

List of publications

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Publications in periodicals

1. J. Békési, **K. Kordás**, K. Bali, R. Vajtai, Cs. Beleznai, L. Nánai: *UV-laser-induced etching and metal seeding on polymers; a surface characterization*, Applied Surface Science **138-139** (1999) 613-616.
2. **K. Kordás**, J. Békési, K. Bali, R. Vajtai, L. Nánai, Thomas F. George and S. Leppävuori: *UV laser-induced liquid phase palladium seeding on polymers*, Journal of Materials Research **14** (1999) 3690-3694.
3. **K. Kordás**, K. Bali, S. Leppävuori, A. Uusimäki, L. Nánai: *Laser direct writing of palladium on polyimide surfaces from solution*, Applied Surface Science **152** (1999) 149-155.
4. **K. Kordás**, K. Bali, S. Leppävuori, A. Uusimäki, L. Nánai: *Laser direct writing of copper on polyimide surfaces from solution*, Applied Surface Science **154-155** (2000) 399-404.
5. **K. Kordás**, L. Nánai, G. Galbács, A. Uusimäki, S. Leppävuori, K. Bali: *Reaction Dynamics of CW Ar⁺ laser induced copper direct writing from liquid electrolyte on polyimide substrates*, Applied Surface Science **158** (2000) 127-133.
6. A. Siska, Z. Kónya, K. Hernádi, I. Kiricsi, **K. Kordás**, R. Vajtai: *Nanostructured carbon generated by CVD from acetylene on surfaces pre-treated by combination of physical and chemical methods*, Journal of Materials Research **15** (2000) 2087-2090.
7. **K. Kordás**, L. Nánai, K. Bali, J. Békési, Thomas F. George, S. Leppävuori and A. Uusimäki: *Palladium thin film deposition on polyimide by cw Ar⁺ laser for electroless copper plating*, Thin Solid Films **384** (2001) 185-188.
8. **K. Kordás**, J. Békési, R. Vajtai, M. Jauhianen, J. Remes, A. Uusimäki, S. Leppävuori, Thomas F. George and L. Nánai: *Laser-assisted via hole metallization in PCB materials*. Journal of Electronic Materials (2001) L21-24.
9. **K. Kordás**, L. Nánai, K. Bali, K. Stépán, R. Vajtai, Thomas F. George, S. Leppävuori: *Palladium thin film deposition from liquid precursors on polymers by projected excimer beams*. Applied Surface Science **168** (2000) 66-70.
10. **K. Kordás**, J. Békési, R. Vajtai, L. Nánai, Leppävuori, A. Uusimäki, K. Bali, Thomas F. George, G. Galbács: *Laser-assisted metal deposition from liquid-phase precursors on polymers*, Applied Surface Science **172** (2001) 178-189.
11. **K. Kordás**, J. Remes, S. Leppävuori, L. Nánai: *Laser-assisted Selective Deposition of Nickel Patterns on Porous Silicon Substrates*, Applied Surface Science **178** (2001) 93-97.
12. **K. Kordás**, J. Remes, S. Beke, T. Hu, S. Leppävuori: *Manufacturing of Porous Silicon; porosity and thickness dependence on electrolyte composition*, Applied Surface Science **178** (2001) 190-193.
13. R. Vajtai, **K. Kordás**, B.Q. Wei, J. Békési, S. Leppävuori, P.M. Ajayan: *Carbon nanotube network growth on palladium seeds*, Materials Science & Engineering C **19** (2002) 271-274.
14. **K. Kordás**, S. Leppävuori, J. Békési, L. Nánai, J. Remes, R. Vajtai, S. Szatmári: *Nickel Deposition on Porous Silicon Utilizing Lasers*, Applied Surface Science **186** (2002) 232-236.

15. A.E. Pap, **K. Kordás**, R. Peura, S. Leppävuori: *Simultaneous chemical silver and palladium deposition on porous silicon; FESEM, TEM, EDX and XRD investigation*, Applied Surface Science **201** (2002) 56-60.
16. **K. Kordás**, A.E. Pap, V. Lyöri, A. Uusimäki, J. Vähäkangas, S. Leppävuori: *Mirror fabrication on optical fibres using maskless excimer laser-assisted methods*, Surface and Coatings Technology **155** (2002) 285.
17. A.E. Pap, **K. Kordás**, H. Jantunen, S. Leppävuori: *Copper plating on and electrical investigation of a low-permittivity cycloolefin-copolymer*, Polymer Testing **22** (2003) 657-661.
18. **K. Kordás**, A.E. Pap, S. Leppävuori: *Laser-enhanced selective TiO₂ deposition on Si*, Surface and Coatings Technology **176** (2003) 84-87.
19. **K. Kordás**, A.E. Pap, S. Beke, S. Leppävuori: *Optical properties of porous silicon (Part I) - Fabrication and investigation of single layers*, Optical Materials **25** (2004) 251-255.
20. **K. Kordás**, S. Beke, A.E. Pap, A. Uusimäki, S. Leppävuori: *Optical properties of porous silicon (Part II) - Fabrication and investigation of multilayer structures*, Optical Materials **25** (2004) 257-260.
21. A.E. Pap, **K. Kordás**, S. Leppävuori, *Thermal oxidation of porous silicon; Study on reaction kinetics*, Journal of Physical Chemistry B **108**, 12744 (2004).
22. **K. Kordás**, A.E. Pap, J. Saavalainen, H. Jantunen, P. Moilanen, E. Haapaniemi, S. Leppävuori: *Laser-Induced Surface Activation on LTCC Materials for Chemical Metallization*, IEEE Transactions on Advanced Packaging (2004) in press.
23. J. Juuti, **K. Kordás**, R. Lonnakko, P. Moilanen, S. Leppävuori, *Mechanically amplified large displacement piezoelectric actuators*, Sensors and Actuators B (2004) in press.
24. A.E. Pap, **K. Kordás**, G. Tóth, J. Levoska, A. Uusimäki, J. Vähäkangas, S. Leppävuori and T.F. George, *Thermal oxidation of porous silicon; Study on structure*, Applied Physics Letters **86** (2005) in press.
25. G. Tóth, **K. Kordás**, A.E. Pap, J. Vähäkangas, A. Uusimäki, S. Leppävuori, *Origin and FEM-assisted evaluation of residual stress in thermally oxidized porous silicon*, Computational Materials Science (2004) in press.
26. G. Tóth, **K. Kordás**, J. Vähäkangas, A. Uusimäki, S. Leppävuori, T.F. George, L. Nánai, *Laser-induced gold deposition on p⁺-Si from liquid precursors*, Journal of Physical Chemistry B (2005) submitted.
27. **K. Kordás**, A.E. Pap, G. Tóth, M. Pudas, J. Jääskeläinen, A. Uusimäki, J. Vähäkangas: *Laser soldering of flip-chips*, Optics and Lasers in Engineering (2005) submitted.
28. **K. Kordás**, A.E. Pap, J. Vähäkangas, S. Leppävuori: *Carbon nanotube synthesis on oxidized porous silicon*, Applied Surface Science (2005) submitted.

Conference proceedings

29. L. Nánai, **K. Kordás**, K. Bali, *Laser induced liquid phase deposition (LCLD); The state of Art*, 9th International Conference on Laser-Assisted Microtechnology (LAM 2000), SPIE 4157 (2001) 228-248.
30. **K. Kordás**, A.E. Pap, J. Saavalainen, H. Jantunen, P. Moilanen, E. Haapaniemi, S. Leppävuori, L. Nánai: *Laser-induced surface modification on LTCC materials for chemical metallization*, Microtechnologies for the New Millennium 2003, SPIE 5118 (2003) 390-399.

Book / Chapter

31. **K. Kordás**: *Laser-assisted chemical liquid-phase deposition of metals for micro- and optoelectronics*, Acta Universitatis Ouluensis **C 168** (Oulu University Press, Finland) 2002.
32. L. Nánai, **K. Kordás**, S. Leppävuori, T.F. George, *Chemistry of materials metallization*, in "Modern Topics in Chemical Physics" ed. by T.F. George (Research Signpost, Kerala, India) 2002.
33. **K. Kordás**, G. Tóth, J. Remes, L. Nánai, S. Szatmári, *Current trends in depositing and patterning metal films*, in the Journal of Optoelectronic and Advanced Materials, Romania, 2005.