

Listă de lucrări Diana Cristina Savin

A. Lista lucrărilor cele mai relevante pentru realizările profesionale

1. N. MINCULETE, D. SAVIN, *Some generalizations of the functions τ and τ^{st} in algebraic number fields*, **Expositiones Mathematicae (Science Direct, Elsevier)**, vol.39 (2021), p.344-353
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2. D. SAVIN, M. ȘTEFĂNESCU, *A necessary condition for certain Primes to be written in the form $x^q + ry^q$* , **Journal of Algebra and Its Applications (World Scientific)**, vol. 10, no.3 (June 2011), p.435-443
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3. V. ACCIARO, D. SAVIN, M. TAOUS and A. ZEKHNINI, *On quaternion algebras over the composite of quadratic number fields*, **Glasnik Matematicki**, vol. 56, no. 1 (2021), p. 63-78
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4. V. ACCIARO, D. SAVIN, M. TAOUS and A. ZEKHNINI, *On quaternion algebras over some extensions of quadratic number fields*, **Boletín de la Sociedad Matemática Mexicana**, vol. 27, Issue 3, November 2021, p.1-7 (<https://link.springer.com/article/10.1007/s40590-021-00365-9>
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5. D. SAVIN, *About Special Elements in Quaternion Algebras Over Finite Fields*, **Advances in Applied Clifford Algebras (Springer)**, vol. 27, June 2017, Issue 2, pp.1801-1813
(<https://link.springer.com/article/10.1007/s00006-016-0718-2>; DOI:10.1007/s00006-016-0718-2).
6. D. SAVIN, *About split quaternion algebras over quadratic fields and symbol algebras of degree n* , **Bull. Math. Soc. Sci. Math. Roumanie**, Tome 60 (108) No. 3, 2017, p. 307- 312
(<https://www.jstor.org/stable/26407542?refreqid=excelsior%3Ade7744ba8c496122b7c2ccc79ec87a8a>).
7. N. MINCULETE, D. SAVIN, *Some properties of Euler's function and of the function τ and their generalizations in algebraic number fields*, **Mathematics MDPI** 2021, 9, 1710, p. 1-10
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8. D. SAVIN, *About some split central simple algebras*, **An. Șt. „Ovidius” University of Constanta, Romania, Ser. Mat. XXII (2014), f.1, p. 263-272**.
(https://www.anstuocmath.ro/mathematics/vol22-1/Savin_D.pdf; DOI:10.2478/auom-2014-0022).
9. D. SAVIN, *Some properties of Fibonacci numbers, Fibonacci octonions, and generalized Fibonacci-Lucas octonions*, **Advances in Difference Equations (Springer)** (2015), 2015:298.
(<https://link.springer.com/article/10.1186/s13662-015-0627-z>; DOI:10.1186/s13662-015-0627-z).
10. D. SAVIN, *Quaternion algebras and symbol algebras over algebraic number field K , with the degree $[K:Q]$ even*, **Gulf Journal of Mathematics**, Vol 4, Issue 4 (2016), p. 16-21
(<https://gjom.org/index.php/gjom/issue/view/27>).
11. D. SAVIN, *On the Diophantine Equation $x^4 - q^4 = py^3$, in the special conditions*, **An. Șt. „Ovidius” University of Constanta, Ser. Mat. 12 (2004), f.1., p.81-90**
(https://www.anstuocmath.ro/mathematics/pdf7/dsavin_81_88.pdf).
12. D. SAVIN, *Artin Symbol of the Kummer fields*, **Journal Creative Mathematics and Informatics**, vol. 16 (2007), p. 63-69
(<https://www.creative-mathematics.cunbm.utcluj.ro/article/artin-symbol-of-the-kummer-fields/>).

B. Teza de doctorat:

Contribuții la studiul unor congruențe (ecuații diofantice), Universitatea "Ovidius" din Constanța, Facultatea de Matematică și Informatică, 2004, conducător științific **Prof. univ. dr. Mirela Ștefănescu**.

C. Cărți:

1. A. Bărbulescu, **D. Savin**, *234 probleme rezolvate de analiză complexă*, Edit. Sitech, Craiova, 2006, 201 p.
2. **D. Savin**, M. Ștefănescu, *Lectii de Aritmetică și Teoria Numerelor*, Edit. Matrix Rom, 2008, 314 p.

Capitole de cărți:

1. **D. Savin**, *Special numbers, special quaternions and special symbol elements*, capitol in cartea **Models and Theories in Social Systems**, vol. 179, Springer 2019, ISBN-978-3-030-00083-7, p. 417-430 (https://link.springer.com/chapter/10.1007/978-3-030-00084-4_23).
2. C. Flaut, **D. Savin**, G. Zaharia, *Some applications of Fibonacci and Lucas numbers*, capitol in cartea **Algorithms as a Basis of Modern Applied Mathematics, Studies in Fuzziness and Soft Computing 404**, Springer 2021, p.119-130 (https://doi.org/10.1007/978-3-030-61334-1_5).

D. Lucrări indexate ISI Web of Science

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2. D. Savin, C. Flaut, C. Ciobanu, *Some properties of the symbol algebras*, **Carpathian Journal of Mathematics** vol. 25, No. 2 (2009), p. 239-245 (<http://www.jstor.org/stable/43997648>).
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5. C. Flaut, **D. Savin**, *Some properties of the symbol algebras of degree 3*, **Math. Reports**, vol. 16 (66), no. 3 (2014), 443 – 463 (http://imar.ro/journals/Mathematical_Reports/Mrc14_3.pdf).
6. C. Flaut, **D. Savin**, *Some examples of division symbol algebras of degree 3 and 5*, **Carpathian Journal of Mathematics**, vol. 31, No. 2 (2015), p. 197-204 (<https://www.carpathian.cunbm.utcluj.ro/project/vol-31-2015-no-2/>).
7. **D. Savin**, *Some properties of Fibonacci numbers, Fibonacci octonions, and generalized Fibonacci-Lucas octonions*, **Advances in Difference Equations (Springer)** (2015), 2015:298, DOI 10.1186/s13662-015-0627-z (<https://link.springer.com/article/10.1186/s13662-015-0627-z>).
8. C. Flaut, **D. Savin**, *Quaternion Algebras and Generalized Fibonacci-Lucas Quaternions*, **Advances in Applied Clifford Algebras (Springer)**, December 2015, Volume 25, Issue 4, pp 853-862 (<https://link.springer.com/article/10.1007/s00006-015-0542-0>).
9. D. Savin, *About division quaternion algebras and division symbol algebras*, **Carpathian Journal of Mathematics**, vol. 32, No. 2 (2016), pp. 233 – 240 (<https://www.carpathian.cunbm.utcluj.ro/project/vol-32-2016-no-2/>).
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12. C. Flaut, D. Savin, *Some special number sequences obtained from a difference equation of degree three*, **Chaos, Solitons & Fractals** (Science Direct, Elsevier), vol. 106, January 2018, p 67-71 (<https://www.sciencedirect.com/science/article/abs/pii/S0960077917304708>).
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14. C. Flaut, D. Savin, *Some remarks regarding (a, b, x_0, x_1) numbers and (a, b, x_0, x_1) quaternions*, accepted in **Ars Combinatoria**.
15. C. Flaut, D. Savin, *Some remarks regarding l - elements defined in algebras obtained by the Cayley–Dickson process*, **Chaos, Solitons & Fractals** (Science Direct, Elsevier), vol. 118, January 2019, p 112-116 (<https://www.sciencedirect.com/science/article/abs/pii/S0960077918308294>).
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17. C. Flaut, D. Savin, G. Zaharia, *Properties and applications of some special integer number sequences*, **Mathematical Methods in the Applied Sciences** **2021**, 44, p. 7442–7454, DOI: 10.1002/mma.6257, <https://onlinelibrary.wiley.com/doi/abs/10.1002/mma.6257>
18. N. Minculete, D. Savin, *Some Properties of Extended Euler's Function and Extended Dedekind's Function*, **Mathematics** **MDPI** **2020**, 8, 1222; doi:10.3390/math8081222, p.1-10, (www.mdpi.com/journal/mathematics, DOI:10.3390/math8081222).
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20. V. Acciario, D. Savin, M. Taous and A. Zekhnini, *On quaternion algebras that split over specific quadratic number fields* (arXiv:1906.11076), accepted in **Italian Journal of Pure and Applied Mathematics**.
21. V. Acciario, D. Savin, M. Taous and A. Zekhnini, *On quaternion algebras over the composite of quadratic number fields*, **Glasnik Matematički**, vol. 56, no. 1 (2021), p. 63-78 (<https://doi.org/10.3336/gm.56.1.05>; <https://web.math.pmf.unizg.hr/glasnik/forthcoming.html>).
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23. N. Minculete, D. Savin, *Some properties of Euler's function and of the function τ and their generalizations in algebraic number fields*, **Mathematics** **MDPI** **2021**, 9, 1710, p. 1-10 (https://www.mdpi.com/2227-7390/9/15/1710?type=check_update&version=1 DOI:10.3390/math9151710).
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E. Lucrări indexate BDI

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- 2.D. Savin, *On some Diophantine Equations (I)*, **An. Șt. University „Ovidius“ of Constanta, Romania, Ser. Mat.**, 10 (2002), f.1., p.121-134 (<https://www.anstuocmath.ro/volume-x-2002-fascicola-1.html>).
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6. D. Savin, *On some Diophantine Equations (III)*, **An. Șt. University „Ovidius” of Constanta**, Romania, Ser. Mat., 12 (2004), f.1., p.73 – 80 (<https://www.anstuocmath.ro/volume-xii-2004-fascicola-1.html>).
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8. D. Savin, A Bărbulescu, *On the Diophantine Equation $x^4 - q^4 = py^3$, in special conditions*, **Journal Automation Computers - Applied Mathematics**, vol.15 (2006), No 2, p.295-300 (<http://acam.tucn.ro/pdf/ACAM15%282%292006-abstracts.pdf>).
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10. D. Savin, *Integers Points of Elliptic Curves*, **Seminar Series in Mathematics (Algebra: 5), Proceedings of the 16th National School of Algebra on Elliptic Curves**, 5-12 September 2007, Constanta, Romania, p. 111-122, [Zbl 1154.00014](#).
11. D. Savin, *Bachet-Mordell's Equations*, **Seminar Series in Mathematics (Algebra: 5), Proceedings of the 16th National School of Algebra on Elliptic Curves**, 5-12 September 2007, Constanta, Romania, p. 101-110, [Zbl 1154.00014](#).
12. D. Savin, *On the Diophantine Equation $x^4 - q^4 = py^5$* , **Italian Journal of Pure and Applied Mathematics** no.26 (2009), p.103-108 (<http://ijpam.uniud.it/abstracts/abstract%2026-2009.pdf>).
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15. D. Savin, *About the Diophantine Equation $x^4 - q^4 = py^7$* , **International Journal of Mathematics and Computation**, vol.11, no. J11 (2011), p.21-27 (<http://www.ceser.in/ceserp/index.php/ijmc/article/view/2499>).
16. C. Flaut, D. Savin, G. Iorgulescu, *Some properties of Fibonacci and Lucas symbol elements*, **Journal of Mathematical Sciences: Advances and Applications**, vol. 20 (2013), p. 37-43 (http://scientificadvancespublishers.com/tables_contents_sciences_advances_applications.html).
17. D. Savin, *Fibonacci primes of special forms*, **Notes on Number Theory and Discrete Mathematics**, vol. 20, 2014, no.2, p. 10-19 (<http://nntdm.net/volume-20-2014/number-2/10-19/>).
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