

Research Publications

S.No	Title of the Paper	Name of the Authors	Name of the Journal	Year of Publication	Article Link
1.	Generating monomeric 5-coordinated microperoxidase-11 using carboxylic acid functionalized silver nanoparticles: A surface-enhanced resonance Raman scattering analysis	Govindasamy Kalaivani, Arumugam Sivanesan, Ayyadurai Kannan, Ranganathan Sevvel.	Colloids and Surfaces B: Biointerfaces	2016	http://dx.doi.org/10.1016/j.colsurfb.2016.07.017
2.	A highly selective and simultaneous determination of ascorbic acid, uric acid and nitrite based on a novel poly-N-acetyl-L-methionine (poly-NALM) thin film	Ayyadurai Kannan, Arumugam Sivanesan, Govindasamy Kalaivani, Arumugam Manivelc, Ranganathan Sevvel	RSC Advances	2016	https://doi.org/10.1039/C6RA18440E
3.	A new class of electropolymerized conducting film from the pyrimidine family for the simultaneous determination of ascorbic acid and dopamine	Ayyadurai Kannan, Arumugam Sivanesan, Govindasamy Kalaivania, Ranganathan Sevvel.	RSC Advances	2016	https://doi.org/10.1039/C6RA21549A
4.	Gold nanoparticles embedded electropolymerized thin film of pyrimidine derivative on glassy carbon electrode for highly sensitive detection of L-cysteine	Ayyadurai Kannan, Ranganathan Sevvel	Materials Science and Engineering C	2017	https://doi.org/10.1016/j.msec.2017.04.105
5.	A highly selective and simultaneous determination of paracetamol and dopamine using poly-4-amino-6-hydroxy-2-mercaptopurimidine (Poly-AHMP) film modified glassy carbon electrode	Ayyadurai Kannan, Ranganathan Sevvel	Journal of Electroanalytical Chemistry	2017	http://dx.doi.org/10.1016/j.jelechem.2017.03.002
6.	Highly active 3-dimensional cobalt oxide nanostructures on the flexible	Palanisamy Kannan, Thandavarayan Maiyalagan, Enrico Marsili, Srabanti Ghosh, Longhua Guo, Youju Huang,	Analyst	2017	https://doi.org/10.1039/C7AN01084B

	carbon substrates for enzymeless glucose sensing	Jahangir Ahmed Rather, Dharmaraj Thiruppathi, Joanna Niedziolka-Jönsson, Martin Jönsson-Niedziolka.			
7.	Iron (III)-salen ion catalyzed s-oxidation of L-cysteine and s-alkyl-L-cysteines by H ₂ O ₂ :Spectral, kinetic and electrochemical study	Periyakaruppan Karuppasamy, Dharmaraj Thiruppathi, Muniyandi Ganesan, Thangamuthu Rajendran. Seenivasan Rajagopal, Veluchamy Kamaraj Sivasubramanian.	Polyhedron	2019	https://doi.org/10.1016/j.poly.2018.11.019
8.	Synthesis, photophysics and the binding studies of rhenium(I) diimine surfactant complexes with serum albumins: A spectroscopic and docking study approach	Gopalakrishnan Balakrishnana, Thangamuthu Rajendrana, Krishnan Senthil Murugana, Muniyandi Ganesana, Veluchamy Kamaraj Sivasubramaniana, Seenivasan Rajagopala	Journal of Luminescence	2019	https://doi.org/10.1016/j.jlumin.2018.08.078
9.	Fabrication of an electrochemical sensor based on gold nanoparticles functionalized polypyrrole nanotubes for the highly sensitive detection of L-dopa	Ayyadurai Kannana, Sivaprakasam Radhakrishnan	Materials Today Communications	2020	https://doi.org/10.1016/j.mtcomm.2020.101330
10.	Simple and selective optical biosensor using Ultrasonicator synthesis of (E)-5-((anthracen-9-ylmethylene) amino)-2,3-dihydrophthalazine-1,4-dione for direct detection of ascorbic acid in vegetables and fruits.	Shenbagavalli Kathiravan, Ellairaja Sundaram, Bella Antony Paulraj, Princy Merlin Johnson, Sheng-Tung Huang, Veerappan Mani, Vairathevar Sivasamy Vasantha.	Food Chemistry	2020	https://doi.org/10.1016/j.foodchem.2020.127150
11.	A simple and fast protocol for the synthesis of 2-amino-4-(4-formylphenyl)-4H-chromene-3-carbonitrile to develop an optical	Kathiravan Shenbagavalli, Shiv Kumar Yadav, Periyasamy Ananthappan, Ellairaja Sundaram, Sarkaraismay	New J. Chem	2020	https://doi.org/10.1039/D0NJ04103C

	immunoassay for the quantification of botulinum neurotoxin type F	Ponmariappan and Vairathevar Sivasamy Vasantha.			
12.	A Facile Fabrication of Polyethionine Film on Glassy Carbon Electrode for Simultaneous and Sensitive Detection of Dopamine and Paracetamol	Ayyadurai Kannan, Seenivasan Manojkumar, Sivaprakasam Radhakrishnan	Electroanalysis	2021	https://doi.org/10.1002/ela.n.202060451
13.	Electrocatalytic oxidation of L-Cysteine, L-methionine and Methionine-Glycine Using [Oxoiron(IV)-Salen] Ion Immobilized Glassy Carbon Electrode	Periyakaruppan Karuppasamy, Dharmaraj Thiruppathi, Muniyandi Ganesan, Thangamuthu Rajendran, Seenivasan Rajagopal, Veluchamy Kamaraj Sivasubramanian & Varatharaj Rajapandian	Electrocatalysis	2021	https://doi.org/10.1007/s12678-021-00652-z
14.	Insight into structural aspects and study of reaction kinetics of model [oxo(salen)iron(IV)] complexes with dipeptides.	Periyakaruppan Karuppasamy, Dharmaraj Thiruppathi, Jeyaraj Vijaya Sundar, Muniyandi Ganesan, Thangamuthu Rajendran, Sher Singh Meena, Seenivasan Rajagopal, Veluchamy Kamaraj Sivasubramanian, Varatharaj Rajapandian.	Polyhedron	2021	https://doi.org/10.1016/j.poly.2020.114952
15.	Colorimetric detection and biomagnification of bisphenol A in fish organs and water sources using 3',6'-bis(diethylamino)-2-((3,4,5trimethyl benzylidene) amino) spiro [isoindoline -1,9'-xanthen]-3-one (BTSIXO)-Fe ³⁺ ion conjugate	Ellairaja Sundaram, Abhijit Mannab, Karthika Lakshmi Servarayan, Vairathevar Sivasamy Vasantha.	Food Chemistry	2021	https://doi.org/10.1016/j.foodchem.2020.128627
16.	Enhancement of protection of copper through electropolymerised	K Vinothkumar, G Rajkumar, MG Sethuraman	Materials Chemistry and Physics	2021	https://doi.org/10.1016/j.matchemphys.2020.123987

	poly-2-amino-1, 3, 4-thiadiazole and its composite films				
17.	Effect of Sodium Dodecyl Sulfate on the Photoinduced Electron Transfer Reactions of Ruthenium (II)–Polypyridine Complexes with Phenolate Ions	T Rajendran, S Rajagopal, C Srinivasan, G Balakrishnan, VK Sivasubramanian, M Ganesan	Russian Journal of Physical Chemistry A	2021	https://doi.org/10.1134/S036024421100216
18.	Optical Detection of Thiocyanate in Human Saliva based on the Colorimetric response of (2-(2-hydroxyphenyl)-1H-benzo[d]imidazol-5-yl)(phenyl)methanone (HBPM)/Co ²⁺ ions Conjugate.	Ellairaja Sundaram, Karthika Lakshmi Servarayan, Vairathevar Sivasamy Vasantha.	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	2022	https://doi.org/10.1016/j.saa.2021.120423
19.	First Organic Fluorescent Immunoassay for the Detection of Enterobactercloacaein Food Matrixes	Kathiravan Shenbagavallia, Kannan Suganyab, Ellairaja Sundaram, Marudha muthu Murugan, Vairathevar Sivasamy Vasantha.	Food Chemistry	2022	(ACCEPTED)