

محمد امین موسوی

استادیار

پست الکترونیکی: a-moosavi@nigeb.ac.ir

آدرس اینترنتی: nigeb.ac.ir

تلفن: 44787335

دورنگار: 44787395

تلفن همراه:

آدرس: انتهای بزرگراه همت غرب، بلوار پژوهش، پژوهشگاه ملی مهندسی ژنتیک و زیست فناوری

**مشخصات فردی**

نام و نام خانوادگی: سید محمد امین موسوی

شغل : استادیار

آدرس: صندوق پستی: 14965-161، ایران، تهران، کیلومتر 15 اتوبان تهران-کرج، شهرک علم و فناوری پژوهش، پژوهشگاه ملی مهندسی ژنتیک و تکنولوژی زیستی

تلفن: 44787335-21-0098

فکس: 44787393-21-0098

**تحصیلات:**

|  |  |  |  |
| --- | --- | --- | --- |
| **مقطع تحصيلي** | **رشته تحصيلي** | **سال فارغ التحصيلي** | **کشور** |
| **ليسانس** | زیست شناسی | 1374 | ایران |
| **فوق ليسانس** | سلولی مولکولی- بیوشیمی | 1379 | ایران |
| **دکترا** | بیوشیمی  | 1385 | ایران |

**سوابق پژوهشی:**

1. ***(As Principle Investigator):***

**2017-2019 Developing new inhibitors of LC3/ATG8 and p62/SQSTM1 in cancer,** Funding Agency: National Institute of Genetics Engineering and Biotechnology, International Grants.

**2015-2018 Targeting autophagy and ER stress in leukemia,**

Funding Agency**:** National Institute for Medical Research Development.

**2013-2017 NIGEB Welcome Grants.**

**2013-2015 Pro-oxidant nanoparticles and regulated cell death**, Funding Agency: President Office of Iran.

**2012-2013 Targeting GTP-binding protein nucleostemin in leukemia**, Funding Agency: National Institute of Genetics Engineering and Biotechnology

1. ***(As Co-Principle Investigator):***

**2019-2021 Evaluating therapeutic potentials of Ire1 arm of the UPR in colorectal cancer,**

Funding Agency**:** National Institute for Medical Research Development.

**زمینه های تحقیقاتی:**

سرطان- اتوفاژی- کشف دارو- مرگ سلولی

**انتشارات:**

***2021***

***1.*** Airiau K, Vacher P, Micheau O, Prouzet-Mauleon V, Kroemer G,**Djavaheri-Mergny M\*.** **Moosavi MA**\**. TRAIL Triggers CRAC-Dependent Calcium Influx and Apoptosis through the Recruitment of Autophagy Proteins to Death-Inducing Signaling Complex.* **Cells: 2021, 11 (1), 57 (IF: 6.6, Q1).**

2. Ghafouri-Fard S, Shoorei H, Mohaqiq M, Majidpoor J, **Moosavi MA**, Taheri M. *Exploring the role of non-coding RNAs in autophagy.***Autophagy. 2021: 1-22 (IF 16.08, Q1).**

3. Klionsky D,... **Moosvai MA** et al. [*Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition).*](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=cJTfmAUAAAAJ&sortby=pubdate&citation_for_view=cJTfmAUAAAAJ:uPCvBZYD9qUC) **Autophagy. 2021: 17 (1), 1-382 (IF 16.08, Q1).**

4. Haghi A, Salemi M, Fakhimahmadi F, Mohammadi Kian M, Yousefi H, Rahmati M, Mohammadi S, Ghavamzadeh A, **Moosavi MA**\***, Nikbakht M**\*. [*Effects of different autophagy inhibitors on sensitizing KG-1 and HL-60 leukemia cells to chemotherapy*](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=cJTfmAUAAAAJ&sortby=pubdate&citation_for_view=cJTfmAUAAAAJ:ujxm2eEBZHIC)*.* **IUBMB life, 2020: 73 (1), 130-145 (IF 3.8, Q1).**

5. Listed as Global burden of disease collaborators. *Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life Years for 29 Cancer Groups From 2010 to 2019*.**JAMA oncology, 2021 (IF 31.7 Q1).**

6. Listed as Local Burden of Disease Vaccine Coverage Collaborators. *Mapping routine measles vaccination in low-and middle-income countries* **Nature, 2021: 589 (7842), 415 (IF 49.9, Q1).**

7. Adibzadeh R, Golhin MS, Sari S, Mohammadpour H, Kheirbakhsh R, Muhammadnejad A, Amanpour S, **Moosavi MA,** Rahmati M. *Combination therapy with TiO2 nanoparticles and cisplatin enhances chemotherapy response in murine melanoma models.* **Clinical and Translational Oncology. 2021: 23, 738-749 (IF 3.4. Q2).**

8. Ajdary M, Keyhanfar F, **Moosavi MA**, Shabani R, Mehdizadeh M. [*Potential toxicity of nanoparticles on the reproductive system animal models: A review*](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=cJTfmAUAAAAJ&sortby=pubdate&citation_for_view=cJTfmAUAAAAJ:3x-KLxxGyuUC)*.* **J Reproductive Immunology. 2021:148, 103384 (IF: 2.6, Q2).**

9. Derakhshan S, Poosti A, Emami Razavi A, **Moosavi MA**, Mahdavi N, Baghaei Naieni F, Kamyab Hesari K, Rahpeima A.[*Evaluation of squamous cell carcinoma antigen 1 expression in oral squamous cell carcinoma (tumor cells and peritumoral T-lymphocytes) and verrucous carcinoma and comparison*](https://www.scielo.br/j/jaos/a/CxDWSjPYkKqSVPPVxRqvtJJ/abstract/?lang=en) *with normal oral mucosa.* **J Appl Oral Sci. 2021: 29 (IF: 2.36, Q2).**

*10.* Arani RH, Mohammadpour H, **Moosavi MA,** Muhammadnejad A, Abdollahi A, Rahmati M.[*The Role of Autophagy-related Proteins of Beclin-1/BECN1, LC3II, and p62/SQSTM1 in Melanoma Tumors*](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=cJTfmAUAAAAJ&sortby=pubdate&citation_for_view=cJTfmAUAAAAJ:UarirCmVI0EC)*.* **Asian Pacific Journal of Cancer Biology. 2021: 6 (4), 263-272**

11. Rahmati M, Ahmadmiri NS, **Moosavi MA**.[*New-targeted therapy for leukemia based on Endoplasmic Reticulum Stress*](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=cJTfmAUAAAAJ&sortby=pubdate&citation_for_view=cJTfmAUAAAAJ:dMpQl7XwOw4C)*.* **Basic & Clinical Cancer Research. 2021: 13 (2), 133-142**

***2020***

1. Azimi S, Rahmati M, Fahimi H,**Moosavi MA**\*. *TiO2 nanoparticles enhance the chemotherapeutic effects of 5-fluorouracil in human AGS gastric cancer cells via autophagy blockade.* **Life Sciences: 2020, 248: 117466 (IF 5.3, Q1).**

2. Mohammadalipour Z, Rahmati M, Khataee A,**Moosavi MA**\*. *Differential effects of N‐TiO2 nanoparticle and its photo‐activated form on autophagy and necroptosis in human melanoma A375 cells.* **J cell physiol 235 (11), 8246-8259 (IF 6.38, Q1).**

3. Rahmati M and**Moosavi MA**\*. *Cytokine-Targeted Therapy in Severely ill COVID-19 Patients: Options and Cautions.* **EJMO 2020, 4(2):179–180.**

**2019**

*1.* **Moosavi MA** and Djavaheri-Mergny M\*. *Autophagy: New Insights into Mechanisms of Action and Resistance of Treatment in Acute Promyelocytic leukemia.* **Int. J. Mol. Sci. 2019, 20: 3559 (IF 4.2, Q1).**

2. Mohammadinejad R, **Moosavi MA**, Tavakol S, Vardar DÖ, Hosseini A, Rahmati M, Dini L, Hussain S, Mandegary A, Klionsky DJ**\***. *Necrotic, apoptotic and autophagic cell fates triggered by nanoparticles.* **Autophagy. 2019.15: 4-33 (IF 16.08, Q1).**

3. Shabani S, Mahjoubi F and **Moosavi MA.** *A siRNA‐based method for efficient silencing of PYROXD1 gene expression in the colon cancer cell line HCT116.* **J Cell Biochem. 2019, 120: 19310-19317 (IF 2.8, Q1).**

4. Ahmadiany M, Alavi-Samani M, Hashemi Z, **Moosavi MA\*,** Rahmati M\*. *The Increased RNase Activity of IRE1α in PBMCs from Patients with Rheumatoid Arthritis.* **Advanced Pharmaceutical Bulletin (In press, 2019, Q1).**

5. Kashani MH, Madrakian T, Afkhami A, Mahjoubi F, **Moosavi MA.** *Bottom-up and green-synthesis route of amino functionalized graphene quantum dot as a novel biocompatible and label-free fluorescence probe for in vitro cellular imaging of human ACHN cell lines.* **Materials Science and Engineering. 2019, 114452 (IF 3.5, Q1).**

**2018**

1. Rahmati M\*$, **Moosavi MA$ and** McDermott M\*. *ER stress: a therapeutic option in rheumatoid arthritis?* **Trends in pharm Sci. 2018, 39: 610-23 (IF 14.8, Q1). $Equal contribution**

**2. Mohammad MA\***, Haghi A, Rahmati M, Taniguchi H, Mocan A, Echeverría J, GuptaV.K, Tzvetkov NT, Atanasov AG**\***. *Phytochemicals as potent modulators of autophagy for cancer therapy.* **Cancer letter. 2018, 424:46-69 (IF 8.6, Q1).\*Co-corresponding author**

3. Ajdary M, **Moosavi MA,** Rahmati M, Falahati M, Mahboubi M, Mandegary A, Jangjoo S, Mohammadinejad R, Varma RS**\***. *Health Concerns of Various Nanoparticles: A Review of Their in Vitro and in Vivo Toxicity.* **Nanomaterials (Basel). 2018, 21: 8 (IF 34.9, Q1).**

**2017**

1. Mokarram MP, Albooski A, Zarghooni M, **Moosavi MA,** Sepehr, Z, Chen QM, Hudecki A, Sargazi A, Alizadeh J, Hashemi M, Movassagh H, Owji A, Klonisch T, Los MJ, Ghavami S**\***. *New Frontiers in Treatment of Colorectal Cancer therapy: Autophagy and Unfolded protein Response as Promising Targets*. **Autophagy. 2017, 13 :781-819 (IF 16.08, Q1).**

2. Fakhimahmadi A, Nazmi F, Rahmati M, Bonab NM, Hashemi M, **Mohammad MA\*.** *Nucleostemin silencing induces differentiation and potentiates all-trans-retinoic acid effects in human acute promyelocytic leukemia NB4 cells via autophagy.* **Leukemia Research**. **2017, 63: 15-21. (IF 3.1, Q2).**

3. Rahmati, M**\***, Amanpour S, Kharman-Biz A, **Moosavi MA\*.** *Endoplasmic Reticulum Stress as a Therapeutic Target in Cancer: A mini review*. **Basic & Clinical Cancer research 2017, 9: 38-48.**

**2016**

1. **Moosavi MA\*,** Sharifi M, Moasses-Ghafari S, Mohammad-Alipour M, Khataee, A, Rahmati M, Los MJ, Klonisch T, Ghavami S**\***. *Photodynamic N-TiO2 nanoparticle treatment induces ROS-mediated autophagy and terminal differentiation of K562 cells.* **Scientific Reports. 2016, 6: 34413 (IF 4.3, Q1).**

2. Mahdavi M, Lavi MM, Yekta R, **Moosavi MA ,** Nobarani M, Balalei S, Rashidi. *Evaluation of the cytotoxic, apoptosis inducing activity and molecular docking of spiroquinazolinone benzamide derivatives in MCF-7 breast cancer cells.* **Chem Biol Interact**. **2016, 260: 232-42 (IF 2.57, Q2).**

**2005-2015 (10 selected)**

**1.** Nazmi F, **Moosavi MA\*,** Rahmati M, Hoessinpour-Feizi MA. Modeling and structural analysis of human Guanine nucleotide-binding protein-like 3, nucleostemin. **Bioinformation. 2015, 11: 353-8 (IF 0.4, Q3).**

**2.** Rahmati M, **Moosavi MA***\****,** Zarghami N. Nucleostemin Knocking-down causes cell cycle arrest and apoptosis in human T-cell acute lymphoblastic leukemia MOLT-4 cells via p53 and p21 Waf1/Cip1 up-regulation. **Hematology. 2014, 19: 455-62 (IF 1.54, Q3).**

**3. Moosavi MA,** Moasses ghafary S, Rahmati M, Asadi M. Growth inhibitory and apoptotic effects of carbenoxolone in human leukemia K562 cell Line. **Daru-J Pharm Res. 2011, 19: 455-61** **(IF 2.6, Q2).**

**4. Moosavi MA** and Yazdanparast R*.* Distinct MAPK signaling pathways, p21 up-regulation and caspase-mediated p21 cleavage establishes the fate of U937 cells exposed to 3- hydrogenkwadaphnin: differentiation versus apoptosis. **Toxicol Appl Pharmacol. 2008, 230: 86-96 (IF 3.6, Q1).**

**5. Moosavi MA,** and Yazdanparast R. ERK1/2 inactivation and p38 MAPK-mediated caspase activation during GTP-mediated terminal erythroid differentiation of K562 cells. **Int J Biochem Cell Biol. 2007, 39: 1685-97 (IF 3.1, Q1).**

**6. Moosavi MA,** and Yazdanparast R. GTP induces S-phase arrest and inhibits DNA synthesis in K562 cells but not in human normal PBL cells. **BMB reports**. **2006, 39: 492-501 (IF 2.9, Q1).**

**7.** Yazdanparast R, **Moosavi MA**, and Mahdavi M. GTP induces differentiation and apoptosis in human leukemia KG1 and U937 cells. **Acta. Pharm. Sin**. **2006, 27: 1175-84 (IF 4.1, Q1).**

**8. Moosavi MA,** Yazdanparast R, Sanati H, Sarraf Nejad A. 3-hydrogenhwadaphnin targets inosine monophosphate dehydrogenase and triggers post-G1 arrest apoptosis in human leukemia cell lines. **Int J Biochem Cell Biol. 2005, 37: 2366-79** **(IF 3.1, Q1).**

**9.** Yazdanparast R, **Moosavi MA,** and Sanati H. 3-hydrogenkwadaphnin induces differentiation and apoptosis in HL-60 cell line. **Planta Medica. 2005, 71: 112-7(IF 2.4, Q1).**

**10. Moosavi MA,** Yazdanparast R and Sanati H. Anti-proliferative and cytotoxic effects of 3-hydrogenkwadaphnin was reduced by guanosine in K562 and Jurkat cell line. **BMB reports. 2005, 38: 391-8 (IF 2.9, Q1).**

**افتخارات:**

***2014*** –**The Ministry Award winner** for efforts in promoting “International Collaboration for Applied Research Development (ICARD)”, Ministry of Science, Research and Technology of Iran.

***2011*** -**Top advisor award** for Student's Scientific Association, The University of Tabriz, Iran.

***2011*** -**Distinguished teaching award** as the best faculty member of Tabriz University by the selection of students***.***

***2010* & 2011** -**Gold (Team) and Silver (Single) Chess medals,** First and Second Iranian Chess Olympiad among University Staffs of North West of Iran.

***2007*** -**Outstanding Doctoral Graduate Award** as the **first rank** among all Ph.D. dissertations of Iran in the field of basic science between 2005-2007, awarded by Jahad Daneshgahi of Iran.

***2007*** -**Awarded for the best authors of “Biological Book of Year”** in Student 9th Book Festival of Iran. ***Book Title* “**Molecular Cell Biology and Genetics Engineering”.

***2007*** -**KSBMB travel/fellowship award** from 19th Federation of Asian-Pacific Biochemistry and Molecular Biology Conference, Seoul, Korea.

***2006*** -**IUBMB young scientist award** from International Union of Biochemistry and Molecular Biology (IUBMB), Kyoto, Japan.

***2005*** -**Razi young researcher award** by Iranian Society of Biochemistry at 8th Internal and 1st International Congress of Biochemistry, Tehran, Iran.

**سایر:**

**Book chapter:**

1. **Moosavi MA,** Rahmati MA, Ashtari N, Alizadeh J, Batahi Z, Ghavami S. "Apoptosis, Autophagy, and Unfolded Protein Response and Cerebellar Development." Development of the Cerebellum from Molecular Aspects to Diseases. ***Springer International Publishing AG***. **2017, 153-178.**

**Books (in Persian):**

1. **Moosavi MA** and Rahmati MA. Molecular Mechanisms controlling cell fate: apoptosis, autophagy and unfolded protein response. ***Naroon Publisher*.** **First Edition: 2017.**

2. Mahdavi M, **Moosavi MA,** Ardestani A, Sadeghizadeh M. Molecular *Cell Biology and Genetic Engineering***, *Published by* Iran’s Biology House** **(Forth edition, 2006-2014).** (The book has been selected as the best book of year in 2006 in Iran).

**گرنتهای بین المللی / ملی:**

1. ***(As Principle Investigator):***

**2017-2019 Developing new inhibitors of LC3/ATG8 and p62/SQSTM1 in cancer,** Funding Agency: National Institute of Genetics Engineering and Biotechnology, International Grants.

**2015-2018 Targeting autophagy and ER stress in leukemia,**

Funding Agency**:** National Institute for Medical Research Development.

**2013-2017 NIGEB Welcome Grants.**

**2013-2015 Pro-oxidant nanoparticles and regulated cell death**, Funding Agency: President Office of Iran.

**2012-2013 Targeting GTP-binding protein nucleostemin in leukemia**, Funding Agency: National Institute of Genetics Engineering and Biotechnology

1. ***(As Co-Principle Investigator):***

**2019-2021 Evaluating therapeutic potentials of Ire1 arm of the UPR in colorectal cancer,**

Funding Agency**:** National Institute for Medical Research Development.