CURRICULUM VITAE

Dr. Aliasghar Ajami

Personalia

Name	Aliasghar Ajami
Date of birth	21th March 1972
Citizenship	Iranian
Marital status	Married since 1998
Language	Persian (mother tongue), English (fluent) German (medium), Arabic (medium)
Contact Number	0043-67764762604
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Google Scholar Profile	https://scholar.google.com/citations?user=XqJJT1IAAAAJ
Scopus Profile	https://www.scopus.com/authid/detail.uri?authorId=55403165500

Employment

Faculty member of Laser&Optics group at faculty of Physics, **Semnan University**

Education and Research

Dec 2014-March 2017 **Post-Doc** research at **Vienna University of Technology**

Determining the two-photon absorption spectrum using supercontinuum white light.

August 2012-Dec 2014 **Post-Doc** research at **Vienna University of Technology**

Investigating the interaction of ultrashort laser pulses (sub ten femtosecond) with material surfaces using time of flight (TOF) Mass Spectroscopy.

July 2012 Graduation, Dr. Tech. (**Ph.D**.) from **Vienna University of Technology**

2007-2012 Dissertation at **Vienna University of Technology**,
Institute of Applied Physics, Atomic and plasma group

"Two-photon Modification of materials with ultra-short laser radiation Z-scan measurements and 3D-modification of selected materials"

Feb. 1999 Graduation, **MSc** from **Sharif University** of Technology (Tehran, Iran)

1998-1999 **MSc** Thesis performed at Faculty of Physics, **Sharif University of Technology** (Tehran, Iran): *"Optimization of cupper vapor laser with respect to temperature"*

1996-1998 Course of Studies at Faculty of Physics, **Sharif University of Technology**, (Tehran, Iran)

Feb. 1996 Graduation, **BSc** from **University of Isfahan** (Isfahan, Iran)

1991-1996 Course of Studies at Faculty of Physics, **University of Isfahan** (Isfahan, Iran)

1987-1991 High school in Sabzevar (Iran)

Career and experience

- **CEO** of "**Laser Parto Sazan**" (https://lasersazan.com) company at Semnan University Science & Technology | Sep. 2018 – now.
  Producing CNC table, Engraving laser machines, SLA 3D printers.

- **Assistant Professor at Faculty of physics**, Semnan University, Semnan, Iran | Sep. 2017 – now.
  Teaching Physics courses, advising 8 MSc projects, advising 3 PhD dissertation, performing research.

- **Researcher**. **University Assistant at the Vienna University of Technology**, Institute of Applied Physics | Sep. 2012 – March 2017.
  Using Femtolaser amplifier for surface texturing and micro-structuring, Two-photon spectrum determination, TOF mass spectroscopy, supercontinuum generation.
- **Teaching physics at high schools and colleges** | Sep 1999 – Jul 2005.

Skills

- **Femto-laser Amplifier |** Aligning and running Ti-Sapp laser Oscillator **.** Aligning and running Ti-Sapp amplifier **.** pulse shaping using acousto-optic modulator **.** pulse stretching and compressing using prism-pair configuration.
- **3D Printing |** Building 3D complex structures using 3D printers such as FDM, SLA and SLM
- **Two-photon polymerization |** 3D micro-nano structuring based on two-photon absorption.
- **Z-scan technique |** building the Z-scan setup for determining the optical nonlinear properties such as nonlinear absorption cross section and optical nonlinear refractive index.
- **Two-photon spectroscopy |** determining the two-photon absorption spectrum using white light Z-scan.
- **Supercontinuum generation |** producing broadband radiation via focusing the high energetic ultra-short pulses into inert gases.
- **Time of flight Mass spectroscopy |** determining the mass spectrum through measuring the time of flight of ions/neutral species generated by laser exposure.
- **Autocorrelation |** design and building the setup for determining the pulse width of ultrashort pulses.
- **Software |** Lab VIEW, Mathematica, MATLAB, Origin, MathType, EndNote, Mathcad, Laser GRBL (for engraving), Cura (UltiMacker Cura), Lumerical, G-code, SolidWorks, COMSOL

Honors

2009 My proposal regarding Z-scan measurements was selected as an ***innovative idea*** in Vienna University of Technology and granted for three years

1996 Member of Physics **Olympiad** in Iran (1996)

Scientific publications

Publications in peer-reviewed international journals	**38**
Conference papers	**35**

Scientific evaluation activities **since 2012.**

Reviewer for:

Applied Optics	Optics Express	Optics
J. physical chemistry	Optics letters	Optics and photonics conference
J. of optical society of America	Optical Materials	symmetry
J. of the American Ceramic Society	Optical Materials Express	optical materials express
Micro-machines	Optics Communications	Phys. Scripta Journal
J. Alloys and compounds	Coating	J. physical chemistry
Applied science	Materials	

List of publications

Journal Papers:

[1] Aliasghar **Ajami**, Aleksandr Ovsianikov, Robert Liska, and Stefan Baudis, "Z-scan technique: a review from conventional Z-scan to white light Z-scan," *Applied Physics B*, vol. 130 (8), pp. 138-180, 2024.

[2] K. Gallas, D. Wohlmuth, Z. Li, A. **Ajami**, A. Ovsianikov, R. Liska, *et al.*, "Dye-labeled aromatic azides for multi-photon grafting," *Monatshefte für Chemie-Chemical Monthly*, pp. 1-8, 2022.

[3] S. Bashir, M. S. Rafique, A. A. **Ajami**, C. S. Nathala, W. Husinsky, and K. Whitmore, "Femtosecond laser ablation of Zn in air and ethanol: Effect of fluence on the surface morphology, ablated area, ablation rate and hardness," *Applied Physics A*, vol. 127, pp. 1-22, 2021.

[4] J. Švanda, Y. Kalachyova, A. **Ajami**, W. Husinsky, P. Macháč, J. Siegel, et al., "Nonlinear optical properties and markedly higher two photon absorption of ordered c-shaped plasmon-active metal nanostructures," Optical Materials, vol. 112, 2021.

[5] S. Najafi, A. S. Arabanian, R. Massudi, A. **Ajami**, and W. Husinsky, "Induced birefringence in glass: depletion and enhancement by orthogonal-polarized femtosecond pulses," Applied Physics A: Materials Science and Processing, vol. 126, 2020.

[6] S. Bashir, M. Shahid Rafique, C. S. Nathala, A. A. **Ajami**, W. Husinsky, and K. Whitmore, "Pulse duration and environmental effects on the surface nanostructuring

and mechanical properties of zinc during femtosecond laser irradiation," Journal of the Optical Society of America B: Optical Physics, vol. 37, pp. 2878-2891, 2020.

[7] M. Akram, S. Bashir, S. A. Jalil, M. ElKabbash, F. Aumayr, A. **Ajami**, et al., "Femtosecond laser induced periodic surface structures for the enhancement of field emission properties of tungsten," Optical Materials Express, vol. 9, pp. 3183-3192, 2019/07/01 2019.

[8] R. Ahmad, M. Shahid Rafique, A. Ahmed, A. **Ajami**, P. Nekvindova, B. Svecova, et al., "Femtosecond laser induced two-photon absorption in Au-ion embedded glasses," Laser and Particle Beams, vol. 37, pp. 61-66, 2019.

[9] R. Ahmad, M. S. Rafique, A. **Ajami**, S. Bashir, W. Husinsky, and S. Iqbal, "Influence of laser and material parameters on two photon absorption in Rhodamine B and Rhodamine 6G solutions in MeOH," Optik, vol. 183, pp. 835-841, 2019/04/01/ 2019.

[10] M. Tromayer, P. Gruber, A. Rosspeintner, A. **Ajami**, W. Husinsky, F. Plasser, et al., "Wavelength-optimized Two-Photon Polymerization Using Initiators Based on Multipolar Aminostyryl-1,3,5-triazines," Scientific Reports, vol. 8, p. 17273, 2018/11/22 2018.

[11] M. Tromayer, A. Dobos, P. Gruber, A. **Ajami**, R. Dedic, A. Ovsianikov, et al., "A biocompatible diazosulfonate initiator for direct encapsulation of human stem cells: Via two-photon polymerization," Polymer Chemistry, vol. 9, pp. 3108-3117, 2018.

[12] A. Daskalova, A. Trifonov, I. Bliznakova, C. Nathala, A. **Ajami**, W. Husinsky, et al., "Selective cell response on natural polymer bio-interfaces textured by femtosecond laser," Applied Physics A: Materials Science and Processing, vol. 124, 2018.

[13] A. S. Arabanian, S. Najafi, A. **Ajami**, W. Husinsky, and R. Massudi, "Birefringence profile adjustment by spatial overlap of nanogratings induced by ultra-short laser pulses inside fused silica," Applied Physics A: Materials Science and Processing, vol. 124, 2018.

[14] A. **Ajami**, W. Husinsky, A. Ovsianikov, and R. Liska, "Dispersive white light continuum single Z-scan for rapid determination of degenerate two-photon absorption spectra," Applied Physics B: Lasers and Optics, vol. 124, 2018.

[15] S. Bashir, M. S. Rafique, C. S. Nathala, A. A. Ajami, and W. Husinsky, "Femtosecond laser fluence based nanostructuring of W and Mo in ethanol," Physica B: Condensed Matter, vol. 513, pp. 48-57, 2017.

[16] N. Ali, S. Bashir, I. K. Umm, M. Shahid Rafique, N. Begum, W. Husinsky, et al., "Femtosecond laser induced nanostructuring of zirconium in liquid confined environment," Chinese Physics B, vol. 26, 2017.

[17] A. **Ajami**, W. Husinsky, M. Tromayer, P. Gruber, R. Liska, and A. Ovsianikov, "Measurement of degenerate two-photon absorption spectra of a series of developed two-photon initiators using a dispersive white light continuum Z-scan," Applied Physics Letters, vol. 111, 2017.

[18] C. S. R. Nathala, A. **Ajami**, W. Husinsky, B. Farooq, S. I. Kudryashov, A. Daskalova, et al., "Ultrashort laser pulse ablation of copper, silicon and gelatin: effect of the pulse

duration on the ablation thresholds and the incubation coefficients," Applied Physics A: Materials Science and Processing, vol. 122, pp. 1-8, 2016.

[19] S. Najafi, R. Massudi, A. **Ajami**, C. S. R. Nathala, W. Husinsky, and A. S. Arabanian, "Study on contribution of the asymmetric stress to the birefringence induced by an ultrashort single laser pulse inside fused silica glass," Journal of Applied Physics, vol. 120, 2016.

[20] C. S. R. Nathala, A. **Ajami**, A. A. Ionin, S. I. Kudryashov, S. V. Makarov, T. Ganz, et al., "Experimental study of fs-laser induced sub-100-nm periodic surface structures on titanium," Optics Express, vol. 23, pp. 5915-5929, 2015/03/09 2015.

[21] S. I. Kudryashov, S. V. Makarov, A. A. Ionin, C. S. R. Nathala, A. **Ajami**, T. Ganz, et al., "Dynamic polarization flip in nanoripples on photoexcited Ti surface near its surface plasmon resonance," Optics Letters, vol. 40, pp. 4967-4970, 2015.

[22] S. Bashir, M. S. Rafique, C. S. R. Nathala, A. **Ajami**, and W. Husinsky, "SEM and Raman spectroscopy analyses of laser-induced periodic surface structures grown by ethanol-assisted femtosecond laser ablation of chromium," Radiation Effects and Defects in Solids, 2015.

[23] A. **Ajami**, W. Husinsky, B. Svecova, S. Vytykacova, and P. Nekvindova, "Saturable absorption of silver nanoparticles in glass for femtosecond laser pulses at 400 nm," Journal of Non-Crystalline Solids, vol. 426, pp. 159-163, 2015.

[24] A. **Ajami**, P. Gruber, M. Tromayer, W. Husinsky, J. Stampfl, R. Liska, et al., "Evidence of concentration dependence of the two-photon absorption cross section: Determining the “true” cross section value," Optical Materials, vol. 47, pp. 524-529, 2015/09/01/ 2015.

[25] Z. Li, J. Torgersen, A. **Ajami**, S. Mühleder, X. Qin, W. Husinsky, et al., "Initiation efficiency and cytotoxicity of novel water-soluble two-photon photoinitiators for direct 3D microfabrication of hydrogels," RSC Advances, vol. 3, pp. 15939-15946, 2013.

[26] [27] Z. Li, E. Stankevičius, A. **Ajami**, G. Račiukaitis, W. Husinsky, A. Ovsianikov, et al., "3D alkyne-azide cycloaddition: Spatiotemporally controlled by combination of aryl azide photochemistry and two-photon grafting," Chemical Communications, vol. 49, pp. 7635-7637, 2013.

[27] Z. Li, N. Pucher, K. Cicha, J. Torgersen, S. C. Ligon, A. **Ajami**, et al., "A straightforward synthesis and structure-activity relationship of highly efficient initiators for two-photon polymerization," Macromolecules, vol. 46, pp. 352-361, 2013.

[28] Z. Li, A. **Ajami**, E. Stankevičius, W. Husinsky, G. Račiukaitis, J. Stampfl, et al., "3D photografting with aromatic azides: A comparison between three-photon and two-photon case," Optical Materials, vol. 35, pp. 1846-1851, 2013/08/01/ 2013.

[29] S. Bashir, M. Shahid Rafique, A. **Ajami**, W. Husinsky, and I. K. Umm, "The growth of nanoscale periodic and dot-like structures on the surface of stainless steel with femtosecond laser pulses in the dry and wet ambient environment," Applied Physics A: Materials Science and Processing, vol. 113, pp. 673-681, 2013.

[30] S. Bashir, M. Shahid Rafique, A. **Ajami**, W. Husinsky, and K. Umm i, "The growth of nanoscale periodic and dot-like structures on the surface of stainless steel with femtosecond laser pulses in the dry and wet ambient environment," Applied Physics A: Materials Science and Processing, pp. 1-9, 2013.

[31] A. Ovsianikov, Z. Li, A. **Ajami**, J. Torgersen, W. Husinsky, J. Stampfl, et al., "3D grafting via three-photon induced photolysis of aromatic azides," Applied Physics A: Materials Science and Processing, vol. 108, pp. 29-34, 2012.

[32] W. Husinsky, A. **Ajami**, P. Nekvindova, B. Svecova, J. Pesicka, and M. Janecek, "Z-scan study of nonlinear absorption of gold nano-particles prepared by ion implantation in various types of silicate glasses," Optics Communications, vol. 285, pp. 2729-2733, 2012.

[33] Z. Li, M. Siklos, N. Pucher, K. Cicha, A. **Ajami**, W. Husinsky, et al., "Synthesis and structure-activity relationship of several aromatic ketone-based two-photon initiators," Journal of Polymer Science, Part A: Polymer Chemistry, vol. 49, pp. 3688-3699, 2011.

[34] M. S. Rafique, S. Bashir, A. **Ajami**, W. Husinsky, A. Hobro, and B. Lendl, "Atomic force microscopy, Raman spectroscopy and nonlinear absorption properties of femtosecond laser irradiated CR-39," Applied Physics A: Materials Science and Processing, vol. 101, pp. 551-554, 2010.

[35] M. S. Rafique, S. Bashir, A. **Ajami**, and W. Husinsky, "Nonlinear absorption properties correlated with the surface and structural changes of ultra-short pulse laser irradiated CR-39," Applied Physics A: Materials Science and Processing, vol. 100, pp. 1183-1189, 2010.

[36] A. **Ajami**, W. Husinsky, R. Liska, and N. Pucher, "Two-photon absorption cross section measurements of various two-photon initiators for ultrashort laser radiation applying the Z-scan technique," Journal of the Optical Society of America B: Optical Physics, vol. 27, pp. 2290-2297, 2010.

Conference Papers:

1- **Aliasghar Ajami**, "Two-photon absorption and its applications" presnted at *the 30th Iranian Conference on Optics and Photonics* as key Lecture in Damghan, Iran, Feb 2024

2- **Aliasghar Ajami**, Nasrin Fallah, “Fully automatic Z-scan setup for determining the nonlinear optical” presented at *The first international conference and the fourth national conference of laboratory equipment and technologies*, Tehran, Iran 2023

3- **Aliasghar Ajami**, Soodabeh Moniri, "The effect of laser power and scanning speed on the structural resolution of productions created with stereolithography 3D printers " presented at *The national conrefence on technological advances in applied physics* Kerman, Iran, 2023.

4- **Aliasghar Ajami,** Aleksandr Ovsianikov, Robert Liska, Maximilian Tromayer, Jürgen Stampfl. "3D Micro-Nano-Structuring Based on Two-Photon Polymerization". in: The 6th International and 17th National Conference on Manufacturing Engineering ICME2021, Tehran, Iran, 2-4 March 2021

5- **Aliasghar Ajami,** Dispersive White Light Supercontiuum Single Z-scan". At: International Scientific Conference on Lasers, Optics, Photonics and Sensors” June 12-14, 2021

6- **Aliasghar Ajami,** Jan Svanda, Wolfgang Husinsky. “Two-photon absorption measurement of Plasmon-active nanostructures using the open-aperture Z-scan technique”. In: Iranian Nano-Photonic Conference, University of Sistsn and Baluchestan, Zahedan, Iran, **2020** – October 23

7- **Aliasghar Ajami,** Aleksandr Ovsianikov. ”Multi-photon Absorption Photo-polymerization: Unique Technique to build Micro-structures with Nano Resolution“. In: 8th International Conference on Nanostructures (ICNS8), Sharif University of Technology, TEHRAN, IRAN, 20-22 April **2020.**

8- **Aliasghar Ajami,** Chandra Nathala, and Wolfgang Husinsky. “White light suppercontinuum generation using femtosecond pulses“. In: The 27th Iranian Conference on Optics and Photonics (ICOP 2021), and the 13th Iranian Conference on Photonics Engineering and Technology (ICPET 2021). University of Sistsn and Baluchestan, Zahedan, Iran,Jan. 26-29, **2021**

9- **Aliasghar Ajami**, Aleksandr Ovsianokov. “3D micro-nano structuring using femtosecond laser pulses”. In: Second Micro/nano technology conference (MNtech**2020**). Ghazwin-Iran, 2020

10- **Aliasghar Ajami**, Wolfgang Husinsky. "Micro-nano 3D structuring based on two-photon photopolymerization." In: The 25th Iranian Conference on Optics and Photonics (ICOP 2019), and the 11th Iranian Conference on Photonics Engineering and Technology (ICPET 2019). Shiraz-Iran, 2019

11- **Aliasghar Ajami**, Wolfgang Husinsky. "Sub-8 fs Pulses: a Consequence of Compressing White Light Continuum Generated by Hollow Core Fiber." In: The 24th Iranian Conference on Optics and Photonics (ICOP 2018), and the 10th Iranian Conference on Photonics Engineering and Technology (ICPET 2018). Shahrekord-Iran, 2018

12- Daskalova, A., I. Bliznakova, A. Trifonov, A. Popatanasov, H. Declercq, C. Nathala, **A**. **Ajami**, W. Husinsky and I. Buchvarov. "Femtosecond Laser Micropatterning of Chitosan Thin Films for Surface Functionalization." In *Optics InfoBase Conference Papers*, Part F82-CLEO_Europe 2017, 2017.

13- **Aliasghar Ajami,** Wolfgang Husinsky. "Evidence of Concentration dependence of the two-photon absorption cross section: Determining the "true" cross section value." In: The 21th Iranian Conference on Optics and Photonics (ICOP 2015), and the 7th Iranian Conference on Photonics Engineering and Technology (ICPET 2015). Tehran-Iran, 2015

14- M.T. Samuel Clark Ligon, Zhiquan Li, Jan Torgersen, **Aliasghar Ajami**, Arnulf Rosspeintner, New Developments in Initiators for Two- Photon Polymerization, in: Rad Tech UV/EB 2014, 2014.

15- C. Gorsche, M. Tromayer, Z. Li, J. Torgersen, **A. Ajami**, A. Rosspeintner, S. Naumov, T. Scherzer, A. Ovsianikov, R. Liska: "*Efficent synthesis of two-photon initiators via one step aldol condensation*"; Poster: Photopolymerization Fundamentals 2013, Jackson Hole; 22.09.2013 - 25.09.2013; in: "*Book of Abstracts*", (2013).

16- B. Holzer, M. Tromayer, D. Lumpi, **A**. **Ajami**, E. Horkel, W. Husinsky, A. Ovsianikov, R. Liska, J. Fröhlich: "*Cap-Linker-Cap Systems as Initiators for Two-Photon Induced-Polymerization*"; Poster: LPM 2014, Vilnius; 17.06.2014 - 20.06.2014; in: "*LPM 2014 Program & Technical Digest*", (2014), S. 260.

17- Z. Li, K. Cicha, **A**. **Ajami**, A. Rosspeintner, S. Naumov, T. Scherzer, J. Stampfl, R. Liska: "*A facial preparation and structure property relationship of novel photoinitiators for two -photon photopolymerization*"; Vortrag: 4th Bratislava Young Polymer Scientists workshop, Bratislava; 01.10.2012 - 05.10.2012; in: "*4th Bratislava Young Polymer Scientists workshop*", ISBN: 978-80-970923-2-0; S. 83, 2012

18- **A**. **Ajami**: "*Photo-polymerization and photo-grafting via multi-photon absorption process using ultrashort laser pulses*". In: 3rd International Conference on the Physics of Optical Materials and Devices (ICOM 2012), Belgrade/Serbia; 04.09. 2012.

19- *Z. Li, K. Cicha, A. Ajami, A. Rosspeintner, S. Naumov, T. Scherzer, J. Stampfl, R. Liska: "A Straightforward Synthesis and Structure-Property Relationship of Highly Efficient Two-photon Photoinitiators for 3D microfabrication";*
Poster: European Symposium of Photopolymer Science - ESPS 2012, Torino; 04.09.2012 - 07.09.2012; in: "European Symposium of Photopolymer Science - Book of Abstracts", (2012), S. 24.

20- Z. Li, X.H. Qin, A. Ovsianikov, J. Torgersen, **A**. **Ajami**, W. Husinsky, S. Mühleder, W. Holnthoner, J. Stampfl, R. Liska: "*Novel water soluble two-photon initiators for 3D scaffold microfabrication*"; Vortrag: 5th Biomaterialsymposium, Vienna; 19.11.2012 - 21.11.2012; in: "*5th Vienna Biomaterialsymposium 19.11.-21.11.2012*", J. Stampfl (Hrg.); (2012), S. 95.

21- Z. Li, X.H. Qin, A. Ovsianikov, J. Torgersen, **A**. **Ajami**, W. Husinsky, S. Mühleder, W. Holnthoner, J. Stampfl, R. Liska: "*Water Soluble Initiators for Two-photon Polymerization*"; Poster: The 3rd TERMIS World Congress 2012, Vienna; 05.09.2012 - 08.09.2012; in: "*Journal of Tissue Engineering and Regenerative Medicine 2012*", John Wiley & Sons, Ltd., 6/Supplement s1 (2012), ISSN: 1932-7005; S. 369.

22- Z. Li, X.H. Qin, A. Ovsianikov, J. Torgersen, **A**. **Ajami**, J. Stampfl, R. Liska: "*3D site-specific functionalization of matrices via multi-photon grafting and subsequent click reaction*"; Poster: European Symposium of Photopolymer Science - ESPS 2012, Torino; 04.09.2012 - 07.09.2012; in: "*European Symposium of Photopolymer Science - Book of Abstracts*", (2012), S. 25.

23- Z. Li, X.H. Qin, A. Ovsianikov, J. Torgersen, S. Mühleder, W. Holnthoner**, A. Ajami**, W. Husinsky, J. Stampfl, R. Liska: "*Water Soluble Initiators for Two-photon Polymerization*"; Poster: European Symposium of Photopolymer Science - ESPS 2012, Torino; 04.09.2012 - 07.09.2012; in: "*European Symposium of Photopolymer Science - Book of Abstracts*", (2012), S. 26.

24- M. Tromayer, P. Gruber, **A. Ajami**, A. Rosspeintner, S. Naumov, A. Ovsianikov, J. Stampfl, R. Liska: "*Synthesis And Characterization Of Aminostyryl-1,3,5-Triazines As Initiators For Two-Photon Induced Polymerization*"; Poster: ESPS 2014, Vienna; 09.09.2014 - 12.09.2014; in: "*3rd European Symposium of Photopolymer Science*", (2014), ISBN: 978-3-9502992-9-8; S. 220.

25- M. Tromayer, Z. Li, J. Torgersen, **A. Ajami**, A. Rosspeintner, S. Naumov, R. Liska: "*Preparation and characterization of novel type I/ type II photoinitiators for two-photon submicro-stereolithography*"; Poster: Austrian - Slovenian Polymer Meeting - ASPM 2013, Bled; 03.05.2013 - 05.05.2013; in: "*The Proceedings of the Austrian - Slovenian Polymer Meeting - ASPM 2013*", M. Zigon, T. Rajsp (Hrg.); (2013), 978-961-269-992-5; 307 S.

26- M. Tromayer, Z. Li, J. Torgersen, **A. Ajami**, A. Rosspeintner, S. Naumov, T. Scherzer, A. Ovsianikov, R. Liska: "*Novel Highly Efficient Initiators For Two-Photon Induced Photopolimerization*"; Vortrag: RadTech Europe 2013, Basel; 15.10.2013 - 17.10.2013; in: "*Abstract Book*", (2013), S. 40.

27- M. Tromayer, L. Zhiquan, E. Stankevicius, P. Gruber, **A. Ajami**, W. Husinsky, G. Račiukaitis:

"*High-resolution 3D patterning via multi-photon grafting with aromatic azides*"; Poster: LPM 2014, Vilnius; 17.06.2014 - 20.06.2014; in: "*LPM 2014 Program & Technical Digest*", (2014), S. 262.

28- **Ajami,** "*Saturation of Absorption for Silver Nanoparticles in Glass irradiated with Femtosecond Laser pulses at 400 nm*"; The 21th Iranian Conference on Optics and Photonics (ICOP 2015), and the 8th Iranian Conference on Photonics Engineering and Technology (ICPET 2015). Tehran/Iran

29- **A. Ajami**, Z. Li, A. Ovsianikov, J. Torgersen, J. Stampfl, W. Husinsky: "*Effect of Concentration of Chromophores on Two-photon Absorption Cross Section*"; Poster: 50 years of nonlinear optics, NLO 50 International Symposium, Barcelona/Spain; 08.10.2012 - 10.10.2012.

30- W. Husinsky, C. Nathala, **A. Ajami**, A. Assion: "*Influence of the pulse duration on the ablation threshold and the incubation coefficient of copper and silicon upon irradiation by femtosecond laser pulses*"; Poster: International Conference on Laser Ablation (COLA 2015), Cairns/Australia; 01.09.2015.

31- S. Ligon, M. Tromayer, Z. Li, J. Torgersen, **A**. **Ajami**, A. Rosspeintner, S. Naumov, T. Scherzer, J. Stampfl, R. Liska: "*New Developments in Initiators for Two-Photon Polymerization*"; Vortrag: RadTech USA 2014, Chicago (Rosemont); 12.05.2014 - 14.05.2014.

32- N. Pucher, **A**. **Ajami**, K. Cicha, W. Husinsky, J. Stampfl, R. Liska, Optimization of feature resolution, processing window & structuring time for the two-photon polymerization (2PP) process by the use of novel initiators", In: The 11th International Symposium on Laser Precision Microfabrication, 2010.

33- A.R. Niklas Pucher, **Aliasghar Ajami**, Wolfgang Husinsky, Georg Gescheidt, Jürgen Stampfl and Robert Liska, Photochemistry and Photophysics of Two-Photon Initiators", in: RadTech Europe Conference Proceedings 2009.

34- W. Husinsky, S. Bashir, M.S. Rafique, **A**. **Ajami**, Laser analytical probing of ultra-short-laser-matter interaction: Ejected particles and surface topography, in: AIP conference American Institute of Physics, Nagoyo, 2009, pp. 79-89.

35- **A**. **Ajami**, M.S. Rafique, N. Pucher, S. Bashir, W. Husinsky, R. Liska, R. Inführ, H. Lichtenegger, J. Stampfl, S. Lüftenegger, Z-scan measurements of two-photon absorption for ultrashort laser radiation, in: SPIE, 2008, pp. 70271H-70271.