

### Abebe Belay Gemta

#### **Editor**

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#### **Publications List**

(39 articles on SCI and reputable journals (about 48,000 reads and 341 citations))

##### Books

1. Abebe Belay (2010), Spectroscopy of Major Biochemical Compounds in Coffee Beans, Publisher LAP LAMBERT Academic Publishing, Germany.
2. Abebe Belay (2010) Measurement of Caffeine in Coffee Beans by UV-Vis Spectroscopy: Theoretical and Experimental Approach, LAP LAMBERT Academic Publishing, Germany.
3. Abebe Belay (2010) Fluorescence and Electron Paramagnetic Resonance (EPR) Spectroscopy: Basic principles, and its application in biological systems, LAP LAMBERT Academic Publishing, Germany.
4. Abebe Belay (2011) Introduction to Laser Physics, Adama University, Ethiopia

##### Book Chapter

1. Abebe Belay (2012) Properties and Analysis of Caffeine and Chlorogenic Acids in Coffee Beans, Coffee Consumption and Health, Nova Publisher, Newyork

##### Articles on Journals

- Semahegn Asemare, Abebe Belay A.R. Chandra Reddy, (2020) Synthesis and characterization of zinc oxide nanoparticles for UV-Vis radiation blockers in textiles, under review
- Abebe Belay, Melaku Mekuria and Getachew Adam (2020). Synthesis and characterizations of zinc oxide nanoparticles for UV light absorbers and antibacterial activities in cotton textiles, submitted
- Mideksa Kasahu, Alemayhu Yadate, Abebe Belay, Zerihun Belay (2020), Antimicrobial Activity of Chemical, Thermal and Green Route-derived Zinc Oxide Nanoparticles: A Comparative Analysis, Nano Biomedicine and Nanotechnology Vol 12(1):47-56
- Demirew Abera, Hailemikael Tesso, Abebe Belay (2019) Synthesis of Some Amidoalkyl naphthol and Benzoxanthene Derivatives by Zinc Oxide Nanoparticles Catalyst Under Solvent Free Condition and Evaluation of Their Antimicrobial and Antioxidant Activities, Chemistry and Materials Research, Vol.11 No.7, DOI: 10.7176/CMR
- Abebe Belay Bulcha Bekele, A.R.Chandra Reddy (2019). Effects of Temperatures and Polyvinyl Alcohol concentrations in the Synthesis of Zinc Oxide Nanoparticles, Digest Journal of nanomaterials and Biostructure, Vol 14(1), 2019:51-60
- Dinka Mulugeta, Bedasa Abdisa, Abebe Belay, Milkyas Endale (2018). Synthesis of Chalcone and Flavanone Derivatives using ZnO Nanoparticle as Catalyst for Antibacterial Activity, Chemistry and Materials Research, Vol.10 No.6s, 2018
- Abebe Belay and Gido Assefa (2018). Concentration, Wavelength and Temperature Dependent Refractive Index of Sugar Solutions and Methods of Determination Contents of Sugar in Soft Drink Beverages, Journal of Lasers, Optics and Photonics, Volume 5, Issue 2, 1000187 DOI: 10.4172/2469-410X.1000187
- Henok Habte, Abebe Belay, Getahun Kitilla, Gelana Amente (2018). The Effect of Cross-Sectional Area

- and Height of Soil on Primary Wastewater Treatment, *International Journal of Engineering Science and Computing*, Volume 8 Issue No.7
- Segedie Getie, A. R. Chandra Reddy, Zerihun Belay, Abebe Belay (2017) Synthesis and Characterizations of Zinc Oxide Nanoparticles for Antibacterial Applications, *Nanomedicine and Nanotechnology* S8: 004. doi:10.4172/2157-7439.S8-004
  - Bereket Dalga, Abebe Belay (2017) Study the self-association of caffeine and chlorogenic acid and their hetero-association with methylene blue using spectrophotometric method, *ROMANIAN J. BIOPHYS.*, Vol. 27, No. 1–2, P. 35–53
  - A Abraha, AV Gholap, A Belay, Determinations of noroxacin complexes with caffeine and its optical transition probabilities using UV-Vis spectroscopy, *IJPS*, 11(21) (2017) 269-278
  - Yilkal Dessie, Abebe Belay, Solomon Girmay Optical Photocatalytic Degradation of Methylene Blue Using Lignocellulose Modified TiO<sub>2</sub>, DOI: 10.11648/j.ijpp.20170203.12
  - Abebe Belay, Hyung Kook Kim, Yoon-Hwae Hwang (2017) Spectroscopic Study of Binding of Chlorogenic Acid with the Surface of ZnO Nanoparticles *Russian Journal of Physical Chemistry* Volume 91, Issue 9, pp 1781–1790
  - A Abraha, AV Gholap, A Belay, Investigation of self-association, optical transition probability and hetero-association with chlorogenic acid of nicotinamide using UV-Vis spectroscopy", *IJPS*, 11(21) (2017) 269-278
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  - Abebe Belay, Ermias Libindengle, Hyung Kook Kim , Yoon-Hwae Hwang (2014) Solvent Polarity Effects on the Absorption and Fluorescence Spectra of Chlorogenic (CGA) and Caffeic Acid (CA) Compounds: Determination of the Ground and Excited State Dipole Moments, *Journal of Luminescence*: 31(1);118-126; (2016)
  - Abebe Belay The hetero-association of caffeine with 5-caffeoylquinic acid and Ethidium Bromide in aqueous solution, *Journal of Biological Physics and Chemistry* vol. 13(1) (2013) 30-35
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  - Abebe Belay Hetero-Association of Caffeine (CA) with Polyphenols and Drugs, *J. Biol. Chem. Research*. Vol. 30(1) (2013) 144-152
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  - Abebe Belay Self-association, Sodium ions Complexation, and Optical Transition Probabilities of Caffeic Acid Determined by Spectrophotometer, *Journal of Biological Physics and Chemistry*, 12 (2012) pp 23-28.
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- Abebe Belay Msc thesis "Standard procedures to determine the percentage of caffeine in coffee seeds by UV-vis spectrophotometer." AAU, Ethiopia
- Abebe Belay, Kasshun Ture Thermal and optical properties of caffeine and coffee seeds by Fluorescence spectroscopy, and IR unpublished paper