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Year <u>Title, Author(s), Journal, Volume, Issue, Page Numbers</u>

2022 <u>Chemistry/Nutrition Category</u>

"An International Collaborative Study on Trypsin Inhibitor Assay for Legumes, Cereals, and Related Products", Keshun Liu, Susan Seegers, Wenming Cao, Janitha Wanasundara, Juxing Chen, Alessandro Esteves da Silva, Kristopher Ross, Alexandra Lozano Franco, Theo Vrijenhoek, Pankaj Bhowmik, Yonghui Li, Xin Wu, and Scott Bloomer (*JAOCS* 98 (4):375-390)

Engineering/Technology Category

"Effect of Peroxyl-Radicals-Induced Oxidative Modification in the Physicochemical and Emulsifying Properties of Walnut Protein", Xiaoying Mao, Dandan Wang, Lingge Sun, Jian Zhang, and Qingzhi Wu (*JAOCS* 98(9):903-910)

2021 <u>Chemistry/Nutrition Category</u>

"Trypsin Inhibitor and Urease Activity of Soybean Meal Products from Different Countries and Impact of Trypsin Inhibitor on Ileal Amino Acid Digestibility in Pig," Juxing Chen, Karen Wedekind, Jeffery Escobar, and Mercedes Vazquez-Añón (*JAOCS* 97(10):1151-1163).

Engineering/Technology Category

"Estimating Oil and Protein Content of Sesame Seeds Using Image Processing and Artificial Neural Network" Mahdieh Parsaeian, Mojtaba Shahabi, and Hamid Hassanpour (*JAOCS* 97(7):691-702).

2020 <u>Chemistry/Nutrition Category</u>

"Effect of a Mutant Danbaekkong Allele on Soybean Seed Yield, Protein, and Oil Concentration," M. J. Cunicelli, H. S. Bhandari, P. Chen, C. E. Sams, M. A. Rouf Mian, L. A. Mozzoni, C. J. Smallwood, and V. R. Pantalone (*JAOCS* 96(8):927-935).

Engineering/Technology Category

"Nutrient Enhancement of Corn Distillers Dried Grains by Addition of Coproducts of the Enzyme-Assisted Aqueous Extraction Process of Soybeans in Corn Fermentation," J. K. Sekhon, K. A. Rosentrater, S Jung, and T. Wang (*JAOCS* 96(9):1047-1057).

2019 <u>Chemistry/Nutrition Category</u>

Stability and Bioavailability of Curcumin in Mixed Sodium Caseinate and Pea Protein Isolate Nanoemulsions," M. Yerramilli, N. Longmore, and S. Ghosh (*JAOCS* 95(8): 1013–1026).

Engineering/Technology Category

"Changes in Corn Protein Content During Storage and Their Relationship with Dry Grind Ethanol Production," D. Ramchandran, M.P. Hojilla-Evangelista, S.P. Moose, K.D. Rausch, M.E. Tumbleson, and V. Singh (*JAOCS* 95(8):923–932).

2018 <u>Chemistry/Nutrition Category</u>

"Biologically Active Digests from Pumpkin Oil Cake Protein: Effect of Cross-linking by Transglutaminase," L. Popović, Z. Stolić, J. Čakarević, A. Torbica, J. Tomić, and M. Šijački (*JAOCS* 94(10):1245–1251).

Engineering/Technology Category

"Effects of Steam Distillation and Screw-pressing on Extraction, Composition and Functional Properties of Protein in Dehulled Coriander (*Coriandrum sativum* L.)," M. P. Hojilla-Evangelista and R.L. Evangelista (*JAOCS* 94(2):315–324).

2017 <u>Chemistry/Nutrition Category</u>

"Conversion of Canola Meal into a High Protein Feed Additive via Solid State Fungal Incubation Process," J.R. Croat, M. Berhow, B. Karki, K. Muthukumarappan, and W.R. Gibbons (*JAOCS* 93(4):499–507).

Engineering/Technology Category

"Optimization of Enzymatic Process Condition for Protein Enrichment, Sugar Recovery and Digestibility Improvement of Soy Flour," A.A. Loman and L.K. Ju (*JAOCS* 93(8):1063–1073)

2016 <u>Chemistry/Nutrition Category</u>

"Validation of a Method for Quantitation of Soybean Lectin in Commercial Varieties," M.L. Breeze, E. Leyva-Guerrero, G.R. Yeaman, Y. Dudin, R. Akel, P. Brune, F. Claussen, C. Dharmasri, J. Golbach, and nine others (*JAOCS* 92(8): 1085–1092).

Engineering/Technology Category

"Examination of the Causes of Instability of Soy Protein Isolate During Storage Through Probing of the Heat Induced Aggregation," F.X. Guo, Y.L. Xiong, F. Qin, H.J. Jian, X.L. Huang, and J, Chen (*JAOCS* 92(8):1075–1084).

2015 <u>Chemistry/Nutrition Category</u>

"Lipid Co-oxidation of Proteins: One Size Does Not Fit All," K.M. Schaich (*INFORM* 25:134–139, Mar. 2014).

Engineering/Technology Category

"Physicochemical Properties Improvement of Soy Protein_Using Divalent Ions During a Two-Step Fractionation Process," N.N. Wu, E.L. Zheng, B. Tan, Z. Teng, X.Q. Yang, and Z.M. Gao (*JAOCS* 91(7):1235–1245).

2014 <u>Chemistry/Nutrition Category</u>

"Flaxseed Cyclolinopeptides: Analysis and Storage Stability," F. Aladedunye, E. Sosinska, and R. Przybylski (*JAOCS* 90(3):419–428).

Engineering/Technology Category

"Enzymatic Demulsification of the Oil-Rich Emulsion_Obtained by Aqueous Extraction of Peanut Seeds," S.B. Zhang, X.J. Liu, Q.Y. Lu, Z.W. Wang, and X. Zhao (*JAOCS* 90(8):1261–1270).

2013 <u>Chemistry/Nutrition Category</u>

"A Dynamic Light Scattering Study on the Complex Assembly of Glycinin Soy Globulin in Aqueous Solutions," V.M. Pizones Ruiz-Henestrosa, M.J. Martinez, J.M.R. Patino, and A.M.R. Pilosof (*JAOCS* 89(7):1183–1191).

Engineering/Technology Category

"Ethanol Production from Soybean Fiber, a Co-product of Aqueous Oil Extraction, Using a Soaking in Aqueous Ammonia Pretreatment," B. Karki, D. Maurer, S. Box, T.H. Kim, and S. Jung (*JAOCS* 89(7):1345–1353).

 2012 <u>Chemistry/Nutrition Category</u>
 "Comparison of Flavor Volatiles and Some Functional Properties of Different Soy Protein Products," N. Wu, L. Wang, S. Yang, S. Yin, Z. Teng, and E. Zheng (JAOCS 88(10):1621–1631)

Engineering/Technology Category

"Sunflower Protein Concentrates and Isolates Prepared from Oil Cakes Have High Water Solubility and Antioxidant Capacity," P.R. Salgado, S.E. Molina Ortiz, S. Petruccelli, and A.N. Mauri, *JAOCS* 88(3):351–360.

2011 <u>Chemistry/Nutrition Category</u>

"An Improved Isolation Method of Soy β -Conglycinin Subunits and Their Characterization," D-B Yuan, W. Min, X-Q Yang, C-H Tang, K-L. Huang, J. Guo, J-M. Wang, N-N Wu, H-G. Zheng, and J-R QI (*JAOCS* 87(9):997–1004).

Engineering/Technology Category

"Enzyme-Assisted Aqueous Extraction of Oil from Isolated Oleosomes of Soybean Flour," L.T. Towa, V.N. Kapchie, C. Hauck, and P.A. Murphy (*JAOCS* 87(3):347–354).

2010 <u>Chemistry/Nutrition Category</u>

"Fourier Transform Near Infrared Spectroscopy as a Quality Control Tool for the Analysis of Lecithin and By-Products during Soybean Oil Processing," H. Li, M. Gulden, R. Cocciardi, and J. Hughes (*JAOCS* 86(9):835–841).

Engineering/Technology Category

"Two-Stage Countercurrent Enzyme-Assisted Aqueous Extraction Processing of Oil and Protein from Soybeans," J.M.L. Nobrega de Moura and L.A. Johnson (*JAOCS* 86(3):283–289)

2009 <u>Chemistry/Nutrition Category</u>
 "Antioxidant and Antithrombitic Activities of Rapeseed Peptides," S.B. Zhang, Z. Wang, and S.Y. Xu (JAOCS 85(6):521–527).

Engineering/Technology Category

"Protein Subunit Composition Effects on the Thermal Denaturation at Different Stages During the Soy Protein," E.M. Bainy, S.M. Tosh, M. Corredig, L. Woodrow, and V. Poysa (*JAOCS* 85(6):581–590).

 2008 <u>Chemistry/Nutrition Category</u>
 "Preparation of Protein-Stabilized β-Carotene Nanodispersions by Emulsification-Evaporation Method," B-S. Chu, S. Ichikawa, S. Kanafusa, and M. Nakajima (JAOCS 84(11):1053–1062).

Engineering/Technology Category

"Characterization of Fractionated Soy Proteins Produced by a New Simplified Procedure," N.A. Deak, P.A. Murphy, and L.A. Johnson (*JAOCS* 84(2):137–149).

2007 <u>Chemistry/Nutrition Category</u>

"Modification of Maillard Browning in a Microwaved Glucose/Glycine Model System by Water-Soluble Natural Antioxidants and Foods Containing Them," W.L. Porter, K.R. Conca, W.G. Yeomans, S. Diotte, A. Lynch, and J. Tate (*JAOCS* 83(8):697–705).

Engineering/Technology Category

"Production of Mustard Protein Isolates from Oriental Mustard (*Brassica juncea L.*), "R. Marnoch and L.L. Diosady (*JAOCS* 83(1):65–69).

2006 <u>Chemistry/Nutrition Category</u>

"The Role of Endogenous Amphiphiles on the Stability of Virgin Olive Oil-in-Water Emulsions," T.G. Sotiroudis, G.T. Sotiroudis, N. Varkas, and A. Xenakis (*JAOCS* 82(6):415–420).

Engineering/Technology Category

"Composition and Economic Comparison of Germ Fractions from Modified Corn Processing Technologies," D.B. Johnston, A.J. McAloon, R.A. Moreau, K.B. Hicks, and V. Singh (*JAOCS* 82(8):603–608).

2005 <u>Chemistry/Nutrition Category</u>

"Quantitative Trait Loci for B-Conglycinin 7(S) and Glycinin (IIS) Fractions of Soybean Storage Protein," D.R. Panthee, P. Kwanyuen, C.E. Sams, D.R. West, A.M. Saxton, and V.R. Pantalone (*JAOCS* 81(11):1005–1012).

Engineering/Technology Category

"Investigation of Soy Protein-Kymene[®] Adhesive Systems for Wood Composites," K. Li, S. Peshkova, and X. Geng (*JAOCS* 80(5):487–491).

2004 <u>Chemistry/Nutrition Category</u>
 "Reconstitution of Single Molecular Species from Isolated Subunits of Glycinin," G. Zhang, S. Tsunokawa, Y. Hayashi, S. Matsumoto, Y. Matsumura, and T. Mori (*JAOCS* 80(5):497–501).

Engineering/Technology Category Not awarded in 2004

2003 <u>Chemistry/Nutrition Category</u>
 "Effect of Gallic Acid on the Aroma Constituents of Soymilk and Soy Protein," W. L. Boatright (JAOCS 79(4):317–323).

Engineering/Technology Category

"Factors Affecting Oil Extraction/Water Adsorption in Sequential Extraction Processing of Corn," M. Hojilla-Evangelista and L.A. Johnson (*JAOCS* 79(8):815–823).

2002 <u>Chemistry/Nutrition Category</u> "Purification and Characterization of Antioxidative Peptides from Protein Hydrolysate of Lecithin-Free Egg Yolk," P-J. Park, W-K. Jung, K-S. Nam, F. Shahidi, and S-K. Kim (JAOCS 78(6):651–656).

Engineering/Technology Category

"Twin-Screw Extrusion Texturization of Extruded-Expelled Soybean Flour," T. W. Crowe and L.A. Johnson (*JAOCS* 78(8):781–786).

2001 <u>Chemistry/Nutrition Category</u>

"Sunflower Protein Hydrolysates for Dietary Treatment of Patients with Liver Failure," J. Bautista, R. Corpas, O. Cremades, I. Hernández-Pinzón, R. Ramos, A. Villanueva, R. Sánchez-Vioque, A. Clemente, J. Pedroche, J. Vioque, J. Parrado, and F. Millan (*JAOCS* 77(2):121–126).

Engineering/Technology Category

"Isolation and Separation of Tocopherols from Olive By-products with Supercritical Fluids," E. Ibáñez, J. Palacios, F. Señoráns, G. Santa-Mariá, J. Tabera, and G. Reglero (*JAOCS* 77(2):187–190).

2000 <u>Chemistry/Nutrition Category</u>
 "Lipoxygenase Activity in Olive (*Olea europaea*) Fruit," J. J. Salas, M. Williams, J.L. Harwood, and J. Sánchez (JAOCS 76(10):1163–1168).

Engineering/Technology Category

"Pilot-Plant Fractionation of Soybean Glycinin and β -Conglycinin," S. Wu, P.A. Murphy, L.A. Johnson, A.R. Fratzke, and M.A. Reuber (*JAOCS* 76(3):285–293).

1999 <u>Chemistry/Nutrition Category</u>

"Hydrophobicity, Solubility, and Emulsifying Properties of Soy Protein Peptides Prepared by Papain Modification and Ultrafiltration," W. Wu, N.S. Hettiarachchy, and M. Qi (*JAOCS* 75(7):845–850).

Engineering/Technology Category

"Structure and Performance of Soy Hull Carbon Adsorbents as Affected by Pyrolysis Temperature," R. Gnanasambandam, M. Mathias, and A. Proctor (*JAOCS* 75(5):615–621).

1998 <u>Chemistry/Nutrition Category</u>
 "Analogous Salicyclic Acid Affinity Regions in Serum Albumin and Soybean β-Conglycinin," J.A. Rothus and W.J. Wolf (JAOCS 74(10):1193–1201).

Engineering/Technology Category Not awarded in 1998

1997 <u>Chemistry/Nutrition Category</u>
 "Low-Molecular Weight Organic Compositions of Acid Waters from Vegetable Oil Soapstocks, "S. Johansen, A. Sivasothy, M. Dowd, P. Reilly, and E. Hammond (*JAOCS* 73(10):1275–1286).

Engineering/Technology Category Not awarded in 1997

 1996 <u>Chemistry/Nutrition Category</u>
 "Potential β-Sheet Surfaces of Soybean Seed Proteins," J.A. Rothfus (JAOCS 72(5):501–506). Engineering/Technology Category

"Off-Flavor Removal from Soy-Protein Isolate by Using Liquid and Supercritical Carbon Dioxide," P. Maheshwari, E.T. Ooi, and Z.L. Nikolov (*JAOCS* 72(10):1107–1115).

1995 <u>Chemistry/Nutrition Category</u>
 "Detection of Soybean Antigenicity and Reduction by Twin-Screw Extrusion," A. Ohishi, K. Watanabe, M. Urushibata, K. Utsuno, K. Ikuta, K. Sugimoto, and H. Harada (JAOCS 71(12):1391–1396).

Engineering/Technology Category Not awarded in 1995

1994 <u>Chemistry/Nutrition Category</u> "Thermal Gelation of the 12S Canola Globulin," L.W. Léger and S.D. Arntfield (JAOCS 70(9):853–861).

> Engineering/Technology Category Not awarded in 1994

1993 <u>Chemistry/Nutrition Category</u>
 "Amidination of Lipase with Hydrophobic Imidoesters," M. Basri, K. Ampon,
 W.M.Z. Yunus, C.N.A. Razak, and A.B. Salleh (JAOCS 69(6):579–583).

Engineering/Technology Category

"Characterization of Protein Extracted from Flaked, Defatted, Whole Corn by the Sequential Extraction Process," M.P. Hojilla-Evangelista, D.J. Myers, and L.A. Johnson (*JAOCS* 69(3):199–204).

1992 <u>Chemistry/Nutrition Category</u>

"Mechanism of Formation of Chloropropanols Present in Protein Hydrolysates," P.D. Collier, D.D.O. Cromie, and A.P. Davies (*JAOCS* 68(10):785–791).

Engineering/Technology Category (tie)

"Peptidoglutaminase Deamidation of Proteins and Protein Hydrolysates for Improved Food Use," J.S. Hamada (*JAOCS* 68(7):459–462).

"Characterization of Texture and Mechanical Properties of Heat-Induced Soy Protein Gels," I.J. Kang, Y. Matsumura, and T. Mori (*JAOCS* 68(5):339–345).

1991 <u>Chemistry/Nutrition Category</u>

"Effects of Maturation and Storage on Solubility, Emulsion Stability and Gelation Properties of Isolated Soy Proteins," J.J. Yao, K. Tanteeratarm, and L.S. Wei (*JAOCS* 67(12):974–979).

Engineering/Technology Category

"Near-Infrared Reflectance Measurement of Moisture, Protein and Oil Content of Ground Crambe Seed," R.A. Hartwig and C.R. Hurburgh, Jr. (*JAOCS* 67(7):435–437).

1990 <u>Chemistry/Nutrition Category</u>

"Effects of Vegetable Proteins on Iron and Zinc Absorption and Availability in Humans," C.W. Miles (*JAOCS* 66(7):924–931).

Engineering/Technology Category

"Determination of the Total Glucosinolate Content in Canola by Reaction with Thymol and Sulfuric Acid," D.R. DeClercq and J.K. Daun (*JAOCS* 66(6):788–791).

1989 <u>Chemistry/Nutrition Category (tie)</u>

"Gossypol Analysis in Cottonseed Oil by HPLC," N. Chamkasem (*JAOCS* 65(10):1601–1604).

"Effects of Deteriorated Frying Oil and Dietary Protein Levels on Liver Microsomal Enzymes in Rats," C-J. Huang, N-S. Cheung, and V-R. Lu (*JAOCS* 65(11):1796–1803).

Engineering/Technology Category

"Modeling of Solvent Extraction of Oilseeds," G. Abraham, R.J. Hron, Sr. and S.P. Koltun (*JAOCS* 65(1):129–135).

1988 <u>Chemistry/Nutrition Category</u>
 "Comparative Nutritional Value for Amino Acids, Oligopeptides and Soybean Meal,"
 S. Arai and H. Kimura (JAOCS 64(12):1692–1696).

Engineering/Technology Category

"Flavor Improvement of Soybean Preparations by Genetic Removal of Lipoxygenase-2," C.S. Davies, S.S. Nielsen, and N.C. Nielsen (*JACOS* 64(10):1428–1433).

1987 <u>Chemistry/Nutrition Category</u> "Soy Protein Gelation," A-M. Hermansson (JAOCS 63(5):658–666).

Engineering/Technology Category

"Pilot Plant Studies on Extracting Cottonseed with Methylene Chloride," L.A. Johnson, J.T. Farnsworth, N.Z. Sadek, N. Chamkasem, E.W. Lusas, and B.L. Reid (*JAOCS* 63(5):647–652).

1986 <u>Chemistry/Nutrition Category</u>

"The Structure and Complexity of the 11S Polypeptides in Soybeans," N.C. Nielsen (*JAOCS* 62(12):1680–1686).

<u>Engineering/Technology Category</u> "Film Forming and Foaming Behavior of Food Proteins," J.B. German, T.E. O'Neill and J.E. Kinsella (*JAOCS* 62(9):1358–1366).

1985 <u>*Chemistry/Nutrition Category*</u> "The Biochemistry of Selenoproteins," R.A. Sunde (JAOCS 61(12):1891–1900).

<u>Engineering/Technology Category</u> "Production of Protein and Fatty Acids in the Anaerobic Fermentation of Molasses by *E. ruminantium*," K.I. Mehta and C.D. Callihan (*JAOCS* 61(11):1728–1734).

1984 <u>Chemistry/Nutrition Category</u> "Protein Conformations and Their Stabilities," C.N. Pace (JAOCS 60(5):970–975).

Engineering/Technology Category

"Soy Protein Hydrolysis in Membrane Reactors," M. Cheryan and D. Deeslie (*JAOCS* 60(6):1112–1115).