

### C3.12 (C. Feldmann)

- [C3.12:1] G. Bühler, A. Zharkouskaya, and C. Feldmann, *Ionic Liquid based Approach to Nanoscale Functional Materials*, [Solid State Sci. 10, 461 \(2008\)](#)
- [C3.12:2] \* A. Zharkouskaya, C. Feldmann, K. Trampert, W. Heering, and U. Lemmer, *Ionic Liquid based Approach to Luminescent LaPO<sub>4</sub>:Ce,Tb Nanocrystals: Synthesis, Characterization and Application*, [Eur. J. Inorg. Chem. 873 \(2008\)](#)
- [C3.12:3] M. Roming and C. Feldmann, *Selective Synthesis of  $\alpha$ - and  $\beta$ -SrHPO<sub>4</sub> Nanoparticles*, [J. Mater. Sci. 43, 5504 \(2008\)](#)
- [C3.12:4] M. Roming and C. Feldmann, *Anorganisch-organischer Kompositelichtstoff*, Patent application, DE 102008009541.9, WO 2009/100800 A1
- [C3.12:5] M. Roming, C. Feldmann, Y.S. Avadhut, and J. Schmedt auf der Günne, *Characterization of Noncrystalline Nanomaterials: NMR of Zinc Phosphate as a Case Study*, [Chem. Mater. 20, 5787 \(2008\)](#)
- [C3.12:6] M. Roming and C. Feldmann, *Synthesis and Characterization of Nanoscaled BiPO<sub>4</sub> and BiPO<sub>4</sub>:Tb*, [J. Mater. Sci. 44, 1412 \(2009\)](#)
- [C3.12:7] M. Mai and C. Feldmann, *Two-color Emission of Zn<sub>2</sub>SiO<sub>4</sub>:Mn from Ionic Liquid mediated Synthesis*, [Solid State Sci. 11, 528 \(2009\)](#)
- [C3.12:8] ‡ V. Pankratov, A.I. Popov, S.A. Chernov, A. Zharkouskaya, and C. Feldmann, *Mechanism for energy transfer processes between Ce<sup>3+</sup> and Tb<sup>3+</sup> in LaPO<sub>4</sub>:Ce,Tb nanocrystals by time-resolved luminescence spectroscopy*, [phys. stat. sol. \(b\) 247, 2252 \(2010\)](#)
- [C3.12:9] A. Zharkouskaya, H. Lünsdorf, and C. Feldmann, *Ionic Liquid-Based Synthesis of Luminescent YVO<sub>4</sub>:Eu and YVO<sub>4</sub>:Eu@YF<sub>3</sub> Nanocrystals*, [J. Mater. Sci. 44, 3936 \(2009\)](#)
- [C3.12:10] C.J. Höller, M. Mai, C. Feldmann, and K. Müller-Buschbaum, *The Interaction of Rare Earth Chlorides with 4,4'-Bipyridine for the Reversible Formation of Template Based Luminescent Ln-N-MOFs*, [Dalton Trans. 39, 461 \(2010\)](#)
- [C3.12:11] M. Roming, H. Lünsdorf, K.E.J. Dittmar, and C. Feldmann, *ZrO(HPO<sub>4</sub>)<sub>1-x</sub>(FMN)<sub>x</sub>: Quick and Easy Synthesis of a Nanoscale Luminescent Biomarker*, [Angew. Chem. Int. Ed. 49, 632 \(2010\)](#)
- [C3.12:12] S. Becht, S. Ernst, H. Bappert, and C. Feldmann, *Do-it-yourself! Nanomaterialien zum Anfassen*, [Chem. Unserer Zeit 44, 14 \(2010\)](#)
- [C3.12:13] M. Roming and C. Feldmann, *Zirconium Umbelliferonephosphate – A Luminescent Organic-Inorganic Hybrid Nanomaterial*, [Solid State Sci. 13, 508 \(2011\)](#)
- [C3.12:14] A. Zurawski, M. Mai, D. Baumann, C. Feldmann, and K. Müller-Buschbaum, *Homoleptic Imidazolate Frameworks  $^3_4[\text{Sr}_{1-x}\text{Eu}_x(\text{Im})_2]$  – Hybrid Materials with Efficient and Tuneable Luminescence*, [Chem. Commun. 47, 496 \(2011\)](#)
- [C3.12:15] ‡ V. Pankratov, A.I. Popov, A. Kotlov, and C. Feldmann, *Luminescence of nano- and macrosized LaPO<sub>4</sub>:Ce,Tb excited by synchrotron radiation*, [Opt. Mater. 33, 1102 \(2011\)](#)
- [C3.12:16] P. Schmitt, N. Brem, S. Schunk, and C. Feldmann, *Polyol-Mediated Synthesis and Properties of Nanoscale Molybdates/Tungstates: Color, Luminescence, Catalysis*, [Adv. Funct. Mater. 21, 3037 \(2011\)](#)
- [C3.12:17] C. Feldmann, *Luminescent Nanomaterials*, [Nanoscale 3, 1947 \(2011\)](#)

- [C3.12:18] M. Mai and C. Feldmann, *Microemulsion-based Synthesis and Luminescence of Nanoparticulate CaWO<sub>4</sub>, ZnWO<sub>4</sub>, CaWO<sub>4</sub>:Tb and CaWO<sub>4</sub>:Eu*, [J. Mater. Sci. \*\*47\*\*, 1427 \(2012\)](#)
- [C3.12:19] A.I. Popov, L. Shirmane, A. Kotlov, and C. Feldmann, *LaPO<sub>4</sub>:Ce,Tb and YVO<sub>4</sub>:Eu Nanophosphors: Luminescence Studies in the Vacuum-ultraviolet Spectral Range*, [J. Appl. Phys. \*\*110\*\*, 053522 \(2011\)](#)
- [C3.12:20] P.R. Matthes, C.J. Höller, M. Mai, J. Heck, S.J. Sedlmaier, S. Schmiechen, C. Feldmann, W. Schnick, and K. Müller-Buschbaum, *Luminescence Tuning of MOFs via Ligand to Metal and Metal to Metal Energy Transfer by Co-Doping of [Gd<sub>2</sub>Cl<sub>6</sub>(bipy)<sub>3</sub>]•2bipy with Europium and Terbium*, [J. Mater. Chem. \*\*22\*\*, 10179 \(2012\)](#)
- [C3.12:21] A. Kuzmanoski and C. Feldmann, *Fluorescent Nanoparticles*, Optical Molecular Imaging (Eds. F. Alves, F. Kiessling), Vol. 4 of Comprehensive Biomedical Physics, Elsevier, Amsterdam 2012
- [C3.12:22] \* S. Marks, J. Heck, P.O. Burgos, C. Feldmann, and P.W. Roesky, *[Ln(BH<sub>4</sub>)<sub>2</sub>(THF)<sub>2</sub>] (Ln = Eu, Yb) – A highly luminescent material. Synthesis, Properties, Reactivity, and NMR Studies*, [J. Am. Chem. Soc. \*\*134\*\*, 16983 \(2012\)](#)
- [C3.12:23] C. Feldmann, *Technical Revolution underway: Nitride-based Phosphors for LED Application*, [Z. Anorg. Allg. Chem. \*\*638\*\*, 2169 \(2012\)](#)
- [C3.12:24] J.C. Rybak, M. Hailmann, P.R. Matthes, A. Zurawski, J. Heck, C. Feldmann, S. Götzendörfer, J. Meinhardt, G. SEXTL, H. Kohlmann, S. Sedlmaier, W. Schnick, and K. Müller-Buschbaum\*, *MOF Luminescence in the Yellow Gap by Co-doping of the Homoleptic Imidazolate [Balm<sub>2</sub>]:Eu<sup>2+</sup> with Divalent Europium*, [J. Am. Chem. Soc. \*\*135\*\*, 6896 \(2013\)](#)
- [C3.12:25] \* D.T. Thielemann, A.T. Wagner, E. Birtalan, D. Kölmel, J. Heck, B. Rudat, M. Neumaier, C. Feldmann, U. Schepers\*, S. Bräse\*, and P.W. Roesky\*, *A Luminescent Cell-Penetrating Pentadecanuclear Lanthanide Cluster*, [J. Am. Chem. Soc. \*\*135\*\*, 7454 \(2013\)](#)
- [C3.12:26] P.R. Matthes, J. Nitsch, A. Kuzmanoski, C. Feldmann, A. Steffen, T.B. Marder, and K. Müller-Buschbaum\*, *The Series of Rare Earth Complexes [Ln<sub>2</sub>Cl<sub>6</sub>(μ-4,4'-bipy)(py)<sub>6</sub>], Ln = Y, Pr, Nd, Sm-Yb – A Molecular Model System for Luminescence Properties in MOFs based on LnCl<sub>3</sub> and 4,4'-Bipyridine*, [Chem. Europ. J. \*\*19\*\*, 17369 \(2013\)](#)
- [C3.12:27] H.B. Yahia, U.Ch. Rodewald, R. Pöttgen\*, M. Roming, C. Feldmann, and F. Weill, *X-Ray Diffraction, SAED, NMR, and Photoluminescence Characterization of RE<sub>4</sub>O<sub>4</sub>[PO<sub>4</sub>]Cl (RE = La-Nd, Sm and Gd)*, [J. Mater. Chem. C \*\*2\*\*, 1131 \(2014\)](#)
- [C3.12:28] \* A. Kuzmanoski, and C. Feldmann, *Tb<sub>2</sub>(bpdC)<sub>3</sub> and Eu<sub>2</sub>(bpdC)<sub>3</sub> Nanoparticles (bpdC: 2,2'-bipyridine-4,4'-dicarboxylate) and Their Luminescence*, [Z. Naturforsch. B \*\*69\*\*, 248 \(2014\)](#)
- [C3.12:29] N. Dannenbauer, A. Kuzmanoski, C. Feldmann, K. Müller-Buschbaum\*, *1,3-Thiazole as Suitable Antenna for Lanthanide Photoluminescence in [LnCl<sub>3</sub>(thz)<sub>4</sub>]2·thz (Ln: Sm, Eu, Gd, Tb, Dy)*, [Z. Naturforsch. B \*\*69\*\*, 255 \(2014\)](#)
- [C3.12:30] J. Ungelenk, M. Speldrich, R. Dronskowski, and C. Feldmann, *Polyol-mediated Low-Temperature Synthesis of Crystalline Tungstate Nanoparticles MWO<sub>4</sub> (M = Mn, Fe, Co, Ni, Cu, Zn)*, [Solid State Sci. \*\*31\*\*, 62 \(2014\)](#)

## Invited Talks at International Conferences

Claus Feldmann, *Pigments, Luminescent Materials and Transparent Conductive Oxides via the Polyol Process*, Université Marie-et-Pierre-Curie et Dennis-Diderot, Paris, 20.03.2008

Claus Feldmann, *Über Nanomaterialien und andere Festkörper: Form, Funktion, Verwendung*, GDCh-Vortrag, Universität Bayreuth, 05.02.2009

Claus Feldmann, *Ionic Liquids – Useful Solvents in Functional Nanomaterials Synthesis?* AICHEM 2009, Frankfurt, 13.05.2009

Claus Feldmann, *Nanoskalige Funktionsmaterialien – Synthese, Eigenschaften, Anwendung*, Institut für Neue Materialien, Saarbrücken, 25.05.2009

Claus Feldmann, *ZrO(FMN) – Quick and Easy Synthesis of a Novel Nanoscale Luminescent Biomarker*, MRS Fall Meeting, Boston, 29.11.–04.12.2009

Claus Feldmann, *Die Zwerge kommen! – Faszination und Nutzen von Nanomaterialien*, Abendvortrag, Landesmuseum für Technik und Arbeit, Mannheim, 10.02.2010

Claus Feldmann, *Organisch-anorganische Hybridleuchtstoffe*, Nanomat Szene Meeting, Karlsruhe, 13.04.–14.04.2010

Claus Feldmann, *Kleine und große Festkörper – Synthese, Struktur, Eigenschaften*, Universität Mainz, 08.06.2010

Claus Feldmann, *Solid State Chemistry meets Nanomaterials: Über unedle Metalle, Leuchtendes, Ausgehöhlt und Brom*, GDCh-Vortrag, Universität Osnabrück, 09.11.2010

Claus Feldmann, *ZrO(FMN) – Quick and Easy Synthesis of a Novel Nanoscale Luminescent Biomarker*, Colloids & Materials 2011 – 1st Internat. Symposium on Colloids and Materials, Amsterdam 08.05.–11.05.2011

Claus Feldmann, *Nanoskalige Lumineszenzmarker und pharmazeutische Carrier*, Molekulare Bildgebung 2011, Göttingen 10.10.–12.10.2011

Claus Feldmann, *Hohlkugeln, Leuchtstoffe, Hybride – Neuartige Nanomaterialien für die Medizin?* Helmholtz-Institut für Medizinische Technik, Prof. F. Kießling, RWTH Aachen, 12.07.2012

Claus Feldmann, *Inorganic-Organic Hybrid Nanoparticles for Multipurpose Application*, NANO2012 – XIth International Conference on Nanostructured Materials, Rhode, 26.08.–31.08.2012

Claus Feldmann, *Inorganic-Organic Hybrid Nanoparticles for Multipurpose Application*, MRS Spring Meeting, San Francisco, 31.03.–05.04.2013

Claus Feldmann, *Efficient Daylight-driven Photocatalysis based on  $\beta$ -SnWO<sub>4</sub>: Processing and Application of a New Nanomaterial*, ICMAT 2013 – 7th International Conference on Materials for Advanced Technologies, Singapore, 30.06.–05.07.2013