

# **SAEED SARKAR**

**PhD**



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## **Academic Background**

**1994** Physics Department  
University of Surrey, Guildford, UK, GU2 5XH  
Ph.D. Degree in Medical Physics(Nuclear Medicine)

**1998** Physics Department  
University of Surrey, Guildford, UK, GU2 5XH  
MSc in Medical Physics

**1979-1984** College of Science,  
Kashan University, Kashan, Iran  
BSc in Physics

## **Professional Activities**

- Secretary General of Iran Nano Initiative Council, Presidency, 2008 till now
- Head of Research Center for Science and Technology in Medicine (RCSTM), 2002 till now
- Head of Health Physics, Tehran Univ. of Medical sciences, since 1996
- Head of Medical Physics Dep., Tehran Univ. of Medical sciences, from 1997 till 2004
- Supervised more than 30 MSc and 10 PhD students
- Published more than 70 papers in different national and ISI journals and more than 40 national and international published abstract and 2 books.
- Published 20 International Patents and 2 National.

## **Publications**

### ***Peer-reviewed Journal Publications:***

1. Leveraging deep neural networks to improve numerical and perceptual image quality in low-dose preclinical PET imaging. Mahsa Amirrashedi, Saeed Sarkar, Hojjat Mamizadeh, Hossein Ghadiri, Pardis Ghafarian, Habib Zaidi, Mohammad Reza Ay. *Journal Computerized Medical Imaging and Graphics*. Volume: 94, 102010, 2021.
2. The effect of magnetic field strength on the positron range and projected annihilation artifact in integrated PET/MR systems: a GATE Monte Carlo study. Sepideh Barati, Milad Enferadi, Saeed Sarkar, Parham Geramifar. *The International Journal of Medical Physics Research and Practice*. Volume: 48, Issue: 9, P 2473-4209, 2021.
3. Evaluation of Thermal Properties of Ferromagnetic Core for Treatment of Solid Tumors by Electromagnetic Induction Hyperthermia. Elham Mohagheghpour, Shahab Sheibani, Reza Saber, Mohammad Soliemanpoor, Saeed Sarkar, Amirhossein Nezamdust, *Journal of Biomedical Physics and Engineering*, 2021/7/14.
4. 1. 24 Years old male with abnormal Sestamibi scan. Philip Cohen, Shahram Dabiri Oskooie, H Argani, Shahab Hoda, Simin Dadparvar, K Woods, RM Mango, JC Sebatino, S Patil, Y Dou, MA Oghabian, P Kaboli, Armaghan Fard-Esfahani, Hamidreza Aghayousefi, Mohammad Eftekhari, Babak Fallahi, Mohsen Saghari, Abbas Madani, Javad Esmaili, Javad Jannati, Banafsheh Dormanesh, Fariba Akhzari, Maryam Shahidzadeh Mahani, Abbas Takavar, Mehrosadat Alavi, Mojtaba Ansari, Mohammad Hoshiari, Seyed Hossein Mortazavi, Alireza Rezaei Arjroodi, Babak Fallahi Sichani, Simin Dadashzadeh, Golahmad Nasiroghli, Ali Sattari, Gholamali Shabani, Tayebeh Hadizad, Reza Najafi, Saeed Sarkar, Akram Abehesht, Seyed Hassan Firouzabadi, *Iranian Journal of Nuclear Medicine*, Volume: 29, 2021.
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7. Targeted gold nanoparticles enable molecular CT imaging of head and neck cancer: An in vivo study (vol114,105554,2019). Sara Khademi, Saeed Sarkar, Ali Shakeri-Zadeh, Neda Attaran, Sharmin Kharrazi, Mohammad Reza Ay, Hosein Azimian, Hossein Ghadiri, International Journal of Biochemistry & Cell Biology. Vol 120, 2020.
8. The impact of iterative reconstruction protocol, signal-to-background ratio and background activity on measurement of PET spatial resolution. Sahar Rezaei, Pardis Ghafarian, Mehrdad Bakhshayesh-Karam, Carlos F. Uribe, Arman Rahmim, Saeed Sarkar, Mohammad Reza Ay, Japanese Journal of Radiology, P 1-9, 2020.
9. Joint compensation of motion and partial volume effects by iterative deconvolution incorporating wavelet-based denoising in oncologic PET/CT imaging. Sahar Rezaei, Pardis Ghafarian, Abhinav K Jha, Arman Rahmim, Saeed Sarkar, Mohammad Reza Ay, Physica Medica, Vol 68, P 52-60, 2019.
10. Targeted gold nanoparticles enable molecular CT imaging of head and neck cancer. Sara Khademi, Saeed Sarkar, Ali Shakeri-Zadeh, Neda Attaran, Sharmin Kharrazi, Mohammad Reza Ay, Hossein Azimian, Hossein Ghadir, The International Journal of Biochemistry & Cell Biology, 2019, Vol 114.
11. NEMA NU-4 2008 Performance Evaluation of Xtrim-PET: A prototype SiPM-based preclinical scanner. Mahsa Amirrashedi, Saeed Sarkar, Pardis Ghafarian, Reza Hashemi Shahraki, Parham Geramifar, Habib Zaidi, Mohammad Reza Ay, Medical physics, 2019.
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20. Evaluation of effect of gold nanorods and spherical gold nanoparticles of different sizes on X-ray attenuation in computed tomography. Sara Khademi, Hossein Ghadiri, Saeed Sarkar, Sharmin Kharrazi, Seyed Mohammad Amini, Ali Shakeri-Zadeh, Mohammad Reza Ay, *Iranian Journal of Medical Physics* 15, 354-354, 2018.
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## Patents

- 2021 Electrochemical chlorine gas sensor and fabrication thereof
- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar
  - Application Number: US 11,199,520
  - Submitted in: USA
- 2021 Normalization of a positron emission tomography scanner
- Inventors: Mahsa Amirrashedi, Mohammad Reza Ay, Saeed Sarkar, Mohammad Hossein Farahani
  - Application Number: US 11,172,906
  - Submitted in: USA
- 2021 Altering paths of optical photons passing through a scintillator
- Inventors: Amirhossein Sanaat, Mohammad Reza Ay, Mohammad Hossein Farahani, Saeed Sarkar
  - Application Number: US 11,150,360
  - Submitted in: USA
- 2021 Location tracking on a surface
- Inventors: Saeed Alikhani, Mohammad Jalal Sadeghi, Alireza Ahmadian, Farzam Farahmand, Saeed Sarkar
  - Application Number: US 10,952,798
  - Submitted in: USA
- 2020 Fabrication of nanomotors and applications thereof for surface writing
- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar
  - Application Number: US 10,865,105
  - Submitted in: USA
- 2020 Single photon emission computed tomography imaging with a spinning parallel-slat collimator
- Inventors: Hojjat Mahani, Mohammad Reza Ay, Saeed Sarkar, Mohammad Hossein Farahani
  - Application Number: US 10/795,033
  - Submitted in: USA
- 2020 Peak detection in a two dimensional image
- Inventors: Navid Zeraatkar, Salar Sajedi Toighoun, Mohsen Taheri Parkoohi, Mohammad Reza Ay, Mohammad Hossein Farahani, Saeed Sarkar

- Application Number: US 15829808
  - Submitted in: USA
- 2020 Nanomotors for Reduction of Nitroarenes
- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar
  - Application Number: US 10,759,684
  - Submitted in: USA
- 2020 Controlling a Laparoscopic Instrument
- Inventors: Alireza Mirbagheri, Golchehr Amirkhani, Seiedmuhammad Yazdian, Farzam Farahmand, Saeed Sarkar
  - Application Number: US 16/832,439
  - Submitted in: USA
- 2020 Normalization of a Positron Emission Tomography Scanner.
- Inventors: Mahsa Amirrashedi, Mohammad Reza Ay, Saeed Sarkar, Mohammad Hossein Farahani
  - Application Number: US 16/746,447
  - Submitted in: USA
- 2020 Fabrication of nanomotors and applications thereof.
- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar
  - Application Number: US 10,576,320
  - Submitted in: USA
- 2020 Robotic guide for brain biopsy
- Inventors: Mohammad Akbar, Amirhossein Ahmadian, Mohammad Jalal Sadeghi, Alireza Ahmadian, Farzam Farahmand, Saeed Sarkar
  - Application Number: 10,555,784
  - Submitted in: USA
- 2019 Altering paths of optical photons passing through a scintillator
- Inventors: Amirhossein Sanaat, Mohammad Reza Ay, Mohammad Hossein Farahani, Saeed Sarkar
  - Application Number: US 16/533,820
  - Submitted in: USA
- 2019 ACCURACY OF ELECTROMAGNETIC NAVIGATION SYSTEMS
- Inventors: Saghatchi Samaneh, Hasani Bidgoli Javad, Sadeghi Mohammad Jalal, Ahmadian Alireza, Farahmand Farzam, Sarkar Saeed
  - Application Number: US 16/511,343
  - Submitted in: USA

- 2019 Nanomotors for reduction of nitroarenes
- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar,
  - Application Number: US 16/175, 107
  - Submitted in: USA
- 2018 Surgical instrument
- Inventors: Dariush Nazarinasab, Mohammad Jalal Sadeghi, Alireza Ahmadian, Farzam Farahmand, Saeed Sarkar
  - Application Number: 29/582,903
  - Submitted in: USA
- 2018 NAVIGATING AN IMAGING INSTRUMENT IN A BRANCHED STRUCTURE
- Inventors: Samaneh Saghatchi, Javad Hasani bidgoli, Mohammad Jalal Sadeghi, Alireza Ahmadian, Farzam Farahmand, Saeed Sarkar
  - Application Number: 15/986,724
  - Submitted in: USA
- 2018 SINGLE PHOTON EMISSION COMPUTED TOMOGRAPHY IMAGING WITH A SPINNING PARALLEL- SLAT COLLIMATOR
- Inventors: Hojjat Mahani, Mohammad Reza Ay, Saeed Sarkar, Mohammad Hossein Farahani
  - Application Number: 15/920,426
  - Submitted in: USA
- 2018 LOCATION TRACKING ON A SURFACE
- Inventors: Saeed Alikhani, Hasani bidgoli, Mohammad Jalal Sadeghi, Alireza Ahmadian, Farzam Farahmand, Saeed Sarkar
  - Application Number: 15/894,459
  - Submitted in: USA
- 2018 DEVICE FOR BRAIN BIOPSY
- Inventors: Javad Hasani bidgoli, Amirhossein Ahmadian, Mohammad Jalal Sadeghi, Alireza Ahmadian, Farzam Farahmand, Saeed Sarkar
  - Application Number: 15/854,442
  - Submitted in: USA
- 2018 ROBOTIC SYSTEM FOR SPECT IMAGING
- Inventors: Mohammad Reza Ay, Mohammad Hossein Farahani, Saeed Sarkar, Behnoosh Teimourian Fard, Salar Sajedi Toighoun, Sanaz Kaviani
  - Application Number: 9/986,960
  - Submitted in: USA

- 2018            **ROBOTIC GUIDE FOR BRAIN BIOPSY**
- Inventors: Mohammad Akbar, Seyed Mohammad Javad Mortazavi Ashkezari, Javad Hasani bidgoli, Amirhossein Ahmadian, Mohammad Jalal Sadeghi, Alireza Ahmadian, Farzam Farahmand, Saeed Sarkar
  - Application Number: 15/829,791
  - Submitted in: USA
- 2018            **POSITRON RANGE REDUCTION IN POSITRON EMISSION TOMOGRAPHY IMAGING**
- Inventors: Hojjat Mahanim, Mustafa Abbasi, Mohammad Reza Ay, Saeed Sarkar, Mohammad Hossein Farahani
  - Application Number: 15/847,809
  - Submitted in: USA
- 2018            **PEAK DETECTION IN A TWO DIMENSIONAL IMAGE**
- Inventors: Navid Zeraatkar, Sajedi Toighoun, Taheri Parkoohi, Mohammad Reza Ay, Mohammad Hossein Farahani, Saeed Sarkar
  - Application Number: 15/829,808
  - Submitted in: USA
- 2018            **METHODS AND BIOSENSORS FOR TUMOR DETECTION**
- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar,
  - Application Number: US 15/818, 767
  - Submitted in: USA
- 2018            **Fabrication of nanomotors and applications thereof surface writing**
- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar,
  - Application Number: US 15/866, 485
  - Submitted in: USA
- 2018            **Fabrication of nanomotors and applications thereof**
- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar,
  - Application Number: US 15/866, 480
  - Submitted in: USA
- 2017            **COMPACT CARDIAC SPECT SCANNER WITH SPINNING PARALLEL-SLAT COLLIMATOR**



- Inventors: Hojjat Mahanim, Mohammad Reza Ay, Saeed Sarkar, Mohammad Hossein Farahani
- Application Number: 62/470,363
- Submitted in: USA

2017 ELECTROCHEMICAL CHLORINE GAS SENSOR AND FABRICATION THEREOF

- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar,
- Application Number: US 62/375,910
- Submitted in: USA

2017 FABRICATION OF SMALL AND COST-EFFECTIVE NANOROD-SHAPED MOTOR AND APPLICATIONS THEREOF FOR SENSING VEGF<sub>165</sub> TUMOR MARKER,

- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar,
- Application Number: US 62/475,827
- Submitted in: USA

2017 FABRICATION OF SMALL AND COST-EFFECTIVE NANOROD-SHAPED MOTOR AND APPLICATIONS THEREOF FOR THE SURFACE WRITING,

- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar,
- Application Number: US 62/475,830
- Submitted in: USA

2017 FABRICATION OF SMALL AND COST-EFFECTIVE NANOROD-SHAPED MOTOR AND APPLICATIONS THEREOF FOR DECONTAMINATION OF PARAOXON-METHYL,

- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar,
- Application Number: US 62/475,829
- Submitted in: USA

2016 Western blot kid for detection of vaccinated poultry

- Rasool Madani, Seyed Mahdi Rezayat, Saeed Sarkar, Tara Emami.
- Application Number: 13636713
- US Patent: 9,395, 362
- Submitted in: USA

2016 REDUCTION OF POSITRON RANGE IN HIGH-RESOLUTION PET IMAGING

- Inventors: Hojjat Mahanim, Mustafa Abbasi, Mohammad Reza Ay, Saeed Sarkar, Mohammad Hossein Farahani
- Application Number: 62/435,877
- Submitted in: USA

- 2016 AUTOMATIC 2D PEAK DETECTION FOR CALIBRATION OF GAMMA DETECTOR BLOCK IMAGES
- Inventors: Navid Zeraatkar, Salar Sajedi Toighoun, Mohsen Taheri Parkoohi, Mohammad Reza Ay, Mohammad Hossein Farahani, Saeed Sarkar
  - Application Number: 62/429,763
  - Submitted in: USA
- 2016 ROBOTIC SYSTEM FOR SPECT IMAGING
- Inventors: Mohammad Reza Ay, Mohammad Hossein Farahani, Saeed Sarkar, Behnoosh Teimourian Fard, Salar Sajedi Toighoun, Sanaz Kaviani
  - Application Number: 15/099,015
  - Submitted in: USA
- 2016 ELECTROCHEMICAL CHLORINE GAS SENSOR AND FABRICATION THEREOF,
- Inventors: Mahmoud Amouzadeh Tabrizi, Mojtaba Shamsipur, Reza Saber, Saeed Sarkar,
  - Application Number: US 62/375,910
  - Submitted in: USA
- 2016 Desktop open-gantry spect imaging system
- Inventors: Navid Zeraatkar, Mohammad Hossein Farahani, Mohammad Reza Ay, Saeed Sarkar
  - Application Number: US 20160116604 A1
  - Submitted in: USA
  - <http://www.freshpatents.com/-dt20160428ptan20160116604>.
- 2015 Fluorescence molecular tomography system for small animal imaging
- Sedigheh Marjaneh Hejazi, Mohammad Ali Oghabian, Reza Massoudi, Hanieh Mohammadreza, Saeed Sarkar,
  - Application Number: 29/527,560
  - Submitted in: Europe, Iran.
  - [https://www.lens.org/images/patent/US/D743554/S1/US\\_D743554\\_S1.pdf](https://www.lens.org/images/patent/US/D743554/S1/US_D743554_S1.pdf)
- 2015 Electro spun nanofibrous wound dressing and a method of synthesizing the same.
- Mirzaei, Esmail, Majidi, Reza Faridi, Sarkar, Saeed, Rezayat, Seyed Mehdi.
  - Application Number: 13313033
  - Patent Number: 9101508
  - Submitted in: USA
- 2013 Electro spun nanofibrous wound dressing and a method of synthesizing the same.
- Mirzaei, Esmail, Majidi, Reza Faridi, Sarkar, Saeed, Rezayat, Seyed Mehdi.
  - Application Number: US9101508, US 20130150763 A1
  - Submitted in: USA
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- 2013 Electro spun nanofibrous wound dressing and a method of synthesizing the same.
- Mirzaei, Esmaeil, Majidi, Reza Faridi, Sarkar, Saeed, Rezayat, Seyed Mehdi.
  - Application Number: US 20130150763 A1
  - Submitted in: USA
- 2013 Nonlinear recursive filter for medical image processing
- Inventors: Mohammad Hossein Farahani, Salar Sajedi Toighoun, Mohammad Reza Ay, Saeed Sarkar
  - Patent Number: 8503748
  - Application Number: 13196664
  - Submitted in: USA
  - <https://www.google.com/patents/US8503748>
  - <https://www.google.com/patents/US20120027274>
- 2013 Western Blot Kit for Detection of Vaccinated Poultryaanm
- Inventors: Rasool Madani, Seyed Mahdi Rezayat, Saeed Sarkar, Tara Emami
  - Patent application number: US20130017536 A1
  - Submitted in: USA
  - <http://www.google.com/patents/US20130017536>
- 2013 A western blot kit for detection of vaccinated poultry
- Inventors: Rasool Madani, Seyed Mahdi Rezayat, Saeed Sarkar, Tara Emami
  - Patent application number: WO2012052047 A1
  - Europe
  - <http://www.google.com/patents/WO2012052047A1>
- 2013 Electro Spun Nanofibrous Wound Dressing And A Method Of Synthesizing The Same
- Inventors: Esmaeil Mirzaei, Reza Faridi Majidi, Saeed Sarkar, Seyed Mehdi Rezayat
  - Patent application number: US20130150763
  - Submitted in: USA
  - <http://www.google.com/patents/US20130150763>
- 2012 Platform connector
- Inventors: Reza Saber, Saeed Sarkar
  - Patent application number: US D659639 S1
  - Submitted in: USA
  - [https://www.lens.org/images/patent/US/D659639/S1/US\\_D659639\\_S1.pdf](https://www.lens.org/images/patent/US/D659639/S1/US_D659639_S1.pdf)
- 2012 Conducting tip connector
- Inventors: Reza Saber, Saeed Sarkar
  - Patent application number: 29/377,633

- Submitted in: USA
  - [https://www.lens.org/images/patent/US/D664929/S1/US\\_D664929\\_S1.pdf](https://www.lens.org/images/patent/US/D664929/S1/US_D664929_S1.pdf)
- 2012      NONLINEAR RECURSIVE FILTER FOR MEDICAL IMAGE PROCESSING
- Inventors: Mohammad Hossein Farahani, Salar Sajedi Toighoun, Mohammad Reza Ay, Saeed Sarkar
  - Application Number: 13/196,664
  - Submitted in: USA
- 2012      A western blot kit for detection of vaccinated poultry
- Inventors: Tara Emami, Rasool Madani, Seyed Mahdi Rezayat, Saeed Sarkar
  - Patent application number: US20130017536, WO2012052047 A1
  - Submitted in: USA, Europe
  - <http://www.google.com/patents/US20130017536>
- 2011      Water soluble compounds
- Inventors: Saeed Sarkar, Seyed Mahdi Rezayat, Anatoly Leonidovich Buchachenko, Dmitry Anatolevich Kuznetsov, Marina Alexeyevna Orlova, Marina Abramovna Yurovskaya, Igor Viktorovich Trushkov
  - Patent Number: 78,879,996
  - Application Number: 12123285
  - Submitted in: USA
  - [https://www.lens.org/images/patent/US/7879996/B2/US\\_7879996\\_B2.pdf](https://www.lens.org/images/patent/US/7879996/B2/US_7879996_B2.pdf)
- 2011      Electro spun nanofibrous wound dressing and a method of synthesizing the same
- Inventors: Esmaeil Mirzaei, Reza Faridi Majidi, Saeed Sarkar, Seyed Mehdi Rezayat
  - Patent application number: US 9101508 B2, US 20130150763 A1
  - Submitted in: USA
  - <https://www.google.com/patents/US20130150763>
  - <https://www.google.com/patents/US9101508>
- 2011      2-([60] Fullerene [1',9':3,4] Cyclohexen-1-Y1)-5,10,15,20-(Tetra Magnesium [(4-(N-(4-Carboxy Butyl) Amino) Phenyl 2,3-Dicarboxylate)]) Porphyrin Iron (II); Prepared By Linking A Fullerene To A Porphyrin Compound, Preferably With Electromagnetic Or Sonic Waves
- Inventors: Saeed Sarkar, Seyed Mahdi Rezayat, Anatoly Leonidovich Buchachenko, Dmitry Anatolevich Kuznetsov, Marina Alexeyevna Orlova, Marina Abramovna Yurovskaya, Igor Viktorovich Trushkov,
  - Patent application number: US7879996 B2
  - Submitted in: USA

- 2011            Piezomotor Connector
- Inventors: Reza Saber, Saeed Sarkar
  - Patent application number: US D639737 S1, US 29/377,634
  - Submitted in: USA
  - [https://www.lens.org/images/patent/US/D639737/S1/US\\_D639737\\_S1.pdf](https://www.lens.org/images/patent/US/D639737/S1/US_D639737_S1.pdf)
- 2008            Use Of A Magnesium Isotope For Treating Hypoxia And A Medicament Comprising The Same
- Inventors: Saeed Sarkar, Seyed Mahdi Rezayat, Anatoly Leonidovich Buchachenko, Dmitry Anatolevich Kuznetsov, Marina Alexeyevna Orlova, Marina Abramovna Yurovskaya, Igor Viktorovich Trushkov
  - Patent application number: US 20080317876 A1, EP 1992339 A1, CN 101310721 A,
  - Submitted in: USA, Europe, China, India
  - <https://www.google.com/patents/EP1992339A1?cl=en&dq=ininventor:%22Saeed+Sarkar%22&hl=en&sa=X&ved=0ahUKEwjpxOroLjMAhULM8AKHYXvBE8Q6AEIXjAJ>
- 2008            New Water Soluble Porphylleren Compounds
- Inventors: Saeed Sarkar, Seyed Mahdi Rezayat, Anatoly Leonidovich Buchachenko, Dmitry Anatolevich Kuznetsov, Marina Alexeyevna Orlova, Marina Abramovna Yurovskaya, Igor Viktorovich Trushkov
  - Patent application number: US 20080319187 A1, EP1992627A1, CN101307055A
  - Submitted in: USA, Europe, China, India
- 2007            STM
- Inventors: Reza Saber, Saeed Sarkar
  - Patent application number:
  - Submitted in: Iran
- 2004            Industrial CT scanner
- Inventors: Saeed Sarkar
  - Patent application number:
  - Submitted in: Iran

### **Awards:**

- 2015, The 21<sup>th</sup> Razi Research Festival on Medical Sciences, Selected second inventors.
- 2014, The 19<sup>th</sup> Razi Research Festival on Medical Sciences, Selected Project.
- 2013, The 27<sup>th</sup> Kharazmi international Festival, third place Applied Research.
- 2011, The 17<sup>th</sup> Razi Research Festival on Medical Sciences. Designated growth centers.
- 2010, The 16<sup>th</sup> Razi Research Festival on Medical Sciences. Designated growth centers.
- 2009, The 11<sup>th</sup> Young Kharazmi Festival, First Place.

- 2008, The Third Top of Nano Festival, First Place.
- 2008, The Sheikh Bahai Festival, First Place Entrepreneurs Emerging Technologies.
- 2006, The 12<sup>th</sup> Razi Research Festival on Medical Sciences.
- 2003, The sixth Festival of Avesina, Second Place.

### **As keynote speaker & Invited Speaker:**

- 2008, Knowledge Based Industries& Nano technology, Towards Development Arab Economies driven by knowledge based industries, Doha, Qatar.
- 2009, 1st ICPC Nanonet, Prague, Czech Republic.
- 2010, 3rd International Conference on Nanostructures, Kish Island, Iran.
- 2010, International Seminar on Nano-materials in Energy and Environment, Damascus, Syria.
- 2011, The 1st MEFOMP International Conference of Medical Physics, Shiraz, Iran.
- 2012, 1st Iran Nano Forum 2012 (INF2012), Tehran, Iran.
- 2012, 8th World Islamic Economic Forum's (WIEF), Johor Bahru Malaysia.
- 2013, Emerging Ethical Issues in Science and Technology, Follow-Up Conference to the 8th Ordinary Session of UNESCO's World Commission on the Ethics of Scientific Knowledge and Technology (COMEST), Bratislava, Slovakia.
- 2014, IFNE 2014: International forum on Nanotechnology Economy, Tehran, Iran.
- 2014, The Seventh International Nanotechnology Festival, Iran Nano 2014, Tehran, Iran.
- 2014, CHInano 2nd International Roundtable on Nanotechnology, Suzhou, China.

- 2014, Nano Korea Symposium , Korea.
- 2014, nanoSUR Forum, Caracas, Venezuela.
- 2016, “Opening Ceremony”, Science and Technology Exchange Program (STEP) in Islamic Countries, December 2016 University Putra Malaysia.
- 2016, “A Glance at Nanoscience and Nanotechnology Status in Islamic Countries”, Science and Technology Exchange Program (STEP) in Islamic Countries, December 2016 University Putra Malaysia.
- 2020, “Secretary General of Iran Nanotechnology Innovation Council (INIC)’, INDONESIA-IRAN, VIRTUAL HEALTH BUSINESS FORUM (IIVHBF) 2020, 14-17 December

### **National Research Success**

Research director and manager of the following product oriented projects:

Design and Construction of:

- Intelligent Surgical Navigation System
- Scanning Tunneling Microscope (STM)"
- Atomic Force Microscope (AFM)
- Hand held Gamma Camera
- Animal Single Photon Emission Computed Tomography (Animal SPECT)
- Florescent Molecular Tomography using Quantum dots

### **Editorial Board**

2000 till now	ACTA Medica Iranica Journal,
2002 till now	Iranian Journal of Medical Physics
2002 till now	Iranian Journal of Radiation Research
2002 till now	Iranian Journal of Nuclear Medicine
2002 -2010	Iranian Journal of Radiology
2002 -2010	ACTA Medica Iranica journal
2012 till now	Journal of Frontiers in Biomedical Technologies (FBT)

### **Membership in various institutions & scientific societies**

- Academic member of high council for educational programming in Ministry of Science and Technology since 2010
- Founder and Member of Board, Iranian Association of Nanotechnology, 2005 till now
- Board Member of Nanotechnology, Ministry of Health and Medical Education, 2007 till now
- Member of board of trustees, Kashan University of Medical Sciences, since 2008