

Research Publications

Dr. Nagaraj P. Shetti

Research Publications

<https://scholar.google.com/citations?user=V9DjrzYAAAAJ&hl=en>

118. 2D/2D Heterojunction of MoS₂/g-C₃N₄ nanoflowers for enhanced visible Light-driven photocatalytic and electrochemical degradation of organic pollutants

D. Monga, D. Ilager, **N. P. Shetti**, S. Basu, T. M. Aminabhavi

Journal of Environmental Management, 273 (2020) 111096 (Elsevier Publication; IF: 5.647)

<https://doi.org/10.1016/j.jenvman.2020.111096>

117. Ultrasonication and electrochemically-assisted synthesis of reduced graphene oxide nanosheets for electrochemical sensor applications

S. D. Bukkitgar, N. P. Shetti, K. R. Reddy, T. A. Saleh, T. M. Aminabhavi

FLatChem, 273 (2020) 100183 (Elsevier Publication; IF: Pending)

<https://doi.org/10.1016/j.flatc.2020.100183>

116. Sustainable environmental management and related biofuel technologies

S. Sharma, A. Kundu, S. Basu, **N. P. Shetti**, T. M. Aminabhavi

Journal of Environmental Management, 273 (2020) 111096 (Elsevier Publication; IF: 5.647)

<https://doi.org/10.1016/j.jenvman.2020.111096>

115. The COVID-19 Paradox: Impact on India and Developed Nations of the World

A. Kundu, S. Basu, **N. P. Shetti**, A. K. Malik, T. M. Aminabhavi

Sensors International 1 (2020) 100026 (Elsevier Publication; IF: Pending)

<https://doi.org/10.1016/j.sintl.2020.100026>

114. Poly(eriochrome black T) modified electrode for electroensing of methdilazine

N. P. Shetti, D. Ilager, S. J. Malode, D. Monga, S. Basu, K. R. Reddy

Materials Science in Semiconductor Processing 120 (2020) 105261 (Elsevier Publication; IF: 3.085)

<https://doi.org/10.1016/j.mssp.2020.105261>

113. Electrocatalytic detection of herbicide, amitrole at WO₃·0.33H₂O modified carbon

paste electrode for environmental applications

D. Ilager, H. Seo, **N. P. Shetti**, S. S. Kalanur, T. M. Aminabhavi

Science of The Total Environment, 743 (2020) 140691 (Elsevier Publication; IF: 6.551)

<https://doi.org/10.1016/j.scitotenv.2020.140691>

112. Recent trends in functionalized nanoparticles loaded polymeric composites: Energy applications

T. A. Saleh, N. P. Shetti, M. M. Shanbhag, K. Raghava Reddy, T. M. Aminabhavi

Materials Science for Energy Technologies 3 (2020) 515-525 (Elsevier Publication; IF: Pending)

<https://doi.org/10.1016/j.mset.2020.05.005>

111. Current treatment protocol for COVID-19 in India

S. Sharma, S. Basu, **N. P. Shetti**, T. M. Aminabhavi

Sensors International 1 (2020) 100013 (Elsevier Publication; IF: Pending)

<https://doi.org/10.1016/j.sintl.2020.100013>

110. Invasion of novel corona virus (COVID-19) in Indian Territory

N. P. Shetti, R. K. Srivastava, S. Sharma, S. Basu, T. M. Aminabhavi

Sensors International 1 (2020) 100012 (Elsevier Publication; IF: Pending)

<https://doi.org/10.1016/j.sintl.2020.100012>

109. Hetero-nanostructured metal oxide-based hybrid photocatalysts for enhanced photoelectrochemical water splitting – A review

Ch. V. Reddy, K. R. Reddy, **N. P. Shetti**, J. Shim, T. M. Aminabhavi, D. D. Dionysiou

International Journal of Hydrogen Energy 45 (2020) 18331-18347 (Elsevier Publication; IF: 4.939)

<https://doi.org/10.1016/j.ijhydene.2019.02.109>

108. Z-scheme binary 1D ZnWO₄ nanorods decorated 2D NiFe₂O₄ nanoplates as photocatalysts for high efficiency photocatalytic degradation of toxic organic pollutants from wastewater

C. V. Reddy, R. Koutavarapu, K. R. Reddy, **N. P. Shetti**, T. M. Aminabhavi, J. Shim

Journal of Environmental Management, 268 (2020) 110677 (Elsevier Publication; IF: 4.865)

<https://doi.org/10.1016/j.jenvman.2020.110677>

107. Biofuels, biodiesel and biohydrogen production using bioprocesses

R. K. Srivastava, N. P. Shetti, K. R. Reddy, **T. M. Aminabhavi**

Environmental Chemistry Letters, 18 (2020) 1049–1072 (Springer Publication; IF: 4.617)

<https://doi.org/10.1007/s10311-020-00999-7>

106. Electroanalysis of carbendazim using MWCNT/Ca-ZnO modified electrode

N. P. Shetti, S. J. Malode, K. K. Prabhu, [R. M. Kulkarni](#) *Electroanalysis*, 32 (2020) 1590-1599 (Wiley Publication; IF: 2.691) <https://doi.org/10.1002/elan.201900776>

105. Skin patchable electrodes for biosensor applications: A review

N. P. Shetti, A. Mishra, S. Basu, [R. J. Mascarenhas](#), R. R. Kakarla, T. M. Aminabhavi

ACS Biomaterials Science and Engineering, 6 (2020) 1823-1835 (ACS Publication; IF: 4.511)

<http://dx.doi.org/10.1021/acsbiomaterials.9b01659>

104. Sustainable energy from waste organic matters via efficient microbial processes

[R. K. Srivastava](#), **N. P. Shetti**, K. R. Reddy, [T. M. Aminabhavi](#)

Science of The Total Environment, 722 (2020) 137927 (Elsevier Publication; IF: 5.589)

<https://doi.org/10.1016/j.scitotenv.2020.137927>

103. Electrochemical behavior of diclofenac sodium at coreshell nanostructure modified electrode and its analysis in human urine and pharmaceutical samples

[N. C. Honakeri](#), S. J. Malode, [R. M. Kulkarni](#), **N. P. Shetti**

Sensors International 1 (2020) 100002 (Elsevier Publication; IF: Pending)

<https://doi.org/10.1016/j.sintl.2020.100002>

102. Prospects of biohydrogen production from organic waste – A review

[S. Priya](#), [B. Brijesh](#), [K. R. Reddy](#), [C. V. Reddy](#), **N. P. Shetti**, [R. V. Kulkarni](#), [A. V. Raghu](#) *Chemical Engineering & Technology*, 43 (2020)

1240-1248 (Wiley Publication; IF: 3.742)

<https://doi.org/10.1002/ceat.201900400>

101. Metal-Organic frameworks (MOFs)-based efficient heterogeneous photocatalysts: Synthesis, properties and its applications in photocatalytic hydrogen generation, CO₂ reduction and photodegradation of organic dyes

Ch. V. Reddy, K. R. Reddy, V. V. N. Harish, J. Shim, M. V. Shankar, **N. P. Shetti**, T. M. Aminabhavi

International Journal of Hydrogen Energy 45 (2020) 7656-7679 (Elsevier Publication; IF: 4.084) <https://doi.org/10.1016/j.ijhydene.2019.02.144>

100. Hetero Nanostructured Iron Oxide and Bentonite Clay Composite Assembly for the Determination of an Antiviral Drug Acyclovir

[N. P. Shetti](#), S. J. Malode, [D. S. Nayak](#), [R. R. Naik](#), [G. T. Kuchinad](#), [K. R. Reddy](#), [S. S. Shukla](#), [T. M. Aminabhavi](#)

Microchemical Journal 155 (2020) 104727 – (Elsevier Publication; IF: 3.206)

<https://doi.org/10.1016/j.microc.2020.104727>

99. Waste-to-energy nexus for circular economy and environmental protection: Recent trends in hydrogen energy

[S. Sharma](#), [S. Basu](#), **N. P. Shetti**, [T. M. Aminabhavi](#)

Science of The Total Environment, 713 (2020) 136633 (Elsevier Publication; IF: 6.551)

<https://doi.org/10.1016/j.scitotenv.2020.136633>

98. Copper-doped ZrO_2 nanoparticles as high-performance catalysts for efficient removal of toxic organic pollutants and stable solar water oxidation

C. [V. Reddy](#), [I. N. Reddy](#), [K. Ravindranadh](#), [K. R. Reddy](#), [N. P. Shetti](#), [D. Kim](#), [J. Shim](#), [T. M. Aminabhavi](#)

Journal of Environmental Management, 260 (2020) 110088 (Elsevier Publication; IF: 4.865)

<https://doi.org/10.1016/j.jenvman.2020.110088>

97. Development of a novel nanosensor using Ca-doped ZnO for antihistamine drug

D. [R. Kulkarni](#), [S. J. Malode](#), [K. K. Prabhu](#), [N. H. Ayachit](#), [R. M. Kulkarni](#), [N. P. Shetti](#)

Materials Chemistry and Physics, 246 (2020) 122791 (Elsevier Publication; IF: 3.408)

<https://doi.org/10.1016/j.matchemphys.2020.122791>

96. Novel ruthenium doped TiO_2 /reduced graphene oxide hybrid as highly selective sensor for the determination of ambroxol

[S. D. Bukkitgar](#), [N. P. Shetti](#), [R. S. Malladi](#), [K. R. Reddy](#), [S. S. Kalanur](#), [T. M. Aminabhavi](#)

Journal of Molecular Liquids, 300 (2020) 112368 (Elsevier Publication; IF: 4.561) <https://doi.org/10.1016/j.molliq.2019.112368>

95. Amberlite XAD-4 modified electrodes for highly sensitive electrochemical determination of nimesulide in human urine

[N.P. Shetti](#), M. M. Shanbhag, [S. J. Malode](#), [R. K. Srivastava](#), [K. R. Reddy](#)

Microchemical Journal 153 (2020) 104389 – (Elsevier Publication; IF: 3.206)

<https://doi.org/10.1016/j.microc.2019.104389>

94. Efficient removal of toxic organic dyes and photoelectrochemical properties of iron-doped zirconia nanoparticles

C. V. Reddy, I. N. Reddy, V.V.N. Harish, K. R. Reddy, [N. P. Shetti](#), J. Shim, T. M. Aminabhavi

Chemosphere, 239 (2020) 124766- (Elsevier Publication; IF:5.108)

DOI: [10.1016/j.chemosphere.2019.124766](https://doi.org/10.1016/j.chemosphere.2019.124766)

93. Novel nanoclay-based electrochemical sensor for highly efficient electrochemical sensing nimesulide

[N. P. Shetti](#), S. J. Malode, D. S. Nayak, S. D. Bukkitgar, G. B. Bagihalli, R. M. Kulkarni, K. R. Reddy

Journal of Physics and Chemistry of Solids, 137 (2020) 109210- (Elsevier Publication; IF: 2.752) DOI:<https://doi.org/10.1016/j.jpics.2019.109210>

92. Carbon cloth-based hybrids for flexible electrochemical supercapacitors

A. Mishra, [N. P. Shetti](#), S. Basu, K. R. Reddy

Chemelectrochem, 6 (23)(2019) 5771-5786 (Wiley Publication; IF: 3.975)

<https://doi.org/10.1002/celec.201901122>

Journal of Materials Science Materials in Electronics, 30 (2019) 20646–20653 (Springer Publication; IF: 2.195)

<https://doi.org/10.1007/s10854-019-02430-6>

90. [Novel Co and Ni metal nanostructures as efficient photocatalysts for photodegradation of organic dyes](#)

M. Srinivas, C. H. Reddy, K. R. Reddy, **N. P. Shetti**, M. S. Reddy, A. V. Raghu

Materials Research Express, 6 (2019) 125502 (IOP Science Publication; IF: 1.449)

<https://doi.org/10.1088/2053-1591/ab5328>

89. Novel heterostructured Ru-doped TiO₂/CNTs hybrids with enhanced electrochemical sensing performance for cetirizine

N. P. Shetti, S. J. Malode, D. S. Nayak, K. R. Reddy

Materials Research Express, 6 (2019) 115085 (IOP Science Publication; IF: 1.449)

<https://doi.org/10.1088/2053-1591/ab4b92>

88. Novel biosensor for efficient electrochemical detection of methdilazine using carbon nanotubes- modified electrode

N. P. Shetti, S. J. Malode, D. S. Nayak, C. V. Reddy, K. R. Reddy

Materials Research Express, 6 (2019) 116308 (IOP Science Publication; IF: 1.449)

<https://doi.org/10.1088/2053-1591/ab4471>

87. Band Gap Tuning and Surface Modification of Carbon Dots for Sustainable Environmental Remediation and Photocatalytic Hydrogen Production – A Review

A. Mehta, A. Mishra, S. Basu, **N. P. Shetti**, K. R. Reddy, T. A. Saleh, T. M. Aminabhavi

Journal of Environmental Management, 250 (2019) 109486- (Elsevier Publication; IF: 4.865)

<https://doi.org/10.1016/j.jenvman.2019.109486>

86. Silica gel-modified electrode as an electrochemical sensor for the detection of acetaminophen

N.P. Shetti, S. J. Malode, D. S. Nayak, K. R. Reddy, C. V. Reddy, K. Ravindranadh

Microchemical Journal 150 (2019) 104206 – (Elsevier Publication; IF: 3.206)

<https://doi.org/10.1016/j.microc.2019.104206>

85. [Nanostructured organic and inorganic materials for Li-ion batteries: A review](#)

N. P. Shetti, S. Dias, K. R. Reddy

Materials Science in Semiconductor Processing 104 (2019) 104684 – (Elsevier

Publication; IF:2.722) <https://doi.org/10.1016/j.mssp.2019.104684>

84. Fabrication of ZnO nanoparticles modified sensor for electrochemical oxidation of methdilazine

[N. P. Shetti, S. J. Malode, D. S. Nayak, G. B. Bagihalli, S. S. Kalanur, R. S. Malladi, C. V. Reddy, T. M. Aminabhavi, K. R. Reddy](#)

Applied Surface Science, 496 (2019) 143656 – (Elsevier Publication; IF: 5.155)

<https://doi.org/10.1016/j.apsusc.2019.143656>

83. [Nanostructured silver doped TiO₂/CNTs hybrid as an efficient electrochemical sensor for detection of anti-inflammatory drug, cetirizine](#)

[N. P. Shetti, S. J. Malode, D. S. Nayak, T. M. Aminabhavi, K. R. Reddy](#)

Microchemical Journal 150 (2019) 104124 – (Elsevier Publication; IF: 3.206)

<https://doi.org/10.1016/j.microc.2019.104124>

82. Sustainable hydrogen production for the greener environment by quantum dots-based efficient photocatalysts: A review

[V. N. Rao, N. L. Reddy, M. Mamatha Kumari, K. K. Cheralathan, P. Ravi, M. Sathish, B. Neppolian, K. R. Reddy, N. P. Shetti, P. Prathap, T. M. Aminabhavi, M. V. Shankar](#)

Journal of Environmental Management, 248 (2019) 109246- (Elsevier Publication; IF: 4.865)

<https://doi.org/10.1016/j.jenvman.2019.07.017>

81. Electro sensing base for herbicide aconifen at graphitic carbon nitride modified carbon electrode– Water and soil sample analysis

[N. P. Shetti, S. J. Malode, P. R. Vernekar, D. S. Nayak, N. S. Shetty, K. R. Reddy, S. S. Shukla, T. M. Aminabhavi](#)

Microchemical Journal 149 (2019) 103976 – (Elsevier Publication; IF: 3.206)

<https://doi.org/10.1016/j.microc.2019.103976>

80. A novel biosensor based on graphene oxide-nanoclay hybrid electrode for the detection of theophylline for healthcare applications

[N. P. Shetti, S. J. Malode, D. S. Nayak, G. B. Bagihalli, K. R. Reddy, K. Ravindranadh, C. V. Reddy](#)

Microchemical Journal 149 (2019) 103985- (Elsevier Publication; IF: 3.206) <https://doi.org/10.1016/j.microc.2019.103985>

79. ZnO based nanostructured electrodes for electrochemical sensors and biosensors in biomedical applications

[N. P. Shetti, S. D. Bukkitgar, R. R. Kakarla, C. V. Reddy, T. M. Aminabhavi](#)

Biosensors and Bioelectronics 141 (2019) 111417- (Elsevier Publication; IF: 9.518)

<https://doi.org/10.1016/j.bios.2019.111417>

78. A novel electrochemical sensor for detection of molinate using ZnO nanoparticles

loaded carbon electrode

N. P. Shetti, S. J. Malode, D. Ileger, K. R. Reddy, S. S. Shukla, T. M. Aminabhavi
Electroanalysis 31 (2019) 1040-1049 (Wiley Publication; IF: 2.691)
<https://doi.org/10.1002/elan.201800775>

77. Electrochemical sensors and biosensors based on graphene functionalized with metal oxide nanostructures for healthcare applications

S. Kumar, D. B. Shikandar, S. Singh, Pratibha, V. Singh, K. R. Reddy, **N. P. Shetti**,
C. V. Reddy, Veera Sadhu, S. Naveen

Chemistry Select, 4 (2019) 5322-5337 (Wiley Publication; IF: 1.716)

<https://doi.org/10.1002/slct.201803871>

76. Electro-oxidation and determination of nimesulide at nanosilica modified sensor

N. P. Shetti, S. J. Malode, S. D. Bukkitgar, G. B. Bagihalli, R. M. Kulkarni, S. B. Pujari, K. R. Reddy *Materials Science for Energy Technologies*, 2 (2019) 396-400 (Elsevier Publication; IF: Pending) <https://doi.org/10.1016/j.mset.2019.03.005>

75. Metal oxide nanohybrids-based low-temperature sensors for NO₂ detection: A short review

A. Mishra, S. Basu, **N. P. Shetti**, K. R. Reddy

Journal of Materials Science Materials in Electronics 30 (2019) 8160-8170 (Springer Publication; IF: 2.195) DOI: 10.1007/s10854-019-01232-0

74. Graphitic carbon nitride (g-C₃N₄)-based metal-free photocatalysts for water splitting: A review

A. Mishra, A. Mehta, S. Basu, **N. P. Shetti**, K. R. Reddy, T. M. Aminabhavi

Carbon, 149 (2019) 693-721 (Elsevier Publication; IF: 7.466)

<https://doi.org/10.1016/j.carbon.2019.04.104>

73. Photocatalytic recovery of H₂ from H₂S containing wastewater: Surface and interface control of photo-excitons in Cu₂S@TiO₂ core-shell nanostructures

V. N. Rao, N. L. Reddy, M. M. Kumari, P. Ravi, M. Sathish, K. M. Kuruvilla, V. Preethi, K. R. Reddy, **N. P. Shetti**, T. M. Aminabhavi, M. V. Shankar

Applied Catalysis B: Environmental, 254 (2019) 174-185 (Elsevier Publication; IF: 14.229)

<https://doi.org/10.1016/j.apcatb.2019.04.090>

72. A review on frontiers in plasmonic nano-photocatalysts for hydrogen production

N. L. Reddy, V. N. Rao, M. Vijayakumar, R. Santhosh, S. Anandan, M. Karthik, M. V. Shankara, K. R. Reddy, **N. P. Shetti**, M. N. Nadagouda, T. M. Aminabhavi

International Journal of Hydrogen Energy, 44 (2019) 10453-10472 (Elsevier Publication; IF: 4.084)

<https://doi.org/10.1016/j.ijhydene.2019.02.120>

71. Electro-catalytic behavior of Mg-doped ZnO nano-flakes for oxidation of anti-inflammatory drug

S. D. Bukkitgar, **N. P. Shetti**, R. M. Kulkarni, K. R., Reddy, S. S. Shukla, V. S. Saji, T. M. Aminabhavi, *Journal of Electrochemical Society* 166 (2019) B3072-B3078 (ECS Publication; IF: 3.120) doi: 10.1149/2.0131909jes

70. Nanostructured titanium oxide hybrids-based electrochemical biosensors for healthcare applications

N. P. Shetti, S. D. Bukkitgar, K. R. Reddy, Ch. V. Reddy, T. M. Aminabhavi

Colloids and Surfaces B: Biointerfaces 178 (2019)385-394 (Elsevier Publication; IF:3.973)

<https://doi.org/10.1016/j.colsurfb.2019.03.013>

69. Role of conducting polymer and metal oxide-based hybrids for applications in amperometric sensors and biosensors

B. S. Dakshayini, K. R. Reddy, A. Mishra, N. P. Shetti, S. J. Malode, S. Basu, S. Naveen, A. V. Raghu

Microchemical Journal 147 (2019) 7-24 (Elsevier Publication; IF: 3.206)

<https://doi.org/10.1016/j.microc.2019.02.061>

68. Membranes for dehydration of alcohols via pervaporation

M. S. Jyothi, K. R. Reddy, K. Soontarapa, S. Naveen, A. V. Raghu, R. V. Kulkarni, D. P. Suhas, **N. P. Shetti**, M. N. Nadagouda, T. M. Aminabhavi,

Journal of Environmental Management 242 (2019) 415-429 (Elsevier Publication; IF:4.865)

<https://doi.org/10.1016/j.jenvman.2019.04.043>

67. Polymeric graphitic carbon nitride (g-C₃N₄)-based semiconducting nanostructured materials: Synthesis methods, properties and photocatalytic applications

K. R. Reddy, Ch. V. Reddy, M. N. Nadagouda, **N. P. Shetti**, S. Jaesool, T. M. Aminabhavi

Journal of Environmental Management 238 (2019) 25-40 (Elsevier Publication; IF: 4.865)

<https://doi.org/10.1016/j.jenvman.2019.02.075>

66. Electrochemical behavior of flufenamic acid at amberlite XAD-4 resin and silver-doped titanium dioxide/ amberlite XAD-4 resin modified carbon electrodes

N. P. Shetti, D. S. Nayak, S. J. Malode, K. R. Reddy, S. S. Shukla, T. M. Aminabhavi

Colloids and Surfaces B: Biointerfaces 177 (2019) 407-415 (Elsevier Publication; IF: 3.973)

<https://doi.org/10.1016/j.colsurfb.2019.02.022>

65. Electrochemical detection and degradation of textile dye Congo red at graphene oxide modified electrode

N. P. Shetti, S. J. Malode, R. S. Malladi, S. L. Nargund, S. S. Shukla, T. M. Aminabhavi *Microchemical Journal* 146 (2019) 387-392

(Elsevier Publication; IF: 3.206)

<https://doi.org/10.1016/j.microc.2019.01.033>

64. Sensors based on ruthenium-doped TiO₂ nanoparticles loaded into multi-walled carbon nanotubes for the detection of flufenamic acid and mefenamic acid

N. P. Shetti, D. S. Nayak, S. J. Malode, K. R. Reddy, S. S. Shukla, T. M. Aminabhavi

Analytica Chimica Acta 1051 (2019) 58-72 (Elsevier Publication; IF: 5.256)

<https://doi.org/10.1016/j.aca.2018.11.041>

63. Electrode materials for Lithium-ion batteries

A. Mishra, A. Mehta, S. Basu, S. J. Malode, **N. P. Shetti**, S. S. Shukla, M. N. Nadagouda, T. M. Aminabhavi

Materials Science for Energy Technologies, 1 (2) (2018) 182-187 (Elsevier Publication; IF: Pending) <https://doi.org/10.1016/j.mset.2018.08.001>

62. Magnetron sputter deposited NiCu alloy catalysts for production of hydrogen through electrolysis in alkaline water

M. Kumar, **N. P. Shetti**

Materials Science for Energy Technologies 1 (2) (2018) 160-165 (Elsevier Publication; IF: Pending)

<https://doi.org/10.1016/j.mset.2018.06.010>

61. Electrocatalytic reduction of oxygen on Co₃O₄: Effects of processing method

H. P. Uskaikar, **N. P. Shetti**, S. J. Malode

Materials Science for Energy Technologies, 1 (2) (2018) 129-135 (Elsevier Publication; IF:)

<https://doi.org/10.1016/j.mset.2018.06.006>

60. Ag (I)-Catalyzed Chlorination of Linezolid during Water Treatment: Kinetics and Mechanism

R. M Kulkarni, M. S. Hanagadakar, R. S. Malladi, **N. P. Shetti**

International Journal of Chemical Kinetics 50 (7) (2018) 495-506 (Wiley Publication; IF:1.417)

<https://doi.org/10.1002/kin.21175>

59. Electrochemical behavior of an anti-viral drug valacyclovir at carbon paste electrode and its analytical application

U. S. Devarushi, **N. P. Shetti**, S. M. Tuwar

Russian Journal of Electrochemistry, 54 (10) (2018) 869-878 (Springer Publication; IF: 1.043)

DOI: 10.1134/S1023193518100026

58. Electrochemical behavior of azo food dye at nanoclay modified carbon electrode-a nanomolar determination

N. P. Shetti, D. S. Nayak, S. J. Malode

Vacuum, 155(2018) 524-530 (Elsevier Publication; IF: 2.515)

<https://doi.org/10.1016/j.vacuum.2018.06.050>

57. Electrochemical behavior of thiosalicylic acid at γ -Fe₂O₃ nanoparticles and clay composite carbon electrode

N. P. Shetti, D. S. Nayak, G. T. Kuchinad, R. R. Naik

Electrochimica Acta 269 (2018) 204-211 (Elsevier Publication; IF: 5.383)

<https://doi.org/10.1016/j.electacta.2018.02.170>

56. Silver-Doped Titania Modified Carbon Electrode for Electrochemical Studies of Furantril

D. B. Shikandar, **N. P. Shetti**, R. M. Kulkarni, S. D. Kulkarni

ECS Journal of Solid State Science and Technology 7 (7) (2018) Q3215-Q3220 (ECS Publication; IF: 1.795) doi: 10.1149/2.0321807jss

55. Construction of nanoparticles composite sensor for atorvastatin and its determination in pharmaceutical and urine samples

Shikandar D. B., **N. P. Shetti**, R. M. Kulkarni

Sensors and Actuators B: Chemical, 255 (2018) 1462-1470 (Elsevier Publication; IF: 6.393)

<https://doi.org/10.1016/j.snb.2017.08.150>

54. Fabrication of MWCNTs and Ru Doped TiO₂ Nanoparticles Composite Carbon Sensor for Biomedical Application

N. P. Shetti, D. S. Nayak, S. J. Malode, R. M. Kulkarni

ECS Journal of Solid State Science and Technology 7 (7) (2018) Q3070-Q3078 (ECS Publication; IF: 1.795) doi: 10.1149/2.0101807jss

53. Electrooxidation and determination of flufenamic acid at graphene oxide modified carbon electrode

N. P. Shetti, D. S. Nayak, S. J. Malode, R. M. Kulkarni, D. B. Kulkarni, R. A. Teggi, V. V. Joshi

Surface and Interfaces, 9 (2017) 107-113 (Elsevier Publication; IF: 0.943)

<https://doi.org/10.1016/j.surfin.2017.08.008>

52. Fabrication of a TiO₂ and clay nanoparticles composite electrode as a sensor Shikandar D. B., **N. P. Shetti**,

Analytical Methods, 9, 4387-4393, 2017 (RSC Publication; IF: 2.378) 10.1039/C7AY01068K

51. Nano molar detection of acyclovir, an antiviral drug at nanoclay modified carbon paste electrode

N. P. Shetti, D. S. Nayak, S. J. Malode, R. M. Kulkarni

Sensing and Bio-Sensing Research, 14 (2017) 39-46 (Elsevier Publication; IF: 1.012)

<https://doi.org/10.1016/j.sbsr.2017.04.004>

50. Electrochemical oxidation and thermodynamic parameters for an anti-viral drug valacyclovir

U. S. Devarushi, **N. P. Shetti**, S. M. Tuwar and J. Seetharamappa

Analytical and Bioanalytical Electrochemistry 9 (2017) 102-116 (IF: Pending)

49. Electrochemical oxidation of erythrosine at TiO₂ nanoparticles modified gold electrode-An environmental application

N. P. Shetti, D. S. Nayak, G. T. Kuchinad

Journal of Environmental Chemical Engineering, 5 (2017) 2083-2089 (Elsevier Publication; IF: 1.198) <https://doi.org/10.1016/j.jece.2017.03.040>

48. An electrochemical sensor for clozapine at ruthenium doped TiO₂ nanoparticles modified electrode

N. P. Shetti, D. S. Nayak, S. J. Malode, R. M. Kulkarni

Sensors and Actuators B: Chemical, 247 (2017) 858-867 (Elsevier Publication; IF: 6.393)

<https://doi.org/10.1016/j.snb.2017.03.102>

47. [Electrochemical detection of chlorpheniramine maleate in the presence of an anionic surfactant and its analytical applications](#)

N. P. Shetti, D. S. Nayak

Canadian Journal of Chemistry, 999 (2017) 1-7 (Canadian Science Publication; IF: 1.084)

<https://doi.org/10.1139/cjc-2016-0406>

46. Electrochemical oxidation and determination of an anti-cancer drug pemetrexed disodium

U. S. Devarushi, **N. P. Shetti**, S. M. Tuwar

Asian Journal of Pharmaceutical and Clinical Research 10 (2017) 492-496 (IF: Pending)

<https://doi.org/10.22159/ajpcr.2017.v10i3.15941>

45. Electro-oxidation and determination of 2-Thiouracil at TiO₂ nanoparticles-modified gold electrode

Shikandar D. B., **N. P. Shetti**, R. M. Kulkarni

Surfaces and Interfaces, 6 (2017) 127-133

(Elsevier Publication; IF: Pending) DOI: [10.1016/j.surfin.2017.01.003](https://doi.org/10.1016/j.surfin.2017.01.003)

44. [Electrochemical sensor based upon ruthenium doped TiO₂ nanoparticles for the determination of Flufenamic acid](#)

N. P. Shetti, D. S. Nayak, S. J. Malode, R. M. Kulkarni

Journal of The Electrochemical Society, 164 (5) (2017) B3036-B3042 (ECS Publication; IF: 3.120)

doi: 10.1149/2.0031705jes

43. [Electrochemical oxidation of nimesulide in aqueous acid solutions based on TiO₂ nanostructure modified electrode as a sensor](#)

Shikandar D. B., **N. P. Shetti**, R. M. Kulkarni, S.B. Halbhavi, M. Wasim, M. Mylar, P. S. Durgi,

S. S. Chirmure

Journal of Electroanalytical Chemistry, 778 (2016) 103-109 (Elsevier Publication; IF: 3.218)

<https://doi.org/10.1016/j.jelechem.2016.08.024>

42. Voltammetric response and determination of an anti-inflammatory drug at a cationic surfactant- modified glassy carbon electrode

D. S. Nayak, **N. P. Shetti**

Journal of Surfactants and Detergents, 19 (2016) 1071-1079 (Springer Publication; IF: 1.450)

<https://doi.org/10.1007/s11743-016-1854-3>

41. Electrochemical oxidation of provitamin B₅, D-panthenol and its analysis in spiked human urine

D. S. Nayak, **N. P. Shetti**

Journal of Analytical Science and Technology, 12 (2016) 1-8 (Springer Publication; IF: Pending)

<https://doi.org/10.1186/s40543-016-0092-7>

40. Electrooxidation of antihistamine drug methdilazine and its analysis in human urine and blood samples

N. P. Shetti, D. S. Nayak, S. D. Bukkitgar

Cogent Chemistry, 1153274 (2016) 1-9 (Taylor & Francis Publication; IF: Pending)

<https://doi.org/10.1080/23312009.2016.1153274>

39. Electro-oxidation of a Food Dye Fast Green FCF and Its Analytical Applications

D. S. Nayak, **N. P. Shetti**

Analytical and Bioanalytical Electrochemistry, 8 (2016) 38-50 (IF: Pending)

38. Electrochemical Sensor for the Determination of Anticancer Drug 5-Fluorouracil at Glucose

Modified Electrode

S. D. Bukkitgar, **N. P. Shetti**

Chemistry Select, 1 (2016) 771-777 (Wiley Publication; IF: 1.716)

<https://doi.org/10.1002/slct.201600197>

37. Electrochemical oxidation of loop diuretic furosemide in aqueous acid medium and its analytical application

S. D. Bukkitgar, **N. P. Shetti**

Cogent Chemistry, 1152784 (2016) 1-9 (Taylor & Francis Publication; IF: Pending)

<https://doi.org/10.1080/23312009.2016.1152784>

36. [Electrochemical behavior of anticancer drug 5-fluorouracil at carbon paste electrode and its analytical application](#)

S. D. Bukkitgar, **N. P. Shetti**

Journal of Analytical Science and Technology, 7 (2016) 1-9 (Springer Publication; IF: Pending)

<https://doi.org/10.1186/s40543-015-0080-3>

35. Development of Voltammetric Method for the Determination of an Anticancer Drug, 5-Fluorouracil at a Multi-walled Carbon Nanotubes Paste Electrode

J. C. Abbar, **N. P. Shetti** and S. T. Nandibewoor

Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry, 46 (2016) 814- 820 (Taylor & Francis Publication; IF: 1.2)

<https://doi.org/10.1080/15533174.2014.989586>

34. [Electro-oxidation of nimesulide at 5% barium-doped zinc oxide nanoparticle modified glassy carbon electrode](#)

S. D. Bukkitgar, **N. P. Shetti**, R. M. Kulkarni, M. R. Doddamani

Journal of Electroanalytical Chemistry, 762 (2016) 37-42 (Elsevier Publication; IF: 3.218)

<https://doi.org/10.1016/j.jelechem.2015.12.023>

33. Electrochemical behavior of an anticancer drug 5-fluorouracil at methylene blue modified carbon paste electrode

S. D. Bukkitgar, **N. P. Shetti**

Materials Science and Engineering: C, 65 (2016) 262-268 (Elsevier Publication; IF: 4.959)

<https://doi.org/10.1016/j.msec.2016.04.045>

32. Nanocomposites: general discussion

G. Swamy, S. Kumar, S. Kulkarni, A. Srivastav, P. R. Chowdhury, G. V. Pavankumar, E. Eiser, A. Edwards, B. L. V. Prasad, B. Madivala, **N. P. Shetti**, M. Bockstaller, H. Medhi, Y. Joshi, N. S. John, C. Chakravarty, V. Shinde, R. Banyopadhyaya, N. Kotov, R. Krishnamoorti, M. Courty, J. Jestin, D. Frenkel

Faraday Discussions, 186 (2016) 1-16 (RSC Publication; IF: 3.712)
10.1039/C6FD90003H

31. A novel sensor for a food dye erythrosine at glucose modified electrode

D. S. Nayak, **N. P. Shetti**

Sensors and Actuators B: Chemical, 230 (2016) 140-148 (Elsevier Publication; IF: 6.393)

DOI: [10.1016/j.snb.2016.02.052](https://doi.org/10.1016/j.snb.2016.02.052)

30. [Electrochemical behavior of xanthene food dye erythrosine at glassy carbon electrode and its analytical applications](#)

D. S. Nayak, **N. P. Shetti**, U. Katrahalli

Asian Journal of Pharmaceutical and Clinical Research, 8 (2015) 125-129 (IF: Pending)

29. [Electro-sensing base for mefenamic acid on a 5% barium-doped zinc oxide nanoparticle modified electrode and its analytical application](#)

S. D. Bukkitgar, **N. P. Shetti**, R. M. Kulkarni, S. T. Nandibewoor

RSC Advances, 5 (2015) 104891-104899 (RSC Publication; IF: 3.049)
10.1039/C5RA22581G

28. [Electro-oxidation of captopril at a gold electrode and its determination in pharmaceuticals and human fluids](#)

N. P. Shetti, S. J. Malode and S. T. Nandibewoor

Analytical Methods, 7 (2015) 8673-8682 (RSC Publication; IF: 2.378)
10.1039/C5AY01619C

27. Electrochemical sensor for the detection of mefenamic acid in pharmaceutical sample and human urine at glassy carbon electrode

S. D. Bukkitar, N. P. Shetti, D. S. Nayak, G. B. Bagihalli, S. T. Nandibewoor

Der Pharma Chemica, 6 (2014) 258-268 (IF: Pending)

26. Electrochemical behavior of an antiviral drug acyclovir at fullerene-C₆₀-modified glassy carbon electrode

N. P. Shetti, S. J. Malode and S. T. Nandibewoor

Bioelectrochemistry, 88 (2012) 76-83 (Elsevier Publication; IF: 4.474)

doi: 10.1016/j.bioelechem.2012.06.004

25. [Voltammetric oxidation and determination of loop diuretic furosemide at a multi-walled carbon nanotubes paste electrode](#)

S. J. Malode, J. A. Abbar, N. P. Shetti and S. T. Nandibewoor

Electrochimica Acta, 60 (2012) 95-101 (Elsevier Publication; IF: 5.383)

<http://dx.doi.org/10.1016/j.electacta.2011.11.011>

24. [Mechanistic aspects of Os\(VIII\) catalysed oxidation of loop diuretic drug furosemide by Ag\(III\) periodate complex in aqueous alkaline medium](#)

S. J. Malode, N. P. Shetti and S. T. Nandibewoor

Journal of Chemical Science, 124 (2012) 421-430 (Springer Publication; IF: 1.496)

<https://doi.org/10.1007/s12039-011-0182-4>

23. [Voltammetric behavior of theophylline and its determination at multi-wall carbon nanotube paste electrode](#)

S. J. Malode, N. P. Shetti and S. T. Nandibewoor

Colloids and Surfaces B: Biointerfaces, 97 (2012) 1-6 (Elsevier Publication; IF: 3.973)

<https://doi.org/10.1016/j.colsurfb.2012.04.010>

22. [Mechanistic aspects of oxidation of loop diuretic drug furosemide by Ag\(III\) periodate complex in alkali media: A kinetic approach](#)

S. J. Malode, N. P. Shetti and S. T. Nandibewoor

Main Group Chemistry, 10 (2011) 215-227 (Taylor & Francis Publication; IF: 0.625)

DOI: 10.3233/MGC-2011-0050

21. [Os\(VIII\)/Ru\(III\) catalysed oxidation of l-valine by Ag\(III\) periodate complex in aqueous alkaline medium: A comparative kinetic study](#)

S. J. Malode, N. P. Shetti and S. T. Nandibewoor

Catalysis Letters, 146 (2011) 1526-1540 (Springer Publication; IF: 2.372)

DOI:10.1007/s10562-011-0623-1

20. Oxidation of 6-aminopenicillanic acid by an alkaline copper(III) periodate complex in the absence and presence of ruthenium(III) as a homogeneous catalyst

N. P. Shetti, S. J. Malode and S. T. Nandibewoor

Polyhedron, 30 (2011) 1785-1798 (Elsevier Publication; IF: 2.284)

<https://doi.org/10.1016/j.poly.2011.04.025>

19. Thermodynamic quantities for the different steps involved in the oxidation of ketorolac drug by Cu(III) periodate complex in aqueous alkaline medium: a mechanistic approach
S. J. Malode, **N. P. Shetti**, and S. T. Nandibewoor
Journal of Solution Chemistry, 39 (2010) 417-430 (Springer Publication; IF: 1.039). DOI: [10.1007/s10953-010-9501-5](https://doi.org/10.1007/s10953-010-9501-5)
18. Oxidation of L-tryptophan by Ag(III) complex in alkali media: a kinetic, mechanistic approach
A. M. Tatagar, **N. P. Shetti** and S. T. Nandibewoor
Main Group Chemistry, 8 (2009) 307-321 (Taylor & Francis Publication; IF: 0.625)

<https://doi.org/10.1080/10241220903377499>

17. Mechanistic Study on the Oxidation of 4-Hydroxycoumarin by Diperiodatonickelate(IV) in Aqueous Alkaline Medium
R. S. Shettar, **N. P. Shetti** and S.T.Nandibewoor
E-Journal Chemistry, 6(3) (2009) 601-610 (IF: Pending)
<http://dx.doi.org/10.1155/2009/417947>
16. Kinetics and mechanistic study of oxidative Decarboxylation and of deamination of L-glutamine by diperiodatocuprate(III) in aqueous alkaline medium
R. S. Shettar, **N. P. Shetti** and S. T. Nandibewoor
Oxidation Communication, 32 (2009) 830-843 (IF: Pending) DOI: 10.1134/S0023158409040090
15. Mechanistic investigations on the oxidations of L-valine by diperiodatocuprate (III) in aqueous alkaline medium : A kinetic model
B. A. Deganatti, **N. P. Shetti** and S. T. Nandibewoor
Transition Metal Chemistry, 34 (2009) 143-152 (Springer Publication; IF: 1.016)

DOI: [10.1007/s11243-008-9170-z](https://doi.org/10.1007/s11243-008-9170-z)

14. A kinetic and mechanistic study on the oxidation of L-cystine by alkaline diperiodatocuprate (III) – A free radical intervention
R. R. Hosamani, **N. P. Shetti** and S. T. Nandibewoor
Kinetics and Catalysis, 50 (2009) 530-539 (Springer Publication; IF: 0.868)

<https://doi.org/10.1134/S0023158409040090>

13. Mechanistic investigations on the oxidation of L-valine by Ag(III) periodate complex in alkali media: a kinetic approach

S. J. Malode, **N. P. Shetti**, and S. T. Nandibewoor

Acta Chemica Slovenica, 56 (2009) 936-945 (IF: 1.076)

12. Oxidative degradation and deamination of atenolol by diperiodatocuprate(III) in aqueous alkaline medium: a mechanistic study

R. N. Hegde, **N. P. Shetti** and S. T. Nandibewoor

Polyhedron, 28 (2009) 3499-3506 (Elsevier Publication; IF: 2.284)

<https://doi.org/10.1016/j.poly.2009.07.051>

11. Mechanistic investigations on oxidation of ampicillin drug by diperiodatoargentate (III) in aqueous alkaline medium.

R. R. Hosamani, **N. P. Shetti**, and S. T. Nandibewoor

Journal of Physical Organic Chemistry, 22 (2009) 234-240 (Wiley Publication; IF: 1.53)

<https://doi.org/10.1002/poc.1460>

10. Kinetic and mechanistic investigations of oxidation of pentoxifylline drug by alkaline permanganate

R. N. Hegde, **N. P. Shetti** and S. T. Nandibewoor

Industrial & Engineering Chemistry Research, 48 (2009) 7025-7031 (ACS Publication; IF: 3.375) <https://doi.org/10.1021/ie9004145>

9. Electro-oxidation and determination of gabapentin at gold electrode

R. N. Hegde, B. E. Kumara Swamy, **N. P. Shetti** and S. T. Nandibewoor

Journal of Electroanalytical Chemistry, 635 (2009) 51-57 (Elsevier Publication; IF: 3.218)

<https://doi.org/10.1016/j.jelechem.2009.08.004>

8. Electro-oxidation and determination of trazodone at multi-walled carbon nanotube-modified glassy carbon electrode

R. N. Hegde, **N. P. Shetti** and S. T. Nandibewoor

Talanta, 79 (2009) 361-368 (Elsevier Publication; IF: 4.916)

<https://doi.org/10.1016/j.talanta.2009.03.064>

7. Mechanistic investigations of ruthenium(III) catalysed oxidation of L-tryptophan by diperiodatocuprate(III) in aqueous alkaline media (stopped flow technique): A kinetic study

N. P. Shetti, R. R. Hosamani and S. T. Nandibewoor

The Open Catalysis Journal, 2 (2009) 130-139 (Bentham Publication; IF: Pending)

DOI: [10.2174/1876214X00902010130](https://doi.org/10.2174/1876214X00902010130)

6. Mechanistic aspects of oxidation on L-tyrosine by diperiodatocuprate(III) complex in alkali media: a kinetic model.

N. P. Shetti, R. N. Hegde and S. T. Nandibewoor

Central European Journal of Chemistry, 7(4) (2009) 929-937 (Springer Publication; IF: 1.329)

<https://doi.org/10.2478/s11532-009-0085-0>

5. Kinetic and mechanistic investigations on oxidation of L-tryptophan by diperiodatocuprate (III) in aqueous alkaline medium.

N. P. Shetti, and S. T. Nandibewoor

Z. Phys. Chem., 223 (2009) 299-317 (IF: 1.47)

<https://doi.org/10.1524/zpch.2009.5432>

4. Electrochemical oxidation of loop diuretic furosemide at gold electrode and its analytical applications

N. P. Shetti, S. V. Lokesh, R. N. Hegde and S. T. Nandibewoor

International Journal of Electrochemical Science, 4 (2009) 104-121 (IF: 3.84)

3. Structure reactivity and thermodynamic analysis on the oxidation of ampicillin drug by copper(III) complex in aqueous alkaline Medium (stopped flow technique)

N. P. Shetti, R. N. Hegde and S. T. Nandibewoor

Journal of Molecular Structure, 930 (2009) 180-186 (Elsevier Publication; IF: 2.120)

<https://doi.org/10.1016/j.molstruc.2009.05.013>

2. Mechanistic aspects of uncatalysed and Os(VIII) catalysed oxidation of 5-flourouracil-An anticancer drug by alkaline diperiodatoargentate(III)

N. P. Shetti, R. N. Hegde and S. T. Nandibewoor

Inorganica Chimica Acta, 362 (2009) 2270-2278 (Elsevier Publication; IF: 2.433)

<https://doi.org/10.1016/j.ica.2008.10.006>

1. Mechanistic Aspects of Osmium(VIII) Catalyzed Oxidation of L-Tryptophan by Diperiodatocuprate(III) in Aqueous Alkaline Medium: A Kinetic Model

N. P. Shetti, R. R. Hosamani and S. T. Nandibewoor

Research Letters In Inorganic Chemistry, 2 (2008) 1-5 (Hindawi Publication; IF: Pending)

<http://dx.doi.org/10.1155/2008/216058>.

Publications in International Conference Proceedings

28. Nanolevel detection and analysis of an antiviral drug at ZnO nanoparticles modified sensor

M. Pavamana, **N. P. Shetti**, S. J. Malode and S. D. Bukkitgar

Materials Today Proceedings, 18 (2019) 1568–1573 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.07.086>

27. Nanosilica modified sensor for the electro-oxidation and determination of an antihistamine drug

R. Hosamani, **N. P. Shetti**, S. J. Malode and S. D. Bukkitgar

Materials Today Proceedings, 18 (2019) 1562–1567 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.07.085>

26. Fabrication of multi-walled carbon nanotubes and ZnO nanoparticles composite electrode as a sensor for paracetamol

D. S. Patil, **N. P. Shetti**, D. S. Nayak and R. S. Revankar

Materials Today Proceedings, 18 (2019) 1124–1131 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.572>

25. Clay coated carbon electrode sensor for a food dye sunset yellow

C. V. Moolya, **N. P. Shetti** and D. S. Nayak

Materials Today Proceedings, 18 (2019) 1116–1123 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.571>

24. Electroanalysis of paracetamol at nanoclay modified graphite electrode

M. M. Patil, **N. P. Shetti**, D. S. Nayak, S. J. Malode, and T. R. Chakkalabbi

Materials Today Proceedings, 18 (2019) 986–993 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.538>

23. Applications of zinc oxide nanoparticles as an electrode modifier for ambroxol

H. P. Uskaikar, **N. P. Shetti**, S. D. Bukkitgar, S. J. Malode, N. V. Jamakandi and Manu T. M *Materials Today Proceedings*, 18 (2019) 963–967 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.533>

22. Voltammetric sensor for secretolytic agent ambroxol at titanium dioxide nanoparticles modified electrode

K. C. Naik, **N. P. Shetti**, S. D. Bukkitgar, S. J. Malode and H. P. Uskaikar

Materials Today Proceedings, 18 (2019) 941–946 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.530>

21. Electrochemical oxidation of food dye at nanosilica modified carbon electrode

M. Reddy, **N. P. Shetti**, D. S. Nayak, S. J. Malode and U. Muddapur *Materials Today Proceedings*, 18 (2019) 798–805 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.502>

20. A novel sensor based on graphene oxide nanoparticles for the detection and analysis of an antihistamine drug

R. Yaragatti, S. J. Malode, **N. P. Shetti**, D. S. Nayak, R. M. Kulkarni, S. Halbhavi, A. Dandin, D. Idli, S. Kalmani and V. Randewadi

Materials Today Proceedings, 18 (2019) 780–787 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.496>

19. Electro oxidation and analytical applications of nimesulide at graphene oxide and reduced graphene oxide modified carbon paste electrode

U. S. Devarushi, **N. P. Shetti**, S. J. Malode and S. M. Tuwar

Materials Today Proceedings, 18 (2019) 751–758 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.488>

18. Development of a sensor for thiosalicylic acid at MWCNT modified gold

A. Kulkarni, **N. P. Shetti**, S. J. Malode and R. M. Kulkarni

Materials Today Proceedings, 18 (2019) 723–730 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.477>

17. ZnO nanoparticles modified sensor for the Electroanalysis of Thiosalicylic acid

N. Navelkar, **N. P. Shetti**, S. J. Malode and R. M. Kulkarni

Materials Today Proceedings, 18 (2019) 710–716 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.474>

16. Electro-sensing tool for nonsteroidal drug Flufenamic acid at multiwalled carbon nanotubes modified graphite electrode

D. S. Nayak and **N. P. Shetti**

Materials Today Proceedings, 18 (2019) 679–686 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.467>

15. Voltammetric detection and determination of mefenamic acid at Silver doped TiO₂ nanoparticles modified electrode

S. J. Malode, **N. P. Shetti** and R. M. Kulkarni

Materials Today: Proceedings 18 (2019) 671–678 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.464>

14. TiO₂ nanoparticles modified sensor for theophylline drug

A. Janaj, **N. P. Shetti**, S. J. Malode, S. D. Bukkitgar and R. M. Kulkarni

Materials Today Proceedings, 18 (2019) 606–612 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.454>

13. Electroanalysis of 1,3-dimethylxanthine at zinc oxide nanoparticles modified electrode

A. Bandi, **N. P. Shetti**, S. J. Malode, S. D. Bukkitgar and R. M. Kulkarni

Materials Today Proceedings, 18 (2019) 590–595 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.452>

12. Electrochemical behavior of mefenamic acid at graphene oxide modified carbon paste electrode

N. Talikoti, U. S. Devarushi, S. M. Tuwar, **N. P. Shetti** and S. J. Malode

Materials Today Proceedings, 18 (2019) 582–589 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.451>

11. Electroanalysis of an antihistamine drug at nanostructured modified electrode

R. Kudchi, **N. P. Shetti**, S. J. Malode and A. Todakar

Materials Today Proceedings, 18 (2019) 558–565 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.447>

10. Electro oxidation and analytical applications of valacyclovir at reduced graphene

oxide modified carbon paste electrode

A. Todakar, **N. P. Shetti**, U. S. Devarushi and S. M. Tuwar

Materials Today Proceedings, 18 (2019) 550–557 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.445>

9. Voltammetry and analytical applications of hydrochlorothiazide at graphene oxide modified glassy carbon electrode

A. Totaganti, S. J. Malode, D. S. Nayak and **N. P. Shetti**

Materials Today Proceedings, 18 (2019) 542–549 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2019.06.441>

8. Electrochemical behavior study of theophylline at methylene blue dye modified electrode and its analytical applications

Shikandar D. B., **N. P. Shetti**

Materials Today Proceedings 5 (10P1) (2018) 21474-21481 (Elsevier Publication)

DOI: 10.1016/j.matpr.2018.06.557

7. Nano-silica modified electrode as a sensor for the determination of mefenamic acid- a voltammetric sensor

Shikandar D. B., **N. P. Shetti**, R. M. Kulkarni, S. Chirmure

Materials Today Proceedings 5 (10P1) (2018) 21466-21473 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2018.06.556>

6. Electrochemical behavior of mefenamic acid at zinc oxide nanoparticles modified carbon paste electrode

Shikandar, **N. P. Shetti** D. B., R. M. Kulkarni, M. Wasim

Materials Today Proceedings 5 (10P1) (2018) 21458-21465 (Elsevier Publication)

<https://doi.org/10.1016/j.matpr.2018.06.555>

5. An enhanced sensing platform for clozapine at 2.0% silver doped TiO₂ nanoparticles- A sensitive detection

D. S. Nayak, **N. P. Shetti**, S. J. Malode, R. M. Kulkarni

Materials Today Proceedings 5 (10P1)(2018) 21271-21278, (Elsevier Publication)

DOI: 10.1016/j.matpr.2018.06.528

4. [Ba-ZnO Nanoparticles for Photocatalytic Degradation of Chloramphenicol](#)

R. M. Kulkarni, R. S. Malladi, M. S. Hanagadakar, **N. P. Shetti**, M. Doddamani *AIP Conference Proceedings*, 1989 (1) (2018) 020026- (AIP Publication)

<https://doi.org/10.1063/1.5047702>

3. Electroanalysis of theophylline at eriochrome black –T and graphite powder composite electrode

U. S. Devarushi, **N. P. Shetti**, Shikandar D. B. and S. M. Tuwar

AIP Conference Proceedings, 1989 (1) (2018) 020009- (AIP Publication)

<https://doi.org/10.1063/1.5047685>

2. Nanomolar determination of ambroxol at patton and reeders reagent modified carbon electrode

U. S. Devarushi, **N. P. Shetti**, A. B. Todakar and S. M. Tuwar

AIP Conference Proceedings, 1989 (1) (2018) 020041- (AIP Publication)

<https://doi.org/10.1063/1.5047717>

1. Electrochemical sensor for secretolytic agent- ambroxol at eriochrome black -T modified carbon electrode

U. S. Devarushi, **N. P. Shetti**, M. B. Reddy and S. M. Tuwar

AIP Conference Proceedings, 1989 (1) (2018) 020039- (AIP Publication)

<https://doi.org/10.1063/1.5047715>

Publication of Invited Book Chapters

1. **Chapter 10** - Graphene–Clay-Based Hybrid Nanostructures for Electrochemical Sensors and Biosensors

[N. P. Shetti, D.S. Nayak, K. R. Reddy, T. M. Aminabhavi](#)

Graphene-Based Electrochemical Sensors for Biomolecules Micro and Nano Technologies, Elsevier Publication, 2019, Pages 235-274.

<https://doi.org/10.1016/B978-0-12-815394-9.00010-8>

2. **Chapter 27** - Photocatalysis of Graphene and Carbon Nitride-Based Functional Carbon Quantum Dots

A. [Mishra](#), S. [Basu](#), **N. P. Shetti**, K. R. [Reddy](#), T. M. [Aminabhavi](#)

Nanoscale Materials for Water Purification, Micro and Nano Technologies, Elsevier Publication, 2019, Pages 759-781

<https://doi.org/10.1016/B978-0-12-813926-4.00035-5>

3.

4. **Chapter 10** - Functionalized magnetic nanoparticles/biopolymer hybrids: Synthesis methods, properties and biomedical applications

[K. R. Reddy](#), [P. A. Reddy](#), [C. V. Reddy](#), **N. P. Shetti**, [B. Babu](#), [K. Ravindranadh](#), [M. V. Shankar](#), [M. C. Reddy](#), [S. Soni](#), [S. Naveen](#)

Methods in Microbiology, Elsevier Publication, [Volume 46](#), 2019, Pages 227-254 <https://doi.org/10.1016/bs.mim.2019.04.005>

5. **Chapter 17**- Modernization of biosensing strategies for the development of lab-on- chip integrated systems electrochemical systems for healthcare applications

[S. Roy](#), [S. J. Malode](#), **N. P. Shetti**, P. Chandra

Bioelectrochemical Interface Engineering, Wiley Publication, 2019, Pages 325-342 <https://doi.org/10.1002/9781119611103.ch17>

6. **Chapter 7** - Recent developments in ionic liquid-based electrolytes for energy storage

supercapacitors and rechargeable batteries

A. Mishra, **N. P. Shetti**, S. Basu, K. R. Reddy, T. M. Aminabhavi

Green Sustainable Process for Chemical and Environmental Engineering and Science, Ionic Liquids as Green Solvents, Elsevier Publication, 2020, Pages 199-221.

<https://doi.org/10.1016/B978-0-12-817386-2.00007-X>

7. **Chapter 4** - Metal oxide-based nanosensors for healthcare and environmental applications

D. K. Kumar, K. R. Reddy, V. Sadhu, **N. P. Shetti**, C. V. Reddy, R. S. Chouhan, S. Naveen

Nanomaterials in Diagnostic Tools and Devices, Elsevier Publication, 2020, Pages 113-129

<https://doi.org/10.1016/B978-0-12-817923-9.00004-3>.

8. **Chapter 11** - Electroanalytical techniques for investigating biofilms: Applications in biosensing and biomolecular interfacing

N. P. Shetti, S. J. Malode, S. Roy, P. Chandra, K. R. Reddy, S. Chatterjee Nanomaterials in Diagnostic Tools and Devices, Elsevier Publication, 2020, Pages 293-329.

<https://doi.org/10.1016/B978-0-12-817923-9.00011-0>

9. **Chapter 19** - Fundamentals, recent advances, and perspectives of electrode materials for bioelectrochemical sensing applications

S. Chatterjee, **N. P. Shetti**, K. R. Reddy

Nanomaterials in Diagnostic Tools and Devices, Elsevier Publication, 2020, Pages 557-589. <https://doi.org/10.1016/B978-0-12-817923-9.00019-5>.

Dr. Gangadhar B. Bagihalli

Research Papers:

<https://scholar.google.com/citations?hl=en&user=7ItPTZgAAAAJ>

1. **G. B. Bagihalli**, P. G. Avaji, P. S. Badami and S. A. Patil (2008). "Synthesis, spectral characterization, electrochemical and biological activity studies of Co(II), Ni(II) and Cu(II) complexes with thicarbohydrazone". *J. Coord. Chem.* Taylor & Francis, 61(17) P, 2793-2806.
2. **G. B. Bagihalli**, P. G. Avaji, S. A. Patil and P. S. Badami (2008). "Synthesis, spectral characterization, in vitro antibacterial, antifungal and cytotoxic activity of Co(II), Ni(II) and Cu(II) complexes with 1,2,4-triazole Schiff bases". *Eur. J. Med Chem.* Elsevier, 43, P 2639-2649. (Cited 398 times & selected in the top 25 articles in the year 2008).
3. **G. B. Bagihalli**, P. S. Badami and S. A. Patil (2009). "Synthesis, spectral characterization and in vitro biological studies of Co(II), Ni(II) and Cu(II) complexes with 1,2,4-triazole Schiff bases". *J. Enzym. Med. Chem.* Taylor & Francis, 24(2), P 381-394.
4. **G. B. Bagihalli**, S. A. Patil and P. S. Badami (2009). "Synthesis, spectral characterization, in vitro microbial and cytotoxic studies of lanthanum(III) and thorium(IV) complexes with 1,2,4-triazole Schiff bases". *J. Enzym. Med. Chem.* Taylor & Francis, 24(3), P 730-741.
5. **G. B. Bagihalli**, S. A. Patil and P. S. Badami (2008). "Synthesis, Physico-Chemical Investigation and Biological studies of Zinc(II) complexes with 1,2,4-triazole Schiff bases". *J. Iranian. Chem. Soc.* Springer, 6(2), P 259-270.
6. **G. B. Bagihalli** and S. A. Patil (2009). "Synthesis, spectral characterization, in vitro biological and DNA Cleavage studies of Co(II), Ni(II), Cu(II) and Zn(II) complexes with 1,2,4-triazole Schiff bases". *J. Coord. Chem.* Taylor & Francis, 62(10), P 1690-1700.
7. **G. B. Bagihalli** and S. A. Patil (2010). "Synthesis, Physico-Chemical Investigations, of Co(II), Ni(II) and Cu(II) Complexes and their In vitro Microbial, Cytotoxic and DNA Cleavage Studies". *J. Enzym. Med. Chem.* Taylor & Francis, 25(3), P 430-439.
8. **G. B. Bagihalli** and S. A. Patil (2010). "Synthesis, Physico-Chemical investigations of Co(II), Ni(II) and Cu(II) complexes and there in vitro microbial, cytotoxic, DNA cleavage studies". *J. Enzym. Med. Chem.* Taylor & Francis, 25(3), P 430-439.

9. **G. B. Bagihalli** and S. A. Patil (2009). "Synthesis, Physico-Chemical Investigations, and In vitro Microbial, Studies of VO(IV) Complexes with Novel ONON donor Schiff bases". *Main Group Chemistry*, IOS Press, 8(2), P 71-88.
10. A. D. Kulkarni, **G. B. Bagihalli**, S. A. Patil and P. S. Badami (2009). "Synthesis, Physico-chemical characterization, Electrochemical and *in-vitro* Antimicrobial Studies of Co(II), Ni(II) and Cu(II) Complexes with Schiff bases of formyl coumarin derivatives". *J. Coord. Chem.* Taylor & Francis, 62(18), P 3060-3072.
11. A. D. Kulkarni, P. G. Avaji, **G. B. Bagihalli**, P. S. Badami and S. A. Patil (2009). "Synthesis, Spectral characterization, electrochemical and biological studies of Co(II), Ni(II) and Cu(II) complexes with novel Schiff bases of 8-formyl-7-hydroxy-4-methyl coumarin". *J. Coord. Chem.* Taylor & Francis, 62(3), P 481-492.
12. S. A. Patil, V. H. Naik, A. D. Kulkarni, U. Kamble, **G. B. Bagihalli** (2010). "DNA cleavage, in vitro antimicrobial and electrochemical studies of Co(II), Ni(II) and Cu(II) complexes with m-substituted thiosemicarbazide schiff bases". *J. Coord. Chem.* Taylor & Francis, 63(4), P 688-699.
13. J. M. Sibanyoni, **G. B. Bagihalli** and S. F. Mapolie (2012). "Binuclear Pd-Methyl complexes of N,N¹-{1,n}-alkanediyl-bis(pyridinyl-2-methanimine) ligands (n=5, 8, 9, 10 and 12): Evaluation as Catalysts Precursors for Phenylacetylene Polymerization". *J. Organometallic Chemistry*. Elsevier, 700, P 93-102.
14. M. Manjunath, A. D. Kulkarni, **G. B. Bagihalli**, and S. Malladi (2016). "Thiosemicarbazone Scaffold as a Multidentate Ligand for Transition Metal Ions: Synthesis, Characterization, in vitro Antimicrobial, Anthelmintic, DNA Cleavage and Cytotoxic Studies". *Helvetica Chimica Acta*. Wiley, 99, P 1-11.
15. M. Manjunath, A. D. Kulkarni, **G. B. Bagihalli** and S. Malladi (2017). "Sangamesh A. Patil, Bio-important antipyrine derived Schiff bases and their transition metal complexes: Synthesis, spectroscopic characterization, antimicrobial, anthelmintic and DNA cleavage investigation". *J. Mol. Str.* Elsevier, P 314-321.
16. V. Adimule, P. Vageesha, **G. B. Bagihalli**, D. Bowmik, H. J. Adarsha (2019). "Synthesis, Characterization of Hybrid Nanomaterials of Strontium, Yttrium, Copper Doped with Indole Schiff Base Derivatives Possessing Dielectric and Semiconductor Properties". Book Chpter : *Emerging Research in Electronics, Computer Science and Technology*, Springer, P 1131-1140.
17. N. P Shetti, S. J Malode, D. S. Nayak, **G. B. Bagihalli**, K. R. Reddy, K. Ravindranadh, C. V. Reddy (2019). "A novel biosensor based on graphene oxide-nanoclay hybrid electrode for the

detection of Theophylline for healthcare applications”. *Microchemical Journal*. Elsevier. P 103985.

18. N. P. Shetti, S. J. Malode, S. D. Bukkitgar, **G. B. Bagihalli**, R. M. Kulkarni, S. B. Pujari, K. R. Reddy (2019). “Electro-oxidation and determination of nimesulide at nanosilica modified sensor”. *Materials Science for Energy Technologies*. Elsevier, P 396-400.
19. N. P. Shetti, S. J. Malode, D. S. Nayak, **G. B. Bagihalli**, S. S. Kalanur, R. S. Malladi, C. V. Reddy, T. M. Aminabhavi, K. R. Reddy(2019). “Fabrication of ZnO nanoparticles modified sensor for electrochemical oxidation of methdilazine”. *Applied Surface Science*, Elsevier, P 143656.
20. N. P. Shetti, S. J. Malode, D. S. Nayak, S. D. Bukkitgar, **G. B. Bagihalli**, R. M. Kulkarni, K. R. Reddy (2020). “Novel nanoclay-based electrochemical sensor for highly efficient electrochemical sensing nimesulide”. *Journal of Physics and Chemistry of Solids*, Elsevier, P109210.

Book:

21. **V. Adimule**, G. B. Bagihalli, **L. S. Kumar**., “Anticancer Properties of Some Novel 1,3,4-Oxadiazole Molecules”. Lambert. 2018.

Research Papers:

<https://scholar.google.co.in/citations?user=xbcG4o4AAAAJ&hl=en>

1. S. D. Bukkitgar, N. P. Shetti, K. R. Reddy, T. A. Saleh, T. M. Aminabhavi, (2020). "Ultrasonication and electrochemically-assisted synthesis of reduced graphene oxide nanosheets for electrochemical sensor applications." *FlatChem*, Elsevier, Journal Pre-proof In Press, P 100183.
2. S. D. Bukkitgar., N. P. Shetti, R. S. Malladi, R. K. Reddy, S. S. Kalanur, and T. M. Aminabhavi (2020). "Novel ruthenium doped TiO₂/reduced graphene oxide hybrid as highly selective sensor for the determination of ambroxol." *Journal of Molecular Liquids*, Elsevier, 300, P 112368.
3. N. P. Shetti, S. J. Malode, D. S. Nayak, S. D. Bukkitgar, G. B Bagihalli, R. M. Kulkarni, K. R. Reddy (2020). "Novel nanoclay-based electrochemical sensor for highly efficient electrochemical sensing nimesulide" *Journal of Physics and Chemistry of Solids*, Pergamon, 137, P 109210.
4. N. P. Shetti, S. J. Malode, S. D. Bukkitgar, G. B Bagihalli, R. M. Kulkarni, S. P. Pujari, K. R. Reddy (2019) "Electro-oxidation and determination of nimesulide at nanosilica modified sensor". *Material science for energy Technologies*, Elsevier, 2(3) P 396-400
5. N. P. Shetti, S. D. Bukkitgar, K. R. Reddy, C. V. Reddy, T. M. Aminabhavi (2019) "[ZnO-based nanostructured electrodes for electrochemical sensors and biosensors in biomedical applications](#)". *Biosensors and Bioelectronics*, Elsevier, 141, 111417.
6. N. P. Shetti, S. D. Bukkitgar, K. R. Reddy, C. V. Reddy, T. M. Aminabhavi (2019) "Nanostructured titanium oxide hybrids-based electrochemical biosensors for healthcare applications". *Colloids and Surfaces B: Biointerfaces*, Elsevier, 178, 385 – 394.
7. S. Kumar, S. D. Bukkitgar, S. Singh, V. Singh, K. R. Reddy, N. P. Shetti, C. V. Reddy, V. Sadhu, S Naveen, (2019). "Electrochemical sensors and biosensors based on graphene functionalized with metal oxide nanostructures for healthcare applications". *ChemistrySelect*, 4(18), 5322 – 5337.
8. S. D. Bukkitgar, N. P. Shetti, R. M. Kulkarni, K. R. Reddy, S. S Shukla, V. S. Saji, T. M. Aminabhavi (2019). "Electro-catalytic behavior of Mg-doped ZnO nano-flakes for oxidation of anti-inflammatory drug". *Journal of The Electrochemical Society*, IOP Publishing, 166 (9) B3072.
9. M. Pavamana, N. P. Shetti, S. J. Malode, S. D. Bukkitgar, (2019) "Nano level detection and analysis of an antiviral drug at ZnO nanoparticles modified sensor". *Materials Today: Proceedings*, Elsevier, 18, 1568-1573.
10. R. Hosamani, N. P. Shetti, S. J. Malode, S. D. Bukkitgar, (2019) "Nanosilica modified sensor for the electro-oxidation and determination of an antihistamine drug". *Materials Today: Proceedings*, Elsevier, 18, 1562-1567.
- A. A. Janaj, N. P. Shetti, S. J. Malode, S. D. Bukkitgar, R. M. Kulkarni (2019), TiO₂

nanoparticles modified sensor for theophylline drug”. *Materials Today: Proceedings*, 18, 606-612

11. N. P. Shetti, S. J. Malode, S. D. Bukkitgar, R. M. Kulkarni (2019), “Electroanalysis of 1, 3–dimethylxanthine at zinc oxide nanoparticles modified electrode”. *Materials Today: Proceedings*, 18, 590-595
12. K. C. Naik, N. P. Shetti, S. D. Bukkitgar, S. J. Malode, H. P. Uskaikar (2019), “Voltammetric sensor for secretolytic agent ambroxol at titanium dioxide nanoparticles modified electrode”, *Materials Today: Proceedings*, 18, 941-946
13. H. P. Uskaikar, N. P. Shetti, S. D. Bukkitgar, S. J. Malode, N. V. Jamakandi, T. M. Manu (2019) “Applications of zinc oxide nanoparticles as an electrode modifier for ambroxol”. *Materials Today: Proceedings* 18, 963-967
14. U. S. Devarushi, N. P. Shetti, S. D. Bukkitgar, S. M. Tuwar, (2019). “Electrochemical Behavior of an Anti-Viral Drug Valacyclovir at Carbon Paste Electrode and Its Analytical Application”. *Russian Journal of Electrochemistry*, Pleiades Publishing, 54 (10), 760-768.
15. U. S. Devarushi, N. P. Shetti, S. D. Bukkitgar, S. M. Tuwar, (2018). “Electroanalysis of theophylline at eriochrome black–T and graphite powder composite electrode” *AIP Conference Proceedings*, AIP Publishing LLC, 1989 (1), 020009.
16. S. D. Bukkitgar, N. P. Shetti, R. M. Kulkarni, (2018). “Construction of nanoparticles composite sensor for atorvastatin and its determination in pharmaceutical and urine samples”. *Sensors and Actuators B: Chemical*, Elsevier, 255, 1462-1470
17. S. D. Bukkitgar, N. P. Shetti, R. M. Kulkarni, S. D. Kulkarni, (2018). “Silver-Doped Titania Modified Carbon Electrode for Electrochemical Studies of Furantril”. *ECS Journal of Solid State Science and Technology*, ECS, 7 (7), Q3215-Q3220
18. S. D. Bukkitgar, N. P. Shetti, (2018). “Electrochemical behavior of theophylline at methylene blue dye modified electrode and its analytical application”. *Materials Today: Proceedings* 5 (10), 21474-21481
19. S. D. Bukkitgar, N. P. Shetti, R. M. Kulkarni, S. Churmure, (2018). “Nano-silica modified electrode as a sensor for the determination of mefenamic acid-A voltammetric sensor”. *Materials Today: Proceedings*, 5 (10), 21466-21473
20. S. D. Bukkitgar, N. P. Shetti, R. M. Kulkarni, M. Wasim, (2018) “Electrochemical behavior of mefenamic acid at zinc oxide nanoparticles modified carbon paste electrode”. *Materials Today: Proceedings*, 5 (10), 21458-21465
21. S. D. Bukkitgar, N. P. Shetti, R. M. Kulkarni, (2017). “Electro-oxidation and determination of 2-thiouracil at TiO₂ nanoparticles-modified gold electrode”. *Surfaces and interfaces*, Elsevier, 6, 127-133, 2017
22. S. D. Bukkitgar, N. P. Shetti, (2017). “Fabrication of a TiO₂ and clay nanoparticle composite electrode as a sensor”. *Analytical methods*, Royal Society of Chemistry, 9 (30),

4387-4393.

23. S. D. Bukkitgar, N. P. Shetti, (2016). "Electrochemical oxidation of loop diuretic furosemide in aqueous acid medium and its analytical application". *Cogent Chemistry*, Cogent OA, 2 (1), 1152784.
24. N. P. Shetti, D. S. Nayak, S. D. Bukkitgar, (2016). "Electrooxidation of antihistamine drug methdilazine and its analysis in human urine and blood samples". *Cogent Chemistry*, Cogent OA, 2 (1), 1153274.
25. S. D. Bukkitgar, N. P. Shetti, (2016). "Electrochemical behavior of anticancer drug 5-fluorouracil at carbon paste electrode and its analytical application". *Journal of Analytical Science and Technology*, Korea Basic Science Institute, 7 (1) 1.
26. S. D. Bukkitgar, N. P. Shetti, R. M. Kulkarni, S. B. Halbhavi, M. Wasim, M. Mylar, P. S Durgi, S. S Chirmure, (2016). "Electrochemical oxidation of nimesulide in aqueous acid solutions based on TiO₂ nanostructure modified electrode as a sensor". *Journal of Electroanalytical Chemistry*, Elsevier, 778, 103-109
27. S. D. Bukkitgar, N. P. Shetti, (2016). "Electrochemical behavior of an anticancer drug 5-fluorouracil at methylene blue modified carbon paste electrode". *Materials Science and Engineering: C*, Elsevier, 65, 262-268, 2016
28. S. D. Bukkitgar, N. P. Shetti, (2016). "Electrochemical Sensor for the Determination of Anticancer Drug 5-Fluorouracil at Glucose Modified Electrode" *ChemistrySelect*, 1 (4), 771-777.
29. S. D. Bukkitgar, N. P. Shetti, R. M. Kulkarni, M. R. Doddamani, (2016). "Electro-oxidation of nimesulide at 5% barium-doped zinc oxide nanoparticle modified glassy carbon electrode". *Journal of Electroanalytical chemistry*, Elsevier, 762, 37-42.
30. S. D. Bukkitgar, N. P. Shetti, R. M. Kulkarni, S. T. Nandibewoor, (2015). "Electro-sensing base for mefenamic acid on a 5% barium-doped zinc oxide nanoparticle modified electrode and its analytical application". *RSC Advances*, Royal Society of Chemistry, 5 (127), 104891-104899.

Dr. Shweta J. Malode

Research Papers

<https://scholar.google.co.in/citations?user=hOSLh1QAAAAJ&hl=en>

- 1) N.P. Shetti, D. Ilager, **S.J. Malode**, D. Monga, S. Basu and K.R. Reddy (2020). "Poly(eriochrome black T) modified electrode for electro-sensing of methdilazine." *Materials Science in Semiconductor Processing*, 120, P 105261.
- 2) P.R. Vernekar, N.P. Shetti, M.M. Shanbhag, **S.J. Malode**, R.S. Malladi and K.R. Reddy (2020). "Novel layered structured bentonite clay-based electrodes for electrochemical sensor applications." *Microchemical Journal*, 159, P 105441.

- 3) N.P. Shetti, **S.J. Malode**, D.S. Nayak, R.R. Naik, G.T. Kuchinad, K.R. Reddy, S.S. Shukla and T.M. Aminabhavi (2020). "[Hetero-nanostructured iron oxide and bentonite clay composite assembly for the determination of an antiviral drug acyclovir.](#)" *Microchemical Journal*, 155, P 104727.
- 4) D.R. Kulkarni, **S.J. Malode**, K.K. Prabhu, N.H. Ayachit, R.M. Kulkarni and N.P. Shetti (2020). "[Development of a novel nanosensor using Ca-doped ZnO for antihistamine drug.](#)" *Materials Chemistry and Physics*, 246, P 122791.
- 5) **S.J. Malode**, P.K. Keerthi, N.P. Shetti and R.M. Kulkarni (2020). "[Electroanalysis of carbendazim using MWCNT/Ca-ZnO modified electrode.](#)" *Electroanalysis*.
- 6) N.P. Shetti, M.M. Shanbhag, **S.J. Malode**, R.K. Srivastava and K.R. Reddy (2020). "[Amberlite XAD-4 modified electrodes for highly sensitive electrochemical determination of nimesulide in human urine.](#)" *Microchemical Journal*, 153, P 104389.
- 7) N.P. Shetti, **S.J. Malode**, D.S. Nayak, S.D. Bukkitgar, G.B. Bagihalli, R.M. Kulkarni and K.R. Reddy (2020). "[Novel nanoclay-based electrochemical sensor for highly efficient electrochemical sensing nimesulide.](#)" *Journal of Physics and Chemistry of Solids*, 137, P 109210.
- 8) N.C. Honakeri, **S.J. Malode**, R.M. Kulkarni and N.P. Shetti (2020). "[Electrochemical behavior of diclofenac sodium at coreshell nanostructure modified electrode and its analysis in human urine and pharmaceutical samples.](#)" *Sensors International*, 1, P 100002.
- 9) N.P. Shetti, **S.J. Malode**, D.S. Nayak, G.B. Bagihalli, S.S. Kalanur, R.S. Malladi, C.V. Reddy, T.M. Aminabhavi and K.R. Reddy (2019). "[Fabrication of ZnO nanoparticles modified sensor for electrochemical oxidation of methdilazine.](#)" *Applied Surface Science*, 496, P 143656.
- 10) N.P. Shetti, **S.J. Malode**, S.D. Bukkitgar, G.B. Bagihalli, R.M. Kulkarni, S.B. Pujari and K.R. Reddy (2019). "[Electro-oxidation and determination of nimesulide at nanosilica modified sensor.](#)" *Materials Science for Energy Technologies*, 2(3), P 396-400.
- 11) N.P. Shetti, **S.J. Malode**, D.S. Nayak, K.R. Reddy, C.V. Reddy and K. Ravindranadh (2019). "[Silica gel-modified electrode as an electrochemical sensor for the detection of acetaminophen.](#)" *Microchemical Journal*, 150, P 104206.
- 12) N.P. Shetti, **S.J. Malode**, D.S. Nayak, T.M. Aminabhavi and K.R. Reddy (2019). "[Nanostructured silver doped TiO₂/CNTs hybrid as an efficient electrochemical sensor for detection of anti-inflammatory drug, cetirizine.](#)" *Microchemical Journal*, 150, P 104124.
- 13) N.P. Shetti, **S.J. Malode**, D.S. Nayak and K.R. Reddy (2019). "[Novel heterostructured Ru-doped TiO₂/CNTs hybrids with enhanced electrochemical sensing performance for Cetirizine.](#)" *Materials Research Express*, 6(11), P 115085.
- 14) N.P. Shetti, **S.J. Malode**, D.S. Nayak, C.V. Reddy and K.R. Reddy (2019). "[Novel biosensor for efficient electrochemical detection of methdilazine using carbon nanotubes-modified electrodes.](#)" *Materials Research Express*, 6 (11), P 116308.
- 15) N.P. Shetti, **S.J. Malode**, D.S. Nayak, G.B. Bagihalli, K.R. Reddy, K. Ravindranadh and

- C.V. Reddy (2019). "[A novel biosensor based on graphene oxide-nanoclay hybrid electrode for the detection of Theophylline for healthcare applications.](#)" *Microchemical Journal*, 149, P 103985.
- 16) N.P. Shetti, **S.J. Malode**, P.R. Vernekar, D.S. Nayak, N.S. Shetty, K.R. Reddy, S.S. Shukla and T.M. Aminabhavi (2019). "[Electro-sensing base for herbicide acclonifen at graphitic carbon nitride modified carbon electrode–Water and soil sample analysis.](#)" *Microchemical Journal*, 149, P 103976.
- 17) N.P. Shetti, **S.J. Malode**, D. Ilager, K. Raghava Reddy, S.S. Shukla and T.M. Aminabhavi (2019). "[A novel electrochemical sensor for detection of molinate using ZnO nanoparticles loaded carbon electrode.](#)" *Electroanalysis*, 31(6), P 1040-1049.
- 18) N.P. Shetti, D.S. Nayak, **S.J. Malode**, K.R. Reddy, S.S. Shukla and T.M. Aminabhavi (2019). "[Electrochemical behavior of flufenamic acid at amberlite XAD-4 resin and silver-doped titanium dioxide/amberlite XAD-4 resin modified carbon electrodes.](#)" *Colloids and Surfaces B: Biointerfaces*, 177, P 407-415.
- 19) N.P. Shetti, **S.J. Malode**, R.S. Malladi, S.L. Nargund, S.S. Shukla and T.M. Aminabhavi (2019). "[Electrochemical detection and degradation of textile dye Congo red at graphene oxide modified electrode.](#)" *Microchemical Journal*, 146, P 387-392.
- 20) N.P. Shetti, D.S. Nayak, **S.J. Malode**, R.R. Kakarla, S.S. Shukla and T.M. Aminabhavi (2019). "[Sensors based on ruthenium-doped TiO₂ nanoparticles loaded into multi-walled carbon nanotubes for the detection of flufenamic acid and mefenamic acid.](#)" *Analytica Chimica Acta*, 1051, P 58-72.
- 21) M. Pavamana, N.P. Shetti, **S.J. Malode** and S.D. Bukkitgar (2019). "[Nano level detection and analysis of an antiviral drug at ZnO nanoparticles modified sensor.](#)" *Materials Today: Proceedings*, 18, P 1568-1573.
- 22) R. Hosamani, N.P. Shetti, **S.J. Malode** and S.D. Bukkitgar (2019). "[Nanosilica modified sensor for the electro-oxidation and determination of an antihistamine drug.](#)" *Materials Today: Proceedings*, 18, P 1562-1567
- 23) R.S. Kudchi, N.P. Shetti, **S.J. Malode** and A.B. Todakar (2019). "[Electroanalysis of an antihistamine drug at nano structured modified electrode.](#)" *Materials Today: Proceedings*, 18, P 558-565.
- 24) M.M. Patil, N.P. Shetti, **S.J. Malode**, D.S. Nayak and T.R. Chakklabbi (2019). "[Electroanalysis of paracetamol at nanoclay modified graphite electrode.](#)" *Materials Today: Proceedings*, 18, P 986-993.
- 25) A.A. Janaj, N.P. Shetti, **S.J. Malode**, S.D. Bukkitgar and R.M Kulkarni (2019). "[TiO₂ nanoparticles modified sensor for theophylline drug.](#)" *Materials Today: Proceedings*, 18, P 606-612.
- 26) A.B. Bandi, N.P. Shetti, **S.J. Malode**, S.D. Bukkitgar and R.M. Kulkarni (2019). "[Electroanalysis of 1, 3–dimethylexanthine at zinc oxide nanoparticles modified electrode.](#)" *Materials Today: Proceedings*, 18, P 590-595.
- 27) M. Reddy, N.P. Shetti, D.S. Nayak, **S.J. Malode** and U. Muddapur (2019). "[Electrochemical oxidation of food dye at nanosilica modified carbon electrode.](#)"

Materials Today: Proceedings, 18, P 798-805.

- 28) A. Totaganti, **S.J. Malode**, D.S. Nayak and N.P. Shetti (2019). "[Voltammetry and analytical applications of hydrochlorothiazide at graphene oxide modified glassy carbon electrode.](#)" *Materials Today: Proceedings*, 18, P 542-549.
- 29) K.C. Naik, N.P. Shetti, S.D. Bukkitgar, **S.J. Malode** and H.P. Uskaikar (2019). "[Voltammetric sensor for secretolytic agent ambroxol at titanium dioxide nanoparticles modified electrode.](#)" *Materials Today: Proceedings*, 18, P 941-946.
- 30) R.M. Yaragatti, **S.J. Malode**, N.P. Shetti, D.S. Nayak, R.M. Kulkarni, S.B. Halbhavi, A.F. Dandin, D.C. Idli, S.S. Kalmani and V.A. Randewadi (2019). "[A novel sensor based on graphene oxide nanoparticles for the detection and analysis of an antihistamine drug.](#)" *Materials Today: Proceedings*, 18, P 780-787.
- 31) N.G. Talikoti, U.S. Devarushi, S.M. Tuwar, N.P. Shetti and **S.J. Malode** (2019). "[Electrochemical behavior of mefenamic acid at graphene oxide modified carbon paste electrode.](#)" *Materials Today: Proceedings*, 18, P 582-589.
- 32) N. Navelkar, N.P. Shetti, **S.J. Malode** and R.M. Kulkarni (2019). "[ZnO nanoparticles modified sensor for the electroanalysis of thiosalicylic acid.](#)" *Materials Today: Proceedings*, 18, P 710-716.
- 33) U.S. Devarushi, N.P. Shetti, **S.J. Malode** and S.M. Tuwar (2019). "[Electro oxidation and analytical applications of nimesulide at graphene oxide and reduced graphene oxide modified carbon paste electrode.](#)" *Materials Today: Proceedings*, 18, P 751-758.
- 34) **S.J. Malode**, N.P. Shetti and R.M. Kulkarni (2019). "[Voltammetric detection and determination of mefenamic acid at silver-doped TiO₂ nanoparticles modified electrode.](#)" *Materials Today: Proceedings*, 18, P 671-678.
- 35) H.P. Uskaikar, N.P. Shetti, S.D. Bukkitgar, **S.J. Malode**, N.V. Jamakandi and T.M. Manu (2019). "[Applications of zinc oxide nanoparticles as an electrode modifier for ambroxol.](#)" *Materials Today: Proceedings*, 18, P 963-967.
- 36) A.R. Kulkarni, N.P. Shetti, **S.J. Malode** and R.M. Kulkarni (2019). "[Development of a sensor for thiosalicylic acid at MWCNT modified gold.](#)" *Materials Today: Proceedings*, 18, P 723-730.
- 37) A. Mishra, A. Mehta, S. Basu, **S.J. Malode**, N.P. Shetti, S.S. Shukla, M.N. Nadagouda and T.M. Aminabhavi (2018). "[Electrode materials for lithium-ion batteries.](#)" *Materials Science for Energy Technologies*, 1 (2), P 182-187.
- 38) H.P. Uskaikar, N.P. Shetti and **S.J. Malode** (2018). "[Electrocatalytic reduction of oxygen on Co₃O₄: Effects of processing method.](#)" *Materials Science for Energy Technologies*, 1 (2), P 129-135.
- 39) N.P. Shetti, D.S. Nayak and **S.J. Malode** (2018). "[Electrochemical behavior of azo food dye at nanoclay modified carbon electrode-a nanomolar determination.](#)" *Vacuum*, 155, P 524-530.
- 40) N.P. Shetti, D.S. Nayaka, **S.J. Malode** and R.M. Kulkarni (2018). "[An enhanced sensing platform for clozapine at 2.0% silver doped TiO₂ nanoparticles-A sensitive detection.](#)"

Materials Today: Proceedings, 5 (10), P 21271-21278.

- 41) N.P. Shetti, D.S. Nayak, **S.J. Malode** and R.M. Kulkarni (2018). "[Fabrication of MWCNTs and Ru doped TiO₂ nanoparticles composite carbon sensor for biomedical application.](#)" *ECS Journal of Solid State Science and Technology*, 7 (7), P Q3070-Q3078.
- 42) N.P. Shetti, D.S. Nayak, **S.J. Malode**, R.M. Kulkarni, D.B. Kulkarni, R.A. Teggi and V.V. Joshi (2017). "[Electrooxidation and determination of flufenamic acid at graphene oxide modified carbon electrode.](#)" *Surfaces and Interfaces*, 9, P 107-113.
- 43) N.P. Shetti, D.S. Nayak, **S.J. Malode** and R.M. Kulkarni (2017). "[An electrochemical sensor for clozapine at ruthenium doped TiO₂ nanoparticles modified electrode.](#)" *Sensors and Actuators B: Chemical*, 247, P 858-867.
- 44) N.P. Shetti, D.S. Nayak, **S.J. Malode** and R.M. Kulkarni (2017). "[Nano molar detection of acyclovir, an antiviral drug at nanoclay modified carbon paste electrode.](#)" *Sensing and Bio-sensing research*, 14, P 39-46.
- 45) N.P. Shetti, D.S. Nayak, **S.J. Malode** and R.M. Kulkarni (2017). "[Electrochemical sensor based upon ruthenium doped TiO₂ nanoparticles for the determination of flufenamic acid.](#)" *Journal of The Electrochemical Society*, 164 (5), P B3036-B3042.
- 46) N.P. Shetti, **S.J. Malode** and S.T. Nandibewoor (2015). "[Electro-oxidation of captopril at a gold electrode and its determination in pharmaceuticals and human fluids.](#)" *Analytical Methods*, 7 (20), P 8673-8682.
- 47) **S.J. Malode** and S.T. Nandibewoor (2013). "[Electrochemical oxidation and determination of nimesulide using a carbon paste electrode.](#)" *Zeitschrift für Physikalische Chemie*, 227 (1), P 73-88.
- 48) **S.J. Malode** and S.T. Nandibewoor (2013). "[Electro-oxidation of nimesulide at gold electrode and its determination in pharmaceutical dosage form and human biological fluid.](#)" *Asian Journal of Pharmaceutical and Clinical Research*, 6, P 71-76.
- 49) N.P. Shetti, **S.J. Malode** and S.T. Nandibewoor (2012). "[Electrochemical behavior of an antiviral drug acyclovir at fullerene-C60-modified glassy carbon electrode.](#)" *Bioelectrochemistry*, 88, P 76-83.
- 50) **S.J. Malode**, N.P. Shetti and S.T. Nandibewoor (2012). "[Voltammetric behavior of theophylline and its determination at multi-wall carbon nanotube paste electrode.](#)" *Colloids and Surfaces B: Biointerfaces*, 97, P 1-6.
- 51) **S.J. Malode**, N.P. Shetti and S.T. Nandibewoor (2012). "[Mechanistic aspects of Os \(VIII\) catalysed oxidation of loop diuretic drug furosemide by Ag \(III\) periodate complex in aqueous alkaline medium.](#)" *Journal of Chemical Sciences*, 124 (2), P 421-430.
- 52) J.C. Abbar, **S.J. Malode** and S.T. Nandibewoor (2012). "[Electrochemical determination of a hemorheologic drug, pentoxifylline at a multi-walled carbon nanotube paste electrode.](#)" *Bioelectrochemistry*, 83, P 1-7.
- 53) **S.J. Malode**, J.C. Abbar, N.P. Shetti and S.T. Nandibewoor (2012). "[Voltammetric oxidation and determination of loop diuretic furosemide at a multi-walled carbon nanotubes paste electrode.](#)" *Electrochimica acta*, 60, P 95-101.

- 54) **S.J. Malode**, N.P. Shetti and S.T. Nandibewoor (2011). "[Os \(VIII\)/Ru \(III\) Catalysed Oxidation of L-Valine by Ag \(III\) Periodate Complex in Aqueous Alkaline Medium: A Comparative Kinetic Study.](#)" *Catalysis letters*, 141 (10), P 1526-1540.
- 55) N.P. Shetti, **S.J. Malode** and S.T. Nandibewoor (2011). "[Oxidation of 6-aminopenicillanic acid by an alkaline copper \(III\) periodate complex in the absence and presence of ruthenium \(III\) as a homogeneous catalyst.](#)" *Polyhedron*, 30 (11), P 1785-1798.
- 56) **S.J. Malode**, J.C. Abbar and S.T. Nandibewoor (2011). "[Mechanistic investigations of ruthenium \(III\) catalyzed oxidation of pentoxifylline by copper \(III\) periodate complex in aqueous alkaline medium.](#)" *Monatshefte für Chemie-Chemical Monthly*, 142 (5), P 469-479.
- 57) **S.J. Malode**, N.P. Shetti and S.T. Nandibewoor (2011). "[Mechanistic aspects of oxidation of loop diuretic drug furosemide by Ag \(III\) periodate complex in alkali media: A kinetic approach.](#)" *Main Group Chemistry*, 10 (3, 4), P 215-227.
- 58) J.C. Abbar, **S.J. Malode** and S.T. Nandibewoor (2010). "[Osmium \(VIII\) catalyzed and uncatalyzed oxidation of a hemorheologic drug Pentoxifylline by alkaline copper \(III\) periodate complex: A comparative kinetic and mechanistic approach.](#)" *Polyhedron*, 29 (15), P 2875-2883.
- 59) **S.J. Malode**, J.C. Abbar and S.T. Nandibewoor (2010). "[Mechanistic aspects of uncatalyzed and ruthenium \(III\) catalyzed oxidation of DL-ornithine monohydrochloride by silver \(III\) periodate complex in aqueous alkaline medium.](#)" *Inorganica Chimica Acta*, 363 (11), P 2430-2442.
- 60) J.C. Abbar, **S.J. Malode** and S.T. Nandibewoor (2010). "[Kinetic and Mechanistic Aspects of Osmium \(VIII\) Catalyzed Oxidation of DL-ornithine by Copper \(III\) Periodate Complex in Aqueous Alkaline Medium.](#)" *Zeitschrift für Physikalische Chemie*, 224 (6), P 865-882.
- 61) **S.J. Malode**, J.C. Abbar and S.T. Nandibewoor (2010). "[Osmium \(VIII\) Catalyzed Oxidation of DL-Ornithine Monohydrochloride by a New Oxidant, Diperiodatoargentate \(III\) in Aqueous Alkaline Medium.](#)" *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry*, 40 (4), P 246-256.
- 62) **S.J. Malode**, N.P. Shetti and S.T. Nandibewoor (2010). "[Thermodynamic quantities for the different steps involved in the oxidation of the drug ketorolac by Copper \(III\) periodate complex in aqueous alkaline medium: A mechanistic approach.](#)" *Journal of solution chemistry*, 39 (3), P 417-430.
- 63) J.C. Abbar, **S.J. Malode** and S.T. Nandibewoor (2009). "[Mechanistic aspects of uncatalyzed and ruthenium \(III\) catalyzed oxidation of DL-ornithine by copper \(III\) periodate complex in aqueous alkaline medium: A comparative kinetic study.](#)" *Journal of Molecular Catalysis A: Chemical*, 313(1-2), P 88-99.
- 64) **S.J. Malode**, N.P. Shetti and S.T. Nandibewoor (2009). "[Mechanistic Investigations on the Oxidation of L-valine by Ag \(III\) Periodate Complex in Alkali Media: a Kinetic Approach.](#)" *Acta Chimica Slovenica*, 56, P 936-945.

Book Chapters and Review Articles

- 65) N.P. Shetti, **S.J. Malode**, S. Roy, P. Chandra, K.R. Reddy and S. Chatterjee.

“Electroanalytical techniques for investigating Biofilms: Applications in biosensing and biomolecular interfacing.” *Nanomaterials in Diagnostic Tools and Devices*, 2020, P 293-329.

- 66) S. Roy, **S.J. Malode**, N.P. Shetti and P. Chandra, “[Modernization of Biosensing Strategies for the Development of Lab-on-Chip Integrated Systems.](#)” *Bioelectrochemical Interface Engineering*, 2019, P 325-342.
- 67) B.S. Dakshayini, K.R. Reddy, A. Mishra, N.P. Shetti, **S.J. Malode**, S. Basu, S. Naveen and A.V. Raghu (2019). “[Role of conducting polymer and metal oxide-based hybrids for applications in amperometric sensors and biosensors.](#)” *Microchemical Journal*, P 7-24.
- 68) A. Mishra, A. Mehta, S. Basu, **S.J. Malode**, N.P. Shetti, S.S. Shukla, M.N. Nadagouda and T.M. Aminabhavi (2018). “[Electrode materials for lithium-ion batteries.](#)” *Materials Science for Energy Technologies*, 1(2), 182-187.