

## **J. Banio mokslo darbų sąrašas**

1. V.Kalesinskas and J.Banys, "Device for measurements of complex reflection coefficient," Authors license Nr. 1385088 (1986).
2. J.Banys and A.Zukauskas, "Light scattering spectra of  $Sb_2S_3$ ," Lithuanian J. of Physics, **27**, 214-219 (1987).
3. J.Banys, A.Brilingas, J.Grugas and G.Guseinov, "Microwave dielectric dispersion in  $TlGaSe_2$ ," Sov.Phys. Solid State, **29**, 3324-3329 (1987).
4. J.Banys, J.Grugas and G.Guseinov, "Microwave dielectric dispersion in  $TlInS_2$ ," Ferroelectrics, **82**, 3-9 (1988).
5. J.Banys, J.Grugas, N.Kolpakova, R.Sobiestianskas and E.Sher, "Microwave study of the ferroelectric phase transitions in  $Cd_2Nb_2O_7$ ," Lithuanian J. of Physics, **29**, 209-215 (1989).
6. J.Banys, J.Grugas and G.Guseinov, "Microwave investigation of defect influence on soft mode parameters in  $TlInS_2$ ," Lithuanian J. of Physics," **29**, 348-356 (1989).
7. J.Banys, J.Grugas and A.Brilingas, "Pinning effect on microwave dielectric properties and soft mode in  $TlInS_2$  and  $TlGaSe_2$  ferroelectrics," Phase Transitions, **20**, 211-229 (1990).
8. D.F.McMorrow, R.A.Cowley, P.D.Hatton and J.Banys, "The structure of the paraelectric and incommensurate phases of  $TlGaSe_2$ ," J.Phys.: Condens. Matter, **2**, 3699-3712 (1990).
9. J.Banys, F.R.Wondre and G.Guseinov, "Powder diffraction study of  $TlGaTe_2$ ,  $TlInTe_2$  and  $TlInSe_2$ ," Materials letters, **9**, 269-274 (1990).
10. J.Banys, A.Brilingas and F.Wondre, "Investigation of structural phase transitions of ferroelectric crystals  $TlAB_2$ ," Proceedings of the conference "Real structure and properties of acentric crystals", Russia, Aleksandrov, p. 137-143 (1990).
11. J.Banys, A.M.Glazer, F.R.Wondre and J.Grugas, "Study of structural phase transitions in  $TlAB_2$ ," Ferroelectrics, **110**, 157-162 (1990).
12. J.Banys, J.Grugas and F.Wondre, "Dielectric relaxation in  $TlInS_2$  crystals with admixtures," Lithuanian J. of Physics, **31**, 454-460 (1991).
13. J.Banys, J.Grugas, S.Rudys and I.Kosakovskis, "Investigation of  $TlGaSe_2$  crystal dielectric properties in the frequency range 80-120 GHz," Lithuanian J. of Physics, **32**, 260-266 (1992).
14. J.Grugas, J.Banys and R.Sobiestianskas, "Microwave and millimetre wave spectroscopy of fundamental dielectric dispersion in new ferroelectrics," Ferroelectrics, **133**, 199-203 (1992).
15. J.Banys, J.Grugas, V.Valiukėnas and K.Wacker, "Microwave dielectric properties of  $TlSbSe_2$  crystals," Solid State Communications, **82**, 633-636 (1992).
16. J.Banys, J.Grugas, S.Lapinskas, Z.Lileikis and T.Yagi, "Influence of the external electric field on the dielectric properties of  $Ca_2Cr(C_2D_5CO_2)_6$ ," Phys.stat.sol.(a), **132**, 191-196 (1992).
17. K.Wacker, M.Fiederle, M.Salk, J.Banys, J.Grugas and V.Valiukėnas, "Zur anisotropie der Elektrischen und dielektrischen Eigenschaften von  $TlSbSe_2$  - kristallen," Deutschen Gesellschaft fur Kristallographie, Mainz, Germany, Z.Kristallogr. Suppl. Issue Nr.5, 257 (1992).

- 18.J.Banys and J.Grugas, "Dielectric properties of TlInS<sub>2</sub> with FeSe<sub>2</sub> admixture. Influence of an external electric field," Phys.stat.sol. (a), **136**, 235-240 (1993).
19. J.Banys, C.Klimm, G.Völkel, H.Bauch and A.Klöpperpieper, "Proton-glass behaviour in solid solution of (betaine phosphate)<sub>0.15</sub>(Betaine phosphite)<sub>0.85</sub>," Phys.Rev.B, **50**, 16751-16753 (1994).
20. J.Banys, J.Grugas, R.Sobiestianskas and A.Brilingas, "Microwave dielectric dispersion in Tl(InS<sub>2</sub>)<sub>0.985</sub>(FeSe<sub>2</sub>)<sub>0.015</sub>," Ferroelectrics Letters, **18**, 209-214 (1994).
21. A.Pöpll, J.Banys, G.Völkel, J.Hoentsch, S.Orlinskii and A.Klöpperpieper, "Electron spin relaxation of the PO<sub>3</sub><sup>2-</sup> radical in ferroelectric betaine phosphite and in the proton glass betaine phosphate/betaine phosphite mixed crystals," Extended abstracts of the XXVII congress AMPERE "Magnetic Resonance and Related Phenomena", Kazan, Russia, 490 - 491 (1994).
22. V.Valevichius, V.Samulionis, J.Banys, J.Grugas and T.Yagi, "Ultrasonic study of ferroelectric phase transition in DDSP," Ferroelectrics, **156**, 365-370 (1994).
23. V.Valevichius, V.Samulionis and J.Banys, "Ultrasonic dispersion in the phase transitions region of ferroelectric materials," Journal of alloys and compounds, **211/212**, 369-373 (1994).
24. R.Sobiestianskas, J.Banys, J.Grugas, S.Dacko and Z.Czapla, "Microwave dielectric dispersion in RbHSeO<sub>4</sub>," Ferroelectrics Letters, **18**, 39-44 (1994).
25. A.Pöpll, J.Banys, L.Kevan and A.Klöpperpieper, "Determination of the deuterium content of deuterated betaine arsenate by means of electron spin echo envelope modulation," J.Appl.Magn.Reson., **7**, 449-458 (1994).
26. D.Klimm, C.Klimm and J.Banys, "Detection of the local phase transition in GaP by dielectric measurements," Phys.stat.sol. (a), **148**, K63-K73 (1995).
27. H.Bauch, J.Banys, R.Böttcher, C.Klimm, A.Klöpperpieper and G.Völkel, "Anomalies of the low frequency dielectric dispersion in Betaine phosphite," Phys.stat.sol. (b), **187**, K81-K84 (1995).
28. J.Banys, R.Sobiestianskas and A.Brilingas, "Microwave dielectric investigation of the phase transition in the BCCD at T<sub>i</sub>," Phys.stat.sol. (a), **147**, K103-K105 (1995).
29. H.Bauch, J.Banys, A.Pöpll, G.Völkel, A.Klöpperpieper and C.Klimm, "Structural phase transitions in deuterated betaine phosphite studied by dielectric and electron paramagnetic resonance methods," Ferroelectrics, **163**, 59-68 (1995).
30. J.Banys, J.Hoentsch, A.Pöpll, S.Orlinskii, G.Völkel and A.Klöpperpieper, "Electron spin relaxation of the PO<sub>3</sub><sup>2-</sup> radical in solid solutions (betaine phosphate)<sub>x</sub>(betaine phosphite)<sub>1-x</sub>," Extended abstracts of the 12th Specialized Colloque AMPERE "Dynamics of partially disordered condensed matter", Corfu, Greece, 127 - 128 (1995).
31. J.Banys, C.Klimm and G.Völkel, "Dielectric properties of deuterated betaine phosphite near the ferroelectric phase transition," Phys.stat.sol. (b), 198, K1-K3 (1996).
32. J.Banys, A.Pöpll, G.Völkel, J.Simon, J.Hoentsch and A. Klöpperpieper, "Electron spin relaxation of the PO<sub>3</sub><sup>2-</sup> radical in mixed (betaine phosphate)<sub>0.95</sub>(betaine phosphite)<sub>0.05</sub> crystal," Lithuanian J. of Physics, **36**, 409 - 412 (1996).
33. V.Samulionis, V.Valevichius, J.Banys and A.Brilingas, "Ultrasonic studies of incommensurate phase transitions," Journal de Physique IV, **6**, 405 -408 (1996).

34. J.Banys, R.Sobiestianskas, G.Völkel, C.Klimm and A.Klöpperpieper, "Microwave dielectric dispersion in deuterated betaine phosphite," Phys.stat.sol. (a), **155**, 541-545 (1996).
35. J.Banys, C.Klimm, G.Völkel, R.Böttcher, H.Bauch and A.Klöpperpieper, "Proton glass behavior in solid solution of  $\gamma$ -irradiated betaine phosphate<sub>0.15</sub> betaine phosphite<sub>0.85</sub>," J.Phys.: Condens. Matter, **8**, L245-251 (1996).
36. J.Simon, J.Banys, J.Hoentsch, G.Völkel, R.Böttcher, A.Hofstaetter and A.Scharmann, "Indications of a ferroelectric phase transition in CaMoO<sub>4</sub> from pulsed electron paramagnetic resonance and dielectric studies," J.Phys.: Condens. Matter, **8**, L359 - 362 (1996).
37. J.Banys, C.Klimm, G.Völkel, R.Böttcher, J.Simon, H.Bauch and A.Klöpperpieper, "Dielectric investigation of a solid solution of deuterated betaine phosphate<sub>0.95</sub> betaine phosphite<sub>0.05</sub>," J.Phys.: Condens. Matter, **8**, L681 - 684 (1996).
38. H.Bauch, G.Völkel, R.Böttcher, A.Pöpll, H.Schäfer, J.Banys and A.Klöpperpieper, "ENDOR and pulsed ESR study of proton glass behavior in the mixed crystal (betaine phosphate)<sub>0.15</sub>(betaine phosphite)<sub>0.85</sub>," Phys.Rev. B **54**, 9162 -9173 (1996).
39. G.Völkel, H.Bauch, R.Böttcher, A.Pöpll, H.Schäfer, J.Banys and A.Klöpperpieper, "An ENDOR and pulsed EPR study of proton glass behavior in the mixed crystal (betaine phosphate)<sub>0.15</sub>(betaine phosphite)<sub>0.85</sub>," Extended abstracts of the 28th congress AMPERE "Magnetic Resonance and Related Phenomena", Canterbury, Great Britain, 122 - 123 (1996).
40. J.Simon, J.Banys, J.Hoentsch, G.Völkel, R.Böttcher, A.Hofstaeter and A.Scharmann, "Indications of a ferroelastic phase transition in CaMoO<sub>4</sub> and CaWO<sub>4</sub> from pulsed mEPR and dielectric studies," Extended abstracts of the 28th congress AMPERE "Magnetic Resonance and Related Phenomena", Canterbury, Great Britain, 173 - 174 (1996).
41. V.Samulionis, V.Valevicius, J.Banys and S.Kamba, "Critical ultrasonic behavior near phase transitions in BCCD crystals," Ferroelectrics, 183, 225 - 234 (1996).
42. J.Grigas, R.Mizaras, J.Banys, A.Brilingas and B.Jaselskis, "Permittivity and ionic conductivity of the xenon compound Na<sub>4</sub>XeO<sub>6</sub> 8H<sub>2</sub>O," Lithuanian J. of Physics, **36**, 413 - 416, (1996).
43. J.Banys, R.Sobiestianskas, C.Klimm and G.Völkel, "Ferroelectric properties of deuterated betaine phosphite near the ferroelectric phase transition," Lithuanian J. of Physics, **37**, 505 - 507 (1997).
44. R.Mizaras, J.Banys and A.I.Baranov, "Dielectric investigation of glass behavior in Cs<sub>5</sub>H<sub>3</sub>(SO<sub>4</sub>)<sub>4</sub>H<sub>2</sub>O crystal," Lithuanian J. of Physics, **37**, 582 - 585 (1997).
45. R.Mizaras, M.Takashige, J.Banys, S.Kojima, J.Grigas, S.I.Hamazaki and A.Brilingas, "Dielectric relaxation in Ba<sub>2</sub>NaNb<sub>5(1-x)</sub>Ta<sub>5x</sub>O<sub>15</sub> single crystals," Journal of the Physical Society of Japan, **66**, 2881 - 2885 (1997).
46. J.Banys, C.Klimm, G.Völkel and A.Klöpperpieper, "Proton glass behavior in solid solution of  $\gamma$  - irradiated deuterated betaine phosphate<sub>0.15</sub> betaine phosphite<sub>0.85</sub>. Influence of the external bias field," Lithuanian J. of Physics, **37**, 402 - 407 (1997).
47. J.Banys, C.Klimm, G.Völkel, A.Kajokas and A.Klöpperpieper, "Proton glass behavior in a solid solution of  $\gamma$  - irradiated deuterated betaine phosphate<sub>0.15</sub> betaine phosphite<sub>0.85</sub>," J.Phys.: Condens. Matter, **9**, L7 - 12 (1997).

48. V.Samulionis, J.Banys, G.Völkel and A.Klöpperpieper, "Ultrasonic anomalies in deuterated betaine phosphite near the ferroelectric phase transition," phys. stat. sol (a), **168**, 535 - 541 (1998).
49. J.Banys, A.Kajokas, C.Klimm, G.Völkel and A.Klöpperpieper, "Dielectric investigation of proton glass behavior in a solid solution of deuterated (betaine phosphate)<sub>0.01</sub> (betaine phosphite)<sub>0.99</sub>," J.Phys.: Condens. Matter, **10**, 8389 - 8394 (1998).
50. P.Kundrotas, J.Banys, C.Klimm, G.Völkel and A.Rosengren, "Dielectric measurements and Monte Carlo studies of mixed crystals (betaine phosphate)<sub>x</sub>(betaine phosphite)<sub>1-x</sub>," Lithuanian J. of Physics, **38**, 184 - 190, (1998).
51. J. Banys, G.Völkel, A.Pöpl and J.Simon, "Electron spin relaxation of the PO<sub>3</sub><sup>2-</sup> radical in mixed (betaine phosphate)<sub>x</sub>(betaine phosphite)<sub>1-x</sub>.crystals," Extended abstracts of the 29th congress AMPERE "Magnetic Resonance and Related Phenomena", Berlin, Germany, 1078 - 1079 (1998).
52. J.Totz, J.Banys, D.Michel and A. Klöpperpieper, "Low frequency dielectric investigation of deuterated (betaine phosphate)<sub>x</sub>(betaine phosphite)<sub>1-x</sub> in the region of T<sub>C1</sub>," J.Phys.: Condens. Matter, **10**, 9281 - 9292 (1998).
53. J.Banys, A.Kajokas, C.Klimm, G.Völkel and A.Klöpperpieper, "Dielectric investigation of proton glass behaviour in a solid solution of deuterated betaine phosphate<sub>0.4</sub> betaine phosphite<sub>0.6</sub>," Phase Transitions, **64**, 229 - 238 (1998).
54. J.Banys, "Dielectric studies of phase transitions and glass behaviour in betaine phosphate - betaine phosphite mixed crystals," Lithuanian J. of Physics, **38**, 499 - 518 (1998).
55. R.Böttcher, A.Pöpl, G.Völkel, J.Banys and A.Klöpperpieper, "Indications of an intermediate phase in single crystals of betaine phosphate/betaine phosphite solid solutions," Ferroelectrics, **208**, 105 - 124 (1998).
56. J.Banys, A.Brilingas, D.Jakonis, A.Kajokas and S.Kamba, "Phason and domain wall dynamics in betaine calcium chloride dihydrate (BCCD)," Lithuanian J. of Physics, **38**, 14 - 17 (1998).
57. R.Mizaras, A.Kajokas, J.Banys, A.Brilingas, J.Grigas, S.Kamba and J.Petzelt, "Low frequency dielectric properties of lanthanum modified lead zirconate titanate ceramics," Lithuanian J. of Physics, **38**, 18 - 20 (1998).
58. J.Banys, "The structure of the paraelectric and incommensurate phases of TlInS<sub>2</sub>," Lithuanian J. of Physics, **38**, 33 - 38 (1999).
59. J.Banys, V.Samulionis and V.Cajipe, "Low frequency dielectric properties of new one - dimensional ferroelectric CuInP<sub>2</sub>S<sub>6</sub>," Lithuanian J. of Physics, **38**, 39 - 43 (1999).
60. A.Kajokas, J.Grigas, A.Brilingas, J.Banys and K.Lukasziewicz, "Origin of anomalies of physical properties in Bi<sub>2</sub>S<sub>3</sub> crystals," Lithuanian J. of Physics, **38**, 45 - 53 (1999).
61. V.Samulionis, J.Banys and Yu.M.Vysochanskii, "Piezoelectric and ultrasonic properties of the ferroelectric - semiconductor crystals of Sn<sub>2</sub>P<sub>2</sub>(S,Se)<sub>6</sub> family," proceedings of 10th International Symposium on Electrets (ISE 10), Delphi, Greece, 793 - 796 (1999).
62. V.Samulionis, J.Banys, Yu.Vysochanskii and A.Grabar, "The critical behaviour of ultrasonic velocity at a second - order phase transition in Sn<sub>2</sub>P<sub>2</sub>S<sub>6</sub> single crystals," Phys.stat.sol. (b), **215**, 1151 - 1156 (1999).

63. V.Samulionis, J.Banys, Yu.Vysochanskii, "Investigation of acoustoelectric phenomena in  $\text{Sn}_2\text{P}_2\text{S}_6$  single crystals," *Ferroelectrics*, **224**, 517-524 (1999).
64. J.Banys, V.Samulionis, V.Cajipe, "Dielectric properties in the vicinity of phase transition of new ferroelectric  $\text{CuInP}_2\text{S}_6$ ," *Ferroelectrics*, **223**, 43-50 (1999).
65. S.Kamba, J.Petzelt, J.Banys, R.Mizaras, A.Brilingas, J.Grigas, "Dielectric response of antiferroelectric PLZT 2/95/5 ceramics in the range of  $10-10^{14}$  Hz and 10-530K," *Ferroelectrics*, **223**, 247-254 (1999).
66. J.Banys, P.J.Kundrotas, C.Klimm, A.Klöpperpieper and G.Völkel, "Phase diagram of the mixed crystals betaine phosphate and betaine phosphite: experimental and Monte Carlo results," *Phys.Rev. B* **61**, 3159 -3162 (2000).
67. J.Banys, C.Klimm, G.Völkel, H.Schäfer, A.Kajokas and A. Klöpperpieper, "Glass behaviour in the solid solution of deuterated betaine phosphate<sub>0.15</sub>betaine phosphite<sub>0.85</sub>," *J.Phys.: Condens. Matter*, **12**, 201 - 211 (2000).
68. S.Kamba, V.Bovtun, J.Petzelt, I.Rychetsky, R.Mizaras, A.Brilingas, J.Banys, J.Grigas and M.Kosec, "Dielectric dispersion of the relaxor PLZT ceramics in the frequency range 20 Hz – 100 THz," *J.Phys.: Condens. Matter*, **12**, 497 - 519 (2000).
69. V.Samulionis, J.Banys and G.Völkel, "Ultrasonic investigations of elastic phase transitions in betaine compounds," *Journal of Alloys and Compounds*, **310**, 176 - 180 (2000).
70. J.Banys, A.Sereika, A.Kajokas, A.Brilingas, J.Grigas, C.Klimm and G. Völkel, "Spontaneous polarisation in the mixed  $\text{DBP}_{0.01}\text{DBPI}_{0.99}$  and  $\text{DBP}_{0.03}\text{DBPI}_{0.97}$  crystals," *Lithuanian J. of Physics*, **40**, 337 - 341 (2000).
71. V.Samulionis, J.Banys, Yu.Vysochanskii and V.Cajipe, "Ultrasonic, piezoelectric and dielectric properties of new materials exhibiting cooperative dipole effects," *J. of Vibroengineering*, **23**, Nr.2, 53 – 62 (2000).
72. V.Samulionis and J.Banys, "Ultrasonic investigations of betaine compounds," *J. of Vibroengineering*, **23**, Nr.2, 95 – 99 (2000).
73. V.Samulionis, J.Banys and G.Völkel, "Ultrasonic investigation of antiferrodistortive phase transitions in betaine compounds," *Ultrasound*, **36**, Nr.3, 11 – 16 (2000).
74. J.Banys, "Fazinių virsmų fizikos laboratotiniai darbai", p. 82, Vilnius (2000).
75. J.Banys, C.Klimm, G. Völkel, A.Kajokas, A.Brilingas and J.Grigas, "Dielectric properties in the vicinity of the ferroelectric phase transition in a mixed crystal of deuterated  $\text{DBP}_{0.01}\text{DBPI}_{0.99}$ ," *J.Phys.: Condens. Matter*, **13**, 1773 - 1780 (2001).
76. J.Banys, "Fazinių virsmų tyrimai Vilniaus universitete," *Mokslas ir gyvenimas*, Nr.3, 17 (2001).
77. J.Banys, V.Samulionis, V.Cajipe and Yu.Vysochanskii, "Dielectric properties of  $\text{CuInP}_2\text{Se}_6$  and  $\text{CuCrP}_2\text{S}_6$  crystals," *Lithuanian J. of Physics*, **41**, 280 - 282 (2001).
78. A.Kajokas, S.Lapinskas and J.Banys, "Simulation of the distribution of the relaxation times," *Lithuanian J. of Physics*, **41**, 345 - 348 (2001).
79. V.Samulionis, J.Banys, G. Völkel and A. Klöpperpieper, "Acoustic attenuation at elastic phase transition in deuterated betaine phosphate/betaine phosphite solid solutions," *Proceedings of the 17<sup>th</sup> International Congress on Acoustics, Rome*, 10 – 11 (2001).

80. A.Kajokas, A.Matulis, J.Banys, R.Mizaras, A.Brilingas and J.Grigas, "Dielectric dispersion and distribution of the relaxation times of the relaxor PLZT ceramics," *Ferroelectrics*, **257**, 69 – 74 (2001).
81. J.Banys, V.Samulionis, V.Cajipe and Yu.Vysochanskii, "Dielectric properties of ferroelectric CuInP<sub>2</sub>Se<sub>6</sub> and CuCrP<sub>2</sub>S<sub>6</sub>," *Ferroelectrics*, **257**, 163 – 168 (2001).
- 82 V.Samulionis, J.Banys, Yu.Vysochanskii and V.Cajipe, "Elastic and electromechanical properties of new ferroelectric - semiconductor materials of Sn<sub>2</sub>P<sub>2</sub>S<sub>6</sub> family," *Ferroelectrics*, **257**, 113 – 122 (2001).
83. V.Samulionis, J.Banys and Yu.Vysochanskii, "Ultrasonic investigation of photostimulated phenomena in ferroelectric semiconductors," *Ferroelectrics*, **257**, 135 – 140 (2001).
84. J.Banys, A.Kajokas, A.Brilingas. J.Grigas, G.Völkel and C.Klimm, "Spontaneous polarisation in the mixed ferroelectric DBP<sub>x</sub>/DBPI<sub>1-x</sub> crystals," *Ferroelectrics*, **258**, 113 – 122 (2001).
85. J.Banys, S.Kamba, A. Klöpperpieper and G. Völkel, "Infrared spectrum of deuterated betaine phosphite," *phys. stat. sol (b)*, **231**, 581 - 588 (2002).
86. J.Banys, A.Kajokas, S.Lapinskas, A.Brilingas, J.Grigas, J.Petzelt and S.Kamba, "Microwave and millimetre-wave dielectric response of Rb<sub>1-x</sub>(ND<sub>4</sub>)<sub>2</sub>PO<sub>4</sub> dipolar glass," *J.Phys.: Condens. Matter*, **14**, 3725 - 3733 (2002).
87. J.Banys, S.Lapinskas, A.Kajokas, A.Matulis, C.Klimm, G.Völkel and A.Klöpperpieper, "Dynamic dielectric susceptibility of the betaine phosphate (0.15) betaine phosphite (0.85) dipolar glass," *Phys.Rev.B*, **66**, 144113 (2002).
88. J.Banys, A.Brilingas, J.Grigas, A.Kajokas, C.Klimm, A.Matulis, G. Völkel, S.Lapinskas and A.Klöpperpieper, "Radio and microwave spectroscopy of the betaine phosphate/betaine phosphite mixed crystals," *Ferroelectrics*, **267**, 285 – 292 (2002).
89. G.Völkel, N.Alsabbagh, J.Banys, H.Bauch, R.Böttcher, M.Gutjahr, D.Michel and A.Pöpll, "Local ordering processes in ferroelectric, glass-like and modulated phases: an EPR study," in *Adv. In Solid State Phys.*, v. **42**, p. 241 – 251 (2002).
90. J.Banys, "Ispūdžiai iš dešimtosios pasaulinės feroelektrikų konferencijos Madride," *Mokslas ir gyvenimas*, Nr.4, 16 -17 (2002).
91. A.Janavicius, J.Banys, R.Purlys, S.Balakauskas, "The diffusion coefficient of vacancies excited by X-rays in monocrystalline Si", *Lithuanian J. of Physics*, **42**, 337 - 340 (2002).
92. J.Grigas, A.Kania, J.Banys, A.Brilingas, P.Keburis, " Relaxational dynamics of ferroelectric ALN ceramics at M<sub>1</sub> – M<sub>2</sub> phase transition," *Lithuanian J. of Physics*, **43**, 59 - 64 (2003)
93. J.Banys, M.Kinka, J.Macutkevic, A.Brilingas, S.Lapinskas, A.Poepll, G.Voelkel, W.Boehlmann, V.Umamaheswari and M.Hartmann, "Dielectric spectroscopy of water confined in molecular sieve materials MCM-41: low temperature freezing phenomena," *Lithuanian J. of Physics*, **43**, 443 - 448 (2003)
94. J.Banys, "Rysio linijos," p. 162, Vilnius (2003).
95. J.Banys, J.Macutkevic, C.Klimm, G.Völkel, A.Kajokas, A.Brilingas and J.Grigas, "Dielectric properties in the vicinity of the ferroelectric phase transition in a mixed crystal of deuterated betaine phosphate<sub>0.03</sub> betaine phosphite<sub>0.97</sub>," *Phys.stat.sol. (a)*, **201**, 602-612 (2004).

96. J.Banys, J.Macutkevic, V.Samulionis, A.Brilingas and Yu.Vysochanskii, "Dielectric and ultrasonic investigation of phase transition in CuInP<sub>2</sub>S<sub>6</sub> crystals," *Phase Transitions*, **77**, 345-358 (2004).
97. J.Macutkevic, J.Banys and A.Matulis, "Determination of the distribution of the relaxation times from dielectric spectra," *Nonlinear analysis: modelling and control*, **9**, 75-88 (2004).
98. J.Banys, "Vilniaus universiteto fizikos fakultetas," *Mokslas ir gyvenimas*, Nr.3, 2-3 (2004).
99. J.Banys, "Technikos enciklopedija," Vilnius, p. 789 (2004).
100. J.Banys, "Ispūdžiai iš vokietijos fizikų draugijos konferencijos Drezdene," *Fizikų žinios*, Nr. 26, 20 (2004).
101. V.Samulionis, J.Banys and Yu.Vysochanskii, "Acoustoelectric effects in Sn<sub>2</sub>P<sub>2</sub>S<sub>6</sub> – type ferroelectric semiconductors," *Phys.stat.sol. (a)*, pssa200306821 (2004).
102. J.Banys, "Tarpautinė mokslinė fizikų konferencija "Struktūra ir spektroskopija," *Mokslas ir gyvenimas*, Nr.1, 20-21 (2005).
103. J.Banys, J.Macutkevic, A.Brilingas, J.Grigas, K.Bormanis and A.Sternberg, "Broad band dielectric spectroscopy of 0.2PMN-0.4PSN-0.4PZN relaxor ceramics," *Materials science*, **11**, 3-8 (2005)
104. J.Banys, M.Kinka, J.Macutkevic, G.Voelkel, W.Boehlmann, V.Umamaheswari, M.Hartmann and A.Poepll, "Broadband dielectric spectroscopy of water confined in MCM-41 molecular sieve materials – low temperature freezing phenomena," *J.Phys.: Condens. Matter*, **17**, 2843 - 2857 (2005).
105. J.Banys, G. Völkel, R. Böttcher, D. Michael and Z. Czapla, „Dielectric properties of a DMAGaS/DMAAS mixed crystal," *Phase Transitions*, **78**, 337 – 349 (2005).
106. J.Macutkevic, S.Lapinskas, J.Grigas, A.Brilingas, J.Banys, R.Grigelaitis, K.Meskonis, K.Bormanis, A.Sternberg and V.Zauls, " Distribution of the relaxation times of the new relaxor 0.4PSN-0.3PMN-0.3PZN ceramics," *Journal of the European Ceramic Society*, **25**, 2515 – 2519 (2005).
107. V.Samulionis and J.Banys, "Ultrasonic and piezoelectric studies of of a new layered ferroelectric compounds of Sn<sub>2</sub>P<sub>2</sub>S<sub>6</sub> family," *Journal of the European Ceramic Society*, **25**, 2543 – 2546 (2005).
108. J.Vaitkus, J.Banys, V.Gostilo, S.Zatoloka, A.Mekys, J.Storasta and A.Zindulis, "Influence of electronic and ionic processes on electrical properties of TlBr crystals," *Nuclear Instruments and Methods in Physics Research A*, **546**, 188 – 191 (2005).
109. V.Samulionis, J.Banys and Yu.Vysochanskii, "Piezoelectric and elastic properties of new layered ferroelectric – semiconductor materials of Sn<sub>2</sub>P<sub>2</sub>S<sub>6</sub> family," *Journal de Physique IV*, **126**, 139 - 142 (2005).
110. G Völkel, R Böttcher, D. Michel, Z Czapla and J Banys, „Dimethylammonium gallium sulfate hexahydrate and dimethylammonium aluminium sulfate hexahydrate—members of a crystal family with exceptional commensurate/incommensurate phase sequences," *J.Phys.: Condens. Matter*, **17**, 4511 - 4529 (2005).
111. J.Banys, J.Macutkevic, R.Grigelaitis and W.Kleemann, "Dynamics of nanoscale polar regions and critical behavior of the uniaxial relaxor Sr<sub>0.61</sub>Ba<sub>0.39</sub>Nb<sub>2</sub>O<sub>6</sub>·Co," *Phys.Rev.B*, **72**, 024106 (2005).

112. J. Banys, J. Macutkevic, A. Brilingas, J. Grigas, K. Bormanis and A. Stenberg, „Radio and Microwave Spectroscopy of 0.2PMN-0.4PSN-0.4PZN Relaxor Ceramics,“ *Ferroelectrics*, **318**, 141 – 146 (2005).
113. J. Banys, R. Grigalaitis, J. Macutkevic, A. Brilingas, V. Samulionis, J. Grigas and Yu. Vysochanskii, „Dipolar Glass Behaviour in Mixed CuInP<sub>2</sub>(S<sub>0.7</sub>Se<sub>0.3</sub>)<sub>6</sub> Crystals,“ *Ferroelectrics*, **318**, 163 – 168 (2005).
114. J. Banys, M. Kinka, A. Meskauskas, J. Macutkevic, G. Völkel, W. Böhlman, V. Umamaheswari, M. Hartmann and A. Pöpl, “Broadband Dielectric Spectroscopy of Water Confined in MCM-41 Molecular Sieve Material,” *Ferroelectrics*, **318**, 201 – 207, (2005).
115. M. Kinka, J. Banys, J. Macutkevic, A. Pöpl, W. Böhlmann, V. Umamaheswari, M. Hartmann and G. Völkel, „Dielectric response of water confined in MCM-41 molecular sieve material,“ *phys. stat. sol. (b)*, **242**, No. 12, R100–R102 (2005).
116. R. Grigalaitis, J. Banys, A. Kania and A. Slodzyk, “Distribution of relaxation times in PMN single crystal,” *Journal de Physique IV*, **128**, 127 - 131 (2005).
117. M. Kinka, J. Banys, W. Boehlmann, E. Bierwirth, M. Hartmann, D. Michel, G. Voelkel and A. Poepl, “Dielectric spectroscopy of BaTiO<sub>3</sub> confined in MCM-41 mesoporous molecular sieve materials,” *Journal de Physique IV*, **128**, 81 - 85 (2005).
118. J. Banys, J. Macutkevic, A. Brilingas, J. Grigas, C. Klimmz and G. Voelkel, „Broadband dielectric spectroscopy of betaine phosphate<sub>0.03</sub> betaine phosphite<sub>0.97</sub> crystals in the vicinity of the ferroelectric phase transitions,“ *Phase Transitions*, **78**, 869 - 881 (2005).
119. J. Banys, J. Macutkevic, A. Brilingas, V. Samulionis, K. Bormanis, A. Sternberg and V. Zauls, „Anomalous broad dielectric dispersion of 0.4PZN-0.3PSN-0.3PMN relaxor ceramics at lower temperatures,“ *Materials Science Forum*, **514**, p 216 – 220 (2006).
120. V. Samulionis, J. Banys and Yu. Vysochanskii, “The characterization of two dimensional electrostrictive CuInP<sub>2</sub>S<sub>6</sub> materials for transducers,” *Materials Science Forum*, **514**, p 230 – 234 (2006).
121. R. Grigalaitis, J. Banys, S. Lapinskas, E. Erdem, R. Boettcher, H. J. Glaesel and E. Hartmann, “Dielectric investigations and theoretical calculations of size effect in lead titanate nanocrystals,” *Materials Science Forum*, **514**, p 235 – 239 (2006).
122. J. Banys, M. Kinka, J. Macutkevic, G. Völkel, W. Böhlmann, V. Umamaheswari, M. Hartmann and A. Pöpl, “Effect of confinement on the freezing-melting dynamics of water,” *Materials Science Forum*, **514**, p 1255 – 1259 (2006).
123. R. Blinc, V. V. Laguta, B. Zalar and J. Banys, „Polar nanoclusters in relaxors,“ *Journal of Materials Science*, **41**, p. 27 – 30, (2006).
124. J. Banys, J. Macutkevic, S. Lapinskas, C. Klimm and G. Voelkel, „Relaxation times of BP<sub>1-x</sub>P<sub>x</sub> mixed crystals: Atypical dipolar glass behavior of the average local potential asymmetry,“ *Phys Rev B*. **73**, 144202 (2006).
125. E. Erdem, H.C. Semmelhack, R. Boettcher, H. Rumpf, J. Banys, A. Matthes, H.J. Glaesel, D. Hirsch and E. Hartmann, “Study of the tetragonal-to-cubic phase transition in PbTiO<sub>3</sub> nanopowders,” *J.Phys.: Condens. Matter*, **18**, 3861 - 3874 (2006).
126. M. Kinka, J. Banys, W. Böhlmann, E. Bierwirth, M. Hartmann, D. Michel, G. Völkel and A. Pöpl, „Dielectric spectroscopy of nano BaTiO<sub>3</sub> confined in MCM-41 mesoporous

molecular sieve materials,” IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, **53**, 2305 – 2308 (2006).

127. R. Grigalaitis, J. Banys, S. Lapinskas, E.Kazakevicius, E. Erdem, R. Boettcher, H. J. Glaesel and E. Hartmann, “Dielectric Investigations and Theoretical Calculations of Size Effect in Lead Titanate Nanocrystals,” IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, **53**, 2270 – 2274 (2006).
128. V.Samulionis, J.Banys, Yu.Vysochanskii and I.Studenyak, “Investigation of ultrasonic and acoustoelectric properties of ferroelectric-semiconductor crystals,” Ferroelectrics, **336**, 29 – 38 (2006).
129. R.Grigalaitis, J.Banys, A.Brilingas, J.Grigas, A.Kania and A.Slodczyk, “Dielectric dispersion in pure PMN and PMN with 10 % PT single crystals,” Ferroelectrics, **339**, 21 – 28 (2006).
130. M.Kinka, J.Banys, J.Macutkevic and A.Meskauskas, “Conductivity of nanostructured mesoporous MCM-41 molecular sieve materials,” Electrochimica Acta, **51**, 6203-6206 (2006).
131. Yu.Vysochanskii, T.Janssen, R.Currat, R.Folk, J.Banys, J.Grigas and V.Samulionis, “Phase transitions in ferroelectric phosphorous chalcogenide crystals,” Vilnius University Press, ISBN 9986-19-885-2, p. 453 (2006).
132. J. Macutkevic, S. Kamba, J. Banys, A. Brilingas, A. Pashkin, J. Petzelt, K. Bormanis and A. Sternberg, “Infrared and broadband dielectric spectroscopy of PZN-PMN-PSN relaxor ferroelectrics: Origin of two-component relaxation,” Phys. Rev. B **74**, 104106 (2006)
133. R. Grigalaitis; J. Banys, A. Sternberg; K. Bormanis and V. Zauls, „Dynamics of polar clusters in PMN ceramics: comparison with PMN single crystal,“ Ferroelectrics, **340**, 147 – 153 (2006).
134. R.Grigalaitis, J.Banys, A.Brilingas, A.Mikonis, K.Bormanis, A.Sternberg and V.Zauls, “Dielectric spectroscopy and distribution of relaxation times of PMN-PSN ceramics,“. Journal of Electroceramics, **19**, Nr 4, p. 433 - 435 (2007).
135. R. Sobiestijanskas, J. Banys, A. Brilingas, J. Grigas, A.Pawlowski and B. Hilczer, „Dielectric properties of  $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$  crystals in room- and high-temperature phases,“ Ferroelectrics, **348**, 75 – 81 (2007).
136. J.Banys, J.Macutkevic, V.Samulionis, A.Brilingas, R.Sobiestianskas and Yu.Vysochanskii, “Crossover between ferroelectric order and dipolar glass disorder in CuInP<sub>2</sub>(S<sub>0.25</sub>Se<sub>0.75</sub>)<sub>6</sub> crystals,” Ferroelectrics, **346**, 136 – 142 (2007).
137. M.Kinka, J.Banys and A.Naberezhnov, “Dielectric properties of sodium nitrite confined in porous glass,” Ferroelectrics, **348**, 67 – 74 (2007).
138. J. Banys, M. Kinka, A. Meskauskas, R. Sobiestianskas, G. Völkel, W. Böhlmann, M. Hartmann and A. Pöpll, “Effect of confinement on the dynamics of Methanol,” Ferroelectrics, **346**, 173 – 180 (2007).
139. P.Keburis, J.Banys, J.Grigas, Z.Bortkevic and A.Kholkin, “Dielectric properties of relaxor ceramics BBT,” Ferroelectrics, **347**, 50 – 54 (2007).
140. V. Samulionis, J. Banys and Yu. Vysochanskii, “Ultrasonic and piezoelectric investigation of phase transitions in layered CuIn<sub>1-x</sub>Cr<sub>x</sub>P<sub>2</sub>S<sub>6</sub> crystals,” Ferroelectrics, **348**, 124 – 130 (2007).

141. J.Banys, R.Grīgalaitis, A.Brīlingas, A.Sternberg, V.Zauls and K.Bormanis, "Anomalous broad distribution of relaxation times in mixed PMN-PSN ceramics," *Ferroelectrics*, **347**, 30 – 36 (2007).
142. A. Gutgalis, J. Banys, V. Sirutkaitis and Robertas Grīgalaitis, "Dielectric properties of KDP crystal damaged by laser beam," *Proc. SPIE*, **6596**, 65961M (2006)
143. R.Grīgalaitis, J.Banys, A.Džiaugys, A.Brīlingas, A.Sternberg, V.Zauls and K.Bormanis, „Broad distribution of relaxation times in 0,6PMN – 0,4PZN relaxor ceramics” *Ferroelectrics* **353**, 3 – 9 (2007).
144. V.Samulionis, J.Banys and Yu.Vysochanskii, "Piezoelectric and ultrasonic studies of mixed CuInP<sub>2</sub>(S<sub>x</sub>Se<sub>1-x</sub>)<sub>6</sub> layered crystals," *Ferroelectrics* **351**, 88 – 95 (2007).
145. A.Mikonis, J.Banys, R.Grīgalaitis, S.Lapinskas, A.Matulis and G.Voelkel, "Two dimensional distribution of relaxation times," *Ferroelectrics* **353**, 154 – 163 (2007).
146. P.Keburis, J.Banys, A.Brīlingas, Z.Bortkevič, A.Kholkin and M.E.V.Costa, "Dielectric dispersion and distribution of relaxation times of the relaxor ceramics BBT," *Ferroelectrics* **353**, 87 – 89 (2007).
147. P.Keburis, J.Banys, A.Brīlingas, J.Prapuolenis, A.Kholkin and M.E.V.Costa, "Dielectric properties of relaxor ceramics BBN." *Ferroelectrics* **353**, 149 – 153 (2007).
148. J.Banys, M.Kinka, G.Voelkel, W.Boehlmann, V.Umamaheswari, M.Hartmann and A.Poepll, "Dielectric spectroscopy of betaine phosphite confined in MCM-41 molecular sieve materials," *Ferroelectrics* **353**, 97 – 103 (2007).
149. A.Gutgalis, J.Banys, J.Macutkevič and Yu.Vysochanskii, "New inhomogeneous ferroelectric Cu(In<sub>0.7</sub>Cr<sub>0.3</sub>)P<sub>2</sub>S<sub>6</sub> crystal with ferroelectric and dipolar glass coexistence," *Ferroelectrics* **353**, 91 – 96 (2007).
150. P.Keburis, J.Banys, J.Grigas, A.Brīlingas, T.Burtilius, A.Salak and V.Ferreira, "Dielectric properties of LMT-BT mixed ceramics," *Journal of the European Ceramic Society*, **27**, 4367 – 4370 (2007).
151. R.Grīgalaitis, J.Banys, A.Brīlingas, A.Sternberg, K.Bormanis and V.Zauls, "Broadband dielectric spectroscopy of PSN ceramics," *Journal of the European Ceramic Society*, **27**, 4383 – 4389 (2007).
152. V.Samulionis, A.Salak, J.Banys, V.M.Ferreira and P.Keburis, "Ultrasonic and piezoelectric properties of the BT-LMT ceramic system," *Journal of the European Ceramic Society*, **27**, 4003 – 4006 (2007).
153. J.Macutkevič, S.Kamba, J.Banys, A.Pashikin, K.Bormanis and A.Sternberg, "Far-infrared and THz spectroscopy of 0.4PMN-0.3PSN-0.3PZN relaxor ferroelectric ceramics," *Journal of the European Ceramic Society*, **27**, 3713 – 3717 (2007).
154. V.Samulionis, J.Banys and Yu.Vysochanskii, "Ultrasonic attenuation and piezoelectric properties at phase transitions of layered polar crystals of CuInP<sub>2</sub>S<sub>6</sub> family," *Proceedings of 19<sup>th</sup> International congress on acoustics*, Madrid, p. 1 – 6 (2007).
155. M.Kinka, J.Banys, G.Voelkel, W.Boehlmann, V.Umamaheswari, M.Hartmann and A.Poepll, "Dielectric spectroscopy of mesoporous MCM-41 molecular sieve materials containing betaine phosphite," *Nanosystems, Nanomaterials, Nanotechnologies*, **5**, Nr.2, p. 631-639 (2007).

156. P.Keburis, J.Banys, A.Brilingas, A.Kholkin and M.E.V.Costa, "Dynamics of nanoclusters in ferroelectric relaxor ceramics BBN" Nanosystems, Nanomaterials, Nanotechnologies, **5**, Nr.2, p. 617-622 (2007).
157. R.Grigalaitis, J.Banys, A.Sternberg, K.Bormanis and V.Zauls, "Dynamics of polar nano regions in disordered and ordered PSN," Nanosystems, Nanomaterials, Nanotechnologies, **5**, Nr.2, p. 623-629 (2007).
158. Indija ?
159. J.Macutkevic, S.Kamba, J.Banys, A.Pashkin, K.Bormanis and A.Sternberg, "Corrigendum to Far-infrared and THz spectroscopy of 0.4PMN-0.3PSN-0.3PZN relaxor ferroelectric ceramics," Journal of the European Ceramic Society, **27**, 4821 (2007).
160. S.Kamba, D.Nuzhnny, S.Veljko, V.Bovtun, J.Petzelt, Y.L.Wang, N.Setter, J.Levoska, M.Tyunina, J.Macutkevic and J.Banys, "Dielectric relaxation and polar phonon softening in relaxor ferroelectric PbMg<sub>1/3</sub>Ta<sub>2/3</sub>O<sub>3</sub>" J.Appl.Phys, **102**, 074106 (2007).
161. V. Samulionis, A. Salak, J. Banys, V. M. Ferreira and P. Keburis, "Investigation of ultrasonic, dielectric and piezoelectric properties of the xLMT - (1-x)BT ceramics with x=0.025, 0.05, 0.075, 0.1," Ultrasound, **62**, Nr.2, p7-10 (2007).
162. J.Macutkevic, J.Banys, K.Bormanis and A.Sternberg, "Broad band dielectric spectroscopy of 0.4PMN-0.3PSN-0.3PZN ceramics," Journal of Physics: Conference series, **93**, 012014 (2007).
163. R.Grigalaitis, J.Banys, A.Brilingas, A.Sternberg, K.Bormanis and V.Zauls, "Distribution of relaxation times in 0.5PMN-0.5PSN ceramics," Journal of Physics: Conference series, **93**, 012019 (2007).
164. V. Samulionis, J. Banys and Yu. Vysochanskii, „Piezoelectric and elastic properties of layered materials of Cu(In,Cr)P<sub>2</sub>(S,Se)<sub>6</sub> system,“ Journal of Electroceramics, 10.1007/s10832-007-9397-7, **22**, p.192 - 197 (2009).
165. V. Samulionis, A. Salak, J. Banys, V. M. Ferreira and P. Keburis, "Ultrasonic, dielectric and piezoelectric properties of the BT-LMT ceramics," Proceedings of the International Congress on Ultrasonics, ID1770 (2007).
166. J.Banys, J.Macutkevic, R.Grigalaitis and Yu.Vysochanskii, "Influence of small amount of CuInP<sub>2</sub>Se<sub>6</sub> to conductivity of CuInP<sub>2</sub>S<sub>6</sub> crystal," Solid State Ionics, **179**, 79-81 (2008).
167. A.Dziaugys, J.Banys, A.Kezionis, V.Samulionis and I.Studenyak, "Conductivity investigations of Cu<sub>7</sub>GeS<sub>5</sub>I family fast-ion conductors," Solid State Ionics, **179**, 168-171 (2008).
168. R.Sobiestianskas, J.Banys, J.Grugas and A.Pawlowski, "Conductivity properties of Rb<sub>3</sub>H(SeO<sub>4</sub>)<sub>2</sub> crystals in the region of superionic phase transition," Solid State Ionics, **179**, 213-217 (2008).
169. J.Macutkevic, R.Grigalaitis, R.Adomavicius, A.krotkus, J.Banys, G.Valusis, K.Bormanis and A.Sternberg, "Teraherz spectroscopy of ordered PbSc<sub>1/2</sub>Nb<sub>1/2</sub>O<sub>3</sub> ceramics," Acta Physica Polonica, **113**, No.3, 883 – 886 (2008).
170. J.Macutkevic, S.Kamba, J.Banys, A.Pashkin, K.Bormanis and A.Sternberg, "Polar phonons in relaxor ferroelectric 0.2PSn-0.4PMN-0.4PZN," Acta Physica Polonica, **113**, No.3, 879 – 882 (2008).

171. B.Vengalis, J.Devenson, A.K.Oginskis, R.Butkute, A.Maneikis, A.Steikunaite, L.Dapkus, J.Banys and M.Kinka, "Growth and investigation of heterostructures based on multiferroic  $\text{BiFeO}_3$ ," *Acta Physica Polonica*, **113**, No.3, 1095-1098 (2008).
172. J.Banys, J.Macutkevic, C.Klimm and G.Voelkel, "Coexistence of glass and ferroelectric order in deuterated betaine phosphate<sub>0.05</sub> betaine phosphite<sub>0.95</sub> crystals," *Phase Transitions*, **81**, 303 – 314 (2008).
173. H.Fuess, G.Voelkel and J.Banys, "Specialized colloque AMPERE and AvH – workshop: Advanced materials as studied by spectroscopic and diffraction techniques," *Phase transitions*, **81**, 283 – 284 (2008).
174. J.Macutkevic, R.Grimalaitis, R.Adomavicius, A.Krotkus, J.Banys, G.Valusis, K.Bormanis and A.Sternberg, "Soft mode in PMN-PSN ceramics," *Phys.stat.sol. (b)*, pssb200744040, 245, 1206 - 1209 (2008).
175. R.Grimalaitis, J.Banys, A.Brilingas, A.Sternberg, V.Zauls and K.Bormanis, "Broad distribution of relaxation times in disordered PMN – PSN ceramics," Proc. 10<sup>th</sup> ECerS Conf, Goller Verlag, ISBN 3-87264-022-4, 539 – 542 (2007).
176. P.Keburis, D.A.Kiselev, J.Banys, M.E.V.Costa and A.L.Kholkin, "PFM studies of domain structure of relaxor ceramics  $\text{BaBi}_2\text{Nb}_2\text{O}_9$ ," Proc. 10<sup>th</sup> ECerS Conf, Goller Verlag, ISBN 3-87264-022-4, 587 - 589 (2007).
177. J.Banys, R.Grimalaitis, M.Ivanov, J.Carreaud and J.M.Kiat, „Dielectric behaviour of a nanograin PMN powders,“ *Integrated Ferroelectrics*, **99**, 132 – 139 (2008).
178. J.Macutkevic, J.Banys, R.Grimalaitis and Yu. Vysochanskii, „Asymmetric phase diagram of mixed  $\text{CuInP}_2(\text{S}_{x}\text{Se}_{1-x})_6$  crystals,“ *Phys.Rev.B*, **78**, 064101 (2008).
179. V. Samulionis, J. Banys and Yu. Vysochaskii, „Piezoelectric and ultrasonic studies of new (Cu,Ag) InP<sub>2</sub>(Se,S)<sub>6</sub> layered ferroelectric compounds,“ 2nd International Congress On Ceramics, Verona, Italy, 1-P043-ID 570, ISBN: 978-88-8080-084-2, p. 1-6, June 29 - July 4 (2008).
180. A.Dziaugys, J.Banys, V.Samulionis and Y.Vysochanskii, "Dielectric and ultrasonic studies of new  $\text{Ag}_{0.1}\text{Cu}_{0.9}\text{InP}_2\text{S}_6$  layered ferroelectric compound," *Ultrasound*, **63**, Nr.3, 7 – 10 (2008).
181. J. F.Scott, H. J.Fan, S.Kawasaki, J.Banys, M.Ivanov, A.Krotkus, J.Macutkevic, R.Blinc, V.V.Laguta, P.Cevc, J.S.Liu, A.L.Kholkin, "Terahertz Emission from Tubular  $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$  Nanostructures," *Nano Lett.* **8**, p. 4404 – 4409, (2008).
182. R.Grimalaitis, J.Banys, A.Brilingas, A.Sternberg, V.Zauls, K.Bormanis, "Broadband Dielectric Spectroscopy of PSN-Rich PMN-PSN Ceramics," *Ferroelectrics* **369**, 190 – 197 (2008).
183. J. Macutkevic, R.Grimalaitis, R.Adomavicius, A.Krotkus, J.Banys, G.Valusis, K.Bormanis, A.Sternberg, „Broadband Dielectric Spectroscopy of Ferroelectric Phase Transitions in  $\text{PbSc}_{1/2}\text{Nb}_{1/2}\text{O}_3$  Ordered Ceramics,“ *Ferroelectrics* **369**, 185 – 189 (2008).
184. T.Ramoska, J.Banys, R.Grimalaitis, A.Kareiva, „Dielectric Investigations of Nanoferroelectric  $\text{BaTiO}_3$ ,“ *Ferroelectrics* **368**, 170 – 176 (2008).

185. M.Ivanov, J. Banys, S.Rudys, R.Grimalaitis, „Measurements of Complex Dielectric Constant of Ferroelectrics with Six-port Reflectometer in 80-120 GHz Frequency Range,“ *Ferroelectrics* **367**, 229 – 233 (2008).
186. V. V. Shvartsman, J. Dec, Z. K. Xu, J. Banys, P. Keburis and W. Kleemann, „Crossover from ferroelectric to relaxor behavior in  $\text{BaTi}_{1-x}\text{Sn}_x\text{O}_3$  solid solutions,“ *Phase transitions* **81**, 1013 – 1021 (2008).
187. J. Macutkevic, J.Banys, Yu.Vysochanskii, „Broadband dielectric spectroscopy of  $\text{CuInP}_2\text{Se}_6$  crystals,“ *Phys.stat.sol. (a)*, **206**, p 167 – 172, DOI10.1002, pssa.200824231 (2009).
188. A.Dziaugys, J.Banys, J.Macutkevic and Yu.Vysochanskii, „Conductivity spectroscopy of new  $\text{AgInP}_2\text{S}_6$  crystals,“ *Integrated Ferroelectrics*, **103**, Nr 1, p. 52 – 59 (2009).
189. J.Banys, M.Kinka, G.Voelkel, W.Boehlmann and A.Poeppl, „Dielectric response of water confined in metal – organic frameworks,“ *Appl. Phys. A*, DOI 10.1007/s00339-008-5052-7 (2009).
190. J.Banys, „Ferolektrikai,“ *Spectrum*, Nr.1, p. 7 – 9, (2009).
191. V.Samulionis, J.Banys and Yu.Vysochanskii, „Piezoelectric and ultrasonic studies of mixed  $\text{Ag}_x\text{Cu}_{1-x}\text{InP}_2(\text{S},\text{Se})_6$  layered crystals,“ *Materials Science Forum*, **636-637**, p 398 – 403 (2010).
192. J.Banys, M.Ivanov, J.Macutkevic, A.Krotkus, H. J.Fan, S.Kawasaki, J.F.Scott, „THz emission from PZT nanotubes,“ *Ferroelectrics* **378**, 79 – 83 (2009).
193. S.Lapinskas, R.Grimalaitis, J.Banys and E.E.Tornau, “ Relaxation times obtained from dynamical decay function of 1D and 3D Ising model,“ *Ferroelectrics* **378**, 63 – 69 (2009).
194. J.Banys, J.Grigas, R.Grimalaitis, Guest editorial, *Ferroelectrics* **378**, ix (2009).
195. V.Samulionis, J.Banys, I.P.Studenyak and V.V.Panko, „Ultrasonic and piezoelectric investigations of phase transitions in ferroelastic  $\text{Cu}_6\text{PS}_5(\text{I},\text{Br})$  mixed crystals,“ *Ferroelectrics* **379**, 62 – 68 (2009).
196. V.Samulionis, J.Banys and Yu.Vysochanskii, „Ultrasonic and piezoelectric studies of phase transitions in two-dimensional  $\text{CuInP}_2\text{S}_6$  type crystals,“ *Ferroelectrics* **379**, 69 – 76 (2009).
197. J.Banys, J.Grigas, R.Grimalaitis, Guest editorial, *Ferroelectrics* **379**, ix (2009).
198. S.Rudys, M.Ivanov and J.Banys, „EM simulation for the material elecrical properties measurement in micowave range,“ *Acta universitatis Ouluensis*, **C323**, 73 – 83 (2009).
199. R.Grimalaitis, J.Banys, J.Macutkevic, R.Adomavicius, A.Krotkus, K.Bormanis and A.Sternberg, „Broadband dilecric spectroscopy of  $\text{PMg}_{1/3}\text{Nb}_{2/3}\text{O}_3\text{-PbSc}_{1/2}\text{Nb}_{1/2}\text{O}_3$  ceramics,“ *Journal of the European Ceramic Society*, **30**, p. 613 - 616 (2010).
200. S.Greicius, J.Banys, I.Szafraniak – Wisa, „Dielectric investigation of  $\text{BiFeO}_3$  ceramics,“ *Processing and Application of Ceramics*, **3**, p. 85 – 87 (2009).
201. J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, P.Kuzhir, S.Maksimenko, V.Kuznetsov, S.Moseenkov, O.Shenderova and Ph.Lambin, „Dielectric properties of onion – like carbon based polymer films: experiment and modelling,“ *Solid State Sciences*, **11**, p. 1828 - 1832 (2009).

202. J.Banys, S.Rudys, M.Ivanov, Jing Li, Hong Wang, „Dielectric properties of cubic bismuth based pyrochlores containing lithium and fluorine,“ *Journal of the European Ceramic Society*, **30**, p. 385-388 (2010).
203. J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, V.Kuznetsov, S.Moseenkov, O.Shenderova, „High dielectric permittivity of percolative composites based on onion like carbon,“ *Applied Physics letters*, **95**, 112901 (2009).
204. S.Greicius, J.Banys, R.Z.Zuo, T.Granzow, „Dielectric investigations of  $0.945(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3\text{-}0.055\text{BaTiO}_3$ ,“ *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **56**, 1831 – 1834 (2009).
205. J.Macutkevic, D.Seliuta, G.Valusis, J.banys, P.Kuzhir, S.Maksimenko, K.Batrakov, V.Kuznetsov, S.Moseenkov, OShenderova, Ph.Lambin, „Dielectric response of onion like carbon based polymethyl methacrylate composites,“ *Journal of Nanoelectronics and Optoelectronics*, **4**, p. 261 – 266 (2009).
206. J.Banys, M.Ivanov, R.Adomavicius, A.Krotkus, J.Macutkevic, J.Scott, H.J.Fan, „THz reflectivity spectroscopy of tubular PZT nanostructures,“ *Integrated Ferroelectrics*, **106**, 17 – 22 (2009).
207. M.Kinka, J.Banys, A.Naberezhnov, „Dielectric properties of  $\text{NaNO}_2$  and  $\text{NaNO}_3$  confined in porous glass,“ *Ferroelectrics*, **390**, 160-167 (2009).
208. A.Dziaugys, J.Banys, J.Macutkevic, Yu.Vysochanskii, ”Dielectric properties of new  $\text{AgInP}_2\text{Se}_6$  crystals,” *Ferroelectrics*, **391**, 151-157 (2009).
209. J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, P.Kuzhir, S.Maksimenko, V.Kuznetsov, S.Moseenkov, O.Shenderova, Ph.Lambin, “Influence of humidity on dielectric properties of PMMA nanocomposites containing onion like carbon,” *Ferroelectrics*, **391**, 131-138 (2009).
210. V.Samulionis, J.Banys, Yu.Vysochanskii, “Linear and nonlinear elastic properties of  $\text{CuInP}_2\text{S}_6$  layered crystals under polarization reversal,” *Ferroelectrics*, **389**, 18-24 (2009).
211. A.Lekstutis, T.Granzow, E.Aulbach, J.Banys and D.Lupascu, “Fatigue in lead zirconate titanate under pressure,” Proceedings of the 14<sup>th</sup> US – Japan seminar Dielectric and piezoelectric materials, Resort at the mountain Welches, Oregon, United States, October 11 – 14, p. 254 – 260 (2009).
212. S.Greicius, J.Banys, I.Szafraniak, A.Kholkin, “Conductivity investigations of pure and Ba, Ca, Sr doped  $\text{BaTiO}_3$ ,“ Proceedings of the 2009 18<sup>th</sup> IEEE International symposium an application of ferroelectric, Xian, China, August 23 – 27, p. 430 – 432 (2009).
213. R.Sobiestianskas, B.Vengalis, J.Banys, “High frequency dielectric study of multiferroic  $\text{Bi}_{0.9}\text{La}_{0.1}\text{Fe}_{0.9}\text{Mn}_{0.1}\text{O}_3$  thin films,” Proceedings of the 2009 18<sup>th</sup> IEEE International symposium an application of ferroelectric, Xian, China, August 23 – 27, p. 232 – 235 (2009).
214. A.Dziaugys, J.Banys, V.Samulionis, Yu.Vysochanskii, “Investigation of  $\text{CuInP}_2\text{S}_6$  family layered crystals for ultrasonic transducers,” Proceedings of the 2009 18<sup>th</sup> IEEE International symposium an application of ferroelectric, Xian, China, August 23 – 27, p. 116 – 120 (2009).
215. R.Grigelaitis, J.Banys, S.Bagdzevicius, A.Sternberg, K.Bormanis, “Dielectric investigation of lead free perovskite strontium titanate with 25 % bismuth ceramics,” *Phys.stat.sol.(c)*, **pssc200982535** (2009).

216. J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, P.Kuzhir, S.Maksimenko, V.Moseenkov, A.Usolseva, I.Mazov, A.Ischenko, P.Lambin, “Dielectric properties of MWCNT basd polymer composites close and below percolation threshold,” Phys.stat.sol.(c), pssc**200982531** (2009).
217. A.Dziaugys, J.Banys, J.Macutkevic, V.Samulionis, Yu.Vysochanskii, “Dielectric spectroscopy of CuBiP<sub>2</sub>S<sub>6</sub> crystals,” Phys.stat.sol.(c), pssc**200982525** (2009).
218. J.Banys, R.Grigalaitis, A.Mikonis, J.Macutkevic, P.Keburis, “Distribution of relaxation timesof relaxors: comparison with dipolar glasses,” Phys.stat.sol.(c), pssc**200982529** (2009).
219. A.Dziaugys, J.Banys, V.Samulionis and I.Studenjak, “Dielectric properties of Cu<sub>6</sub>PS<sub>5</sub>I single crystals,” Integrated Ferroelectrics, **109**, p. 18 – 26 (2009).
220. A.Mikonis, J.Macutkevic, R.Grigalaitis, J.Banys, R.Adomavicius, A.Krotkus, A.N.Salak, N.P.Vyshatko and D.D.Khalyavin, „Broadband dielectric spectroscopy of La<sub>1/3</sub>NbO<sub>3</sub> ceramics,” Integrated Ferroelectrics, **109**, p. 55 – 60 (2009).
221. J.Macutkevic, P.Kuzhir, D.Seliuta, G.Valusis, J.Banys, A.Paddubskaya, D.Bychanok, G.Slepyan, S.Maksimenko, V.Kuznetsov, S.Moseenkov, O.Shenderova, A.Mayer and Ph.Lambin, „Dielectric properties of a novel high absorbing onion like carbon based polymer composite,” Diamond and related materials, **19**, p. 91 – 99 (2010).
222. I.Mazov, V.Kuznetsov, S.Moseenkov, A.Usolseva, A.Romanenko, O.Anikeeva, T.Buryakov, P.Kuzhir, S.Maksimenko, D.Bychanok, J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, and P.Lambin, „Elecromagnetic shielding properties of MWCNT/PMMA composites in Ka-band,” Phys.stat.sol. (b), pssb**200982294** (2009).
223. R.Sobiestianskas, A.Hardy, J.Banys, Jan D’Haen, M.Van Bael, „Microwave dielectric properties of BiFeO<sub>3</sub> thin film Prepared by aqueous chemical solution deposition method,” Processing and Application of Ceramics, **3**, p. 167 – 170 (2009).
224. J.Banys, T.Ramoska, M.Vijatovic, J.Bobic, B.Stojanovic, „Dielectric investigations of Barium titanate doped with 0.5 mol % antimony,” Proceedings of the 11th ECERS conference, Krakow, Poland, p. 354 – 356 (2009), ISBN 978-83-60958-54-4.
225. R.Grigalaitis, J.Banys, A.Brilingas, K.Bormanis, A.Sternberg, V.Zauls, „Broadband dielectric studies of (1-x)PMN-(x)PT relaxor ceramics,” Proceedings of the 11th ECERS conference, Krakow, Poland, p. 357 – 359 (2009), ISBN 978-83-60958-54-4.
226. R.Sobiestijanskas, J.Banys, B.Vengalis, J.Devenson, A.K.Oginskis, V.Lisauskas, L.Dapkus, „Dielectric study of BiFeO<sub>3</sub> multiferroic films deposited on highly conductive substrates,” Proceedings of the 11th ECERS conference, Krakow, Poland, p. 366 – 369 (2009), ISBN 978-83-60958-54-4.
227. M.Ivanov, S.Rudys, S.Lapinskas, J.Banys, J.Macutkevic, A.Ye.Yermakov, M.A.Uimin, A.A.Mysik, O.Shenderova, “Measurements of complex dielectric permittivity and magnetic permeability of carbon coated Ni kapsules,” Proceedings of 18th International conference on microwave, radar and wireless communications, MIKON – 2010, 14 – 16 June, Vilnius, p. 105 – 108 (2010).
228. J.D.Bobic, M.M.Vijatovic S.Greicius, J.Banys, B.D.Stojanovic, „Dielectric and relaxor behavior of BaBi<sub>4</sub>Ti<sub>4</sub>O<sub>15</sub> ceramics,” Journal of alloys and compounds, **499**, 221 - 226 (2010).
229. V.Samulionis, J.Banys, Yu.Vysochanskii, „Characterization of CuInP<sub>2</sub>S<sub>6</sub> family two dimensional crystals for ultrasonic transducers,” Ultrasonic symposium IUS proceedings, Rome, Italy, 20 – 23 September, p. 964 – 967 (2009).

230. J.Banys, „Dielectric spectroscopy of dipolar glasses and relaxors,“ Materials Science Research Journal, **3**, 223 – 350 (2009).
231. A.Kohutych, R.Yevych, S.Perechinskii, V.Samulionis, J.Banys and Yu.Vysochanskii, „Sound behavior near Lifshitz point in proper ferroelectrics,“ Phys Rev B. **82**, 054101 (2010).
232. A.Dziaugys, J.Banys, J.Macutkevic, R.Sobiestijanskas, Yu.Vysochanskii, „Dipolar glass phase if ferroelectrics: CuInP<sub>2</sub>S<sub>6</sub> and Ag<sub>0.1</sub>Cu<sub>0.9</sub>InP<sub>2</sub>S<sub>6</sub> crystals,“ Phys.stat.sol.(a), **207**, 1960-1967 pssa.200925346 (2010).
233. V.Samulionis, J.Banys, Yu.Vysochanskii, „Piezoelectric and ultrasonic studies of mixed Ag<sub>x</sub>Cu<sub>1-x</sub>InP<sub>2</sub>(S,Se)<sub>6</sub> layered crystals,“ Materials Science Forum, **636-637**, p 398 – 403 (2010).
234. J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, S.Hens, V.Borjanovic, V.Kusnetzov, O.Shenderova, „Effect of thermal treatment conditions on the properties of onion like carbon based polymer composite,“ Composites science and technology, **70**, 2298 - 2303 (2010).
235. T.Ramoska, J.Banys, R.Sobiestianskas, M.Vijatovic, J.Bobic, B.Stojanovic, „Dielectric investigations of La-doped barium titanate,“ Processing and Application of Ceramics, **4**, p. 193 – 198 (2010).
236. J.Banys, „Dielectric spectroscopy of dipolar glasses and relaxors,“ in Handbook of material science research, New York, ISBN 978 – 1 – 60741 – 798 – 9, p. 1 – 124 (2010).
237. V.Samulionis, J.Banys, J.Macutkevic, yu.Vysochanskii, „Dielectric and ultrasonic spectroscopy of quasi – one dimensional CuInP<sub>2</sub>(S<sub>x</sub>Se<sub>1-x</sub>)<sub>6</sub> mixed crystals,“ in Handbook of material science research, New York, ISBN 978 – 1 – 60741 – 798 – 9, p. 213 – 269 (2010).
238. A.Senyshyn, B.Schwarz, T.Lorenz, V.T.Adamiv, Ya.V.Burak, J.Banys, R.grigalaitis, L.Vasylechko, H.Ehrenberg, H.Fuess, „Low – temperature crystal structure, specific heat and dielectric properties of lithium tetraborate Li<sub>2</sub>B<sub>4</sub>O<sub>7</sub>,“ J.Appl. Phys., **108**, 093524 (2010).
239. V.Samulionis, J.Banys, Yu.Vysochanskii, „Ultrasonic investigation of field induced piezoelectric properties in lead free materials,“ Integrated Ferroelectrics, **115**, 9 – 17 (2010).
240. S.Bagdzevicius, J.banys, R.grigalaitis, A.Strenberg, K.Bormanis, „Dipolar glass – like perovskite Sr<sub>0.8</sub>Bi<sub>0.2</sub>TiO<sub>3</sub> ceramic,“ Ferroelectrics, **400**, 434 – 400 (2010).
241. J.Banys, R.Grimalaitis, A.Mikonis, J.Macutkevic, P.Keburis, „Dielectric spectroscopy of relaxors and dipolar glasses,“ Ferroelectrics, **405**, 3 – 12 (2010).
242. J.Macutkevic, J.Banys, R.Grimalaitis, „Comment on „Revisit of the Vogel – Fulcher freezing in lead magnesium niobite relaxors [Appl. Phys. Lett. 97, 132905 (2010)]“, Appl. Phys. Lett., **98**, 016101 (2011).
243. A.Dziaugys, J.Banys, J.Macutkevic, Yu.Vysochanskii, I.Pritz, M.Gurzan, „Phase transitions in CuBiP<sub>2</sub>Se<sub>6</sub> crystals,“ Phase Transitions, **84**, 147 – 156 (2011).
244. A.Paddubskaya, D.Bychanok, P.Kuzhir, S.Maksimenko, V.Kuznetsov, S.Moseenkov, O.Shenderova, J.Banys, J.Macutkevic, G.Valusis, „Onion like carbon: electromagnetic applications,“ Proceedings of conference Topical problems of Solid state physics, Minsk, Belorussia, 9 – 14 June, p. 156 – 160 (2010).
245. A.Dziaugys, J.Banys, Yu.Vysochanskii, „Broadband dielectric investigations of indium rich CuInP<sub>2</sub>S<sub>6</sub> layered crystals,“ Z.Krystallogr., **226**, p. 171 – 176 (2011).

246. P.Kuzhir, A.Paddubskaya, D.Bychanok, A. Nemilentsau, M.Shuba, A.Plusch, S.Maksimenko, S.Bellucci, L.Colderoni, F.Micciulla, I.Sacco, G.Rinaldi, J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, „Microwave probing of nanocarbon based epoxy resin composite films: towards electromagnetic shielding,“ *Thin Solid Films*, **519**, p. 4114 – 4118 (2011).
247. S.Bellucci, L.Colderoni, F.Micciulla, G.Rinaldi, I.Sacco, A.Paddubskaya, D.Bychanok, A.Plusch, P Kuzhir, , S.Maksimenko, , M.Shuba, S.Slepyan, J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, „Effectivness of microwave electromagnetic shielding in carbon based epoxy nanocomposites,“ proceedings of 35th International confeence on Infrared, Millimeter and Terahertz waves, p. 1 – 2 (2010).
248. I.N.Mazov, V.L.Kuznetsov, S.I.Moseenkov, A.V.Ishchenko, N.A.Rudina, A.I.Roamnenko, T.I.Buryakov, O.B.Anikeeva, J.Mucutkevic, D.Seliuta, G.Valusis, J.Banys, „Structure and electrophysical properties of multiwalled carbon nanotubes/polymethylmethacrylate composites prepared via coagulation technique,“ *Nanoscience and Nanotechnology letters*, **3**, p. 18 – 23 (2011).
249. E.Masiukaite, J.Banys, R.Sobiestijanskas, T.Ramoska, V.A.Khomchenko, D.A.Kiselev, „Conductivity investigations of Aurivilius type  $\text{Bi}_{2.5}\text{Gd}_{1.5}\text{Ti}_3\text{O}_{12}$  ceramics,“ *Solid State Ionics*, **188**, p. 50 – 52 (2011).
250. A.Dziaugys, J.Banys, V.Samulionis, J.Macutkevic, Yu.Vysochanskii, V.Schvartzman, W.Kleemann, „Phase transitions in layered semiconductor – ferroelectrics,“ in *Ferroelectrics characterization and modelling*, InTech, ISBN 978 – 953 – 307 – 455 – 9, p. 153 – 180 (2011).
251. W.Kleemann, V.Schvartzman, P.Borisov, J.Banys, Yu.Vysochanskii, „Magnetic and polar phases and dynamical clustering in multiferroic layered solid solutions  $\text{CuCr}_{1-x}\text{In}_x\text{P}_2\text{S}_6$ ,“ *Phys.Rev.B*, **84**, 094411 (2011).
252. J.Macutkevic, J.Banys, A.Bussmann – Holder, A.R.Bishop, „Origin of polar nanoregions in relaxor ferroelectrics: nonlinearity, discrete breather formation ge transfere,“ *Phys.Rev.B*, **83**, 184301 (2011).
253. R.Sobiestianskas, B.Vengalis, J.Banys, J.Devenson, A.K.Oginskis, V.Lisauskas, L.Dapkus, „Microwave dielectric properties of  $\text{BiFeO}_3$  multiferroic films deposited on conductive layers,“ *Materials Science Poland*, **29**, p. 41 – 46 (2011).
254. R.Grigalaitis, S.Lapinskas, J.Banys, E.E.Tornau, „Simulation of relaxation times distribution for relaxors using distrinution of three dimensional Ising type clusters,“ *Ferroelectrics*, **415**, p. 40 – 50 (2011).
255. J.Banys, S.Lapinskas, S.Rudys, S.Greicius, R.Grigalaitis, „High frequency measurements of ferroelectrics and related materials in coaxial line,“ *Ferroelectrics*, **414**, p. 64 – 69 (2011).
256. J.Pozingis, J.Banys, J.Macutkevic, R.Adomavicius, A.Krotkus, D.C.Lupascu, „Relaxor behaviour and soft mode in  $0.85\text{Ag}_{0.9}\text{Li}_{0.1}\text{NbO}_3 - 0.15\text{Bi}_{0.5}\text{K}_{0.5}\text{TiO}_3$  ceramics,“ *Ferroelectrics*, **416**, p. 72 – 77 (2011).
257. J.Macutkevic, J.Banys, „Comment on „Relaxor behavior and dielectric relaxation in  $\text{Pb}(\text{Ba}_{1/3}\text{Nb}_{2/3})\text{O}_3$ : a phase pure new relaxor material,“ *J.Appl.Phys.*, **109**, 116101 (2011).
258. M.M.Vijatovic Petrovic, J.D.Bobic, T.Ramoska, J.Banys, B.D.Stojanovic, „Antimony doping effect on barium titanate structure and electrical properties,“ *Ceramics International*, **37**, p. 2669 – 2677 (2011).

259. J.Banys, J.Macutkevic, S.Lapinskas, R.Pirc, Z.Kutnjak, R.Blinc, „Low frequency dielectric investigation of  $Rb_{0.5}(ND_4)_{0.5}D_2PO_4$  dipolar glass: comparison with nuclear magnetic resonance investigations,“ *J.Appl.Phys.*, **109**, 114101 (2011).
260. A.Dziaugys, J.Banys, I.Studenyak, „Dielectric investigations of superionic  $Cu_6PS_5Br$  single crystal,“ *Solid State Ionics*, **199 – 200**, p. 21 – 24 (2011).
261. P.Kuzhir, A.Paddubskaya, D.Bychanok, G.Slepyanin, S.Maksimenko, J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, V.Kuznetsov, S.Moseenkov, O.Shenderova, Ph.Lambin, Electromagnetic response of polymer composites with quasi spherical nanocarbon inclusions: theory below percolation threshhold,“ *Journal of Polymer Engineering*, **31**, p. 167 – 173 (2011).
262. I.Mazov, V.Kuznetsov, S.Moseenkov, A.Ischenko, A.Rudina, P.Kuzhir, S.Maksimenko, K.Batrakov, A.Romanenko, T.Buryakov, O.Anikeeva, J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, Ph.Lambin, „Nanocarbon in microwaves: response properties and applications,“ *Proceedings Actual problems of microworld physics*, p. 174 – 181 (2011).
263. M.M.Vijatovic Petrovic, J.D.Bobic, T.Ramoska, J.Banys, B.D.Stojanovic, „Electrical properties of lanthanum doped barium titanate ceramics,“ *Materials Characterization*, **62**, p. 1000 – 1006 (2011).
264. J.Macutkevic, J.Banys, A.Bussmann – Holder, A.R.Bishop, „Publisher’s note: Origin of polar nanoregions in relaxor ferroelectrics: nonlinearity, discrete breather formation and charge transfere [Phys.Rev.B, **83**, 184301 (2011)],“ *Phys.Rev.B*, **83**, 229901(E) (2011).
265. J.Banys, J.Grigas, R.Grigelaitis, Guest editorial, *Ferroelectrics* **417**, vii (2011).
266. M.Ivanov, K.Klemkaite, A.Khinsky, A.Kareiva, J.Banys, „Dielectric and conductive properties of hydrotalcite,“ *Ferroelectrics*, **417**, p. 136 – 142 (2011).
267. S.Rudys, M.Ivanov, J.Banys, N.P.Vyshatko, A.D.Shilin, A.N.Salak, „Dielectric and impedance spectroscopy of  $xNBT-(1-x)LMT$  ceramics,“ *Ferroelectrics*, **417**, p. 143 – 150 (2011).
268. J.Banys, T.Ramoska, J.Matukas, S.Pralgauskaite, F.M.Alawneh, V.V. Shvartsman and D.C. Lupascu, „Investigation of dielcric and noise properties of the multiferroic composite  $BaTiO_3$  with  $CoFe_2O_4$ ,“ *Ferroelectrics*, **417**, p. 25 – 32 (2011).
269. J.Banys, J.Grigas, R.Grigelaitis, Guest editorial, *Ferroelectrics* **418**, vii (2011).
270. A.Kupreviciute, J.Banys, T.Ramoska, R.Sobiestianskas, F.M.Alawneh, N.Gharbi and D.C. Lupascu, „Dielectric properties and conductivity of iron oxide – barium titanate composites,“ *Ferroelectrics*, **418**, p. 94 – 99 (2011).
271. S.N.Kalaev, Z.N.Omarov, K.Bormanis, S.A.Sadikov, J.Banys, „Features of thermal properties of ferroelectric PLZT ceramics in the region of phase transition,“ *Ferroelectrics*, **420**, p. 89 – 94 (2011).
272. V.Samulionis, J.Banys, A.Dziaugys, M.I.Gurzan, I.P.Pritz, Yu.Vysochanskii, „Piezoelectric and ultrasonic studies of new lamellar crystals of  $CuInP_2S_6$  type,“ *Ferroelectrics*, **419**, p. 97 – 102 (2011).
273. V.Samulionis, J.Banys, A.Sanches-Ferrer, R.Mezzenga, „Ultrasonic characterization of dynamic elastic properties of polymer composites with inorganic nanotubes,“ *Sensors and Transducers*, **12**, p. 66 – 70 (2011).

274. J.Banys, S.Bagdzevicius, M.Kinka, V.Samulionis, R.Grigalaitis, „Dielectric studies of  $\text{Ba}_2\text{Pr}_x\text{Nd}_{1-x}\text{FeNb}_4\text{O}_{15}$  ceramics,“ Proceedings of the 2011 IEEE Applications of ferroelectrics International symposium and International symposium on Piezoresponse force microscopy and nanoscale phenomena in polar materials, Vancouver, Canada, July 24 – 27, p. 1 – 3 (2011).
275. A.Dziaugys, J.Banys, V.Samulionis, I.Studenyak, „Dielectric investigations of phse transitions in  $\text{Cu}_6\text{PS}_5(\text{I}_x\text{Br}_{1-x})$  mixed crystals,“ Ferroelectrics, **420**, p. 30 – 36 (2011).
276. V.Samulionis, J.Banys, Yu.Vysochanskii, „Ultrasonic relaxation in phase transition region in ferroelectric semiconductors of  $\text{Sn}_2\text{P}_2\text{S}_6$  family,“ Solid State Phenomena, **184**, p. 345 – 350 (2012).
277. A.Paddubskaya, D.Bychanok, A.Plyushch, P.Kuzhir, A.Nemilentsau, S.Maksimenko, S.bellucci, L.Colderoni, F.Micciula, I.Sacco, G.Rinaldi, G J.Macutkevic, D.Seliuta, G.Valusis, J.Banys, „Epoxy resin/SWCNT scielding paint for super high frequency range,“ Journal of nanoelectronics and optoelectronics, **7**, p. 81 – 86 (2012).
278. A.Senyshyn, H.Boysen, R.Niewa, J.Banys, M.Kinka, Ya.V.Burak, V.T.Adamiv, F.Izumi, I.Chumak, H.Fuess, „High – temperature properties of lithium tetraborate  $\text{Li}_2\text{B}_4\text{O}_7$ ,“ J.Phys.D: Appl. Phys., **45**, 175305 (2012).
279. A.Dziaugys, V.Schvartzman, J.Macutkevic, J.Banys, Yu.Vysochanskii, W.Kleemann, „Phase diagram of mixed  $\text{Cu}(\text{In}_x\text{Cr}_{1-x})\text{P}_2\text{S}_6$  crystals,“ Phys.Rev.B, **85**, 134105 (2012).
280. R.Sobiestianskas, W.Peng, N.Lemme, M.Karkut, J.Banys, J.Holc, M.Kosec, „Microwave dielectric dispersion in a multiferroic  $\text{Pb}(\text{Fe}_{1/2}\text{Nb}_{1/2})\text{O}_3$  thin film,“ Appl.Phys.Lett., **100**, 122904 (2012).
281. S. Bellucci, L.Coderoni, F.Micciulla, I.Sacco, G.Rinaldi, P.Kuzhir, A.Paddubskaya, M.Shuba, S.Maksimenko, J.Macutkevic, D.Seliuta, G.Valusis, R.Adomavicius, J.Banys, „Epoxy - nano-carbon shielding coating for super-high-frequency range,“ 11 International Semiconductor Conference (Cas 2011), 34th Edition, VOLS 1 and 2 Book Series: International Semiconductor Conference, p. 57-60 (2011).
282. S.Svirskas, M.Ivanov, S.Bagdzevicius, M.Dunce, M.Antonova, E.Birks, A.Sternberg, A.Brilingas, J.Banys, „Dynamics of phase transition in 0.4NBT-0.4ST-0.2PT solid solution,“ Integrated Ferroelectrics, **134**, 81 – 87 (2012).
283. T.Ramoska, J.Banys, L.Mitoseriu, V.Buscaglia, K.Mazeika, D.Baltrunas, „Mossbauer investigations of the  $0.5\text{BaTiO}(3)-0.5(\text{Ni},\text{Zn})\text{Fe}_2\text{O}_4$  composites,“ Ferroelectrics, **428**, 101-108 (2012).
284. S.Bagdzevicius, J.Banys, R.Grigalaitis, A.Sternberg, K.Bormanis, „Broadband dielectric investigation of Sodium Potassium Niobate ceramic doped 8% of Antimony,“ Ferroelectrics, **428**, 14-19 (2012).
285. S.Rudys, M.Ivanov, J.Banys, „Ansoft HFSS software application for the dielectric and magnetic measurements of ferroelectrics and related materials in microwaves,“ Ferroelectrics, **430**, 115-122 (2012).
286. M.Ivanov, J.Banys, C.Bogicevic, J.M.Kiat, „Size effects on dielectric properties of nanograin PSN ceramics,“ Ferroelectrics, **429**, 43-47 (2012).
287. M.Kinka, V.Samulionis, J.Banys, A.Kalvane, K.Bormanis, „Dielectric and ultrasonic investigation of phase transitions in  $\text{PbFe1/2Nb1/2O}_3$  ceramics,“ Ferroelectrics, **440**, 93-99 (2012).

288. A.Dziaugys, J.Banys, Yu.Vysochanskii, „Conductivity investigations of layered Mn<sub>2</sub>P<sub>2</sub>S<sub>6</sub> and Cu<sub>0.52</sub>Mn<sub>1.74</sub>P<sub>2</sub>S<sub>6</sub> crystals,“ Proceedings of the 2012 21<sup>st</sup> IEEE International symposium an application of ferroelectric held jointly with 11th European Conference on the Applications of Polar Dielectrics and 4th Conference on Piezoresponse Force Microscopy and Nanoscale Phenomena in Polar Materials, Aveiro, Portugal, July 9 – 13, p. 1 – 3 (2012).
289. J.Macutkevic, R.Adomavicius, A.Krotkus, J.Banys, V.Kuznetsov, S.Moseenkov, A.Romanenko, O.Shenderova, “Localization and electrical transport in onion-like carbon based composites,” *J.Appl. Phys.*, **111**, 103701 (2012).
290. J.Banys, D. Ciplys, „19th International Congress on Sound and Vibration (ICSV19),“ *International Journal Of Acoustics And Vibration*, Vol.**17**, Issue 2, p.58-58 (2012).
291. J.D.Bobic, M.M.V. Petrovic, J.Banys, B.D.Stojanovic, „Electrical properties of niobium doped barium bismuth-titanate ceramics,“ *MATERIALS RESEARCH BULLETIN*, Vol. **47**, Issue 8, p.1874-1880 (2012).
292. M.M.V.Petrovic, J.D.Bobic, A.M.Radojkovic, J.Banys, B.D.Stojanovic, „Improvement of barium titanate properties induced by attrition milling,“ *CERAMICS INTERNATIONAL*, Vol. **38**, Issue 7, p. 5347-5354 (2012).
293. M.Kinka, M.Josse, E.Castel, S.Bagdzevicius, V.Samulionis, R.Grigelaitis, J.Banys, M.Maglione, „Coexistence of Ferroelectric and Relaxor States in Ba<sub>2</sub>Pr<sub>x</sub>Nd<sub>1-x</sub>FeNb<sub>4</sub>O<sub>15</sub> Ceramics,“ ,” *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **59**, 1879 – 1882 (2012).
294. S.Bagdzevicius, R. Grigelaitis, J. Banys, A.Sternberg, K.Bormanis, „Dielectric investigation of sodium potassium niobate ceramic doped 7% of antimony,“ *Solid State Ionics*, **225**, 667-671 (2012).
295. M.Urvakis, A.Kupreviciute, J.Banys, J.Macutkevic, B.Mayoral, T. McNally, „Effect of annealing and biaxial deformation on the dielectric properties of composites of multiwall carbon nanotubes and poly(ethylene terephthalate),“ *JOURNAL OF NANOPHOTONICS*, Vol. **6**, 061708 (2012).
296. K.Glukhov, K.Fedyo, J.Banys, Y.Vysochanskii, „Electronic Structure and Phase Transition in Ferroelectric Sn<sub>2</sub>P<sub>2</sub>S<sub>6</sub> Crystal,“ *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*, Vol. **13**, Issue 11, p.14356-14384 (2012).
297. P.P.Kuzhir, A.G.Paddubskaya, M.V. Shuba, S.A.Maksimenko, A.Celzard, V.Fierro, G.Amaral-Labat, A.Pizzi, G.Valusis, J.Macutkevic, M.Ivanov, J.Banys, S.Bistarelli, A.Cataldo, M.Mastrucci, F.Micciulla, I.Sacco, E.Stefanutti, S.Bellucci, „Electromagnetic shielding efficiency in K-a-band: carbon foam versus epoxy/carbon nanotube composites,“ *JOURNAL OF NANOPHOTONICS*, Vol.**6**, 061715 (2012).
298. V. Samulionis, J. Banys, Š. Svirskas, A. Sanchez-Ferrer, R. Mezzenga, „Ultrasonic characterization of polyurea elastomers,“ *Proceedings of 19th International Congress on Sound and Vibration 2012 (ICSV 19)*, 8-12 July, Vilnius, Lithuania, ISBN: 9781622764655, Publisher: Curran Associates, Inc. ( Feb 2013 ), p. 1290-1297 (2013).
299. J. Macutkevic, D. Seliuta, G. Valusis, J. Banys, P. Kuzhir, S. Maksimenko, V. Kuznetsov, S. Moseenkov, O. Shenderova, Ph. Lambin, „Dielectric Relaxation of Onion-Like Carbon Based Polymers Composites,“ in *Polymer relaxation*, ISBN 978-1-61470-381-5, p. 107-136 (2012).

300. L.I.Gurskii, J.Macutkevic, J.Banys, A.Poddubskaya, M.N.Saraseko, A.V.Petrov, N.A.Kalandra, N.A.Sobolev, „Synthesis and dielectric properties of Pb<sub>0.85</sub>Ba<sub>0.25</sub>Zr<sub>0.53</sub>Ti<sub>0.47</sub>O<sub>3</sub> compounds with nano-inclusions of Cu and Ni,“ *Phys.stat.sol.(c)*, **10**, 640-645 (2013).
301. J.Macutkevic, J.Banys, „Comment on "Giant dielectric permittivity of detonation-produced nanodiamond is caused by water" by S. S. Batsanov, S. M. Gavrilkin, A. S. Batsanov, K. B. Poyarkov, I. I. Kulakova, D. W. Johnson and B. G. Mendis, *J. Mater. Chem.*, 2012, 22, 11166,“ *JOURNAL OF MATERIALS CHEMISTRY C*, Vol.**1**, Issue 19, p.3255-3256 (2013).
302. P.Kuzhir, S.Maksimenko, V.Kuznetsov, L.Bulusheva, A.Okotrub, A.Romanenko, O. Shenderova, J.Macutkevic, G.Valusis, J.Banys, P.Lambin, „Onion-Like Carbon in Microwaves: Toward Electromagnetic Shielding,“ *Proceedings of conference WOMEN IN PHYSICS*, Book Series: AIP Conference Proceedings, Vol.**1517**, p.228-228 (2013).
303. A.Mikonis, J.Banys, R.Grigelaitis, A.Matulis, S.Lapinskas, G.Volkel, „Determination of the two dimensional distribution of the attempt relaxation times and activation energies from temperature dependence of dielectric dispersion,“ *CENTRAL EUROPEAN JOURNAL OF PHYSICS*, **11**, Issue 2, p.206-212 (2013).
304. J.Macutkevic, P.P. Kuzhir, A.G.Paddubskaya, J.Banys, S.A.Maksimenko, E.Stefanutti, F. Micciulla, S.Bellucci, „Broadband dielectric/electric properties of epoxy thin films filled with multiwalled carbon nanotubes,“ *JOURNAL OF NANOPHOTONICS*, Vol.**7**, 073593 (2013).
305. R.Mackeviciute, M.Ivanov, J.Banys, N.Novak, Z.Kutnjak, M.Wencka, J.F.Scott, „The perfect soft mode: giant phonon instability in a ferroelectric,“ *J.Phys.: Condens. Matter*, **25**, 212201 (2013).
306. M.M.V. Petrovic, J.D.Bobic, R.Grigelaitis, B.D.Stojanovic, J.Banys, „La-doped and La/Mn-co-doped Barium Titanate Ceramics,“ *ACTA PHYSICA POLONICA A*, **124**, p. 155-160 (2013).
307. J.Macutkevic, P. Kuzhir, A.Paddubskaya, S.Maksimenko, J.Banys, A.Celzard, V.Fierro, E.Stefanutti, A.Cataldo, F.Micciulla, S.Bellucci, „Epoxy Resin/Carbon Black Composites Below the Percolation Threshold,“ *JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY*, Vol.**13**, Issue 8, p.5434-5439 (2013).
308. J.Macutkevic, R.Grigelaitis, J.Banys, S.Hens, V.Borjanovic, O.Shenderova, V.Kuznetsov, S.Moseenkov, „Dielectric properties of onion like carbon composites,“ *Proceedings of international conference Nanomeeting 2013*, Minsk, Belorussia, Physics, Chemistry and Application of Nanostructures, p. 226 – 229 DOI: 10.1142/9789814460187\_0056 (2013).
309. J.Macutkevic, I.Kranauskaite, J.Banys, A.Paddubskaya, E.Stefanuti, A.Cataldo, .Micciulla, A.Celzard, V.Fierro, „Dielectric properties of epoxy resin composites filled with nanocarbon inclusions,“ *Proceedings of international conference Nanomeeting 2013*, Minsk, Belorussia, Physics, Chemistry and Application of Nanostructures, p. 238 – 241 DOI: 10.1142/9789814460187\_0059 (2013).
310. J. Macutkevic, P. Kuzhir, A. Paddubskaya, S. Maksimenko, J. Banys, A. Celzard, V. Fierro, S. Bistarelli, A. Cataldo, F. Micciulla, S. Bellucci, „Electrical transport in carbon black-epoxy resin composites at different temperatures,“ *J.Appl. Phys.*, **114**, 033707 (2013).

311. M.M. Vijatović Petrović, J.D. Bobić, J. Banys, B.D. Stojanović, „Electrical properties of antimony doped barium titanate ceramics,“ MATERIALS RESEARCH BULLETIN, Vol. **48**, Issue 10, p.3766-3772 (2013).
312. J.D. Bobić, M.M. Vijatović Petrović, J. Banys, B.D. Stojanović, „Effect of La substitution on the structural and electrical properties of BaBi<sub>4-x</sub>LaxTi<sub>4</sub>O<sub>15</sub>,“ Ceramics International, **39**, p. 8049 – 8057 (2013).
313. M. Simenas, R. Sobiestianskas, K. Bormanis, J. Banys, T. Ramoška, „Dielectric relaxation and conductivity in the PbCo0.5Ta0.5O<sub>3</sub> ceramics,“ Solid State Ionics, **247-248**, 98-101 (2013).
314. P.P. Kuzhir, A.G. Paddubskaya, S.A. Maksimenko, A. Celzard, V.Fierro, G.Amaral-Labat, A.Pizzi, J.Macutkevic, G.Valusis, M.Ivanov, J.Banys, S.Bellucci, „Highly porous conducting carbon foams for electromagnetic applications,“ IEEE Proceedings of International Symposium on Electromagnetic Compatibility (EMC EUROPE), Rome, Italy, 17-21 Sept. 2012, ISBN: 978-1-4673-0718-5, p. 1-4 (2012).
315. L.Mitoseriuia, J.Banys, K.Roleder, „Guest editors' note,“ Phase Transitions, **86**, 633-634 (2013).
316. A.Dziaugys, J.Banys, J.Macutkevic, Yu.Vysochanskii, „Anisotropy effects in thick layered CuInP<sub>2</sub>S<sub>6</sub> and CuInP<sub>2</sub>Se<sub>6</sub> crystals,“ Phase transitions, **86**, 878 – 885 (2013).
317. T.Salkus, V.Galeckas, J.C.Bandot. I.I.Makauz, I.P.Studenyak, A.Selskis, A.Kezionis, J.Banys, „Impedance spectroscopy study of Cu<sub>6</sub>PS<sub>5</sub>I – As<sub>2</sub>S<sub>3</sub> nanocomposites,“ Ionics, **19**, 1387 – 1391 (2013).
318. P.Kuzhir, A.Paddubskaya, A.Plyushch, N.Volynets, S.Maksimenko, J.Macutkevic, I.Kranauskaitė, J.Banys, E.Ivanov, R.Kotsilkova, A.Celzard, V.Fiero, J.Zicans, T.Ivanova, R.Merijs Meri, I.Bochkov, A.Cataldo, F.Micciulia, S.Bellucci, Ph.Lambin, „Epoxy composites filled with high surface area – carbon fillers: optimization of electromagnetic shielding, electrical, mechanical and thermal properties,“ J.Appl. Phys., **114**, 164304 (2013).
319. A.Dziaugys, J.Banys, Yu.Vysochanskii, „Dielectric investigations of layered Mn<sub>2</sub>P<sub>2</sub>S<sub>6</sub> and Cu<sub>0.52</sub>Mn<sub>1.74</sub>P<sub>2</sub>S<sub>6</sub> single crystals,“ Ferroelectrics, **447**, 56 – 62 (2013).
320. V.Samulionis, S.Svirskas, J.Banys, A.Sanchez-Ferrer, S. Jecg Chin, T.McNally, „Ultrasonic properties of composites of polymers and inorganic nanoparticles,“ Phys.stat.sol.(a), 201329294 (2013).
321. S.Svirskas, D.Jablonskas, V.Samulionis, A.Kupreviciute, J.Banys, S. Jecg Chin, T.McNally, „Effect of Mo<sub>6</sub>S<sub>3</sub>I<sub>6</sub> nanowires on the dielectric properties of poly(ε-caprolactone),“ Phys.stat.sol.(a), 201329313 (2013).
322. J.Macutkevic, J.Banys, V.Kuznetsov, S.Moseenkov, O.Shenderova, „Broadband dielectric properties of onion like carbon/polyurethane composites,“ Phys.stat.sol.(a), **210**, 201330257 (2013).
323. J.Macutkevic, P.Kuzhir, A.Paddubskaya, M.Shuba, J.Banys, S.Maksimenko, V.Kuznetsov, I.Mazov, D.Krasnikov, „Influence of carbon – nanotube diameters on composite dielectric properties,“ Phys.stat.sol.(a), 201329254 (2013).

324. M.Vijatovic Petrovic, J.Bobic, H.Ursic, J.Banys, B.Stojanovic, „The electrical properties of chemically obtained barium titanate improved by attrition milling,“ *J.Sol-Gel Sci Technol.*, **67**, 267 – 272 (2013).
325. R.Grigalaitis, S.Lapinskas, J.Banys, E.Tornau, „On ergodic relaxation time in the three dimensional Ising model,“ *Lithuanian J. of Physics*, **53**, 157-162 (2013).
326. S.Bellucci, J.Macutkevic, P. Kuzhir, A.G. Paddubskaya, S.A. Maksimenko, A. Cataldo, F.Miciulia, J.Banys, „Nano carbon broad band analysis, temperature dependent dielectric properties and percolation thresholds,“ *IEEE Proceedings of International Conference on Electromagnetics in Advanced Applications*, Torino, Italy, 9-13 Sept. 2013, ISBN: 978-1-4673-5705-0, p. 1-4 (2013).
327. V.Samulionis, J.Banys, S.Svirskas, A.Sanchez-Ferrer, R.Mezzenga, T.McNally, „Ultrasonic studies of polymer composites with inorganic nanotubes,“ *IEEE Proceedings of International Joint Conference UFFC, EFTF and PFM*, Prague, Czech Republic, 24-29 July 2013, ISBN: 978-1-4673-5686-2, p. 1-2 (2013).
328. J.Macutkevic, J.Banys, K.Glemza, V.Kuznetsov, V.Borjanovic, O.Shenderova, „Dielectric properties of annealed onion-like carbon composites in microwave region,“ *Lithuanian J. of Physics*, **53**, 238-243 (2013).
329. E. Palaimienė, J. Banys, V.A. Khomchenko, and K. Glemža, „Dielectric properties of Aurivillius-type  $\text{Bi}_4\text{-xGdxTi}_3\text{O}_{12}$  ceramics,“ *Lithuanian J. of Physics*, **53**, 210-214 (2013).
330. J.Macutkevic, P.Kuzhir, A.Paddubskaya, J.Banys, S.Maksimenko, S.Moseenkov, V.L.Kuznetsov, O.Shenderova, Ph.Lambin, „Onset of electrical percolation in onion like carbon/poly(methyl methacrylate) composites,“ *Nanoscience and Nanotechnology Letters*, **5**, 1201 – 1206 (2013).
331. S.Svirskas, M.Ivanov, S.Bagdzevicius, J.Macutkevic, A.Brilingas, J.banys, J.Dec, S.Miga, M.Dunce, E.Birks, M.Antonova, A.Strenberg, „Dielectric properties of  $0.4\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3 - (0.6-x)\text{SrTiO}_3 - x\text{PbTiO}_3$  solid solutions,“ *Acta Materialia*, **64**, 123 – 132 (2014).
332. R.Grigalaitis, M.M.Vijatovic Petrovic, J.D.Bobic, A.Dzunuzovic, R.Sobiestianskas, A.Brilingas, B.D.Stojanovic, J.Banys, „Dielectric and magnetic properties of  $\text{BaTiO}_3 - \text{NiFe}_2\text{O}_4$  multiferroic composites,“ *Ceramics International*, **40**, 6165 – 6170 (2014).
333. A.Weller, H.J.Glasel, E.Hartmann, E.Erdem, R.Bottcher, J.Banys, „Preparation of ferroelectric nanopowders and radiation cured nanocomposites,“ book series VDI Berichte, vol 1839, p. 105 – 109 (2004).
334. A.Plyushch, D.Bychanok, P.Kuzhir, S.Maksimenko, K.Lapko, A.Sokol, J.Macutkevic, J.Banys, F.Micciulla, A.Cataldo, S.Bellucci, „Heat-resistant unfired phosphate ceramics with carbon nanotubes for electromagnetic application,“ *Phys.stat.sol.(a)*, **211**, 2580 - 2585 (2014).
335. E.Palaimiene, J.Macutkevic, J.Banys, A.Kania, „Dielectric properties of PMN-PT crystals,“ *Journal of Applied Physics*, **116**, 104103 (2014).
336. Faycal Ben Tahar, C.Hrizi, S.Chaabouni, N.Chniba-Boudjada, N.R.Ramond, S.Balciunas, M.Ivanov, R.Mackeviciute, J.Banys, „Synthesis, crystal structure, vibrational, optical and dielectric properties of 2-(2-Aminoethyl)-1-methylpyrrolidinium chloride hexachlorobismuthate (III) monohydrate  $[\text{C}_7\text{H}_{18}\text{N}_2]_2\text{ClBiCl}_6\cdot\text{H}_2\text{O}$ ,“ *Journal of Advances in Chemistry*, vol **9**, no. 3, p. 1 – 18 (2014).

337. A.Sakanas, R.Grimalaitis, J.Banys, L.Mitoseriu, V.Busaglia, P.Nanni, „Broadband dielectric spectroscopy of BaTiO<sub>3</sub>-Ni<sub>0.5</sub>Zn<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub> composite ceramics,“ *Journal of alloys and compounds*, **602**, 241-247 (2014).
338. T.Salkus, A.Kezionis, M.Ivanov, M.I.Kayla, M.Kranjcec, I.P.Studenyak, J.Banys, „Electrical conductivity and dielectric permittivity of Cu<sub>6</sub>AsS<sub>5</sub>I superionic crystals,“ *Solid State Ionics*, **262**, 582 – 584 (2014).
339. T.Salkus, E.Kazakevicius, J.Banys, M.Kranjcec, A.A.Chomolyak, Yu.Yu.Neimeth, I.P.Studenyak, „Influence of grain size effect on electrical properties of Cu<sub>6</sub>PS<sub>5</sub>I superionic ceramics,“ *Solid State Ionics*, **262**, 597 – 600 (2014).
340. J.Pozingis, J.Macutkevic, R.grigalaitis, J.Banys, D.C.Lupascu, „Structure and dielectric properties of (1-x)Ag<sub>0.9</sub>Li<sub>0.1</sub>NbO<sub>3</sub>-(x)Bi<sub>0.5</sub>K<sub>0.5</sub>TiO<sub>3</sub> ferroelectric ceramics,“ *Ceramics International*, **40**, 9961 – 9969 (2014).
341. J.Macutkevic, J.Banys, „comment on „order parameter and scaling behavior in BaZr<sub>x</sub>Ti<sub>1-x</sub>O<sub>3</sub> [Appl.Phys.Lett. 103,262905(2013)],“ *Applied Physics letters*, **104**, 156102 (2014).
342. J.Macutkevic, A.Paddubskaya, P.Kuzhir, J.Banys, S.Maksimenko, V.L.Kuznetsov, I.N.Mazov, D.V.Krasnikov, „Dielectric properties of polymer composites with different diameters,“ *Journal of nanoscience and Nanotechnology*, **14**, 5430 – 5434 (2014).
343. J.Petzelt, D.Nuzhnny, V.Bovtun, M.Pasciak, S.Kamba, R.Dittmer, S.Svirskas, J.Banys, J.Rodel, „Peculiar Bi – ion dynamics in Na<sub>1/2</sub>Bi<sub>1/2</sub>TiO<sub>3</sub> from terahertz and microwave dielectric spectroscopy,“ *Phase Transitions*, **87**, 953 – 965 (2014).
344. I.Kranauskaite, J.Macutkevic, P.Kuzhir, N.Volynets, A.Paddubskaya, D.Bychanok, S.Maksimenko, J.Banys, R.Juskenas, S.Bistarelli, A.Cataldo, F.Micciulla, S.Bellucci, V.Fiero, A.Celzard, „Dielectrics properties of graphite – based epoxy composites,“ *Phys.stat.sol.(a)*, **211**, 1623-1633 (2014).
345. R.Grimalaitis, S.Bagdzevicius, J.Banys, E.E.Tornau, K.Bormanis, A.Sternberg, I.Bdikin, A.Kholkin, „Local piezoelectricity in SrTiO<sub>3</sub> – BiTiO<sub>3</sub> ceramics,“ *Lithuanian J. of Physics*, **54**, 170-176 (2014).
346. V.Samulionis, J.Banys, J.Macutkevic, Yu.Vysochanskii, „Ultrasonic behaviour near phase transitions in (Pb<sub>y</sub>Sn<sub>1-y</sub>)<sub>2</sub>P<sub>2</sub>S<sub>6</sub> ferroelectric materials,“ *Ferroelectrics*, **462**, 87-96 (2014).
347. J.Pozingis, J.Macutkevic, R.grigalaitis, J.Banys, D.C.Lupascu, „Dielectric properties of 0.9Ag<sub>0.9</sub>Li<sub>0.1</sub>NbO<sub>3</sub>-0.1Bi<sub>0.5</sub>K<sub>0.5</sub>TiO<sub>3</sub> ferroelectric ceramics,“ *Ferroelectrics*, **463**, 99-104 (2014).
348. Yu.Vysochanskii, M.Medulych, A.Molnar, K.Glukhov, A.Dziaugys, J.Banys, R.Yevych, M.Maior, „Chemical bonding and polarons in Sn<sub>2</sub>P<sub>2</sub>S(Se)<sub>6</sub> ferroelectrics,“ *Ferroelectrics*, **462**, 117-128 (2014).
349. J.Macutkevic, A.Molak, J.Banys, „Impedance spectroscopy of (Pb<sub>0.5</sub>Na<sub>0.5</sub>)(Mn<sub>0.5</sub>Nb<sub>0.5</sub>)O<sub>3</sub> ceramics,“ *Ferroelectrics*, **463**, 40-47 (2014).
350. R.M.Katiliute, P.Seibutas, M.Ivanov, R.grigalaitis, A.Stanulis, J.Banys, A.Kareiva, „Dielectric and impedance spectroscopy of BaSnO<sub>3</sub> and Ba<sub>2</sub>SnO<sub>4</sub>,“ *Ferroelectrics*, **464**, 49-58 (2014).
351. J.Macutkevic, I.Kranauskaite, J.Banys, S.Moseenkov, V.Kuznetsov, O.Shenderova, „Metal-insulator transition and size dependent electrical percolation in onion-like carbon/polydimethylsiloxane composites,“ *Journal of Applied Physics*, **115**, 213702 (2014).

352. R.Grigalaitis, M.Ivanov, J.Macutkevic, J.Banys, J.Carreau, J.M.Kiat, V.V.Laguta, B.Zalar, „Size effects in a relaxor: further insights into PMN,“ *J.Phys.Cond. Matter*, **26**, 272201 (2014).
353. J.Macutkevic, I.Kranauskaite, J.Banys, S.Moseenkov, V.Kuznetsov, O.Shenderova, „Size dependent electrical percolation threshold and electrical transport in onion – like carbon based composites,“ *Proceedings of ECCM16 – 16th European conference on composite materials*, Seville, Spain, 22 – 26 June, p. 1 – 8 (2014).
354. E.Palaimiene, J.Macutkevic, D.V.Karpinsky, A.L.Kholkin, J.Banys, „Dielectric investigations of polycrystalline samarium bismuth ferrite ceramic,“ *Applied Physics letters*, **106**, 012906 (2015).
355. R.Mackeviciute, V.Goian, S.Greicius, R.Grigalaitis, D.Nuzhnny, J.Holz, J.Banys, S.Kamba, „Lattice dynamics and broad band dielectric properties of multiferroic  $Pb(Fe_{1/2}Nb_{1/2})O_3$  ceramics,“ *Journal of Applied Physics*, **117**, 084101 (2015).
356. M.Simenas, M.Kobalz, M.Mendt, P.Eckold, H.Krautscheid, J.Banys, A.Poepl. „Synthesis, structure, and elektron paramagnetic resonance study of a mixed valent metal – organic framework containing  $Cu_2$  paddle – whell units,“ *Journal of Physical Chemistry C*, **119**, 4898 – 4907 (2015).
357. M.Letellier, J.Macutkevic, A.Paddubskaya, A.Klochkov, P.Kuzhir, J.Banys, V.Fiero, A.Celzard, „Microwave dielectric properties of tannin based carbon foams,“ *Ferroelectrics*, **479**, 119-126 (2015).
358. A.Sakanas, R.Grigalaitis, M.Ivanov, J.Banys, L.Mitoseriu, V.Buscaglia, P.Nanni, „The alternative expression of Lichteneker’s logarithmic mixture formula and its application to the broad band dielectric spectroscopy of  $BaTiO_3$  –  $Ni_{0.5}Zn_{0.5}Fe_2O_4$  composites,“ *Ferroelectrics*, **479**, 90-97 (2015).
359. J.Belovickis, J.Macutkevic, S.Svirskas, V.Samulionis, J.Banys, O.Shenderova, V.Borjanovic, „Dielectric spectroscopy of polymer based PDMS nanocomposites with ZnO nanoparticles,“ *Ferroelectrics*, **479**, 82-89 (2015).
360. V.Samulionis, S.Svirskas, J.Banys, A.Sanchez-Ferrer, N.Gimeno, M.B.Ros, „Phase transitions in smectic bent – core main – chain polymer networks detected by dielectric and ultrasonic techniques,“ *Ferroelectrics*, **479**, 76-81 (2015).
361. V.Samulionis, S.Svirskas, J.Banys, A.Sanchez-Ferrer, A.Mrzel, „Ultrasonic and dielectric studies of polyurea elastomer composites with inorganic nanoparticles,“ *Ferroelectrics*, **479**, 67-75 (2015).
362. J.Macutkevic, A.Molak, J.Banys, „Dielectric properties of  $NaNbO_3$  ceramics,“ *Ferroelectrics*, **479**, 48-55 (2015).
363. R.Mackeviciute, R.Grigalaitis, M.Ivanov, R.Sliteris, J.Banys, „Dielectric and pyroelectric properties of PMN-29PT single crystals near MPB,“ *Ferroelectrics*, **479**, 29-34 (2015).
364. S.Bellucci, S.Bistarelli, A.Cataldo, F.Micciulla, I.Kranausklaite, J.Macutkevic, J.Banys, N.Volynets, A.Paddubskaya, D.Bychanok, P.Kuzhir, S.Maksimenko, V.Fiero, A.Celzard, „Broadband dielectric spectroscopy of composites filled with various carbon materials,“ *IEEE transactions on Microwave theory and Techniques*, **63**, No. 6, 2024 – 2031 (2015).

365. A. Belianinov, Q. He, A. Dziaugys, P. Maksymovych, E. Eliseev, A. Borisevich, A. Morozovska, J. Banys, Y. Vysochanskii, and S. V. Kalinin, „CuInP<sub>2</sub>S<sub>6</sub> Room Temperature Layered Ferroelectric,“ *Nano Lett.*, **15** (6), 3808–3814 (2015).
366. S.Svirskas, M.Simenas, J.Banys, P.Martins, S. Lanceros – Mendez, „Dielectric relaxation and ferromagnetic resonance in magnetoelectric (Polyvinyl – fluoride)/ferrite composites,“ *J. Polym. Res.*, **22**, No 7, 1 – 10, DOI 10.1007/s10965-015-0780-9, (2015).
367. Z.Czapla, I.Stasyuk, J.Banys, „3rd Ploish – Lithuanian – Ukrainian meeting on ferroelectric physics, 31 August – 4 September 2014, Wroclaw, Pawlowice, Poland,“ *Phase Transitions*, **88**, No8, 759 – 760 (2015).
368. I.Kranauskaite, J.Macutkevic, J.Banys, E.Talik, V.Kuznetsov, N.Nunn and O.Shenderova, „Synergy effects in the electrical conductivity behavior of onion-like carbon and multiwalled carbon nanotubes composites,“ *Phys.stat.sol.(b)*, **252**, 1799-1803 (2015).
369. J.Macutkevic, J.Banys and Yu.Vysochanskii, „Electrical conductivity of layered CuInP<sub>2</sub>(S<sub>x</sub>Se<sub>1-x</sub>)<sub>6</sub> crystals,“ *Phys.stat.sol.(b)*, **252**, 1773-1777 (2015).
370. S. Balčiūnas, M. Ivanov, R. Grigalaitis, J. Banys, H. Amorín, A. Castro andM. Algueró, „Revisiting the broadband dielectric properties of high-sensitivity piezoelectric BiScO<sub>3</sub>–PbTiO<sub>3</sub>: Size effects,“ *Phys.stat.sol.(b)*, DOI: 10.1002/pssb.201552040 (2015).
371. J.Banys, J.Macutkevič, C.Klimm, and G.Völkel, „Crossover between ferroelectric order and dipolar glass disorder in betaine phosphate<sub>0.06</sub> betaine phosphite<sub>0.94</sub> mixed crystals,“ *Lithuanian J. of Physics*, **55**, 117-125 (2015).
372. I.Kranauskaitė, J.Banys, E.Talik, V.Kuznetsov, N.Nunn, and O.Shenderova, „Electric/dielectric properties of composites filled with onion-like carbon and multiwalled carbon nanotubes,“ *Lithuanian J. of Physics*, **55**, 126-131 (2015).
373. M.M. Vijatović Petrović, J.D. Bobić, R. Grigalaitis, N.I. Ilic, A.S. Dzunuzovic, V. Jankauskaite, J. Banys, B.D. Stojanović, „Ceramics–acceptor joint effect in barium titanate systems,“ *Ceramics International*, **41**, Issue 9, 11365–11371 (2015).
374. V.Samulionis, J.Macutkevic, J.Banys, J.Belovickis, O.Shenderova, „Ultrasonic and dielectric studies of polymer PDMS composites with ZnO and onion – like carbon nanoinclusions,“ *IOP Conference series: Materials science and engineering*, **87**, 012010 (2015).
375. N.Apanasevich, A.Sokal, K.Lapko, A.Kudlash, V.Lomonosov, A.Plyushch, P.Kuzhir, J.Macutkevic, J.Banys, A.Okotrub, „Phosphate ceramics – carbon nanotubes composites:liquid aluminum phosphate vs solid magnesium phosphate binder,“ *Ceramics International*, **41**, Issue 9, 12147–12152 (2015).
376. S.Bellucci, S.Bistarelli, A.Cataldo, F.Micciulla, I.Kranauskaite, J.Macutkevic, J.Banys, N.Volynets, A.Paddubskaya, D.Bychanok, P.Kuzhir, S.Maksimenko, V.Fierro, A.Celzard, „Broadband Dielectric Spectroscopy of Composites Filled With Various Carbon Materials,“ *IEEE Transactions on Microwave Theory and Techniques*, **63**, 2024 – 2031 (2015).
377. M.Letellier, J.Macutkevic, A.Paddubskaya, A.Plyushch, P.Kuzhir, M.Ivanov, J.Banys, A.Pizzi, V.Fierro, A.Celzard, „Tannin-Based Carbon Foams for Electromagnetic Applications,“ *IEEE Transactions on Electromagnetic Compatibility*, DOI: 10.1109/TEMC.2015.2430370 (2015).
378. M. V. Shuba, A. G. Paddubskaya, G. Valusis, M. Ivanov, J. Banys, G. Hanson, „estimation of microwave permittivity of suspensions comprising aggregated single-walled carbon

nanotubes,“ Physics, Chemistry and Applications of Nanostructures, 225-228, DOI: 10.1142/9789814696524\_0056 (2015).

379. V.Samulionis, J.Macutkevic, J.Banys, J.Belovickis, O.Shenderova, „Ultrasonic studies of onion-like carbons/polydimethylsiloxane composites,“ IEEE International Ultrasonics Symposium (IUS) proceedings, Pages: 1986 - 1987, DOI: 10.1109/ULTSYM.2014.04942014, (2014).

380. S.Bellucci, S.Bistarelli, A.Cataldo, F.Micciulla, J.Macutkevic, I.Kranauskaite, J.Banys, P.Kuzhir, N.Volynets, A.Paddubskaya, D.Bychanok, S.Maksimenko, V.Fierro, A.Celzard, „Microwave response properties of epoxy resin composites filled with graphitic fillers,“ 2014 International Conference on Numerical Electromagnetic Modeling and Optimization for RF, Microwave, and Terahertz Applications (NEMO) Proceedings, Pages: 1 - 4, DOI: 10.1109/NEMO.2014.6995701, (2014).

381. S.Bellucci, J.Macutkevic, P.P.Kuzhir, A.Paddubskaya, S.A.Maksimenko, A.Cataldo, F.Micciulla, J.Banys, „Nanocarbon broadband analysis, temperature dependent dielectric properties and percolation thresholds,“ 2013 International Conference on Electromagnetics in Advanced Applications (ICEAA) Proceedings, Pages: 536 - 539, DOI: 10.1109/ICEAA.2013.6632295, (2013).

382. J.Macutkevic, J.Banys, S.Moseenkov, V.Kuznetsov, N.Nunn, and O.Shenderova, „Dielectric properties of onion-like carbon and detonation nanodiamond/polydimethylsiloxane composites,“ Polym Compos. doi: 10.1002/pc.23119, p 1 - 9 (2014).

383. A. Dziaugys, J. Macutkevic, S. Svirskas, R. Juskenas, M. Wencka, J. Banys, S.F. Motria, Yu. Vysochanskii, „Maxwell-Wagner relaxation and anomalies of physical properties in Cu<sub>0.15</sub>Fe<sub>1.7</sub>PS<sub>3</sub> mixed material,“ Journal of Alloys and Compounds, **650**, p. 386 – 392, doi:10.1016/j.jallcom.2015.07.261, (2015).

384. S.Pralgauskaite, J.Matukas, R.Grigelaitis, J.Banys, I.Zamaraite, M.Vijatovic Petrovic, J.Bobic, B.Stojanovic, „Low frequency noise characterizations of BaTiO<sub>3</sub> – NiFe<sub>2</sub>O<sub>4</sub> composites at phase transition,“ Proceedings of 23rd International conference on Noise and Fluctuations, Xian, China, 2 – 5 June, p. 1 - 4, (2015).

385. J.Macutkevic, I.Kranauskaite, J.Banys, N.Nunn, O.Shenderova, „Synergy effect in carbon naotubes/onion like mixed composites,“ Proceedings of the 20th International conference on composite materials ICCM20, Copenhagen, Denmark, 19 – 24 July. P. 1 - 8, (2015).

386. J.Banys, R.Grigelaitis, S.Bagdzevicius, Guest editorial, Ferroelectrics **479**, w1 - w2 (2015).

387. S.Freidlaender, M.Simenas, M.Kobalz, P.Eckold, O.Ovchar, G.Belous, J.Banys, H.Krautscheid, A.Poepll. „Single crystal electron paramagnetic resonance with dielectric resonators of mononuclear Cu<sup>2+</sup> ions in metal – organic framework containing Cu<sub>2</sub> paddle – whell units,“ Journal of Physical Chemistry C, **119**, 19171 – 19179 (2015).

388. J.Macutkevic, J.Banys, S.Moseenkov, V.Kuznetsov, N.Nunn, O.Shenderova, „Dielectric properties of onion-like carbon and detonation nanodiamond/polydimethylsiloxane composites,“ Polymer composites, **36**, p. 2084 – 2092 (2015).

389. J.Banys, R.Grigelaitis, S.Bagdzevicius, Guest editorial, Ferroelectrics **480**, w1 - w2 (2015).

390. D.Jablonskas, R.Grigelaitis, J.Banys, A.A.Bokov, Z.G.Ye, „Broadband dielectric spectra in  $PbMn_{1/3}Nb_{2/3}O_3$  crystals with chemical order modified by La doping,“ *Applied Physics Letters*, **107**, 142905 (2015).
391. M.Silibin, J.Belovickis, S.Svirskas, M.Ivanov, J.Banys, A.Solnyshkin, S.Gavrilov, O.Varenyk, A.Pusenkova, N.Morosovsky, V.Shvartsman, A.Morosovska, „Polarization reversal in organic – inorganic ferroelectric composites: modeling and experiment,“ *Applied Physics Letters*, **107**, 142907 (2015).
392. M.Simenas, A.Ciupa, M.Maczka, A.Poepll, J.Banys, „EPR study of structural phase transition in manganese doped  $[(CH_3)_2NH_2][Zn(HCOO)_3]$  metal – organic framework,“ *Journal of Physical Chemistry C*, **119**, 43, 24522-24528 (2015).
393. K.Z.Rushchanskii, R.M.Bilanych, A.A.Bobic, R.M.Yevych, A.A.Kohutych, S.I.Perechinskii, V.Samulionis, J.Banys, Yu.Vysochanskii, „Ferroelectricity in  $(Pb_ySn_{1-y})_2P_2S_6$  mixed crystals and random field BEG model,“ *Phys. Stat. Sol. B*, **253**, 384 – 391, DOI 10.1002 (2016).
394. A.Sakanas, R.Grigelaitis, J.Banys, L.Curecheriu, L.Mitoseriu, V.Buscaglia, „Microstructural influence on the broadband dielectric properties of  $BaTiO_3 - Ni_{0.5}Zn_{0.5}Fe_2O_4$  core – shell composites: experiment and modelling,“ *Journal of Applied Physics*, **118**, 174106 (2015).
395. A.Plyushch, J.Macutkevic, P.Kuzhir, J.Banys, V.Fiero, A.Celzard, „Dielectric properties and the electrical conductivity of flat micronic graphite: polyurethane composites,“ *Journal of nanophotonics*, **10**, 012511 (2016).
396. J.D.Bobić, R.M.Katiliute, M.Ivanov, M.M.Vijatović Petrović, N.I.Ilić, A.S.Džunuzović, J. Banys, B. D. Stojanović, „Dielectric, ferroelectric and magnetic properties of La doped  $Bi_5Ti_3FeO_{15}$  ceramics,“ *Journal of Materials Science: Materials in Electronics*, **27**, No3, 2448 – 2454 (2016).
397. M.Simenas, B.Jee, M.Hartmann, J.Banys, A.Poepll, „Adsorption and desorption of HD on the metal-organic framework CuZn(btc) studied by 3 – pulse ESEEM spectroscopy,“ *Journal of Physical Chemistry C*, **119**, 28530 – 28535, DOI 10.1021/acs.jpcc.5b11058 (2015).
398. J.Macutkevic, J.Banys, „Electrical properties analysis of materials with ferroic order,“ *RSC advances*, **6**, 21345-21346 (2016).
399. K.Z.Rushchanskii, A.A.Molnar, R.M.Bilanych, R.M.Yevych, A.A.Kohutych, Yu.Vysochanskii, V.Samulionis, J.Banys, „Observation of nonequilibrium behavior near Lifshitz point in ferroelectrics with incommensurate phase,“ *Phys.Rev.B*, **93**, 014101 (2016).
400. S.Bagdzevicius, R.Mackeviciute, M.Ivanov, B.Fraygola, C.S.Sandu, N.Setter, J.Banys, „Internal electrical and strain fields influence on the electrical tunability of epitaxial  $Ba_{0.7}Sr_{0.3}TiO_3$  thin films,“ *Appl.Phys. Letters*, **108**, 132901 (2016).
401. I.Kraunauskaite, J.Macutkevic, J.banys, VL.Kuznetsov, S.I.Moseenkov, N.A.Rudyna, D.V.Krasnikov, „Length – dependent broadband electric properties of PMMA composites filled with carbon nanotubes,“ *Phys. Stat. Sol. A*, **213**, 1025 – 1033, (2016).
402. A.Plyusch, J.Macutkevic, P.Kuzhir, J.Banys, Dz.Bychanok, Ph.Lambin, S.Bistarelli, A.Cataldo, F.Micciula, S.Bellucci, „Electromagnetic properties of graphene nanoplatelets/epoxy composites,“ *Composites Science and technology*, **128**, 75 – 83 (2016).

403. J.D.Bobic, J.Macutkevic, R.Grigalaitis, M.Ivanov, M.M.Vijatovic Petrovic, J.Banys, B.D.Stojanovic, „Correlation between microstructure and electrical properties of ferroelectric relaxors, “ Nano scale ferroelectrics and multiferroics: key processes and characterization issues and nanosclae effects, John Wiley and sons ltd, ISBN: 978-1-118-93575-0 p. 554 – 587 (2016).
404. R. Mackeviciute, M. Ivanov, S. Bagdzevicius, R. Grigalaitis, J. Banys, „Electrical model of a thin dielectric film with a bottom electrode of non-negligible distributed resistance,“ Ferroelectrics, **497**, 114 – 125 (2016).
405. S.Bagdzevicius, I.Kranauskaite, R.Grigalaitis, K.Bormanis, A.Sternberg, J.Banys, „Chemical strain effects and changed lattice dynamic in  $(Sr_{1-1.5x}Bi_x)TiO_3$  ceramics ( $x \leq 0.15$ ),“ Ferroelectrics, **497**, 24 – 33 (2016).
406. S.Rudys, J.Banys, „Elecromagnetic wave submission into closed space system and method,“ Authors license Nr. LT6255 (2016).
407. A.Plyushch, J.Macutkevic, J. Banys, D.Bychanok, S.Maksimenko, A.Cataldo, F.Micciulla, S.Bellucci, „Electromagnetic properties of graphene nanoplatelets / epoxy composites in the wide temperature range,“ Physics, Chemistry and Applications of Nanostructures, 233-235 (2015).
408. M.Simenas, S.Balciunas, M.Maczka, J.Banys, E.Tornau, „Structural phase transition in perovskite metal – formate frameworks: a Potts – type model with dipolar interactions,“ Phys. Chem. Chem. Phys., **18**, 18528 – 18535 (2016).
409. J.Belovickis, V.Samulionis, J.Banys, M.Silibin, A.Solnyshkin, Yu.Shilaeva, K.Nekludov, S.Gavrilov, V.Rubanik Jr, V.Rubanik, V.V.Shvartsman, „Ultrasonic spectroscopy of copolymer based P(VDF-TrFE) composites with fillers on lead zirconate titanate basis,“ Polymer testing, **53**, 211 – 216 (2016).
410. J.Banys, S.Bagdzevicius, Guest editorial, Integrated Ferroelectrics **173**, vii (2016).
411. T.Pecnik, A.Erste, A.Matacz, V.Bobnar, M.Ivanov, J.Banys, Feng Xiang, Hong Wang, B.Malic, S.Glinsek, „Dielectric dynamics of the polycrystalline  $Ba_{0.5}Sr_{0.5}TiO_3$  thin films,“ EPL (Europhysics Letters), **114**, N.4, 47009 (2016).
412. M.Simēnas, A.Ciupa, M.Maczka, G.Voelkel, A.Poepl, J.Banys, „EPR of Structural Phase Transition in Manganese- and Copper-Doped Formate Framework of  $[NH_3(CH_2)_4NH_3][Zn(HCOO)_3]_2$ ,“ Journal of Physical Chemistry C, **120**, 35, 19751-19758 DOI 10.1021/acs.jpcc.6b07389 (2016).
413. S.Gielis, M.Ivanov, N.Peys, E.J. van den Ham, N.Pavlovic, J.Banys, M.van Bael, „Aqueous chemical solution deposition of ultra high – k  $LuFeO_3$  thin films,“ Journal of European Ceramic Society, 10,1016 (2017).
414. M.Maczka, M.Ptak,S.Pawlus,W.Paraguassu, A.Sieradzki, S.Balciunas, M.Simenas, J.Banys, „Temperature- and pressure-dependent studies of niccolite-type formate frameworks of  $[NH_3(CH_2)_4NH_3][M_2(HCOO)_6]$  ( $M=Zn, Co, Fe$ ),“ Physical Chemistry Chemical Physics, **18**, 27613 (2016).
415. R.Mackeviciute, S.Bagdzevicius, M.Ivanov, B.Fraygola, R.Grigalaitis, N.Setter, J.Banys, „Strain engineering of elecrica conductivity in epitaxial thin  $Ba_{0.7}Sr_{0.3}TiO_3$  film heterostructures,“ Lithuanian J. of Physics, **56**, 173-181 (2016).

416. R.Yevych, V.Haborets, M.Medulych, A.Molnar, A.Kohutych, A.Dziaugys, J.Banys, Yu.Vysochanskii, "Valence fluctuations in  $\text{Sn}(\text{Pb})_2\text{P}_2\text{S}_6$  ferroelectrics," Low temperature physics, **42**, Nr. 2, p.1477-1486 (2016).
417. A.Plyushch, J.Macutkevic, P.Kuzhir, J.Banys, Dz.Bychanok, Ph.Lambin, S.Bistarelli, A.Cataldo, F.Micciulla, S.Bellucci, "Electromagnetic properties of graphene nanoplatelets/epoxy composites," Composites science and technology, **128**, p. 75 – 83 (2016).
418. A.L.Gurskii, J.Macutkevic, J.Banys, A.V.Petrov, N.A.Kalanda, M.V.Yarmolich, A.A.Klimsa, A.L.Zhaludkevich, O.V.Ignatenko, P.P.Kuzhir, "Electrical-physical and dielectric properties of  $\text{Pb}_{0.85}\text{Zr}_{0.53}\text{Ti}_{0.47}\text{O}_3 - \text{Sr}_2\text{FeMoO}_{6-\delta}$  composites," Doklady BGUIR, **6**, p. 11 – 17 (2016).
419. M.Simenas, R.Matsuda, S.Kitagawa, A.Poepll, J.Banys, "Electron paramagnetic resonance study of guest molecule influenced magnetism in Kagome Metal – Organic framework," Journal of Physical Chemistry C, **120**, 48, p.27462 - 27467(2016).
420. J.D.Bobic, R.M.Katiliute, M.Ivanov, N.I.Ilic, A.S.Dzunuzovic, M.M.Vijatovic Petrovic, J.Banys, B.D.Stojanovic, „Influence of tungsten doping on dielectric, electric and ferroelectric behavior of  $\text{BaBi}_4\text{Ti}_4\text{O}_{15}$  ceramics," Journal of alloys and compounds, **702**, 619-625 (2017).
421. A.N.Salak, D.D.Khalyavin, I.Zamaraite, A.Stanulis, A.Kareiva, A.D.Shilin, V.V.Rubanik, Yu.V.Radyush, A.V.Pushkarev, N.M.Olekhovich, M.Starykevich, R.Grimalaitis, M.Ivanov, J.Banys, "Metastable perovskite  $\text{Bi}_{1-x}\text{La}_x\text{Fe}_{0.5}\text{Sc}_{0.5}\text{O}_3$  phases in the range of compositional crossover," Phase Transitions, **90**, No.9, 831 – 839, 01411594.2017.1290802 (2017).
422. A.Plyusch, P.P.Kuzhir, S.A.Maksimenko, J.Macutkevic, J.Banys, A.Sokal, K.N.Lapko, V.Archipov, A.Oktorub, "Grain size effect in conductive phosphate / carbon nanotube ceramics," Ceramics International, **43**, 4965–4969 (2017).
423. S.Pralgauskaite, J.Matukas, M.Tretjak, J.Macutkevic, J.Banys, A.Selskis, A.Cataldo, F.Micciulia, S.Belucci, V.Fiero, A.Celzard, „Resistivity and low – frequency noise characteristics of epoxy – carbon composites," Journal of Applied Physics, **121**, 114303 (2017).
424. S.Rudys, R.Grimalaitis, J.Banys, „A compact lamp," Authors license Nr. LT6385 (2017).
425. S.Rudys, J.Banys, „Easily deployable phased antenna for a spacecraft and system of such antennas," Authors license Nr. LT6384 (2017).
426. S.Rudys, R.Grimalaitis, J.Banys, V.Jonkus, J.Krivochiza, S.Svirskas, D.Jablonskas, J.Aleksandrovicius, „Radio frequency signal segmentation method," Authors license Nr. LT6402 (2017).
427. S.Svirskas, J.Banys, S.Kojima, „Broadband dielectric spectroscopy of Pb-based relaxor ferroelectric  $(1-x)\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3-x\text{PbTiO}_3$  with intermediate random fields," Journal of Applied Physics, **121**, 134101 (2017).
428. M.Simenas, S.Balciunas, M.Trzebiatowska, M.Ptak, M.Maczka, G.Volkel, A.Poppl, J.Banys, „Electron paramagnetic resonance and electric characterization of a  $[\text{CH}_3\text{NH}_2\text{NH}_2][\text{Zn}(\text{HCOO})_3]$  perovskite metal formate framework," Journal of Materials Chemistry C, **5**, 18, p.4526 - 4536(2017).
429. A.Sakanas, D.Nuzhnny, R.Grimalaitis, J.Banys, F.Borodavka, S.Kamba, C.E.Ciomaga, L.Mitoseriu, „Dielectric and phonon spectroscopy of Nb-doped  $\text{Pb}(\text{Zr}_{1-y}\text{Ti}_y)\text{O}_3-\text{CoFe}_2\text{O}_4$  composites," Journal of Applied Physics, **121**, 214101 (2017).

430. F.Gheorghiu, M.Simenas, C.E.Ciomagac, M.Airimioaeid, V.Kalendra, J.Banys, M.Dobromirc, S.Tascua, L.Mitoseriu, „Preparation and structural characterization of Fe-doped BaTiO<sub>3</sub> diluted magnetic ceramics,“ *Ceramics International*, **43**, p. 9998 – 10005 (2017).
431. I.Kranauskaite, J.Macutkevic, J.Banys, D.Bychanok, D.Meisak, „Broadband electrical properties of carbon nanotubes – epoxy resin composites,“ *Proceedings of international conference Nanomeeting 2017, Minsk, Belorussia, Physics, Chemistry and Application of Nanostructures*, p. 190 – 193, ISBN978-981-3224-52-0 (2017).
432. A.Plyusch, J.Macutkevic, V.Samulionis, J.Banys, P.P.Kuzhir, V.Fiero, A.Celzard, „Synergetic impact of graphite nanoplatelets and triglycine sulphate particles on the ferroelectric properties of epoxy composites,“ *Proceedings of international conference Nanomeeting 2017, Minsk, Belorussia, Physics, Chemistry and Application of Nanostructures*, p. 194 – 197, ISBN978-981-3224-52-0 (2017).
433. I.Anusca, S.Balčiūnas, P.Gemeiner, S.Svirskas, M.Sanlialp, G.Lackner, C.Fettkenhauer, J.Belovickis, V.Samulionis, M.Ivanov, B.Dkhil, J.Banys, V.V.Shvartsman, D.C.Lupascu, „Dielectric Response: Answer to Many Questions in the Methylammonium Lead Halide Solar Cell Absorbers,“ *Advanced Energy Materials*, **7**, 1700600, DOI: 10.1002/aenm.201700600 (2017).
434. M.V.Shuba, A.G.Paddubskaya, P.P.Kuzhir, S.A.Maksimenko, G.Valusis, M.Ivanov, J.Banys, V.Ksenevich, G.W.Hanson, „Observation of the microwave near-field enhancement effect in suspensions comprising single-walled carbon nanotubes,“ *Mater. Res. Express*, **4**, 075033 (2017).
435. A.V.Petrov, J.Macutkevic, J.Banys, N.A.Kalandra, L.I.Gurskii, A.V.Solnyshkin, A.O.Plyushch, P.P.Kuzhir, N.A.Sobolev, „Synthesis and dielectric properties of ferroelectric-ferrimagnetic PZT-SFMO composites,“ *Modern Electronic Materials*, **3**, p. 26-31 (2017).
436. M. Letellier, J. Macutkevic, P. Kuzhir, J. Banys, V. Fierro, A. Celzard, „Electromagnetic properties of model vitreous carbon foams,“ *Carbon*, **122**, p. 217 – 227, DOI: 10.1016/j.carbon.2017.06.080 (2017).
437. I.Zamaraitė, J.Matukas, S.Pralgauskaitė, Yu.Vysochanskii, J.Banys, A.Dziaugys, „Low-frequency noise characteristics of lamellar ferrielectric crystal CuInP<sub>2</sub>S<sub>6</sub> at the phase transition,“ *Journal of Applied Physics*, **122**, 024101 (2017).
438. M.Simēnas, A.Kultaeva, S.Balciunas, M.Trzebiatowska, D.Klose, G.Jeschke, M.Mączka, J.Banys, A.Poeppl, „Single Crystal Electron Paramagnetic Resonance of Dimethylammonium and Ammonium Hybrid Formate Frameworks: Influence of External Electric Field,“ *Journal of Physical Chemistry C*, **121**, 30, p. 16533–16540 (2017).
439. M.M.Vijatovic Petrovic, R.Grigelaitis, N.Ilic, J.D.Bobic, A.Dzunuzovic, J.Banys, B.D.Stojanovic, „Interdependence between structure and electrical characteristics in Sm-doped barium titanate,“ *Journal of alloys and compounds*, **724**, 959-968 (2017).
440. S.Svirskas, J.Belovickis, D.Semeliovė, P.Martins, S.Laceros – Mendes, J.Banys, „Temperature and frequency dependence of the dielectric and piezoelectric response of P(VDF-TrFE)/CoFe<sub>2</sub>O<sub>4</sub> magnetoelectric composites,“ *Lithuanian J. of Physics*, **57**, 103-111 (2017).
441. R.Mackeviciute, R.Grigelaitis, J.Banys, M.Boata, A.Ghosh, G.Rijnders, “Electrical properties of PMN-33PT thin film at MPB,” *Ferroelectrics*, **512**, 1-7 (2017).

442. S.Balciunas, M.Ivanov, J.Banys, S.Wada, "Dielectric properties of BaTiO<sub>3</sub>-KNbO<sub>3</sub> composites," *Ferroelectrics*, **512**, 8-13 (2017).
443. J.Belovickis, V.Samulionis, J.Banys, M.Silibin, A.Solnyshkin, K.Nekludov, A.Sysa, "Effect of thermal cycling on ferroelectric phase transition of PVDF-TrFE based composites as investigated by ultrasonic spectroscopy," *Ferroelectrics*, **512**, 65-70 (2017).
444. D.Jablonskas, M.Ivanov, R.Grimalaitis, J.Banys, "Implementation of an improved non-linear susceptometer," *Ferroelectrics*, **513**, 32-37 (2017).
445. I.Zamaraitė, A.Dziaugys, J.Banys, Yu.Vysochanskii, "Dielectric and electrical properties of AgCrP<sub>2</sub>S<sub>6</sub> and Cu<sub>0.2</sub>Ag<sub>0.8</sub>CrP<sub>2</sub>S<sub>6</sub> layered crystals," *Ferroelectrics*, **515**, 13-17 (2017).
446. D.Jablonskas, S.Lapinskas, S.Rudys, M.Ivanov, J.Banys, "Full-wave finite space model of open-ended coaxial line for dielectric spectroscopy of liquids," *Rewiev of Scientific Instruments*, **88**, 084703 (2017).
447. M.Al Helal, M.Aftabuzzaman, S.Svirskas, J.Banys, S.Kojima, "Temperature evolution of central peaks and effect of electric field in relaxor ferroelectric 0.83Pb(Mg<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-0.17PbTiO<sub>3</sub> single crystals," *Japanese Journal Of Applied Physics*, **56**, 10PB03 (2017).
448. M.Simenas, S.Balciunas, M.Maczka, J.Banys, E.E.Tornau, "Exploring the Antipolar Nature of Methylammonium Lead Halides: A Monte Carlo and Pyrocurrent Study," *Journal of Physical Chemistry Letters*, **8**, 4906 – 4911 (2017).
449. J.Banys, M.Glinchuk, R.Poprawski, „4th Lithuanian – Polish –Ukrainian meeting on ferroelectric physics, 5 – 9 September 2016, Palanga, Lithuania,“ *Phase Transitions*, **90**, No9, 817 (2017).
450. M.Simėnas, L.Macalik, K.Aidas, V.Kalendra, D.Klose, G.Jeschke, M.Mączka, G.Völkel, J.Banys, A.Pöpl, „Pulse EPR and ENDOR Study of Manganese Doped [(CH<sub>3</sub>)<sub>2</sub>NH<sub>2</sub>][Zn(HCOO)<sub>3</sub>] Hybrid Perovskite Framework,“ *Journal of Physical Chemistry C*, **121**, 27225-27232 (2017).
451. J.Macutkevic, J.Belovickis, G.Otorgust, H.Dodiuk, S.Kenig, V.Samulionis, J.Banys, A.Zak, „Broadband dielectric and ultrasonic properties of WS<sub>2</sub> nanotubes/polyurethane composites,“ *Polymer Compsites*, DOI: 10.1002/pc.24554 (2017).
452. I.Kranauskaitė, J.Macutkevič, A.Borisova, A.Martone, M.Zarrelli, A.Selskis, A.Aniskevich, J.Banys, „Enhancing electrical conductivity of MWCNT/epoxy composites by GNP particles,“ *Lithuanian J. of Physics*, **57**, p. 232 - 242 (2017).
453. I.P.Studenyak, V.Yu.Izai, A.I.Pogodin, O.P.Kokhan, V.I.Sidey, M.Yu.Sabov, A.Kežionis, T.Šalkus, J.Banys, "Structural and electrical properties of argyrodite-type Cu<sub>7</sub>PS<sub>6</sub> crystals," *Lithuanian J. of Physics*, **57**, p. 243 - 251 (2017).
454. A.S.Dzunuzovic, M.M.Vijatovic Petrovic, J.D.Bobic, N.I.Ilic, M.Ivanov, R.Grimalaitis, J.Banys, B.D.Stojanovic, "Magneto-electric properties of xNi<sub>0.7</sub>Zn<sub>0.3</sub>Fe<sub>2</sub>O<sub>4</sub> – (1-x)BaTiO<sub>3</sub> multiferroic composites," *Ceramics International*, **44**, p. 683-694 (2018).
455. Š.Svirskas, M.Dunce, E.Birks, A.Sternberg, J.Banys, „Electromechanical properties of Na<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub>-SrTiO<sub>3</sub>-PbTiO<sub>3</sub> solid solutions,“ *Journal of Physics and Chemistry of Solids*, **114**, 94-99 (2018).
456. M.Ivanov, J.Macutkevic, R.Grimalaitis, J.Banys, „General view of ferroelectrics: origin of ferroelectricity in metal oxide ferroelectrics and ferroelectric properties,“ p, 5 -33, in *Magnetic,*

ferroelectric and multiferroic metal oxides, ed. B.Stojanovic, Elsevier, ISBN: 9780128111802, Published: 4th January 2018.

457. J.D.Bobić, M.Ivanov, N.I.Ilić, A.S.Dzunuzović, M.M. Vijatović Petrović, J.Banys, A.Ribic, Z.Despotovic, B.D.Stojanovic, „PZT-nickel ferrite and PZT-cobalt ferrite comparative study: Structural, dielectric, ferroelectric and magnetic properties of composite ceramics,“ *Ceramics International*, **44**, p. 6551 – 6557 (2018).
458. Š.Svirskas, V.V.Shvartsman, M.Dunce, R.Ignatans, E.Birks, T.Ostapchuk, S.Kamba, D.C.Lupascu, J.Banys, „Two-phase dielectric polar structures in 0.1NBT-0.6ST-0.3PT solid solutions,“ *Acta Materialia*, **153**, p. 117 – 125 (2018).
459. M.M.Vijatović, Petrović, R.Grigalaitis, A.Dzunuzovic, J.D.Bobić, B.D.Stojanović, R.Šalaševičius, J.Banys, „Positive influence of Sb doping on properties of di-phase multiferroics based on barium titanate and nickel ferrite,“ *Journal of Alloys and Compounds*, **749**, p.1043-1053 (2018).
460. Š.Svirskas, D.Jablonskas, V.Samulionis, S.Kojima, J.Banys, „Is there a spontaneous ferroelectric phase transition in  $0.83\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3\text{-}0.17\text{PbTiO}_3$  single crystal?“ *Journal of Alloys and Compounds*, **748**, p. 127-133 (2018).
461. D.Jablonskas, M.Ivanov, J.Banys, G.A.Giffin, S.Passarini, „Dielectric spectroscopy of  $\text{Pyr}_{14}\text{TFSI}$  and  $\text{Pyr}_{120}\text{TFSI}$  ionic liquids,“ *Electrochimica Acta*, **274**, p. 400-405 (2018).
462. S.Balciunas, M.Ivanov, R.Grigalaitis, J.Banys, H.Amorin, A.Castro, M.Alguero, „Evidence of Kittel type behaviour of the permittivity of a nanostructured high sensitivity piezoelectric,“ *Journal of Applied Physics*, **123**, 20, 204103 (2018).
463. M.Simenas, M.Ptak, A.H.Khan, L.Dagys, V.Balevicius, M.Bertmer, G.Voelkel, M.Maczka, A.Poepll, J.Banys, „Spectroscopic Study of  $[(\text{CH}_3)_2\text{NH}_2][\text{Zn}(\text{HCOO})_3]$  Hybrid Perovskite Containing Different Nitrogen Isotopes,“ *Journal of Physical Chemistry C*, **122**, 18, p. 10284-10292 (2018).
464. M.Simenas, A.Ciupa, G.Usevicius, K.Aidas, D.Klose, G.Jeschke, M.Maczka, G.Voelkel, A.Poepll, J.Banys, „Electron paramagnetic resonance of a copper doped  $[(\text{CH}_3)_2\text{NH}_2][\text{Zn}(\text{HCOO})_3]$  hybrid perovskite framework,“ *Physical Chemistry Chemical Physics*, **20**, 17, p. 12097-12105 (2018).
465. A.Plyushch, J.Macutkevič, J.Banys, P.Kuzhir, N.Kalandra, A.Petrov, C.Silvestre, M.A.Uimin, A.Ye.Yermakov,O.Shenderova, „Carbon-Coated Nickel Nanoparticles: Effect on the Magnetic and Electric Properties of Composite Materials,“ *Coatings*, **8**, 5, 165 (2018).
466. M.Tretjak, S.Pralgauskaitė, J.Macutkevič, J.Matukas, J.Banys, P.Kuzhir, E.Ivanov, R.Kotsilkova, „Influence of carbon nanotube surface treatment on resistivity and low-frequency noise characteristics of epoxy-based composites,“ *Polymer Composites*, **39**, p. E1224-E1230 Supplement: 2 (2018).
467. J.Belovickis, M.Ivanov, S.Svirskas, V.Samulionis, J.Banys, A.V.Solnyshkin, S.A.Gavrilov, K.N.Nekludov, V.V.Shvartsman, M.V.Silibin, „Dielectric, Ferroelectric, and Piezoelectric Investigation of Polymer-Based P(VDF-TrFE) Composites,“ *Phys.stat.sol.(b)*, **255**, 1700196 (2018).
468. M.Šimėnas, J.Banys, E.E.Tornau, „Screening of point defects in methylammonium lead halides: a Monte Carlo study,“ *Journal of Materials Chemistry C*, **6**, 6, p. 1487-1494 (2018).

469. I.Kranauskaite, J.Macutkevic, J.Banys, V.Kuznetsov, M.Letellier, V.Fierro, A.Celzard, O.Shenderova, „Size-Dependent Electrical and Thermal Properties of Onion-Like Carbons/Polyurethane Composites,” *Polymer Composites*, doi.org/10.1002/pc.24816 (2018).
470. J.Belovickis, L.Werne, M.Silibin, V.Samulionis, D.Lellinger, H.Oehler, J.Banys, A.Sysa, K.Nekludov, V.V.Shvartsman, I.Alig, “Influence of annealing conditions on elastic and dielectric properties of P(VDF-TrFE) copolymer and its composites,” *Polymer Composites*, **40**, 1609 – 1618, doi.org/10.1002/pc.24908 (2019).
471. A.Plyushch, J.Macutkevic, V.Samulionis, J.Banys, D.Bychanok, P.Kuzhir, S.Mathieu, V.Fierro, A.Celzard, “Synergetic effect of triglycine sulfate and graphite nanoplatelets on dielectric and piezoelectric properties of epoxy resin composites,” *Polymer Composites*, **40**, E1181 – E1188, doi.org/10.1002/pc.24932 (2018).
472. D.C.Lupascu, I.Anusca, S.Balciunas, P.Gemeiner, S.Svirskas, C.Fettkenhauer, J.Belovickis, V.Samulionis, M.Ivanov, B.Dkhil, J.Banys, V.V.Shvartsman, “Dielectric effects in perovskite solar cell absorbers,” *Proceedings of the Third Seminar on The Mechanics of Multifunctional Material, Physikzentrum Bad Honnef, June 11 - 15*, p. 73 – 76 (2018).
473. E.Palaimiene, J.Macutkevic, J.Banys, A.Selskis, V.Fierro, A.Celzard, S.Schaefer, O.Shenderova, “Ultra-low percolation threshold in epoxy resin–onion-like carbon composites,” *Appl. Phys. Lett.*, **113**, 033105 (2018).
474. I.Zamaraitė, R.Yevych, A.Dziaugys, A.Molnar, J.Banys, S.Svirskas, Yu.Vysochanskii, “Double hysteresis loops in proper uniaxial ferroelectrics,” *Phys. Rev. Applied*, **10**, 034017 (2018).
475. A.Sieradzki, M.Maczka, M.Simenas, J.K.Zareba, A.Gagor, S.Balciunas, M.Kinka, A.Ciupa, M.Nyk, V.Samulionis, J.Banys, M.Paluch, S.Pawlus, “On the origin of ferroelectric structural phases in perovskite – like metal – organic formate,” *J of Materials Chemistry C*, **6**, 9420-9429 (2018).
476. F.Gheorghiu, C.E.Ciomaga, M.Simenas, M.Airimioaeid, S.Qiao, S.Tascu, V.Kalendra, J.Banys, O.G.Avadenei, L.Mitoseriu, „Preparation and structural characterization of Ba(Ti<sub>1-x</sub>Fe<sub>x</sub>)O<sub>3-x/2</sub> ceramics. Application for a miniaturized resonator antenna,“ *Ceramics International*, **44**, p. 20862 – 20870 (2018).
477. Md.Al Helal, S.Tsukada, Š.Svirskas, J.Banys, S.Kojima, „Angle-resolved polarized Raman scattering on relaxor ferroelectrics with intermediate random fields,“ *Jpn. J. Appl. Phys.*, **57**, 11UB08 (2018).
478. C.E.Ciomaga, M.Airimioaei, I.Turcan, A.V. Lukacs, S.Tascu, M.Grigoras, N.Lupu, J.Banys, L.Mitoseriu, “Functional properties of percolative CoFe<sub>2</sub>O<sub>4</sub>-PbTiO<sub>3</sub> composite ceramics,” *Journal of Alloys and Compounds*, **775**, 90 - 99 (2019).
479. D.De Sloovere, M.Safari, K.Elen, J.D'Haen, O.A.Drozhzhin, A.M.Abakumov, M.Simenas, J.Banys, J.Bekaert, B.Partoens, M.K.Van Bael, A.Hardy, “Reduced Na<sub>2+x</sub>Ti<sub>4</sub>O<sub>9</sub>/C Composite: A Durable Anode for Sodium-Ion Batteries,” *Chemistry of Materials*, **30**, Issue: 23, 8521-8527 (2018).
480. M.Rok, G.Bator, W.Medycki, M.Zamponi, S.Balciunas, M.Simenas, J.Banys, “Reorientational dynamics of organic cations in perovskite-like coordination polymers,” *Dalton Transactions*, **47**, Issue: 48, 17329-17341 (2018).

481. M.Tretjak, S.Pralgauskaitė, J.Macutkevic, J.Matukas, J.Banys, P.Kuzhir, E.Ivanov, R.Kotsilkova, "Influence of carbon nanotube surface treatment on resistivity and low-frequency noise characteristics of epoxy-based composites," *Polymer Composites*, **39**, Issue S2 (2018).
482. P.Galizia, M.Anbinderis, R.Grigalaitis, J.Banys, C.Baldisserri, G.Maizza, C.Galassi, "Magneto-dielectric characterization of  $\text{TiO}_2\text{-CoFe}_2\text{O}_4$  derived ceramic composites," *Processing and Application of Ceramics*, **12**, Issue 4, 350-356 (2018).
483. D.Meisak, J.Macutkevic, D.Bychanok, A.Selskis, J.Banys, P.Kuzhir, "Broadband Dielectric Properties of  $\text{Fe}_2\text{O}_3\cdot\text{H}_2\text{O}$  Nanorods/Epoxy Resin Composites," *Journal of Nanomaterials*, **2019**, Article ID 9756920, 8 pages (2019).
484. V.Samulionis, J.Macutkevic, J.Banys, O.Shenderova, A.Zak, "High Frequency Ultrasonic and Photoacoustic Studies of Polymer Composites with Nanoinclusions," 2018 IEEE International Ultrasonics Symposium (IUS) proceedings, DOI: 10.1109/ULTSYM.2018.8580146 (2018).
485. J. Suchanicz, D. Sitko, Š. Svirskas, M. Ivanov, A. Kežionis, J. Banys, P. Czaja, T. V. Kruzina, J. Szczęsny, "Ferroelectric, dielectric and optic properties of Mn and Cr-doped  $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$  single crystals," *Ferroelectrics*, **532**, 38 – 49 (2018).
486. A.Dziaugys, J.Banys, M.P.Trubitsyn, "Dielectric relaxation in pure and doped with Cu lead germanate single crystal," *Ferroelectrics*, **532**, 13 – 19 (2018).
487. I.Zamaraite, S.Svirskas, Y.Vysochanskii, K.Glemza, J.Banys, A.Dziaugys, "Dielectric, pyroelectric and ferroelectric properties of lead-doped  $\text{Sn}_2\text{P}_2\text{S}_6$  crystals," *Phase Transitions*, **92**, 500 – 507 (2019).
488. M. Rok, G. Bator, B. Zarychta, B. Dziuk, J. Repeć, W. Medycki, M. Zamponi, G. Usevičius, M. Šimėnas, J. Banys, "Isostructural phase transition, quasielastic neutron scattering and magnetic resonance studies of a bistable dielectric ion-pair crystal  $[(\text{CH}_3)_2\text{NH}_2]_2\text{KCr}(\text{CN})_6$ ," *Dalton Transactions*, **48**, 4190-4202 (2019).
489. P.Galizia, M.Anbinderis, R.Grigalaitis, J.Banys, C.Baldisserri, G.Maizza, C.Galassi, "Magneto-dielectric characterization of  $\text{TiO}_2\text{-CoFe}_2\text{O}_4$  derived ceramic composites," *Processing And Application Of Ceramics*, **12**, 350-356 (2018).
490. S.Balciunas, A.Peterson, M.Ivanov, J.Adamson, J.Banys, "Dielectric properties of one-dimensional ice in HHTP- $4\text{H}_2\text{O}$  crystallites," *Ferroelectrics*, **533**, 192 – 197 (2018).
491. S.Balciunas, M.Ivanov, M.Watanabe, K.Matsumoto, S.Ueno, I.Fujii, J.Banys, S.Wada, "Dielectric properties of BT-BT and BF-BT composites," *Ferroelectrics*, **533**, 145 – 150 (2018).
492. M.Tretjak, S.Pralgauskaitė, J.matukas, J.macutkevic, J.banys, "Low frequency Noise and Resistivity Characteristics of Hybrid Composites with Onion-Like Carbon and Multi-Walled Carbon Nanotubes," *Fluctuation and Noise Letters*, **18**, 1940009, <https://doi.org/10.1142/S0219477519400091> (2019).
493. J.Macutkevic, S.Kamba, K.Glemza, J.Banys, K.Bormanis, A.Sternberg, "High Temperature Dielectric Properties of PMN-PSN-PZN Relaxors," *Phys.stat.sol. (b)*, **256**, Issue: 10, 1900050 (2019).
494. M. M. Rahaman, S. Tsukada, Š. Svirskas, J. Banys, S. Kojima, "Vibrational Dynamics of Ferroelectric  $\text{K}(\text{Ta}_{1-x}\text{Nb}_x)\text{O}_3$  Studied by Inelastic Light Scattering," *Ferroelectrics*, **538**, 96 – 104 (2019).

495. S.Balčiūnas, M.Šimėnas, D.Pavlovaitė, M.Kinka, Fa-Kuen Shieh, K.C.-W Wu, J.Banys, R.Grigalaitis, “Low-Frequency Dipolar Dynamics and Atmospheric Effects in ZIF-90 Metal–Organic Framework,” *Journal of Physical Chemistry C*, **123**, 1, p. 631-636 (2019).
496. M.Trzebiatowska, M.Mączka, M.Ptak, L.Giriunas, S.Balciunas, M.Simenas, D.Klose, J.Banys, „Spectroscopic Study of Structural Phase Transition and Dynamic Effects in a  $[(\text{CH}_3)_2\text{NH}_2][\text{Cd}(\text{N}_3)_3]$  Hybrid Perovskite Framework,“ *Journal of Physical Chemistry C*, **123**, 18, p. 11840-11849 (2019).
497. M.Šimėnas, S.Balčiūnas, A.Ciupa, L.Vilčiauskas, D.Jablonskas, M.Kinka, A.Sieradzki, V.Samulionis, M.Maczka, J.Banys, „Elucidation of dipolar dynamics and the nature of structural phases in the  $[(\text{CH}_3)_2\text{NH}_2][\text{Zn}(\text{HCOO})_3]$  hybrid perovskite framework,“ *J of Materials Chemistry C*, **7**, 6779 - 6785 (2019).
498. A. Plyushch, J. Macutkevič, S. Svirskas, J. Banys, V. Plausinaitiene, Dz. Bychanok, S. A. Maksimenko, A. Selskis, A. Sokal, K. N. Lapko, P. P. Kuzhir, “Silicon carbide/phosphate ceramics composite for electromagnetic shielding applications: Whiskers vs particles,” *Appl. Phys. Lett.*, **114**, 183105 (2019).
499. S.Rudys, R.Grigalaitis, J.Banys, „A compact lamp,“ US Patent Nr. US10220900 (2019).
500. S.Rudys, M.Ivanov, R.Grigalaitis, K.Glemza, J.Banys, V.V.Rubanik, A.D. Shilin and A.N.Salak, “High-temperature electrical conductivity of the  $x\text{NBT}-(1-x)\text{LMT}$  ceramics: verification of Meyer-Neldel rule,“ *Integrated Ferroelectrics*, **196**, 47 – 51 (2019).
501. E. Palaimiene, J. Macutkevič, A. Molak and J. Banys, “Broadband spectroscopy of  $\text{Bi}(\text{Mn}_{0.33}\text{Nb}_{0.67})\text{O}_{3.1}$  ceramics,” *Integrated Ferroelectrics*, **196**, 94 – 99 (2019).
502. D.Sokol, M.Ivanov, A.N.Salak, R.Grigalaitis, J.Banys and A.Kareiva, „Dielectric properties of Bi-substituted LDHs synthesized by co-precipitation and sol-gel methods,“ *Materials Science Poland*, : <https://doi.org/10.2478/msp-2019-0035> (2011).
503. D.Meisak, J.Macutkevič, D.Bychanok, A.Selskis, J.Banys, and P.Kuzhir, „Broadband Dielectric Properties of  $\text{Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$  Nanorods/Epoxy Resin Composites,“ *Journal of Nanomaterials*, Article ID 9756920, Volume 2019 (2019).
504. M.Šimėnas, S.Balčiūnas, A.Gonzalez-Nelson, M.Kinka, M.Ptak, M.A. van der Veen, M.Mączka, J.Banys, „Preparation and Dielectric Characterization of P(VDF–TrFE) Copolymer-Based Composites Containing Metal–Formate Frameworks,“ *Journal of Physical Chemistry C*, **123**, 26, 16380-16387 (2019).
505. A.Valiulis, J.Bousquet, A.Veryga, U.Suprun, D.Sergeenko, S.Cebotari, D.Borelli, S.Pietikainen, J.Banys, I.Agache, N.E.Billo, A.Bush, I.Chkhaidze, L.Dubey, W.J.Fokkens, J.Grigg, T.Haahtela, K.Julge, O.Katilov, N.Khaltaev, M.Odemyr, S.Palkonen, R.Savli, A.Utkus, V.Vilc, T.Alasevicius, A.Bedbrook, M.Bewick, J.Chorostowska-Wynimko, E.Danila, A.Hadjipanayis, R.Karseladze, V.Kvedariene, E.Lesinskas, L.Münter, B.Samolinski, S.Sargsyan, B.Sitkauskienė, D.Somekh, L.Vaideliene, A.Valiulis, P.W.Hellings, „Vilnius Declaration on chronic respiratory diseases: multisectoral care pathways embedding guided self-management, mHealth and air pollution in chronic respiratory diseases,“ *Clinical And Translational Allergy*, **9**, Article Number: 7 (2019).
506. M.Šimėnas, A.Ibenskas, A.Stroppa, A.Gągor, M.Mączka, J.Banys, E.E.Tornau, „Simulation of Structural Phase Transitions in Perovskite Methylhydrazinium Metal-Formate

Frameworks: Coupled Ising and Potts Models,” Journal of Physical Chemistry C, 32, 19912 – 19919, DOI: 10.1021/acs.jpcc.9b03448 (2019).

507. S.Rudys, J.Banys, „Easily deployable phased antenna for a spacecraft and system of such antennas“ US Patent Nr. US10367246 (2019).

508. P.Bertasius, M.Shneider, J.Macutkevic, V.Samulionis, J.Banys, A.Zak, “Dielectric Properties of Epoxy-Matrix Composites with Tungsten Disulfide Nanotubes,” Journal of Nanomaterials, 5761439, Article ID 5761439 (2019).

509. D.Sokol, M.Ivanov, A.N.Salak, R.Grīgalaitis, J.Banys, A.Kareiva, “Dielectric properties of Bi-substituted LDHs synthesized by co-precipitation and sol-gel methods,” Materials Science Poland, **37**, 2, p.190 – 195 (2019).

510. A.Stanulis, A.Katelnikovas, A.N.Salak, P.Seibutas, M.Ivanov, R.Grīgalaitis, J.Banys, A.Kareiva, R.Ramanauskas, A.R.Barron, “Temperature-Induced Structural Transformations in Undoped and Eu<sup>3+</sup>-Doped Ruddlesden–Popper Phases Sr<sub>2</sub>SnO<sub>4</sub> and Sr<sub>3</sub>Sn<sub>2</sub>O<sub>7</sub>: Relation to the Impedance and Luminescence Behaviors,” Inorganic Chemistry, **58**, 17, 11410-11419 (2019).

511. D. Meisak, J. Macutkevic, J. Banys, D. Bychanok, P. Kuzhir, “Dielectric Properties of Epoxy Resin Composites Based on Magnetic Nanoparticles,” International Journal of Nanoscience, **18**, No. 03n04, 1940018 (2019).

512. A.Plyushch, J.Macutkevič, P.Kuzhir, A.Sokal, K.Lapko, A.Selskis, J.Banys, “Synergy Effects in Electromagnetic Properties of Phosphate Ceramics with Silicon Carbide Whiskers and Carbon Nanotubes,” Appl. Sci., **9**(20), 4388 (2019).

513. L. Dagys, S. Balčiūnas, J. Banys, F. Kuliešius, V. Chizhik, V. Balevičius, “CP MAS kinetics and impedance spectroscopy studies of local disorder in low-dimensional H-bonded proton-conducting materials,” Lithuanian J. of Physics, **59**, 130-138 (2019).

514. P.Peksa, J.Trzmiel, K.Fedoruk, A.Gągor, M.Šimėnas, A.Ciupa, S.Pawlus, J.Banys, M.Mączka, A.Sieradzki, “Impact of the Copper-Induced Local Framework Deformation on the Mechanism of Structural Phase Transition in [(CH<sub>3</sub>)<sub>2</sub>NH<sub>2</sub>][Zn(HCOO)<sub>3</sub>] Hybrid Metal–Formate Perovskite,” The Journal of Physical Chemistry C, **123**, 38, 23594-23603 (2019).

515. J.Castro-Gutiérrez, E.Palaimiene, J.Macutkevic, J.Banys, P.Kuzhir, S.Schaefer,V.Fierro, A.Celzard, “Electromagnetic Properties of Carbon Gels,” Materials, 12(24), 4143 (2019).

516. P.Bertasius, D.Meisak, J.Macutkevic, P.Kuzhir, A.Selskis, E.Volnyanko, J.Banys, “Fine Tuning of Electrical Transport and Dielectric Properties of Epoxy/Carbon Nanotubes Composites via Magnesium Oxide Additives,” Polymers, 11(12), 2044 (2019).

517. P.Bertasius, J.Macutkevic, J.Banys, S.Gaidukovs, A.Barkane, R.Vaivodiss, “Synergy effects in dielectric and thermal properties of layered ethylene vinyl acetate composites with carbon and Fe<sub>3</sub>O<sub>4</sub> nanoparticles,” Journal of Applied Polymer Science, 48814 DOI: 10.1002/APP.48814 (2019).

518. D.Meisak, J.Macutkevic, A.Selskis, J.Banys, P.Kuzhir, “Dielectric Properties and Electrical Percolation in MnFe<sub>2</sub>O<sub>4</sub>/Epoxy Resin Composites,” Phys.stat.sol.(a), **1900526** (2019).

519. D.Adamchuk, R.Grīgalaitis, S.Svirskas, J.Macutkevic, E.Palaimiene, J.Banys, L.Mitoseriu, G.Canu, M.T.Buscaglia, V.Buscaglia, “Distributions of relaxation times in relaxor ferroelectric Ba(Ti<sub>0.8</sub> Ce<sub>0.2</sub>)O<sub>3</sub>,” Ferroelectrics, **553**, 103 – 110 (2019).

520. D.V.Adamchuk, V.K.Ksenevich, N.A.Poklonski, M.Navickas, J.Banys, "Nonstoichiometric tin oxide films: study by X-ray diffraction, Raman scattering and electron paramagnetic resonance," Lithuanian J. of Physics, **59**, 224-232 (2019).
521. A.Plyushch, D.Lyakhov, M.Šimėnas, D.Bychanok, J.Macutkevič, D.Michels, J.Banys, P.Lamberti, P.Kuzhir, "Percolation and Transport Properties in the Mechanically Deformed Composites Filled with Carbon Nanotubes," Appl. Sci., **10**(4), 1315, <https://doi.org/10.3390/app10041315> - 15 (2020).
522. S.Svirskas, D.Jablonskas, S.Rudys, S.Lapinskas, R.Grimalaitis, J.Banys, "Broad-band measurements of dielectric permittivity in coaxial line using partially filled circular waveguide," Review of Scientific Instruments, **91**, 035106 (2020).
523. D.Meisak, J.Macutkevic, A.Plyushch, P.Kuzhir, A.Selskis, J.Banys, "Dielectric Relaxation in the Hybrid Epoxy/MWCNT/MnFe<sub>2</sub>O<sub>4</sub> Composites," Polymers, **12**(3), 697; <https://doi.org/10.3390/polym12030697> (2020).
524. L.Kozielski, A.Wilk, M.M.Bućko, J.Banys, "A Large Piezoelectric Strain Recorded in BCT Ceramics Obtained by a Modified Pechini Method," Materials, **13**(7), 1620; <https://doi.org/10.3390/ma13071620> (2020).
525. M.Navickas, L.Giriūnas, V.Kalendra, T.Biktagirov, U.Gerstmann, W.G.Schmidt, M.Mączka, A.Pöpl, J.Banys, M.Šimėnas, "Electron paramagnetic resonance study of ferroelectric phase transition and dynamic effects in a Mn<sup>2+</sup> doped [NH<sub>4</sub>][Zn(HCOO)<sub>3</sub>] hybrid formate framework," Physical Chemistry Chemical Physics, **22**, 16, p. 8513 – 8521, <https://doi.org/10.1039/D0CP01612H> (2020).
526. J.Macutkevic, V.Samulionis, J.Belovickis, J. Banys and O.Shenderova, „Dielectric Properties and Relaxation of Polydimethylsiloxane Composites,“ in Polydimethylsiloxane: Structure and Applications, New York, ISBN 978 – 1 – 53617 – 590 – 5, p. 1 – 28 (2020).
527. M.Mączka, A.Gagor, J.K.Zaręba, D.Stefanska, M.Drozd, S.Balciunas, M.Šimėnas, J.Banys, A.Sieradzki, „Three-Dimensional Perovskite Methylhydrazinium Lead Chloride with Two Polar Phases and Unusual Second-Harmonic Generation Bistability above Room Temperature,“ Chemistry of Materials, **32**, 9, p. 4072 – 4082, DOI: 10.1021/acs.chemmater.0c00973 (2020).
528. S.Balčiūnas, D.Pavlovaitė, M.Kinka, J.Y.Yeh, Po-Chun Han, Fa-Kuen Shieh, K.C.-W.Wu, M.Šimėnas, R.Grimalaitis, J.Banys, „Dielectric Spectroscopy of Water Dynamics in Functionalized UiO-66 Metal-Organic Frameworks,“ Molecules, **25**(8), 1962; <https://doi.org/10.3390/molecules25081962> (2020).
529. I.Zamaraitė, A Džiaugys, Yu Vysochanskii, J Banys, „Quantum paraelectricity and induced ferroelectricity by germanium doping of (PbySn<sub>1-y</sub>)<sub>2</sub>P<sub>2</sub>S(Se)<sub>6</sub> single crystals,“ Lithuanian J. of Physics, **60**, 91 - 98 (2020).
530. M.Šimėnas, D.Klose, M.Ptak, K.Aidas, M.Mączka, J.Banys, A.Pöpl, G.Jeschke, "Magnetic excitation and readout of methyl group tunnel coherence," Science Advances, Vol. **6**, no. 18, eaba1517 (2020).
531. E.Palaimiene, J.Macutkevic, J.Banys,A.Winiarski, I.Gruszka, J.Koperski, A.Molak, "Crossover from Ferroelectric to Relaxor Behavior in Ba<sub>1-x</sub>Ca<sub>x</sub>TiO<sub>3</sub> (x = 0.17) System," Materials, **13**(12), 2854; <https://doi.org/10.3390/ma13122854> (2020).

532. J.P.Cardoso, D.Delmonte, E.Gilioli, E.L.Fertman, A.V.Fedorchenko, V.V.Shvartsman, V.Paukšta, R.Grimalaitis, J.Banys, D.D.Khalyavin, J.M.Vieira, A.N.Salak, "Phase Transitions in the Metastable Perovskite Multiferroics  $\text{BiCrO}_3$  and  $\text{BiCr}_{0.9}\text{Sc}_{0.1}\text{O}_3$ : A Comparative Study," *Inorganic Chemistry*, **59**, 13, 8727-8735 (2020).
533. S.Svirskas, S.Balciunas, M.Simenas, G.Usevicius, M.Kinka, M.Velicka, D.Kubicki, M.E.Castillo, A.Karabanov, V.V.Shvartsman, M.de Rosário Soares, V.Šablinskas, A.N. Salak, D.C.Lupascu, J.Banys, "Phase transitions, screening and dielectric response of  $\text{CsPbBr}_3$ ," *J. Mater. Chem. A*, **8**, 14015-14022 (2020).
534. A.Dziaugys, K.Kelley, J.A.Brehm, L.Tao, A.Puretzky, T.Feng, A.O'Hara, S.Neumayer, M.Chyasnichyus, E.A.Eliseev, J.Banys, Yu.Vysochanskii, Feng Ye, B.C.Chakoumakos, M.A.Susner, M.A.McGuire, S.V. Kalinin, P.Ganesh, N.Balke, S.T.Pantelides, A.N.Morozovska, P.Maksymovych, "Piezoelectric domain walls in van der Waals antiferroelectric  $\text{CuInP}_2\text{Se}_6$ ," *Nature Communications*, **11**, Article number: 3623 (2020).
535. E.Palaimiene, S.Schaefer, J.Macutkevič, J.Banys, A.Selskis, V.Fierro, A.Celzard, "Electrical percolation and electromagnetic properties of polydimethylsiloxane composites filled with Ag nanoparticles of different sizes," *Polymer Composites*, <https://doi.org/10.1002/pc.25748> (2020).
536. S.Rudys, R.Grimalaitis, J.Banys, „A compact lamp,“ European Patent Nr. EP3294615 (2020).
537. J. Macutkevič, V. Samulionis, J. Belovickis, J. Banys and O. Shenderova, "Dielectric Properties and Relaxation of Polydimethylsiloxane Composites," in *Polydimethylsiloxane: Structure and Applications*, New York, ISBN: 978-1-53617-590-5, p. 1 – 28 (2020).
538. E.Palaimiene, S.Schaefer, J.Macutkevič, J.Banys, A.Selskis, V.Fierro, A.Celzard, "Electrical percolation and electromagnetic properties of polydimethylsiloxane composites filled with Ag nanoparticles of different sizes," *Polymer Composites*, DOI: 10.1002/pc.25748 (2020).
539. M.Simenas, S.Balciunas, J.N.Wilson, S.Svirskas, M.Kinka, A.Garbaras, V.Kalendra, A.Gagor, D.Szewczyk, A.Sieradzki, M.Maczka, V.Samulionis, A.Walsh, R.Grimalaitis, J.Banys, "Suppression of phase transitions and glass phase signatures in mixed cation halide perovskites," *Nature Communications*, **11**, 5103 (2020).
540. L.Dagys, V.Klimkevičius, V.Klimavicius, S.Balčiūnas, J.Banys, V.Balevicius, "Cross-polarization with magic-angle spinning kinetics and impedance spectroscopy study of proton mobility, local disorder, and thermal equilibration in hydrogen-bonded poly(methacrylic acid)," *Journal of Polymer Science, pol.* 20200592 (2020).
541. S.Svirskas, D.Adamchuk, R.Grimalaitis, D.Jablonskas, J.Macutkevič, G.Canu, M.T.Buscaglia, V.Buscaglia, L.Curecheriu, L.Mitoseriu, J.Banys, "Dipolar glass state in  $\text{BaCe}_{0.3}\text{Ti}_{0.7}\text{O}_3$  perovskite solid solutions," *Journal of alloys and compounds*, **854**, 155755 (2021).
542. M.Simenas, S.Balciunas, S.Svirskas, M.Kinka, V.Samulionis, R.Grimalaitis, J.Banys, A.Garbaras, A.Gagor, M.Maczka, A.Sieradzki, "Peculiarities of dipolar ordering in mixed cation halide perovskites," *Proceedings of the 2020 IEEE International symposium an application of ferroelectric*, Denver, USA, July 19 – 23, 978-1-728-6430-4 (2020).

543. S.Rudys, J.Banys, „Easily deployable phased antenna for a spacecraft and system of such antennas,“ European Patent Nr. EP3289634 (2020).
544. V.Ksenevich,V.Dorosinets,D.Adamchuk, J.Macutkevic, J.Banys, “Weak Localization in Polycrystalline Tin Dioxide Films,” Materials **13**(23), 5415 (2020).
545. A.Valiulis, J.Bousquet, A.Veryga, U.Suprun, D.Sergeenko, S.Cebotari, D.Borelli, S.Pietikainen, J.Banys, I.Agache, N.E.Billo, A.Bush, I.Chkhaidze, L.Dubey, W.J.Fokkens, J.Grigg, T.Haahtela, K.Julge, O.Katilov, N.Khaltaev, M.Odemyr, S.Palkonen, R.Savli, A.Utkus, V.Vilc, T.Alasevicius, A.Bedbrook, M.Bewick, J.Chorostowska-Wynimko, E.Danila, A.Hadjipanayis, R.Karseladze, V.Kvedariene, E.Lesinskas, L.Münter, B.Samolinski, S.Sargsyan, B.Sitkauskienė, D.Somekh, L.Vaideliene, A.Valiulis, P.W.Hellings, „Correction to: Vilnius Declaration on chronic respiratory diseases: multisectoral care pathways embedding guided self-management, mHealth and air pollution in chronic respiratory diseases,“ Clinical And Translational Allergy, **10**, Article Number: 49 (2020).
546. M.Mączka, M.Ptak, D.L.M.Vasconcelos, L.Giriunas, P.T.C.Freire, M.Bertmer, J.Banys, M.Simenas, „NMR and Raman Scattering Studies of Temperature- and Pressure-Driven Phase Transitions in  $\text{CH}_3\text{NH}_2\text{NH}_2\text{PbCl}_3$  Perovskite,“ J. Phys. Chem. C, **124**, 2699 - 27008 <https://doi.org/10.1021/acs.jpcc.0c07886> (2020).
547. S.Balčiūnas, M.Ivanov, J.Banys, S.Ueno, S.Wada, „In search of an artificial morphotropic phase boundary: Lead free barium titanate based composite structures,“ Lithuanian J. of Physics, **60**, 225-234 (2020).
548. E.Palaimienė, J.Macutkevič, J.Banys, I.Gruszka, A.Kania, “Broadband and infrared spectroscopy of  $\text{Ag}_{0.98}\text{Li}_{0.02}\text{NbO}_3$  ceramics,” Lithuanian J. of Physics, **60**, 247-252 (2020).
549. I.Zamaraičia, V.Liubachko, R.Yevych, A.Oleaga, A.Salazar, A.Dziaugys, J.Banys and Yu. Vysochanskii, “Quantum paraelectric state and critical behavior in  $\text{Sn}(\text{Pb})_2\text{P}_2\text{S}(\text{Se})_6$  ferroelectrics,” Journal of Applied Physics, **128**, 234105 (2020).
550. M.Dunce, A.Olšauskaitė, E.Birks, Š.Svirskas, A.Kežionis, L.Bikshe, A.Sternberg, J.Banys, “Revision of the freezing concept in relaxor ferroelectrics: the case of  $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3-\text{Sr}_{0.7}\text{Bi}_{0.2}\text{TiO}_3$  solid solutions,” Ferroelectrics, **569**, 266 – 279 (2020).
551. A.Dziaugys, I.Zamaraičia, J.Macutkevič, D.Jablonskas, S.Miga, J.Dec, Yu.Vysochanskii, J.Banys, “Non-linear dielectric response of layered  $\text{CuInP}_2\text{S}_6$  and  $\text{Cu}_{0.9}\text{Ag}_{0.1}\text{InP}_2\text{S}_6$  crystals,” Ferroelectrics, **569**, 280 – 285 (2020).
552. A.Plyushch, J.Macutkevič, A.Sokal, K.Lapko, A.Kudlash, D.Adamchuk, V.Ksenevich, D.Bychanok, A.Selskis, P.Kuzhir, J.Banys, “The Phosphate-Based Composite Materials Filled with Nano-Sized  $\text{BaTiO}_3$  and  $\text{Fe}_3\text{O}_4$ : Toward the Unfired Multiferroic Materials,” Materials, **14**(1), 133 (2021).
553. Y.Pashkevich, R.Babkin, V.Rubanik, A.D.Shilin, D.E.L.Vieira, A.N.Salak, J.Banys, “Magnetic Anisotropy in the CoII-AlIII-nitrate Layered Double Hydroxides with the Co/Al Ratios 2, 3, and 4,” Proceedings of the 2020 10th International Conference Nanomaterials: Applications & Properties 18<sup>th</sup> IEEE International symposium an application of ferroelectric, Sumy, Ukraine, November 9 – 13, 01NMM10-1-01NMM10-5, doi: 10.1109/NAP51477.2020.9309621. (2020).
554. A.Bradeško, M.Vrabelj, L.Fulanović, Š.Svirskas, M.Ivanov, R.Katiliūte, D.Jablonskas, M.Šimėnas, G.Usevičius, B.Malič, J.Banys, T.Rojac, „ Implications of acceptor doping in the

polarization and electrocaloric response of 0.9Pb(Mg<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>–0.1PbTiO<sub>3</sub> relaxor ferroelectric ceramics,“ Journal of Materials Chemistry C, DOI: 10.1039/d0tc05854h (2021).

555. D.Meisak, J.Macutkevic, A.Selskis, P.Kuzhir, J.Banys, “Dielectric Relaxation Spectroscopy and Synergy Effects in Epoxy/MWCNT/Ni@C Composites,” Nanomaterials, **11(2)**, 555; (2021).

556. V.Kavaliukė, T.Šalkus, S.Balčiūnas, J.Banys, A.I.Pogodin, O.P.Kokhan, I.P.Studenyak, “Electrical properties of (Cu<sub>1-x</sub>Ag<sub>x</sub>)<sub>7</sub>GeS<sub>5</sub>I crystals investigated by impedance spectroscopy,” Solid State Ionics, **363**, 115593 (2021).

557. P.Bertasius, S.Schaefer, J.Macutkevic, J.Banys, A.Selskis, V.Fierro, A.Celzard, „Dielectric properties of polydimethylsiloxane composites filled with SrTiO<sub>3</sub> nanoparticles, Polymer Composites, <https://doi.org/10.1002/pc.26031> (2021).

558. M.Tretjak, E.Palaimiene, S.Pralgauskaitė, J.Matukas, J.Banys, J.Macutkevič, V.Fierro, S.Schaefer, A.Celzard, “Noise and Electrical Characteristics of Composites Filled with Onion-Like Carbon Nanoparticles,” Polymers, **13(7)**, 997 (2021).

559. E.Palaimiene, J.Macutkevic, A.Kezionis, J.Banys, I.Gruszka, J.Koperski, A.Kania, “Dielectric properties and infrared spectra of Ag0·92Li0·08NbO<sub>3</sub> ceramics,” Solid State Communications, **332**, 114338 (2021).

560. Š.Svirskas, S.Balčiūnas, M.Šimėnas, G.Usevičius, M.Kinka, M.Velička, D.Kubicki, M.Escobar Castillo, A.Karabanov, V.V.Shvartsman, M.de Rosário Soares, V.Šablinskas, A.N.Salak, D.C.Lupascu, J.Banys, “Reply to the Comment on “Phase transitions, screening and dielectric response of CsPbBr<sub>3</sub>” by Š. Svirskas, S. Balčiūnas, M. Šimėnas, G. Usevičius, M. Kinka, M. Velička, D. Kubicki, M. E. Castillo, A. Karabanov, V. V. Shvartsman, M. R. Soares, V. Šablinskas, A. N. Salak, D. C. Lupascu and J. Banys, J. Mater. Chem. A, 2020, 8, 14015,” J. Mater. Chem. A, **9**, 18, 11453 - 11455 (2021).

561. I.Zamaraite, D.E.Vieira, L.G.Vieira, J.L.Ribeiro, J.M.Vieira, A.N.Salak, J.Banys, “Dielectric and Infrared Spectroscopy Characterization of Co-Al Layered Double Hydroxides,” Phys.stat.sol.(a), 2100106 (2021).

562. T.Kudrevičius, A.Plyushch, M.Ivanov, Š.Svirskas, V.Plaušinaitienė, A.Selskis, P.Kuzhir, J.Banys, “Aqueous tape casting of the 0.7Pb(Mg<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-0.3PbTiO<sub>3</sub> ceramic films: Production optimization and properties,” Journal of Electroceramics **41**, p20 - 25 (2021).

563. M. Naveed-Ul-Haq, V.V.Shvartsman, V.Samulionis, M.Ivanov, J.Banys, D.C.Lupascu, “Dependence of the magnetoelectric coupling on elastic and dielectric properties of two-phase multiferroic composites,” Journal of Materials Science, **56**, 14978–14988 (2021).

564. M.Šimėnas, S.Balčiūnas, Š.Svirskas, M.Kinka, M.Ptak, V.Kalendra, A.Gagor, D.Szewczyk, A.Sieradzki, R.Grigalaitis, A.Walsh, M.Mączka, J.Banys, “Phase Diagram and Cation Dynamics of Mixed MA<sub>1-x</sub>F<sub>x</sub>PbBr<sub>3</sub> Hybrid Perovskites,” Chemistry of Materials **33**, 15, 5926-5934 (2021).

565. A.Gonzalez-Nelson, S.Mula, M.Šimėnas, S.Balčiūnas, A.R.Altenhof, C.S.Vojvodin, S.Canossa, J.Banys, R.W.Schurko, F.X.Coudert, M.A. van der Veen, “Emergence of Coupled Rotor Dynamics in Metal–Organic Frameworks via Tuned Steric Interactions,” Journal of the American Chemical Society **143**, 31, 12053-12062 (2021).

566. A.Plyushch, N.Mačiulis, A.Sokal, R.Grigalaitis, J.Macutkevič, A.Kudlash, N.Apanasevich, K.Lapko, A.Selskis, S.A.Maksimenko, P.Kuzhir, J.Banys,

“0.7Pb(Mg1/3Nb2/3)O3-0.3PbTiO3 Phosphate Composites: Dielectric and Ferroelectric Properties,” *Materials* **14**(17), 5065 (2021).

567. M.Jiang, W.Hu, L.Jacob, Q.Sun, N.Cox, D.Kim, Ye Tian, L.Zhao, Yang Liu, Li Jin, Zhuo Xu, Peng Liu, Gang Zhao, Jian Wang, Š.Svirskas, J.Banys, Chul-hong Park, T.J.Frankcombe, Xiaoyong Wei, Yun Liu, “Hole-Pinned Defect Clusters for a Large Dielectric Constant up to GHz in Zinc and Niobium Codoped Rutile SnO<sub>2</sub>,” *ACS Applied Materials & Interfaces* **13**, 45, 54124-54132 (2021).
568. V.Veerapandian, M.N.Popov, F.Mayer, J.Spitaler, S.Svirskas, V.Kalendra, J.Lins, G.Canu, M.T.Buscaglia, M.Pasciak, J.Banys, P.B.Groszewicz, V.Buscaglia, J.Hlinka, M.Deluca, “Origin of Relaxor Behavior in Barium-Titanate-Based Lead-Free Perovskites,” *Advanced electronic materials*, 2100812 (2021).
569. I.Zamaraitė, Yu.Vysochanskii, A.Dziaugys, J.Banys, “Dielectric, Pyroelectric and Ferroelectric Properties of Sn<sub>2</sub>P<sub>2</sub>(SexS<sub>1-x</sub>)<sub>6</sub> Single Crystals,” *Integrated Ferroelectrics*, **220**, 39 – 45 (2021).
570. V.Haborets, K.Glukhov, J.Banys, Yu.Vysochanskii, “Layered GeP<sub>2</sub>S<sub>6</sub>, GeP<sub>2</sub>Se<sub>6</sub>, GeP<sub>2</sub>Te<sub>6</sub>, SnP<sub>2</sub>S<sub>6</sub>, SnP<sub>2</sub>Se<sub>6</sub>, and SnP<sub>2</sub>Te<sub>6</sub> Polar Crystals with Semiconductor–Metal Transitions Induced by Pressure or Chemical Composition,” *Integrated Ferroelectrics*, **220**, 90 – 99 (2021).
571. J.Banys, R.Grigelaitis, M.Kinka, “Guest Editorial,” *Integrated Ferroelectrics*, **220**, 1 (2021).
572. P.Latko-Durałek, P.Bertasius, J.Macutkevič, J.Banys, A.Boczkowska, “Fibers of Thermoplastic Copolyamides with Carbon Nanotubes for Electromagnetic Shielding Applications,” *Materials*, **14**(19), 5699 (2021).
573. V.Klimavicius, L.Dagys, V.Klimkevičius, D.Lengvinaitė, K.Aidas, S.Balčiūnas, J.Banys, V.Chizhik, V.Balevicius, “Solid-State NMR and Impedance Spectroscopy Study of Spin Dynamics in Proton-Conducting Polymers: An Application of Anisotropic Relaxing Model,” *The Journal of Physical Chemistry B* **125**, 45, 12592-12602 (2021).
574. Jianmei Liu, L.Jacob, J.Langley, Zhenxiao Fu, Xiuhua Cao, Shiwo Ta, Hua Chen, Š.Svirskas, J.Banys, Xiaoyong Wei, N.Cox, T.J. Frankcombe, Yun Liu, “Microwave Dielectric Materials with Defect-Dipole Clusters Induced Colossal Permittivity and Ultra-low Loss,” *ACS Applied Electronic Materials* **3**, 11, 5015-5022 (2021).
575. J.Macutkevič, J.Banys, A.Kania, “Electrical Conductivity and Dielectric Relaxation in Ag<sub>1-x</sub>LixNbO<sub>3</sub>,” *Crystals* **12**(2), 158 (2022).
576. M.T.Colomer, M.Simenas, J.Banys, F.Vattier, A.Gagor, M.Maczka, “Effect of sintering under CO+N<sub>2</sub>/H<sub>2</sub> and CO<sub>2</sub>+air atmospheres on the physicochemical features of a commercial nano-YSZ,” *Journal of Alloys and Compounds*, **904**, 163976 (2022).
577. I.Vanskevičė, M.A.Kazakova, J.Macutkevič, N.V.Semikolenova, J.Banys, “Dielectric Properties of Hybrid Polyethylene Composites Containing Cobalt Nanoparticles and Carbon Nanotubes,” *Materials*, **15**(5), 1876 (2022).
578. B.Beklešovas, A.Ilijinas, V.Stankus, J.Čyvienė, M.Andrulevičius, M.Ivanov, J.Banys, “Structural, Morphologic, and Ferroelectric Properties of PZT Films Deposited through Layer-by-Layer Reactive DC Magnetron Sputtering,” *Coatings*, **12**(6), 717 (2022).

579. E.Palaimiene, J.Macutkevič, J.Banys, A.Selskis, N.Apanasevich, A.Kudlash, A.Sokal, K.Lapko, "Phosphate Ceramics with Silver Nanoparticles for Electromagnetic Shielding Applications," *Materials*, **15(20)**, 7100 (2022).
580. B.Bajaca, J.Vukmirovic, N.Samardzic, J.Banys, G.Stojanovic, J.Bobic, V.V.Srdic, "Dielectric and ferroelectric properties of multilayer BaTiO<sub>3</sub>/NiFe<sub>2</sub>O<sub>4</sub> thin films prepared by solution deposition technique," *Ceramics International*, **48**, 18, p.26378-26386 (2022).
581. A. Plyushch, D.Lewin, A.Sokal, R.Grimalaitis, V.V.Shvartsman, J.Macutkevič, S.Salamon, H.Wende, K.N.Lapko, P.P.Kuzhir, D.C.Lupascu, J.Banys, "Magnetoelectric coupling in nonsintered bulk BaTiO<sub>3</sub> -- xCoFe<sub>2</sub>O<sub>4</sub> multiferroic composites," *Journal of Alloys and Compounds*, **917**, 165519 (2022).
582. E.Palaimiene, A.Plyushch, J.Macutkevič, J.Banys, E.Talik, A.Kania, "Ferroelectric properties and phase transitions dynamics of Ag<sub>1-x</sub>LixNbO<sub>3</sub> ( $x \leq 0.08$ ) ceramics," *Journal of Alloys and Compounds*, **913**, 165290 (2022).
583. I.Zamaraitė, S.Rudys, S.Lapinskas, R.Aleksiejunas, R.Grimalaitis, J.Banys, "Computational electromagnetic analysis of partially-filled rectangular waveguide at X-band frequencies," *Nonlinear analysis: modelling and control*, **27**, No. 6, p. 1150–1167 (2022).
584. L.Curecheriu, T.Sandu, O.Condurachea, G.Canu, C.Costa, M.T.Buscaglia, M.Asandulesa, J.Banys, V.Buscaglia, L.Mitoseriu, "Dielectric, ferroelectric and electrocaloric properties of 1%Eu - doped BaZryTi<sub>1-y</sub>O<sub>3</sub> ceramics," *Materials Research Bulletin*, **157**, 112034 (2023).
585. E.Palaimiene, V.Gribauskaite, J.Banys, A.V.Pushkarev, Yu.V.Radyush, N.M.Olekhovich, J.P.V.Cardoso, A.N.Salak, "Dielectric characterization of the BiFe0.5Cr0.5O<sub>3</sub> ceramics," *Lithuanian J. of Physics*, **62**, 206 - 211 (2022).
586. S.Svirskas, T.Kudrevičius, E.Birks, M.Dunce, A.Sternbergs, C.-H.Huang, J.Banys. "Dielectric and piezoelectric properties of 0.8Na0.5Bi0.5TiO<sub>3</sub>-0.2BaTiO<sub>3</sub> modified with sodium niobate," *Lithuanian J. of Physics*, **62**, 212 - 220 (2022).
587. A.Plyushch, D.Lewin, P.Ažubalis, V.Kalendra, A.Sokal, R.Grimalaitis, V.V.Shvartsman, S.Salamon, H.Wende, A.Selskis, K.N.Lapko, D.C.Lupascu, J.Banys, "Phosphate bonded CoFe<sub>2</sub>O<sub>4</sub>–BaTiO<sub>3</sub> layered structures: dielectric relaxations and magnetoelectric coupling," *Lithuanian J. of Physics*, **62**, 221 - 228 (2022).
588. I.Zamaraitė, A.Džiaugys, Yu.Vysochanskii, J.Banys, "Contribution of ferroelectric and non-ferroelectric factors to P–E hysteresis loops of CuInP<sub>2</sub>S<sub>6</sub>-type single crystals," *Lithuanian J. of Physics*, **62**, 229 - 234 (2022).
589. S.Rudys, S.Balčiūnas, Ch.Vollinger, J.Banys, V.Kalendra, "Investigation of dielectric and magnetic properties of Al-800 ferrites," *Lithuanian J. of Physics*, **62**, 277 - 281 (2022).
590. R.Grimalaitis, R.Šalaševičius, J.Banys, M.Vijatovic Petrovic, A.Dzunuzovic, M.A.Zaghete, G.F.Teixeira, B.Stojanovic, "Functional properties of PVDF-based NZF-BT flexible films," *Lithuanian J. of Physics*, **62**, 282 - 291 (2022).
591. M.Tretjak, S.Pralgauskaitė, J.Matukas, A.Plyushch, J.Macutkevič, J.Banys, B.Karakashov, V.Fierro, A.Celzard, "Electrical Resistivity and Microwave Properties of Carbon Fiber Felt Composites," *Materials*, **15(20)**, 8654 (2022).
592. V.Kalendra, J.Turčak, J.Banys, J.J.L.Morton, M.Šimėnas, "X- and Q-band EPR with cryogenic amplifiers independent of sample temperature," *Journal of Magnetic Resonance*, **346**, 107356 (2023).

592. V.Kalendra, J.Turčak, J.Banys, J.J.L.Morton, M.Šimėnas, “X- and Q-band EPR with cryogenic amplifiers independent of sample temperature,” Journal of Magnetic Resonance, **346**, 107356 (2023).
593. L.Curecheriu, T.Sandu, O.Condurache, G.Canu, C.Costa, M.T.Buscaglia, M.Asandulesa, J.Banys, V.Buscaglia, L.Mitoseriu, “Dielectric, ferroelectric and electrocaloric properties of 1%Eu – doped BaZryTi<sub>1-y</sub>O<sub>3</sub> ceramics,” Materials Research Bulletin, **157**, 112034 (2023).
- 594 G.Usevicius, A.Eggeling, I.Pocius, V.Kalendra, D.Klose, M.Maczka, A.Poepll, J.Banys, G.Jeschke, M.Simenas, “Probing Methyl Group Tunneling in [(CH<sub>3</sub>)<sub>2</sub>NH<sub>2</sub>][Zn(HCOO)<sub>3</sub>] Hybrid Perovskite Using Co<sup>2+</sup> EPR,” Molecules, **28**, 979 (2023).
595. M.Bleija, O.Platnieks, J.Macutkevic, J.Banys, O.Starkova, L.Grase, S.Gaidukovs, “Poly(Butylene Succinate) Hybrid Multi-Walled Carbon Nanotube/Iron Oxide Nanocomposites: Electromagnetic Shielding and Thermal Properties,” Polymers, **15**, 515 (2023).
596. P.Bertasius, A.Plyushch, J.Macutkevic, J.Banys, A.Selskis, O.Platnieks, S.Gaidukovs, “Multilayered Composites with Carbon Nanotubes for Electromagnetic Shielding Application,” Polymers, **15**, 1053 (2023).
597. D.Meisak, A.Plyushch, J.Macutkevic, R.Grimalaitis, A.Sokal, K.N.Lapko, A.Selskis, P.P.Kuzhir, J.Banys, “Effect of temperature on shielding efficiency of phosphate-bonded CoFe<sub>2</sub>O<sub>4</sub>-xBaTiO<sub>3</sub> multiferroic composite ceramics in microwaves,” Journal of Materials Resreach and Technolgy, **24**, p1939-1948 (2023).
598. D.Meisak, M.Kinka, A.Plyushch, J.Macutkevic, A.Zarkov, S.Schaefer, A.Selskis, V.Samulionis, P.Kuzhir, J.Banys, V.Fierro, A.Celzard, “Piezoelectric Nanogenerators Based On BaTiO<sub>3</sub>/PDMS Composites for High-Frequency Applications,” ACS Omega, **8**, Issue15, p. 13911-13919 (2023).
599. A.Z.Szeremeta, J.Macutkevič, M.Zubko, S.Miga, Š.Svirskas, I.Gruszka, J.Koperski, J.Banys, A.Molak, “Doping influence on structural ferroelectric phase transitions and electrical features of barium calcium titanate,” Journal of the European Ceramic Society, **43**, p. 4029 – 4043 (2023).
600. J.Banys, “Welcoming address by Juras Banys, President of the Lithuanian Academy of Sciences,” Science and science of science, **119**, 8 (2023).
601. J.Banys, A.Dziaugys, K.E.Glukhov, A.N.Morozovska, N.V.Morozovsky, Y.M.Vysochanskii, “Van der Waals Ferroelectrics: Properties and Device Applications of Phosphorous Chalcogenides,” ISBN:9783527350346, |Online ISBN:9783527837175 |DOI:10.1002/9783527837175, Wiley-VCH GmbH p 381 (2022).
602. S.Rudys, R.Grimalaitis, J.Banys, „A compact lamp,“ European Patent Nr. EP3294615 (2023).
603. P.Blyweert, A.Zharov, D.Meisak, A.Plyushch, J.Macutkevič, J.Banys, V.Fierro, A.Celzard, “Electromagnetic properties of 3D-printed carbon–BaTiO<sub>3</sub> composites,” Appl. Phys. Lett. **123**, 012903 (2023).
604. V.Klimavicius, V.Klimkevicius, K.Aidas, S.Balciunas, J.Banys, R.Makuska, V.Balevicius, “Fine structural features and proton conduction in zwitterionic poly(2-methacryloyloxyethyl phosphorylcholine) (PMPC): Multinuclear solid-state NMR, impedance and FTIR spectroscopy study,” Reactive and Functional Polymers, **192**, 105727 (2023).

605. Yu.Vysochanskii, V.Liubachko, R.Yevych, K.Glukhov, A.Kohutych, V.Hryts, A.Dziaugys, J. Banys, "Joint Influence of Indium and Copper Cation Sublattices on the Origin of Ferrielectricity in 2D CuInP<sub>2</sub>S<sub>6</sub>," IEEE International Symposium on Applications of Ferroelectrics (ISAF) DOI: 10.1109/ISAF53668.2023.10265377 (2023).
606. V.Kalendra, J.Turčak, G.Usevičius, H.Karas, M.Hülsmann, A.Godt, G.Jeschke, J.Banys, J.J.L. Morton, M.Šimėnas, "Q-band EPR cryoprobe," Journal of Magnetic Resonance, **356**, 107573, (2023).
607. B.Beklešovas, V.Stankus, B.Abakevičienė, J.Link, R.Stern, A.Plyushch, J.Banys, J.Čyvienė, R.Girčys, M.Bašinskas, "Synthesis and Characterization of Cr-Doped Pb<sub>2</sub>Fe<sub>2</sub>O<sub>5</sub> Thin Films by Reactive Magnetron Sputtering," ECS Journal of Solid State Science and Technology, **12**, 10, 103014, (2023).
608. M.Mączka, M.Ptak, A.Gagor, J.K.Zaręba, X.Liang, S.Balčiūnas, O.A.Semenikhin, O.I.Kucheriv, I.A.Gural'skiy, S.Shova, A.Walsh, J.Banys, M.Šimėnas, "Phase Transitions, Dielectric Response, and Nonlinear Optical Properties of Aziridinium Lead Halide Perovskites," Chemistry of Materials, <https://doi.org/10.1021/acs.chemmater.3c02200>
609. V.Laguta, V.Bovtun, M.Kempa, O.Laguta, P.Neugebauer, M.Šimėnas, J.Banys, S.Kamba, "Enhancement of microwave fields in pulse EPR of quantum paraelectrics," Journal: Applied Physics Letters, **123**, 214001 (2023).
610. V.Haronin, M.Alexe, R.Grimalaitis, J.Banys. "Semiconductive lead zirconate titanate thin films grown by pulsed laser deposition,: Lithuanian J. of Physics, **64**, 101-106 (2024).
611. M.Simenas, A.Gagor, J.Banys, M. Maczka, "Phase transitions and dynamics in mixed three- and low-dimensional lead halide perovskites," Chemical Reviews, **124**, 2281 – 2326 (2024).
612. I.Vanskevičė, M.Kinka,J.Banys, J.Macutkevič, S.Schaefer, A.Selskis,V.Fierro, A.Celzard, "Dielectric and Ultrasonic Properties of PDMS/TiO<sub>2</sub> Nanocomposites," Polymers, **16**, 603 (2024).
613. Yu.Vysochanskii, I.V.Liubachko, K.Glukhov, R.Yevych, A.Kohutych, V.Hryts, A.Dziaugys, J.Banys, "Ordering/displacive ferrielectricity in 2D CuInP<sub>2</sub>S<sub>6</sub>," Ferroelectrics, **618**, 906 – 9015 (2024).
614. M.Ptak, A.Kaban'ski, B.Dziuk, S.Balciunas, G.Usevicius, J.K.Zare, J.Banys, M.Simenas, A.Sieradzki, D.Stefanska, "Mechanism of isosymmetric polar order-disorder phase transition in pyroelectric [CH<sub>3</sub>CH<sub>2</sub>NH<sub>3</sub>]<sub>2</sub>NaGa(HCOO)<sub>6</sub> double perovskite," Journal of Materials Chemistry C, **12**, 4663 – 4675 (2024).
615. G.Usevičius, J.Turčak, Y.Zhang, A.Eggeling, Ž.Einorytė, M.A.Hope, Š.Svirskas, D.Klose, V. Kalendra, K.Aidas, G.Jeschke, J.Banys, M.Šimėnas, "Probing structural and dynamic properties of MAPbCl<sub>3</sub> hybrid perovskite using Mn<sup>2+</sup> EPR," Dalton Transactions, **53**, 7292 – 7302 (2024)
616. V Haronin, Z Yang, R Grimalaitis, I Calisir, J Banys, D.A.Hall, "Broadband dielectric spectroscopy of Nb-doped 0.7BiFeO<sub>3</sub>–0.3BaTiO<sub>3</sub> ceramics," Journal of Physics Communications, **8**, 10 (2024).
617. M.Dunce, A.Plyushch, E.Birks, Š.Svirskas, J.Banys, P.Jankauskas, L.Bikse, A.Atvars, O.Freimanis, M.Leimane, A.Bundulis, "Free-standing 0.9Na0.5Bi0.5TiO<sub>3</sub>-0.1Sr0.7Bi0.2TiO<sub>3</sub>

thick films produced by water-based tape-casting method," Journal of the Americam Ceramic Society, **107**, 6532 – 6543 (2024).

618. S.Streckaitė, L.Abdelrazik, K.Maleckaitė, M.Šimėnas, G.Usevičius, J.Banys, D.Rutkauskas, A.Katelnikovas, V.Pakštas, M.Franckevičius, V.Gulbinas, "The limiting factors of quantum-cutting efficiency of ytterbium-doped lead halide perovskites: dimeric and monomeric ytterbium species Check for updates," Jouranl of Materials Chemistry C, **12**, 11995 – 12003 (2024).
619. V.Haronin, I.Jankowska-Sumara, C.Kadlec, A.Majchrowski, O.Suvorova, R.Grigelaitis, J.Banys, "Broadband dielectric spectroscopy of a PbHf<sub>1-x</sub>Sn<sub>x</sub>O<sub>3</sub> material," Phase Transitions, **97**, <https://doi.org/10.1080/01411594.2024.2369838> (2024).
620. G.Rimkus, S.Balčiūnas, H.R.Petrosova, O.I.Kucheriv, R.Lemežis, V.Klimavičius, V.Kalendra, J.Banys, I.A.Guralskiy, M.Šimėnas, "B-Site Mixing Effects in Hybrid Perovskites: Phase Transitions and Dielectric Response of MAPb<sub>1-x</sub>Sn<sub>x</sub>Br<sub>3</sub>," Chemistry of Materials, **36**, 7397 – 7405 (2024).
621. D.Meisak, A.Plyushch, M.Kinka, S.Balčiūnas, V.Kalendra, S.Schaefer, A.Zarkov, A.Selskis, J.Banys, V.Fierro, A.Celzard, "Effect of Particle Size on the Origin of Electromechanical Response in BaTiO<sub>3</sub>/PDMS Nanogenerators," ACS Applied Electronic Material, **6**, 7464 – 7474 (2024).
622. F.Mireckas, S.Pralgauskaitė, M.Korzhenevskaya, J.Matukas, A.Plyushch, J.Banys, A.Selskis, J.Macutkevič, M.Bleija, O.Platnieks, S.Gaidukovs, "Dielectric, low-frequency noise and mechanical properties of hybrid carbon nanotubes/graphene nanoplatelets epoxy composites," Polymer Composites, **46**, Issue 4, 3153 – 3164 (2024).
623. D.Tsyhanok, D.Meisak, J.Banys, J.Macutkevič, A.Selskis, A.Sabalina, O.Platnieks, S.Gaidukovs, "Dielectric spectroscopy and synergistic effects in epoxy composites filled with multi-walled carbon nanotubes and carbon-coated copper nanoparticles," Polymer Composites, <https://doi.org/10.1002/pc.29337> (2024).
624. G.Rimkus, S.Balčiūnas, H.R.etrosova Olesia, I.Kucheriv, R.Lemežis, V.Klimavičius, V.Kalendra, J.Banys, I.A.Gural'skiy, M.Šimėnas,"B-Site Mixing Effects in Hybrid Perovskites: Phase Transitions and Dielectric Response of MAPb<sub>1-x</sub>Sn<sub>x</sub>Br<sub>3</sub>," Chemistry of Materials, **37**, 1314 – 1320 (2025).
625. D.Tsyhanok, D.Meisak, P.Blyweert ,A.Selskis, J.Macutkevič, J.Banys, V.Fierro, A.Celzard, "Investigating 3D-Printed Carbon–Carbonyl Iron Composites for Electromagnetic Applications," Polymers, **17(8)**, 1009 (2025).