

Peer-Reviewed Journal Articles:

- J1. "Leveraging machine learning for analyzing structural behavior of a composite wind turbine blade", R. Rafiee, A. Shahcheraghi, A. Shayestehmanesh, Engineering Applications of Artificial Intelligence, 2025, 153: 110895.
[DOI:10.1016/j.engappai.2025.110895](https://doi.org/10.1016/j.engappai.2025.110895)
- J2. "Stochastic multi-scale modeling for estimating the Mode-I dynamic fracture toughness of CNT-reinforced polymers", R. Yazdanparast, R. Rafiee, Composites Part A, 2025, 194: 108882.
[DOI: 10.1016/j.compositesa.2025.108882](https://doi.org/10.1016/j.compositesa.2025.108882)
- J3. "Developing an analytical solution for stress analysis of composite pipes under combined external pressure and axial load", R. Rafiee, A. Shahcheraghi, Applied Physics A, 2025, 131(4): 247.
[DOI: 10.1007/s00339-025-08344-x](https://doi.org/10.1007/s00339-025-08344-x)
- J4. "Estimating strength of 3D-printed polymers based on the appraisal of available models", R. Rafiee, H. Amohaji, H. Khezma, Journal of Materials Engineering and Performance, 2025, In-Press.
[DOI: 10.1007/s11665-025-10880-9](https://doi.org/10.1007/s11665-025-10880-9)
- J5. "The effect of notches on the mechanical properties and damage failures of fiber-metal laminates: an experimental and numerical study", H.K. Dalfi, A. Al-Obaidi, R. Rafiee, N. Abdulridha, Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design & Application, 2025, In-Press.
[DOI: 10.1177/14644207241310771](https://doi.org/10.1177/14644207241310771)
- J6. "A rate-dependent crack bridging model for dynamic fracture of CNT reinforced polymers", R. Yazdanparast, R. Rafiee, Engineering Fracture Mechanics, 2024; 311:110535.
[DOI: 10.1016/j.engfracmech.2024.110535](https://doi.org/10.1016/j.engfracmech.2024.110535)
- J7. "A 3D nonlinear viscoelastic-viscoplastic constitutive model for dynamic response of an epoxy resin", R. Yazdanparast, R. Rafiee, Acta Mechanica, 2024; 235: 6625-6639.
[DOI: 10.1007/s00707-024-04065-z](https://doi.org/10.1007/s00707-024-04065-z)
- J8. "Dynamic mechanical behavior of CNT-reinforced epoxy under medium-strain rate: A comparative study", R. Yazdanparast, R. Rafiee, H. Kalhori, B. Li, Composite Structures, 2024; 334: 118343.
[DOI: 10.1016/j.compstruct.2024.118343](https://doi.org/10.1016/j.compstruct.2024.118343)
- J9. "A rate-dependent cohesive zone model for dynamic crack growth in carbon nanotube reinforced polymers", R. Yazdanparast, R. Rafiee, International Journal of Solids and Structures, 2024; 300:112932.
[DOI: 10.1016/j.ijsolstr.2024.112932](https://doi.org/10.1016/j.ijsolstr.2024.112932)
- J10. "On the application of genetic algorithm for predicting strength of CNT/ABS filaments using multi-scale modeling", R. Rafiee, H. Amohaji, Applied Physics A, 2024; 130(7): 513.
[DOI: 10.1007/s00339-024-07657-7](https://doi.org/10.1007/s00339-024-07657-7)
- J11. "Predicting mechanical properties of 3D printed nanocomposites using multi-scale modeling", R. Rafiee, H. Zehtabzadeh, M. R. Amini, Additive Manufacturing, 2024; 83:104055.
[DOI: 10.1016/j.addma.2024.104055](https://doi.org/10.1016/j.addma.2024.104055)
- J12. "A 3D viscoelastic-viscoplastic behavior of carbon nanotube-reinforced polymers: Constitutive model and experimental characterization", R. Yazdanparast, R. Rafiee, Polymer Composites, 2024; 45(7): 6245-6438.
[DOI:10.1002/polc.28207](https://doi.org/10.1002/polc.28207)
- J13. "Effects of thermoplastic articles on the mechanical performance and damage failure of notched fiber metal laminated", H Dalfi, R. Rafiee, A. Al-Obaidi, N. Abdulridha, Journal of Reinforced Plastics and Composites, 2024; 07316844241233164.
[DOI:10.1177/07316844241233164](https://doi.org/10.1177/07316844241233164)

- J14. "Examining tensile properties in nanocomposite samples fabricated through extrusion-based additive manufacturing", R. Rafiee, M. R. Amin, H. Zehtabzadeh, Arabian Journal of Science and Technology, 2024; 49(8): 10913-10926.
[DOI:10.1007/s13369-023-08562-6](https://doi.org/10.1007/s13369-023-08562-6)
- J15. "On the strength of polymeric composites exposed to long-term Ultra-Violent radiation", R. Rafiee, A. H. Rahimi, Journal of Composite Materials, 2023; 00219983231178087.
[DOI:10.1177/00219983231178087](https://doi.org/10.1177/00219983231178087)
- J16. "Investigating long-term creep in a composite pipe subjected to transvers loading and aqueous condition", R. Rafiee, M. N. Arabian, Polymer Composites, 2023; In-Press.
[DOI:10.1002/pc.27434](https://doi.org/10.1002/pc.27434)
- J17. "Optimization of the mechanical performance and damage failure characteristics of laminated composites based on fiber orientation", H. Dalfi, A. Al-Obaid, A. Tariq, H. Razzaq, R. Rafiee, Frontiers of Structural and Civil Engineering, 2023; In-Press.
[DOI:10.1007/s11709-023-0996-4](https://doi.org/10.1007/s11709-023-0996-4)
- J18. "Investigating the influence of pull-out speed on the interfacial properties and pull-out behavior of CNT/polymer nanocomposites", R. Yazdanparast, R. Rafiee, Composite Structures, 2023; 117049.
[DOI:10.1016/j.compstruct.2023.117049](https://doi.org/10.1016/j.compstruct.2023.117049)
- J19. "Linkage learning of optimization of aeroelastic and structural behavior of composite wings", R. Rafiee, T. Farsadi, M. Ahamid-Tehrani, P. Sharifi, International Journal of Aeronautical and Space Sciences, 2023; 1-12.
[DOI: 10.1007/S42405-023-00603-6](https://doi.org/10.1007/S42405-023-00603-6)
- J20. "Randomized Kaczmarz and Landweber algorithm for impact force identification on a composite panel", H. Kalhori, R. Rafiee, L. Ye, B. Halkon, M. Bahmanpour, International Journal of Impact Engineering, 2023; 176:104576
[DOI: 10.1016/j.ijimpeng.2023.104576](https://doi.org/10.1016/j.ijimpeng.2023.104576)
- J21. "A micro-macromechanical approach for analyzing creep in randomly oriented short fiber composites", R. Rafiee, A. Ghamarzadeh, Polymer Composites, 2023, 44:2187-2195.
[DOI:10.1002/pc.27235](https://doi.org/10.1002/pc.27235)
- J22. "Dental composites with strength after aging improved by using anodic nano-porous fillers: experimental results, modeling and simulation", A. Ghorbanhosseini, R. Rafiee, A. Pligovka, M. Salerno, Engineering with Computers, 2023; 39(1): 387-398.
[DOI: 10.1007/s00366-021-01566-6](https://doi.org/10.1007/s00366-021-01566-6)
- J23. "Determining in-plane material properties of square core cellular materials using computational homogenization technique", R. Yazdanparast, R. Rafiee, Engineering with Computers, 2023; 39(1): 373-386
[DOI: 10.1007/s00366-021-01562-w](https://doi.org/10.1007/s00366-021-01562-w)
- J24. "Filament wound pipe optimization platform development: A methodological approach", R. Rafiee, R. Shahzadi, S. Jafari, Composite Structures, 2022; 297:115972.
[DOI:10.1016/j.compstruct.2022.115972](https://doi.org/10.1016/j.compstruct.2022.115972)
- J25. "Structural optimization of filament wound composite pipes", R. Rafiee, R. Shahzadi, H. Spresp, Frontiers in Civil and Structural Engineering, 2022; 16:1056-1069.
[DOI:10.1007/s11709-022-0868-3](https://doi.org/10.1007/s11709-022-0868-3)
- J26. "Estimating the burst pressure of a filament wound composite pressure vessel using two-scale and multi-scale analyses", R. Rafiee, A. Salehi, Mechanics of Advanced Materials and Structures, 2023; 30(13): 2668-2683.
[DOI: 10.1007/s00339-022-05505-0](https://doi.org/10.1007/s00339-022-05505-0)

- J27. "A novel recursive multi-scale modeling for predicting the burst pressure of filament wound composite pressure vessels", R. Rafiee, A. Salehi, Applied Physics A, 2022; 128(5): 1-14.
DOI: [10.1007/s00339-022-05505-0](https://doi.org/10.1007/s00339-022-05505-0)
- J28. "Experimental investigation of Graphene Nanoplatelets effect on the Fatigue Behavior of Basalt/Epoxy Composite Pressure Vessels", H. Sepetcioglu, N. Tarakcioglu, R. Rafiee, Thin-Walled Structures, 2021; 171:108672.
DOI:[10.1016/j.tws.2021.108672](https://doi.org/10.1016/j.tws.2021.108672)
- J29. "A hysteresis cohesive approach for predicting mixed-mode delamination onset of composite laminates under cyclic loading: Part II: numerical and experimental analyses ", R. Rafiee, S. Sotoudeh, Composite Structures, 2021; 277:114668.
DOI:[10.1016/j.compstruct.2021.114668](https://doi.org/10.1016/j.compstruct.2021.114668)
- J30. "A hysteresis cohesive approach for predicting mixed-mode delamination onset of composite laminates under cyclic loading: Part I:, model development ", R. Rafiee, S. Sotoudeh, Composite Structures, 2021; 277:114667.
DOI:[10.1016/j.compstruct.2021.114667](https://doi.org/10.1016/j.compstruct.2021.114667)
- J31. "Multi-scale modeling of polymeric composites including nanoporous fillers of milled anodic alumina", R. Rafiee, A. Eskandariyun, C. Larosa, M. Salerno, Arabian Journal For Science and Engineering; 2022; 47:8189-8198.
DOI:[10.1007/s13369-021-06199-x](https://doi.org/10.1007/s13369-021-06199-x)
- J32. "Numerical investigation of the effect of moisture and impurity on long-term creep behavior of polymer composite pipes", A. Khademi, A. Yousefi, M. Haghghi-Yazdi, M. Safarabadi, R. Rafiee, International Journal of Pressure Vessels and Piping, 2021; 193: 104456.
DOI:[10.1016/j.ijpvp.2021.104456](https://doi.org/10.1016/j.ijpvp.2021.104456)
- J33. "Failure analysis of a composite wind turbine blade at the adhesive joint of the trailing edge ", R. Rafiee, M. R. Hashemi-Taheri, Engineering Failure Analysis, 2021; 121: 1051418.
DOI:[10.1016/j.engfailanal.2020.105148](https://doi.org/10.1016/j.engfailanal.2020.105148)
- J34. "Experimental study on the effect of hygrothermal environments combined with the sustained mechanical loads on the strength of composite rings ", R. Rafiee, M. Maleki, S. Rahnama, Composite Structures, 2021; 258: 113397.
DOI:[10.1016/j.compstruct.2020.113397](https://doi.org/10.1016/j.compstruct.2020.113397)
- J35. "Characterizing delamination toughness of laminated composites containing carbon nanotubes: Experimental study and stochastic multi-scale modeling ", R. Rafiee, M. Sahraei, Composites Science & Technology, 2021; 201: 108478.
DOI:[10.1016/j.compstruct.2020.112868](https://doi.org/10.1016/j.compstruct.2020.112868)
- J36. "Analyzing the long-term creep behavior of composite pipes: Developing an alternative scenario of short-term multi-stage loading test", R. Rafiee, A. Ghorbanhosseini, Composite Structures, 2020; 254: 112868.
DOI:[10.1016/j.compstruct.2020.112868](https://doi.org/10.1016/j.compstruct.2020.112868)
- J37. "Bending analysis of molded composite grating panels: Theoretical and experimental investigations", R. Rafiee, R. Yazdanparast, A. Ghorbanhosseini, Fibers and Polymers, 2021; 22: 1653-1663.
DOI:[10.1007/s12221-021-0875-3](https://doi.org/10.1007/s12221-021-0875-3)
- J38. "Fatigue analysis of a composite ring: Experimental and theoretical investigations", R. Rafiee, F. Abbasi, S. Maleki, Journal of Composite Materials, 2020; 54(26): 4011-4024.
DOI: [10.1177/0021998320925163](https://doi.org/10.1177/0021998320925163)
- J39. "Numerical and experimental analyses of the hoop tensile strength of filament wound composite tubes", R. Rafiee, F. Abbasi, Mechanics of Composite Materials, 2020; 56(4):423-436.
DOI: [10.1007/s11029-020-09894-2](https://doi.org/10.1007/s11029-020-09894-2)

- J40. "Experimental and theoretical investigations of creep on a composite pipe under compressive transverse loading", R. Rafiee, A. Ghorbanhosseini, Fiber and Polymers, 2021; 22(1): 222-230.
[DOI: 10.1007/s12221-021-0265-x](https://doi.org/10.1007/s12221-021-0265-x)
- J41. "A cohesive zone model for predicting the initiation of Mode II delamination in composite under cyclic loading", R. Rafiee, S. Sotoudeh, Journal of Reinforced Plastics & Composites, 2021; 40(5-6):179-192.
[DOI: 10.1177/0731684420949660](https://doi.org/10.1177/0731684420949660)
- J42. "Predicting the strength of carbon nanotube reinforced polymers using stochastic bottom-up modeling", R. Rafiee, H. Zehtabzadeh, Applied Physics A, 2020; 126(8): 1-13.
[DOI: 10.1007/s00339-020-03784-z](https://doi.org/10.1007/s00339-020-03784-z)
- J43. "Developing a homogenization approach for estimation of in-plane effective elastic moduli of hexagonal honeycombs", R. Yazdanparast, R. Rafiee, Engineering Analysis with Boundary Elements, 2020; 117: 202-211.
[DOI: 10.1016/j.enganabound.2020.04.012](https://doi.org/10.1016/j.enganabound.2020.04.012)
- J44. "Developing a micro-macromechanical approach for evaluating long-term creep in composite cylinders", R. Rafiee, A. Ghorbanhosseini, Thin-Walled Structures, 2020; 151: 106714.
[DOI: 10.1016/j.tws.2020.106714](https://doi.org/10.1016/j.tws.2020.106714)
- J45. "Investigating the influence of bonded and non-bonded interactions on the interfacial bonding between carbon nanotube and polymer", R. Rafiee, M. Sahraci, Composite Structures, 2020; 238: 111996.
[DOI: 10.1016/j.compstruct.2020.111996](https://doi.org/10.1016/j.compstruct.2020.111996)
- J46. "Predicting Young's modulus of agglomerated graphene/polymer using multi-scale modeling", R. Rafiee, A. Eskandariyun, Composite Structures, 2020; 245: 112324.
[DOI: 10.1016/j.compstruct.2020.112324](https://doi.org/10.1016/j.compstruct.2020.112324)
- J47. "Theoretical study of failure in composite pressure vessels subjected to low-velocity impact and internal pressure", R. Rafiee, H. Rashedi, Sh. Rezaee, Frontiers of Structural and Civil Engineering, 2020; 14: 1349-1358.
[DOI: 10.1007/s11709-020-0650-3](https://doi.org/10.1007/s11709-020-0650-3)
- J48. "Stochastic failure analysis of composite pipes subjected to random excitation", R. Rafiee, P. Sharifi, Construction and Building Materials, 2019; 224: 950-961.
[DOI: 10.1016/j.conbuildmat.2019.07.107](https://doi.org/10.1016/j.conbuildmat.2019.07.107)
- J49. "Theoretical and numerical analyses of composite cylinders subjected to the low velocity impact", R. Rafiee, A. Ghorbanhosseini, Sh. Rezaee, Composite Structures, 2019; 226:111230.
[DOI: 10.1016/j.compstruct.2019.111230](https://doi.org/10.1016/j.compstruct.2019.111230)
- J50. "Estimating Young's modulus of Graphene/polymer composites using stochastic multi-scale modeling", R. Rafiee, A. Eskandariyun, Composites Part B, 2019; 173: 106842.
[DOI: 10.1016/j.compositesb.2019.05.053](https://doi.org/10.1016/j.compositesb.2019.05.053)
- J51. "3D stress analysis of generally laminated piezoelectric plates with electromechanical coupling effects", A. Andakhshideh, R. Rafiee, S. Maleki, Applied Mathematical Modeling, 2019; 74: 258-279.
[DOI: 10.1016/j.apm.2019.04.060](https://doi.org/10.1016/j.apm.2019.04.060)
- J52. "A study on fracture behavior of semi-elliptical 3D crack in clay-polymer nanocomposites considering interfacial debonding", M. Zahedi, R. Malekimoghadam, R. Rafiee, U. Icardi, Engineering Fracture Mechanics, 2019; 209: 245-259.
[DOI: 10.1016/j.engfracmech.2019.01.031](https://doi.org/10.1016/j.engfracmech.2019.01.031)
- J53. "The influence of hygrothermal environments on the stress concentration in unidirectional composite lamina", S. Rahnama, R. Rafiee, M. Maleki, Mechanics of Materials, 2019; 129: 332-340.
[DOI: 10.1016/j.mechmat.2018.12.010](https://doi.org/10.1016/j.mechmat.2018.12.010)

- J54. "Equivalent reinforcement isotropic model for fracture investigation of orthotropic materials", M. Fakoor, R. Rafiee, Sh. Zare, Steel & Composite Structures, 2019; 30(1): 1-12.
[DOI: 10.12989/scs.2019.30.1.001](https://doi.org/10.12989/scs.2019.30.1.001)
- J55. "Evaluating mechanical performance of GFRP pipes subjected to transverse loading", R. Rafiee, M. R. Habibagahi, Thin-walled Structures, 2018; 131: 347-359.
[DOI: 10.1016/j.tws.2018.06.037](https://doi.org/10.1016/j.tws.2018.06.037)
- J56. "Predicting mechanical properties of nanoclay/polymer composites using stochastic approach", R. Rafiee, R. Shahzadi, Composites Part B, 2018; 152: 31-42.
[DOI: 10.1016/j.compositesb.2018.06.033](https://doi.org/10.1016/j.compositesb.2018.06.033)
- J57. "On the stiffness prediction of GFRP pipes subjected to transverse loading", R. Rafiee, M. R. Habibagahi, KSCE Journal of Civil Engineering, 2018; 22(11):4564-4572.
[DOI: 10.1007/s12205-018-2003-5](https://doi.org/10.1007/s12205-018-2003-5)
- J58. "Investigating structural failure of a filament-wound composite tube subjected to internal pressure: Experimental and theoretical evaluation", R. Rafiee, M.A. Torabi, S. Maleki, Polymer Testing, 2018; 67:322-330.
[DOI: 10.1016/j.polymertesting.2018.03.020](https://doi.org/10.1016/j.polymertesting.2018.03.020)
- J59. "Investigating the influence of delamination on the stiffness of composite pipes under compressive transverse loading using cohesive zone method", S. Maleki, R. Rafiee, A. Hasannia, M. R. Habibagahi, Frontiers of Structural and Civil Engineering, 2019; 13:1316-1323.
[DOI: 10.1007/s11709-019-0555-1](https://doi.org/10.1007/s11709-019-0555-1)
- J60. "Mechanical properties of nanoclay and nanoclay reinforced polymers: A review", R. Rafiee, R. Shahzadi, Polymer Composites, 2019; 40(2): 431-445.
[DOI: 10.1002/pc.24725](https://doi.org/10.1002/pc.24725)
- J61. "Stochastic prediction of burst pressure in composite pressure vessels", R. Rafiee, M.A. Torabi, Composite Structures, 2018; 185:573-583.
[DOI: 10.1016/j.compstruct.2017.11.068](https://doi.org/10.1016/j.compstruct.2017.11.068)
- J62. "Investigating interaction between CNT and polymer using cohesive zone model", R. Rafiee, A. Ghorbanhosseini, Polymer Composites, 2018; 39(11): 3903-3911.
[DOI: 10.1002/pc.24428](https://doi.org/10.1002/pc.24428)
- J63. "Comparative study on predicting Young's modulus of graphene sheets using nano-scale continuum mechanics approach", R. Rafiee, A. Eskandariyun, Physica E, 2017; 90:42-48.
[DOI: 10.1016/j.physe.2017.03.006](https://doi.org/10.1016/j.physe.2017.03.006)
- J64. "Stochastic fatigue analysis of glass fiber reinforced polymer pipes", R. Rafiee, Composite Structures, 2017; 167: 96-102.
[DOI: 10.1016/j.compstruct.2017.01.068](https://doi.org/10.1016/j.compstruct.2017.01.068)
- J65. "Stochastic multi-scale modeling of randomly grown CNTs on carbon fiber", R. Rafiee, A. Ghorbanhosseini, Mechanics of Materials, 2017; 106: 1-7.
[DOI: 10.1016/j.mechmat.2017.01.001](https://doi.org/10.1016/j.mechmat.2017.01.001)
- J66. "Theoretical modeling of fatigue phenomenon in composite pipes", R. Rafiee, F. Eslami, Journal of Composite Structures, 2017; 161:256-263.
[DOI: 10.1016/j.compstruct.2016.11.054](https://doi.org/10.1016/j.compstruct.2016.11.054)
- J67. "Predicting mechanical properties of fuzzy fiber reinforced composites: Radially grown carbon nanotubes on the carbon fiber", R. Rafiee, A. Ghorbanhosseini, International Journal of Mechanics and Materials in Design, 2016; 12(4):1-14.
[DOI: 10.1007/s10999-016-9359-9](https://doi.org/10.1007/s10999-016-9359-9)

- J68. "The influence of material properties on the aeroelastic behavior of a composite wind turbine blade", R. Rafiee, M. Moradi, M. Khanpour, Journal of Renewable and Sustainable Energy, 2016; 8:063305-1-12.
[DOI: 10.1063/1.4968600](https://doi.org/10.1063/1.4968600)
- J69. "Evaluating long-term performance of Glass Fiber Reinforced Plastic pipes subjected to internal pressure", R. Rafiee, B. Mazhari, Construction and Building Materials, 2016; 122:694-701.
[DOI: 10.1016/j.conbuildmat.2016.06.103](https://doi.org/10.1016/j.conbuildmat.2016.06.103)
- J70. "On the mechanical performance of Glass-Fiber-Reinforced Thermosetting-Resin pipes: A Review", R. Rafiee, Journal of Composite Structures, 2016; 143:151-164.
[DOI: 10.1016/j.compstruct.2016.02.037](https://doi.org/10.1016/j.compstruct.2016.02.037)
- J71. "A study on nonlinear vibration behavior of CNT-based representative volume element", M. Jamal-Omidi, M. Shayanmehr, S. Shokrollahi, R. Rafiee, Aerospace Science and Technology, 2016; 55: 272-281.
[DOI: 10.1016/j.ast.2016.06.005](https://doi.org/10.1016/j.ast.2016.06.005)
- J72. "A study on equivalent spherical structure of buckyball-C₆₀ based on continuum shell model", M. Jamal-Omidi, M. Shayanmehr, R. Rafiee, Latin American Journal of Solid and Structures, 2016; 13: 1016-1029.
[DOI: 10.1590/1679-78252508](https://doi.org/10.1590/1679-78252508)
- J73. "Characterizing nanotube-polymer interaction using molecular dynamics simulation", R. Rafiee, M. Mahdavi, Journal of Computational Materials Science, 2016; 112: 356-363.
[DOI: 10.1016/j.commatsci.2015.10.041](https://doi.org/10.1016/j.commatsci.2015.10.041)
- J74. "Simulation of the long-term hydrostatic tests on Glass Fiber Reinforced Plastic Pipes", R. Rafiee, B. Mazhari, Journal of Composite Structures, 2016; 136:56-63.
[DOI: 10.1016/j.compstruct.2015.09.058](https://doi.org/10.1016/j.compstruct.2015.09.058)
- J75. "Simulation of aeroelastic behavior in a composite wind turbine blade", R. Rafiee, M. Tahani, M. Moradi, Journal of Wind Engineering & Industrial Aerodynamics, 2016; 151: 60-69.
[DOI: 10.1016/j.jweia.2016.01.010](https://doi.org/10.1016/j.jweia.2016.01.010)
- J76. "The influence of production inconsistencies on the functional failure of GRP pipes", R. Rafiee, M. Fakoor, H. Hesamsadat, Steel & Composite Structures, An International Journal, 2015; 19(6): 1369-1379.
[DOI: 10.12989/scs.2015.19.6.1369](https://doi.org/10.12989/scs.2015.19.6.1369)
- J77. "The influence of fiber-crack angle on the crack tip parameters in orthotropic materials", M. Fakoor, R. Rafiee, M. Sheikh-Ansari, Proceedings of the Institution of Mechanical Engineers, Part C, Journal of Mechanical Engineering Science 2015; In-Press.
[DOI: 10.1177/0954406215617195](https://doi.org/10.1177/0954406215617195)
- J78. "Modeling creep in polymeric composites: Developing a general integrated procedure", R. Rafiee, B. Mazhari, International Journal of Mechanical Sciences, 2015; 99: 112-120.
[DOI: 10.1016/j.ijmecsci.2015.05.011](https://doi.org/10.1016/j.ijmecsci.2015.05.011)
- J79. "Molecular dynamics simulation of defected carbon nanotubes", R. Rafiee, M. Mahdavi, Proceedings of the Institution of Mechanical Engineers, Part L, Journal of Materials: Design & Application, 2016; 230(2): 654-662.
[DOI: 10.1177/1464420715584809](https://doi.org/10.1177/1464420715584809)
- J80. "Stochastic analysis of functional failure pressures in glass fiber reinforced polyester pipes", R. Rafiee, F. Reshadi, S. Eidi, Materials & Design, 2015; 67: 422-427.
[DOI: 10.1016/j.matdes.2014.12.003](https://doi.org/10.1016/j.matdes.2014.12.003)
- J81. "Uncertainty quantification for multi-scale modeling of polymer nanocomposites with dependent parameters", N. Vu-Bac, R. Rafiee, X. Zhuang, T. Lahmer, T. Rabczuk, Composites Part B, 2015; 68: 446-464.
[DOI: 10.1016/j.compositesb.2014.09.008](https://doi.org/10.1016/j.compositesb.2014.09.008)

- J82. "Multi-scale modeling of carbon nanotube reinforced polymers using irregular tessellation technique", R. Rafiee, V. Firouzbakht, Mechanics of Materials, 2014; 78: 74-84.
DOI: [10.1016/j.mechmat.2014.07.021](https://doi.org/10.1016/j.mechmat.2014.07.021)
- J83. "Evaluating the influence of defects on the Young's modulus of carbon nanotubes using stochastic modeling", R. Rafiee, R. Pourazizi, Journal of Materials Research, 2014; 17(3):758-766.
DOI: [10.1590/S1516-14392014005000071](https://doi.org/10.1590/S1516-14392014005000071)
- J84. "Influence of CNT functionalization on the interphase region between CNT and polymer", R. Rafiee, R. Pourazizi, Journal of Computational Materials Science, 2015; 96: 573-578.
DOI:[10.1016/j.commatsci.2014.03.056](https://doi.org/10.1016/j.commatsci.2014.03.056)
- J85. "Simulation of functional failure in GRP mortar pipes", R. Rafiee, F. Reshadi, Journal of Composite Structures, 2014; 113:155-163.
DOI:[10.1016/j.compstruct.2014.03.024](https://doi.org/10.1016/j.compstruct.2014.03.024)
- J86. "Modeling and experimental evaluation of functional failure pressures in glass fiber reinforced pipes", R. Rafiee, A. Amini, Journal of Computational Materials Science, 2015; 96: 579-588.
DOI:[10.1016/j.commatsci.2014.03.036](https://doi.org/10.1016/j.commatsci.2014.03.036)
- J87. "Uncertainties propagation in methamodel-based probabilistic optimization of CNT/polymer composite structures using stochastic multi-scale modeling", H. Ghasemi, R. Rafiee, X. Zhuang, J. Muthu, T. Rabczuk, Journal of Computational Materials Science, 2014; 85:295-305.
DOI:[10.1016/j.commatsci.2014.01.020](https://doi.org/10.1016/j.commatsci.2014.01.020)
- J88. "The influence of CNT contents on the electrical and electromagnetic properties of CNT/Vinylester", R. Rafiee, M. H. Sabour, A. Nikfarjam, M. Taheri, Journal of Electronic Materials, 2014; 3(9): 3477-3485.
DOI:[10.1007/s11664-014-3290-3](https://doi.org/10.1007/s11664-014-3290-3)
- J89. "On the modeling of carbon nanotube: A critical review", R. Rafiee, R. Maleki Moghadam, Journal of Composites Part B, 2013; 56:435-449.
DOI:[10.1016/j.compositesb.2013.08.037](https://doi.org/10.1016/j.compositesb.2013.08.037)
- J90. "Aeroelastic investigation of a composite wind turbine blade", R. Rafiee, M. Fakoor, Journal of Wind and Structures, 2013; 17(6):671-680.
DOI: [10.12989/was.2013.17.6.671](https://doi.org/10.12989/was.2013.17.6.671)
- J91. "Challenges of the modeling methods for investigating the interaction between CNT and the surrounding polymer", R. Rafiee, T. Rabczuk, R. Pourazizi, J. Zhao, Y. Zhang, Journal of Advances in Materials Science and Engineering, Volume 2013; Article ID 183026, 10 pages.
DOI:[10.1155/2013/183026 \(<http://www.hindawi.com/journals/amse/2013/183026/>\)](http://www.hindawi.com/journals/amse/2013/183026/)
- J92. "Fracture investigation of wood under mixed mode I/II loading based on maximum shear stress criterion", M. Fakoor, R. Rafiee, Journal of Strength of Materials 2013; 45(3): 169-178.
DOI:[10.1007/s11223-013-9468-8](https://doi.org/10.1007/s11223-013-9468-8)
- J93. "Transition angle, a novel concept for predicting the failure mode in orthotropic materials", M. Fakoor, R. Rafiee, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2013; 227: 2155-2162.
DOI:[10.1177/0954406212470905](https://doi.org/10.1177/0954406212470905)
- J94. "Modal analysis of carbon nanotube reinforced polymer using multi-scale finite element method", A. Freridoon, R. Rafiee, R. Maleki Moghadam, Mechanics of Composite Materials 2013; 49(3): 325-332.
DOI: [10.1007/s11029-013-9350-6](https://doi.org/10.1007/s11029-013-9350-6)
- J95. "Influence of carbon nanotube waviness on the stiffness reduction of CNT/polymer composites", R. Rafiee, Journal of Composite Structures 2013; 97: 304-309.

- J96. "Simulation of impact and post-impact behavior of carbon nanotube reinforced polymer using multi-scale finite element modeling", R. Rafiee, R. Maleki Moghadam, Journal of Computational Materials Science 2012; 63:261-268.
[DOI:10.1016/j.commatsci.2012.06.010](https://doi.org/10.1016/j.commatsci.2012.06.010)
- J97. "Apparent hoop tensile strength prediction of GRP pipes", R. Rafiee, Journal of Composites Materials 2013, 47 (11): 1377-1386.
[DOI: 10.1177/0021998312447209](https://doi.org/10.1177/0021998312447209)
- J98. "Experimental and theoretical investigations on the failure of filament wound GRP pipes", R. Rafiee, Journal of Composites Part B 2012, 45(1): 257-267.
[DOI: 10.1016/j.compositesb.2012.04.009](https://doi.org/10.1016/j.compositesb.2012.04.009)
- J99. "Investigation of chirality and diameter effects on the Young's modulus of carbon nanotubes using non-linear potentials", R. Rafiee, M. Heidarhaci, Journal of Composite Structures 2012; 94: 2460-2464.
[DOI: 10.1016/j.compstruct.2012.03.010](https://doi.org/10.1016/j.compstruct.2012.03.010)
- J100. "Influence of non-bonded interphase on crack driving force in carbon nanotube reinforced polymer", R. Rafiee, A. Fereidoon, M. Heidarhaci, Journal of Computational Materials Science 2012; 56: 25-28.
[DOI:10.1016/j.commatsci.2011.12.025](https://doi.org/10.1016/j.commatsci.2011.12.025)
- J101. "Experimental study and predicting the tensile strength of nanocomposite specimens produced with a 3D printer", R. Rafiee, A. Amohaji, Iranian Journal of Manufacturing Engineering 2024, In-Press. [In Persian]
- J102. "Theoretical and experimental investigation of nanocomposite filament strength", R. Rafiee, A. Amohaji, Journal of Science & Technology of Composites, 2024, Accepted. [In Persian]
- J103. "Reliability analysis of failure in composite pressure vessels", R. Rafiee, S. Bazargani, Iranian Journal of Manufacturing Engineering 2021; 8(4):50-61. [In Persian]
- J104. "Electrical and electromagnetic properties of isolated carbon nanotubes and carbon nanotube-based composites", A. Nikfarjam, R. Rafiee, M. Taheri, Polyolefins Journal 2017; 4(1):31-56.
- J105. "Modeling creep in laminated polymeric composites with long fibers using micromechanics", R. Rafiee, B. Mazhari, Journal of Science & Technology of Composites 2016, 3(4):409-418 . [In Persian].
- J106. "Predicting Young's modulus of aggregated carbon nanotube reinforced polymer", R. Rafiee, V. Firouzbakht, Mechanics of Advanced Composite Structures 2014, 1: 9-16.
- J107. "The effects of structural defects on the mechanical properties of CNT", R. Rafiee, R. Pourazizi, Modares Journal of Mechanical Engineering 2013; 13(13):165-175. [In Persian]