

1. L. Sapa, *A finite-difference method for a parabolic-elliptic system*, Opuscula Mathematica 17 (1997), 57–66.
2. L. Sapa, *A finite-difference method for a non-linear parabolic-elliptic system with Dirichlet conditions*, Universitatis Iagellonicae Acta Mathematica 37 (1999), 363–376.
3. J. Artymiuk, E. Artymiuk, L. Sapa, *Construction calculations in the design of bite drilling tools*, Wiertnictwo, Nafta, Gaz 19 (2002), 27–34.
4. L. Sapa, *Existence and uniqueness of a classical solution of Fourier's first problem for non-linear parabolic-elliptic systems*, Universitatis Iagellonicae Acta Mathematica 44 (2006), 83–95.
5. M. Malec, L. Sapa, *A finite difference method for nonlinear parabolic-elliptic systems of second-order partial differential equations*, Opuscula Mathematica 27 (2007), 259–289.
6. L. Sapa, *A finite difference method for quasi-linear and nonlinear differential functional parabolic equations with Dirichlet's condition*, Annales Polonici Mathematici 93 (2008), 113–133.
7. L. Sapa, *A finite difference method for quasi-linear and nonlinear differential functional parabolic equations with Neumann's condition*, Commentationes Mathematicae 49 (2009), 83–106.
8. K. Kropielnicka, L. Sapa, *Estimate of solutions for differential and difference functional equations with applications to difference methods*, Applied Mathematics and Computation 217 (2011), 6206–6218.
9. L. Sapa, *Estimates of solutions for parabolic differential and difference functional equations and applications*, Opuscula Mathematica 32 (2012), 529–549.
10. L. Sapa, *Implicit difference methods for differential functional parabolic equations with Dirichlet's condition*, Zeitschrift fur Analysis und ihre Anwendungen 32 (2013), 313–337.
11. L. Sapa, *Existence, uniqueness and estimates of classical solutions to some evolutionary system*, Opuscula Mathematica 35 (2015), 935–956.
12. K. Tkacz-Śmiech, B. Bożek, L. Sapa, M. Danielewski, *Viscosity controlled interdiffusion in nitriding*, Diffusion Foundations 10 (2016), 28–38.
13. L. Sapa, *Global existence and uniqueness of a classical solution to some differential evolutionary system*, Rocky Mountain Journal of Mathematics 47 (2017), 2351–2380.
14. R. Filipkiewicz, P. Kalita, L. Sapa, K. Szyszkiewicz, *On local weak solutions to Nernst–Planck–Poisson system*, Applicable Analysis 96 (2017), 2316–2332.
15. M. Danielewski, L. Sapa, *Nonlinear Klein-Gordon equation in Cauchy-Navier elastic solid*, Cherkasy University Bulletin, Physical and Mathematical Sciences 1 (2017), 22–29.
16. L. Sapa, *Difference methods for parabolic equations with Robin condition*, Applied Mathematics and Computation 321 (2018), 794–811.
17. L. Sapa, B. Bożek, M. Danielewski, *Existence, uniqueness and properties of global weak solutions to interdiffusion with Vegard rule*, Topological Methods in Nonlinear Analysis 52 (2018), 423–448.

18. L. Sapa, B. Bożek, M. Danielewski, *Weak solutions to interdiffusion models with Vegard rule*, AIP Conference Proceedings 1926, 020039 (2018), 020039-1–020039-9.
19. B. Bożek, L. Sapa, M. Danielewski, *Difference methods to one and multidimensional interdiffusion models with Vegard rule*, Mathematical Modelling and Analysis 24 (2019), 276–296.
20. L. Sapa, B. Bożek, K. Tkacz-Śmiech, M. Zajusz, M. Danielewski, *Interdiffusion in many dimensions: mathematical models, numerical simulations and experiment*, Mathematics and Mechanics of Solids 25 (2020), 2178–2198.
21. M. Danielewski, L. Sapa, *Foundations of the quaternion quantum mechanics*, Entropy 22, 1424 (2020), 1–20.
22. M. Danielewski, L. Sapa, *Diffusion in Cauchy elastic solid*, Diffusion Fundamentals 33 (2020), 1–14.
23. M. Danielewski, L. Sapa, *Quaternions and Cauchy classical theory of elasticity*, Advances in Manufacturing Science and Technology 44 (2020), 67–70.
24. L. Sapa, *Parabolic-elliptic system modeling biological ion channels*, Journal of Differential Equations 291 (2021), 1–26.
25. B. Bożek, L. Sapa, K. Tkacz-Śmiech, M. Zajusz, M. Danielewski, *Compendium about multicomponent interdiffusion in two dimensions*, Metallurgical and Materials Transactions A - Metallurgy and Materials Science 52A (2021), 3221–3231.
26. L. Sapa, B. Bożek, M. Danielewski, *Remarks on parabolicity in a one-dimensional interdiffusion model with the Vegard rule*, Iranian Journal of Science and Technology Transaction A - Science 45 (2021), 2135–2147.
27. B. Bożek, L. Sapa, K. Tkacz-Śmiech, M. Danielewski, J. Rybak, *A mathematical model and simulations of low temperature nitriding*, CMES - Computer Modeling in Engineering and Sciences 130 (2022), 777–803.
28. M. Danielewski, L. Sapa, Ch. Roth, *Quaternion quantum mechanics II: resolving the problems of gravity and imaginary numbers*, Symmetry 15, 1672 (2023), 1–23.
29. L. Sapa, S. Skurativskyi, V. Vladimirov, *On the soliton-like solutions of the refined model of elastic media containing inclusions*, Reports on Mathematical Physics 93 (2024), 165–177.