

دکتر فائزه قناتی



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آزمایشگاهها :

آزمایشگاههای 4001 و 4002

تجهیزات آزمایشگاهی: گاز کروماتوگراف، HPLC، کوره الکتریکی، اسپکتروفتومتر، روتاری اوپورتور، میکروسکوپهای نوری و فلورسانس سیستمهای کشت سلول و بافت شامل اتاق رشد، هودهای لامینار و فیتوترون، مولدهای میدان مغناطیسی ایستا و جریانهای الکترومغناطیسی

gnaling pathways in relationship with trace elements, heavy metals, physical elicitors (e.g., UV, Ultra/Infra sound, magnetic/electromagnetic fields)

2--Oxidative Stress and Biotechnology of Plant Secondary Metabolites |

حوزه فعالیتهای پژوهشی مرتبط: 1-مسیرهای سیگنالینگ پاسخ سلولهای گیاهی به فلزات سنگین، عناصر کمیاب و محرکهای فیزیکی (جاذبه متغیر، فرا و فرو صوت، فرا بنفش و الکترومغناطیس)

2- مکانیسم استرسهای اکسیداتیو و بیوتکنولوژی متابولیتهای ثانویه گیاهی

منتخبی از دستاوردهای تحقیقاتی و انتشارات مرتبط

- ❖ Energy saving and improvement of metabolism of cultured tobacco cells upon exposure to 2-D clinorotation, Journal of Plant Physiology 234–235 (2019) 36–43
- ❖ The role of SIPK signaling pathway in antioxidant activity and programmed cell death of tobacco cells after exposure to cadmium, Plant Science 280 (2019) 416–423

- ❖ Pyrrolizidine Alkaloids-Free Extract from the Cell Culture of *Lithospermum officinale* with High Antioxidant Capacity, *Applied Biochemistry and Biotechnology* (2018) In press, DOI: 10.1007/s12010-018-2830-3
- ❖ On the mechanism of the cell cycle control of suspension-cultured tobacco cells after exposure to static magnetic field, *Plant Science* (2018) **277**: 139-144
- ❖ Possible role of iron containing proteins in physiological responses of soybean to static magnetic field, *Journal of Plant Physiology* (2018) **226**: 163-171
- ❖ Physiological Parameters of Silicon-Treated Maize Under Salt Stress Conditions, *Silicon* (2018) **10**: 2585-2592
- ❖ Techno-economic and environmental assessment of conceptually designed in situ lipid extraction process from microalgae *Algal Research* (2018) **35**: 547-560
- ❖ The contribution of cell wall composition in the expansion of *Camellia sinensis* seedlings roots in response to aluminum, *Planta* (2018) 247:381–392
- ❖ Effect of nutrients on the growth and physiological features of newly isolated *Haematococcus pluvialis* TMU1, *Bioresource Technology* 255 (2018) 229–237
- ❖ Comparison of sucrose metabolism in wheat seedlings during drought stress and subsequent recovery, *Biologia Plantarum* (2018), **62** (3): 595-599
- ❖ Fructan dynamics and antioxidant capacity of 4-day-old seedlings of wheat (*Triticum aestivum*) cultivars during drought stress and recovery, *Functional Plant Biology*, (2018). **45**, 1000–1008
- ❖ Exergy-based screening of biocompatible solvent for *in situ* lipid extraction from *Chlorella vulgaris*, *Journal of applied phycology* (2017) 29:89–103
- ❖ Physiological effects of repeated foliar application of magnetite nanoparticles on maize plants, *J Agro Crop Sci.* (2017) 203: 592-603
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- ❖ Change of antioxidant enzymes activity of hazel (*Corylus avellana* L.) cells by AgNPs, *Cytotechnology*, (2016) 68:525-530

- ❖ Ultrasonic irradiation effects on electrochemical synthesis of ZnO nanostructures. *Ultrasonics Sonochemistry* 21 (2014) 1435–1440
- ❖ Effect of Methyl Jasmonate and Silver Nanoparticles on Production of Secondary Metabolites by *Calendula officinalis* L. (Asteraceae). *Tropical Journal of Pharmaceutical Research* November 2014; 13(11): 1783-1789
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