

## Publications of Prof. Satish Ogale in Last 10 Years

### Total Career Research Publications

**Total Publications:** > 450 peer-reviewed research publications in International peer-reviewed journals including Nature (1), Science (3), Nature Materials (2), Nano Letters (2), Phys. Rev. Letts. (11), Advanced Materials (5), Energy & Environmental Sci (4), Phys. Rev. B (34), Phys. Rev. B (Rapid Comm) (2), Phys. Rev. E (4), Appl. Phys. Lett. (66), Advanced Energy Materials (1), Advanced Functional Materials (2), Small (3), ChemComm (1), ChemSusChem (6), Green Chem (2), Nanoscale (9), Biomaterials (1), Lab Chip (1), Chemistry of Materials (3), J. Mater. Chem. A, B, C (13), J. Appl. Phys. (48), Nucl. Instrum.Meth. B (10), J. Mater. Res. (8), Carbon (1), Appl. Mater. Interfaces (4), Chemistryselect (3), ACS Appl. Mater. Interfaces (13), Inter. J. Hydro. Energy (2) etc.

### Books Edited

**S. B. Ogale** (NCL), T. Venkatesan (NUS, Singapore) and M. Blamire (Cambridge, UK) (Editors) "Functional Metal Oxides: New Science and Novel Applications", Wiley-VCH, **2013**

**S. B. Ogale** (Editor) "Thin Films and Heterostructures for Oxide Electronics, **Springer, 2005**

### Granted US Patents

Electronically conducting carbon and carbon based material by pyrolysis of dead leaves and other similar natural waste, Mandakini Biswal, Abhik Banerjee and Satishchandra Ogale, **US Patent no. US9212285 B2** Granted

Shape preserving chemical transformation of ZnO mesostructures into anatase TiO<sub>2</sub> mesostructures for optoelectronic application, Subas Muduli, Vivek Dhas, Onkar Game, Ashish Yengantiwar and Satishchandra Ogale, **US Patent no. US 9290392 B2**, Granted

Highly sensitive magnetic tunable heterojunction device for resistive switching, Satishchandra Ogale, DD Sarma, Abhimanyu Rana, Vishal Thakare, AK Puri, **US 9594129 B2**, Granted

Selective process for the detection of fluoride ions, Debanjan Guin, Satishchandra Ogale, Pooja Singh, **US9651491 B2**, Granted

Fluorescent, spherical sophorolipid mesostructures for imaging and therapeutic applications, Asmita Prabhune, Pradeed Singh, Ruchira Mukherji and Satishchandra Ogale, **US 9757481 B2**, Granted

Process for the synthesis of nitrogen-doped carbon electro-catalyst, Rohan Gokhale, Sreekuttan Unni, Kurungot Sreekumar and **Satishchandra Ogale, US9899687B2**, Granted

### Publications during last 10 years (shown with topics and impact factors where available)

#### 2018

1. Basu A, Kour P, Parmar S, Naphade R, and **Ogale SB**, Flex-Mode Mechatronic Functionality of Lead Iodide Hybrid Perovskite Systems, *J. Phys. Chem. C*, Accepted DOI: 10.1021/acs.jpcc.8b00192, **Impact factor: 4.53 Perovskite Devices**
2. Nagane S, Ghosh D, Hoyer R, Zhao B, Ahmad S, Walker A, Islam S, **Ogale SB**, Sadhanala A, Lead-Free Perovskite Semiconductors Based on Germanium-Tin Solid Solutions: Structural and Optoelectronic Properties *J. Phys. Chem. C*, Accepted 10.1021/acs.jpcc.8b00480, **Impact factor: 4.53 Perovskite Devices**
3. Tonda, S; Kumar, Santosh; Bhardwaj, M; Yadav, P; **Ogale SB**, 2017, g-C<sub>3</sub>N<sub>4</sub>/NiAl-LDH 2D/2D Hybrid Heterojunction for High-Performance Photocatalytic Reduction of CO<sub>2</sub> into Renewable Fuels, *ACS Applied Materials and Interfaces* 2018, 10, 2667-2678, **Impact Factor: 7.504, CO<sub>2</sub> reduction**

4. Malik W, Puthusseri D, Gawli Y, Sharma N, and **Ogale SB**, Hard carbons for sodium ion battery anodes: Synthetic strategies, material properties, and storage mechanisms, *ChemSusChem* 2018, 11, 506-526, (Mini Review) **Impact factor: 7.2 Charge Storage**
5. Thripuranthaka M., Sharma N, Das T, Varhade S, Badadhe S S, Thotiyl M O, Kabir M, and **Ogale SB**, A Combined Experimental and Computational Study of Gas Sensing by Cu<sub>3</sub>SnS<sub>4</sub> Nanoparticulate Film: High Selectivity, Stability, and Reversibility for Room Temperature H<sub>2</sub>S Sensing, *Adv. Mater. Interfaces* 2018, 1701492, **Impact factor: 4.28 Gas Sensing**
6. Jain S, Patrike A, Badadhe S, Bhardwaj M, and **Ogale SB**, Room-Temperature Ammonia Gas Sensing Using Mixed-Valent CuCo<sub>2</sub>O<sub>4</sub> Nanoplatelets: Performance Enhancement through stoichiometry Control, *ACS Omega* 2018, 3, 1977–1982, **Impact factor: NA Gas Sensing**

## 2017

7. Sarma N, Puthusseri D, Thotiyl OT, and **Ogale SB**, Hard Carbon and Li<sub>4</sub>Ti<sub>5</sub>O<sub>12</sub>-Based Physically Mixed Anodes for Superior Li-Battery Performance with Significantly Reduced Li Content: A Case of Synergistic Materials Cooperation, *ACS Omega*, 2017, 2, 8818, **Impact factor: NA Charge Storage**
8. Nagaraju D, Gupta S, Kumar D, Jijil C, Bhat S, Jagadeesan D and **Ogale SB**, Room Temperature Activation of CO<sub>2</sub> by Dual-Defect Stabilized Nanoscale Hematite (Fe<sub>2</sub>O<sub>3</sub>): Concurrent role of Fe and O vacancies, *ACS Omega*, 2017, 2, 8407, **Impact factor: NA CO<sub>2</sub> reduction**
9. Sattwick Haldar, Kingshuk Roy, Shyamapada Nandi, Debanjan Chakraborty, Dhanya Puthusseri, Yogesh Gawli, **Ogale SB**, and R. Vaidhyanathan, 2017, High and Reversible Lithium Ion Storage in Self-Exfoliated Triazole-Triformyl Phloroglucinol based Covalent Organic Nanosheets, *Adv. Energy Mater.* 2017, 1702170, **Impact Factor: 16.721, Charge Storage**
10. Robertson N, Shinton S, Karve P, **Ogale SB**, Building Comprehensive Networks to Address the Sustainable Energy Challenge with Focus on Rural India, *ACS Energy Letters*, 2017, 2, 2449-2451 **Impact factor: NA**
11. Naphade R, Nagane S, Bansode U, Tathavadekar M, Sadhanala A, **Ogale SB**, Synthetic Manipulation of Hybrid Perovskite Systems in Search of Novel and Enhanced Functionalities, *ChemSusChem*, 2017, 10, 3722-3739, **Impact factor: 7.2 Perovskite Solar cells**
12. Sharma N, Gawli Y, Ahmad A, Muhammed M, **Ogale SB**, Nanotubular Hard Carbon Derived from Renewable Natural Seed Gel for High Performance Sodium-Ion Battery Anode, *ChemistrySelect*, 2017, 2, 6909-6915 **Impact factor: NA Charge Storage**
13. Tathavadekar M, Krishnamurthy S, Banerjee A, Nagane S, Gawli Y, Suryawanshi A, Bhat S, Puthusseri P, Mohite A D, **Ogale SB**, Low-dimensional hybrid perovskites as high performance anodes for alkali-ion batteries, *Journal of Materials Chemistry A*, 2017, 5, 18634-18642 **Impact factor: 8.86 Charge Storage**
14. Naphade R, Zhao B, Richter J M, Booker E, Krishnamurthy S, Friend R H, Sadhanala A, **Ogale SB**, High Quality Hybrid Perovskite Semiconductor Thin Films with Remarkably Enhanced Luminescence and Defect Suppression via Quaternary Alkyl Ammonium Salt Based Treatment, *Advanced Materials Interfaces*, 2017, 4, 1700562, **Impact factor: 4.279 Perovskite Solar cells**
15. Gawli Y, Wahid M, Fernandez, Kothari D, Shelke M, **Ogale SB**, Hexaphosphate-Derived Phosphorus-Functionalized Carbon for R Lithium-Ion Battery Anode, *ChemistrySelect* 2017, 2, 5600-5607, **Impact factor: NA Charge Storage**
16. Wahid M, Gawli Y, Puthusseri D, Kumar A, Shelke M, **Ogale SB**, Nutty Carbon: Morphology Replicating Hard Carbon from Walnut Shell for Na Ion Battery Anode, *ACS Omega* 2017, 2, 3601-3609, **Impact factor: NA Charge Storage**

17. Bhardwaj M, Suryawanshi A, Fernandes R, Tonda S, Banerjee A, Kothari D, **Ogale SB**, CuCo<sub>2</sub>O<sub>4</sub> nanowall morphology as Li-ion battery anode: Enhancing electrochemical performance through stoichiometry control, *Mater. Res. Bull.*, 2017, 90, 303-310, **Impact factor: 2.446, Charge Storage**
18. Bansode U, **Ogale SB**, On-axis pulsed laser deposition of hybrid perovskite films for solar cell and broadband photo-sensor applications, *J. Appl. Phys.* 2017, 121, 133107, **Impact factor: 2.068, Perovskite Solar cells**
19. Bhardwaj M, Patrike A, Naphade R, Tonda S, Gawli Y, **Ogale SB**, Porous CuCo<sub>2</sub>O<sub>4</sub> Nanotubules for Li-Ion Battery Anode, *ChemistrySelect* 2017, 2, 2922-2926, **Impact factor: NA, Charge Storage**
20. Tonda S, Kumar S, Gawli S, Bhardwaj M, and **Ogale SB**, g-C<sub>3</sub>N<sub>4</sub> (2D)/ CdS (1D)/ rGO (2D) Dual-Interface Nano-Composite for Excellent and Stable Visible Light Photocatalytic Hydrogen Generation, *Int. J. Hydrogen Energy*, 2017, 42 (9), 5971-5984 **Impact factor: 3.582, Photocatalytic Hydrogen Generation**
21. Nagane S, Ichake A, Agrawal I, Sadhanala A, Friend R. H., **Ogale SB**, Wadgaonkar P, Phenothiazine-Based D-A- $\pi$ -A Dyes for Highly Efficient Dye-Sensitized Solar Cells: Effect of Internal Acceptor and Non-Conjugated p-Spacer on Device Performance, *ChemPlusChem*, 2017, 82, 280-286, **Impact factor: 2.797 Dye sensitized solar cells**

## 2016

22. Basu A, Roy K, Sharma N, Nandi S, Vaidhyanathan R, Rane S, Rode C, **Ogale SB**, CO<sub>2</sub> Laser Direct Written MOF-Based Metal-Decorated and Heteroatom-Doped Porous Graphene for Flexible All-Solid-State Microsupercapacitor with Extremely High Cycling Stability, *ACS Appl. Mater. Interfaces*, 2016, 8 , 31841–31848 **Impact factor: 7.5, Charge Storage**
23. Nagane S and **Ogale SB**, CH<sub>3</sub>NH<sub>3</sub>Pb(BF<sub>4</sub>)<sub>3</sub> and (C<sub>4</sub>H<sub>9</sub>NH<sub>3</sub>)<sub>2</sub>Pb(BF<sub>4</sub>)<sub>4</sub> Family of 3D and 2D Perovskites without and with Iodide and Bromide Ions Substitution, *J. Phys. Chem. Letts.*, 2016, 7 (22), 4757-4762, **Impact factor: 9.35, Perovskite Solar cells**
24. Naphade R, Nagane S, Shanker S G., Fernandes R, Kothari D C, Zhou Y, Padture N P and **Ogale SB**, Hybrid perovskite quantum nanostructures synthesized by electrospray antisolvent-solvent extraction and intercalation, *ACS Appl. Mater. Interfaces*, 2016, 8, 854-861, **Impact factor: 7.5, Perovskite Solar cells**
25. Basu A, Bhardwaj M, Gawli Y, Rode C and **Ogale SB**, A robust highly flexible micro-pseudocapacitor based on ternary oxide CuCo<sub>2</sub>O<sub>4</sub> having ultrathin porous nanowall type morphology blended with CNT, *ChemistrySelect*, 2016, 1, 5159 – 5164. **Impact factor: NA**
26. Dhakras D. and **Ogale SB**, High-Performance Organic–Inorganic Hybrid Piezo-Nanogenerator via Interface Enhanced Polarization Effects for Self-Powered Electronic Systems, *Adv. Mater. Interfaces*, 2016, 3, 1600492, **Impact factor: 4.279, Nanogenerators**
27. Yadav P, Basu A, Suryawanshi A, Game O, and **Ogale SB**, Highly Stable Laser-Scribed Flexible Planar Microsupercapacitor Using Mushroom Derived Carbon Electrodes, *Adv. Mater. Interfaces*, 2016, 3, 1600057, **Impact factor: 4.279, Microsupercapacitors**
28. Agarkar S, Yadav P, Fernandes R, Kothari D, Suryawanshi A and **Ogale SB**, Minute-made activated porous carbon from agro-waste for Li-ion battery anode using a low power microwave oven, *Electrochimica Acta*, 2016, 212, 535-544. **Impact factor: 4.798, Charge Storage**
29. Sawane Y, **Ogale S**, Banpurkar A. Low voltage electrowetting on ferroelectric PVDF-HFP insulator with highly tunable contact angle range *ACS Appl. Mater. Interfaces*, 2016, 8, 36, 24049-24056 **Electrowetting**

30. Gawli Y, Banerjee A, Dhakras D, Deo M, Bulan D, Wadgaonkar P, Shelke M and **Ogale S B**, Polyaniline Architecture by Concurrent Inorganic and Organic Acid Doping for Superior and Robust High Rate Supercapacitor Performance, *Scientific Reports (Nature Publishing)*, 2016, 6, 21002, **Impact Factor: 4.25, Charge Storage**
31. Suryawanshi A, Biswal M, Mhamane D, Yadav P, Banerjee A, Yadav P, Patil S, Aravindan V, Madhavi S and **Ogale SB**, A comparative evaluation of differently synthesized high surface area carbons for Li-ion hybrid electrochemical supercapacitor application: Pore size distribution holds the key, *Applied Materials Today*, 2016, 2, 1-6, **Impact factor: NA, Charge Storage**
32. Puthusseri D, Vanchiappan A, Srinivasan M and **Ogale S B**, Co<sub>3</sub>O<sub>4</sub> nanoparticle loaded 3D interconnected porous graphene for Li-ion battery anode, *Energy Technology*, 2016, 4, 816–822, **Impact factor: 2.789, Charge Storage**
33. Badadhe S, Suryawanshi S, Naphade R Chaudhary M, More M Shelke M, **Ogale SB**, Synthesis, microstructure, optical and field emission studies of iron vanadium oxide nanosheets, *J. Appl. Phys. D: Applied Physics*, 2016, 49, 14 **Impact Factor:2.58, Sensors**
34. Mhamane D, Aravindan V, Taneja D, Suryawanshi A, Game O, Srinivasan M., **Ogale SB**. Graphene based nanocomposites for alloy (SnO<sub>2</sub>), and conversion (Fe<sub>3</sub>O<sub>4</sub>) type efficient anodes for Li-ion battery applications *Comp. Sci. Tech.* 2016, 130, 88-95 **Charge storage**
35. Game O, Kumari T, Singh U, Aravindan V, Madhavi S and **Ogale SB**, (001) faceted mesoporous anatase TiO<sub>2</sub> microcubes as superior insertion anode in practical Li-ion configuration with LiMn<sub>2</sub>O<sub>4</sub>, *Energy Storage Materials*, 2016, 3, 106–112, **Impact factor: NA, Charge storage**
36. Suryawanshi A, Vanchiappan A, Srinivasan M and **Ogale SB**, , Red mud and Li-ion Battery: A Magnetic Connection, *ChemSusChem* 2016, 9, 2193-2200, **Impact factor: 7.226, Charge Storage**

#### 2015

37. Naphade R, Nagane S., Shanker G, Fernandes R, Kothari D, Zhou Y, Pature N, **Ogale SB** Hybrid Perovskite Quantum Nanostructures Synthesized by Electrospray Antisolvent–Solvent Extraction and Intercalation *ACS Appl. Mater. Inter.* 2015 8 (1), 854-861 **Impact Factor: 7.5, Perovskite Solar cell**
38. Anothumakkool B, Agrawal I, Bhange S N, Soni R, Game O, **Ogale SB** and KurungotS, Pt- and TCO-Free Flexible Cathode for DSSC from Highly Conducting and Flexible PEDOT Paper Prepared via in Situ Interfacial Polymerization, *ACS Appl. Mater. Interfaces*, 2015, 8 (1), 553-562 **Impact factor: 7.5 , Dye (QD) Sensitized Solar Cells**
39. Mallows. J, Planells. M, Thakare, V, Bhosale R, **Ogale SB** and Robertson N, p-Type NiO Hybrid Visible Photodetector, *ACS Appl. Mater. Interfaces*, 2015, 7, 27597–27601, **Impact factor: 7.5 Photosensor**
40. Bhosale R, Kelkar S, Parte G, Fernandes R, Kothari D C and **Ogale SB**, NiS<sub>1.97</sub>: A New Efficient Water Oxidation Catalyst for Photoelectrochemical Hydrogen Generation, *ACS Appl. Mater. Interfaces*, 2015, 7, 20053–20060, **Impact factor: 7.5 Water Splitting**
41. A Suryawanshi, V Aravindan, D Mhamane, P Yadav, S Patil, S Madhavi and **Ogale SB**, Excellent performance of Fe<sub>3</sub>O<sub>4</sub>-perforated graphene composite as promising anode in practical Li-ion configuration with LiMn<sub>2</sub>O<sub>4</sub>, *Energy Storage Materials*, 2015,1, 152-157, **Impact factor: NA, Charge Storage**
42. Bansode U, Naphade R , Game O , Agarkar S , and **Ogale SB**, 2015, Hybrid Perovskite Films by a New Variant of Pulsed Excimer Laser Deposition: A Room-Temperature Dry Process, *J. Phys. Chem. C*, 2015,119, 9177, **Impact Factor: 4.53, Perovskite Solar cell**

43. Sawane Y B, Datar S, **Ogale SB** and Banpurkar A G, , Hysteretic D C electrowetting by field-induced nano-structurations on polystyrene films, *Soft Matter*, 2015, 11, 2655-2664, **Impact Factor 3.889 Electrowetting**
44. Basu A, Suryawanshi A, Kumawat B, Dandia A, Guin D and **Ogale SB**, , Starch (Tapioca) to carbon dots: an efficient green approach to an on-off-on photoluminescence probe for fluoride ion sensing *Analyst*, 2015, 140, 1837-1841, **Impact Factor 3.885, Carbon**
45. Malik W, Parte G, Phase D and **Ogale S B**, 2015, Yogurt: A novel precursor for heavily nitrogen doped supercapacitor carbon, *J. Mater. Chem. A*, 2015,3, 1208-1215, **Impact Factor: 8.867 Charge Storage**
46. Tathvadekar M, Agarkar S, Game O, Agarwal I, Kulkarni S, Mhaisalkar S and **Ogale SB**, 2015, Enhancing efficiency of perovskite solar cell via surface microstructuring: Superior grain growth and light harvesting effect, *Solar Energy*, 2015, 112, 12-19, **Impact Factor: 4.018 Dye (QD) Sensitized Solar Cells**
47. Malik W, Parte G, Fernandes R, Kothari D C and **Ogale SB**, Natural-gel derived N-doped, ordered and interconnected 1D nanocarbon threads as efficient supercapacitor electrode materials, *RSC Adv.*, 2015,5, 51382-51391, **Impact Factor: 3.108 Charge Storage**
48. Chhatre S, Aravindan V, Puthusseri D, Banerjee A, Srinivasan M, Wadgaonkar P, and **Ogale SB**, 2015, High surface area porous carbon for ultracapacitor application by pyrolysis of polystyrene containing pendant carboxylic acid groups prepared via click chemistry, *Materials Today (Commun)*, 2015, 4, 166–175 **Impact Factor: NA Charge Storage**
49. Chaudhari N, Mandal L, Game O, Warule S, Phase D, Jadkar S and **Ogale SB**, 2015, Dramatic enhancement in photoresponse of  $\beta$ -In<sub>2</sub>S<sub>3</sub> through suppression of dark conductivity by synthetic control of defect induced carrier compensation, *ACS Appl. Mater. Interfaces*, 2015, 7, 17671–17681, **Impact factor: 7.5 Device Science**
50. Singh PK, Prabhune A, and **Ogale SB**, 2015, Pulsed Laser Driven Molecular Self-assembly of Cephalexin: Aggregation Induced Fluorescence and Its Utility as Mercury Ions Sensor, *Photochemistry & Photobiology*, 2015,91, 1340–1347, **Impact factor: 2.121, Photosensor**
51. Bhaskara Rao BV, Yadav P, Aepuru R, Panda HS, **Ogale SB**, Kale SN Single-layer graphene-assembled 3D porous carbon composites with PVA and Fe<sub>3</sub>O<sub>4</sub> nano-fillers: an interface-mediated superior dielectric and EMI shielding performance *Phy. Chem. Chem. Phy.* 2015 17,28, 18353-18363 **Impact factor: 4.123 , EMI Shielding**

#### 2014

52. Game O, Singh U, Kumari T and **Ogale SB**, ZnO(N)-Spiro-MeOTAD hybrid photodiode: An efficient self-powered eco-friendly fast-response UV(Visible) photosensor, *Nanoscale*, 2014, 6, 503-513, **Impact Factor: 7.367 Photosensors/Sensors**
53. Singh P, Wani K, Kaul-Ghanekar R, Pabhune A, **Ogale SB**, 2015, From Micron to Nano-Curcumin by sophorolipid co-processing: Highly enhanced bioavailability, fluorescence, and anti-cancer efficacy, *RSC Advances*, 2015, 4,60334-60341, **Impact Factor: 3.108, Biomedical Science**
54. Puthusseri D, Anothumakkool B, Aravindan V, Srinivasan M, Sreekumar K and **Ogale SB**, From waste paper basket to solid state and Li-HEC ultracapacitor electrodes: A value added journey for shredded office paper, *Small*, 2014, 10, 4395-4402, **Impact Factor: 8.643 Charge Storage/Carbon**
55. Nagane S, Bansode U, Game O, Chhatre S and **Ogale SB**, CH<sub>3</sub>NH<sub>3</sub>PbI<sub>(3-x)</sub>(BF<sub>4</sub>)<sub>x</sub> : Molecular Ion substituted hybrid perovskite, *ChemComm*, 2014, 50, 9741-9744 **Impact Factor: 6.31 Perovskite solar cells**

56. Puthusseri D, Vanchiappan A, Srinivasan M and **Ogale SB**, 3D micro-porous conducting carbon beehive by single step polymer carbonization for high performance supercapacitor: Role of in situ porogen formation, *Energy and Environ. Sci.*, 2014,7, 728-735, **Impact factor: 29.518 Charge Storage/Carbon**
57. Anothumakkool B, Game O, Bhange S, Kumari T, **Ogale SB**, Kurungot S, Enhanced Catalytic Activity of Polyethylenedioxythiophene towards Tri-iodide Reduction in DSSC via 1-Dimensional Alignment Using Hollow Carbon Nanofiber, *Nanoscale* 2014, 6, 10332-10339 **Impact Factor: 7.367 Dye sensitized solar cells**
58. Deshpande A, Kelkar S, Rayalu S, and **Ogale SB**, Orthorhombic/Cubic Cd<sub>2</sub>SnO<sub>4</sub> Nanojunctions: Enhancing Solar Water Splitting Efficiency by Suppression of Charge Recombination, *J. Mater. Chem. A*, 2014, 2 (2), 492 – 499, **Impact factor: 8.867 Water Splitting**
59. Verma S, Kumar A, Pravarthana D, Deshpande A, **Ogale SB**, Yusuf S, Off-stoichiometric nickel cobaltite nanoparticles: Thermal stability, magnetization and neutron diffraction studies, *J. Phys. Chem. C* 2014,118 , 16246–16254 **Impact Factor: 4.536 Nanomaterials**
60. Shaikh P, Thakare V, Late D and **Ogale SB**, Back-to-back MOS-Schottky (Pt-SiO<sub>2</sub>-Si-C-Pt) nano-heterojunction device as an efficient self-powered photodetector: One step fabrication by pulsed laser deposition, *Nanoscale*, 2014,6, 3550-3556, **Impact Factor: 7.367 Photosensors/Sensors**
61. Rana A, Lu H, Bogle K, Zhang Q, Vasudevan R, Thakare V, Gruverman A, **Ogale SB**, and Valanoor N, Scaling Behavior of Resistive Switching in Epitaxial Bismuth Ferrite Heterostructures, *Adv. Func. Mater.* 2014,24, 3962-3969 **Impact Factor: 12.12 Device Science.**
62. Biswal M, Deshpande A, Kelkar S, **Ogale SB**, Water Electrolysis with a Conducting Carbon Cloth: Sub-Threshold Hydrogen Generation and Super-Threshold Carbon Quantum Dot Formation, *ChemSusChem*, 2014, 7, 883-889, **Impact factor: 7.22 Water splitting**
63. Gokhale R, Unni S, Puthusseri D, Sreekumar K, **Ogale SB**, An efficient heteroatom-doped carbon electrocatalyst for oxygen reduction reaction by pyrolysis of protein-rich pulse flour cooked with SiO<sub>2</sub> nanoparticles, *Phys. Chem. Chem. Phys.*, 2014, 16, 4251-4259, **Impact Factor: 4.123 Catalysis/Carbon**
64. Tathavadekar M, Biswal M, Agarkar S, Giribabu L, **Ogale SB**, Electronically and Catalytically Functional Carbon Cloth as a Permeable and Flexible Counter Electrode for Dye Sensitized Solar Cell, *Electrochimica Acta*, 2014, 123, 248-253, **Impact Factor: 4.798 Dye sensitized solar cell**
65. Patil R, Phadke S, Deshpande A and **Ogale SB**, Low temperature grown CuBi<sub>2</sub>O<sub>4</sub> flower morphology and its composite with CuO nanosheets for photoelectrochemical water splitting, Accepted, *J. Mater. Chem. A*, 2014, 2, 3661-3668, **Impact factor: 7.44 Water Splitting**
66. Naphade R, Tathavadekar M, Jog JP, Agarkar S, and **Ogale SB**, Plasmonic Light Harvesting of Dye Sensitized Solar Cells by Au-Nanoparticles Loaded TiO<sub>2</sub> Nanofibers, *J. Mater. Chem. A*, 2014, 2, 975-984, **Impact factor: 8.867 Dye (QD) Sensitized Solar Cells**
67. Banerjee A, Upadhyay K Puthusseri D, Vanchiappan A, Srinivasan M and **Ogale SB**, MOF-derived crumpled-sheet-assembled perforated carbon cuboids as highly effective cathode active materials for ultra-high energy density Li-ion hybrid electrochemical capacitors (Li-HECs), *Nanoscale*, 2014, 6, 4387-439, **Impact Factor: 7.367 Charge Storage/Carbon**
68. Banerjee A, Upadhyay K, Bhatnagar S, Tathavadekar M, Bansode U, Agarkar S A and **Ogale SB**, Nickel cobalt sulfide nanoneedle-array as an effective alternative to Pt as counter electrode in dye sensitized solar cell, *RSC Advances*, 2014,4, 8289-8294, **Impact Factor: 3.108, Dye(QD) sensitized solar cell**

69. Puthusseri D, Vanchiappan A, Srinivasan M and **Ogale SB**, Improving the energy density of Li-ion capacitors using polymer-derived porous carbons as cathode, *Electrochimica Acta*, 2014, 130, 766-770, **Impact Factor: 4.798 Charge Storage/Carbon**
70. Suryawanshi A, Biswal M, Mhamane D, Gokhale R, Patil S, Guin D and **Ogale SB**, Large scale synthesis of graphene quantum dots (GQDs) from waste biomass and their use as an efficient and selective photoluminescence *on-off-on* probe for Ag<sup>+</sup> ions, *Nanoscale*, 2014, 6, 11664-11670, **Impact factor: 7.367 Carbon/Graphene QD**
71. Late D J, Shaikh P A, Khare R, Kashid R V, Chaudhary M, More M A, and **Ogale SB**, Pulsed Laser-Deposited MoS<sub>2</sub> Thin Films on W and Si: Field Emission and Photoresponse Studies, *ACS Appl. Mater. Interfaces*, 2014, 6 (18), 15881–15888, **Impact factor: 7.5 Device Science.**
72. Gokhale R; Aravindan V; Yadav P; Jain S; Phase D; Madhavi S; **Ogale SB**, Oligomer-salt derived 3D, heavily nitrogen doped, porous carbon for Li-ion hybrid electrochemical capacitors application, *Carbon* 2014, 80, 460-471, **Impact factor:6.337 Charge Storage/Carbon**
73. Singh U, Banerjee A, Mhamane D, Suryawanshi A, Upadhyay K and **Ogale SB**, Surfactant free gram scale synthesis of mesoporous Ni(OH)<sub>2</sub>-r-GO nanocomposite for high rate pseudocapacitor application, *RSC Advances*, 2014, 4, 39875-39883, **Impact factor: 3.108 Charge Storage/Carbon**
74. Banerjee A, Bhatnagar S, Upadhyay K, Yadav P, and **Ogale SB**, Hollow Co<sub>0.85</sub>Se nanowire array on carbon fiber paper for high rate pseudocapacitor, *ACS. Appl. Mater. Interfaces*, 2014, 6 (21), 18844–18852 **Impact factor 7.504 Charge storage/Carbon**
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