photoelectrodes in dye-sensitized solar cells (Chapter 9) (ISBN : 978-0-323-85705-5) Title of Book : Advances in Metal Oxides and Their Composites for Emerging Applications Ed.: Sagar D. Delekar	Jayraj V. Vaghasiya, Keval K. Sonigara, ***Saurabh S. Soni***	Elsevier	June 2022
04.	Metal oxides as photoanodes for photoelectrochemical water splitting: synergy of oxygen vacancy (Chapter 3) (ISBN : 978-0-323-85705-5) Title of Book : Advances in Metal Oxides and Their Composites for Emerging Applications Ed.: Sagar D. Delekar	Keval K. Sonigara, Jayraj V. Vaghasiya, ***Saurabh S. Soni***	Elsevier	June 2022

List of Publications **(No. of publications = 95)**



a) In Journals

1. Micellar Structure of Silicone Surfactants in Water from Surface Activity, SANS and Viscosity Studies.
   Saurabh. S. Soni, N. V. Sastry, V. K. Aswal and P. S. Goyal
   J. Phys. Chem. B **2002**, *106*, 2606 – 2617. *(Impact Factor : **2.857**)* *https://doi.org/10.1021/jp0129434*

2. Surface Activity, SANS and Viscosity Studies in Aqueous Solutions of Oxyethylene and Oxybutylene Di- and Triblock Copolymers.
   Saurabh S. Soni, N. V. Sastry, A. K. Patra, J. V. Joshi and P. S. Goyal
   J. Phys. Chem. B **2002**, *106*, 13069 – 13077. *(Impact Factor : **2.857**)*
   https://doi.org/10.1021/jp026277y
3. Dynamic Light Scattering and Viscosity Studies on the Association Behavior of Silicone Surfactants in Aqueous Solutions.
   Saurabh. S. Soni, N. V. Sastry, John George and H. B. Bohidar
   J. Phys. Chem. B **2003**, *107*, 5382 – 5390. *(Impact Factor : **2.857**)*
   https://doi.org/10.1021/jp027444x

4. Surface Active and Association Behavior of Oxybutylene – Oxyethylene and Oxyethylene – Oxybutylene – Oxyethylene Copolymers in Aqueous Solutions.
   S. S. Soni, N. V. Sastry, John George and H. B. Bohidar
   Langmuir **2003**, *19*, 4597 – 4603. *(Impact Factor : **3.557**)*
   https://doi.org/10.1021/la027072j

5. Study on the Effect on Nonelectrolyte Additives on the Phase, Thermodynamics, and Structural Changes in Micelles of Silicone Surfactants in Aqueous Solutions from Surface Activity, Small Angle Neutron Scattering and Viscosity Measurements.
   Saurabh S. Soni, N. V. Sastry, J. V. Joshi, Ekta Seth and P. S. Goyal
   Langmuir **2003**, *19*, 6668 – 6677. *(Impact Factor : **3.557**)*
   https://doi.org/10.1021/la034389q

6. Quantitative SAXS Analysis of the P123/Water/Ethanol Ternary Phase Diagrams.
   S. S. Soni, G. Brotons, M. Bellour, T. Narayanan and A. Gibaud
   J. Phys. Chem. B **2006**, *110*, 15157 – 15165. *(Impact Factor : **2.857**)*
   https://doi.org/10.1021/jp062159p

7. Visible – Light Photocatalysis in Titania based Mesoporous Thin Films.
   Saurabh. S. Soni, M. J. Henderson, J.-F. Bardeau, J. White, A. Gibaud
   Advanced Materials **2008,** *20***,** 1493-1498**.** *(Impact Factor : **27.398**)*
   https://doi.org/10.1002/adma.200701066

8. Synthesis, Characterization and Curing of o-Cresol – Furfural Resins.
   A. U. Patel, ***S. S. Soni***, H. S. Patel
   Int. J. Polymeric Materials **2009**, *58*, 10, 509 – 516. *(Impact Factor :**1.982**)*
   https://doi.org/10.1080/00914030903035436

9. Excess molar volumes, excess isentropic compressibilities and relative permittivity deviations for the ternary mixtures of esters + glycols + organic solvents at different temperatures.
   N. V. Sastry, M. C. Patel, R. R. Thakor, ***S. S. Soni***
   J Mol. Liq. **2010**, *157*, 25 – 33. *(Impact Factor : **5.065**)*
   https://doi.org/10.1016/j.molliq.2010.08.001

10. Densities, Speeds of Sound, Excess Molar Volumes, and Excess Isentropic Compressibilities at T = (298.15 and 308.15) K for Methyl Methacrylate + 1-alkanols (1-Butanol, 1-Pentanol, and 1- Heptanol) + Cyclohexande, + Benzene, + Toluene, + *p*-xylene and + Ethylbenzene.
    N. V. Sastry, S. R. Patel, ***S. S. Soni***

J Chem. Eng. Data **2011**, *56*, 142 – 152. *(Impact Factor : **2.323**)*
https://doi.org/10.1021/je100652b

11. Effect of non-electrolyte additives on micellization and clouding behavior of silicone surfactant in aqueous solutions.
S. S. Soni, S. H. Panjabi, N. V. Sastry
Colloid and Surf. A **2011**, *377*, 205 – 211. *(Impact Factor : **3.990**)*
https://doi.org/10.1016/j.colsurfa.2010.12.048

12. Silica gel supported $-SO_3H$ functionalised benzimidazolium based ionic liquid as a mild and effective catalyst for rapid synthesis of 1-amidoalkyl naphthols.
Deepali A. Kotadia, ***Saurabh S. SONI***
J. Molecular Catalysis A, **2012,** *353-354,* 44 – 49. *(Impact Factor **: 3.687)***
https://doi.org/10.1016/j.molcata.2011.11.003

13. Ionic conductivity through thermoreversible polymer gel : ordering matters
Saurabh S. SONI, Kishan B. Fadadu, Alain Gibaud
Langmuir, **2012** *28*, 751 – 756. ***(**Impact Factor : **3.557)***
doi: 10.1021/la202670v

14. Aggregation behavior of pyridinium based ionic liquids in water – surface tension, ^1H NMR chemical shifts, SANS and SAXS measurements.
Nandhibatla V. Sastry, Nilesh M. Vaghela, Pradip M. Macwan, ***Saurabh S. SONI***, Vinod K. Aswal, Alain Gibaud
J. Colloid and Interface Science, **2012,** *371(1),* 52-61. *(Impact Factor **: 7.489)***
DOI: 10.1016/j.jcis.2011.12.077

15. Spectral sensitization of TiO_2 by new hemicyanine dyes in dye solar cell yielding enhanced photovoltage : Probing chain length effect on performance.
Kishan B. Fadadu, ***Saurabh S. Soni***
Electrochimica Acta **2013**, *88*, 270 – 277. ***(**Impact Factor **: 6.215)***
https://doi.org/10.1016/j.electacta.2012.10.072

16. Symmetrical and unsymmetrical Bronsted Acidic ionic liquids for the effective conversion of fructose to 5-hydroxymethyl furfural.
Deepali A. Kotadia, ***Saurabh S. Soni***
Catalysis Science and Technology **2013**, *3*, 469-474. *(Impact Factor **: 5.721)***
https://doi.org/10.1039/C2CY20493B

17. Visible light induced cell damage of Gram positive bacteria by N-doped TiO_2 mesoporous thin films.
S. S. Soni, G. S. Dave, M. J. Henderson, A. Gibaud
Thin Solid Films **2013**, *531*, 559 – 565. *(Impact Factor **: 2.030**)*
https://doi.org/10.1016/j.tsf.2012.12.056

18. Excess molar volumes, excess isentropic compressiblities, excess viscosities for Methyl acetate + ethyl acetate, + buty acetate +, isoamyl acetate +, methyl propionate + , ethyl propionate + , ethyl butyrate +, methyl methacrylate +, ethyl methacrylate +, and butyl methacrylate + cyclohexane at T = 298.15 and 303.15 K.
Nandhibatla V. Sastry, Sunil R. Patel, ***Saurabh S. Soni***
J. Mol. Liquid **2013,** *183*, 102-112. *(Impact Factor : **5.065**)*

https://doi.org/10.1016/j.molliq.2013.04.015

19. Ionic liquid induced sphere – to – ribbon transition in the block copolymer mediated synthesis of silver nanoparticles.
Saurabh S. Soni, Rohit L. Vekariya, Vinod K. Aswal
RSC Advances **2013**, *3*, 8398-8406. *(Impact Factor : **3.119**)*
https://doi.org/10.1039/C3RA41138A

20. Sulfonic acid functionalized solid acid: an alternative eco-friendly approach for transesterification of non-edible oils with high free fatty acids.
Deepali A Kotadia, ***Saurabh S SONI***
Monatsh Chem. **2013** *144*, 1735-1741. *(Impact Factor : **1.349**)*
DOI: 10.1007/s00706-013-1041-4

21. Time-dependent stereoselective Heck reaction using mesoporous Pd/TiO_2 nanoparticles catalyst under sunlight.
Saurabh S SONI, Deepali A. Kotadia
Catalysis Science and Technology **2014**, *4*, 510-515. *(Impact Factor **: 5.721**)*
https://doi.org/10.1039/C3CY00602F

22. Effect of self-assembly on triiodide diffusion in water based polymer gel electrolytes : An application in dye solar cell
S. S. Soni, K. B. Fadadu, R. L. Vekariya, J. Debgupta, K. D. Patel, A. Gibaud, V. K. Aswal
J. Colloid and Interface Science **2014**, *425*, 110-117. (*Impact Factor : **7.489***)
https://doi.org/10.1016/j.jcis.2014.03.047

23. Nonelectrolyte-Induced micellar shape changes in aqueous solutions of silicone surfactants.
S. S. Soni, R. L. Vekariya, N. V. Sastry, H. P. Soni, S. R. Patil, S. H. Panjabi
J. Dispersion Science & Technology **2014**, *35(10)*, 1419-1426. (*Impact Factor : **1.701***)
https://doi.org/10.1080/01932691.2013.848406

24. Pd doped SiO_2 nanoparticles : an efficient recyclable catalyst for Suzuki, Heck and Sonogashira reactions.
Deepali A Kotadia, Urmila H. Patel, Sahaj Gandhi, Saurabh S. Soni
RSC Advances **2014**, *4*, 32826-32833. (*Impact Factor = **3.119***)
https://doi.org/10.1039/C4RA01813C

25. Highly Efficient One-dimensional ZnO Nanowire-based Dye sensitized Solar Cell using a Metal free, D-π-A type, Carbazole derivative with more than 5% power conversion
Dipankar Barpuzary, Anindya S. Patra, Jayraj V. Vaghasiya, Bharat G. Solanki, ***Saurabh S. Soni***, Mohammad Qureshi
ACS Applied Materials Interface Science, **2014**, *6*, 12629-12639. (*Impact Factor* : ***8.758***)
https://doi.org/10.1021/am5026193

26. Effect of Ionic Liquids on Microstructures of Micellar Aggregates formed by PEO-PPO-PEO Block Copolymer in Aqueous Solution.
Rohit L. Vekariya, Debes Ray, Vinod K. Aswal, Puthussericka A. Hassan, ***Saurabh S. Soni***
Colloids and Surfaces A : Physicochem. Eng. Aspects **2014**, *462*, 153-161. (*Impact Factor : **3.990***)

https://doi.org/10.1016/j.colsurfa.2014.08.030

27. Stable mesoporous Fe/TiO_2 nanoparticles : A recoverable catalyst for solvent-free synthesis of propargylamine via C-H activation
Deepali A. Kotadia, ***Saurabh S. Soni***
Applied Catalysis A : General, **2014**, *488*, 231-238. (*Impact Factor : **5.006***)
https://doi.org/10.1016/j.apcata.2014.09.044

28. A synergistic effect of microwave / ultrasound and symmetrical acidic ionic liquids on transesterification of vegetable oils with high free fatty acid.
Saurabh S. Soni, Deepali A. Kotadia, Vaibhav K. Patel, Hiren Bhatt
Biomass Conv. Bioref. **2014**, *4*, 301-309. (*Impact Factor : **2.602***)
10.1007/s13399-013-0112-4

29. Influence of N-alkylpyridinium halide based ionic liquids on Micellization of P123 in aqueous solutions : A SANS, DLS and NMR study.
Rohit L. Vekariya, Vinod K. Aswal, Puthussericka A. Hassan, ***Saurabh S. Soni***
Langmuir, **2014**, *30*, 14406-14415. (*Impact Factor* : ***3.557***)
https://doi.org/10.1021/la502902n

30. Enhanced photovoltaic performance of mesoporous SnO_2 based solar cells utilizing 2D MgO nanosheets sensitized by a metal-free carbazole derivative.
Mohammad Qureshi, Tridip Ranjan Chetia,Mohammad Shaad Ansaria, ***Saurabh S. Soni,*** M. Qureshi
J. Mater. Chem. A, **2015,** *3*, 4291-4300. (*Impact Factor* : ***11.301***)
https://doi.org/10.1039/C4TA05877A

31. Sulphonate anchored hemicyanine dyes for dye solar cell : A study on dipole moment and polarity.
Kishan B. Fadadu, Jayraj V. Vaghasiya, Sudip Choudhury, ***Saurabh S. Soni***
J. Renew. & Sustain. Energy, **2015**, *7*, 023114. (*Impact Factor* : ***1.575***)
DOI: 10.1063/1.4915519

32. Microbial Selenium Nanoparticles (SeNPs) and their Application as a Sensitive Hydrogen Peroxide Biosensor.
K. S. Prasad, J. V. Vaghsiya, ***S. S. Soni***, J. Patel, R. Patel, M. Kumari, F. Jsamani, K. Selvaraj,
Appl. Biochem. Biotechnol. **2015**, *177*, 1386 – 1393. (Impact Factor : ***2.277***)
https://doi.org/10.1007/s12010-015-1814-9

33. Photocatalytic activity of Fe doped ZnS nanoparticles and carrier mediated ferromagnetism.
N. Dixit, J. V. Vaghasiya, ***S. S. Soni***, M. Sarkar, M. Chavda, N. Agrawal
J. Environ. Chem. Eng., **2015**, *3*, 1691. (Impact Factor : ***1.355***)
10.1016/j.jece.2015.06.010

34. Improved molecular architecture of D–π–A carbazole dyes: 9% PCE with a cobalt redox shuttle in dye sensitized solar cells.
S. S. Soni, K. B. Fadadu, J. V. Vaghasiya, B. G. Solanki, K.K. Sonigara, A.Singh, D.Das, P.K. Iyer
J. Mater. Chem. A, **2015**, *3*, 21664. (Impact Factor : ***11.301***)

https://doi.org/10.1039/C5TA06548H

35. Evolution of rhodium (III) and iridium (III) chelates as metallonucleases.
P. A. Vekariya, P. S. Karia, J. V. Vaghsiya, ***S. S. Soni***, E. Suresh
Polyhedron **2016**, *110*, 73 – 84. (Impact Factor : ***2.343***)
DOI:10.1016/j.poly.2016.01.050

36. Hybrid AgNP-TiO_2 thin film based photoanode for dye sensitized solar cell.
Jayraj V. Vaghasiya, Keval K. Sonigara, Kishan B. Fadadu, ***Saurabh S. Soni***
Perspectives in Science **2016**, *8*, 46-49. (Impact Factor : ***N.A.***)
https://doi.org/10.1016/j.pisc.2016.03.003

37. ZnO/CdS bi-layer nanostructures photoanode for dye sensitized solar cells.
Paresh V. Dalal, Milind P. Deshpande, Bharat G. Solanki, ***Saurabh S. Soni***
AIP Conference Proceedings **2016**, *1728*, 020223-1-4. (Impact Factor : ***N.A.***)
10.1063/1.4946274

38. Humic Acid as a Sensitizer in Highly Stable Dye Sensitized Solar Cells : Energy from an Abundant Natural Polymer Soil Component.
Rohit L. Vekariya, Keval K. Sonigara, Kishan B. Fadadu, Jayraj V. Vaghasiya, ***Saurabh S. Soni***
ACS Omega, **2016**, *1*, 14-18. (Impact Factor : ***2.870***)
https://doi.org/10.1021/acsomega.6b00010

39. Ni doped ZnS nanoparticles as Photocatalyst : Can mixed phase be optimized for better performance ?
Ekta Shah, Jayraj V. Vaghasiya, ***Saurabh S. Soni***, C. J. Panchal, Priya S. Suryavandhi, Mukesh Chavda, Hemant P. Soni
J. Environ. Chem. Eng. **2016**, *4*, 4708-4718. (Impact Factor : ***4.30***)
https://doi.org/10.1016/j.jece.2016.10.031

40. Design, synthesis and DSSC performance of o-fluorine substituted phenylene spacer sensitizers : Effect of TiO_2 thickness variation.
T. Bhim Raju, J. V. Vaghasiya, A. Afroz, ***S. S. Soni***, P. K. Iyer,
Phys. Chem. Chem. Phys. **2016,** *18*, 28485- 28491. (Impact Factor : ***3.430***)
https://doi.org/10.1039/C6CP05641E

41. Influence of m-fluorine substituted phenylene spacer dyes in dye-sensitized solar cells.
T. Bhim Raju, J. V. Vaghasiya, M. A. Afroz, ***S. S. Soni***, P. K. Iyer
Org. Electronics **2016**, *39*,371-379. (Impact Factor : ***3.310***)
DOI: 10.1016/j.orgel.2016.10.024

42. Role of a phenothiazine/phenoxazine donor in solid ionic conductors for efficient solid state dye sensitized solar cells.
Jayraj V. Vaghasiya, Keval K. Sonigara, Jyoti Prasad, Thomas Beuvier, Alain Gibaud, ***Saurabh S. Soni***
J. Mater. Chem. A **2017**, *5*, 5373-5382. (Impact Factor : ***11.301***)
https://doi.org/10.1039/C6TA09777D

43. A Smart Flexible Zinc Battery with Colling Recovery Ability.
J. Zhao, K. K. Sonigara, J. Li, J. Zhang, B. Chen, J. Zhang, ***S. S. Soni***, X. Zhou, G. Cui, L. Chen

Angewandte Chemie International Edition **2017**, 56, 7871-7875. (Impact Factor : ***12.959***)
https://doi.org/10.1002/anie.201704373

44. Twisted donor substituted simple thiophene dyes retard the dye aggregation and charge recombination in dye – sensitized solar cells.
T. B. Raju, J. V. Vaghasiya, M. A. Afroz, ***S. S. Soni***, P. K. Iyer
Org. Electronics **2017**, *50*, 25-32. (Impact Factor : ***3.310***)
DOI: 10.1016/j.orgel.2017.07.019

45. Iodine induced 1-D lamellar self assembly in organic ionic crystals for solid state dye sensitized solar cells.
Jayraj V. Vaghsiya, Keval K. Sonigara, Thomas Beuvier, Alain Gibaud, ***Saurabh S. Soni***
Nanoscale **2017**, *9*, 15949 - 15957 (Impact Factor : ***6.895***)
https://doi.org/10.1039/C7NR06128E

46. Effect of fluorine substitution and position on phenylene spacer in carbazole based organic sensitizers for dye sensitized solar cells.
Mohammad Adil Afroz, Keval K. Sonigara, Telugu Bhim Raju, ***Saurabh S. Soni***, Parameswar Krishnan Iyer
Phys. Chem. Chem. Phys. **2017**, *19*, 28579-28587 (Impact Factor : ***3.430***)
https://doi.org/10.1039/C7CP05226J

47. Effect of structural manipulation in hetero-tri-aryl amine donor-based D–A'–p–A sensitizers in dye-sensitized solar cells.
Dinesh S. Patil, Keval K. Sonigara, Manoj M. Jadhav, Kiran C. Avhad, Suryapratap Sharma, ***Saurabh S. Soni*** and Nagaiyan Sekar
New J. Chem. **2018**, *42*, 4361-4371. (Impact Factor : ***3.288***)
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