

**Списък на публикациите на чл. кор. проф. дхн Тони Спасов
за участие в конкурса за избор на академици на БАН**

1. S. Budurov, T. Spassov, T. Markov, Crystallization kinetics of the amorphous alloy $\text{Fe}_{80}\text{B}_{20}$ studied using a thermomagnetic balance, *J. Mater. Science* 21 (1986) 2553-2556.
2. U. Boehnke, G. Kuhn, G. Berezovski, T. Spassov, Some aspects of the thermal behaviour of In_2Se_3 , *Journal of Thermal Analysis* 32 (1987) 115-120.
3. Yu. Berezovskaya, S. Budurov, T. Spassov, Specific Heats of FCC Solid Solutions of the Bi_2O_3 - Y_2O_3 System, *Cryst. Res. Technol.* 22 (1987) 1415-1419.
4. Yu. Berezovskaya, S. Budurov, T. Spassov, Specific Heats of FCC Solid Solutions of the Bi_2O_3 - Er_2O_3 System, *Cryst. Res. Technol.* 22 (1987) 1421-1425.
5. N. Rysava, T. Spassov, L. Tichy, Isothermal DSC method for evaluation of the kinetics of crystallization in the Ge-Sb-S glassy System, *Journal of Thermal Analysis* 32 (1987) 1015-1021.
6. S. Budurov, T. Spassov, K. Marchev, Effects of non-steady state nucleation in the kinetics of crystallization of the amorphous alloy $\text{Fe}_{80}\text{B}_{20}$, *Journal of Mater. Science* 22 (1987) 3485-3490.
7. S. Budurov, T. Spassov, G. Stephany, S. Roth, M. Reinbold, Influence of copper additions on the crystallization of amorphous Fe-B-Si alloys, *Mater. Sci. and Engineering* 97 (1988) 361-364.
8. T. Spassov, S. Budurov, Investigation of the nucleation kinetics and linear growth rate during the devitrification of $\text{Fe}_{80}\text{B}_{20}$ amorphous alloy with the aid of the thermomagnetic balance, *Cryst. Res. Technol.* 23 (1988) 1225-1230.
9. H. Fiedler, G. Stephani, S. Roth, T. Spassov, S. Budurov, Influence of alloying elements on the Curie point of amorphous Fe-B-Si alloys, *Proc. of the International Conference on Rapidly Quenched Metallic Alloys*, Varna (1987), Akademie der Wissenschaften der DDR, Berlin (1988) 241-244, Ed. H. Fiedler.
10. S. Budurov, T. Spassov, W. Diakovich, G. Konzos, A. Lovas, Isothermal crystallization kinetics of amorphous Ni-B alloys, *Proc. of the International Conference on Rapidly Quenched Metallic Alloys*, Varna (1987), Akademie der Wissenschaften der DDR, Berlin (1988) 85-90, Ed. H. Fiedler.
11. M. Jurisch, S. Budurov, T. Spassov, W. Diakovich, DSC investigation of the kinetics of crystallization of the amorphous alloy $\text{Fe}_{40}\text{Ni}_{40}\text{P}_{14}\text{B}_6$ obtained by means of one-roller and two-roller technique, *Proc. of the International Conference on Rapidly Quenched Metallic Alloys*, Varna (1987), Akademie der Wissenschaften der DDR, Berlin (1988) 95-101, Ed. H. Fiedler.
12. T. Spassov, R. Kovatcheva, S. Budurov, Metallographic investigation of the kinetics of crystallization of the amorphous alloy $\text{Fe}_{80}\text{B}_{20}$, *Proc. of the International Conference on Rapidly Quenched Metallic Alloys*, Varna (1987), Akademie der Wissenschaften der DDR, Berlin (1988) 91-94, Ed. H. Fiedler.
13. S. Budurov, T. Spassov, K. Marchev, Crystallization kinetics of amorphous Fe-B and Cu-Zr alloys, *Wissenschaftliche Berichte "Seminar on Rapid Solidification"*, Akademie der Wissenschaften der DDR, Dresden 1988, 196-220.
14. S. Budurov, T. Spassov, M. Lazarova, G. Konczos, A. Lovas, Compositional effects in the crystallization of Ni-TM-B glasses, *Proc. of the 6-th Non-Ferrous Metallurgical Symposium*, Sect.B, Edn. of the Central Research Institute for Physics, Budapest 1989, 227-236.

15. T. Spassov, W. Diakovich, S. Budurov, Kinetics of isothermal crystallization of the amorphous alloy Fe-B, *Inter. J. Rap. Sol.* 5 (1990) 89-98.
16. G. Ivanov, G. Stergioudis, T. Spassov, A. Papadimitriou, I. Tsoukalas, K. Melidis, Crystallization and structural aspects of amorphous CoFeB alloys, derived from magnetic properties and electrical resistivity measurements, *Z. Metallkunde* 82 (1991) 34-36.
17. G. Stergioudis, G. Ivanov, S. Chagivasiliou, A. Papadimitriou, T. Spassov, I. Tsoukalas, Influence of Cr and Si concentration on crystallization behaviour, electrical resistivity and magnetic properties of (Fe, Cr)-B-Si amorphous alloys, *Solid State Comm.* 80 (1991) 89-94.
18. D. Akhtar, T. Spassov, U. Koester, Texture in the melt-spun Nd-Fe-B ribbons, *Z. Metallkunde* 82 (1991) 823-826.
19. U. Koester, T. Spassov, M. Sutton, Nanocrystalline materials by crystallization of Zr-based metallic glasses, *Proc. III-rd International Conference on Non-crystalline Solids*, Matalascanas (Spain), 1991, Eds. A. Conde, C. F. Conde and M. Millan, 149-152.
20. T. Spassov, A study of the nucleation kinetics, linear growth and overall crystallization kinetics of meltspun Pd-Si amorphous alloy, *Cryst. Res. and Techn.* 27 (1992) 149-156.
21. T. Spassov, U. Koester, Grain growth kinetics in nanocrystalline Zr-based alloys, *Key Engineering Materials* Vol. 81-83 (1993) 249-254.
22. T. Spassov, V. Diakovich, A modified Johnson-Mehl-Avrami kinetic model of overall crystallization of Fe-Co-B metallic glasses, *Journal of Alloys and Compounds* 198 (1993) 187-191.
23. T. Spassov, U. Koester, Grain growth in nanocrystalline zirconium - based alloys, *Journal of Materials Science* 28 (1993) 2789-2794.
24. M. Lazarova, T. Spassov, S. Budurov, DSC and X-Ray Study of Hydrogenated Fe₇₉B₁₄Si₇ and Fe₆₀Co₂₅B₁₅ Amorphous Alloys, *International Journal Rapid Solidification* 8 (1994) 133-145.
25. T. Spassov, Crystallization of Co₃₃Zr₆₇ glasses above the glass transition temperature, *Annuaire de L'Universite de Sofia* 87 (1994) 5-16.
26. G. Ivanov, T. Spassov, S. Budurov, Resistivity study of the electrolytic hydrogenation of Fe-B-Si glasses, *Annuaire de L'Universite de Sofia* 87 (1994) 49-53.
27. T. Spassov, G. Tzolova, Hydrogen in Cu-Ti and Ni-Ti metallic glasses, *Crys. Res. Technol.* 29 (1994) 99-107.
28. M. Stancheva, St. Manev, D. Lazarov, T. Spassov, Oxidation of carbon monoxide and hydrogen on the surface of crystalline and amorphous Cu₆₀Zr₄₀ alloys, *React. Kinet. Catal. Lett.* 52 (1) (1994) 199-204.
29. T. Spassov, S. Budurov, Crystallization behaviour of Fe-(Nb,Cu)-Si-B metallic glasses, *Journal of Thermal Analysis* 45 (1995) 1-7.
30. T. Spassov, Phase transformations in rapidly quenched Nd-Fe-B alloys, *Annuaire de L'Universite de Sofia* 88 (1995) 123-128.
31. T. Spassov, G. Tzolova, Oxidation kinetics of amorphous, polycrystalline and nanocrystalline Co₃₃Zr₆₇ alloys, *Crys. Res. Technol.* 7 (1996) 881-888.
32. T. Spassov, U. Koester, J. Meinhardt, Nanocrystallization of Co₃₃Zr₆₇ glasses, *Journal of Materials Science* 32 (1997) 1483-1486.

33. T.Spassov, V.Petkov, U.Koester, Nanocrystallization, grain growth and subsequent phase transformations in rapidly quenched Co₃₃Zr₆₇ alloys, *Proc. of the IX Int.Conference on Rapidly Quenched and Metastable Materials*, ed. P. Duhaj, P. Mravko, P.Svec, Bratislava 1996, Mat Sci Eng A, Elsevier 1997, p.224-227.
34. U.Köster, D.Zander, H.Alves, T.Spassov, Hydrogenation of amorphous, nanocrystalline and quasicrystalline magnesium alloys, *Proc. of the First Israeli International Conference on Magnesium Science & Technology*, ed. E. Aghion, D. Eliezer, MRI, Beer-Sheva, Israel 1998, p.244-249.
35. T. Spassov, U.Köster, Thermal stability and hydriding properties of nanocrystalline melt-spun Mg₆₃Ni₃₀Y₇ alloys, *Journal of Alloys and Compounds* 279 (1998) 279-286.
36. T. Spassov, G. Stergioudis, G. Ivanov, E.K. Polychroniadis, Crystallization of as-quenched and hydrogenated Cu₅₀Ti₄₀Al₁₀ amorphous alloy, *Z. Metallkunde* 89, 1 (1998) 23-26.
37. T. Spassov, G. Ivanov, Influence of hydrogen on the crystallization of amorphous Cu₅₀ Ti₅₀Al₁₀ alloy, *Annuaire de l'universite de Sofia*, 90 (1998) 11-20.
38. T. Spassov, U.Köster, Nanocrystalline Mg-Ni-based hydrogen storage alloys produced by nanocrystallization, *Materials Science Forum* 307 (1999) 197-202. *Journal of Metastable and Nanocrystalline Materials* 1 (1999) 197-202.
39. T.Spassov, V. Rangelova, Hydriding properties of amorphous Ni-B alloy studied by DSC and thermogravimetry, *Thermochimica Acta* 326 (1999) 69-73.
40. T.Spassov, U.Koster, Hydrogenation of amorphous and nanocrystalline Mg-based alloys, *J. Alloys and Compounds* 287 (1999) 243-250.
41. T.Spassov, U.Köster, Microstructure, Microhardness and Corrosion Behaviour of Rapidly Solidified Magnesium based Mg-Ni-(Y, Mm) alloys, *Z. für Metallkunde* 91 (8) (2000) 675-679.
42. V. Petkov, T. Spassov, S. Surinach, M. Baro, New Gd-Al Nanophase Obtained by Crystallization of Gd₄Al₃ Metallic Glass, *Nanostructured Materials* 12B (1999) 609-612.
43. D.Zander, U.Köster, T. Spassov, Hydrogenation of amorphous, nano- and quasicrystalline Mg-based alloys, *Proc. 2nd Izraeli International Conference on Magnesium Science & Technology*, ed. E.Aghion, D.Elizezer, MRI, Izrael 2000, p.237-246.
44. T.Spassov, V.Rangelova, N.Neykov, Nanocrystallization and hydrogen storage in rapidly solidified Mg-Ni-RE alloys, *Journal of Alloys and Compounds* 334 (2002) 219-223.
45. T.Spassov, H.Alves, U. Köster, Oxidation of rapidly solidified Mg₈₇Ni₁₂Y₁ alloy, *Journal of Alloys and Compounds* 336 (2002) 163-169.
46. V. Rangelova, T.Spassov, Primary crystallization kinetics in rapidly quenched Mg-based Mg-Ni-Y alloys, *Journal of Alloys and Compounds* 345 (2002) 148-154.
47. T.Spassov, P.Solsona, S.Surinach, M.D.Baro, Nanocrystallization in Mg₈₃Ni_{17-x}Y_x (x=0,7.5) amorphous alloys, *Journal of Alloys and Compounds* 345 (2002) 123-129.
48. M.Daviti, K.Chrysafis, K.Paraskevopoulos, E.Polychroniadis, T.Spassov, Kinetic analysis of the α - β HgI₂ phase transition using isothermal and non-isothermal scanning calorimetry, *J.Thermal Analysis and Calorimetry* 70 (2002)605-614.
49. T.Spassov, P.Solsona, S.Surinach, M.D.Baro, Optimization of the ball-milling and heat treatment parameters for synthesis of amorphous and nanocrystalline Mg₂Ni-based alloys, *Journal of Alloys and Compounds* 349 (2003) 242-254.

50. T.Spassev, P.Solsona, S. Bliznakov, S.Surinach, M.D.Baró, Synthesis and hydrogen sorption properties of nanocrystalline $\text{Mg}_{1.9}\text{M}_{0.1}\text{Ni}$ ($\text{M}=\text{Ti}, \text{Zr}, \text{V}$) obtained by mechanical alloying, *Journal of Alloys and Compounds* 356-357 (2003) 639-643.
51. V.Rangelova, N.Neykov, T.Spassev, Nanocrystallization of hydrogen-charged $\text{Mg}_{76}\text{Ni}_{19}\text{Y}_5$ amorphous alloy, *Journal of Thermal Analysis and Calorimetry* 75 (2004) 373-378.
52. V.Rangelova, N.Neykov, T.Spassev, Influence of Hydrogen on the Crystallization of Amorphous Mg-Ni-Y alloys, *Annuaire de l'universite de Sofia* 96 (2004)51-55.
53. T.Spassev, L.Lybenova, U.Köster, M.D.Baró, Mg-Ni-RE nanocrystalline alloys for hydrogen storage, *Materials Science and Engineering A* 375-377 (2004) 794-799.
54. T.Spassev, N.Neykov, W.Jung, A Vassileva, High temperature oxidation of rapidly solidified Cu-Ti-(Al) alloys, *Z.Metallkunde* 94 (2003) 134-138.
55. S. Doppiu, P. Solsona, T. Spassev, S. Surinach and M.D. Baró, Synthesis of nanocrystalline MgH_2 by Reactive Milling, *Proceedings of the Centenario de las Reales Sociedades de Física y Química* 9-11 July 2003, Madrid, Spain, p.606.
56. P.Solsona, S.Doppiu, T.Spassev, S. Suriñach, M.D. Baró, Evolution of amorphous and nanocrystalline phases in mechanically alloyed $\text{Mg}_{1.9}\text{M}_{0.1}\text{Ni}$ ($\text{M}=\text{Ti}, \text{Zr}, \text{V}$), *Journal of Alloys and Compounds* 381 (2004) 66-71.
57. S. Doppiu, P. Solsona, T. Spassev, S. Surinach and M.D. Baró, Influence of Different Metals Addition on Nanocrystalline MgH_2 Synthesized by Reactive Mechanical Milling under H_2 Atmosphere, "Trends in Nanotechnology", TNT 2003, 15-19 September 2003, Salamanca, Spain, p.344.
58. P.Delchev, P.Solsona, B.Drenchev, N.Drenchev, T.Spassev, M.D.Baró, Direct hydriding of $\text{Mg}_{87}\text{Al}_7\text{Ni}_3\text{Mn}_3$ by reactive mechanical milling in hydrogen atmosphere and influence of particle size on the dehydriding reaction, *Journal of Alloys and Compounds* 388 (2005) 98-103.
59. Á. Révész, D. Fátay, D. Zander, T. Spassev, Influence of particle size on the hydrogen sorption properties of ball-milled MgH_2 with Nb_2O_5 as catalyst, *11th International Symposium on Metastable, Mechanically Alloyed and Nanocrystalline Materials, ISMANAM 2004, Sendai, Japan* *Journal of Metastable & Nanocrystalline Materials* 24-25 (2005), 447-450.
60. S. Bliznakov, N.Drenchev, B.Drenchev, P.Delchev, P.Solsona, T. Spassev, Electrochemical properties of nanocrystalline Mg_2Ni -type alloys prepared by mechanical alloying, *Journal of Alloys and Compounds* 404-406 (2005), 682-686.
61. S. Doppiu, P. Solsona, T. Spassev, G. Barkhordarian, M. Dornheim, T. Klassen, S. Suriñach, M.D. Baró, Thermodynamic properties and absorption-desorption kinetics of $\text{Mg}_{87}\text{Ni}_{10}\text{Al}_3$ alloy synthesised by reactive ball milling under H_2 atmosphere, *Journal of Alloys and Compounds* 404-406 (2005) 27-30.
62. T. Spassev, V. Rangelova, P. Solsona, M.D.Baró, D. Zander, U. Köster, Hydriding/dehydriding properties of nanocrystalline $\text{Mg}_{87}\text{Ni}_3\text{Al}_3\text{M}_7$ ($\text{M}=\text{Ti}, \text{Mn}, \text{Ce}, \text{La}$) alloys prepared by ball milling, *Journal of Alloys and Compounds* 398 (2005) 139-144.
63. T. Spassev, V. Petkov, P.Solsona, Hydriding/dehydriding of $\text{Mg}_{87}\text{Ni}_3\text{Al}_3\text{Mm}_7$ ($\text{Mm}=\text{Ce}, \text{La}$ -rich mischmetal) alloy produced by mechanical milling, *Journal of Alloys and Compounds* 403 (2005) 363-367.
64. D. Fátay, Á. Révész, T. Spassev, Particle size and catalytic effect on the dehydriding of MgH_2 , *Journal of Alloys and Compounds* 399 (2005) 237-241.

65. B.Abrashev, S. Bliznakov, T. Spassov, A. Popov, Synthesis and Characterization of Amorphous Ti-Fe Alloy, *Proceedings of the International Workshop "Portable and Emergency Energy Sources – from Materials to Systems" 16-22 Sept.2005, Primorsko, Bulgaria, ed. A. Momchilov, P. Andreev, P3* 1-3.
66. S.Bliznakov, N.Drenchev, T.Spassov, A.Popov, Nanocrystalline Mg based alloys obtained by mechanical alloying as precursors for high-capacity negative electrodes in rechargeable Ni/MH batteries, *Proc. of NATO- ASI, "Functional Properties of Nanostructured Materials", eds. R. Kassing et al., NATO Science Series, II. Mathematics, Physics and Chemistry - vol. 223 (2006) 469-472. DOI 10.1007/1-4020-4594-8_45.*
67. T. Spassov, Hydrogen Storage in Metal Hydrides, *"Portable and Emergency Energy Sources", Eds. Z. Stoyanov and D. Vladikova, Prof. Marin Drinov Academic Publishing House, Sofia 2006, ISBN 954-322-133-2, p.217-255.*
68. P. Delchev, Ts. Himitliiska, T. Spassov, Microstructure and hydriding properties of ball-milled Mg–10 at.%MmNi₅ (Mm = La, Ce-rich mischmetal) composites, *Journal of Alloys and Compounds* 417 (2006) 85-91.
69. T. Spassov, S. Todorova, W. Jung and A. Borissova, Hydrogen sorption properties of ternary intermetallic Mg–(Ir,Rh,Pd)–Si compounds, *Journal of Alloys and Compounds*, 429 (2007) 306-310.
70. A. Revesz, D.Fatay, T.Spassov, Microstructure and hydrogen sorption kinetics of Mg nanopowders with catalyst, *Journal of Alloys and Compounds* 434-435 (2007) 725-728.
71. A. Borissova, S.Bliznakov, T.Spassov, Electrochemical hydrogen insertion in Mg-La(Mm)Ni₅ nanocomposites, *Journal of Alloys and Compounds* 434-435 (2007) 760-763.
72. B. Abrashev, S.Bliznakov, T.Spassov, A.Popov, Electrochemical hydriding of nanocrystalline TiFe alloys, *Journal of Applied Electrochemistry* 37 (2007) 871-875.
73. B. Drenchev, T.Spassov, Electrochemical hydriding of amorphous and nanocrystalline TiNi-based alloys, *Journal of Alloys and Compounds*, 441 (2007) 197-201.
74. L. Pramatarova, E. Pesheva, S. Stavrev, T. Spassov, P. Montgomery, A. Toth, M. Dimitrova, M. Apostolova, Artificial bones trough nanodiamonds, *J. OPTOELECTRONICS AND ADVANCED MATERIALS* 9 (1) (2007) 236-239.
75. D.Fatay, T.Spassov, P.Delchev, G.Ribarik, A. Revesz, Microstructural development in nanocrystalline MgH₂ during H-absorption/desorption cycling, *Int. J. Hydrogen Energy* 32 (2007) 2914-2919.
76. M. Khristova, B. Ivanov, I. Spassova, T. Spassov, NO Reduction with CO on Copper and Ceria Oxides Supported on Alumina, *Catalysis Letters* 119, 1-2, (2007) 79-86.
77. A.Revesz, D. Fatay, T. Spassov, Hydriding kinetics of ball-milled nanocrystalline MgH₂ powders, *Journal of Materials Research* 22, 11(2007) 3144-3151.
78. L. Pramatarova, R. Dimitrova, E. Pecheva, T. Spassov, M. Dimitrova, Peculiarities of hydroxyapatite/nanodiamond composites as novel implants, *Journal of Physics: Conference Series* 93 (2007) 012049
79. Tsveta Himitliiska, Tony Spassov, Formation of nanostructured phases by thermal and chemical treatment of amorphous Ti- and Zr-based alloys, *Nanoscale Phenomena and Structures*, Ed. D. Kashchiev, Sofia 2008, Prof. Marin Drinov Academic Publishing House, ISBN: 978-954-322-244-5, p. 317-320.

80. Stanislava Todorova, Tony Spassov, Kinetics of nanocrystallization in Mg-based amorphous alloys, *Nanoscale Phenomena and Structures*, Ed. D. Kashchiev, Sofia 2008, Prof. Marin Drinov Academic Publishing House, ISBN: 978-954-322-244-5, p. 97-100.
81. P.Delchev, Tz.Himitlijska, T.Spassov, Hydrogen storage properties of Mg-10at.%LaNi₅ composites, synthesized by reactive ball milling, *Annuaire de L'Universite de Sofia* 100 (2008) 29-38.
82. Tz.Kolev, B.Koleva, T.Spassov, E. Cherneva, M. Spiteller, W.S. Sheldrick, H. Mayer-Figge, Synthesis, spectroscopic, thermal and structural elucidation of 5-amino-2-methoxypyridine ester amide of squaric acid ethyl ester: a new material with an infinite pseudo layered structure and potential NLO application, *Journal of Molecular Structure* 875, 1-3 (2008) 372-381.
83. Koleva, B.B., Kolev, T.M., Simeonov, V., Spassov, T., Spiteller, M., Linearly polarized IR-spectroscopy of partially oriented solids as a colloid suspension in nematic host: a tool for spectroscopic and structural elucidation of the embedded chemicals, *Journal of Inclusion Phenomena and Macrocyclic Chemistry* 61, 3-4 (2008) 319-333.
84. N.Drenchev, T.Spassov, I. Kanazirski, Electrochemical hydriding/dehydriding of nanocrystalline Mg_{2-x}Sn_xNi (x = 0, 0.1, 0.3), *Journal of Applied Electrochemistry* 38, 2 (2008) 197-202.
85. B.Drenchev, T.Spassov, D.Radev, Influence of alloying and microstructure on the electrochemical hydriding of TiNi ternary alloys, *Journal of Applied Electrochemistry* Volume 38, 4, (2008) 437-444.
86. N. Drenchev, T.Spassov, St.Bliznakov, Influence of tin on the electrochemical and gas phase hydrogen sorption in Mg_{2-x}Sn_xNi (x = 0, 0.1, 0.3), *Journal of Alloys and Compounds* 450, 1-2, (2008) 288-292.
87. T.Spassov, V. Rangelova, H. Chaney, S. Stoyanov, O. Petrov, Synthesis and hydrogen adsorption in Cu-based coordination framework materials, *Scripta Materialia* 58 (2008) 118-121.
88. B. Abrashev, S. Bliznakov, T. Spassov, A. Popov, Synthesis and study of structural, morphological and electrochemical properties of TiFe_{1-x}Co_x hydrogen storage alloys, *Journal of Physics: Conference Series* 113 (1) (2008) art. no. 012049.
89. S. Bliznakov, N. Dimitrov, T. Spassov, A. Popov, Metal hydride alloys for electrochemical energy source applications, *Mater. Res. Soc. Symp. Proc.* Vol. 1042 (2008) 59-63.
90. T.Spassov, S.Todorova, V.Petkov, Kinetics of Mg₆Ni nanocrystallization in amorphous Mg₈₃Ni₁₇, *J. Non-Cryst. Solids* 355 (1) (2009) 355 pp. 1-5.
91. B. Drenchev, T. Spassov, Influence of B substitution for Ti and Ni on the electrochemical hydriding of TiNi, *Journal of Alloys and Compounds* 474 (2009) 527-530.
92. S.Todorova, T.Spassov, Mg₆Ni formation in rapidly quenched amorphous Mg-Ni alloys, *Journal of Alloys and Compounds* 469 (2009) 193-196.
93. Tz.Himitlijska, T.Spassov, N. Dimitrov, Effect of SEM electron beam on the hydrogen desorption of pre-charged amorphous Cu₃₃Ti₆₇ alloys, *Materials Characterization* 60 (1) (2009) 26-29.
94. Tz.Himitlijska, T.Spassov, Hydrogen in amorphous TM₃₃Zr₆₇ (TM=Fe, Co, Ni) alloys, *J. Thermal Analysis and Calorimetry* 96, 2 (2009) 347-351.
95. Vesselina Rangelova, Maia Spassova, Tony Spassov, M-4,4'-(perfluoropropane -2,2-diyl)diphthalic acid coordination compounds (M=Cu, Co, Ce) for hydrogen storage, *Annuaire de L'Universite de Sofia* 101 (2009) 119-126.

96. T. Spassov, L. Lyubenova, Y. Liu, S. Bliznakov, M. Spassova, N. Dimitrov, Mechanochemical synthesis, thermal stability and selective electrochemical dissolution of Cu-Ag solid solutions, *Journal of Alloys and Compounds* 478 (1-2) (2009) 232-236.
97. T. Spassov, P. Delchev, P. Madjarov, M. Spassova, Ts. Himitliiska, Hydrogen storage in Mg–10at.% LaNi₅ nanocomposites, synthesized by ball milling at different conditions, *Journal of Alloys and Compounds* 495 (1) (2010) 149-153.
98. B. Abrashev, T. Spassov, S. Bliznakov, A. Popov, Microstructure and electrochemical hydriding/dehydriding properties of ball-milled TiFe-based alloys, *Int. Journal Hydrogen Energy* 35 (2010) 6332-6337.
99. E. Radeva, L. Pramatarova, E. Pecheva, T. Hikov, E. Iacob, L. Vanzetti, R. Dimitrova, N. Krasteva, T. Spassov, D. Fingarova, Study of Organosilicon Plasma Polymer Used in Composite Layers with Biomedical Application, *Proceedings of AIP* 10(1) (2010) 949-954.
100. L. Pramatarova, E. Pecheva, R. Dimitrova, T. Spassov, N. Krasteva, T. Hikov, D. Fingarova, D. Mitev, Hydroxyapatite Reinforced Coatings with Incorporated Detonationally Generated Nanodiamonds, *Proceedings of AIP* 10(1) (2010) 937-942.
101. Á. Révész, Zs. Kánya, T. Verebélyi, P.J. Szabó, A.P. Zhilyaev, T. Spassov, The effect of high-pressure torsion on the microstructure and hydrogen absorption kinetics of ball-milled Mg₇₀Ni₃₀, *Journal of Alloys and Compounds* 504 (2010) 83–88.
102. T. Spassov, Z. Zlatanova, M. Spassova, S. Todorova, Hydrogen sorption properties of ball-milled Mg-C nanocomposites, *International Journal of Hydrogen Energy* 35 (2010) 10396-10403.
103. N. Drenchev, E. Ivanova, M. Mihaylov, T. Spassov, K. Hadjiivanov, Coordination Chemistry of Copper Ions in a Basolite C300 MOF sample: an FTIR Spectroscopic Study of Adsorbed CO, *Current Issues in Organic Chemistry* eds. K. Hadjiivanov, V. Valtchev, S. Mintova, G. Vayssilov Heron Press, Sofia, 2010, 271-280.
104. L. Mihailov, T. Spassov, I. Kanazirski, I. Tsvetanov, Electrocatalytic behavior of Ni-based amorphous alloys for hydrogen evolution, *Journal of Materials Science* 46 (22) (2011) 7068-7073.
105. Z. Zlatanova, T. Spassov, G. Eggeler, M. Spassova, Synthesis and hydriding/dehydriding properties of Mg₂Ni-AB (AB=TiNi or TiFe) nanocomposites, *International Journal of Hydrogen Energy*, 36(13), (2011) 7559-7566.
106. L. Lyubenova, T. Spassov, M. Spassova, Amorphization and solid solution formation in Sn modified Cu-Ag alloys produced by ball milling, *Bulg. Chem. Comm.* 43 (2) (2011) 264.
107. T. Spassov, V. Rangelova, S. Todorova, P. Georgiev, Hydrogen Storage in Metal-Organic Microporous Structures, *Current Physical Chemistry* 2 (2) (2012) 162-177.
108. A. Révész, A. Kis-Tóth, L.K. Varga, E. Schafner, I. Bakonyi, T. Spassov, Hydrogen storage of melt-spun amorphous Mg 65Ni 20Cu 5Y 10 alloy deformed by high-pressure torsion, *International Journal of Hydrogen Energy*, 37 (7) (2012) 5769-5776.
109. L. Mihailov, T. Spassov, M. Bojinov, Effect of microstructure on the electrocatalytic activity for hydrogen evolution of amorphous and nanocrystalline Zr-Ni alloys, *International Journal of Hydrogen Energy* 37 (14) (2012) 10499-10506.
110. M. Redzeb, Z. Zlatanova, T. Spassov, Influence of boron on the hydriding of nanocrystalline Mg₂Ni, *Intermetallics* 34 (2013) 63-68.

111. Ádám Révész, Ágnes Kis-Tóth, Péter Szommer, Tony Spassov, Hydrogen storage, microstructure and mechanical properties of strained $\text{Mg}_{65}\text{Ni}_{20}\text{Cu}_5\text{Y}_{10}$ metallic glass, *Materials Science Forum* 729 (2013) 74-79
112. L. Mihailov, M. Redzeb, T. Spassov, Selective dissolution of amorphous and nanocrystalline Zr_2Ni , *Corrosion Science* 74 (2013) 308-313.
113. A. Revesz, M. Gajdics, T. Spassov, Microstructural evolution of ball-milled Mg- Ni powder during hydrogen sorption, *International Journal of Hydrogen Energy* 38 (20) (2013) 8342-8349.
114. M. Petrov, B. Katranchev, P. M. Rafailov, H. Naradikian, U. Dettlaff-Weglikowska, E. Keskinova and T. Spassov, Phases and properties of nanocomposites of hydrogen-bonded liquid crystals and carbon nanotubes, *Physical Review E* 88 (2013) 042503.
115. E. Grigorova, M. Spassova, M. Khristov, B. Tsyntsarski, T. Spassov, High-pressure DSC study on the hydriding and dehydriding of Mg/C nanocomposites, *J. Therm. Anal. Calorim.* April 2014, Volume 116, Issue 1, pp 265-272, DOI 10.1007/s10973-013-3574-5
116. Grigorova, E., Spassova, M., Spassov, T., Khristov, M., Hydrogen sorption properties of 90 wt% MgH_2 -10 wt% MeSi 2 (Me = Ti, Cr), *Journal of Materials Science* 49 (6) 2014, 2647-2652
117. Révész, Á., Kis-Tóth, Á., Varga, L.K., Lábár, J.L., Spassov, T., High glass forming ability correlated with microstructure and hydrogen storage properties of a Mg-Cu-Ag-Y glass, *International Journal of Hydrogen Energy* 39, Issue 17, 5 June 2014, Pages 9230-9240.
118. Á. Révész, M. Gajdics, L. K. Varga, T. Spassov, Hydrogenation of Nanocrystalline Mg_2Ni Alloy Prepared by High Energy Ball-Milling Followed by Equal-Channel Angular Pressing or Cold Rolling, *Advances in Science and Technology*, Vol. 93, pp. 112-117, 2014
119. Révész, A., Gajdics, M., Varga, L.K., Krállics, G., Péter, L., Spassov, T., Hydrogen storage of nanocrystalline Mg-Ni alloy processed by equal-channel angular pressing and cold rolling, *International Journal of Hydrogen Energy* 39, Issue 18, 15 June 2014, Pages 9911-9917.
120. Katranchev, B., Petrov, M. , Keskinova, E., Naradikian, H., Rafailov, P.M., Dettlaff-Weglikowska, U., Spassov, T., Liquid crystal nanocomposites produced by mixtures of hydrogen bonded achiral liquid crystals and functionalized carbon nanotubes, *Journal of Physics: Conference Series*, Volume 558, Issue 1, 2014, Article number 012024.
121. Panayotov, D., Mihaylov, M., Nihtianova, D., Spassov, T., Hadjiivanov, K., Spectral evidence for hydrogen-induced reversible segregation of CO adsorbed on titania-supported rhodium *Physical Chemistry Chemical Physics* 16, Issue 26, 14 July 2014, Pages 13136-13144.
<https://doi.org/10.1039/C4CP01136H>
122. L. Mihaylov, L. Lyubenova, Ts. Gerdjikov, D. Nihtianova, T. Spassov, Selective dissolution of amorphous Zr-Cu-Ni-Al alloys, *Corrosion Science* 94 (2015) 350–358;
doi:10.1016/j.corsci.2015.02.031
123. Hristina Stoyadinova, Zlatina Zlatanova, Maya Spassova, Tony Spassov, Mikhail Baklanov Influence of Milling Conditions on the Hydriding Properties of Mg-C Nanocomposites, *Journal of Nanomaterials*, Volume 2015, Article ID 418585, <http://dx.doi.org/10.1155/2015/418585>
124. St. Pereva, Ts. Himitliiska, T. Spassov, S. D. Stoyanov, L. N. Arnaudov, T. Dudev, Cyclodextrin-Based Solid–Gas Clathrates, *J. Agric. Food Chem.*, 2015, 63 (29), pp 6603–6613, DOI: 10.1021/acs.jafc.5b01357
125. D. Panayotov, E. Ivanova, M. Mihaylov, K. Chakarova, T. Spassov and K. Hadjiivanov

Hydrogen spillover on Rh/TiO₂: the FTIR study of donated electrons, co-adsorbed CO and H/D exchange, *Phys. Chem. Chem. Phys.*, 2015, 17, 20563-20573, DOI: 10.1039/C5CP03148F

126. S. Mihaylova, St. Todorova, V. Rangelova, T. Spassov, ADSORPTION PROPERTIES AND CHARACTERIZATION OF METAL-ORGANIC FRAMEWORKS (MOFS) SYNTHESIZED BY TWO DIFFERENT METHODS, *Nanoscience & Nanotechnology*, 15, No 2 eds. E. Balabanova, E. Mileva, Sofia, 2015, 28-30.

127. T. Spassov, S. Gyurov, G. Stefanov, A. Rangelov, L. Drenchev, K. Russew, Thermo-mechanical study of bulk glass forming Zr-Cu-Ni-Al alloys, *Journal of Non-Crystalline Solids* 443, 2016, 103-107.

128. Pereva, S., Sarafska, T., Bogdanova, S., Spassov, T., Efficiency of "cyclodextrin-ibuprofen" inclusion complex formation, *Journal of Drug Delivery Science and Technology* 35, 2016, 34-39.

129. Tzvetkov, G., Tsyntsarski, B., Balashev, K., Spassov, T., Microstructural investigations of carbon foams derived from modified coal-tar pitch, *Micron* 89, 2016, 34-42.

130. G. Tzvetkov, S. Mihaylova, K. Stoitchkova, P. Tzvetkov, T. Spassov, Mechanochemical and chemical activation of lignocellulosic material to prepare powdered activated carbons for adsorption applications, *Powder Technology* 299 (2016) 41–50.

131. B. Katranchev, M. Petrov, P. Rafailov, N. Todorov, E. Keskinova, H. Naradikian, T. Spassov, Ferroelectric state induced in mixture of dimer liquid crystal and perfluorooctanoic acid, *Molecular Crystals and Liquid Crystals* 632 (2016) 21-28.

132. E.M. Paschalidou, F. Celegato, F. Scaglione, P. Rizzi, L. Battezzati, A. Gebert, S. Oswald, U. Wolff, L. Mihaylov, T. Spassov, The mechanism of generating nanoporous Au by de-alloying amorphous alloys, *Acta Materialia* 119 (2016) 177-183.

133. Hr. Stoyadinova, Z. Zlatanova, M. Spassova, V. Rangelova, T. Spassov, Influence of Milling Time on the Hydriding Properties of Amorphous MgNi Alloys, *Comptes rendus de l'Academie bulgare des Sciences* Tome 69, No 9, 2016, 1137-1144.

134. Á. Révész, C. Szilágyi, T. Spassov, Hydrogen sorption of magnesium plates deformed by surface mechanical attrition treatment, *Bulgarian Chemical Communications*, Volume 48, Number 3 (pp. 469–475) 2016.

135. G. Tzvetkov, N. Kaneva, T. Spassov, Room-temperature fabrication of core-shell nano-ZnO/pollen grain biocomposite for adsorptive removal of organic dye from water, *Applied Surface Science*, Volume 400, 2017, Pages 481–491.

136. A. Rangelov, S. Stoyanov, L. Arnaudov, T. Spassov, Novel mechanochemical approach for wheat starch-LPC complex formation, *Journal of Cereal Science* 76, July 2017, Pages 72-75.

137. G. Tzvetkov, N. Kaneva, T. Spassov, Low-temperature Preparation of ZnO-coated Pollens and Their Photocatalytic Performance Under UV-Light, *Comptes rendus de l'Acad'emie bulgare des Sciences* Tome 70, No 6, 2017, Pages 785-794

138. Angelova S., Nikolova V., Pereva S., Spassov T., Dudev T., α -Cyclodextrin: How Effectively Can Its Hydrophobic Cavity Be Hydrated?, *J Phys Chem B*. 2017, 121 (39) 9260-9267. doi: 10.1021/acs.jpcc.7b04501.

139. A. Rangelov, L. Arnaudov, S. Stoyanov, T. Spassov, GELATINIZATION OF INDUSTRIAL STARCHES STUDIED BY DSC AND TG, *Bulgarian Chemical Communications* 2017, 49 (2) 422-429.

140. G. Tzvetkov, T. Spassov, N. Kaneva, B. Tsyntsarski, Mesoporous cellular-structured carbons derived from glucose-fructose syrup and their adsorption properties towards Acetaminophen, *Functional Materials Letters* Vol. 10, No. 6 (2017) 1750080. DOI: 10.1142/S1793604717500801
141. T Spassov, G Stefanov, S Gyurov, Viscous flow features of amorphous Zr 65 (Ni, Pd) 35 alloy, *Prace Instytutu Odlewnictwa Transactions of Foundry Research Institute* 57 (2017) 327-331.
142. B. Abrashev, T. Spassov, M. Pandev, S. Vassilev, A. Popov, Hydrogen sorption and electrochemical properties of Ti-Fe based alloys synthesized by mechanical alloying, *BULGARIAN CHEMICAL COMMUNICATIONS* 49 (2017) 247-253.
143. Mandana Ershad, M. Inês G. S. Almeida, Tony G. Spassov, Robert W. Catrall, Spas D. Kolev, Polymer inclusion membranes (PIMs) containing purified dinonylnaphthalene sulfonic acid (DNNS): performance and selectivity, *Separation and Purification Technology*, Volume 195, 29 April 2018, Pages 446-452.
144. T. Spassov, L. Mihailov, L. Lyubenova, Micro- and nanoporous metals by selective dissolution of alloys, *Journal of the Technical University of Gabrovo*, 56 (2018) 20-25.
145. G. Tzvetkov, M. Tsvetkov, T. Spassov, Ammonia-evaporation-induced construction of threedimensional NiO/g-C₃N₄ composite with enhanced adsorption and visible light-driven photocatalytic performance, *Superlattices and Microstructures* 119 (2018) 122e133
146. L. Mihaylov, A. Inoue, L. Lyubenova, D. Nihitjanova, T. Spassov, Nanoporous metallic structures by de-alloying bulk glass forming Zr-based alloys, *Intermetallics* 98 (2018) 148-153.
147. C. Specht, R. Catrall, T. Spassov, M. Spassova, S. Kolev, Polymer Inclusion Membranes as Substrates for Controlled In-Situ Gold Nanoparticle Synthesis, *Reactive and Functional Polymers* 2018, 130 (2018) 81-90. <https://doi.org/10.1016/j.reactfunctpolym.2018.06.005>
148. St. Todorova, V. Rangelova, V. Koleva, T. Spassov, Influence of Milling Conditions on the Behavior of AB₅-Type Materials as Metal Hydride Electrodes, *Journal of Nanomaterials*, Volume 2019, Article ID 6258484, <https://doi.org/10.1155/2019/6258484>.
149. G. Tzvetkov, M. Nedyalkova, J. Zaharieva, T. Spassov, B. Tsyntsarski, Tuning the photocatalytic activity of carbohydrate-derived humins via ball milling: Insights by experimental and chemometrics approach, *Powder Technology* Volume 355, October 2019, Pages 83-92, <https://doi.org/10.1016/j.powtec.2019.07.019>
150. Á. Révész, **T. Spassov**, V. Kovács Kis, E. Schafler, M. Gajdics, The influence of preparation conditions on the hydrogen sorption of Mg-Nb₂O₅-CNT produced by ball milling and subsequent high-pressure torsion, Proceedings of The 25th International Symposium on Metastable, Amorphous and Nanostructured Materials (**ISMANAM 2018**), 2-6.07.2018, Rome, Italy, Journal of Nanoscience and Nanotechnology, Volume 20, Number 7, 4587-4590, 2018 <https://doi.org/10.1166/jnn.2020.17871>
151. Ludmil Drenchev , Tony Spasov and Stoyko Gyurov, PREPARATION AND CHARACTERIZATION OF AMORPHOUS AND NANOCRYSTALLINE PALLADIUM ALLOYS, *Engineering Sciences*, LV, 2018, No. 4, 23-36.
152. Xiaopeng Xiong, M. Inês G.S. Almeida, Silvia Simeonova, Tony G. Spassov, Robert W. Catrall, Spas D. Kolev, The potential of polystyrene-block-polybutadiene-block-polystyrene triblock co-polymer as a base-polymer of polymer inclusion membranes (PIMs), *Separation and Purification Technology* 229 (2019) 115800.
153. St. Pereva, Ts. Sarafska, V. Petrov, M. Spassova, S. Bogdanova, T. Spassov, Ibuprofen/β-CD complexation by controlled annealing of their mechanical mixture, *Bulgarian Chemical Communications*, Volume 51, Issue 3 (2019) 326 - 331, DOI: 10.34049/bcc.51.3.4907.

154. L. Mihaylov, T. Boyadzhieva, R. Tomov, V. Kumar, V. Koleva, R. Stoyanova, T. Spassov, LiMnPO₄-Olivine Deposited on Nanoporous Alloy as Additive-Free Electrodes for Lithium Ion Batteries, *Dalton Trans.*, 2019, 48, 17037-17044.
155. Ludmil Drenchev, Tony Spassov, Georgi Stefanov, Akihisa Inoue, Stoyko Gyurov, Static and Dynamic Thermal Properties of a Pd₄₀Ni₄₀Si₂₀ Glassy Alloy, *Metals* 2019, 9, 1157; doi:10.3390/met9111157.
156. Roumen Tsekov and Tony Spassov, Universality in Glass Transitions, *Comptes rendus de l'Académie bulgare des sciences: sciences mathématiques et naturelles* 2019, 72(12):1650-1653.
157. Stiliyana Pereva, Valya Nikolova, Silvia Angelova, Tony Spassov and Todor Dudev, Water inside β -cyclodextrin cavity: amount, stability and mechanism of binding, *Beilstein J. Org. Chem.* 2019, 15, 1592–1600. <https://doi.org/10.3762%2Fbjoc.15.163>
158. L. Mihaylov, E. Vassileva, L. Lyubenova, A. Inoue, T. Spassov, "Synthesis and catalytic properties of nanoporous Pd-based alloys: chemical vs. electrochemical de-alloying of Pd-Ni-Si glasses," *Proc. SPIE 11332, International Conference on Quantum, Nonlinear, and Nanophotonics* 2019 (ICQNN 2019), 1133206 (30 December 2019); doi: 10.1117/12.2553420.
159. George Tzvetkov, Joana Zaharieva, Martin Tsvetkov, Tony Spassov, "A novel construction of Z-scheme CuO/g-C₃N₄ heterojunction for visible-light-driven photocatalysis in natural seawater," *Proc. SPIE 11332, International Conference on Quantum, Nonlinear, and Nanophotonics* 2019 (ICQNN 2019), 113320B (30 December 2019); doi: 10.1117/12.2552240
160. Stiliyana Pereva, Valya Nikolova, Tsveta Sarafska, Silvia Angelova, Tony Spassov, Todor Dudev, Inclusion complexes of ibuprofen and β -cyclodextrin: Supramolecular structure and stability, *Journal of Molecular Structure* 1205 (2020) 127575. <https://doi.org/10.1016/j.molstruc.2019.127575>.
161. Marcell Gajdics, Tony Spassov, Viktoria Kovacs Kis, Erhard Schafner, Adam Revesz, Microstructural and morphological investigations on Mg-Nb₂O₅-CNT nanocomposites processed by high-pressure torsion for hydrogen storage applications, *International Journal of Hydrogen Energy* 45 (2020) 7917-7928, <https://doi.org/10.1016/j.ijhydene.2019.06.165>.
162. Marcell Gajdics, Tony Spassov, Viktória Kovács Kis, Ferenc Béke, Zoltán Novák, Erhard Schafner and Ádám Révész, Microstructural Investigation of Nanocrystalline Hydrogen-Storing Mg-Titanate Nanotube Composites Processed by High-Pressure Torsion, *Energies* 2020, 13, 563; doi:10.3390/en13030563.
163. Révész, Á.; Spassov, T.; Kis, V.K.; Schafner, E.; Gajdics, M. The Influence of Preparation Conditions on the Hydrogen Sorption of Mg-Nb₂O₅-CNT Produced by Ball Milling and Subsequent High-Pressure Torsion. *J. Nanosci. Nanotechnol.* 2020, doi:10.1166/jnn.2020.17871.
164. Tony Spassov, George Tzvetkov, Lyudmil Lyutov, Novel spherical simonkolleite nanoparticles and their promotional effect on the thermal decomposition of ammonium perchlorate, *Vacuum* 175 (2020) 109285, <https://doi.org/10.1016/j.vacuum.2020.109285>.
165. George Tzvetkov, Martin Tsvetkov, Tony Spassov, Hierarchical CuO microparticles constructed via underwater Leidenfrost process and their Fenton-like catalytic activity, *Materials Letters* 272 (2020) 127840, <https://doi.org/10.1016/j.matlet.2020.127840>.
66. Alcantara, H.J.P., Jativa, F., Doronila, A.I., Anderson, C.W.N., Siegele, R., Spassov, T.G., Sanchez-Palacios, J.T., Boughton, B.A., Kolev, S.D., Localization of mercury and gold in cassava (*Manihot esculenta* Crantz), *Environmental Science and Pollution Research* 27, (2020) 18498–18509 <https://doi.org/10.1007/s11356-020-08285-3>

167. St. Todorova, V. Rangelova, L. Mihaylov, T. Spassov, Effect of hydrogen induced decrepitation on the hydrogen sorption properties of MmNi_5 , *Int. J. Electrochem. Sci.*, 15 (2020) 4900 – 4907, doi: 10.20964/2020.06.29
168. Stoyko Gyurov, Tony Spassov, Jordan Georgiev, Georgi Stefanov, Nikolay Marinkov, Daniela Kovacheva, Lyudmil Drenchev, Bulk Amorphous Foam of $(\text{Pd}_{48}\text{Cu}_{20}\text{Ni}_6\text{Sb}_{26})_{96}\text{Zr}_4$ Alloy, *Comptes rendus de l'Académie bulgare des Sciences* 73 (11) (2020) 1517-1523, DOI:10.7546/CRABS.2020.11.05
169. George Tzvetkov, Martin Tsvetkov, Tony Spassov On-surface Underwater Leidenfrost-assisted Preparation of ZnO-coated Cellulosic Nonwoven Fabric with UV-blocking Property, *Comptes rendus de l'Académie bulgare des Sciences* 73 (11) (2020) 1524-1530, DOI:10.7546/CRABS.2020.11.06
170. Todorova, S.; Abrashev, B.; Rangelova, V.; Mihaylov, L.; Vassileva, E.; Petrov, K.; Spassov, T. Hydrogen Gas Phase and Electrochemical Hydriding of $\text{LaNi}_5\text{-xMx}$ ($\text{M} = \text{Sn, Co, Al}$) Alloys. *Materials* 2021, 14, 14. <https://dx.doi.org/10.3390/ma14010014>
171. Tzvetkov, G., Spassov, T., Tsvetkov, M., Rangelova, V., Mesoporous cauliflower-like CuO/Cu(OH)_2 hierarchical structures as an excellent catalyst for ammonium perchlorate thermal decomposition, *Materials Letters* 291 (2021), Article number 129534. <https://doi.org/10.1016/j.matlet.2021.129534>
172. Stiliyana Pereva, Tsveta Sarafska, Vesselin Petrov, Silvia Angelova, Tony Spassov, Inclusion complexes of (*S*)-naproxen and native cyclodextrins: supramolecular structure and stability, *Journal of Molecular Structure* (2021) 130218. <https://doi.org/10.1016/j.molstruc.2021.130218>
173. Eli Grigorova, Petar Tzvetkov, Stanislava Todorova, Pavel Markov and Tony Spassov, Facilitated Synthesis of Mg_2Ni Based Composites with Attractive Hydrogen Sorption Properties, *Materials* 2021, 14, 1936. <https://doi.org/10.3390/ma14081936>.
174. E.Vassileva, L.Mihaylov, T.Boyadjieva, V.Koleva, R.Stoyanova, T.Spassov, Porous Sn obtained by selective electrochemical dissolution of melt-spun $\text{Zn}_{70}\text{Sn}_{30}$ alloys with lithium and sodium storage properties, *Journal of Alloys and Compounds* 877, 2021, 160319, <https://doi.org/10.1016/j.jallcom.2021.160319>.
175. George Tzvetkov, Martin Tsvetkov, Tony Spassov, Facile preparation of edelweiss-like ZnO microparticles with strong UV-violet emission, *Vacuum* 192 (2021) 110457. <https://doi.org/10.1016/j.vacuum.2021.110457>
176. Ádám Révész, Dániel G. Fodor, György Krállics, Tony Spassov, and Marcell Gajdics, Structural and hydrogen storage characterization of nanocrystalline magnesium synthesized by ECAP and catalyzed by different nanotube additives, *Reviews on Advanced Materials Science* 2021; 60: 884–893.
177. Révész, Á., Gajdics, M., Alifah, M., Kovács Kis, V., Schafner, E., Varga, L., Todorova, S., Spassov, T., Baricco, M., Thermal, Microstructural and Electrochemical Hydriding Performance of a $\text{Mg}_{65}\text{Ni}_{20}\text{Cu}_5\text{Y}_{10}$ Metallic Glass Catalyzed by CNT and Processed by High-Pressure Torsion, *Energies* 15(15), 2022, 5710, DOI: 10.3390/en15155710
178. R.I. Tomov, L. Mihaylov, L.R. Bird, Ev. Vassileva, R.V. Kumar, M. Chhowalla and T. Spassov, On the performance of a hierarchically porous $\text{Ag}_2\text{S-Cu}_x\text{S}$ electrode in Li-ion batteries, *Dalton Trans.*, 2022, <https://doi.org/10.1039/D2DT02880H>.
179. S. Gutzov, D. Shandurkov, N. Danchova, V. Petrov, T. Spassov, Hybrid composites based on aerogels: Preparation, structure and tunable luminescence, *Journal of Luminescence* 251 (2022) 119171, <https://doi.org/10.1016/j.jlumin.2022.119171>
180. Vassileva, E., Mihaylov, L., Spassova, M., Spassov, T., Porous metallic structures by de-alloying microcrystalline melt-spun ternary $\text{Zn}_{70}(\text{Sn,Bi})_{30}$, *Journal of Porous Materials* 2023, 30(2), pp. 485-492 DOI:10.1007/s10934-022-01361-8.

181. Lyubenova, L., Rangelova, V., Spassova, M., Spassov, T., Glass forming ability of Zr-based Zr–Cu–Ni–Al–(Ag) alloys, *Journal of Thermal Analysis and Calorimetry*, 148(10), pp. 3975-3980, 2023.
182. Révész, Á., Paramonov, R., Spassov, T., Gajdics, M., Microstructure and Hydrogen Storage Performance of Ball-Milled MgH₂ Catalyzed by FeTi, *Energies* 16(3),1061, 2023.
183. Todorova, S., Abrashev, B., Rangelova, V., Vassileva, E., Spassov, T., EFFECT OF LOW Al CONTENT ON THE ELECTRODE PERFORMANCE OF LaNi_{5-x}Al_x HYDROGEN STORAGE ALLOYS, *Journal of Chemical Technology and Metallurgy* 58(1), pp. 200-207, 2023.
184. Wu, N., Almeida, M.I.G.S., Simeonova, S., Spassov, T., Datcheva, M., Kolev, S.D., Preparation and characterization of very thin polymer inclusion membranes (PIMs) and their application to the transport of thiocyanate, *Journal of Membrane Science* 668,121249, 2023.
185. Tzvetkov G., Spassov T., Rangelova V, FACILE PREPARATION OF HUMINS-LOADED GRAPHITIC CARBON NITRIDE WITH IMPROVED CATALYTIC ACTIVITY ON THE THERMAL DECOMPOSITION OF AMMONIUM PERCHLORATE, *Comptes Rendus de L'Academie Bulgare des Sciences*, 76 (6) Pages 890 – 896, 2023. DOI: 10.7546/CRABS.2023.06.08
186. Shandurkov, D., Danchova, N., Spassov, T., (...), Tsekov, R., Gutzov, S., Silica Gels Doped with Gold Nanoparticles: Preparation, Structure and Optical Properties, *Gels* 9(8), 663 (2023).
187. Ev. Vassileva, L. Mihaylov, L. Lyubenova, T. Spassov, F. Scaglione, P. Rizzi, Porous metallic structures by dealloying amorphous alloys, *Journal of Alloys and Compounds* 969 (2023) 172417.
<https://doi.org/10.1016/j.jallcom.2023.172417>
188. Grigorova E., Todorova S., Tzvetkov P., Spassov T., Hydrogen sorption and electrochemical hydriding of Mg_{2.1}Ni_{0.7}V_{0.3} (2023) *Bulgarian Chemical Communications*, 55 (3), 183 – 187.
DOI: 10.34049/bcc.55.3.5498
189. Abrashev, B., Terziev, V., Todorova, S., Spassov, T. Attractive electrode properties of LaNi_{4.5}Co_{0.4}Al_{0.1} hydrogen-absorbing alloy. *J Solid State Electrochem* 28(5), 1671-1680 (2024).
<https://doi.org/10.1007/s10008-023-05735-z>
190. Sarafska, T., Ivanova, S., Dudev, T., Petrov, V., Spassov, T., Beta-cyclodextrin – Citric acid complexation by ball milling and annealing, *Journal of Molecular Structure* 1295,136701 (2024).
[10.1016/j.molstruc.2023.136701](https://doi.org/10.1016/j.molstruc.2023.136701)
191. V. Rangelova, M. Spassova, G. Tzvetkov, T. Spassov, P. Tzvetkov, SAND-ROSE SHAPED β-Ni(OH)₂ MICROSPHERES: A HIGH EFFICIENT ADDITIVE IN THE THERMAL DECOMPOSITION OF AMMONIUM PERCHLORATE, *Journal of Chemical Technology and Metallurgy* 59 (1) 2024, 113-118.
DOI: 10.59957/jctm.v59.i1.2024.13
192. Lea Kukoc-Modun, Tomislav Kraljevic, Dimitrios Tsikas, Tony G. Spassov, Spas D. Kolev, Determination of N-Acetyl-L-cysteine Ethyl Ester (NACET) by Sequential Injection Analysis, *Sensors* 2024, 24, 312. <https://doi.org/10.3390/s24020312>
193. Dimitar Shandurkov, Nina Danchova, Tony Spassov, Vesselin Petrov and Stoyan Gutzov, Luminescence of Binary-Doped Silica Aerogel Powders: A Two-Step Sol-Gel Approach, *Gels* 2024, 10, 104.
<https://doi.org/10.3390/gels10020104>
194. Roman Paramonov, Tony Spassov, Péter Nagy, Adam Revesz, Synergetic Effect of FeTi in Enhancing the Hydrogen-Storage Kinetics of Nanocrystalline MgH₂, *Energies* 2024, 17(4),794.
<https://doi.org/10.3390/en17040794>

195. Todor Dudev and Tony Spassov, Inclusion Complexes between β -Cyclodextrin and Gaseous Substances - N_2O , CO_2 , HCN , NO_2 , SO_2 , CH_4 and $CH_3CH_2CH_3$: Role of the Host's Cavity Hydration, *Inorganics* 2024, 12, 110. <https://doi.org/10.3390/inorganics12040110>
196. Tsveta Sarafska, Stanislava Ivanova, Todor Dudev, Christo Tzachev, Vesselin Petrov and Tony Spassov, Enhanced Solubility of Ibuprofen by Complexation, with β -Cyclodextrin and Citric Acid, *Molecules* 2024, 29, 1650. <https://doi.org/10.3390/molecules29071650>
197. N. Uhlikova, I. McKelvie, S.D. Kolev, E. Vassileva, T.G. Spassov, M.I.G.S. Almeida, Preconcentrating extractive polymeric network in paper-based sensing of copper, *Microchemical Journal* (2024), doi: <https://doi.org/10.1016/j.microc.2024.110744>
198. Tsveta P. Sarafska, Maya I. Spassova, Todor M. Dudev, Stilian M. Pereva, Simeon D. Stoyanov, Tony G. Spassov, Easy and effective method for α -CD: N_2O host-guest complex formation, *Int. J. Mol. Sci.* 2024, 25, 5472. <https://doi.org/10.3390/ijms25105472>

Патент:

199. Георги Цветанов Цветков, Тони Георгиев Спасов, Мариянка Николова Гаджева, ПОЛИФУРАНОВ ПЕНЕСТ МАТЕРИАЛ И МЕТОД ЗА ПОЛУЧАВАНЕТО МУ, BG 67251 B1 – патент 2021.

Научно-популярни статии:

200. Тони Спасов. Наноструктури за съхранение на водород, екологично чисто и възобновимо гориво. *сп. Природа* 2013, бр. 2, стр. 42-49.

Учебници и учебни помагала:

Стоян Будуров, Тони Спасов

“Увод в химията на твърдото тяло”

Унив. Издателство “Н.Рилски”, Благоевград, 1997, ISBN 954-680-080-5

Светла Богданова, Цвета Сарафска, Тони Спасов

„Ръководство по фармакокинетика“

Унив. Издателство „Св. Климент Охридски“, София, 2017, ISBN 978-954-07-4218-2
