UNIVERSITAS
GADJAH MADA
**Pemodelan Struktur Molecularly Imprinted Chitosan dengan Templat Paclobutrazol dan Asam Giberelat
menggunakan Density Functional Theory**
Fahrezy Thomas Pratama, Drs. Iqmal Tahir, M.Si
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

# DAFTAR PUSTAKA

Ajdanian, L., Arouiee, H., Jones, A. M. P., Hesami, M., Nemati, H., and Pepe, M., 2024, Investigating the Impact of Paclobutrazol and Tannic Acid on Floral Development of In Vitro-Grown Cannabis Plantlets, *Heliyon*, 10, e36768.

Bader, R. F. W., 1990, *Atoms in Molecules: A Quantum Theory*, 1st edition, Oxford University Press, Oxford.

Basuki, B. R., dan Sanjaya, I. G. M., 2009, Cross-linked Chitosan Synthesis Using Glutaraldehyde and Functional Group Identification as well as Its Deacetylation Degree, *J. Ilmu Dasar*, 10(1), 93–101.

BelBruno, J. J., 2018, Molecularly Imprinted Polymers, *Chem. Rev.*, 119(1), 94–119.

Boroznjak, R., Reut, J., Tretjakov, A., Lomaka, A., Öpik, A., and Syritski, V., 2017, A Computational Approach to Study Functional Monomer-Protein Molecular Interactions to Optimize Protein Molecular Imprinting, *J. Mol. Recognit.*, 30(10), 1–9.

Camila, A. N., Siswoyo, H., dan Hendrawan, A. P., 2023, Penentuan Tingkat Kesuburan Tanah pada Lahan Pertanian di Kelurahan Bandulan Kecamatan Sukun Kota Malang Berdasarkan Parameter Kimia, *J. Sains Eduk. Sains*, 6(1), 28–33.

Campbell, J., 2005, *The Importance of Size and Shape in Imprinted Polymers*, Thesis, Louisiana State University.

Chrisnandari, R. D., 2018, Sintesis dan Karakterisasi Molecularly Imprinted Polymer untuk Kloramfenikol Menggunakan Polimerisasi Fasa Ruah, *J. Pharm.*, 3(1), 40–46.

Cramer, C. J., 2004, *Essentials of Computational Chemistry: Theories and Models*, 2nd edition, John Wiley & Sons, Chichester.

Davies, P. J., 2010, The Plant Hormons: Their Nature, Occurrence, and Functions, In: Davies, P. J. (ed.), *Plant Hormons: Biosynthesis, Signal Transduction, Action!*, 3rd edition, Springer, Dordrecht, 1–15.

Debitama, A. Muh. N. H., Mawarni, I. A., dan Hasanah, U., 2022, Pengaruh Hormon Auksin sebagai Zat Pengatur Tumbuh pada Beberapa Jenis Tumbuhan Monocotyledoneae dan Dicotyledoneae, *Biodidaktika: J. Biol. Pembelajaran*, 17(1), 120–130.

Deka, B. C., and Bhattacharyya, P. K., 2016, Reactivity of Chitosan Derivatives and Their Interaction with Guanine: A Computational Study, *J. Chem. Sci.*, 128(4), 589–597.

Desta, B., and Amare, G., 2021, Paclobutrazol as a Plant Growth Regulator, *Chem. Biol. Technol. Agric.*, 8(1), 1.

Domard, A., 1987, pH and c.d. Measurements on a Fully Deacetylated Chitosan: Application to CuII-Polymer Interactions, *Int. J. Biol. Macromol.*, 9(2), 98–104.

Ellames, G., Hanson, J. R., Hitchcock, P. B., and Thomas, S. A., 1979, The Molecular and Crystal Structures of Gibberellin A4 and Gibberellin A13 Methyl Esters, *J.C.S. Perkin I*, 1922–1926.

UNIVERSITAS
GADJAH MADA
**Pemodelan Struktur Molecularly Imprinted Chitosan dengan Templat Paclobutrazol dan Asam Giberelat
menggunakan Density Functional Theory**
Fahrezy Thomas Pratama, Drs. Iqmal Tahir, M.Si
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**



Fadlunisa, 2019, *Molecularly Imprinted Polymer Chitosan Berbasis Quartz Crystal Microbalance untuk Deteksi Alpha Pinane*, Skripsi, Program Studi Fisika, Departemen Fisika, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta.

Fan, L., Jin, R., Le, X., Zhou, X., Chen, S., Liu, H., and Xiong, Y., 2012, Chitosan Microspheres for Controlled Delivery of Auxins as Agrochemicals, *Microchim. Acta*, 176(3–4), 381–387.

Fareghi, A. R., Moghadam, P. N., and Khalafy, J., 2017, Synthesis and Characterization of a Cellulose-Based Molecularly Imprinted Polymer in Aqueous Solution: The Study of Furosemide Slow Release, *Starch-Stärke*, 69(11–12), 1–43.

Gaspar, T., Kevers, C., Penel, C., Greppin, H., Reid, D. M., and Thorpe, T. A., 1996, Plant Hormons and Plant Growth Regulators in Plant Tissue Culture, *In Vitro Cell. Dev. Biol. Plant*, 32, 272–289.

Goudie, K. J., McCreath, S. J., Parkinson, J. A., Davidson, C. M., and Liggat, J. J., 2023, Investigation of the Influence of pH on the Properties and Morphology of Gelatin Hydrogels, *J. Polym. Sci.*, 61(19), 2316–2332.

Grimme, S., Ehrlich, S., and Goerigk, L., 2011, Effect of the Damping Function in Dispersion Corrected Density Functional Theory, *J. Comput. Chem.*, 32(7), 1456–1465.

Hanson, R. M., Prilusky, J., Zhou, R., Nakane, T., and Sussman, J. L., 2013, JSmol and the Next-Generation Web-Based Representation of 3D Molecular Structure as Applied to Proteopedia, *Isr. J. Chem.*, 53(3–4), 207–216.

Hanwell, M. D., Curtis, D. E., Lonie, D. C., Vandermeersch, T., Zurek, E., and Hutchison, G. R., 2012, Avogadro: An Advanced Semantic Chemical Editor, Visualization, and Analysis Platform, *J. Cheminform.*, 4(17), 1–17.

Hasanah, A. N., Safitri, N., Zulfa, A., Neli, N., and Rahayu, D., 2021, Faktors Affecting Preparation of Molecularly Imprinted Polymer and Methods on Finding Template-Monomer Interaction as the Key of Selective Properties of the Materials, *Mol.*, 26(18), 1–22.

Haupt, K., 2003, Molecularly Imprinted Polymers: The Next Generation, *Anal. Chem.*, 75(17), 376A–383A.

Humphrey, W., Dalke, A., and Schulten, K., 1996, VMD: Visual Molecular Dynamics, *J. Mol. Graph.*, 14(1), 33–38.

Jamnongkan, T., and Kaewpirom, S., 2010, Controlled-Release Fertilizer Based on Chitosan Hydrogel: Phosphorus Release Kinetics, *J. Polym. Environ.*, 18(3), 413–421.

Karrat, A., Lamaoui, A., Amine, A., Palacios-Santander, J. M., and Cubillana-Aguilera, L., 2020, Applications of Chitosan in Molecularly and Ion Imprinted Polymers, *Chem. Africa*, 3(3), 513–533.

Keyes, G., Sorrells, M. E., and Setter, T. L., 1990, Gibberellic Acid Regulates Cell Wall Extensibility in Wheat (*Triticum aestivum* L.), *Plant Physiol.*, 92(1), 242–245.

Kulkova, M. A., Bhuj, B. D., and Dhar, S., 2024, Paclobutrazol (PBZ) and Its Metabolic Function in Agriculture: A Review, *Open Access J. Biog. Inform.*, 1(1), 1–10.

UNIVERSITAS
GADJAH MADA
**Pemodelan Struktur Molecularly Imprinted Chitosan dengan Templat Paclobutrazol dan Asam Giberelat
menggunakan Density Functional Theory**
Fahrezy Thomas Pratama, Drs. Iqmal Tahir, M.Si
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**



Kulkarni, V. H., Kulkarni, P. V., and Keshavayya, J., 2007, Glutaraldehyde-Crosslinked Chitosan Beads for Controlled Release of Diclofenac Sodium, *J. Appl. Polym. Sci.*, 103(1), 211–217.

Kumar, A., Biswas, T. K., and Singh, N., 2014, Effect of Gibberellic Acid on Growth, Quality and Yield of Tomato (*Lycopersicon esculentum* Mill.), *IOSR J. Agric. Vet. Sci.*, 7(11), 57–61.

Kumar, A., Shaikh, A. Y., and Pandey, A. K., 2022, Computational Modeling and Theoretical Calculations of Molecularly Imprinted Polymers, In: Balasubramanian, S. and Ponnusamy, V. K. (eds.), *Computational Modelling and Simulations for Designing of Molecularly Imprinted Polymers*, Elsevier, 81–112.

Lamotte-Brasseur, J., Dive, G., Dehareng, D., and Ghuysen, J. M., 1990, Electrostatic Potential Maps at the Quantum Chemistry Level of the Active Sites of the Serine Peptidases, α-Chymotrypsin and Subtilisin, *J. Theor. Biol.*, 145(2), 183–198.

Lee, S., Lee, M., Gyak, K. W., Kim, S. D., Kim, M. J., and Min, K., 2022, Novel Solubility Prediction Models: Molecular Fingerprints and Physicochemical Features vs Graph Convolutional Neural Networks, *ACS Omega*, 7(14), 12268–12277.

Lenton, J. R., Appleford, N. E. J., and Temple-Smith, K. E., 1994, Growth Retardant Activity of Paclobutrazol Enantiomers in Wheat Seedlings, *Plant Growth Regul.*, 15(3), 281–291.

Li, Z. A., Chen, D. Y., and Liu, L. J., 2008, Redetermination of 1-Naphthalene-Acetic Acid, *Acta Crystallogr. Sect. E: Struct. Rep. Online*, 64(12), 7–13.

Li, L., Chen, L., Zhang, H., Yang, Y., Liu, X., and Chen, Y., 2016, Temperature and Magnetism Bi-Responsive Molecularly Imprinted Polymers: Preparation, Adsorption Mechanism and Properties as Drug Delivery System for Sustained Release of 5-Fluorouracil, *Mater. Sci. Eng. C*, 61, 158–168.

Li, J., Cai, C., Li, J., Li, J., Li, J., Sun, T., Wang, L., Wu, H., and Yu, G., 2018, Chitosan-Based Nanomaterials for Drug Delivery, *Mol.*, 23(10), 2661.

Lu, T., and Chen, Q., 2022, Independent Gradient Model Based on Hirshfeld Partition: A New Method for Visual Study of Interactions in Chemical Systems, *J. Comput. Chem.*, 43(8), 539–555.

Luo, J., Wang, X., and Pang, W., 2024, GA3-Induced SlXTH19 Expression Enhances Cell Wall Remodeling and Plant Height in Tomatoes, *Plants*, 13(24), 3578.

Ma, X., Li, S., and Qiu, J., 2023, Development of an Fe3O4 Surface-Grafted Carboxymethyl Chitosan Molecularly Imprinted Polymer for Specific Recognition and Sustained Release of Salidroside, *Polym.*, 15(5), 1187.

Maglic, J. B., and Lavendomme, R., 2022, MoloVol: An Easy-to-Use Program for Analyzing Cavities, Volumes and Surface Areas of Chemical Structures, *J. Appl. Cryst.*, 55(4), 1033–1044.

Métraux, J. P., 1987, Gibberellins and Plant Cell Elongation, In: Davies, P. J. (ed.), *Plant Hormons and Their Role in Plant Growth and Development*, Springer, Dordrecht, 296–317.

UNIVERSITAS
GADJAH MADA
**Pemodelan Struktur Molecularly Imprinted Chitosan dengan Templat Paclobutrazol dan Asam Giberelat
menggunakan Density Functional Theory**
Fahrezy Thomas Pratama, Drs. Iqmal Tahir, M.Si
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**



Naito, P. K., Ogawa, Y., Sawada, D., Nishiyama, Y., Iwata, T., and Wada, M., 2016, X-Ray Crystal Structure of Anhydrous Chitosan at Atomic Resolution, *Biopolym.*, 105(7), 361–368.

Neese, F., 2012, The ORCA Program System, *Wiley Interdiscip. Rev. Comput. Mol. Sci.*, 2(1), 73–78.

Nicholls, I. A., Golker, K., Olsson, G. D., Suriyanarayanan, S., and Wiklander, J. G., 2021, The Use of Computational Methods for the Development of Molecularly Imprinted Polymers, *Polym.*, 13(17), 2841.

Nigović, B., Antolić, S., Kojić-Prodić, B., Kiralj, R., Magnus, V., and Salopek-Sondi, B., 2000, Correlation of Structural and Physico-Chemical Parameters with the Bioactivity of Alkylated Derivatives of Indole-3-Acetic Acid, a Phytohormone (Auxin), *Struct. Sci.*, 56(1), 94–111.

Parr, R. G., and Yang, W., 1989, *Density-Functional Theory of Atoms and Molecules*, 1st edition, Oxford University Press, New York.

Patil, A., Mahadik, S. G., and Mane, A. V., 2024, Effect of Plant Growth Regulators on Morpho-Physiological Parameters of Okra (*Abelmoschus esculentus* (L.) Moench) in Konkan Condition, *Int. J. Res. Agron.*, 7(12A), 2080–2085.

Piluharto, B., Indarti, D., and Handoko, D. S. P., 2024, Synthesis and Characterization of Glutaraldehyde-Crosslinked Chitosan for Urea Controlled Release, *Indones. Chim. Lett.*, 3(2), 1–9.

Rademacher, W., 2015, Plant Growth Regulators: Backgrounds and Uses in Plant Production, *J. Plant Growth Regul.*, 34, 845–872.

Raja, K., Prabhu, C., and Subramanian, K. S., 2021, Electrospun Polyvinyl Alcohol (PVA) Nanofibers as Carriers for Hormons (IAA and GA3) Delivery in Seed Invigoration for Enhancing Germination and Seedling Vigor of Agricultural Crops (Groundnut and Black Gram), *Polym. Bull.*, 78(11), 6429–6452.

Ramachandran, K. I., Gopakumar, D., and Namboori, K., 2008, *Computational Chemistry and Molecular Modeling: Principles and Applications*, 1st edition, Springer, Berlin.

Řezáč, J., and Hobza, P., 2016, Benchmark Calculations of Interaction Energies in Noncovalent Complexes and Their Applications, *Chem. Rev.*, 116(9), 5038–5071.

Rojas, J., 2015, Improved Polymer Functionality by Cross-Linking with Glutaraldehyde to Achieve Controlled Drug Release, In: Tiwari, A. and Patra, H. K. (eds.), *Advanced Theranostics Materials*, Wiley-Scrivener, 459–479.

Saha, S., and Pal, D., 2017, Log P, In: Wang, Z. (ed.), *Encyclopedia of Physical Organic Chemistry*, 1st edition, Wiley Inter Science, 629–650.

Sajini, T., and Mathew, B., 2021, A Brief Overview of Molecularly Imprinted Polymers: Highlighting Computational Design, Nano and Photo-Responsive Imprinting, *Talanta Open*, 4, 1–20.

Saleh, M., Zulmanwardi, dan Pasanda, O. S., 2018, Pembuatan Pupuk SRF (Slow Release Fertilizer) dengan Menggunakan Polimer Amilum, *Prosiding Seminar Hasil Penelitian*, 3, 80–85.

UNIVERSITAS
GADJAH MADA
**Pemodelan Struktur Molecularly Imprinted Chitosan dengan Templat Paclobutrazol dan Asam Giberelat
menggunakan Density Functional Theory**
Fahrezy Thomas Pratama, Drs. Iqmal Tahir, M.Si
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**



Santos Filho, F. B. S., Silva, T. I., and Dias, M. G., 2022, Paclobutrazol Reduces Growth and Increases Chlorophyll Indices and Gas Exchanges of Basil (*Ocimum basilicum*), *Braz. J. Biol.*, 82, e262364.

Saputra, A., Wijaya, K., Ahmad, M. N., dan Tahir, I., 2013, Penggunaan Metode Semiempirik AM1 untuk Pemilihan Monomer Fungsional Efektif pada Prasintesis Polimer Tercetak Diazinon, *Valensi*, 3(1), 1–9.

Sargsyan, K., Grauffel, C., and Lim, C., 2017, How Molecular Size Impacts RMSD Applications in Molecular Dynamics Simulations, *J. Chem. Theory Comput.*, 13(4), 1518–1524.

Schauperl, M., and Lewis, D. W., 2015, Probing the Struktural and Binding Mechanism Heterogeneity of Molecularly Imprinted Polymers, *J. Phys. Chem. B*, 119(2), 563–571.

Shea, K. J., Yan, M., and Roberts, M. J. (eds.), 2002, *Molecularly Imprinted Materials—Sensors and Other Devices*, Mater. Res. Soc. Symp. Proc., 723, Materials Research Society.

Sholl, D. S., and Steckel, J. A., 2009, *Density Functional Theory: A Practical Introduction*, 1st edition, John Wiley & Sons, Hoboken.

Sirianni, D. A., Alenaizan, A., Cheney, D. L., and Sherrill, C. D., 2018, Assessment of Density Functional Methods for Geometry Optimization of Bimolecular van der Waals Complexes, *J. Chem. Theory Comput.*, 14(6), 3004–3013.

Soumya, P. R., Kumar, P., and Pal, M., 2017, Paclobutrazol: A Novel Plant Growth Regulator and Multi-Stress Ameliorant, *Indian J. Plant Physiol.*, 22(3), 267–278.

Steffens, G. L., Byun, J. K., and Wang, S. Y., 1985, Controlling Plant Growth via the Gibberellin Biosynthesis System—I. Growth Parameter Alterations in Apple Seedlings, *Physiol. Plant.*, 63(2), 163–168.

Steiner, T., and Desiraju, G. R., 1998, Distinction Between the Weak Hidrogen Bond and the van der Waals Interaction, *Chem. Commun.*, 0(8), 891–892.

Stewart, H., Carraher, C. E., and Soldani, W. J., 1990, Struktural Characterization and Effects of Gibberellic Acid-Containing Organometallic Polymers as Plant Growth Regulators, In: Carraher, C. E. and Sperling, L. H. (eds.), *Polymer Applications of Renewable-Resource Materials*, Springer, Boston, 85–97.

Suratman, A., Purwaningsih, D. R., dan Kunarti, E. S., 2020, Controlled Release Fertilizer Encapsulated by Glutaraldehyde-Crosslinked Chitosan Using Freeze-Drying Method, *Indones. J. Chem.*, 20(5), 1049–1058.

Tadi, K. K., and Motghare, R. V., 2013, Rational Synthesis of Pindolol Imprinted Polymer by Non-Covalent Protocol Based on Computational Approach, *J. Mol. Model.*, 19, 3385–3396.

Taheri, S., Werbrouck, S. P., Skirtach, A. G., and Parakhonskiy, B. V., 2024, Calcium Carbonate Macroparticles as Delivery System for Gradient Slow Release Hormon for In Vitro Plant Growth Regulation of *Arabidopsis thaliana*, *Appl. Mater. Today*, 41, 1–9.

Tahir, I., Yudha, E., Pradipta, M. F., Wijaya, K., Mudasir, M., Vebryana, M. F., Saviola, A. J., and Wahab, R. A., 2024, Supramolecular Modeling of

UNIVERSITAS
GADJAH MADA
**Pemodelan Struktur Molecularly Imprinted Chitosan dengan Templat Paclobutrazol dan Asam Giberelat
menggunakan Density Functional Theory**
Fahrezy Thomas Pratama, Drs. Iqmal Tahir, M.Si
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**



Molecularly Imprinted Chitosan-Resveratrol Using Density Functional Theory, *Key Eng. Mater.*, 990, 103–116.

Terracina, J. J., Bergkvist, M., and Sharfstein, S. T., 2016, Computational Investigation of Stoichiometric Effects, Binding Site Heterogeneities, and Selectivities of Molecularly Imprinted Polymers, *J. Mol. Model.*, 22, 139.

Tirado-Rives, J., and Jorgensen, W. L., 2008, Performance of B3LYP Density Functional Methods for a Large Set of Organic Molecules, *J. Chem. Theory Comput.*, 4(2), 297–306.

Toh, P. L., Meepripruk, M., Ang, L. S., Sulaiman, S., and Mohamed-Ibrahim, M. I., 2017, First Principles Study on the Stability and Elektronic Structures of 7,8-Dichloro-4-Oxo-4H-Chromene-3-Carbaldehyde, *Appl. Mech. Mater.*, 855, 31–36.

Tomasi, J., Mennucci, B., and Cammi, R., 2005, Quantum Mechanical Continuum Solvation Models, *Chem. Rev.*, 105(8), 2999–3094.

Tsatsakis, A. M., and Shtilman, M. I., 1993, Phytoactive Polymers: New Synthetic Plant Growth Regulators, In: Roubelakis-Angelakis, K. A., and Tran Thanh Van, K. (eds.), *Morphogenesis in Plants*, Springer, New York, 259–276.

Tsatsakis, A. M., and Shtilman, M. I., 1994, Polymeric Derivatives of Plant Growth Regulators: Synthesis and Properties, *Plant Growth Regul.*, 14, 69–77.

Tsatsakis, A. M., Paritsis, K. N., Shtilman, M. I., Shashkova, I. B., Alegakis, A. K., and Roubelakis-Angelakis, K. A., 1995, 1-Naphthylacetic Acid Slow Release Polymeric Formulations: Auxin Type Effect in Tobacco Leaf Segments is Affected by Structure and Hydrolysis, *Plant Growth Regul.*, 17, 167–175.

Urry, L. A., Cain, M. L., Wasserman, S. A., Minorsky, P. V., and Orr, R. B., 2021, *Campbell Biology*, 12th edition, Pearson Education, Inc., Hoboken.

Valderrama, A. N., Jacinto, C. H., Lay, J., Flores, Y. E., Zavaleta, D. C., and Rodríguez Delfín, A., 2020, Faktorial Design for Preparing Chitosan Nanoparticles and Its Use for Loading and Controlled Release of Indole-3-Acetic Acid with Effect on Hydroponic Lettuce Crops, *Biocatal. Agric. Biotechnol.*, 26, 101640.

Wang, C., Ding, C., Wu, Q., and Xiong, X., 2019, Molecularly Imprinted Polymers with Dual Template and Bifunctional Monomers for Selective and Simultaneous Solid-Phase Extraction and Gas Chromatographic Determination of Four Plant Growth Regulators in Plant-Derived Tissues and Foods, *Food Anal. Methods*, 12, 1160–1169.

Wang, R., Yang, J., and Shi, Z., 2008, Separation of Gibberellic Acid (GA3) by Macroporous Adsorption Resins, *Front. Chem. Eng. China*, 2(1), 62–66.

Weigend, F., and Ahlrichs, R., 2005, Balanced Basis Sets of Split Valence, Triple Zeta Valence and Quadruple Zeta Valence Quality for H to Rn: Design and Assessment of Accuracy, *Phys. Chem. Chem. Phys.*, 7(18), 3297–3305.

Xiong, W. M., Kong, J. H., Chen, J., Chen, J. Z., and Nie, X. L., 2016, Crystal Structure of (2RS,3RS)-1-(4-Chlorophenyl)-4,4-dimethyl-2-(1H-1,2,4-triazol-1-yl)pentan-3-ol, C15H20ClN3O, *Z. Kristallogr. NCS*, 231(3), 879–881.

UNIVERSITAS
GADJAH MADA
**Pemodelan Struktur Molecularly Imprinted Chitosan dengan Templat Paclobutrazol dan Asam Giberelat
menggunakan Density Functional Theory**
Fahrezy Thomas Pratama, Drs. Iqmal Tahir, M.Si
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**



Xu, J., Yan, J., He, L., Sun, J., Wang, W., Chen, Q., Li, J., and Guo, Y., 2021, The Effects of Exogenous Application of GA3 and Paclobutrazol on Bulblet Formation in *Lycoris radiata*, *Horticulturae*, 7(9), 304.

Xu, L., Huang, Y. A., Zhu, Q. J., and Ye, C., 2015, Chitosan in Molecularly-Imprinted Polymers: Current and Future Prospects, *Int. J. Mol. Sci.*, 16(8), 18328–18347.

Xu, L., Zhao, Z. X., Huang, Y. A., and Zhu, Q. J., 2020, Preparation of Chitosan Molecularly Imprinted Polymers and the Recognition Mechanism for Adsorption of Alpha-Lipoic Acid, *Mol.*, 25(2), 1–15.

Zhang, Y., Li, Y., Hu, Y., Li, G., and Chen, Y., 2010, Preparation of Magnetic Indole-3-Acetic Acid Imprinted Polymer Beads with 4-Vinylpyridine and β-Cyclodextrin as Binary Monomer via Microwave Heating Initiated Polymerization and Their Application to Trace Analysis of Auxins in Plant Tissues, *J. Chromatogr. A*, 1217(47), 7337–7344.

Zhang, Z., Tan, W., and Hu, Y., 2012, Microwave Synthesis of Gibberellin Acid 3 Magnetic Molecularly Imprinted Polymer Beads for the Trace Analysis of Gibberellin Acids in Plant Samples by Liquid Chromatography-Mass Spectrometry Detection, *Analyst*, 137(8), 1967–1976.

Zheng, R. R., Wu, Y., and Xia, Y. P., 2012, Chlorocholine Chloride and Paclobutrazol Treatments Promote Carbohydrate Accumulation in Bulbs of *Lilium* Oriental Hybrids ‘Sorbonne’, *J. Zhejiang Univ. Sci. B*, 13(2), 136–144.