

# **SCINT 2001: 6th International Conference on Inorganic Scintillators**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **Light output and energy resolution of Ce<sup>3+</sup> doped scintillators**

*Wednesday, 19 September 2001 11:00 (30 minutes)*

**Primary author:** DORENBOS, P

**Presenter:** DORENBOS, P

**Session Classification:** New Scintillators : NS2

Contribution ID: 2

Type: **not specified**

## **Development of YAlO<sub>3</sub>: Ce scintillator: Influence of Zr<sup>4+</sup> co-doping**

*Wednesday, 19 September 2001 11:30 (20 minutes)*

**Primary author:** MARES, J

**Presenter:** MARES, J

**Session Classification:** New Scintillators : NS2

Contribution ID: 3

Type: **not specified**

## **Scintillation properties of LaBr<sub>3</sub>:Ce<sup>3+</sup> crystals: Fast, Efficient and High energy resolution scintillators**

*Wednesday, 19 September 2001 11:50 (20 minutes)*

**Primary author:** VAN LOEF, E

**Presenter:** VAN LOEF, E

**Session Classification:** New Scintillators : NS2

Contribution ID: 4

Type: **not specified**

## **Optical properties of Ce<sup>3+</sup> and Gd<sup>3+</sup>- doped sol gel silicate Glasses**

*Wednesday, 19 September 2001 12:10 (20 minutes)*

**Primary author:** VEDDA, A

**Presenter:** VEDDA, A

**Session Classification:** New Scintillators : NS2

Contribution ID: 5

Type: **not specified**

# Application in High Energy Physics and Nuclear Physics

*Thursday, 20 September 2001 08:30 (30 minutes)*

**Primary author:** CARLSON, P

**Presenter:** CARLSON, P

**Session Classification:** Detectors for Physics 2 (DP2)

Contribution ID: 6

Type: **not specified**

## **Development of a compact photon detector for ANKE at COSY Jülich**

*Thursday, 20 September 2001 09:00 (20 minutes)*

**Primary author:** HEJNY, H

**Presenter:** HEJNY, H

**Session Classification:** Detectors for Physics 2 (DP2)

Contribution ID: 7

Type: **not specified**

## **Scintillators for photon detection at medium energies- a comparative study of BaF<sub>2</sub>, CeF<sub>3</sub> and PbWO<sub>4</sub>**

*Thursday, 20 September 2001 09:20 (20 minutes)*

**Primary author:** NOVOTNY, R

**Presenter:** NOVOTNY, R

**Session Classification:** Detectors for Physics 2 (DP2)



Contribution ID: 8

Type: **not specified**

## **Endcap calorimeter of KEDR detector based on CsI(Na) crystals**

*Thursday, 20 September 2001 09:40 (20 minutes)*

**Primary author:** ORESHKIN, S

**Presenter:** ORESHKIN, S

**Session Classification:** Detectors for Physics 2 (DP2)

Contribution ID: 9

Type: **not specified**

## **Bright Ultrafast Scintillation from Wide Band Gap Semiconductors**

*Thursday, 20 September 2001 11:00 (30 minutes)*

**Primary author:** DERENZO, S

**Presenter:** DERENZO, S

**Session Classification:** New Scintillators 3 (NS3)

Contribution ID: **10**

Type: **not specified**

## **Interest of thin scintillating films**

*Thursday, 20 September 2001 11:30 (20 minutes)*

**Primary author:** DUJARDIN, C

**Presenter:** DUJARDIN, C

**Session Classification:** New Scintillators 3 (NS3)

Contribution ID: 11

Type: **not specified**

## **Crystal growth and luminescence properties of Li<sub>2</sub>B<sub>4</sub>O<sub>7</sub>: Ce, In, Ni, Cu, Ti**

*Thursday, 20 September 2001 11:50 (20 minutes)*

**Primary author:** ISHII, M

**Presenter:** ISHII, M

**Session Classification:** New Scintillators 3 (NS3)

Contribution ID: 12

Type: **not specified**

## **Application perspective of cadmium-containing crystals based on tungstates and double tungstates**

*Thursday, 20 September 2001 12:10 (20 minutes)*

**Primary author:** NAGORNAYA, L

**Presenter:** NAGORNAYA, L

**Session Classification:** New Scintillators 3 (NS3)

Contribution ID: 13

Type: **not specified**

## **Alpha-gamma pulse shape discrimination in CsI:Tl, CsI: Na and BaF2 scintillators**

*Thursday, 20 September 2001 15:00 (20 minutes)*

**Primary author:** DINCA, L

**Presenter:** DINCA, L

**Session Classification:** Industrial Applications (IA)

Contribution ID: 14

Type: **not specified**

## **Radon gamma-ray spectrometry with YAP: Ce scintillator**

*Thursday, 20 September 2001 15:20 (20 minutes)*

**Primary author:** PLASTINO, W

**Presenter:** PLASTINO, W

**Session Classification:** Industrial Applications (IA)

Contribution ID: 15

Type: **not specified**

## **Detection of low activities with the use of inorganic scintillators: the optimal way of processing the spectrum of scintillation signals**

*Thursday, 20 September 2001 15:40 (20 minutes)*

**Primary author:** RATNER, M

**Presenter:** RATNER, M

**Session Classification:** Industrial Applications (IA)



Contribution ID: 16

Type: **not specified**

## **New Scintillators : From Study to Application**

*Thursday, 20 September 2001 16:00 (1h 30m)*

**Primary author:** GEKTIN, A

**Presenter:** GEKTIN, A

**Session Classification:** Round Table

Contribution ID: 17

Type: **not specified**

## **Study of optical and luminescent properties of some inorganic scintillators in the fundamental absorption region**

*Friday, 21 September 2001 08:30 (30 minutes)*

**Primary author:** MIKHAILIN, V

**Presenter:** MIKHAILIN, V

**Session Classification:** Scintillation mechanisms 2 (SM2)

Contribution ID: **18**

Type: **not specified**

## **Hartree-Fock calculation BaF2: La systems**

*Friday, 21 September 2001 09:00 (20 minutes)*

**Primary author:** SOBOLEV, A

**Presenter:** SOBOLEV, A

**Session Classification:** Scintillation mechanisms 2 (SM2)

Contribution ID: 19

Type: **not specified**

## **Recombination processes in crystals of solid solutions of $Ba_{1-x}La_xF_{2+x}$**

*Friday, 21 September 2001 09:20 (20 minutes)*

**Primary author:** NEPOMNYASHCHIKH, A

**Presenter:** NEPOMNYASHCHIKH, A

**Session Classification:** Scintillation mechanisms 2 (SM2)

Contribution ID: 20

Type: **not specified**

## **Energy transfer in ZnWO<sub>4</sub> and CdWO<sub>4</sub> scintillators**

*Friday, 21 September 2001 09:40 (20 minutes)*

**Primary author:** NAGIRNYI, V

**Presenter:** NAGIRNYI, V

**Session Classification:** Scintillation mechanisms 2 (SM2)

Contribution ID: 21

Type: **not specified**

## **HadronTherapy: A modern tool for medicine**

*Monday, 17 September 2001 09:30 (30 minutes)*

**Primary author:** GERARD, JEAN- PIERRE

**Presenter:** GERARD, JEAN- PIERRE

**Session Classification:** Opening Session

Contribution ID: 22

Type: **not specified**

## **New trends in PET scanners**

*Monday, 17 September 2001 10:00 (30 minutes)*

**Primary author:** TOWNSEND, D

**Presenter:** TOWNSEND, D

**Session Classification:** Opening Session

Contribution ID: 23

Type: **not specified**

## **The Discovery and Development of LSO**

*Monday, 17 September 2001 11:00 (30 minutes)*

**Primary author:** MELCHER, C

**Presenter:** MELCHER, C

**Session Classification:** Opening Session



Contribution ID: 24

Type: **not specified**

## **25 years of scintillating crystals in High Energy Physics**

*Monday, 17 September 2001 11:30 (30 minutes)*

**Primary author:** LONGO, E

**Presenter:** LONGO, E

**Session Classification:** Opening Session

Contribution ID: 25

Type: **not specified**

## Welcome from the Chairmen

*Monday, 17 September 2001 09:00 (30 minutes)*

**Primary author:** PAUL LECOQ & CHRISTIAN PEDRINI

**Presenter:** PAUL LECOQ & CHRISTIAN PEDRINI

**Session Classification:** Opening Session

Contribution ID: 26

Type: **not specified**

## **Femtosecond VUV sources and applications**

*Friday, 21 September 2001 11:00 (30 minutes)*

**Primary author:** SALIN, F

**Presenter:** SALIN, F

**Session Classification:** Advanced Techniques (AT)

Contribution ID: 27

Type: **not specified**

## **Micro-focalized X-ray beam excitation of micro-structured scintillator**

*Friday, 21 September 2001 11:30 (20 minutes)*

**Primary author:** GARNIER, N

**Presenter:** GARNIER, N

**Session Classification:** Advanced Techniques (AT)

Contribution ID: 28

Type: **not specified**

## Energy resolution of pure NaI scintillator

*Friday, 21 September 2001 11:50 (20 minutes)*

**Primary author:** MOSZYNSKI, M

**Presenter:** MOSZYNSKI, M

**Session Classification:** Advanced Techniques (AT)

Contribution ID: 29

Type: **not specified**

## **A dual head PET System wit**

*Friday, 21 September 2001 12:10 (20 minutes)*

**Primary author:** STREUN, M

**Presenter:** STREUN, M

**Session Classification:** Advanced Techniques (AT)

Contribution ID: **30**

Type: **not specified**

## Conclusion

*Friday, 21 September 2001 14:30 (2 hours)*

**Primary author:** M. WEBER , C.W. E. VAN-EIJK

**Presenter:** M. WEBER , C.W. E. VAN-EIJK

**Session Classification:** Conclusion

Contribution ID: 31

Type: **not specified**

# Application in High Energy Physics and Nuclear Physics

*Monday, 17 September 2001 18:30 (30 minutes)*

**Primary author:** FAURE, JL

**Presenter:** FAURE, JL

**Session Classification:** Detector for physics (DP1)



Contribution ID: 32

Type: **not specified**

## **Status of the PWO crystal production from Russia for CMS-ECAL**

*Monday, 17 September 2001 19:00 (20 minutes)*

**Primary author:** E. AUFFRAY

**Presenter:** E. AUFFRAY

**Session Classification:** Detector for physics (DP1)

Contribution ID: 33

Type: **not specified**

## **Influence of the distribution of PWO crystals radiation hardness on the electromagnetic calorimeter performance**

*Monday, 17 September 2001 19:20 (20 minutes)*

**Primary author:** DROBYCHEV, G

**Presenter:** DROBYCHEV, G

**Session Classification:** Detector for physics (DP1)

Contribution ID: 34

Type: **not specified**

## **Studies of Lead Tungstate Crystals for the ALICE electromagnetic calorimeter PHOS**

*Monday, 17 September 2001 19:40 (20 minutes)*

**Primary author:** IPPOLITOV, M

**Presenter:** IPPOLITOV, M

**Session Classification:** Detector for physics (DP1)

Contribution ID: 35

Type: **not specified**

## Crystal growth from the melt

*Tuesday, 18 September 2001 08:30 (30 minutes)*

**Primary author:** FUKUDA, T.

**Presenter:** FUKUDA, T.

**Session Classification:** Crystal Growth (CG)

Contribution ID: 36

Type: **not specified**

## **Mass production of PWO scintillation elements for CMS Electromagnetic Calorimeter**

*Tuesday, 18 September 2001 09:00 (20 minutes)*

**Primary author:** ANNENKOV, A.

**Presenter:** ANNENKOV, A.

**Session Classification:** Crystal Growth (CG)

Contribution ID: 37

Type: **not specified**

## **Potential of existing Growth Methods of LuAP and related Scintillators**

*Tuesday, 18 September 2001 09:20 (20 minutes)*

**Primary author:** PETROSYAN, A.

**Presenter:** PETROSYAN, A.

**Session Classification:** Crystal Growth (CG)

Contribution ID: 38

Type: **not specified**

## **Production of REAlO<sub>3</sub>: Ce scintillators by Czochralski method**

*Tuesday, 18 September 2001 09:40 (20 minutes)*

**Primary author:** TKACHEV, A.

**Presenter:** TKACHEV, A.

**Session Classification:** Crystal Growth (CG)

Contribution ID: 39

Type: **not specified**

## **Crystal growth, spectroscopy and scintillating performance of Yb:YAG**

*Tuesday, 18 September 2001 10:00 (20 minutes)*

**Primary author:** YANG, P.

**Presenter:** YANG, P.

**Session Classification:** Crystal Growth (CG)



Contribution ID: 40

Type: **not specified**

## **Stages of energy relaxation in scintillators and their influence on efficiency and energy resolution**

*Monday, 17 September 2001 16:00 (30 minutes)*

**Primary author:** VASIL'EV, A.

**Presenter:** VASIL'EV, A.

**Session Classification:** Scintillation mechanisms 1 (SM1)

Contribution ID: 41

Type: **not specified**

## NaI(Tl) Electron Energy Resolution

*Monday, 17 September 2001 16:30 (20 minutes)*

**Primary author:** MENGESHA, W.

**Presenter:** MENGESHA, W.

**Session Classification:** Scintillation mechanisms 1 (SM1)

Contribution ID: 42

Type: **not specified**

## **Luminescence and Scintillation Properties of zinc oxide**

*Monday, 17 September 2001 16:50 (20 minutes)*

**Primary author:** WILLIAMS, R.

**Presenter:** WILLIAMS, R.

**Session Classification:** Scintillation mechanisms 1 (SM1)

Contribution ID: 43

Type: **not specified**

## **A phenomenon of scintillation in solids**

*Monday, 17 September 2001 17:10 (20 minutes)*

**Primary author:** KORZHIK, M.

**Presenter:** KORZHIK, M.

**Session Classification:** Scintillation mechanisms 1 (SM1)

Contribution ID: 44

Type: **not specified**

## **Crystal Conditioning for high energy physics detectors**

*Tuesday, 18 September 2001 11:30 (30 minutes)*

**Primary author:** SCHNEEGANS, M.

**Presenter:** SCHNEEGANS, M.

**Session Classification:** Crystal Conditioning (CC)

Contribution ID: 45

Type: **not specified**

## **Litrani: a general purpose Monte-Carlo program simulating light propagation in isotropic or anisotropic media**

*Tuesday, 18 September 2001 12:00 (20 minutes)*

**Primary author:** GENTIT, F.

**Presenter:** GENTIT, F.

**Session Classification:** Crystal Conditioning (CC)

Contribution ID: 46

Type: **not specified**

## **Operation characteristics of scintillation detectors based on PbWO<sub>4</sub>, LSO:Ce and CdWO<sub>4</sub> crystals for nuclear physics and medical apparatus**

*Tuesday, 18 September 2001 12:20 (20 minutes)*

**Primary author:** GLOBUS, M.

**Presenter:** GLOBUS, M.

**Session Classification:** Crystal Conditioning (CC)

Contribution ID: 47

Type: **not specified**

## **Functional possibilities of organosilicon coatings on the surface of Csi-based Scintillators**

*Tuesday, 18 September 2001 12:40 (20 minutes)*

**Primary author:** KUDIN, A.

**Presenter:** KUDIN, A.

**Session Classification:** Crystal Conditioning (CC)



Contribution ID: 48

Type: **not specified**

## Defects in Scintillating Crystals

*Tuesday, 18 September 2001 16:00 (30 minutes)*

**Primary author:** SCHWEIZER, S.

**Presenter:** SCHWEIZER, S.

**Session Classification:** Radiation Damage (RD)

Contribution ID: 49

Type: **not specified**

## **Properties of the heavy Germanate Glasses**

*Tuesday, 18 September 2001 16:30 (20 minutes)*

**Primary author:** CHEN, G.

**Presenter:** CHEN, G.

**Session Classification:** Radiation Damage (RD)

Contribution ID: 50

Type: **not specified**

## **Metastable defects in beryllium oxide crystals**

*Tuesday, 18 September 2001 16:50 (20 minutes)*

**Primary author:** KRUZHALOV, A.

**Presenter:** KRUZHALOV, A.

**Session Classification:** Radiation Damage (RD)

Contribution ID: 51

Type: **not specified**

## **Thermoluminescent response of LiF: Mg,Ti to low energy helium and carbon ions**

*Tuesday, 18 September 2001 17:10 (20 minutes)*

**Primary author:** RODRIGUEZ-VILLAFUERTE, M.

**Presenter:** RODRIGUEZ-VILLAFUERTE, M.

**Session Classification:** Radiation Damage (RD)

Contribution ID: 52

Type: **not specified**

## **Rare earth activated wide bandgap materials for scintillators**

*Tuesday, 18 September 2001 18:00 (30 minutes)*

**Primary author:** WOJTOWICZ, A.

**Presenter:** WOJTOWICZ, A.

**Session Classification:** New Scintillators 1 (NS1)

Contribution ID: 53

Type: **not specified**

## **Scintillation properties of Yb doped and Yb based aluminium garnets**

*Tuesday, 18 September 2001 18:30 (20 minutes)*

**Primary author:** BELOGUROV, S.

**Presenter:** BELOGUROV, S.

**Session Classification:** New Scintillators 1 (NS1)

Contribution ID: 54

Type: **not specified**

## **Ytterbium based Scintillators, a new class of inorganic Scintillators for Solar Neutrino Spectroscopy**

*Tuesday, 18 September 2001 18:50 (20 minutes)*

**Primary author:** CHIPAUX, R.

**Presenter:** CHIPAUX, R.

**Session Classification:** New Scintillators 1 (NS1)

Contribution ID: 55

Type: **not specified**

## **Fast luminescence of HfO<sub>2</sub>-Yb<sub>2</sub>O<sub>3</sub> and ZrO<sub>2</sub>O<sub>3</sub> solid solutions**

*Tuesday, 18 September 2001 19:10 (20 minutes)*

**Primary author:** KAMENSKIKH, I

**Presenter:** KAMENSKIKH, I

**Session Classification:** New Scintillators 1 (NS1)



Contribution ID: 56

Type: **not specified**

## **LuPO<sub>4</sub>:Nd and YPO<sub>4</sub>: Nd - new promising VUV scintillation**

*Tuesday, 18 September 2001 19:30 (20 minutes)*

**Primary author:** TAVERNIER, S.

**Presenter:** TAVERNIER, S.

**Session Classification:** New Scintillators 1 (NS1)

Contribution ID: 57

Type: **not specified**

## Quest and Investigation of Long Wavelength Scintillators

*Tuesday, 18 September 2001 19:50 (20 minutes)*

**Primary author:** RODNYI, P.

**Presenter:** RODNYI, P.

**Session Classification:** New Scintillators 1 (NS1)

Contribution ID: 58

Type: **not specified**

# **Properties of Avalanche Photodiodes for Applications in High Energy Physics, Astrophysics and Medical Imaging**

*Wednesday, 19 September 2001 08:30 (30 minutes)*

**Primary author:** RENKER, D

**Presenter:** RENKER, D

**Session Classification:** Medical Imaging (MI)

Contribution ID: 59

Type: **not specified**

## **Development of the HiLight Scintillator for Computed Tomography Medical Imaging**

*Wednesday, 19 September 2001 09:00 (20 minutes)*

**Primary author:** DUCLOS, S.

**Presenter:** DUCLOS, S.

**Session Classification:** Medical Imaging (MI)

Contribution ID: **60**

Type: **not specified**

## **A new Scintillator for digital X-ray Radiographies**

*Wednesday, 19 September 2001 09:20 (20 minutes)*

**Primary author:** NAGARKAR, V

**Presenter:** NAGARKAR, V

**Session Classification:** Medical Imaging (MI)

Contribution ID: **61**

Type: **not specified**

## **Doping PbWO<sub>4</sub> with different ions to increase the light yield**

*Wednesday, 19 September 2001 09:40 (20 minutes)*

**Primary author:** KOBAYASHI, M

**Presenter:** KOBAYASHI, M

**Session Classification:** Medical Imaging (MI)

Contribution ID: 62

Type: **not specified**

## **Optical properties and scintillation mechanism in Lu<sub>0.8</sub>Y<sub>0.2</sub>AlO<sub>3</sub>: Ce**

*Wednesday, 19 September 2001 10:00 (20 minutes)*

**Primary author:** KUNTNER, C

**Presenter:** KUNTNER, C

**Session Classification:** Medical Imaging (MI)