

1.01 Izvirni znanstveni članek | *Original Scientific Paper*

1. KORUZA, Jurij, ROŽIČ, Brigita, CORDOYIANNIS, George, MALIČ, Barbara, KUTNJAK, Zdravko. Large electrocaloric effect in lead-free $K_{0.5}Na_{0.5}NbO_3$ - $SrTiO_3$ ceramics. *Applied physics letters*, ISSN 0003-6951. [Print ed.], 2015, vol. 106, no. 20, str. 202905-1-202905-4, doi: [10.1063/1.4921744](https://doi.org/10.1063/1.4921744). [COBISS.SI-ID [28581927](https://www.cobiss.si/id/28581927)], [JCR, SNIP, WoS, Scopus] **[NAMASTE v zahvali]**
2. ROJAC, Tadej, URŠIČ, Hana, BENČAN, Andreja, MALIČ, Barbara, DAMJANOVIĆ, Dragan. Mobile domain walls as a bridge between nanoscale conductivity and macroscopic electromechanical response. *Advanced functional materials*, ISSN 1616-301X, 2015, vol. 25, no. 14, str. 2099-2108, doi: [10.1002/adfm.201402963](https://doi.org/10.1002/adfm.201402963). [COBISS.SI-ID [28359975](https://www.cobiss.si/id/28359975)], [JCR, SNIP, WoS, Scopus] **[NAMASTE v zahvali]**
3. RUDEŽ, Rok, PAVLIČ, Jernej, BERNIK, Slavko. Preparation and influence of highly concentrated screen-printing inks on the development and characteristics of thick-film varistors. *Journal of the European ceramic society*, ISSN 0955-2219. [Print ed.], 2015, vol. 35, no. 11, str. 3013-2023, doi: [10.1016/j.jeurceramsoc.2015.04.035](https://doi.org/10.1016/j.jeurceramsoc.2015.04.035). [COBISS.SI-ID [28573991](https://www.cobiss.si/id/28573991)], [JCR, SNIP, WoS, Scopus]
4. ABELLARD, Andre-Pierre, KUŠČER, Danijela, LETHIECQ, Marc, MALIČ, Barbara, LEVASSORT, Franck. Processing and electromechanical properties of lead zirconate titanate thick films by electrophoretic deposition. *Advances in applied ceramics*, ISSN 1743-6753, 2015, vol. 114, no. 4, str. 198-204, doi: [10.1179/1743676115Y.0000000008](https://doi.org/10.1179/1743676115Y.0000000008). [COBISS.SI-ID [28547111](https://www.cobiss.si/id/28547111)], [JCR, SNIP, WoS]
5. MESARIČ, Tina, GAMBARDELLA, Chiara, MILIVOJEVIĆ, Tamara, FAIMALI, Marco, DROBNE, Damjana, FALUGI, Carla, MAKOVEC, Darko, JEMEC, Anita, SEPČIĆ, Kristina. High surface adsorption properties of carbon-based nanomaterials are responsible for mortality, swimming inhibition, and biochemical responses in *Artemia salina* larvae. *Aquatic toxicology*, ISSN 0166-445X. [Print ed.], 2015, vol. 163, str. 121-129, doi: [10.1016/j.aquatox.2015.03.014](https://doi.org/10.1016/j.aquatox.2015.03.014). [COBISS.SI-ID [3423311](https://www.cobiss.si/id/3423311)], [JCR, SNIP, WoS, Scopus]
6. GORGIEVA, Selestina, KOKOL, Vanja. Processing of gelatin-based cryogels with improved thermo-mechanical resistance, pore size gradient and high potential for sustainable protein-drug release. *Journal of biomedical materials research. Part A*, ISSN 1549-3296, 2015, vol. 103, issue 3, str. 1119-1130. <http://onlinelibrary.wiley.com/doi/10.1002/jbm.a.35261/abstract>, doi: [10.1002/jbm.a.35261](https://doi.org/10.1002/jbm.a.35261). [COBISS.SI-ID [17920790](https://www.cobiss.si/id/17920790)], [JCR, SNIP, WoS, Scopus]
7. PODLIPEC, Rok, ŠTRANCAR, Janez. Cell-scaffold adhesion dynamics measured in first seconds predicts cell growth on days scale - optical tweezers study. *ACS applied materials & interfaces*, ISSN 1944-8244. [Print ed.], 2015, vol. 7, no. 12, str. 6782-6791, doi: [10.1021/acsami.5b00235](https://doi.org/10.1021/acsami.5b00235). [COBISS.SI-ID [28541479](https://www.cobiss.si/id/28541479)], [JCR, SNIP, WoS, Scopus]
8. TESTEN, Anže, PODLIPEC, Rok, MRAVLJAK, Janez, ORTHMANN, Andrea, ŠENTJURC, Marjeta, ZEISIG, Reiner, ŠTRANCAR, Janez, KOKLIČ, Tilen. How perifosine affects liposome-encapsulated drug delivery across a cell barrier. *Therapeutic delivery*, ISSN 2041-5990, 2015, vol. 6, no. 4, str. 423-441. <http://www.future-science.com/doi/abs/10.4155/tde.14.127>, doi: [10.4155/tde.14.127](https://doi.org/10.4155/tde.14.127). [COBISS.SI-ID [3863665](https://www.cobiss.si/id/3863665)], [SNIP, Scopus]
9. GARVAS, Maja, TESTEN, Anže, UMEK, Polona, GLOTER, Alexandre, KOKLIČ, Tilen, ŠTRANCAR, Janez. Protein corona prevents TiO_2 phototoxicity. *PloS one*, ISSN 1932-6203, 2015, vol. 10, no. 6, str. e0129577-1- e0129577-17. <http://www.plosone.org/article/fetchObject.action?uri=info:doi/10.1371/journal.pone.0129577&representation=PDF>, doi: [10.1371/journal.pone.0129577](https://doi.org/10.1371/journal.pone.0129577). [COBISS.SI-ID [28666407](https://www.cobiss.si/id/28666407)], [JCR, SNIP, WoS]

10. BELAVIČ, Darko, HROVAT, Marko, MAKAROVIC, Kostja, DOLANC, Gregor, POHAR, Andrej, HOČEVAR, Stanko, MALIČ, Barbara. 3D LTCC structure for a large-volume cavity-type chemical microreactor. V: *Special issue IMAPS Poland 2014, 38th International IMAPS - CPMT Poland Conference & Exhibiton, September 21-24, 2014, Rzeszów-Czarna, Poland*, (Microelectronics international, ISSN 1356-5362, Vol. 32, no. 2, 2015). Port Erin: Wela Publications, 2015, vol. 32, no. 3, str. 133-137, doi: [10.1108/MI-01-2015-0011](https://doi.org/10.1108/MI-01-2015-0011). [COBISS.SI-ID [28781351](#)], [JCR, SNIP, Scopus] ,
11. ČOPAR, Simon, TKALEC, Uroš, MUŠEVIČ, Igor, ŽUMER, Slobodan. Knot theory realizations in nematic colloids. *Proceedings of the National Academy of Sciences of the United States of America*, ISSN 00278424, 2015, vol. 112, no. 6, str. 16751680, ilustr. <http://www.pnas.org/content/112/6/1675.full.pdf+html>. [COBISS.SIID [2787940](#)], [JCR, SNIP, Scopus do 1. 8. 2015: št. citatov (TC): 1, čistih citatov (CI): 1, normirano št. čistih citatov (NC): 0] **[NAMASTE v zahvali]**
12. Boštjan Genorio, *Acta Chim. Slov.* 2015, 62, : *Synthesis and Electrochemical Characterization ...Scientific paper*, Synthesis and Electrochemical Characterization of Graphene Nanoribbon stacks Functionalized with Buckyballs **[ŠE NI VPISAN V COBISS NAMASTE v zahvali]**
13. PLAZNIK, Uroš, VRABELJ, Marko, KUTNJAK, Zdravko, MALIČ, Barbara, POREDOŠ, Alojz, KITANOVSKI, Andrej. Electrocaloric cooling : the importance of electric-energy recovery and heat regeneration. *Europhysics letters*, ISSN 0295-5075, 2015, vol. 111, nr. 5, str. 57009-1-57009-6, ilustr., doi: [10.1209/0295-5075/111/57009](https://doi.org/10.1209/0295-5075/111/57009). [COBISS.SI-ID [14221083](#)], [JCR, SNIP, WoS, Scopus] **[k projektu L2-6768; ARRS]**
14. PLAZNIK, Uroš, KITANOVSKI, Andrej, ROŽIČ, Brigita, MALIČ, Barbara, URŠIČ, Hana, DRNOVŠEK, Silvo, CILENŠEK, Jena, VRABELJ, Marko, POREDOŠ, Alojz, KUTNJAK, Zdravko. Bulk relaxor ferroelectric ceramics as a working body for an electrocaloric cooling device. *Applied physics letters*, ISSN 0003-6951. [Print ed.], 2015, vol. 106, nr. 4, str. 1-4, ilustr., doi: [10.1063/1.4907258](https://doi.org/10.1063/1.4907258). [COBISS.SI-ID [13878299](#)], [JCR, SNIP, WoS, Scopus] **[k projektu L2-6768; ARRS]**
15. ARSOV, Zoran, ŠVAJGER, Urban, MRAVLJAK, Janez, PAJK, Stane, KOTAR, Anita, URBANČIČ, Iztok, ŠTRANCAR, Janez, ANDERLUH, Marko. Internalization and accumulation in dendritic cells of a small pH-activatable glycomimetic fluorescent probe as revealed by spectral detection. *ChemBioChem*, ISSN 1439-4227. [Print ed.], Dec. 2015, vol. 16, iss. 18, str. 2660-2667. <http://onlinelibrary.wiley.com/doi/10.1002/cbic.201500376/abstract>, doi: [10.1002/cbic.201500376](https://doi.org/10.1002/cbic.201500376). [COBISS.SI-ID [3970417](#)], [JCR, SNIP, Scopus]
16. FERK, Gregor, STERGAR, Janja, MAKOVEC, Darko, HAMLER, Anton, JAGLIČIČ, Zvonko, DROFENIK, Mihael, BAN, Irena. Synthesis and characterization of Ni-Cu alloy nanoparticles with a tunable Curie temperature. *Journal of alloys and compounds*, ISSN 0925-8388. [Print ed.], 5 Nov. 2015, vol. 648, str. 53-58, doi: [10.1016/j.jallcom.2015.06.067](https://doi.org/10.1016/j.jallcom.2015.06.067). [COBISS.SI-ID [18811926](#)], [JCR, SNIP, WoS, Scopus]
17. FERK, Gregor, DROFENIK, Mihael, MAKOVEC, Darko, BAN, Irena. Monodispersed water-soluble maghemite nanoparticles stabilized by a polymerized bilayer of 10-undecenoic acid. *Materials letters*, ISSN 0167-577X. [Print ed.], 15 Oct. 2015, vol. 157, str. 239-242, doi: [10.1016/j.matlet.2015.05.077](https://doi.org/10.1016/j.matlet.2015.05.077). [COBISS.SI-ID [18753302](#)], [JCR, SNIP, WoS, Scopus]
18. BELAVIČ, Darko, BRADEŠKO, Andraž, SANTO-ZARNIK, Marina, ROJAC, Tadej. Construction of a piezoelectric-based resonance ceramic pressure sensor designed for high-temperature applications. *Metrologia i Systemy Pomiarowe*, ISSN 0860-8229, 2015, vol. XXXII, no. 3, str. 331-340, doi: [10.1515/mms-2015-0034](https://doi.org/10.1515/mms-2015-0034). [COBISS.SI-ID [28895783](#)], [JCR, SNIP, WoS, Scopus]
19. VRABELJ, Marko, URŠIČ, Hana, KUTNJAK, Zdravko, ROŽIČ, Brigita, DRNOVŠEK, Silvo, BENČAN, Andreja, BOBNAR, Vid, FULANOVIČ, Lovro, MALIČ, Barbara. Large electrocaloric effect in grain-size-engineered $0.9\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3-0.1\text{PbTiO}_3$. *Journal of the European ceramic society*, [Print ed.], [in press] 2015, 6 str., doi:

[10.1016/j.jeurceramsoc.2015.09.031](https://doi.org/10.1016/j.jeurceramsoc.2015.09.031). [COBISS.SI-ID [28945447](#)]

20. URŠIČ, Hana, VRABELJ, Marko, FULANOVIĆ, Lovro, BRADEŠKO, Andraž, DRNOVŠEK, Silvo, MALIČ, Barbara. Specific heat capacity and thermal conductivity of the electrocaloric $(1-x)\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-xPbTiO}_3$ ceramics between room temperature and 300°C = Specifična toplotna kapaciteta in toplotna prevodnost elektrokalorične keramike $(1-x)\text{Pb}(\text{Mg}_{\text{spodaj}}(1/3)\text{Nb}_{\text{spodaj}}(2/3))\text{O}_{\text{spodaj}}3\text{xPbTiO}_{\text{spodaj}}3$ v temperaturnem območju od sobne temperature do 300°C. *Informacije MIDEM*, ISSN 0352-9045, 2015, vol. 45, no. 4, str.260-265. [COBISS.SI-ID [29253415](#)], [[JCR](#), [SNIP](#)] **[NAMASTE v zahvali]**

1.08 Objavljeni znanstveni prispevek na konferenci | *Published Scientific Conference Contribution*

1. MATAVŽ, Aleksander, FRUNZĀ, Raluca-Camelia, MALIČ, Barbara, et al. Inkjet printing of alkoxide-based precursor solution for use in transparent electronics. V: 7. študentska konferenca Mednarodne podiplomske šole Jožefa Stefana = 7th Jožef Stefan International Postgraduate School Students' Conference, 20.-22. 5. 2015, Ljubljana. REŠETIČ, Andraž (ur.), et al. *Zbornik = Proceedings*. Ljubljana: Mednarodna podiplomska šola Jožefa Stefana, 2015, zv. 1, str. 218-227. [COBISS.SI-ID [28611623](#)] **[NAMASTE v zahvali]**
2. FRUNZĀ, Raluca-Camelia, BARQUINHA, Pedro, STROESCU, Hermine, GARTNER, Măriuca, MALIČ, Barbara, et al. Solution-derived Ta_2O_5 high-K thin films for gate dielectric applications. V: 7. študentska konferenca Mednarodne podiplomske šole Jožefa Stefana = 7th Jožef Stefan International Postgraduate School Students' Conference, 20.-22. 5. 2015, Ljubljana. REŠETIČ, Andraž (ur.), et al. *Zbornik = Proceedings*. Ljubljana: Mednarodna podiplomska šola Jožefa Stefana, 2015, zv. 1, str. 188-197. [COBISS.SI-ID [28608807](#)] **[NAMASTE v zahvali]**
3. BELAVIČ, Darko. Keramični mikrosistemi za povezane sodelujoče sisteme pri nadzoru zdravega bivalnega in delovnega okolja = Ceramic microsystems for clean and healthy environment. V: MOHORČIČ, Mihael (ur.), ROBNIK, Ana (ur.), BAŠKOVČ, Dalibor (ur.). *Delavnica Pametna mesta in skupnosti kot razvojna priložnost Slovenije : zbornik 18. mednarodne multikonference Informacijska družba - IS 2015, 12. oktober 2015, [Ljubljana, Slovenia] : zvezek H = Workshop Smart cities and communities as a development opportunity for Slovenia : proceedings of the 18th International Multiconference Information Society - IS 2015, October 12th, 2015, Ljubljana, Slovenia : volume H*. Ljubljana: Institut Jožef Stefan, 2015, str. 20-23. <http://is.ijs.si/zborniki/!%20H%20-%20Pametna%20mesta%20-%20ZBORNIK.pdf>. [COBISS.SI-ID [28968487](#)]
4. BELAVIČ, Darko, MAKAROVIC, Kostja, BRADEŠKO, Andraž, URŠIČ, Hana. Microfluidic elements in LTCC-based ceramic microsystems. V: 51th International Conference on Microelectronics, Devices and Materials and the Workshop on Terahertz and Microwave Systems, September 23 - 25 2015, Bled, Slovenia. TRONTELJ, Janez (ur.), TOPIČ, Marko (ur.), SEŠEK, Aleksander (ur.). *Conference proceedings 2015*. Ljubljana: MIDEM - Society for Microelectronics, Electronic Components and Materials, 2015, str. 68-73. [COBISS.SI-ID [28887591](#)]

1.10 Objavljeni povzetek znanstvenega prispevka na konferenci (vabljen predavanje) | *Invited Lecture (Published Abstract)*

1. KUTNJAK, Zdravko, ROŽIČ, Brigita, MALIČ, Barbara, URŠIČ, Hana, ZHANG, Qiming M. Electrocaloric relaxor ferroelectric materials for dielectric. V: MALIČ, Barbara (ur.), et al. *Piezo 2015 : Electroceramics for End-Users VIII, 25-28 January 2015, Maribor, Slovenia : program*.

[S. l.: s. n], 2015. [COBISS.SI-ID [28356647](#)]

1.12 Objavljeni povzetek znanstvenega prispevka na konferenci | *Published Scientific Conference Contribution*

1. ABELLARD, Andre-Pierre, LEVASSORT, Franck, LETHIECQ, Marc, MALIČ, Barbara, KUŠČER, Danjela. Lead zirconate titanate based thick films prepared by electrophoretic deposition for high-frequency ultrasonic applications. V: MALIČ, Barbara (ur.), et al. *Piezo 2015 : Electroceramics for End-Users VIII, 25-28 January 2015, Maribor, Slovenia : program*. [S. l.: s. n], 2015. [COBISS.SI-ID [28355367](#)]
2. PODLIPEC, Rok, ŠTRANCAR, Janez. Scaffold biocompatibility with respect to biopolymer mobility and cell adhesion dynamics: [presented at 105th EBSA European Biophysics Congress, 18-22 July 2015, Dresden, Germany]. *European biophysics journal*, ISSN 0175-7571, 2015, vol. 44, suppl. 1, str. S134. [COBISS.SI-ID [28760615](#)], [[JCR](#), [SNIP](#)]
3. GARVAS, Maja, URBANČIČ, Iztok, TESTEN, Ana, UMEK, Polona, ŠKARABOT, Miha, ARSOV, Zoran, KOKLIČ, Tilen, MUŠEVIČ, Igor, ŠTRANCAR, Janez. Fluorescence microspectroscopy insight into membrane disintegration driven by TiO₂ nanoparticles : [presented at 105th EBSA European Biophysics Congress, 18-22 July 2015, Dresden, Germany]. *European biophysics journal*, ISSN 0175-7571, 2015, vol. 44, suppl. 1, str. S78. [COBISS.SI-ID [28760871](#)], [[JCR](#), [SNIP](#)]
4. GARVAS, Maja, URBANČIČ, Iztok, TESTEN, Anže, UMEK, Polona, ŠKARABOT, Miha, ARSOV, Zoran, KOKLIČ, Tilen, MUŠEVIČ, Igor, ŠTRANCAR, Janez. Fluorescence microspectroscopy insight into membrane disintegration driven by titanium dioxide nanoparticles. V: 3rd International Conference on IEEE BioPhotonics Conference, Florence, Italy, 20-22 May, 2015 [and] ICOB 2015, International Congress on Biophotonics, 20-22 May 2015. *Florence BioPhotonics week*. [S. l.: s. n.], 2015, str. 23. http://biophotonics2015.ifac.cnr.it/images/BioPhotonics2015_Technical_Program_final.pdf. [COBISS.SI-ID [28837671](#)]
5. ARSOV, Zoran, ŠVAJGER, Urban, MRAVLJAK, Janez, PAJK, Stane, URBANČIČ, Iztok, ŠTRANCAR, Janez, ANDERLUH, Marko. Spectral detection of accumulation of a Ph-activatable fluorescent probe in dendritic cells. V: 3rd International Conference on IEEE BioPhotonics Conference, Florence, Italy, 20-22 May, 2015 [and] ICOB 2015, International Congress on Biophotonics, 20-22 May 2015. *Florence BioPhotonics week*. [S. l.: s. n.], 2015. http://biophotonics2015.ifac.cnr.it/images/BioPhotonics2015_Technical_Program_final.pdf. [COBISS.SI-ID [28837415](#)]
6. PODLIPEC, Rok, ŠTRANCAR, Janez. Scaffold biocompatibility with respect to biopolymer mobility and cell adhesion dynamics : [presented at CTESS Symposium 2015. REGENERATIVE Medicine: Achievements and Perspectives, 17 April 2015. Ljubljana **[ŠE NI VPISAN V COBISS]**]

3.14 Predavanja na tuji univerzi | *Invited Lecture*

1. TKALEC, Uroš. *Experimental topology with liquid crystal colloids : invited lectures at Squishy Physics Seminar, Department of Physics, Harvard University, Cambridge, Massachusetts, USA, 17. June 2015*. [COBISS.SI-ID [32070617](#)]
2. TKALEC, Uroš. *How geometric topology of nematic braids directs the formation of framed knots and links : invited lectures at Widely Applied Mathematics Seminar, School of Engineering and Applied Sciences, Harvard University, Cambridge, Massachusetts, USA, 18. June 2015*. [COBISS.SI-ID [32070873](#)]

3. TKALEC, Uroš. *Reconfigurable topological structures in confined nematic liquid crystals : invited lectures at Condensed matter & Biological Physics Seminar, Brown University, Providence, Rhode Island, USA, 15. June 2015.* [COBISS.SI-ID [32070105](#)]

3.15 Prispevek na konferenci brez natasa | *Non-Published Scientific Conference Contribution*

1. URŠIČ, Hana, MALIČ, Barbara, BELAVIČ, Darko, JERLAH, Mitja, BENČAN, Andreja, MAKAROVIČ, Kostja, SCHREINER, Cristina, CIOBANU, Romeo, MERCIONIU, Ionel-Florinel, BOLADO, Pablo-Fenjul. *Integrated sensors with microfluidic features using LTCC technology-INTCERSEN : presented at M-ERA.net Conference at the E-MRS 2015 Fall Meeting & Exhibit, September 15-18, Warsaw, Poland.* [COBISS.SI-ID [28878631](#)]