

ISI Publications.

2018

1- Large area multi-channel plasmonic absorber based on the touching triangular dimers fabricated by angle controlled colloidal nanolithography, SM Hamidi, S Behjati, Optics & Laser Technology 99, 203-213.

2-Enhanced Faraday rotation in one dimensional magneto-plasmonic structure due to Fano resonance, S Sadeghi, SM Hamidi, Journal of Magnetism and Magnetic Materials 451, 305-310.

3- New generation of α -MnO₂ nanowires @PDMS composite as a hydrogen gas sensor, SM Hamidi, A Mosivand, M Mahboubi, H Arabi, N Azad, MR Jamal, Applied Physics A 124 (3), 253.

4-Localized to Propagating Surface Plasmon Resonance Transition in Ni-Au Magneto-Plasmonic Gratings, MA Oskuei, SM Hamidi, Journal of Superconductivity and Novel Magnetism 31 (4), 1167-1171.

5- Demonstration of tunable complex refractive index of graphene covered one dimensional photonic crystals, SM Hamidi, M Mahboubi, SM Mohseni, B Azizi, A Ghaderi, S Javadi, Optical and Quantum Electronics 50 (4), 182.

6- Exciton-plasmon coupling in two-dimensional plexitonic nano grating, N Asgari, SM Hamidi, Optical Materials 81, 45.

7-Sensitivity optimization of Bell-Bloom magnetometers by manipulation of atomic spin synchronization, M Ranjbaran, MM Tehranchi, SM Hamidi, SMH Khalkhali, Physica C: Superconductivity and its Applications 548, 99-102.

8-Highly sensitive biochemical sensor based on nanostructured plasmonic interferometer, Z Khajemiri, SM Hamidi, OK Suwal, Optics communications 427, 85-89.

9- Tamm plasmon boosting Faraday rotation in a coupled resonator magneto-plasmonic structure, SM Hamidi, R Moradlou, Journal of Magnetism and Magnetic Materials, 469, 364.

10- Relaxation time dependencies of optically detected magnetic resonance harmonics in highly sensitive Mx magnetometers, M Ranjbaran, MM Tehranchi, SM Hamidi, SMH Khalkhali, Journal of Magnetism and Magnetic Materials, 469, 522.

11- Fantastic Exciton-plasmon coupling in Dye-doped Poly (vinyl pyrrolidone)/Gold one-dimensional Nano-grating, N Asgari, SM Hamidi, Superlattices and Microstructures.

2017

1-“Fabrication methods of plasmonic and magnetoplasmonic crystals: a review”, F Sohrabi, SM Hamidi, THE EUROPEAN PHYSICAL JOURNAL P LUS 132 (15), 1-22.

2-“Harmonic detection of magnetic resonance for sensitivity improvement of optical atomic magnetometers”, M Ranjbaran, MM Tehranchi, SM Hamidi, SMH Khalkhali, Journal of Magnetism and Magnetic Materials 424, 284-290.

3-“Improvement of the spin polarization lifetime in the 85 Rb vapor cell by octadecyltrichlorosilane coating”, SMH Khalkhali, M Ranjbaran, D Mofidi, SM Hamidi, MM Tehranchi, Chinese Journal of Physics.

4-“Thermoelastic-tunable magnetic response of BiFeO₃ thin film on colloidal photonic crystal substrate fabricated by pulsed laser deposition”, ZS Azizi, MM Tehranchi, SM Hamidi, SH Vakili, S Poormahdian, physica status solidi (a) 214 (2).

5- “New generation of one-dimensional photonic crystal cavities as robust high-efficient frequency converter”, TS Parvini, MM Tehranchi, SM Hamidi, Photonics and

Nanostructures-Fundamentals and Applications.

6-“Optical detection of brain activity using plasmonic ellipsometry technique”, F Sohrabi, SM Hamidi, Sensors and Actuators B: Chemical 251, 153-163.

7-“Effects of square-wave magnetic fields on synchronization of nonlinear spin precession for sensitivity improvement of M X magnetometers”, M Ranjbaran, MM Tehranchi, SM Hamidi, SMH Khalkhali, Journal of Magnetism and Magnetic Materials.

8-“All optical fan out able half adder circuit based on nonlinear directional coupler”, A Adami, SM Hamidi, K Navi, M Hosseinzade, Optik-International Journal for Light and Electron Optics.

9-“Plasmon-exciton induced circular dichroism in Gold/PMMA (RB) complex”, SM Hamidi, F Jafari, S Behjati, F Sohrabi, Journal of Materials Science: Materials in Electronics, 1-9.

10- [Engineered magneto-optical response of cobalt ferrite thin films deposited on self-assembled colloidal crystal](#), ZS Azizi, MM Tehranchi, SM Hamidi, SH Vakili, S Pourmahdian, Thin Solid Films 638, 81-88.

11- [Localized to Propagating Surface Plasmon Resonance Transition in Ni-Au Magneto-Plasmonic Gratings](#), MA Oskuei, SM Hamidi, Journal of Superconductivity and Novel Magnetism, 1-5.

12- Transverse Tunable Magneto-Plasmonic Kerr Effect in Large Area Micro-Patterned Au/Co/Au Structures, SM Hamidi, S Behjati, F Sohrabi, Journal of Superconductivity and Novel Magnetism, 1-9.

13-Characterization of Au/Fe/Au and Au/Co/Au Magneto-Plasmonic Multilayers as an Ethanol Vapor Sensor, M Afsharnia, SM Hamidi, IEEE Transactions on Magnetics, 1-5.

14-All-optical photonic crystal logic gates using nonlinear

directional coupler, H Sharifi, SM Hamidi, K Navi, Photonics and Nanostructures-Fundamentals and Applications 27, 55-63.

2016

1- *“Enhanced magneto-plasmonic activity of cobalt layer perforated by Au nanostructures”*, S. M. Hamidi, M. Mosleh, N. Rajab, A. H. Baradaran Ghasemi, J. of superconductivity and novel magnetism, 29,771 (2016).

2- *“Hydrogen gas sensor based on long-range plasmons in lossy palladium film placed on photonic crystal stack”*, S. M. Hamidi, R. Ramezani, Optical materials,53,201, (2016).

3-*Effect of cerium substitution on microstructure and Faraday rotation of $Ce_x Y_{3-x} Fe_{50}O_{12}$ thin films*,SM Shahrokhvand, M Mozaffari, ASH Rozatian, SM Hamidi,Applied Physics A 122 (1), 1-5(2016)

4- *Enhanced magneto-plasmonic effect in Au/Co/Au multilayers caused by exciton-plasmon strong coupling*, S. M. Hamidi, O. Ghaebi, Journal of magnetism and magnetic materials, 414, 122 (2016)

5- *A new design procedure for all-optical photonic crystal logic gates and functions based on threshold logic*, H. Sharifi, S. M. Hamidi, K. Navi, Optics communications, 370, 231 (2016)

6-Magneto-plasmonic study of aligned Ni, Co and Ni/Co multilayer in polydimethylsiloxane as magnetic field sensor,SM Hamidi, B Mosaeii, M Afsharnia, A Aftabi, M Najafi,Journal of Magnetism and Magnetic Materials 417, 413-419.

7-Photonic crystal power combiner based on hexagonal waveguides,M Zahednamazi, A Alikhani, SM Hamidi,Optik-International Journal for Light and Electron Optics 127 (20), 8600-8603.

8-Neuroplasmonics: From Kretschmann configuration to plasmonic crystals, F Sohrabi, SM Hamidi, The European Physical Journal Plus 131 (7), 1-15.

9-A new design procedure for all optical photonic crystal logic gates and functions based on threshold logic, H Sharifi, M Hamidi, seyedeh, K Navi, Optics Communications 370, 231-238.

2015

1- *"One-step construction and examination of one-dimensional plasmonic chromium nano-grating"*, Hamidi, S., M. Zamani and H. Goudarzi, *Optics Communications* , 345(0): 47-51 (2015).

2- *"Optical and magneto-optical properties of aligned Ni nanowires embedded in polydimethylsiloxane."*, Hamidi, S. M., A. Sobhani, A. Aftabi and M. Najafi , *Journal of Magnetism and Magnetic Materials*, 374(0): 139-143 (2015).

3- *"Fabrication and Characterization of a Microwave Filter Based on a Nanowire-Supported Magnetic Photonic Band Gap Material"*, SM Hamidi, A Sobhani, A Aftabi , *Journal of Superconductivity and Novel Magnetism* 28 (12), 3565-3569

4- *"One dimensional tunable Coupled Resonator Optical Waveguide based on Liquid-Crystal layers"*, M Oraie, SM Hamidi, H Latifi , *Optik-International Journal for Light and Electron Optics* 126 (21), 2891-2894

5- *"Room temperature photoinduced magnetism in [py. H] 3 [FeCl 4] 2 Cl"*, F Baniasadi, MM Tehranchi, MB Fathi, SM Hamidi, N Safari, V Amani , *Materials Chemistry and Physics*

6- *"Kolarkoski sequence as an element to radiate giant forward and backward second harmonic signals"*, TS Parvini, MM Tehranchi, SM Hamidi, S Sarkarati, *Journal of Applied Physics* 118 (18), 183108

- 7- *"Use of nanostructures based on silver nanospikes prepared by oblique angle deposition as broadband optical polarizer"*, SM Hamidi, M Zamani, *Journal of Superconductivity and Novel Magnetism* 28 (5), 1565-1569
- 8- *"Enhanced optically induced magnetization due to inverse Faraday effect in plasmonic nanostructures"*, SM Hamidi, M Razavinia, MM Tehrani, *Optics Communications* 338, 240-245
- 9- *"Optical RNS adder and multiplier"*, LA Bakhtiar, E Yaghoubi, SM Hamidi, M Hosseinzadeh, *International Journal of Computer Applications in Technology* 52 (1), 71-76
- 10- *"Surface Plasmon Resonance Magneto-Optical Kerr Effect in Au/Co/Au Magneto-Plasmonic Multilayer"*, S. M. Hamidi, H. Goudarzi, S. Sadeghi, *Journal of Superconductivity and Novel Magnetism*, 28, 1565 (2015).
- 11- *"Giant enhancement of second harmonic generation in one-dimensional defective nonlinear photonic crystals"*, T. S. Parvini, M. M. Tehrani, S. M. Hamidi, *Applied physics A: materials science and processing*, 118, 1447 (2015).
- 12- *"Ac magneto-electric measurement of Cobalt ferrite/Barium titanate thin film"*, S. M. H. Khalkhali, S. Salimian, S. M. Hamidi, M. M. Tehrani, *submitted to European physical journal B*, 2015.

2014

- 1- *"Design of 1*3 Power splitter based on photonic crystal ring resonator"*, F. Sohrabi, T. Mahinroosta, S. M. Hamidi, *Optical engineering*, 53 (11), 115104 (2014).
- 2- *"Surface Plasmon Resonance Magneto-Optical Kerr Effect in Au/Co/Au Magneto-Plasmonic Multilayer"*, S. M. Hamidi, H. Goudarzi, S. Sadeghi, *Journal of Superconductivity and Novel Magnetism*: 1-5. 2014.

3-“Magneto-plasmonic enhanced in cobalt thin film incorporating core shell Ag@Au nanoparticles”, S. M. Hamidi, M. Oskuie, Journal of Superconductivity and novel magnetism. 27 (6), 1469 (2014).

4-“Photo-magnetic assisted ferroelectric polarization in magneto-electric BiFeO₃/BaTiO₃ thin film”, S. M. Khalkhali, M. M. Tehrani, S. M. Hamidi, Journal of magnetism and magnetic materials, 355, 188-191 (2014).

5-“Adjustable surface Plasmon resonance with Au, Ag and Ag@Au core-shell nanoparticles”, S. M. Hamidi, M. Oskuie, Chinese Optics Letters, 12 (3), 031601 (2014).

6-“All optical OR/AND/XOR gates based on nonlinear directional coupler.”, Yaghoubi, E., L. Bakhtiar, A. Adami, S. Hamidi and M. Hosseinzadeh, A. Journal of Optics 43(2): 146-153 (2014).

7- “Photo-magnetic assisted ferroelectric polarization in magneto-electric BiFeO₃/BaTiO₃ thin film”, S. M. Khalkhali, M. M. Tehrani, S. M. Hamidi, Journal of magnetism and magnetic materials, 355, 188-191 (2014).

8 – “Optical RNS adder and multiplier”, L. A. Bakhtiar, E. Yaghoubi, S. M. Hamidi, M. Hoseinzadeh, International Journal of computer applications in technology, 2014.

2013

1-“Effect of bismuth on improvement of Faraday Effect in YFeO₃ Thin Films Grown by PLD” A. Beiranvand, S. M. Hamidi, Z. Aboalizadeh, M. Mozaffari, J. Amighian, M. M. Tehrani and A. Yousif, Life Science Journal;10(2s) (2013).

2-“Magneto-electric Effect in Ba_{0.5}Sr_{0.5}TiO₃ /CoFe₂O₄ multilayer Prepared by Pulsed Laser Deposition Method”, S. M. Khalkhali, M. M. Tehrani, S. M. Hamidi, Journal of Superconductivity and novel magnetism. 27 (2), 565-567 (2013).

- 3- *“Enhanced Polar Magneto-optical Kerr rotation in Cobalt thin film incorporating Ag nanoparticles”*, S. M. Hamidi, M. A. Oskuie, S. Sadeghi, M. M. Tehrani, *Journal of Superconductivity and novel magnetism*, 26 (10), .860 (2013).
- 4- *“Contribution of Au nanoparticles to longitudinal magneto-optical kerr effect of Bragg reflector based magneto-plasmonic multilayers”*, S. M. Hamidi, H. Normhamadi, M. M. Tehrani, *J. Optics and Laser Technology*, 49, 237–242 (2013).
- 5- *“Optical Bistability in One-dimensional Coupled Resonator Nonlinear Optical Waveguide”*, S. M. Hamidi, Z. Eslamiat, *Journal of Nonlinear Optical Physics & Materials* , 22(1), 1350003 (2013).
- 6- M. Hamidi, Z. Eslamiat, *J. Nonlinear Optic. Phys. Mat.* 22, 1350003 (2013) [15 pages] DOI: 10.1142/S0218863513500033
- 7- *“Three-input majority function with nonlinear material in all-optical domain.”*, Bakhtiar, L., E. Yaghoubi, A. Adami, S. Hamidi and M. Hosseinzadeh, *Journal of Nonlinear Optical Physics & Materials* , *Journal of Optics* 42(4): 349-354. (2013).
- 8- *“All-optical parity circuits using nonlinear directional coupler.”*, Bakhtiar, L., E. Yaghoubi, A. Adami, S. Hamidi and M. Hosseinzadeh , *International Journal of Modern Education and Computer Science (IJMECS)* 5(5): 68 (2013).

2012

- 1- *“Efficient Second Harmonic Generation through One-dimensional Coupled Resonator Poled Nonlinear Optical Waveguide”*, S. M. Hamidi, T. Parvini, M. M. Tehrani, *Applied physics A*, 111, 525 (2012).
- 2- S. M. Hamidi, M. M. Tehrani, *“ Longitudinal magneto-optical Kerr effect in magneto-plasmonic heterostructures”*, *Journal of Superconductivity and novel magnetism* 26 (5),

1585-1587 (2012).

- 3- "*Determination of atomic number density of Rb vapor by using spectral Faraday rotation measurement*", M. M. Tehranchi, S. M. Hamidi, B. Abaie, J. Korean physical Society 62 (5), 731-733 (2012).
- 4- "*Growth-induced magnetic anisotropy behavior in thin garnet films fabricated by pulsed laser deposition*", M. M. Tehranchi, S. M. Hamidi, Applied physics A, 109, 169 (2012).
- 5- "*Preparation and investigation of Ce : YIG thin films with a high magneto-optical figure of merit*", S M Shahrokhvand, A S H Rozatian, M Mozaffari, S. M Hamidi and M M Tehranchi, J. Phys. D: Appl. Phys. 45 (2012) 235001.
- 6- "*Growth-induced magnetic anisotropy behavior in thin garnet films fabricated by pulsed laser deposition*", M. M. Tehranchi, S. M. Hamidi, Applied physics A, 109, 169 (2012).
- 7- "*Preparation and investigation of Ce : YIG thin films with a high magneto-optical figure of merit*", S M Shahrokhvand, A S H Rozatian, M Mozaffari, S. M Hamidi and M M Tehranchi, J. Phys. D: Appl. Phys. 45 (2012) 235001.
- 8- "*Tunable Optical Properties in Tilted Engineered One-dimensional Coupled Resonator Optical Waveguides*", S. M. Hamidi, A. Bananej, M.M. Tehranchi, J. Optics and laser technology, 44 (5), 1556-1563 (2012).
- 9- "*Magneto-optical Faraday rotation in Ce: YIG thin films incorporating Gold nanoparticles*", S. M. Hamidi, M.M. Tehranchi, J. Superconductivity and Novel magnetism, 25 (8), 2713-2717 (2012).
- 10- "*Optical and Magneto-optical Properties of One-dimensional Magnetized Coupled Resonator Plasma Photonic Crystals*", S. M. Hamidi, Phys. Plasmas 19, 012503 (2012); doi:10.1063/1.3677263 (8 pages).

12- *“Cavity Enhanced Longitudinal Magneto-Optical Kerr effect in Magneto-Plasmonic Multilayers Consist of Ce: YIG thin films incorporating Gold nanoparticles”*, S. M. Hamidi, M. M. Tehranchi, *J. Superconductivity and novel magnetism*, 25 (6), 2097-2100 (2012), DOI 10.1007/s10948-012-1591-4.

13- *“Longitudinal magneto-optical Kerr effect in magneto-plasmonic heterostructures”*, S. M. Hamidi, M. M. Tehranchi, *Journal of Superconductivity and novel magnetism* 26 (5), 1585-1587 (2012).

2011

1- *“The Inspection of Magnetic Flux Leakage from Metal Surface Cracks by Magneto-optical Sensors ”*, M. M. Tehranchi, S. M. Hamidi, H. Eftekhari, M. Karbaschi, M. Ranjbaran, *Sensors and Actuators A* 172 (2011) 365– 368.

2- *“ Effect of magnetic annealing on magneto-optical properties of Ce YIG thin films incorporating Gold nanoparticles”*, S. M. Hamidi, M.M. Tehranchi, *J. Phys. D: Applied Phys.* 44, 305003 (2011).

3- *“Engineered One-Dimensional Magneto-Photonic Crystal for Wavelength Division Multiplexing Systems”*, S. M. Hamidi, M.M. Tehranchi, M. Shasti, *J. Phys. D: Appl. Phys.* 44, 205107, (2011).

4- *“Effects of target rotation rate on the structural and morphological properties of thin garnet films fabricated by pulsed laser deposition”*, M. M. Tehranchi, S. M. Hamidi, A. Hasanpour, M. Mozaffari, J. Amighian, *J. Optics and Laser Technology* 43, 609, (2011).

5- *“A novel design for all-optical NAND/NOR/XOR gates based on nonlinear directional coupler”*, Yaghoubi, E., L. Bakhtiar, A. Adami and S. Hamidi . *J. Adv. Comput. Res* 2: 51-59. (2011).

2010

- 1- *"Adjustable Faraday rotation in one-dimensional magneto-photonic crystals"*, S. M. Hamidi, M. M. Tehranchi, A. Bananej, *Opt. mat.* 32, 1085, 2010.
- 2- *"The magneto-optical Co-based amorphous thin film as a magnetic field sensor"*, S. M. Hamidi, M. M. Tehranchi, Y. Chiniforooshan, *Journal of optoelectronic and advanced materials*, 12, 1135 (2010).
- 3- *"High Transmission Enhanced Faraday rotation in Coupled Resonator Magneto-Optical Waveguides"*, S. M. Hamidi, M. M. Tehranchi, *J. Lightwave. Tech.* 28 (15), 2139 (2010).

2009

- 1- *"The design of half-subtractor logic function based on nonlinear directional coupler"*, Bakhtiar, L., E. Yaghoubi, A. Adami, S. Hamidi and M. Hosseinzadeh, *Journal of Computer Engineering* 1: 3-11. (2009).

2008

- 1- *"A flexible design for one dimensional photonic crystals with controllable photonic bandgap width"*, A. Bananej, S. M. Hamidi, W. Li, Ch. Li and M. M. Tehranchi, *optical materials*, 30, 1822, 2008.
- 2- *"Adjustable dispersion compensating in one dimensional coupled resonator planar optical waveguides"*, S. M. Hamidi, A. Bananej and M. M. Tehranchi, *optics communication*, 281, 4917, 2008.
- 3- *"Magneto optical Kerr effect in Glass/CoFeSiB/ Cu/ SnO₂ thin film"*, M. Ghanaatshoar, M. Moradi, M. M. Tehranchi, S. M. Hamidi, *journal of non- crystalline solids*, 354, 5266 (2008).
- 4- *"Magnetic behaviours of amorphous Fe₇₈Si₉B₁₃ thin films"*

prepared by pulsed laser deposition", S. M. Hamidi, M. M. Tehranchi, M. Ghanaatshoar, M. Moradi, S. M. Mohseni, Journal of non- crystalline solids, 354, 5178 (2008).

5- *"The influence of laser annealing in the presence of longitudinal weak magnetic field on asymmetrical magnetoimpedance response of CoFeSiB amorphous ribbons"*, M. Ghanaatshoar, N. Nabipour, M. M. Tehranchi, S. M. Hamidi, S. M. Mohseni, Journal of Non-Crystalline Solids, 354, (2008).