List of Publications in Peer Reviewed Journals (Year wise)

Year 2013

[1] Facile preparation of polyaniline/MnO2 nanofibers and its electrochemical application in the simultaneous determination of catechol, hydroquinone, and resorcinol
M.U. Anu Prathap, Biswarup Satpati, Rajendra Srivastava*
*Sensors & Actuators: B. Chemical (Accepted on 21st May 2013)

[2] Simultaneous and sensitive determination of ascorbic acid, dopamine, uric acid, and tryptophan with silver nanoparticles-decorated reduced graphene oxide modified electrode
Balwinder Kaur, Thangarasu Pandiyan, Biswarup Satpati, Rajendra Srivastava*
*Colloids and Surfaces B: Biointerfaces (Accepted on 16th May 2013)

[3] Synthesis of NiCo$_2$O$_4$ and its application in the electrocatalytic oxidation of methanol
M.U. Anu Prathap, Rajendra Srivastava*
Nano Energy (Accepted on 11th April, 2013)
(Online available http://dx.doi.org/10.1016/j.nanoen.2013.04.003)

[4] Simultaneous determination of ascorbic acid, dopamine, uric acid, and tryptophan by nanocrystalline ZSM-5 modified electrodes
Balwinder Kaur, Rajendra Srivastava*
*Journal of Nanoscience and Nanotechnology (Accepted 11th April 2013)

Rajkumar Kore, Rajendra Srivastava*
*Journal of Molecular Catalysis A: Chemical 376 (2013) 90-97

[6] Transition metal nanoparticles supported on mesoporous polyaniline catalyzed reduction of nitroaromatics
Mahesh Tumma, Rajendra Srivastava*
*Catalysis Communications 37 (2013) 64–68

Rajkumar Kore, R. Sridharkrishna, and Rajendra Srivastava*
*RSC Advances 3 (2013) 1317-1322
[8] Tailoring properties of polyaniline for simultaneous determination of a quaternary mixture of ascorbic acid, dopamine, uric acid, and tryptophan
M.U. Anu Prathap, Rajendra Srivastava*
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[9] One-pot synthesis of 3-substituted indole derivatives using moisture stable, reusable task specific ionic liquid catalysts
A. Ravindran, R. Kore, R. Srivastava*
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Year 2011-2012

[10] Synthesis of transition metal exchanged nanocrystalline ZSM-5 and their application in electrochemical oxidation of glucose and methanol
Balwinder Kaur, M.U. Anu Prathap, Rajendra Srivastava*

[11] Synthesis of zeolite Beta, MFI, and MTW using imidazole, piperidine, and pyridine based quaternary ammonium salts as structure directing agents
R. Kore, R. Srivastava*
RSC Advances 2 (2012) 10072–10084

[12] Influence of –SO$_3$H functionalization (N-SO$_3$H or N-R-SO$_3$H, where R = alkyl/benzyl) on the activity of Brönsted acidic ionic liquids in the hydration reaction
R. Kore, R. Srivastava*

[13] Hydration of alkynes using Brönsted acidic ionic liquids in the absence of Nobel metal catalyst/H$_2$SO$_4$
R. Kore, T.J. Dhilip Kumar, R. Srivastava*
Journal of Molecular Catalysis A: Chemical 360 (2012) 61–70

[14] Direct synthesis of metal Oxide incorporated mesoporous SBA-15 and their applications in non-enzymatic sensing of glucose
M.U. Anu Prathap, B. Kaur, Rajendra Srivastava*
Journal Colloid and Interface Science 370 (2012) 144–154
[15] Hydrothermal synthesis of CuO micro-/nanostructures and their applications in the oxidative degradation of methylene blue and non-enzymatic sensing of glucose/H₂O₂
M.U. Anu Prathap, Balwinder Kaur, Rajendra Srivastava*
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[16] Syntheses and catalytic activities of homogenous and hierarchical ZSM-5 grafted Pd(II) dicarbene complex of imidazole based ionic liquids
Rajkumar Kore, Mahesh Tumma, Rajendra Srivastava*
Catalysis Today 198 (2012) 189–196

[17] Synthesis of mesostructured polyaniline using mixed surfactants, anionic sodium dodecylsulfate and non-ionic polymers and their applications in H₂O₂ and glucose sensing
M.U. Anu Prathap, Bhawana Thakur, Shilpa N. Sawant, Rajendra Srivastava*

[18] Synthesis of triethoxysilane imidazolium based ionic liquids and their application in the preparation of mesoporous ZSM-5
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Rajkumar Kore, Biswarup Satpati, Rajendra Srivastava*
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[20] Morphologically controlled synthesis of copper oxides and their catalytic applications in the synthesis of propargylamine and oxidative degradation of methylene blue
Rajendra Srivastava*, Anu Prathap M. U., Rajkumar Kore

[21] Synthesis and applications of novel imidazole and benzimidazole based sulfonic acid group functionalized Bronsted acidic ionic liquid catalysts
Raj Kumar Kore, Rajendra Srivastava*
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[22] Synthesis and applications of highly efficient, reusable, sulfonic acid group
functionalized Brönsted acidic ionic liquid catalysts

Raj Kumar Kore, **Rajendra Srivastava**
*Catalysis Communications* 12 (2011) 1420-1424

[23] Synthesis of nanoporous metal oxides through the self-assembly of phloroglucinol–formaldehyde resol and tri-block copolymer
M.U. Anu Prathap, **R. Srivastava**
*Journal Colloid and Interface Science* 358 (2011) 399-408

[24] Morphological controlled synthesis of micro-/nano-polyaniline
M.U. Anu Prathap, **R. Srivastava**
*Journal of Polymer Research* 18 (2011) 2455-2467

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[25] Eco-friendly and morphologically controlled synthesis of porous CeO₂ microstructure and its application in water purification
**Rajendra Srivastava**
*Journal Colloid and Interface Science* 348 (2010) 600-607

[26] Assessment of the Catalytic Activities of Novel Brönsted Acidic Ionic Liquid Catalysts
**Rajendra Srivastava**
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**R. Srivastava**, S. I. Fujita and M. Arai
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**R. Srivastava**, N. Iwasa, S.I. fujita, M. Arai
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Preparation of nanocrystalline MFI-zeolite having intracrystalline mesopores and its application in fine chemical synthesis involving large molecules


Assessment of the mesopore wall catalytic activities of MFI zeolite with mesoporous/microporous hierarchical structures

V. N. Shetti, J. Kim, R. Srivastava, M. Choi, R. Ryoo

A novel method for the protection of amino alcohols and carbonyl compounds over a heterogeneous, reusable catalyst

P. Srivastava and R. Srivastava

Synthesis of a novel class of mesoporous hollow silica from organic templates

N. Venkatathrin, R. Srivastava, D. S. Yun and J. W. Yoo

Catalytic investigations of calix[4]arene scaffold based phase transfer catalyst

P. Srivastava and R. Srivastava


Rajendra Srivastava*

Amphiphilic organosilane-directed synthesis of crystalline zeolite with tunable mesoporosity.


Mesoporous materials with zeolite framework: remarkable effect of the hierarchical structure for retardation of catalyst deactivation

R. Srivastava, M. Choi and R. Ryoo
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M. Choi, R. Srivastava and R. Ryoo

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[39] Fe-Zn double metal cyanide complexes as novel Solid, transesterification catalysts
R. Srivastava, D. Srinivas, P. Ratnasamy


[40] Hydrophobic, solid acid catalysts for production of biofuels and lubricants
P.S. Sreeprasanth, R. Srivastava, D. Srinivas, P. Ratnasamy


[41] Active sites for CO₂ activation over amine-functionalized mesoporous SBA-15 catalysts
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[42] Syntheses of polycarbonate and polyurethane precursors utilizing CO₂ over highly efficient, solid as-synthesized MCM-41 catalyst
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[45] Zeolite-based organic-inorganic hybrid catalysts for phosgene-free and solvent-free synthesis of cyclic carbonates and carbamates at mild conditions utilizing CO₂
[46] Factors affecting activation and utilization of carbon dioxide in cyclic carbonate synthesis over Cu and Mn peraza macrocyclic complexes

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[52] Efficient chemoselective liquid phase acylation of amines, alcohols and bifunctional compounds over ZSM-35

R. Srivastava, and N. Venkatathri


[53] Synthesis of polycarbonate monomers by CO2 insertion in epoxides over zeolite-based catalysts
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**Rajendra Srivastava, D. Srinivas and Paul Ratnasamy**

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**R. Srivastava, D. Srinivas and P. Ratnasamy**

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[58] Pd-SAPO-31, an efficient, heterogeneous catalyst for Heck reactions of deactivated aryl chlorides

**R. Srivastava, N. Venkatathri, D. Srinivas and P. Ratnasamy**


**Book Chapter Published**

1. Synthesis and applications of porous materials

**Rajendra Srivastava, S. I. Fujita and Masahiko Arai**

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Chapter 1, pp 1-53.

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   Darbha Srinivas and Rajendra Srivastava
   **USA Patent 7,365,214 (29th April 2008)**

2. Adenine modified silica-based catalyst, a process for the preparation and use there for the production of cyclic carbonates
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   **USA patent 7,375,224 (20th May 2008)**

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   Darbha Srinivas, Rajendra Srivastava and Paul Ratnasamy
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   Darbha Srinivas, Rajendra Srivastava and Paul Ratnasamy

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   **USA Patent 7,754,643 B2 (13th July 2010)**