

Contents

Contents	4
J. Daniel, P. Souček, L. Zábranský, M. Stupavská, K. Bernátová, V. Buršíková, P. Vašina Structure and mechanical properties of Ni doped nc-TiC/a-C(:H) coatings	7
H. Dvořáková, M. Stupavská, Jan Čech, P. St'ahel Improvement of wettability high density polyethylene by plasma treatment: Impact of distance between sample and DCSBD electrode	11
J. Faltýnek, V. Kudrle Microwave diagnostics of low pressure and atmospheric plasma	15
M. Fekete, J. Hnilica, P. Vašina Effect of pulse off time on temporal evolution of sputtered species densities in multi-pulse HiPIMS discharge	22
O. Galmiz, D. Pavliňák, M. Zemánek, A. Bucek, A. Brablec, M. Černák Surface dielectric barrier discharge generated using liquid electrodes and its application for surface treatment of polymer tubes	28
J. Horak, M. Prochazka, L. Blahova, F. Krcma Parylene C and SiO _x bilayers for archaeological artefacts preservation	33
P. Klein, J. Hnilica, Z. Hubička, M. Čada, P. Vašina Observation of cathode voltage and discharge current oscillations and spoke behaviour in HiPIMS	37
T. Morávek, J. Ráhel' Luminescence study of alumina powders	43
D. Pavliňák, J. Hnilica, A. Quade, J. Schäfer, M. Alberti, V. Kudrle Functionalisation and pore size control of electrospun PA6 nanofibres using a microwave jet plasma	47

L. Potočňáková, J. Voráč, P. Synek, J. Hnilica, V. Kudrle Phase synchronized ICCD imaging of power modulated microwave plasma jet at atmospheric pressure	51
J. Ráhel, J. Čech, T. Morávek Striated Patterns in Coplanar Barrier Discharge	55
J. Ráhel, T. Morávek, Z. Navrátil, J. Čech Investigation of diffuse helium coplanar barrier discharge by single photon counting	60
D. Skácelová, J. Čech, M. Černák Interaction of atmospheric pressure plasma and silicon surface	64
P. Souček, V. Buršíková, L. Zábranský, J. Buršík, P. Vašina Deposition of Hard Yet Moderately Ductile MoBC Coatings by p-DC Magnetron Sputtering	68
V. Švachová, K. Slánská, M. Slánská, L. Vojtová, D. Pavliňák Electrospinning of Biopolymers Suitable for Medical Applications	72
L. Zábranský, V. Buršíková, P. Souček, P. Vašina Study of the adhesion of nc-TiC/a-C:H coatings deposited on steel substrates	77