

WYKAZ WAŻNIEJSZYCH PUBLIKACJI
INSTYTUTU - CENTRUM
NIEKONWENCJONALNYCH TECHNOLOGII HYDROSTRUMIENIOWYCH
za rok 2009

Książki

1. Borkowski P. (redakcja): *Unconventional and Hydrojetting Technologies.* (ISSN 0239-7129). Wyd. Uczelniane PK. Koszalin, 2009, (p. 528).

Artykuły

2. Borkowski J., Borkowski P.: *Criteria of effective materials cutting with suspension abrasive-water jet.* ACME, Vol. IX (2009), No. 2, pp. 5-14.
3. Borkowski P.: *High-pressure water jet technology application for abyssal well renovation.* Annual Set the Environment Protection. Vol. 11 (2009), pp. 39-48.
4. Borkowski P.: *Abrasive grains distribution in high-pressure abrasive-water jet used for surface treatment.* ACME, Vol. IX (2009), No. 3, pp. 5-16.
5. Borkowski P., Borkowski J.: *Examination of bones cut with high-pressure liquid jet admixed with granular biomaterials carried out in the aspect of its application in orthopedic surgery.* Int. Conf. Snezhinsk and Science – 2009. Present Problems of Atomic Science and Technology. Snezhinsk, 2009, pp. 229-230.
6. Borkowski P., Borkowski J., Szpakowicz A.: *Basis of forming spatial objects using abrasive water jet.* Water Jet 2009 – Research, Development, Applications. Ostrava, Czech Republik, 2009, pp. 29-37.
7. Borkowski P., Sobczak R.: *Micro cutting with suspensive abrasive-water jet.* 9th Pacific Rim Int. Conf. on Water Jetting Technology. Koriyama, Japan, 2009, Paper No. A3-2, pp 151-156.
8. Borkowski P., Szpakowicz A.: *Abrasive-water jet shaping of bas-relief.* 2009 WJTA American Waterjet Conference and Expo, 2009, Houston, Texas, 2009, Paper No. 3-A.
9. Borkowski P., Borkowski J.: *Unconventional method of poly-metallic concretions output from ocean's bottom.* In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 31-42.
10. Borkowski P., Borkowski J.: *High-pressure water jet application for coal conversion into new generation fuel.* In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 43-54.
11. Borkowski P., Borkowski J., Sokołowski A.: *Basis of municipal solid waste utilization with high-pressure hydrojetting technology.* In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 55-72.
12. Borkowski P., Borkowski J., Bielecki M.: *Strength of chosen metal materials in cosmic conditions.* In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 73-82.
13. Borkowski J., Borkowski P.: *Silicon carbide grains thermal-fatigue wear during grinding.* In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 83-94.
14. Borkowski J., Borkowski P.: *Attritions grain's wear during grinding.* In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 95-106.

15. Borkowski J., Borkowski P.: *Bond fracture in grinding wheels*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 107-120.
16. Borkowski J., Borkowski P.: *Grinding wheels wear influence by elementary effects*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 121-134.
17. Borkowski P., Borkowski J., Bielecki M.: *Monitoring of high-pressure hydrojet with ultra high speed camera*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 169-176.
18. Borkowski P.: *Distribution of abrasive grains and dry-ice pellets in high-pressure water jet used for surface treatment*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 177-190.
19. Borkowski P.: *Structure of high-pressure hybrid jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 191-198.
20. Borkowski P.: *Chips shape during titanium alloys cutting with high-pressure abrasive-water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 199-204.
21. Borkowski J., Borkowski P., Bielecki M.: *Chips created during titanium alloys milling assisted with high-pressure lubricoolant jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 205-212.
22. Borkowski P.: *Quality effects of surface treatment with high-pressure abrasive-water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 213-228.
23. Borkowski P.: *Modeling methods of high-pressure abrasive-water jetting*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 247-258.
24. Borkowski J., Sutowska M.: *The quality of surface shaped by abrasive-water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 259-272.
25. Borkowski P.: *Mechanism of chips creation during surface treatment using high-pressure abrasive-water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 273-282. 26. Borkowski P., Borkowski J.: *High-pressure abrasive-water jet used for evaluation of hip articulations wear rate*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 283-290.
27. Borkowski J., Borkowski P.: *Cutting and shaping of grinding tools by high pressure abrasive-water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 291-296.
28. Borkowski J., Borkowski P.: *Abrasive-water jet treatment of ceramic materials*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 297-304.
29. Borkowski P., Chomka G.: *The basis of material treatment using cryogenic jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 305-316.
30. Borkowski P.: *High-pressure hybrid jet application for enamel decoating*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 317-324.
31. Borkowski J., Borkowski P., Sokołowski A.: *Thermal effects of high-pressure water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 325-336.

32. Borkowski J., Borkowski P., Sutowska M.: *Water-jet noise research*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 337-344.
33. Borkowski P.: *Abrasive suspension jet generated according to BorJet system*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 345-354.
34. Borkowski P., Sobczak R.: *Micro-cutting with suspended abrasive-water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 355-368.
35. Borkowski P.: *Modern water-jetting system application for ship's side surface treatment*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 369-378.
36. Borkowski P., Chomka G.: *Application of high-pressure water-ice jet for surface treatment*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 379-390.
37. Borkowski P.: *Water pipeline renovation with high-pressure water jet technique*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 391-400.
38. Borkowski J., Borkowski P.: *Implementation of high-pressure water jet for abyssal well renovation*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 401-410.
39. Borkowski P.: *Surface treatment effectiveness using rotary water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 411-422.
40. Borkowski P.: *Application of abrasive waterjet technology for concrete cut*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 423-430.
41. Borkowski P.: *High-pressure abrasive-water jet cutting comparison with other methods of concentrated beam energy*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 431-438.
42. Borkowski P., Szpakowicz A.: *Surface sculpture using high-pressure abrasive water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 439-452.
43. Borkowski P.: *Question of hydrojetting nanotechnology*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 453-462.
44. Borkowski P., Borkowski J., Cwanek J.: *High-pressure liquid jet usefulness for biomaterial grains additives for orthopedic surgery*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 463-470.
45. Borkowski P., Borkowski J., Bielecki M.: *Aircraft honeycomb composites machining with AWJ method*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 471-482.
46. Borkowski J., Borkowski P.: *Treatment efficiency increase of ductile materials in grinding assisted with waterjet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 483-492.
47. Borkowski P., Borkowski J.: *Comminution of different materials with high-pressure water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 493-500.
48. Borkowski P., Borkowski J., Mazurkiewicz M., Lasko S.: *High-pressure water jet applications for copper ore deposits mining and it's processing*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 501-510.

49. Borkowski P., Borkowski J., Mazurkiewicz M., Lasko S.: *Coal micronization utilizing with high-pressure water jet*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 511-518.
50. Borkowski P., Borkowski J., Bielecki M.: *High explosives washing out from artillery ammunition using hydrojetting technology*. In book: Unconventional and Hydrojetting Technologies. (ISSN 0239-7129). Koszalin, 2009, pp. 519-528.
51. Borkowski J., Borkowski P., Marciak M.: *Problematyka hydrostrumieniowego kształtowania materiałów kompozytowych stosowanych w konstrukcjach lotniczych*. Współczesne Problemy Obróbki Ściernej. Wyd. Uczelniane PK. Koszalin, 2009, s. 543-554.
52. Borkowski P., Szpakowicz A.: *Zagadnienia hydrostrumieniowego odtwarzania obiektu przestrzennego na podstawie jego obrazu*. Współczesne Problemy Obróbki Ściernej. Wyd. Uczelniane PK. Koszalin, 2009, s. 555-564.

Rozprawa doktorska:

53. Sutowska M.: *Problematyka krzywoliniowego przecinania materiałów wysokociśnieniową strugą wodno-ścierną uwzględniająca kryteria jakości powierzchni*. Rozprawa doktorska. Wydział Mechaniczny, Politechnika Koszalińska, 2009.

Patenty

54. Borkowski P.: *Sposób wytwarzania strugi wielofazowej do obróbki powierzchni*. Patent udzielony Decyzją Urzędu Patentowego RP nr DP/P.371401 z dn. 21.10.2009.
55. Borkowski P., Borkowski J.: *Sposób kształtowania powierzchni strugą wodno-ścierną, zwłaszcza przeznaczony do wykonywania płaskorzeźb*. Zgłoszenie patentowe nr P.390126, 2009.

Wykłady seminaryjne (na uczelniach zagranicznych)

56. Borkowski P.: *Water pipeline renovation with high-pressure water jet technology*. Snezhinsk State Academy of Physics and Technology, Department of Mechanical Engineering. Snezhinsk, Russja. 4.06.2009.
57. Borkowski P.: *Novel technique for spatial objects shaping with high-pressure abrasive water jet*. Nihon University, Department of Mechanical Engineering. Koriyama, Japan. 23.11.2009.