



DAFTAR PUSTAKA

- Acharya, U. K., Subedi, P. and Walsh, K. B., 2012, Evaluation of Dry Extract System Involving NIR Spectroscopy (DESIR) for Rapid Assessment of Pesticide Contamination of Fruit Surface, *Am. J. Anal. Chem.*, 3(8), 524-533.
- Ahmad, T., Wani, I. A., Ahmed, J. and Al-Hartomy, O. A., 2014, Effect of Gold Ion Concentration on Size and Properties of Gold Nanoparticles in TritonX-100 Based Inverse Microemulsions, *Appl. Nanosci.*, 4, 491-498.
- Aljabali, A. A. A., Akkam, Y., Alzoubi, M. S., Al-Batayneh, K. M., Al-trad, B., Alrob, O. A., Alkilany, A. M., Benamara, M. and Evans, D. J., 2018, Synthesis of Gold Nanoparticles Using Leaf Extract of *Ziziphus Zizyphus* and Their Antimicrobial Activity, *Nanomater.*, 8(3), 176-186.
- Annur, S., Santosa, S. J., Aprilita, N. H., Phuong, N. T. and Phuocs, N. V., 2018, A Preliminary Research for Selective Detection of Cr(III) in Water Sample, *Asian J. Env. Tech.*, 1(2), 76-83.
- Aragay, G., Pino, F. and Merkoci, A., 2012, Nanomaterials for Sensing and Destroying Pesticides, *Chem. Rev.*, 112, 5317–5338.
- Baek, K. and Patra, J. K., 2015, Novel Green Synthesis of Gold Nanoparticles Using *Citrullus lanatus* Rind and Investigation of Proteasome Inhibitory Activity, Antibacterial, and Antioxidant Potential, *Int. J. Nanomed.*, 10(1), 7253-7264.
- Bala, R., Sharma, R. K. and Wangoo, N., 2014, Highly Sensitive Colorimetric Detection of Etyl Paration Using Gold Nanoprobes, *Sensors Actuators B. Chem.*, 210, 425-430.
- Bala, R., Sharma, R. K. and Wangoo, N., 2015, Development of Gold Nanoparticles-Based Aptasensor for the Colorimetric Detection of Organophosphorus Pesticide Phorate, *Anal. Bioanal. Chem.*, 210, 425-430.
- Bao, J., Hou, C., Chen, M., Li, J., Huo, D., Yang, M., Luo, X. and Lei, Y., 2015, Plant Esterase-Chitosan/Gold Nanoparticles-Graphene Nanosheet Composite-Based Biosensor for the Ultrasensitive Detection of Organophosphate Pesticides, *J. Agric. Food Chem.*, 63 (47), 10319-10326.
- Barman, G., Maiti, S. and Laha, J. K., 2013, Trichloroaceticacid Assisted Synthesis of Gold Nanoparticles and Its Application in Detection and Estimation of Pesticides, *J. Anal. Sci. Technol.*, 4, 1-7.
- Barman, G., Maiti, S. and Laha, J. K., 2013, Bio-fabrication of Gold Nanoparticles Using Aquaous Extract of Red Tomato and Its Use as a Colorimetric Sensor, *Nano. Res. Letter.*, 8, 181-190.
- Bastus, N. G., Merkoci, F., Piella, J. and Puntes, V., 2014, Synthesis of Highly Monodisperse Citrate Stabilized Silver Nanoparticles up to 200 nm: Kinetic Control and Catalytic Properties, *Chem. Mater.*, 26, 2836-2846.



- Buduru, P. and Reddy, S. R., 2016, Oxamic Acid and *p*-Aminobenzoic Acid Functionalized Gold Nanoparticles as A Probe for Colorimetric Detection of Fe³⁺ Ion, *Sensors and Actuators B.*, 237, 935-943.
- Carlo, G. D., Curulli, A., Toro, R. G., Bianchini, C., Caro, T. D., Padeletti, D., Zane, D. and Ingo, G. M., 2012, Green Synthesis of Gold-Chitosan Nanocomposites for Caffeic Acid Sensing, *Langmuir*, 28, 5471-5479.
- Chauhan, V., Tomar, S., Saini, Y. and Tripathi, R. M., 2017, Method Development for Determination of Residual Chlorpyrifos in the Grapes by TLC-Fid, *Egypt J. Foren. Sci.*, 7(30), 107-114.
- Chilumuru, R. M. R., Lakkineni, C. A. K. and Sekharan, C. B., 2015, Determination of Organophosphate Insecticide (Chlorpyrifos) in Cabbage, Cauliflower, and Capsicum by High Performance Liquid Chromatography, *Der Pharm. Lett.*, 7(2), 1-8.
- Cumberland, S. A. and Lead, J. R., 2013, Synthesis of NOM-Capped Silver Nanoparticles: Size, Morphology, Stability and NOM Binding Characteristics, *ACS Sustainable Chem. Eng.*, 1, 817-825.
- Das, M., Shim, K. H., An, S. S. and Yi, D. K., 2011, Review on Gold Nanoparticles and Their Applications, *Toxicol. Environ. Health. Sci.*, 3(4), 193-205.
- Dou, X., Chu, X., Kong, W., Luo, J. and Yang, M., 2015, A Gold-Based Nanobeacon Probe for Fluorescence Sensing of Organophosphorus Pesticides, *Anal. Chim. Acta.*, 891, 291-297.
- Dumur, F., Guerlin, A., Dumas, E., Bertin, D., Gigmes, D. and Mayer, C. R., 2011, Controlled Spontaneous Generation of Gold Nanoparticles Assisted By Dual Reducing and Capping Agents, *Gold Bull.*, 44, 119-137.
- Dunn, G. E. and Kung, F. L., 1965, Effect of Intramolecular Bonding on Ionization Constant of Substituted Salicylic Acid, *Can. J. Chem.*, 88, 1261-1270.
- Eustis, S. and El-Sayed, M., A., 2006, Why Gold Nanoparticles Are More Precious than Pretty Gold: Noble Metal Surface Plasmon Resonance and Its Enhancement of the Radiative and Nonradiative Properties of Nanocrystals of Different Shapes, *Chem. Soc. Rev.*, 35, 209-217.
- Fang, C., Dharmarajan, R., Megharaj, M., and Naidu, R., 2017, Gold Nanoparticle-Based Optical Sensors for Selected anionic Contaminants, *TrAC – Trends Anal. Chem.*, 86, 143-154.
- Fu, X. C., Zhang, J., Tao, Y. Y., Wu, J., Xie, C. G. and Kong, L. T., 2015, Three-Dimensional Mono-6-thio-β-cyclodextrin Covalently Functionalized Gold Nanoparticle/Single-Wall Carbon Nanotube Hybrids for Highly Sensitive and Selective Electrochemical Determination of Methyl Parathion, *Electrochim. Acta*, 153, 12-18.



- Futyra, A. R., Liskiewich, M. K., Sebastian, V., Irusta, S., Arruebo, M., Stochel, G. and Kyziol, A., 2015, Development of Noncytotoxic Chitosan-Gold Nanocomposites as Efficient Antibacterial Materials, *ACS Appl. Mater. Interfaces*, 7, 1087-1099.
- Garcia, M. J. L., Avila, M., Alfonso, E. F. S., Rios, A. and Zougagh, M., 2014, Synthesis of Gold Nanoparticles Using Phenolic Acid and Its Application in Catalysis, *J. Mater. Environ. Sci.*, 5(6), 1919-1926.
- Ge, K., Liu, J., Fang, G., Wang, P., Zhang, D. and Wang, S., 2018, A Colorimetric Probe Based on Functionalized Gold Nanorods for Sensitive and Selective Detection of As(III) Ion, *Sensors*, 18, 2372-2385.
- Gonzalez, A. G. and Herrador, M. A., 2007, A Practical Guide to Analytical Methods Validation, Including Measurement Uncertainty and Accuracy Profiles, *Trends in Anal. Chem.*, 26, 227-238.
- Girrane, A., Corma, A. and Garcia, H., 2008, Gold-Catalyzed Synthesis of Aromatic Azo Compounds from Anilines and Nitroaromatics, *Science*, 322(5908), 1661-1664.
- Gunsolus, I. L., Mousavi, M. P. S., Hussein, K., Buhlmann, P. and Haynes, C. L., 2015, Effect of Humic and Fulvic Acids on Silver Nanoparticle Stability, Dissolution and Toxicity, *Environ. Sci. Technol.*, 49, 8078-8086.
- Handajani, U. and Raharjo, Y., 2017, Determination of Chlorpyrifos Pesticide by Effervescence Liquid Phase Microextraction HPLC UV-Vis, *J. Chem. Tech. Metal.*, 52(6), 1056-1061.
- Hasan, S., 2015, A Review on Nanoparticles: Their Synthesis and Types, *Res. J. Recent. Sci.*, 4, 1-3.
- Herizchi, R., Abbasi, E., Milani, M. and Akbarzadeh, A., 2014, Current Methods for Synthesis of Gold Nanoparticles, *Artif. Cells Nanomed. Biotechnol.*, 141, 1-7.
- Hermita, 2004, Petunjuk Pelaksanaan Validasi Metode dan Cara Perhitungannya, *Majalah Ilmu Kefarmasian*, 1(3), 117-135.
- Jafarizad, A., Safaei, K., Gharibian, S., Omidi, Y. and Ekinci, D., 2015, Biosynthesis and In-Vitro Study of Gold Nanoparticles Using Mentha and Pelargonium Extracts, *Procedia Mater. Sci.*, 11, 224-230.
- Jiang, L., Guan, J., Zhao, L., Li, J. and Yang, W., 2009, pH-Dependent Aggregation of Citrate-Caped Au Nanoparticles Induced by Cu²⁺ Ions: the Competition Effect of Hydroxyl Groups with the Carboxyl Groups, *Colloids Surfaces A Physicochem. Eng. Asp.*, 346, 216-220.
- Jin, W., Huang, P., Chen, Y., Wu, F. and Wan, Y., 2015, Colorimetric Detection of Cr³⁺ Using Gold Nanoparticles Functionalized with 4-amino Hippuric Acid, *J. Nanopart. Res.*, 17, 357-366.



- Jongjinakool, S., Pasalak, K., Bousod N. and Teepoo, S., 2014, Gold Nanoparticles Based Colorimetric Sensor for Cysteine Detection, *Energy Procedia*, 56, 10-18.
- Kaviya, S. and Prasad, E., 2014, Sequential Detection of Fe³⁺ and As³⁺ Ions by Naked Eye Throught Aggregation and Dis-Aggregation of Biogenic Gold Nanoparticles, *Anal. Method*, 7, 168-178.
- Khalil, M. M. H., Ismail, E. H. and El-Magdoub, F., 2012, Biosynthesis of Au Nanoparticles Using Olive Leaf Extract: 1st Nano Updates. *Arab. J. Chem.*, 5(4), 431-437.
- Khan, S., Bakht, J. and Syed, F., 2018, Green Synthesis of Gold Nanoparticles Using Acer Pentapomicum Leaves Extract Its Characterization, Antibacterial, Antifungal and Antioxidant Bioassay, *Dig. J. Nanomater. Bios.*, 13(2), 579-589.
- Kim, H. S., Seo, Y. S., Kim, K., Han, J. W., Park, Y. and Cho, S., 2016, Concentration Effect of Reducing Agents on Green Synthesis of Gold Nanoparticles: Sized, Morphology and Growth Mechanism, *Nano. Res. Lett.*, 11, 230-239.
- Kiran, K., 2013, Detection of Chlorpyrifos Pesticides in Various Water Samples Using Gold Nanoparticles, *Int. J. Res. Eng. Tech.*, 2(11), 218-221.
- Kraynov, A. and Muller, T. E., 2011, Concepts for the Stabilization of Metal Nanoparticles in Ionic Liquids, Applications of Ionic Liquids in Science and Technology, *InTech*, 235-252.
- Kumar, D., Meenan, B. J., Mutreja, I., D'Sa, R. and Dixon, D., 2012, Controlling the Size and Size Distribution of Gold Nanoparticles: A Design of Experiment Study, *Int. J. Nanosci.*, 11(2), 1250-1257.
- Kumari, M., Mishra, A., Pandey, S., Singh, S. P., Chaudhry, V., Mudiam, M. K. R., Shukla, S., Kakkar, P. and Nautiyal, C. S., 2016, Pshyco-Chemical Condition Optimization During Biosynthesis Lead to Development of Improved and Catalytically Efficient Gold Nanoparticles, *Sci. Rep.*, 6, 27575.
- Lata, K., Jaiswal, A. K., Naik, L. and Sharma, R., 2014, Gold Nanoparticles: Preparation, Characterization, and Its Stability in Water, *Nano Trend J. Nanotech. Appl.*, 17(1), 134-144.
- Lehotay, S. J., Kok, A. D., Hiemstra, M. and Bodegraven, P. V., 2005, Validation of A Fast and Easy Methods for Determination of Residues from 229 Pesticides in Fruits and Vegetables Using Gas and Liquid Chromatography and Mass Spectrometric Detection, *J. AOAC Int.*, 88(2), 595-614.
- Leiva, A., Bonardd, S., Pino, M., Saldias, C., Kortaberria, G. and Radic, D., 2015, Improving the Performance of Chitosan in the Synthesis and Stabilization of Gold Nanoparticles, *J. Eur. Polym.*, 68, 419-431.
- Li, S., Goluch, E., Liu, C., Szegedi, S., Shaikh, K., Ahmed, F., Hu, A. and Zhao,



- S., 2010, Gold Nanoparticle Based Biodetection for Chip-Based Portable Diagnosis Systems, *JALA*, 15, 107-113.
- Lisha, K. P., Anshup and Pradeep, T., 2009, Enhanced Visual Detection of Pesticides Using Gold Nanoparticles, *J. Environ. Sci. Health. B.*, 44(7), 697-705.
- Liu, G., Lu, M., Huang, X., Li, T. and Xu, D., 2018, Application of Gold Nanoparticle Colorimetric Sensing to Rapid Food Safety Screening, *Sensors*, 18, 4166-4182.
- Liu, G., Wang, S., Yang, X., Li, T., She, Y., Wang, J., Zou, P., Jin, F., Jin, M. and Shao, H., 2015, Colorimetric Sensing of Antrazine in Rice Sample Using Cysteamine Functionalized Gold Nanoparticles After solid Phase Extraction, *Anal. Methods*, 8, 52-56.
- Liu, R. H., Yang, C., Xu, Y. M., Xu, P., Jiang, H. and Qiao, C. L., 2013, Development of a Whole-Cell Biocatalyst/Biosensor by Display of Multiple Heterologous Proteins on the Escherichia Coli Cell Surface for the Detoxification and Detection of Organophosphates, *J. Agric. Food Chem.*, 61, 7810-7816.
- Liu, X., Luo, L., Zhang, Y. and Ding Y., 2012, Electropolymerization of 4-Aminobenzoic Acid Containing Nano-Au Deposited on Carbon Paste Electrode for Determination of Acetaminophen, *J. Iranian Chem. Res.*, 5(3), 161-171.
- Lu, Y.C. and Chou, K.S., 2008, A Simple and Effective Route for Synthesis of Nano Silver Colloidal Dispersions, *J. Chin. Ins. Chem.*, 39, 673-678.
- Maruyama, T., Fujimoto, Y. and Maekawa, T., 2015, Synthesis of Gold Nanoparticles Using Various Amino Acids, *J. Colloid. Interface Sci.*, 447, 254-257.
- Mauldin, R. E., Primus, T. M., Buettgenbach, T. A. and Johnston, J. J., 2006, A Simple HPLC Methods for the Determination of Chlorpyrifos in the Black Oil Sunflower Seeds, *J. Liq. Chrom. Rel. Technol.*, 29(3), 339-348.
- Miranda-Andrade, J. R., Perez-Gramatgez, A., Pandoli, O., Romani, E. C., Aucelio, R. Q. and Da Silva, A. R., 2016, Spherical Gold Nanoparticles and Gold Nanorods for the Determination of Gentamicin, *Spectrochim. Acta A.*, 172, 195-207.
- Nara, S., Tripathi, V., Singh, H. and Srivastav, G., 2010, Colloidal Gold Probe Based Rapid Immunochromatographic Strip Assay for Cortisol, *Anal. Chim. Acta*, 682 (1-2), 66-71.
- Nordin, N., Yuzof, N. A., Abdullah, J., Radu, S. and Hajian, R., 2016, Characterization of Polylactide-Stabilized Gold Nanoparticles and Its Application in the Fabrication of Electrochemical DNA Biosensors, *J. Braz. Chem. Soc.*, 27(9), 1679-1686.
- Ortiz, M. P., Urzua, C. Z., Acosta, Z. A., Lueje, A. A., Albericio, F. and Kogan,



- M. J., 2017, Gold Nanoparticles as an Efficient Drug Delivery System for GLP-1 Peptides, *Colloids Surf. B.*, 158, 25-32.
- Ozin, G. A., 1992, Nanochemistry: Synthesis in Diminishing Dimensions, *Adv. Mater.*, 4, 612-649.
- Paul, B. and Tiwari, A., 2015, A Brief Review on the Application of the Gold Nanoparticles as Sensor in Multi Dimensional Aspects, *IOSR J. Environ. Sci. Toxicol. Food Tech.*, 1(4), 1-7.
- Pearson, R. G., 1968, Hard and Soft Acids and Bases, HSAB, Part 1: Fundamentals Principles, *J. Chem. Educ.*, 45, 581-587.
- Phan, C. M. and Nguyen, H. M, 2017, On the Role of Capping Agent in Wet Synthesis of Nanoparticles, *J. Phys. Chem. A.*, 121(41), 1089-1108.
- Pinto, V. V., Ferreira, M. J., Silva, R., Santos, H. A., Silva, F. and Pereira, C. M., 2010, Long Time Effect on the Stability of Silver Nanoparticles in Aqueous Medium: Effect of the Synthesis and Storage Conditions, *Colloids Surfaces A Physicochem. Eng. Asp.*, 364, 19-25.
- Polte, J., 2015, Fundamental Growth Principles of Colloidal Metal Nanoparticles – A New Perspective, *Cryst. Eng. Comm.*, 17, 6809-6830.
- Polte, J., Ahner, T. T., Delissen, F., Sokolov, S., Emmerling, F., Thunemann, A. F. and Kraehnert, R., 2010, Mechanism of Gold Nanoparticle Formation in the Classical Citrate Synthesis Method Derived from Coupled In Situ XANES and SAXS Evaluation, *J. Am. Chem. Soc.*, 132, 1296-1301.
- Priecel, P., Salami, H. A., Padilla, R. H., Zhong, Z. and Sanchez, J. A. L., 2016, Anisotropic Gold Nanoparticles: Preparation and Applications in Catalysis, *Chinese. J. Chem.*, 37(10), 1619-1650.
- Rai, A., Prabhune, A. and Perry, C. C., 2010, Antibiotic Mediated Synthesis of Gold Nanoparticles with Potent Antimicrobial Activity and Their Application in Antimicrobial Coatings, *J. Mater. Chem.*, 20, 6789-6798.
- Raveendran, P., Fu, J. and Wallen, S. L., 2003, Completely “Green” Synthesis and Stabilization of Metal Nanoparticles, *J. Am. Chem. Soc.*, 125, 13940-13941.
- Rawat, P., Rajput, Y. S., Bharti, M. K. and Sharma, R., 2016, A Methods for Synthesis of Gold Nanoparticles Using 1-Amino-2-naphthol-4-sulphonic Acid as Reducing Agent, *Curr. Sci.*, 110(12), 2297-2300.
- Riyanto, 2014, *Validasi dan Verifikasi Metode Uji*, Deepublish, Yogyakarta.
- Rohit, J. V., Singhal, R. K., Basu, H. and Kailasa, S. K., 2016, Development of *p*-Nitroaniline Dithiocarbamate Caped Gold Nanoparticles-Based Microvolume UV-Visible Spectrometric Method for Facile and Selective Detection of Quinalphos Insecticide in Environmental Samples, *Sensor. Actuat. B-Chem.* 237, 826-835.
- Scarabelli, L., Grzelcsak, M. and Liz-Marzan, L. M., 2013, Tuning Nanogold Synthesis Through Pre-reduction with Salicylic Acid, *Chem. Mater.*, 25(21),



4232-4238.

- Sha, N., Dingbin, L., Zuo, W., Kaiyong, C. and Yu, J. X., 2011, Utilization of Unmodified Gold Nanoparticles in Colorimetric Detection, *Sci. China Phys. Mech.*, 54(10), 1757-1765.
- Sharma, N., Bhatt, G. and Khotiyal, P., 2015, Gold Nanoparticles Synthesis, Properties, and Forthcoming Applications – A Review, *Indian J. Pharm. Biol. Res.*, 3(2), 13-27.
- Shiraishi, Y., Tanaka, H., Sakamoto, H., Hayashi, N., Kofuji, Y., Ichikawa, S. and Hirai, T., 2017, Synthesis of Au Nanoparticles with Benzoic Acid as Reductant and Surface Stabilizer Promoted Solely by UV Light, *Langmuir*, 33(48), 13797-13804.
- Singh, S., Tripathi, P., Kumar, N. and Nara, S., 2016, Colorimetric Sensing of Malathion Using Palladium-Gold Bimetallic Nanozyme, *Biosensors and Bioelectronics*, 2016, 584-592.
- Subramaniam, C., Tom, R. T. and Pradeep, T., 2005, On the Formation of Protected Gold Nanoparticles from AuCl_4^- by the Reduction Using Aromatic Amines, *J. Nanopart. Res.*, 7, 209-217.
- Sun, Y., 2010, Synthesis of Gold-Amine Nanoparticles of Various Sized Using Two Different Methods, *Thesis*, Jiangnan University.
- Susanthy, D., Santosa, S. J. and Kunarti, E. S., The Synthesis and Stability Study of Silver Nanoparticles Prepared Using *p*-Aminobenzoic Acid as Reducing Agent and Stabilizing Agent, *Indones. J. Chem.*, 18 (3), 421-427.
- Szunerits, S. and Boukherroub, R., 2012, Sensing Using Localized Surface Plasmon Resonance Sensor, *Chem. Commun.*, 48, 8999-9010.
- Syahbirin, G., Purnama, H. and Prijono, D., 2001, Pesticide Residues in Three Kinds of Imported Fruits, *Buletin Kimia*, 1, 113-118.
- Tabrizi, A., Ayhan, F. and Ayhan, H., 2009, Gold Nanoparticle Synthesis and Characterization, *Hacettepe J. Biol. & Chem.*, 37 (3), 217-226.
- Uppal, M. A., Kafizas, A., Ewing, M. B. and Parkin, I., P., 2013, The Room Temperature Formation of Gold Nanoparticles from the Reaction of Cyclohexanone and Auric Acid; A Transition from Dendritic Particles to Compact Shape and Nanoplates, *J. Mater. Chem. A.*, 1, 7351-7359.
- Turkevich, J., Stevenson, P. C. and Hillier, J., 1951, A Study of Nucleation and Growth Processes in the Synthesis of Colloidal Gold, *J. Discuss. Faraday Soc.*, 11, 55-75.
- Vilela, D., Gonzalez, M. C. and Escarpa, A., 2012, Sensing Colorimetric Approaches Based on Gold and Silver Nanoparticles Aggregation: Chemical Creativity Behind the Assay. A Review, *Anal. Chim. Acta.*, 751, 24-43.
- Wagers, K., Chui, T. and Adem, S., 2014, Effect of pH on the Stability of Gold



Nanoparticles and Their Application for Melamine Detection in Infant Formula, *IOSR J. Appl. Chem.*, 7(8), 15-20.

Wang, Y. C. and Gunasekaran, S., 2012, Spectroscopic and Microscopic Investigation of Gold Nanoparticle Nucleation and Growth Mechanisms Using Gelatin as a Stabilizer, *J. Nanopart. Res.*, 14, 1200-1211.

Yoosaf, K., Ipe, B. I., Suresh, C. H. and Thomas, K. G., 2007, In Situ Synthesis of Metal Nanoparticles and Selective Naked-Eye Detection of Lead Ion from Aqueous Media, *J. Phys. Chem. C.*, 111, 12839-12847.

Zhan, S., Yu, M., Lv, J., Wang, L. and Zhou, P., 2014, Colorimetric Detection of Trace Arsenic(III) in Aqueous Solution Using Arsenic Aptamer and Gold Nanoparticles, *Aust. J. Chem.*, 67, 813-815.

Zhang, Y. X., Zheng, J., Gao, G., Kong, Y. F., Zhi, X., Wang, K., Zhang, X. Q. and Cui, D. X., 2011, Biosynthesis of Gold Nanoparticles Using Chloroplasts, *Int. J. Nanomed.*, 6, 2899-2906.

Zhu, C., Bai, W., Liu, J., Yan, M., Yang, S. and Chen, A., 2015, Gold Nanoparticle Based Colorimetric Aptasensor for Rapid Detection of Six Organophosphorous Pesticides, *Environ. Toxicol. Chem.*, 34(10), 2244-2249.