

Publications

2021

Energy funnelling within multichromophore architectures monitored with subnanometre resolution

Shuiyan Cao, Anna Rosławska, Benjamin Doppagne, Michelangelo Romeo, Michel Féron, Frédéric Chérioux, Hervé Bulou, Fabrice Scheurer and Guillaume Schull

Nature Chemistry 2021; <https://doi.org/10.1038/s41557-021-00697-z>

2020

Single-molecule tautomerization tracking through space- and time-resolved fluorescence spectroscopy

B. Doppagne, T. Neuman, R. Soria-Martinez, L.E. Parra Lopez, H. Bulou, M. Romeo, S. Berciaud, F. Scheurer, J. Aizpurua and G. Schull

Nat. Nanotechnol. (2020). <https://doi.org/10.1038/s41565-019-0620-x>

Magnetic phase and magneto-resistive effects in vanadium oxide epitaxial nanoclusters.

B. Kengni Zanguim, L. Joly, F. Scheurer, P. Ohresser, J.-F. Dayen, C. Ulhaq-Bouillet, J. Uzan, B. Kundys, H. Majjad and D. Halley

Appl. Phys. Lett. 116, 042404 (2020); <https://doi.org/10.1063/1.5131829>

2018

Bright electroluminescence from single graphene nanoribbon junctions

M.C. Chong, N. Afshar-Imani, F. Scheurer, C. Cardoso, A. Ferretti, D. Prezzi, G. Schull

Nano Lett. 18, 175 (2018)

Cu metal / Mn phthalocyanine organic spinterfaces atop Co with high spin polarization at room temperature

E. Urbain, F. Ibrahim, M. Studniarek, F. Ngassam Nyakam, L. Joly, J. Arabski, F. Scheurer, F. Bertran, P. Le Fèvre, G. Garreau, E. Denys, P. Wetzels, M. Alouani, E. Beaurepaire, S. Boukari, M. Bowen, and W. Weber

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Fano description of single-hydrocarbon fluorescence excited by a scanning tunneling microscope

Jörg Kröger, Benjamin Doppagne, Fabrice Scheurer, and Guillaume Schull,

Nano Lett 18, 3407 (2018)

Electrofluorochromism at the single molecule level

B. Doppagne, M. Chong, H. Bulou, A. Boeglin, F. Scheurer, and G. Schull

Science 361, 251 (2018)

When interfaces meet: controlling an organic spinterface using an artificial magnetoelectric. New opportunities for multifunctional electronics

M. Studniarek, S. Cherifi-Hertel, E. Urbain, U. Halisdemir, R. Arras, B. Taudul, F. Schleicher, M. Hervé, C.-H. Lambert, A. Hamadeh, L. Joly, F. Scheurer, G. Schmerber, V. Da Costa, B. Warot-Fonrose, C. Marcelot, O. Mauguin, L. Largeau, F. Leduc, F. Choueikani, E. Otero, W. Wulfhekel, J. Arabski, P. Ohresser, W. Weber, E. Beaurepaire, S. Boukari, and M. Bowen

Soleil Highlights 2017 (2018)

Exciting molecular spin states at the tip of a STM

M. Ormaza, N. Bachellier, M.N. Faraggi, B. Verlhac, P. Abufager, P. Ohresser, L. Joly, M. Romeo, F. Scheurer, M.-L. Bocquet, N. Lorente, L. Limot,

Soleil Highlights 2017 (2018)

Ultralow-temperature device dedicated to soft X-ray magnetic circular dichroism experiments

J.-P. Kappler, E. Otero, W. Li, L. Joly, G. Schmerber, B. Muller, F. Scheurer, F. Leduc, B. Gobaut, L. Poggini, G. Serrano, F. Choueikani, E. Lhotel, A. Cornia, R. Sessoli, M. Mannini, M.-A. Arrio, Ph. Saintavit and P. Ohresser

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L. Joly, J.-P. Kappler, P. Ohresser, Ph. Saintavit, Y. Henry, F. Gautier, G. Schmerber, D. J. Kim, C. Goyhenex, H. Bulou, O. Bengone, J. Kavich, P. Gambardella, and F. Scheurer

Phys. Rev. B 95, 041108(R) 2017

Efficient spin-flip excitation of a Nickelocene molecule

M. Ormaza, N. Bachellier, M. N. Faraggi, B. Verlhac, P. Abufager,
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Probing a Device's Active Atoms

M. Studniarek, U. Halisdemir, F. Schleicher, B. Taudul, E. Urbain, S. Boukari, M. Hervé, Ch.-H. Lambert, A. Hamadeh, S. Petit-Watelot,
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Vibronic Spectroscopy with Submolecular Resolution from STM-Induced Electroluminescence

B. Doppagne, M. C. Chong, E. Lorchat, S. Berciaud, M. Romeo, H. Bulou, A. Boeglin, F. Scheurer, and G. Schull
Phys. Rev. Lett. **118**, 127401 (2017)

Le fil moléculaire qui éclaire comme une LED

F. Scheurer, G. Schull

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Modulating the Ferromagnet/Molecule Spin Hybridization Using an Artificial Magnetoelectric

M. Studniarek, S. Cherifi-Hertel, E. Urbain, U. Halisdemir, R. Arras, B. Taudul, F. Schleicher, M. Hervé, C.-H. Lambert, A. Hamadeh, L.
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Interface Magnetoelectric Coupling in Co/Pb(Zr,Ti)O₃

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Single Molecules as Whispering Galleries for Electrons

G. Reecht, H. Bulou, G. Schull, and F. Scheurer

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High Spin Polarization at Ferromagnetic Metal–Organic Interfaces: A Generic Property

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Electroluminescence of a Polythiophene Molecular Wire Suspended between a Metallic Surface and the Tip of a Scanning Tunneling Microscope

Gaël Reecht, Fabrice Scheurer, Virginie Speisser, Yannick J. Dappe, Fabrice Mathevet, and Guillaume Schull

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Nicolas Moreau, Vincent Repain, Cyril Chacon, Yann Girard, Jerome Lagoute, Fabrice Scheurer, Philippe Ohresser, Jean Klein and Sylvie Rousset

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Guillaume Schull, Fabrice Scheurer et Gaël Reecht

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F. Djeghloul, F. Ibrahim, M. Cantoni, M. Bowen, L. Joly, S. Boukari, P. Ohresser, F. Bertran,
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Dispositif injecteur de spins comportant une couche de protection en son centre

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