1. **Skórkowska-Telichowska Katarzyna, Żuk Magdalena, Kulma Anna, Bugajska-Prusak Ada, Ratajczak Katarzyna, Gąsiorowski Kazimierz, Kostyn Kamil, Szopa Jan**

   New dressing materials derived from transgenic flax products to treat long-standing venous ulcers : a pilot study

   Wound Repair and Regeneration, 2010, **18**, 168-179.

2. **Żuk Magdalena, Kulma Anna, Dymińska Lucyna, Szołtysek Katarzyna, Prescha Anna, Hanuza Jerzy, Szopa Jan**

   Flavonoid engineering of flax potentiate its biotechnological application

   BMC Biotechnology, 2011, **11**.

3. **Czemplik-Hubacz Magdalena Olga, Boba Aleksandra, Kostyn Kamil, Kulma Anna, Mituła Agnieszka, Styrczewska Monika, Wróbel-Kwiatkowska Magdalena, Żuk Magdalena, Szopa Jan, Skórkowska-Telichowska Katarzyna**

   Flax Engineering for Biomedical Application

   in: Biomedical engineering, trends, research and technologies

   InTech, Rijeka, 2011, 407-434.

4. **Styrczewska Monika, Kulma Anna, Szopa Jan**

   Flax produces biologically active cannabinoids

   FEBS Journal, 2011, **278**.

5. **Czemplik-Hubacz Magdalena Olga, Żuk Magdalena, Kulma Anna, Kuc S, Szopa Jan**

   GM flax as a source of effective antimicrobial compounds

   in: Science against microbial pathogens : communicating current research and technological advances. Vol. 2

   Formatex Research Center, Badajoz, 2011, 1216-1224.

6. **Żuk Magdalena, Dymińska Lucyna, Kulma Anna, Boba Aleksandra, Prescha Anna, Szopa Jan, Mączka Mirosław, Zając Adam, Szołtysek Katarzyna, Hanuza Jerzy**

IR and Raman studies of oil and seedcake extracts from natural and genetically modified flax seeds

Spectrochimica Acta. Part A: Molecular and Biomolecular Spectroscopy, 2011, **78**, 1080-1089.

7. **Wojtasik Wioleta, Kulma Anna, Kostyn Kamil, Szopa Jan**

   The changes in pectin metabolism in flax infected with Fusarium

   Plant Physiology and Biochemistry, 2011, **49**, 862-872.

8. **Miśta Dorota, Króliczewska Bożena, Zawadzki Wojciech, Pecka E, Steininger M, Hull S, Żuk Magdalena, Szopa Jan**

   The effect of Linola and W92/72 transgenic flax seeds on the rabbit caecal fermentation - in vitro study

   Polish Journal of Veterinary Sciences, 2011, **14**, 557-564.

9. **Boba Aleksandra, Kulma Anna, Kostyn Kamil, Starzycki Michał, Starzycka Eligia, Szopa Jan**

   The influence of carotenoid biosynthesis modification on the Fusarium culmorum and Fusarium oxysporum resistance in flax

   Physiological and Molecular Plant Pathology, 2011, **76**, 39-47.

10. **Styrczewska Monika, Kulma Anna, Szopa Jan**

    Analysis of a terpenoid components in a flax fiber and their influence on a human fibroblast gene expression.

    BioTechnologia, 2012, **93**, 216.

11. **Styrczewska Monika, Kulma Anna, Ratajczak Katarzyna, Amarowicz Ryszard, Szopa Jan**

    Cannabinoid like antiinflammatory compounds from flax fiber

    Cellular and Molecular Biology Letters, 2012, **17**, 479-499.

12. **Arendt Małgorzata, Kulma Anna, Szopa Jan**

    Crossing transgenic and non-transgenic flax plants to obtain new fiber and oil forms

BioTechnologia, 2012, **93**, 202.

13. **Żuk Magdalena, Prescha Anna, Styrczewska Monika, Szopa Jan**

    Engineering flax plants to increase their antioxidant capacity and improve oil composition and stability

    Journal of Agricultural and Food Chemistry, 2012, **60**, 5003-5012.

14. **Żuk Magdalena, Szopa Jan**

    Flax biotechnology

    BioTechnologia, 2012, **93**, 195.

15. **Kostyn Kamil, Czemplik-Hubacz Magdalena Olga, Kulma Anna, Bortniczuk Małgorzata, Skała Jacek, Szopa Jan**

    Genes of phenylpropanoid pathway are activated in early response to Fusarium attack in flax plants

    Plant Science, 2012, **190**, 103-115.

16. **Kulma Anna, Szatkowski Michał, Szopa Jan**

    Identification of phenolic components in a genetically modified flax by UPLC-PDA-MS method

    BioTechnologia, 2012, **93**, 203.

17. **Wróbel-Kwiatkowska Magdalena, Czemplik-Hubacz Magdalena Olga, Kulma Anna, Żuk Magdalena, Kaczmar Jacek, Dymińska Lucyna, Hanuza Jerzy, Ptak Maciej, Szopa Jan**

    New biocomposites based on bioplastic flax fibers and biodegradable polymers

    Biotechnology Progress, 2012, **28**, 1336-1346.

18. **Preisner Marta, Kulma Anna, Żebrowski J, Dymińska Lucyna, Hanuza Jerzy, Szopa Jan**

    Reducing pectin level in flax plants : new quality of flax fibre

    FEBS Journal, 2012, **279**, 72-73.

19. **Preisner Marta, Kulma Anna, Żebrowski Jacek, Dymińska Lucyna, Hanuza Jerzy, Szopa Jan**

    Silencing CAD gene in flax : an insight into metabolite flux within the phenylpropanoid pathway in modified flax plants

    BioTechnologia, 2012, **93**, 204.

20. **Czemplik-Hubacz Magdalena Olga, Kulma Anna, Bazela Karolina, Szopa Jan**

    The biomedical potential of genetically modified flax seeds overexpressing the glucosyltransferase gene

    BMC Complementary and Alternative Medicine, 2012, **12**.

21. **Skórkowska-Telichowska Katarzyna, Kulma Anna, Żuk Magdalena, Czuj Tadeusz, Szopa Jan**

    The effects of newly developed linen dressing on decubitus ulcers

    Journal of Palliative Medicine, 2012, **15**, 146-148.

22. **Skórkowska-Telichowska Katarzyna, Kulma Anna, Szopa Jan**

    The response of diabetic foot to a new type of dressing

    International Archives of Medecine, 2012, **5**.

23. **Wojtasik Wioleta, Kulma Anna, Szopa Jan**

    The significance of flax fibre pectin in the extracellular matrix remodelling of wound healing process

    FEBS Journal, 2012, **279**.

24. **Wojtasik Wioleta, Kulma Anna, Dymińska Lucyna, Hanuza Jerzy, Żebrowski Jacek, Szopa Jan**

    Fibres from flax overproducing β-1,3-glucanase show increased accumulation of pectin and phenolics and thus higher antioxidant capacity

    BMC Biotechnology, 2013, **13**, 1-16.

    DOI: 10.1186/1472-6750-13-10

25. **Styrczewska Monika, Kulma Anna, Kostyn Kamil, Hasiewicz-Derkacz Karolina, Szopa Jan**

    Flax terpenoid pathway as a source of health promoting compounds

    Mini-Reviews in Medicinal Chemistry, 2013, **13**, 353-364.

    DOI: 10.2174/1389557511313030004

26. **Dymińska Lucyna, Szatkowski Michał, Wróbel-Kwiatkowska Magdalena, Żuk Magdalena, Kurzawa Adam, Syska Wojciech, Gągor Anna, Zawadzki Mirosław, Ptak Maciej, Mączka Mirosław, Hanuza Jerzy, Szopa Jan**

    Improved properties of micronized genetically modified flax fibers

    Journal of Biotechnology, 2013, **164**, 292-299.

    DOI: 10.1016/j.jbiotec.2013.01.002

27. **Skórkowska-Telichowska Katarzyna, Czemplik-Hubacz Magdalena Olga, Kulma Anna, Szopa Jan**

    The local treatment and available dressings designed for chronic wounds

    Journal of the American Academy of Dermatology, 2013, **68**, 117-126.

    DOI: 10.1016/j.jaad.2011.06.028

28. **Hasiewicz Karolina, Kostyn Kamil, Kulma Anna, Gębarowski Tomasz, Gąsiorowski Kazimierz, Szopa Jan, Hasiewicz-Derkacz Karolina**

    The properties of emulsion based on the ideal oil obtained from seed of transge nic flax plants overproducing phenylpropanoid compounds

    FEBS Journal, 2013, **280**.

29. **Matusiewicz Magdalena, Kosieradzka Iwona, Żuk Magdalena, Szopa Jan**

    Transgenic flax in high-fat diet inhibits inflammatory state development in mice liver

    in: Energy and protein metabolism and nutrition in sustainable animal production : 4th International Symposium on Energy and Protein Metabolism and Nutrition, Sacramento, California, USA, 9-12 September 2013 / red.James W Oltjen, Ermias Kebreab, Helene Lapierre

    Wageningen Academic Publishers, Wageningen, 2013, 381-382.

30. **Kostyn Kamil, Szatkowski Michał, Kulma Anna, Kosieradzka Iwona, Szopa Jan**

Transgenic Potato Plants with Overexpression of Dihydroflavonol Reductase Can Serve as Efficient Nutrition Sources

Journal of Agricultural and Food Chemistry, 2013, **61**, 6743-6753.

31. **Żuk Magdalena, Dorotkiewicz-Jach Agata, Drulis-Kawa Zuzanna, Arendt Małgorzata, Kulma Anna, Szopa Jan**

Bactericidal activities of GM flax seedcake extract on pathogenic bacteria clinical strains.

BMC Biotechnology, 2014, **14**, 1-15.

DOI: 10.1186/1472-6750-14-70

32. **Mierziak Justyna, Wojtasik Wioleta, Kostyn Kamil, Czuj Tadeusz, Szopa Jan, Kulma Anna**

Crossbreeding of transgenic flax plants overproducing flavonoids and glucosyltransferase results in progeny with improved antifungal and antioxidative properties

Molecular Breeding, 2014, **34**, 1917-1932.

DOI: 10.1007/s11032-014-0149-5

33. **Zeitoun Ahmed, Preisner Marta, Kulma Anna, Dymińska Lucyna, Hanuza Jerzy, Starzycki Michał, Szopa Jan**

Does biopolymers composition in seeds contribute to the flax resistance against the Fusarium infection ?

Biotechnology Progress, 2014, **30**, 992-1004.

DOI: 10.1002/btpr.1965

34. **Mierziak Justyna, Kostyn Kamil, Kulma Anna**

Flavonoids as important molecules of plant interactions with the environment

Molecules, 2014, **19**, 16240-16265.

DOI: 10.3390/molecules191016240

35. **Preisner Marta, Wojtasik Wioleta, Kulma Anna, Żuk Magdalena, Szopa Jan**

Flax Fiber

in: Kirk-Othmer Encyclopedia of Chemical Technology

WILEY-BLACKWELL, , 2014, 1-32.

DOI: 10.1002/0471238961.0612012401110914.a01.pub2

36. **Matusiewicz Magdalena, Kosieradzka Iwona, Żuk Magdalena, Szopa Jan**

Genetically modified flax expressing NAP-SsGT1 transgene : examination of anti-inflammatory action

International Journal of Molecular Sciences, 2014, **15**, 16741-16759.

DOI: 10.3390/ijms150916741

37. **Preisner Marta, Kulma Anna, Żebrowski Jacek, Dymińska Lucyna, Hanuza Jerzy, Arendt Małgorzata, Starzycki Michał, Szopa Jan**

Manipulating cinnamyl alcohol dehydrogenase (CAD) expression in flax affects fibre composition and properties.

BMC Plant Biology, 2014, **14**, 1-18.

DOI: 10.1186/1471-2229-14-50

38. **Dymińska Lucyna, Gągor Anna, Hanuza Jerzy, Kulma Anna, Preisner Marta, Żuk Magdalena, Szatkowski Michał, Szopa Jan**

Spectroscopic characterization of genetically modified flax fibers

Journal of Molecular Structure, 2014, **1074**, 321-329.

DOI: 10.1016/j.molstruc.2014.06.013

39. **Skórkowska-Telichowska Katarzyna, Kulma Anna, Żuk Magdalena, Szopa Jan**

The effect of a new type of dressing for chronic venous wounds

British Journal of Medicine and Medical Research, 2014, **4**, 2463-2469.

DOI: 10.9734/BJMMR/2014/5584

40. **Kulma Anna, Żuk Magdalena, Long SH, Qiu Caisheng, Wang YF, Jankauskiene S., Preisner Marta, Kostyn Kamil, Szopa Jan**

Biotechnology of fibrous flax in Europe and China

Industrial Crops and Products, 2015, **68**, 50-59.

DOI: 10.1016/j.indcrop.2014.08.032

41. **Grajzer Magdalena, Prescha Anna, Korzonek Katarzyna, Wojakowska Anna, Dziadas Mariusz, Kulma Anna, Grajeta Halina**

    Characteristics of rose hip (Rosa canina L.) cold-pressed oil and its oxidative stability studied by the differential scanning calorimetry method

    Food Chemistry, 2015, **188**, 459-466.

    DOI: 10.1016/j.foodchem.2015.05.034

42. **Matusiewicz Magdalena, Kosieradzka Iwona, Żuk Magdalena, Szopa Jan**

    Effect of dose and administration period of seed cake of genetically modified and non-modified flax on selected antioxidative activities in rats

    International Journal of Molecular Sciences, 2015, **16**, 14259-14275.

    DOI: 10.3390/ijms160614259

43. **Styrczewska Monika, Kostyn Anna, Kulma Anna, Majkowska-Skrobek Grażyna, Augustyniak Daria, Prescha Anna, Czuj Tadeusz, Szopa Jan**

    Flax Fiber Hydrophobic Extract Inhibits Human Skin Cells Inflammation and Causes Remodeling of Extracellular Matrix and Wound Closure Activation

    Biomed Research International, 2015, **2015**, 1-15.

    DOI: 10.1155/2015/862391

44. **Żuk Magdalena, Richter Dorota, Matuła Jan, Szopa Jan**

    Linseed, the multipurpose plant

    Industrial Crops and Products, 2015, **75**, 165-177.

    DOI: 10.1016/j.indcrop.2015.05.005

45. **Hasiewicz-Derkacz Karolina, Kulma Anna, Czuj Tadeusz, Prescha Anna, Żuk Magdalena, Grajzer Magdalena, Łukaszewicz Marcin, Szopa Jan**

    Natural phenolics greatly increase flax (Linum usitatissimum) oil stability

    BMC Biotechnology, 2015, **15**, 1-14.

    DOI: 10.1186/s12896-015-0178-0

46. **Kulma Anna, Skórkowska-Telichowska Katarzyna, Kostyn Kamil, Szatkowski Michał, Skała Jacek, Drulis-Kawa Zuzanna, Preisner Marta, Żuk Magdalena, Szperlik Jakub, Wang YF, Szopa Jan**

New flax producing bioplastic fibers for medical purposes

Industrial Crops and Products, 2015, **68**, 80-89.

DOI: 10.1016/j.indcrop.2014.09.013

47. **Wojtasik Wioleta, Kulma Anna, Namysł Katarzyna, Preisner Marta, Szopa Jan**

Polyamine metabolism in flax in response to treatment with pathogenic and non-pathogenic Fusarium strains

Frontiers in Plant Science, 2015, **6**, 1-12.

DOI: 10.3389/fpls.2015.00291

48. **Skórkowska-Telichowska Katarzyna, Hasiewicz-Derkacz Karolina, Gębarowski Tomasz, Moreira Helena, Gębczak Katarzyna, Kulma Anna, Gąsiorowski Kazimierz, Hasiewicz Karolina**

Prozdrowotne działania olejów z lnu : wnioski z badań w hodowlach komórkowych

Bromatologia i Chemia Toksykologiczna, 2015, **3**, 522-527.

49. **Preisner Marta, Wojtasik Wioleta, Szopa Jan, Kulma Anna**

Rozwój, różnicowanie się i skład komórek włókna lnianego

Postępy Biochemii, 2015, **61**, 416-429.

50. **Arendt Małgorzata, Kostyn Anna, Kostyn Kamil, Kulma Anna, Bartkowiak Anna**

Sesame and linseeds oil

in: Plant lipids : science, technology, nutritional value and benefits to human health

Research Signpost, Karela, 2015, 43-63.

51. **Matusiewicz Magdalena, Kosieradzka Iwona, Sobczak-Filipiak Małgorzata, Żuk Magdalena, Szopa Jan**

Transgenic flax overexpressing polyphenols as a potential anti-inflammatory dietary agent

Journal of Functional Foods, 2015, **14**, 299-307.

DOI: 10.1016/j.jff.2015.02.004

52. **Żuk Magdalena, Działo Magdalena, Richter Dorota, Dymińska Lucyna, Matuła Jan, Kotecki Andrzej, Hanuza Jerzy, Szopa Jan**

Chalcone Synthase (CHS) Gene Suppression in Flax Leads to Changes in Wall Synthesis and Sensing Genes, Cell Wall Chemistry and Stem Morphology Parameters

Frontiers in Plant Science, 2016, **7**, 1-14.

DOI: 10.3389/fpls.2016.00894

53. **Wróbel-Kwiatkowska Magdalena, Kostyn Kamil, Dymińska Lucyna, Hanuza Jerzy, Szopa Jan, Rymowicz Waldemar**

Characterization of suspension cultures derived from transgenic flax (Linum usitatissimum L.) plants

Journal of Biotechnology, 2016, **231**, 1-1.

DOI: 10.1016/j.jbiotec.2016.05.268

54. **Pelc Katarzyna, Czemplik-Hubacz Magdalena Olga, Szopa Jan, Kulma Anna**

Effects of treatment of human keratinocytes with flax extracts

Acta Biochimica Polonica, 2016, **63**.

55. **Skórkowska-Telichowska Katarzyna, Hasiewicz-Derkacz Karolina, Gębarowski Tomasz, Kulma Anna, Moreira Helena, Kostyn Kamil, Gębczak Katarzyna, Szyjka Anna, Wojtasik Wioleta, Gąsiorowski Kazimierz, Hasiewicz Karolina**

Emulsions made of oils from seeds of GM flax protect V79 cells against oxidative stress

Oxidative Medicine and Cellular Longevity, 2016, **2016**, 1-12.

DOI: 10.1155/2016/7510759

56. **Działo Magdalena, Szopa Jan, Żuk Magdalena**

Epigenetic modulation of the chalcone synthase gene activity in flax

Acta Biochimica Polonica, 2016, **63**.

57. **Wojtasik Wioleta, Kulma Anna, Dymińska Lucyna, Hanuza Jerzy, Czemplik-Hubacz Magdalena Olga, Szopa Jan**

Evaluation of the significance of cell wall polymers in flax infected with a pathogenic strain of Fusarium oxysporum

BMC Plant Biology, 2016, **16**, 1-16.

DOI: 10.1186/s12870-016-0762-z

58. **Czemplik-Hubacz Magdalena Olga, Mierziak Justyna, Szopa Jan, Kulma Anna**

Flavonoid C-glucosides Derived from Flax Straw Extracts Reduce Human Breast Cancer Cell Growth In vitro and Induce Apoptosis

Frontiers in Pharmacology, 2016, **7**, 1-13.

DOI: 10.3389/fphar.2016.00282

59. **Mierziak Justyna, Czemplik-Hubacz Magdalena Olga, Simiczyjew Aleksandra, Szopa Jan, Kulma Anna**

Flavonoid C-glucosides from flax straw extracts reduce human breast cancer cell growth in vitro

Acta Biochimica Polonica, 2016, **63**.

60. **Korzun-Chłopicka Urszula, Boba Aleksandra, Szopa Jan, Kulma Anna**

Manipulation of vanillin synthesis in genetically modified flax

Acta Biochimica Polonica, 2016, **63**.

61. **Wojtasik Wioleta, Kulma Anna**

Odporność roślin na biotyczne czynniki stresowe

Postępy Biologii Komórki, 2016, **43**, 453-475.

62. **Wojtasik Wioleta, Kulma Anna, Szopa Jan**

The influence of pectin extract from flax shives on the expression of genes involved in the extracellular matrix remodelling in NHDF cell line after induction of the inflammatory state with LPS

Acta Biochimica Polonica, 2016, **63**.

63. **Działo Magdalena, Mierziak Justyna, Korzun Urszula, Preisner Marta, Szopa Jan, Kulma Anna**

The potential of plant phenolics in prevention and therapy of skin disorders

International Journal of Molecular Sciences, 2016, **17**, 1-41.

DOI: 10.3390/ijms17020160

64. **Króliczewska Bożena, Miśta Dorota, Króliczewski Jarosław, Zawadzki Wojciech, Kubaszewski Rafał, Wincewicz Edyta, Żuk Magdalena, Szopa Jan**

A new genotype of flax (*Linum usitatissimum* L.) with decreased susceptibility to fat oxidation: consequences to hematological and biochemical profiles of blood indices.

Journal of the Science of Food and Agriculture, 2017, **97**, 165-171.

DOI: 10.1002/jsfa.7705

65. **Guo Yuan, Qiu Caisheng, Long Songhua, Chen Ping, Hao Dongmei, Preisner Marta, Wang Hui, Wang Yufu**

Digital gene expression profiling of flax (Linum usitatissimum L.) stem peel identifies genes enriched in fiber-bearing phloem tissue.

Gene, 2017, **626**, 32-40.

DOI: 10.1016/j.gene.2017.05.002

66. **Sztafrowski Dariusz, Aksamit-Stachurska Anna, Kostyn Kamil, Mackiewicz Paweł, Łukaszewicz Marcin**

Electromagnetic field seems to not influence transcription via CTCT motif in three plant promoters.

Frontiers in Plant Science, 2017, **8**, 1-14.

DOI: 10.3389/fpls.2017.00178

67. **Gębarowski Tomasz, Gębczak Katarzyna, Wiatrak Benita, Kulma Anna, Pelc Katarzyna, Czuj Tadeusz, Szopa Jan, Gąsiorowski Kazimierz**

Flax oil from transgenic Linum usitatissimum selectively inhibits in vitro proliferation of human cancer cell lines.

Acta Poloniae Pharmaceutica - Drug Research, 2017, **74**, 653-659.

68. **Gębarowski Tomasz, Moreira Helena, Szyjka Anna, Wiatrak Benita, Wojtasik Wioleta, Kulma Anna, Szopa Jan, Gąsiorowski Kazimierz**

Impact of fabrics from transgenic flax plant on human dermal fibroblasts in vitro proliferation.

Acta Poloniae Pharmaceutica - Drug Research, 2017, **74**, 642-652.

69. **Boba Aleksandra, Kostyn Kamil, Kostyn Anna, Wojtasik Wioleta, Dziadas Mariusz, Preisner Marta, Szopa Jan, Kulma Anna**

Methyl salicylate level increase in flax after Fusarium oxysporum infection is associated with phenylpropanoid pathway activation.

Frontiers in Plant Science, 2017, **7**, 1-22.

DOI: 10.3389/fpls.2016.01951

70. **Działo Magdalena, Szopa Jan, Czuj Tadeusz, Żuk Magdalena**

Oligodeoxynucleotides can transiently up- and downregulate CHS gene expression in flax by changing DNA methylation in a sequence-specific manner.

Frontiers in Plant Science, 2017, **8**, 1-14.

DOI: 10.3389/fpls.2017.00755

71. **Czemplik-Hubacz Magdalena Olga, Korzun-Chłopicka Urszula, Szatkowski Michał, Działo Magdalena, Szopa Jan, Kulma Anna**

Optimization of phenolic compounds extraction from flax shives and their effect on human fibroblasts.

Evidence-based Complementary and Alternative Medicine, 2017, **2017**, 1-15.

DOI: 10.1155/2017/3526392

72. **Wojtasik Wioleta, Czemplik-Hubacz Magdalena Olga, Preisner Marta, Dymińska Lucyna, Yuan Guo, Szopa Jan, Kulma Anna**

Pectin from transgenic flax shives regulates extracellular matrix remodelling in human skin fibroblasts.

Process Biochemistry, 2017, **55**, 187-198.

DOI: 10.1016/j.procbio.2017.02.001

73. **Matusiewicz Magdalena, Kosieradzka Iwona, Nowak Zuzanna, Żuk Magdalena, Szopa Jan**

Polyphenol content in cold-pressed cakes of conventional and genetically modified flax as factor affecting stability of the product in different laboratory storage conditions.

Journal of Animal and Feed Sciences, 2017, **26**, 70-75.

DOI: 10.22358/jafs/69335/2017

74. **Dymińska Lucyna, Calik Maciej, Albegar Abduladhim Moamer M, Zając Adam, Kostyn Kamil, Lorenc Jadwiga, Hanuza Jerzy**

Quantitative determination of the iodine values of unsaturated plant oils using infrared and Raman spectroscopy methods.

International Journal of Food Properties, 2017, **20**, 2003-2015.

DOI: 10.1080/10942912.2016.1230744

75. **Czemplik-Hubacz Magdalena Olga, Kulma Anna, Wang Yu Fu, Szopa Jan**

Therapeutic strategies of plant-derived compounds for diabetes via regulation of monocyte chemoattractant protein-1.

Current Medicinal Chemistry, 2017, **24**, 1453-1468.

DOI: 10.2174/0929867324666170303162935

76. **Boba Aleksandra, Kostyn Kamil, Preisner Marta, Wojtasik Wioleta, Szopa Jan, Kulma Anna**

Expression of heterologous lycopene β-cyclase gene in flax can cause silencing of its endogenous counterpart by changes in gene-body methylation and in ABA homeostasis mechanism.

Plant Physiology and Biochemistry, 2018, **127**, 143-151.

DOI: 10.1016/j.plaphy.2018.03.023

77. **Okińczyc Piotr, Szumny Antoni, Szperlik Jakub, Kulma Anna, Franiczek Roman, Żbikowska Beata, Krzyżanowska Barbara, Sroka Zbigniew**

Profile of polyphenolic and essential oil composition of Polish propolis, black poplar and aspens buds.

Molecules, 2018, **23**, 1-18.

DOI: 10.3390/molecules23061262

78. **Preisner Marta, Wojtasik Wioleta, Kostyn Kamil, Boba Aleksandra, Czuj Tadeusz, Szopa Jan, Kulma Anna**

The cinnamyl alcohol dehydrogenase family in flax: Differentiation during plant growth and under stress conditions.

Journal of Plant Physiology, 2018, **221**, 132-143.

DOI: 10.1016/j.jplph.2017.11.015

79. **Króliczewska Bożena, Miśta Dorota, Ziarnik Angelika, Żuk Magdalena, Szopa Jan, Pecka-Kiełb Ewa, Zawadzki Wojciech, Króliczewski Jarosław**

    The effects of seed from Linum usitatissimum cultivar with increased phenylpropanoid compounds and hydrolysable tannin in a high cholesterol-fed rabbit.

    Lipids in Health and Disease, 2018, **17**, 1-14.

    DOI: 10.1186/s12944-018-0726-4

80. **Oleszkiewicz Tomasz, Klimek-Chodacka Magdalena, Milewska-Hendel Anna, Zubko Maciej, Stróż Danuta, Kurczyńska Ewa, Boba Aleksandra, Szopa Jan, Barański Rafał**

    Unique chromoplast organisation and carotenoid gene expression in carotenoid-rich carrot callus.

    Planta, 2018, **248**, 1455-1471.

    DOI: 10.1007/s00425-018-2988-5

81. **Nowak Nicole, Kulma Anna, Gutowicz Jan**

    Up-regulation of key glycolysis proteins in cancer development.

    Open Life Sciences, 2018, **13**, 569-581.

    DOI: 10.1515/biol-2018-0068

82. **Skórkowska-Telichowska Katarzyna, Kulma Anna, Gębarowski Tomasz, Wojtasik Wioleta, Kostyn Kamil, Moreira Helena, Szyjka Anna, Boba Aleksandra, Preisner Marta, Mierziak Justyna, Arendt Małgorzata, Kostyn Anna, Szatkowski Michał, Szopa Jan, Gąsiorowski Kazimierz**

    V79 fibroblasts are protected against reactive oxygen species by flax fabric.

    Applied Biochemistry and Biotechnology, 2018, **184**, 366-385.

    DOI: 10.1007/s12010-017-2552-y

83. **Wojtasik Wioleta, Boba Aleksandra, Preisner Marta, Kostyn Kamil, Szopa Jan, Kulma Anna**

DNA methylation profile of *β-1,3-glucanase* and *chitinase* genes in flax shows specificity towards *Fusarium oxysporum* strains differing in pathogenicity.

Microorganisms, 2019, **7**, 1-19.

DOI: 10.3390/microorganisms7120589

84. **Gąsiorowski Kazimierz, Gębarowski Tomasz, Moreira Helena, Kulma Anna, Szatkowski Michał, Szopa Jan**

Impact of fabrics from transgenic flax on cultures of skin cells.

Advances in Clinical and Experimental Medicine, 2019, **28**, 431-438.

DOI: 10.17219/acem/92563

85. **Żuk Magdalena, Szperlik Jakub, Hnitecka Agata, Szopa Jan**

Temporal biosynthesis of flavone constituents in flax growth stages.

Plant Physiology and Biochemistry, 2019, **142**, 234-245.

DOI: 10.1016/j.plaphy.2019.07.009

86. **Działo Magdalena, Szopa Jan, Hnitecka Agata, Żuk Magdalena**

Transgenerational perpetuation of CHS gene expression and DNA methylation status induced by short oligodeoxynucleotides in flax (Linum usitatissimum).

International Journal of Molecular Sciences, 2019, **20**, 1-18.

DOI: 10.3390/ijms20163983

87. **Styrczewska Monika, Żuk Magdalena, Boba Aleksandra, Zalewski Iwan, Kulma Anna**

Use of natural components derived from oil seed plants for treatment of inflammatory skin diseases.

Current Pharmaceutical Design, 2019, **25**, 2241-2263.

DOI: 10.2174/1381612825666190716111700

88. **Mierziak Justyna, Wojtasik Wioleta, Kulma Anna, Dziadas Mariusz, Kostyn Kamil, Dymińska Lucyna, Hanuza Jerzy, Żuk Magdalena, Szopa Jan**

3-hydroxybutyrate is active compound in flax that upregulates genes involved in DNA methylation.

International Journal of Molecular Sciences, 2020, **21**, 1-20.

DOI: 10.3390/ijms21082887

89. **Grajzer Magdalena, Szmalcel Karolina, Kuźmiński Łukasz, Witkowski Mateusz, Kulma Anna, Prescha Anna**

Characteristics and antioxidant potential of cold-pressed oils - possible strategies to improve oil stability.

Foods, 2020, **9**, 1-18.

DOI: 10.3390/foods9111630

90. **Łyczko Jacek, Pawlak Aleksandra, Augustyński Iwo, Okińczyc Piotr, Szperlik Jakub, Kulma Anna, Różański Henryk, Obmińska-Mrukowicz Bożena, Szumny Antoni**

Chemical profiling and cytotoxic activity of 150-year old original sample of Jerusalem Balsam.

Food and Chemical Toxicology, 2020, **138**, 1-12.

DOI: 10.1016/j.fct.2020.111183

91. **Kostyn Kamil, Boba Aleksandra, Kostyn Anna, Kozak Bartosz, Starzycki Michał, Kulma Anna, Szopa Jan**

Expression of the tyrosine hydroxylase gene from rat leads to oxidative stress in potato plants.

Antioxidants, 2020, **9**, 1-21.

DOI: 10.3390/antiox9080717

92. **Boba Aleksandra, Kostyn Kamil, Kozak Bartosz, Wojtasik Wioleta, Preisner Marta, Prescha Anna, Gola Edyta, Lysh Dzmitry, Dudek Barbara, Szopa Jan, Kulma Anna**

Fusarium oxysporum infection activates the plastidial branch of the terpenoid biosynthesis pathway in flax, leading to increased ABA synthesis.

Planta, 2020, **251**, 1-14.

DOI: 10.1007/s00425-020-03339-9

93. **Żuk Magdalena, Pelc Katarzyna, Szperlik Jakub, Sawuła Agnieszka, Szopa Jan**

Metabolism of the cyanogenic glucosides in developing flax: metabolic analysis, and expression pattern of genes.

Metabolites, 2020, **10**, 1-13.

DOI: 10.3390/metabo10070288

94. **Wojtasik Wioleta, Preisner Marta, Boba Aleksandra, Kostyn Kamil, Dymińska Lucyna, Hanuza Jerzy, Szopa Jan, Kulma Anna**

Rearrangement of cell wall polymers in flax infected with a pathogenic strain of Fusarium culmorum.

Physiological and Molecular Plant Pathology, 2020, **110**, 1-11.

DOI: 10.1016/j.pmpp.2020.101461

95. **Wróbel-Kwiatkowska Magdalena, Kostyn Kamil, Dymińska Lucyna, Hanuza Jerzy, Kurzawa Adam, Żuk Magdalena, Rymowicz Waldemar**

Spectroscopic and biochemical characteristics of flax transgenic callus cultures producing PHB.

Plant Cell Tissue and Organ Culture, 2020, **141**, 489-497.

DOI: 10.1007/s11240-020-01806-5

96. **Szopa Jan, Żuk Magdalena, Wojtasik-Górna Wioleta Anna**

Sposób zmiany poziomu ekspresji genu obecnego w genomie komórki roślinnej, epigenetycznie zmodyfikowana roślina otrzymana z komórki wytworzonej tym sposobem, sposób wytwarzania epigenetycznie modulowanego lnu o zwiększonej ekspresji endogennych genów kodujących β-glukanazę oraz oligonukleotyd jednoniciowego DNA do otrzymywania epigenetycznie modulowanego lnu.

2020-10-05, Pat.236567.

97. **Gębarowski Tomasz, Wiatrak Benita, Janeczek Maciej, Żuk Magdalena, Pistor Patrycja, Gąsiorowski Kazimierz**

Were our ancestors right in using flax dressings? Research on the properties of flax fibre and its usefulness in wound healing.

Oxidative Medicine and Cellular Longevity, 2020, **2020**, 1-10.

DOI: 10.1155/2020/1682317

98. **Mierziak Justyna, Burgberger Marta, Wojtasik Wioleta**

3-Hydroxybutyrate as a metabolite and a signal molecule regulating processes of living organisms.

Biomolecules, 2021, **11**, 1-21.

DOI: 10.3390/biom11030402

99. **Bujok Jolanta, Miśta Dorota, Wincewicz Edyta, Króliczewska Bożena, Dzimira Stanisław, Żuk Magdalena**

Atherosclerosis development and aortic contractility in hypercholesterolemic rabbits supplemented with two different flaxseed varieties.

Foods, 2021, **10**, 1-15.

DOI: 10.3390/foods10030534

100. **Paluch E., Szperlik Jakub, Lamch Ł., Wilk Kazimiera A., Obłąk Ewa**

Biofilm eradication and antifungal mechanism of action against *Candida albicans* of cationic dicephalic surfactants with a labile linker.

Scientific Reports, 2021, **11**, 1-12.

DOI: 10.1038/s41598-021-88244-1

101. **Grajzer Magdalena, Wiatrak Benita, Gębarowski Tomasz, Matkowski Adam, Grajeta Halina, Rój Edward, Kulma Anna, Prescha Anna**

Chemistry, oxidative stability and bioactivity of oil extracted from Rosa rugosa (Thunb.) seeds by supercritical carbon dioxide.

Food Chemistry, 2021, **335**, 1-9.

DOI: 10.1016/j.foodchem.2020.127649

102. **Okińczyc Piotr, Widelski Jarosław, Szperlik Jakub, Żuk Magdalena, Mroczek Tomasz, Skalicka-Woźniak Krystyna, Sakipova Zuriyadda, Widelska Gabriela, Kuś Piotr Marek**

Impact of plant origin on Eurasian propolis on phenolic profile and classical antioxidant activity.

Biomolecules, 2021, **11**, 1-18.

DOI: 10.3390/biom11010068

103. **Paluch E., Szperlik Jakub, Czuj Tadeusz, Cal Magdalena, Lamch Ł., Wilk Kazimiera A., Obłąk Ewa**

Multifunctional cationic surfactants with a labile amide linker as efficient antifungal agents - mechanisms of action.

Applied Microbiology and Biotechnology, 2021, **105**, 1237-1251.

DOI: 10.1007/s00253-020-11027-7

104. **Boba Aleksandra, Kostyn Kamil, Kozak Bartosz, Zalewski Iwan, Szopa Jan, Kulma Anna**

Transcriptomic profiling of susceptible and resistant flax seedlings after Fusarium oxysporum lini infection.

PLoS One, 2021, **16**, 1-11.

DOI: 10.1371/journal.pone.0246052