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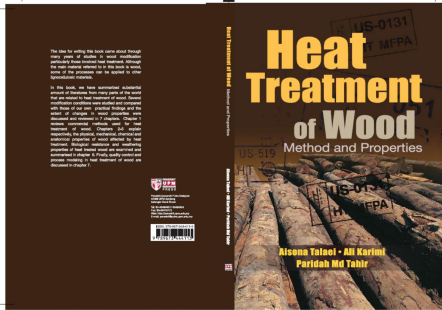
Head of Department of Wood Science and Technologies

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Education	<p>Ph.D. in Wood Science and Technology, Tehran University (UT) Tehran, Iran, 2010. Influence of Hydrothermal Treatment in Buffered Mediums on Natural Durability and Mechanical Properties of Beech Wood.</p> <p>M.Sc. in Wood Science and Technology, Tarbiat Modarres University (TMU), Tehran, Iran, 2005. Thesis Title: Influence of Acetylation on Fire Resistance and Thermal Behavior of Beech Plywood.</p> <p>B.Sc. in Wood Science and Technology, Tehran University (UT) Tehran, Iran, 2003. Thesis Title: Investigation of Fire Safety in Conference Rooms with Intumescent Coatings.</p>	
Professional Experience	<p>Assistant Professor in Shahid Rajaei Teacher Training University (SRTTU), Faculty of Materials Engineering and New Technologies, Department of Wood Science and Technologies, 2013-2020.</p>	
Teaching Experience	<ul style="list-style-type: none"> • Wood Mechanics • Wood Identifying • Wood Drying • Wood Chemistry 	<ul style="list-style-type: none"> • Engineered Wood Products • Non Destructive Tests • Wood Modification • Instrumental analysis
Research Interests	<ul style="list-style-type: none"> • Wood Modification • Fire Resistance • Thermal Behavior 	<ul style="list-style-type: none"> • Thermowood • EWPs • Bio-composites
Research Publications (JOURNALS)	<ol style="list-style-type: none"> 1. CR Welzbacher, G Rassam, A Talaei, C Brischke Microstructure, strength and structural integrity of heat-treated beech and spruce wood. <i>Wood Material Science & Engineering</i> 6 (4), 219-227.2011. 2. HR Taghiyari, A Talaei, A Karimi, A correlation between the gas and liquid permeabilities of beech wood heat-treated in hot water and steam mediums. <i>Maderas. Ciencia y tecnología</i> 13 (3), 329-336. 2011. 3. B Mohebbi, A Talaei, SK Najafi. Influence of acetylation on fire resistance of beech plywood. <i>Materials Letters</i> 61 (2), 359-362. 2007. 4. M Ghofrani, S Pishan, A Talaei. The effect of core type and skin on the mechanical properties of lightweight sandwich panels. <i>Iranian Journal of Wood and Paper Science Research</i> 28 (4), 720-731. 2014. 5. A TALAEI, A.N. Karimi, G EBRAHIMI, SA MIRSHOKRAEE. Comparative study of heat treated beech wood in hot water and steam mediums. <i>IRANIAN JOURNAL</i> 	

- OF WOOD AND PAPER INDUSTRIES 2 (1), 27-38.2011.
6. **A TALAEI**. TGA and DTA thermal analysis of wood-polymer produced by furfurylation of beech and fir wood. IRANIAN JOURNAL OF WOOD AND PAPER SCIENCE RESEARCH 33 (46500638), 501-510. 2019.
7. MH REZVANI, **A TALAEI**, CHH Rajabi. Modification of Paulownia wood with methylolated dimethyloldihydroxyethylenurea (mDMDHEU) and its effect on selected Strength Properties. IRANIAN JOURNAL OF WOOD AND PAPER SCIENCE RESEARCH 32 (36000537), 436-449. 2017.
8. **A TALAEI**, MH REZVANI. EVALUATION OF THE INFLUENCE OF CHEMICAL MODIFICATION WITH POLYCREASE ECR ON THE FUNCTIONAL PERFORMANCE OF POPLAR WOOD/POLYMER. IRANIAN JOURNAL OF WOOD AND PAPER SCIENCE RESEARCH 32 (1), 33-46. 2017.
9. **A TALAEI**, H ABDOLZADEH. Effect of furfurylation on glueline shear strength of and screw withdrawal resistance of beech and fir wood. IRANIAN JOURNAL OF WOOD AND PAPER SCIENCE RESEARCH 31 (35600486), 435-445. 2016.
10. **A TALAEI**, MS ZARE, H ABDOLZADEH. EFFECT FURFURYLATION ON PHYSICAL PROPERTIES AND SURFACE QUALITY OF TWO SPECIES (BEECH AND SILVER FIR) IRANIAN JOURNAL OF WOOD AND PAPER INDUSTRIES 7 (3), 400-411. 2016.
11. **A TALAEI**, ZM SALEH, H ABDOLZADEH. STUDY ON ADHESION STRENGTH OF CLEAR COATINGS IN BEECH-FURFURYL ALCOHOL WOOD POLYMER. IRANIAN JOURNAL OF WOOD AND PAPER INDUSTRIES 7 (1), 115-127. 2016.
12. **A TALAEI**, M TAVAKOLIYAN. INFLUENCE OF FURFURYLATION ON PRACTICAL PROPERTIES OF BEECH PLYWOOD. IRANIAN JOURNAL OF WOOD AND PAPER INDUSTRIES 7 (2), 219-230. 2016.
13. M GHOFRANI, **A TALAEI**. INFLUENCE OF HEAT TREATMENT CONDITIONS ON STRENGTH PROPERTIES OF POPLAR WOOD (POPULUS DELTOIDES). IRANIAN JOURNAL OF WOOD AND PAPER INDUSTRIES 2 (2), 161-170.
14. M.M. Mehrandish¹, **A. Talaei** and M.H. Rezvani. Investigation of fire resistance in modified paulownia wood with citric acid and comparison with different fire retardants. Iranian Journal of Wood and Paper Science Research Vol. 34 No. (4), 547-562. 2020.
15. A. Fazeli and **A. Talaei**. The effect of heat treatment and primary impregnation of Fir wood with borax on the fire resistance and thermal behavior. J. of Wood & Forest Science and Technology, Vol. 25 (4), 71-86. 2018.
16. **A. Talaei**, M. H. Rezvani, H. Doost Mohammadi. Investigation of adhesion strength of alkyd and nitro cellulose transparent coatings in different heat-treated Poplar wood. Journal of Color Science & Technology. Vol. 12(3), 171-180. 2018.
17. S. Yusefi Lonbar, **A. Talaei**, M.H. Rezvani. Investigation on physical and mechanical performance of wood-based composites after laboratory accelerated aging. Iranian Journal of Wood and Paper Industries, Vol. 9, No. 1, 103-115. 2018.
18. **A. Talaei**, A. Ahmadi Gh. Rassam. Study on leaching of copper nano particles in combined impregnation-densification treatments of wood after accelerated aging. Iranian Journal of Wood and Paper Industries, Vol. 6, No. 1, 159-165. 2015.
19. **A. Talaei**, A.N. Karimi. Compression strength, hardness and shear strength of heat treated beech (*Fagus orientalis*) wood in buffered mediums. International Journal of Mechanical And Production Engineering, ISSN: 2320-2092, Vol. 3(2), 6-9, 2015.

<p>Research Publications (CONFERENCES)</p>	<p>20. Mohebbi B. & Talaei A. "Smoke Analysis of Acetylated Beech Layers" 2nd European Wood Modification Conference. Göttingen, Germany. Oct. 2005.</p> <p>21. A Talaei. "Influence of Acetylation on Fire Resistance of Beech Plywood" (IRG/WP 06-40326) IRG37 Conference, Tromso, Norway. Jun 2006.</p> <p>22. A Talaei, B Mohebbi. "Thermal Analysis of Acetylated Beech Layers" 1st Iranian Combustion Conference, Tehran, Iran Feb 2006.</p> <p>23. A Talaei, B Mohebbi. "Fire Resistance of Acetylated Beech Plywood" 1st Iranian Combustion Conference, Tehran, Iran Feb 2006.</p> <p>24. A Talaei. "Material properties of acetylated beech plywood" The International Research Group on Wood Protection, (IRG/WP 08-40425) IRG39 Conference, Istanbul, Turkey May 2008.</p> <p>25. A Talaei. "Physical and Mechanical Properties of Acetylated Beech Plywood" Workshop on Biological Characteristics of Wood and Its Related Properties. Tehran-Chalous, Iran. Oct 2008.</p> <p>26. A Talaei, K Yaghoobi. "Physical and Mechanical Properties of Hydrothermally Modified Mulberry (<i>Morus alba</i> L.) Wood" (IRG/WP 09-40425) IRG40 Conference. Beijing, China. May 2009</p> <p>27. A Talaei, K Yaghoobi, AN Karimi. "Comparative Study of Heat Treatment of Beech Wood in Hot Water and Steam Medium"(IRG/WP 10-40536) IRG41 Conference. Biaritz, France. May 2010.</p> <p>28. HR Taghiyari, A Talaei, AN Karimi. "Effects of Heat-Treatment in Hot Water and Steam Mediums on Gas Permeability of Beech Wood" (IRG/WP 11-40557) IRG42 Conference. Queenstown, New Zealand. May 2011.</p> <p>29. A Talaei, AN Karimi , K Yaghoobi and AF Talaei. "Mechanical Properties of Hydrothermally Treated Beech Wood in Buffered Mediums" (IRG/WP 12-40597)) IRG43 Conference. Kuala Lumpur, Malaysia. May 2012.</p> <p>30. A Talaei, AN Karimi. "Chemical Analysis of Hydrothermally Treated Beech Wood in Buffered Mediums"(IRG/WP 12-40604) IRG43 Conference. Kuala Lumpur, Malaysia. May 2012.</p> <p>31. A Talaei, M Ghofrani and S Pishan. "Study on Fire Resistance of Lightweight Panels Made of Honeycomb and Polyurethane Cores" (IRG/WP 13-40645)) IRG44 Conference. Stockholm, Sweden. May 2013.</p> <p>32. A Talaei, AN Karimi and MF Thevenon. "Influence of Heat Treatment Medium on Fungal Resistance of Beech Wood" (IRG/WP 13-40643) IRG44 Conference. Stockholm, Sweden. May 2013.</p> <p>33. Gh Rassam, A Talaei, A Ahmadi. "Leachability and Dimensional Stability of Nanosilver- Steamed Densified Poplar" (IRG/WP 14-40684) IRG45 Conference. St. George Utah, USA. May 2014.</p> <p>34. A Talaei & AN Karimi. "Compression strength, hardness and shear strength of heat treated beech (<i>Fagus orientalis</i>) wood in buffered mediums" International Conference on Engineering and Natural Science. Kuala Lumpur, Malaysia December 2014.</p> <p>35. A Talaei, D Ansari Movahed & Gh Rassam. "Investigation of Dimensional Stability and Coating Performance of Different Heat-Treated Poplar Wood Before and After Accelerated Aging" (IRG/WP 14-40684) IRG46 Conference. Viña del Mar, Chile. May 2015.</p> <p>36. A Talaei & M Tavakoliyan. "Influence of heat treatment of sycamore and spruce wood on tensile adhesion strength of transparent coatings" The 6th</p>

	<p>International Color & Coating Congress. Tehran, Iran. 10-12 November 2015.</p> <p>37. A Talaei & MS Zare. "Effect of heat treatment on adhesion strength of clear coatings in beech and poplar wood" The 6th International Color & Coating Congress. Tehran, Iran. 10-12 November 2015.</p> <p>38. A Talaei, M.H. Rezvani, H. Doost Mohammad "Influence of heat treatment in different mediums on the adhesion strength of clear coatings" The 6th International Color & Coating Congress. Tehran, Iran. 10-12 November 2015.</p> <p>۳۹. محمد رجبی دهکی و آیسونا طلائی. « بررسی ویژگی‌های مکانیکی تخته‌های لایه‌ای تقویت شده با صفحات الیاف شیشه (GFRP)» اولین همایش ملی مدیریت منابع طبیعی، دانشگاه گنبد کاووس گنبد-ایران اسفند 1392.</p> <p>۴۰. آیسونا طلائی، افروز غیاث وند و زهرا محمدمرادی. «بررسی مقاومت نگهداری اتصالات فلزی در تخته‌های کمپوزیت چوبی مورد استفاده در مبلمان» نخستین کنفرانس ملی توسعه کشاورزی، زمین سالم. ایران البرز ۳۰ دی ۱۳۹۴.</p> <p>۴۱. کاظم آرام، آیسونا طلائی و محمد غفرانی. « تاثیر اصلاح چوب با نانواکسید آلومینیوم بر روی ثبات ابعادی، زاویه تماس و مقاومت به آبشویی» اولین کنفرانس ملی آینده مهندسی و تکنولوژی. تهران ایران. ۷ اسفند ۱۳۹۵.</p> <p>۴۲. آیسونا طلائی، محمدهادی رضوانی و سمانه یوسفی. « ارزیابی میزان مقاومت انفصالی پیچ و ظرفیت تحمل تنش پانل های چوب با استفاده از آزمون کهنگی تسریع شده» دومین همایش ملی دانش و نوآوری در صنعت چوب و کاغذ. کرج ایران. ۸ اسفند ۱۳۹۷.</p> <p>۴۳. آیسونا طلائی و وحید حیدری. «بررسی امکان سنتز و کاربرد رزین طبیعی کیتوزان از ضایعات میگو در ساخت تخته لایه» دومین کنفرانس ملی علوم و مهندسی محیط زیست و توسعه پایدار. تهران ایران. ۱۷ بهمن ۱۳۹۸.</p>	
<p>Publications (BOOK)</p>	<p>44. A. Talaei, A. Karimi, M.T. Paridah. "Heat Treatment of Wood- Methods and Properties" ISBN 978-967-344-411-3 Universiti Putra Malaysia Press. (In English) First Print 2014.</p>	
	<p>45. A. Karimi, A. Talaei, A. Tutunjanian. "Atlas of World Commercial Woods" ISBN 978-964-970-086-1 Ayig Press. (In Persian) First Print 2007.</p>	