

## *Curriculum Vitae:*

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**Address:** Assistant Professor, Department of Pharmaceutical Biotechnology, School of Pharmacy, Shahid Beheshti University of Medical Sciences, No. 2660, Vali-e-Asr Ave., 1991953381 Tehran, Iran.

## *Education:*

- Pharm.D. School of Pharmacy, Mazandaran University of Medical Sciences, Sari, Iran, 2008 up to 2014.
- PhD. Department of Pharmaceutical Biotechnology, School of Pharmacy, Shahid Beheshti University of Medical Sciences, Tehran, Iran, 2019.

## *International activities:*

- **Guest Editor;** MDPI International Journal of Molecular Sciences (ISSN 1422-0067), (Impact Factor: 5.92).

Home page: [https://www.mdpi.com/journal/ijms/special\\_issues/nano\\_theragnostic](https://www.mdpi.com/journal/ijms/special_issues/nano_theragnostic)

- **Biotechnology Advisory Board;** Cambridge Scholars Publishing; UK

Home page: <http://www.cambridgescholars.com/t/AdvisoryBoardHamed>

- **Editorial Board;** Biocell (Impact Factor 2.82), (ISSN: 1667-5746); Tech Science Press, USA

Home page: <https://www.techscience.com/biocell/index.html>

- **Associate Editorial Board;** Current Nanomedicine (ISSN: 2468-1881); Bentham Science.

Home page: <https://benthamscience.com/journals/current-nanomedicine/editorial-board/#top>

- **Associate Editorial Board;** Nanoscience & Nanotechnology-Asia (ISSN: 2210-6820); Bentham Science.

Home page: <https://benthamscience.com/journals/nanoscience-and-nanotechnology-asia/editorial-board/>

- **Editorial Board;** Nanoscience and Nanotechnology (ISSN: 2529-7775); Whioce Publishing Pte Ltd. Singapore

Home page: <http://ojs.whioce.com/index.php/nn/about/editorialTeam>

### ***Research interests:***

- Pharmaceutical nanobiotechnology
- Biosynthesis and characterization of nanomaterials
- Pharmaceutical potential of biological nanomaterials
- Nanomedicine and drug delivery systems
- Polymeric and inorganic nanomaterials

### ***Awards and honors:***

- The World's Top 2% Scientists List, according to a Stanford University study 2020.
- Institution of Engineering and Technology Premium Award 2020
- Institution of Engineering and Technology Premium Award 2019

### ***English Books:***

1. **Title:** Cancer Nanotheranostics (Volume 1)

**Chief Editor:** Muthupandian Saravanan, **Hamed Barabadi**

(2021), Springer Nature, USA.

eBook ISBN: 978-3-030-74330-7

DOI: 10.1007/978-3-030-74330-7

Link: <https://www.springer.com/gp/book/9783030743291>

2. **Title:** Cancer Nanotheranostics (Volume 2)

**Chief Editor:** Muthupandian Saravanan, **Hamed Barabadi**

(2021), Springer Nature, USA.

eBook ISBN: 978-3-030-76263-6

DOI: 10.1007/978-3-030-76263-6

Link: <https://www.springer.com/gp/book/9783030762629>

3. **Title:** Handbook: Emerging Nanomaterials and Nano-Based Drug Delivery Approaches to Combat Antimicrobial Resistance

**Chief Editor:** Muthupandian Saravanan, **Hamed Barabadi**, Ebrahim Mostafavi, Thomas J. Webster

(2022-February), Elsevier, USA

4. **Title:** Pharmaceutical Nanobiotechnology for Targeted Therapy

**Chief Editor:** Ebrahim Mostafavi, **Hamed Barabadi**, Muthupandian Saravanan

(2022), Springer, USA

5. **Title:** Bioengineering of Nanomaterials for Wound Healing and Infection Control

**Chief Editor:** **Hamed Barabadi**, Ebrahim Mostafavi, Muthupandian Saravanan, Hossein Vahidi

(2022), Elsevier, USA

### ***English Book Chapters:***

1. M. Saravanan, **H. Barabadi**, B. Ramachandran, G. Venkatraman, K. Ponnuragan: Emerging Plant-based Anti-cancer Green Nanomaterials in Present Scenario. In Hand Book: Comprehensive Analytical Chemistry; Volume 87: Engineered Nanomaterials and Phytonanotechnology: Challenges for Plant Sustainability, 11/2019: pages 291-318; Elsevier., ISBN: 0166-526X, <https://doi.org/10.1016/bs.coac.2019.09.001>.

2. D. Medina-Cruz\*, E. Mostafavi\*(Co-first author), A. V. Crua, A. Benko, J. L. Cholula-Diaz, T. J. Webster, M. Saravanan, H. Vahidi, **H. Barabadi**, “Nanobiosensors for theragnostic applications”, in: Handbook on Nanobiomaterials for therapeutics and diagnostic applications, Invited Book Chapter, Elsevier, 2021. <https://doi.org/10.1016/B978-0-12-821013-0.00005-2>
3. D. Medina-Cruz\*, Mostafavi\*(Co-first author), A. V. Crua, **H. Barabadi**, G. Guisbiers, J. L. CholulaDiaz, T. J. Webster, “Green Nanotechnology and Nano-Selenium for Biomedical Applications”, in: Nanomedicine, Invited Book Chapter, Elsevier, 2022.
4. D. Medina-Cruz\*, E. Mostafavi\*(Co-first author), A. V. Crua, **H. Barabadi**, G. Guisbiers, J. L. CholulaDiaz, T. J. Webster, “Green synthesized metallic nanoparticles for antimicrobial applications”, in: Nanomedicine, Invited Book Chapter, Elsevier, 2022.
5. M. Saravanan, **H. Barabadi**, H. Vahidi, T. J. Webster, D. Medina-Cruz, E. Mostafavi, A. V. Crua, J. L. Cholula-Diaz, “Emerging Theranostic Silver and Gold Nanobiomaterials for Breast Cancer: Present Status and Future Prospects”, in: Handbook on Nanobiomaterials for therapeutics and diagnostic applications”, Invited Book Chapter, Elsevier, 2021. <https://doi.org/10.1016/B978-0-12-821013-0.00004-0>.
6. M. Saravanan, **H. Barabadi**, H. Vahidi, “Green nanotechnology: Isolation of bioactive molecules and modified approach of bio-synthesis”, in: “Biogenic Nanoparticles for Cancer Theranostics”, Invited Book Chapter, Elsevier, 2021. DOI: 10.1016/C2019-0-02790-2.
7. D. Zewdu, A. Wondimu, **H. Barabadi**, M.A. Mahjoub, S. Ravikumar, P. Boomi, M. Saravanan, “Emerging Mesoporous Silica Nanoparticle-Mediated, Controlled

- and Targeted Drug Delivery System: Present Status and Future Prospects”, in: Handbook on Nanobiomaterials for therapeutics and diagnostic applications”, Invited Book Chapter, Elsevier, 2021. <https://doi.org/10.1016/B978-0-12-821013-0.00018-0>.
8. S. Manikandan, R. Subbaiya, M. Saravanan, **H. Barabadi**, R. Arulvel, "Emerging Theragnostic Metal-Based Nanomaterials to Combat Cancer", in: Cancer Nanotheranostics (Volume 1), Chapter 11, Springer, 2021. Pages 317-334. [https://link.springer.com/chapter/10.1007/978-3-030-74330-7\\_11](https://link.springer.com/chapter/10.1007/978-3-030-74330-7_11)
  9. **H. Barabadi**, et al, "Microbial Nanotechnology-based Approaches for Wound Healing and Infection Control", in: Handbook of Microbial Nanotechnology, Chapter 1, Elsevier, 2022. <https://doi.org/10.1016/B978-0-12-823426-6.00009-7>
  10. L.B. Truong, D. Medina Cruz, **H. Barabadi**, et al, "Cancer Therapeutics with Microbial Nanotechnology-based Approaches", in: Handbook of Microbial Nanotechnology, Chapter 2, Elsevier, 2022. <https://doi.org/10.1016/B978-0-12-823426-6.00004-8>
  11. H. Barabadi, et al, "Antiviral Potential of Green-Synthesized Silver Nanoparticles", in: Handbook of Microbial Nanotechnology, Chapter 14, Elsevier, 2022. <https://doi.org/10.1016/B978-0-12-823426-6.00030-9>

### ***Published papers:***

1. **Hamed Barabadi**, Faraz Mojab, Hossein Vahidi, Boshra Marashi, Niloufar Talank, Omid Hosseini, Muthupandian Saravanan. Green Synthesis, Characterization, Antibacterial and Biofilm Inhibitory Activity of Silver Nanoparticles Compared to Commercial Silver Nanoparticles. *Inorganic Chemistry Communications*. 2021; 129: 108647.
2. **Hamed Barabadi**, Alireza Mohammadzadeh, Hossein Vahidi, Masoumeh Rashedi, Muthupandian Saravanan, Niloufar Talank, Ahad Alizadeh. *Penicillium chrysogenum*-Derived Silver Nanoparticles: Exploration of Their Antibacterial and Biofilm Inhibitory Activity Against the Standard and Pathogenic *Acinetobacter baumannii* Compared to Tetracycline. *Journal of Cluster Science*. 2021. <https://doi.org/10.1007/s10876-021-02121-5>.
3. Gulzar Ahmed Rather, Anima Nanda, Manzoor Ahmad Pandit, Showket Yahya, **Hamed Barabadi**, Muthupandian Saravanan. Biosynthesis of Zinc Oxide Nanoparticles Using *Bergenia ciliate* Aqueous Extract and Evaluation of their Photocatalytic and Antioxidant Potential. *Inorganic Chemistry Communications*. 2021. 134:109020. <https://doi.org/10.1016/j.inoche.2021.109020>
4. AR Golnaraghi-Ghomi, M Mohammadi-Khanaposhti, A Sokhansanj, Y Saadati, E Khazraei, F Kobarfard, **H Barabadi**, A Golnaraghi. Artificial Neural Network Modeling of Fungus-Mediated Extracellular Biosynthesis of Zirconium Nanoparticles Using Standard *Penicillium* spp. *Journal of Cluster Science*. 2021. <https://doi.org/10.1007/s10876-021-02111-7>.
5. Hossein Vahidi, Farzad Kobarfard, Ahad Alizadeh, Muthupandian Saravanan, **Hamed Barabadi**. Green nanotechnology-based tellurium nanoparticles: Exploration of their antioxidant, antibacterial, antifungal and cytotoxic potentials

against cancerous and normal cells compared to potassium tellurite. *Inorganic Chemistry Communications*. 2021; 124: 108385.

6. Muthupandian Saravanan, Ebrahim Mostafavi, Savariar Vincent, Hadush Negash, Rajapriya Andavar, Venkatesan Perumal, Namas Chandra, Selvaraju Narayanasamy, Kalishwaralal Kalimuthu, **Hamed Barabadi**. Nanotechnology-based approaches for emerging and re-emerging viruses: Special emphasis on COVID-19. *Microbial Pathogenesis*. 2021; 156: 104908.
7. Aleksandra Benko, David Medina-Cruz, Ada Vernet-Crua, Catherine P. O'Connell, Małgorzata Świątek, **Hamed Barabadi**, Muthupandian Saravanan, Thomas J. Webster. Nanocarrier drug resistant tumor interactions: novel approaches to fight drug resistance in cancer. *Cancer Drug Resistance*. 2021; 4. DOI: 10.20517/cdr.2020.81.
8. Karthik Vivekanandhan, Poornima Shanmugam, **Hamed Barabadi**, et al. Emerging Therapeutic Approaches to Combat COVID-19: Present status and future perspectives. *Frontiers in Molecular Biosciences*. 2021; 8. doi: 10.3389/fmolb.2021.604447.
9. Muthupandian Saravanan, Hossein Vahidi, David Medina Cruz, Ada Vernet-Crua, Ebrahim Mostafavi, Ryan Stelmach, Thomas J Webster, Mohammad Ali Mahjoub, Masoumeh Rashedi, and **Hamed Barabadi**. Emerging Antineoplastic Biogenic Gold Nanomaterials for Breast Cancer Therapeutics: A Systematic Review. *International Journal of Nanomedicine*. 5/2020; 15: 3577-3595.
10. **Hamed Barabadi**, Hossein Vahidi, Masoumeh Rashedi, Mohammad Ali Mahjoub, Anima Nanda, Muthupandian Saravanan. Recent advances in biological mediated cancer research using silver nanoparticles as a promising strategy for hepatic cancer

therapeutics: a systematic review. *Nanomedicine Journal*. 8/2020; 7(4): 251-262.  
DOI: 10.22038/NMJ.2020.16373.

11. Ashapura Khatua, Abhinav Prasad, Eepsita Priyadarshini, Ishita Virmani, Ilora Ghosh, Bernard Paul, Ramovatar Meena, **Hamed Barabadi**, Amiya Kumar Patel, Muthupandian Saravanan. CTAB-PLGA curcumin nanoparticles: preparation, biophysical characterization and their enhanced antifungal activity against phytopathogenic fungus *Pythium ultimum*. *ChemistrySelect*. 9/2020; 5(34): 10574-10580.
12. Hossein Vahidi, Farzad Kobarfard, Zahra Kosar, Mohammad Ali Mahjoub, Muthupandian Saravanan, **Hamed Barabadi**. Mycosynthesis and characterization of selenium nanoparticles using standard *Penicillium chrysogenum* PTCC 5031 and their antibacterial activity: A novel approach in microbial nanotechnology. *Nanomedicine Journal*. 9/2020; 7(4): 315-323.
13. Karthigadevi Guruviah, Sathish Kumar Annamalai, Arulvel Ramaswamy, Chozhavendhan Sivasankaran, Subbaiya Ramasamy, **Hamed Barabadi**, Muthupandian Saravanan. Comparative antimicrobial and anticancer activity of biologically and chemically synthesized zinc oxide nanoparticles toward breast cancer cells. *Nanomedicine Journal*. 9/2020; 7(4): 272-283.
14. **Hamed Barabadi**, Thomas J. Webster, Hossein Vahidi, Hamed Sabori, Kaveh Damavandi Kamali, Fereshteh Jazayeri Shoushtari, Mohammad Ali Mahjoub, Masoumeh Rashedi, Ebrahim Mostafavi, David Medina Cruz, Omid Hosseini, Muthupandian Saravanan. Green nanotechnology-based Gold Nanomaterials for Hepatic Cancer Therapeutics: A Systematic Review. *Iranian Journal of Pharmaceutical Research*. 9/2020; 19(3): 3-17. DOI: 10.22037/IJPR.2020.113820.14504.



15. David Medina Cruz, Ebrahim Mostafavi, Ada Vernet Crua, **Hamed Barabadi**, Veer Shah, Jorge Luis Cholula-Díaz, Gregory Guisbiers, Thomas J Webster. Green nanotechnology-based zinc oxide (ZnO) nanomaterials for biomedical applications: a review. *Journal of Physics: Materials*. 3/2020; DOI: 10.1088/2515-7639/ab8186.
16. Chelliah Pragathiswaran, Chinnasamy Smitha, **Hamed Barabadi**, Mysoon M Al-Ansari, Latifah A Al-Humaid, Muthupandian Saravanan. TiO<sub>2</sub>@ZnO nanocomposites decorated with gold nanoparticles: Synthesis, characterization and their antifungal, antibacterial, anti-inflammatory and anticancer activities. *Inorganic Chemistry Communications*. 9/2020; DOI: 10.1016/j.inoche.2020.108210
17. Hadi Samadian, Mohammad Saeid Salami, Mehdi Jaymand, Asaas Azarnezhad, Masoud Najafi, **Hamed Barabadi**, Amirhossein Ahmadi. Genotoxicity assessment of carbon-based nanomaterials; Have their unique physicochemical properties made them double-edged swords? *Mutation Research/Reviews in Mutation Research* 1/2020; DOI: 10.1016/j.mrrev.2020.108296
18. Kaur, Manjot, Kulwinder Singh, Paviter Singh, Amanpreet Kaur, Ramovatar Meena, Gajendra Pratap Singh, Hamed Barabadi, Muthupandian Saravanan, and Akshay Kumar. Emerging aluminium nitride nanoparticles: chemical synthesis and exploration of their biocompatibility and anticancer activity against cervical cancer cells. *Nanomedicine Journal* 7, no. 3 (2020): 194-198.
19. Ashapura Khatua, Abhinav Prasad, Eepsita Priyadarshini, Amiya Kumar Patel, Aparupa Naik, Muthupandian Saravanan, **Hamed Barabadi**, Ilora Ghosh, Bernard Paul, Rajamani Paulraj, Ramovatar Meena: Emerging Antineoplastic Plant-Based Gold Nanoparticle Synthesis: A Mechanistic Exploration of their Anticancer

Activity Toward Cervical Cancer Cells. Journal of Cluster Science 12/2019;,  
DOI:10.1007/s10876-019-01742-1

20. Vishnupriyan Varadharaj, Arulvel Ramaswamy, Rajeswari Sakthivel, Ramasamy Subbaiya, **Hamed Barabadi**, Murugesan Chandrasekaran, Muthupandian Saravanan: Antidiabetic and Antioxidant Activity of Green Synthesized Starch Nanoparticles: An In Vitro Study. Journal of Cluster Science 11/2019;,  
DOI:10.1007/s10876-019-01732-3
21. **Hamed Barabadi**, Hossein Vahidi, Mohammad Ali Mahjoub, • Zahra Kosar, Kaveh Damavandi Kamali, Karuppiyah Ponmurugan, Omid Hosseini, Masoumeh Rashedi, Muthupandian Saravanan: Emerging Antineoplastic Gold Nanomaterials for Cervical Cancer Therapeutics: A Systematic Review. Journal of Cluster Science 11/2019;,  
DOI:10.1007/s10876-019-01733-2
22. Ahmad Reza Golnaraghi, Mohammad Mohammadi-Khanaposhti, Hossein Vahidi, Farzad Kobarfard, Mahdiah Ameri Shah Reza, **Hamed Barabadi**: Fungus-mediated Extracellular Biosynthesis and Characterization of Zirconium Nanoparticles Using Standard Penicillium Species and Their Preliminary Bactericidal Potential: A Novel Biological Approach to Nanoparticle Synthesis. Iranian journal of pharmaceutical research (IJPR) 10/2019; 18(4):2101-2110.,  
DOI:10.22037/IJPR.2019.112382.13722
23. **Hamed Barabadi**, Hossein Vahidi, Kaveh Damavandi Kamali, Masoumeh Rashedi, Saravanan Muthupandian: Antineoplastic Biogenic Silver Nanomaterials to Combat Cervical Cancer: A Novel Approach in Cancer Therapeutics. Journal of Cluster Science 10/2019;,  
DOI:10.1007/s10876-019-01697-3
24. Ishita Virmani, Christo Sasi, Eepsita Priyadarshini, Raj Kumar, Saurabh Kumar Sharma, Gajendra Pratap Singh, Ram Babu Pachwarya, R. Paulraj, **Hamed**

- Barabadi**, Muthupandian Saravanan, Ramovatar Meena: Comparative Anticancer Potential of Biologically and Chemically Synthesized Gold Nanoparticles. Journal of Cluster Science 10/2019;, DOI:10.1007/s10876-019-01695-5
25. **Hamed Barabadi**, Hossein Vahidi, Kaveh Damavandi Kamali, Masoumeh Rashedi, Omid Hosseini, Saravanan Muthupandian: Emerging Theranostic Gold Nanomaterials to Combat Colorectal Cancer: A Systematic Review. Journal of Cluster Science 09/2019;, DOI:10.1007/s10876-019-01681-x
26. **Hamed Barabadi**, Hossein Vahidi, Kaveh Damavandi Kamali, Masoumeh Rashedi, Omid Hosseini, Ahmad Reza Golnaraghi Ghomi, Muthupandian Saravanan: Emerging Theranostic Silver Nanomaterials to Combat Colorectal Cancer: A Systematic Review. Journal of Cluster Science 09/2019;, DOI:10.1007/s10876-019-01668-8
27. Hossein Vahidi, **Hamed Barabadi**, Muthupandian Saravanan: Emerging Selenium Nanoparticles to Combat Cancer: A Systematic Review. Journal of Cluster Science 09/2019;, DOI:10.1007/s10876-019-01671-z
28. Keywan Mortezaee, Masoud Najafi, Hadi Samadian, **Hamed Barabadi**, Asaad Azarnezhad, Amirhossein Ahmadi: Redox interactions and genotoxicity of metal-based nanoparticles: A comprehensive review. Chemico-Biological Interactions 09/2019; 312:108814., DOI:10.1016/j.cbi.2019.108814
29. **Hamed Barabadi**, Hossein Vahidi, Kaveh Damavandi Kamali, Omid Hosseini, Mohammad Ali Mahjoub, Masoumeh Rashedi, Fereshteh Jazayeri Shoushtari, Muthupandian Saravanan: Emerging Theranostic Gold Nanomaterials to Combat Lung Cancer: A Systematic Review. Journal of Cluster Science 08/2019;, DOI:10.1007/s10876-019-01650-4

30. **Hamed Barabadi**, Masoud Najafi, Hadi Samadian, Asaad Azarnezhad, Hossein Vahidi, Mohammad Ali Mahjoub, Mahbobeh Koohiyan, Amirhossein Ahmadi: A Systematic Review of the Genotoxicity and Antigenotoxicity of Biologically Synthesized Metallic Nanomaterials: Are Green Nanoparticles Safe Enough for Clinical Marketing?. *Medicina* 08/2019; 55(8):439., DOI:10.3390/medicina55080439
31. **Hamed Barabadi**, Omid Hosseini, Kaveh Damavandi Kamali, Fereshteh Jazayeri Shoushtari, Masoumeh Rashedi, Hamed Haghi-Aminjan, Muthupandian Saravanan: Emerging Theranostic Silver Nanomaterials to Combat Lung Cancer: A Systematic Review. *Journal of Cluster Science* 07/2019;, DOI:10.1007/s10876-019-01639-z(
32. Ashapurna Khatua, Eepsita Priyadarshini, Paulraj Rajamani, Amiyakumar Patel, Jitender Kumar, Aparupa Naik, Muthupandian Saravanan, **Hamed Barabadi**, Abhinav Prasad, Llor Ghosh, Bernard Paul, Ramovatar Meena: Phytosynthesis, Characterization and Fungicidal Potential of Emerging Gold Nanoparticles Using *Pongamia pinnata* Leave Extract: A Novel Approach in Nanoparticle Synthesis. *Journal of Cluster Science* 07/2019; DOI:10.1007/s10876-019-01624
33. Ramalingam Balachandar, Gurumoorthy P, Natchimuthu Karmegam, **Hamed Barabadi**, Ramasamy Subbaiya, K. Anand, P. Boomi, Saravanan Muthupandian: Plant-Mediated Synthesis, Characterization and Bactericidal Potential of Emerging Silver Nanoparticles Using Stem Extract of *Phyllanthus pinnatus*: A Recent Advance in Phytonanotechnology. *Journal of Cluster Science* 05/2019; 30(6):1481–1488., DOI:10.1007/s10876-019-01591-y
34. **Hamed Barabadi**, Kaveh Damavandi Kamali, Fereshteh Jazayeri Shoushtari, Babak Tajani, Mohammad Ali Mahjoub, Ahad Alizadeh, Saravanan

- Muthupandian: Emerging Theranostic Silver and Gold Nanomaterials to Combat Prostate Cancer: A Systematic Review. *Journal of Cluster Science* 05/2019; 30(6):1375–1382., DOI:10.1007/s10876-019-01588-7
35. **Hamed Barabadi**, Soheila Honary, Pouneh Ebrahimi, Ahad Alizadeh, Farzaneh Naghibi, Muthupandian Saravanan: Optimization of myco-synthesized silver nanoparticles by response surface methodology employing Box-Behnken design. *Synthesis and Reactivity in Inorganic Metal-Organic and Nano-Metal Chemistry* 05/2019;, DOI:10.1080/24701556.2019.1583251
36. Krishnaswamy Kanagamani, Muthukrishnan Pitchaipillai, Shankar Karikalan, Kathiresan Ayyasami, **Hamed Barabadi**, Saravanan Muthupandian: Antimicrobial, Cytotoxicity and Photocatalytic Degradation of Norfloxacin Using *Kleinia grandiflora* Mediated Silver Nanoparticles. *Journal of Cluster Science* 05/2019; 30(6):1415–1424., DOI:10.1007/s10876-019-01583-y
37. **Hamed Barabadi**, Babak Tajani, Mona Moradi, Kaveh, Damavandi Kamali, Ramovatar Meena, Soheila Honary, Mohammad, Ali Mahjoub, Muthupandian Saravanan: *Penicillium* Family as Emerging Nanofactory for Biosynthesis of Green Nanomaterials: A Journey into the World of Microorganisms. *Journal of Cluster Science* 04/2019;, DOI:10.1007/s10876-019-01554-3
38. **Hamed Barabadi**, Zahra Alizadeh, Mohammad Taghi Rahimi, Aleksandra M Barac, Alberto Enrico Maraolo, Lucy J Robertson, Ali Masjedi, Firooz Shahrivar, Ehsan Ahmadpour: Nanobiotechnology as an emerging approach to combat malaria: A systematic review. *Nanomedicine Nanotechnology Biology and Medicine* 03/2019; 18:221-233., DOI:10.1016/j.nano.2019.02.017
39. Pandi Boomi, Gurumalles Prabu Poorani, Subramaniyan Palanisamy, Samayanan Selvam, Ganesan Ramanathan, Sundaram Ravikumar, **Hamed Barabadi**, Halliah

Gurumallesh Prabu, Jeyaraman Jeyakanthan, Muthupandian Saravanan: Evaluation of Antibacterial and Anticancer Potential of Polyaniline-Bimetal Nanocomposites Synthesized from Chemical Reduction Method. Journal of Cluster Science 03/2019;, DOI:10.1007/s10876-019-01530-x

40. **Hamed Barabadi**, Mohammad Ali Mahjoub, Babak Tajani, Amirhossein Ahmadi, Yasmeen Junejo, Saravanan Muthupandian: Emerging Theranostic Biogenic Silver Nanomaterials for Breast Cancer: A Systematic Review. Journal of Cluster Science 03/2019; 30(2):259-279., DOI:10.1007/s10876-018-01491-7
41. **Hamed Barabadi**, Farzad Kobarfard, Hossein Vahidi: Biosynthesis and Characterization of Biogenic Tellurium Nanoparticles by Using *Penicillium chrysogenum* PTCC 5031: A Novel Approach in Gold Biotechnology. Iranian journal of pharmaceutical research (IJPR) 11/2018; 17(Special Issue 2):87-97.
42. Saravanan Muthupandian, Balajee Ramachandran, **Hamed Barabadi**, Marco Giardiello: Barriers for the development, translation, and implementation of nanomedicine: an African perspective. 10/2018; 3(3):106-110., DOI:10.1002/jin2.43
43. **Hamed Barabadi**, Ahad Alizadeh, Muhammad Ovais, Amirhossein Ahmadi, Zabta Khan Shinwari, Saravanan Muthupandian: The efficacy of green nanoparticles against cancerous and normal cell lines: A systematic review and meta-analysis. IET Nanobiotechnology 06/2018; 12(4):377-391., DOI:10.1049/iet-nbt.2017.0120
44. Muthupandian Saravanan, Tsehaye Asmalash, Atsebaha Gebrekidan, Dawit Gebreegziabiher, Tadele Araya, Haftamu Hilekiros, **Hamed Barabadi**, Kumaresan Ramanathan: Nano-Medicine as a Newly Emerging Approach to Combat Human

Immunodeficiency Virus (HIV). 02/2018; 06(1):17-27.,  
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45. Saravanan Muthupandian, Ramachandran Balajee, **Hamed Barabadi**: The prevalence and drug resistance pattern of extended spectrum  $\beta$ -lactamases (ESBLs) producing Enterobacteriaceae in Africa. *Microbial Pathogenesis* 01/2018; 114:180-192., DOI:10.1016/j.micpath.2017.11.061
46. **Hamed Barabadi**: Nanobiotechnology: A promising scope of gold biotechnology. *Cellular and molecular biology* 12/2017; 63(12):3-4., DOI:10.14715/cmb/2017.63.12.2
47. **Hamed Barabadi**, Muhammad Ovais, Zabta Khan Shinwari, Muthupandian Saravanan: Anti-cancer green bionanomaterials: Present status and future prospects. *Green Chemistry Letters and Reviews* 10/2017; 10(4):285-314., DOI:10.1080/17518253.2017.1385856
48. Ramasamy Subbaiya, Andavar Raja Priya, Konathala Ravi Shankar, Masilamani Selvam, Muhammad Ovais, Ramachandran Balajee, **Hamed Barabadi**, Saravanan Muthupandian: Biomimetic synthesis of silver nanoparticles from *Streptomyces atrovirens* and their potential anticancer activity against human breast cancer cells. *IET Nanobiotechnology* 07/2017; 11(8):965–972., DOI:10.1049/iet-nbt.2016.0222
49. Muthupandi Kasithevar, Muthupandian Saravanan, Periyakaruppan Prakash, Hema Kumar, Muhammad Ovais, **Hamed Barabadi**, Zabta Khan Shinwari: Green synthesis of silver nanoparticles using *Alysicarpus monilifer* leaf extract and its antibacterial activity against MRSA and CoNS isolates in HIV patients. DOI:10.1002/jin2.26
50. **Hamed Barabadi**, Soheila Honary, Milad Ali Mohammadi, Ehsan Ahmadpour, Mohammad Taghi Rahimi, Ahad Alizadeh, Farzaneh Naghibi, Muthupandian

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***Patent:***

- Industrial system for production and extraction of silver nanoparticles from *Penicillium chrisogenum*.

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Registered number in Iranian Industrial Invention Organization: 74597 date: 2012

- Improvement in electrical and light system in agricultural pesticide atomizer engine.

Invented by: **Hamed Barabadi**

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