



Gilles K. Kouassi, Ph.D.
Associate Professor of Physical Chemistry
ASQ Certified Manager of Quality /Organizational Excellence (CMQ/OE)

SELECTED PEER-REVIEW PUBLICATIONS

1. **Kouassi, K.G.**, Gogineni, V, Boley, S. M. Microencapsulation of vitamins K into a dual polysaccharide matrix. Effects of pH, ionic strength, glass transition, and water activity on controlled release. *Submitted*
2. **Kouassi K. G**, Gowda N.M., Boley, S. M., et al. 2013. Nano/microencapsulation of functional ingredients and drugs into biopolymers matrices: a study of stability and controlled release. Book Chapter. [ACS symposium series: Advanced in Applied Nanotechnology for Agriculture](http://pubs.acs.org/isbn/9780841228023). [http://pubs.acs.org/isbn/9780841228023 Chapter 13, pp. 221–234.
3. **Kouassi K. G**. Teriveedhi, V., Milby, C., Tarab, A., Boley, S. M., et al. 2012. Nano/Micro-encapsulation of of linoleic acid in biopolymer matrices: effects of the physical state, water, and quercetin on oxidative and thermal stability. *J. Encapsul. Absorp. Sci.* 2. 1-10. [[link](#)]
4. Kolachana, V.S.K. Cholkar, K, Kayani, W., M., **Kouassi, K. G.**, Gowda, N. M. 2012, Oxidative conversion of lactic acid by chloramine-T in sulfuric acid medium: a kinetic and mechanistic study. *Am. J. Chem.* 2, 18-24. [[link](#)]

5. Poloju, S., Cholkar, K, **Kouassi, K. G.** Made Gowda, N. et al. 2012. Oxidation of Lactic Acid by Manganese (III) in Sulfuric Acid Medium: Kinetics and mechanism. *Am. J. Chem.* 2012, 2(3): 58-62.[\[link\]](#)
6. Naini, Y.R., Ahmad, T., **Kouassi, K. G.** Ananda, S. Netkal M. Made Gowda, 2012. Synthesis and Characterization of transition metal complexes of chlorpromazine. *Am. J. Chem.* 2012; 2(4): 181-185. [\[link\]](#)
7. Cholkar, K., **Kouassi, K. G.**, Puttaswamy, C, K.S. Rangappa, K.S., Made Gowda, N. 2012. Ruthenium (III) catalyzed oxidation of indigo carmine by manganese (III) in sulfuric acid medium: a kinetic and mechanistic study". *Oxi. Commun.*
8. Cholkar K., **Kouassi, K. G.**, Ananda, S. et al. 2011. Osmium (VIII)-catalyzed kinetics and mechanism of indigo Carmine by Chloramine –B and basic medium. *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-metal Chemistry.* 41, (9), 1126,-1134.[\[link\]](#)]
9. **Kouassi, K. G.** 2011. Magnetic and gold-coated magnetic nanoparticles as tools for biodetection: preparation, characterization, and biosensing applications. *Current Nanoscience.* 7, 4, 510-523.[\[link\]](#)
10. Hayman, M. M., **Kouassi K. G.** et al. 2008. Effect of water activity on the activity of Lactase dehydrogenase and growth of *Listeria monocytogenes* upon high pressure treatments. *Int .J. Food Microbiol.* 124, (1) 21-26.[\[link\]](#)
11. **Kouassi, K. G.**, Wang, P., et al. 2007. Aptamer-mediated magnetic and gold coated magnetic nanoparticles as detection assay for prion protein assessment. *Biotechnol. Prog.* 23, 1239-1244. [\[link\]](#)
12. **Kouassi, K. G.**, Anantheswaran S. et al. D. J. 2007. Investigating the effects of high pressure processing on activity and structural changes of alkaline phosphatase and L-lactate dehydrogenase in milk and buffers. *J. Agric. Food Chem.* 55, 9520-9529. [\[link\]](#)
13. **Kouassi, K. G.** Irudayaraj J. 2006. Magnetic and gold coated magnetic nanoparticles as a DNA sensor. *Anal. Chem.* 78, 3234-3241. [\[link\]](#) [Designated # 1 Most Accessed Article by readers of *Analytical Chemistry*, a journal of the American Chemical Society (ACS) [\[link\]](#) and 11th of 100 best articles in nanomedicine by *Ion Channel Press*.

14. **Kouassi, K. G.** Irudayaraj, J. 2006. A nanoparticles-based immobilization assay for prion kinetics study. *J. Nanobiotechnol.* 2006, 4:8.[\[link\]](#)
15. **Kouassi, K. G.**, Irudayaraj, J., McArty, G. 2005. Activity of glucose oxidase functionalized onto magnetic nanoparticles. *Biomag. Res. and Tech.* 3/1/1. [\[link\]](#) [Ranked # 4 Most Accessed Article in Biomagnetic Research and Technology in 2005].
16. **Kouassi, K. G.**, Irudayaraj, J. MacArty, G. 2005. Activity of cholesterol oxidase bound to magnetic nanoparticles .*J. Nanobiotech.*3:1 [\[link\]](#)
<http://www.jnanobiotechnology.com/content/3/1/1>
17. **Kouassi, K. G.** and Roos, Y. 2002. Glass transition, water, and glycerol effects on Sucrose inversion in pullulan–sucrose systems. *J. Food Sci.* 67, 3402-3407.[\[link\]](#)
18. **Kouassi, K.G.**, Jouppila, K., Roos H. Y. Effects of κ -carrageenan on crystallization and in lactose-sucrose food systems. Proceedings of the *Nordic Rheology Conference*. Nordic Rheology Society. June 2002, Gothenburg, Sweden, June 2002.
19. **Kouassi, K.** and Roos, Y. 2001. Glass transition and water effects on sucrose Inversion in noncrystalline carbohydrate food systems. *Food Res. Int.* 34, 895-901.[\[link\]](#)
20. **Kouassi, K** and Roos, Y. 2000. Glass transition and water effects on sucrose inversion by invertase in lactose-sucrose system. *J. Agric. Food Chem.* 48, 2461-2466.[\[link\]](#)