

Gormsgade 4
8700 Horsens, Denmark
mjbeigrezaee@outlook.com
+45 50 38 80 09

December 24, 2025

Siemens Gamesa Renewable Energy
Talent Acquisition Team
Denmark

Dear Hiring Team,

I am writing to express my strong interest in the Wind Blade Structural Engineer position at Siemens Gamesa. With a Ph.D. in Solid Mechanics and Structures from the University of Trento, Italy, and extensive experience in FEA, composite materials, and structural integrity assessment, I am eager to contribute to the design, analysis, and reliability of wind turbine blades that drive the global energy transition.

During my doctoral research, I performed advanced finite element analyses on lattice and functionally graded composite structures under operational loads. I developed automated workflows for design optimization, validated models against experimental and analytical benchmarks, and produced actionable engineering reports. My experience with bonded joints, lightweight structures, and multi-physics simulations aligns directly with the requirements for assessing blade conditions, investigating failures, and proposing retrofit solutions.

I have also gained hands-on experience in coupled CFD and thermal-structural analyses, high-performance computing, and parametric modeling using Python, MATLAB, SolidWorks, and ABAQUS. These skills enable me to translate complex computational results into practical engineering recommendations, ensuring structural integrity and durability of critical components.

I am particularly drawn to Siemens Gamesa's mission to advance renewable energy and its collaborative, innovative environment. I am confident that my background in structural mechanics, composite materials, and engineering simulations will allow me to contribute immediately to your blade engineering team, tackling complex challenges and improving global fleet performance.

I would welcome the opportunity to discuss how my skills and experience can support Siemens Gamesa's goals in wind blade reliability and innovation. Thank you for considering my application.

Sincerely,

Mohammad-Javad Beigrezaee



M. Javad Beigrezaee

Ph.D. in Solid Mechanics and Structures

+45 50 38 80 09
mjbeigrezaee@outlook.com
[in](#) mjbeigrezaee
<https://scholar.google.com/citations?user=t2hmdbAAAAAJ>

Summary

Ph.D. in Solid Mechanics and Structures with expertise in thermo-mechanical modeling, lattice and composite structures, finite element analysis, CFD, and experimental validation. Skilled in Python, MATLAB, Julia, C++, HPC simulations, and PyQt GUI development. Passionate about integrating computational and experimental approaches to optimize energy-efficient systems, including latent thermal energy storage and advanced cooling applications. Authored multiple peer-reviewed journal papers and international conference proceedings.

Research Interests

- Thermo-mechanical analysis of composite and lattice structures
- Thermal energy storage, phase change materials, and cooling systems
- CFD and heat transfer modeling
- System-level modeling, optimization, and digital twin development
- Experimental validation and sensor-based measurements
- Computational mechanics, molecular dynamics, and ML-assisted material design

Research Experience

- Overall 9 ISI journal papers, 2 papers under review, and 6 international conference proceedings.
- 2021–2025 **Doctoral Researcher (Ph.D. Completed)**, *University of Trento, Italy*
- Conducted coupled thermo-mechanical simulations on lattice and composite structures to evaluate temperature-dependent performance.
 - Designed and tested prototypes under controlled thermal and mechanical conditions.
 - Developed parametric workflows for optimizing energy dissipation, heat transfer, and structural integrity in graded materials.
 - Implemented HPC-based computational frameworks for multi-physics simulations.
 - Published multiple peer-reviewed papers on material optimization and structural reliability.
- 2019–2021 **Independent Researcher (Remote Collaboration)**, *Iran / International Collaboration*
- Modeled thermally loaded porous materials and nanostructures using molecular dynamics and FEA.
 - Investigated heat conduction, mechanical stress, and defect sensitivity in 2D materials.
 - Contributed to publications on thermal and structural performance in lattice and composite systems.
- 2017–2019 **Graduate Researcher (M.Sc.)**, *Iran University of Science and Technology*
- Analyzed thermal and mechanical behavior of adhesive joints under multi-axial loading.
 - Correlated experimental results with FEA for validation of thermo-mechanical responses.
 - Published research in *Journal of Adhesion and Engineering Failure Analysis*.
- 2013–2017 **Undergraduate Research Assistant**, *Kermanshah University of Technology, Iran*
- Performed atomistic simulations to evaluate stress concentration and mechanical degradation in graphene sheets.
 - Developed foundational skills in computational mechanics, FEA, and multi-scale modeling.

Education

- 2021 – 2025 **Ph.D. in Solid Mechanics and Structures**, *University of Trento, Italy*
Thesis: Mechanics of Lattice Functionally Graded Materials
Supervisor: Prof. Nicola Maria Pugno
- 2017 – 2019 **M.Sc. in Applied Mechanics**, *Iran University of Science and Technology, Tehran, Iran*
Thesis: Increasing the strength of single lap joints using adherend notching
Supervisor: Prof. Majid Reza Ayatollahi
- 2013 – 2017 **B.Sc. in Mechanical Engineering**, *Kermanshah University of Technology, Iran*
Thesis: Atomistic evaluation of stress concentration in graphene sheets
Supervisor: Prof. Seyed Kamal Jalali

Technical Skills

- FEM/CFD ABAQUS, ANSYS, COMSOL; coupled thermo-structural simulations
- CAD SolidWorks, AutoCAD; parametric modeling
- Programming Python, MATLAB, Julia, C++; HPC workflows; PyQt GUI development
- Experimental Prototype design, testing, sensor integration, data acquisition
- Other Multi-objective optimization, digital twin modeling, ML-assisted design

Languages

Persian (native), English (C1), Danish (A2), Italian (A1)

References

- Prof. Nicola Maria Pugno** — Solid and Structural Mechanics, nicola.pugno@unitn.it
- Prof. Diego Misseroni** — Solid Mechanics, diego.misseroni@unitn.it
- Prof. Seyed Kamal Jalali** — Mechanical Engineering, seyedkamal.jalali@iust.ac.ir
- Prof. Majid Reza Ayatollahi** — Mechanical Engineering, m.ayat@iust.ac.ir

Declaration

I confirm that all information provided is accurate and complete to the best of my knowledge. I authorize the processing of my data for this application.

Horsens, Denmark
December 24, 2025
Mohammad-Javad Beigrezaee





MARYAM AGHILI
OFFICIAL ENGLISH TRANSLATOR
TO THE JUDICIARY OF I.R.IRAN
Unit 11, 4th Floor, No. 688, Next To Sarsabz Cross, Resalat Highway, TEHRAN-IRAN
Tel/Fax: 77493888 - 77203323

IRAN UNIVERSITY OF SCIENCE & TECHNOLOGY (IUST)

Transcript of Graduate Studies

Date: Nov. 18, 2019 Time: 12:37

Golestan Comprehensive Academic System Report No.: 1572

| | | | |
|--|------------------------------|-----------------------------------|--|
| Name & Surname: Mr. MOHAMMADJAVAD BEIGREZAAE | | | |
| ID Card No.: 3330306165 | National ID Code: 3330306165 | Father's Name: ESKANDAR | |
| Place of Issue: Eslamabad Gharb | Studentship No.: 96743565 | Birth Year: 1995 | |
| Type of Program: Education/Research-based | | Date of Graduation: Sep. 16, 2019 | |
| Major: Mechanical Engineering – Applied Design | | Degree: Master of Science Degree | |

| Row | Course No. | Course Titles | Marks | Marks (in letters) | Credits | Points |
|-----|------------|---------------------------------|-------|-----------------------|---------|--------|
| 1 | 1912031 | Continuum Mechanics I | 14.00 | C | 3.00 | 42.00 |
| 2 | 1912066 | Advanced Mathematics I | 13.30 | D | 3.00 | 39.90 |
| 3 | 1912014 | Theory of Elasticity | 13.30 | D | 3.00 | 39.90 |
| 4 | 1912192 | Fracture Mechanics | 12.50 | D | 3.00 | 37.50 |
| 5 | 9012046 | Seminar | 19.43 | A | 2.00 | 38.86 |
| 6 | 1912025 | Finite Elements Method I | 16.00 | B | 3.00 | 48.00 |
| 7 | 1912135 | Fatigue in Polymeric Composites | 14.80 | C | 3.00 | 44.40 |
| 8 | 1912137 | Adhesively Bonded Structures | 15.70 | C | 3.00 | 47.10 |
| 9 | 1912138 | Advanced Composite Mechanics | 06.50 | F | 3.00 | — |
| 10 | 1912138 | Advanced Composite Mechanics | 17.45 | B | 3.00 | 52.35 |

The above-mentioned has passed the M.Sc. thesis (6.00 credits) with grade EXCELLENT (range 19-20).

| | |
|----------------------------|----------------------------------|
| Total Taken Credits: 35.00 | Total Passed Credits: 32.00 |
| Total Points: 390.01 | Total Average: 15.00 (out of 20) |

M. SEDIGHI
Head of Graduate Studies Dept.
Signed & Sealed

Notes:

- * These are remedial courses and are not calculated in the Total Average.
- ** Due to transfer from another university, these courses are not accepted and are not calculated in the Total Average.
- *** Due to the change of the major, these courses are not accepted and are not calculated in the Total Average.
- # Eliminated courses considering the Bachelor regulations of 2014.
- The marks range from zero to 20.00.
- F mark stands for failed courses and other letter marks are passed courses.
- This transcript of records is issued without alteration.

True translation from Persian text is certified.

Official Translator to the Judiciary of the Islamic Republic of Iran
Mrs. Maryam Aghili, Tehran, July 21, 2020



KERMANSHAH UNIVERSITY OF TECHNOLOGY

Student's Transcript of Records

Golestan Comprehensive Academic System

Report No.: 572

Date & Time: July 01, 2020, 10:57

| | | | | | | | | |
|---|--|--|---|--|--|--|--------------------------------------|--|
| Name & Surname: Mr. MOHAMMADJAVAD BEIGREZAAE | | | | | | | SCANNED PHOTO OF THE HOLDER | |
| Father's Name: Eskandar | Faculty: Energy, Department: Mechanics | ID card No. / National ID Code: 3330306165 | | | | | | |
| Studentship No.: 92103105 | Place of Issue: Eslamabad Gharb | Date of Birth: Oct. 25, 1995 | GPA: 16.4 (out of 20) | | | | | |
| Passed Credits: 142 | Effective Credits in GPA: 142 | Total Points: 2329.08 | Type of Admission to University: Overall Test | | | | | |
| Last Status: GRADUATE | Degree: Bachelor of Science Degree (Evening Program) | Major: Mechanical Engineering | | | | | | |

| Code/ Group | Course Title | Credit | Course Type | Course Status | Mark Status | Mark | Result |
|---|---|-------------------|----------------|--------------------|----------------|-------|--------|
| <i>1st Semester, Academic Year 2013-2014</i> | | | | | | | |
| 1012003_01 | General Chemistry | 3 | Basic | Normal | Reported | 17 | Passed |
| 1012004_02 | Industrial Drafting I | 2 | Main | Normal | Reported | 19.1 | Passed |
| 9999001_03 | General Persian | 3 | General | Normal | Reported | 14 | Passed |
| 9999005_03 | General English | 3 | General | Normal | Reported | 17.75 | Passed |
| 9999017_03 | General Mathematics I | 3 | Basic | Normal | Reported | 17 | Passed |
| 9999019_03 | General Physics I | 3 | Basic | Normal | Reported | 17.5 | Passed |
| Average: 16.94 (out of 20) | Points: 287.95 | Taken Credits: 17 | | Passed Credits: 17 | | | |
| <i>2nd Semester, Academic Year 2013-2014</i> | | | | | | | |
| 1012008_01 | Statics | 3 | Main | Normal | Reported | 18.6 | Passed |
| 1012009_01 | Materials Science | 3 | Main | Normal | Reported | 11.25 | Passed |
| 1012010_01 | Computer Programming | 3 | Basic | Normal | Reported | 19.76 | Passed |
| 9999002_04 | Islamic Thought I | 2 | General | Normal | Reported | 17.5 | Passed |
| 9999016_31 | Marriage Knowledge | 2 | General | Normal | Reported | 17 | Passed |
| 9999018_03 | General Mathematics II | 3 | Basic | Normal | Reported | 15 | Passed |
| 9999020_03 | General Physics II | 3 | Basic | Normal | Reported | 16 | Passed |
| 9999022_23 | Physics I Lab. | 1 | Basic | Normal | Reported | 12 | Passed |
| Average: 16.14 (out of 20) | Points: 322.83 | Taken Credits: 20 | | Passed Credits: 20 | | | |
| <i>3rd Semester, Academic Year 2013-2014</i> | | | | | | | |
| 1012047_02 | Industrial Design II | 2 | Specialized | Normal | Reported | 15.25 | Passed |
| 9999021_01 | Differential Equations | 3 | Basic | Normal | Reported | 16 | Passed |
| 9999023_03 | Physics II Lab. | 1 | Basic | Normal | Reported | 20 | Passed |
| Average: 16.42 (out of 20) | Points: 98.50 | Taken Credits: 6 | | Passed Credits: 6 | | | |
| <i>1st Semester, Academic Year 2014-2015</i> | | | | | | | |
| 1012012_01 | Dynamics | 4 | Main | Normal | Reported | 09.75 | Failed |
| 1012013_01 | Numerical Calculations | 2 | Basic | Normal | Reported | 17.5 | Passed |
| 1012015_01 | Mechanics of Materials I | 3 | Main | Normal | Reported | 15.25 | Passed |
| 1012016_01 | Fundamentals of Electrical Engineering I | 3 | Main | Normal | Reported | 19 | Passed |
| 1012017_02 | Welding Workshop | 1 | Main | Normal | Reported | 20 | Passed |
| 1012021_01 | Thermodynamics I | 3 | Main | Normal | Reported | 15.2 | Passed |
| 1012034_01 | Machine Tools Workshop | 1 | Main | Normal | Reported | 19 | Passed |
| 9999003_03 | Islamic Thought II | 2 | General | Normal | Reported | 16 | Passed |
| Average: 15.44 (out of 20) | Points: 254.35 | Taken Credits: 19 | | Passed Credits: 15 | | | |
| <i>2nd Semester, Academic Year 2014-2015</i> | | | | | | | |
| 1012012_01 | Dynamics | 4 | Main | Normal | Reported | 13.6 | Passed |
| 1012018_01 | Engineering Mathematics | 3 | Main | Normal | Reported | 11.75 | Passed |
| 1012020_01 | Mechanics of Materials II | 2 | Main | Normal | Reported | 15.5 | Passed |
| 1012022_01 | Fluids Mechanics I | 3 | Main | Normal | Reported | 12 | Passed |
| 1012023_01 | Fundamentals of Electrical Engineering II | 3 | Main | Normal | Reported | 18 | Passed |
| 1012029_02 | Auto Mechanics Workshop | 1 | Main | Normal | Reported | 19.75 | Passed |
| 9999004_03 | Islamic Ethics (Lifestyle) | 2 | General | Normal | Reported | 20 | Passed |
| Average: 15.02 (out of 20) | Points: 270.40 | Taken Credits: 18 | | Passed Credits: 18 | | | |



مریم عقیلی

مترجم رسمی انتکس قوه قضائیه جمهوری اسلامی ایران

سازمان اسناد و کتابخانه ملی جمهوری اسلامی ایران، واحد ۱۱

تلفن: ۰۲۶-۴۴۳۷۸۸۸ - ۰۲۶-۴۴۳۷۷۷۷

MARYAM AGHILI

OFFICIAL ENGLISH TRANSLATOR

TO THE JUDICIARY OF I.R.IRAN

Unit 11, 4th Floor, No. 688, Next To Sarsabz Cross, Resalat Highway, TEHRAN-IRAN

Tel/Fax: 77493888 - 77203323

Official Translation

۹۱۱۲۴۸



جمهوری اسلامی ایران

ردیف دفتر ثبت

۹۹۷ ۱۴۸-۱

قوه قضائیه - اداره مترجمین رسمی

| 3 rd Semester, Academic Year 2014-2015 | | | | | | | |
|---|---|-------------------|-------------|--------------------|-----------|-------|--------|
| 1012044_01 | Production Methods & Workshop | 3 | Specialized | Normal | Reported | 20 | Passed |
| 9999006_02 | Analytical History of Early Islam | 2 | General | Normal | Reported | 17 | Passed |
| Average: 18.80 (out of 20) | Points: 94.00 | Taken Credits: 5 | | Passed Credits: 5 | | | |
| 1 st Semester, Academic Year 2015-2016 | | | | | | | |
| 1012024_01 | Mechanical Engineering Design I | 3 | Main | Normal | Reported | 12.5 | Passed |
| 1012025_01 | Mechanical Vibrations | 3 | Main | Normal | Reported | 12 | Passed |
| 1012026_01 | Thermodynamics II | 3 | Main | Normal | Reported | 18.7 | Passed |
| 1012028_02 | Fundamentals of Electric Power Lab. | 1 | Main | Normal | Reported | 19.5 | Passed |
| 1012036_01 | Mechanics of Materials Lab. | 1 | Main | Normal | Reported | 20 | Passed |
| 1012043_01 | Fundamental of Composite Materials | 3 | Specialized | Normal | Reported | 19.5 | Passed |
| 9999008_04 | Thematic Commentary of Holy Quran (Islamic Texts) | 2 | General | Normal | Reported | 19.25 | Passed |
| 9999009_12 | Physical Education I | 1 | General | Normal | Reported | 18.5 | Passed |
| Average: 16.74 (out of 20) | Points: 284.60 | Taken Credits: 17 | | Passed Credits: 17 | | | |
| 2 nd Semester, Academic Year 2015-2016 | | | | | | | |
| 1012027_01 | Fluids Mechanics II | 3 | Main | Normal | Reported | 16 | Passed |
| 1012030_01 | Mechanical Engineering Design II | 3 | Main | Normal | Reported | 17 | Passed |
| 1012031_01 | Heat Transfer I | 3 | Main | Normal | Reported | 10.3 | Passed |
| 1012035_01 | Thermodynamics Lab. | 1 | Main | Normal | Reported | 19 | Passed |
| 1012090_01 | Press Molds Design & Manufacturing | 3 | Specialized | Normal | Reported | 19.75 | Passed |
| 9999012_31 | Physical Education II | 1 | General | Normal | Reported | 19 | Passed |
| Average: 16.23 (out of 20) | Points: 227.15 | Taken Credits: 14 | | Passed Credits: 14 | | | |
| 3 rd Semester, Academic Year 2015-2016 | | | | | | | |
| 1012062_01 | Internship I | 0.5 | Internship | Normal | Reported | 19.75 | Passed |
| 1012063_01 | Internship II | 0.5 | Internship | Normal | Reported | 19.75 | Passed |
| Average: 19.75 (out of 20) | Points: 19.75 | Taken Credits: 1 | | Passed Credits: 1 | | | |
| 1 st Semester, Academic Year 2016-2017 | | | | | | | |
| 1012019_01 | Machine Dynamics | 3 | Main | Normal | Reported | 17.75 | Passed |
| 1012033_02 | Fluids Mechanics Lab. | 1 | Main | Normal | Reported | 16.75 | Passed |
| 1012037_01 | Bachelor of Science Project | 3 | Project | Normal | Continued | - | |
| 1012042_01 | Specialized English | 2 | Specialized | Normal | Reported | 14 | Passed |
| 1012048_01 | Project Control & Management | 2 | Specialized | Normal | Reported | 11 | Passed |
| 1012070_01 | Air Conditioning Systems Design I | 3 | Specialized | Normal | Reported | 20 | Passed |
| Average: 16.36 (out of 20) | Points: 180.00 | Taken Credits: 11 | | Passed Credits: 11 | | | |
| 2 nd Semester, Academic Year 2016-2017 | | | | | | | |
| 1012032_02 | Automatic Control | 3 | Main | Normal | Reported | 10.5 | Passed |
| 1012037_01 | Bachelor of Science Project | 3 | Project | Continued | Reported | 20 | Passed |
| 1012038_01 | Machine Dynamics & Vibrations Lab. | 1 | Main | Normal | Reported | 17.5 | Passed |
| 1012049_01 | Intro to Finite Elements | 3 | Specialized | Normal | Reported | 14.35 | Passed |
| 1012057_0 | Introduction of Fracture Mechanics | 3 | Specialized | *** | Reported | 18.5 | Passed |
| 1012059_0 | Design of Pressure Tanks | 3 | Specialized | *** | Reported | 20 | Passed |
| 9999007_01 | Islamic Revolution & Its Origins | 2 | General | Normal | Reported | 11 | Passed |
| Average: 16.09 (out of 20) | Points: 289.55 | Taken Credits: 18 | | Passed Credits: 18 | | | |

*** Intro to professor

S. FATHI: Head of Academic Affairs & Graduate
Studies of the University
Signed & Sealed

True translation from Persian text is certified.
Official Translator to the Judiciary of the Islamic Republic of Iran
Mrs. Maryam Aghili, Tehran, July 21, 2020





قوه قضائیه - اداره مترجمین رسمی

MARYAM AGHILI
OFFICIAL ENGLISH TRANSLATOR
TO THE JUDICIARY OF I.R.IRAN
Unit 11, 4th Floor, No. 688, Next To Sarsabz Cross, Resalat Highway, TEHRAN-IRAN
Tel/Fax: 77493888- 77 20 33 23

In the Name of God, the Compassionate, the Merciful

IRAN UNIVERSITY OF SCIENCE & TECHNOLOGY (IUST) (Founded in 1929)

DIPLOMA

No.: 99-99-15-1192

Date: July 05, 2020

Specific hologram of IUST is affixed.

SCANNED
& SEALED
PHOTO
OF THE
HOLDER

Whereas:

Mr. MOHAMMADJAVAD BEIGREZAAE,

son of ESKANDAR, holder of ID card No. 3330306165 issued in Eslamabad Gharb – Iran and born in 1995, has successfully completed the program prescribed by the School of Mechanical Engineering on Sep. 16, 2019; therefore, this Master of Science Degree diploma in the field of:

“Mechanical Engineering – Applied Design”

is conferred on him.

The faculty members wish the above-said alumnus all the best in mingling knowledge with practice, virtue, and fear of God and in gaining God's blessing by serving the mankind.

B. MOHAMMADI
Chancellor of the Faculty
Signed

J. ZAKERI SARDOROUDI
President of the University
Signed & Sealed

98-00-B-13/96743565

True translation from Persian text is certified.
Official Translator to the Judiciary of the Islamic Republic of Iran
Ms. Maryam Aghili, Tehran, July 21, 2020





In the Name of God, the Almighty

MINISTRY OF SCIENCE, RESEARCH & TECHNOLOGY
Kermanshah University of Technology

DIPLOMA

No.: S/D/F/99/102

Date: July 01, 2020

Specific hologram of Kermanshah University of Technology is affixed.

SEALED
PHOTO
OF THE
HOLDER

By virtue of the approval passed on May 19, 2012 by Higher Education Expansion Council;
whereas:

Mr. MOHAMMADJAVAD BEIGREZAEE,

son of ESKANDAR, holder of National ID code: 3330306165 issued in Eslamabad Gharb – Iran, born in 1995, has successfully completed the Bachelor of Science Degree program in this university by July 2017; therefore, this Bachelor of Science Degree diploma in the field of:

“Mechanical Engineering”

is conferred on him.

The faculty members wish the above-said alumnus all the best in mingling knowledge with practice, virtue, and fear of God and in gaining God's blessing by serving the mankind.

QR CODE

A. A. AKHTARI

President of the University

Signed & Sealed

True translation from Persian text is certified.

Official Translator to the Judiciary of the Islamic Republic of Iran
Mrs. Maryam Aghili, Tehran, July 21, 2020



Publications — Mohammad Javad Beigrezaee

Under Review

2. **M. J. Beigrezaee**, S. K. Jalali, D. Misseroni, N. M. Pugno, “A Refined Gibson–Ashby Model for Functionally Graded Honeycombs with Random Irregularities,” *International Journal of Mechanical Sciences*, under review.
1. **M. J. Beigrezaee**, M. Heshmati, S. K. Jalali, N. M. Pugno, “Wave propagation in honeycombs with functionally graded wall thickness and random lattice irregularities,” *International Journal of Mechanical Sciences*, under review.

Journal Papers (ISI)

9. S. K. Jalali, **M. J. Beigrezaee**, N. M. Pugno, “Physically based machine learning for multi-objective optimal design of partially recycled materials,” *Journal of Cleaner Production*, 2025, <https://doi.org/10.1016/j.jclepro.2025.147081>
8. S. K. Jalali, **M. J. Beigrezaee**, D. Misseroni, N. M. Pugno, “A modified Gibson–Ashby model for functionally graded lattice structures,” *Mechanics of Materials*, 2024, <https://doi.org/10.1016/j.mechmat.2023.104822>
7. S. K. Jalali, **M. J. Beigrezaee**, and N. M. Pugno, “Reporting a misunderstanding in relating the Young’s modulus to functionally graded porosity,” *Composite Structures*, vol. 281, p. 115007, Feb. 2022, <https://doi.org/10.1016/j.compstruct.2021.115007>
6. S. K. Jalali, **M. J. Beigrezaee**, and N. M. Pugno, “Is it always worthwhile to resolve the governing equations of plate theories for graded porosity along the thickness?,” *Composite Structures*, vol. 256, p. 112960, Jan. 2021, <https://doi.org/10.1016/j.compstruct.2020.112960>
5. **M. J. Beigrezaee**, M. R. Ayatollahi, B. Bahrami, and L. F. M. da Silva, “A new geometry for improving the strength of single lap joints using adherend notching technique,” *Journal of Adhesion*, vol. 97, no. 11, pp. 1004–1023, 2021, <https://doi.org/10.1080/00218464.2020.1724787>
4. B. Bahrami, M. R. Ayatollahi, **M. J. Beigrezaee**, and L. F. M. da Silva, “Strength improvement in single lap adhesive joints by notching the adherends,” *International Journal of Adhesion and Adhesives*, vol. 95, no. June, p. 102401, 2019, <https://doi.org/10.1016/j.ijadhadh.2019.102401>
3. **M. J. Beigrezaee**, M. R. Ayatollahi, B. Bahrami, and L. F. M. da Silva, “Failure load analysis in single lap joints - effect of adherend notching,” *Engineering Failure Analysis*, vol. 104, no. May, pp. 75–83, 2019, <https://doi.org/10.1016/j.engfailanal.2019.05.020>
2. S. K. Jalali, **M. J. Beigrezaee**, and S. Hayati, “How does porosity affect the free vibration of single-layered graphene sheets?,” *Superlattices and Microstructures*, vol. 128, no. November 2018, pp. 221–242, 2019, <https://doi.org/10.1016/j.spmi.2019.01.023>
1. S. K. Jalali, **M. J. Beigrezaee**, and N. M. Pugno, “Atomistic evaluation of the stress concentration factor of graphene sheets having circular holes,” *Physica E: Low-Dimensional Systems and Nanostructures*, vol. 93, no. January, pp. 318–323, Sep. 2017, <https://doi.org/10.1016/j.physe.2017.06.031>.

Other Publications (non-**ISI**)

2. B. Bahrami, M. R. Ayatollahi, **M. J. Beigrezaee**, "Strength improvement by adherend notching and tapering," *Journal of Science and Technology of Composites*, 2020.
1. S. K. Jalali, **M. J. Beigrezaee**, "Stress concentration factor of graphene sheets with elliptical vacancies," *Journal of Solid Mechanics*, 2019.

Conference Proceedings

6. S. K. Jalali, **M. J. Beigrezaee**, N. Pugno, "Machine Learning-Based Optimization of Recycled Resources Integration in Virgin Materials: A Focus on Automotive Applications", *UK Association for Computational Mechanics* (UKACM 2025), London, United Kingdom, 23 – 25 April 2025.
5. **M. J. Beigrezaee**, S. K. Jalali, D. Misseroni, N. Pugno, "Nonlinear Mechanical Simulation of Spider Silk Composites for Enhanced Energy Absorption", *26th International Conference of the Theoretical and Applied Mechanics* (ICTAM 2024), Daegu, Korea, 25 – 30 August 2024.
4. **M. J. Beigrezaee**, S. K. Jalali, D. Misseroni, N. Pugno, "A Gibson-Ashby Model for Graded 2D Cellular Solids", *XVII international conference in computational plasticity, fundamentals, and applications* (COMPLAS 2023), Barcelona, Spain, 5 – 7 September 2023.
3. S. K. Jalali, **M. J. Beigrezaee**, N. M. Pugno, "Vibrational Analysis of Defected Circular Single-layered Graphene and Silicene Sheets Under Pre-strains", *25th International Congress of Theoretical and Applied Mechanics* (ICTAM 2021), Milan, Italy, 22 – 27 August 2021
2. S. K. Jalali and **M. J. Beigrezaee**, "Molecular Dynamic Based Free Vibrational Analysis of Circular Single Layered Graphene Sheets," *5th International Conference on Advances in Mechanical Engineering* (ICAME 2019), Istanbul, Turkey, 17 – 19 December 2019.
1. M. R. Ayatollahi, B. Bahrami, **M. J. Beigrezaee**, "Finite element analysis of a geometrically improved single lap joint," *2nd International Conference on Structural Integrity and Durability* (ICSID 2018), Dubrovnik, Croatia, 2 – 5 October 2018.