Bibliography

- Abreu H, Hernández H, and Núnez L A; Sound speeds, cracking and the stability of self-gravitating anisotropic compact objects. *Classical and Quantum Gravity*, 24:4631–4645, 2007. (pages 46, 86, 113).
- [2] Akmal A, Pandharipande V R, and Ravenhall D G; Equation of state of nucleon matter and neutron star structure. *Physical Review C*, 58:1804–1828, 1998. (page 16).
- [3] Andréasson H; Sharp bounds on 2m/r of general spherically symmetric static objects. Journal of Differential Equations, 245:2243–2266, 2008. (page 67).
- [4] Antony H and Joceyln B S and John DH P and Paul F S and Ashley C R; Observation of a rapidly pulsating radio source. *Harvard University Press*, 217:709–713, 1979. (page 16).
- [5] Azam M, Mardan S A, Noureen I, and Rehman M A; Study of polytropes with generalized polytropic equation of state. *The European Physical Journal C*, **76**:1–9, 2016. (page 98).
- [6] Azam M and Mardan S A; Cracking of charged polytropes with generalized polytropic equation of state. *The European Physical Journal C*, **77**:1–13, 2017. (page 99).

- [7] Bayin S; Anisotropic fluid spheres in general relativity. *Physical Review D*, 26:1262–1274, 1982. (page 8).
- [8] Banerjee A, Rahaman F, Jotania K, Sharma R, and Karar I; Finch-Skea star in dimensions. *General Relativity and Gravitation*, 45:717–726, 2013. (page 12).
- [9] Banerjee S; Mathematical model of relativistic anisotropic compact stellar model admitting linear equation of state. *Communications in Theoretical Physics*, **70**:585–592, 2018. (page 77).
- [10] Barreto W, Herrera L, and Santos N O; A generalization of the concept of adiabatic index for non-adiabatic systems. Astrophysics and space science, 187:271– 290, 1992. (page 114).
- [11] Bhar P; Singularity-free anisotropic strange quintessence star. Astrophysics and Space Science, 356:309–318, 2015. (pages 41, 80).
- [12] Bhar P and Rahaman F; The dark energy star and stability analysis. The European Physical Journal C, 75:1–12, 2015. (pages 41, 80).
- [13] Bhar P; Strange star admitting Chaplygin equation of state in Finch–Skea spacetime. Astrophysics and Space Science, 359:1–9, 2015. (page 38).
- [14] Bhar P, Singh K N, and Manna T; Anisotropic compact star with Tolman IV gravitational potential. Astrophysics and Space Science, 361:284–294, 2016. (pages 41, 80).
- [15] Bhar P and Ratanpal B S; A new anisotropic compact star model having Matese & Whitman mass function. Astrophysics and Space Science, 361:217–224, 2016. (pages 41, 80).

- [16] Bhar P, Maurya S K, Gupta Y K, and Manna T; Modelling of anisotropic compact stars of embedding class one. *The European Physical Journal A*, **52**:312– 322, 2016. (pages 23, 41, 80).
- [17] Bhar P, Singh K N, and Manna T; A new class of relativistic model of compact stars of embedding class I. International Journal of Modern Physics D, 26:1-10, 2017. (page 13).
- [18] Bhar P, Singh K N, and Pant D N; Compact star modeling with quadratic equation of state in Tolman VII space-time. *Indian Journal of Physics*, 91:701– 709, 2017. (pages 41, 80).
- [19] Bhar P, Govender M, and Sharma R; Anisotropic stars obeying Chaplygin equation of state. *Pramana*, **90**:1–9, 2018. (page 99).
- [20] Bhar P and Rej P; Compact stellar model in the presence of pressure anisotropy in modified Finch Skea space-time. *Journal of Astrophysics and Astronomy*, 42:74–90, 2021. (page 13).
- [21] Bhar P, Rej P, Takisa P M, and Zubair M; Relativistic compact stars in Tolman spacetime via an anisotropic approach. *The European Physical Journal C*, 81:531– 544, 2021. (page 13).
- [22] Bhar P, Rej P, Siddiqa A, and Abbas G; Finch-skea star model in f (R, T) theory of gravity. International Journal of Geometric Methods in Modern Physics, 18:1–14, 2021. (page 39).
- [23] Binnington T and Poisson E; Relativistic theory of tidal Love numbers. *Physical Review D*, 80:1–30, 2009. (page 98).
- [24] Bondi H; The contraction of gravitating spheres. Proceedings of the Royal

Society of London. Series A. Mathematical and Physical Sciences, **281**:39–48, 1964. (pages 47, 86).

- [25] Bowyer S, Byram E T, Chubb T A, and Friedman H; Cosmic X-ray sources. Science, 147:394–398, 1965. (page 16).
- [26] Bodmer A R; Collapsed nuclei. *Physical Review D*, 4:1601–1606, 1971. (page 38).
- [27] Böhmer C G and Harko T; Minimum mass-radius ratio for charged gravitational objects. *General Relativity and Gravitation*, **39**:757–775, 2007. (page 67).
- [28] Bowers R L and Liang E P T; Anisotropic spheres in general relativity. Astrophysical Journal, 188:657–665, 1974. (pages 8, 22, 57, 97).
- [29] Buchdahl H A; General relativistic fluid spheres. *Physical Review*, **116**:1027–1034, 1959. (page 38).
- [30] Buchdahl H A; Regular general relativistic charged fluid spheres. Acta Physica Polonica. Series B, 10:673–685, 1979. (page 67).
- [31] Canuto V; Equation of state at ultrahigh densities. Annual Review of Astronomy and Astrophysics, 12:167–214, 1974. (pages 8, 21, 57).
- [32] Chan R, Herrera L, and Santos N O; Dynamical instability for radiating anisotropic collapse. Monthly Notices of the Royal Astronomical Society, 265:533– 544, 1993. (pages 66, 114).
- [33] Chan R, Silva MFA DA, and Rocha J F; Gravitational collapse of self-similar and shear-free fluid with heat flow. *International Journal of Modern Physics D*, 12:347–368, 2003. (page 97).

- [34] Chandrasekhar S; Stellar configurations with degenerate cores. The Observatory, 57:373–377, 1934. (page 8).
- [35] Chandrasekhar S; Dynamical instability of gaseous masses approaching the Schwarzschild limit in general relativity. *Physical Review Letters*, **12**:114–116, 1964. (page 114).
- [36] Chattopadhyay P K and Paul B C; Relativistic star solutions in higherdimensional pseudospheroidal space-time. *Pramana*, 74:513–523, 2010. (pages 11, 22).
- [37] Chattopadhyay P K, Deb R, and Paul B C; Relativistic solution for a class of static compact charged star in pseudo-spheroidal spacetime. *International Journal* of Modern Physics D,21:1–21, 2012. (page 11).
- [38] Chavanis P H; A simple model of universe with a polytropic equation of state.In Journal of Physics: Conference Series, 1030:1–18, 2018. (page 98).
- [39] Das S, Rahaman F, and Baskey L; A new class of compact stellar model compatible with observational data. *The European Physical Journal C*, **79**:853– 865, 2019. (pages 18, 41, 80).
- [40] Das S, Singh K N, Baskey L, Rahaman F, and Aria A K; Modeling of compact stars: an anisotropic approach. *General Relativity and Gravitation*, 53:1–32, 2021. (pages 18, 41, 80).
- [41] Das S, Parida B K, Chakraborty K, and Ray S; Anisotropic compact star with a linear pressure-density relationship. *International Journal of Modern Physics* D, 31:1–24, 2022. (page 13).
- [42] Das S, Chakraborty K, Baskey L, and Ray S; A study on the effect of anisotropy

under Finch–Skea geometry. *Chinese Journal of Physics*, **81**:362–381, 2023. (page 39).

- [43] Dayanandan B, Maurya S K, Gupta Y K, and Smitha T; Anisotropic generalization of Matese & Whitman solution for compact star models in general relativity. Astrophysics and Space Science, 361:1–9, 2016. (pages 13, 38).
- [44] Dayanandan B and Maurya S K; Modeling of charged anisotropic compact stars in general relativity. *The European Physical Journal A*, 53:1–11, 2017. (page 39).
- [45] Delgaty M S R and Lake K; Physical acceptability of isolated, static, spherically symmetric, perfect fluid solutions of Einstein's equations. *Computer Physics Communications*, **115**:395–415, 1998. (pages 9, 82).
- [46] de Leon J P; New analytical models for anisotropic spheres in general relativity. Journal of mathematical physics, 28:1114–1117, 1987. (page 9).
- [47] Dev K and Gleiser M; Anisotropic stars: exact solutions. General relativity and gravitation, 34:1793–1818, 2002. (pages 38, 57).
- [48] Dev K and Gleiser M; Anisotropic stars II: stability. General relativity and gravitation, 35:1435–1457, 2003. (pages 38, 57).
- [49] Demorest P B, Pennucci T, Ransom S M, Roberts M S E, and Hessels J W T; A two-solar-mass neutron star measured using Shapiro delay. *nature*, 467:1081– 1083, 2010. (page 16).
- [50] Dicus D A, Repko W W, and Teplitz V L; Critical charges on strange quark nuggets and other extended objects. *Physical Review D*, 78:1–5, 2008. (page 58).
- [51] Doneva D D and Yazadjiev S S; Nonradial oscillations of anisotropic neutron stars in the cowling approximation. *Physical Review D*, 85:1–9, 2012. (page 114).

- [52] Durgapal M C; A class of new exact solutions in general relativity. Journal of Physics A: Mathematical and General, 15:1–7, 1982. (page 8).
- [53] Durgapal M C and Fuloria R C; Analytic relativistic model for a superdense star. General relativity and gravitation, 17:671–681, 1985. (pages 13, 38, 58).
- [54] Esculpi M and Aloma E; Conformal anisotropic relativistic charged fluid spheres with a linear equation of state. *The European Physical Journal C*, 67:521–532, 2010. (page 58).
- [55] Fatema S and Murad M H; An exact family of Einstein-Maxwell Wyman-Adler solution in general relativity. *International Journal of Theoretical Physics*, 52:2508–2529, 2013. (page 13).
- [56] Feroze T and Siddiqui A A; Charged anisotropic matter with quadratic equation of state. *General Relativity and Gravitation*, 43:1025–1035, 2011. (pages 12, 57, 104).
- [57] Finch M R and Skea J E F; A realistic stellar model based on an ansatz of Duorah and Ray. *Classical and Quantum Gravity*, 6:467–476, 1989. (page 11).
- [58] Finch M R and Skea J E F; A review of the relativistic static fluid sphere. preprint available on the World Wide Web at http://edradour. symbcomp. uerj. br/pubs. html, 1998. (page 82).
- [59] Felice F, Siming L, and Yunqiang Yu; Relativistic charged spheres II. regularity and stability. *Classical and Quantum Gravity*, 16:2669–2675, 1999. (page 58).
- [60] Freire P C C, Bassa C G, Wex N, Stairs I H, Champion D J, Ransom S M, Lazarus P, Kaspi V M, Hessels J M T, Kramer M; On the nature and evolution of the unique binary pulsar J1903+ 0327. *Monthly Notices of the Royal Astronomical Society*, 412:2763–2780, 2011. (page 16).

- [61] Gangopadhyay T, Ray S, Li X D, Dey J, and Dey M; Strange star equation of state fits the refined mass measurement of 12 pulsars and predicts their radii. *Monthly Notices of the Royal Astronomical Society*, 431:3216–3221, 2013. (pages 32, 69).
- [62] Geng J, Li B, and Huang Y; Repeating fast radio bursts from collapses of the crust of a strange star. *The Innovation*, 2:1-5, 2021. (pages 38, 58).
- [63] Gleiser M and Dev K; Anistropic stars: Exact solutions and stability. International Journal of Modern Physics D, 13:1389–1397, 2004. (pages 38, 57).
- [64] Gokhroo M K and Mehra A L; Anisotropic spheres with variable energy density in general relativity. *General relativity and gravitation*, 26:75–84, 1994. (page 57).
- [65] Gupta Y K and Maurya S K; A class of charged analogues of Durgapal and Fuloria superdense star. Astrophysics and Space Science, 331:135–144, 2011. (page 13).
- [66] Güver T, Wroblewski P, Camarota L, and Ozel F; The mass and radius of the neutron star in 4U 1820- 30. *The Astrophysical Journal*, **719**:1807–1812, 2010. (page 16).
- [67] Güver T, Özel F, Lavers A C, and Wroblewski P; The distance, mass, and radius of the neutron star in 4U 1608- 52. *The Astrophysical Journal*, **712**:964– 973, 2010. (page 16).
- [68] Hansraj S and Maharaj S D; Charged analogue of Finch–Skea stars. International Journal of Modern Physics D, 15:1311–1327, 2006. (page 12).
- [69] Harko T and Mak M K; Anisotropy in Bianchi-type brane cosmologies. Classical and Quantum Gravity, 21:1489–1503, 2004. (page 97).

- [70] Harko T and Mak M K; Exact power series solutions of the structure equations of the general relativistic isotropic fluid stars with linear barotropic and polytropic equations of state. Astrophysics and Space Science, 361:283–302, 2016. (page 77).
- [71] Heintzmann H and Hillebrandt W; Neutron stars with an anisotropic equation of state-mass, redshift and stability. Astronomy and Astrophysics, 38:51–55, 1975. (pages 66, 114).
- [72] Herrera L and Núñez L; Modeling'hydrodynamic phase transitions' in a radiating spherically symmetric distribution of matter. *The Astrophysical Journal*, 339:339–353, 1989. (page 97).
- [73] Herrera L; Cracking of self-gravitating compact objects. *Physics Letters A*, 165:206–210, 1992. (page 86).
- [74] Herrera L and Santos N O; Jeans mass for anisotropic matter. Astrophysical Journal, Part 1 (ISSN 0004-637X) 438:308–313, 1995. (page 97).
- [75] Herrera L and Santos N O; Thermal evolution of compact objects and relaxation time. Monthly Notices of the Royal Astronomical Society, 287:161–164, 1997. (page 97).
- [76] Herrera L and Santos N O; Local anisotropy in self-gravitating systems. *Physics Reports*, 286:53–130, 1997. (pages 8, 22, 38).
- [77] Herrera L, Prisco A Di, Barreto W, and Ospino J; Conformally flat polytropes for anisotropic matter. *General Relativity and Gravitation*, 46:1–16, 2014. (page 98).
- [78] Herrera L, Fuenmayor E, and Leon P; Cracking of general relativistic anisotropic polytropes. *Physical Review D*, **93**:024047, 2016. (page 98).

- [79] Hillebrandt W and Steinmetz K O; Anisotropic neutron star models-stability against radial and nonradial pulsations. Astronomy and Astrophysics 53:283–287, 1976. (page 114).
- [80] Ivanov B V; Relativistic static fluid spheres with a linear equation of state. arXiv preprint gr-qc/0107032, 2001. (pages 77, 97).
- [81] Ivanov B V; Static charged perfect fluid spheres in general relativity. *Physical Review D*, 65:104001, 2002. (page 57).
- [82] Ivanov B V; The importance of anisotropy for relativistic fluids with spherical symmetry. International Journal of Theoretical Physics, 49:1236–1243, 2010. (page 97).
- [83] Ivanov B V; Analytical study of anisotropic compact star models. The European Physical Journal C, 77:1–12, 2017. (page 98).
- [84] Ivanov B V; Linear and Riccati equations in generating functions for stellar models in general relativity. *The European Physical Journal Plus*, **135**:1–14, 2020. (page 57).
- [85] Jotania K and Tikekar R; Paraboloidal space-times and relativistic models of strange stars. International Journal of Modern Physics D, 15:1175–1182, 2006. (page 12).
- [86] Karmarkar K R; Gravitational metrics of spherical symmetry and class one. In Proceedings of the Indian Academy of Sciences-Section A, 27, 56–60. Springer, 1948. (pages 17, 23).
- [87] Karmakar S, Mukherjee S, Sharma R, and Maharaj S D; The role of pressure anisotropy on the maximum mass of cold compact stars. *Pramana*, 68:881–889, 2007. (page 22).

- [88] Komathiraj K and Maharaj S D; Analytical models for quark stars. International Journal of Modern Physics D, 16:1803–1811, 2007. (pages 41, 58, 80).
- [89] Komathiraj K and Maharaj S D; Classes of exact Einstein–Maxwell solutions. General Relativity and Gravitation, 39:2079–2093, 2007.
- [90] Komathiraj K and Maharaj S D; Tikekar superdense stars in electric fields. Journal of Mathematical Physics, 48:1–15, 2007. (page 12).
- [91] Komathiraj K and Maharaj S D; A class of charged relativistic spheres. Mathematical and computational applications, 15:665–673, 2010. (page 12).
- [92] Kohler M and Chao K L; Zentralsymmetrische statische Schwerefelder mit räumen der Klasse 1. Zeitschrift für Naturforschung A, 20:1537–1543, 1965. (pages 18, 26).
- [93] Kippenhahn R, Weigert R, and Weiss A; Stellar structure and evolution, Springer, 192, 1990. (page 38).
- [94] Krori K D, Borgohain P, and Devi R; Some exact anisotropic solutions in general relativity. *Canadian journal of physics*, 62:239–246, 1984. (page 8).
- [95] Knutsen H; Some physical properties and stability of an exact model of a relativistic star. Astrophysics and space science, 140:385–401, 1988. (page 57).
- [96] Khunt A C, Thomas V O, and Vinodkumar P C; Distinct classes of compact stars based on geometrically deduced equations of state. *International Journal of Modern Physics D*, **30**:1–10, 2021. (page 13).
- [97] Matese J J and Whitman P G; New method for extracting static equilibrium configurations in general relativity. *Physical Review D*, 22:1270–1275, 1980. (pages 10, 39).

- [98] Maurya S K and Gupta Y K; Extremization of mass of charged superdense star models describe by Durgapal type space-time metric. Astrophysics and Space Science, 334:301–310, 2011. (page 13).
- [99] Maurya S K and Gupta Y K; On a family of well-behaved perfect fluid balls as astrophysical objects in general relativity. Astrophysics and Space Science, 334:145–154, 2011. (page 13).
- [100] Maurya S K, Gupta Y K, Ray S, and Chowdhury S R; Spherically symmetric charged compact stars. *The European Physical Journal C*, **75**:1–12, 2015. (page 23).
- [101] Maurya S K, Gupta Y K, Ray S, and Dayanandan B; Anisotropic models for compact stars. *The European Physical Journal C*, **75**:225–236, 2015. (pages 38, 58).
- [102] Maurya S K, Gupta Y K, Ray S, and Chatterjee V; Relativistic electromagnetic mass models in spherically symmetric spacetime. Astrophysics and Space Science, 192:351–361, 2016. (page 23).
- [103] Maurya S K, Gupta Y K, Ray S, and Deb D; Generalised model for anisotropic compact stars. *The European Physical Journal C*, **76**:1–12, 2016. (page 23).
- [104] Maurya S K, Gupta Y K, Smitha T T, and Rahaman F; A new exact anisotropic solution of embedding class one. *The European Physical Journal A*, 52:191–203, 2016. (pages 23, 26).
- [105] Maurya S K, Gupta Y K, Rahaman F, Rahaman M, and Banerjee A; Compact stars with specific mass function. *Annals of Physics*, **385**:532–545, 2017. (page 23).

- [106] Maurya S K, Ratanpal B S, and Govender M; Anisotropic stars for spherically symmetric spacetimes satisfying the Karmarkar condition. Annals of Physics, 192:36–49, 2017. (page 23).
- [107] Maurya S K and Govender M; A family of charged compact objects with anisotropic pressure. The European Physical Journal C, 77:1–14, 2017. (page 23).
- [108] Maurya S K, Banerjee A, and Hansraj S; Role of pressure anisotropy on relativistic compact stars. *Physical Review D*, 97:1–10, 2018. (pages 38, 58).
- [109] Maurya S K, Banerjee A, Jasim M K, Kumar J, Prasad A K, and Pradhan A; Anisotropic compact stars in the Buchdahl model: A comprehensive study. *Physical Review D*, **99**:1–24, 2019. (pages 38, 58).
- [110] Maurya S K, Maharaj S D, and Deb D; Generalized anisotropic models for conformal symmetry. *The European Physical Journal C*, **79**:1–15, 2019. (page 58).
- [111] Maurya S K, Maharaj S D, Kumar J, and Prasad A K; Effect of pressure anisotropy on Buchdahl-type relativistic compact stars. *General Relativity and Gravitation*, **51**:1–28, 2019. (page 58).
- [112] Maurya S K, Singh K N, Errehymy A, and Daoud M; Anisotropic stars in f (G,T) gravity under class I space-time. *The European Physical Journal Plus*, 135(10):1–20, 2020. (page 23).
- [113] Maurya S K, Tello-Ortiz F, and Jasim M K; An egd model in the background of embedding class I space-time. *The European Physical Journal C*, 80(10):1–17, 2020. (page 23).

- [114] Murad M H; A new well-behaved class of charge analogue of Adler's relativistic exact solution. Astrophysics and Space Science, 343:187–194, 2013. (page 13).
- [115] Murad M H and Fatema S; A family of well-behaved charge analogues of Durgapal's perfect fluid exact solution in general relativity. Astrophysics and space science, 343:587–597, 2013. (pages 13, 57).
- [116] Murad M H and Fatema S; Some static relativistic compact charged fluid spheres in general relativity. Astrophysics and Space Science, 192:293–305, 2014. (page 57).
- [117] Murad M H and Fatema S; Some new Wyman-Leibovitz-Adler type static relativistic charged anisotropic fluid spheres compatible to self-bound stellar modeling. *The European Physical Journal C*, **192**:1–21, 2015. (pages 13, 41, 57).
- [118] Maharaj S D, Matondo D K, and Takisa P M; A family of Finch and Skea relativistic stars. International Journal of Modern Physics D, 192:1–12, 2017. (page 12).
- [119] Mak M K and Harko T; An exact anisotropic quark star model. Chinese journal of astronomy and astrophysics, 192:248–259, 2002. (pages 58, 97).
- [120] Mak M K and Harko T; New method for generating general solution of Abel differential equation. Computers & Mathematics with applications, 192:91–94, 2002. (page 97).
- [121] Mak M K and Harko T; Anisotropic stars in general relativity. Proceedings of the Royal Society of London. Series A: Mathematical, Physical and Engineering Sciences, 459:393–408, 2003. (pages 12, 22).
- [122] Maharaj S D and Maartens R; Anisotropic spheres with uniform energy den-

sity in general relativity. *General relativity and gravitation*, **21**:899–905, 1989. (pages 5, 9, 24).

- [123] Maharaj S D and Chaisi M; New anisotropic models from isotropic solutions. Mathematical methods in the applied sciences, 29:67–83, 2006. (page 22).
- [124] Maharaj S D and Chaisi M; Equation of state for anisotropic spheres. General Relativity and Gravitation, 192:1723–1726, 2006. (page 77).
- [125] Maharaj S D and Komathiraj K; Generalized compact spheres in electric fields. *Classical and quantum gravity*, **192**:4513–4524, 2007. (page 12).
- [126] Maharaj S D and Thirukkanesh S; Generalized isothermal models with strange equation of state. *Pramana*, 72:481–494, 2009. (pages 77, 98).
- [127] Maharaj S D and Takisa P M; Regular models with quadratic equation of state. General Relativity and Gravitation, 44:1419–1432, 2012. (pages 39, 97).
- [128] Maharaj S D, Sunzu J M, and Ray S; Some simple models for quark stars. The European Physical Journal Plus, 129:1–10, 2014. (pages 59, 77, 98).
- [129] Maartens R and Maharaj S D; Collision-free gases in spatially homogeneous space-times. Journal of mathematical physics, 26:2869–2880, 1985. (page 8).
- [130] Martínez A P, Rojas H P, and Cuesta H J M; Magnetic collapse of a neutron gas: Can magnetars indeed be formed? The European Physical Journal C-Particles and Fields, 29:111–123, 2003. (page 97).
- [131] Malaver M; Strange quark star model with quadratic equation of state. arXiv preprint arXiv:1407.0760, 2014. (pages 58, 97).

- [132] Malaver M and Kasmaei H D; Relativistic stellar models with quadratic equation of state. International Journal of Mathematical Modelling & Computations, 10(2):111–124, 2020. (pages 58, 97).
- [133] Malaver M and Iyer R; Analytical model of compact star with a new version of modified Chaplygin equation of state. arXiv preprint arXiv:2204.13108, 2022. (page 99).
- [134] Misner C W, Thorne K S, Wheeler J A, and Kaiser D I; Gravitation Princeton, 1973. (page 14).
- [135] Moustakidis Ch C; The stability of relativistic stars and the role of the adiabatic index. General Relativity and Gravitation, 49:1–21, 2017. (pages 66, 114).
- [136] Nazar H, Azam M, Abbas G, Ahmed R, and Naeem R; Relativistic polytropic models of charged anisotropic compact objects. *Chinese Physics C*, 47:1–31, 2023. (page 99).
- [137] Nasheeha R N, Thirukkanesh S, and Ragel F C; Anisotropic models for compact star with various equation of state. *The European Physical Journal Plus*, 136:1–20, 2021. (pages 20, 96, 99, 101, 113, 116).
- [138] Nash J; The imbedding problem for Riemannian manifolds. Annals of mathematics, 63:20–63, 1956. (page 23).
- [139] Ngubelanga S A and Maharaj S D; Relativistic stars with polytropic equation of state. The European Physical Journal Plus, 130:1–5, 2015. (pages 57, 98).
- [140] Ngubelanga S A, Maharaj S D, and Ray S; Compact stars with quadratic equation of state. Astrophysics and Space Science, 357:1–9, 2015. (pages 77, 98).
- [141] Nilsson Ulf S and Uggla C; General relativistic stars: Linear equations of state. Annals of Physics, 286:278–291, 2000. (page 77).

- [142] Nicotra O E, Baldo M, Burgio G F, and Schulze H J; Hybrid protoneutron stars with the mit bag model. *Physical Review D*, 74:123001, 2006. (page 58).
- [143] Oppenheimer J R and Volkoff G M; On massive neutron cores. Physical Review, 55:374–381, 1939. (pages 16, 67, 87).
- [144] Özel F, Güver T, and Psaltis D; The mass and radius of the neutron star in EXO 1745- 248. The Astrophysical Journal, 693:1775–1779, 2009. (page 16).
- [145] Pant D N and Sah A; Charged fluid sphere in general relativity. Journal of Mathematical Physics, 20:2537–2539, 1979. (page 8).
- [146] Pant D N and Sah A; Class of solutions of Einstein's field equations for static fluid spheres. *Physical Review D*, 26:1254–1261, 1982. (page 8).
- [147] Pant D N, Singh K N, and Pradhan N; A hybrid space-time of Schwarzschild interior and Vaidya-Tikekar solution as an embedding class I. Indian Journal of Physics, 91:343-350, 2017. (page 24).
- [148] Pandey S N and Sharma S P;. Insufficiency of Karmarkar's condition. General Relativity and Gravitation, 14:113–115, 1982. (page 23).
- [149] Pandya D M, Thomas V O, and Sharma R; Modified Finch and Skea stellar model compatible with observational data. Astrophysics and Space Science, 356:285–292, 2015. (pages 13, 38).
- [150] Pandya D M and Thomas V O; Models of compact stars of embedding class one for anisotropic distributions satisfying Karmarkar condition. *Canadian Journal* of Physics, 97:1–10, 2019. (page 24).
- [151] Prasad A K, Kumar J, and Sarkar A; Behavior of anisotropic fluids with Chaplygin equation of state in Buchdahl spacetime. *General Relativity and Gravitation*, 53:1–20, 2021. (page 99).

- [152] Prasad A K and Kumar J; Anisotropic relativistic fluid spheres with a linear equation of state. New Astronomy, 95:1–18, 2022. (pages 77, 98).
- [153] Patel L K and Koppar S S; A charged analogue of the Vaidya Tikekar solution. Australian journal of physics, 40:441–448, 1987. (pages 8, 22).
- [154] Patel L K and Mehta N P; An exact model of an anisotropic relativistic sphere. Australian Journal of Physics, 48:635–644, 1995. (page 57).
- [155] Patel R, Ratanpal B S, and Pandya D M; New charged anisotropic solution on paraboloidal spacetime. Astrophysics and Space Science, 368:1–11, 2023. (pages 77, 98).
- [156] Paul B C, Chattopadhyay P K, Karmakar S, and Tikekar R; Relativistic strange stars with anisotropy. *Modern Physics Letters A*, 26:575–587, 2011. (page 11).
- [157] Prakash M, Lattimer J M, Pons J A, Steiner A W, and Reddy S; Evolution of a neutron star from its birth to old age. *Physics of neutron star interiors*, 12:364–423, 2001. (page 16).
- [158] Ratanpal B S, Thomas V O and Pandya D M; A new class of solutions of anisotropic charged distributions on pseudo-spheroidal spacetime. Astrophysics and Space Science, 360:1–9, 2015. (pages 11, 22, 57).
- [159] Ratanpal B S, Thomas V O and Pandya D M; Anisotropic star on pseudospheroidal spacetime. Astrophysics and Space Science, 361:1–8, 2016. (pages 11, 22).
- [160] Ratanpal B S, Pandya D M, Sharma R, and Das S; Charged compact stellar model in Finch-Skea spacetime. Astrophysics and Space Science, 362:1–8, 2017. (pages 12, 23).

- [161] Ratanpal B S; Cracking and stability of non-rotating relativistic spheres with anisotropic internal stresses. *IOP SciNotes*, 1:1-8, 2020. (pages 86, 113, 119).
- [162] Ratanpal B S and Patel R; Anisotropic approach: compact star as generalized model. Astrophysics and Space Science, 368:1–10, 2023. (page 80).
- [163] Rawls M L, Orosz J A, McClintock J E, Torres M A P, Bailyn C D, and Buxton M M; Refined neutron star mass determinations for six eclipsing X-ray pulsar binaries. *The Astrophysical Journal*, **730**:1–11, 2011. (page 16).
- [164] Ray S, Espindola A L, Malheiro M, Lemos J P S, and Zanchin V T; Electrically charged compact stars and formation of charged black holes. *Physical Review D*, 68:1–10, 2003. (page 58).
- [165] Rahaman F, Ray S, Jafry A K, and Chakraborty K; Singularity-free solutions for anisotropic charged fluids with Chaplygin equation of state. *Physical Review* D, 82(10):1–11, 2010. (page 99).
- [166] Rahaman F, Sharma R, Ray S, Maulick R, and Karar I; Strange stars in Krori–Barua space-time. The European Physical Journal C, 72:1–9, 2012. (page 38).
- [167] Rocha L S, Bernardo A, Avellar MGB, and Horvath JE; Exact solutions of a model for strange stars with interacting quarks. Astronomische Nachrichten, 340:180–183, 2019. (page 108).
- [168] Ruderman M; Pulsars: structure and dynamics. Annual Review of Astronomy and Astrophysics, 10:427–476, 1972. (pages 8, 21, 56, 97).
- [169] Schwarzschild K; Sitz deut akad wiss berlin. Kl. Math. Phys, 24:424, 1916.
 (pages 18, 21, 26).

- [170] Schwarzschild K; Über das gravitationsfeld eines massenpunktes nach der einsteinschen theorie. Sitzungsberichte der königlich preußischen Akademie der Wissenschaften zu Berlin, 1:189–196, 1916. (page 7).
- [171] Schwarzschild K; Uber das gravitationsfeld einer kugel aus inkompressibler flüssigkeit nach der einsteinschen theorie. Sitzungsberichte der königlich preußischen Akademie der Wissenschaften zu Berlin, 24:424–434, 1916. (page 7).
- [172] Shapiro S L, Teukolsky S A, Holes B, Dwarfs W, and Stars N; The physics of compact objects. Wiley, New York, 1:119–123, 1983. (page 14).
- [173] Shapiro S L and Teukolsky S A; Black holes, white dwarfs, and neutron stars: The physics of compact objects. John Wiley & Sons, 2008. (page 16).
- [174] Singh K N, Maurya S K, Errehymy A, Rahaman F, and Daoud M; Physical properties of class I compact star model for linear and Starobinsky- f (R,T) functions. *Physics of the Dark Universe*, **30**:1–5, 2020. (page 23).
- [175] Singh K N, Bisht R K, Maurya S K, and Pant D N; Static fluid spheres admitting Karmarkar condition. *Chinese Physics C*, **44**:1–11, 2020. (page 23).
- [176] Singh G P and Kotambkar S; Charged fluid distribution in higher dimensional spheroidal space-time. *Pramana*, 65:35–41, 2005. (page 11).
- [177] Sharma R and Mukherjee S, Maharaj S D; General solution for a class of static charged spheres. *General Relativity and Gravitation*, **33**:999–1009, 2001. (page 12).
- [178] Sharma R and Maharaj S D; A class of relativistic stars with a linear equation of state. Monthly Notices of the Royal Astronomical Society, 375:1265–1268, 2007. (pages 12, 22, 57, 77, 80).

- [179] Sharma R and Ratanpal B S; Relativistic stellar model admitting a quadratic equation of state. International Journal of Modern Physics D, 22:1–17, 2013. (pages 13, 23, 38, 41, 57, 104).
- [180] Sharma R, Das S, and Thirukkanesh S; Anisotropic extension of Finch and Skea stellar model. Astrophysics and Space Science, 362:1–11, 2017. (pages 13, 39).
- [181] Sunzu J M, Maharaj S D, and Ray S; Charged anisotropic models for quark stars. Astrophysics and Space Science, 352:719–727, 2014. (pages 39, 41, 58, 80).
- [182] Sokolov A I; Phase transitions in a superfluid neutron liquid. Sov. Phys. JETP, 52:575–576, 1980. (page 97).
- [183] Takisa P M and Maharaj S D; Compact models with regular charge distributions. Astrophysics and Space Science, 343:569–577, 2013. (page 57).
- [184] Takisa P M and Maharaj S D; Some charged polytropic models. General Relativity and Gravitation, 45:1951–1969, 2013. (pages 12, 57, 98).
- [185] Takisa P M, Maharaj S D, and Subharthi R; Stellar objects in the quadratic regime. Astrophysics and Space Science, 354:463–470, 2014. (page 97).
- [186] Takisa P M and Maharaj S D; Anisotropic charged core envelope star. Astrophysics and Space Science, 361:1–9, 2016. (page 12).
- [187] Tello-Ortiz F, Maurya S K, Errehymy A, Singh K N, and Daoud M; Anisotropic relativistic fluid spheres: an embedding class I approach. *The European Physical Journal C*, **79**:1–14, 2019. (page 23).
- [188] Thirukkanesh S and Maharaj S D; Exact models for isotropic matter. Classical and Quantum Gravity, 23:2697–2709, 2006. (page 12).

- [189] Thirukkanesh S and Maharaj S D; Charged anisotropic matter with a linear equation of state. *Classical and Quantum Gravity*, **25**(23):1–14, 2008. (pages 57, 58, 61, 77).
- [190] Thirukkanesh S and Ragel F C; Exact anisotropic sphere with polytropic equation of state. *Pramana*, 78:687–696, 2012. (page 57).
- [191] Thirukkanesh S; New classes of charged spheroidal models. Journal of Astrophysics, 2013. (page 11).
- [192] Thirukkanesh S and Ragel F C; A realistic model for charged strange quark stars. Chinese Physics C, 41:1–7, 2017.
- [193] Thirukkanesh S, Ragel F C, Sharma R, and Das S; Anisotropic generalization of well-known solutions describing relativistic self-gravitating fluid systems: an algorithm. *The European Physical Journal C*, **78**:1–9, 2018. (pages 39, 41, 80).
- [194] Thirukkanesh S, Sharma R, and Maharaj S D; Anisotropic generalization of Vaidya-Tikekar superdense stars. *The European Physical Journal Plus*, **134**:1–8, 2019. (page 12).
- [195] Thirukkanesh S, Kaisavelu A, and Govender M; A comparative study of the linear and colour-flavour-locked equation of states for compact objects. *The European Physical Journal C*, **80**:1–8, 2020. (page 108).
- [196] Thomas V O, Ratanpal B S, and Vinodkumar P C; Core-envelope models of superdense star with anisotropic envelope. *International Journal of Modern Physics D*, 14:85–96, 2005. (page 11).
- [197] Thomas V O and Ratanpal B S; Non-adiabatic gravitational collapse with anisotropic core. International Journal of Modern Physics D, 16:1479–1495, 2007. (pages 11, 22, 57).

- [198] Thomas V O and Pandya D M; A new class of solutions of compact stars with charged distributions on pseudo-spheroidal spacetime. Astrophysics and Space Science, 360:1–13, 2015. (pages 11, 57).
- [199] Thomas V O and Pandya D M; Compact stars on pseudo-spheroidal spacetime compatible with observational data. Astrophysics and Space Science, 360:1–8, 2015. (pages 11, 57).
- [200] Thomas V O and Pandya D M; Anisotropic compacts stars on paraboloidal spacetime with linear equation of state. *The European Physical Journal A*, 53:1–9, 2017. (pages 19, 23, 41, 61, 62, 105).
- [201] Tikekar R and Patel L K; Non-adiabatic collapse of a radiating star in a spheroidal space-time. *Math. Today*, 6:11–16, 1988. (page 22).
- [202] Tikekar R; Exact model for a relativistic star. Journal of Mathematical Physics, 31:2454–2458, 1990. (page 11).
- [203] Tikekar R and Thomas V O; Relativistic fluid sphere on pseudo-spheroidal space-time. *Pramana*, **50**:95–103, 1998. (pages 11, 22, 23, 57).
- [204] Tikekar R and Thomas V O; Anisotropic fluid distributions on pseudospheroidal spacetimes. *Pramana*, 52:237–244, 1999. (pages 11, 22, 57).
- [205] Tikekar R and Thomas V O; A relativistic core-envelope model on pseudospheroidal space-time. *Pramana*, 64:5–15, 2005. (pages 11, 57).
- [206] Tikekar R and Jotania K; On relativistic models of strange stars. *Pramana*, 68:397–406, 2007. (pages 23, 24, 80).
- [207] Tikekar R and Jotania K; A relativistic two-parameter core-envelope model of compact stars. *Gravitation and cosmology*, **15**:129–133, 2009. (page 23).

- [208] Tolman R C; Static solutions of einstein's field equations for spheres of fluid. *Physical Review*, 55:364–373, 1939. (pages 8, 13, 67, 87).
- [209] Usov V V; Electric fields at the quark surface of strange stars in the color-flavor locked phase. *Physical review D*, **70**:1–3, 2004. (page 97).
- [210] Usov V V, Harko T, and Cheng K S; Structure of the electrospheres of bare strange stars. *The Astrophysical Journal*, **620**:915–921, 2005. (page 58).
- [211] Vaidya P C and Tikekar R; Exact relativistic model for a superdense star. Journal of Astrophysics and Astronomy, 3:325–334, 1982. (pages 8, 10, 22, 23, 38).
- [212] Varela V, Rahaman F, Ray S, Chakraborty K, and Kalam M; Charged anisotropic matter with linear or nonlinear equation of state. *Physical Review* D, 82:1–14, 2010. (page 77).
- [213] Weber F; Pulsars as astrophysical laboratories for nuclear and particle physics, vol. bs1, bristol, uk, 1999. (page 38).
- [214] Weber F; Quark matter in neutron stars. Journal of Physics G: Nuclear and Particle Physics, 25(9):R195, 1999.

(page 97).