



energetic and advanced protective materials

Peer reviewed publications

Sulfates-based nanothermites: An expanding horizon for metastable interstitial composites

M. COMET, G. VIDICK*, F. SCHNELL, Y. SUMA, B. BAPS*, D. SPITZER

Angewandte Chemie (2015), Vol. 127, Issue 15, pp. 4538-4543 - © 2015 Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim
ISL-PR-U-PU 6052/2015

Sulfates-based nanothermites: An expanding horizon for metastable interstitial composites

M. COMET, G. VIDICK*, F. SCHNELL, Y. SUMA, B. BAPS*, D. SPITZER

Angewandte Chemie International Edition (2015), Vol. 54, No. 15, pp. 4458-4462 - © 2015 Wiley -VCH Verlag GmbH & Co. KGaA, Weinheim
ISL-PR-U-PU 6053/2015

Nanodiamond for tuning the properties of energetic composites

V. PICHOT, M. COMET, J. MIESCH, D. SPITZER

Journal of Hazardous Materials, 300 (2015), pp.194-201 - © 2015 Elsevier B.V.
ISL-PR-U-PU 6054/2015

Water interaction with hydrogenated and oxidized detonation nanodiamonds - Microscopic and spectroscopic analyses

S. STEHLIK*, T. GLATZEL*, V. PICHOT, R. PAWLAK*, E. MEYER*, D. SPITZER, B. REZEK*

in press: Diamond and related Materials, xxx, 2015 - © 2015 Elsevier B.V.
ISL-PR-U-PU 6055/2015

Low oxidation state and enhanced magnetic properties induced by raspberry shaped nanostructures of iron oxide

O. GERBER, B.P. PICHON*, C. ULHAQ*, J.-M. GRENÈCHE*, C. LEFEVRE*, I. FLOREA*, O. ERSEN*, D. BEGIN*, S. LEMONNIER, E. BARRAUD, S. BEGIN-COLIN*

The Journal of Physical Chemistry C 2015, 119, 24665-24673 - © 2015 American Chemical Society
ISL-PR-U-PU 6085/2015

Coupled electro-thermo-mechanical finite element modeling of the spark plasma sintering technique

M. SCHWERTZ, A. KATZ, E. SORREL, S. LEMONNIER, E. BARRAUD, A. CARRADO, S. d'ASTORG*, A. LERICHE*, M. NARDIN, M.F. VALLAT*, F. KOSIOR*

Metallurgical and Materials Transactions B, Vol. 46B, No. 6, December 2015
© 2015 The Minerals, Metals & Materials Society and ASM International
ISL-PR-U-PU 6086/2015

Experimental investigation of different ignition methods for LOVA gun propellant

B. BASCHUNG, BOUCHAMA*, M. COMET, C. BOULNOIS*

Proceedings of the 28th International Symposium on Ballistics, Atlanta/GA, US, September 22-26, 2014
© ISB 2014
ISL-U-PU 6046/2015

Modulation of the reactivity of a WO₃/Al energetic material with graphitized carbon black as additive

A. BACH, P. GIBOT, L. VIDAL*, R. GADIOU*, F. SCHNELL, D. SPITZER

Journal of Energetic Materials, 33 (2015) 260-276, 2015 - © 2015, Taylor & Francis Group, LLC
ISL-U-PU 6060/2015

Enhancement of the graphitic carbon nitride surface properties from calcium salts as templates

P. GIBOT, F. SCHNELL, D. SPITZER

Microporous Mesoporous Materials 219 (2016) 42-47 - © 2015 Elsevier Inc.
ISL-U-PU 6061/2015

Formation of H_xN-rich graphitic carbon nitride network from guanidine carbonate salt by pyrolysis

P. GIBOT, P. FIOUX*, F. SCHNELL, D. SPITZER

Diamond Related Materials 59 (2015) 7DS12 - © 2015 Elsevier B.V.

ISL-U-PU 6062/2015

Ca₃(PO₄)₂ biomaterial: A non toxic template to prepare highly porous Cr₂O₃

P. GIBOT, F. SCHNELL, D. SPITZER

Materials Letters 161 (2015) 172DS174 - © 2015 Elsevier B.V.

ISL-U-PU 6063/2015

Peer reviewed publications

On maximum bandwidth of rectangular cavity antennas with broadside radiation pattern

M. MARTINIS, K. MAHDJOUBI*, R. SAULEAU*, S. COLLARDEY*, L. BERNARD, G. VALERIO*
IEEE Antennas and Wireless Propagation Letters, Vol. 13, 2014, pp. 1709-1712 - © 2014 IEEE
ISL-PR-U-PU 6011/2015

Robust gain-scheduled autopilot design for spin-stabilized projectiles with a course-correction fuze

S. THEODOULIS, F. SEVE, Ph. WERNERT
Journal of Aerospace Science & Technology, Vol. 42 (2015), pp. 477- 489 - © 2015 Elsevier Masson SAS
ISL-PR-U-PU 6020/2015

Bandwidth behavior and improvement of miniature cavity antennas with broadside radiation pattern using a metasurface

M. MARTINIS, K. MAHDJOUBI*, R. SAULEAU*, S. COLLARDEY*, L. BERNARD
IEEE Transactions on Antennas and Propagation, Vol. 63, No. 5, May 2015, pp. 1899-1908 - © 2015 IEEE
ISL-PR-U-PU 6034/2015

Magnetometer-augmented IMU simulator: In-depth elaboration

T. BRUNNER, J.P. LAUFFENBURGER*, S. CHANGEY, M. BASSET*
Sensors MDPI 2015, Inertial Sensors and Systems, 15 (3), pp. 5293-5310
ISL-PR-PU 6035/2015

Data fusion for attitude estimation of a projectile: From theory to in-flight demonstration

S. CHANGEY, E. PECHEUR
Chapter 29 from Multisensor Data Fusion: From Algorithms and Architectural Design to Applications
© 2016 Taylor & Francis Group
ISL-PR-U-PU 6048/2015

Free flight measurement technique in shock tunnel

B. MARTINEZ, M. BASTIDE, P. WEY
30th AIAA Aerodynamic Measurement Technology and Ground Testing Conference, 2014, Atlanta/GA, US, June 16-20, 2014 - © 2014 AIAA
ISL-U-PU 6001/2015

Supersonic projectile steering using micro-actuators: Experimental and numerical flow study

M. LIBSIG, B. MARTINEZ, C. REY, Th. GAUTHIER
CFTL2014 - 14ème Congrès Francophone de Technique Laser, Marseille, FR, 15-19 septembre 2014
ISL-PU 6012/2015

Pitch axis control for a guided projectile in a wind tunnel-based Hardware-In-the-Loop setup

G. STRUB, V. GASSMANN, S. THEODOULIS, S. DOBRE, M. BASSET*
2015 AIAA SCITECH, Modeling and Simulation Technologies Conference, Kissimmee/FL, US, January 5-9, 2015
© 2015 AIAA
ISL-U-PU 6021/2015

Comparison of a cavity antenna with stacked patches and a metasurface-inspired design

M. MARTINIS, K. MAHDJOUBI*, R. SAULEAU*, S. COLLARDEY*, L. BERNARD
EuCAP'2015 - 9th European Conference on Antennas and Propagation, Lisbon, PT, April 12-17, 2015
© 2015 EurAAP
ISL-U-PU-6033/2015

A conical phased array for reliable and discrete communications

V. JAECK, L. BERNARD, K. MAHDJOUBI*, R. SAULEAU*, S. COLLARDEY*, P. POULIGUEN*, P. POTIER*
EuCAP'2015 - 9th European Conference on Antennas and Propagation, Lisbon, PT, April 12-17, 2015
© 2015 EurAAP
ISL-U-PU 6036/2015

Compact beam forming network for a switched phased array

V. JAECK, L. BERNARD, K. MAHDJOUBI*, R. SAULEAU*, S. COLLARDEY*, P. POULIGUEN*, P. POTIER*

EuCAP'2015 - 9th European Conference on Antennas and Propagation, Lisbon, PT, April 12-17, 2015

© 2015 EurAAP

ISL-U-PU 6037/2015

MarcoPolo-R ERC dynamic stability characterization. Open range free-flight tests

S. DOBRE, C. BERNER, M. ALBISSER, F. SAADA, E. CLOPEAU*, L. FERRACINA*, L. MARRAFFA*

8th European Symposium on Aerothermodynamics for Space Vehicles, Lisbon, PT, March 2-6, 2015

© European Space Agency

ISL-U-PU 6039/2015

Recent advances in antenna field at ISL

L. BERNARD, V. JAECK, M. MARTINIS, C. THOMAS, R. ADAM, E. BIEBER

Workshop Unistra-ISL-UHA, University of Strasbourg, Illkirch Grafenstaden, FR, July 7-8, 2015

ISL-PU 6041/2015

Intégration de capteurs magnétiques dans des algorithmes de navigation pour la localisation de véhicule de manière absolue

S. CHANGEY, Multiple authors

Workshop Unistra-ISL-UHA, University of Strasbourg, Illkirch Grafenstaden, FR, July 7-8, 2015

ISL-PU 6043/2015

Synthèse de diagrammes de réseaux d'antennes de géométrie 3D

V. JAECK, L. BERNARD, K. MAHDJOUBI*, R. SAULEAU*, S. COLLARDEY*, P. POTIER*, P. POULIGUEN*

XIXèmes Journées Nationales Micro-ondes, Bordeaux, FR, 2-5 juin 2015 - © JNM'15

ISL-U-PU 6045/2015

Experimental investigations on a free-flying supersonic projectile model submitted to an electric discharge generating plasma

P. GNEMMI, C. REY

ISSW30 - 30th International Symposium on Shock Waves, Tel Aviv, Israel, July 19-24, 2015

ISL-PU 6057/2015

Recent developments at the ISL open range test site and related measurement techniques

C. BERNER, S. DOBRE, M. ALBISSER

66th Aeroballistic Range Association Meeting, San Antonio/TX, US, October 4-9, 2015

ISL-PU 6058/2015

Supersonic projectile steering using micro-actuators: experimental and numerical study

M. LIBSIG, B. MARTINEZ, C. REY, Th. GAUTHIER, P. WEY, C. BERNER

33rd AIAA Applied Aerodynamics Conference, pp. 2411-2423, Dallas/TX, US, June 22-26, 2015 - © 2015 AIAA

ISL-U-PU 6068/2015

Motion measurement of a wind tunnel model by stereovision technique

B. MARTINEZ, D. BIDINO, M. BASTIDE, C. DEMEAUTIS, P. WEY, F. LEOPOLD

31st AIAA Aerodynamic Measurement Technology and Ground Testing, Dallas/TX, US, June 22-26, 2015

© 2015 AIAA

ISL-U-PU 6091/2015

Performance improvement of a motor speed controller for low-cost MAVs

E. ROUSSEL, V. GASSMANN, E. LAROCHE*

CEAS EuroGNC Conference 2015, Toulouse, FR, April 13-15, 2015 - © 2015 Springer

ISL-U-PU 6099/2015

Pitch axis control for a guided projectile in a wind tunnel-based hardware-in-the-loop setup

G. STRUB, V. GASSMANN, S. THEODOULIS, S. DOBRE

Journée GT MOSAR, French-German Research Institute of Saint-Louis (ISL), Saint-Louis, FR, April 23, 2015

ISL-PU 6101/2015

Hardware-in-the-loop experimental setup development for a guided projectile in a wind tunnel

G. STRUB, V. GASSMANN, S. THEODOULIS, S. DOBRE

Workshop Unistra-ISL-UHA, University of Strasbourg, Illkirch Grafenstaden, FR, July 7-8, 2015

ISL-PU 6102/2015

Nonlinear flight simulator of a canard-guided spin-stabilized projectile

F. SEVE, S. THEODOULIS, M. ZASADZINSKI*, M. BOUTAYEB*, Ph. WERNERT

CEAS EuroGNC Conference 2015, Toulouse, FR, April 13-15, 2015 - © 2015 Springer

ISL-U-PU 6103/2015

LPV/LFR modelling and analysis of a highly agile missile

S. FLEISCHMANN, S. THEODOULIS, J.-P. HARCAUT*, E. LAROCHE*, E. WALLNER*

Journée GT MOSAR, French-German Research Institute of Saint-Louis (ISL), Saint-Louis, FR, April 23, 2015

ISL- PU 6106/2015

Peer reviewed publications

6.5 W ZnGeP₂ OPO directly pumped by a Q-switched Tm³⁺-doped single-oscillator fiber laser

C. KIELECK, A. BERROU, B. DONELAN, B. CADIER*, T. ROBIN*, M. EICHHORN

Optics Letters, Vol. 40, Issue 6, pp. 1101-1104 (2015) - © 2015 Optical Society of America

ISL-PR-U-PU-6016/2015

Actively mode-locked Tm³⁺-doped silica fiber laser with wavelength-tunable, high average output power

C. KNEIS, B. DONELAN, A. BERROU, I. MANEK-HÖNNINGER*, T. ROBIN*, B. CADIER*, M. EICHHORN, C. KIELECK

Optics Letters, Vol. 40, No. 7, April 1, 2015 - © 2015 Optical Society of America

ISL-PR-U-PU-6022/2015

The use of a railgun facility for dynamic fracture of brittle materials

M. SCHNEIDER, G. VINCENT, J.D. HOGAN*, J.G. SPRAY*

IEEE Transactions on Plasma Science, Vol. 43, Issue 5, pp. 1162-1166 - © 2015 IEEE

ISL-PR-U-PU 6023/2015

Using the SR13-60 railgun in augmented mode

G. VINCENT, S. HUNDERTMARK

IEEE Transactions on Plasma Science, Vol. 43, Issue 5, pp. 155-1558 - © 2015 IEEE

ISL-PR-U-PU 6024/2015

Temperature dependence of 4H-SiC ionization rates using Optical Beam Induced Current

H. HAMAD*, C. RAYNAUD*, P. BEVILACQUA*, S. SCHARNHOLZ, D. PLANSON*

Materials Science Forum, Vols 821-823 (2015), pp. 223-228 - © 2015 Trans Tech Publications, Switzerland

ISL-PR-U-PU-6038/2015

Experimental tests for Lithium batteries discharged by high power pulses

M. MARRACCI*, B. TELLINI*, O. LIEBFRIED, V. BROMMER

International Instrumentation and Measurement Technology Conference (I²MTC), Pisa, IT, May 11-14, 2015 - © 2015 IEEE

ISL-PR-U-PU-6047/2015

A high-pressure, flowing liquid dielectric pulse forming line

R. BISCHOFF

IEEE Transactions on Plasma Science, Vol. 43, No. 10, October 2015, pp. 3381-3384 - © 2015 IEEE

ISL-PR-U-PU-6076/2015

Further experiments with a UHF radio link to a railgun projectile

S. HUNDERTMARK, Y. SCHAEFFER, D. SIMICIC, G. VINCENT

17th International Symposium on Electromagnetic Launch Technology (EML), 2014, La Jolla/CA, US, July 07-11, 2014 © 2014

IEEE

ISL-U-PU-6002/2015

Acceleration of aluminum booster projectiles with PEGASUS

S. HUNDERTMARK, D. SIMICIC, G. VINCENT

17th International Symposium on Electromagnetic Launch Technology (EML), 2014, La Jolla/CA, US, July 07-11, 2014 © 2014

IEEE

ISL-U-PU-6003/2015

Using the SR13-60 railgun in augmented mode

G. VINCENT, S. HUNDERTMARK

17th International Symposium on Electromagnetic Launch Technology (EML), 2014, La Jolla/CA, US, July 07-11, 2014 © 2014

IEEE

ISL-U-PU-6004/2015

A scenario for a future European shipboard railgun

S. HUNDERTMARK, D. LANCELLE*

17th International Symposium on Electromagnetic Launch Technology (EML), 2014, La Jolla/CA, US, July 07-11, 2014 © 2014 IEEE

ISL-U-PU-6005/2015

Experiments to increase the used energy with the PEGASUS railgun

S. HUNDERTMARK, M. SCHNEIDER, D. SIMICIC, G. VINCENT

IEEE Transactions on Plasma Science, Vol. 42, Issue: 10, October 2014 - © 2014 IEEE

ISL-U-PU-6006/2015

The modular augmented staged electromagnetic launcher operated in the energy storage mode

M. ROCH, S. HUNDERTMARK, M.J. LÖFFLER*, P. ZACHARIAS*

17th International Symposium on Electromagnetic Launch Technology (EML), La Jolla/CA, US, July 07-11, 2014

© IEEE 2014

ISL-U-PU 6007/2015

A high-power capacitor charger using IGBTs in a boost converter system

V. BROMMER, O. LIEBFRIED, S. SCHARNHOLZ

La Revue 3EI, n°79, Janvier 2015 - © 2015 SEE - Société de l'électricité, de l'électronique et des technologies de l'information et de la communication

ISL-U-PU-6014/2015

6.5 W mid-infrared ZnGeP2 parametric oscillator directly pumped by a Q-switched Tm³⁺-doped single-oscillator fiber laser

C. KIELECK, A. BERROU, B. DONELAN, B. CADIER*, T. ROBIN*, M. EICHHORN

Proc. of SPIE, Volume 9347, Nonlinear Frequency Generation and Conversion: Materials, Devices, and Applications XIV, February 27, 2015 - © 2015 SPIE

ISL-U-PU-6017/2015

Invited Paper -

Spectroscopic foundations of lasers: Spontaneous emission into a resonator mode

M. EICHHORN, M. POLLNAU*

IEEE Journal of Selected Topics in Quantum Electronics, Vol. 21, No. 1, January/February 2015 - © 2015 SPIE

ISL-U-PU-6018/2015

4.5 W mid-infrared supercontinuum generation in a ZBLAN fiber pumped by a Q-switched mode-locked Tm³⁺-doped fiber laser

C. KNEIS, B. DONELAN, A. BERROU, I. MANEK-HÖNNINGER*, B. CADIER*, T. ROBIN*, M. POULAIN*, F. JOULAIN*

Proc. SPIE 9342, Solid State Lasers XXIV: Technology and Devices, February 20, 2015 - © 2015 SPIE

ISL-U-PU-6019/2015

120-mJ Mid-Infrared ZnGeP2 FIRE OPO

M. EICHHORN, M. SCHELLHORN, M.W. HAAKESTADT*, H. FONNUM*, E. LIPPERT*

Nonlinear Optics (NLO), Kauai, HI/US, July 26-31, 2015

ISL-PU-6050/2015

Advances in mid-infrared nanosecond OPOs directly pumped by Tm³⁺-doped and Tm³⁺, Ho³⁺-co-doped fiber lasers

C. KIELECK, B. DONELAN, A. DHOLLANDE, C. KNEIS, M. SCHELLHORN, M. EICHHORN

Advanced Solid State Lasers Conference and Exhibition, Berlin, DE, October 4-9, 2015 - © 2015 OSA

ISL-U-PU-6064/2015

Mid-IR supercontinuum generation in ZBLAN fibers with high output power and high conversion efficiency

C. KNEIS, T. ROBIN*, B. CADIER*, F. JOULAIN*, M. POULAIN*, I. MANEK-HÖNNINGER*,

M. EICHHORN, C. KIELECK

Advanced Solid State Lasers Conference and Exhibition, Berlin, DE, October 4-9, 2015 - © 2015 OSA

ISL-U-PU-6065/2015

Single-frequency Q-switched operation of a resonantly pumped Ho:KY3F10 laser with a twisted mode cavity using pre-pulse control

M. SCHELLHORN, C. BOLLIG*, D. PARISI*, M. TONELLI*, M. EICHHORN

Advanced Solid State Lasers Conference and Exhibition, Berlin, DE, October 4-9, 2015 - © 2015 OSA

ISL-U-PU-6066/2015

Progress in resonantly pumped Ho³⁺:KY₃F₁₀ laser

M. SCHELLHORN, C. BOLLIG*, D. PARISI*, M. TONELLI*, M. EICHHORN

4th French-German Workshop on Oxide, Dielectrics and Laser Crystals, ISL, Saint-Louis, FR, September 09-10, 2015

ISL-PU-6067/2015

Mid-infrared fiber lasers. Final Report of Task Group 095

I.D. AGGARWAL*, M. EICHHORN, H. HEISELBERG*, C. KIELECK, E. LIPPERT*, R. D. PETERSON*, J. SANGHERA*, J. SWIDERSKI*, F. THÉBERGE*, D. H. TITTERTON*, D. VINCENT*

Science & Technology Organization, STO Technical Report - STO-TR-SET-170 - © 2015 STO/NATO

ISL-U-PU-6069/2015

Laser-induced damage study at 1.064 and 2.09 μm of high optical quality CdSiP₂ crystal

A. DHOLLANDE, C. KIELECK, G. MARCHEV*, P. G. SCHUNEMANN*, K. T. ZAWILSKI*, V. PETROV*, M. EICHHORN

Advanced Solid State Lasers Conference and Exhibition, Berlin, DE, October 4-9, 2015 - © 2015 OSA

ISL-U-PU-6070/2015

Experimental study of the system parameters for the operation of a liquid dielectric Marx generator

R. BISCHOFF

20th IEEE International Pulsed Power Conference (PPC) 2015, Austin/TX, US, May 31-June 4, 2015 - © 2015 IEEE

ISL-U-PU-6077/2015

Determination of 4H-SiC ionization rates using OBIC based on two-photon absorption

H. HAMAD*, C. RAYNAUD*, P. BEVILACQUA*, S. SCHARNHOLZ, B. VERGNE, D. PLANSON*

International Conference on Silicon Carbide and Related Materials (ICSCRM), Giardini Naxos, IT, October 04-09, 2015

ISL-PU-6081/2015

Precise automated semiconductor characterization under ambient control (PASChAC) - An advanced test bench for high-voltage semiconductor devices

B. VERGNE, S. SCHARNHOLZ, R. HASSDORF, D. PLANSON*, D. TOURNIER*, P. BROSELARD*

19th International Symposium on High Voltage Engineering, Pilsen, CZ, August 23-28, 2015 - © 2015 ISH

ISL-U-PU-6082/2015

An ultrafast I(V) measurement technique accounting for capacitive and leakage currents in reverse mode for SiC power devices

J.-B. FONDER*, P. BROSELARD*, D. TOURNIER*, M. BERTHOU*, B. VERGNE

International Conference on Silicon Carbide and Related Materials (ICSCRM), Giardini Naxos, IT, October 04-09, 2015

ISL-PU-6083/2015



protection technologies, security, situational awareness

Peer reviewed publications

Description of the yield state of bioplastics on examples of starch-based plastics and PLA/PBAT blends

T. FRAS, M. NISHIDA*, A. RUSINEK*, R.B. PECHERSKI*, N. FUKUDA*
ENGINEERING TRANSACTIONS - Engng. Trans. - 62, 4, pp. 329-354, 2014 - © 2014 Institute of Fundamental Technological Research
ISL-PR-U-PU-6010/2015

Study of blast and shock wave mitigation by wet aqueous foam

C. BREDÁ, S. KERAMPARAN*, M.-O. STURTZER, M. ARRIGONI*, J.F. LEGENDRE, Y.-M. SCOLAN*
23rd Military Aspects of Blast and Shock, Oxford, UK, September 7-12, 2014
ISL-PR-PU-6013/2015

Sensitivity of shot detection and localization to environmental propagation

S. CHEINET, T. BROGLIN
Applied Acoustics, Vol. 93 (2015), pp. 97-105 - © 2015 Elsevier Ltd.
ISL-PR-U-PU-6015/2015

Comprehensive evaluation of coagulation in swine subjected to isolated primary blast injury

N. PRAT*, R. MONTGOMERY*, A.P. CAP*, M.A. DUBICK*, J.C. SARRON*, C. DESTOMBE*, P. MAY*,
P. MAGNAN
SHOCK, Vol. 43, No. 6, pp. 598-603, 2015 - © 2015 Shock Society
ISL-PR-U-PU-6044/2015

Chip calorimetry for the sensitive identification of hexogen and pentrite from their decomposition inside copper oxide nanoparticles

K. BONNOT, D. DOBLAS, F. SCHNELL, L. SCHLUR, D. SPITZER
Analytical Chemistry 2015, 87 (18), pp. 9494-9499 - © 2015 American Chemical Society
ISL-PR-U-PU-6056/2015

Multiple-return single-photon counting of light in flight and sensing of non-line-of-sight objects at shortwave infrared wavelengths

M. LAURENZIS, J. KLEIN*, E. BACHER, N. METZGER
Optics Letters, Vol. 40, No. 20, pp. 4815-4818, October 15, 2015 - © 2015 Optical Society of America
ISL-PR-U-PU-6059/2015

Primary blast injury on thorax: a critical review of the studies and their outcomes

J. BOUTILLIER, C. DECK*, R. WILLINGER
IRCOBI Conference, Lyon, FR, September 9-11, 2015
ISL-PR-PU-6071/2015

Bio-inspired approach for intelligent unattended ground sensors

N. HUEBER, P. RAYMOND, C. HENNEQUIN, A. PICHLER, M. PERROT, Ph. VOISIN, J.P. MOEGLIN
Proc. of SPIE Vol. 9494, 94940. Next-Generation Robotics II and Machine Intelligence and Bio-inspired Computation: Theory and Applications IX - © 2015 SPIE
ISL-PR-U-PU-6073/2015

Protective performance of hybrid metal foams as MMOD shields

A. KLAUZAR, M. CHIROLI, A. JUNG*, B. RECK
Procedia Engineering, Vol. 103, 2015, pp. 294-301 - © 2015 Elsevier Ltd.
ISL-PR-PU-6074/2015

Perforation of aluminum plates by fragment simulating projectiles (FSP)

T. FRAS, L. COLARD, P. PAWLOWSKI*
The International Journal of Multiphysics, 2015, Vol. 9, No. 3 - © 2015 Multi-Science Publishing
ISL-PR-U-PU-6075/2015

Rifle impulse noise affects middle-ear compliance in soldiers wearing protective earplugs

A. JOB*, P. HAMERY, S. De MEZZO, J.C. FIALAIRE*, A. ROUX*, M. UNTEREINER*, F. CARDINALE*,
H. MICHEL*, C. KLEIN*, B. BELCOURT*

International Journal of Audiology, Vol. 55, Issue 1, January 2016 - © 2016 British Society of Audiology

ISL-PR-U-PU-6079/2015

Improved mechanical properties by nanostructuring - Special considerations under dynamic load conditions

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

Handbook of Mechanical Nanostructuring, Vol. 1, 2015 - © 2015 Wiley-VCH Verlag

ISL-PR-U-PU-6080/2015

Influence of gating and of the gate shape on the penetration capacity of range-gated active imaging in scattering environments

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

Optics Express, Vol. 23, No. 26, pp. 32897-32908 (2015) - © 2015 Optical Society of America

ISL-PR-U-PU-6107/2015

A multi-purpose vehicle simulant to study blast protection

M.-O. STURTZER, F. RONDOT, J.F. LEGENDRE

Light-Weight Armour Group for Defence & Security (LWAG) Industry Focus Day and Symposium, Ryn, Poland, September 15-18, 2014

ISL-PU-6008/2015

Transporting longitudinal polarized electromagnetic waves

K. KALTENECKER, A. TUNIZ*, B.T. KUHLMEY*, A. ARGYROS*, M. WALTHER*, B.M. FISCHER

8th Terahertz Days Conference, Arêches Beaufort, FR, March 31-April 2, 2015

ISL-PU 6025/2015

AlyPOTEC - Analysis of pharmaceutical counterfeits using terahertz technology

S. ENGELBRECHT, D. SIMICIC, H. SCHARF, B.M. FISCHER, F. ROSA*, Ph. ESPEAU*

WISG15, Workshop Interdisciplinaire sur la Sécurité Globale, Troyes, FR, 03-04 février 2015

ISL-PU 6026/2015

Study of the thermo-mechanical behavior of aeronautical composite materials submitted to a laser irradiation

V. ALLHEILY, F. LACROIX, A. EICHHORN, G. L'HOSTIS*, B. DURAND*, L. MERLAT

Journées Nationales des Procédés Laser pour l'Industrie (JNPLI 2015), La Cité - Centre des Congrès, Nantes, FR, 28-30 avril 2015

ISL-PU-6027/2015

Improvement Of optical and acoustical Technologies for the Protection (IMOTEP)

S. HENGY, M. LAURENZIS, A. SCHNEIDER, V. ZIMPFER

NATO MP-IST-SET-126-22 Symposium, Norfolk, Virginia, USA, May 2015 - © 2015 NATO RTO

ISL-U-PU-6028/2015

Study of single photon counting for non-line-of-sight vision

M. LAURENZIS, F. CHRISTNACHER, J. KLEIN*, M. HULLIN*, A. VELTEN*

Proceedings of SPIE, Vol. 9492, 94920K - *Advanced Photon Counting Techniques IX* - © 2015 SPIE

ISL-U-PU-6029/2015

Electro-optical detection probability of optical devices determined by bidirectional laser retro-reflection cross section

M. LAURENZIS, F. CHRISTNACHER, A. MATWYSCHUK, S. SCHERTZER, S. HENGY

Proceedings of SPIE Vol. 9461, 94611L - *Radar Sensor Technology XIX; and Active and Passive Signatures VI*

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Study of a dual mode SWIR active imaging system for direct imaging and non-line-of-sight vision

M. LAURENZIS, F. CHRISTNACHER, A. VELTEN*

Proceedings of SPIE Vol. 9465, 946509 - Laser Radar Technology and Applications XX; and Atmospheric Propagation XII - © 2015 SPIE

ISL-U-PU-6031/2015

Acoustic sensor network for hostile fire indicator for ground bases and helicopter-mounted applications

P. NAZ, S. HENGY, M. LAURENZIS

Proceedings of SPIE Vol. 9464 94640G-1 - Ground/Air Multisensor Interoperability, Integration, and Networking for Persistent ISR VI - © 2015 SPIE

ISL-U-PU-6032/2015

Degradation of front-back spectral cues induced by tactical communication and protective systems

T. JOUBAUD*, V. ZIMPFER, A. GARCIA*, C. LANGRENNE*

EuroNoise2015 - 10th European Congress on Noise Control Engineering, Maastricht, NL, May 31-June 3, 2015

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Time-domain modeling for impulse source localization in urban environments

S. CHEINET, S. (ISL); EHRHARDT, L. (ISL); BROGLIN, T. (ISL)

EuroNoise2015 - 10th European Congress on Noise Control Engineering, Maastricht, NL, May 31-June 3, 2015

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Active-imaging-based underwater navigation

D. MONNIN, G. SCHMITT, C. FISCHER, M. LAURENZIS, F. CHRISTNACHER

Proceedings of SPIE Vol. 9649, Electro-Optical Remote Sensing, Photonic Technologies, and Applications IX © 2015

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Improvement of optical and acoustical technologies for the protection of camps or mobile troops: Poject IMOTEP

S. HENGY, M. LAURENZIS, B.M. FISCHER, P. NAZ, V. ZIMPFER

10th Security Research Conference: Future Security, Berlin, DE, September 15-17, 2015 - © 2015 Fraunhofer IOSB

ISL-U-PU-6051/2015

Real-time movement detection and analysis for video surveillance applications

N. HUEBER, C. HENNEQUIN, P. RAYMOND, J.P. MOEGLIN

SPIE Proceedings, Vol. 9079, June 2014 - © Society of Photo-Optical Instrumentation Engineers

ISL-U-PU 6072/2015

Very high level impulse noises and hearing protection

P. HAMERY, V. ZIMPFER, K. BUCK, S. De MEZZO

EuroNoise2015 - 10th European Congress on Noise Control Engineering, Maastricht, NL, May 31-June 3, 2015

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Matrix active imaging system of direct conversion tomographic data into a color image 3D (MAITO-DIC)

A. MATWYSCHUK, E. BACHER, N. METZGER

14ème colloque international francophone du Club CMOI/SFO «Contrôles et Mesures Optiques pour l'Industrie» Pleumeur-Bodou/Lannion, FR, 16-20 novembre 2015 - © 2015 Club CMOI/SFO

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Instantaneous generation of spatial diversity for speckle contrast reduction

Y. LUTZ

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Methodology for the conception of speckle reduction elements in the case of short pulse illumination

Y. LUTZ, J.-M. POYET

SPIE Defense and Security, Toulouse, FR, September 21-24, 2015 - © 2015 SPIE

ISL-U-PU-6088/2015

Advanced laser-based imaging technologies for situational awareness in unmanned vehicles

B.M. FISCHER, M. LAURENZIS, F. CHRISTNACHER, D. MONNIN, A. MATWYSCHUK

10th Security Research Conference: Future Security, Berlin, DE, September 15-17, 2015 - © 2015 Fraunhofer IOSB

ISL-U-PU-6089/2015

General overview of the active imaging

A. MATWYSCHUK, F. CHRISTNACHER

Séminaire Vision nocturne bas niveau de lumière, DGA, Toulouse, FR, 04-05/11/2015

ISL-PU-6090/2015

Optical tracking of non-line-of-sight objects in real time

J. KLEIN*, J. MARTIN*, M. LAURENZIS, M. HULLIN*

5th Workshop on Active Imaging, French-German Research Institute of Saint-Louis (ISL), Saint-Louis, FR, November 18-19, 2015

ISL-PU-6092/2015

Sniper detection in a heterogeneous sensor network and optical non-line of sight localization

M. LAURENZIS, F. CHRISTNACHER

8. Tagung Optik und Optronik in der Wehrtechnik der Deutschen Gesellschaft für Wehrtechnik eV (DWT), Hamburg, DE, 21.-23.

September 2015 - © 2015 DWT-SGW

ISL-U-PU-6093/2015

On the penetration capacity of range-gated active imaging in scattering environment

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

5th Workshop on Active Imaging, French-German Research Institute of Saint-Louis (ISL), Saint-Louis, FR, November 18-19, 2015

ISL-PU-6094/2015

Acoustical and optical UAV detection

F. CHRISTNACHER, A. MATWYSCHUK, S. HENGY, N. METZGER, E. BACHER, S. SCHERTZER, G. SCHMITT, P. NAZ

5th Workshop on Active Imaging, French-German Research Institute of Saint-Louis (ISL), Saint-Louis, FR, November 18-19, 2015

ISL-PU-6095/2015

Multiple-return time correlated single photon counting at shortwave infrared wavelength

M. LAURENZIS, J. KLEIN*, E. BACHER, N. METZGER

5th Workshop on Active Imaging, French-German Research Institute of Saint-Louis (ISL), Saint-Louis, FR, November 18-19, 2015

ISL-PU-6096/2015

Hue-preserving local contrast enhancement and illumination compensation for outdoor color images

M. TEKTONIDIS, D. MONNIN, F. CHRISTNACHER

Proceedings of SPIE Electro-Optical Remote Sensing, Photonic Technologies, and Applications IX, SPIE Security + Defence, Toulouse, FR, 21-24 September 2015 - © 2015 SPIE

ISL-U-PU-6097/2015

Study of factors governing intelligibility in multi-speaker environments from an experiment with a large panel of listeners

P. CHEVRET*, V. ZIMPFER

InterNoise 2015 - 44th International Congress and Exposition on Noise Control Engineering, San Francisco/CA, USA, August 07-12, 2015

ISL-U-PU 6098/2015

Active-imaging-based underwater navigation

D. MONNIN, G. SCHMITT, C. FISCHER, M. LAURENZIS, F. CHRISTNACHER

5th Workshop on Active Imaging, French-German Research Institute of Saint-Louis (ISL), Saint-Louis, FR, November 18-19, 2015

ISL-PU-6100/2015

Interference effects in laser illumination using a lightpipe

J.-M. POYET

5th Workshop on Active Imaging, French-German Research Institute of Saint-Louis (ISL), Saint-Louis, FR, November 18-19, 2015

ISL-PU-6104/2015

Measurement of high level impulse noise for the use with different damage risk criteria

K. BUCK, P. HAMERY, S. De MEZZO, F. KÖNIGSTEIN

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