

## Peer reviewed publications

**Synthesis of vertically aligned titanium dioxide nanotubes on microcantilevers for new nanostructured micromechanical sensors for explosive detection**

COTTINEAU T.\*, PRONKIN S.\*, ACOSTA M.\*, MÉNY Ch.\*, SPITZER D., KELLER V.\*

*Sensors and Actuators B: Chemical*, 182 (2013) 489DS497 - © 2013 Elsevier B.V.

Ref. ISL: PR-U-PU-6013/2013

**Reply to comment on "Tunable generation and adsorption of energetic compounds in the vapor phase at trace levels: A tool for testing and developing sensitive and selective substrates for explosive detection"**

BONNOT K., BERNHARDT P.\*, HASSLER D., BARAS Ch., COMET M., KELLER V.\*, SPITZER D.

*Analytical Chemistry* 2013, 85, 3016-3016 - © 2013 American Chemical Society

Ref. ISL: PR-U-PU-6014/2013

**The security in pyrotechnics: scientific fact or regulation?**

COMET M., SCHNELL F., PICHOT V., SIEGERT B., SPITZER D.

*L'Actualité Chimique*, Avril 2013, n°373, p. 31-36 - © Société Chimique de France (SCF)

Ref. ISL: PR-U-PU-6016/2013

**First ballistic evaluations of aluminium-based nanocomposites consolidated by the SPS process**

LEMONNIER S., BARRAUD E., NUSSBAUM J., TERNER C., QUESNAY F., SORREL E., MOITRIER F.

*27th International Symposium on Ballistics (ISB)*, Freiburg, DE, April 22-26, 2013and *J. Appl. Mech.* 80(3), April 19, 2013

Ref. ISL: PR-PU-6019/2013

**Dynamic compaction resistance sintering validation tests on alumina ceramics of this new flash sintering process**

ACQUIER P., LEMONNIER S., TERNER C., ALLAIN-BONASSO N.\*, RUSINEK A.\*, GROSDIDIER T.\*, BARRAUD E.

*Fifth International Conference on Shaping of Advanced Ceramics, "Shaping 5"*, Mons, BE, January 29-31, 2013

Ref. ISL: PR-PU-6021/2013

**Spark plasma sintering of YAG transparent ceramics**

MARLOT C., LE GALLET S.\*, NAIMI F.\*, BARRAUD E., EICHHORN M.\*, BERNARD F.\*

*Fifth International Conference on Shaping of Advanced Ceramics, "Shaping 5"*, Mons, BE, January 29-31, 2013

Ref. ISL: PR-PU-6022/2013

**Local detection of nitrogen-vacancy centers in a nanodiamond monolayer**

PAWLAK R.\*, GLATZEL T.\*, PICHOT V., SCHMIDLIN L., KAWAI S.\*, FREMY S.\*, SPITZER D., MEYER E.\*

*Nano Lett.*, 2013, 13(12), pp. 5803-5807 - © 2013 American Chemical Society

Ref. ISL: PR-U-PU-6060/2013

\* not member of ISL

## **Understanding ultrafine nanodiamond formation using nanostructured explosives**

PICHOT V., RISSE B., SCHNELL F., MORY J., SPITZER D.

*Scientific Reports 3, 2159 (2013) - © 2013 Nature Publishing Group*

Ref. ISL: PR-U-PU-6061/2013

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## **Dynamic Compaction Resistance Sintering (DCRS) : effet de l'impact sur les propriétés physiques de spécimens de cuivre fritté**

MOITRIER F., ACQUIER P., LEMONNIER S., BARRAUD E., ALLAIN-BONASSO N.\*, GROSDIDIER T.\*, RUSINEK A.\*

*Congrès « Poudre et Matériaux Frittés » (PMF2013), 22 mai 2013, Belfort, FR*

Ref. ISL: PU-6026/2013

## **Electrochemical properties of hollow iron oxide nanostructures as electrodes for super capacitor or Li-battery**

GERBER O., BÉGIN-COLIN S.\*, PICHON B.P.\*, BARRAUD E., LEMONNIER S.

*Presentation at the E-MRS 2013 Spring Meeting, Strasbourg, FR, May 28, 2013*

Ref. ISL: PU-6033/2013

## **Dynamic Compaction Resistance Sintering: Effect of impact on physical properties of copper pellets**

ACQUIER P., LEMONNIER S., TERNER C., ALLAIN-BONASSO N.\*, RUSINEK A.\*, GROSDIDIER T.\*, BARRAUD E.

*Conférence EUROMAT 2013, Sevilla, ES, September 8-13, 2013*

Ref. ISL: PU-6042/2013

## **Electrochemical properties of hollow iron oxide nanostructures as electrodes for super capacitor or Li-battery**

GERBER O., BÉGIN-COLIN S.\*, PICHON B.P.\*, BARRAUD E., LEMONNIER S.

*EUROMAT 2013, Sevilla, ES, September 8-13, 2013*

Ref. ISL: PU-6044/2013

### Peer reviewed publications

#### **Aerodynamic performance of a gun launched micro air vehicle**

GNEMMI P., MEDER K., REY C.

*International Journal of Micro Air Vehicles*, Vol. 4, No. 4, December 2012

Ref. ISL: PR-PU-6001/2013

#### **Investigation of the Magnus effect of a generic projectile at Mach 3 up to 16 degrees angle of attack**

KLATT D., HRUSCHKA R., LEOPOLD F.

*Journal of Applied Mechanics*, May 2013, Vol. 80 - © 2013 ASME

Ref. ISL: PR-U-PU-6020/2013

#### **Guidance and control design for a class of spin-stabilized fin-controlled projectiles**

THEODOULIS S., GASSMANN V., WERNERT Ph., DRITSAS L.\*, KITSIOS J.\*, TZES A.\*

*Journal of Guidance, Control, and Dynamics*, Vol. 36, No. 2, March-April 2013

Ref. ISL: PR-PU-6024/2013

#### **Computation validation on lateral jet interactions at supersonic speeds**

GNEMMI P., GRUHN P.\*, LEPLAT M.\*, NOTTIN Ch.\*, WALLIN S.\*

*Int. J. Engineering Systems Modelling and Simulation*, Vol. 5, Nos. 1/2/3, pp. 68-83, 2013

© 2013 Inderscience Enterprises Ltd.

Ref. ISL: PR-U-PU-6025/2013

#### **Unidirectional fiber optic sensor for angular acceleration measurement**

SCHLÖFFEL G., SEILER F.

*Optics Letters*, Vol. 38, No. 9, pp. 1500-1502, 2013 - © 2013 Optical Society of America

Ref. ISL: PR-U-PU-6071/2013

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#### **Design of an enhanced patch array on a reactive impedance substrate**

JAECK V., BERNARD L.

*iWAT 2013, International Workshop on Antenna Technology*, Karlsruhe, DE, March 4-6, 2013

© IEEE 2013

Ref. ISL: U-PU-6008/2013

#### **Prediction of aerodynamic performances of a gun launched micro air vehicle**

GNEMMI P., REY C., MEDER K.

*48th International Symposium of Applied Aerodynamics*, Saint-Louis, ISL, March 25-27, 2013

Ref. ISL: PU-6012/2013

#### **Supersonic projectile behaviour under electric discharges generating a plasma**

GNEMMI P., REY C., WEY P.

*48th International Symposium of Applied Aerodynamics*, Saint-Louis, FR, March 25-27, 2013

Ref. ISL: PU-6015/2013

### **Conception and realisation of a demonstrator for a hybrid projectile/MAV system. State of the work after 32 months**

GNEMMI P., CHANGEY S., REY C., ROUSSEL E., MEDER K., METZGER N.,  
SCHERTZER S., PECHEUR E., DROUOT A., CHAUFFAUT C.\*, SIRYANI R.\*, BERNER C.,  
BERNARD L., WEY P., MARTINEZ B., BOUTAYEB M.\*, LOZANO R.\*

*Workshop Interdisciplinaire sur la Sécurité Globale (WISG 2013), Troyes, FR, 22-23 janvier  
2013*

*Ref. ISL: PU-6017/2013*

### **Identifiability investigation of the aerodynamic coefficients from free-flight tests**

ALBISSER M., DOBRE S., BERNER C., THOMASSIN M.\*, GARNIER H.\*

*AIAA Atmospheric Flight Mechanics Conference, Boston/MA, US, August 19-22, 2013*

© AIAA 2013

*Ref. ISL: U-PU-6037/2013*

### **About the camel effect on heat transfer to a sphere at hypersonic flow condition**

ADELI R.\*, GNEMMI P., SEILER F.

*29th International Symposium on Shock Waves (ISSW29), Madison/WI, US, July 14-19,  
2013*

*Ref. ISL: PU-6039/2013*

### **Optimal control framework for impulsive missile interception guidance**

WALTER L., SCHLÖFFEL G., HOLZAPFEL F.\*

*Guidance, Navigation and Control Conference 2013, AIAA, Boston, US, August 19-22, 2013*

© 2013 American Institute of Aeronautics and Astronautics

*Ref. ISL: U-PU-6043/2013*

### **Bandwidth behavior of miniature square cavity microstrip antennas**

MARTINIS M., MAHDJOUBI K.\*, SAULEAU R.\*, COLLARDEY S.\*, BERNARD L.

*ICEAA - IEEE APWC - EMS 2013, Turin, IT, September 9-13, 2013 - © 2013 IEEE*

*Ref. ISL: U-PU-6047/2013*

### **Investigations on bandwidth enhancement of low-cost printed phased arrays with reactive impedance substrates**

BERNARD L., JAECK V.

*2013 IEEE International Symposium on Phased Array Systems and Technology, Waltham-  
Boston/MA, US, October 15-18, 2013 - © 2013 IEEE*

*Ref. ISL: U-PU-6062/2013*

### **Étude des performances d'un réseau phasé et commuté**

JAECK V., BERNARD L., MAHDJOUBI K.\*, SAULEAU R.\*, COLLARDEY S.\*,

POULIGUEN P.\*, POTIER P.\*

*Assemblée Générale du GDR ONDES 2451 Interférences d'ondes, UFR des Sciences et  
Techniques de Bourgognes, Dijon, FR, 28-30 octobre 2013*

*Ref. ISL: PU-6068/2013*

### **Bandwidth of miniature rectangular cavity antennas**

MARTINIS M., MAHDJOUBI K\*, SAULEAU R.\*, COLLARDEY S.\*, BERNARD L.

*Assemblée Générale du GDR ONDES 2451 Interférences d'ondes, UFR des Sciences et Techniques de Bourgognes, Dijon, FR, 28-30.10.2013*

Ref. ISL: PU-6070/2013

### **Invited paper**

#### **Fixed structure robust control design for the 155 mm canard-guided projectile roll-channel autopilot**

THEODOULIS S., GASSMANN V., BRUNNER T., WERNERT Ph.

*IEEE, 21st Mediterranean Conference on Control & Automation, Plataniass-Chania, GR, June 25-28, 2013*

Ref. ISL: PU-6085/2013

#### **Robust bank-to-turn autopilot design for a class of 155 mm spin-stabilized canard-guided projectiles**

THEODOULIS S., GASSMANN V., BRUNNER T., WERNERT Ph.

*AIAA Atmospheric Flight Mechanics Conference, Boston, US, August 19-22, 2013*

Ref. ISL: PU-6086/2013

#### **Micro pin interaction in fin vicinity at supersonic conditions**

MARTINEZ B., LIBSIG M., GAUTHIER Th., KLATT D.

*48th International Symposium of Applied Aerodynamics, ISL, Saint-Louis, FR, March 25-27, 2013*

Ref. ISL: PU-6088/2013

#### **PSP measurements on micro pin interaction in fin vicinity at supersonic conditions**

GAUTHIER Th., MARTINEZ B., LIBSIG M., KLATT D.

*15ème Congrès Français de Visualisation et de Traitement d'Images en Mécanique des Fluides, Orléans, FR, 18-22 novembre 2013 - © 2013 FLUVISU*

Ref. ISL: U-PU-6089/2013

### Peer reviewed publications

**Effects of explosive particle microstructure parameters on NQR parameters in RDX**  
SCHUNCK Th., BORNE L., SCHLESSER F., MORY J., HIMMELSBACH R., KRÜGER D., MERLAT L.

*Applied Magnetic Resonance* (2012), Vol. 43, No. 4, pp. 499-510 - © Springer-Verlag 2012  
Ref. ISL: PR-U-PU-6002/2013

**In-band pumped Ho<sup>3+</sup>:KY<sub>3</sub>F<sub>10</sub> 2- $\mu$ m laser**

SCHELLHORN M., PARISI D.\*, VERONESI S.\*, BOLOGNESI G.\*, EICHHORN M., TONELLI M.\*

*Optics Letters*, Vol. 38, No. 4/February 15, 2013, pp. 504-506 - © 2013 Optical Society of America

Ref. ISL: PR-U-PU-6006/2013

**High-energy Ho:LLF MOPA laser system using a top-hat pump profile for the amplifier stage**

SCHELLHORN M., EICHHORN M.

*Applied Physics B, Lasers and Optics*, 109, 351-357, (2012) - © Springer-Verlag 2012

Ref. ISL: PR-U-PU-6007/2013

**Pulse current characterization of SiC GTO thyristors with etched JTE**

SCHARNHOLZ S., HASSDORF R., PÂQUES G., VERGNE B., PLANSON D.

*Materials Science Forum Vols. 740-742* (2013) pp. 986-989 - © (2013) Trans Tech Publications, Switzerland

Ref. ISL: PR-U-PU-6010/2013

**Edge termination design improvements for 10 kV 4H-SiC bipolar diode**

NGUYEN M.\*, HUANG R.\*, PHUNG L.V.\*, PLANSON D.\*, BERTHOU M.\*, GODIGNON P.\*, VERGNE B., BROSELARD P.

*Materials Science Forum Vols. 740-742* (2013) pp. 986-989 - © (2013) Trans Tech Publications, Switzerland

Ref. ISL: PR-U-PU-6011/2013

**Payload acceleration using a 10-MJ DES railgun**

HUNDERTMARK S., SCHNEIDER M., VINCENT G.

*IEEE Transactions on Plasma Science*, Vol.41, No.5, pp.1455-1459, May 2013 - © 2013 IEEE

Ref. ISL: PR-U-PU-6027/2013

**Using the hexagonal segmented railgun in multishot mode with three projectiles**

VINCENT G., HUNDERTMARK S.

*IEEE Transactions on Plasma Science*, Vol. 41, No. 5, May 2013, pages 1431-1435

© 2013 IEEE

Ref. ISL: PR-U-PU-6032/2013

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\* not member of ISL

### **Fast wavefront sensing using a hardware parallel classifier chip**

PICHLER A., RAYMOND P., EICHHORN M.

*Applied Physics B*, DOI: 10.1007/s00340-013-5607-y - © Springer-Verlag Berlin Heidelberg

Ref. ISL: PR-U-PU-6038/2013

### **Dynamic fragmentation of planetary materials: Sub-hypervelocity ejecta measurements and velocity scaling**

HOGAN J.D.\*, SPRAY J.G.\*, ROGERS R.J.\*, VINCENT G., SCHNEIDER M.

*Planetary and Space Science*, Volume 87, October 2013, Pages 66-77

© 2013 Elsevier Ltd.

Ref. ISL: PR-U-PU-6053/2013

### **Dynamic fragmentation of planetary materials: Ejecta length quantification and semi-analytical modeling**

HOGAN J.D.\*, SPRAY J.G.\*, ROGERS R.J.\*, VINCENT G., SCHNEIDER M.

*International Journal of Impact Engineering* 62 (2013) 219-228 - © 2013 Elsevier Ltd.

Ref. ISL: PR-U-PU-6054/2013

### **Dynamic fragmentation of natural ceramic tiles: Ejecta measurements and kinetic consequence**

HOGAN J.D.\*, SPRAY J.G.\*, ROGERS R.J.\*, VINCENT G., SCHNEIDER M.

*International Journal of Impact Engineering* 58 (2013) 1-16 - © 2013 Elsevier Ltd.

Ref. ISL: PR-U-PU-6055/2013

### **A four-stage XRAM generator as inductive pulsed power supply for a small-caliber railgun**

LIEBFRIED O., BROMMER V.

*IEEE Transactions on Plasma Science*, Vol. 41, No. 10, pp. 2805-2809, October 2013

© 2013 IEEE

Ref. ISL: PR-U-PU-6063/2013

### **A high-power capacitor charger using IGBTs in a boost-converter topology**

BROMMER V., LIEBFRIED O., SCHARNHOLZ S.

*IEEE Transactions on Plasma Science*, Vol. 41, No. 10, pp. 2600-2604, October 2013

© 2013 IEEE

Ref. ISL: PR-U-PU-6064/2013

### **High-pulse energy mid-IR ZGP OPO**

SHELLHORN M., STÖPPLER G., BIGOTTA S., HILDENBRAND A., KIELECK C., EICHHORN M.

*Mid-Infrared Coherent Sources (MICS) 2013 paper: MW3B.1, Advanced Solid-State Lasers Congress Technical Digest* - © OSA 2013

Ref. ISL: PR-U-PU-6065/2013

### **Development of XRAM generators as inductive power sources for very high current pulses**

LIEBFRIED O., BROMMER V., SCHARNHOLZ S.

*Pulsed Power Conference (PPC), 2013 19th IEEE, June 16-21, 2013, pp.1-6* - © 2013 IEEE

Ref. ISL: PR-U-PU-6067/2013

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\* not member of ISL

### **Short-pulse Marx generator for high-power microwave applications**

PINGUET S., DUPÉROUX J.P., DELMOTE P., BIETH F., BISCHOFF R.

*IEEE Transactions on Plasma Science*, Vol. 41, No. 10, October 2013 - © 2013 IEEE

Ref. ISL: PR-U-PU-6069/2013

### **Transient 3-d simulation of an experimental railgun using finite element methods**

HUNDERTMARK S., ROCH M.

*Journal of Electrical Engineering*, Vol. 13/2013, Ed. 3, Art. 13.3.30 - © 2013 IEEE

Ref. ISL: PR-U-PU-6073/2013

### **Kilometer range filamentation**

DURAND M.\*, HOUARD A.\*, PRADE B.\*, MYSYROWICZ A.\*, DURÉCU A.\*, MOREAU B.\*,  
FLEURY D.\*, VASSEUR O.\*, BORCHERT H., DIENER K., SCHMITT R., THÉBERGE F.\*,  
CHATEAUNEUF M.\*, DAIGLE J.-F.\*, DUBOIS J.\*

*Optics Express*, Vol. 21, Issue 22, pp. 26836-26845 (2013) - © 2013 Optical Society of America

Ref. ISL: PR-U-PU-6074/2013

### **Velocity-induced current profiles inside the rails of an electric launcher**

LIEBFRIED O., SCHNEIDER M., STANKEVIC T.\*, BALEVICIUS S.\*, ZURAUŠKIENE N.\*

*IEEE Transactions on Plasma Science*, Vol. 41, No. 5, pp.1520-1525, May 2013 - © 2013 IEEE

in: *Proceedings of the 16th International Symposium on Electromagnetic Launch Technology (EML), 2012*

Ref. ISL: PR-U-PU-6028/2013

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### **Range-gated imaging with speckle-free and homogeneous laser illumination**

LAURENZIS M., POYET J.-M., LUTZ Y., MATWYSCHUK A., CHRISTNACHER F.

*Proceedings of SPIE Vol. 8542, 854203 (2012)* - © 2012 SPIE

Ref. ISL: U-PU-6003/2013

### **Design and performances of a compact, high-power, wideband electromagnetic source**

DELMOTE P., BIETH F., PINGUET S.

*EAPPC/BEAMS 2012 (4th Euro-Asian Pulsed Power Conference and the 19th International Conference on High-Power Particle Beams)*, Karlsruhe, DE, September 30 - October 4, 2012

Ref. ISL: PU-6009/2013

### **Refurbishment of a 30-MJ-pulsed power supply for pulsed power applications**

LIEBFRIED O., BROMMER V., SCHARNHOLZ S., SPAHN E.

*IEEE Transactions on Plasma Science*, Vol. 41, No. 5, pp.1285-1289, May 2013 - © 2013 IEEE

in: *Proceedings of the 16th International Symposium on Electromagnetic Launch Technology (EML), 2012*

Ref. ISL: PR-U-PU-6029/2013



### **Multimode antennas for nuclear quadrupole resonance detection of explosives**

ADAM R., SCHUNCK Th., MERLAT L.

*Second EU Conference on Detection of Explosives (EUCDE), Rome, IT, March 13-15, 2013*

Ref. ISL: PU-6030/2013

### **Nuclear Quadrupole Resonance detection of illicit substances: Aspects of NQR signatures**

SCHUNCK Th., BORNE L., BOHN M.\*, ADAM R., HIMMELSBACH R., KRÜGER D., MERLAT L.

*in: Proceedings of the Second EU Conference on Detection of Explosives (EUCDE) 2013*

Ref. ISL: PU-6031/2013

### **The application of liquid dielectrics in Marx generators**

BISCHOFF R., PINGUET S., DUPÉROUX J.P.

*EAPPC/BEAMS 2012 (4th Euro-Asian Pulsed Power Conference and 19th International Conference on High-Power Particle Beams), Karlsruhe, DE, September 30 - October 4, 2012*

Ref. ISL: PU-6041/2013

### **Influence of SPS parameters on the densification of YAG ceramics for laser applications**

KATZ A., BARRAUD E., LEMONNIER S., LERICHE A.\*, d'ASTORG S.\*

*EUROMAT 2013, Sevilla, ES, September 8-13, 2013*

Ref. ISL: PU-6045/2013

### **Novel non-planar ring cavity for enhanced beam quality in high-pulse-energy optical parametric oscillators**

EICHHORN M., STÖPPLER G., SCHÖNER J., SCHELLHORN M., BIGOTTA S.

*OSA Topical Meeting on Nonlinear Optics (NLO), Kohala Coast, Hawaii, USA, July 21-26, 2013 - © OSA 2013*

Ref. ISL: U-PU-6056/2013

### **Ho<sup>3+</sup>:LLF MOPA pumped RISTRA ZGP OPO at 3-5 μm**

STÖPPLER G., SCHELLHORN M., EICHHORN M.

*Nonlinear Frequency Generation and Conversion: Materials, Devices, and Applications XII (Ed.: K.L. Vodopyanov), Proc. of SPIE Vol. 8604, 86040I - © 2013 SPIE*

Ref. ISL: U-PU-6066/2013

### **In-band pumped Ho<sup>3+</sup>:KY<sub>3</sub>F<sub>10</sub> 2-μm laser**

SCHELLHORN M., PARISI D.\*, VERONESI S.\*, BOLOGNESI G.\*, EICHHORN M., TONELLI M.\*

*The European Conference on Lasers and Electro-Optics (CLEO\_Europe) 2013*

*paper: CA3\_3Sun - © 2013 IEEE*

Ref. ISL: U-PU-6072/2013

### **Compact high-power / high-energy 2 μm and mid-infrared laser sources for OCM**

KIELECK C., HILDENBRAND A., SCHELLHORN M., STÖPPLER G., EICHHORN M.

*Technologies for Optical Countermeasures X; and High-Power Lasers 2013: Technology and Systems (Ed.: D.H. Titterton, H. Ackermann, M.A. Richardson, W.L. Bohn, R.J. Grasso), Proc. of SPIE Vol. 8898, 889809 - © 2013 SPIE*

Ref. ISL: U-PU-6076/2013

\* not member of ISL

## Peer reviewed publications

### **Evaluating a linearized Euler equations model for strong turbulence effects on sound propagation**

EHRHARDT L., CHEINET S., JUVÉ D.\*, BLANC-BENON P.\*

*J. Acoust. Soc. Am.* 133 (4), April 2013, 1922-1933 - © 2013 Acoustical Society of America

Ref. ISL: PR-U-PU-6023/2013

### **Comparison of thoracic wall behavior in large animals and human cadavers submitted to an identical ballistic blunt thoracic trauma**

PRAT N.\*, RONGIERAS F.\*, DE FREMINVILLE H.\*, MAGNAN P., DEBORD E.\*, FUSAI T.\*, DESTOMBE C.\*, SARRON J.C.\*, VOIGLIO E.\*

*Forensic Science International*, Volume 222, Issue 1, pp. 179-185, 10 October 2012

© 2012 Elsevier Ireland Ltd.

Ref. ISL: PR-U-PU-6075/2013

### **New hybrid foam materials for impact protection**

JUNG A.\*, LACH E., DIEBELS S.\*

*International Journal of Impact Engineering* 64 (2014) 30-38 - © 2013 ELSEVIER Ltd.

Ref. ISL: PR-U-PU-6090/2013

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### **Results of the SCI-256 change detection trials in Amersfoort, NLD**

GOND L., SCHNEIDER A., MONNIN D.

*NATO SCI-256 Task Group on Route Threat Detection and Clearance Technologies*

© NATO RTO 2013 - NATO Restricted Releasable to Sweden

Ref. ISL: U-PU-6005/2013

### **Coding of range-gates with ambiguous sequences for extended three-dimensional imaging**

LAURENZIS M., BACHER E., METZGER N., SCHERTZER S., CHRISTNACHER F.

*Proceedings of SPIE Vol. 8542, 854204 (2012)* - © 2012 SPIE

Ref. ISL: U-PU-6004/2013

### **Explosive devices: Fragment dependent blast wave formation and its effects on a target structure**

RECK B., ECKENFELS D., LEGENDRE J.-F.

*8th International Nordmetall Colloquium, Adorf/Erzgebirge, DE, April 17-18, 2013*

Ref. ISL: PU-6018/2013

### **A numerical approach to the climatology of near-surface sound levels**

CHEINET S.

*Proceedings of Meetings on Acoustics, Vol. 19, 045026 (2013)* - © 2013 Acoustical Society of America

Ref. ISL: U-PU-6034/2013

**Source localization results for airborne acoustic platforms**

OSTASHEV V.E.\* , CHEINET S., COLLIER S.L.\* , REIFF Ch.\* , LIGON D.A.\* , WILSON D.K.\* , NOBLE J.M.\* , ALBERTS W.C.K. II\*

*Proceedings of Meetings on Acoustics, Vol. 19, 045025 (2013) - © 2013 Acoustical Society of America*

Ref. ISL: U-PU-6035/2013

**Hostile fire indicator threat data collection for helicopter-mounted applications**

NAZ P., HENGY S., De MEZZO S.

*SPIE Defense, Security, and Sensing 2013, Proceedings Vol. 8742, Baltimore, US, 29 April - 3 May 2013 - © 2013 SPIE*

Ref. ISL: U-PU-6036/2013

**Source localization results for airborne acoustic platforms in the 2010 Yuma Proving Ground test**

OSTASHEV V.E.\* , COLLIER S.L.\* , REIFF Ch.\* , CHEINET S., LIGON D.A.\* , WILSON D.K.\* , NOBLE J.M.\* , ALBERTS W.C.K. II\*

*Proc. SPIE Conference 8742 (Baltimore, Maryland, USA), Ground/Air Multisensor Interoperability, Integration and Networking for Persistent ISR IV, 87420K (May 22, 2013) doi:10.1117/12.2015152 - © SPIE 2013*

Ref. ISL: U-PU-6040/2013

**Blast-fragment interaction effects of explosive devices at close standoff**

RECK B., ECKENFELS D., LEGENDRE J.-F.

*15th International Symposium on the Interaction of the Effects of Munitions with Structures (ISIEMS), Potsdam, DE, September 16-20, 2013*

Ref. ISL: PU-6046/2013

**Image change detection using a SWIR active imaging system**

SCHNEIDER A., MONNIN D., LAURENZIS M., CHRISTNACHER F.

*Conference on Electro-Optical Remote Sensing VII, Dresden, DE, September 23-26, 2013; paper 8897-21 - © 2013 SPIE*

Ref. ISL: U-PU-6048/2013

**Comparison of three methods reducing the beam parameter product of a laser diode stack for long-range laser illumination applications**

LUTZ Y., POYET J.-M., METZGER N.

*Conference on Electro-Optical and Infrared Systems: Technology and Applications X, Dresden, DE, September 23-26, 2013; paper 8896-7 - © 2013 SPIE*

Ref. ISL: U-PU-6049/2013

**Invited Paper****Comparison of flash and accumulation mode in range-gated active imaging**

CHRISTNACHER F., LAURENZIS M., SCHERTZER S.

*Conference on Electro-Optical and Infrared Systems: Technology and Applications X, Dresden, DE, September 23-26, 2013; paper 8896-5 - © 2013 SPIE*

Ref. ISL: U-PU-6050/2013

### **Advanced range imaging with gated-viewing: compressed sensing and coding of range-gates**

LAURENZIS M., BACHER E., SCHERTZER S., CHRISTNACHER F.

*Conference on Electro-Optical and Infrared Systems: Technology and Applications X, Dresden, DE, September 23-26, 2013; paper 8896-6 - © 2013 SPIE*

Ref. ISL: U-PU-6051/2013

### **Invited Paper**

#### **Non-line-of-sight active imaging of scattered photons**

LAURENZIS M., VELTEN A.\*

*Conference on Electro-Optical Remote Sensing VII, Dresden, DE, September 23-26, 2013; paper 8897-5 - © 2013 SPIE*

Ref. ISL: U-PU-6052/2013

#### **Shaped charge jet penetration into masonry materials**

CHANTERET P.-Y., RECK B.

*27th International Symposium on Ballistics, Freiburg, DE, April 22-26, 2013*

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#### **Experimental study on the influence of weaving parameters on the ballistic performances of 3D fabrics**

CHEVALIER C., NUSSBAUM J., BOUSSU F.\*

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#### **Development of a new device for experimental study of the dynamic behaviour of ballistic yarns**

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POYET J.-M., CHRISTNACHER F., MEYER O.\*

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#### **Comparison of flash and accumulation mode in range-gated active imaging**

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\* not member of ISL

### **Computational optics in laser gated viewing: advanced range imaging and non-line-of-sight vision**

LAURENZIS M., VELTEN A.\*

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### **Investigation of explosively dispersed glass particles**

STURTZER C.A., STURTZER M.-O., VEYSSIÈRE B.\*, KHASAINOV B.\*

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### **Characterization of multiphase blast effects on infrastructure generated by explosive compositions containing high density inert material**

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### **Sound-localization performance with the hearing protectors**

ZIMPFER V., SARAFIAN D.

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*Ref. ISL: U-PU-6087/2013*