A TENTH BIBLIOGRAPHY OF FRACTIONAL PROGRAMMING

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1. Introduction

This bibliography of fractional programming is a continuation of ninth previous bibliographies by the first author (Pure Appl.Math. Sci. (India), Vol. XIII, No. 1-2, 35-69, March (1981); ibid. Vol. XVII, No. 1-2, 87-102, March (1983); ibid. XXII, No. 1-2, 109-122, September (1985); Optimization 23(1992)1, 53-71; ibid. 45(1999) 1-4, 343-367; ibid. 55 (2006)4, 405-428; AMO-Advanced Modeling and Optimization 15(2013)2, 309-386; Optimization 66(2017)3, 439-470; ibid. 68(2019)11, 2125-2169.

This paper lists in alphabetical order by the name of the first author, 527 papers dealing with fractional programming and its applications. This covers mainly the period 2018-2020 but it also includes some references published up to 2018 which were not included in the first previous bibliographies. In compiling this list we used Mathematical Reviews, Zentralblatt für Mathematik and Internet.

The papers are either published in some form (in technical journals or as internal reports) or are available only as typewritten manuscripts (for example as doctoral these or as papers presented at scientific session). If a work was first published as an internal report, and later in a technical journal, both publications are cited, since it may occasionally be easier for anyone seeking literature to find a copy of the internal report.

The references are classified into one or more of 13 sections by their basic contents.

In an undertaking of this scope and nature some errors are inevitable, despite elaborate precautions and checks. The authors will be grateful for any corrections, additions or comments about this bibliography. .

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2. Classification by subject area

1. General, fractional functions, books, surveys, doctoral thesis, master of science thesis, bibliographies: 15, 67, 82, 111, 127, 144, 228, 232, 236, 265, 275, 337, 347, 397, 414, 419, 425, 444.

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2.4. *Portfolio analysis*: 63, 271.
2.5. *Sustainable agriculture*: 280, 298, 315, 353, 426, 505, 511.
2.6. *Water-resources allocation*: 104, 163, 221, 326, 327, 380, 465, 512.
2.7. *Energy efficiency*: 9, 19, 25, 27, 32, 56-58, 62, 70, 91, 96, 98, 138, 142, 178, 180, 186, 187, 190, 191, 199, 200, 203, 216, 217, 223, 224, 231, 237, 238, 240, 246, 251, 274, 279, 288, 289, 290, 294, 302, 312, 313, 317, 319, 320, 325, 328, 339, 339, 351, 357, 382, 390, 393, 402, 403, 409, 432, 452, 456, 458, 460, 467, 468, 470, 471, 477, 478, 481, 486, 487, 489, 492, 495, 497, 503, 504, 507, 524, 525.
2.8. *Resources allocation*: 26, 36, 81, 95, 97, 99, 123, 146, 153, 156, 161, 193, 277, 282, 297, 299, 300, 318, 334, 479, 500.
2.9. *Signal-to-noise ratio*: 52, 103, 148, 157, 212, 295, 321, 384, 431, 490, 491.
2.10. *Device-to-device* (D2D) *communication*: 22, 85, 139, 140, 145, 211, 222, 239, 247, 305, 386, 416, 451, 464.
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2.14. *Multiple-input multiple-output* (MIMO) *networks (systems):* 89, 126, 204, 205, 214, 245, 349, 399, 469, 474, 493, 494, 517.
2.15. *Radio access networks*: 18, 59, 65, 377, 396.
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2.17. *Weighted coefficient quantification*: 20, 147, 365.
2.18. *Statistical data analysis:* 149, 220, 250, 293, 355, 457, 463, 476, 496, 506, 509.
2.19. *Total least-squares problem*: 64, 165, 196, 480.
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2.22. *Carbon intensity reduction potential*: 192.
2.23. *Verifiable computation*: 335.
2.24. *Sequential control*: 428.
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2.26. *Multinomial logit model*: 227, 230.
2.27. *Traveling salesman problem*: 287.

2.28. *Machine learning*: 281, 310.
2.29. *Energy systems planning*: 292.
2.30. *Polynomial matrix transform*: 303.
2.31. *Tropical algebra*: 316.
2.32. *Spectral decomposition*: 348.
2.33. *Minimal cost flow problem*: 352.
2.34. *Supply chain optimization*: 362, 516.
2.35. *Gini coefficient*: 363.
2.36. *Linear regression*: 364.
2.37. *Construction industry*: 367.
2.38. *Crow search algorithms*: 383.
2.39. *Group decision making*: 410, 453.
2.40. *Polynomial optimization*: 437.
2.41. *Handover security*: 448.
2.42. *Secure communications*: 461.
2.43. *Waste management system*: 482.
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2.45. *Vehicle routing problem*: 61.
2.46. *Power allocation*: 60.
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3. Linear fractional programming
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3.2. *Bilevel linear fractional programming problems:* 92-94.

4. Integer and mixed integer fractional programming
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4.2. *Multiobjective functions*: 29, 30, 48, 90, 181, 269, 323, 445.

5. Optimality conditions and duality theory in fractional programming
5.1 . *Linear and nonlinear fractional programming problem*: 5, 23, 254-257, 276, 389, 434, 508, 523, 526.
5.2 . *Multiobjective fractional programming problem*: 14, 37, 40, 115, 117, 128-133, 135, 136, 143, 151, 154, 155, 195, 198, 233, 234, 253, 336, 356, 392, 440.
5.3 . *Multiobjective fractional programming problem with set and n-set functions*: 248.
5.4 . *Generalized fractional programming problem*: 21, 41, 106, 134, 137, 182, 249, 284, 415, 430, 443.
5.5 . *Semiinfinite multiobjective fractional programming problem*: 38, 46, 176, 252, 283, 405, 446, 502.
5.6 . *Multiobjective fractional variational problems*: 263, 371, 438.

13. Parametric fractional programming and sensitivity analysis: 69, 264, 373, 374.

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