

### الف) مشخصات فردي :

نام و نام خانوادگی : وحید احمدی

تاریخ تولد : 1339

مرتبه علمی : استاد

محل خدمت : تهران، دانشگاه تربیت مدرس،

دانشکده مهندسی برق و کامپیوتر، گروه مهندسی الکترونیک و گروه نانو فناوری

### ب) سوابق تحصیلی :

1- کارشناسی، مهندسی برق- الکترونیک، دانشگاه صنعتی شریف - تهران 1365

2- کارشناسی ارشد، مهندسی برق- الکترونیک، دانشگاه تربیت مدرس - تهران 1369

3- دکتری، مهندسی برق - الکترونیک، دانشگاه کیوتو- ژاپن 1373

### ج) زمینه های مورد علاقه تحقیقاتی

1- نانو فوتونیک و نانو اپتوالکترونیک

2- ادوات لیزری و آشکارسازهای کوانتومی نیمرسانا شامل لیزرها و آشکارسازهای

آبشاری کوانتومی و نقطه کوانتومی

3- تقویت کننده ها، مدولاتورها و سوئیچ های چاه کوانتومی و نقطه کوانتومی (تمام

نوری) سریع

4- ادوات و مدارهای مجتمع نوری کوانتومی

5- ادوات نوری مبتنی بر ساختارهای فوتونیک کریستال، متا مواد، CNT، GNR

6- ادوات نوری مبتنی بر ساختارهای موجبرهای حلقوی

7- ادوات و ساختارهای MEMS و NEMS

8- لیزرهای نانو ساختار تصادفی

**د) دروس تدریس شده (کارشناسی ارشد و دکتری)**

- 1- الکترونیک نوری 1
- 2- الکترونیک نوری 2
- 3- الکترونیک نوری 3 ( مباحث ویژه، پیشرفته )
- 4- تئوری و تکنولوژی ساخت قطعات نیمه هادی I
- 5- تئوری و تکنولوژی ساخت قطعات نیمه هادی II (پیشرفته)
- 6- ادوات کوانتومی نوری
- 7- ادوات ومدارهای مجتمع نوری
- 8- نانو تکنولوژی و سیستمهای مکانیکی- میکروالکترونیک ( MEMS و NEMS)

**ه) سوابق اجرایی- علمی:**

- 1- شورای پژوهش های علمی کشور، عضو شورای کمیسیون انرژی، 1377 - 1384
- 2- وزارت علوم و آموزش عالی، عضو شورای تخصصی طرح ها و فعالیتهای تحقیقاتی وزارت، 1376-1377
- 3- دانشگاه تربیت مدرس، رئیس بخش مهندسی برق، 1385 - 1387
- 4- پژوهشکده میکرو الکترونیک ایران، عضو هیئت امنای پژوهشکده، 1384 تا 1387

**و) سوابق علمی-پژوهشی:**

- 1- ارائه بیش از 250 مقاله تخصصی در مجلات و کنفرانسهای علمی-پژوهشی داخل و خارج کشور
- 2- انجام یک طرح تحقیقاتی ملی (طراحی و ساخت لیزر مخابراتی 1300 نانومتر)
- 3- انجام طرحهای متعدد تحقیقاتی مشترک با صنعت
- 4- راهنمایی و مشاوره بیش از 70 پروژه کارشناسی ارشد و دکتری
- 5- داوری مجلات علمی-پژوهشی داخلی و بین المللی (نظیر: IEEE Photonics Technology Letters  
IEEE Journal of Quantum Electronics  
Journal of Lightwave Technology  
Optics Express
- 6- عضو هیئت موسس انجمن اپتیک و فوتونیک ایران
- 7- عضو هیئت موسس جمعیت ایرانی پیشبرد ارتباط با صنعت و دانشگاه
- 8- دبیر کمیته علمی سیزدهمین کنفرانس اپتیک و فوتونیک ایران (اسفند 1385)
- 9- رئیس شانزدهمین کنفرانس مهندسی برق ایران (اردیبهشت 1387)
- 10- سردبیر مجله علمی-پژوهشی علوم و فنون ایران (1379-1384)
- 11- عضو هیئت تحریریه نشریه بین المللی ارتباطات و فناوری اطلاعات (1386-تاکنون)
- 12- عضو هیئت تحریریه نشریه مهندسی برق مدرس (1389-تاکنون)
- 13- عضو کمیته راهبردی و ارتباط با دانشگاهها، وزارت ارتباطات و فناوری اطلاعات، 1389
- 14- عضو ارشد (IEEE Senior Member) انجمن بین المللی مهندسی برق و الکترونیک

**و) مقالات ارائه شده در کنفرانس های علمی داخلی و خارجی**

1. **V. Ahmadi**, S. Noda, and A. Sasaki, "Two-Dimensional Static Simulation of HPT/LD Optoelectronic Integrated Device," Japan Optics 92, paO2, 1992.
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9. **V. Ahmadi**, S. Noda, and A. Sasaki, "Noise Characteristics of an Optoelectronic Integrated Light Amplifier," Proc. 14<sup>th</sup> Iranian Conf. on Elect. Eng., Electronics, 52, 1996.
10. **V. Ahmadi**, "Computational Analysis of an Optical Amplifier Switch Integrated by HPT/LD," Proc. 5<sup>th</sup> Iranian Conf. on Elect Eng. Electronics, 1997.
11. M. H. Sheikhi, **V. Ahmadi**, et al, "Modeling and Analysis of Dynamic Operation of an Integrated Optoelectronic Integrated Device Composed of HPT/LD," 5<sup>th</sup> Conf. on Elect. Eng., Iran, Electronics Proceedings, 1997, (Persian).
12. M. Mohammadi, **V. Ahmadi**, "Fabrication and Characterization of a GaAs Solar Cell," 4<sup>th</sup> Conf. on Condensed Matter, Iran, Proceedings, 1997 (Persian).
13. **V. Ahmadi**, M. H. Sheikhi, "Numerical Analysis for the Dynamic Response of an HPT/LD Optoelectronic Integrated Device," Proc. 5<sup>th</sup> International Symp. On Advanced Material PP. 639-644, 1997.
14. **V. Ahmadi**, M. H. Sheikhi, "Numerical Analysis for Characteristics of a QW Structure Optoelectronic Integrated Device," Proc. of IEEE Int. On Semiconductor for Electronics, ICSE98, 1998.
15. M. Oskoei, **V. Ahmadi**, "Optical Output Characteristics of a GaAs Laser Diode," 5<sup>th</sup> Meeting of Optic Professionals," 1998 (in Persian).
16. G. Abaiani, **V. Ahmadi**, et al, "Fabrication and Analysis of 1.3  $\mu\text{m}$  Heterojunction LED and LD," 6<sup>th</sup> Conf. on Elect. Eng., Iran, Electronics Proceedings, 1998 (Persian).
17. M. H. Sheikhi, **V. Ahmadi**, "Optimum Design of VCSEL for Very Short Optical Pulses," 6<sup>th</sup> Conf. on Elect. Eng., Iran, Electronics Proceedings, 1998 (Persian).
18. H. S. Abedi, **V. Ahmadi**, et al, "Simulation of Index Guided Semiconductor Laser," 7<sup>th</sup> Conf. on Elect. Eng., Iran, Electronics Proceedings, 1999 (Persian).
19. M. H. Sheikhi, **V. Ahmadi**, M. K. Morravej-Farshi, "Optimum design of a Gain Switch Vertical

Cavity Surface emitting Semiconductor Laser”, 7th Iranian Conference on Electrical Engineering 1999, Tehran-Iran. (in Persian).

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21. N. Hatefi, **V. Ahmadi**, et al, “Simulation of Index Guided Semiconductor Laser,” 7<sup>th</sup> Conf. on Elect. Eng., Iran, Electronics Proceedings, 1999 (Persian).
22. F. Shahshahani, **V. Ahmadi**, et al, “Analysis for the Effects of Grating Structure on the Output Characteristics of DFB LD,” 1<sup>st</sup> Conf. on Applications of Physics and Nuclear Science in Medicine, Iran, Proceedings, 1999 (Persian).
23. A. Banoushi, **V. Ahmadi**, et al, “Analysis of a PIN-APD Characteristics,” 1<sup>st</sup> Conf. on Applications of Physics and Nuclear Science in Medicine, Iran, Proceedings, 1999 (Persian).
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25. M. H. Sheikhi, **V. Ahmadi**, “Analysis for Static and Dynamic Operation of a Quantum Well Optoelectronic Integrated Device with HPT/QW-LD Structure,” 8<sup>th</sup> Conf. on Elect. Eng., Iran, Electronics Proceedings, 2000 (Persian).
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Pulses in Pulsed Laser Radar, "1<sup>st</sup> Conf Exhibit. on Microwaves, Radio Communication and Electromagnetic Compatibility, Messe Stuttgart, Germany, 8-10 May 2001.

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53. M. Soroosh, **V. Ahmadi**, "Calculation of Excess Noise in SAM-APD using MLP Neural Network," 12<sup>th</sup> Iranian Conference on Electrical Engineering (ICEE 2004) Proc. Vol1, Mashhad, Iran, May 11-13, 2004 (in Persian).
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