

## Publications & Patents of Vladimir Atanasov

1. Atanasov, Vladimir; Oleynikov, Andrey; Xia, Jiabing; Lyonnard, Sandrine; Kerres, Jochen  
**Phosphonic acid functionalized poly(pentafluorostyrene) as polyelectrolyte membrane for fuel cell application**  
*Journal of Power Sources* (2017), 343, 364-372. DOI:10.1016/j.jpowsour.2017.01.085
2. Kerres, Jochen; Atanasov, Vladimir  
**Cross-linked PBI-based high-temperature membranes: Stability, conductivity and fuel cell performance**  
*International Journal of Hydrogen Energy* (2015), 40(42), 14723-14735.  
DOI:10.1016/j.ijhydene.2015.08.054
3. Hajdok, Imre; Atanasov, Vladimir; Kerres, Jochen  
**Perfluoro- p-xylene as a new unique monomer for highly stable arylene main-chain ionomers applicable to low-T and high-T fuel cell membranes**  
*Polymers* (2015), 7(6), 1066-1087. DOI:10.3390/polym7061066
4. Atanasov, Vladimir; Kerres, Jochen  
**ETFE-g-pentafluorostyrene: Functionalization and proton conductivity**  
*European Polymer Journal* (2015), 63, 168-176. DOI:10.1016/j.eurpolymj.2014.12.017
5. Kerres, Jochen A.; Katzfuss, Anika; Chromik, Andreas; Atanasov, Vladimir  
**Sulfonated poly(styrene)s-PBIOO blend membranes: Thermo-oxidative stability and conductivity**  
*Journal of Applied Polymer Science* (2014), 131(4), 39889/1-39889/10. DOI:10.1002/app.39889
6. Atanasov, Vladimir; Gudat, Dietrich; Ruffmann, Bastian; Kerres Jochen  
**Highly phosphonated poly(pentafluorostyrene): Characterization and blends with polybenzimidazole**  
*European Polymer Journal* (2013), 49(12), 3977-3985. DOI:10.1016/j.eurpolymj.2013.09.002
7. Atanasov, Vladimir; Buerger, Matthias; Lyonnard, Sandrine; Porcar, Lionel; Kerres, Jochen  
**Sulfonated poly(pentafluorostyrene): Synthesis & characterization**  
*Solid State Ionics* (2013), 252, 75-83. DOI:10.1016/j.ssi.2013.06.010
8. Kerres, Jochen; Atanasov, Vladimir  
**Phosphonated fluorinated aromatic monomers and polymers, production methods and applications**  
*Ger. Offen.* (2012), DE 102011015212 A1 20120927.
9. Atanasov, Vladimir; Buerger, Matthias; Wohlfarth, Andreas; Schuster, Michael; Kreuer, Klaus-Dieter; Maier, Joachim  
**Highly sulfonated poly(phenylene sulfones): optimization of the polymerization conditions**  
*Polymer Bulletin* (2012), 68(2), 317-326. DOI:10.1007/s00289-011-0539-3
10. Kaz, T.; Xia, J.; Chromik, A.; Atanasov, V.; Haering, T.; Kerres, J.  
**Electrode compositions for high-temperature polymer electrolyte fuel cell (HT-PEFC)**  
*ECS Transactions* (2011), 41(1, Polymer Electrolyte Fuel Cells 11), 2033-2040.  
DOI:10.1149/1.3635733
11. Kerres, J.; Chromik, A.; Krajinovic, K.; Katzfuss, A.; Seyb, C.; Aniol, K.; Atanasov, V.; Kaz, T.; Haering, T.; Kruger, A.  
**Monomers, polymers and cross-linked membranes for membrane fuel cells and electrolysis**  
*ECS Transactions* (2011), 41(1, Polymer Electrolyte Fuel Cells 11), 1621-1632.  
DOI:10.1149/1.3635694
12. Atanasov, Vladimir; Kerres, Jochen  
**Highly Phosphonated Polypentafluorostyrene**  
*Macromolecules* (2011), 44(16), 6416-6423. DOI:10.1021/ma2011574
13. Schuster, Michael; de Araujo, Carla C.; Atanasov, Vladimir; Andersen, Henrik T.; Kreuer, Klaus-Dieter; Maier, Joachim  
**Highly Sulfonated Poly(phenylene sulfone): Preparation and Stability Issues**  
*Macromolecules* (2009), 42(8), 3129-3137. DOI:10.1021/ma900333n
14. Vockenroth, Inga K.; Jung, Mathieu; Atanasov, Vladimir; Atanasova, Petia P.; Koeper, Ingo  
Sensing with ion channels embedded in solid supported membranes  
*Abstracts of Papers, 234th ACS National Meeting*, Boston, MA, United States, August 19-23, 2007 (2007), COLL-430.
15. Atanasova, Petia P.; Atanasov, Vladimir; Koeper, Ingo  
**Anchor-Lipid Monolayers at the Air-Water Interface: Prearranging of Model Membrane Systems**  
*Langmuir* (2007), 23(14), 7672-7678. DOI:10.1021/la7002854
16. Atanasov, Vladimir; Koper, Ingo; Knoll, Wolfgang; Schiller, Stefan

- Biomimetic systems consisting of lipid membranes bound to an electrically conducting substrate**  
*U.S. Pat. Appl. Publ.* (2006), US 20060292637 A1 20061228,
17. Jung, Mathieu; Atanasov, Vladimir; Koeper, Ingo  
**Hindered lateral diffusion in tethered bilayer lipid membranes**  
*Abstracts of Papers, 232nd ACS National Meeting*, San Francisco, CA, United States, Sept. 10-14, 2006 (2006), PHYS-061.
18. Atanasov, Vladimir; Atanasova, Petia P.; Vockenroth, Inga K.; Knorr, Nikolaus; Koeper, Ingo  
**A Molecular Toolkit for Highly Insulating Tethered Bilayer Lipid Membranes on Various Substrates**  
*Bioconjugate Chemistry* (2006), 17(3), 631-637. DOI:10.1021/bc050328n
19. Atanasov, Vladimir; Knorr, Nikolaus; Duran, Randolph S.; Ingebrandt, Sven; Offenhaeusser, Andreas; Knoll, Wolfgang; Koeper, Ingo  
**Membrane on a chip: A functional tethered lipid bilayer membrane on silicon oxide surfaces**  
*Biophysical Journal* (2005), 89(3), 1780-1788. DOI:10.1529/biophysj.105.061374
20. Koeper, Ingo; Knorr, Nikolaus; Atanasov, Vladimir; Long, Joanna R.; Anderson, Peter A. V.; Duran, Randy; Knoll, Wolfgang  
**Membrane on a chip: tethered bilayer membranes as a biosensor platform**  
*Abstracts of Papers, 229th ACS National Meeting*, San Diego, CA, United States, March 13-17, 2005 (2005), COLL-173.
21. Atanasov, V.; Sinigersky, V.; Klapper, M.; Muellen, K.  
**Core-shell macromolecules with rigid dendritic polyphenylene cores and polymer shells**  
*Macromolecules* (2005), 38(5), 1672-1683. DOI:10.1021/ma048172u
22. Angelova, Olyana; Kossev, Krastmir; Atanasov, Vladimir  
**1-(tert-Butyl)-3-(2-pyridyl)thiourea**  
*Acta Crystallographica, Section C: Crystal Structure Communications* (1999), C55(2), 220-222. DOI:10.1107/S0108270198009615
23. Angelova, Olyana; Petrova, Rosica; Atanasov, Vladimir  
**2-(Nitroamino)pyridine**  
*Acta Crystallographica, Section C: Crystal Structure Communications* (1998), C54(3), 441-442. DOI:10.1107/S0108270197015503