

INSTITUT TEHNIČKIH NAUKA SANU  
BEOGRAD  
Knez Mihailova 35/IV

NAUČNOM VEĆU INSTITUTA

Predmet: Zahtev za pokretanje postupka za izbor u naučno zvanje

Molim Vas da, u skladu sa Zakonom o naučnoistraživačkoj delatnosti ("Službeni glasnik RS", br. 110/05 i 50/06-ispravka), Naučno veće Instituta tehničkih nauka SANU pokrene postupak mog izbora u zvanje: viši naučni saradnik.

Predlažem komisiju za pripremu izveštaja Naučnom veću u sledećem sastavu:

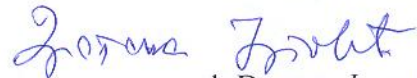
- dr Miodrag Mitrić, naučni savetnik Instituta za nuklearne nauke Vinča, Univerzitet u Beogradu
- dr Nikola Cvjetičanin, vanredni profesor Fakulteta za fizičku hemiju Univerziteta u Beogradu
- dr Dragoljub Uskoković, naučni savetnik, rukovodilac projekta III45004
- dr Nina Obradović, viši naučni saradnik Instituta tehničkih nauka SANU

U prilogu dostavljam:

- stručnu biografiju
- bibliografiju
- vrednost indikatora i kompetentnost
- izveštaj o citiranosti radova (Scopus).

U Beogradu,  
14.08.2013.

Podnosilac zahteva



dr Dragana Jugović

naučni saradnik Instituta tehničkih nauka SANU

## Biografija dr Dragane Jugović

Dr Dragana Jugović je rođena 1. 2. 1973. godine u Beogradu. Osnovnu školu i gimnaziju je završila u Beogradu. Diplomirala je na Fakultetu za fizičku hemiju Univerziteta u Beogradu 2002. godine sa temom „Sinteza i elektrohemijske osobine  $\text{LiMn}_2\text{O}_4$  kao katode Li-jon akumulatora” i stekla zvanje diplomirani fizikohemičar.

Magistrirala je na Fakultetu za fizičku hemiju Univerziteta u Beogradu 2004. godine, sa temom „Karakterizacija katodnih materijala  $\text{LiMn}_{2-x}\text{M}_x\text{O}_4$  (M=Mn, Cr, Zn) sintetisanih ultrazvučnom sprej pirolizom” i stekla zvanje magistar fizičko-hemijskih nauka.

Doktorirala je na Fakultetu za fizičku hemiju Univerziteta u Beogradu 2008. godine, sa temom „Sinteza i karakterizacija oksidnih katodnih materijala za litijumske izvore struje” i promovisana u doktora fizičko-hemijskih nauka.

Od 2002. godine je zaposlena u Institutu tehničkih nauka SANU, angažovanjem na realizaciji projekata finansiranih od strane Ministarstva za nauku Republike Srbije. Trenutno je angažovana na projektu III45004 „Molekularno dizajniranje nanočestica kontrolisanih morfoloških i fizičko-hemijskih karakteristika i funkcionalnih materijala na njihovoj osnovi“, koje finansira Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije, a rukovodilac projekta je prof. dr Dragoljub Uskoković.

Istraživačko zvanje istraživač-saradnik je stekla 2005. godine. Naučno zvanje naučni saradnik stekla je 4. 3. 2009. godine, a procedura za izbor je pokrenuta 17. 12. 2008. godine po predlogu broj 2714/7 Instituta za nuklearne nauke "Vinča". Do sada je objavila 18 naučnih radova, od toga 10 u vrhunskim međunarodnim časopisima, 1 u istaknutom međunarodnom časopisu, 5 u međunarodnim časopisima i 2 u vodećim časopisima nacionalnog značaja. Nakon izbora u zvanje naučni saradnik objavila je 6 radova u vrhunskim međunarodnim časopisima, od kojih je na 5 njih korespondirajući autor i 2 rada u međunarodnom časopisu, pri čemu nijedan od njih nije proistekao iz doktorske teze. Koautor je patentne prijave na nacionalnom nivou. Po poslednjoj kategorizaciji istraživača svrstana je u A2 kategoriju.

Dobitnica je nagrade za najbolju prezentaciju mladih istraživača 2003. godine na XLVII Konf. za ETRAN.

Rukovodilac je međunarodnog bilateralnog projekta sa Slovenijom za period 2012-2013. pod nazivom "Visoko-energijski ortosilikatni materijali za litijum jonske akumulatore", evidencioni broj 651-03-1251/2012-09/05, finansiranog od strane Ministarstva prosvete, nauke i tehnološkog razvoja Republike Srbije i Ministarstva za obrazovanje, nauku, kulturu i sport Republike Slovenije. U planu joj je i trilateralni projekat između Švajcarske, Slovenije i Srbije, SCOPES 2013-2016, koji finansira Švajcarska nacionalna naučna fondacija i za koji je priprema programa u toku.

Po pozivu Organizatora konferencije International Electric Mobility Conference and Exhibition for Electric Mobility 2011. godine u Ljubljani u Sloveniji je održala predavanje "Impact of synthesis techniques on the structure and performances of LiFePO<sub>4</sub> powders", link: <http://www.electromobility.si/index.php?id=1627>. Ovo je inače prestižna Konferencija na kojoj su izlagali isključivo predavači po pozivu i koja je okupila velika imena iz oblasti litijum jonskih baterija: prof. dr Jean-Marie Tarascon, prof. dr Doron Aurbach, prof. dr Josh Thomas i drugi.

Potpredsednik je Naučno-organizacionog odbora Konferencije mladih istraživača u čijoj organizaciji je učestvovala od prvog naučnog skupa do danas, kada je prerasla u domaću konferenciju sa međunarodnim učešćem Young Researchers' Conference- Materials Science And Engineering, link: <http://www.mrs-serbia.org.rs/10conference.html>

Recenzent je brojnih naučnih radova za časopise sa ISI liste iz oblasti elektrohemije i nauke o materijalima kao što su: vrhunski međunarodni časopisi Journal of Power Sources, Electrochimica Acta, Powder Technology, Materials Research Bulletin, Materials Letters, Journal of Alloys and Compounds, Journal of Materials Science; istaknuti međunarodni časopis Journal of Solid State Electrochemistry; i međunarodni časopis Ionics.

Angažovanost u razvoju obrazovanja i formiranju naučnih kadrova kandidatkinje se ogleda u rukovođenju i mentorskom radu sa studentima doktorskih studija Fakulteta za fizičku hemiju Univerziteta u Beogradu Miloša Milovića i Maje Kuzmanović, istraživač-saradnicima Instituta tehničkih nauka SANU, i učešćem u Komisiji za pregled i ocenu dokorskog rada doktoranda Milice Vujković i diplomskog rada Dragane Arsevske, takođe na Fakultetu za fizičku hemiju. Takođe je član nekoliko komisija za izbor u istraživačka i naučna zvanja Instituta tehničkih nauka SANU, Instituta za nuklearne nauke "Vinča" i Fakulteta za fizičku hemiju.

Prema citatnoj bazi Scopus ukupna citiranost objavljenih radova je 175, odnosno 162 bez autocitata, a Hirshov index 5. Osim citiranosti meru uticajnosti naučnog rada kandidatkinje određuje i učestalost preuzimanja nekog rada. U periodu od aprila do septembra 2009. godine članak Dragana Jugović, Dragan Uskoković, "A review of recent developments in the synthesis procedures of lithium iron phosphate powders", J. Power Sources 190, 2009, 538-544 nalazio se na prvom mestu po učestalosti preuzimanja sa sajta pomenutog časopisa <http://top25.sciencedirect.com/subject/energy/11/journal/journal-of-power-sources/03787753/archive/22/> i <http://top25.sciencedirect.com/subject/energy/11/journal/journal-of-power-sources/03787753/archive/23/>

a na listi 25 najčešće preuzimanih članaka iz ovog časopisa tokom akademske 2009/10. godine (od oktobra 2009. do septembra 2010) nalazio se na osmom mestu <http://top25.sciencedirect.com/subject/energy/11/journal/journal-of-power-sources/03787753/archive/29/>

Imajući u vidu kvalitativne pokazatelje naučnoistraživačkog rada navedene u stručnoj biografiji, i s obzirom da kandidatkinja ispunjava kvantitativne zahteve za sticanje zvanja viši naučni saradnik (61.4 poena), a da je od prethodnog izbora prošlo 4.5 godina, zadovoljeni su svi uslovi za pokretanje postupka za izbor u više zvanje.

## BIBLIOGRAFIJA

### 1. Monografska studija/poglavlje u knjizi M12 ili rad u tematskom zborniku medjunarodnog značaja (M14): 4

1.1 Magdalena Stevanović, Dragana Jugović, Smilja Marković, Nenad Ignjatović, Miloš Bokorov, Dragan Uskoković, Institute of Technical Sciences of the Serbian Academy of Sciences and Arts-in 50 Years of electron Microscopy in Serbia: monography Publisher: Institute of Nuclear Science "Vinča", For Publisher: Dr Jovan Nedeljković, Editors Prof.dr Aleksandra Korać, dr Jasmina Grbović Novaković]. Beograd, 2006., (Serbian Society for Microscopy and Academy of Medical Science) pp. 95-99. (ISBN 86-7306-084-2).

### 2. Rad u vrhunskom međunarodnom časopisu (M21): 8

- 2.1 Ivana Stojković, Azarnoush Hosseinmardi, Dragana Jugović, Miodrag Mitrić, Nikola Cvjetičanin, Rapid synthesis of  $\text{LiCr}_{0.15}\text{Mn}_{1.85}\text{O}_4$  by glycine–nitrate method, *Solid State Ionics* 177, 2006, pp.847–850. IF: 2.190 Oblast: Physics, Condensed Matter 14/58
- 2.2 D. Jugović, N. Cvjetičanin, V. Kusigerski, M. Mitrić, M. Miljković, D. Makovec, D. Uskoković, Structural and magnetic characterization of  $\text{LiMn}_{1.825}\text{Cr}_{0.175}\text{O}_4$  spinel obtained by ultrasonic spray pyrolysis, *Mat. Res. Bull.* 42, 2007, 515-522. IF: 1.380 Oblast: Materials Science, Multidisciplinary 50/178
- 2.3 Vladan Kusigerski, Dragana Marković, Vojislav Spasojević, Nikola Cvjetičanin, Miodrag Mitrić, Dragana Jugović, Dragan Uskoković, Ground-state magnetism of chromium-substituted  $\text{LiMn}_2\text{O}_4$  spinel, *J. Magn. Magn. Mater.* 320, 2008, 943-949. IF: 1.704 Oblast: Materials Science, Multidisciplinary 48/189
- 2.4 Dragana Jugović, Miodrag Mitrić, Nikola Cvjetičanin, Boštjan Jančar, Slavko Mentus, Dragan Uskoković, Synthesis and characterization of  $\text{LiFePO}_4$  /C composite obtained by sonochemical method, *Solid State Ionics* 179, 2008, 415–419. IF: 2.425 Oblast: Physics, Condensed Matter 13/62
- 2.5 Dragana Jugović, Dragan Uskoković, A review of recent developments in the synthesis procedures of lithium iron phosphate powders, *J. Power Sources* 190, 2009, 538-544. IF: 4.290 Oblast: Electrochemistry 2/26

- 2.6 Dragana Jugović, Miodrag Mitrić, Maja Kuzmanović, Nikola Cvjetičanin, Srečo Škapin, Božidar Cekić, Valentin Ivanovski, Dragan Uskoković, Preparation of  $\text{LiFePO}_4/\text{C}$  composites by co-precipitation in molten stearic acid, *J. Power Sources* 196, 2011, 4613–4618. IF: 4.951 Oblast: Electrochemistry 2/27
- 2.7 D. Jugović, M. Mitrić, M. Kuzmanović, N. Cvjetičanin, S. Marković, S. Škapin, D. Uskoković, Rapid crystallization of  $\text{LiFePO}_4$  particles by facile emulsion-mediated solvothermal synthesis, *Powder Technology* 219, 2012, 128-134. IF: 2.080 Oblast: Engineering, Chemical 36/133
- 2.8 Miloš Milović, Dragana Jugović, Nikola Cvjetičanin, Dragan Uskoković, Aleksandar S. Milošević, Zoran S. Popović, Filip R. Vukajlović, Crystal structure analysis and first principle investigation of F doping in  $\text{LiFePO}_4$ , *Journal of Power Sources* 241, 2013, 70-79. IF: 4.951 Oblast: Electrochemistry 2/27
- 2.9 Dragana Jugović, Miodrag Mitrić, Miloš Milović, Bojan Jokić, Marija Vukomanović, Danilo Suvorov, Dragan Uskoković, Properties of quenched  $\text{LiFePO}_4/\text{C}$  powder obtained via cellulose matrix-assisted method, *Powder Technology* 246, 2013, 539-544. IF: 2.080 Oblast: Engineering, Chemical 36/133
- 2.10 Milica Vujković, Dragana Jugović, Miodrag Mitrić, Ivana Stojković, Nikola Cvjetičanin, Slavko Mentus, The  $\text{LiFe}_{(1-x)}\text{V}_x\text{PO}_4/\text{C}$  composite synthesized by gel-combustion method, with improved rate capability and cycle life in aerated aqueous solutions, *Electrochimica Acta*, 2013, <http://dx.doi.org/10.1016/j.electacta.2013.07.219> IF: 3.832 Oblast: Electrochemistry 7/27

### **3. Rad u istaknutom međunarodnom časopisu (M22): 5**

- 3.1 D. Jugović, N. Cvjetičanin, V. Kusigerski and S. Mentus, Synthesis of  $\text{LiMn}_2\text{O}_4$  by glycine-nitrate method, *J. Optoelectron. Adv. Mater.* 5, 2003, pp. 343-347. IF: 0.996 Oblast: Materials Science, Multidisciplinary 70/177

### **4. Rad u međunarodnom časopisu (M23): 3**

- 4.1 D. Jugović, M. Mitrić, N. Cvjetičanin, M. Miljković, V. Jokanović and D. Uskoković, Properties of  $\text{LiMn}_2\text{O}_4$  Powders Obtained By Ultrasonic Spray Pyrolysis, *Materials Science Forum* 453-454, 2004, 387-392. IF: 0.613 Oblast: Materials Science, Multidisciplinary 90/173

- 4.2 D. Jugović, N. Cvjetičanin, M. Mitrić, S. Mentus, and D. Uskoković, Comparison between Different  $\text{LiFePO}_4$  Synthesis Routes, *Materials Science Forum* 555, 2007, 225-230. IF: 0.399 Oblast: Materials Science, Multidisciplinary 137/178
- 4.3 J. P. Marković, D. Jugović, M. Mitrić, D. Makovec, S. K. Milonjić, D. P. Uskoković, Nanostructured  $\text{ZrO}_2$  powder synthesized by ultrasonic spray pyrolysis, *Surf. Rev. Lett.* 14, 2007, 915-919. IF: 0.750 Oblast: Physics, Condensed Matter 40/60
- 4.4 Tanja Barudžija, Alexey A. Gusev, Dragana Jugović, Miroslav Dramićanin, Miodrag Zdujić, Čedomir Jovalekić, Miodrag Mitrić, Structural and magnetic properties of mechanochemically synthesized nanocrystalline titanium monoxide, *Hemijska industrija* 66, 2012, 181-186. IF: 0.463 Oblast: Engineering, Chemical 104/133
- 4.5 Tanja Barudžija, Alexey A. Gusev, Dragana Jugović, Milena Marinović-Cincović, Miroslav Dramićanin, Miodrag Zdujić, Čedomir Jovalekić, Miodrag Mitrić, Structural and magnetic properties of mechanochemically synthesized nanosized yttrium titanate, *Hemijska industrija* 66, 2012, 309-315. IF: 0.463 Oblast: Engineering, Chemical 104/133

## 5. Predavanje po pozivu sa međunarodnog skupa štampano u izvodu (M32): 1.5

- 5.1 Dragana Jugović, *Impact of synthesis techniques on the structure and performances of  $\text{LiFePO}_4$  powders*, International Electric Mobility Conference and Exhibition for Electric Mobility, 27th - 28th of October 2011, Ljubljana, Slovenia <http://www.electromobility.si/index.php?id=1677>

## 6. Saopštenje sa međunarodnog skupa štampano u celini (M33): 1

- 6.1 Dragana Jugović, Vladan Kusigerski, Nikola Cvjetičanin and Slavko Mentus, *Synthesis of  $\text{LiMn}_2\text{O}_4$  by glycine-nitrate method*, Second International Conference on Advanced Materials and Structures 2002, Book of papers, pp. 195-197.
- 6.2 Dragana Jugović, Vladan Kusigerski, Nikola Cvjetičanin and Slavko Mentus, *Combustion Synthesis Of  $\text{LiMn}_2\text{O}_4$  As Cathode Material For Lithium Secondary Batteries*, 6<sup>th</sup> International Conference on Fundamental and Applied Aspects of Physical Chemistry, Physical Chemistry 2002., Book of papers, pp.263-265.

- 6.3 D. Jugović, O. Milošević, N. Cvjetičanin, M. Mitrić, M. Miljković, V. Jokanović, S. Mentus and D. Uskoković, *Aerosol Synthesis of  $\text{LiMn}_2\text{O}_4$  and Its Electrochemical Performances*, Proceedings of the X WRTCS, Science of sintering: current problems and new trends, SASA, Belgrade 2003, 197-202.
- 6.4 I. Stojković, D. Jugović, M. Mitrić, N. Pavlović and N. Cvjetičanin, *Synthesis of  $\text{LiMn}_{2-x}\text{Cr}_x\text{O}_4$  ( $x=0,18$ ) by glycine-nitrate method*, Physical Chemistry 2004., Proceedings of the 7<sup>th</sup> International Conference on Fundamental and Applied Aspects of Physical Chemistry, Vol. II, 523-525.
- 6.5 M. Radić, N. Ignjatović, D. Jugović, Z. Nedić, M. Mitrić and M. Miljković, *Synthesis of BCP and BCP/PIGA biomaterials by ultrasonic spray pyrolysis*, Physical Chemistry 2004., Proceedings of the 7<sup>th</sup> International Conference on Fundamental and Applied Aspects of Physical Chemistry, Vol. II, 487-489.
- 6.6 D. Jugović, M. Mitrić, N. Cvjetičanin, M. Miljković, and D. Uskoković, *Synthesis And Structure Of  $\text{LiMn}_{2-x}\text{Zn}_x\text{O}_4$  Through Ultrasonic Spray Pyrolysis*, Physical Chemistry 2006., Proceedings of the 8<sup>th</sup> International Conference on Fundamental and Applied Aspects of Physical Chemistry, p. 516-518.
- 6.7 D. Jugović, M. Mitrić, and N. Cvjetičanin, *Electrochemical properties of  $\text{LiFePO}_4/\text{C}$  composites obtained by ultrasound assisted synthesis at different calcination temperatures*, Proceedings of the 9<sup>th</sup> International Conference on Fundamental and Applied Aspects of Physical Chemistry, Physical Chemistry 2008., pp. 288-290.
- 6.8 M. Jović, Z. Stojanović, D. Jugović, Lj. Veselinović, S. Škapin, D. Uskoković, Hydrothermal synthesis of  $\text{LiFePO}_4$  in presence of different organic additives, Proceedings of the 10<sup>th</sup> International Conference on Fundamental and Applied Aspects of Physical Chemistry, Physical Chemistry 2010., pp. 441-443.
- 6.9 M. Milović, D. Jugović, M. Mitrić, B. Jokić, D. Uskoković, *Synthesis and structural properties of F-doped  $\text{LiFePO}_4/\text{C}$  Composite*, Proceedings of the 11<sup>th</sup> International Conference on Fundamental and Applied Aspects of Physical Chemistry, Physical Chemistry 2012, Belgrade, Serbia, Volume I, pp. 441-443.



## 7. Saopštenje sa međunarodnog skupa štampano u izvodu (M34): 0.5

- 7.1 D. Jugović, O. Milošević, N. Cvjetičanin, A. Tucić, V. Jokanović, S. Mentus and D. Uskoković, *Aerosol Synthesis of LiMn<sub>2</sub>O<sub>4</sub> and Its Electrochemical Performances*, X World Round Table Conference on Sintering, 2002, Book of Abstracts, pp.51.
- 7.2 D. Jugović, M. Mitrić, N. Cvjetičanin, M. Miljković, V. Jokanović, S. Mentus and D. Uskoković, *Properties of LiMn<sub>2</sub>O<sub>4</sub> Powders Obtained By Ultrasonic Spray Pyrolysis*, The Fifth Students' Meeting School of Ceramics, December 4-5, 2003, Novi Sad, Serbia and Montenegro, Book of Extended Abstracts, pp. 40-41.
- 7.3 D. Jugović, M. Mitrić, N. Cvjetičanin, S. Mentus, D. Uskoković, "*Synthesis of olivine-type LiFePO<sub>4</sub> by sonochemical method*", The Ninth Yugoslav Materials Research Society Conference YUCOMAT 2007., The Book of Abstracts, p. 16.
- 7.4 I. Stojković, D. Jugović, M. Mitrić, N. Cvjetičanin, S. Mentus, Synthesis of Li<sub>1+x</sub>Mn<sub>2-x</sub>O<sub>4</sub> cathode material using gel-combustion method, The Ninth Yugoslav Materials Research Society Conference YUCOMAT 2007, Herceg-Novi, September 10-14, 2007., The Book of Abstracts, p. 79.
- 7.5 Z. Stojanović, D. Jugović, D. Uskoković, Hydrothermal synthesis of cathode materials for lithium-ion batteries, The Ninth Yugoslav Materials Research Society Conference YUCOMAT 2007, Herceg-Novi, September 10-14, 2007., The Book of Abstracts, p. 79.
- 7.6 Dragana Jugović, Miodrag Mitrić, Nikola Cvjetičanin, Boštjan Jančar, Slavko Mentus, Dragan Uskoković, *Ultrasound assisted synthesis of nanostructured LiFePO<sub>4</sub>/C composite*, WomenInNano Winter School, Kranjska Gora, Slovenia, 7-9 February 2008, Abstract Book, p. 69.
- 7.7 Nikola Cvjetičanin, Dragana Jugović, and Miodrag Mitrić, *Synthesis of LiFePO<sub>4</sub> powder by citrate method*, Second Regional Symposium on Electrochemistry : South-East Europe, Sava Center, Belgrade, Serbia, June 6 to 10, 2010, Abstract Book ECS-P-04
- 7.8 M. Jović, D. Jugović, M. Mitrić, N. Cvjetičanin, D. Uskoković, *Microemulsion-mediated hydrothermal synthesis of LiFePO<sub>4</sub> cathode material*, The Twelfth Annual Conference YUCOMAT 2010, Herceg-Novi, September 6.-10. 2010, The Book of Abstracts, p. 71.
- 7.9 D. Jugović, M. Jović, M. Mitrić, N. Cvjetičanin, D. Uskoković, *Preparation of LiFePO<sub>4</sub>/C composites by co-precipitation in the presence of stearic acid*, The Twelfth

- Annual Conference YUCOMAT 2010, Herceg-Novi, September 6.-10. 2010, The Book of Abstracts, p. 10, oral
- 7.10 D. Jugović, M. Kuzmanović, M. Mitrić, N. Cvjetičanin, D. Uskoković, *Syntheses and characterizations of LiFePO<sub>4</sub> powders*, Thirteenth Annual Conference YUCOMAT 2011, Herceg Novi, September 5.-9. 2011., The Book of Abstracts, p. 6., oral
- 7.11 N. Cvjetičanin, T. Barudžija, D. Jugović, M. Mitrić, *Electrochemical properties of anodically grown TiO<sub>2</sub>*, Thirteenth Annual Conference YUCOMAT 2011, Herceg Novi, September 5.-9. 2011., The Book of Abstracts, p. 86., poster
- 7.12 M. Milović, D. Jugović, M. Mitrić, B. Jokić, D. Uskoković, *Synthesis and characterization of Li<sub>2</sub>FeSiO<sub>4</sub>/C composite*, Fourteenth Annual Conference - YUCOMAT 2012, Herceg Novi, Montenegro, September 3.-7. 2012, Program and the book of abstracts, p. 77, poster
- 7.13 D. Jugović, M. Mitrić, M. Milović, B. Jokić, D. Uskoković, *Synthesis and characterization of LiFePO<sub>4</sub>/C composite obtained by cellulose template*, Fourteenth Annual Conference - YUCOMAT 2012, Herceg Novi, Montenegro, September 3.-7. 2012, Program and the book of abstracts, p. 76, poster

## **8. Rad u vodećem časopisu nacionalnog značaja (M51): 2**

- 8.1 D. Jugović, O. Milošević, N. Cvjetičanin, M. Mitrić, M. Miljković, V. Jakanović, S. Mentus and D. Uskoković, *Elektrohemijske osobine praha LiMn<sub>2</sub>O<sub>4</sub> dobijenog različitim postupcima sinteze*, *Tehnika - Novi materijali* 11 (6), 2002, 12-16.
- 8.2 Dragana Jugović, Miodrag Mitrić, Nikola Cvjetičanin, Miroslav Miljković, Vukoman Jakanović, Dragan Uskoković, *Dobijanje i karakterizacija prahova litijum manganata ultrazvučnom sprej pirolizom*, *ETF Journal of Electrical Engineering* 12, 2004, 106-112.

## **9. Saopštenje sa skupa nacionalnog značaja štampano u celini (M63): 0.5**

- 9.1 Dragana Jugović, Vukoman Jakanović, Dragan Uskoković, Nikola Cvjetičanin, Miroslav Miljković, Miodrag Mitrić, *Dobijanje i karakterizacija prahova litijum manganata ultrazvučnom sprej pirolizom*, Zbornik radova XLVII Konf. za ETRAN, Herceg Novi, 8-13. juna 2003, tom IV, 300-303

9.2 D. Jugović, M. Mitrić, N. Cvjetićanin, M. Miljković, D. Makovec i D. Uskoković, *Izomorfna izmena Mn<sup>3+</sup> jona Cr<sup>3+</sup> jonima u spinelu LiMn<sub>2</sub>O<sub>4</sub> dobijenom ultrazvučnom sprej pirolizom*, Kongres fizičara Srbije i Crne Gore, Petrovac na moru, 3-5. jun 2004, Zbornik radova pp. 4·73 - 4·76.

## 10. Saopštenje sa skupa nacionalnog značaja štampano u izvodu (M64): 0.2

10.1 D. Jugović, O. Milošević, N. Cvjetićanin, M. Mitrić, M. Miljković, V. Jokanović, S. Mentus and D. Uskoković, *Elektrohemijske osobine praha LiMn<sub>2</sub>O<sub>4</sub> dobijenog različitim postupcima sinteze*, Prvi seminar mladih naučnika, Zbornik apstrakata, Beograd 26. decembar 2002, I/5

10.2 D. Jugović, N. Cvjetićanin, V. Kusigerski, S. Mentus, D. Uskoković, *Sinteza i elektrohemijaska svojstva LiMn<sub>2</sub>O<sub>4</sub> kao katode Li-jon akumulatora*, Knjiga apstrakata, Naučni skup "Sinterovanje - teorija i tehnologija", SANU, Beograd 2003, str.36

10.3 D. Jugović, M. Mitrić, N. Cvjetićanin, M. Miljković, V. Jokanović, S. Mentus and D. Uskoković, *Properties of LiMn<sub>2</sub>O<sub>4</sub> Powders Obtained By Ultrasonic Spray Pyrolysis*, The fifth Yugoslav Materials Research Society Conference YUCOMAT 2003, Sept. 15-19 2003, The Book of Abstracts, pp. 54.

10.4 N. Cvjetićanin, D. Jugović, M. Mitrić, M. Miljković, S. Mentus, *Synthesis of LiMn<sub>2-x</sub>Ni<sub>x</sub>O<sub>4</sub> and LiCo<sub>1-x</sub>Ni<sub>x</sub>O<sub>2</sub> By Glycine-nitrate Method*, The fifth Yugoslav Materials Research Society Conference YUCOMAT 2003, Sept. 15-19 2003, The Book of Abstracts, pp. 54

10.5 D. Jugović, M. Mitrić, N. Cvjetićanin, M. Miljković, D. Uskoković, *Izomorfna izmena Mn<sup>3+</sup> jona Cr<sup>3+</sup> jonima u LiMn<sub>2</sub>O<sub>4</sub> spinelu*, Drugi seminar mladih naučnika, Zbornik apstrakata, Beograd 29. decembar 2003, I/8

10.6 D. Jugović, N. Cvjetićanin, M. Mitrić, M. Miljković, V. Jokanović, S. Mentus and D. Uskoković, *Synthesis of metal-substituted lithium manganese oxide spinels through ultrasonic spray pyrolysis*, The sixth Yugoslav Materials Research Society Conference YUCOMAT 2004, Sept. 13-17 2004, The Book of Abstracts, pp. 13, O.S.A.10.

10.7 M. Mitrić, V. Kusigerski, V. Spasojević, D. Jugović and D. Uskoković, *Structural and magnetic properties of nanosize Li(Cr, Zn)<sub>x</sub>Mn<sub>2-x</sub>O<sub>4</sub> compounds obtained by spray pyrolysis*, The sixth Yugoslav Materials Research Society Conference YUCOMAT 2004, Sept. 13-17 2004, The Book of Abstracts, pp. 13, P.S.A.29.

- 10.8 D. Jugović, N. Cvjetićanin, M. Mitrić, S. Mentus, and D. Uskoković, *Comparison Between Different LiFePO<sub>4</sub> Synthesis Routes*, The Eight Yugoslav Materials Research Society Conference YUCOMAT 2006., The Book of Abstracts, pp. 12.
- 10.9 I. Stojković, D. Jugović, M. Mitrić, N. Cvjetićanin, S. Mentus, *Rapid Synthesis and Characterization of Li<sub>1+x</sub>Cr<sub>y</sub>Mn<sub>2-x-y</sub>O<sub>4</sub>*, The Eight Yugoslav Materials Research Society Conference YUCOMAT 2006., The Book of Abstracts, p. 81.
- 10.10 D. Jugović, M. Mitrić, N. Cvjetićanin, S. Mentus, and D. Uskoković, *Sinteza LiFePO<sub>4</sub> prahova metodom ultrazvučne sprej pirolize i sonohemijskim tretmanom*, Peti seminar mladih istraživača, Zbornik apstrakata, Beograd 25.-26. decembar 2006, I/1
- 10.11 Dragana Jugović, Miodrag Mitrić, Nikola Cvjetićanin, Slavko Mentus, Dragan Uskoković, *Structural properties of lithium intercalated compounds obtained through different ways of syntheses*, 45th Meeting of the Serbian Chemical Society, Novi Sad, January 25-26, 2007, Book of Abstracts, pp. 149.
- 10.12 Maja Kuzmanović, Dragana Jugović, Miodrag Mitrić, Nikola Cvjetićanin, Srečo Škapin, Dragan Uskoković, *Crystal growth of solvothermally obtained LiFePO<sub>4</sub> in dependence of synthesis conditions*, Ninth Young Researchers' Conference – Materials Science and Engineering, December 20.-22. 2010, Belgrade, Serbia, II/3
- 10.13 M. Milović, D. Jugović, M. Mitrić, B. Jokić, D. Uskoković, *New facile synthesis route for obtaining phase pure LiFePO<sub>4</sub>/C composite*, Joint event of the 11th Young Researchers' Conference: Materials Science and Engineering and the 1st European Early Stage Researchers' Conference on Hydrogen Storage, Belgrade, December 3.-5. 2012, Y14

### **Odbranjena doktorska disertacija (M71): 6**

„Sinteza i karakterizacija oksidnih katodnih materijala za litijumske izvore struje”, Fakultet za fizičku hemiju Univerziteta u Beogradu, 2008.

### **Odbranjen magistarski rad (M72): 3**

„Karakterizacija katodnih materijala LiMn<sub>2-x</sub>M<sub>x</sub>O<sub>4</sub> (M=Mn, Cr, Zn) sintetisanih ultrazvučnom sprej pirolizom”, Fakultet za fizičku hemiju Univerziteta u Beogradu, 2004.

## Patentna prijava (M92): 8

Dragoljub Uskoković, Dragana Jugović, Maja Kuzmanović, Postupak dobijanja kompozita litijum gvožđe fosfata ( $\text{LiFePO}_4$ ) i ugljenika metodom precipitacije u rastopu stearinske kiseline, Patentna prijava P 2010/0488 od 12.11.2010, broj dokumenta RS 20100488, objavljena 30.06.2012. u Glasniku intelektualne svojine br. 3/2012 - M92 - (2012).

## NAUČNOISTRAŽIVAČKI REZULTATI OSTVARENI NAKON IZBORA U ZVANJE NAUČNI SARADNIK (posle 25. 12. 2008)

### Rad u vrhunskom međunarodnom časopisu (M21): 8

- 1 Dragana Jugović, Dragan Uskoković, A review of recent developments in the synthesis procedures of lithium iron phosphate powders, *J. Power Sources* 190, 2009, 538-544. IF: 4.290 Oblast: Electrochemistry 2/26
- 2 Dragana Jugović, Miodrag Mitrić, Maja Kuzmanović, Nikola Cvjetičanin, Srečo Škapin, Božidar Cekić, Valentin Ivanovski, Dragan Uskoković, Preparation of  $\text{LiFePO}_4/\text{C}$  composites by co-precipitation in molten stearic acid, *J. Power Sources* 196, 2011, 4613–4618. IF: 4.951 Oblast: Electrochemistry 2/27
- 3 D. Jugović, M. Mitrić, M. Kuzmanović, N. Cvjetičanin, S. Marković, S. Škapin, D. Uskoković, Rapid crystallization of  $\text{LiFePO}_4$  particles by facile emulsion-mediated solvothermal synthesis, *Powder Technology* 219, 2012, 128-134. IF: 2.080 Oblast: Engineering, Chemical 36/133
- 4 Miloš Milović, Dragana Jugović, Nikola Cvjetičanin, Dragan Uskoković, Aleksandar S. Milošević, Zoran S. Popović, Filip R. Vukajlović, Crystal structure analysis and first principle investigation of F doping in  $\text{LiFePO}_4$ , *Journal of Power Sources* 241, 2013, 70-79. IF: 4.951 Oblast: Electrochemistry 2/27
- 5 Dragana Jugović, Miodrag Mitrić, Miloš Milović, Bojan Jokić, Marija Vukomanović, Danilo Suvorov, Dragan Uskoković, Properties of quenched  $\text{LiFePO}_4/\text{C}$  powder obtained via cellulose matrix-assisted method, *Powder Technology* 246, 2013, 539-544. IF: 2.080 Oblast: Engineering, Chemical 36/133

- 6 Milica Vujković, Dragana Jugović, Miodrag Mitrić, Ivana Stojković, Nikola Cvjetičanin, Slavko Mentus, The  $\text{LiFe}_{(1-x)}\text{V}_x\text{PO}_4$  /C composite synthesized by gel-combustion method, with improved rate capability and cycle life in aerated aqueous solutions, *Electrochimica Acta*, 2013, <http://dx.doi.org/10.1016/j.electacta.2013.07.219>  
IF: 3.832 Oblast: Electrochemistry 7/27

#### **Rad u međunarodnom časopisu (M23): 3**

- 1 Tanja Barudžija, Alexey A. Gusev, Dragana Jugović, Miroslav Dramićanin, Miodrag Zdujić, Čedomir Jovalekić, Miodrag Mitrić, Structural and magnetic properties of mechanochemically synthesized nanocrystalline titanium monoxide, *Hemijska industrija* 66, 2012, 181-186. IF: 0.463 Oblast: Engineering, Chemical 104/133
- 2 Tanja Barudžija, Alexey A. Gusev, Dragana Jugović, Milena Marinović-Cincović, Miroslav Dramićanin, Miodrag Zdujić, Čedomir Jovalekić, Miodrag Mitrić, Structural and magnetic properties of mechanochemically synthesized nanosized yttrium titanate, *Hemijska industrija* 66, 2012, 309-315. IF: 0.463 Oblast: Engineering, Chemical 104/133

#### **Predavanje po pozivu sa međunarodnog skupa štampano u izvodu (M32): 1.5**

- 1 Dragana Jugović, *Impact of synthesis techniques on the structure and performances of  $\text{LiFePO}_4$  powders*, International Electric Mobility Conference and Exhibition for Electric Mobility, 27th - 28th of October 2011, Ljubljana, Slovenia  
<http://www.electromobility.si/index.php?id=1677>

#### **Saopštenje sa međunarodnog skupa štampano u celini (M33): 1**

- 1 M. Jović, Z. Stojanović, D. Jugović, Lj. Veselinović, S. Škapin, D. Uskoković, Hydrothermal synthesis of  $\text{LiFePO}_4$  in presence of different organic additives, Proceedings of the 10<sup>th</sup> International Conference on Fundamental and Applied Aspects of Physical Chemistry, Physical Chemistry 2010., pp. 441-443.
- 2 M. Milović, D. Jugović, M. Mitrić, B. Jokić, D. Uskoković, *Synthesis and structural properties of F-doped  $\text{LiFePO}_4$ /C Composite*, Proceedings of the 11<sup>th</sup> International

Conference on Fundamental and Applied Aspects of Physical Chemistry, Physical Chemistry 2012, Belgrade, Serbia, Volume I, pp. 441-443.

**Saopštenje sa međunarodnog skupa štampano u izvodu (M34): 0.5**

- 1 Nikola Cvjetičanin, Dragana Jugović, and Miodrag Mitrić, *Synthesis of LiFePO<sub>4</sub> powder by citrate method*, Second Regional Symposium on Electrochemistry : South-East Europe, Sava Center, Belgrade, Serbia, June 6 to 10, 2010, Abstract Book ECS-P-04
- 2 M. Jović, D. Jugović, M. Mitrić, N. Cvjetičanin, D. Uskoković, *Microemulsion-mediated hydrothermal synthesis of LiFePO<sub>4</sub> cathode material*, The Twelfth Annual Conference YUCOMAT 2010, Herceg-Novi, September 6.-10. 2010, The Book of Abstracts, p. 71.
- 3 D. Jugović, M. Jović, M. Mitrić, N. Cvjetičanin, D. Uskoković, *Preparation of LiFePO<sub>4</sub>/C composites by co-precipitation in the presence of stearic acid*, The Twelfth Annual Conference YUCOMAT 2010, Herceg-Novi, September 6.-10. 2010, The Book of Abstracts, p. 10, oral
- 4 D. Jugović, M. Kuzmanović, M. Mitrić, N. Cvjetičanin, D. Uskoković, *Syntheses and characterizations of LiFePO<sub>4</sub> powders*, Thirteenth Annual Conference YUCOMAT 2011, Herceg Novi, September 5.-9. 2011., The Book of Abstracts, p. 6., oral
- 5 N. Cvjetičanin, T. Barudžija, D. Jugović, M. Mitrić, *Electrochemical properties of anodically grown TiO<sub>2</sub>*, Thirteenth Annual Conference YUCOMAT 2011, Herceg Novi, September 5.-9. 2011., The Book of Abstracts, p. 86., poster
- 6 M. Milović, D. Jugović, M. Mitrić, B. Jokić, D. Uskoković, *Synthesis and characterization of Li<sub>2</sub>FeSiO<sub>4</sub>/C composite*, Fourteenth Annual Conference - YUCOMAT 2012, Herceg Novi, Montenegro, September 3.-7. 2012, Program and the book of abstracts, p. 77, poster
- 7 D. Jugović, M. Mitrić, M. Milović, B. Jokić, D. Uskoković, *Synthesis and characterization of LiFePO<sub>4</sub>/C composite obtained by cellulose template*, Fourteenth Annual Conference - YUCOMAT 2012, Herceg Novi, Montenegro, September 3.-7. 2012, Program and the book of abstracts, p. 76, poster

## **Saopštenje sa skupa nacionalnog značaja štampano u izvodu (M64): 0.2**

- 1 Maja Kuzmanović, Dragana Jugović, Miodrag Mitrić, Nikola Cvjetičanin, Srečo Škapin, Dragan Uskoković, *Crystal growth of solvothermally obtained LiFePO<sub>4</sub> in dependence of synthesis conditions*, Ninth Young Researchers Conference – Materials Science and Engineering, December 20.-22. 2010, Belgrade, Serbia, II/3
- 2 M. Milović, D. Jugović, M. Mitrić, B. Jokić, D. Uskoković, *New facile synthesis route for obtaining phase pure LiFePO<sub>4</sub>/C composite*, Joint event of the 11th Young Researchers' Conference: Materials Science and Engineering and the 1st European Early Stage Researchers' Conference on Hydrogen Storage, Belgrade, December 3.- 5. 2012, Y14

## **Patentna prijava (M92): 8**

Dragoljub Uskoković, Dragana Jugović, Maja Kuzmanović, Postupak dobijanja kompozita litijum gvožđe fosfata (LiFePO<sub>4</sub>) i ugljenika metodom precipitacije u rastopu stearinske kiseline, Patentna prijava P 2010/0488 od 12.11.2010, broj dokumenta RS 20100488, objavljena 30.06.2012. u Glasniku intelektualne svojine br. 3/2012 - M92 - (2012).



### Vrsta i kvantifikacija svih naučnoistraživačkih rezultata dr Dragane Jugović

Kategorija	Broj	Vrednost indikatora	Ukupna vrednost
M14	1	4	4
M21	10	8	80
M22	1	5	5
M23	5	3	15
M32	1	1.5	1.5
M33	9	1	9
M34	13	0.5	6.5
M51	2	2	4
M63	2	0.5	1
M64	13	0.2	2.6
M71	1	6	6
M72	1	3	3
Ukupno			137.6

### Vrsta i kvantifikacija naučnoistraživačkih rezultata dr Dragane Jugović nastalih nakon izbora u zvanje naučni saradnik

Kategorija	Broj	Vrednost indikatora	Ukupna vrednost
M21	6	8	48
M23	2	3	6
M32	1	1.5	1.5
M33	2	1	2
M34	7	0.5	3.5
M64	2	0.2	0.4
Ukupno			61.4

### Ispunjenje kvantitativnih zahteva za sticanje zvanja viši naučni saradnik

potreban uslov	ostvareno
Ukupno: 48	Ukupno: 61.4
$M10+M20+M31+M32+M33+M41+M42+M51 \geq 40$	$M21+M23+M32+M33 = 57.5$
$M11+M12+M21+M22+M23+M24+M31+M32+M41+M42 \geq 28$	$M21+M23+M32 = 55.5$

**Spisak citata bez autocitata dr Dragane Jugović prema indeksnoj bazi  
Scopus na dan 13. 08. 2013.**

**Rad**

**Dragana Jugović, Miodrag Mitrić, Maja Kuzmanović, Nikola Cvjetičanin, Srečo Škapin, Božidar Cekić, Valentin Ivanovski, Dragan Uskoković, "Preparation of  $\text{LiFePO}_4/\text{C}$  composites by co-precipitation in molten stearic acid", J. Power Sources 196, 2011, 4613–4618.**

**Citiran u :**

1. Zhang X, Zhang X, He W, Sun C, Ma J, Yuan J, Du X. High-performance mesoporous  $\text{LiFePO}_4$  from baker's yeast. *Colloids and Surfaces B: Biointerfaces* 2013;103:114-20.
2. Zhang Q, Peng T, Zhan D, Hu X, Zhu G. Facile synthesis of carbon coated  $\text{LiFePO}_4$  nanocomposite with excellent electrochemical performance through in situ formed lithium stearate pyrolysis route. *Mater Chem Phys* 2013;138(1):146-53.
3. Lin Y, Wu J, Chen W. Enhanced electrochemical performance of  $\text{LiFePO}_4/\text{C}$  prepared by sol-gel synthesis with dry ball-milling. *Ionics* 2013;19(2):227-34.
4. Zhang X, Zhang X, He W, Yue Y, Liu H, Ma J. Biocarbon-coated  $\text{LiFePO}_4$  nucleus nanoparticles enhancing electrochemical performances. *Chemical Communications* 2012;48(81):10093-5.
5. Inagaki M. Carbon coating for enhancing the functionalities of materials. *Carbon* 2012;50(9):3247-66.
6. Du X, He W, Zhang X, Yue Y, Liu H, Zhang X, Min D, Ge X, Du Y. Enhancing the electrochemical performance of lithium ion batteries using mesoporous  $\text{Li}_3\text{V}_2(\text{PO}_4)_3/\text{C}$  microspheres. *Journal of Materials Chemistry* 2012;22(13):5960-9.
7. Liu AF, Wen ZB, Liu YF, Hu ZH.  $\text{LiFe}_{1-x}\text{Mn}_x\text{PO}_4/\text{C}$  composite as cathode material for lithium ion battery. *Functional Materials Letters* 2011;4(4):319-22.

**Rad**

**Dragana Jugović, Dragan Uskoković, "A review of recent developments in the synthesis procedures of lithium iron phosphate powders", J. Power Sources 190, 2009, 538-544.**

**Citiran u :**

1. Prosini PP, Gislou P, Cento C, Carewska M, Masci A. Effect of the synthesis conditions on the electrochemical properties of  $\text{LiFePO}_4$  obtained from  $\text{NH}_4\text{FePO}_4$ . *Mater Res Bull.* 2013;48(9):3438-48.

2. Bai Y, Yin Y, Zhao H, Yang J, Liu D, Zhang W. Temperature determination and temperature influence on the raman spectra of pure, C-coated and co-doped LiFePO<sub>4</sub>. *Science of Advanced Materials*. 2013;5(5):440-6.
3. Chen Z, Yuan G, Dai C, Hu X, Luo X. Electrochemical behavior of mg-doped 7LiFePO<sub>4</sub>-Li<sub>3</sub>V<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub> composite cathode material for lithium-ion batteries. *Ionics*. 2013;19(8):1077-84.
4. Jabbour L, Bongiovanni R, Chaussy D, Gerbaldi C, Beneventi D. Cellulose-based li-ion batteries: A review. *Cellulose*. 2013;20(4):1523-45.
5. Zhang SM, Zhang JX, Xu SJ, Yuan XJ, Tian T. Synthesis of nano-sized FePO<sub>4</sub> cathode material via a microemulsion technique [Internet]; 2013 [cited 2013 Aug 12]. Available from: [www.scopus.com](http://www.scopus.com).
6. Jensen KMO, Christensen M, Gunnlaugsson HP, Lock N, Bøjesen ED, Proffen T, et al. Defects in hydrothermally synthesized LiFePO<sub>4</sub> and LiFe<sub>1-x</sub>MnxPO<sub>4</sub> cathode materials. *Chemistry of Materials*. 2013;25(11):2282-90.
7. Wang G, Chen L, Mathur GN, Varadan VK. Synthesis and electrochemical properties of spinel lithium manganese oxides for lithium ion batteries. *Proceedings of SPIE - the international society for optical engineering*; ; 2013.
8. Chen Z, Jin H, Dai C, Wu G, Nelson M, Cheng Y. Effects of carbon source on performance of Li<sub>3</sub>V<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub>/C cathode materials synthesized via carbon thermal reduction for li-ion batteries. *International Journal of Electrochemical Science*. 2013;8(6):8153-66.
9. Yoon M-, Islam M, Ur S-. The role of impurities on electrochemical properties of LiFePO<sub>4</sub> cathode material. *Ceram Int*. 2013;39(SUPPL.1):S647-51.
10. Simon B, Weil M. Analysis of materials and energy flows of different lithium ion traction batteries. *Revue de Metallurgie.Cahiers D'Informations Techniques*. 2013;110(1):65-76.
11. Anseán D, González M, Viera JC, García VM, Blanco C, Valledor M. Fast charging technique for high power lithium iron phosphate batteries: A cycle life analysis. *J Power Sources*. 2013;239:9-15.
12. Xiao P, Lai MO, Lu L. Hollow microspherical LiFePO<sub>4</sub>/C synthesized from a novel multidentate phosphonate complexing agent. *RSC Advances*. 2013;3(15):5127-30.
13. Orikasa Y, Maeda T, Koyama Y, Minato T, Murayama H, Fukuda K, et al. Phase transition analysis between LiFePO<sub>4</sub> and FePO<sub>4</sub> by in-situ time-resolved X-ray absorption and X-ray diffraction. *J Electrochem Soc*. 2013;160(5):A3061-5.
14. Harrison KL, Bridges CA, Paranthaman MP, Segre CU, Katsoudas J, Maroni VA, et al. Temperature dependence of aliovalent-vanadium doping in LiFePO<sub>4</sub> cathodes. *Chemistry of Materials*. 2013;25(5):768-81.

15. Yoon M-, Islam M, Park YM, Ur S-. Effect of synthesizing method on the properties of LiFePO<sub>4</sub>/C composite for rechargeable lithium-ion batteries. *Electronic Materials Letters*. 2013;9(2):187-93.
16. Li J, Zhao H, Qu G, Gu J, Ning P. Research of lithium ferrous phosphate by microwave technique [Internet]; 2013 [cited 2013 Aug 12]. Available from: [www.scopus.com](http://www.scopus.com).
17. Lin Y, Lin Y, Zhou T, Zhao G, Huang Y, Yang Y, et al. Electrochemical performance of LiFePO<sub>4</sub>/Si composites as cathode material for lithium ion batteries. *Mater Chem Phys*. 2013;138(1):313-8.
18. Su K, Liu F, Chen J. Preparation of high performance carbon-coated LiMnPO<sub>4</sub> nanocomposite by an acetate-assisted antisolvent precipitation method. *J Power Sources*. 2013;232:234-9.
19. Devaraju MK, Tomai T, Unemoto A, Honma I. Novel processing of lithium manganese silicate nanomaterials for li-ion battery applications. *RSC Advances*. 2013;3(2):608-15.
20. Liang Y-, Li C-, Chen W-, Lee J-. Hydrothermal synthesis of lithium iron phosphate using pyrrole as an efficient reducing agent. *Electrochim Acta*. 2013;87:763-9.
21. Liu Q, Liu Z, Xiao G, Liao S. Enhancement of capacity at high charge/discharge rate and cyclic stability of LiFePO<sub>4</sub>/C by nickel doping. *Ionics*. 2013;19(3):445-50.
22. Shi Y, Wang Y, Pan S, Yang Z, Dong X, Wu H, et al. Synthesis, crystal structures and optical properties of two congruent-melting isotypic diphosphates: LiM<sub>3</sub>P<sub>2</sub>O<sub>7</sub> (M=Na, K). *Journal of Solid State Chemistry*. 2013;197:128-33.
23. Kulova TL. New electrode materials for lithium-ion batteries (review). *Russian J Electrochem*. 2013;49(1):1-25.
24. Sun X-, Xu Y-, Liu Y-, Li L. Optimizing the hydrothermal synthesis of micro-sized olivine LiFePO<sub>4</sub>. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*. 2012;28(12):2885-92.
25. Hao G-, Zhang H, Chen X-, Cao G-, Yang Y. A novel method for preparing pomegranate-structured FePO<sub>4</sub>/C composite materials as cathode for lithium-ion batteries. *Mater Res Bull*. 2012;47(12):4048-53.
26. Ma J, Li B, Kang F. Improved electrochemical performances of nanocrystalline LiFePO<sub>4</sub>/C composite cathode via V-doping and VO<sub>2</sub>(B) coating. *Journal of Physics and Chemistry of Solids*. 2012;73(12):1463-8.
27. Lv Y, Wang L, Lu D, Sun J, Sun J. Synthesis of LiFePO<sub>4</sub> by co-precipitation and optimization of its performance [Internet]; 2012 [cited 2013 Aug 12]. Available from: [www.scopus.com](http://www.scopus.com).
28. Zou J, Fu Q, Zeng X, Deng F, Yan Y. Preparation and electrochemical properties of LiMnPO<sub>4</sub> anode material doped with fe [Internet]; 2012 [cited 2013 Aug 12]. Available from: [www.scopus.com](http://www.scopus.com).

29. Sun X, Xu Y. Fe excess in hydrothermally synthesized LiFePO<sub>4</sub>. *Mater Lett*. 2012;84:139-42.
30. Liu X, Huang J-, Zhang Q, Liu X-, Peng H-, Zhu W, et al. N-methyl-2-pyrrolidone-assisted solvothermal synthesis of nanosize orthorhombic lithium iron phosphate with improved li-storage performance. *Journal of Materials Chemistry*. 2012;22(36):18908-14.
31. Xing Y, Xu B, Liu Z-, Li C, Zhang A-, Zhang L-, et al. Synthesis of nanometric LiFePO<sub>4</sub> materials in liquid phase: Effects of precipitation method and calcination temperature. *Gongneng Cailiao/Journal of Functional Materials*. 2012;43(17):2347-50.
32. Orlenius J, Lyckfeldt O, Kasvayee KA, Johander P. Water based processing of LiFePO<sub>4</sub>/C cathode material for li-ion batteries utilizing freeze granulation. *J Power Sources*. 2012;213:119-27.
33. Kim J-, Manuel J, Lee M-, Scheers J, Lim D-, Johansson P, et al. Towards flexible secondary lithium batteries: Polypyrrole-LiFePO<sub>4</sub> thin electrodes with polymer electrolytes. *Journal of Materials Chemistry*. 2012;22(30):15045-9.
34. Yang K, Tan F, Wang F, Long Y, Wen Y. Response surface optimization for process parameters of LiFePO<sub>4</sub>/C preparation by carbothermal reduction technology. *Chin J Chem Eng*. 2012;20(4):793-802.
35. Zhang Y, Huo Q-, Du P-, Wang L-, Zhang A-, Song Y-, et al. Advances in new cathode material LiFePO<sub>4</sub> for lithium-ion batteries. *Synth Met*. 2012;162(13-14):1315-26.
36. Inagaki M. Carbon coating for enhancing the functionalities of materials. *Carbon*. 2012;50(9):3247-66.
37. Ding K, Li W, Wang Q, Wei S, Guo Z. Modified solid-state reaction synthesized cathode lithium iron phosphate (LiFePO<sub>4</sub>) from different phosphate sources. *Journal of Nanoscience and Nanotechnology*. 2012;12(5):3812-20.
38. Wang G, Chen L, Mathur GN, Varadan VK. Lithium iron phosphates as cathode materials in lithium ion batteries for electric vehicles. *Proceedings of SPIE - the international society for optical engineering*; ; 2012.
39. Yim C-, Baranova EA, Abu-Lebdeh Y, Davidson I. Highly ordered LiFePO<sub>4</sub> cathode material for li-ion batteries templated by surfactant-modified polystyrene colloidal crystals. *J Power Sources*. 2012;205:414-9.
40. Liu Q, Liao S, Song H, Zeng J. LiFePO<sub>4</sub>/C microspheres with nano-micro structure, prepared by spray drying method assisted with PVA as template. *Current Nanoscience*. 2012;8(2):208-14.
41. Toprakci O, Toprakci HAK, Ji L, Xu G, Lin Z, Zhang X. Carbon nanotube-loaded electrospun LiFePO<sub>4</sub>/carbon composite nanofibers as stable and binder-free cathodes for rechargeable lithium-ion batteries. *ACS Applied Materials and Interfaces*. 2012;4(3):1273-80.

42. Wang W, Hao J, Guo Z, Ye Q. A simple hydrothermal process based on  $\text{FePO}_4 \cdot 2\text{H}_2\text{O}$  to synthesize spherical  $\text{LiFePO}_4/\text{C}$  cathode material [Internet]; 2012 [cited 2013 Aug 12]. Available from: [www.scopus.com](http://www.scopus.com).
43. Hong J, Wang Y, He G, He M. A new approach to  $\text{LiFePO}_4/\text{C}$  synthesis: The use of complex carbon source without ball milling. *Mater Chem Phys*. 2012;133(1):573-7.
44. Ding K, Li W, Yang H, Wei S, Guo Z. Ti-doped lithium iron phosphate ( $\text{LiFePO}_4$ ) cathode materials: Synthesis and electrochemical evaluation. *Journal of New Materials for Electrochemical Systems*. 2012;15(2):63-9.
45. Jüstel M, Schwinger A, Friedrich B, Binnewies M. Synthesis of  $\text{LiFePO}_4$  by ultrasonic and nozzle spray pyrolysis. *Zeitschrift für Physikalische Chemie*. 2012;226(2):177-83.
46. Shao B, Taniguchi I. Synthesis of  $\text{Li}_2\text{FeSiO}_4/\text{C}$  nanocomposite cathodes for lithium batteries by a novel synthesis route and their electrochemical properties. *J Power Sources*. 2012;199:278-86.
47. Ding K, Wang L, Li J, Jia H, He X. Influence of carbon sources on the preparation of  $\text{Li}_0.5\text{Fe}_0.8\text{Co}_0.2\text{O}_4$  and its electrochemical performance. *International Journal of Electrochemical Science*. 2012;7(2):1611-9.
48. Jiang Y-, Liu Q-, Luo C-, Liao S-. Progress in synthesis of nanosized lithium iron phosphate cathode materials with special morphologies. *Xiandai Huagong/Modern Chemical Industry*. 2012;32(1):23-9.
49. Wang J, Sun X. Understanding and recent development of carbon coating on  $\text{LiFePO}_4$  cathode materials for lithium-ion batteries. *Energy and Environmental Science*. 2012;5(1):5163-85.
50. Wang Y, Liu Z, Zhou S. An effective method for preparing uniform carbon coated nanosized  $\text{LiFePO}_4$  particles. *Electrochim Acta*. 2011;58(1):359-63.
51. Ding K, Wang L, Li J, Jia H, He X. Preparation of  $\text{Li}_0.5\text{Fe}_{1-x}\text{Mn}_x\text{O}_4/\text{CNT}$  materials for li-ion batteries. *International Journal of Electrochemical Science*. 2011;6(12):6165-76.
52. Lin Y, Lin Y, Zeng B, Zhao G, Zhou T, Chen M, et al. An optimized mn-doped  $\text{LiFePO}_4/\text{C}$  composite synthesized by carbonthermal reduction technique. *International Journal of Electrochemical Science*. 2011;6(12):6653-61.
53. Yang X, Zhang SM, Zhang JX, Xu MY, Ren P, Li XC, et al. The study on synthesis and modification for iron phosphate. *Functional Materials Letters*. 2011;4(4):323-6.
54. Bakenov Z, Taniguchi I.  $\text{LiMnPO}_4$  olivine as a cathode for lithium batteries. *Open Materials Science Journal*. 2011;5:222-7.
55. Saji VS, Kim Y-, Kim T-, Cho J, Song H-. One-dimensional (1D) nanostructured and nanocomposited  $\text{LiFePO}_4$ : Its perspective advantages for cathode materials of lithium ion batteries. *Physical Chemistry Chemical Physics*. 2011;13(43):19226-37.

56. Kim J-, Shin C-, Ahn J-, Matic A, Jacobsson P. Highly porous LiMnPO<sub>4</sub> in combination with an ionic liquid-based polymer gel electrolyte for lithium batteries. *Electrochemistry Communications*. 2011;13(10):1105-8.
57. Krishnan P, Advani SG, Prasad AK. Synthesis and evaluation of polythiocyanogen (SCN)<sub>x</sub> as a rechargeable lithium-ion battery electrode material. *J Power Sources*. 2011;196(18):7755-9.
58. Toprakci O, Ji L, Lin Z, Toprakci HAK, Zhang X. Fabrication and electrochemical characteristics of electrospun LiFePO<sub>4</sub>/carbon composite fibers for lithium-ion batteries. *J Power Sources*. 2011;196(18):7692-9.
59. Ren J, Pu W, He X, Jiang C, Wan C. A carbon-LiFePO<sub>4</sub> nanocomposite as high-performance cathode material for lithium-ion batteries. *Ionics*. 2011;17(7):581-6.
60. Karami H, Taala F. Synthesis, characterization and application of Li<sub>3</sub>Fe<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub> nanoparticles as cathode of lithium-ion rechargeable batteries. *J Power Sources*. 2011;196(15):6400-11.
61. Tan J, Tiwari A. Effects of carbon precursors on LiFePO<sub>4</sub>/C nanocomposites for lithium-ion batteries. *Nanoscience and Nanotechnology Letters*. 2011;3(4):487-90.
62. Liu Y, Liu D, Zhang Q, Cao G. Engineering nanostructured electrodes away from equilibrium for lithium-ion batteries. *Journal of Materials Chemistry*. 2011;21(27):9969-83.
63. Boyle TJ, Ottley LAM, Apblett CA, Stewart CA, Hoppe SM, Hawthorne KL, et al. Synthesis, characterization, and electrochemical properties of a series of sterically varied iron(II) alkoxide precursors and their resultant nanoparticles. *Inorg Chem*. 2011;50(13):6174-82.
64. Luo G-, Yu S-, Shao D, Xiao J-, Yu X-. Synthesis and characterization of core-shell nano-LiFePO<sub>4</sub>/C cathode material. *Zhongnan Daxue Xuebao (Ziran Kexue Ban)/Journal of Central South University (Science and Technology)*. 2011;42(7):1942-6.
65. Su X, Zhang X. Hydrothermal synthesis of LiFePO<sub>4</sub> cathode. *Progress in Chemistry*. 2011;23(6):1090-9.
66. Wu B, Zhang Y, Li N, Yang C, Yang Z, Zhang C, et al. Research on low temperature performance of the F-doped LiFePO<sub>4</sub>/C cathode materials. *Journal of New Materials for Electrochemical Systems*. 2011;14(3):147-52.
67. Kang F-, Ma J, Li B-. Effects of carbonaceous materials on the physical and electrochemical performance of a LiFePO<sub>4</sub> cathode for lithium-ion batteries. *Xinxing Tan Cailiao/New Carbon Materials*. 2011;26(3):161-70.
68. Jeong G, Kim Y-, Kim H, Kim Y-, Sohn H-. Prospective materials and applications for li secondary batteries. *Energy and Environmental Science*. 2011;4(6):1986-2002.
69. Quartarone E, Mustarelli P. Electrolytes for solid-state lithium rechargeable batteries: Recent advances and perspectives. *Chem Soc Rev*. 2011;40(5):2525-40.

70. Pietrzak TK, Wewior L, Garbarczyk JE, Wasiucionek M, Gorzkowska I, Nowinski JL, et al. Electrical properties and thermal stability of FePO<sub>4</sub> glasses and nanomaterials. *Solid State Ionics*. 2011;188(1):99-103.
71. Harrison KL, Manthiram A. Microwave-assisted solvothermal synthesis and characterization of metastable life 1-x(VO) xPO<sub>4</sub> cathodes. *Inorg Chem*. 2011;50(8):3613-20.
72. Qiao YQ, Tu JP, Xiang JY, Wang XL, Mai YJ, Zhang D, et al. Effects of synthetic route on structure and electrochemical performance of Li<sub>3</sub>V<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub>/C cathode materials. *Electrochim Acta*. 2011;56(11):4139-45.
73. Hong S-, Nugroho A, Kim SJ, Kim J, Chung KY, Cho B-, et al. Continuous supercritical hydrothermal synthesis: Lithium secondary ion battery applications. *Research on Chemical Intermediates*. 2011;37(2-5):429-40.
74. Bai Y, Yin Y, Yang J, Qing C, Zhang W. Raman study of pure, C-coated and co-doped LiFePO<sub>4</sub>: Thermal effect and phase stability upon laser heating. *J Raman Spectrosc*. 2011;42(4):831-8.
75. Jensen K, Christensen M, Tyrsted C, Iversen BB. Real-time synchrotron powder X-ray diffraction study of the antisite defect formation during sub- and supercritical synthesis of LiFePO<sub>4</sub> and LiFe<sub>1-x</sub>Mn<sub>x</sub>PO<sub>4</sub> nanoparticles. *Journal of Applied Crystallography*. 2011;44(2):287-94.
76. Aravindan V, Ravi S, Kim WS, Lee SY, Lee YS. Size controlled synthesis of Li<sub>2</sub>MnSiO<sub>4</sub> nanoparticles: Effect of calcination temperature and carbon content for high performance lithium batteries. *J Colloid Interface Sci*. 2011;355(2):472-7.
77. Zhang W-. Structure and performance of LiFePO<sub>4</sub> cathode materials: A review. *J Power Sources*. 2011;196(6):2962-70.
78. Xia S, Li X, Li X, Huang Y. Preparation of LiFePO<sub>4</sub>/C cathode material by spray-drying method. *Huazhong Keji Daxue Xuebao (Ziran Kexue Ban)/Journal of Huazhong University of Science and Technology (Natural Science Edition)*. 2011;39(3):1-5.
79. Yang M, Gao Q. LiFePO<sub>4</sub>/C composite cathode material with a continuous porous carbon network for high power lithium-ion battery. *J Alloys Compounds*. 2011;509(8):3690-8.
80. Son CG, Yang HM, Lee GW, Cho AR, Aravindan V, Kim HS, et al. Manipulation of adipic acid application on the electrochemical properties of LiFePO<sub>4</sub> at high rate performance. *J Alloys Compounds*. 2011;509(4):1279-84.
81. Li Y-, Zhao S-, Nan C-, Li B-. Electrochemical performance of SiO<sub>2</sub>-coated LiFePO<sub>4</sub> cathode materials for lithium ion battery. *J Alloys Compounds*. 2011;509(3):957-60.
82. Yu S, Luo G, Luo Y, Liu W, Yu X. Physical and electrochemical properties of LiFePO<sub>4</sub>/C cathode material prepared from a new carbon source [Internet]; 2011 [cited 2013 Aug 12]. Available from: [www.scopus.com](http://www.scopus.com).



83. Chung S-, Kim Y-, Choi S-. Direct physical imaging and chemical probing of LiFePO<sub>4</sub> for lithium-ion batteries. *Advanced Functional Materials*. 2010;20(24):4219-32.
84. Ruan Y, Wang H, Cheng B. Effect of carbon sources on electrochemical properties of LiFePO<sub>4</sub>/C composite cathode [Internet]; 2010 [cited 2013 Aug 12]. Available from: [www.scopus.com](http://www.scopus.com).
85. Chen Z, Dai C, Wu G, Nelson M, Hu X, Zhang R, et al. High performance Li<sub>3</sub>V<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub>/C composite cathode material for lithium ion batteries studied in pilot scale test. *Electrochim Acta*. 2010;55(28):8595-9.
86. Rangappa D, Sone K, Ichihara M, Kudo T, Honma I. Rapid one-pot synthesis of LiMPO<sub>4</sub> (M = Fe, Mn) colloidal nanocrystals by supercritical ethanol process. *Chemical Communications*. 2010;46(40):7548-50.
87. Yu F, Zhang J, Yang Y, Song G. Porous micro-spherical aggregates of LiFePO<sub>4</sub>/C nanocomposites: A novel and simple template-free concept and synthesis via sol-gel-spray drying method. *J Power Sources*. 2010;195(19):6873-8.
88. Zhang W, Zhao F, Wang Q, Yang Z. LiFePO<sub>4</sub> synthesized by hydrothermal method from Li<sub>3</sub>PO<sub>4</sub> and its modification. *Huagong Xuebao/CIESC Journal*. 2010;61(10):2719-25.
89. Galinetto P, Mozzati MC, Grandi MS, Bini M, Capsoni D, Ferrari S, et al. Phase stability and homogeneity in undoped and Mn-doped LiFePO<sub>4</sub> under laser heating. *J Raman Spectrosc*. 2010;41(10):1276-82.
90. Zhang W-. Comparison of the rate capacities of LiFePO<sub>4</sub> cathode materials. *J Electrochem Soc*. 2010;157(10):A1040-6.
91. Liu D, Cao G. Engineering nanostructured electrodes and fabrication of film electrodes for efficient lithium ion intercalation. *Energy and Environmental Science*. 2010;3(9):1218-37.
92. Zhao T, Xu W, Ye Q, Cheng J, Zhao H, Wu Z, et al. Local structure of vanadium in doped LiFePO<sub>4</sub>. *Journal of Synchrotron Radiation*. 2010;17(5):584-9.
93. Santhanam R, Rambabu B. Research progress in high voltage spinel LiNi<sub>0.5</sub>Mn<sub>1.5</sub>O<sub>4</sub> material. *J Power Sources*. 2010;195(17):5442-51.
94. Zhao X, Tang X, Zhang L, Zhao M, Zhai J. Effects of neodymium aliovalent substitution on the structure and electrochemical performance of LiFePO<sub>4</sub>. *Electrochim Acta*. 2010;55(20):5899-904.
95. Kendrick E, Slater P. Conducting solids. *Annual Reports on the Progress of Chemistry - Section A*. 2010;106:429-57.
96. Aravindan V, Karthikeyan K, Amaresh S, Lee YS. LiMnBO<sub>3</sub>/C: A potential cathode material for lithium batteries. *Bulletin of the Korean Chemical Society*. 2010;31(6):1506-8.
97. Dargaville S, Farrell TW. Predicting active material utilization in LiFePO<sub>4</sub> electrodes using a multiscale mathematical model. *J Electrochem Soc*. 2010;157(7):A830-40.

98. Liu AF, Hu ZH, Wen ZB, Lei L, An J. LiFePO<sub>4</sub>/C with high capacity synthesized by carbothermal reduction method. *Ionics*. 2010;16(4):311-6.
99. Lim HH, Jang IC, Lee SB, Karthikeyan K, Aravindan V, Lee YS. The important role of adipic acid on the synthesis of nanocrystalline lithium iron phosphate with high rate performance. *J Alloys Compounds*. 2010;495(1):181-4.
100. Kim W-, Kim S-, Jang IC, Lim HH, Lee YS. Remarkable improvement in cell safety for Li[Ni<sub>0.5</sub>Co<sub>0.2</sub>Mn<sub>0.3</sub>]O<sub>2</sub> coated with LiFePO<sub>4</sub>. *J Alloys Compounds*. 2010;492(1-2):L87-90.
101. Lee SB, Jang IC, Lim HH, Aravindan V, Kim HS, Lee YS. Preparation and electrochemical characterization of LiFePO<sub>4</sub> nanoparticles with high rate capability by a sol-gel method. *J Alloys Compounds*. 2010;491(1-2):668-72.
102. Huang B, Zheng X, Jia D, Lu M. Design and synthesis of high-rate micron-sized, spherical LiFePO<sub>4</sub>/C composites containing clusters of nano/microspheres. *Electrochim Acta*. 2010;55(3):1227-31.
103. Gnanaraj JS, Puglia F, Lucht B, Yang L. High voltage (□5V) olivine-type LiCoPO<sub>4</sub>/C nano-particle cathode material synthesized from modified solid state reaction. *ECS transactions*; ; 2009.
104. Milosevic O, Mancic L, Rabanal ME, Gomez LS, Marinkovic K. Aerosol route in processing of nanostructured functional materials. *KONA Powder and Particle Journal*. 2009;27:84-106.
105. Lee SB, Cho SH, Heo JB, Aravindan V, Kim HS, Lee YS. Copper-substituted, lithium rich iron phosphate as cathode material for lithium secondary batteries. *J Alloys Compounds*. 2009;488(1):380-5.

## Rad

**Dragana Jugović, Miodrag Mitrić, Nikola Cvjetičanin, Boštjan Jančar, Slavko Mentus, Dragan Uskoković, "Synthesis and characterization of LiFePO<sub>4</sub>/C composite obtained by sonochemical method", Solid State Ionics 179, 2008, 415–419.**

## Citiran u :

1. Vujković M, Stojković I, Cvjetičanin N, Mentus S. Gel-combustion synthesis of LiFePO<sub>4</sub>/C composite with improved capacity retention in aerated aqueous electrolyte solution. *Electrochim Acta* 2013;92:248-56.
2. Yu Y, Li Q, Ma Y, Zhang X, Zhu Y, Qian Y. Shape controlled hydrothermal synthesis and characterization of LiFePO<sub>4</sub> for lithium ion batteries. *Journal of Nanoscience and Nanotechnology* 2013;13(2):1515-9.

3. Liang Y-, Li C-, Chen W-, Lee J-. Hydrothermal synthesis of lithium iron phosphate using pyrrole as an efficient reducing agent. *Electrochim Acta* 2013;87:763-9.
4. Surzhikov AP, Pritulov AM, Lysenko EN, Sokolovskii AN, Vlasov VA, Vasendina EA. Dependence of lithium-zinc ferrosphel phase composition on the duration of synthesis in an accelerated electron beam. *Journal of Thermal Analysis and Calorimetry* 2012;110(2):733-8.
5. Aksienionek M, Michalska M, Wasiucionek M, Lipińska L, Mirkowska M, Gierlotka S. LiFePO<sub>4</sub>-carbon composites obtained by high-pressure technique: Synthesis and studies on their structure and physical properties. *Solid State Ionics* 2012;225:676-9.
6. Zhao X, Baek D-, Manuel J, Heo M-, Yang R, Ha JK, Ryu H-, Ahn H-, Kim K-, Cho K-, Ahn J-. Electrochemical properties of magnesium doped LiFePO<sub>4</sub> cathode material prepared by sol-gel method. *Mater Res Bull* 2012;47(10):2819-22.
7. Oh SW, Huang Z-, Zhang B, Yu Y, He Y-, Kim J-. Low temperature synthesis of graphene-wrapped LiFePO<sub>4</sub> nanorod cathodes by the polyol method. *Journal of Materials Chemistry* 2012;22(33):17215-21.
8. Yang H, Pee J-, Kim HT, Kim Y. Synthesis of LiCoO<sub>2</sub> nano powders using recycled cobalt precursors from waste WC-co hard metal. *Journal of Ceramic Processing Research* 2012;13(3):319-23.
9. Taniguchi I, Tussupbayev R. Synthesis of LiFePO<sub>4</sub>/C nanocomposites by a novel process and their electrochemical properties. *Chem Eng J* 2012;192:334-42.
10. Nacimiento F, Alcántara R, Nwokeke UG, González JR, Tirado JL. Nanocrystalline CoSn<sub>2</sub>-carbon composite electrode prepared by using sonochemistry. *Ultrason Sonochem* 2012;19(2):352-7.
11. González JR, Alcántara R, Nacimiento F, Tirado JL. CoSn-graphite electrode material prepared by using the polyol method and high-intensity ultrasonication. *Electrochim Acta* 2011;56(27):9808-17.
12. Liu WL, Tu JP, Qiao YQ, Zhou JP, Shi SJ, Wang XL, Gu CD. Optimized performances of core-shell structured LiFePO<sub>4</sub>/C nanocomposite. *J Power Sources* 2011;196(18):7728-35.
13. Chen H, Gong W-, Xiang K-, Liu J-. Effect of solidifying process on morphology and electrochemical performance of LiFePO<sub>4</sub>/C composites. *Fenmo Yejin Cailiao Kexue Yu Gongcheng/Materials Science and Engineering of Powder Metallurgy* 2011;16(4):575-9.
14. Kang F-, Ma J, Li B-. Effects of carbonaceous materials on the physical and electrochemical performance of a LiFePO<sub>4</sub> cathode for lithium-ion batteries. *Xinxing Tan Cailiao/New Carbon Materials* 2011;26(3):161-70.
15. Chen H, Xiang K-, Gong W-, Liu J-. Effect of heat treatment process on microstructure and electrochemical performance of LiFePO<sub>4</sub>/C composites. *Cailiao Rechuli Xuebao/Transactions of Materials and Heat Treatment* 2011;32(1):10-3.

16. Toprakci O, Toprakci HAK, Ji L, Zhang X. Fabrication and electrochemical characteristics of LiFePO<sub>4</sub> powders for lithium-ion batteries. *KONA Powder and Particle Journal* 2010;28:50-73.
17. Chen H, Gong W-, Liu Y-, Liu J-. Preparation and electrochemical properties of branched LiFePO<sub>4</sub>/C composite with carbon core structure. *Zhongguo Youse Jinshu Xuebao/Chinese Journal of Nonferrous Metals* 2010;20(11):2206-12.
18. Wu L, Li X, Wang Z, Guo H, Wang X, Wu F, Fang J, Wang Z, Li L. A novel process for producing synthetic rutile and LiFePO<sub>4</sub> cathode material from ilmenite. *J Alloys Compounds* 2010;506(1):271-8.
19. Liu Y, Cao C. Enhanced electrochemical performance of nano-sized LiFePO<sub>4</sub>/C synthesized by an ultrasonic-assisted co-precipitation method. *Electrochim Acta* 2010;55(16):4694-9.
20. Chen H, Gong W-, Liu Y-, Liu J-. Characterization and electrochemical properties of LiFePO<sub>4</sub>/C composite with carbon core structure. *Wuji Cailiao Xuebao/Journal of Inorganic Materials* 2010;25(5):480-4.
21. Zhang W, Zhou X, Tao X, Huang H, Gan Y, Wang C. In situ construction of carbon nano-interconnects between the LiFePO<sub>4</sub> grains using ultra low-cost asphalt. *Electrochim Acta* 2010;55(8):2592-6.
22. Fergus JW. Recent developments in cathode materials for lithium ion batteries. *J Power Sources* 2010;195(4):939-54.
23. Xu J, Chen G. Electrochemical performance of lifePO<sub>4</sub> cathode material coated with PbTe. *Electrochemical and Solid-State Letters* 2009;12(11):H399-401.
24. Wang K, Cai R, Yuan T, Yu X, Ran R, Shao Z. Process investigation, electrochemical characterization and optimization of LiFePO<sub>4</sub>/C composite from mechanical activation using sucrose as carbon source. *Electrochim Acta* 2009;54(10):2861-8.
25. Kim J-, Choi J-, Chauhan GS, Ahn J-, Hwang G-, Choi J-, Ahn H-. Enhancement of electrochemical performance of lithium iron phosphate by controlled sol-gel synthesis. *Electrochim Acta* 2008;53(28):8258-64.

## Rad

Vladan Kusigerski, Dragana Marković, Vojislav Spasojević, Nikola Cvjetićanin, Miodrag Mitrić, Dragana Jugović, Dragan Uskoković, "Ground-state magnetism of chromium-substituted  $\text{LiMn}_2\text{O}_4$  spinel", J. Magn. Magn. Mater., 320, 2008, 943-949.

## Citiran u :

1. Iturrondobeitia A, Goñi A, Palomares V, Gil De Muro I, Lezama L, Rojo T. Effect of doping  $\text{LiMn}_2\text{O}_4$  spinel with a tetravalent species such as Si(IV) versus with a trivalent species such as Ga(III). electrochemical, magnetic and ESR study. J Power Sources 2012;216:482-8.

## Rad

D. Jugović, N. Cvjetićanin, M. Mitrić, S. Mentus, and D. Uskoković, "Comparison between Different  $\text{LiFePO}_4$  Synthesis Routes", Materials Science Forum Vol. 555, 2007, pp. 225-230.

## Citiran u :

1. Harrison KL, Bridges CA, Paranthaman MP, Segre CU, Katsoudas J, Maroni VA, et al. Temperature dependence of aliovalent-vanadium doping in  $\text{LiFePO}_4$  cathodes. Chemistry of Materials. 2013;25(5):768-81.

2. Toprakci O, Toprakci HAK, Ji L, Zhang X. Fabrication and electrochemical characteristics of  $\text{LiFePO}_4$  powders for lithium-ion batteries. KONA Powder and Particle Journal. 2010;28:50-73.

3. Kim J-, Choi J-, Chauhan GS, Ahn J-, Hwang G-, Choi J-, et al. Enhancement of electrochemical performance of lithium iron phosphate by controlled sol-gel synthesis. Electrochim Acta. 2008;53(28):8258-64.

4. Uskoković D. Controlled designing of fine particles at molecular and nano levels. Materials science and technology conference and exhibition, MS and T'07 - "exploring structure, processing, and applications across multiple materials systems"; ; 2007.

## Rad

**J. P. Marković, D. Jugović, M. Mitrić, D. Makovec, S. K. Milonjić, D. P. Uskoković,** “*Nanostructured ZrO<sub>2</sub> powder synthesized by ultrasonic spray pyrolysis*”, *Surf. Rev. Lett.*,14, (2007), 915-919.

## Citiran u :

1. Shi F, Li Y, Wang H, Zhang Q. Fabrication of well-dispersive yttrium-stabilized cubic zirconia nanoparticles via vapor phase hydrolysis. *Progress in Natural Science: Materials International* 2012;22(1):15-20.

## Rad

**D. Jugović, N. Cvjetičanin, V. Kusigerski, M. Mitrić, M. Miljković, D. Makovec, D. Uskoković,** “*Structural and magnetic characterization of LiMn<sub>1.825</sub>Cr<sub>0.175</sub>O<sub>4</sub> spinel obtained by ultrasonic spray pyrolysis*, *Mat. Res. Bull.* 42, 2007, 515-522.

## Citiran u :

1. Özgür C, An O. The effect of reactor temperature gradient on microstructures of sodium borosilicate glass powders produced by ultrasonic spray pyrolysis technique. *Ceram Int* 2011;37(8):2991-5.
2. Özgür C, Şan O. Preparation of spherical and dense Na<sub>2</sub>O-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> glass powders by ultrasonic spray pyrolysis technique. *J Non Cryst Solids* 2010;356(50-51):2794-8.
3. Bang JH, Suslick KS. Applications of ultrasound to the synthesis of nanostructured materials. *Adv Mater* 2010;22(10):1039-59.
4. Uskoković D, Controlled designing of fine particles at molecular and nano levels. *Materials science and technology conference and exhibition, MS and T'07 - "Exploring structure, processing, and applications across multiple materials systems"*; 2007. 691 p.

## Rad

Ivana Stojković, Azarnoush Hosseinmardi, Dragana Jugović, Miodrag Mitrić, Nikola Cvjetićanin, “*Rapid synthesis of  $\text{LiCr}_{0.15}\text{Mn}_{1.85}\text{O}_4$  by glycine–nitrate method*”, *Solid State Ionics* 177, 2006, pp.847–850.

## Citiran u :

1. Vujković M, Stojković I, Cvjetićanin N, Mentus S. Gel-combustion synthesis of  $\text{LiFePO}_4/\text{C}$  composite with improved capacity retention in aerated aqueous electrolyte solution. *Electrochim Acta* 2013;92:248-56.
2. Vujković M, Cvjetićanin N, Gavrilov N, Stojković I, Mentus S. Electrochemical behavior of nanostructured  $\text{MnO}_2/\text{C}$  (vulcan®) composite in aqueous electrolyte  $\text{LiNO}_3$ . *Hemijska Industrija* 2011;65(3):287-93.
3. Zhao M, Song X, Wang F, Dai W, Lu X. Electrochemical performance of single crystalline spinel  $\text{LiMn}_2\text{O}_4$  nanowires in an aqueous  $\text{LiNO}_3$  solution. *Electrochim Acta* 2011;56(16):5673-8.
4. Santos PTA, Lira HL, Gama L, Argolo F, Andrade HMC, Costa ACFM. Evaluation of  $\text{NiFe}_2\text{O}_4$  spinel, synthesized by combustion reaction, as a catalyst for selective CO oxidation. *Materials Science Forum* 2010;660-661:771-6.
5. Stojković IB, Cvjetićanin ND, Mentus SV. The improvement of the li-ion insertion behaviour of  $\text{Li}_{1.05}\text{Cr}_{0.10}\text{Mn}_{1.85}\text{O}_4$  in an aqueous medium upon addition of vinylene carbonate. *Electrochemistry Communications* 2010;12(3):371-3.
6. Stojković I, Cvjetićanin N, Pašti I, Mitrić M, Mentus S. Electrochemical behaviour of  $\text{V}_2\text{O}_5$  xerogel in aqueous  $\text{LiNO}_3$  solution. *Electrochemistry Communications* 2009;11(7):1512-4.
7. Cvjetićanin N, Stojković I, Mitrić M, Mentus S. Cyclic voltammetry of  $\text{LiCr}_{0.15}\text{Mn}_{1.85}\text{O}_4$  in an aqueous  $\text{LiNO}_3$  solution. *J Power Sources* 2007;174(2):1117-20.

## Rad

**D. Jugović, M. Mitrić, N. Cvjetičanin, M. Miljković, V. Jokanović and D. Uskoković, “Properties of  $\text{LiMn}_2\text{O}_4$  Powders Obtained By Ultrasonic Spray Pyrolysis”, Materials Science Forum Vols. 453-454, 2004, pp. 387-392.**

## Citiran u :

1. Piszora P. Inequality of quenched and high temperature structure of lithium deficient  $\text{LiMn}_2\text{O}_4$ . J Alloys Compounds 2005;401(1-2):34-40.

## Rad

**D. Jugović, N. Cvjetičanin, V. Kusigerski and S. Mentus, “Synthesis of  $\text{LiMn}_2\text{O}_4$  by glycine-nitrate method”, J. Optoelectron. Adv. Mater., 5, 2003, pp. 343-347.**

## Citiran u :

1. Vujković M, Stojković I, Cvjetičanin N, Mentus S. Gel-combustion synthesis of  $\text{LiFePO}_4/\text{C}$  composite with improved capacity retention in aerated aqueous electrolyte solution. Electrochim Acta 2013;92:248-56.
2. Mojović Z, Banković P, Milutinović-Nikolić A, Dostanić J, Jović-Jovičić N, Jovanović D. Al,cu-pillared clays as catalysts in environmental protection. Chem Eng J 2009;154(1-3):149-55.
3. Jović M, Dašić M, Holl K, Ilić D, Mentus S. Gel-combustion synthesis of  $\text{CoSb}_2\text{O}_6$  and its reduction to powdery  $\text{Sb}_2\text{Co}$  alloy. Journal of the Serbian Chemical Society 2009;74(1):53-60.
4. Mojović Z, Milutinović-Nikolić A, Mentus S, Jovanović D. Electrochemical oxidation of phenol on metal-impregnated zeolite electrodes. Chemical Engineering and Technology 2009;32(5):738-44.
5. Mentus S, Tomić-Tucaković B, Majstorović D, Dimitrijević R. Gel-combustion synthesis of  $\text{NiO-MoO}_3$  mixtures and their reduction to ni-mo alloys. Mater Chem Phys 2008;112(1):254-61.
6. Mentus S, Jelić D, Grudić V. Lanthanum nitrate decomposition by both temperature programmed heating and citrate gel combustion: Comparative study. Journal of Thermal Analysis and Calorimetry 2007;90(2):393-7.
7. Nikolic R, Zec S, Maksimovic V, Mentus S. Physico-chemical characterization of thermal decomposition course in zinc nitrate-copper nitrate hexahydrates. Journal of Thermal Analysis and Calorimetry 2006;86(2):423-8.