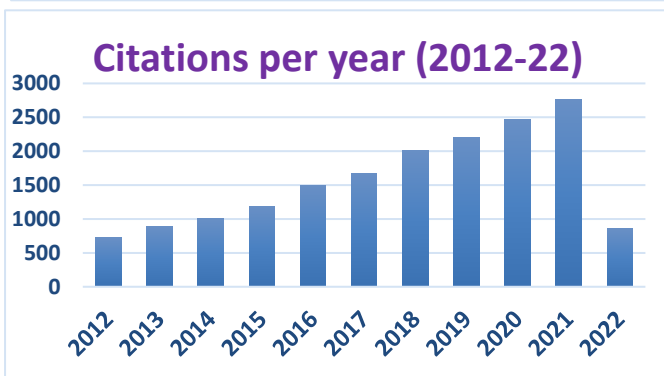
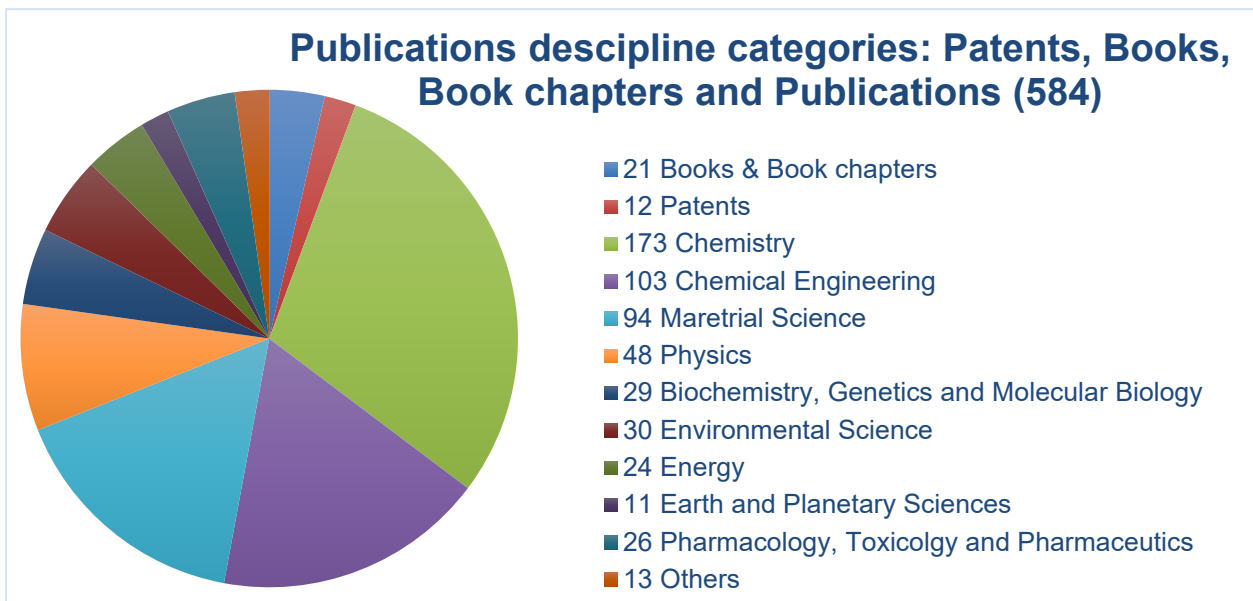


Distinguished Prof. Suresh K. Bhargava



Citations from 1996-2022

Total citations: >20,500

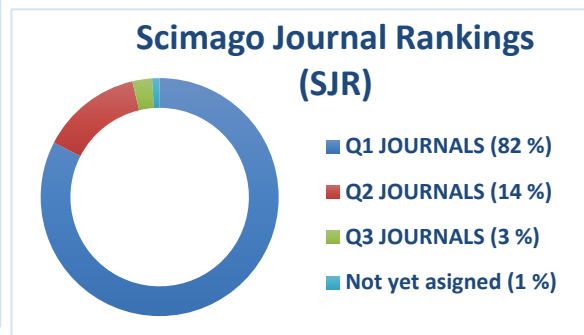
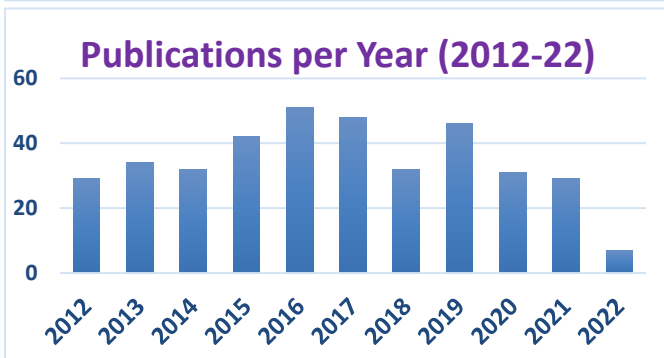
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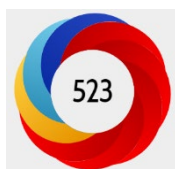
Research Gate RG score: 51.94

ScienceDirect profile

views: >300,000



Highest community impact on his paper: *Bhargava et al, Potent and Selective Cytotoxic and Anti-inflammatory Gold(III) Compounds Containing Cyclometalated Phosphine Sulfide Ligands, Chem. A Eur. J., 25 (62), 14089-14100.*



Placed in top 1 % journals > 176 million people reached

Covered on > 240 media and online outlets around the globe including AAAS and ATSE

Works were published in top journals namely: *Journal of the American Chemical Society, Chemical Reviews, Chemical Society Reviews, Energy & Environmental Science, Angewandte Chemie International Edition in English, Advanced Materials, Nature Communications, ACS Applied Materials & Interfaces, Chemical Communications, Chemistry of Materials and Coordination Chemistry Reviews.*

BOOKS/BOOK CHAPTERS

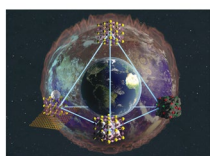
1. Islam, M.K., Haque, N., Somerville, M., Pownceby, M.I., **Bhargava, S.**, Tardio, J. (2022). Estimation of the Generation and Value Recovery from E-waste Printed Circuit Boards: Bangladesh Case Study. In: Lazou, A., Daehn, K., Fleuriault, C., Gökelma, M., Olivetti, E., Meskers, C. (eds) REWAS 2022: Developing Tomorrow's Technical Cycles (Volume I). The Minerals, Metals & Materials Series. Springer, Cham.
2. Balasubramanian, V., Nawshad Haque, Suresh Bhargava, Srinivasan Madapusi, Rajarathinam Parthasarathy, Techno-economic evaluation methodology for hydrogen energy systems, *Bioenergy Resources and Technologies*, **2021**, 237-260, Publisher: Academic Press.
3. Md Khairul Islam, Michael Somerville, Mark I Pownceby, James Tardio, Nawshad Haque, Suresh Bhargava, Experimental Determination of Liquidus Temperature and Phase Equilibria of the CaO–Al₂O₃–SiO₂–Na₂O Slag System Relevant to E-Waste Smelting, *Rare Metal Technology* 2021, **2021**, 265-276, Publisher: Springer, Cham
4. Selvakannan Periasamy, Deepa Dumbre, Libitha Babu, Srinivasan Madapusi, Sarvesh Kumar Soni, Hemant Kumar Daima, Suresh Kumar Bhargava, Amino Acids Functionalized Inorganic Metal Nanoparticles: Synthetic Nanozymes for Target Specific Binding, Sensing and Catalytic Applications, *Nanozymes for Environmental Engineering*, **2021**, 1.33. Publisher: Springer, Cham
5. Selvakannan, P. R., Hoang, L., Kumar, V. V., Dumbre, D., Jampaiah, D., Das, J., **Bhargava, S. K.** Selective Hydrogenation of 1, 3-Butadiene to 1-Butene: Review on Catalysts, Selectivity, Kinetics and Reaction Mechanism, *Catalysis for Clean Energy and Environmental Sustainability: Petrochemicals and Refining Processes-Volume 2*, Publisher: Springer Nature, Pages 205-228, **2021**.
6. Daima. H.K., Kothari. S. L., **Bhargava. S. K.** (Editors), *Nanotoxicology: toxicity evaluation of nanomedicine applications*, 1st Edition, pp. 1-496, **2021**. Publisher: CRC Press (Taylor & Francis group), Catalog #: 310845, ISBN-10: 0367266474, ISBN-13: 978-0367266479 (In Production).
7. Tunki, L., Kulhari, H., **Bhargava, S.K.**, Pooja, D. Pharmacokinetic considerations in design of dendrimer-based nanomedicines, *Pharmaceutical Applications of Dendrimers*, **2020**, 93-106, Editors: Abhay Chauhan and Hitesh Kulhari, Elsevier, ISBN: 978-0-12-814527-2.
8. Reddy, T.S.; **Bhargava, S.K.**, Design of dendrimer based prodrugs, *Pharmaceutical Applications of Dendrimers*, **2020**, 199-210, Editors: Abhay Chauhan and Hitesh Kulhari, Elsevier, ISBN: 978-0-12-814527-2.
9. Begum, S., Rao, A. G., **Bhargava, S. K.**, Sridhar, S., Jegatheesan, V., Eshtiaghi, N., 'Waste-to-Energy Production through a Biorefinery System' in *Waste-to-Energy*, Editors: Eduardo Jacob-Lopes, Leila Queiroz Zepka, Maria Isabel Queiroz, **2019**, 85-103, New York : Nova Science Publishers, Inc., ISBN: 9781536144321.
10. Nazia, S., Siddhartha, M., Siddhartha, M., Jegatheesan, J., **Bhargava, S. K.**, Sridhar, S., 'Molecular Dynamics Simulation for Prediction of Structure-Property Relationships of Pervaporation Membranes' in *Membrane Processes: Pervaporation, Vapor Permeation and Membrane Distillation for Industrial Scale Separations*, Editors: Sundergopal Sridhar, Siddhartha Moulik, Wiley, New Jersey; **2018**, 211-225, ISBN: 9781119418221.

11. Nazia, S., Vani, B., **Bhargava, S. K.**, Sridhar, S., 'Low-Cost Production of Anti-Diabetic and Anti-Obesity Sweetener from Stevia Leaves by Diafiltration Membrane Process' in *Membrane Technology*, **2018**, 175-190, ISBN 1138095427.
12. **Bhargava, S. K.**, Pownceby, M. I., Ram, R., *Hydrometallurgy*, Printed Edition of the Special Issue Published in *Metals*, **2016**, 6(5), 122; doi:10.3390/met6050122. ISBN 978-3-03842-465-9 (PDF) ISBN 978-3-03842-464-2 (Pbk).
13. Kantam, M. L., Kishore, R., Yadav, J., **Bhargava, S. K.**, Jones, L. A., Venugopal, A., 'Hydrogenation for Fine Chemical Synthesis: Status and Future Perspectives' in *Industrial Catalytic Processes for Fine and Specialty Chemicals*, Editors: Sunil S. Joshi and Vivek V. Ranade, Elsevier, ISBN: 978-0-12-801457-8, **2016**, 427-462.
14. Ali, M. E., Rahman M. M., Dhahi T. S., Kashif, M., Sarkar, M. S., Basirun, W. J., Hamid S. B. A., **Bhargava, S. K.**, 'Nanostructured Materials: Bioengineering Platforms for Sensing Nucleic Acids', in *Reference Module in Materials Science and Materials Engineering*, Editor-in-Chief: Saleem Hashmi, Oxford, Elsevier; **2016**, 1-26, ISBN: 978-0-12-803581-8.
15. K. Praneeth, Tardio, J., **Bhargava, S. K.**, S. Sridhar., 'Synthesis and characterization of PVDF/PAN hollow fibre blend membrane for surface water treatment', in *Chemical and Bioprocess Engineering: Trends and Developments*, Editors: Y. Pydi Setty, Shirish Sonawan, Srinu Naik Sapavatu, Apple Academic Press, ISBN: 9781771880770, 375 pages, **2015**, 257-267.
16. Ramanathan, R., Shukla, R., **Bhargava, S. K.**, Bansal, V., 'Green synthesis of nanomaterials using biological routes' in *Nanomaterials for Environmental Protection*, Editors: Boris I. Kharisov, Oxana V. Kharissova, H. V. Rasika Dias, John Wiley & Sons Inc. New Jersey. Sep **2014**, 329-348.
17. S. Sridhar, K. Praneeth, D. Manjunath, **Bhargava, S. K.**, 'Membrane facilitated defluoridation of water: Process intensification and scale up', in *Industrial catalysis and separations: Innovations for Process Intensification*, Editors: K. V. Raghavan, B. M. Reddy, Apple Academic press, Inc. ISBN: 978-1-926895-96-3, Hardcover 471 pages, May **2014**, 107-151.
18. Kantam, M. L., Reddy, C. V., Srinivas, P., **Bhargava, S.**, 'Recent Developments in Recyclable Copper Catalyst Systems for C-N Bond Forming Cross-Coupling Reactions Using Aryl Halides and Arylboronic Acids' in *Topics in Organometallic Chemistry*, Editors: M. Beller, J. M. Brown, P. H. Dixneuf, J. Dupont, A. Fu"rstner, L. J. Gooßen, P. Hofmann, T. Ikariya, S. Nolan, L. A. Oro, Q.-L. Zhou, Springer-Verlag Berlin Heidelberg, ISBN: 978-3-642-40545-7, Feb **2013**, 46, 119-172.
19. Ippolito, S. J., Sabri, Y. M., **Bhargava, S. K.**, 'Measuring Gas Phase Mercury Emissions from Industrial Effluents', in *Environmental Chemistry and Toxicology of Mercury*, Editors: Guangliang Liu, Yong Cai, Nelson O'Driscoll, John Wiley & Sons, Inc. ISBN: 978-0-470-57872-8, Hardcover 600 pages, Jan **2012**, 59-109.
20. Kantam, M. L., Manorama, S. V., Pratyay Basak., **Bhargava, S. K.**, Chintareddy, V. R., 'Nanoscale oxides in catalysis' in *Manipulation of Nanoscale Materials: An Introduction to Nanoarchitectonics*, RSC Nanoscience and Nanotechnology book series, Editor: Professor Katsuhiko Ariga, RSC, UK, ISBN: 9781849734158, **2012**, 129-155.
21. Bansal, V., **Bhargava, S. K.**, 'Ionic liquids as designer solvents for the synthesis of metal nanoparticles' in *Ionic Liquids: Theory, Properties, New Approaches*, Editor: Alexander Kokorin, In-Tech, Croatia, ISBN: 978-953-307-349-1, **2011**, 367-382 (This chapter has been downloaded more than 7150 times as at 15th September 2017).

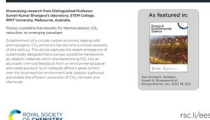
PATENTS

Patent Description		Type	Status
1.	Sabri, Y., Bhargava, S. , Alenezy, E., Ippolito, S. J., Kandjani, A. E. A chemiresistive substrate for a hydrogen gas sensor	PCT	PCT/AU2021/051274
2.	Mirzadeh, N.; Bhargava, S. ; Priver, S. H.; Telukutla, S. ANTI-CANCER GOLD COMPOUNDS	PCT	WO 2020/223765 A1 Int. Appl No. PCT/AU2020/05045 1
3.	Sabri, Y., Bhargava, S. , Alenezy, E., Ippolito, S. J., Kandjani, A. E. A chemiresistive substrate for a hydrogen gas sensor	Australian	Filed on 30 th of October 2020 Appl. No. 2020903952
4.	Mirzadeh, N.; Bhargava, S. ; Priver, S. H.; Telukutla, S.	Australian	Filed on 07/05/2019 Appl. No. 2019901547
5.	Shankaraiah, N.; Sharma, P.; Reddy, T. S.; Kumar, N. P.; Senwar, K. R.; Bhargava, S. K. , Thiazolidinedione-vinyl benzimidazole derivatives as anticancer agents	Indian	Filed in 2018 Appl. No. 201641035739A
6.	Bhargava, S. ; Mirzadeh, N.; Telukutla, S.; Shukla, R., Methods of treatment of cancer, using gold(I)-gold(III) complexes, AU2016902835 .	Australian	Filed on 19 th of July 2016
7.	Bhargava, S. K. , Bansal, V., Kandjani, A. E., Sabri, Y. M., System for Detection and Removal Of Mercury, APP No: 2013903747 .	Australian	Filed on 27 th September 2013
8.	Bhargava, S. K. , Ippolito, S. J., Sabri, Y. M., Electrodeposited Gold Nanostructures, WO 2010/138996 A1, PCT/AU2010/000662 .	PCT	Published on 9 th December 2010 <i>This technology is transferred towards commercialization and licenced to Minsensor Pty LTD.</i> International PCT patent in Australia, Canada, China, Europe, Japan, South Africa and USA.
9.	Bhargava, S. K. , Ippolito, S. J., Sabri, Y. M., Sood, D. K., Electrodeposited Nanostructures, 2009902459 .	PCT	Filed 1 st June 2009 <i>This technology is transferred towards commercialization with Minsensor Pty LTD.</i>
10.	Bhargava, S. K. , Ippolito, S. J., Sabri, Y. M., Sood, D. K., Electrodeposited Nanostructures, 2008903362 .	PCT	Filed 1 st July 2008 <i>This technology is transferred towards commercialization with Minsensor Pty LTD.</i>
11.	Eyer, S., Sumich, M., Bhargava, S. K. , Akolekar, D. B., Homogeneous Catalyst for Wet Oxidation, Method for Preparation of Same and Method for Use of Same in Bayer Process Solutions, 2000071796 .	Australian	2000 <i>This technology is transferred towards commercialization with Alcoa World Alumina.</i> Ready for implementation after successful pilot plants.
12.	Bhargava, S. K. , Sumich, M., Eyer, S., Akolekar, D. B., Catalytic Wet Oxidation of Organics in the Bayer process, 2000017606 .	Australian	2000 <i>This technology is transferred towards commercialization with Alcoa World Alumina.</i> Ready for implementation after successful pilot plants.

COVER PAGE ARTICLES



Mehla, S., Kandjani, A. E., Babarao, r., Lee, A. E., Periasamy, S., Wilson, K., Ramakrishna, S., **Bhargava, S. K.** Porous crystalline frameworks for thermocatalytic CO₂ reduction: an emerging paradigm; *Energy Environ. Sci.*, **2021**, 14, 320-352.



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Mirzadeh, N., Privér, S.H., Blake, A.J., Schmidbaur, H., **Bhargava, S.K.** Innovative molecular design strategies in materials science following the aurophilicity concept; *Chem. Rev.* **2020**, 120, 7551–7591.

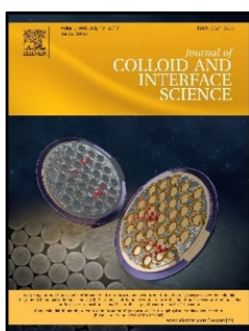


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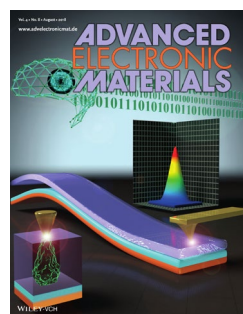
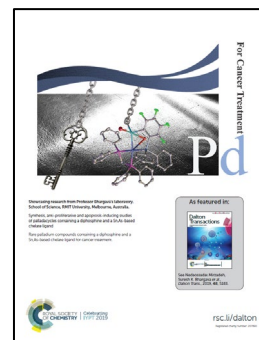
T. S. Reddy, D. Pooja, S. H. Privér, R. B. Luwor, N. Mirzadeh, S. Ramesan, S. Ramakrishna, S. Karri, M. Kuncha, **S. K. Bhargava**, Potent and Selective Cytotoxic and Anti-inflammatory Gold(III) Compounds Containing Cyclometalated Phosphine Sulfide Ligands; *Chem. Eur. J.* **2019**, 25, 14089.

A. E. Kandjani, R. Ramanathan, M. Zabara, Y. M. Sabri, **S. K. Bhargava**, & V. Bansal, Inorganic/Organic Heterojunctions: Long-Range Ordered Crystals of 3D Inorganic–Organic Heterojunctions via Colloidal Lithography; *Small Methods*, **2019**, Vol. 10, No. 3.



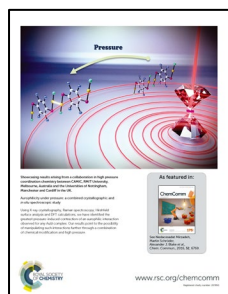
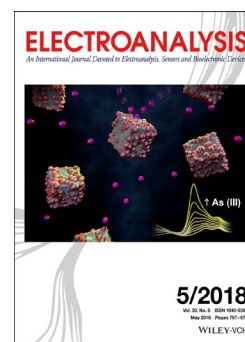
B. Lay, Y. M. Sabri, A.E. Kandjani, **S. K. Bhargava**, Using colloidal lithography to control the formation of gas sorption sites through galvanic replacement reaction; *J. Coll. Inter. Sci.*, **2019**, Vol. 548.

Mirzadeh, N., Telukutla, S. R., Privér, S. H., **Bhargava, S. K.**, Synthesis, anti-proliferative and apoptosis-inducing studies of palladacycles containing a diphosphine and a Sn,As-based chelate ligand, *DALTON TRANSACTIONS*, **2019**, 48, 5183-5192.



Ram Kumar, C. B., Kandjani, A. E., Jones, L. A., Periasamy, S. R., Wong, S., Narayan, R., **Bhargava, S. K.**, Ippolito, S. J., Basak, P., Volatile Memory: Nanostructured Fused Pyrrole Thin Films: Encoding Nano “Bits” with Temporary Remanence, *ADVANCED ELECTRONIC MATERIALS*, **2018**, 4(8), <https://doi.org/10.1002/aelm.201700626>.

Ren, B., Putla, S., Kandjani, A. E., Hillary, B., Amin, M. H., **Bhargava, S. K.**, Jones, L. A., Electrochemical Detection of As(III) on a Manganese Oxide-Ceria (Mn_2O_3/CeO_2) Nanocube Modified Au Electrode, *ELECTROANALYSIS*, **2018**, 30, 1-10.



O'Connor, A. E., Mirzadeh, N., **Bhargava, S. K.**, Easun, T. L., Schröder, M., Blake, A. J., Aurophilicity under pressure: a combined crystallographic and in situ spectroscopic study, *CHEMICAL COMMUNICATIONS*, **2016**, Advance Article, 52, 6769-6772.

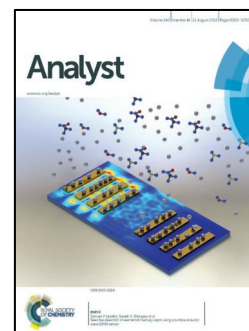
Griffin, M. J., Kabir, K. M. M., Coyle, V. E., Kandjani, A. E., Sabri, Y. M., Ippolito, S. J., **Bhargava, S. K.**, A Nanoengineered Conductometric Device for Accurate Analysis of Elemental Mercury Vapor, *ENVIRONMENTAL SCIENCE AND TECHNOLOGY*, **2015**, 50(3), 1384–1392.





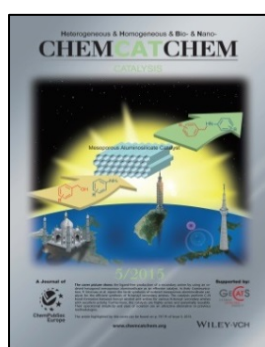
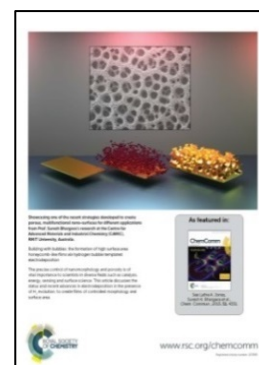
Kandjani, A. E., Sabri, Y. M., Periasamy, S. R., Zohora, N., Amin, M. H., Nafady, A., **Bhargava, S. K.**, Controlling Core/Shell formation of nano-cubic p-Cu₂O/n-ZnO toward enhanced photocatalytic performance, LANGMUIR, **2015**, 31(39), 10633-10934.

Kabir, K. M. M., Sabri, Y. M., Matthews, G. I., Jones, L. A., Ippolito, S., **Bhargava, S. K.**, Selective detection of elemental mercury vapor using a surface acoustic wave (SAW) sensor, ANALYST, **2015**, 140, 5508 – 5517.



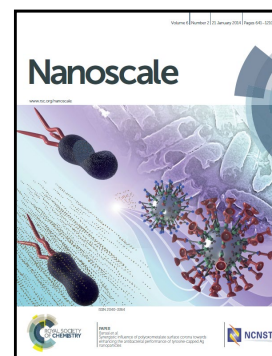
Ramanathan, R., Walia, S., Kandjani, A. E., Balendran, S., Mohammadtaheri, M., **Bhargava, S. K.**, Kalantar-zadeh, K., Bansal, V., Low-Temperature Fabrication of Alkali Metal–Organic Charge Transfer Complexes on Cotton Textile for Optoelectronics and Gas Sensing, LANGMUIR, **2015**, 31 (4), 1581-1587.

Plowman, B. J., Jones, L. A., **Bhargava, S. K.**, Building With Bubbles: The Formation of High Surface Area Honeycomb-like Films via Hydrogen Bubble Templated Electrodeposition, CHEMICAL COMMUNICATIONS, **2015**, 51, 4331- 4346.



Srinivasu, P., Venkanna, D., Kantam, M. L., Tang, J., **Bhargava, S. K.**, Aldalbahi, A., Wu, K. C.-W., Yamauchi, Y., Ordered Hexagonal Mesoporous Aluminosilicates and their Application in Ligand-Free Synthesis of Secondary Amines, CHEMCATCHEM, **2015**, 7(5), 747–751.

Daima, H. K., Selvakannan, P. R., Kandjani, A. E., Shukla, R., **Bhargava, S. K.**, Bansal, V., Synergistic influence of polyoxometalate surface corona towards enhancing the antibacterial performance of tyrosine-capped Ag Nanoparticles, NANOSCALE, **2014**, 6, 758-765.



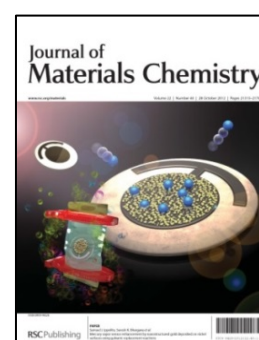
Mirzadeh, N., Drumm, D. W., Wagler, J., Russo, S. P., **Bhargava, S. K.**, Different solvates of the dinuclear cyclometallated gold(I) complex $[Au_2(\mu-2-C_6H_4AsMe_2)_2]$: a computational study insight into solvent-effected optical properties, DALTON TRANSACTIONS, **2013**, 42 (36), 12883-12890.

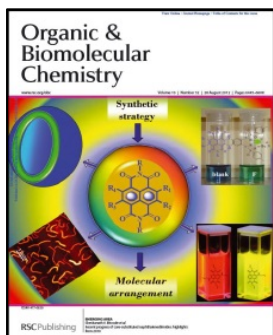
Ramanathan, R., Field, M. R., Smooker, P. M., O'Mullane, A. P., **Bhargava, S. K.**, Bansal, V., Aqueous phase synthesis of copper nanoparticles: A link between bacterial heavy metal resistance and nanoparticle synthesis, NANOSCALE, **2013**, 5 (6), 2300-2306.



Goethals, E. C., Elbaz, A., Lopata, A. L., **Bhargava, S. K.**, Bansal, V., Decoupling the effects of the size, wall thickness, and porosity of curcumin-loaded chitosan nanocapsules on their anticancer efficacy: size is the winner, LANGMUIR, **2013**, 9(2), 658-666.

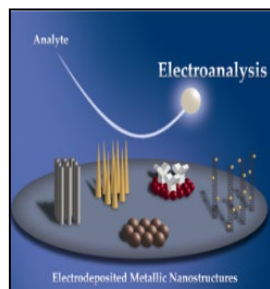
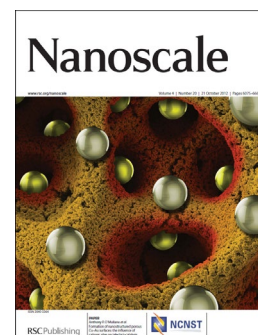
Sabri, Y. M., Ippolito, S., Atanacio, A., Bansal, V., **Bhargava, S. K.**, Mercury vapour sensor enhancement by nanostructured gold deposited on nickel surfaces using galvanic replacement reactions, JOURNAL OF MATERIALS CHEMISTRY, **2012**, 22 (40), 21395 – 21404.





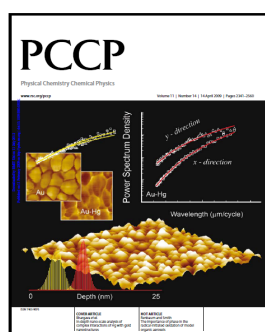
Bhosale, S. V., Bhosale, S. V., **Bhargava, S. K.**, Recent progress of core-substituted naphthalenediimides: highlights from 2010; ORGANIC & BIOMOLECULAR CHEMISTRY, **2012**, 10(32), 6445-6468. [Emerging Area], **Inside Front Cover**.

Najdovski, I., Selvakannan, P. R., **Bhargava, S. K.**, O'Mullane, A., Formation of nanostructured porous Cu/Au surfaces: the influence of cationic sites on (electro)-catalysis, NANOSCALE, **2012**, 4(20), 6298-6306.



Plowman, B. J., **Bhargava, S. K.**, O'Mullane, A. P., Electrochemical fabrication of metallic nanostructured electrodes for electroanalytical applications, ANALYST, **2011**, 136, 5107-5119.

Bansal, V., Ramanathan, R., **Bhargava, S. K.**, Fungus-mediated biological approaches towards 'green' synthesis of oxide nanomaterials, AUSTRALIAN JOURNAL OF CHEMISTRY, **2011**, 64(3), 279-293.



Sawant, P. D., Sabri, Y. M., Ippolito, S. J., Bansal, V., **Bhargava, S. K.**, In-depth nano-scale analysis of complex interactions of Hg with gold nanostructures using AFM-based power spectrum density method, PHYSICAL CHEMISTRY CHEMICAL PHYSICS, **2009**, 11(14), 2374-2378.

SELECTED KEY PUBLICATIONS

The selection of papers is based on international recognition of the work by media and scientific community

Average Citations per paper from this list – 127.5

Average Journal impact factor from this list – 9.877

1. Mehla, S., Kandjani, A. E., Babarao, r., Lee, A. E., Periasamy, S., Wilson, K., Ramakrishna, S., **Bhargava, S. K.** Porous crystalline frameworks for thermocatalytic CO₂ reduction: an emerging paradigm; *Energy Environ. Sci.*, **2021**, 14, 320-352.
[JIF: 30.289] Establishment of a circular carbon economy dealing with anthropogenic CO₂ emissions has become a critical necessity of this century. This article captures the recent emergence of systemically designed Nano porous crystalline frameworks as catalytic materials which are transitioning CO₂ into an abundant chemical feedstock from an environmental pariah and waste product. Such catalysts afford a great control over the local reaction environment and catalytic pathways and enable the efficient conversion of CO₂ into fuels and chemicals.
2. Reddy, T. S., Pooja, D., Privér, S. H., Luwor, R. B., Mirzadeh, N., Ramesan, S., Ramakrishna, S., Karri, S., Kuncha, M., **Bhargava, S. K.**, Potent and selective cytotoxic and anti-inflammatory gold (III) compounds containing cyclometallated phosphine sulfide ligands, *CHEMISTRY A EUROPEAN JOURNAL*, 2019, 25, 14023-14100.
[JIF: 5.16] Placed in top 5% publications list. Gold anti-cancer research from CAMIC's Molecular Engineering Group went viral. It was featured over 240 media outlets worldwide with a reach of up to 176 million people. According to RMIT's media team, the total average value of the media coverage received for this research was worth \$1,642,900 AUD]
3. Manchala, S., Tandava, V. S. R. K., Jampaiah, D., **Bhargava, S. K.**, Shanker, V., Novel and Highly Efficient Strategy for the Green Synthesis of Soluble Graphene by Aqueous Polyphenol Extracts of Eucalyptus Bark and Its Applications in High-Performance Supercapacitors, *ACS SUSTAINABLE CHEMISTRY & ENGINEERING*, 2019, 7, 11612-11620.
[JIF: 6.97; Citations: 8] Research about an environmentally sustainable way to produce Graphene, published in ACS Sustainable Chemistry & Engineering and co-authored by Distinguished Professor Suresh Bhargava and Dr Deshetti Jampaiah with NIT Warangal research team was featured in at least 7 counties worldwide and reached 64 million people.
4. Jalili, R., Esrafilzadeh, D., Aboutalebi, S. H., Sabri, Y. M., Kandjani, A. E. & **Bhargava, S. K.** et al. 'Silicon as a ubiquitous contaminant in graphene derivatives with significant impact on device performance', *NATURE COMMUNICATIONS*, 2018, 9, 5070.
[JIF: 11.88; Citations: 8]
5. Kandjani, A. E., Sabri, Y. M., Field, M. R., Coyle, V. E., Smith, R. & **Bhargava, S. K.**, 'Candle-Soot Derived Photoactive and Superamphiphobic Fractal Titania Electrode', *CHEMISTRY OF MATERIALS*, 2016, 28, 7919-7927.
[JIF: 10.15; Citations: 16]
6. Plowman, B. J., Jones, L. A., **Bhargava, S. K.**, Building With Bubbles: The Formation of High Surface Area Honeycomb-like Films via Hydrogen Bubble Templated Electrodeposition, *CHEMICAL COMMUNICATIONS*, **2015**, 51, 4331- 4346.

[Journal Impact Factor (JIF): 6.16, Citations: 131, ISI-JCR Rank: 23/165 in the Chemistry Multidisciplinary Category. Article with inside cover page. Suresh has delivered 20 Key note and or invited lectures around the world on this work. This work shows how building new technologies from the base up can lead to a broad range of new applications]

7. Patil, N. S., Uphade, B. S., Jana, P., **Bhargava, S. K.**, Choudhary, V. R., Epoxidation of styrene by anhydrous t-butyl hydroperoxide over reusable gold supported on MgO and other alkaline earth oxides, *JOURNAL OF CATALYSIS*, **2004**, 223 (1), 236-239.
[JIF: 7.723; Citations: 173, ISI-JCR Rank: 5/134 in the Chemical Engineering Category. This highly cited work was carried out in conjunction with an Indian scientist from NCL Pune under a global PhD program (Student: Dr Nilesh Patil) created by Professor Bhargava to start a collaboration between RMIT University and NCL Pune. Dr Nilesh Patil, RMIT University PhD now works as the Deputy General Manager R&D (API) at Wanbury Limited, India]
8. **Bhargava, S. K.**, Tardio, J., Prasad, J., Foger, K., Akolekar, D. B., Grocott, S. C., Wet oxidation and catalytic wet oxidation, *INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH*, **2006**, 45(4), 1221-1258.
[JIF: 3.14; Citations: 459, ISI-JCR Rank: 34/134 in the Chemical Engineering Category. Hot paper of the year – One of the most accessed articles for the year 2006. This work was supported by ARC – Linkage program and resulted into a successful pilot plant trial with Alcoa World Alumina]
9. Bansal, V., Jani, H., Plessis, J. D., Coloe, P. J., **Bhargava, S. K.**, Galvanic replacement reaction on metal films: A one-step approach to create nanoporous surfaces for catalysis, *ADVANCED MATERIALS*, **2008**, 20(4), 717-723.
[JIF: 25.80; Citations: 138, ISI-JCR Rank: 6/274 in the Materials Science Multidisciplinary Category. This work demonstrated for the first time that galvanic replacement reactions can be conducted on bulk surfaces, thus opening avenues for catalysis and sensing applications]
10. **Bhargava, S. K.**, Booth, J. M., Agrawal, S., Coloe, P., Kar, G., Gold nanoparticle formation during bromoaurate reduction by amino acids, *LANGMUIR*, **2005**, 21(13), 5949-5956.
[JIF: 3.683, Citations: 200, ISI-JCR Rank: 41/146 in the Physical Chemistry Category. This work is the first example of formation of gold nanoparticles by amino acids and is considered pioneering work in the area of Nanobiology]
11. Bennett, M. A., **Bhargava, S. K.**, Cheng, E. C.-C., Lam, W. H., Lee, T. K.-M., Priver, S. H., Wagler, J., Willis, A. C., Yam, V. W.-W., Unprecedented near-infrared (NIR) emission in diplatinum(III) (d⁷-d⁷) complexes at room temperature, *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, **2010**, 132(20), 7094-7103.
[Note: Authors are listed in alphabetical order. JIF: 14.695; Citations: 43, ISI-JCR Rank: 10/165 in the Chemistry Multidisciplinary Category. First report of the preparation of diplatinum (II) complexes phosphorescent in the visible to near-infrared region at both room and low temperatures]
12. Hind, A. R., **Bhargava, S. K.**, McKinnon, A., At the solid/liquid interface: FTIR/ATR - The tool of choice, *ADVANCES IN COLLOID AND INTERFACE SCIENCE*, **2001**, 93(1-3), 91-114.
[JIF: 8.243; Citations: 266, ISI-JCR Rank: 19/146 in the Physical Chemistry Category. A Review of the application of ATR/FTIR spectroscopy for interfacial studies]
13. Bennett, M. A., **Bhargava, S. K.**, Griffiths, K. D., Robertson G. B., Wickramasinghe, W. A., Willis, A. C., Dinuclear complexes of gold(I) containing bridging cyclometalated arylphosphane or arylarsane

ligands and Coupling of cyclometalated phenylphosphanes in dinuclear gold(II)-complexes, ANGEWANDTE CHEMIE – INTERNATIONAL EDITION IN ENGLISH, **1987**, 26(3), 258-261.

[Note: Authors are listed in alphabetical order. JIF: 12.257; Citations: 117 (combined), ISI-JCR Rank: 13/165 in the Chemistry Multidisciplinary Category. The first paper shows the reactivity of gold binuclear complexes in different oxidation states, and the second paper shows the first example of gold cyclometallated binuclear complexes and a rational route to its synthesis]

14. Bennett, M. A., **Bhargava, S. K.**, Hockless, D. C. R., Welling, L. L., Willis, A. C., Dinuclear cyclometalated complexes containing bridging (2-diphenylphosphino)phenylphosphine and (2-diethylphosphino) phenylphosphine, $C_6H_4PR_2$ (R = Ph, Et). Carbon-carbon bond formation by reductive elimination at a gold(II)-gold(II) centre, JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, **1996**, 118(43), 10469-10478.

[Note: Authors are listed in alphabetical order. JIF: 14.695; Citations: 74, ISI-JCR Rank: 10/165 in the Chemistry Multidisciplinary Category. Pioneering paper in the field of gold molecular chemistry and cited in many books or reviews written after 2000, including Comprehensive Inorganic Chemistry, Advanced Inorganic Chemistry and Organic Chemistry of Gold]

15. Cheung, T., **Bhargava, S. K.**, Hobday, M., Foger, K., Adsorption of NO on Cu exchanged zeolites, an FTIR study: Effects of Cu levels, NO pressure, and catalyst pretreatment, JOURNAL OF CATALYSIS, **1996**, 158(1), 301-310.

[JIF: 7.723; Citations: 152, ISI-JCR Rank: 5/134 in the Chemical Engineering Category. Our major contribution in search of an alternative non-precious metal based DNOx catalyst for car exhausts. We have also advised Alcoa World Alumina on the issues related to DNOx catalyst.]

REFEREED JOURNAL ARTICLES

551. Jampaiah, D., Murzin, D. Y., Lee, A. F., Schaller, D., Tabulo, B., Bhargava, S. K., Wilson, K. Catalytic selective ring opening of polyaromatics for cleaner transportation fuels, *Energy & Environmental Science*, 2022 (Just accepted), DOI: 10.1039/D1EE02363B (**Review Article**) (**Q1**)
550. Korcoban, D., Kandjani, A. E., Coyle, V. E., Alenezy, E. K, **Bhargava, S. K.**, Sabri, Y. Recyclable SERS substrate: Optimised by reducing masking effect through colloidal lithography, *Applied Surface Science*, 2022, 578, 151852. (**Q1**)
549. Prasad, N. S., Babarao, R., Madapusi, S., Sridhar, S., Choudhury, N. R., **Bhargava, S. K.**, Residual solvent induced physical morphology and gas permeation in polyamide-imide membrane: Experimental investigation and molecular simulations, *European Polymer Journal*, 2022, 165, 111012. (**Q1**)
548. Baruah, M. J., Bora, T. J., Gogoi, G., Hoque, N., Gour, N. K., **Bhargava, S. K.**, Guha, A.K., Nath, J. K., Das, B., Bania, K. K., Chirally Modified Cobalt-Vanadate Grafted on Battery Waste Derived Layered Reduced Graphene Oxide for Enantioselective Photooxidation of 2-Naphthol: Asymmetric Induction through Non-Covalent Interaction, *Journal of Colloid and Interface Science*, **2022**, 608, 1526-1542. (**Q1**)
547. Sarker, S. R., Polash, S. A., Karim, M. N., Saha, T., Dekiwadia, C., Bansal, V., Sabri, Y., Kandjani, A. E., Bhargava, S. K. Functionalized Concave Cube Gold Nanoparticles as Potent Antimicrobial Agents against Pathogenic Bacteria, *ACS Applied Biomaterials*, 2022, 5, 2, 492–503. (**Q1**)
- 546 Mehla, S., Kandjani, A. E., Coyle, V., Harrison, C. J., Low, M. X., Kaner, R. B., Sabri, Y., Bhargava, S. K. Gold Sunflower Microelectrode Arrays with Dendritic Nanostructures on the Lateral Surfaces for Antireflection and Surface-Enhanced Raman Scattering, *ACS Applied Nano Materials*, 2022, 5, 2, 1873–1890. (**Q1**)
545. Neha Bighane, Srinivasan Madapusi, Suresh Bhargava, Oligomeric membranes for simultaneous chemical reaction and separation, *Materials Today: Proceedings*, **2022**, 50, Part 2, 139-145. (**Q - Not assigned**)
544. Kumari, S., Chouhan, A., Sharma, O. P., Tawfik, S. A., Tran, K., Spencer, M. J. S., **Bhargava, S. K.**, Walia, S., Ray, A., Khatri, O. P. Surface Functionalization of WS₂ Nanosheets with Alkyl Chains for Enhancement of Dispersion Stability and Tribological Properties, *ACS Applied Materials & Interfaces*, **2021**, DOI: <https://doi.org/10.1021/acsami.1c17162>. (**Q1**)
543. Houshyar, S., Mirzadeh, N., Pillai, M. M., Saha, T., Khalid, A., Bhattacharyya, A., Dekiwadia, C., Zizhou, R., Cryle, M. J., Payne, J. A. E., **Bhargava, S. K.**, Fox, K., Tran, P. A. Surgical mesh coatings for infection control and temperature sensing: An in-vitro investigation, *OpenNano*, **2021**, <https://doi.org/10.1016/j.onano.2021.100032> (**Q1**)
542. Tong, K. KH., Hanif, M., Movassaghi, S., Sullivan, M. P., Lovett, J. H., Hummitzsch, K., Söhnel, T., Jamieson, S. M. F., **Bhargava, S. K.**, Harris, H. H., Hartinger, C. G. Triazolyl-Functionalized N-Heterocyclic Carbene Half-Sandwich Compounds: Coordination Mode, Reactivity and in vitro Anticancer Activity, *ChemMedChem*, **2021**, 16, 3017-3026. (**Q1**)

541. Ranjith Kumar Jakku, Nedaossadat Mirzadeh, Steven H Privér, Govind Reddy, Anil Kumar Vardhaman, Giribabu Lingamallu, Rajiv Trivedi, **Bhargava, S. K.** Tetraphenylethylene-Substituted Bis (thienyl) imidazole (DTITPE), An Efficient Molecular Sensor for the Detection and Quantification of Fluoride Ions, *Chemosensors*, **2021**, 9, 285. **(Q2)**
540. Sangita Kumari, Ajay Chouhan, Om P Sharma, Sherif Abdulkader Tawfik, Michelle JS Spencer, Suresh K Bhargava, Sumeet Walia, Anjan Ray, Om P Khatri, Alkali-Assisted Hydrothermal Exfoliation and Surfactant-Driven Functionalization of h-BN Nanosheets for Lubrication Enhancement, *ACS Applied Nano Materials*, **2021**, 4, 9143-9154. **(Q1)**
539. Ramesh Tangirala, Anoosha Borra, Bankupalli Satyavathi, Prathap Kumar Thella, KV Padmaja, Madapusi P Srinivasan, Rajarathinam Parthasarathy, Suresh Bhargava, Calorimetric transformation studies for crystal growth kinetics of benzoic acid in binary mixtures during cooling crystallization, *Journal of Thermal Analysis and Calorimetry*, **2021**, 1-9. **(Q2)**
538. Nedaossadat Mirzadeh, Srinivasa Reddy Telukutla, Rodney Luwor, Steven Privér, Ganga Reddy Velma, Ranjith Kumar Jakku, Stephens Andrew N, Magdalena Plebanski, Hartinger Christian, Suresh Bhargava, Dinuclear orthometallated gold(I)-gold(III) anticancer complexes with potent in vivo activity through an ROS-dependent mechanism, *Metallomics*, **2021**, 13, mfab039. **(Q1)**
537. Bhugendra Chutia, Nayab Hussain, Panchanan Puzari, Deshetti Jampaiah, Suresh K Bhargava, Ekaterina V Matus, Ilyas Z Ismagilov, Mikhail Kerzhentsev, Pankaj Bharali, Unraveling the Role of CeO₂ in Stabilization of Multivalent Mn Species on α -MnO₂/Mn₃O₄/CeO₂/C Surface for Enhanced Electrocatalysis, *Energy Fuels* **2021**, 35, 13, 10756–10769. **(Q1)**
536. Ali Rouhollah Jalili, Alexandra Satalov, Sahar Nazari, Bryan Harry Rahmat Suryanto, Jing Sun, Mohammad Bagher Ghasemian, Mohannad Mayyas, Ahmad E Kandjani, Ylias M Sabri, Edwin Mayes, Suresh K Bhargava, Jun Araki, Cécile Zakri, Philippe Poulin, Dorna Esrafilzadeh, Rose Amal, Liquid Crystal-Mediated 3D Printing Process to Fabricate Nano-Ordered Layered Structures, *ACS Applied Materials & Interfaces*, **2021**, 13, 24, 28627–28638. **(Q1)**
535. Md Khairul Islam, Michael Somerville, Mark I Pownceby, James Tardio, Nawshad Haque, Suresh Bhargava, Phase Equilibria Study of CaO-Al₂O₃-SiO₂-Na₂O Slags for Smelting Waste Printed Circuit Boards, *The Journal of The Minerals (JOM)*, **2021**, 73, 1889-1898. **(Not available)**
534. Nebeal Faris, Adam J Fischmann, Simon Assmann, Lathe A Jones, James Tardio, Srinivasan Madapusi, Stephen Grocott, Suresh Bhargava, A study into the behaviour of nickel, cobalt and metal impurities during partial neutralisation of synthetic nickel laterite pressure leach solutions and pulps, *Hydrometallurgy*, **2021**, 202, 105604. **(Q1)**
533. Ylias Sabri, Ahmad E Kandjani, Christopher J Harrison, Satya R Sarker, Anastasios Chalkidis, Victoria E Coyle, Glenn Matthews, Samuel Ippolito, KM Mohibul Kabir, Madapusi Srinivasan, Suresh K Bhargava, Gold nanorod self-assembly on a quartz crystal microbalance: an enhanced mercury vapor sensor, *Environmental Science: Nano*, **2021**. DOI: 10.1039/D1EN00677K. **(Q1)**

532. Roxanne Hubesch, Maciej Mazur, Karl Föger, PR Selvakannan, Suresh K Bhargava, Zeolites on 3D-printed open metal framework structure: metal migration into zeolite promoted catalytic cracking of endothermic fuels for flight vehicles, *Chemical Communications*, **2021**, 57, 9586-9589. **(Q1)**
531. Faris, N., White, J., Magazowski, F., Fischmann, A., Jones, L. A., Tardio, J., Madapusi, S., Grocott, S., **Bhargava, S. K.** An investigation into potential pathways for nickel and cobalt loss during impurity removal from synthetic nickel laterite pressure acid leach solutions via partial neutralisation. *Hydrometallurgy*, **2021**, 105595. **(Q1)**
530. Sana, S., Reddy, V. G., Reddy, T. S., Tokala, R., Kumar, R., **Bhargava, S. K.**, Shankaraiah, N. Cinnamide Derived Pyrimidine-Benzimidazole Hybrids as Tubulin Inhibitors: Synthesis, In silico and Cell Growth Inhibition Studies. *Bioorganic Chemistry*, **2021**, 104765. **(Q1)**
529. Shivhare, A., Jampaiah, D., **Bhargava, S. K.**, Lee, A. F., Srivastava, R., Wilson, K. Hydrogenolysis of Lignin-Derived Aromatic Ethers over Heterogeneous Catalysts. *ACS Sustainable Chemistry & Engineering*, **2021**. **(Q1)**
528. Najari, S., Saeidi, S., Concepcion, P., Dionysiou, D. D., **Bhargava, S. K.**, Lee, A. F., Wilson, K. Oxidative dehydrogenation of ethane: catalytic and mechanistic aspects and future trends. *Chemical Society Reviews*, **2021**. **(Q1)**
527. Mozammel, T., Dumbre, D., Selvakannan, P., Sadasivuni, K. K., **Bhargava, S. K.** Calcined hydrotalcites of varying Mg/Al ratios supported Rh catalysts: highly active mesoporous and stable catalysts toward catalytic partial oxidation of methane. *Emergent Materials*, **2021**, 1-3. **(Not yet assigned)**
526. Joshi, S., Sabri, Y. M., **Bhargava, S. K.**, Sunkara, M. V., Ippolito, S.J. Band offset in calcium hydroxide mediated CaO-ZnO heterointerfaces, *Materials Science and Engineering: B*, **2021**, 265, 115005. **(Q1)**
525. Nazia, S., Sahu, N., Jegatheesan, V., **Bhargava, S. K.**, Sridhar, S. Integration of ultrafiltration membrane process with chemical coagulation for proficient treatment of old industrial landfill leachate, *Chemical Engineering Journal*, **2021**, 128598. **(Q1)**
524. Mehla, S., Kandjani, A. E., Babarao, R., Lee, A. F., Periasamy, S., Wilson, K., Ramakrishna, S., **Bhargava, S. K.** Porous Crystalline Frameworks for Thermocatalytic CO₂ Reduction: An Emerging Paradigm, *Energy & Environmental Science*, **2021**, 14, 320-352. **(Q1)**
523. Nazia, S., Mishra, K., Jegatheesan, V., Bhargava, S. K., Sundergopal. S. An integrated process of methanol coagulation and side-stream membrane bioreactor for the treatment of rice gruel wastewater, 2021.
522. Koley, P., Rao, B. S., Sabri, Y. M., **Bhargava, S. K.**, Tardio, J., Lingaiah, N. Selective conversion of furfural into tetrahydrofurfuryl alcohol using a heteropoly acid-based material as a hydrogenation catalyst, *Sustainable Energy & Fuels*, **2020**, 4, 4768-4779. **(Q1)**
521. Alenezzy, E. K., Sabri, Y. M., Kandjani, A. K., Korcoban, D., Rashid, S. S. A. A. H., Ippolito, S. J., **Bhargava, S. K.** Low-Temperature Hydrogen Sensor: Enhanced Performance Enabled through Photoactive Pd-Decorated TiO₂ Colloidal Crystals, *ACS sensors*, **2020**, 5, 12, 3902-3914. **(Q1)**

520. Ghosh, R., Pin, K. Y., Reddy, V. S., Jayathilaka, W., Ji, D., Serrano-García, W., **Bhargava, S. K.**, Ramakrishna, S., Chinnappan, A. Micro/nanofiber-based noninvasive devices for health monitoring diagnosis and rehabilitation, *Applied Physics Reviews*, 2020, 7, 041309. **(Q1)**
519. Jakku, R., Eda, R. R., Mirzadeh, N., Telukutla, S. R., Vardhaman, A. K., Lingamallu, G., Balasubramanian, S., Deep, P., Sistla, R., **Bhargava, S. K.**, Trivedi, R. (η^6 -Arene) ruthenium (II) complexes with ferrocene-tethered salicylaldimine ligands: Synthesis, characterization and anti-cancer properties, *Polyhedron*, **2020**, 192, 114829. **(Q2)**
518. Mozammel, T., Dumbre, D., Hubesch, R., Yadav, G. D., Selvakannan, P.R., **Bhargava, S. K.** Carbon Dioxide Reforming of Methane over Mesoporous Alumina Supported Ni(Co), Ni(Rh) Bimetallic, and Ni(CoRh) Trimetallic Catalysts: Role of Nanoalloying in Improving the Stability and Nature of Coking, *Energy & Fuels*, **2020**, 12, 16433-16444. **(Q1)**
517. Kandjani, A. K., Sabri, Y. M., Coyle, V. E., Harrison, C. J., Korcoban, D., Balasubramanyam, R. K. C., Jones, L. A., Field, M. R., **Bhargava, S. K.** Long-range ordered TiO₂/Au hollow urchins: topology control for maskless electrodeposition, *Journal of Materials Chemistry A*, **2020**, 8, 26035-26044. **(Q1)**
516. Chhipa, H., Reddy, T. S., Soni, S. K., Selvakannan, P, **Bhargava, S. K.** Self-assembled nanostructures of phosphomolybdate, nucleobase and metal ions synthesis and their in vitro cytotoxicity studies on cancer cell lines, *Journal of Materials Chemistry B*, **2020**, 8, 11044-11054. **(Q1)**
515. Goswami, C., Saikia, H., Tada, K., Tanaka, S., Sudarsanam, P., **Bhargava, S.K.** and Bharalia, P. Bimetallic Palladium-Nickel Nanoparticles Anchored on Carbon as High Performance Electrocatalysts for Oxygen Reduction and Formic Acid Oxidation Reactions, *ACS Applied Energy Materials*, **2020**, **Just accepted**. <https://doi.org/10.1021/acsaem.0c01622> **(Q1)**
514. Nazia, S., Vaishnavi, D., Jegatheesan, V., **Bhargava, S.K.**, Sundergopal, S. Performance of Chemically Resistant Polyurea Reverse Osmosis Membrane in the Treatment of Highly Alkaline Industrial Wastewater Containing Sodium Aluminate, *Journal of Water Supply: Research and Technology – AQUA*, **2020**, **Just accepted**. **(Q3)**
513. Begum, S., Arelli, V., Anupoju, G.R., Sridhar, S., **Bhargava, S.K.**, Eshtiaghi, N. Optimization of feed and extractant concentration for the liquid-liquid extraction of volatile fatty acids from synthetic solution and landfill leachate, *Journal of Industrial and Engineering Chemistry*, **2020**, 90, 190-202. **(Q1)**
512. Tunki, L., Jangid, A.K., Pooja, D., **Bhargava, S.K.**, Sistla, R., Kulhari, H. Serotonin Functionalized Vit-E Nanomicelles for Targeting of Irinotecan to Prostate Cancer Cells, *ACS Applied Bio Materials*, **2020**, 3 (8), 5093-5102. **(Q1)**
511. Sudhakar, P., Kumari, A., Gold, M., Prathap, R., Thella, K., Satyavathi, B., Shah, K., Kundu, S., **Bhargava, S.K.** Experimental determination and modelling of the co-solvent and antisolvent behaviour of binary systems on the dissolution of pharma drug; L-aspartic acid and thermodynamic correlations, **2020**, *Journal of Molecular Liquids*, 113657. **(Q1)**

510. Mirzadeh, N., Privér, S.H., Blake, A.J., Schmidbaur, H., **Bhargava, S.K.** Innovative molecular design strategies in materials science following the aurophilicity concept. *Chemical Reviews*, **2020**, 120, 15, 7551-7591. (Q1)
509. Bighane, N., Madapusi, S., **Bhargava, S.K.** A REVIEW ON SIMULTANEOUS CHEMICAL REACTION AND SEPARATION BY MEMBRANES, *Asian Journal of Science and Technology*, **2020**, 11, 10767-10783. (Q - Not assigned) (Review)
508. Chalkidis, A., Jampaiah, D., Aryan, A., Woodd, C.D., Hartley, P.G., Sabri, Y.M., **Bhargava, S.K.** Mercury-bearing wastes: Sources, policies and treatment technologies for mercury recovery and safe disposal, *Journal of Environmental Management*, **2020**, 270, 110945. (Q1) (Review)
507. Shaik, N., Jegatheesan, V., **Bhargava, S.K.**, Sundergopal, S. Microbial Fuel Cell–Aided Processing of Kitchen Wastewater Using High-Performance Nanocomposite Membrane, *Journal of Environmental Engineering*, **2020**, 146, 04020073. (Q2)
506. Jampaiah, D.; Damma, D.; Chalkidis, A.; Venkataswamy, P.; Bhargava, S. K.; Reddy, B. M. MOF-derived ceria-zirconia supported Co₃O₄ catalysts with enhanced activity in CO₂ methanation, *CATALYSIS TODAY*, **2020**. DOI: [10.1016/j.cattod.2020.05.047](https://doi.org/10.1016/j.cattod.2020.05.047) (Q1)
505. Sana, S.; Reddy, V. G.; Bhandari, S.; Reddy, T. S.; Tokala, R.; Sakla, A. P.; **Bhargava, S. K.**; Shankaraiah, N. Exploration of Carbamide Derived Pyrimidine-Thioindole Conjugates as Potential VEGFR-2 Inhibitors with Anti-Angiogenesis Effect, *EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY*, **2020**, 112457. (Q1)
504. Hashima, L.H.; Halilub, A.; Sudarsanam, P.; Umare, Y.B.; Johana, M.R.B.; Bhargava, S.K. Bifunctional rice husk-derived SiO₂-Cu-Al-Mg nanocatalyst for one-pot conversion of biomass-derived furfural to furfuryl acetate, *Fuel*, **2020**, 275, 117953 (Q1)
503. Rao, B.G.; Sudarsanam, P.; Rao, T.V.; Amin, M.H.; Bhargava, S.K.; Reddy, B.M. Highly Dispersed MnOx Nanoparticles on Shape-Controlled SiO₂ Spheres for Ecofriendly Selective Allylic Oxidation of Cyclohexene, *Catalysis Letters*, **2020**, 150, 3023-3035. (Q2)
502. Ram, R.; Coyle, V.; Bond, A.; Chen, M.; Bhargava, S.K.; Jones, L.A. A scanning electrochemical microscopy (SECM) study of the interfacial solution chemistry at polarised chalcopyrite (CuFeS₂) and chalcocite (Cu₂S), *Electrochemistry Communications*, **2020**, 106730. (Q1)
501. Reddy, T.S.; Privér, S.H.; Mirzadeh, N.; Luwor, R.B; Reddy, V.G.; Ramesan, S.; **Bhargava, S.K.**, Antitumor and antiangiogenic properties of gold(III) complexes containing cycloaurated triphenylphosphine sulfide ligands. *Inorganic Chemistry*, **2020**, Just accepted. (Q1)
500. Hazarika, K.K.; Talukdar, H.; Sudarsanam, P.; **Bhargava, S.K.**; Bharali, P; Highly dispersed Mn₂O₃-Co₃O₄ nanostructures on carbon matrix as heterogeneous Fenton-like catalyst, *Applied Organometallic Chemistry*, **2020**, e5512. (Q2)

499. Manchala, S.; Tandava, V.S.R.K.; Jampaiah, D.; **Bhargava, S.K.**; Shanker, V; A Novel Strategy for Sustainable Synthesis of Soluble Graphene by a Herb *Delphinium denudatum* Root Extract for Use as Light-Weight Supercapacitors, **ChemistrySelect**, **2020**, **5**, 2701-2709. (Q2)
498. Velisoju, V.K.; Jampaiah, D.; Gutta, G.; Bentrup, U.; Brückner, A.; **Bhargava, S.K.**; Akula, V.; Conversion of γ -Valerolactone to Ethyl Valerate over Metal Promoted Ni/ZSM-5 Catalysts: Influence of NiO/Ni₂+ Heterojunctions on Activity and Product Selectivity. **ChemCatChem**, **2020**, **12**, 1341-1349. (Q1)
497. Rahman, A.; Tardio, J.; **Bhargava, S.K.**; Zaman, M.N.; ASM Mehedi Hasan, Torpy, A.; Pownceby, M.; Comparison of the chemistry and mineralogy of ilmenite concentrates sourced from fluvial (Brahmaputra River) and beach placer (Cox's Bazar) deposits, Bangladesh. **Ore Geology Reviews**, **2020**, 103271. (Q1)
496. S Joshi, LA Jones, YM Sabri, SK Bhargava, MV Sunkara, SJ Ippolito, Facile Conversion of Zinc Hydroxide Carbonate to CaO-ZnO for Selective CO₂ Gas Detection, **Journal of Colloid and Interface Science**, **2020**. (Q1)
495. Chalkidis, A., Deshetti, J., Hartley, P. G., Sabri, Y. M., **Bhargava, S. K.**, Mercury in natural gas streams: A review of materials and processes for abatement and remediation, **JOURNAL OF HAZARDOUS MATERIALS**, **2020**, 382, 121036. (Q1) (Review)
494. Begum, S.; Rao, A. G.; **Bhargava, S. K.**; Sridhar, S.; Jegatheesan, V.; Eshtiaghi, N., Waste-to-Energy Production through a Biorefinery System. **J WASTE-TO-ENERGY**, **2019**, 85. (Not yet assigned)
493. Bighane, N.; Sridhar, S.; Madapusi, S.; **Bhargava, S.**; Narayan, R.; Biogas separation by polymer-based membranes. **Asian Journal of Science and Technology** **2019**, 10 (06), 9689-9695. (Q3)
492. Manchala, S.; Tandava, V.; Nagappagari, L. R.; Muthukonda Venkatakrisnan, S.; Jampaiah, D.; Sabri, Y. M.; **Bhargava, S. K.**; Shanker, V., Fabrication of a novel ZnIn₂S₄/g-C₃N₄/graphene ternary nanocomposite with enhanced charge separation for efficient photocatalytic H₂ evolution under solar light illumination. **Photochem. Photobiol. Sci.**, **2019**, 18, 2952-2964. (Q2)
491. S.R. Sarker, A.S. Ball, S.K. Bhargava, S.K. Soni, Evaluation of plasmid DNA stability against ultrasonic shear stress and its in vitro delivery efficiency using ionic liquid [Bmim][PF₆], **RSC Advances** **9** (50), 29225-29231, 2019. (Q1)
490. C. Sun, N. Mirzadeh, Si-Xuan Guo, J. Li, Z. Li, Alan M. Bond, Jie Zhang, S. K. Bhargava, Unprecedented Formation of a Binuclear Au(II)-Au(II) Complex through Redox State Cycling: Electrochemical Interconversion of Au(I)-Au(I), Au(II)-Au(II), and Au(I)-Au(III) in Binuclear Complexes Containing the Carbanionic Ligand C₆F₄PPh₂, **Inorganic Chemistry**, **2019**, 58 (20), 13999-14004. (Q1)
489. Reddy, T. S., Pooja, D., Privér, S. H., Luwor, R. B., Mirzadeh, N., Ramesan, S., Ramakrishna, S., Karri, S., Kuncha, M., **Bhargava, S. K.** Potent and selective cytotoxic and anti-inflammatory gold (III) compounds containing cyclometallated phosphine sulfide ligands, **CHEMISTRY A EUROPEAN JOURNAL**, **2019**, 25, 14089-14100. (Q1)

488. Kandjani, A. E., Ramanathan, R., Zabara, M., Sabri, Y. M., **Bhargava, S. K.**, Bansal, V., Long-Range Ordered Crystals of 3D Inorganic–Organic Heterojunctions via Colloidal Lithography, *SMALL METHODS*, **2019**, 1900080. (Not yet assigned)
487. Siddiqui, S., Nafady, A., El-Sagher, H. M., Al-Saeedi, S. I., Alsalme, A. M., Sirajuddin, Talpur, F. N., Sherazi, S. T. H., Kalhor, M. S., Shah, M. R., Shaikh, T., Arain, M., **Bhargava, S. K.**, Sub-ppt level voltammetric sensor for Hg²⁺ detection based on nafion stabilized l-cysteine-capped Au@Ag core-shell nanoparticles, *JOURNAL OF SOLID STATE ELECTROCHEMISTRY*, **2019**, 23(7), 2073–2083. (Q2)
486. Shaik, S. P., Reddy, T. S., Sunkari, S., Rao, A. V. S., Babu, K. S.; Bhargava, Suresh K.; Kamal, Ahmed, Synthesis of Benzo[d]imidazo[2,1-b]thiazole-Propenone Conjugates as Cytotoxic and Apoptotic Inducing Agents, *ANTI-CANCER AGENTS IN MEDICINAL CHEMISTRY*, **2019**, 19(3), 347-355(9). (Q3)
485. Halilu, A., Ali, T. H., Putla, S., **Bhargava, S. K.**, Synthesis of Fuel Grade Molecules from Hydroprocessing of Biomass-Derived Compounds Catalyzed by Magnetic Fe (NiFe) O₄-SiO₂ Nanoparticles, *SYMMETRY*, **2019**, 11(4), 524. (Q2)
484. Jadala, C., Sathish, M., Reddy, T. S., Reddy, V. G., Tokala, R., **Bhargava, S. K.**, Shankaraiah, N., Nagesh, N., Kamal, A., Synthesis and in vitro cytotoxicity evaluation of β -carboline-combretastatin carboxamides as apoptosis inducing agents: DNA intercalation and topoisomerase-II inhibition, *BIOORGANIC & MEDICINAL CHEMISTRY*, **2019**, 27(15), 3285-3298. (Q1)
483. Faris, N., Ram, R., Tardio, J., **Bhargava, S.**, Pownceby, M. I., Experimental study into the beneficiation of a ferruginous rare earth bearing lateritic ore by magnetising roasting and magnetic separation, *acs sustENGINEERING*, **2019**, 137, 303-318. (Q1)
482. Tunki, L., Kulhari, H., Vadithe, L. N., Kuncha, M., **Bhargava, S.**, Pooja, D., Sistla, R., Modulating the site-specific oral delivery of sorafenib using sugar-grafted nanoparticles for hepatocellular carcinoma treatment, *EUROPEAN JOURNAL OF PHARMACEUTICAL SCIENCES*, **2019**, 137, 104978. (Q1)
481. Lay, B., Sabri, Y. M., Kandjani, A. E., **Bhargava, S. K.**, Using colloidal lithography to control the formation of gas sorption sites through galvanic replacement reaction, *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, **2019**, 547, 199-205. (Q1)
480. Reddy, V. G., Reddy, T. S., Jadala, C., Reddy, M. S., Sultana, F., Akunuri, R., **Bhargava, S. K.**, Wlodkovic, D., Srihari, P., Kamal, A., Pyrazolo-benzothiazole hybrids: Synthesis, anticancer properties and evaluation of antiangiogenic activity using in vitro VEGFR-2 kinase and in vivo transgenic zebrafish model, *EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY*, **2019**, 182, 111609. (Q1)
479. Navya, P. N., Kaphle, A., Srinivas, S. P., **Bhargava, S. K.**, Rotello, V. M., Daima, H. K., Current trends and challenges in cancer management and therapy using designer nanomaterials, *NANO CONVERGENCE*, **2019**, 6, 23. (Q1) (Review)

478. Reddy, V. G., Jampaiah, D., Chalkidis, A., Sabri, Y. M., Mayes, E. L. H., **Bhargava, S. K.**, Highly dispersed cobalt oxide nanoparticles on manganese oxide nanotubes for aerobic oxidation of benzyl alcohol, *CATALYSIS COMMUNICATIONS*, **2019**, 130, 105763. (Q1)
477. Varala, S., Ravisankar, V., Maha, A-A., Pownceby, M. I., Parthasarathy, R., **Bhargava, S. K.**, Process optimization using response surface methodology for the removal of thorium from aqueous solutions using rice-husk., *CHEMOSPHERE*, **2019**, 237, 124488. (Q1)
476. Rashid, S. S. A. A. H., Sabri, Y. M., Kandjani, A. E., Harrison, C. J., Ram Kumar, CB., Gaspera, E. D., Field, M. R., **Bhargava, S. K.**, Tricoli, A., Wlodarski, W., Ippolito, S. J., Zinc titanate nanoarrays with superior optoelectrochemical properties for chemical sensing, *ACS APPLIED MATERIALS & INTERFACES*, **2019**, 11, 32, 29255-29267. (Q1)
475. Jampaiah, D., Damma, D., Chalkidis, A., Singh, M., Sabri, Y. M., Mayes, E. L. H., Bansal, V., **Bhargava, S. K.**, MOF-derived noble-metal-free Cu/CeO₂ with high porosity for efficient water-gas shift reaction at low temperatures, *CATALYSIS SCIENCE & TECHNOLOGY*, **2019**, 9, 4226-4231. (Q1)
474. Mehla, S., Das, J., Jampaiah, D., Periasamy, S., Nafady, A., **Bhargava, S. K.**, Recent advances in preparation methods for catalytic thin films and coatings, *CATALYSIS SCIENCE & TECHNOLOGY*, Minireview, **2019**, 9, 3582-3602. (Q1) (**Review**)
473. Manchala, S., Tandava, V. S. R. K., Jampaiah, D., **Bhargava, S. K.**, Shanker, V., Novel and Highly Efficient Strategy for the Green Synthesis of Soluble Graphene by Aqueous Polyphenol Extracts of Eucalyptus Bark and Its Applications in High-Performance Supercapacitors, *ACS SUSTAINABLE CHEMISTRY & ENGINEERING*, **2019**, 7(13), 11612-11620. (Q1)
472. Coyle, V. E., Kandjani, A. E., Field, M. R., Hartley, P., Chen, M., Sabri, Y. M., **Bhargava, S. K.**, Co₃O₄ needles on Au honeycomb as a non-invasive electrochemical biosensor for glucose in saliva, *BIOSENSORS AND BIOELECTRONICS*, **2019**, 141, 111479. (Q1)
471. Chalkidis, A., Jampaiah, D., Amin, M. H., Hartley, P. G., Sabri, Y. M., **Bhargava, S. K.**, CeO₂-Decorated α -MnO₂ Nanotubes: A Highly Efficient and Regenerable Sorbent for Elemental Mercury Removal from Natural Gas, *LANGMUIR*, **2019**, 35(25), 8246-8256. (Q1)
470. Chalkidis, A., Jampaiah, D., Hartley, P. G., Sabri, Y. M., **Bhargava, S. K.**, Regenerable α -MnO₂ nanotubes for elemental mercury removal from natural gas, *FUEL PROCESSING TECHNOLOGY*, **2019**, 193, 317-327. (Q1)
469. Sharma, M., Das, B., Hazarika, A., Guha, A. K., **Bhargava, S. K.**, Bania, K. K., PdO/CuO Nanoparticles on Zeolite-Y for Nitroarene Reduction and Methanol Oxidation, *ACS APPLIED NANOMATERIALS*, **2019**, 2(6), 3769-3779. (Q1)
468. Sharma, M., Das, B., Baruah, M. J., Biswas, S., Roy, S., Hazarika, A., **Bhargava, S. K.**, Bania, K. K., Pd-Au-Y as Efficient Catalyst for C-C Coupling Reactions, Benzylic C-H Bond Activation and Oxidation of Ethanol for Synthesis of Cinnamaldehydes, *ACS CATALYSIS*, **2019**, 9(7), 5860-5875. (Q1)

467. Mirzadeh, N., Telukutla, S. R., Privér, S. H., **Bhargava, S. K.**, Synthesis, anti-proliferative and apoptosis-inducing studies of palladacycles containing a diphosphine and a Sn,As-based chelate ligand, *DALTON TRANSACTIONS*, **2019**, 48, 5183-5192. (Q1)
466. Radhakrishnan, R., Pooja, D., Kulhari, H., Gudem, S., Ravuri, H. G., **Bhargava, S.**, Ramakrishna, S., Bombesin conjugated solid lipid nanoparticles for improved delivery of epigallocatechin gallate for breast cancer treatment, *CHEMISTRY AND PHYSICS OF LIPIDS*, Accepted Manuscript, **2019**, 224, 104770. (Q1)
465. Reddy, V. G., Telukutla, S. R., Priver, S. H., Bai, Y., Mishra, S., Wlodkowic, D., Mirzadeh, N., **Bhargava, S.**, Synthesis of Gold(I) Complexes Containing Cinnamide: In Vitro Evaluation of Anticancer Activity in 2D and 3D Spheroidal Models of Melanoma and In Vivo Angiogenesis, *INORGANIC CHEMISTRY*, **2019**, 58(9), 5988-5999. (Q1)
464. Sarker, S. R., Polash, S. A., Boath, J., Kandjani, A. E., Poddar, A., Dekiwadia, C., Shukla, R., Sabri, Y., **Bhargava, S. K.**, Functionalization of Elongated Tetrahedral Au Nanoparticles and Their Antimicrobial Activity Assay, *ACS APPLIED MATERIALS AND INTERFACES*, **2019**, 11(14), 13450-13459. (Q1)
463. Kabir, K. M. M., Jampaiah, D., Kandjani, A. E., Mullett, M., Tardio, J., Sabri, Y. M., **Bhargava, S. K.**, Cold vapor integrated quartz crystal microbalance (CV-QCM) based detection of mercury ions with gold nanostructures, *SENSORS AND ACTUATORS B: CHEMICAL*, **2019**, 290, 453-458. (Q1)
462. Mirzadeh, N., Reddy, T. S., **Bhargava, S. K.**, Advances in diphosphine ligand-containing gold complexes as anticancer agents, *COORDINATION CHEMISTRY REVIEWS*, **2019**, 388, 343-359. (Review) (Q1)
461. Pabba, S., Kumari, A., Narra, T., Thella, P. K., Satyavathi, S., Shah, K., Kundu, S., **Bhargava, S. K.**, Measurement and Modeling of Solid-Liquid Equilibria of L-Glutamic Acid in Pure Solvents and Aqueous Binary Mixtures, *JOURNAL OF CHEMICAL AND ENGINEERING DATA*, **2019**, 64 (3), 1155-1165. (Q1)
460. Faris, N., Ram, R., Tardio, J., **Bhargava, S.**, Pownceby, M. I., Characterisation of a ferruginous rare earth bearing lateritic ore and implications for rare earth mineral processing, *MINERALS ENGINEERING*, **2019**, 134, 23-36. (Q1)
459. Dhanavath, K. N., Bankupalli, S., Sugali, C. S., Perupogu, V., N. V., Satyanarayana, **Bhargava, S.**, Parthasarathy, R., Optimization of process parameters for slow pyrolysis of neem press seed cake for liquid and char production, *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, **2019**, 7(1), 102905. (Q1)
458. Laghari, G. N., Nafady, A., Al-Saeedi, S. I., Sirajuddin, Sherazi, S. T. H., Nisar, J., Shah, M. R., Abro, M. I., Arain, M., **Bhargava, S. K.**, Ranolazine-functionalized copper nanoparticles as a colorimetric sensor for trace level detection of As³⁺, *NANOMATERIALS*, **2019**, 9(1), 83. (Q1)
457. Ren, B., Kandjani, A. E., Chen, M., Field, M. R., Oppedisano, D. K., **Bhargava, S. K.**, Jones, L. A., Preparation of Au nanoparticles on a magnetically responsive support via pyrolysis of a Prussian blue composite, *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, **2019**, 540, 563-571. (Q1)
456. Jampaiah, D., Chalkidis, A., Sabri, Y. M., **Bhargava, S. K.**, Role of ceria in the design of composite materials for elemental mercury removal, *CHEMICAL RECORD*, **2019**, 18, 1-14. (Review) (Q1)
455. Jampaiah, D., Velisoju, V. K., Devaiah, D., Singh, M., Mayes, E. L. H., Coyle, V. E., Reddy, B. M., Bansal, V., **Bhargava, S. K.**, Flower-like Mn₃O₄/CeO₂ microspheres as an efficient catalyst for diesel soot and CO oxidation: Synergistic effects for enhanced catalytic performance, *APPLIED SURFACE SCIENCE*, **2019**, 473, 209-221. (Q1)

454. Navya, P. N., Madhyastha, H., Madhyastha, R., Nakajima, Y., Maruyama, M., Srinivas, S. P., Jain, D., Amin, M. H., **Bhargava, S. K.**, Daima, H. K., Single step formation of biocompatible bimetallic alloy nanoparticles of gold and silver using isonicotinylhydrazide, *MATERIALS SCIENCE AND ENGINEERING: C*, **2019**, 96, 286-294. (Q1)
453. Kumar, J. R., Reddy, E. R., Trivedi, R., Vardhaman, A. K., Giribabu, L., Mirzadeh, N., **Bhargava, S. K.**, Isophorone-boronate ester: A simple chemosensor for optical detection of fluoride anion, *APPLIED ORGANOMETALLIC CHEMISTRY*, **2019**, 33(1), e4688. (Q2)
452. Deshetti, J., Chalkidis, A., Sabri, Y. M., Mayes, E. L. H., Reddy, B. M., **Bhargava, S. K.**, Low-temperature elemental mercury removal over TiO₂ nanorods-supported MnO_x-FeO_x-CrO_x, *CATALYSIS TODAY*, **2019**, 324, 174-182. (Q1)
451. Samudrala, P. S., Nakhate, A. V., Gupta, S. S. R., Rasal, K. B., Deshmukh, G. P., Gadipelly, C. R., Theegala, S., Dumbre, D. K., Periasamy, S., Komandur, V. R. C., **Bhargava, S. K.**, Mannepilli, L. K., Oxidative coupling of carboxylic acids or benzaldehydes with DMF using hydrotalcite-derived oxide catalysts, *APPLIED CATALYSIS B: ENVIRONMENTAL*, **2019**, 240, 348-357. (Q1)
450. Mahmood, N., De Castro, I. A., Pramoda, K., Khoshmanesh, K., **Bhargava, S. K.**, Kalantar-Zadeh, K., Atomically thin two-dimensional metal oxide nanosheets and their heterostructures for energy storage, *ENERGY STORAGE MATERIALS*, **2019**, 16, 455-480. (Review) (Q1)
449. Elbourne, A., Coyle, V. E., Truong, V. K., Sabri, Y. M., Kandjani, A. E., **Bhargava, S. K.**, Ivanova, E. P., Crawford, R. J., Multi-directional electrodeposited gold nanospikes for antibacterial surface applications, *NANOSCALE ADVANCES*, **2019**, 1, 203-212. (Q1)
448. Kantam, M. L., Gadipelly, C., Deshmukh, G., Reddy, K. R., **Bhargava, S.**, Copper catalyzed C-H activation, *CHEMICAL RECORD*, **2019**, 19 (7), 1302-1318. (Review) (Q1)
447. Reynolds, H. S., Ram, R., Pownceby, M. I., Yang, Y., Chen, M., Tardio, J., Jones, L., **Bhargava, S. K.**, Kinetics of uranium extraction from coffinite—A comparison with other common uranium minerals, *TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA*, **2018**, 28(10) 2135-2142. (Q1)
446. Jalili, R., Esrafilzadeh, D., Aboutaleb, S. H., Sabri, Y., Kandjani, A., **Bhargava, S.**, Gaspera, E. D., Gengenbach, T., Walker, A., Chao, Y., Wang, C., Alimadadi, H., Mitchell, D., Officer, D., MacFarlane, D., Wallace, G., Silicon as a ubiquitous contaminant in graphene derivatives with significant impact on device performance, *NATURE COMMUNICATIONS*, **2018**, Paper #NCOMMS-18-14875D. (Q1)
445. Cheng, Z., Mozammel, T., Patel, J., Lee, W. J., Huang, S., Lim, S., Ma, X., **Bhargava, S.**, Li, C., A method for the quantitative analysis of gaseous mixtures by online mass spectrometry, *INTERNATIONAL JOURNAL OF MASS SPECTROMETRY*, **2018**, 434, 23-28. (Q2)
444. Telukutla, S., Privér, S., Rao, V. V., Mirzadeh, N., **Bhargava, S. K.**, Gold(I) and Gold(III) Phosphine Complexes: Synthesis, Anticancer Activities Towards 2D and 3D Cancer Models, and Apoptosis Inducing Properties, *DALTON TRANSACTIONS*, **2018**, 47(43), 15312-15323. (Q1)
443. Sabri, Y. M., Kandjani, A. E., Rashid, S. S. A. A. H., Harrison, C. J., Ippolito, S. J., **Bhargava, S. K.**, Soot template TiO₂ fractals as a photoactive gas sensor for acetone detection, *SENSORS AND ACTUATORS B: CHEMICAL*, **2018**, 275, 215-222. (Q1)
442. Gupta, S. S. R., Nakhate, A. V., Deshmukh, G. P., Periasamy, S., Samudrala, S. P., **Bhargava, S. K.**, Kantam, M. L., Direct Synthesis of Amides from Oxidative Coupling of Benzyl Alcohols or Benzylamines with N-

Substituted Formamides Using a Cu-Fe-Based Heterogeneous Catalyst, CHEMISTRY SELECT, **2018**, 3, 8436-8443. (Q2)

441. Ram Kumar, C. B., Kandjani, A. E., Jones, L. A., Periasamy, S. R., Wong, S., Narayan, R., **Bhargava, S. K.**, Ippolito, S. J., Basak, P., Nanostructured Fused Pyrrole Thin Films: Encoding Nano “Bits” with Temporary Remanence, ADVANCED ELECTRONIC MATERIALS, **2018**, 4(8), 1700626. (Q1)
440. Joshi, S., Ram Kumar, C. B., Ippolito, S. J., Sabri, Y. M., Kandjani, A. E., **Bhargava, S. K.**, Sunkara, M. V., Straddled Band Aligned CuO/BaTiO₃ Heterostructures: Role of Energetics at Nanointerface in Improving Photocatalytic and CO₂ Sensing Performance, ACS APPLIED NANO MATERIALS, **2018**, 1(7), 3375-3388. (NOT ASIGNED)
439. Lay, B., Kandjani, A. E., Kabir, K. M. M., Hartley, P., Sabri, Y. M., **Bhargava, S. K.**, Gas sensing performance enhancement: Determining the role of active sites through colloidal lithography, SENSORS AND ACTUATORS: B. CHEMICAL, **2018**, 273, 1376-1384. (Q1)
438. Daima, H. K., Shankar, S., Anderson, A., Periasamy, S., **Bhargava, S.**, Bansal, V., Complexation of plasmid DNA and poly(ethylene oxide)/poly(propylene oxide) polymers for safe gene delivery, ENVIRONMENTAL CHEMISTRY LETTERS, **2018**, 16 (4), 1457-1462. (Q2)
437. Bennett, M. A., **Bhargava, S. K.**, Mirzadeh, N., Privér, S. H., The use of [2-C₆R₄PPh₂]⁻ (R = H, F) and related carbanions as building blocks in coordination chemistry, COORDINATION CHEMISTRY REVIEWS, **2018**, 370, 69-128. (Review) (Q1)
436. Dhanavath, K. N., Shah, K., **Bhargava, S. K.**, Bankupalli, S., Parthasarathy, R., Oxygen–steam gasification of karanja press seed cake: Fixed bed experiments, ASPEN Plus process model development and benchmarking with saw dust, rice husk and sunflower husk, JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, **2018**, 6(2), 3061-3069. (Q1)
435. Das, B., Sharma, M., Deka, B. K., Hazarika, A., Park, Y-B., Hazarika, A., **Bhargava, S. K.**, Bania, K. K., Facile Synthesis of 1D-Architecture of Silver-Vanadates in Carbon Nest for Enhanced Visible Light Driven Photo-oxidation Process, JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, **2018**, 6(2), 3167-3176. (Q1)
434. Dhanavath, K. N., Bankupalli, S., **Bhargava, S. K.**, Parthasarathy, R., An experimental study to investigate the effect of torrefaction temperature on the kinetics of gas generation, JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, **2018**, 6(2), 3332-3341. (Q1)
433. Begum, S., Anupoju, G. R., Sundergopal, S., **Bhargava, S. K.**, Jegatheesan, V., Eshtiaghi, N., Significance of implementing decentralized biogas solutions in India: a viable pathway for biobased economy, DETRITUS, **2018**, 1, 75-82. (NOT ASIGNED)
432. Nguyen, E. P., Lee, L., Rezk, A. R., Sabri, Y. M., **Bhargava, S. K.**, Yeo, L. Y., Hybrid Surface and Bulk Resonant Acoustics for Concurrent Actuation and Sensing on a Single Microfluidic Device, ANALYTICAL CHEMISTRY, **2018**, 90 (8), 5335–5342. (Q1)
431. Kumar, N. P., Sharma, P., Reddy, T. S., Shankaraiah, N., **Bhargava, S. K.**, Kamal, A., Microwave-assisted one-pot synthesis of new phenanthrene fused-tetrahydrobenzo-acridinones as potential cytotoxic and apoptosis inducing agents, EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, **2018**, 151, 173-185. (Q1)
430. Ren, B., Putla, S., Kandjani, A. E., Hillary, B., Amin, M. H., **Bhargava, S. K.**, Jones, L. A., Electrochemical Detection of As(III) on a Manganese Oxide-Ceria (Mn₂O₃/CeO₂) Nanocube Modified Au Electrode, ELECTROANALYSIS, **2018**, 30, 1-10. (Q2)

429. Singh, M., Deshetti, J., Kandjani, A. E., Sabri, Y. M., Gaspera, E. D., Reineck, P., Judd, M., Langley, J., Cox, N., Embden, J. V., Mayes, E. L. H., Gibson, B. C., **Bhargava, S. K.**, Ramanathan, R., Bansal, V., Oxygen-deficient photostable Cu₂O for enhanced visible light photocatalytic activity, **2018**, NANOSCALE, 2018, 10, 6039-6050. (Q1)
428. Joshi, S., Antolasic, F., Sunkara, M. V., **Bhargava, S. K.**, Ippolito, S. J., Highly Selective CO₂ Gas Sensing Properties of CaO-BaTiO₃ Heterostructures Effectuated through Discretely Created n-n Nanointerfaces, ACS SUSTAINABLE CHEMISTRY & ENGINEERING, **2018**, 6 (3), 4086–4097. (Q1)
427. Putla, S., Hillary, B., Amin, M. H., Rockstroh, N., Bentrup, U., Brückner, A., **Bhargava, S. K.**, Heterostructured Copper–Ceria and Iron–Ceria Nanorods: Role of Morphology, Redox, and Acid Properties in Catalytic Diesel Soot Combustion, LANGMUIR, **2018**, 34 (8), 2663-2673. (Q1)
426. Velisoju, V. K., Gutta, N., Tardio, J., **Bhargava, S. K.**, Vankudoth, K., Chatla, A., Medak, S., Akula, V., Hydrodeoxygenation activity of W modified Ni/H-ZSM-5 catalyst for single step conversion of levulinic acid to pentanoic acid: An insight on the reaction mechanism and structure activity relationship, APPLIED CATALYSIS A: GENERAL, **2018**, 550, 142-150. (Q1)
425. Eda, S., Borra, A., Parthasarathy, R., Bankupalli, S., **Bhargava, S.**, Thella, P. K., Recovery of Levulinic acid by Reactive Extraction using Tri-n-octylamine in Methyl isobutyl ketone: Equilibrium and Thermodynamic Studies and Optimization using Taguchi Multivariate approach, SEPARATION AND PURIFICATION TECHNOLOGY, **2018**, 197, 314-324. (Q1)
424. Begum, S., Anupoju, G. R., Sridhar, S., **Bhargava, S. K.**, Jegatheesan, V., Eshtiaghi, N., Evaluation of single and two stage anaerobic digestion of landfill leachate: Effect of pH and initial organic loading rate on volatile fatty acid (VFA) and biogas production, BIORESOURCE TECHNOLOGY, **2018**, 251, 364-373. (Q1)
423. Dhanavath, K. N., Shah, K., Islam, Md, S., Ronte, A., Parthasarathy, R., **Bhargava, S. K.**, Bankupalli, S., Experimental Investigations on Entrained Flow Gasification of Torrefied Karanja Press Seed Cake, JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, **2018**, 6(1), 1242-1249. (Q1)
422. Reddy, T. S., Privér, S. H., Mirzadeh, N., **Bhargava, S. K.**, Synthesis of gold(I) phosphine complexes containing the 2-BrC₆F₄PPh₂ ligand: Evaluation of anticancer activity in 2D and 3D spheroidal models of HeLa cancer cells, EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, **2018**, 145, 291-301. (Q1)
421. Reddy, V. G., Bonam, S. R., Reddy, T. S., Akunuri, R., Naidu, V. G. M., Nayak, V. L., **Bhargava, S. K.**, Kumar, H. M. S., Srihari, P., Kamal, A., 4 β -amidotriazole linked podophyllotoxin congeners: DNA topoisomerase-II α inhibition and potential anticancer agents for prostate cancer, EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, **2018**, 144, 595-611. (Q1)
420. Ramanathan, R., Pearson, A., Walia, S., Kandjani, A. E., Mohammadtaheri, M., Bhaskaran, M., Sriram, S., **Bhargava, S. K.**, Bansal, V., Solution-processable do-it-yourself switching devices (DIY devices) based on CuTCNQ metal-organic semiconductors, APPLIED MATERIALS TODAY, **2018**, 10, 12-17. (Q1)
419. Makam, P., Shilpa, R., Kandjani, A. E., Periasamy, S. R., Sabri, Y. M., Madhu, C., **Bhargava, S. K.**, SERS and fluorescence-based ultrasensitive detection of mercury in water, BIOSENSORS AND BIOELECTRONICS, **2018**, 100, 556–564. (Q1)
418. Eda, S., Kota, B. J., Thella, P. K., Bankupalli, S., **Bhargava, S. K.**, Parthasarathy, R., Regeneration of levulinic acid from loaded-organic phase: equilibrium, kinetic studies and process economics, CHEMICAL PAPERS, **2017**, 71 (10), 1939–1951. (Q2)

417. Khan, H., Zavabeti, A., Wang, Y., Harrison, C. J., Carey, B. J., Mohiuddin, M., Chrimes, A. F., Castro, I. A. D., Zhang, B., Sabri, Y. M., **Bhargava, S. K.**, Ou, J. Z., Daeneke, T., Russo, S. P., Li, Y., Kalantar-zadeh, K., Quasi physisorptive two dimensional tungsten oxide nanosheets with extraordinary sensitivity and selectivity to NO₂, *NANOSCALE*, **2017**, 9, 19162-19175. (Q1)
416. Varala, S., Parthasarathy, R., **Bhargava, S. K.**, Bankupalli, S., Desorption studies for the recovery of radionuclides (Th and Zr) and optimization using Taguchi mixed design L₁₈ (2¹³3²) – A regeneration step for loaded biosorbent, general mathematical model for multistage operation, *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, **2017**, 5 (6), 5396-5405. (Q1)
415. Faris, N., Tardio, J., Ram, R., **Bhargava, S.**, Pownceby, M. I., Investigation into coal-based magnetizing roasting of an iron-rich rare earth ore and the associated mineralogical transformations, *MINERALS ENGINEERING*, **2017**, 114, 37-49. (Q1)
414. Sharma, M., Das, B., Sharma, M., Deka, B. K., Park, Y-B., **Bhargava, S. K.**, Bania, K. K., Pd/Cu-Oxide Nanoconjugate at Zeolite-Y Crystallite Crafting the Mesoporous Channels for Selective Oxidation of Benzyl-Alcohols, *ACS APPLIED MATERIALS AND INTERFACES*, **2017**, 9 (40), 35453–35462. (Q1)
413. Amin, M. H., Putla, S., Field, M. R., Patel, J., **Bhargava, S. K.**, Effect of a Swelling Agent on the Performance of Ni/Porous Silica Catalyst for CH₄–CO₂ Reforming, *LANGMUIR*, **2017**, 33 (40), 10632–10644. (Q1)
412. Andrews, W. L., Tardio, J., **Bhargava, S. K.**, Wilde, A., Otto, A., Pownceby, M. I., Development of a new near infrared (NIR) tool for quantifying coffinite (USiO₄) in a moderately complex uranium ore analogue, *JOURNAL OF GEOCHEMICAL EXPLORATION*, **2017**, 182 (A), 80-93. (Q1)
411. Naik, D. K., Islam, M. S., Satyavathi, B., **Bhargava, S. K.**, Shah, K., Parthasarathy, R., Experimental investigations on the effect of pyrolytic bio-oil during the liquefaction of Karanja Press Seed Cake, *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 5 (5), **2017**, 4986-4993. (Q1)
410. Rao, V. V., Mirzadeh, N., **Bhargava, S.**, Likhar, P. R., Highly Selective Approach to α -Iodoketones from Aminoalkynols with Iodine Monochloride, *SYNTHESIS*, **2017**, 49, A–G. (Q1)
409. Gericke, R., Bennett, M. A., Privér, S. H., **Bhargava, S. K.**, Formation of Heterobimetallic Complexes by Addition of d¹⁰-Metal Ions to cis-[(dppe)M(κ C-2-C₆F₄PPh₂)₂] (M = Ni, Pd, and Pt), *ORGANOMETALLICS*, **2017**, 36 (17), 3178–3188. (Q1)
408. Jampaiah, D., Velisoju, V. K., Venkataswamy, P., Coyle, V. E., Nafady, A., Reddy, B. M., **Bhargava, S. K.**, Nanowire Morphology of Mono- and Bi-doped α -MnO₂ Catalysts for Remarkable Enhancement in Soot Oxidation, *ACS APPLIED MATERIALS AND INTERFACES*, **2017**, 9 (38), 32652–32666. (Q1)
407. Balasubramanyam, R. K. C., Kandjani, A. E., Harrison, C. J., Rashid, S. S. A. A. H., Sabri, Y. M., **Bhargava, S. K.**, Narayan, R., Basak, P., Ippolito, S. J., 1,4-dihydropyrrolo[3,2-b]pyrroles as a Single Component Photoactive Layer: A New Paradigm for Broadband Detection, *ACS APPLIED MATERIALS & INTERFACES*, **2017**, 9 (33), 27875–27882. (Q1)
406. Worthington, M., Kucera, R., Albuquerque, I., Gibson, C., Sibley, A., Slattery, A., Campbell, J., Alboaiji, S., Muller, K., Young, J., Adamson, N., Gascooke, J., Jampaiah, D., Sabri, Y., **Bhargava, S.**, Ippolito, S., Lewis, D., Quinton, J., Ellis, A., Johs, A., Bernardes, G., Chalker, J. M., Laying Waste to Mercury: Inexpensive Sorbents Made from Sulfur and Recycled Cooking Oils, *CHEMISTRY A EUROPEAN JOURNAL*, **2017**, 23,1–13. (Q1)

405. Dhanavath, K. N., Shah, K., Bankupalli, S., **Bhargava, S. K.**, Parthasarathy, R., Derivation of optimum operating conditions for the slow pyrolysis of Mahua press seed cake in a fixed bed batch reactor for bio-oil production, *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, **2017**, 5 (4), 4051-4063. (Q1)
404. Hurt, C., Brandt, M., Priya, S. S., Bhatelia, T., Patel, J., Selvakannan PR., **Bhargava, S.**, Combining Additive Manufacturing and Catalysis: A Review, *CATALYSIS SCIENCE AND TECHNOLOGY*, **2017**, 7, 3421-3439. (Review) (Q1)
403. Ren, B., Jones, L. A., Oppedisano, D. K., Kandjani, A. E., Chen, M., Antolasic, F., Ippolito, S. J., **Bhargava, S. K.**, The Preparation of a AuCN/Prussian Blue Nanocube Composite through Galvanic Replacement Enhances Stability for Electrocatalysis, *CHEMISTRYSELECT*, **2017**, 2, 5333-5340. (Q2)
402. Reddy, T. S., Privér, S. H., Mirzadeh, N., **Bhargava, S. K.**, Anti-cancer gold(I) phosphine complexes: Cyclic trimers and tetramers containing the P-Au-P moiety, *JOURNAL OF INORGANIC BIOCHEMISTRY*, 175, **2017**, 1-8. (Q2)
401. Sharma, P., Reddy, T. S., Kumar, N. P., Senwar, K. R., **Bhargava, S. K.**, Shankaraiah, N., Conventional and microwave-assisted synthesis of new 1H-benzimidazole-thiazolidinedione derivatives: A potential anticancer scaffold, *EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY*, **2017**, 138, 234-245. (Q1)
400. Guggilapu, S. D., Guntuku, L., Reddy, T. S., Nagarsenkar, A., Sigalapalli, D. K., Naidu, V. G. M., **Bhargava, S. K.**, Babu, B. N., Synthesis of thiazole linked indolyl-3-glyoxylamide derivatives as tubulin polymerization inhibitors, *EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY*, **2017**, 138, 83-95. (Q1)
399. Lay, B., Coyle, V. E., Kandjani, A. E., Amin, M. H., Sabri, Y. M., **Bhargava, S. K.**, Nickel-Gold Bimetallic Monolayer Colloidal Crystal via Galvanic Replacement as a Highly Sensitive Electrochemical Sensor, *JOURNAL OF MATERIALS CHEMISTRY B*, **2017**, 5, 5441-5449. (Q1)
398. Lay, B., Kandjani, A. E., Amin, M. H., Kabir, K. M. M., Ippolito, S. J., Sabri, Y. M., **Bhargava, S. K.**, Galvanic replacement of colloidal monolayer crystal on a QCM device for selective detection of mercury vapour, *SENSORS AND ACTUATORS B: CHEMICAL*, **2017**, 250, 383-392. (Q1)
397. Bhanuchander, P., Priya, S. S., Kumar, V. P., Hussain, Sk., Rajan, N. P., **Bhargava, S. K.**, Chary, K. V. R., Direct Hydrogenolysis of Glycerol to Biopropanols over Metal Phosphate Supported Platinum Catalysts, *CATALYSIS LETTERS*, **2017**, 147 (4), 845-855. (Q2)
396. Ambursa, M. M., Sudarsanam, P., Voon, L. H., Hamid, S. B. A., **Bhargava, S. K.**, Bimetallic Cu-Ni catalysts supported on MCM-41 and Ti-MCM-41 porous materials for hydrodeoxygenation of lignin model compound into transportation fuels, *FUEL PROCESSING TECHNOLOGY*, **2017**, 162, 87-97. (Q1)
395. Faris, N., Ram, R., Tardio, J., **Bhargava, S.**, McMaster, S., Pownceby, M. I., Application of ferrous pyrometallurgy to the beneficiation of rare earth bearing iron ores – A review, *MINERALS ENGINEERING*, **2017**, 110, 20-30. (Review) (Q1)
394. Priya, S. S., Selvakannan, P. R., Chary, K. V. R., Kantam, M. L., **Bhargava, S. K.**, Solvent-free microwave-assisted synthesis of solketal from glycerol using transition metal ions promoted mordenite solid acid catalysts, *MOLECULAR CATALYSIS*, **2017**, 434, 184-193. (Q1)
393. Wächtler, E., Wahlicht, S., Privér, S. H., Bennett, M. A., Gerke, B., Pöttgen, R., Brendler, E., Gericke, R., Wagler, J. and **Bhargava, S. K.**, Tin (IV) Compounds with 2-C₆F₄PPh₂ Substituents and Their Reactivity toward

- Palladium (0): Formation of Tin–Palladium Complexes via Oxidative Addition, *INORGANIC CHEMISTRY*, **2017**, 56 (9), 5316–5327. (Q1)
392. Sabri, Y. M., Kabir, K. M., Kandjani, A. E., **Bhargava, S. K.**, Studying the effect of dealloying Cu-Au nanostructures on their mercury sensing performance, *SENSORS AND ACTUATORS B: CHEMICAL*, **2017**, 245, 273-281. (Q1)
391. McMaster, S. A., Ram, R., Faris, N., Pownceby, M. I., Tardio, J., **Bhargava, S. K.**, Uranium leaching from synthetic betafite: $[(Ca, U)_2(Ti, Nb, Ta)_2O_7]$, *INTERNATIONAL JOURNAL OF MINERAL PROCESSING*, **2017**, 160, 58-67. (Q2)
390. Guggilapu, S. D., Lalita, G., Reddy, T. S., Prajapati, S. K., Nagarsenkar, A., Ramu, S., Brahma, U. R., Lakshmi, U. J., Vegi, G. M. N., **Bhargava, S. K.**, Babu, B. N., Synthesis of C 5-tethered indolyl-3-glyoxylamide derivatives as tubulin polymerization inhibitors, *EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY*, **2017**, 128, 1-12. (Q1)
389. Singh, S., Sabri, Y. M., Jampaiah, D., Selvakannan, P. R., Nafady, A., Kandjani, A. E., **Bhargava, S. K.**, Easy, one-step synthesis of CdTe quantum dots via microwave irradiation for fingerprinting application, *MATERIALS RESEARCH BULLETIN*, **2017**, 90, 260-265. (Q1)
388. Hillary, B., Sudarsanam, P., Amin, M. H., **Bhargava, S. K.**, Nanoscale Cobalt-Manganese-Oxide Catalyst Supported on Shape-Controlled Cerium Oxide: Effect of Nanointerface Configuration on Structural, Redox, and Catalytic Properties, *LANGMUIR*, **2017**, 33 (8), 1743–1750. (Q1)
387. Saikia, H., Duarah, R., Sudarsanam, P., **Bhargava, S. K.**, Bharali, P., PdCu Nanoparticles Stabilized on Porous CeO₂ for Catalytic Degradation of Azo Dyes: Structural Characterization and Kinetic Studies, *CHEMISTRY SELECT*, **2017**, 2(6), 2123-2130. (Q2)
386. Hamid, S. B. A., Ambursa, M. M., Sudarsanam, P., Voon, L. H., **Bhargava, S. K.**, Effect of Ti loading on structure-activity properties of Cu-Ni/Ti-MCM-41 catalysts in hydrodeoxygenation of guaiacol, *CATALYSIS COMMUNICATIONS*, **2017**, 94, 18-22. (Q1)
385. McGuinness, D. S., Patel, J., Amin, M. H., **Bhargava, S.K.**, DFT Study of Nickel Catalyzed Low Temperature Methanol Synthesis, *CHEMCATCHEM*, **2017**, 9, 1837-1844. (Q1)
384. Hughes, W., Rananaware, A., La, D. D., Jones, L. A., **Bhargava, S.K.**, Bhosale, S. V., Aza-crown ether-core substituted naphthalene diimide fluorescence “turn-on” probe for selective detection of Ca²⁺, *SENSORS AND ACTUATORS B: CHEMICAL*, **2017**, 244, 854–860. (Q1)
383. Kabir, K. M. M., Ippolito, S. J., Kandjani, A. E., Sabri, Y. M., **Bhargava, S. K.**, Nano-engineered surfaces for mercury vapor sensing: Current state and future possibilities, *TrAc TRENDS IN ANALYTICAL CHEMISTRY*, **2017**, 88, 77–99. (Review) (Q1)
382. Kumar, N. P., Sharma, P., Reddy, T. S., Nekkanti, S., Shankaraiah, N., Lalita, G., Sujanakumari, S., **Bhargava, S. K.**, Naidu, V. G. M., Kamal, A., Synthesis of 2,3,6,7-tetramethoxyphenanthren-9-amine: An efficient

precursor to access new 4-aza-2,3-dihydropyridophenanthrenes as apoptosis inducing agents, EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, **2017**, 127, 305-317. (Q1)

381. Kabir, K. M. M., Sabri, Y. M., Myers, L., Harrison, I., Boom, E., Coyle, V. E., Ippolito, S. J., **Bhargava, S. K.**, Investigating the cross-interference effects of alumina refinery process gas species on a SAW based mercury vapor sensor, HYDROMETALLURGY, **2017**, 170, 51-57. (Q1)
380. Faris, N., Ram, R., Chen, M., Tardio, J., Pownceby, M. I., Jones, L., McMaster, S., Webster, N. A. S., **Bhargava, S.**, The effect of thermal pre-treatment on the dissolution of chalcopyrite (CuFeS₂) in sulfuric acid media, HYDROMETALLURGY, **2017**, 169, 68–78. (Q1)
379. Jampaiah, D., Telukutla, S. R., Coyle, V. E., Nafady, A., **Bhargava, S. K.**, Co₃O₄@CeO₂ hybrid flower-like microspheres: a strong synergistic peroxidase-mimicking artificial enzyme with high sensitivity for glucose detection, JOURNAL OF MATERIALS CHEMISTRY B, **2017**, 5, 720-730. (Q1)
378. Walia, S., Sabri, Y., Ahmed, T., Field, M. R., Ramanathan, R., Arash, A., **Bhargava, S. K.**, Sriram, S., Bhaskaran, M., Bansal, V., Defining the role of humidity in the ambient degradation of few-layer black phosphorus, 2D MATERIALS, **2017**, 4(1). (Q1)
377. Kumar, V. V., Naresh, G., Deepa, S., Bhavani, P. G., Nagaraju, M., Sudhakar, M., Chary, K.V.R., Tardio, J., **Bhargava, S. K.**, Venugopal, A., Influence of W on the reduction behaviour and Brønsted acidity of Ni/TiO₂ catalyst in the hydrogenation of levulinic acid to valeric acid: Pyridine adsorbed DRIFTS study, APPLIED CATALYSIS A: GENERAL, **2017**, 531, 169-176. (Q1)
376. Muktham, R., Taha, M., Shahsavari, E., **Bhargava, S. K.**, Bankupalli, S., Ball, A. S., Pongamia pinnata seed residue-a low cost inedible resource for on-site/in-house lignocellulases and sustainable ethanol production, RENEWABLE ENERGY, **2017**, 103, 682-687. (Q1)
375. Sabri, Y. M., Ippolito, S. J., Salhi, L., Priver, S. H., Ioppolo-Armanios, M., Nunes, M., **Bhargava, S. K.**, Detection of alkali emissions from alumina refining processes, HYDROMETALLURGY, **2017**, 170, 68-73. (Q1)
374. Sharma, P.; Reddy, T. S.; Thummuri, D.; Senwar, K. R.; Kumar, N. P.; Naidu, V. G. M.; **Bhargava, S. K.**; Shankaraiah, N. Synthesis and biological evaluation of new benzimidazole-thiazolidinedione hybrids as potential cytotoxic and apoptosis inducing agents, EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, **2016**, 124, 608-621. (Q1)
373. Sharma, P.; Thummuri, D.; Reddy, T. S.; Senwar, K. R.; Naidu, V. G. M.; Srinivasulu, G.; **Bhargava, S. K.**; Shankaraiah, N. New (E)-1-alkyl-1H-benzo[d]imidazol-2-yl)methylene)indolin-2-ones: Synthesis, in vitro cytotoxicity evaluation and apoptosis inducing studies, EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, **2016**, 122, 584-600. (Q1)
372. Senwar, K. R.; Reddy, T. S.; Thummuri, D.; Sharma, P.; **Bhargava, S. K.**; Naidu, V. G. M.; Shankaraiah, N. Design and synthesis of 4'-O-alkylamino-tethered-benzylideneindolin-2-ones as potent cytotoxic and apoptosis inducing agents, Bioorganic and medicinal chemistry letters, **2016**, 26, 4061-4069. (Q1)

371. Ali , M. E., Sultana, S., Hamid, S. B. A., Hossain, M. A. M., Yehya, W. A., Kader, M. A., **Bhargava, S. K.**, Gelatin Controversies in Food, Pharmaceuticals and Personal Care Products: Authentication Methods, Current Status and Future Challenges, CRITICAL REVIEWS IN FOOD SCIENCE AND NUTRITION, **2016**, DOI: 10.1080/10408398.2016.1264361. **(Review)** (Q1)
370. Kabir, K. M. M., Kandjani, A. E., Harrison, C. J., Ippolito, S. J., Sabri, Y. M., **Bhargava, S. K.**, A real-time comparison of mercury accumulation on noble metal thin films using gravimetric device, SUPERLATTICES AND MICROSTRUCTURES, **2016**, 100, 1151–1158. (Q2)
369. Kandjani, A. E., Sabri, Y. M., Field, M. R., Coyle, V.E., Smith, R., **Bhargava, S. K.**, Candle-soot derived Photoactive and Superamphiphobic Fractal Titania Electrode, CHEMISTRY OF MATERIALS, **2016**, 28 (21), 7919-7927. (Q1)
368. Naresh, G., Velisoju, V. K., , Anjaneyulu, C., Tardio, J., **Bhargava, S. K.**, Patel, J., Venugopal, A., Nano size H β zeolite as an effective support for Ni and Ni-Cu for CO $_x$ free hydrogen production by catalytic decomposition of methane, INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, **2016**, 41(44), 19855–19862. (Q1)
367. Joshi, S., Lanka, S., Ippolito, S., **Bhargava, S.**, Manorama, S. V., {111} Faceted Li $_4$ Ti $_5$ O $_{12}$ Octahedra as Reference Electrode Material in Nanostructured Potentiometric CO $_2$ Sensor, JOURNAL OF MATERIALS CHEMISTRY A, **2016**, 4, 16418-16431. (Q1)
366. Muktham, R., Ball, A. S., **Bhargava, S. K.**, Bankupalli, S., Bioethanol production from non-edible de-oiled Pongamia pinnata seed residue-optimization of acid hydrolysis followed by fermentation, INDUSTRIAL CROPS AND PRODUCTS, **2016**, 94, 490–497. (Q1)
365. Muktham, R., **Bhargava, S. K.**, Bankupalli, S., Ball, A. S., A Review on 1st and 2nd Generation Bioethanol Production-Recent Progress, JOURNAL OF SUSTAINABLE BIOENERGY SYSTEMS, **2016**, 6, 72-92. **(Review)** (not found)
364. Hamid, S. B. A., Daud, N. A., Suppiah, D. D., Yehya, W. A., Sudarsanam, P., **Bhargava, S. K.**, Catalytic dehydration of glycerol to acrolein over M $_{2.5}$ H $_{0.5}$ PW $_{12}$ O $_{40}$ (M = Cs, Rb and K) phosphotungstic acids: Effect of substituted alkali metals, POLYHEDRON, Special issue of Polyhedron honoring Prof. Martin Bennett (FRS) on the occasion of his 80th Birthday, **2016**, 120, 154-161. (Q2)
363. Nafady, A., Sabri, Y. M., Kandjani, A. E., Alsalmeh, A. M., Bond, A. M., **Bhargava, S.**, Preferential synthesis of highly conducting TI(TCNQ) phase II nanorod networks via electrochemically driven TCNQ/TI(TCNQ) solid-solid phase transformation, SOLID STATE ELECTROCHEMISTRY, **2016**, 20 (12), 3303-3314, DOI: 10.1007/s10008-016-3359-4. (Q2)
362. Jampaiah, D., Perla, V., Coyle, V. E., Reddy, B. M., **Bhargava, S. K.**, Low-temperature CO oxidation over manganese, cobalt, and nickel doped CeO $_2$ nanorods, RSC ADVANCES, **2016**, 6, 80541-80548. (Q1)
361. Coyle, V. E., Kandjani, A. E., Sabri, Y. M., **Bhargava, S. K.**, Au Nanospikes as a Non-enzymatic Glucose Sensor: Exploring Morphological Changes with the Elaborated Chronoamperometric Method, ELECTROANALYSIS, **2016**, 28, 1-12. (Q2)

360. Soni, S. K., Kabir, K. M. M., Babarao, R., Coyle, V. E., Sarkar, S., Sabri, Y. M., **Bhargava, S. K.**, A QCM based 'on-off' mechanistic study of gas adsorption by plasmid DNA and DNA-[Bmim][PF₆] construct, RSC ADVANCES, **2016**, 6, 81318-81329. (Q1)
359. Reddy, P. V., Parsharamulu, T., Annapurna, M., Likhar, P. R., Kantam, M. L., **Bhargava, S.**, Carboxyamido/carbene ligated palladium (II) complex: A versatile catalyst for the synthesis of aryl-substituted heteroarenes, POLYHEDRON, Special issue of Polyhedron honoring Prof. Martin Bennett (FRS) on the occasion of his 80th Birthday, **2016**, 120, 150-153. (Q2)
358. Hamid, S. B. A., Basiron, N., Yehya, W. A., Sudarsanam, P., **Bhargava, S. K.**, Nanoscale Pd-based catalysts for selective oxidation of glycerol with molecular oxygen: Structure-activity correlations, POLYHEDRON, Special issue of Polyhedron honoring Prof. Martin Bennett (FRS) on the occasion of his 80th Birthday, **2016**, 120, 124-133. (Q2)
357. Dumbre, D. K., Amin, M. H., Loh, Q., Choudhary, V., Periasamy, S., **Bhargava, S.**, Nanocrystalline FeOCl_x grafted MCM-41 as active mesoporous catalyst for solvent-free multi-condensation reaction, RSC ADVANCES, **2016**, 6, 69334-69342. (Q1)
356. Sabri, Y.M., Kabir, K. M. M., Boom, E., Rosenberg, S., Ippolito, S. J., **Bhargava, S. K.**, Mercury detection in real industrial flue gas using a nanostructured quartz crystal microbalance, INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, **2016**, 55(28), 7661-7668. (Q1)
355. Goyal, R., Sarkar, B., Bag, A., Siddiqui, N., Dumbre, D., Lucas, N., **Bhargava, S. K.**, Bordoloi, A., Studies of synergy between metal-support interfaces and selective hydrogenation of HMF to DMF in water, JOURNAL OF CATALYSIS, **2016**, 340(2016), 248-260. (Q1)
354. Bhosale, R. S., Kelson, M. M. A., Bhosale, S. V., **Bhargava, S. K.**, Bhosale, S. V., Amphiphilic push-pull iminocoumarin for colorimetric selective fluoride anion sensing, MATERIALS TODAY: PROCEEDINGS, **2016**, 3(6), 1883-1889. (NOT YET ASSIGNED)
353. Booth, J. M., Drumm, D. W., Casey, P. S., Smith, J. S., Seeber, A. J., **Bhargava, S. K.**, Russo, S. P., Correlating the Energetics and Atomic Motions of the Metal-Insulator Transition of M1 Vanadium Dioxide, SCIENTIFIC REPORTS, 6, **2016**, Article number: 26391 (2016). (Q1)
352. Radhakrishnana, R., Kulhari, H., Pooja, D., Gudem, S., **Bhargava, S.**, Shukla, R., Sistla, R., Encapsulation of biophenolic phytochemical EGCG within lipid nanoparticles enhances its stability and cytotoxicity against cancer, CHEMISTRY AND PHYSICS OF LIPIDS, **2016**, 198, 51-60. (Q1)
351. Ahmad, M., Raman, A. Z. A., Basiron, W. J., **Bhargava, S. K.**, Treatment of textile effluent containing recalcitrant dyes using MOF derived Fe-ZSM-5 heterogeneous catalyst, RSC ADVANCES, **2016**, 6, 51078-51088. (Q1)
350. Rananaware, A., Gupta, A., Li, J., Bilic, A., Jones, L. A., **Bhargava, S. K.**, Bhosale, S., A four-directional non-fullerene acceptor based on tetraphenylethylene and diketopyrrolopyrrole functionalities for efficient

photovoltaic devices with a high open-circuit voltage of 1.18 V, CHEMICAL COMMUNICATIONS., **2016**, 52, 8522-8525. (Q1)

349. Khalil, I., Julkapli, N. M., Yehye, W. A., Basirun, W. J., **Bhargava, S. K.**, Graphene–Gold Nanoparticles Hybrid—Synthesis, Functionalization, and Application in a Electrochemical and Surface-Enhanced Raman Scattering Biosensor, MATERIALS, **2016**, 9(6), 406; doi:10.3390/ma9060406. (Review) (Q1)
348. Kabir, K. M. M., Lay, B., Kandjani, A. E., Sabri, Y. M., Ippolito, S. J., **Bhargava, S. K.**, A nanoengineered surface acoustic wave device for analysis of mercury in gas phase, SENSORS AND ACTUATORS B: CHEMICAL, **2016**, 234, 562–572. (Q1)
347. Ram, K. C. B., Kumar, R., Ippolito, S. J., **Bhargava, S. K.**, Periasamy, S. R., Narayan, R., Basak, P., Quadrupolar (A- π -D- π -A) Tetra-aryl 1,4- Dihydropyrrolo [3,2- b] pyrroles as Single Molecular Resistive Memory Devices: Substituent Triggered Amphoteric Redox Performance and Electrical Bistability, THE JOURNAL OF PHYSICAL CHEMISTRY, **2016**, 120 (21), 11313–11323. (Q1)
346. Deshetti, J., Telukutla, S. R., Kandjani, A. E., Periasamy, S., Sabri, Y. M., Coyle, V. E., Shukla, R., **Bhargava, S. K.**, Fe doped CeO₂ nanorods for enhanced peroxidase-like activity and their application towards glucose detection, JOURNAL OF MATERIALS CHEMISTRY B, **2016**, 4, 3874-3885. (Q1)
345. La, D. D., **Bhargava, S.**, Bhosale, S. V., Improved and a Simple Approach for Mass Production of Graphene Nanoplatelets Material, CHEMISTRY SELECT, **2016**, 1(5), 949–952. (Q2)
344. Ahmad, M., Farhana, R., Raman, A. Z. A., **Bhargava, S. K.**, Synthesis and activity evaluation of heterometallic nano oxides integrated ZSM-5 catalysts for palm oil cracking to produce biogasoline, ENERGY CONVERSION AND MANAGEMENT, **2016**, 119, 352–360. (Q1)
343. Ambursa, M. M., Ali, T. H., Lee, H. V., Putla, S., **Bhargava, S. K.**, Hamid, S. B. A., Hydrodeoxygenation of dibenzofuran to bicyclic hydrocarbons using bimetallic Cu–Ni catalysts supported on metal oxides, FUEL, **2016**, 180, 767–776. (Q1)
342. Sabri, Y. M., Kandjani, A. E., Ippolito, S. J., **Bhargava, S. K.**, Ordered Monolayer Gold Nano-urchin Structures and Their Size Induced Control for High Gas Sensing Performance, SCIENTIFIC REPORTS, 6, **2016**, Article number: 24625 (2016). (Q1)
341. Kabir, K. M. M., Sabri, Y. M., Kandjani, A. E., Ippolito, S. J., **Bhargava, S. K.**, Development and comparative investigation of Ag-sensitive layer based SAW and QCM sensors for mercury sensing applications, THE ANALYST, **2016**, 141, 2463-2473. (Q1)
340. Gbadamasi, S., Ali, T. H., Voon, L. H., Atta, A. Y., Putla, S., **Bhargava, S. K.**, Hamid, S. B. A., Promising Ni/Al-SBA-15 catalysts for hydrodeoxygenation of dibenzofuran into fuel grade hydrocarbons: synergetic effect of Ni and Al-SBA-15 support, RSC ADVANCES, **2016**, 6, 25992-26002. (Q1)

339. O'Connor, A. E., Mirzadeh, N., **Bhargava, S. K.**, Easun, T. L., Schröder, M., Blake, A. J., Aurophilicity under pressure: a combined crystallographic and in situ spectroscopic study, *CHEMICAL COMMUNICATIONS*, **2016**, 52, 6769-6772. (Q1)
338. Kabir, K. M. M., Sabri, Y. M., Lay, B., Ippolito, S. J., **Bhargava, S. K.**, A silver electrode based surface acoustic wave (SAW) mercury vapor sensor: a physio-chemical and analytical investigation, *RSC ADVANCES*, **2016**, 6, 36362-36372. (Q1)
337. Anjaneyulu, C., Naresh, G., Kumar, V. V., Padmasri, A. H., Tardio, J., **Bhargava, S. K.**, Venugopal, A., Ni/H-ZSM-5 as a stable and promising catalyst for CO_x free H₂ production by CH₄ decomposition, *RSC ADVANCES*, **2016**, 6, 34600-34607. (Q1)
336. Priya, S. S., Bhanuchander, P., Kumar, V. P., **Bhargava, S. K.**, Chary, K. V. R., Activity and Selectivity of Platinum–Copper Bimetallic Catalysts Supported on Mordenite for Glycerol Hydrogenolysis to 1,3-Propanediol, *INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH*, **2016**, 55(16), 4461–4472. (Q1)
335. Kabir, K. M. M., Matthews, G. I., Sabri, Y. M., Russo, S. P., Ippolito, S. J., **Bhargava, S. K.**, Development and experimental verification of a finite element method for accurate analysis of a surface acoustic wave device, *SMART MATERIALS AND STRUCTURES*, **2016**, 25(3), 035040 (13pp). (Q1)
334. Yang, Y., Liu, W., **Bhargava, S. K.**, Zeng, W., Chen, M., A XANES and XRD study of chalcopyrite bioleaching with pyrite, *MINERALS ENGINEERING*, **2016**, 89, 157–162. (Q1)
333. Putla, S., Hillary, B., Mallesham, B., Rao, B. G., Amin, M. H., Nafady, A., Alsalmeh, A., Reddy, B. M., **Bhargava, S. K.**, Designing CuO_x Nanoparticles-Decorated CeO₂ Nanocubes for Catalytic Soot Oxidation: Role of Nano-interface in the Catalytic Performance of Hetero-structured Nanomaterials, *LANGMUIR*, **2016**, 32(9), 2208-2215. (Q1)
332. Priya, S. S., Bhanuchander, P., Kumar, v. P., Deepa K. Dumbre, Periasamy, S. R., **Bhargava, S. K.**, Kantam, M. L., Chary, K. V. R., Platinum Supported on H-Mordenite: A Highly Efficient Catalyst for Selective Hydrogenolysis of Glycerol to 1,3-Propanediol , *ACS SUSTAINABLE CHEMISTRY and ENGINEERING*, **2016**, 4(3), 1212-1222. (Q1)
331. Halilu, A., Ali, T. H., Atta, A. Y., Putla, S., **Bhargava, S. K.**, Hamid, S. B. A., Highly Selective Hydrogenation of Biomass- Derived Furfural into Furfuryl Alcohol using a Novel Magnetic Nanoparticles Catalyst, *ENERGY & FUELS*, **2016**, 30(3), 2216-2226. (Q1)
330. Kumar, V. V., Naresh, G., Sudhakar, M., Anjaneyulu, C., **Bhargava, S. K.**, Tardio, J., Reddy, V. K., Padmasri, A. H., Venugopal, A., An investigation on the influence of support type for Ni catalysed vapour phase hydrogenation of aqueous levulinic acid to g-valerolactone, *RSC ADVANCES*, **2016**, 6, 9872–9879. (Q1)
329. Samsudin, E. M., Hamid, S. B. A., Juan, J. C., Basirun, W. J., Kandjani, A. E., **Bhargava, S. K.**, Effective role of trifluoroacetic acid (TFA) to enhance the photocatalytic activity of F-doped TiO₂ prepared by modified sol-gel method, *APPLIED SURFACE SCIENCE*, **2016**, 365, 57–68. (Q1)

328. Muktham, R., Ball, A. S., **Bhargava, S. K.**, Bankupalli, S., Study of thermal behavior of deoiled karanja seed cake biomass: thermogravimetric analysis and pyrolysis kinetics, *ENERGY SCIENCE & ENGINEERING*, **2016**, 4(1), 86-95. (Q1)
327. Putla, S., Hillary, B., Amin, M. H., Hamid, S. B. A., **Bhargava, S. K.**, Structure-activity relationships of nanoscale MnOx/CeO₂ heterostructured catalysts for selective oxidation of amines under eco-friendly conditions, *APPLIED CATALYSIS B: ENVIRONMENTAL*, **2016**, 185, 213-224. (Q1)
326. Griffin, M. J., Kabir, K. M. M., Coyle, V. E., Kandjani, A. E., Sabri, Y. M., Ippolito, S. J., **Bhargava, S. K.**, A Nanoengineered Conductometric Device for Accurate Analysis of Elemental Mercury Vapor, *ENVIRONMENTAL SCIENCE AND TECHNOLOGY*, **2016**, 50(3), 1384–1392. (Q1)
325. Varala, S., Kumari, A., Dharanija, B., **Bhargava, S.**, Parthasarathy, R., Satyavathi, B., Removal of thorium (IV) from aqueous solutions by deoiled karanja seed cake: Optimization using Taguchi method, equilibrium, kinetic and thermodynamic studies, *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, **2016**, 4(1), 405-417. (Q1)
324. Putla, S., Mallesham, B., Rangaswamy, A., **Bhargava, S. K.**, Reddy, B. M., Promising nanostructured gold/metal oxide catalysts for oxidative coupling of benzylamines under eco-friendly conditions, *MOLECULAR CATALYSIS A: CHEMICAL*, **2016**, 412, 47-55. (Q1)
323. Akondi, A. M., Kantam, M. L., Trivedi, R., Bharatam, J., Vemulapalli, S. P. B., **Bhargava, S. K.**, Buddana, S. K., Prakasham, R. S., Ce/SiO₂ composite as an efficient catalyst for the multicomponent one-pot synthesis of substituted pyrazolones in aqueous media and their antimicrobial activities, *JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL*, **2016**, 411, 325-336. (Q1)
322. Vijay, V., Karkhelikar, M. V., Balasubramanian, S., Mirzadeh, N., **Bhargava, S. K.**, Likhar, P. R., Electronically Modified Amine Substituted Alkynols for Regio-selective Synthesis of Dihydrofuran Derivatives, *ORGANIC & BIOMOLECULAR CHEMISTRY*, **2016**, 14, 288-295. (Q1)
321. Sudhakar, M., Kumar, V. V., Naresh, G., Kantam, M. L., **Bhargava, S. K.**, Venugopal, A., Vapour phase hydrogenation of aqueous levulinic acid over hydroxyapatite supported metal (M = Pd, Pt, Ru, Cu, Ni) catalysts, *APPLIED CATALYSIS B: ENVIRONMENTAL*, **2016**, 180, 113-120. (Q1)
320. Tang, W. N. H., Danaci, D., Singh, R., **Bhargava, S. K.**, Webley, P. A., Oxygen selective iron and cobalt–metalloporphyrin polymers – Extraordinary selectivity at low temperature, *MICROPOROUS AND MESOPOROUS MATERIALS*, **2016**, 222, 63-72. (Q1)
319. Jampaiah, D., Ippolito, S., Sabri, Y. M., Tardio, J., Periasamy, S., Nafady, A., Reddy, B. M., **Bhargava, S. K.**, Ceria–zirconia modified MnOx catalysts for gaseous elemental mercury oxidation and adsorption, *CATALYSIS SCIENCE & TECHNOLOGY*, **2016**, 6, 1792-1803. (Q1)
318. Sarkar, S., Mantria, K., Kumar, D., **Bhargava, S. K.**, Soni, S. K., Self-assembled lipase nanosphere templated one-pot biogenic synthesis of silica hollow spheres in ionic liquid [Bmim][PF₆], *RSC ADVANCES.*, **2015**, 5, 105800-105809.

317. Larki, P., Sabri, Y. M., Kabir, K. M. M., Nafady, A., Kandjani, A. E., **Bhargava, S. K.**, Silver/Gold Core/shell nanowire monolayer on a QCM microsensor for enhanced mercury detection, *RSC ADVANCES*, **2015**, 5, 92303-92311.
316. Bhosale, R. S., Kobaisi, M. A., Bhosale, S. V., **Bhargava, S.**, Bhosale, S. V., Flower-like supramolecular self-assembly of phosphonic acid appended naphthalene diimide and melamine, *SCIENTIFIC REPORTS* 5, **2015**, Article number: 14609 (2015).
315. Priya, S. S., Kumar, V. P., Kantam, M. L., **Bhargava, S. K.**, Srikanth, A., Chary, K. V. R., High Efficiency Conversion of Glycerol to 1,3-Propanediol Using a Novel Platinum–Tungsten Catalyst Supported on SBA-15, *INDUSTRIAL and ENGINEERING CHEMISTRY RESEARCH*, **2015**, 54(37), 9104–9115.
314. Yang, Y., Tan, S. N., Glenn, A. M., Harmer, S., **Bhargava, S.**, Chen, M., A direct observation of bacterial coverage and biofilm formation by *Acidithiobacillus ferrooxidans* on chalcopyrite and pyrite surfaces, *BIOFOULING*, **2015**, 31(7), 575–586.
313. Mirzadeh, N., Privér, S. H., Abraham, A., Shukla, R., Bansal, V., **Bhargava, S. K.**, Linking Flavonoids to Gold – A New Family of Gold Compounds for Potential Therapeutic Applications, *EUROPEAN JOURNAL OF INORGANIC CHEMISTRY*, **2015**, 2015(25), 4275–4279.
312. Kumar, V. V., Naresh, G., Sudhakar, M., Tardio, J., **Bhargava, S. K.**, Venugopal, A., Role of Brønsted and Lewis acid sites on Ni/TiO₂ catalyst for vapour phase hydrogenation of levulinic acid: Kinetic and mechanistic study, *APPLIED CATALYSIS A: GENERAL*, **2015**, 505, 217-223.
311. McMaster, S. A., Ram, R., Pownceby, M. I., Tardio, J., **Bhargava, S.**, Characterisation and leaching studies on the uranium mineral betafite [(U,Ca)₂(Nb,Ti,Ta)₂O₇], *MINERALS ENGINEERING*, **2015**, 81, 58–70.
310. Kabir, K. M. M., Ippolito, S. J., Matthews, G. I., Hamid, S. B. A., Sabri, Y. M., **Bhargava, S. K.**, Determining the Optimum Exposure and Recovery Periods for Efficient Operation of a QCM Based Elemental Mercury Vapor Sensor, *JOURNAL OF SENSORS*, **2015** (2015), Article ID 727432, 7 pages.
309. Putla, S., Amin, M. H., Reddy, B. M., Nafady, A., Al Farhan, K. A., **Bhargava, S. K.**, MnO_x Nanoparticle-Dispersed CeO₂ Nanocubes: A Remarkable Heteronanostructured System with Unusual Structural Characteristics and Superior Catalytic Performance, *ACS APPLIED MATERIALS AND INTERFACES*, **2015**, 7 (30), 16525–16535.
308. Sabri, Y. M., Ippolito, S. J., Tardio, J., Morrison, P. D., **Bhargava, S. K.**, Studying mercury partition in monoethylene glycol (MEG) used in gas facilities, *FUEL*, **2015**, 159, 917–924.
307. Kabir, K. M. M., Sabri, Y. M., Kandjani, A. E., Matthews, G. I., Field, M. R., Nafady, A., Jones, L. A., Ippolito, S. J., **Bhargava, S. K.**, Mercury sorption and desorption on gold: A comparative analysis of surface acoustic wave and quartz crystal microbalance-based sensors, *LANGMUIR*, **2015**, 31 (30), 8519-8529.
306. Shankar, S., Soni, S. K., Daima, H. K., Periasamy, S., Khire, J. M., **Bhargava, S. K.**, Bansal, V., Charge-switchable gold nanoparticles for enhanced enzymatic thermostability, *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, **2015**, 17, 21517-21524.
305. Soni, S. K., Sarkar, S., Periasamy, S., Sarkar, D., **Bhargava, S. K.**, Intrinsic therapeutic and biocatalytic roles of ionic liquid mediated self-assembled platinum-phytase nanosphere, *RSC ADVANCES*, **2015**, 5, 62871–62881.

304. Dhillon, A., Nair, M., **Bhargava, S. K.**, Kumar, D., Excellent fluoride decontamination and antibacterial efficacy of Fe–Ca–Zr hybrid metal oxide nanomaterial, *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, **2015**, 457, 289–297.
303. Wachtler, E., Priver, S. H., Wagler, J., Heine, T., Zhechkov, L., Bennett, M. A., **Bhargava, S. K.**, Metallophilic Contacts in 2-C₆F₄PPh₂ Bridged Heterobinuclear Complexes: A Crystallographic and Computational Study, *INORGANIC CHEMISTRY*, **2015**, 54 (14), 6947–6957.
302. Kandjani, A. E., Sabri, Y. M., Periasamy, S. R., Zohora, N., Amin, M. H., Nafady, A., **Bhargava, S. K.**, Controlling Core/Shell formation of nano-cubic p-Cu₂O/n-ZnO toward enhanced photocatalytic performance, *LANGMUIR*, **2015**, 31(39), 10633-10934.
301. Reddy, K. R., Venkanna, D., Kantam, M. L., **Bhargava, S. K.**, Srinivasu, P., SnO₂-SiO₂ Mesoporous Composite: A Very Active Catalyst for Regioselective Synthesis of Aromatic Ketones with Unusual Catalytic Behavior, *INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH*, **2015**, 54 (28), 7005–7013.
300. Putla, S., Hillary, B., Dumbre, D. K., Amin, M. H., Baithy, M., Reddy, B. M., **Bhargava, S. K.**, Highly efficient cerium dioxide nanocubes-based catalyst for low temperature diesel soot oxidation: cooperative effect of cerium-and cobalt-oxides, *CATALYSIS SCIENCE & TECHNOLOGY*, **2015**, 5, 3496-3500.
299. Kabir, K. M. M., Sabri, Y. M., Matthews, G. I., Jones, L. A., Ippolito, S., **Bhargava, S. K.**, Selective detection of elemental mercury vapor using a surface acoustic wave (SAW) sensor, *ANALYST*, **2015**, 140, 5508 – 5517.
298. Samsudin, E. M., Hamid, S. B. A., Juan, J. C., Basirun, W. J., Kandjani, A. E., **Bhargava, S. K.**, Controlled nitrogen insertion in titanium dioxide for optimal photocatalytic degradation of atrazine, *RSC ADVANCES*, **2015**, 5(55), 44041-44052.
297. Sabri, Y. M., Ippolito, S. J., Tardio, J., Hamid, S. B. A., **Bhargava, S. K.**, Mercury migration and speciation study during monoethylene glycol (MEG) regeneration processes, *INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH*, **2015**, 54 (19), 5349–5355.
296. Soni, S. K., Sarkar, S., Mirzadeh, N., Periasamy, S. R., **Bhargava, S. K.**, Self-assembled functional nanostructure of plasmid DNA with Ionic Liquid [Bmim][PF₆]: Enhanced efficiency in bacterial gene transformation, *LANGMUIR*, **2015**, 31(16), 4722–4732.
295. Priya, S. S., Kumar, V. P., Kantam, M. L., **Bhargava, S. K.**, Periasamy, S., Chary, K. V. R., Metal–acid bifunctional catalysts for selective hydrogenolysis of glycerol under atmospheric pressure: A highly selective route to produce propanols, *APPLIED CATALYSIS A: GENERAL*, **2015**, 498, 88-98.
294. Jampaiah, D., Venkataswamy, P., Tur, K. M., Ippolito, S. J., **Bhargava, S. K.**, Reddy, B. M., Effect of MnO_x loading on structural, surface, and catalytic properties of CeO₂-MnO_x mixed oxides prepared by sol-gel method, *JOURNAL OF INORGANIC AND GENERAL CHEMISTRY*, **2015**, 641, (6), 1141–1149.
293. Jampaiah, D., Tur, K. M., Venkataswamy, P., Ippolito, S., Sabri, Y. M., Tardio, J., **Bhargava, S. K.**, Reddy, B. M., Catalytic oxidation and adsorption of elemental mercury over nanostructured CeO₂-MnO_x catalyst, *RSC ADVANCES*, **2015**, 5, 30331-30341.

292. Jampaiah, D., Ippolito, S. J., Sabri, Y. M., Reddy, B. M., **Bhargava, S. K.**, Highly efficient nanosized Mn and Fe codoped ceria-based solid solutions for elemental mercury removal at low flue gas temperatures, CATALYSIS SCIENCE AND TECHNOLOGY, **2015**, 5, 2913-2924.
291. Zhang, W., Naidu, B. S., Ou, J. Z., O'Mullane, A. P., Chrimes, A. F., Carey, B. J., Wang, Y., Tang, S.-Y., Sivan, V., Mitchell, A., **Bhargava, S. K.**, Kalantar-zadeh, K., Liquid Metal/Metal Oxide Frameworks with Incorporated Ga₂O₃ for Photocatalysis, ACS APPLIED MATERIALS & INTERFACES, **2015**, 7(3), 1943-1948.
290. Srinivasu, P., Venkanna, D., Kantam, M. L., Tang, J., **Bhargava, S. K.**, Aldabahi, A., Wu, K. C.-W., Yamauchi, Y., Ordered Hexagonal Mesoporous Aluminosilicates and their Application in Ligand-Free Synthesis of Secondary Amines, CHEMCATCHEM, **2015**, 7(5), 747-751.
289. Kabir, K. M. M., Sabri, Y. M., Matthews, G. I., Ippolito, S. J., **Bhargava, S. K.**, Cross sensitivity effects of volatile organic compounds on a SAW-based elemental mercury vapor sensor, SENSORS AND ACTUATORS B: CHEMICAL, **2015**, 212, 235-241.
288. Mirzadeh, N., Bennett, M. A., Wächtler, E., Zhechkov, L., Heine, T., **Bhargava, S. K.**, Formation of heterobinuclear Pt-Au complexes by chelate ring-opening of cis-[Pt(κ^2 -C₆R₄PPh₂)₂] (R = H, F), JOURNAL OF ORGANOMETALLIC CHEMISTRY, **2015**, 783, 130-134.
287. Anjaneyulu, Ch., Kumar, S. N., Kumar, V. V., Naresh, G., **Bhargava, S. K.**, Chary, K. V. R., Venugopal, A., Influence of La on reduction behaviour and Ni metal surface area of Ni-Al₂O₃ catalysts for Cox free H₂ by catalytic decomposition of methane, INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, **2015**, 40(9), 3633-3641.
286. Plowman, B. J., Jones, L. A., **Bhargava, S. K.**, Building With Bubbles: The Formation of High Surface Area Honeycomb-like Films via Hydrogen Bubble Templated Electrodeposition, CHEMICAL COMMUNICATIONS, **2015**, 51, 4331- 4346. (Feature Article)
285. Kar, G., Privér, S. H., Jones, L. A., Guo, S. X., Torriero, A. A. J., Bond, A. M., Bennett, M. A., **Bhargava, S. K.**, Cyclopalladated complexes containing 2-C₆R₄PPh₂ ligands (R = H, F): one-electron electrochemical reduction leading to metal-carbon σ -bond cleavage via palladium(I), DALTON TRANSACTIONS, **2015**, 44 (7), 3367-3377.
284. Sabri, Y. M., Kandjani, A. E., Ippolito, S. J., **Bhargava, S. K.**, Nanosphere Monolayer on a Transducer for Enhanced Detection of Gaseous Heavy Metal, ACS APPLIED MATERIALS AND INTERFACES, **2015**, 7(3), 1491-1499.
283. Amin, M. H., Putla, S., Hamid, S. B. A., **Bhargava, S. K.**, Understanding the role of lanthanide promoters on the structure-activity of nanosized Ni/ γ -Al₂O₃ catalysts in carbon dioxide reforming of methane, APPLIED CATALYSIS A: GENERAL, **2015**, 492, 160-168.

282. Hasan, Md. R., Hamid, S. B. A., Basirun, W. J., Chowdhury, Z. Z., Kandjani, A. E., **Bhargava, S. K.**, Ga doped RGO-TiO₂ composite on ITO surface electrode for investigation of photoelectrocatalytic activity under visible light irradiation, *NEW JOURNAL OF CHEMISTRY*, **2015**, 39, 369-376.
281. **Bhargava, S. K.**, Ram, R., Pownceby, M., Grocott, S., Ring, B., Tardio, J., Jones, L., A review of acid leaching of uraninite, *HYDROMETALLURGY*, **2015**, 151, 10-24. (Review)
280. Dumbre, D. K., Mozammel, T., Selvakannan, P. R., Hamid, S. B. A., Choudhary, V. R., **Bhargava, S. K.**, Thermally decomposed mesoporous Nickel Iron hydrotalcite: An active solid-base catalyst for solvent-free Knoevenagel condensation, *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, **2015**, 441, 52-58.
279. Kandjani, A. E., Sabri, Y. M., Mohammadtaheri, M., Bansal, V., **Bhargava, S. K.**, Detect, remove and re-use: a new paradigm in sensing and removal of Hg (II) from wastewater via SERS-active ZnO/Ag nano-arrays, *ENVIRONMENTAL SCIENCE AND TECHNOLOGY*, **2015**, 49 (3), 1578-1584.
278. Ramanathan, R., Walia, S., Kandjani, A. E., Balendhran, S., Mohammadtaheri, M., **Bhargava, S. K.**, Kalantar-Zadeh, K., Bansal, V., Low temperature fabrication of alkali metal-organic charge transfer complexes on cotton textile for optoelectronics and gas sensing, *LANGMUIR*, **2015**, 31(4), 1581-1587.
277. Nafady, A., Alsalmeh, A. M., AL-Farhan, K. A., Khatib, R. M. E., **Bhargava, S.**, Probing Solvation and Ion-Pairing Effects on the Redox Behavior of Cyclopentadienyl Cobalt Dicarbonyl, CpCo(CO)₂, in the presence of [B(C₆F₅)₄]⁻ anion, *INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCES*, **2014**, 9, 8131 – 8144.
276. Sabri, Y. M., Ippolito, S. J., Tardio, J., Bansal, V., O'Mullane, A. P., **Bhargava, S. K.**, Gold nanospikes based microsensor as a highly accurate mercury emission monitoring system, *SCIENTIFIC REPORTS* 4, Article number: 6741, **2014**, doi:10.1038/srep06741.
275. Priya, S. S., Kumar, V. P., Kantam, M. L., **Bhargava, S. K.**, Chary, K. V. R., Vapour-Phase Hydrogenolysis of Glycerol to 1,3-Propanediol Over Supported Pt Catalysts: The Effect of Supports on the Catalytic Functionalities, *CATALYSIS LETTERS*, **2014**, 144(12), 2129-2143.
274. Priya, S. S., Kumar, V. P., Kantam, M. L., **Bhargava, S. K.**, Chary, K. V. R., Catalytic performance of Pt/AlPO₄ catalysts for selective hydrogenolysis of glycerol to 1,3-propanediol in the vapour phase, *RSC ADVANCES*, **2014**, 4, 51893-51903.
273. Racharlawar, S. S., Kumar, A., Mirzadeh, N., **Bhargava, S. K.**, Wagler, J., Likhar, P. R., New Palladium (II) Complex of SCN Unsymmetric Pincer-Type Ligand via Oxidative Addition, *JOURNAL OF ORGANOMETALLIC CHEMISTRY*, **2014**, 772–773, 182–187.
272. Kandjani, A. E., Mohammadtaheri, M., Thakkar, A., **Bhargava, S. K.**, Bansal, V., ZnO/Ag nanoarrays as reusable SERS substrates with controllable 'hot-spots' for highly reproducible molecular sensing, *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, **2014**, 436, 251-257.

271. Plowman, B. J., Abdelhamid, M. E., Ippolito, S. J., Bansal, V., **Bhargava, S. K.**, O'Mullane, A. P., Electrocatalytic and SERS activity of Pt rich Pt-Pb nanostructures formed via the utilisation of in-situ underpotential deposition of lead, *JOURNAL OF SOLID STATE ELECTROCHEMISTRY*, **2014**, 18(12), 3345-3357.
270. Duan, H., Yang, Y., Patel, J., Dumbre, D., **Bhargava, S. K.**, Burke, N., Zhai, Y., Webley, P. A., A facile method to synthesis a mesoporous carbon supported methanol catalyst containing well dispersed Cu/ZnO, *MATERIALS RESEARCH BULLETIN*, **2014**, 60, 232-237.
269. Sudarsanam, P., Periasamy, S., Soni, S. K., **Bhargava, S. K.**, Reddy, B. M., Structural evaluation and catalytic performance of nano-Au supported on nanocrystalline Ce_{0.9}Fe_{0.1}O_{2-δ} solid solution for oxidation of carbon monoxide and benzylamine, *RSC ADVANCES*, **2014**, 4, 43460-43469.
268. Srinivasu, P., Suresh, K., Datt, G., Abhayankar, A. C., Rao, P. N., Kantam, M. L., **Bhargava, S. K.**, Tang, J., Yamauchi, Y., Ordered mesoporous ferrosilicate materials with highly dispersed iron oxide nanoparticles and investigation of their unique magnetic properties, *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, **2014**, 16, 22471-22475.
267. McMaster, S. A., Ram, R., Charalambous, F., Pownceby, M. I., Tardio, J., **Bhargava, S. K.**, Synthesis and characterisation of the uranium pyrochlore Betafite [(Ca,U)₂(Ti,Nb,Ta)₂O₇], *JOURNAL OF HAZARDOUS MATERIALS*, **2014**, 280, 478-486.
266. Lay, B., Sabri, Y. M., Ippolito S. J., **Bhargava, S. K.**, Galvanically replaced Au-Pd nanostructures: Study of their enhanced elemental mercury sorption capacity over gold, *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, **2014**, 16, 19522-19529.
265. Privér, S. H., Bennett, M. A., Willis, A. C., Pottabathula, S., Kantam, M. L., **Bhargava, S. K.**, *Ortho*-Metallated triphenylphosphine chalcogenide complexes of platinum and palladium: synthesis and catalytic activity, *DALTON TRANSACTION*, **2014**, 43, 12000-12012.
264. Oppedisano, D. K., Jones, L. A., Junk, T., **Bhargava, S. K.**, Ruthenium electrodeposition from aqueous solution at high cathodic overpotential, *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*, **2014**, 161(10), D489-D494.
263. Parsharamulu, T., Venkanna, D., Kantam, M. L., **Bhargava, S. K.**, Srinivasu, P., The First Example of Ortho-Arylation of Benzamides over Pd /Mesoporous Silica: A Novel Approach for Direct sp² C-H Bond Activation, *INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH*, **2014**, 53(52), 20075-20084.
262. Radhakumari, M., Ball, A., **Bhargava, S. K.**, Satyavathi, B., Optimization of glucose formation in Karanja biomass hydrolysis using Taguchi robust method, *BIORESOURCE TECHNOLOGY*, **2014**, 166, 534-540.
261. Raveendranath, R. K., Suresh, M., Kantam, M. L., **Bhargava, S. K.**, Pavuluri, S., Palladium-free, highly efficient mesoporous tinsilicates catalytic acyl sonogashira coupling reaction, *INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH*, **2014**, 53 (49), 18630-18636.
260. Plowman, B. J., Field, M. R., **Bhargava, S. K.**, O'Mullane, A. P., Exploiting the Facile Oxidation of Evaporated Gold Films to Drive Electroless Silver Deposition for the Creation of Bimetallic Au/Ag Surfaces, *CHEMELECTROCHEM*, **2014**, 1(1), 76-82.
259. Akondi, A. M., Kantam, M. L., Trivedi, R., Sreedhar, B., Buddana, S. K., Prakasham, R. S., **Bhargava, S.**, Formation of benzoxanthenones and benzochromenones via cerium-impregnated-MCM 41 catalyzed, solvent-free, three-component reaction and their biological evaluation as anti-microbial agents, *JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL*, **2014**, 386, 49-60.

258. Ram, R., Charalambous, F. A., McMaster, S., Pownceby, M. I., Tardio, J., **Bhargava, S. K.**, The effect of $[Fe]_{TOT}$ on the dissolution of synthetic Pb-doped UO_2 and Th-doped UO_2 , *Minerals Engineering*, **2014**, 58, 26-38.
257. Koppineni, P., Moulik, S., Vadthya, P., **Bhargava, S. K.**, Tardio, J., Sundargopal, S., Performance assessment and hydrodynamic analysis of a submerged membrane bioreactor for treating dairy industrial effluent, *JOURNAL OF HAZARDOUS MATERIALS*, **2014**, 274, 300-313.
256. Koppineni, P., **Bhargava, S. K.**, Tardio, J., Sridhar, S., Design of novel ultrafiltration systems based on robust polyphenylsulfone hollow fiber membranes for treatment of contaminated surface water, *CHEMICAL ENGINEERING JOURNAL*, **2014**, 248, 297-306.
255. Nafady, A., Al-Qahtani, N. J., Al-Farhan, K. A., **Bhargava, S.**, Bond, A. M., Synthesis and characterization of microstructured sheets of semiconducting $Ca[TCNQ]_2$ via redox-driven solid-solid phase transformation of TCNQ microcrystals, *J SOLID STATE ELECTROCHEM*, **2014**, 18, 851-859.
254. Dumbre, D. K., Selvakannan, P. R., Patil, S. K., Choudhary, V. R., **Bhargava, S. K.**, Mesoporous, ligand free Cu-Fe solid catalyst mediated C-S cross coupling of thiols with aryl halides, *APPLIED CATALYSIS A: GENERAL*, **2014**, 476, 54-60.
253. Dumbre, D. K., Choudhary, V. R., Patil, N. S., Uphade, B. S., **Bhargava, S. K.**, Calcium oxide supported gold nanoparticles as catalysts for the selective epoxidation of styrene by t-butyl hydroperoxide, *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, **2014**, 415, 111-116.
252. Charalambous, F. A., Ram, R., McMaster, S., Pownceby, M. I., Tardio, J., **Bhargava, S. K.**, Leaching behaviour of natural and heat-treated brannerite-containing Uranium ores in sulphate solutions with iron(III), *MINERALS ENGINEERING*, **2014**, 57, 25-35.
251. Koppineni, P., Dasari, M., **Bhargava, S. K.**, Tardio, J., Sundargopal, S., Economical treatment of reverse osmosis reject of textile industry effluent by electrodialysis–evaporation integrated process, *DESALINATION*, **2014**, 333(1), 82–91.
250. Daima, H. K., Selvakannan, P. R., Kandjani, A. E., Shukla, R., **Bhargava, S. K.**, Bansal, V., Synergistic influence of polyoxometalate surface corona towards enhancing the antibacterial performance of tyrosine-capped Ag Nanoparticles, *NANOSCALE*, **2014**, 6, 758-765.
249. Al-Hwaiti, M., Tardio, J., Reynolds, H., **Bhargava, S.**, Selectivity assessments of a sequential extraction procedure for potential trace metal's mobility and bioavailability in phosphate rocks from Jordan Phosphate Mines, *SOIL AND SEDIMENT CONTAMINATION: AN INTERNATIONAL JOURNAL*, **2014**, 23(4), 417-436.
248. Jones, L. A., Ott, A., Tardio, J., Morrison, P., Rosenberg, S., Gunda, M., **Bhargava, S. K.**, VOC emission from alumina calcination stacks caused by thermal decomposition of organic additives, *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, **2014**, 2, 626-631.
247. Mirzadeh, N., Privér, S. H., Bennett, M. A., Wagler, J., **Bhargava, S. K.**, Divalent Platinum Complexes of the Carbanion $2-C_6F_4AsPh_2$: Monodentate or Bidentate Coordination?, *ORGANOMETALLICS*, **2013**, 32(24), 7451-7459.
246. Amin, M. H., Tardio, J., **Bhargava, S. K.**, An investigation on the role of ytterbium in ytterbium promoted gamma-alumina-supported nickel catalysts for dry reforming of methane, *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, **2013**, 38(33), 14223-14231.

245. Daima, H. K., Selvakannan, P. R., Shukla, R., **Bhargava, S. K.**, Bansal, V., Fine-tuning the antimicrobial profile of biocompatible gold nanoparticles by sequential surface functionalization using polyoxometalates and lysine, **2013**, PLOS ONE, 8(10), e79676.
244. Anjaneyulu, C., Kumar, V. V., **Bhargava, S. K.**, Venugopal, A., Characteristics of La-modified Ni-Al₂O₃ and Ni-SiO₂ catalysts for CO_x-free hydrogen production by catalytic decomposition of methane, JOURNAL OF ENERGY CHEMISTRY, **2013**, 22(6), 853-860.
243. Ram, R., Charalambous, F. A., McMaster, S., Pownceby, M. I., Tardio, J., **Bhargava, S. K.**, Chemical and microstructural characterisation studies on natural uraninite and associated gangue minerals, MINERALS ENGINEERING, **2013**, 45,159-169.
242. Shekhawat, K. S., Sharma, H., **Bhargava, S. K.**, Sharma, D. K., Electrochemical Behavior of 4-(5',6',7', 8'-Tetrahydronaphthalene)-1-tetralone in Aprotic Media, CHEMICAL SCIENCE TRANSACTIONS, **2013**, 2(4), 1334- 1339.
241. Kantam, M. L., Reddy, P. V., Srinivas, P., Venugopal, A., **Bhargava, S.**, Nishina, Y., Nanocrystalline magnesium oxide-stabilized palladium (0): the Heck reaction of heteroaryl bromides in the absence of additional ligands and base, CATAL. SCI. TECHNOL., **2013**, 3, 2550-2554.
240. Goethals, E. C., Shukla, R., Mistry, V., **Bhargava, S. K.**, Bansal, V., Role of the templating approach in influencing the suitability of polymeric nanocapsules for drug delivery LbL vs SC/MS, LANGMUIR, **2013**, 29(39), 12212-12219.
239. Ramanathan, R., Kandjani, A. E., Walia, S., Balendhran, S., **Bhargava, S. K.**, Kalantar-Zadeh, K., Bansal, V., 3-D nanorod arrays of metal-organic KTCNQ semiconductor on textiles for flexible organic electronics, RSC ADVANCES, **2013**, 3 (39) 17654-17658.
238. Pearson, A., Bhosale, S., **Bhargava, S. K.**, Bansal, V., Combining the UV switchability of keggin ions with a galvanic replacement process to fabricate TiO₂ -polyoxometalate-bimetal nanocomposites for improved surface enhanced Raman scattering and solar light photocatalysis, ACS APPLIED MATERIALS & INTERFACES, **2013**, 5 (15) , 7007-7013.
237. Charalambous, F. A., Ram, R., McMaster, S., Tardio, J., **Bhargava, S. K.**, An investigation on the dissolution of synthetic brannerite (UTi₂O₆), HYDROMETALLURGY, **2013**, 139, 1-8.
236. Ram, R., Charalambous, F. A., McMaster, S., Pownceby, M. I., Tardio, J., **Bhargava, S. K.**, An investigation on the dissolution of natural uraninite ores, MINERALS ENGINEERING, **2013**, 50-51, 83-92.
235. Zoolfakar, A. S; Kadir, R. A., Rani, R. A; Balendhran, S., Liu, X; Kats, E., **Bhargava, S. K.**, Bhaskaran, M., Sriram, S., Zhuiykov, S., O'Mullane, A. P., Kalantar-Zadeh, K., Engineering electrodeposited ZnO films and their memristive switching performance, PHYSICAL CHEMISTRY CHEMICAL PHYSICS, **2013**, 15(25), 10376-10384.
234. Jampaiah, D., Tur, K. M., Ippolito, S. J., Sabri, Y. M., Tardio, J., **Bhargava, S. K.**, Reddy, B. M., Structural characterization and catalytic evaluation of transition and rare earth metal doped ceria-based solid solutions for elemental mercury oxidation, RSC ADVANCES, **2013**, 3 (31), 12963-12974.
233. Selvakannan, P. R., Ramanathan, R., Plowman, B. J., Sabri, Y. M., Daima, H. K., O'Mullane, A. P., Bansal, V., **Bhargava, S. K.**, Probing the effect of charge transfer enhancement in off resonance mode SERS via conjugation of the probe dye between silver nanoparticles and metal substrates, PHYS. CHEM. CHEM. PHYS., **2013**, 15 (31), 12920-12929.

232. Mirzadeh, N., Drumm, D. W., Wagler, J., Russo, S. P., **Bhargava, S.**, Different solvates of the dinuclear cyclometallated gold(I) complex $[\text{Au}_2(\mu\text{-}2\text{-C}_6\text{H}_4\text{AsMe}_2)_2]$: a computational study insight into solvent-effected optical properties, *DALTON TRANSACTIONS*, **2013**, 42 (36), 12883-12890.
231. Srinivas, M., Srinivasu, P., **Bhargava, S. K.**, Kantam, M. L., Direct synthesis of two-dimensional mesoporous copper silicate as an efficient catalyst for synthesis of propargylamines, *CATALYSIS TODAY*, **2013**, 208, 66-71.
230. Sabri, Y. M., Ippolito, S. J., **Bhargava, S. K.**, Support layer influencing sticking probability: enhancement of mercury sorption capacity of gold, *JOURNAL OF PHYSICAL CHEMISTRY C*, **2013**, 117 (16), 8269-8275.
229. Mahajan, M., **Bhargava, S. K.**, O'Mullane, A. P., Reusable surface confined semi-conducting metal-TCNQ and metal-TCNQF₄ catalysts for electron transfer reactions, *RSC ADVANCES*, **2013**, 3(13), 4440-4446.
228. Ram, R., Charalambous F., McMaster, S., Tardio, J., **Bhargava, S.**, An investigation on the effects of several anions on the dissolution of synthetic uraninite (UO₂), *HYDROMETALLURGY*, **2013**, 136, 93-104.
227. Mirzadeh, N., Bennett, M., Wagler, J., Wachtler, E., Gerke, B., Pöttgen, R., **Bhargava, S.**, Dichotomy between Palladium(II)-Tin(II) and Palladium(0)-Tin(IV) in complexes of a Sn,As-based chelate ligand, *EUROPEAN JOURNAL OF INORGANIC CHEMISTRY*, **2013**, 2013(12), 1997-2001.
226. Reddy, P. V., Srinivas, P., Annapurna, M., **Bhargava, S.**, Wagler, J., Mirzadeh, N., Kantam, M. L., Phosphine-free palladium catalyzed decarboxylative coupling of alkynylcarboxylic acids with aryl and heteroaryl halides, *ADVANCED SYNTHESIS & CATALYSIS*, **2013**, 355 (4), 705-710.
225. Choudhary, V. R., Dumbre, D. K., Patil, N. S., Uphade, B. S., **Bhargava, S. K.**, Epoxidation of styrene by t-butyl hydroperoxide over gold nanoparticles supported on Yb₂O₃: Effect of gold deposition method, gold loading and calcination temperature of the catalyst on its surface properties and catalytic performance, *JOURNAL OF CATALYSIS*, **2013**, 300, 217-224.
224. Dumbre, D. K., Yadav, P. N., **Bhargava, S. K.**, and Choudhary, V. R., Suzuki-Miyaura cross coupling reaction between aryl halides and phenylboronic acids over gold nanoparticles supported on MgO (or CaO) and other metal oxides, *JOURNAL OF CATALYSIS*, **2013**, 301, 134-140.
223. Mirzadeh, N., Bennett, M. A., **Bhargava, S. K.**, Cycloaurated complexes of aryl carbanions: Digold(I), Digold(II) and beyond, *COORDINATION CHEMISTRY REVIEWS*, **2013**, 257 (15-16), 2250-2273.
222. Selvakannan, P. R., Mantri, K., Tardio, J., **Bhargava, S. K.**, High surface area Au-SBA-15 and Au-MCM-41 materials synthesis: Tryptophan amino acid mediated confinement of gold nanostructures within the mesoporous silica pore walls, *JOURNAL OF COLLOIDS AND INTERFACE SCIENCE*, **2013**, 394, 475-484.
221. Mantri, K., Selvakannan, P. R., Tardio, J., **Bhargava, S. K.**, Synthesis of very high surface area Au-SBA-15 materials by confinement of gold nanoparticles formation within silica pore walls, *COLLOIDS AND SURFACES A: Physicochemical and Engineering Aspects*, **2013**, 429, 149-158.
220. Pearson, A., O'Mullane, A. P., **Bhargava, S. K.**, Bansal, V., Effect of imidazolium-based ionic liquids on the nanoscale morphology of CuTCNQ (TCNQ = 7,7,8,8-tetracyanoquinodimethane) metal-organic semiconductors, *LANGMUIR*, **2013**, 29 (1), 8-12.
219. Goethals, E. C., Elbaz, A., Lopata, A. L., **Bhargava, S. K.**, Bansal, V., Decoupling the effects of the size, wall thickness and porosity of curcumin-loaded chitosan nanocapsules on their anticancer efficacy: size is the winner, *LANGMUIR*, **2013**, 29(2), 658-666.

218. Kandajani, A. E., Griffin, M. J., Ramanathan, R., Ippolito, S. J., **Bhargava, S. K.**, Bansal, V., A new paradigm for signal processing of Raman spectra using a smoothing free algorithm: coupling continuous wavelet transform with signal removal method, *JOURNAL OF RAMAN SPECTROSCOPY*, **2013**, 44 (4), 608-621.
217. Ramanathan, R., Field, M. R., O'Mullane, A. P., Smooker, P. M., **Bhargava, S. K.**, Bansal, V., Aqueous phase synthesis of copper nanoparticles: A link between heavy metal resistance and nanoparticle synthesis ability in bacterial systems, *NANOSCALE*, **2013**, 5 (6), 2300-2306.
216. Kantam, M. L., Annapurna. M., Likhar, P. R., Srinivas, P., Mirzadeh, N., **Bhargava, S. K.**, Palladium complexes containing multidentate phenoxy-pyridyl-amidate ligands: Highly efficient catalyst for Heck coupling of deactivated aryl halides, *JOURNAL of ORGANOMETALLIC CHEMISTRY*, **2013**, 723, 129–136.
215. Mahajan, M., **Bhargava, S. K.**, O'Mullane, A. P., Electrochemical formation of porous copper 7,7,8,8-tetracyanoquinodimethane and copper 2,3,5,6-tetrafluoro-7,7,8,8-tetracyanoquinodimethane honeycomb surfaces with superhydrophobic properties, *ELECTROCHIMICA ACTA*, **2013**, 101, 186-195.
214. Deepthi, S. B., Trivedi, R., Sujitha, P., Kumar, C. G., Sridhar, B., **Bhargava, S. K.**, Synthesis, characterization and cytotoxic activity of palladium (II) carbohydrate complexes, *JOURNAL OF CHEMICAL SCIENCES*, **2012**, 124(6), 1405-1413.
213. Sharma, D. K., Mourya, G. L., Jhankal, K. K., Jones, L. A., **Bhargava, S. K.**, Electrochemical behaviour and validated determination of the anticancer drug tamoxifen, *DER PHARMACIA LETTRE*, **2012**, 4(5), 1599-1606.
212. Choudhary, V. R., Dumbre, D. K., Yadav, P. N., **Bhargava, S. K.**, Thermally decomposed Cu-Fe-hydroxalcite: A novel highly active catalyst for o-arylation of naphthol and phenols by aryl halides, *CATALYSIS COMMUNICATIONS*, **2012**, 29, 132-136.
211. Charalambous, F. A., Ram, R., Pownceby, M. I., Tardio, J., **Bhargava, S. K.**, Chemical and microstructural characterisation studies on natural and heat treated brannerite samples, *MINERALS ENGINEERING*, **2012**, 39, 276-288.
210. Pearson, A., Zheng, H., Kalantar-Zadeh, K., **Bhargava, S. K.**, Bansal, V., Decoration of TiO₂ nanotubes with metal nanoparticles using polyoxometalate as a UV-switchable reducing agent for enhanced visible and solar light photocatalysis, *LANGMUIR*, **2012**, 28 (40) , 14470-14475.
209. Pearson, A., O'Mullane, A. P., **Bhargava, S. K.**, Bansal, V., Comparison of nanostructures obtained from galvanic replacement in water and an ionic liquid for applications in electrocatalysis and SERS, *ELECTROCHEMISTRY COMMUNICATIONS*, **2012**, 25 , 87-90.
208. Bhosale, S. V., Bhosale, S. V., **Bhargava, S. K.**, Recent progress of core-substituted naphthalenediimides: highlights from 2010, *ORGANIC & BIOMOLECULAR CHEMISTRY*, **2012**, 10(32), 6455-6468. **(Review)**
207. Srinivasu, P., Islam, A., Singh, S. P., Han, L., Kantam, M. L., **Bhargava, S. K.**, Highly efficient nanoporous graphitic carbon with tunable textural properties for dye-sensitized solar cells, *JOURNAL OF MATERIALS CHEMISTRY*, **2012**, 22, 20866-20869.
206. Bhosale, S. V., Nalage, S. V., Booth, J. M., Gupta, A., **Bhargava, S. K.**, Bhosale, S. V., Solvent Induced ordered supramolecular assembly of highly branched protoporphyrin IX derivative, *SUPRAMOLECULAR CHEMISTRY*, **2012**, 24(11), 779-786.

205. Najdovski, I., Selvakannan, P. R., **Bhargava, S. K.**, O'Mullane, A., Formation of nanostructured porous Cu-Au surfaces: the influence of cationic sites on (electro)-catalysis, *NANOSCALE*, **2012**, 4(20), 6298-6306.
204. Adsul, M., Soni, S. K., **Bhargava, S. K.**, Bansal, V., Facile approach for the dispersion of regenerated cellulose in aqueous system in the form of nanoparticles, *BIOMACROMOLECULES*, **2012**, 13(9), 2890-2895.
203. Sabri, Y. M., Ippolito, S. J., Kobaisi, M. A., Griffin, M. J., Nelson, D. R., **Bhargava, S. K.**, Investigation of Hg sorption and diffusion behaviour on ultra-thin films of gold using QCM response analysis and SIMS depth profiling, *JOURNAL OF MATERIALS CHEMISTRY*, **2012**, 22, 20929-20935.
202. Sabri, Y. M., Ippolito, S. J., Atanacio, A. J., Bansal, V., **Bhargava, S. K.**, Mercury vapour sensor enhancement by nanostructured gold deposited on nickel surfaces using galvanic replacement reactions, *JOURNAL OF MATERIALS CHEMISTRY*, **2012**, 22 (40), 21395 – 21404.
201. Bansal, V., Bharde, A., Ramanathan, R., **Bhargava, S. K.**, Inorganic materials using 'unusual' microorganisms, *ADVANCES IN COLLOID AND INTERFACE SCIENCE*, **2012**, 179–182, 150–168. (Review)
200. **Bhargava, S. K.**, Privér, S. H., Willis, A. C., Bennett, M. A., Preparation, structure and reactivity of dipalladium(I) complexes containing the carbanion 2-C₆F₄PPh₂: co-existence of distinct, non-interconverting head-to-head [Dipalladium(0/II)] and head-to-tail [Dipalladium(I)] species, *ORGANOMETALLICS*, **2012**, 31 (15), 5561–5572.
199. Pearson, A., O'Mullane, A. P., **Bhargava, S. K.**, Bansal, V., Synthesis of CuTCNQ/Au microrods by galvanic replacement of semiconducting phase I CuTCNQ with KAuBr₄ in aqueous medium, *INORGANIC CHEMISTRY*, **2012**, 51(16), 8791-8801.
198. Reddy, B. M., Durgasri, N., Kumar, T. V., **Bhargava, S. K.**, Abatement of gas-phase mercury – recent developments, *CATALYSIS REVIEWS*, **2012**, 54(3), 344-398. (Review)
197. Soni, S. K., Selvakannan, P. R., **Bhargava, S. K.**, Bansal, V., Self-assembled histidine acid phosphatase nanocapsules in ionic liquid [BMIM][BF₄] as functional templates for hollow metal nanoparticles, *LANGMUIR*, **2012**, 28 (28) , 10389-10397.
196. Akondi, A. M., Trivedi, R., Sreedhar, B., Kantam, M. L., **Bhargava, S.**, Cerium-containing MCM-41 catalyst for selective oxidative arene cross-dehydrogenative coupling reaction, *CATALYSIS TODAY*, **2012**, 198(1), 35-44.
195. Amin, M. H., Mantri, K., Newnham, J., Tardio, J., **Bhargava, S. K.**, Highly stable ytterbium promoted Ni/ γ -Al₂O₃ catalysts for carbon dioxide reforming of methane, *APPLIED CATALYSIS B: ENVIRONMENTAL*, **2012**, Volume 119-120, 217-226.
194. Nalage, S. V., Bhosale, S. V., **Bhargava, S. K.**, Bhosale, S. V., Kanamycin A 6'-pyrenylamide: a selective probe for heparin detection, *TETRAHEDRON LETTERS*, **2012**, 53(23), 2864-2867.
193. **Bhargava, S.**, Kitadai, K., Masashi, T., Drumm, D. W., Russo, S. P., Yam, V. W-W., Lee, T. K-M., Wagler, J., Mirzadeh, N., Synthesis and structures of cyclic gold complexes containing diphosphine ligands and luminescent properties of the high nuclearity species, *DALTON TRANSACTIONS*, **2012**, 41(16), 4789-4798.
192. Likhar P, R., Kantam M. L., **Bhargava, S.**, Polyaniline-supported metal catalysts for green synthesis, *INDIAN JOURNAL OF CHEMISTRY*, **2012**, 51A, 155-165. (Review)
191. Ott, A., **Bhargava, S. K.**, O'Mullane, A. P., A study of the galvanic replacement reaction at surfaces and the role of lateral charge propagation, *SURFACE SCIENCE*, **2012**, 606(1-2), L5–L9.

190. Newnham, J., Mantri, K., Amin, M. H., Tardio, J., **Bhargava, S. K.**, Highly stable and active Ni-mesoporous alumina catalysts for dry reforming of methane, *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, **2012**, 37(2), 1454-1464.
189. Sabri, Y. M., Ippolito, S. J., Tardio, J., **Bhargava, S. K.**, Study of surface morphology effects on Hg sorption-desorption kinetics on Gold thin films, *JOURNAL OF PHYSICAL CHEMISTRY C*, **2012**, 116 (3), 2483–2492.
188. Balendhran, S., Ou, J. Z., Bhaskaran, M., Sriram, S., Ippolito, S., Vasic, Z., Kats, E., **Bhargava, S.**, Zhuiykov S., Kalantar-zadeh, K., Atomically thin layers of MoS₂ via a two-step thermal evaporation - exfoliation method, *NANOSCALE*, **2012**, 4(2), 461-466.
187. Pearson, A., **Bhargava, S. K.**, Bansal, V., UV-switchable polyoxometalate sandwiched between TiO₂ and metal nanoparticles for enhanced visible and solar light photocatalysis, *LANGMUIR*, **2011**, 27(15), 9245-9252.
186. Sabri, Y. M., Kojima, R., Ippolito, S. J., Wlodarski, W., Kalantar-zadeh, K., Kaner, R. B., **Bhargava, S. K.**, QCM based mercury vapor sensor modified with polypyrrole supported palladium, *SENSORS AND ACTUATORS, B: CHEMICAL*, **2011**, 160(1), 616–622.
185. Plowman, B. J., **Bhargava, S. K.**, O'Mullane, A. P., Electrochemical fabrication of metallic nanostructured electrodes for electroanalytical applications, *ANALYST*, **2011**, 136(24), 5107-5119. (Review)
184. Ott, A., Jones, L. A., **Bhargava, S. K.**, Direct electrodeposition of porous platinum honeycomb structures, *ELECTROCHEMISTRY COMMUNICATIONS*, **2011**, 13, 1248–1251.
183. Sharma, D. K., Ott, A., O'Mullane, A. P., **Bhargava, S. K.**, The facile formation of silver dendritic structures in the absence of surfactants and their electrochemical and SERS properties, *COLLOIDS AND SURFACES A: PHYSIOCHEMICAL AND ENGINEERING ASPECTS*, **2011**, 386(1-3), 98-106.
182. Bennett, M. A., Kar, G., Mirzadeh, N., Privér, S. H., Rae, A. D., Wagler, J., Willis, A. C., **Bhargava, S. K.**, Bidentate chelate complexes of palladium(II) with the carbanion 2-C₆F₄PPh₂ and their transformation into complexes containing bridging 2-C₆F₄PPh₂, **2011**, *ORGANOMETALLICS*, 30(14), 3749-3762.
181. Satyanarayana, P., Maheswaran, H., Kantam, M. L., **Bhargava, S. K.**, Bis(μ-iodo)bis[(-)-sparteine] dicopper: A versatile catalyst for direct O-Arylation and O-Alkylation of phenols and aliphatic alcohols with haloarenes, *BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN*, **2011**, 84 (7), 788-790.
180. Kantam, M. L., Reddy, P. V., Srinivas, P., **Bhargava, S.**, Ligand and base-free Heck reaction with heteroaryl halides, *TETRAHEDRON LETTERS*, **2011**, 52(34), 4490-4493.
179. Campbell, J. L., Arora, J., Cowell, S. F., Garg, A., Eu, P., **Bhargava, S. K.**, Bansal, V., Quasi-cubic magnetite/silica core-shell nanoparticles as enhanced MRI contrast agents for cancer imaging, *PLOS ONE*, **2011**, 6 (7), e21857.
177. Ram, R., Charalambous, F., Tardio, J., **Bhargava, S.**, An investigation on the effects of Fe (FeIII, FeII) and oxidation reduction potential on the dissolution of synthetic uraninite (UO₂), *HYDROMETALLURGY*, **2011**, 109(1–2), 125–130.
176. Sabri, Y. M., Ippolito, S. J., O'Mullane, A. P., Tardio, J., Bansal, V., **Bhargava, S. K.**, Creating gold nanoprisms directly on quartz crystal microbalance electrodes for mercury vapor sensing, *NANOTECHNOLOGY*, **2011**, 22(30), 305501.

175. Parikh, R. Y., Ramanathan, R., Coloe, P. J., **Bhargava, S. K.**, Patole, M. S., Schouche, Y. S., Bansal, V., Genus-Wide physicochemical evidence of extracellular crystalline silver nanoparticles biosynthesis by *Morganella* spp., PLOS ONE, **2011**, 6(6), e21401.
174. Priyadarshini, S., Joseph, P. J. A., Srinivas, P., Maheswaran, H., Kantam, M. L., **Bhargava, S.**, Bis(μ -iodo)bis((-)-sparteine)dicopper(I) catalyzed Sonogashira-type reaction under palladium and phosphine-free conditions, TETRAHEDRON LETTERS, **2011**, 52(14), 1615-1618.
173. Basile, A., Bhatt, A. I., O'Mullane, A. P., **Bhargava, S. K.**, An investigation of silver electrodeposition from ionic liquids: Influence of atmospheric water uptake on the silver electrodeposition mechanism and film morphology, ELECTROCHIMICA ACTA, **2011**, 56(7) 2895-2905.
172. Ramanathan, R., Campbell, J. L., Soni, S. K., **Bhargava, S. K.**, Bansal, V., Cationic amino acids specific biomimetic silicification in ionic liquid: A quest to understand the formation of 3-D structures in diatoms, PLOS ONE, **2011**, 6(3), e17707.
171. Layek, K., Maheswaran, H., Arundhathi, R., Kantam, M. L., **Bhargava, S. K.**, Nanocrystalline magnesium oxide stabilized palladium(0): An efficient reusable catalyst for room temperature selective aerobic oxidation of alcohols, ADVANCED SYNTHESIS & CATALYSIS, **2011**, 353(4), 606-616.
170. Pearson, A., O'Mullane, A. P., Bansal, V., **Bhargava, S. K.**, Galvanic replacement of semiconductor phase I CuTCNQ microrods with KAuBr_4 to fabricate CuTCNQ/Au nanocomposites with photocatalytic properties, INORGANIC CHEMISTRY, **2011**, 50(5), 1705-1712.
169. Pearson, A., Jani, H., Kalantar-zadeh, K., **Bhargava, S. K.**, Bansal, V., Gold nanoparticle-decorated Keggin ions/ TiO_2 photocatalyst for improved solar light photocatalysis, LANGMUIR, **2011**, 27(11) 6661-6667.
168. Plowman, B. J., O'Mullane, A. P., **Bhargava, S. K.**, The active site behaviour of electrochemically synthesised gold nanomaterials, FARADAY DISCUSSIONS, **2011**, 152, 43-62.
167. O'Mullane, A. P., **Bhargava, S. K.**, Reduction of Au^{3+} ions by activated surface atoms of platinum, ELECTROCHEMISTRY COMMUNICATIONS, **2011**, 13(8), 852-855.
166. Najdovski, I., Selvakannan, P. R., O'Mullane, A. P., **Bhargava, S. K.**, Rapid synthesis of porous honeycomb Cu/Pd through a hydrogen-bubble templating method, CHEMISTRY-A EUROPEAN JOURNAL, **2011**, 17(36), 10058 – 10063.
165. Gupta, S., Bhattacharjee, S., Pandey, D., Bansal, V., **Bhargava, S. K.**, Peng, J. L., Garg, A., Absence of morphotropic phase boundary effects in BiFeO_3 - PbTiO_3 thin films grown via a chemical multilayer deposition method, APPLIED PHYSICS A: MATERIALS SCIENCE AND PROCESSING, **2011**, 104 (1), 395-400.
164. Bansal, V., Ramanathan, R., **Bhargava, S. K.**, Fungus-mediated biological approaches towards 'green' synthesis of oxide nanomaterials, AUSTRALIAN JOURNAL OF CHEMISTRY, **2011**, 64(3), 279-293. (Review)
163. Srinivas, P., Srinivas, K., Likhar, P. R., Sridhar, B., Mohan, K. V., **Bhargava, S.**, Kantam, M. L., Uridate/pyridyl Pd(II) complexes: Phosphine-free high turnover catalysts for the Heck reaction of deactivated aryl bromides, JOURNAL OF ORGANOMETALLIC CHEMISTRY, **2011**, 696(3), 795-801.
162. Ramanathan, R., O'Mullane, A. P., Parikh, R. Y., Smooker, P. M., **Bhargava, S. K.**, Bansal V., Bacterial kinetics-controlled shape-directed biosynthesis of Silver nanoplates using *Morganella psychrotolerans*, LANGMUIR, **2011**, 27(2), 714-719.

161. Plowman, B. J., Mahajan, M., O'Mullane A. P., **Bhargava, S. K.**, Electrochemical detection of dopamine and cytochrome c at a nanostructured gold electrode, *ELECTROCHIMICA ACTA*, **2010**, 55(28), 8953-8959.
160. Reynolds, H.S.; Ram. R.; Charalambous F.A.; Antolasic, F.; Jardio, J.; Bhargava, S.K. Characterisation of a uranium ore using multiple X-ray diffraction based methods, *Minerals Engineering*, 2010, 27, 739-745. (Q1)
159. Najdovski, I., O'Mullane A. P., **Bhargava, S. K.**, Electrochemical properties of galvanically replaced iron nanocubes with gold and palladium, *ELECTROCHEMISTRY COMMUNICATIONS*, **2010**, 12(11), 1535-1538.
158. O'Mullane A. P., Ippolito S. J., Bond A. M., **Bhargava, S. K.**, A study of localised galvanic replacement of copper and silver films with gold using scanning electrochemical microscopy, *ELECTROCHEMISTRY COMMUNICATIONS*, **2010**, 12(5) 611-615.
157. Sirajuddin, Mechler, A., Torriero, A. A. J., Nafady, A., Lee, C-Y., Bond, A. M., O'Mullane, A. P., **Bhargava, S. K.**, The formation of gold nanoparticles using hydroquinone as a reducing agent through a localized pH change upon addition of NaOH to a solution of HAuCl₄, *COLLOIDS AND SURFACES A: PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, **2010**, 370(1-3), 35-41.
156. Subhas, M. S., Racharlawar, S. S., Sridhar, B., Kennady, P. K., Likhar, P. R., Kantam, M. L., **Bhargava, S. K.**, New cyclopalladated benzothiophenes: A catalyst precursor for the Suzuki coupling of deactivated aryl chlorides, *ORGANIC AND BIOMOLECULAR CHEMISTRY*, **2010**, 8(13), 3001-3006.
155. Kantam, M. L., Mahendar, K., Sreedhar, B., Choudary, B. M., **Bhargava, S. K.**, Priver, S. H., Synthesis of α -sulfanyl- β -amino acid derivatives by using nanocrystalline magnesium oxide, *TETRAHEDRON*, **2010**, 66(27-28), 5042-5052.
154. Bennett, M. A., **Bhargava, S. K.**, Bond, A. M., Burgar, I. M., Guo, S-X., Kar, G., Priver, S. H., Wagler, J., Willis, A. C., Torriero, A. A. J., Synthesis, X-ray structure and electrochemical oxidation of palladium(II) complexes of ferrocenyldiphenylphosphine, *DALTON TRANSACTIONS*, **2010**, 39(38), 9079-9090.
153. Basile, A., Hughes, J., McFarlane, A. J., **Bhargava, S. K.**, Development of a model for serpentine quantification in nickel laterite minerals by infrared spectroscopy, *MINERALS ENGINEERING*, **2010**, 23(5), 407-412.
152. Soni, S. K., Ramanathan, R., Coloe, P. J., Bansal, V., **Bhargava, S. K.**, Self-assembled enzyme capsules in ionic liquid [BMIM][BF₄] as templating nanoreactors for hollow silica nanocontainers, *LANGMUIR*, **2010**, 26(20), 16020-16024.
151. Bansal, V., Li, V., O'Mullane, A. P., **Bhargava, S. K.**, Shape dependent electrocatalytic behaviour of silver nanoparticles, *CRYST ENG COMM*, **2010**, 12(12), 4280-4286.
150. Mukherjee, S., Gupta, R., Garg, A., Bansal, V., **Bhargava, S. K.**, Influence of Zr doping on the structure and ferroelectric properties of BiFeO₃ thin films, *JOURNAL OF APPLIED PHYSICS*, **2010**, 107(12), 123535-1-123535-5.
149. **Bhargava, S. K.**, Kitadai, K., Mirzadeh, N., Priver, S. H., Takahashi, M., Wagler, J., Alkynyl derivatives of gold complexes containing C₆H₃-5-Me-2-EPh₂ (E = P, As) ligands, *JOURNAL OF ORGANOMETALLIC CHEMISTRY*, **2010**, 695(14), 1787-1793.

148. Pearson, A., O'Mullane, A. P., Bansal, V., **Bhargava, S. K.**, Galvanic replacement mediated transformation of Ag nanospheres into dendritic Au-Ag nanostructures in the ionic liquid [BMIM][BF₄], *CHEMICAL COMMUNICATIONS*, **2010**, 46(5) 731-733.
147. Plowman, B. J., O'Mullane, A. P., Selvakannan, P. R., **Bhargava, S. K.**, Honeycomb nanogold networks with highly active sites, *CHEMICAL COMMUNICATIONS*, **2010**, 46(48), 9182-9184.
146. Bennett, M. A., **Bhargava, S. K.**, Cheng, E. C-C., Lam, W. H., Lee, T. K-M., Priver, S. H., Wagler, J., Willis, A. C., Yam, V. W-W., Unprecedented near-infrared (NIR) emission in diplatinum(III) (d⁷-d⁷) complexes at room temperature, *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, **2010**, 132(20), 7094-7103.
145. Dong, J., Power, G., Loh, J., Tardio, J., Vernon, C., **Bhargava, S.**, Fundamentals of wet oxidation of Bayer-process liquor: Reactivity of malonates, *INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH*, **2010**, 49(11), 5347-5352.
144. Kantam, M. L., Mahendar, K., **Bhargava, S.**, One-pot, three-component synthesis of highly substituted pyridines and 1,4-dihydropyridines by using nanocrystalline magnesium oxide, *JOURNAL OF CHEMICAL SCIENCES*, **2010**, 122(1), 63-69.
143. Kantam, M. L., Srinivas, P., Yadav, J., Likhar, P. R., **Bhargava, S.**, Trifunctional N,N,O-terdentate amido/pyridyl carboxylate ligated Pd(II) complexes for Heck and Suzuki reactions, *JOURNAL OF ORGANIC CHEMISTRY*, **2009**, 74(13), 4882-4885.
142. Bansal, V., O'Mullane, A. P., **Bhargava, S. K.**, Galvanic replacement mediated synthesis of hollow Pt nanocatalysts: Significance of residual Ag for the H₂ evolution reaction, *ELECTROCHEMISTRY COMMUNICATIONS*, **2009**, 11(8), 1639-1642.
141. Kantam, M. L., Venkanna, G. T., Kumar, K. B. S., Balasubrahmanyam, V., **Bhargava, S. K.**, Synthesis of benzoxazoles via intramolecular cyclization of ortho-halobenzanilides using copper fluorapatite catalyst, *SYNLETT*, **2009**, 11, 1753-1756.
140. Subasinghe, N. D., Awaja, F., **Bhargava, S. K.**, Variation of kerogen content and mineralogy in some Australian tertiary oil shales, *FUEL*, **2009**, 88(2), 335-339.
139. O'Mullane, A. P., Ippolito, S. J., Sabri, Y. M., Bansal, V., **Bhargava, S. K.**, Premonolayer oxidation of nanostructured gold: An important factor influencing electrocatalytic activity, *LANGMUIR*, **2009**, 25(6)3845-3852.
138. Neumeyer, B., Hensler, J., O'Mullane, A. P., **Bhargava, S. K.**, A facile chemical screening method for the detection of stress corrosion cracking in 9 carat gold alloys, *GOLD BULLETIN*, **2009**, 42(3), 209-214.
137. Bennett, M. A., Mirzadeh, N., Priver, S. H., Wagler, J., **Bhargava, S. K.**, Trinuclear mixed-valent gold complexes derived from 2-C₆F₄PPh₂: Phosphine oxide complexes of gold(III) and an ortho-metallated complex of gold(I), *ZEITSCHRIFT FÜR NATURFORSCHUNG - SECTION B JOURNAL OF CHEMICAL SCIENCES*, **2009**, 64(11-12), 1215-1219.
136. Sawant, P. D., Sabri, Y. M., Ippolito, S. J., Bansal, V., **Bhargava, S. K.**, In-depth nano-scale analysis of complex interactions of Hg with gold nanostructures using AFM-based power spectrum density method, *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, **2009**, 11(14), 2374-2378.

135. Plowman, B., Ippolito, S. J., Bansal, V., Sabri, Y. M., O'Mullane, A. P., **Bhargava, S. K.**, Gold nanospikes formed through a simple electrochemical route with high electrocatalytic and surface enhanced Raman scattering activity, *CHEMICAL COMMUNICATIONS*, **2009**, 33, 5039-5041.
134. **Bhargava, S. K.**, Garg, A., Subasinghe, N. D., In situ high-temperature phase transformation studies on pyrite, *FUEL*, **2009**, 88(6), 988-993.
133. Sadek, A. Z., Zheng, H., Breedon, M., Bansal, V., **Bhargava, S. K.**, Latham, K., Zhu, J., Yu, L., Hu, Z., Spizzirri, P. G., Wlodarski, W., Kalantar-zadeh, K., High-temperature anodized WO₃ nanoplatelet films for photosensitive devices, *LANGMUIR*, **2009**, 25(16), 9545-9551.
132. Bennett, M. A., **Bhargava, S. K.**, Bond, A. M., Bansal, V., Forsyth, C. M., Guo, S-X., Priver, S. H., Electrochemical and chemical oxidation of [Pt₂(μ-pyrophosphate)₄]⁴⁻ revisited: characterization of a nitrosyl derivative, [Pt₂(μ-pyrophosphate)₄(NO)]³⁻, *INORGANIC CHEMISTRY*, **2009**, 48(6), 2593-2604.
131. Choudhary, V. R., Jana, P., **Bhargava, S. K.**, Alkaline earth oxide supported nano-gold catalysts: Influence of support, preparation method and calcination temperature of catalyst on its gold particle size and morphology, *INTERNATIONAL JOURNAL OF NANOPARTICLES*, **2009**, 2(1-2), 11-19.
130. Sabri, Y. M., Ippolito, S. J., Tardio, J., Atanacio, A. J., Sood, D. K., **Bhargava, S. K.**, Mercury diffusion in gold and silver thin film electrodes on quartz crystal microbalance sensors, *SENSORS AND ACTUATORS B: CHEMICAL*, **2009**, 137(1), 246-252.
129. Bennett, M. A., Mirzadeh, N., Priver, S. H., Takahashi, M., **Bhargava, S. K.**, ¹⁹⁷Au Mossbauer spectroscopic studies of cyclometalated gold dimers containing 2-C₆F₄PPh₂ Ligands, *BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN*, **2009**, 82(12), 1506-1509.
128. Choudhary, V. R., Dumbre, D. K., **Bhargava, S. K.**, Oxidation of benzyl alcohol to benzaldehyde by tert-butyl hydroperoxide over nanogold supported on TiO₂ and other transition and rare-earth metal oxides, *INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH*, **2009**, 48(21), 9471-9478.
127. Kalantar-zadeh, K., Sadek, A. Z., Zheng, H., Bansal, V., **Bhargava, S. K.**, Wlodarski, W., Zhu, J., Yu, L., Hu, Z., Nanostructured WO₃ films using high temperature anodization, *SENSORS AND ACTUATORS B: CHEMICAL*, **2009**, 142(1), 230-235.
126. Bennett, M. A., **Bhargava, S. K.**, Mirzadeh, N., Priver, S. H., Wagler, J., Willis, A. C., Synthesis and interconversions of digold(I), tetragold(I), digold(II), gold(I)-gold(III) and di gold(III) complexes of fluorine-substituted aryl carbanions, *DALTON TRANSACTIONS*, **2009**, 7537-7551.
125. Sabri, Y. M., Ippolito, S. J., **Bhargava, S. K.**, Mercury vapor sensor for alumina refinery processes, *LIGHT METALS*, **2009**, 37-42.
124. Choudhary, V. R., Jana, P., **Bhargava, S. K.**, Direct H₂-to-H₂O₂ oxidation in aqueous acidic medium containing Br promoter over Pd/Al₂O₃ and Pd/C catalysts thermally pretreated under different conditions, *CATALYSIS LETTERS*, **2008**, 125(3-4), 296-301.
123. Kantam, M. L., Pal, U., Sreedhar, B., **Bhargava, S.**, Iwasawa, Y., Tada, M., Choudary, B. M., Aerobic alcohol oxidation by ruthenium species stabilized on nanocrystalline magnesium oxide by basic ionic liquids, *ADVANCED SYNTHESIS AND CATALYSIS*, **2008**, 350(9), 1225-1229.

122. Kantam, M. L., Laha, S., Yadav, J., Likhar, P. R., Sreedhar, B., Jha, S., **Bhargava, S.**, Udayakiran, M., Jagadeesh, B., An efficient copper-aluminum hydrotalcite catalyst for asymmetric hydrosilylation of ketones at room temperature, *ORGANIC LETTERS*, **2008**, 10(14), 2979-2982.
121. Kantam, M. L., Chakravarti, R., Pal, U., Sreedhar, B., **Bhargava, S.**, Nanocrystalline magnesium oxide-stabilized palladium(0): An efficient and reusable catalyst for selective reduction of nitro compounds, *ADVANCED SYNTHESIS AND CATALYSIS*, **2008**, 350(6), 822-827.
120. Kantam, M. L., Reddy, R. S., Pal, U., Sreedhar, B., **Bhargava, S.**, Transfer hydrogenation of carbonyl compounds catalyzed by ruthenium nanoparticles stabilized on nanocrystalline magnesium oxide by ionic liquids, *ADVANCED SYNTHESIS AND CATALYSIS*, **2008**, 350(14-15), 2231-2235.
119. Kantam, M. L., Chakravarti, R., Sreedhar, B., **Bhargava, S.**, Friedel-Crafts alkylation of nitrogen heterocycles using [Bmim] [OTf] as a catalyst and reaction medium, *SYNLETT*, **2008**, 10, 1449-1454.
118. Kantam, M. L., Chakravarti, R., Chintareddy, V. R., Sreedhar, B., **Bhargava, S.**, Palladium-catalyzed Heck coupling-hydrogenation: Highly efficient one-pot synthesis of dibenzyls and alkyl phenyl esters, *ADVANCED SYNTHESIS AND CATALYSIS*, **2008**, 350(16), 2544-2550.
117. Kantam, M. L., Yadav, J., Laha, S., Sreedhar, B., **Bhargava, S.**, Nanocrystalline magnesium oxide-stabilized molybdenum: An efficient heterogeneous catalyst for the aerobic oxidation of alcohols to carbonyl compounds, *ADVANCED SYNTHESIS AND CATALYSIS*, **2008**, 350(16), 2575-2582.
116. Dhawan, D., **Bhargava, S.**, Tardio, J., Wlodarski, W., Kalantar-Zadeh, K. Gold coated nanostructured molybdenum oxide mercury vapour quartz crystal microbalance sensor, *SENSOR LETTERS*, **2008**, 6(1), 231-236.
115. Bansal, V., Jani, H., Plessis, J. D., Coloe, P. J., **Bhargava, S. K.**, Galvanic replacement reaction on metal films: A one-step approach to create nanoporous surfaces for catalysis, *ADVANCED MATERIALS*, **2008**, 20(4), 717-723.
114. Jani, H., **Bhargava, S. K.**, Tardio, J., Akolekar, D. B., Hoang, M., Catalytic wet oxidation of ferulic acid, *INTERNATIONAL JOURNAL OF ENVIRONMENTAL TECHNOLOGY AND MANAGEMENT*, **2008**, 9(1), 87-96.
113. Kantam, M. L., Laha, S., Yadav, J., **Bhargava, S.**, An efficient synthesis of propargylamines via three-component coupling of aldehydes, amines and alkynes catalyzed by nanocrystalline copper(II) oxide, *TETRAHEDRON LETTERS*, **2008**, 49(19), 3083-3086.
112. Gupta, V. K., Jain, A. K., Khayat, M. A., **Bhargava, S. K.**, Raison, J. R., Electroanalytical studies on cobalt(II) selective potentiometric sensor based on bridge modified calixarene in poly(vinyl chloride), *ELECTROCHIMICA ACTA*, **2008**, 53(16), 5409-5414.
111. Bennett, M. A., **Bhargava, S. K.**, Keniry, M. A., Priver, S. H., Simmonds, P. M., Wagler, J., Willis, A. C., A triad of Bis(orthometalated) d8-complexes containing four-membered rings, *ORGANOMETALLICS*, **2008**, 27(20), 5361-5370.
110. Venkatachalam, D. K., Llewellyn, D. J., Belay, K. B., Elliman, R. G., Sood, D. K., **Bhargava, S. K.**, In-situ XTEM analysis of the liquid phase epitaxial growth of a Si/Au alloy layer, *MICROSCOPY AND MICROANALYSIS*, **2008**, 14(2), 1338-1339.

109. Bennett, M. A., **Bhargava, S. K.**, Priver, S. H., Willis, A. C., Selective cleavage by acids of one metal-carbon σ -bond of a bis(ortho-platinated) triarylphosphane: A ^{31}P NMR trans-influence series based on the unit $\text{Pt}(\text{K}_2\text{-C}_6\text{H}_3\text{-5-Me-2-PPH}_2)(\text{PPh}_2\text{-4-tol})$, EUROPEAN JOURNAL OF INORGANIC CHEMISTRY, **2008**, 22, 3467-3481.
108. Venkatachalam, D. K., Sood, D. K., **Bhargava, S. K.**, Spiral patterns of gold nanoclusters in silicon (100) produced by metal vapour vacuum arc implantation of gold ions, NANOTECHNOLOGY, **2008**, 19(1), 1-8.
107. **Bhargava, S.**, Jani, H., Tardio, J., Akolekar, D., Hoang, M., Catalytic wet oxidation of ferulic acid (a model lignin compound) using heterogeneous copper catalysts, INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH, **2007**, 46(25), 8652-8656.
106. Bansal, V., Syed, A., **Bhargava, S. K.**, Ahmad, A., Sastry, M., Zirconia enrichment in zircon sand by selective fungus-mediated bioleaching of silica, LANGMUIR, **2007**, 23(9), 4993-4998.
105. Mullett, M., Tardio, J., **Bhargava, S.**, Dobbs, C., Removal of mercury from an alumina refinery aqueous stream, JOURNAL OF HAZARDOUS MATERIALS, **2007**, 144(1-2), 274-282.
104. Prasad, J., Tardio, J., Jani, H., **Bhargava, S. K.**, Akolekar, D. B., Grocott, S. C., Wet peroxide oxidation and catalytic wet oxidation of stripped sour water produced during oil shale refining, JOURNAL OF HAZARDOUS MATERIALS, **2007**, 146(3), 589-594.
103. Rai, A., Chaudhary, M., Ahmad, A., **Bhargava, S.**, Sastry, M., Synthesis of triangular Au core-Ag shell nanoparticles, MATERIALS RESEARCH BULLETIN, **2007**, 42(7), 1212-1220.
102. **Bhargava, S. K.**, Tardio, J., Jani, H., Akolekar, D. B., Foger, K., Hoang, M., Catalytic wet air oxidation of industrial aqueous streams, CATALYSIS SURVEYS FROM ASIA, **2007**, 11(1-2), 70-86.
101. Sivan, V., Mitchell, A., Bui, L., Holland, A., **Bhargava, S.**, Priest, T., Etching of lithium niobate using standard Ti indiffusion technique, APPLIED PHYSICS LETTERS, **2007**, 91(23), 231921(1-3).
100. Kantam, M. L., Jaya, V. S., Lakshmi, M. J., Reddy, B. R., Choudary, B. M., **Bhargava, S. K.**, Alumina supported copper nanoparticles for aziridination and cyclopropanation reactions, CATALYSIS COMMUNICATIONS, **2007**, 8(12), 1963-1968.
99. Choudhary, V. R., Jana, P., **Bhargava, S. K.**, Reduction of oxygen by hydroxylammonium salt or hydroxylamine over supported Au nanoparticles for in situ generation of hydrogen peroxide in aqueous or non-aqueous medium, CATALYSIS COMMUNICATIONS, **2007**, 8(5), 811-816.
98. **Bhargava, S. K.**, Akolekar, D. B., Foran, G., Investigations on gold nanoparticles supported on rare earth oxide catalytic materials, JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL, **2007**, 267(1-2), 57-64.
97. Bennett, M. A., **Bhargava, S. K.**, Messelhauser, J., Priver, S. H., Welling, L. L., Willis, A. C., Ortho-Metallated complexes of platinum(II) and diplatinum(I) containing the carbanions (2-diphenylphosphino)phenyl and (2-diphenylphosphino)-n-tolyl (n=5, 6), DALTON TRANSACTIONS, **2007**, (29), 3158-3169.
96. Mohr, F., Priver, S. H., **Bhargava, S. K.**, Bennett, M. A., Ortho-metallated transition metal complexes derived from tertiary phosphine and arsine ligands, COORDINATION CHEMISTRY REVIEWS, **2006**, 250(15-16), 1851-1888. (Review)
95. **Bhargava, S. K.**, Tardio, J., Prasad, J., Foger, K., Akolekar, D. B., Grocott, S. C., Wet oxidation and catalytic wet oxidation, INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH, **2006**, 45(4), 1221-1258. (Review)

94. Booth, J. M., **Bhargava, S. K.**, Bond, A. M., O'Mullane, A. P., Voltammetric monitoring of gold nanoparticle formation facilitated by glycyl-L-tyrosine: Relation to electronic spectra and transmission electron microscopy images, *JOURNAL OF PHYSICAL CHEMISTRY B*, **2006**, 110(25), 12419-12426.
93. Kitadai, K., Takahashi, M., Takeda, M., **Bhargava, S. K.**, Priver, S. H., Bennett, M. A., Synthesis, structures and reactions of cyclometallated gold complexes containing (2-diphenylarsino-n-methyl)phenyl (n = 5, 6), *DALTON TRANSACTIONS*, **2006**, (21), 2560-2571.
92. Kitadai, K., Takahashi, M., Takeda, M., **Bhargava, S. K.**, Bennett, M. A., ¹⁹⁷Au Mossbauer spectroscopic study of binuclear cycloaurated complexes containing bridging (2-diphenylarsino-n-methyl)phenyl (n=5 and 6), *BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN*, **2006**, 79(6), 886-888.
91. Subasinghe, N. D., Akolekar, D. B., **Bhargava, S. K.**, Study of mineral reactions of oil shale under different environmental conditions using in-situ hot-stage XRD analyses, *DEVELOPMENTS IN CHEMICAL ENGINEERING AND MINERAL PROCESSING*, **2006**, 14(1-2), 277-286.
90. **Bhargava, S. K.**, Akolekar, D. B., Foran, G., X-ray absorption spectroscopic studies on novel microporous copper containing catalytic systems, *RADIATION PHYSICS AND CHEMISTRY*, **2006**, 75(11), 1909-1912.
89. Awaja, F., **Bhargava, S.**, The prediction of clay contents in oil shale using DRIFTS and TGA data facilitated by multivariate calibration, *FUEL*, **2006**, 85(10-11), 1396-1402.
88. Akolekar, D. B., **Bhargava, S. K.**, Foran, G., EXAFS studies on gold nanoparticles over novel catalytic materials, *RADIATION PHYSICS AND CHEMISTRY*, **2006**, 75(11), 1948-1952.
87. Bennett, M., **Bhargava, S.**, Boas, J., Boere, R., Bond, A., Edwards, A., Guo, S-X., Hammerl, A., Pilbrow, J., Priver, S., Schwerdtfeger, P., Electrochemically informed synthesis and characterization of salts of the [Pt₂(μ-κAs,κC-C₆H₃-5-Me-2-AsPh₂)₄]⁺ lantern complex containing a Pt-Pt bond of order ½, *INORGANIC CHEMISTRY*, **2005**, 44(7), 2472-2482.
86. **Bhargava, S. K.**, Booth, J. M., Agrawal, S., Coloe, P., Kar, G., Gold nanoparticle formation during bromoaurate reduction by amino acids, *LANGMUIR*, **2005**, 21(13), 5949-5956.
85. **Bhargava, S. K.**, Akolekar, D. B., Adsorption of NO and CO over transition-metal-incorporated mesoporous catalytic materials, *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, **2005**, 281(1), 171-178.
84. Tardio, J., **Bhargava, S.**, Prasad, J., Akolekar, D.B., Catalytic wet oxidation of the sodium salts of citric, lactic, malic and tartaric acids in highly alkaline, high ionic strength solution, *TOPICS IN CATALYSIS*, **2005**, 33(1-4), 193-199.
83. Akolekar, D. B., **Bhargava, S. K.**, Foran, G., Takahashi, M., Studies on gold nanoparticles supported on iron, cobalt, manganese and cerium oxide catalytic materials, *JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL*, **2005**, 238(1-2), 78-87.
82. Fong, C., Krodkiewska, I., Wells, D., Boyd, B. J., Booth, J., **Bhargava, S.**, McDowall, A., Hartley, P. G., Submicron dispersions of hexosomes based on novel glycerate surfactants, *AUSTRALIAN JOURNAL OF CHEMISTRY*, **2005**, 58(9), 683-687.
81. Shankar, S. S., **Bhargava, S.**, Sastry, M., Synthesis of gold nanospheres and nanotriangles by the Turkevich approach, *JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY*, **2005**, 5(10), 1721-1727.

80. **Bhargava, S.**, Awaja, F., Subasinghe, N. D., Characterisation of some Australian oil shale using thermal, X-ray and IR techniques, *FUEL*, **2005**, 84(6), 707-715.
79. Choudhary, V. R., Patil, N. S., Chaudhari, N. K., **Bhargava, S. K.**, Epoxidation of styrene by anhydrous hydrogen peroxide over boehmite and alumina catalysts with continuous removal of the reaction water, *JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL*, **2005**, 227(1-2), 217-222.
78. Li, L., Wlodarski, W., Akolekar, D. B., **Bhargava, S. K.**, Oscillatory response of Pt-based CO sensors, *SENSORS AND ACTUATORS B: CHEMICAL*, **2005**, 108(1-2), 496-500.
77. Akolekar, D. B., **Bhargava, S. K.**, Investigations on gold nanoparticles in mesoporous and microporous materials, *JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL*, **2005**, 236(1-2), 77-86.
76. Adams, M. J., Awaja, F., **Bhargava, S.**, Grocott S., Romeo, M., Prediction of oil yield from oil shale minerals using diffuse reflectance infrared Fourier transform spectroscopy, *FUEL*, **2005**, 84(14-15), 1986-1991.
75. Patil, N. S., Uphade, B. S., Jana, P., **Bhargava, S. K.**, Choudhary, V. R., Epoxidation of styrene by anhydrous t-butyl hydroperoxide over reusable gold supported on MgO and other alkaline earth oxides, *JOURNAL OF CATALYSIS*, **2004**, 223(1), 236-239.
74. Patil, N. S., Uphade, B. S., Jana, P., **Bhargava, S. K.**, Choudhary, V. R., Epoxidation of styrene by t-butyl hydroperoxide over gold supported on Yb₂O₃ and other rare earth oxides, *CHEMISTRY LETTERS*, **2004**, 33(4), 400-401.
73. Bennett, M. A., **Bhargava, S. K.**, Bond, A. M., Edwards, A. J., Guo, S-X., Priver, S. H., Rae, A. D., Willis, A. C., Synthesis, characterization, and electrochemical relationships of dinuclear complexes of platinum(II) and platinum(III) containing ortho-metalated tertiary arsine ligands, *INORGANIC CHEMISTRY*, **2004**, 43(24), 7752-7763.
72. Patil, N. S., Uphade, B. S., Jana, P., Sonawane, R. S., **Bhargava, S. K.**, Choudhary, V. R., Epoxidation of styrene by anhydrous t-butyl hydroperoxide over Au/TiO₂ catalysts, *CATALYSIS LETTERS*, **2004**, 94(1), 89-93.
71. Patil, N. S., Uphade, B. S., McCulloch, D. G., **Bhargava, S. K.**, Choudhary, V. R., Styrene epoxidation over gold supported on different transition metal oxides prepared by homogeneous deposition-precipitation, *CATALYSIS COMMUNICATIONS*, **2004**, 5(11), 681-685.
70. Tardio, J., **Bhargava, S.**, Eyer, S., Sumich, M., Akolekar, D. B., Interactions between specific organic compounds during catalytic wet oxidation of Bayer liquor, *INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH*, **2004**, 43(4), 847-851.
69. Prasad, J., Tardio, J., Akolekar, D. B., **Bhargava, S. K.**, Grocott, S. C., Catalytic wet oxidation of stripped sour water from an oil-shale refining process, *INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH*, **2004**, 43(20), 6363-6368.
68. Tardio, J., **Bhargava, S. K.**, Eyer, S., Akolekar, D. B., Low-temperature wet oxidation of sodium salts of low molecular weight mono- and dicarboxylic acids in synthetic Bayer liquor, *INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH*, **2004**, 43(3), 669-674.
67. Choudhary, V. R., Patil, N. S., Chaudhari, N. K., **Bhargava, S. K.**, Biphasic selective epoxidation of styrene by t-butyl hydroperoxide to styrene oxide using potassium chromate or dichromate catalyst in aqueous medium, *CATALYSIS COMMUNICATIONS*, **2004**, 5(4), 205-208.

66. Akolekar, D. B., **Bhargava, S. K.**, Investigations on the novel niobium incorporated mesoporous catalytic materials, JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL, **2004**, 219(2), 301-308.
65. Bennett, M. A., **Bhargava, S. K.**, Hockless, D. C. R., Mohr, F., Watts, K., Welling, L. L., Willis, A. C., Binuclear ten-membered ring cyclometallated complexes of digold(I) and their reactions with iodine and bromine, ZEITSCHRIFT FUR NATURFORSCHUNG - SECTION B JOURNAL OF CHEMICAL SCIENCES, **2004**, 59(11-12), 1563-1569.
64. Akolekar, D. B., Foran, G., **Bhargava, S. K.**, X-ray absorption spectroscopic studies on gold nanoparticles in mesoporous and microporous materials, JOURNAL OF SYNCHROTRON RADIATION, **2004**, 11(3), 284-290.
63. Patil, N. S., Jha, R., Uphade, B. S., **Bhargava, S. K.**, Choudhary, V. R., Epoxidation of styrene by anhydrous t-butyl hydroperoxide over gold supported on Al₂O₃, Ga₂O₃, In₂O₃ and Ti₂O₃, APPLIED CATALYSIS A: GENERAL, **2004**, 275(1-2), 87-93.
62. Choudhary, V. R., Jana, S. K., Patil, N. S., **Bhargava, S. K.**, Friedel-crafts type benzylation and benzylation of aromatic compounds over H β zeolite modified by oxides or chlorides of gallium and indium, MICROPOROUS AND MESOPOROUS MATERIALS, **2003**, 57(1), 21-35.
61. Kladis, C., **Bhargava, S. K.**, Akolekar, D. B., Interaction of probe molecules with active sites on cobalt, copper and zinc-exchanged SAPO-18 solid acid catalysts, JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL, **2003**, 203(1-2), 193-202.
60. **Bhargava, S. K.**, Mohr, F., Willis, A. C., Expect the unexpected. Isolation and characterisation of some unusual organometallic gold(I) complexes, INORGANICA CHIMICA ACTA, **2003**, 352, 19-23.
59. Choudhary, V. R., Patil, N. S., **Bhargava, S. K.**, Epoxidation of styrene by anhydrous H₂O₂ over TS-1 and γ -Al₂O₃ catalysts: effect of reaction water, poisoning of acid sites and presence of base in the reaction mixture, CATALYSIS LETTERS, **2003**, 89(1-2), 55-62.
58. Hermann, H. L., Schwerdtfeger, P., Mohr, F., **Bhargava, S. K.**, Unusual strong ortho effects in the rearrangement of binuclear gold(I) complexes, ORGANOMETALLICS, **2003**, 22(12), 2373-2377.
57. Bennett, M. A., **Bhargava, S. K.**, Mohr, F., Welling, L. L., Willis, A. C., Synthesis and x-ray structure of a heterovalent, cycloaurated pentafluorophenylgold(I)/pentafluorophenylgold(III) complex, AUSTRALIAN JOURNAL OF CHEMISTRY, **2002**, 55(4), 267-270.
56. Romeo, M. J., Adams, M. J., Hind, A. R., **Bhargava, S. K.**, Grocott, S. C., Near infrared prediction of oil yield from oil shale, JOURNAL OF NEAR INFRARED SPECTROSCOPY, **2002**, 10(3), 223-231.
55. Akolekar, D. B., **Bhargava, S. K.**, Shirgoankar, I., Prasad, J., Catalytic wet oxidation: an environmental solution for organic pollutant removal from paper and pulp industrial waste liquor, APPLIED CATALYSIS A: GENERAL, **2002**, 236(1-2), 255-262.
54. Eyer, S., **Bhargava, S.**, Tardio, J., Akolekar, D. B., Selective organic removal from the alumina industrial liquor: wet oxidation and catalytic wet oxidation of disodium malonate, INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH, **2002**, 41(5), 1166-1170.
53. **Bhargava, S. K.**, Mohr, F., Takahashi, M., Takeda, M., ¹⁹⁷Au Mossbauer spectroscopy studies of some cyclometalated gold dimers, BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN, **2001**, 74(6), 1051-1053.

52. Kladis, C., **Bhargava, S. K.**, Foger, K., Akolekar, D. B., Effects of air pollutants on the cerium exchanged high silica zeolite catalyst: A Fourier transform infrared study, *JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL*, **2001**, 171(1-2), 243-249.
51. Kladis, C., **Bhargava, S. K.**, Foger, K., Akolekar, D. B., Investigations of nitric oxide and carbon monoxide adsorption on the new generation cerium exchanged silico-aluminophosphate of type 18 catalyst, *JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL*, **2001**, 175(1-2), 241-248.
50. Akolekar, D. B., **Bhargava, S. K.**, NO and CO adsorption studies on transition metal-exchanged silico-aluminophosphate of type 34 catalysts, *APPLIED CATALYSIS A: GENERAL*, **2001**, 207(1-2), 355-365.
49. Hind, A. R., **Bhargava, S. K.**, McKinnon, A., At the solid/liquid interface: FTIR/ATR - the tool of choice, *ADVANCES IN COLLOID AND INTERFACE SCIENCE*, **2001**, 93(1-3), 91-114. (Review)
48. Ancker, T. R. V. D., **Bhargava, S. K.**, Mohr, F., Papadopoulos, S., Raston, C. L., Skelton, B. W., White, A. H., Syntheses and crystal structures of binuclear gold(I), silver(I) and copper(I) complexes containing bulky pyridyl functionalised alkyl ligands, *JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS*, **2001**, (20), 3069-3072.
47. **Bhargava, S. K.**, Mohr, F., Bennett, M. A., Welling, L. L., Willis, A. C., Synthesis, structure, and reactions of binuclear gold(I) complexes containing two different bridging ligands, *INORGANIC CHEMISTRY*, **2001**, 40(17), 4271-4275.
46. Schoot, V. D. M., **Bhargava, S.**, Akolekar, D., Föger, K., Watson, H. C., Deterioration of Automotive Catalytic Converters: Physical Catalyst Characterisation, *SAE Technical Paper 2001-01-3691*, **2001**, DOI: 10.4271/2001-01-3691.
45. Schoot, V. D. M., **Bhargava, S.**, Akolekar, D., Föger, K., Watson, H. C., Deterioration of Automotive Catalytic Converters (Part 2): Catalytic Performance Characterisation, *SAE Technical Paper 2001-01-3695*, **2001**, DOI: 10.4271/2001-01-3695.
44. Bennett, M. A., **Bhargava, S. K.**, Ke, M., Willis, A. C., Complexes of platinum(II), platinum(IV), rhodium(III) and iridium(III) containing orthometallated triphenylphosphine, *JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS*, **2000**, (20), 3537-3545.
43. Kladis, C., **Bhargava, S. K.**, Foger, K., Akolekar, D. B., FT-IR studies of the NO adsorption on rare earth (Eu/Gd/Tb) exchanged new generation silicoaluminophosphate catalysts of chabazite type, *CATALYSIS TODAY*, **2000**, 63(2-4), 297-303.
42. **Bhargava, S. K.**, Mohr, F., Gorman, J. D., Oxidative addition reactions of methyl substituted binuclear gold complexes studied by X-ray photoelectron spectroscopy, *JOURNAL OF ORGANOMETALLIC CHEMISTRY*, **2000**, 607(1-2), 93-96.
41. Akolekar, D. B., **Bhargava, S. K.**, Adsorption of NO and CO on silver-exchanged microporous materials, *JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL*, **2000**, 157(1-2), 199-206.
40. **Bhargava, S. K.**, Mohr, F., Bennett, M. A., Welling, L. L., Willis, A. C., Synthesis, structure, and reactions of a binuclear gold(I)-gold(III) complex containing bridging and bidentate (2-diphenylphosphino-6-methyl)phenyl groups, *ORGANOMETALLICS*, **2000**, 19(26), 5628-5635.
39. Eyer, S L., **Bhargava, S. K.**, Sumich, M., Removal of organics from Bayer liquor and wet oxidation, *LIGHT METALS*, **2000**, 45-51.

38. Hind, A. R., **Bhargava, S. K.**, The adsorption of sodium oxalate stabilisers to the surface of gibbsite (a Bayer process solid) under high ionic strength, high pH conditions, *LIGHT METALS*, **2000**, 65-70.
37. Hind, A. R., **Bhargava, S. K.**, Grocott, S. C., The surface chemistry of Bayer process solids: A review, *COLLOIDS AND SURFACES A: PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, **1999**, 146(1-3), 359-374. (**Review**)
36. Akolekar, D. B., **Bhargava, S. K.**, Gorman, J., Paterson, P., Formation of small pore SAPO-44 type molecular sieve, *COLLOIDS AND SURFACES A: PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, **1999**, 146(1-3), 375-386.
35. Akolekar, D. B., **Bhargava, S.**, Bronswijk, W. V., Fourier transform Raman spectroscopy of novel aluminophosphate molecular sieves, *APPLIED SPECTROSCOPY*, **1999**, 53(8), 931-937.
34. Akolekar, D. B., **Bhargava, S. K.**, Influence of thermal, hydrothermal, and acid-base treatments on structural stability and surface properties of macro-, meso-, and microporous carbons, *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, **1999**, 216(2), 309-319.
33. Hind, A. R., **Bhargava, S. K.**, Bronswijk, W. V., Grocott, S. C., Eyer, S. L., On the aqueous vibrational spectra of alkali metal oxalates, *APPLIED SPECTROSCOPY*, **1998**, 52(5), 683-691.
32. Hind, A. R., **Bhargava, S. K.**, Cullis, P. G., Quantitation of quaternary ammonium compounds using electrospray mass spectrometry, *ANALYTICA CHIMICA ACTA*, **1998**, 377(1), 39-45.
31. Akolekar, D. B., **Bhargava, S. K.**, Foger, K., FTIR investigations of the adsorption and disproportionation of NO on Cu-exchanged silicoaluminophosphate of type 34, *JOURNAL OF THE CHEMICAL SOCIETY - FARADAY TRANSACTIONS*, **1998**, 94(1), 155-160.
30. Akolekar, D. B., Hind, A. R., **Bhargava, S. K.**, Synthesis of macro-, meso-, and microporous carbons from natural and synthetic sources, and their application as adsorbents for the removal of quaternary ammonium compounds from aqueous solution, *JOURNAL OF COLLOID AND INTERFACE SCIENCE*, **1998**, 199(1), 92-98.
29. Hind, A. R., **Bhargava, S. K.**, Grocott, S. C., Attenuated total reflection Fourier transform infrared spectroscopic investigation of the solid/aqueous interface of low surface area, water-soluble solids in high ionic strength, highly alkaline, aqueous media, *LANGMUIR*, **1997**, 13(13), 3483-3487.
28. Hind, A. R., **Bhargava, S. K.**, Grocott, S. C., Quantitation of alkyltrimethylammonium bromides in Bayer process liquors by gas chromatography and gas chromatography-mass spectrometry, *JOURNAL OF CHROMATOGRAPHY A*, **1997**, 765(2), 287-293.
27. Hind, A. R., **Bhargava, S. K.**, Grocott, S. C., Adsorption of quaternary ammonium compounds on the surface of sodium oxalate: FTIR/ATR investigation under high-ionic-strength, highly alkaline conditions, *LANGMUIR*, **1997**, 13(23), 6255-6259. (Q1)
26. Akolekar, D. B., **Bhargava, S.**, Investigations on the aqueous solution and solid-state cation exchanged MAPO-ATS type molecular sieve, *JOURNAL OF MOLECULAR CATALYSIS A: CHEMICAL*, **1997**, 122(1), 81-90. (Q2)
25. Bennett, M. A., **Bhargava, S. K.**, Hockless, D. C. R., Welling, L. L., Willis, A. C., Dinuclear cycloaurated complexes containing bridging (2-diphenylphosphino)phenylphosphine and (2-diethylphosphino)phenylphosphine, $C_6H_4PR_2$ (R=Ph, Et). Carbon-carbon bond formation by reductive

- elimination at a gold(II)-gold(II) center, JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, **1996**, 118(43), 10469-10478. (Q1)
24. Cheung, T., **Bhargava, S. K.**, Hobday, M., Foger, K., Adsorption of NO on Cu exchanged zeolites, an FTIR study: Effects of Cu levels, NO pressure, and catalyst pretreatment, JOURNAL OF CATALYSIS, **1996**, 158(1), 301-310. (Q1)
 23. Hobday, M. D., Li, P. H. Y., Crewdson, D. M., **Bhargava, S. K.**, The use of low rank coal-based adsorbents for the removal of nitrophenol from aqueous solution, FUEL, **1994**, 73(12), 1848-1854. (Q1)
 22. Ozgun, H., Lam, L. T., Rand, D. A. J., **Bhargava, S. K.**, Effect of plate preparation on active-material utilization and cycleability of positive plates in automotive lead/acid batteries, JOURNAL OF POWER SOURCES, **1994**, 52(2), 159-171. (Q2)
 21. Paterson, M. J., Orrman-Rossiter K. G., **Bhargava, S.**, Hoffman, A., Physico-chemical changes in a-C:H by MeV He ion irradiation, JOURNAL OF APPLIED PHYSICS, **1994**, 75(2), 792-796. (Q2)
 20. Paterson, M. J., Orrman-Rossiter, K. G., Sood, D. K., **Bhargava, S. K.**, Structural investigation of low energy ion beam deposited diamond-like films, DIAMOND AND RELATED MATERIALS, **1993**, 2(11), 1439-1444. (Q1)
 19. Campbell, I., Saricilar, S., Hoare, I. C., **Bhargava, S. K.**, Effect of sulfur on the oxidative coupling of methane over a lanthana catalyst, APPLIED CATALYSIS A: GENERAL, **1992**, 82(1), 13-30. (Q1)
 18. Takeda, M., Takahashi, M., Ito, Y., Takano, T., Bennett, M. A., **Bhargava, S. K.**, ¹⁹⁷Au Mossbauer-spectra of binuclear gold(I) and gold(II) complexes containing bridging cyclometalated arylphosphine or arylarsine ligands, CHEMISTRY LETTERS, **1990**, 19(4), 543-546. (Q2)
 17. Ekstrom, A., Regtop, R., **Bhargava, S.**, Effect of pressure on the oxidative coupling reaction of methane, APPLIED CATALYSIS, **1990**, 62(1), 253-269. (Q1)
 16. Abel, E. W., **Bhargava, S. K.**, MacKenzie, T. E., Mittal, P. K., Orrell, K. G., Sik, V., Heteronuclear 1,3-intramolecular metal shifts in pentacarbonyl-chromium, -molybdenum, and -tungsten derivatives of 2-Thia-4-selenapentane, A dynamic nuclear magnetic resonance investigation, JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS, **1987**, (4), 757-760. (Q1) (In PhD, UK)
 15. Bennett, M. A., **Bhargava, S. K.**, Griffiths, K. D., Robertson G. B., Wickramasinghe, W. A., Willis, A. C., Dinuclear complexes of gold(I) containing bridging cyclometalated arylphosphane or arylarsane ligands, ANGEWANDTE CHEMIE – INTERNATIONAL EDITION IN ENGLISH, **1987**, 26(3), 258-260. (Q1)
 14. Bennett, M. A., Berry, D. E., **Bhargava, S. K.**, Ditzel, E. J., Robertson, G. B., Willis, A. C., Rational synthesis of dinuclear complexes of platinum(I) and platinum(II) containing bridging ortho-metallated triphenylphosphine ligands from the monomeric bis(chelate) platinum(II) complex Pt(o-C₆H₄PPh₂)₂, JOURNAL OF THE CHEMICAL SOCIETY, CHEMICAL COMMUNICATIONS, **1987**, (21), 1613-1615. (Q1)
 13. Bennett, M. A., **Bhargava, S. K.**, Griffiths, K. D., Robertson, G. B., Coupling of cyclometalated phenylphosphanes in dinuclear gold(II)-complexes, ANGEWANDTE CHEMIE-INTERNATIONAL EDITION IN ENGLISH, **1987**, 26(3), 260-261. (Q1)
 12. Abel, E. W., **Bhargava, S. K.**, Orrell, K. G., Platt, A. W. G., Sik, V., Cameron, T. S., Static and dynamic nuclear magnetic resonance studies of complexes of trimethylplatinum(IV) halides with olefinic thio- and selenoethers. X-Ray crystal structures of [PtXMe₃(MeSeCH=CHSeMe)](X=Cl or I), JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS, **1985**, (2), 345-353. (Q1) (In PhD, UK)

11. Abel, E. W., Bhargava, S. K., Orrell, K. G., 'The stereodynamics of metal-complexes of sulfur-, selenium-, and tellurium-containing ligands' in Progress in Inorganic Chemistry, Editors: Stephen J Lippard, John Wiley & Sons Inc. ISBN: 0-471-87994-0, 1984, 32, 1-118.
10. Abel, E. W., **Bhargava, S. K.**, Mittal, P. K., Orrell, K. G., Sik, V., Pyramidal inversions and 1,2-metal shifts in pentacarbonyl-chromium, -molybdenum, and -tungsten derivatives of dialkyl disulphides and dialkyl diselenides, A nuclear magnetic resonance investigation, JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS, **1985**, (8), 1561-1567. (Q1) (In PhD, UK)
9. Abel, E. W., **Bhargava, S. K.**, Kite, K., Orrell, K. G., Sik, V., Williams, B. L., Nuclear magnetic resonance studies of pyramidal inversion in complexes of tricarbonylrhenium(I) halides with aliphatic and aromatic mixed thio-seleno ethers, JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS, **1984**, (3), 365-370. (Q1) (In PhD, UK)
8. Abel, E. W., **Bhargava, S. K.**, Bhatti, M. M., Mazid, M. A., Orrell, K. G., Sik, V., Hursthouse, M. B., Malik, K. M. A., Observation and evaluation of the synchronous ligand atom pyramidal inversions in binuclear rhenium carbonyl halide complexes of disulphides and diselenides: an X-ray crystal structure of $[\text{Re}_2\text{Br}_2(\text{CO})_6(\text{C}_6\text{H}_5\text{CH}_2\text{SeSeCH}_2\text{C}_6\text{H}_5)]$, JOURNAL OF ORGANOMETALLIC CHEMISTRY, **1983**, 250(1), 373-382. (Q2) (In PhD, UK)
7. Abel, E. W., **Bhargava, S. K.**, Mittal, P. K., Orrell, K. G., Sik, V., Pyramidal inversion and novel 1,2-metal shifts in pentacarbonyl-chromium, -molybdenum, and -tungsten derivatives of dialkyl disulphides and dialkyl diselenides, JOURNAL OF THE CHEMICAL SOCIETY, CHEMICAL COMMUNICATIONS, **1982**, (10), 535-536. (Q1) (In PhD, UK)
6. Abel, E. W., **Bhargava, S. K.**, MacKenzie, T. E., Mittal, P. K., Orrell, K. G., Sik, V., 1,3 intramolecular metal shifts in pentacarbonyltungsten(0) complexes of 2,4-dithiapentane, 2,4-diselenapentane, and 2-selena-4-thiapentane, JOURNAL OF THE CHEMICAL SOCIETY, CHEMICAL COMMUNICATIONS, **1982**, (17), 983-984. (Q1) (In PhD, UK)
5. Abel, E. W., **Bhargava, S. K.**, Orrell, K. G., Sik, V., Conformational studies of dithiastannolanes by dynamic nuclear magnetic resonance spectroscopy, JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS, **1982**, (10), 2073-2078. (Q1) (In PhD, UK)
4. Abel, E. W., **Bhargava, S. K.**, Kite, K., Orrell, K. G., Sik, V., Williams, B. L., Nuclear magnetic resonance study of pyramidal inversion and intramolecular rearrangements in complexes of trimethylplatinum(IV) halides with aliphatic and aromatic mixed thio-seleno-ethers, JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS, **1982**, (3), 583-592. (Q1) (In PhD, UK)
3. Abel, E. W., **Bhargava, S. K.**, Bhatti, M. M., Kite, K., Mazid, M. A., Orrell, K. G., Sik, V., Williams, B. L., Hursthouse, M. B., Malik, K. M. A., A nuclear magnetic resonance study of pyramidal atomic inversion in complexes of tricarbonylrhenium(I) halides with saturated and unsaturated thio- and seleno-ethers: An X-ray crystal structure of $[\text{Re}(\text{CO})_3\{\text{MeSe}(\text{CH}_2)_2\text{SeMe}\}]$, JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS, **1982**, (10), 2065-2072. (Q1) (In PhD, UK)
2. Abel, E. W., **Bhargava, S. K.**, Kite, K., Orrell, K. G., Sik, V., Williams, B. L., Structural dependencies of pyramidal inversion at sulphur and selenium in thio- and seleno- ether complexes of palladium(II) and platinum(II), A nuclear magnetic resonance study, POLYHEDRON, **1982**, 1(3), 289-298. (Q2) (In PhD, UK)

Publications: Professor Suresh K. Bhargava

RMIT Classification: Trusted

1. Abel, E. W., **Bhargava, S. K.**, Orrell, K. G., Sik, V., Complexes of tin(IV) halides and organotin(IV) halides with organic sulphides and selenides: the low temperature cessation of sulphur and selenium inversion and its structural consequences, INORGANICA CHIMICA ACTA, **1981**, 49, 25-30. (Q2) (In PhD, UK)

SELECTED REFEREED CONFERENCE ARTICLES

1. 534. Syed Sulthan Alaudeen Abdul Haroon Rashid, Ylias Sabri, Ahmad Kandjani, Suresh Bhargava, Antonio Tricoli, Wojtek Wlodarski, Samuel Ippolito, Low Concentration Acetone Sensing with ZnO-TiO₂ Composites Nanoarrays: A Comparative Study Under Light Illumination, ECS Meeting Abstracts, **2021**, 1660.
2. Rashid, S.S.A.A.H., Sabri, Y.M., Kandjani, A.E., Bhargava, S.K., Tricoli, A., Wlodarski, W., Ippolito, S.J. Low Concentration Acetone Sensing with ZnO-TiO₂ Composites Nanoarrays: A Comparative Study Under Light Illumination, 237th ECS Meeting with the 18th International Meeting on Chemical Sensors (IMCS 2020) (May 10-14, 2020)
3. Andrews, W., **Bhargava, S.**, Tardio, J., Pownceby, M. I., Short wavelength infrared determination of coffinite (USiO₄), In proceedings of Goldschmidt 2016, Yokohama, Japan, July 2016.
4. Jones, L. A., Ram, R., Tardio, J., Pownceby, M., Chen, M., **Bhargava, S.**, Probing the Surface Chemistry of Uranium Refractory Ores with a Microelectrode, In proceedings of Hydrometallurgy Conference 2016: Sustainable Hydrometallurgical Extraction of Metals, Cape Town, 1–3 August **2016**, 1-6.
5. Amin, M. H., Patel, J., Priver, S., McGuinness, D. S., Hillary, B., Periasamy, S., Sudarsanam, P., Mirzadeh, N., Mozammel, T., **Bhargava, S. K.**, Homogeneous catalytic conversion of syngas into methanol, Asian Pacific Confederation of Chemical Engineering 2015 Congress, incorporating Chemeca 2015 and International Conference on Coal Science and Technology, 27 September - 1 October **2015**, Melbourne, Australia, pp. 1-6. (2015) [Refereed Conference Paper].
6. Amin, M. H., Patel, J., Sage, V., Lee, W. J., Periasamy, S., Dumber, D., Mozammel, T., Prasad, V. V. D. N., Samanta, C., **Bhargava, S. K.**, Tri-reforming of methane for the production of syngas: Review on the process, catalysts and kinetic mechanism, **2015**, In proceedings of the APCChE 2015 Congress incorporating Chemeca 2015, 27 Sept- 01 Oct 2015, Melbourne, Victoria.
7. Sridhar, S., **Bhargava, S. K.**, Potential of Pervaporation and Gas Separation Membrane Processes in Solving Challenging Industrial Separation Problems, **2014**, In Proceedings of CHEMECA 2014 at the Perth Convention and Exhibition Centre, Western Australia.
8. Tur, K. M., Ippolito, S. J., Dumbre, D., Sabri, Y. M., Tardio, J., **Bhargava, S. K.**, Synthesis & Characterisation of MnO₄⁻ exchanged Mg-Al Hydrotalcite Materials and Their Application in Mercury Removal, **2014**, In Proceedings of CHEMECA 2014 at the Perth Convention and Exhibition Centre, Western Australia.
9. Tur, K. M., Ippolito, S. J., Sabri, Y. M., Tardio, J., **Bhargava, S. K.**, Investigations of oxides of Cobalt and Copper as potential catalysts for mercury oxidation, **2014**, In Proceedings of CHEMECA 2014 at the Perth Convention and Exhibition Centre, Western Australia.
10. Kabir, K. M. M., Ippolito, S. J., Sabri, Y. M., Harrison, C. J., Matthews, G., **Bhargava, S. K.**, A comparison of Surface Acoustic Wave (SAW) and Quartz Crystal Microbalance (QCM) based sensors for portable, online mercury vapour sensing, **2014**, In Proceedings of CHEMECA 2014 at the Perth Convention and Exhibition Centre, Western Australia.
11. Dumbre, D., Mozammel, T., Selvakannan, P. R., Choudhary, V. R., Hamid, S. B. A., **Bhargava, S. K.**, Mesoporous, ligand free Cu-Fe solid catalyst mediated C-S cross coupling of thiols with aryl halides, **2014**, In Proceedings of CHEMECA 2014 at the Perth Convention and Exhibition Centre, Western Australia.

12. Praneeth, K., **Bhargava, S. K.**, Tardio, J., Sridhar, S., Water recovery from domestic kitchen effluent through membrane separation processes, **2014**, In Proceedings of CHEMECA 2014 at the Perth Convention and Exhibition Centre, Western Australia.
13. Mozammel, T., Dumbre, D., Selvakannan, P. R., Patel, J., **Bhargava, S. K.**, Nanostructured Nickel, Cobalt and Rhodium supported on mesoporous alumina catalysts for the dry reforming reaction of methane, **2014**, In Proceedings of CHEMECA 2014 at the Perth Convention and Exhibition Centre, Western Australia.
14. Amin, M. H., Tardio, J., **Bhargava, S. K.**, An investigation on the role of Lanthanide promoters in promoted γ -alumina-supported nickel catalysts for dry reforming of methane, **2013**, In proceeding of: Chemeca 2013, At Brisbane Convention & Exhibition Centre, Australia.
15. Amin, M. H., Tardio, J., **Bhargava, S. K.**, A comparison study on methane dry reforming with carbon dioxide over Ni catalysts supported on mesoporous SBA-15, MCM-41, KIT-6 and γ -Al₂O₃ carrier, **2013**, Chemeca 2013, Brisbane Convention & Exhibition Centre, Australia.
16. McMaster, S., Ram, R., Charalambous, F., Tardio, J., **Bhargava, S.**, Characterisation studies on natural and heat treated betafite, **2013**, Chemeca 2013: Challenging Tomorrow, Barton, ACT.
17. Amin, M. H., Tardio, J., **Bhargava, S. K.**, The role of ytterbium as a promoter on nickel catalyst activity during dry reforming of biogas, **2012**, CSIRO Cutting Edge 2012 Symposium, CSIRO, Melbourne, Australia.
18. Daima, H. K., Selvakannan, P. R., Shukla, R., **Bhargava, S. K.**, Bansal, V., Stabilization of polyoxometalates on gold nanoparticles surface using amino acid linker to control their toxicity, **2012**, Chemeca 2012: Quality of life through chemical engineering, Wellington, New Zealand.
19. Turr, K., Tardio, J., Ippolito, S., Sabri, Y., **Bhargava, S.**, Synthesis and catalytic properties of transition metal oxides for the oxidation of gaseous elemental mercury, **2012**, Chemeca 2012: Quality of life through chemical engineering, Wellington, New Zealand.
20. Charalambous, F., Ram, R., McMaster, S., Tardio, J., **Bhargava, S. K.**, An investigation on the dissolution of the uranium mineral brannerite, **2012**, Chemeca 2012: Quality of life through chemical engineering, Wellington, New Zealand.
21. McMaster, S., Ram, R., Charalambous, F., Tardio, J., **Bhargava, S.**, Characterisation and dissolution studies on the uranium mineral betafite, **2012**, Chemeca 2012: Quality of life through chemical engineering, Wellington, New Zealand.
22. Daima, H. K., Selvakannan, P. R., Shankar, S., Shukla, R., **Bhargava, S. K.**, Bansal, V., Amino acid and gold nanoparticles modified mesoporous silica materials synthesis and their applications in DNA transformation, **2012**, Chemeca 2012: Quality of life through chemical engineering, Wellington, New Zealand.
23. Daima, H. K., Selvakannan, P. R., **Bhargava, S. K.**, Bansal, V., Sequential Surface Functionalization by Polyoxometalates and Lysine Renders Non-toxic Gold Nanoparticles Strong Antibacterial Agents, **2012**, Technical Proceedings of the 2012 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2012.
24. Daima, D. K., Shankar, S., Selvakannan, P. R., **Bhargava, S. K.**, Bansal, V., Self-Assembled Nanostructures of Triblock Co-polymer and Plasmid DNA for Gene Delivery, **2012**, Technical Proceedings of the 2012 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2012.

25. Balendhran, S., Ou, J., Bhaskaran, M., Ippolito, S., Vasic, Z., Kats, E., **Bhargava, S.**, Zhuiykov, S., Kalantar-zadeh, K., Facile synthesis of layered hexagonal MoS₂, **2012**, International Conference on Nanoscience and Nanotechnology (ICONN 2012), Perth, Australia.
26. Ward, L., Chen, D., O'Mullane, A., **Bhargava, S.**, Corrosion of a Gold Alloy in Saline and Acidic Environments, **2011**, in Proceedings of the 18th International Corrosion Congress (ICC) 2011, Corrosion Control - Contributing to a Sustainable Future for all, Perth, Australia, 20-24 November, 2011, pp. 1-5.
27. **Bhargava, S.**, O'Leary, K. A., Jackson, T. C., Lakshmanan, B., Durability testing of silicone materials for proton exchange membrane fuel cell use, **2011**, Technical Meeting - American Chemical Society, Rubber Division, Cleveland, Ohio, United States.
28. Reynolds, H. S., Tardio, J., **Bhargava, S. K.**, Dissolution studies of synthetic coffinite, **2011**, Chemeca 2011: Engineering a Better World, NSW, Australia.
29. Dong, J., Loh, J. S. C., Tardio, J., Vernon, C., **Bhargava, S.**, Fundamentals of wet oxidation of bayer liquor organics: Effect of oxygen on malonates, **2011**, Chemeca 2011: Engineering a Better World, NSW, Australia.
30. Amin, M. H., Tardio, J., Charalambous, F., **Bhargava, S. K.**, An investigation on the synthesis of the uranium mineral brannerite, **2011**, Chemeca 2011: Engineering a Better World, NSW, Australia.
31. Jaafaripourmaybody, J., Amin, M.H., Salahi, E., Nemati, A., **Bhargava, S. K.**, In situ synthesis and characterization of carbon nanotube- hydroxyapatite composite by sol-gel technique, **2011**, Chemeca 2011, Hilton Sydney, New South Wales, Australia.
32. Amin, M. H., Mantri, K., **Bhargava, S. K.**, Activity and stability improvements of sol-gel-generated Ni-Yb/Al₂O₃ catalysts for CH₄/CO₂ reforming, **2011**, Chemeca 2011, Hilton Sydney, New South Wales, Australia.
33. Soni, S. K., Sarkar, S., Sarkar, D., Coloe, P., **Bhargava, S. K.**, Bansal, V., Self-assembled histidine acid phosphate nanocapsules as templates for multifunctional hollow platinum nanospheres in ionic liquid [BMIM][BF₄] for drug delivery, **2011**, Chemeca 2011: Engineering a Better World, NSW, Australia.
34. Amin, M. H., Newnham, J., **Bhargava, S. K.**, The Effect of lanthanide promotion on catalytic performance of sol-gel Ni/Al₂O₃ catalysts in the CO₂ dry reforming of methane, **2011**, Chemeca2011, Hilton Sydney, New South Wales, Australia.
35. Ram, R., Charalambous, F., Tardio, J., **Bhargava, S. K.**, Characterisation of uraninite using X-ray diffraction (XRD) and general area detector diffraction system (GADDS), **2011**, Chemeca 2011: Engineering a Better World, NSW, Australia.
36. Ramanathan, R., **Bhargava, S. K.**, Bansal, V., Biomimetic silicification to mimic 3d ornate diatom structures-a myth or a reality?, **2011**, Chemeca 2011: Engineering a Better World, NSW, Australia.
37. Charalambous, F. A., Ram, R., Tardio, J., **Bhargava, S. K.**, Characterisation on a brannerite containing mineral samples, **2011**, Chemeca 2011: Engineering a Better World, NSW, Australia.
38. Ramanathan, R., **Bhargava, S. K.**, Bansal, V., Biological synthesis of copper/copper oxide nanoparticles, **2011**, Chemeca 2011: Engineering a Better World: Sydney Hilton Hotel, NSW, Australia, 18-21 September 2011, Sydney Hilton Hotel, NSW, Australia.

39. Daima, H. K., Selvakannan, P. R., **Bhargava, S. K.**, Bansal, V., Threonine amino acid mediated photochemical synthesis of gold, silver and bimetallic Au/Ag nanoparticles and their antibacterial activity, **2011**, Chemeca 2011: Engineering a Better World: Sydney Hilton Hotel, NSW, Australia.
40. Daima, H. K., Selvakannan, P. R., Homan, Z., **Bhargava, S. K.**, Bansal, V., Tyrosine mediated gold, silver and their alloy nanoparticles synthesis: antibacterial activity toward Gram positive and Gram negative bacterial strains, **2011**, 2011 International Conference on Nanoscience, Technology and Societal Implications (NSTSI), Bhubaneswar.
41. Daima, H. K., Selvakannan, P. R., **Bhargava, S. K.**, Bansal, V., Metal/polyoxometalate/amino acid as functional nanoconjugates for potential antibacterial activity, **2011**, Chemeca 2011: Engineering a Better World, At Sydney Hilton Hotel, NSW, Australia.
42. Reynolds, H. S., Tardio, J., **Bhargava, S. K.**, Characterisation and dissolution studies of coffinite, In Ozberk, E. (Ed.). Uranium 2010: The Future is U Proceedings Volume 1 and 2, (p. 2v). **2010**, Canada: The Canadian Institute of Mining, Metallurgy and Petroleum.
43. **Bhargava, S. K.**, Innovative industry alignment at RMIT to develop skills for uranium industries. In Ozberk, E. (Ed.). Uranium 2010: The Future is U Proceedings Volume 1 and 2, (p. 2v). **2010**, Canada: The Canadian Institute of Mining, Metallurgy and Petroleum.
44. Bassiouni, M., Ward, L. P., Singh, R., O'Mullane, A. P., Gideon, B., **Bhargava, S.**, Studies on the degree of sensitization of welded 2507 super duplex stainless steel using a modified DL-EPR test procedure, **2010**, CAP 2010, Melbourne, Australia.
45. Goethals, E. C., Bansal, V., **Bhargava, S. K.**, Templated Synthesis of Chitosan Nanocapsules with Controllable Shell Thickness and Porosity, **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.
46. Mantri, K., Newnham, J., **Bhargava, S. K.**, CO₂ Reforming of Methane to Syngas over Ni and Ni-Pd Bimetallic-silica Nanocomposite Catalysts, **2010**, Chemeca 2010: Engineering at the Edge, Adelaide, South Australia.
47. Plowman, B., Mahajan, M., Ippolito, S., Bansal, V., O'Mullane, A. P., **Bhargava, S. K.**, The Formation of Gold Nanospikes for Sensing and Electrocatalytic Applications, **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.
48. Amin, M. H., Mantri, K., **Bhargava, S. K.**, Effect of Ytterbium promoted Ni/ γ -Al₂O₃ catalysts on catalytic performance in CO₂ reforming of methane, **2010**, Chemeca2010, The University of Adelaide, Australia.
49. Soni, S. K., Ramanathan, R., Coloe, P. J., Bansal, V., **Bhargava, S. K.**, Self-assembled Histidine Acid Phosphatase (HAP) Nanocapsules in Ionic Liquid [BMIM][BF₄] as Functional Template for Hollow Silica Nanoparticles, **2010**, Chemeca 2010: Engineering at the Edge, Adelaide, South Australia.
50. Amin, M. H., Kshudiram, M., **Bhargava, S. K.** Effect of Ytterbium Promotion on Catalytic Performance of Sol-gel Ni/ γ -Al₂O₃ Catalysts in CO₂ Dry Reforming of Methane, **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.
51. Campbell, J., O'Mullane, A. P., Bansal, V., **Bhargava, S. K.**, Templated Synthesis of Metallic and Bimetallic Nanoshells with Applications in Electrocatalysis, **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.

52. Ramanathan, R., Soni, S. K., **Bhargava, S. K.** Bansal, V., Cationic Amino Acids Mediated Biomimetic Silicification Studies in Ionic Liquid [BMIM][BF₄], **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.
53. Li, V., Homan, Z., **Bhargava, S. K.**, Bansal, V., Shape-controlled Synthesis and Antimicrobial Applications of Ag Nanoparticles, **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.
54. Ramanathan, R., Smooker, P. M., O'Mullane, A. P., **Bhargava, S. K.**, Bansal, V., Biological Synthesis of Anisotropic Silver Nanoparticles, **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.
55. Reynolds, H. S., **Bhargava, S.**, Antolasic, F., Structural Investigation of Titanyl Sulfate Dihydrate and Intermediates Formed during Thermal Decomposition, **2010**, Engineering Our Future: Are We up to the Challenge?, Burswood Entertainment Complex.
56. Basile, A., Bhatt, A., O'Mullane, A. P., **Bhargava, S. K.**, Electrodeposition of Silver from the Room Temperature Ionic Liquids 1-Butyl-3-Methylimidazolium Tetrafluoroborate and n-Methyl-n-Butyl-Pyrrolidinium-Bis-(Trifluoromethanesulfonyl)Imide, **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.
57. Newnham, J., Mantri, K., **Bhargava, S. K.**, CO₂ Reforming of Methane to Syngas over Ordered Ni-Mesoporous Alumina, **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.
58. Nola, N., Tur, K., Ippolito, S., Tardio, J., **Bhargava, S.**, Preliminary Studies on Iron Oxide Nanoparticles as Potential Catalysts for Oxidation of Elemental Mercury Vapour, **2010**, Chemeca 2010: Engineering at the Edge, Hilton Adelaide, South Australia.
59. Pearson, A., O'Mullane, A. P., Bansal, V., **Bhargava, S. K.**, Ionic Liquid [BMIM][BF₄] as an Interesting Solvent for Galvanic Replacement Mediated Shape Transformation of Ag Nanospheres into Ag-Au Dendritic Nanostructures, **2010**, Chemeca 2010: Engineering at the Edge, Adelaide, South Australia.
60. Ram, R., Charalambous, F., Tardio, J., **Bhargava, S.**, The effect of various halides on dissolution of synthetic uranium dioxide (UO₂), **2010**, URANIUM 2010 "The future is U", Saskatoon, Saskatchewan, Canada.
61. Sabri, Y., Kojima, R., Ippolito, S., Kaner, R., Wlodarski, W., Kalantar Zadeh, K., **Bhargava, S.**, PPy/Pd Selective Layers on QCM Electrodes for Hg Detection, **2010**, The 13th International Meeting on Chemical Sensors, Perth, Australia.
62. Abbasian, A. R., Ebadzadeh, T., **Bhargava, S. K.**, Amin, M. H., Microwave-assisted synthesis of alumina nanoparticles from aluminum salt, **2010**, RACI Convention/IUPAC ICPC 2010, Melbourne, Australia.
63. Amin, M. H., Mantri, K., **Bhargava, S. K.**, Synthesis and optimization of nano- sized Ni/g-A1₂O₃ catalyst via sol-gel method for the dry reforming of methane, **2010**, RACI Convention/IUPAC ICPC 2010, Melbourne, Australia.
64. Dong, J., Tardio, J., Loh, J., Power, G., Vernon, C., **Bhargava, S.**, Wet oxidation of Bayer liquor organics: Reaction mechanisms, **2010**, TMS Light Metals, United States.

65. Ramanathan, R., O'Mullane, A., Smooker, P., **Bhargava, S.**, Bansal, V., Drummond, C., Foley, C., Dzurak, A., Biological shape-controlled synthesis of silver nanoplates, **2010**, 2010 International Conference on Nanoscience and Nanotechnology (ICONN), United States.
66. Plowman, B. J., O'Mullane, A. P., Ippolito, S. J., Bansal, V., **Bhargava, S. K.**, Electrochemical formation of platinum nanostructures for fuel cell applications, **2010**, 2010 International Conference on Nanoscience and Nanotechnology (ICONN).
67. Selvakannan, P. R., Ramanathan, R., Plowman, B., Daima, H., O'Mullane, A., Ippolito, S., Bansal, V., **Bhargava, S.**, Electrostatic interactions induced formation of sandwich nanostructures and their usage as SERS substrates, **2010**, Proceedings of Chemeca 2010: Engineering at the Edge, Barton, A.C.T.
68. Daima, H. K., Selvakannan, P. R., Bansal, V., **Bhargava, S. K.**, Surface functionality driven antimicrobial activity: Case study of amino acid reduced nanoparticles with different bacterial strains, **2010**, Proceedings of Chemeca 2010, Melbourne, Australia.
69. Ram, R., Charalambous, F., Tardio, J., Hussein, A., **Bhargava, S.**, Investigation of the Dissolution Kinetics of Synthetic Uraninite (UO_2/UO_2^{2+}), **2009**, Engineering Our Future: Are We up to the Challenge?: Burswood Entertainment Complex. Barton, ACT.
70. Pannirselvam, M, Garg, A, Tardio, J, Antolasic, F, Grocott, S., **Bhargava, S.**, Mineral characterization using micro X-ray diffraction (Micro XRD), a State-of-the-art non-destructive technique, **2009**, Chemeca 2009, Perth, Australia.
71. Charalambous, F., Ram, R., Hussein, A., Tardio, J., **Bhargava, S.**, Characterisation and dissolution studies on natural and synthetic brannerites, **2009**, Engineering Our Future: Are We up to the Challenge?: Burswood Entertainment Complex. Barton, ACT.
72. Barrow, S., Tardio, J., Foger, K., **Bhargava, S.**, Chemistry of formation of a solid oxide fuel cell electrolyte (Yttria Stabilized Zirconia), **2009**, In: Engineering Our Future: Are We up to the Challenge?., Burswood Entertainment Complex, Barton, ACT.
73. Reynolds, H. S., **Bhargava, S.**, Antolasic, F., Tardio, J., Characterisation of a Uranium Ore, **2009**, Engineering Our Future: Are We up to the Challenge?, Burswood Entertainment Complex, Barton, ACT.
74. Pannirselvam, M., Tardio, J., Antolasic, F., Grocott, S., **Bhargava, S.**, Characterization of leach residue processing solids, **2009**, Engineering Our Future: Are We up to the Challenge?, Burswood Entertainment Complex. Barton, ACT.
75. Pannirselvam, M., Tardio, J., Garg, A., Antolasic, F., Grocott, S., **Bhargava, S.**, Characterization of Bauxite pisoliths, **2009**, Engineering Our Future: Are We up to the Challenge?, Burswood Entertainment Complex, Barton, ACT.
76. Sabri, Y., Ippolito, S., **Bhargava, S.**, Mercury vapor sensor for alumina refinery processes, **2009**, TMS 2009 Annual Meeting and Exhibition, Light Metals 2009, Warrendale, USA.
77. Sabri, Y., Ippolito, S., Tardio, J., Sood, D., **Bhargava, S.**, Mullett, M., Harrison, I., Rosenberg, S., Humidity and ammonia interference study for modified and non-modified gold based mercury vapour senses for alumina refineries, **2008**, Proceedings of the 8th International Alumina Quality Workshop, Darwin, Australia.

78. Tardio, J., Dong, J., Loh, J. S. C., Power, G., Vernon, C. F., **Bhargava, S.**, Co-oxidation of refractory Bayer organics using sodium malonate derivatives and wet air oxidation, **2008**, In proceedings of 8th International Alumina Quality Workshop, Darwin, NT, Australia.
79. Sabri, Y. M., Ippolito, S. J., Tardio, J., Sood, D. K., **Bhargava, S. K.**, Electro-deposition of gold nanostructures on gold Quartz Crystal Microbalance (QCM) electrodes for enhanced mercury vapour sensitivity in the presence of interferent gases, **2008**, International Conference on Nanoscience and Nanotechnology, 2008, Melbourne.
80. Hussein, A., Tardio, J., **Bhargava, S.**, Synthesis and dissolution studies of Brannerite, a Uranium containing mineral, **2008**, Chemeca 2008: Towards a Sustainable Australasia, Barton, ACT.
81. Sivan, V., Bui, L., Venkatachalam, D., **Bhargava, S.**, Priest, T., Holland, A., Mitchell, A., Etching lithium niobate during Ti diffusion process, **2008**, In proceedings of SPIE 6800, Device and process technologies for microelectronics, MEMS, Photonics, and Nanotechnology IV, 68001J.
82. Dhawan, D., **Bhargava, S. K.**, Wlodarski, W., Kalantar-zadeh, K., Anodization of sputtered titanium films, **2007**, Proceedings of 2007 Materials Research Society spring meeting, Volume 1023.
83. Venkatachalam, D., Sood, D., **Bhargava, S.**, Self-assembled patterns of gold nanoclusters in silicon (100) produced by metal vapour vacuum arc ion implantation, **2007**, Materials Research Society symposium proceedings, volume 960.
84. Dhawan, D., Sabri, Y., **Bhargava, S.**, Sood, D., Kalantar-Zadeh., K., Development of nanostructured titanium oxide thin films using a gas carving technique, **2007**, Proceedings of SPIE 6415, Micro- and Nanotechnology: Materials, Processes, Packaging, and Systems III.
85. Tardio, J., **Bhargava, S. K.**, Dobbs, C. L., Mullett, M. E., Removal of elemental mercury from digestion condensate using silica-based sorbents, **2006**, Chemeca 2006: Knowledge and Innovation, Auckland, New Zealand.
86. **Bhargava, S. K.**, Akolekar, D. B., Foran, G., Preparation and characterisation of nano gold particles containing novel micro and macro porous catalytic materials, **2006**, International Conference on Nanoscience and Nanotechnology, 2006.
87. Jani, H., **Bhargava, S.**, Tardio, J., Akolekar, D., Hoang, M., Catalytic wet oxidation of Ferulic acid, **2006**, Chemeca 2006: Knowledge and Innovation, Auckland, New Zealand.
88. Tan, J., Kalantar-zadeh, K., Wlodarski, W., **Bhargava, S.**, Akolekar, D., Holland, A., Rosengarten, G., Thermoelectric properties of bismuth telluride thin films deposited by radio frequency magnetron sputtering, **2005**, Proceedings of the SPIE, 5836, 711-718.
89. Akolekar, D. B., **Bhargava, S. K.**, Carbon monoxide and nitric oxide reactions over supported gold nanoparticles catalysts, **2004**, Chemeca 2004: 32nd Australasian Chemical Engineering Conference: Sustainable Processes. Barton, A.C.T.
90. Subasinghe, N. D., Akolekar, D. B., **Bhargava, S. K.**, In-situ hot-stage XRD analyses of oil shale under different environmental conditions, **2004**, Chemeca 2004: 32nd Australasian Chemical Engineering Conference: Sustainable Processes. Barton, A.C.T.

91. Prasad, J., Tardio, J., **Bhargava, S. K.**, Akolekar, D. B., Grocott, S. C., Removal of homogeneous copper catalyst from catalytically wet oxidised stripped sour water by activated carbon, **2004**, Chemeca 2004: 32nd Australasian Chemical Engineering Conference: Sustainable Processes, Barton, A.C.T.
92. Prasad, J., Tardio, J., Akolekar, D. B., **Bhargava, S. K.**, Grocott, S. C., Kinetics of the catalytic wet oxidation of stripped sour water from an oil-shale refining process, 2004, Chemeca 2004: 32nd Australasian Chemical Engineering Conference: Sustainable Processes. Barton, A.C.T.
93. Awaja, F., **Bhargava, S.**, Adams, M., Multivariate calibration of oil yield from oil shale using diffuse reflectance infrared fourier transforms spectroscopy, **2004**, Chemeca 2004: 32nd Australasian Chemical Engineering Conference: Sustainable Processes. Barton, A.C.T.
94. Prasad, J., Tardio, J., **Bhargava, S. K.**, Akolekar, D. B., Grocott, S. C., The wet peroxide oxidation of stripped sour water from an oil-shale refining process, **2004**, Chemeca 2004: 32nd Australasian Chemical Engineering Conference: Sustainable Processes. Barton, A.C.T.
95. Eyer, S. I., **Bhargava, S.**, Sumich, M., Tardio, J., Akolekar, D., Removal of organics from Bayer liquor and wet oxidation, **2000**, Light Metals 2000.
96. Hind, A. R., **Bhargava, S. K.**, The adsorption of sodium oxalate stabilisers to the surface of gibbsite (a Bayer process solid) under high ionic strength, high pH conditions, **2000**, LIGHT METALS –WARRENDALE, 65-70.

MEDIA HIGHLIGHTS

- Gold anti-cancer research, *Potent and selective cytotoxic and anti-inflammatory gold (III) compounds containing cyclometallated phosphine sulfide ligands* in Chemistry: A European Journal from CAMIC's Molecular Engineering Group, including **Distinguished Professor Suresh Bhargava**, **Dr Neda Mirzadeh**, **Dr Telukutla Srinivasa Reddy** and **Dr Steven H. Privér** went viral. It was featured over 240 media outlets worldwide with a reach of up to 176 million people. According to RMIT's media team, the total average value of the media coverage received for this research was worth **\$1,642,900 AUD**. Anti-cancer compounds were also patented by the team.



- Research about an environmentally sustainable way to produce Graphene, *Novel and Highly Efficient Strategy for the Green Synthesis of Soluble Graphene by Aqueous Polyphenol Extracts of Eucalyptus Bark and Its Applications in High-Performance Supercapacitors*, published in ACS Sustainable Chemistry & Engineering and co-authored by **Distinguished Professor Suresh Bhargava** and **Dr Deshetti Jampaiah**, was featured in at least 7 countries worldwide and reached 64 million people.
- Big technology breakthroughs are coming on ever smaller scales
Canberra Times, Canberra; 05 Jan 2013, by Liza Kappelle; Business News, page 6
- Breakthrough for thinner, faster, lighter gadgets
Stuff.co.nz, 04 Jan 2013 (<http://www.stuff.co.nz/the-press/technology/8144797/Breakthrough-for-thinner-faster-lighter-gadgets>) – Also featured in; The Press, The Southland Times, Brisbane Times, West Australian x 2, Yahoo7 News, The Age, WA Today, Canberra Times, Sydney Morning Herald, Adelaide Now, Perth Now, The Daily Telegraph, The Courier Mail, The Australian, Herald Sun, News.com.au, SBS, Tribune Minado.
- SCI:Australian nanotechnology is revolutionary AAP Newswire, 05 Jan 2013
- SCI:New nanomaterial could speed up technology AAP Newswire, 04 Jan 2013
- Invited to speak several times on the **ABC Radio National *The Science Show* with Robyn Williams** – “Mercury released as coal is burnt in power stations”
<http://www.abc.net.au/rn/scienceshow/stories/2009/2558479.htm>
- Interviewed by RMIT press and by Indian press in relation to his research work and his connections to India.
 - **The Hindu, Indian National Newspaper** Sept 2009 “RMIT, IICT to work on air purification.”
 - **SBS Hindu Radio Interview**, May 2009-11-24.
- RMIT Front page – “Measuring Mercury with Nanotechnology”
<http://www.rmit.edu.au/browse;ID=xwzx3dxlgxi>
- AtoZofNano – “Using Nanotechnology to Measure Mercury”
<http://www.azonano.com/details.asp?ArticleId=2395>

Publications: Professor Suresh K. Bhargava

RMIT Classification: Trusted

- AtoZofNano – Nanotechnology Thought Leader Series – Suresh Bhargava
<http://www.azonano.com/experts.asp?iExpertID=70>
- The Age – “Mercury Falling” (19-11-2009)
<http://www.theage.com.au/national/education/mercury-falling-20091119-iocb.html>
- RMIT Front page – “Measuring Mercury with Nanotechnology”
<http://www.rmit.edu.au/browse;ID=xwzx3dxlgxzi>
- Australian Financial review insert- “Midas Touch”
- Nanotechnology Now - “Measuring Mercury with Nanotechnology”
http://www.nanotech-now.com/news.cgi?story_id=33383
- Nanowerk – “Pioneering nanotechnology sensor can precisely measure mercury”
<http://www.nanowerk.com/news/newsid=10860.php>
- Nano techwire.com – “Measuring Mercury with Nanotechnology”
<http://nanotechwire.com/news.asp?nid=7979&ntid=&pg=1>
- Science Alert – “Gold nano-hairs find mercury”
<http://www.sciencealert.com.au/news/20092805-19203.html>
- Nanotechnology & development news – “Measuring Mercury with Nanotechnology”
<http://www.merid.org/NDN/more.php?id=1930>
- R&Dmag – “Gold spikes take accurate measure of industrial mercury”
<http://www.rdmag.com/News/2009/05/Gold-spikes-take-accurate-measure-of-industrial-mercury/>
- ICHemE – “21st century chimney sweeping: RMIT forest of nano-gold captures mercury”
<http://www.tce-today.co.uk/tcetoday/NewsDetail.aspx?nid=11791>
- Gold – “Gold used in US Army DNA research”
http://www.utilisegold.com/news/2009/06/02/story/12162/gold_used_in_us_army_dna_research
- University of California, Santa Barbara: Center for Nanotechnology in Society – “Measuring mercury with nanotechnology”
<http://www.cns.ucsb.edu/clips/measuring-mercury-with-nanotechnology-rmit-5-27-09-2/>
- The Age – “Mercury Falling”
<http://www.theage.com.au/national/education/mercury-falling-20091119-iocb.html>