Engr. Prof. Ernest Teye

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RESEARCH

Interests: Agri-Food Systerms · Postharvest Technology · Food Engineering

Areas: Analytical Chemistry · Biomedical Engineering · Food Science · Molecular Biology · Plant Science · Animal Science and Zoology

RESEARCH SUMMARY

91	2,196	29	57	2.17	21%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 91 publications listed below, 2010–2026. Field-weighted impact is the mean over the 66 works scored for it; 1.00 is the world average for works of the same field, type and year. 14 of the 66 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Associate Professor/DR 2021–2023
Agricultural Engineering, University of Cape Coast School of Agriculture, Cape Coast, Ghana

Senior Research Assistant 2006–2014
Agricultural Engineering, University of Cape Coast, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

Certificate in Postharvest, Physiology and Handling of Fresh Commodities 2017
CINADCO, Telviv, Israel

Food Science and Engineering 2011–2014
School of Food and Biological Engineering, Jiangsu University, Zhenjiang, China

M.Phil Post-harvest Technology 2008–2010
Agricultural Engineering, University of Cape Coast, Cape Coast, Ghana

Ms Research Methodology 2008–2009
University of Pretoria, Pretoria, South Africa

BSc Agriculture 2001–2005
School of Agriculture, University of Cape Coast, School of Agriculture, Cape Coast, Ghana

PUBLICATIONS

Journal articles 86

1. Juliet Dzigbordi Amedekanya, **Ernest Teye**, Enoch T. Quayson, Flavio Odoi-Yorke, Francis Padi Lamptey, Vida Gyimah Boadu (2026). Advances in pre-treatment technologies for rice bran stabilisation: A bibliometric review toward functional food applications. *Food and Humanity*. https://doi.org/10.1016/j.foohum.2026.101357
2. Edward Ken Essuman, Rosemond Godbless Dadzie, Nii Korley Kortei, Clement Okraku Tettey, **Ernest Teye** (2026). Assessment of quality and microbial safety of chilli pepper powder. *Applied Food Research*. https://doi.org/10.1016/j.afres.2026.101806

3. Charles Lloyd Yeboah Amuah, Francis Padi Lamptey, Vida Gyimah Boadu, Jerry Opoku-Ansah, Elliot Kwaku Anyidoho, Haruna Gado Yakubu, Olivia Dzifa Peace Vordoagu, Samuel Sonko Sackey, **Ernest Teye** (2026). Detection of defective cocoa beans using machine learning techniques and NIR spectral data fusion. *Spectrochimica Acta Part A Molecular and Biomolecular Spectroscopy*. https://doi.org/10.1016/j.saa.2026.127792
4. Juliana Opoku Yeboah, Roseline Love MacArthur, Francis Padi Lamptey, Jerry Opoku-Ansah, Charles Lloyd Yeboah Amuah, Robert Agbemafle, Caleb Mawuli Agbale, **Ernest Teye** (2026). Exploring deep learning potential to authenticate vegetable oils and detect fraud using a micro-spectroscopic technique and chemometrics. *Analytical Methods*. https://doi.org/10.1039/d6ay00555a
5. Sandra Ama Kaburi, Gifty Serwaa Otoo, Lariba Cecilia Azumah, Naa Korkoi Ewudzie, Bertina Nyame, Anup Kodape, Francis Padi Lamptey, Francis Appiah, **Ernest Teye** (2026). Pre- and post-harvest practices, aflatoxin risk, and food security under two agroecological zones in Ghana. *Food Safety and Risk*. https://doi.org/10.1186/s40550-026-00148-y
6. Francis Padi Lamptey, **Ernest Teye**, Flavio Odoi-Yorke, Gifty Serwaa Otoo, Ernest Ekow Abano, Charles L. Y. Amuah, Sandra Ama Kaburi (2026). Two decades of near infrared spectroscopy in fruit quality analysis: A bibliometric review of trends, innovations, and future directions. *Journal of Near Infrared Spectroscopy*. https://doi.org/10.1177/09670335261434638
7. **Ernest Teye**, CLY Amuah, J Opoku-Ansah, POW Adueming (2025). Classification of organic and conventional cocoa beans using laser-induced fluorescence spectroscopy combined with chemometric techniques. *Journal of Fluorescence*.
8. Lukeman Haruna, Ernest E. Abano, **Ernest Teye**, Mary Lukeman, Isaac Tukwarlba, Wilson Yeboah, David Nukafo, Kesse J. Agyei (2025). Effects of Different Drying Techniques on the Post-Harvest Quality of Fermented Cocoa Beans in Ghana. *Food Science & Nutrition*. https://doi.org/10.1002/fsn3.70715
9. Francis Padi Lamptey, **Ernest Teye**, Sandra Ama Kaburi, Flavio Odoi-Yorke, Charles Lloyd Yeboah Amuah, Ernest Ekow Abano, Gifty Serwaa Otoo (2025). Feasibility study on fingerprinting organic and conventional mango fruits, chips, and juice using portable near-infrared spectroscopy. *Analytical Methods*. https://doi.org/10.1039/d4ay01813c
10. Joe Stradling, Cassio Lima, Rudi Grosman, Igor Barsukov, Yun Xu, **Ernest Teye**, Chris Elliott, Howbeer Muhamadali, Royston Goodacre (2025). Raman on the palm: handheld Raman spectroscopy for enhanced traceability of palm oil. *npj Science of Food*. https://doi.org/10.1038/s41538-025-00462-3
11. **Ernest Teye**, Charles Lloyd Yeboah Amuah, Vida Gyimah Boadu, Kwadwo Anokye Dompreh, Maxwell Darko Asante, Francis Padi Lamptey, Stephen Narh, Daniel Dzorkpe Gamenyah, George Oduro Nkansah, Selorm Akaba (2025). Rice seed integrity evaluation: Developing a rapid onsite system to check seed fraud using a portable NIR spectroscopic device coupled with smartphone technology. *Food Physics*. https://doi.org/10.1016/j.foodp.2025.100059
12. Selorm Yao-Say Solomon Adade, Hao Lin, Nana Adwoa Nkuma Johnson, Xorlali Nunekpeku, John-Nelson Ekumah, Bridget Ama Kwadzokpui, **Ernest Teye**, Waqas Ahmad, Quansheng Chen (2025). Spectroscopic techniques for edible oil evaluation - Technology overview and recent applications from lab to industry. *Food Control*. https://doi.org/10.1016/j.foodcont.2025.111352
13. Regina Nyorkeh, **Ernest Teye**, Edward Ken Essuman, Simon A. Haughey, Natasha Logan, Christopher T. Elliott (2024). 18 Year analysis of RASFF notifications on Sudan dye adulterated cases in palm oil (2004 to 2022) and the principles of the technique for its detection. *Sustainable Food Technology*. https://doi.org/10.1039/d3fb00190c
14. Selorm Yao-Say Solomon Adade, Hao Lin, Nana Adwoa Nkuma Johnson, Xorlali Nunekpeku, Joshua Harrington Aheto, John-Nelson Ekumah, Bridget Ama Kwadzokpui, **Ernest Teye**, Waqas Ahmad, Quansheng Chen (2024). Advanced food contaminant detection through multi-source data fusion: Strategies, applications, and future perspectives. *Trends in Food Science & Technology*. https://doi.org/10.1016/j.tifs.2024.104851
15. **Ernest Teye**, Charles L.Y. Amuah, Francis Padi Lamptey, Francisca Obeng, Regina Nyorkeh (2024). Artificial intelligence for honey integrity in Ghana: A feasibility study on the use of smartphone images coupled with multivariate algorithms. *Smart Agricultural Technology*. https://doi.org/10.1016/j.atech.2024.100453

16. Rebecca Owusu, Samuel Kwesi Ndzebah Dadzie, **Ernest Teye** (2024). Consumer preference for ripped plantain powder for plantain fritters (kaklo) in Cape Coast, Ghana. *African Journal of Economic and Management Studies*. https://doi.org/10.1108/ajems-06-2024-0333

17. Lukeman Haruna, Ernest E. Abano, **Ernest Teye**, Isaac Tukwarlba, Stephen Adu, Kesse J. Agyei, Eric Kuma, Wilson Yeboah, Mary Lukeman (2024). Effect of partial pulp removal and fermentation duration on drying behavior, nib acidification, fermentation quality, and flavor attributes of Ghanaian cocoa beans. *Journal of Agriculture and Food Research*. https://doi.org/10.1016/j.jafr.2024.101211

18. Lukeman Haruna, Ernest E. Abano, **Ernest Teye**, Isaac Tukwarlba, Wilson Yeboah, Kesse J. Agyei, Mary Lukeman (2024). Effects of Predrying and Spontaneous Fermentation Treatments on Nib Acidification, Fermentation Quality, and Flavour Attributes of Ghanaian Cocoa (Theobroma cacao) Beans. *International Journal of Food Science*. https://doi.org/10.1155/2024/5198607

19. Selorm Yao-Say Solomon Adade, Hao Lin, Xorlali Nunekpeku, Nana Adwoa Nkuma Johnson, Akwasi Akomeah Agyekum, Songguang Zhao, **Ernest Teye**, Sun Qianqian, Bridget Ama Kwadzokpui, John-Nelson Ekumah, Huanhuan Li, Quansheng Chen (2024). Flexible paper-based AuNP sensor for rapid detection of diabenz (a,h)anthracene (DbA) and benzo(b)fluoranthene (BbF) in mussels coupled with deep learning algorithms. *Food Control*. https://doi.org/10.1016/j.foodcont.2024.110966

20. ABANO ERNEST EKOW, CA Wongnaa, **Ernest Teye**, B Adjei-Mensah, B Asante, F Idan, C Antwi (2024). Journal of agriculture and food research. *Journal of Agriculture and Food Research*. https://www.researchgate.net/profile/Lukeman-Haruna/publication/380865604_Effect_of_Partial_pulp_removal_and_fermentation_duration_on_drying_behavior_nib_acidification_fermentation_quality_and_flavor_attributes_of_Ghanaian_cocoa_beans/links/66599179bc86444c721f15c7/Effect-of-Partial-pulp-removal-and-fermentation-duration-on-drying-behavior-nib-acidification-fermentation-quality-and-flavor-attributes-of-Ghanaian-cocoa-beans.pdf

21. Vida Gyimah Boadu, **Ernest Teye**, Francis Padi Lamptey, Charles Lloyd Yeboah Amuah, L.K. Sam-Amoah (2024). Novel authentication of African geographical coffee types (bean, roasted, powdered) by handheld NIR spectroscopic method. *Heliyon*. https://doi.org/10.1016/j.heliyon.2024.e35512

22. ABANO ERNEST EKOW, CLY Amuah, **Ernest Teye** (2024). Smart classification of organic and inorganic pineapple juice using dual NIR spectrometers combined with chemometric techniques. *Applied Food Research*. https://www.sciencedirect.com/science/article/pii/S2772502224000817

23. Francis Padi Lamptey, **Ernest Teye**, Ernest Ekow Abano, Charles L.Y. Amuah (2023). Application of handheld NIR spectrometer for simultaneous identification and quantification of quality parameters in intact mango fruits. *Smart Agricultural Technology*. https://doi.org/10.1016/j.atech.2023.100357

24. Justice Allotey Pappoe, Olivia Mongson, Charles Lloyd Yeboah Amuah, Jerry Opoku-Ansah, Peter Osei-Wusu Adueming, Rabbi Boateng, Moses Jojo Eghan, Samuel Sonko Sackey, Elliot Kwaku Anyidoho, Andrew Atiogbe Huzortey, Benjamin Anderson, Michael Kwame Vowotor, **Ernest Teye** (2023). Classification of Organic and Conventional Cocoa Beans Using Laser-Induced Fluorescence Spectroscopy Combined with Chemometric Techniques. *Journal of Fluorescence*. https://doi.org/10.1007/s10895-023-03499-3

25. **Ernest Teye**, Charles L. Y. Amuah, Tai-Sheng Yeh, Regina Nyorkeh (2023). Nondestructive Detection of Moisture Content in Palm Oil by Using Portable Vibrational Spectroscopy and Optimal Prediction Algorithms. *Journal of Analytical Methods in Chemistry*. https://doi.org/10.1155/2023/3364720

26. Edward Ken Essuman, **Ernest Teye**, Rosemond Godbless Dadzie, Livingstone K. Sam-Amoah (2023). Pesticide Residues and Unauthorized Dyes as Adulteration Markers in Chilli Pepper and Tomato. *International Journal of Food Science*. https://doi.org/10.1155/2023/5337150

27. Vida Gyimah Boadu, **Ernest Teye**, Charles L. Y. Amuah, Francis Padi Lamptey, Livingstone Kobina Sam-Amoah (2023). Portable NIR Spectroscopic Application for Coffee Integrity and Detection of Adulteration with Coffee Husk. *Processes*. https://doi.org/10.3390/pr11041140

28. **Ernest Teye**, Charles L. Y. Amuah, Kofi Atiah, Ransford Opoku Darko, Thomas Abindaw, Kwadwo Kusi Amoah, Michael Miyittah, Emmanuel Afutu, Rebecca Owusu (2023). Quick Determination of Soil Quality Using Portable Spectroscopy and Efficient Multivariate Techniques. *Journal of Spectroscopy*. https://doi.org/10.1155/2023/2024318

29. Edward Ken Essuman, **Ernest Teye**, Livingstone K. Sam-Amoah, Charles L.Y. Amuah (2023). Rapid and non-destructive prediction of adulterated chilli powder by employing pocket-sized NIR spectrometer and chemometrics. *Infrared Physics & Technology*. https://doi.org/10.1016/j.infrared.2023.104961

30. Jerry Opoku-Ansah, Ewura Seidu Yahaya, Charles Lloyd Yeboah Amuah, Regina Nyorkeh, Agnes Adom-Konadu, Peter Osei-Wusu Adueming, **Ernest Teye** (2022). A feasibility study on the use of a pocket-sized NIR spectrometer and multivariate algorithm to distinguish expired drugs from unexpired ones. *Analytical Methods*. https://doi.org/10.1039/d2ay00541g

31. Edward Ken Essuman, **Ernest Teye**, Rosemond Godbless Dadzie, Livingstone K. Sam-Amoah (2022). Consumers' Knowledge of Food Adulteration and Commonly Used Methods of Detection. *Journal of Food Quality*. https://doi.org/10.1155/2022/2421050

32. **Ernest Teye**, Charles L. Y. Amuah, Kofi Atiah, Ransford Opoku Darko, Kwadwo Kusi Amoah, Emmanuel Afutu, Rebecca Owusu (2022). Feasibility Study on the Use of a Portable NIR Spectrometer and Multivariate Data Analysis to Discriminate and Quantify Adulteration in Fertilizer. *Journal of Spectroscopy*. https://doi.org/10.1155/2022/1412526

33. **Ernest Teye** (2022). Mini shortwave spectroscopic techniques and multivariate statistical analysis as a tool for testing intact cocoa beans at farmgate for quality control in Ghana. *Infrared Physics & Technology*. https://doi.org/10.1016/j.infrared.2022.104092

34. Vida Gyimah Boadu, **Ernest Teye**, Charles L. Y. Amuah, L. K. Sam-Amoah (2022). Rapid authentication of coffee bean varieties of different forms by using a pocket-sized spectrometer and multivariate data modelling. *Analytical Methods*. https://doi.org/10.1039/d2ay01480g

35. **Ernest Teye**, Charles L.Y. Amuah (2022). Rice varietal integrity and adulteration fraud detection by chemometrical analysis of pocket-sized NIR spectra data. *Applied Food Research*. https://doi.org/10.1016/j.afres.2022.100218

36. Elliot K. Anyidoho, **Ernest Teye**, Robert Agbemafle, Charles L. Y. Amuah, Vida Gyimah Boadu (2021). Application of portable near infrared spectroscopy for classifying and quantifying cocoa bean quality parameters. *Journal of Food Processing and Preservation*. https://doi.org/10.1111/jfpp.15445

37. Elliot K. Anyidoho, **Ernest Teye**, Robert Agbemafle (2021). Differentiation of Organic Cocoa Beans and Conventional Ones by Using Handheld NIR Spectroscopy and Multivariate Classification Techniques. *International Journal of Food Science*. https://doi.org/10.1155/2021/1844675

38. Roseline Love MacArthur, **Ernest Teye**, Sarah Darkwa (2021). Microbial contamination in palm oil selected from markets in major cities of Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2021.e07681

39. Roseline MacArthur, **Ernest Teye**, Sarah Darkwa (2021). Quality and safety evaluation of important parameters in palm oil from major cities in Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2021.e00860

40. **Ernest Teye**, Christabel Irene Deha, Rosemond Dadzie, Roseline Love MacArthur (2020). Delivering the Nutritional Needs by Food to Food Fortification of Staples Using Underutilized Plant Species in Africa. *International Journal of Food Science*. https://doi.org/10.1155/2020/8826693

41. Terence F McGrath, Maeve Shannon, Olivier P Chevallier, Ratnasekhar Ch, Fei Xu, Fanzhou Kong, Hong Peng, **Ernest Teye**, Selorm Akaba, Di Wu, Libiao Wu, Qiang Cai, Doan Duy Le Nguyen, Van Viet Man Le, Sufyan Pandor, Arun P Kapil, Guangtao Zhang, Mary McBride, Christopher T Elliott (2020). Food Fingerprinting: Using a Two-Tiered approach to Monitor and Mitigate Food Fraud in Rice. *Journal of AOAC International*. https://doi.org/10.1093/jaoacint/qsaa109

42. Elliot K. Anyidoho, **Ernest Teye**, Robert Agbemafle (2020). Nondestructive authentication of the regional and geographical origin of cocoa beans by using a handheld NIR spectrometer and multivariate algorithm. *Analytical Methods*. https://doi.org/10.1039/d0ay00901f

43. Roseline Love MacArthur, **Ernest Teye**, Sarah Darkwa (2020). Predicting adulteration of Palm oil with Sudan IV dye using shortwave handheld spectroscopy and comparative analysis of models. *Vibrational Spectroscopy*. https://doi.org/10.1016/j.vibspec.2020.103129

44. Thomas O. S. Akowuah, **Ernest Teye**, Julius Hagan, Kwasi Nyandey (2020). Rapid and Nondestructive Determination of Egg Freshness Category and Marked Date of Lay using Spectral Fingerprint. *Journal of*

Spectroscopy. https://doi.org/10.1155/2020/8838542

45. **Ernest Teye**, Elliot Anyidoho, Robert Agbemafle, Livingstone K. Sam-Amoah, Chris Elliott (2019). Cocoa bean and cocoa bean products quality evaluation by NIR spectroscopy and chemometrics: A review. *Infrared Physics & Technology*. https://doi.org/10.1016/j.infrared.2019.103127
46. Charles L. Y. Amuah, **Ernest Teye**, Francis Padi Lamptey, Kwasi Nyandey, Jerry Opoku-Ansah, Peter Osei-Wusu Adueming (2019). Feasibility Study of the Use of Handheld NIR Spectrometer for Simultaneous Authentication and Quantification of Quality Parameters in Intact Pineapple Fruits. *Journal of Spectroscopy*. https://doi.org/10.1155/2019/5975461
47. **Ernest Teye**, Charles L.Y. Amuah, Terry McGrath, Christopher Elliott (2019). Innovative and rapid analysis for rice authenticity using hand-held NIR spectrometry and chemometrics. *Spectrochimica Acta Part A Molecular and Biomolecular Spectroscopy*. https://doi.org/10.1016/j.saa.2019.03.085
48. **Ernest Teye**, Chris Elliott, Livingstone Kobina Sam-Amoah, Cheetham Mingle (2019). Rapid and nondestructive fraud detection of palm oil adulteration with Sudan dyes using portable NIR spectroscopic techniques. *Food Additives & Contaminants Part A*. https://doi.org/10.1080/19440049.2019.1658905
49. **Ernest Teye**, Robert Agbemafle, Francis Lamptey (2018). Development and Examination of Sweet Potato Flour Fortified with Indigenous Underutilized Seasonal Vegetables. *Beverages*. https://doi.org/10.3390/beverages4010005
50. Fangkai Han, Xingyi Huang, **Ernest Teye** (2018). Novel prediction of heavy metal residues in fish using a low-cost optical electronic tongue system based on colorimetric sensors array. *Journal of Food Process Engineering*. https://doi.org/10.1111/jfpe.12983
51. **Ernest Teye**, RS Amoah, MO Adu (2017). Evaluation and developing simple techniques for assessing Gari adulteration. *Journal of Food Security*. https://www.academia.edu/download/79328761/JFS-5-5-2.pdf
52. **Ernest Teye**, Philip Fiifi Owusu, Ransford Opoku Darko, Frank K. Ackah (2017). Evaluation of composite tea made from roselle (Hibiscus sabdarffa), ginger (Zingiber officinale) and turkey berry (Solanum torvum). https://doi.org/10.25218/ajfia.2017.01.001.06
53. **Ernest Teye** (2016). Corrections to "The Interaction Study of Colorimetric Sensor Array and Volatile Organic Compounds Using Density Functional Theory"[Aug 14 2620-2625]. *IEEE Sensors Journal*. https://ieeexplore.ieee.org/abstract/document/7462351/
54. **Ernest Teye** (2016). Nondestructive authentication of cocoa bean cultivars by FT-NIR spectroscopy and multivariate techniques. *Focus on Sciences*. https://www.academia.edu/download/106376384/007e8abd1fce6c8c5e080aff47b0aa7c06e2.pdf
55. Lei-ming Yuan, Jian-rong Cai, Li Sun, En Han, **Teye Ernest** (2015). Nondestructive Measurement of Soluble Solids Content in Apples by a Portable Fruit Analyzer. *Food Analytical Methods*. https://doi.org/10.1007/s12161-015-0251-2
56. Fangkai Han, Xingyi Huang, **Ernest Teye**, Haiyang Gu (2015). Quantitative Analysis of Fish Microbiological Quality Using Electronic Tongue Coupled with Nonlinear Pattern Recognition Algorithms. *Journal of Food Safety*. https://doi.org/10.1111/jfs.12180
57. **Ernest Teye** (2014). A nondestructive method for fish freshness determination with electronic tongue combined with linear and non-linear multivariate algorithms. *Czech Journal of Food Sciences*. https://doi.org/10.5555/20143415828
58. **Ernest Teye** (2014). A study of the interactions between colorimetric sensor array and volatile organic compounds. *Journal of Computational and Theoretical Nanoscience*. https://ui.adsabs.harvard.edu/abs/2014JCTN...11.2304H/abstract
59. H. Gu, X. Huang, L. Yao, **E. Teye**, Y. Wen (2014). Effects of substitute group, axial ligand and volatile organic compounds on binding ability of colorimetric sensor array. *Materials Technology*. https://doi.org/10.1179/1753555714y.0000000136
60. **Ernest Teye**, Xingyi Huang, Livingstone K. Sam-Amoah, Jemmy Takrama, Daniel Boison, Francis Botchway, Francis Kumi (2014). Estimating cocoa bean parameters by FT-NIRS and chemometrics analysis. *Food Chemistry*. https://doi.org/10.1016/j.foodchem.2014.12.042

61. **Ernest Teye**, Xingyi Huang, Jemmy Takrama, Gu Haiyang (2014). Integrating NIR Spectroscopy and Electronic Tongue Together with Chemometric Analysis for Accurate Classification of Cocoa Bean Varieties. *Journal of Food Process Engineering*. https://doi.org/10.1111/jfpe.12109

62. Xingyi Huang, Riqin Lv, Liya Yao, Chao Guan, Fangkai Han, **Ernest Teye** (2014). Non-destructive evaluation of total volatile basic nitrogen (TVB-N) and K-values in fish using colorimetric sensor array. *Analytical Methods*. https://doi.org/10.1039/c4ay02623c

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64. **Ernest Teye** (2014). Probing the reactions of colorimetric sensor array and volatile organic compounds using time-dependent density-functional theory. *J. Comput. Theor. Nanosci*. https://www.researchgate.net/profile/Ernest-Teye-2/publication/264985443_Probing_the_Reactions_of_Colorimetric_Sensor_Array_and_Volatile_Organic_Compounds_Using_Time-Dependent_Density-Functional_Theory/links/573c690a08ae298602e582dc/Probing-the-Reactions-of-Colorimetric-Sensor-Array-and-Volatile-Organic-Compounds-Using-Time-Dependent-Density-Functional-Theory.pdf

65. Ran Ding, Xingyi Huang, Fangkai Han, Huang Dai, **Ernest Teye**, Fubin Xu (2014). Rapid and nondestructive evaluation of fish freshness by near infrared reflectance spectroscopy combined with chemometrics analysis. *Analytical Methods*. https://doi.org/10.1039/c4ay01839g

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67. Xingyi Huang, **Ernest Teye**, Joshua D. Owusu-Sekyere, Jemmy Takrama, Livingstone K. Sam-Amoah, Liya Yao, Caleb K. Firempong (2014). Simultaneous Measurement of Titratable Acidity and Fermentation Index in Cocoa Beans by Electronic Tongue Together with Linear and Non-linear Multivariate Technique. *Food Analytical Methods*. https://doi.org/10.1007/s12161-014-9862-2

68. **E Teye** (2014). Study on the binding ability of cobalt-porphyrin with small volatile organic compounds based on density functional theory. *Analytical Methods*. https://doi.org/10.5555/20143207473

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71. **Ernest Teye**, Xing-yi Huang, Wu Lei, Huang Dai (2013). Feasibility study on the use of Fourier transform near-infrared spectroscopy together with chemometrics to discriminate and quantify adulteration in cocoa beans. *Food Research International*. https://doi.org/10.1016/j.foodres.2013.11.021

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