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Senior Research Professor

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**EDUCATION & PROFESSION**

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| since 2008 | Senior Research Professor at the IMDEA Nanoscience Institute, Madrid, Spain
2008-2013 <i>Ramón y Cajal</i> Fellow (I3 & IED accredited), Spanish Science Ministry |
| 2014 | Habilitation, Institute of Physical and Theoretical Chemistry (IPTC), University of Tübingen, Germany |
| 2004 - 2007 | Research fellow at the Laboratory for Chemistry for Novel Materials, University of Mons, Belgium, with David Beljonne & Jérôme Cornil |
| 2003 - 2004 | Research fellow at the Institute of IPTC, University of Tübingen, Germany |
| 2000 - 2003 | Researcher, lecturer and administration manager of the IPTC |
| 2000 | PhD in Physical Chemistry, IPTC, Univ. Tübingen, Germany, with D. Oelkrug |

VISITING RESEARCHER POSITIONS & SCIENTIFIC STAYS

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| since 2014 | <i>Privatdozent</i> (Adjunct Prof.) at the University of Tübingen, Germany |
| since 2014 | Regular visiting researcher, University of Valencia, Spain |
| since 2009 | Regular visiting researcher at Seoul National University, with Soo Young Park |
| 2016 - 2019 | Regular visiting researcher, UNIST, with Minsang Kwon |
| 2014/2015 | Visiting Professor at the University of Mons, Belgium |
| 2014/2015 | Adjunct Professor (WCU Hybrid Program), Seoul National University, Korea |
| 2008 - 2010 | Visiting researcher at ICMol, University of Valencia, Spain |
| 2005 | Visiting researcher with Jean-Luc Brédas, Georgia Tech, Atlanta, USA |
| 2005 - 2014 | Regular visiting researcher at the IPTC, Univ. Tübingen, Germany |

Short scientific stays (1-4 weeks) at Seoul National University (2008), University of Montreal (2007), Milano Bicocca (2006), Politecnico di Milano (2006), Temple University, Philadelphia (2005), Rutherford-Appleton Laboratories, Chilton (2004), Institute for Fluorescence Spectroscopy, Baltimore (2000), C.N.R. Bologna (1998).

DISSEMINATION

- 130 publications in peer-reviewed journals (7500 cites, h = 45), incl. 12 reviews and suchlike
- 80 talks at international conferences, symposia & workshops (30 reputably invited); 80 invited seminars at research institutes; 30 lecture (series); 30 presentations at research meetings.

MANAGEMENT

since 2012	Coordinator & PI of projects financed by the Spanish Science Ministry: [MINECO-FEDER CTQ2011-27317, CTQ2014-58801, CTQ2017-87054]
2017 - 2021	Guarantor of the IMDEA Nanoscience - Severo Ochoa Excellence Center [MINECO SEV-2016-0686]
2013 - 2017	MC Member & WG Leader in COST action MP1302 NANOSPECTROSCOPY
2013 - 2015	Coordination of a Marie-Curie IEF project (SOLARREVOLUTION, Dr. Mike Wykes)
2010 - 2013	PI in a project of the Comunidad Madrid [NANOBIOMAGNET, S2009/MAT-1726]
2002 - 2010	Coordination of two European Marie Curie Research Training Networks (RTNs NANOCHANNEL HPRN-CT-2002-00323, NANOMATCH MRTN-CT-2006-035884)
2000 - 2003	Head of the institute administration at IPTC, University of Tübingen, Germany

COLLABORATIONS

Current collaborations inter alia with S. Y. Park (Seoul), B. Milián-Medina (Valencia), M. S. Kwon (Ulsan), D. Roca Sanjuán (Valencia), R. Wannemacher (Madrid), R. Resel (Graz), J. Kim (Ann Arbor), S. Varghese (IACS, Kolkata), A. Meixner & D. Zhang (Tübingen), D. Beljonne (Mons), N. Crivillers (Barcelona), J. L. Alonso-Gómez (Vigo), S. A. Jursenas (Vilnius), J. Cerezo (Madrid), A. Adawi (Hull), A. Facchetti (FLEXTERRA), F. Santoro (Pisa), H. Detert (Mainz), E. Gnecco (Jena), M. Watson (Lexington), D. R. Whang (Seoul), H.-J. Egelhaaf (Nürnberg).

SERVICE TO THE COMMUNITY

Journals	Associated Editor of 'Frontiers in Chemistry' (since 2013); Member of the Editorial Advisory Board for 'Nanospectroscopy' (de Gruyter; since 2013); Member of the Editorial Board for 'Materials' (since 2018); Guest Editor for 'Materials' (Special Issue 2010 on 'Organic Electronic Materials')
Conferences	Board member of the CIIC conference series (since 2010); Board member of the European School 'Nanostructured Supramolecular Materials' (2002-2010); Organization of numerous Symposia, Training Schools and Research Meetings
Peer reviewer	for ACS, AIP, CSJ, De Gruyter, Elsevier, IUCr, MDPI, NPG, RSC, Springer, Wiley VCH journals: 200 reports in 50 journals Expert referee of the Spanish Science Ministry (2011), Leibniz Association (2017)
Others	since 2008 (IMDEA): <i>Open Door</i> activities, <i>Science Fair</i> etc. 2000-03 (Univ. Tübingen): <i>Academic Advisor</i> in physical chemistry; organization of student excursion, undergraduate student & school visits; training courses for high-school teachers; contributions to Industrial Training Courses in Spectroscopy

TEACHING & SUPERVISION

since 2003	Lecture (30 h) on <i>Optical Spectroscopy</i> : Tübingen (2003, 2016-), Madrid (2011-), Seoul (2009-), Ulsan (2016-18), Mons (2006/-15), Atlanta (2005), Valencia (2008)
since 1995	Supervision of postdocs (10), PhD students (5) and PhD internships (4), master students (3) and undergraduates (8)
1995 - 2004	Lecturer, director and assistant supervisor/advisor of experimental courses in all fields of physical chemistry (av. 60 h/y)
1987 - 1995	Tutoring of high school & university students in mathematics, chemistry & physics

PUBLICATIONS

- 1) *Solvent-Free Acrylic Pressure-Sensitive Adhesives via a Visible-Light Driven Photocatalytic Radical Polymerization without Additives*
J.-H. Back, Y. Kwon, H.-J. Kim, J. C. Roldao, Y. Yu, H.-J. Kim, J. Gierschner, W. Lee, M. S. Kwon, *Green Chem.* under revision.
- 2) *Turn-On Solid State Luminescence by Solvent-Induced Modification of Intermolecular Interactions*
P. Majumdar, M. Ghora, R. Wannemacher, J. Gierschner, S. Varghese, *J. Mater. Chem. C* **2020**, accepted.
- 3) *Dual Emission: Classes, Mechanisms and Conditions*
S. K. Behera, S. Y. Park, J. Gierschner, *Angew. Chem. Int. Ed.* **2020**, accepted.
- 4) *Distinct Helical Molecular Orbitals Through Conformational Lock*
A. Ozelik, D. Aranda, S. Gil-Guerrero, X. A. Pola-Otero, M. Talavera, L. Wang, S. K. Behera, J. Gierschner, Á. Peña-Gallego, F. Santoro, R. Pereira-Cameselle, J. L. Alonso-Gómez, *Chem. Eur. J.* **2020**, accepted.
- 5) *Unraveling the Origin of High Efficiency Photoluminescence in Mixed-Stack Isostructural Crystals of Organic Charge-Transfer Complex: Fine-Tuning of Isometric Donor-Acceptor Pairs*
S. Oh, S. K. Park, B. H. Jhun, J. C. Roldao, J. H. Kim, M.-W. Choi, C. H. Ryoo, S. Jung, N. Demitri, R. Fischer, I. E. Serdiuk, R. Resel, J. Gierschner, S. Y. Park, *J. Phys. Chem. C* **2020**, *37*, 20377–20387.
- 6) *Combined Spectroscopic and TD-DFT Analysis to Elucidate Substitution and Acidochromic Effects: A Case Study on Amino- vs. Nitro-Substituted 2,4-Diphenylquinolines*
G. Carvalho dos Santos, J. C. Roldao, J. Shi, B. Milián-Medina, L. C. da Silva Filho, J. Gierschner, *ChemPhysChem* **2020**, *21*, 1797-1804.
- 7) *Tricolor Fluorescence Switching in a Single Component Mechanochromic Molecular Material*
H.-J. Kim, J. Gierschner, S. Y. Park, *J. Mater. Chem. C* **2020**, *8*, 7417-7421.
- 8) *Self-Assembled Amphiphilic Molecules for Highly Efficient Photocatalytic Hydrogen Evolution from Water*
H.-J. Lee, J. Kim, A. Abudulimu, J. Cabanillas-Gonzales, P. C. Nandajan, J. Gierschner, L. Luer, S. Y. Park, *J. Phys. Chem. C* **2020**, *124*, 6971-6978.
- 9) *Tuning of Solid State Luminescence in Conjugated Organic Materials: Control of Excitonic and Excimeric Contributions through π -Stacking and Halogen Bond Driven Self-Assembly.*
P. Majumdar, F. Tharammal, J. Gierschner, S. Varghese, *ChemPhysChem* **2020**, *21*, 616-624.
- 10) *Counterion-Mediated Crossing of the Cyanine Limit in Crystals and Fluid Solution: Bond Length Alternation and Spectral Broadening Unveiled by Quantum Chemistry*
M. Eskanderi, J. C. Roldao, J. Cerezo, B. Milián-Medina, J. Gierschner, *J. Am. Chem. Soc.* **2020**, *142*, 2835-2843.
- 11) *Excited State Non-Radiative Decay in Stilbenoid Compounds: An ab initio Quantum-Chemistry Study on Size and Substituent Effects*
M. A. Izquierdo, J. Shi, S. Oh, S. Y. Park, B. Milián-Medina, J. Gierschner, D. Roca-Sanjuán, *Phys. Chem. Chem. Phys.* **2019**, *21*, 22429-22439.
- 12) *Crossed 2D vs. Slipped 1D π -Stacking in Polymorphs of Crystalline Organic Thin Films: Impact on the Electronic and Optical Response*
M. J. Aliaga-Gosalvez, M. Demitri, M. Dohr, J. C. Roldao, S. K. Park, S. Oh, S. Varghese, S. Oh, S. Y. Park, Y. Olivier, B. Milián-Medina, R. Resel, J. Gierschner, *Adv. Opt. Mater.* **2019**, *7*, 1900749.
- 13) *Organic Photocatalyst for ppm-Level Visible-Light-Driven Reversible Addition-Fragmentation Chain Transfer (RAFT) Polymerization with Excellent Oxygen Tolerance*
Y. Song, Y. Kim, Y. Noh, V. K. Singh, S. K. Behera, A. Abudulimu, K. Chung, R. Wannemacher, J. Gierschner, L. Luer, M. S. Kwon, *Macromol.* **2019**, *52*, 5538-5545.
- 14) *Assembly-Induced Bright-Light Emission from Solution-Processed Platinum(II) Inorganic Polymers*
A. Perevedentsev, F. L. Bargardi, A. Sánchez-Ferrer, N. J. Cheetham, A. Sousaraei, S. Busato, J. Gierschner, B. Milián-Medina, R. Mezzenga, R. Wannemacher, J. Cabanillas-Gonzalez, M. Campoy-Quiles, W. R. Caseri, *ACS Omega* **2019**, *4*, 10192-10204.

- 15) *Inverted Energy Gap Law for the Nonradiative Decay in Fluorescent Floppy Molecules: Larger Fluorescence Quantum Yields for Smaller Energy Gaps*
J. Shi, M. A. Izquierdo, S. Oh, S. Y. Park, B. Milián-Medina, D. Roca-Sanjuán, J. Gierschner, *Org. Chem. Front.* **2019**, 6, 1948-1954.
- 16) *Probing the Molecular Orientation of a Single Conjugated Polymer via Nano-gap SERS*
A. R. L. Marshall, M. Roberts, J. Gierschner, J.-S. G. Bouillard, A. M. Adawi, *ACS Appl. Polymer Mater.* **2019**, 1, 1175-1180.
- 17) *Highly Efficient and Stable Inverted Perovskite Solar Cells Obtained via Treatment by Semiconducting Chemical Additive*
J. C. Yu, S. Badgujar, E. D. Jung, V. K. Singh, D. W. Kim, J. Gierschner, E. Lee, Y. S. Kim, S. Cho, M. S. Kwon, M. H. Song, *Adv. Mater.* **2019**, 31, 1805554.
- 18) *Highly Efficient Organic Photocatalysts Discovered via a Computer-Aided-Design Strategy for Visible-Light-Driven Atom Transfer Radical Polymerization*
V. K. Singh, C. Yu, S. Badgujar, Y. Kim, Y. Kwon, D. Kim, J. Lee, T. Akhter, G. Thangavel, L. S. Park, J. Lee, P. C. Nandajan, R. Wannemacher, B. Milián-Medina, L. Lüer, K. S. Kim, J. Gierschner, M. S. Kwon, *Nat. Catal.* **2018**, 1, 794-804.
- 19) *Insight into Water-Soluble Highly Fluorescent Low-Dimensional Host-Guest Supramolecular Polymers: Structure and Energy Transfer Dynamics Revealed by Polarized Fluorescence Spectroscopy*
P. C. Nandajan, H.-J. Kim, S. Casado, S. Y. Park, J. Gierschner, *J. Phys. Chem. Lett.* **2018**, 9, 3870-3877.
- 20) *Light Harvesting Fluorescent Supramolecular Block Copolymers Based on Cyanostilbene Derivatives and Cucurbit[8]urils in Aqueous Solution*
H.-J. Kim, P. C. Nandajan, J. Gierschner, S. Y. Park, *Adv. Funct. Mater.* **2018**, 28, 1705141.
- 21) *Designing High Performance All-Small-Molecule Solar Cell with Non-Fullerene Acceptors: Comprehensive Studies on Photoexcitation Dynamics and Charge Separation Kinetics*
J. Shi, A. Isakova, A. Abudulimu, M. van den Berg, O. K. Kwon, A. J. Meixner, S. Y. Park, D. Zhang, J. Gierschner, L. Lüer, *Energy Environ. Sci.* **2018**, 11, 211-220.
- 22) *Room Temperature Phosphorescence based Dissolved Oxygen Detection by Core-shell Polymer Nanoparticles having Metal-free Organic Phosphor*
Y. Yu, M. S. Kwon, J. Jung, Y. Zeng, M. Kim, K. Chung, J. Gierschner, J. H. Youk, S. M. Borisov, J. Kim, *Angew. Chem. Int. Ed.* **2017**, 56, 16207-16211.
- 23) *Determining Molecular Orientation via Single Molecule SERS in a Plasmonic Nano-Gap*
A. R. L. Marshall, J. Stokes, F. N. Viscomi, J. E. Proctor, J. Gierschner, J.-S. Bouillard, A. M. Adawi, *Nanoscale* **2017**, 9, 17415-17421.
- 24) *Solid State Luminescence Enhancement in π -Conjugated Materials: Unraveling the Mechanism beyond the Framework of AIE/AIEE*
J. Shi, L. E. Aguilar Suarez, S.-J. Yoon, S. Varghese, C. Serpa, S. Y. Park, L. Lüer, D. Roca Sanjuán, B. Milián Medina, J. Gierschner, *J. Phys. Chem. C* **2017**, 121, 23166-23183.
- 25) *Twist Elasticity Controlled Crystal Emission in Highly Luminescent Polymorphs of Cyano-Substituted Distyrylbenzene (β DCS)*
J. Shi, S.-J. Yoon, L. Viani, B. Milián-Medina, S. Y. Park, J. Gierschner, *Adv. Opt. Mater.* **2017**, 5, 1700340.
- 26) *Tetrakis{[(p-dodecacarboranyl)methyl]stilbenyl}ethylene: A Luminescent Tetraphenylethylene (TPE) Core System*
J. Cabrera-González, S. Bhattacharyya, B. Milián-Medina, F. Teixidor, N. Farfán, R. Arcos-Ramos, V. Vargas-Reyes, J. Gierschner, R. Nuñez, *Eur. J. Inorg. Chem.* **2017**, 4575-4580.
- 27) *Fluorescent Carborane-Vinylstilbene Functionalised Octasilsesquioxanes: Synthesis, Structural, Thermal and Photophysical Properties*
J. Cabrera-González, A. Ferrer-Ugalde, S. Bhattacharyya, M. Chaari, F. Teixidor, J. Gierschner, R. Nuñez, *J. Mater. Chem. C* **2017**, 5, 10211-10219.
- 28) *Highly Luminescent 2D-type Slab Crystals Based on a Molecular Charge-Transfer Complex as Promising Organic Light-Emitting Transistor Materials*

- S. K. Park, J. H. Kim, T. Ohto, R. Yamada, A. O. F. Jones, D. R. Whang, I. Cho, S. Oh, S. H. Hong, J. E. Kwon, J. H. Kim, Y. Olivier, R. Fischer, R. Resel, J. Gierschner, H. Tada, S. Y. Park, *Adv. Mater.* **29** (2017) 1701346.
- 29) *Molecular Scale Shear Response of the Organic Semiconductor β -DBDCS (100) Surface*
R. Álvarez-Asencio, J. S. Moreno-Ramírez, C. Pimentel, S. Casado, M. Matta, J. Gierschner, L. Muccioli, S.-J. Yoon, S. Varghese, S. Y. Park, E. Gnecco, C. M. Pina, *Phys. Rev. B* **96** (2017) 115422.
- 30) *Crystallization-Induced Emission Enhancement and Amplified Spontaneous Emission from a CF₃-containing Excited-State Intramolecular-Proton-Transfer Molecule*
S. Park, J. E. Kwon, S.-Y. Park, O.-H. Kwon, J. K. Kim, S.-J. Yoon, J. W. Chung, D. R. Whang, S. K. Park, D. K. Lee, D.-J. Jang, J. Gierschner, S. Y. Park, *Adv. Opt. Mater.* **5** (2017) 1700353.
- 31) *Excited State Absorption Spectra of Dissolved and Aggregated Distyrylbenzene - a TD-DFT State and Vibronic Analysis*
E. F. Oliveira, J. Shi, F. C. Lavarda, L. Lürer, B. Milián-Medina, J. Gierschner, *J. Chem. Phys.* **147** (2017) 034903.
- 32) *Highly Light-Sensitive Luminescent Cyanostilbene Flexible Dimers*
M. Martínez-Abadía, S. Varghese, P. Romero, J. Gierschner, R. Giménez, M. B. Ros, *Adv. Opt. Mater.* **5** (2017) 1600860.
- 33) *'Though It Be but Little, It is Fierce' - Excited State Engineering of Conjugated Organic Materials by Fluorination*
B. Milián-Medina, J. Gierschner, *J. Phys. Chem. Lett.* **8** (2017) 91-101.
- 34) *Highly Enhanced Fluorescence of Supramolecular Polymers Based on Cyanostilbene Derivative and Cucurbit[8]uril in Aqueous Solution*
H.-J. Kim, D. R. Whang, J. Gierschner, S. Y. Park, *Angew. Chem. Int. Ed.* **55** (2016) 15915–15919.
- 35) *Resonant Energy Transport in Dye-Filled Monolithic Crystals of Zeolite L – Modeling of Inhomogeneity*
L. Viani, A. Minoia, J. Cornil, D. Beljonne, H.-J. Egelhaaf, J. Gierschner, *J. Phys. Chem. C* **120** (2016) 27192–27199.
- 36) *Naphthalenediimide Polymers with Finely Tuned In-Chain π -Conjugation. Electronic Structure, Film Microstructure, and Charge Transport Properties*
T. Erdmann, S. Fabiano, B. Milián-Medina, D. Hanifi, Z. Chen, M. Berggren, J. Gierschner, A. Salleo, A. Kiriy, B. Voit, A. Facchetti, *Adv. Mater.* **28** (2016) 9169–9174.
- 37) *Regio(ir)regular Naphthalenediimide- and Perylenediimide-Bithiophene Copolymers: How MO Localization Controls the Bandgap*
B. Milián-Medina, M. Wykes, Z. Chen, A. Facchetti, J. Gierschner, *J. Mater. Chem. C* **4** (2016) 9405-9410.
- 38) *¿Conjugated? Copolymers from a Pechmann Dye Derivative*
A. D. Thilanga Liyanage, B. Milián-Medina, B. Zhang, J. Gierschner, M. D. Watson, *Macromol. Chem. Phys.* **217** (2016) 2068-2073.
- 39) *Photoluminescence in Carborane-Stilbene Triads: a Combined Structural, Spectroscopic and Computational study*
J. Cabrera-González, C. Viñas, M. Haukka, S. Bhattacharyya, J. Gierschner, R. Núñez, *Chem. Eur. J.* **22** (2016) 13588-13598.
- 40) *Effective Conjugation in Conjugated Polymers with Strongly Twisted Backbones: a Case Study on Fluorinated MEHPPV*
R. Milad, J. Shi, A. Aguirre, A. Cardone, B. Milián-Medina, G. M. Farinola, M. Abderrabba, J. Gierschner, *J. Mater. Chem. C* **4** (2016) 6900-6906.
- 41) *Tuning of the Electronic and Photophysical Properties of Ladder-Type Quaterphenyl by Selective Methylene-Bridge Fluorination*
B. Dänekamp, B. Kobin, S. Bhattacharyya, S. Hecht, B. Milián-Medina, J. Gierschner, *Phys. Chem. Chem. Phys.* **18** (2016) 16501-16508.
- 42) *Stabilizing and Modulating Color by Copigmentation: Insights from Theory and Experiment*
P. Trouillas, J. C. Sancho-García, V. De Freitas, J. Gierschner, M. Otyepka, O. Dangles, *Chem. Rev.* **116** (2016) 4937-4982.

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- 43) *Polymorphism and Amplified Spontaneous Emission in a Dicyano-Distyrylbenzene Derivative with Multiple Trifluoromethyl Substituents: Intermolecular Interactions in Play*
S. Varghese, S. K. Park, S. Casado, R. Resel, R. Wannemacher, L. Lüer, S. Y. Park, J. Gierschner, *Adv. Funct. Mater.* 26 (2016) 2349-2356.
 - 44) *Synthesis and Conformation of a Novel Fluorescein-Zn-Porphyrin Dyad and Intramolecular Energy Transfer*
O. Rezazgui, P. Trouillas, S. Qiu, B. Siegler, J. Gierschner, S. Leroy-Lhez, *New J. Chem.* 40 (2016) 3843-3856.
 - 45) *Organic Single Crystal Lasers - a Materials View*
J. Gierschner, S. Varghese, S. Y. Park, *Adv. Opt. Mater.* 4 (2016) 348-364.
 - 46) *Sub-nanometer Resolution of an Organic Semiconductor Crystal Surface using Friction Force Microscopy in Water*
C. Pimentel, S. Varghese, S.-J. Yoon, S. Y. Park, J. Gierschner, E. Gnecco, C. M. Pina, *J. Phys.: Condens. Matter* 28 (2016) 134002.
 - 47) *Multi-Luminescent Switching of Metal-Free Organic Phosphors for Luminometric Detection of Organic Solvents*
M. S. Kwon, J. H. Jordahl, A. W. Phillips, K. Chung, S. Lee, J. Gierschner, J. Lahann, J. Kim, *Chem. Sci.* 7 (2016) 2359-2363.
 - 48) *Calculation of Low Bandgap Homopolymers: Comparison of TD-DFT Methods with Experimental Oligomer Series*
E. F. Oliveira, J. C. Roldao, B. Milián-Medina, F. C. Lavarda, J. Gierschner, *Chem. Phys. Lett.* 645 (2016) 169-173.
 - 49) *Stimuli-Responsive Reversible Fluorescence Switching in a Crystalline Donor-Acceptor Mixture Film: Mixed Stack Charge-Transfer Emission versus Segregated Stack Monomer Emission*
S. K. Park, I. Cho, J. Gierschner, J. H. Kim, J. H. Kim, J. E. Kwon, O. K. Kwon, D. R. Whang, J. H. Park, B.-K. An, S. Y. Park, *Angew. Chem. Int. Ed.* 55 (2016) 203-207.
 - 50) *Suppressing Molecular Motions for Enhanced Room-Temperature Phosphorescence of Metal-Free Organic Materials*
M. S. Kwon, Y. Yu, C. Coburn, A. W. Phillips, K. Chung, A. Shanker, J. Jung, G. Kim, K. Pipe, S. R. Forrest, J. H. Youk, J. Gierschner, J. Kim, *Nature Commun.* 6 (2015) 8947.
 - 51) *Vibronic Coupling in Molecular Crystals: a Franck-Condon Herzberg-Teller Model of H-Aggregate Fluorescence Based on Quantum Chemical Cluster Calculations*
M. Wykes, R. Parambil Mangattu, D. Beljonne, J. Gierschner, *J. Chem. Phys.* 143 (2015) 114116.
 - 52) *Excited State Features and Dynamics in a Distyrylbenzene Based Mixed Stack Donor-Acceptor Co-Crystal with Luminescent Charge Transfer Characteristics*
M. Wykes, S. K. Park, S. Bhattacharyya, S. Varghese, J. E. Kwon, D. R. Whang, I. Cho, R. Wannemacher, L. Lüer, S. Y. Park, J. Gierschner, *J. Phys. Chem. Lett.* 6 (2015) 3682-3687.
 - 53) *Shear-Triggered Crystallization and Light Emission of a Thermally Stable Organic Supercooled Liquid*
K. Chung, M. S. Kwon, B. M. Leung, A. G. Wong-Foy, M. S. Kim, J. Kim, S. Takayama, J. Gierschner, A. J. Matzger, J. Kim, *ACS Cent. Sci.* 1 (2015) 94-102.
 - 54) *Optical Properties of Wine Pigments: Theoretical Guidelines with new Methodological Perspectives*
P. Trouillas, F. Di Melo, J. Gierschner, M. Linares, J.-C. Sancho-García, M. Otyepka, *Tetrahedron* 71 (2015) 3079-3088.
 - 55) *Bent-Core Liquid Crystalline Cyanostilbenes: Fluorescence Switching and Thermochromism*
M. Martínez Abadía, S. Varghese, B. Milián-Medina, J. Gierschner, R. Giménez, M. B. Ros, *Phys. Chem. Chem. Phys.* 17 (2015) 11715-11724.
 - 56) *High Contrast Red-Green-Blue Tricolor Fluorescence Switching in Bicomponent Molecular Film*
H.-J. Kim, D. R. Whang, J. Gierschner, C. H. Lee, S. Y. Park, *Angew. Chem. Int. Ed.* 54 (2015) 4330-4333.
 - 57) *A Distyrylbenzene Based Highly Efficient Near-Infrared Emitting Organic Solid*
M. A. Kim, D. R. Whang, J. Gierschner, S. Y. Park, *J. Mater. Chem. C* 3 (2015) 231-234.

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- 58) *Design Principles of Chemiluminescence (CL) Chemodosimeter for Highly Sensitive, Selective, and Self-Signaling Detection of Fluoride Anion: Luminol Protective Approach*
M. S. Kwon, G. Jang, D. Bilby, B. Milián-Medina, J. Gierschner, T. S. Lee, J. Kim, RSC Advances 4 (2014) 46488-46493.
- 59) *Molecular Resolution Friction Microscopy of Cu Phthalocyanine Thin Films on Dolomite (104) in Water*
P. Nita, C. Pimentel, F. Luo, B. Milián-Medina, J. Gierschner, C. M. Pina, E. Gnecco, Nansocale 6 (2014) 8334-8339.
- 60) *Orthogonal Resonator Modes and Low Lasing Threshold in Highly Emissive Distyrylbenzene-Based Molecular Crystals*
S. Varghese, S.-J. Yoon, S. Casado, R. Fischer, R. Wannemacher, S. Y. Park, J. Gierschner, Adv. Opt. Mater. 2 (2014) 542-548.
- 61) *Rationally Designed Molecular D-A-D Triad for Piezochromic and Acidochromic Fluorescence On-Off Switching*
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