

List of Journal Publications (Indexed by ISI-JCR)

- 2020 **Z. Yousaf**, M. Y. Khlopov, M.Z. Bhatti and T. Naseer: *Influence of Modification of Gravity on the Complexity Factor of Static Spherical Structures*, *Monthly Notices of the Royal Astronomical Society*, **495**, 4334 (2020).
- 2020 **Z. Yousaf**: *Definition of Complexity Factor for Self-Gravitating Systems in Palatini $f(R)$ Gravity*, *Physica Scripta*, **95**, 075307 (2020).
- 2020 **Z. Yousaf**, M.Z. Bhatti and T. Naseer: *Measure of Complexity for Dynamical Self-gravitating Structures* *International Journal of Modern Physics D*, **29**, 2050061 (2020).
- 2020 M.Z. Bhatti, **Z. Yousaf** and A. Khadim: *Dynamical Analysis of Self-gravitating Stars in Modified Gauss-Bonnet Gravity*, *Physical Review D*, **101**, 104029 (2020).
- 2020 **Z. Yousaf**, M.Z. Bhatti, T. Naseer and I. Ahmad: *The Measure of Complexity in Charged Celestial Bodies in $f(R, T, R_{\mu\nu} T^{\mu\nu})$ Gravity*, *Physics of the Dark Universe*, **29**, 100581 (2020).
- 2020 **Z. Yousaf**, M. Z. Bhatti and K. Hassan: *Complexity for Self-gravitating Fluid Distributions in $f(G, T)$ Gravity*, *European Physical Journal Plus*, **135**, 397 (2020).
- 2020 M.Z. Bhatti, **Z. Yousaf** and A. Rehman: *Gravastars in $f(R, G)$ Gravity*, *Physics of the Dark Universe*, **29**, 100561 (2020).
- 2020 K. Majeed, **Z. Yousaf**, and G. Abbas: *Effects of Electromagnetic Field on the Stability of Locally Isotropic Gravastars*, *New Astronomy*, **80**, 101397 (2020).
- 2020 **Z. Yousaf**, M.Z. Bhatti and T. Naseer: *New Definition of Complexity Factor in $f(R, T, R_{\mu\nu} T^{\mu\nu})$ Gravity*, *Physics of the Dark Universe*, **28**, 100535 (2020).
- 2020 **Z. Yousaf**, M.Z. Bhatti and T. Naseer: *Study of Charged Spherical Stellar Structure*

- in $f(R, T, R_{\mu\nu} T^{\mu\nu})$ Gravity,
European Physical Journal Plus, **135**, 323 (2020).
- 2020 **Z. Yousaf**, M.Z. Bhatti and H. Asad: *Gravastars in $f(R, T, R_{\mu\nu} T^{\mu\nu})$ Gravity*,
Physics of the Dark Universe, **28**, 100527 (2020).
- 2020 **Z. Yousaf**: *Construction of Charged Cylindrical Gravastar-like Structures*
Physics of the Dark Universe, **28**, 100509 (2020).
- 2020 M. Z. Bhatti, **Z. Yousaf** and M. Yousaf: *Stability of Self-gravitating Anisotropic fluids*
in $f(R, T)$ Gravity,
Physics of the Dark Universe, **28**, 100501 (2020).
- 2020 **Z. Yousaf**, A.Ikram, M. Ilyas and M. Z. Bhatti: *Existence of Dynamical Wormholes*
in $f(R)$ Gravity,
Canadian Journal of Physics, **98**, 474 (2020).
- 2020 M. Z. Bhatti, **Z. Yousaf** and M. Nawaz: *Spherical Collapse with Heat Dissipation*
in $f(R, T, R_{\mu\nu} T^{\mu\nu})$ Gravity,
International Journal of Geometric Methods in Modern Physics, **17**, 2050017
(2020).
- 2019 M. Z. Bhatti, **Z. Yousaf** and Zarnoor: *Stability Analysis of Neutron Stars in Palatini*
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General Relativity and Gravitation, **51**, 144 (2019).
- 2019 **Z. Yousaf**: *Hydrodynamic Properties of Dissipative Fluids Associated with Tilted*
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Modern Physics Letters A, **34**, 1950333 (2019).
- 2019 M. Z. Bhatti, K. Bamba, **Z. Yousaf** and M. Nawaz: *Dissipative Self-Gravitating Sys-*
tems in Modified Gravity,
Journal of Cosmology and Astroparticle Physics, **09**, 011 (2019).
- 2019 **Z. Yousaf**, M. Z. Bhatti and M. F. Malik: *Non-reversible Evolution of Tilted Szeker-*
es Spacetimes with $f(R)$ Gravity
European Physical Journal Plus, **134**, 470 (2019).
- 2019 **Z. Yousaf**, K. Bamba, M. Z. Bhatti and U. Ghafoor: *Charged Gravastars in Modified*
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- 2019 **Z. Yousaf**, M. Z. Bhatti and S. Yaseen: *Tilted Shear-free Axially Symmetric Fluids*
in $f(R)$ Gravity,
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- 2019 M. Z. Bhatti, **Z. Yousaf** and Zarnoor: *Stability of Charged Neutron Star in Palatini $f(R)$ Gravity*,
Modern Physics Letters A, **33**, 1950252 (2019).
- 2019 M. Z. Bhatti, **Z. Yousaf** and M. Ajmal: *Thin Shell Gravastars with Cylindrical Space-time*,
International Journal of Modern Physics D, **28**, 1950123 (2019).
- 2019 **Z. Yousaf**: *On the Role of $f(G,T)$ terms in Structure Scalars*,
European Physical Journal Plus, **134**, 245 (2019).
- 2019 M. Z. Bhatti, **Z. Yousaf** and A. Yousaf: *Energy Content of a Collapsing Sphere with $f(R)$ Gravity*,
International Journal of Geometric Methods in Modern Physics, **16**, 1950041 (2019).
- 2019 M. Shahzadi, **Z. Yousaf** and S. U. Khan: *Circular Motion and Energy Extraction in a Rotating Black Hole*,
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- 2019 M. Ilyas, **Z. Yousaf** and M. Z. Bhatti: *Bounds on Higher Derivative $f(R, \square R, T)$ Gravity from Energy Conditions*,
Modern Physics Letters, A, **34**, 1950082 (2019).
- 2019 **Z. Yousaf**, M. Z. Bhatti and R. Saleem: *Electromagnetic Field and Dark Dynamical Scalars for Spherical Systems*,
European Physical Journal Plus, **134**, 142 (2019).
- 2019 M. Z. Bhatti, **Z. Yousaf** and A. Yousaf: *Tolman Mass of a Spherical Fluids with Electromagnetic Field*,
Modern Physics Letters A, **34**, 1950012 (2019).
- 2018 M. Z. Bhatti, M. Sharif, **Z. Yousaf** and M. Ilyas: *Role of $f(G,T)$ Gravity on the Evolution of Relativistic Stars*,
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- 2018 **Z. Yousaf**, M. Z. Bhatti and M. Ilyas: *Existence of Compact Structures in $f(R,T)$ Gravity*,
European Physical Journal C **78**, 307 (2018).
- 2018 **Z. Yousaf**, M. Sharif, M. Ilyas, M. Z. Bhatti: *Energy Conditions in Higher Derivative $f(R, \square R, T)$ Gravity*,
International Journal of Geometric Methods in Modern Physics, **15**, 1850146 (2018).

- 2018 W. Javed, **Z. Yousaf** and Z. Akhtar: *Thermodynamics and Glassy Phase Transition of Some Regular Black Holes*, *Modern Physics Letters A*, **33**, 1850089 (2018).
- 2018 **Z. Yousaf** and M. Z. Bhatti: *Some Anisotropic Planar Stellar Models*, *International Journal of Geometric Methods in Modern Physics*, **15**, 1850160 (2018).
- 2018 **Z. Yousaf**, K. Bamba, M. Z. Bhatti and U. Farwa: *Dynamical Instability of Spherical Anisotropic Sources in $f(R, T, R_{\mu\nu}T^{\mu\nu})$ Gravity*, *European Physical Journal A*, **54**, 122 (2018).
- 2018 **Z. Yousaf**: *Structure Scalars of Dissipative Fluids with $f(G, T)$ Gravity*, *Astrophysics and Space Science*, **363**, 226 (2018).
- 2018 M. Z. Bhatti, **Z. Yousaf** and M. Ilyas: *Existence of Wormhole Solutions and Energy Conditions in $f(R, T)$ Gravity*, *Journal of Astrophysics and Astronomy*, **39**, 69 (2018).
- 2017 M. Ilyas, **Z. Yousaf**, M. Z. Bhatti and B. Masud: *Existence of Relativistic Structures in $f(R, T)$ Gravity*, *Astrophysics and Space Science*, **362**, 237 (2017).
- 2017 M. Z. Bhatti and **Z. Yousaf**: *Stability of Anisotropic Stellar Filaments*, *Annals of Physics*, **387**, 253 (2017).
- 2017 **Z. Yousaf**, M. Sharif, M. Ilyas, M. Z. Bhatti, *Influence of $f(R)$ Models on the Existence of Anisotropic Self-Gravitating Systems*, *European Physical Journal C*, **691**, 77 (2017).
- 2017 M. Z. Bhatti, **Z. Yousaf** and M. Ilyas: *Evolution of Compact Stars and Dark Dynamical Variables*, *European Physical Journal C*, **690**, 77 (2017).
- 2017 **Z. Yousaf**, M. Ilyas and M. Z. Bhatti: *Influence of Modification of Gravity on Spherical Wormhole Models*, *Modern Physics Letters A*, **32**, 1750163 (2017).
- 2017 K. Bamba, M. Ilyas, M. Z. Bhatti and **Z. Yousaf**: *Energy Conditions in Modified $f(G)$ Gravity*, *General Relativity and Gravitation*, **49**, 112 (2017).
- 2017 M. Z. Bhatti, **Z. Yousaf** and S. Ashraf: *Charged Black String Thin-shell Wormholes in Modified Gravity*, *Annals of Physics*, **383**, 439 (2017).
- 2017 **Z. Yousaf**, M.Z. Bhatti and A. Rafaqat: *Evolution of Inhomogeneous LTB Geometry with Tilted Congruences and Modified Gravity*, *Canadian Journal of Physics*, **95**, 1246 (2017).

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- 2017 **Z. Yousaf**, M.Z. Bhatti and U. Farwa: *Role of $f(R, T, R_{\gamma\delta} T^{\gamma\delta})$ Gravity on the Stability of Cylindrical Stellar Model*,
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- 2017 **Z. Yousaf**: *Stellar Filaments with Minkowskian Core in Einstein- Λ Gravity*,
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- 2017 **Z. Yousaf**, M. Ilyas and M. Z. Bhatti: *Static Spherical Wormhole Models in $f(R, T)$ Gravity*,
European Physical Journal Plus, **132**, 268 (2017).
- 2017 M. Z. Bhatti, **Z. Yousaf** and S. Hanif: *Gravitational Collapse in Generalized Teleparallel Gravity*
European Physical Journal Plus, **132**, 230 (2017).
- 2017 M. Z. Bhatti, **Z. Yousaf** and S. Hanif: *Role of $f(T)$ Gravity on the Evolution of Collapsing Stellar Model*
Physics of the Dark Universe, **16**, 34 (2017).
- 2017 **Z. Yousaf**, M. Z. Bhatti and A. Razaqat: *Electromagnetic effects on the Evolution of LTB Geometry in Modified Gravity*,
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- 2017 M. Z. Bhatti and **Z. Yousaf**: *Gravitational Collapse and Dark Universe with LTB Geometry*,
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- 2017 M.Z. Bhatti and **Z. Yousaf**: *Dynamical Variables and Evolution of the Universe*,
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- 2016 **Z. Yousaf**, K. Bamba and M.Z. Bhatti: *Causes of Irregular Energy Density in $f(R, T)$ Gravity*,
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- 2016 **Z. Yousaf** and M.Z. Bhatti: *Cavity Evolution and Instability Constraints of Relativistic Interiors*,
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- 2016 M.Z. Bhatti and **Z. Yousaf**: *Influence of Electric Charge and Modified Gravity on Density Irregularities*,
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- 2016 **Z. Yousaf**, K. Bamba and M.Z. Bhatti: *Influence of Modification of Gravity on the Dynamics of Radiating Spherical Fluids*,
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- 2016 **Z. Yousaf**, and M.Z. Bhatti: *Electromagnetic Field and Cylindrical Compact Objects in Modified Gravity*,
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- 2016 M. Sharif and **Z. Yousaf**: *Charged Adiabatic LTB Gravitational Collapse in $f(R)$ Gravity*,
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- 2015 M. Sharif and **Z. Yousaf**: *Instability of Meridional Axial System in $f(R)$ Gravity*,
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- 2015 M. Sharif and **Z. Yousaf**: *Radiating Cylindrical Gravitational Collapse with Structure Scalars in $f(R)$ Gravity*,
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- 2015 M. Sharif and **Z. Yousaf**: *Stability of Regular Energy Density in Palatini $f(R)$ Gravity*,
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- 2015 M. Sharif and **Z. Yousaf**: *Dynamics of Spherical Stars with Structure Scalars and $R + \epsilon R^n$ Cosmology*,
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- 2015 M. Sharif and **Z. Yousaf**: *Role of Adiabatic Index on the Evolution of Spherical Gravitational Collapse in Palatini $f(R)$ Gravity*,
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