

**List of Publications  
of  
Dr. Stanislav Baluschev Baluschev**

Names: **Baluschev**, Stanislav (*scientific publications; German spelling*)

Names: **Balouchev**, Stanislav (*in legal documents, patents; French spelling*)

**ORCID ID:** <https://orcid.org/0000-0002-0742-0687>

**h** (Web of Science): **26**

**h** (Google Scholar): **29**

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## Patents and patent applications

**1. „Long-term stable photoactive composition, such as phosphorescent composition or TTA-photon upconversion composition”**

Patent Number: US 10400164

Patent Assignee: Max Planck Gesellschaft zur Forderung der Wissenschaften EV

Inventor(s): Landfester, K.; Avlasevich, Y.; Turshatov, A.; Wurm, F.; Filatov, M.; Busko, D.; Marsico, Filippo; Balouchev, S.;

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**2. “Capsule used as oxygen sensor or temperature sensor for non-invasive sensing in living object comprises sensitizer compound having triplet state, compound capable of reacting with singlet oxygen and emitter compound ”**

Patent Number(s): EP3072942-A1; WO2016150677-A1 ; EP3274420-A1 ; US2018106785-A1 ; EP3274420-B1; ES2713055-T3

Inventor(s): Landfester K, Avlasevich Y, Busko D, Wurm F, Balouchev S

Patent Assignee Name(s): Max Planck Gesellschaft zur Forderung der Wissenschaften EV

Derwent Primary Accession Number: 2016-600644.

**3. “Formulation for manufacturing e.g. organic electrical luminescence device, is composed of nanoparticles that are composed of organically functional material used for production of functional layers of electronic devices”**

Patent Number(s): WO2016107663-A1 ; EP3241248-A1

Inventor(s): Ludemann A, Traut N, Kluge E, Avlasevich Y, Balouchev S, Landfester K

Patent Assignee Name(s) and Code(s): MERCK Patent GmbH (MERE-C)

Derwent Primary Accession Number: 2016-41429W

**4. “Capsule, preferably nanocapsule, microcapsule or macrocapsule, for protecting target compound against gases, radicals, chemical compounds and physical evaporation, comprises shell comprising semicrystalline cellulose nanofibers, and core”**

Patent Number(s): EP2865443-A1 ; WO2015059179-A1

Inventor(s): Landfester K, Balouchev S, Risbo J, Hanner A J

Patent Assignee Name(s) and Code(s): Max Planck Gesellschaft zur Forderung der Wissenschaften EV (PLAC-C)

Univ Copenhagen (UYCO-Non-standard)

Derwent Primary Accession Number: 2015-272410

**5. “Long-term stable photoactive composition for e.g. ink, comprises compound(s), which has triplet state capable of energy transfer by emissive process or non-emissive process, and compound(s) capable of reacting with singlet oxygen”**

Patent Number(s): EP2851407-A1 ; WO2015044129-A1 ; EP3049502-A1 ; US2016222286-A1 ; US10400164-B2

Inventor(s): Landfester K, Avlasevich Y, Turshatov A, Wurm F, Filatov M, Busko D, Balouchev S, Marsico F

Patent Assignee Name(s) and Code(s): Max Planck Gesellschaft zur Forderung der Wissenschaften EV (PLAC-C)

Derwent Primary Accession Number: 2015-21097D

**6.** “Treating cancer involves administering to individual, polymeric nanoparticle comprising medium for photon up-conversion and stabilizing agent, where the medium comprises two components and polymeric organic matrix component”

Patent Number(s): US2013236555-A1 ; US8574465-B2

Inventor(s): Miteva T, Fuhrmann G, Nelles G, Yakutkin V, Balouchev S

Patent Assignee Name(s) and Code(s): SONY CORP (SONY-C)

Derwent Primary Accession Number: 2013-N24902

**7.** “New polymeric nanoparticle comprising medium for photon up-conversion and stabilizing agent, where the medium comprises sensitizer, emissive component and polymeric organic matrix component, useful e.g. for labeling and detection of cells”

Patent Number(s): US2010330026-A1 ; CN101899295-A ; US8431051-B2; CN105727314-A

Inventor(s): Miteva T, Fuhrmann G, Nelles G, Yakutkin V, Balouchev S,

Patent Assignee Name(s) and Code(s): SONY CORP (SONY-C)

Derwent Primary Accession Number: 2011-A10359

**8.** “Composition, useful e.g. for photon energy up-conversion, comprises at least two components, where first and second components are organic compounds and are capable of absorbing energy at first and second wavelengths, respectively”

Patent Number(s): US2009251765-A1 ; US8242263-B2

Inventor(s): Balouchev S, Keivanidis P, Lupton J, Miteva T, Nelles G, Yasuda A

Patent Assignee Name(s) and Code(s): SONY DEUT GmbH (SONY-C)

Max Planck Gesellschaft zur Forderung der Wissenschaften EV (PLAC-C)

Derwent Primary Accession Number: 2009-P65349

**9.** “Device, useful for modifying e.g. narrowing wavelength range of spectrum of light incident on device, comprises medium for photon energy up-conversion comprising two components and matrix in which two components are distributed”

Patent Number(s): EP2075304-A1 ; EP2075304-B1

Inventor(s): Balouchev S, Miteva T, Nelles G, Yakutkin V

Patent Assignee Name(s) and Code(s): SONY CORP (SONY-C)

Derwent Primary Accession Number: 2009-K92633

**10.** “Device, useful e.g. for narrowing the wavelength range of spectrum of light incident on device, comprises medium for photon energy up-conversion comprising sensitizer and emissive component, matrix, and light transparent container”

Patent Number(s): EP2067839-A1 ; US2009290211-A1 ; CN101604107-A ; US7929200-B2 ;

EP2067839-B1 ; CN101604107-B

Inventor(s): Balouchev S, Miteva T, Nelles G, Yakutkin V

Patent Assignee Name(s) and Code(s): SONY CORP (SONY-C)

Derwent Primary Accession Number: 2009-K14176

**11.** “Display system such as red-green-blue display, comprises light emitting medium, light source for providing excitation light to medium, control device, and computer for controlling light source and control device”

Patent Number(s): EP2067837-A1 ; US2009224659-A1 ; CN101556421-A ; US7969646-B2 ; EP2067837-B1

Inventor(s): Balouchev S, Miteva T, Nelles G, Yakutkin V

Patent Assignee Name(s) and Code(s): SONY CORP (SONY-C)

Derwent Primary Accession Number: 2009-K14069

**12.** “*Photon energy up-conversion medium e.g. for use as solar spectrum concentrator in solar cell, greenhouse, or window, comprises sensitizer and emissive component distributed in matrix*”

Patent Number(s): EP2067838-A1 ; WO2009071281-A1 ; US2011013263-A1 ; CN101939400-A ; JP2011505479-W ; IN201003971-P1 ; US8400707-B2 ; EP2067838-B1 ; CN101939400-B ; JP5491408-B2

Inventor(s): Balouchev S, Fuhrmann G, Miteva T, Nelles G, Yakutkin V,

Patent Assignee Name(s) and Code(s): SONY DEUT GmbH (SONY-C)

Derwent Primary Accession Number: 2009-K12163

**13.** Zeeman slower for producing cooled atoms for coating process, has area of cross-section of inner passage that increases monotonously along longitudinal axis at least in part of cooling section

Patent Number(s): WO2007147477-A1 ; EP1871149-A1 ; CN101473705-A ; JP2009541717-W ; US2010012826-A1 ; EP1871149-B1 ; US8049162-B2 ; CN101473705-B

Inventor(s): Miteva T, Nelles G, Yasuda A, Balouchev S.

Patent Assignee Name(s) and Code(s): SONY DEUT GmbH (SONY-C)

Derwent Primary Accession Number: 2008-E83311

**14.** “*Integrated system’s temperature determining method for use in e.g. opto-electronic device, involves measuring emission of radiation from molecular thermometer fraction, and measuring temperature of system based on radiation*”

Patent Number(s): US2007071064-A1 ; US7517144-B2

Inventor(s): Miteva T, Nelles G, Yasuda A, Balouchev S, Lupton J

Patent Assignee Name(s) and Code(s): SONY DEUT GmbH (SONY-C)

Max Planck Gesellschaft zur Forderung der Wissenschaften EV (PLAC-C)

Derwent Primary Accession Number: 2007-474314

**15.** “*Material composition for photon energy up-conversion useful in e.g. solar cell, comprises first component and/or second component that is organic compound*”

Patent Number(s): EP1484379-A1 ; AU2004202413-A1 ; JP2005049824-A ; US2005056815-A1 ; KR2004103500-A ; KR689124-B1 ; AU2004202413-B2 ; US7683363-B2 ; JP4518313-B2 ; EP1484379-B1

Inventor(s): Miteva T, Nelles G, Yasuda A, Balouchev S, Keivanidis P, Lupton J

Patent Assignee Name(s) and Code(s): SONY INT EURO GMBH(SONY-C)

Max Planck Gesellschaft zur Forderung der Wissenschaften EV (PLAC-C)

SONY DEUT GMBH(SONY-C)

Derwent Primary Accession Number: 2005-032703

**16.** “*Temperature determining method for molecular thermometer system, involves photoexciting molecular heater fraction, and detecting emission of radiation from molecular thermometer fraction*”

Patent Number(s): US2004032679-A1 ; EP1391708-A1 ; JP2004077481-A ; US7097354-B2 ; EP1391708-B1 ; DE60224267-E ; DE60224267-T2 ; JP4689154-B2

Inventor(s): Miteva T, Nelles G, Yasuda A, Balouchev S, Lupton J,

Patent Assignee Name(s) and Code(s): Max Planck Gesellschaft zur Forderung der Wissenschaften EV (PLAC-C)

SONY DEUT GMBH(SONY-C)

Derwent Primary Accession Number: 2004-267106

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