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#### تحصیلات

- 1) دکتری, 1380, فیزیک, مرکز تحصیلات تکمیلی در علوم پایه زنجان
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#### مقالات چاپ شده در نشریات بین المللی

- 1) Mirfaez Miri, and . "Motion-induced radiation from a dynamically deforming mirror." PHYSICAL REVIEW A 59, no. 3 (1999): 2291.
- 2) Mirfaez Miri, and Nicolas Rivier. "The equilibrium state of 2D foams." Europhysics Letters 54, no. 1 (2001): 112.
- 3) Mirfaez Miri, and Nicolas Rivier. "Continuum elasticity with topological defects, including dislocations and extra-matter." J. Phys. A: Math. Gen 35, no. 1 (2002): 1727.
- 4) Mirfaez Miri, and . "Persistent random walk in a honeycomb structure: Light transport in foams." PHYSICAL REVIEW E 68, no. 3 (2003): 031102.
- 5) Mirfaez Miri, and . "The role of liquid films for light transport in dry foams." Europhysics Letters 65, no. 4 (2004): 567-573.
- 6) Nicolas Rivier, Mirfaez Miri, and Christophe Oguey. "Plasticity and topological defects in cellular structures: Extra matter, folds and crab moulting." COLLOIDS AND SURFACES A-PHYSICO-CHEMICAL AND ENGINEERING ASPECTS 263, no. 1 (2005): 39.
- 7) Mirfaez Miri, and . "Modelling light transport in dry foams by a coarse-grained persistent random walk." J. Phys. A: Math. Gen 38, no. 17 (2005): 3743-3749.
- 8) محمد منتظری , 063814 (2005): 6 PHYSICAL REVIEW A 71, no. 6 (2005): 063814 , and Mirfaez Miri. "Motion-induced radiation from a dynamically deforming mirror: Neumann boundary condition."
- 9) Michael Schmeideberg, Mirfaez Miri, and . "Photon channelling in foams." EUROPEAN PHYSICAL JOURNAL E 18, no. 1 (2005): 123-131.
- 10) Mirfaez Miri, , and . "Diffusive transport of light in a Kelvin foam." PHYSICAL REVIEW E 72, no. 3 (2005): 031111.
- 11) Mirfaez Miri, and Nicolas Rivier. "Universality in two-dimensional cellular structures evolving by cell division and disappearance." PHYSICAL REVIEW E 73, no. 3 (2006): 031101.
- 12) Mirfaez Miri, , and Ebrahim Fouladvand. "Persistent random walk on a site-disordered one-dimensional lattice: Photon subdiffusion." PHYSICAL REVIEW E 73, no. 3 (2006): 031115.
- 13) , and Mirfaez Miri. "Mechanical response of the quantum vacuum to dynamic deformations of a cavity." PHYSICAL REVIEW A 74, no. 2 (2006): 023801.
- 14) Mirfaez Miri, and Christophe Oguey. "Topological correlations and asymptotic freedom in cellular aggregates." COLLOIDS AND SURFACES A-PHYSICO-CHEMICAL AND ENGINEERING ASPECTS 309, no. 1 (2007): 107.
- 15) Arash Ashourvan, Mirfaez Miri, and . "Rectification of the lateral Casimir force in a vibrating noncontact rack and pinion." PHYSICAL REVIEW E 75, no. 4 (2007): 040103.

- 16) Arash Ashourvan, Mirfaez Miri, and . "Noncontact Rack and Pinion Powered by the Lateral Casimir Force." PHYSICAL REVIEW LETTERS 98, no. 14 (2007): 14080.
- 17) , and Mirfaez Miri. "Motion-induced radiation in a cavity with conducting and permeable plates." PHYSICAL REVIEW A 75, no. 1 (2007): 055802.
- 18) Arash Ashourvan, Mirfaez Miri, and . "Casimir rack and pinion." Journal of Physics: Conference Series 89, no. 1 (2007): 012017.
- 19) Mirfaez Miri, and Ramin Golestanian . "A frustrated nanomechanical device powered by the lateral Casimir force." APPLIED PHYSICS LETTERS 92, no. 1 (2008): -.
- 20) Zeynab Sadjadi , Mirfaez Miri, and Holger Stark . "Diffusive transport of light in three-dimensional disordered Voronoi Structures." PHYSICAL REVIEW E 77, no. 1 (2008): -.
- 21) Mohammad Montazeri , and Mirfaez Miri. "Radiation from a dynamically deforming mirror immersed in the electromagnetic vacuum." PHYSICAL REVIEW E 77, no. 5 (2008): 1-4.
- 22) Zeinab Sadjadi , and Mirfaez Miri. "Persistent random walk on a one - dimensional lattice with random asymmetric transmittances." PHYSICAL REVIEW E 78, no. --- (2008): 1-7.
- 23) Zeinab Sadjadi , Mirfaez Miri, M Reza Shaebani , and Sareh Nakhaee . "Diffusive transport of light in a two-dimensional disordered packing of disks: Analytical approach to transport mean free path." PHYSICAL REVIEW E 78, no. 1 (2008): -.
- 24) Mirfaez Miri, and Ramin Golestanian . "A frustrated non-contact rack-pinion-rack device." Journal of Physics: Conference Series 161, no. 1 (2009): -.
- 25) Zahra Naeimi , and Mirfaez Miri. "Optical properties of fractal aggregates of nanoparticles Effects of particle size polydispersity." PHYSICAL REVIEW E 80, no. 22 (2009): 1-6.
- 26) Rojman Zargar , Ali Najafi , and Mirfaez Miri. "Three - sphere low - Reynolds - number swimmer near a wall." PHYSICAL REVIEW E 80, no. 2 (2009): -.
- 27) Mirfaez Miri, Vahid Nekouie , and Ramin Golestanian . "Nonlinear dynamics of a rack-pinion-rack device powered by the Casimir force." PHYSICAL REVIEW E 81, no. 1 (2010): -.
- 28) Mojtaba Nasiri , Ali Moradian , and Mirfaez Miri. "Dynamics of noncontact rack - and - pinion device : Periodic back - and - forth motion of the rack." PHYSICAL REVIEW E 82, no. 3 (2010): -.
- 29) Mirfaez Miri, and Mojtaba Nasiri . "Noncontact rack - pinion - rack device as a differential vibration sensor." PHYSICAL REVIEW E 82, no. 1 (2010): -.
- 30) Arash Azari , Mirfaez Miri, and Ramin Golestanian . "Effect of the heterogeneity of metamaterials on the Casimir - Lifshitz interaction." PHYSICAL REVIEW A 82, no. 3 (2010): 1-8.
- 31) Mirfaez Miri, Sara Kheradsoud , Ebrahim Madadi , Zahra Mokhtari , and Hosin Hassani . "Optical analog of Matthiessens rule in a one - dimensional model for diffusive light transport in foams." PHYSICAL REVIEW E 82, no. 1 (2010): -.
- 32) Zahra Naeimi , and Mirfaez Miri. "Tunable dichroic self - affine thin films." Journal of Physical Chemistry C 115, no. 1 (2011): 15251-15256.
- 33) Zeinab Sadjadi , and Mirfaez Miri. "Diffusive transport of light in two - dimensional granular materials." PHYSICAL REVIEW E 84, no. 5 (2011): -.
- 34) Ali Moradian , and Mirfaez Miri. "A submicron device to rectify a square - wave angular velocity." EUROPEAN PHYSICAL JOURNAL E 34, no. 2 (2011): 1-6.
- 35) Arashmid Nahal, Talebi Razieh , and Mirfaez Miri. "Thermo - electric - induced dichroism in ion - exchanged glasses : a candidate mechanism for the alignment of silver nanoparticles." APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 106, no. 4 (2011): 941-947.
- 36) Arash Azari , and Mirfaez Miri. "Lateral Casimir force between deeply corrugated dielectric and metallic plates." INTERNATIONAL JOURNAL OF MODERN PHYSICS B 26, no. 4 (2012): -.

- 37) Mojtaba Nasiri , Mirfaez Miri, and Ramin Golestanian . "Synchronizing noncontact rack - and - pinion devices." APPLIED PHYSICS LETTERS 100, no. 11 (2012): -.
- 38) Mojtaba Nasiri , and Mirfaez Miri. "Effect of thermal noise on noncontact rack and pinion device." PHYSICAL REVIEW E 85, no. 4 (2012): -.
- 39) Sahar Pakdel , and Mirfaez Miri. "Faraday rotation and circular dichroism spectra of gold and silver nanoparticle aggregates." Physical Review B - Condensed Matter and Materials Physics 86, no. 23 (2012): 235-445.
- 40) Maryam Taghilloo, and Mirfaez Miri. "Three-sphere magnetic swimmer in a shear flow." PHYSICAL REVIEW E 88, no. 2 (2013): 023008.
- 41) Mirfaez Miri, Negar Otrooshi, and Yaser Abdi. "Nanoemitter in the vicinity of an impedance plane." JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 30, no. 11 (2013): 3027.
- 42) Yaser Abdi, Negar Otrooshi, and Mirfaez Miri. "Surface plasmon resonance of Ag nanoparticles in the vicinity of a high impedance surface." CURRENT APPLIED PHYSICS 14, no. 1 (2014): 1287.
- 43) Mirfaez Miri , and Kourosh Rezaei. "Fractal aggregate of hollow spherical nanoparticles:engineering the absorption spectrum by hollow size." JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 31, no. 11 (2014): 2802.
- 44) Zahra Etesami, and Mirfaez Miri. "Noncontact Casimir rack and pinion as an excitable system." APPLIED PHYSICS LETTERS 107, no. 1 (2015): 143110.
- 45) Atefeh Mohammadzadeh, and Mirfaez Miri. "Magnetic linear and circular dichroism of planar sets of hollow silver nanoparticles: engineering the spectra by hollow size." JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 33, no. 4 (2016): 711.
- 46) Mirfaez Miri, Farhad Zamani, and Hamideh Alipoor. "Two tunneling-coupled two-level systems with broken inversion symmetry: tuning the terahertz emission." JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 33, no. 9 (2016): 1873.
- 47) Mirfaez Miri, and Zahra Etesami. "Casimir rack and pinion as a miniaturized kinetic energy harvester." PHYSICAL REVIEW E 94, no. 1 (2016): 022147.
- 48) Mahdijeh Sadrara, and Mirfaez Miri. "Scattering of electromagnetic waves by a cluster of charged spherical nanoparticles." JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 33, no. 12 (2016): 2552.
- 49) Amin Dehyadegari, Mirfaez Miri, and Zahra Etesami. "Dynamics of noncontact rack-and-pinion device subject to thermal noise: Multiharmonic motion of the rack." INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS 89, no. 1 (2016): 75.
- 50) Mirfaez Miri, and Mahdijeh Sadrara. "Dimers and Trimers of Hollow Silicon Nanoparticles: Manipulating the Magnetic Hotspots." Journal of Physical Chemistry C 121, no. 21 (2017): 11672-11679.
- 51) Mahdijeh Sadrara, and Mirfaez Miri. "Faraday rotation spectrum of magneto-optical nanoparticle aggregates." Physical Review B - Condensed Matter and Materials Physics 96, no. 11 (2017): 115436.
- 52) Zahra Naeimi, and Mirfaez Miri. "Magnetic and electric hotspots via fractal clusters of hollow silicon nanoparticles." OPTICS LETTERS 43, no. 3 (2018): 462.
- 53) Atefeh Mohammadzadeh Novin, and Mirfaez Miri. "Optical response of hybrid semiconductor quantum dot-metal nanoparticle system: Beyond the dipole approximation." JOURNAL OF APPLIED PHYSICS 123, no. 4 (2018): 043111.
- 54) Mirfaez Miri, and Zahra Etesami. "Synchronized motion of noncontact rack-and-pinion devices subject to thermal noise." INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS 99, no. 1 (2018): 273-280.
- 55) Farhad Zamani, and Mirfaez Miri. "Terahertz emission from an array of tunneling-coupled asymmetric two-level systems." OPTICS COMMUNICATIONS 423, no. 1 (2018): 207-214.
- 56) Faezeh Pirmoradian, Babak Zare Rameshti, Mirfaez Miri, and Shahpoor Saeidian. "Topological magnon modes in a chain of magnetic spheres." Physical Review B - Condensed Matter and Materials Physics 98, no. 22 (2018): .
- 57) Mahdijeh Sadrara, and Mirfaez Miri. "Electric and Magnetic Hotspots via Hollow InSb Microspheres for Enhanced Terahertz Spectroscopy." Scientific Reports 9, no. 1 (2019): .

58) Atefeh Mohammadzadeh Novin, and Mirfaez Miri. "Resonance fluorescence of a hybrid semiconductor-quantum-dot-metal-nanoparticle system driven by a bichromatic field." *Physical Review B - Condensed Matter and Materials Physics* 99, no. 11 (2019): .

59) Mahdiyeh Sadrara, and Mirfaez Miri. "Dirac electron scattering from a cluster of electrostatically defined quantum dots in graphene." *Physical Review B - Condensed Matter and Materials Physics* 99, no. 15 (2019): .

60) Zahra Naeimi, Atefeh Mohammadzadeh Novin, and Mirfaez Miri. "Optical response of a hybrid system composed of a quantum dot and a core-shell nanoparticle." *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS* 36, no. 8 (2019): 2317.

#### مقالات چاپ شده در نشریات داخلی

1) زهرا اعتصامی و میر فائز میری. "استخراج انرژی الکتریکی از نوسانات مکانیکی کاتوره ای توسط سامانه های الکترومکانیکی خطی و ناخطی: مقایسه نوبه های گوناگون." پژوهش فیزیک ایران 17، 1 (1396): 33.

#### راهنمایی پایان نامه

1) بررسی پاسخ اپتیکی انبوهه نانوذرات با استفاده از تقریب دوقطبی های جفت شده، سحر پاک دل، دانشگاه تهران، 1391/04/06

2) فرایند اولین عبور یک ولگشت تصادفی از مجموعه ای از نقاط، مرتضی جعفری سیاوشانی، دانشگاه تهران، 1391/06/29

3) پاسخ اپتیکی انبوهه ای از نانو ذرات بیضوی شکل، عاطفه محمدزاده نوین، دانشگاه تهران، 1392/06/26

4) طیف سنجی نمایانی پیسه، سیده هلیا هوشمندضیافی، دانشگاه تهران، 1392/11/30

5) برهمکنش فوتونها با نقاط کوانتومی، هادی سلطان مرادی، دانشگاه تهران، 1395/04/20

#### فعالیت‌های اجرایی

1) مدیر گروه بخش حالت جامد دانشکده فیزیک، 1391/03/16، 1392/03/16، ایران، تهران

2) معاون پژوهشی و تحصیلات تکمیلی دانشکده فیزیک، 1391/09/18، 1393/08/25، ایران، تهران

3) مدیر بخش حالت جامد دانشکده فیزیک، 1393/09/10، 1394/09/10، ایران، تهران

4) نماینده دانشکده فیزیک در شورای سیاست‌گذاری و برنامه ریزی کتابخانه پردیس علوم، 1393/09/17، 1395/09/17، ایران، تهران