

### Articles in ISI journals

1. Dielectric spectrum of rare-earth-doped calcium fluoride crystals  
*Journal of Crystal Growth*, **287** (2006) 234-238  
I. Nicoara, M. Munteanu, N. Pecincina-Girjioaba, **M. Ștef**, L. Lighezan
2. Dielectric relaxation in PbF<sub>2</sub> -doped and X-ray irradiated CaF<sub>2</sub> crystals  
*ECS Transactions*, **3**, 11 (2006) 51-58.  
I. Nicoara, M. Munteanu, N. Pecingina-Garjoaba, **M. Ștef**, L. Lighezan
3. Dielectric spectra of doped and X-ray irradiated calcium fluoride crystals  
*Phys. Status Solidi C* **4** (2007) 1234-1237  
I. Nicoara, M. Munteanu, N. Pecingina-Garjoaba, **M. Ștef**, E. Preda and A. Lucaci
4. Some dielectric and optical properties of ErF<sub>3</sub> -doped CaF<sub>2</sub> crystals.  
*Journal of Crystal Growth*, **310** (2008) 2020-2025  
I. Nicoara, M. Munteanu, E. Preda, **M. Ștef**
5. Growth of YbF<sub>3</sub>-doped CaF<sub>2</sub> crystals and characterization of Yb<sup>3+</sup>/Yb<sup>2+</sup> conversion.  
*Journal of Crystal Growth* **310** (2008) 1470-1475  
I. Nicoara, **M. Ștef**, A. Pruna
6. Influence of various impurities on the optical properties of YbF<sub>3</sub> doped CaF<sub>2</sub> crystals  
*Acta Physica Polonica A* **112** (2007) 1013-1018  
**M. Ștef**, A. Pruna, N. Pecingina-Garjoaba, I. Nicoara
7. Dielectric spectra of Li<sup>+</sup> (Na<sup>+</sup>) codoped CaF<sub>2</sub>:YbF<sub>3</sub> crystals  
*Phys. Status Solidi A* **206** (2009) 738-744  
A. Pruna, **M. Ștef**, I. Nicoara
8. Concentration dependence of Judd-Ofelt parameters of Er<sup>3+</sup> ions in CaF<sub>2</sub> crystals.  
*Physica Scripta* **79** (2009) 035304  
E. Preda, **M. Ștef**, G. Buse, A. Pruna, I. Nicoara
9. Some dielectric and optical properties of PbF<sub>2</sub> -codoped CaF<sub>2</sub>:YbF<sub>3</sub> crystals.  
*Physica Scripta* **T135** (2009) 014044  
**M. Ștef**, G. Buse, A. Pruna, I. Nicoara
10. Judd-Ofelt analysis of the Er<sup>3+</sup> absorption intensities of double-doped CaF<sub>2</sub> :(Er<sup>3+</sup>, Yb<sup>3+</sup>) crystal



*AIP Conference Proceedings*, **1131** (2009) 131-135

G. Buse, E. Preda, **M. Ștef**, A. Pruna, F. Ștef, I. Nicoara

**11.** Luminescence spectrum and Judd-Ofelt analysis of  $\text{CaF}_2:0,83 \text{ mol\% ErF}_3$

*AIP Conference Proceedings*, **1131** (2009) 126-130

E. Preda, **M. Ștef**, G. Buse, A. Pruna, F. Ștef, I. Nicoara

**12.** Influence of  $\text{Li}^+$  and  $\text{Na}^+$  ions on the dielectric spectra of  $\text{YbF}_3$  doped and LiF, NaF codoped  $\text{CaF}_2$  crystals

*AIP Conference Proceedings*, **1131** (2009) 121-125

A. Pruna, **M. Ștef**, G. Buse, I. Nicoara

**13.** Segregation coefficient of  $\text{Pb}^{2+}$  ions in  $\text{CaF}_2$  crystals

*AIP Conference Proceedings*, **1131** (2009) 112-116

**M. Ștef**, O. Bunoiu, M. Paraschiva, A. Pruna, I. Nicoara

**14.** Effective segregation coefficient of  $\text{Er}^{3+}$  ions in  $\text{ErF}_3$ -doped  $\text{CaF}_2$  crystals.

M. Munteanu, **M. Ștef**, O. Bunoiu, I. Nicoara

*Physica Scripta* **81** (2010) 035602

**15.** Distribution of  $\text{Pb}^{2+}$  ions in  $\text{PbF}_2$ -doped  $\text{CaF}_2$  crystals.

M. Paraschiva, I. Nicoara, **M. Ștef**, O.M. Bunoiu

*Acta Physica Polonica A* **117** (2010) 466-470

**16.** Influence of the  $\text{Er}^{3+}$  ions concentration on the structural deformation in doped  $\text{CaF}_2$  crystals

I. Nicoara, M. Munteanu, **M. Ștef**, E. Preda, G. Buse

*AIP Conference Proceedings* **1262** (2010) 104-107

**17.** Influence of  $\text{Yb}^{3+}$  ions on the optical properties of double-doped Er, Yb:  $\text{CaF}_2$  crystals

G. Buse, E. Preda, **M. Ștef**, I. Nicoara

*Physica Scripta* **83** (2011) 025604

**18.** Interface shape studies in Bridgman growth of multicrystalline silicon

O. Bunoiu, **M. Ștef**, A. Popescu, D. Vizman

*AIP Conference Proceedings* **1387** (2011) 226-231

**19.** Study of  $\text{Na}^+$  ions influence on the charge compensating defects in  $\text{CaF}_2:\text{YbF}_3$  crystals using dielectric relaxation

I. Nicoara, **M. Ștef**

*European Physical Journal B* **85** (2012) art. no. 180



**20. Growth and spectroscopic characterization of  $Pb^{2+}$ : $CaF_2$  crystals**

I. Nicoara, M. Paraschiva, **M. Ștef**, F. Ștef

European Physical Journal B **85** (2012) art. no. 292

**21. Influence of  $Pb^{2+}$  ions on the morphology of etch pits and dislocation density of  $CaF_2$ : $YbF_3$  crystals.**

**M. Ștef**, F. Ștef, G. Buse, I. Nicoara

AIP Conference Proceedings **1472** (2012) 192-197

**22. Dielectric relaxation in ytterbium- and lead- doped calcium fluoride crystals,**

**M. Ștef**, I. Nicoara, F. Ștef

European Physical Journal B **86** (2013) art. no. 152

**23. Influence of  $Pb^{2+}$  and  $Na^+$  ions on the spectroscopic properties of  $CaF_2$ : $Yb^{3+}$  crystals**

**M. Ștef**, I. Nicoara, F. Cirlan, I. Para, M. Velazquez, G. Buse,

AIP Conference Proceedings **1694** (2015) 030005-1 - 6

**24. Investigation on crude and high-temperature heated coffee oil by ATR-FTIR spectroscopy along with antioxidant and antimicrobial properties**

D.N. Raba, M.A. Poiana, A.B. Borozan, **M. Ștef**, F. Radu, M.V. Popa,

PLOS ONE (2015) 1-20

**25. Charge compensating defects study of  $YbF_3$ -doped  $BaF_2$  crystals using dielectric loss**

I. Nicoara, **M. Ștef**,

Phys. Status Solidi B **253** (2016) 397-403

**Articles in non-ISI journals**

**1. Dielectric relaxation in erbium and Lanthanum –doped calcium fluoride crystals Sustainability for humanity & environment in the extended connection field science-economy-policy, Ed.**

Politehnica, ISBN 973-625-206-X, Vol. 2 (2005)137-140

M. Munteanu, N. Pecincina-Girjoaba, **M. Ștef**, I. Nicoara

**2. The dielectric spectrum of Erbium doped calcium fluoride crystals**

Analele Universității de Vest din Timișoara **45** (2004) 115-119

M. Munteanu, N. Pecingine-Girjoaba, **M. Ștef**, I. Nicoara



- 3.** Activation energy of various structural defects in pure and  $\text{ErF}_3$  doped  $\text{CaF}_2$   
Analele Universității de Vest din Timișoara **47** (2005) 9-14.  
**M. Ștef**, M. Munteanu, N. Pecingine-Girjoaba, I. Nicoara
- 4.** Judd-Ofelt analysis of  $\text{Er}^{3+}$  ions in  $\text{CaF}_2$  crystals  
Analele Universității de Vest din Timișoara **49** (2006) 123-128  
A. Lucaci, **M. Ștef**, E. Preda, I. Nicoara
- 5.** Some optical and dielectric properties of  $\text{YbF}_3$ -doped  $\text{CaF}_2$  crystals  
Analele Universității de Vest din Timișoara **49** (2006) 129-133  
I. Nicoara, M. Munteanu, N. Pecingine-Girjoaba, **M. Ștef**, L. Lighezan
- 6.** Effect of surface orientation on the dielectric spectra of  $\text{ErF}_3$ -doped  $\text{CaF}_2$  crystals  
Analele Universității de Vest din Timișoara **51** (2007) 32-35  
I. Nicoara, M. Munteanu, E. Preda, **M. Ștef**
- 7.** Some optical properties of  $\text{Yb}^{2+}$  ions in  $\text{CaF}_2$  crystals  
Analele Universității de Vest din Timișoara **51** (2007) 36-39  
I. Nicoara, **M. Ștef**, A. Pruna
- 8.** Dopant concentration distribution of rare-earth doped  $\text{CaF}_2$  crystals  
Analele Universității de Vest din Timișoara **51** (2007) 141-144  
O. Bunoiu, M. Munteanu, E. Preda, I. Nicoara, **M. Ștef**

### Books and book chapters

- 1.** *Characterization of structural defects in crystals*, **M. Ștef**, I. Nicoara, ed. Marineasa, Timișoara, 2009 (ISBN 978-973-631-595-4) – in romanian
- 2.** *Modern aspects of bulk crystal and thin film preparation*, Editors: N. Koleshnikov, E. Borisenko, Book chapter 4: *Growth and characterization of doped  $\text{CaF}_2$  crystals*, I. Nicoara, **M. Ștef**, Ed. InTech 2012, ISBN 978-953-307-610-2 – in english
- 3.** *Growth and characterization of  $\text{CaF}_2:\text{YbF}_3$  crystal*, **M. Ștef**, Editura Eurobit, Timișoara 2012, ISBN 978-973-620-896-6 – in romanian
- 4.** *Teste grilă de fizică*, **M. Ștef**, V.E. Ambruș, A.M. Barb, Editura Universității de Vest, Colecția Amfiteatru, Seria Fizică, Timișoara. **2016**.



### International conferences

1. [Scientific reunion of the special program of the Alexander von Humboldt Foundation concerning the reconstruction of the South Eastern Europe, Timisoara, Romania, Februray 24-25, 2005](#)

*Dielectric relaxation in erbium and lanthanum doped calcium fluoride crystals*

M. Munteanu, N. Pecingina-Girjoaba, **M. Ștef**, I. Nicoara

2. [The 16th American Conference on Crystal Growth and Epitaxy, July 10-14, 2005, Big Sky, Montana, USA \(ACCGE-16\)](#)

*Dielectric spectrum of rare-earth-doped calcium fluoride crystals*

I. Nicoara, M. Munteanu, N. Pecingina-Garjoaba, **M. Ștef**, L. Lighezan

3. [10th Europhysics Conference on Defects in Insulating Materials, Milano, July 10-14, 2006 \(EURODIM 2006\)](#)

*Dielectric spectra of PbF<sub>2</sub>-doped and LiF, NaF codoped CaF<sub>2</sub> crystals*

I. Nicoara, M. Munteanu, N. Pecingina-Garjoaba, **M. Ștef**, E. Preda, A. Lucaci,

4. [210<sup>th</sup> Electrochemical Society Meeting-Cancun, Mexico, Oct.29-Nov.03, 2006 \(ECS-210\)](#)

*Dielectric relaxation in PbF<sub>2</sub>-doped and RX irradiated CaF<sub>2</sub> crystals*

I. Nicoara, M. Munteanu, N. Pecingina-Garjoaba, **M. Ștef**, L. Lighezan

5. [The 15-th International Conference on Crystal Growth, August 12-17, 2007, Salt Lake City, Utah, USA \(ICCG-15\)](#)

5.1. *Some dielectric and optical properties of ErF<sub>3</sub>-doped CaF<sub>2</sub> crystals*

I. Nicoara, M. Munteanu, E. Preda, **M. Ștef**

5.2. *Growth of YbF<sub>3</sub>-doped CaF<sub>2</sub> crystals and characterization of Yb<sup>3+</sup>/Yb<sup>2+</sup> conversion*

I. Nicoara, **M. Ștef**, L. Lighezan

6. [International School and Conference on Optics and Optical Materials, Belgrade, Serbia, 3-7 sept. 2007 \(ISCOM 2007\)](#)

*Influence of various impurities on the optical properties of YbF<sub>3</sub> doped CaF<sub>2</sub> crystals*

**M. Ștef**, A. Pruna, N. Pecingina-Garjoaba, I. Nicoara

7. [The 21<sup>st</sup> Conference on Crystal Growth and Epitaxy - West, June 8 - 11 2008, Stanford Sierra Camp Fallen Leaf Lake, CA \(ACCGE\West 21\)](#)

7.1. *Concentration distribution of Pb<sup>2+</sup> ions in PbF<sub>2</sub> -doped CaF<sub>2</sub> crystals studied by optical absorption method*

I. Nicoara, **M. Ștef** and O. Bunoiu

7.2. *Dielectric spectra of Li<sup>+</sup> (Na<sup>+</sup>) -codoped YbF<sub>3</sub>:CaF<sub>2</sub> crystals*

I. Nicoara, **M. Ștef**, A. Pruna

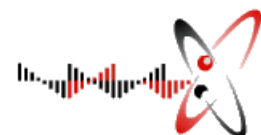
8. [The 15<sup>th</sup> Central European Workshop on Quantum Optics, May 29 - June 3, 2008, Belgrade, Serbia \(CEWQO 2008\)](#)

*Some dielectric and optical properties of PbF<sub>2</sub> and YbF<sub>3</sub> -doped CaF<sub>2</sub> crystals*

**M. Ștef**, G. Buse, A. Pruna and I. Nicoara

9. [The 8<sup>th</sup> International Conference on Physics of Advanced Materials, Iasi, June 4-7, 2008 \(ICPAM-8\)](#)

*Concentration distribution of Yb<sup>3+</sup> and Er<sup>3+</sup> - ions in CaF<sub>2</sub> crystals*



I. Nicoara, O. Bunoiu, **M. Ștef**, G. Buse

10. [The 15<sup>th</sup> International Conference on Luminescence and Optical Spectroscopy of Condensed Matter, July 7 - 11 2008, Lyon, France \(ICL'08\)](#)

10.1. *Influence of Li<sup>+</sup> and Na<sup>+</sup> ions on the luminescence spectra of YbF<sub>3</sub> doped CaF<sub>2</sub> crystals*

I. Nicoara, A. Pruna, **M. Ștef**

10.2. *Influence of Pb<sup>2+</sup> ions on the spectroscopic properties of YbF<sub>3</sub> doped CaF<sub>2</sub> crystals*

**M. Ștef**, I. Nicoara, O. Bunoiu, A. Pruna

11. [Romanian Conference on Advanced Materials, August 25-28, 2009, Brasov, Romania \(ROCAM 2009\)](#)

11.1. *Influence of Yb<sup>3+</sup> and Yb<sup>2+</sup> ions on the optical properties of Er<sup>3+</sup> in double-doped CaF<sub>2</sub>:Er, Yb crystal*

G. Buse, E. Preda, **M. Ștef**, I. Nicoara

11.2. *Optical spectroscopy of Na<sup>+</sup> co-doped CaF<sub>2</sub>:YbF<sub>3</sub> crystals*

A. Pruna, **M. Ștef**, G. Buse, I. Nicoara

11.3. *Dislocations density and etch pits morphology on cleavage plane of Na<sup>+</sup> and Li<sup>+</sup> co-doped CaF<sub>2</sub>:YbF<sub>3</sub> crystals*

A. Pruna, **M. Ștef**, G. Buse, E. Preda, I. Nicoara

11.4. *Luminescence spectra of Pb<sup>2+</sup> co-doped CaF<sub>2</sub>:YbF<sub>3</sub> crystals*

F. Ștef, E. Preda, **M. Ștef**, I. Nicoara

11.5. *Concentration dependence of some physical properties of PbF<sub>2</sub> doped CaF<sub>2</sub> crystals*

M. Paraschiva, A. Pruna, **M. Ștef**, I. Nicoara

12. [The 16th International Conference on Crystal Growth, August 8-13, 2010, Beijing, China \(ICCG-16\)](#)

12.1. *Influence of Na<sup>+</sup> ions on the charge compensating defects in CaF<sub>2</sub>:YbF<sub>3</sub> crystals*

I. Nicoara, **M. Ștef**

12.2. *Influence of Pb<sup>2+</sup> ions on the spectroscopic properties of Yb<sup>2+</sup> ions in CaF<sub>2</sub>:YbF<sub>3</sub>*

**M. Ștef**, I. Nicoara

12.3. [Encapsulated Bridgman solidification of multi-crystalline silicon](#)

O. Bunoiu, **M. Ștef**, A. Popescu, I. Nicoara, D. Vizman, J. Friedrich

13. [The 12th International Balkan Workshop in Applied Physics, July 6-8, 2011, Constanta, Romania \(IBWAP-12\)](#)

*Experimental study of grains size and interface shape in multicrystalline silicon grown by Bridgman method*

V. Pupazan, V. Poenaru, I. Sarbu, **M. Ștef**, M. Bunoiu, D. Vizman

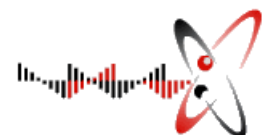
14. [III International School and Conference on Photonics, August 29 - September 2, 2011, Belgrade, Serbia \(PHOTONICA 2011\)](#)

14.1. *Interface shape studies in Bridgman growth of multicrystalline silicon*

M. Bunoiu, **M. Ștef**, A. Popescu, D. Vizman

14.2. *Influence of Na<sup>+</sup> ions on the dielectric spectra of double doped (YbF<sub>3</sub>, NaF):CaF<sub>2</sub> crystals*

**M. Ștef** and I. Nicoara



15. [European Conference on Crystal Growth, June 17 - 20, 2012, Glasgow, Scotland \(ECCG4\)](#)

15.1. *Growth and characterization of small diameter multi-crystalline silicon grown by Bridgman technique*

V. Pupazan, **M. Ștef**, I. Nicoara, O. Bunoiu, D. Vizman

15.2. *Growth and characterization of  $Pb^{2+}$  ions doped  $CaF_2$  crystals*

I. Nicoara, **M. Ștef**, M. Paraschiva, F. Ștef

16. [The 7th International Conference on Advanced Materials, August 28 - 31, 2012, Brasov, Romania \(ROCAM 2012\)](#)

16.1. *Effects of growth parameters on the quality of multi-crystalline silicon grown by a Bridgman technique*

O. Bunoiu, V. Pupazan, **M. Ștef**, A. Popescu, D. Vizman

16.2. *Dielectric relaxation in  $YbF_3$  doped and NaF co-doped  $CaF_2$  crystals*

**M. Ștef**, F. Ștef, I. Nicoara

17. [The 19th American Conference on Crystal Growth and Epitaxy, July 21-26, 2013, Keystone, Colorado, USA](#)

*Influence of various impurities on the  $C_{4v}$  and clusters type charge compensating defects in  $CaF_2:YbF_3$  crystals*

M. Bunoiu, I. Nicoara, **M. Ștef**

18. [17th International Conference on Crystal Growth and Epitaxy \(ICCGE-17\), August 11-16, 2013, Warsaw, Poland](#)

18.1. *Effects of crucible coating on the quality of multi-crystalline silicon growth by a Bridgman technique*

V. Pupazan, R. Negrila, **M. Ștef**, M. Bunoiu, I. Nicoara, D. Vizman

18.2. *Influence of  $Na^+$  and  $Pb^{2+}$  ions on the optical properties of  $Yb^{2+}$  ions in  $YbF_3$  doped  $CaF_2$  crystals*

**M. Ștef**, I. Nicoara

19. [International Conference on Lasers in Medicine, September 19-21, 2013, Timisoara, Romania \(ICLM\)](#)

19.1. *Laser crystals used for medical applications*

M. Bunoiu, **M. Ștef**, I. Nicoara

19.2. *Influence of  $Na^+$  and  $Pb^{2+}$  ions on the light emission intensity in  $YbF_3$  doped  $CaF_2$  crystals*

I. Nicoara, **M. Ștef**, M. Bunoiu

20. [The 14<sup>th</sup> International Balkan Workshop on Applied Physics, July 2-4, 2014, Constanta, Romania \(IBWAP-14\)](#)

20.1. *Effective segregation coefficient of rare-earth ions in fluorite crystals*

M. Bunoiu, **M. Ștef**, I. Nicoara

20.2. *Some optical properties of  $YbF_3$  doped  $BaF_2$  and  $CaF_2$  crystals*

M. Bunoiu, **M. Ștef**, G. Buse, I. Nicoara

21. [10th International Conference on Physics of Advanced Materials, September 22-28, 2014, Iasi, Romania \(ICPAM-10\)](#) – oral presentation

*Influence of various impurities on the compensating defects in  $YbF_3$  doped  $CaF_2$  crystals*



M. Bunoiu, **M. Ștef**, I. Nicoara

**22. The 8<sup>th</sup> International Conference on Advanced Materials – ROCAM 2015, July 07-10, 2015, Bucharest, Romania**

*Dislocation density and etch pits morphology on cleavage plan of YbF<sub>3</sub> doped BaF<sub>2</sub> crystals*

**M. Ștef**, I. Nicoara

**23. The 4th International Conference on the Physics of Optical Materials and Devices (ICOM-2015), August 31st – September 4th 2015, Becici, Montenegro**

*Growth and spectroscopic characterization of YbF<sub>3</sub> doped BaF<sub>2</sub> crystals*

**M. Ștef**, I. Nicoara

**24. Fifth European Conference on Crystal Growth (ECCG5), September 9-11, 2015, Bologna, Italy**

*24.1. Some optical properties of YbF<sub>3</sub>-doped BaF<sub>2</sub> crystals*

I. Nicoara, **M. Ștef**, O.M. Bunoiu

*24.2. Study of charge compensating defects in BaF<sub>2</sub>:YbF<sub>3</sub> crystals using dielectric relaxation*

I. Nicoara, **M. Ștef**, O.M. Bunoiu

**25. 8<sup>th</sup> International Conference Materials Science and Condensed Matter Physics (MSCMP 2016), September 12-16, 2016, Chisinau, Republic of Moldova**

*Comparative study of luminescence concentration quenching of <sup>4</sup>S<sub>3/2</sub> state in Y<sub>2-x</sub>Er<sub>x</sub>O<sub>3</sub> and Y<sub>3-x</sub>Er<sub>x</sub>Ga<sub>5</sub>O<sub>12</sub>*

A.V. Racu, M.C. Pascariu, I. Sebarchievici., Z. Szabadai, A. Micu, O. Kulikova, **M. Ștef**

### National conferences

**1. Physics Conference, TIM-04, Timisoara, 26-27 Nov. 2004**

*Dielectric spectrum of pure and rare-earth ions doped CaF<sub>2</sub>*

M. Munteanu, N. Pecincige-Garjoaba, O.M. Bunoiu, **M. Ștef**, I. Nicoara

**2. Physics Conference, TIM-05, Timisoara, 25-26 Nov. 2005**

*Activation energy of various structural defects in pure and ErF<sub>3</sub> doped CaF<sub>2</sub>*

**M. Ștef**, M. Munteanu, N. Pecincige-Garjoaba, I. Nicoara

**3. Physics Conference, TIM-06, Timisoara, 24-25 Nov. 2006**

*3.1. Judd-Ofelt analysis of Er<sup>3+</sup> ions in CaF<sub>2</sub> crystals*

A. Lucaci, **M. Ștef**, E. Preda, I. Nicoara

*3.2. Some optical and dielectric properties of CaF<sub>2</sub>:PbF<sub>2</sub> crystals*

I. Nicoara, M. Munteanu, N. Pecingina-Garjoaba, **M. Ștef**, L. Lighezan

*3.3. Some, optical and dielectric properties of YbF<sub>3</sub>-doped CaF<sub>2</sub> crystals*

Irina Nicoara, M. Munteanu, N. Pecingina-Garjoaba, **M. Ștef**, L. Lighezan

**4. Physics Conference, TIM-07, Timisoara, 23-24 Nov. 2007**

*4.1. Effect of surface orientation on the the dielectric spectra of ErF<sub>3</sub>-doped CaF<sub>2</sub> crystals*

I. Nicoara, M. Munteanu, E. Preda, **M. Ștef**

*4.2. Some optical properties of Yb<sup>2+</sup> ions in YbF<sub>3</sub>: CaF<sub>2</sub> crystals*





I. Nicoara, **M. Ștef**, A. Pruna

5. [The 5<sup>th</sup> Conference on Condensed Matter Physics, 16 - 18 July 2008, Timisoara \(FMC 2008\)](#)

*Growth of  $ErF_3$  doped  $CaF_2$  crystals and determination of the segregation coefficient of  $Er^{3+}$  ions*

I. Nicoara, O. Bunoiu, **M. Ștef**, G. Buse and A. Pruna

6. [Conferinta Nationala de Fizica, Bucuresti-Magurele, Sept. 10-13, 2008 \(CNF 2008\)](#)

6.1. *Spectroscopic properties of  $PbF_2$  -doped  $CaF_2$  crystals*

I. Nicoara, **M. Ștef**, A. Pruna, G. Buse

6.2. *Segregation coefficient of  $Er^{3+}$  and  $Yb^{3+}$  -ions in  $CaF_2$  crystals*

O. Bunoiu, **M. Ștef**, A. Pruna, G. Buse, I. Nicoara

6.3. *Spectroscopic properties of  $LiF$  ( $NaF$ ) codoped  $CaF_2:YbF_3$  crystals*

A. Pruna, **M. Ștef**, G. Buse, I. Nicoara

7. **Physics Conference, TIM-08, Timisoara, 28-29 nov. 2008**

7.1. *Segregation coefficient of  $Pb^{2+}$  ions in  $PbF_2$ -doped  $CaF_2$  crystals*

**M. Ștef**, O. Bunoiu, M. Paraschiva, A. Pruna and I. Nicoara

7.2. *Influence of  $Li^+$  and  $Na^+$  ions on the dielectric spectra of  $YbF_3$ -doped and  $LiF$ ,  $NaF$  co-doped  $CaF_2$  crystals*

A. Pruna, **M. Ștef**, G. Buse and I. Nicoara

7.3. *Influence of  $Li^+$  and  $Na^+$  ions on the dislocation density of  $YbF_3$ -doped and  $LiF$ ,  $NaF$  co-doped  $CaF_2$  crystals*

A. Pruna, **M. Ștef**, G. Buse and I. Nicoara

7.4. *Luminescence spectra and Judd-Ofelt analysis of  $CaF_2:0.7$  mol%  $ErF_3$  crystal*

E. Preda, **M. Ștef**, G. Buse, A. Pruna, F. Ștef and I. Nicoara

7.5. *Luminescence spectra of  $PbF_2$ -doped  $CaF_2$  crystals*

I. Nicoara, **M. Ștef**, M. Paraschiva, F. Ștef, A. Pruna and G. Buse

7.6. *Judd-Ofelt analysis of the  $Er^{3+}$  of double-doped  $CaF_2:(Er^{3+}, Yb^{3+})$  crystal*

G. Buse, E. Preda, **M. Ștef**, A. Pruna, F. Ștef and I. Nicoara

8. [Physics Conference, TIM-09, Timisoara, 27-28 nov. 2009](#)

8.1. *Influence of  $Na^+$  ions on the charge compensating defects types in  $CaF_2:YbF_3$  crystals*

I. Nicoara, A. Pruna, **M. Ștef**, F. Ștef

8.2. *Influence of the  $Er^{3+}$  ions concentration on the structural defects formation in  $ErF_3$  doped  $CaF_2$  crystals*

I. Nicoara, M. Munteanu, **M. Ștef**, E. Preda, G. Buse

9. [Conferinta Nationala de Fizica \(CNF 2010\), Iasi, 23-25 sept. 2010](#)

9.1. *Bridgman solidification of multi-crystalline silicon*

M. Bunoiu, **M. Ștef**, A. Popescu, I. Nicoara, D. Vizman, J. Friedrich

9.2. *Influence of the  $Pb^{2+}$  ions on the dielectric properties of  $CaF_2:ErF_3$  doped  $CaF_2$  crystals*

**M. Ștef**, I. Nicoara, F. Ștef, E. Preda



10. [Physics Conference, TIM-10, Timisoara, 25-27 nov. 2010](#)

10.1. *Etch pits morphology and dislocation distribution in double-doped (Er, Yb):CaF<sub>2</sub> crystals*  
G. Buse, **M. Ștef**, M. Bunoiu, I. Nicoara

10.2. *Some spectroscopic properties of PbF<sub>2</sub>-doped CaF<sub>2</sub> crystals*  
F. Ștef, **M. Ștef**, M. Paraschiva, E. Preda, N. Leauta, I. Nicoara

10.3. *Crystal growth and characterization of multicrystalline silicon for photovoltaic applications*  
O. Bunoiu, **M. Ștef**, A. Popescu, P. Barvinschi, I. Nicoara, D. Vizman, J. Friedrich

11. [Physics Conference, TIM-11, Timisoara, 24-27 nov. 2011](#)

11.1. *Dielectric spectrum of double-doped (Er, Yb):CaF<sub>2</sub> crystals*  
G. Buse, F. Ștef, **M. Ștef**, I. Nicoara

11.2. *Influence of Pb<sup>2+</sup> ions on the morphology of etch pits and dislocation density of CaF<sub>2</sub>:YbF<sub>3</sub> crystals*  
**M. Ștef**, F. Ștef, G. Buse, E. Preda, I. Nicoara

12. [Physics Conference, TIM-12, Timisoara, 29 nov. - 2 dec. 2012](#)

12.1. *Influence of Pb<sup>2+</sup> ions on the dielectric properties of YbF<sub>3</sub> doped CaF<sub>2</sub> crystals*  
F. Ștef, I. Nicoara, **M. Ștef**, E. Preda, S. Macovei

12.2. *Influence of Pb<sup>2+</sup> and Na<sup>+</sup> ions on the spectroscopic properties of CaF<sub>2</sub>:Yb<sup>3+</sup> crystals*  
**M. Ștef**, I. Nicoara, F. Ștef, M. Velazquez, V. Jubera, G. Buse

13. [Physics Conference, TIM-13, Timisoara, 21 nov. - 24 dec. 2013](#)

13.1. *Some optical properties of BaF<sub>2</sub>:YbF<sub>3</sub> and CaF<sub>2</sub>:YbF<sub>3</sub> crystals*  
F. Ștef, I. Nicoara, **M. Ștef**, E. Preda, S. Macovei

13.2. *The dislocations study of YbF<sub>3</sub> doped BaF<sub>2</sub> crystals*  
**M. Ștef**, I. Nicoara, F. Cirlan

13.3. *Segregation coefficient of Yb<sup>2+</sup> and Yb<sup>3+</sup> ions in BaF<sub>2</sub>:0.17 mol% YbF<sub>3</sub> crystal*  
**M. Ștef**, I. Nicoara, F. Cirlan

14. [Physics Conference, TIM-14, Timisoara, 20 nov. - 22 dec. 2014](#)

14.1. *Influence of YbF<sub>3</sub> concentration on the dislocation density on (111) surface on YbF<sub>3</sub> doped BaF<sub>2</sub> crystals*  
F. Cirlan, **M. Ștef**, G. Buse, M. Bunoiu, I. Nicoara

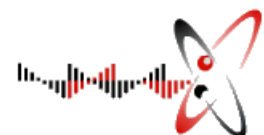
14.2. *Influence of some impurities on the emission properties of CaF<sub>2</sub>:Yb<sup>3+</sup> crystals*  
**M. Ștef**, I. Nicoara, F. Cirlan, I. Para, M. Velazquez, G. Buse

14.3. *Rheological characterization of the ovine ruminal fluid*  
I. Cretescu, C. Mateescu, O. Marinica, M. Neagu, A. Neagu, **M. Ștef**, O. Munteanu

14. [Physics Conference, TIM-15-16, Timisoara, 26 – 28 may 2016](#)

14.1. *Optical study of Yb<sup>3+</sup>-Yb<sup>2+</sup> charge conversion in the as-grown YbF<sub>3</sub>-doped CaF<sub>2</sub> crystals*  
**M. Ștef**, I. Nicoara, L. Rosu, A. Simon, A. Racu, M. Corcodel, F. Cirlan, M. Bunoiu

14.2. *Luminescence concentration quenching of <sup>4</sup>S<sub>3/2</sub> state in Y<sub>2-x</sub>Er<sub>x</sub>O<sub>2-x</sub> microtubes*  
A. Racu, C. Pascariu, Z. Szabadai, A. Micu, O. Kuliukova, **M. Ștef**



*14.3. Experimental study of proton irradiation effect on silicon solar cells,*  
M. Paulescu, D. Vizman, M. Lascu, R. Negrila, **M. Ștef**

