

Publications and patents of the last 10 years

Orcid ID n. 0000-0002-2152-6517

392. E.A. Prasetyanto, Y. Atoini, L. Donato, C.-W. Hsu, L. De Cola
“The Role of a Confined Space on the Reactivity and Emission Properties of Copper (I) Clusters” *Front Chem.* **2022**, *10*, 829538.
391. A. Mosseri, M. Sancho-Albero, M. Leone, D. Nava, F. Secundo, D. Maggioni, L. De Cola, A. Romanelli *Chem. Eur. J.* **2022**, *28*, e202200693.
390. J. Krämer, R. Kang, L.M. Grimm, L. De Cola, P. Picchetti, F. Biedermann
“Molecular Probes, Chemosensors, and Nanosensors for Optical Detection of Biorelevant Molecules and Ions in Aqueous Media and Biofluids”
Chem. Rev. **2022**, *122*, 3459–3636
389. L.M. Grimm, S. Sinn, M. Krstić, E. D’Este, I. Sonntag, E.A. Prasetyanto, T. Kuner, W. Wenzel, L. De Cola, F. Biedermann
“Fluorescent Nanozeolite Receptors for the Highly Selective and Sensitive Detection of Neurotransmitters in Water and Biofluids”
Adv. Mater. **2021**, *33*, 2104614. (Cover of the issue)
388. A. G. Vázquez, M. R. Rodríguez-Luna, J. Verde, E. Piantanida, G. Alonci, M. Palermo, E. Serra, L. De Cola, M. E. Giménez
“Image-Guided Surgical Simulation in Minimally Invasive Liver Procedures: Development of a Liver Tumor Porcine Model Using a Multimodality Imaging Assessment” *Journal of Laparoendoscopic & Advanced Surgical Techniques* **2021**, *31*, 1097-1103.
387. E. Piantanida, I. Boskoski, G. Quero, C. Gallo, Y. Zhang, C. Fiorillo, V. Arena, G. Costamagna, S. Perretta, L. De Cola
“Nanocomposite hyaluronic acid-based hydrogel for the treatment of esophageal fistulas” *Materials Today Bio*, **2021**, *10*, 100109.
386. H. Hernández-Toledo, H. Torrens, M. Flores-Álamo, L. De Cola, G. Moreno-Alcántar
“Self-Assembly and Aggregation-Induced Emission in Aqueous Media of Responsive Luminescent Copper(I) Coordination Polymer Nanoparticles”
Chem. Eur. J. **2021**, *27*, 8308-8314.
385. L. Talamini, P. Picchetti, L.M. Ferreira, G. Sitia, L. Russo, M.B. Violatto, L. Travaglini, J. Fernandez Alarcon, L. Righelli, P. Bigini, L. De Cola
“Organosilica Cages Target Hepatic Sinusoidal Endothelial Cells Avoiding Macrophage Filtering” *ACS Nano* **2021**, *15*, 9701–9716.
384. L. Talamini, E. Matsuura, L. De Cola, S. Muller
“Immunologically Inert Nanostructures as Selective Therapeutic Tools in Inflammatory Diseases” *Cells*, **2021**, *10*, 707-725.
383. P. Picchetti, G. Moreno-Alcántar, L. Talamini, A. Mourgout, A. Aliprandi, L. De Cola
“Smart Nanocages as a Tool for Controlling Supramolecular Aggregation”
J. Am. Chem. Soc. **2021**, *143*, 7681-7687.
382. G. Moreno-Alcántar, A. Aliprandi, L. De Cola, “Aggregation-Induced Emission in Electrochemiluminescence: Advances and Perspectives” *Topics in Current Chemistry*, **2021**, *379*, 31.

381. G. Moreno-Alcántar, A. Aliprandi, R. Rouquette, L. Pesce, K. Wurst, C. Perego, P. Brüggeller, G. M. Pavan, L. De Cola
“Solvent-driven supramolecular wrapping of self-assembled structures”
Angew. Chem. Int. Ed., **2021**, *60*, 5407-5413.
380. R. Kang, L. Talamini, B. Martins Estevão, E. D’Este, L. De Cola, W.Klopper, F. Biedermann
“Discovery of a size-record breaking green-emissive fluorophore: Small, smaller, HINA” *Chem. Sci.*, **2021**, *12*, 1392-1397.
379. N. Vilaca, A.R. Bertao, E.A. Prasetyanto, S. Granja, M. Costa, R. Fernandes, F. Figueiredo, A.M. Fonseca, L. De Cola, F. Baltazar, I.C. Neves
“Surface functionalization of zeolite-based drug delivery systems enhances their antitumoral activity in vivo”
Materials Science & Engineering, C, **2021**, *120*, 111721-111733.
378. C. Lochenie, A. Insuasty, T. Battisti, L. Pesce, A. Gardin, C. Perego, M. Dentinger, D. Wang, G. M. Pavan, A. Aliprandi, L. De Cola
“Solvent-driven chirality for luminescent selfassembled structures: experiments and theory” *Nanoscale*, **2020**, *12*, 21359 – 21367.
377. P. Ceroni, Y. Chao, C. Crucho, L. De Cola, A. Fucikova, A. Goyal, J. Joo, A. R. Kamali, L. Osminkina, S. Silvestrini, et al. “Silicon nanostructures for sensing and bioimaging: general discussion” *Faraday Discussions*, **2020**, *222*, 384-389.
376. E. Longhi, J.M. Fernandez-Hernandez, A. Iordache, R. Frohlich, H-P. Josel, L. De Cola “Ir(III) cyclometalated complexes containing phenylphenanthridine ligands with different substitutions: effects on the electrochemiluminescence properties”
Inorg. Chem., **2020**, *59*, 7435-7443.
375. S. Chakraborty, A. Aliprandi, L. De Cola
“Multinuclear PtII complexes: why three is better than two to enhance photophysical properties” *Chem. Eur. J.*, **2020**, *26*, 11007-11012.
374. J. L. Z. Ddungu, S. Silvestrini, A. Tassoni, L. De Cola
“Shedding light on the aqueous synthesis of silicon nanoparticles by reduction of silanes with citrates”
Faraday Discussions, **2020**, *222*, 350-361.
373. D. Septiadi, V. Barna, D. Saxena, R. Sapienza, D. Genovese, L. De Cola
“Biolasng from individual cells in a low-Q resonator enables spectral fingerprinting”
Adv. Optical. Mater., **2020**, *8*, 1901573.
372. P. Picchetti, B. N. DiMarco, L. Travaglini, Y. Zhang, M. C. Ortega-Liebana, L. De Cola
“Breaking with light: stimuli-responsive mesoporous organosilica particles”
Mat. Chem., **2020**, *32*, 392-399.
371. K. Zarschler, M. Bachmann, J. Ddungu, L. De Cola, H. Stephan, R. Bergmann, G. Singh “Ultrasml silicon nanoparticles as promising platform for targeted multimodal imaging” *Faraday Discussions*, **2019**, *222*, 362-383.
370. M. E. Giménez, C. F. Davrieux, E. Serra, M. Palermo, E. J. Houghton, G. Alonci, E. Piantanida, A. Garcia Vazquez, V. Lindner, B. Dallemagne, M. Diana, J. Marescaux, L. De Cola “Application of a novel material in the inguinal region using a totally percutaneous approach in an animal model: a new potential technique? “

- Hernia*, **2019**, 23, 1175–1185.
369. M. L'Her, Y. Atoini, J. Fouchet, B. Heinrich, N. Del Giudice, E. Scrafton, E. Bordes, L. Karmazin, L. J. Charbonniere, L. De Cola
“Luminescent imidazolium-naphtalene salts in liquid and solid states.”
New Journal of Chemistry, **2019**, 44, 2669.
368. E. Piantanida, G. Alonci, A. Bertucci, L. De Cola
“Design of nanocomposite injectable hydrogels for minimally invasive surgery”
Acc. Chem. Res., **2019**, 52, 2101-2112.
367. A. Aliprandi, L. Capaldo, C. Bobica, S. Silvestrini, L. De Cola
“Effects of the molecular design on the supramolecular organization of luminescent Pt(II) complexes” *Isr. J. Chem.*, **2019**, 59, 892 -897.
366. A. Ruiz-Carretero, Y. Atoini, T. Han, A. Operamolla, S. Ippolito, C. Valentini, S. Carrara, S. Sinn, E. A. Prasetyanto, T. Heiser, P. Samori, G. Farinola, L. De Cola
“Charge transport enhancement in supramolecular oligothiophene assemblies using Pt(II) centers as a guide” *J. Mat. Chem. A*, **2019**, 7, 16777-16784.
365. V. Rizzi, J. Gubitosa, P. Fini, F. Fanelli, A. Fraix, S. Sortino, A. Agostiano, L. De Cola, A. Nacci, P. Cosma
“A comprehensive investigation of amino grafted mesoporous silica nanoparticles supramolecular assemblies to host photoactive chlorophyll a in aqueous solution”
J. Photochem. Photobiol, A: Chemistry, **2019**, 377, 149-158.
364. N. Darmawan, L. Sambri, C. G. Daniliuc, L. De Cola “Blue-emitting bolaamphiphilic zwitterionic iridium(III) complex” *Dalton Trans.*, **2019**, 48, 3664–3670.
363. V. Rizzi, E. A. Prasetyanto, P. Chen, J. Gubitosa, P. Fini, A. Agostiano, L. De Cola, P. Cosma “Amino grafted MCM-41 as highly efficient and reversible ecofriendly adsorbent material for the Direct Blue removal from wastewater”
J. Mol. Liq., **2019**, 273, 435-446.
362. L. Travaglini, P. Picchetti, A. Del Giudice, L. Galantini, L. De Cola
“Tuning and controlling the shape of mesoporous silica particles with CTAB/sodium deoxycholate catanionic mixtures”
Micropor. Mesopor. Mater., **2019**, 279, 423–43.
361. L. Travaglini, P. Picchetti, R. Totovao, E.A. Prasetyanto, L. De Cola “Highly degradable imine-doped mesoporous silica particles”
Mater. Chem. Front., **2019**, 3, 111-119.
360. A. Aliprandi, B. N. DiMarco, L. De Cola
“Transition metal complexes in ECL: diagnostics and biosensing”
Photochemistry, **2019**, 46, 319–351.
359. E. Spain, S. Carrara, K. Adamson, H. Ma, R. O’Kennedy, L. De Cola, R. J. Forster
“Cardiac Troponin I: Ultrasensitive Detection Using Faradaic Electrochemical Impedance” *ACS Omega*, **2018**, 3, 17116–17124.
358. G. Alonci, F. Fiorini, P. Riva, F. Monroy, I. López-Montero, S. Perretta, L. De Cola
“Injectable hybrid hydrogels, with cell-responsive degradation, for tumor resection”
ACS Appl. Bio Mater., **2018**, 1, 1301-1310.
357. Y. Atoini, E. A. Prasetyanto, P. Chen, S. Silvestrini, J. Harrowfield, L. De Cola

- “Luminescence of amphiphilic Pt(II) complexes controlled by confinement”
Chem. Eu. J., **2018**, *24*, 12054-12060.
356. V. Rizzi, F. Fiorini, G. Lamanna, J. Gubitosa, E. A. Prasetyanto, P. Fini, F. Fanelli, A. Nacci, L. De Cola, P. Cosma
“Polyamidoamine-based hydrogel for removal of blue and red dyes from wastewater”
Adv. Sustainable Syst., **2018**, *2*, 1700146.
355. L. Travaglini, L. De Cola
“Morphology control of mesoporous silica particles using bile acids as co-surfactants”
Chem. Mater., **2018**, *30*, 4168–4175.
354. N. Licciardello, S. Hunoldt, R. Bergmann, G. Singh, C. Mamat, A. Faramus, J. L. Z. Ddungu, S. Silvestrini, M. Maggini, L. De Cola, H. Stephan
“Biodistribution studies of ultrasmall silicon nanoparticles and carbon dots in experimental rats and tumor mice” *Nanoscale*, **2018**, *10*, 9880–9891.
353. L. Donato, Y. Atoini, E. A. Prasetyanto, P. Chen, C. Rosticher, C. Bizzarri, K. Rissanen, L. De Cola
“Selective encapsulation and enhancement of the emission properties of a luminescent Cu(I) complex in mesoporous silica” *Helvetica*, **2018**, *101*, e1700273.
352. A. Bertucci, S. Silvestrini, R. Corradini, L. De Cola
“Loading of PNA and other molecular payloads on inorganic nanostructures for theranostics”
In *DNA Nanotechnology: Methods and Protocols*, Second Edition
Ed. *Giampaolo Zuccheri*, Springer Science+Business Media LLC
ISBN 978-1-4939-8582-1, **2018**, *5*, 65-77.
351. A. Manicardi, A. Bertucci, R. Gambari, L. De Cola, R. Corradini
“Preparation of anti-miR PNAs for drug development and nanomedicine”
In *DNA Nanotechnology: Methods and Protocols*, Second Edition
Ed. *Giampaolo Zuccheri*, Springer Science+Business Media LLC
ISBN 978-1-4939-8582-1, **2018**, *4*, 63.
350. V. Giglio, S. Varela-Aramburuc, L. Travaglini, F. Fiorini, P. H. Seeberger, L. Maggini, L. De Cola
“Reshaping silica particles: mesoporous nanodiscs for bimodal delivery and improved cellular uptake” *Chem. Eng. J.*, **2018**, *340*, 148-154.
349. S. Sinn, I. Yang, F. Biedermann, D. Wang, C. Kübel, J. Cornelissen, L. De Cola
“Templated formation of luminescent virus-like particles by tailor-made Pt(II)-amphiphiles” *J. Am. Chem. Soc.*, **2018**, *140*, 2355-2362.
348. R. De Marco, A. Greco, N. Calonghi, S. D. Dattoli, M. Baiula, S. Spampinato, P. Picchetti, L. De Cola, M. Anselmi, F. Cipriani, L. Gentilucci
“Selective detection of $\alpha 4\beta 1$ integrin (VLA-4)-expressing cells using nanostructured materials mimicking integrin-ligand multivalent binding at endothelial surfaces adjacent to inflammatory sites” *Peptide Science*, **2018**, *110* (5), e23081.
347. F. Biedermann, L. De Cola
“Porous supramolecular materials: the importance of emptiness”
Supramol. Chem., **2018**, *30*, 166-168.
346. N. Vilaça, R. Totovao, E. A. Prasetyanto, V. Miranda-Gonçalves, F. Santos, R. Fernandes, F. Figueiredo, M. Bañobre-López, A. Fonseca, L. De Cola, F. Baltazar, I. Neves
“Internalization studies of zeolite nanoparticles by human cells”

- J. Mater. Chem. B*, **2018**, 6, 469-476.
345. S. Carrara, A. Aliprandi, C. F. Hogan, L. De Cola
"Aggregation-induced electrochemiluminescence of platinum (II) complexes"
J. Am. Chem. Soc., **2017**, 139, 14605-14610.
344. M. E. Robinson, A. Nazemi, D. J. Lunn, D. W. Hayward, C. E. Boott, S. Davis, R. L. Harniman, G. R. Whittell, R. M. Richardson, L. De Cola, I. Manners
"Dimensional control and morphological transformations of supramolecular polymeric nanofibers based on cofacially-stacked planar amphiphilic platinum(II) complexes"
ACS Nano, **2017**, 11, 9162-9175.
343. C.-W. Hsu, E. Longhi, S. Sinn, C. S. Hawes, D. C. Young, P. E. Kruger, L. De Cola
"Pyrazolo[4,3-h]quinoline ligand based iridium(III) complexes for electrochemiluminescence"
Chem. Asian J., **2017**, 12, 1649-1658.
342. Y. Atoini, E. A. Prasetyanto, P. Chen, D. Jonckheere, D. De Vos and L. De Cola
"Tuning luminescent properties of a metal organic framework by insertion of metal complexes"
Supramol. Chem., **2017**, 29, 758-767.
341. C. M. Strabler, S. Sinn, R. Pehn, J. Pann, J. Dutzler, W. Viertl, J. Prock, K. Ehrmann, A. Weninger, H. Kopacka, L. De Cola, P. Brüggeller
"Stabilisation effects of phosphane ligands in the homogeneous approach of sunlight induced hydrogen production"
Faraday Discuss., **2017**, 198, 211-233.
340. R. Ragni, V. Maiorano, M. Pugliese, E. Orselli, A. Maggiore, F. Babudri, G. Gigli, L. De Cola, G. M. Farinola
"A highly fluorinated iridium complex as a blue-green emitting component for white electroluminescence"
Synthetic Metals, **2017**, 227, 148-155.
339. L. Arnedo-Sánchez, Nonappa, S. Bhowmik, S. Hietala, R. Puttreddy, M. Lahtinen, L. De Cola, K. Rissanen
"Rapid self-healing and anion selectivity in metallosupramolecular gels assisted by fluorine-fluorine interactions"
Dalton Trans., **2017**, 46, 7309-7316.
338. E. Longhi, L. De Cola
"Iridium(III) Complexes for OLED Application In Iridium(III) in Optoelectronic and Photonics Applications"
From Iridium (III) in Optoelectronic and Photonics Applications Ed. E. Zysman-Colman, Wiley, **2017**, 1, 205-274.
337. C.-W. Hsu, D. Septiadi, C.-H. Lai, P. Chen, P. H. Seeberger, L. De Cola
"Glucose modified silicon nanoparticles for cellular imaging"
Chem. Plus Chem., **2017**, 82, 660-667.
336. S. Carrara, F. Arcudi, M. Prato, L. De Cola
"Amine-rich nitrogen-doped carbon nanodots as platform for self-enhancing electrochemiluminescence"
Angew. Chem. Int. Ed., **2017**, 56, 4757-4761.
335. N. Leblanc, D. Genovese, L. De Cola, A. K. Powell
"A platform with connections in many directions – further remarkable facets to the multifaceted methylbiquinoxen dication"
Phys. Chem. Chem. Phys., **2017**, 19, 6981-6988.
334. A. Palmioli, A. Aliprandi, D. Septiadi, M. Mauro, M. Panigati, A. Bernardi, L. De Cola
"Glyco-functionalized dinuclear rhenium(I) complexes for cell imaging"
Org. Biomol. Chem., **2017**, 15, 1686-1699.

333. R. Nowak, E. A. Prasetyanto, L. De Cola, B. Bojer, R. Siegel, J. Senker, E. Roessler, B. Weber "Proton-driven coordination-induced spin state switch (PD-CISSS) of iron(II) complexes" *Chem. Commun.*, **2017**, 53, 971-974.
332. S. Sinn, F. Biedermann, L. De Cola
"Platinum complex assemblies as luminescent probes and tags for drugs and toxins in water" *Chem. Eu. J.*, **2017**, 23, 1965-1971.
331. A. Aliprandi, C. M. Croisetu, M. Mauro, L. De Cola
"Chiral amplification by self-assembly of neutral luminescent platinum(II) complexes" *Chem. Eu. J.*, **2017**, 23, 5957 – 5961.
330. W. Wohlleben, C. Punckt, J. Aghassi-Hagmann, F. Siebers, F. Menzel, D. Esken, C.-P. Drexel, H. Zoz, H. U. Benz, A. Weier, M. Hitzler, A. I. Schäfer, L. De Cola, E. A. Prasetyanto
"Nanoenabled Products: Categories, Manufacture, and Applications".
In *Metrology and Standardization of Nanomaterials Protocols and Industrial Innovations*, E. Mansfield, D. Kaiser, D. Fujita, M. van de Voorde Eds. Wiley: Heidelberg, **2017**, 411-465.
329. R. Marega, E. A. Prasetyanto, C. Michiels, L. De Cola, D. Bonifazi
"Fast targeting and cancer cell uptake of luminescent antibody-nanozeolite bioconjugates" *Small*, **2016**, 12, 5431-5441 (cover of the issue).
328. P. Ai, M. Mauro, C. Gourlaouen, S. Carrara, L. De Cola, Y. Tobon, U. Giovanella, C. Botta, A. A. Danopoulos, P. Braunstein
"Bonding, luminescence, metallophilicity in linear Au₃ and Au₂Ag chains stabilized by rigid diphosphanyl NHC ligands" *Inorg. Chem.*, **2016**, 55, 8527–8542.
327. F. Fiorini, E.A. Prasetyanto, F. Taraballi, L. Pandolfi, F. Monroy, I. López-Montero, E. Tasciotti, L. De Cola "Nanocomposite hydrogels as platform for cells growth, proliferation and chemotaxis" *Small*, **2016**, 12, 4881–4893 (back cover).
326. M. El Garah, S. Sinn, A. Dianat, A. Santana-Bonilla, R. Gutierrez, L. De Cola, G. Cuniberti, A. Ciesielski, P. Samori
"Discrete polygonal supramolecular architectures of isocytosine-based Pt(II) complexes at the solution/graphite interface" *Chem. Commun.*, **2016**, 52, 11163-11166.
325. S. Sinn, F. Biedermann, M. Vishe, A. Aliprandi, C. Besnard, J. Lacour, L. De Cola
"A ratiometric luminescent switch based on platinum complexes tethered to a crown-ether scaffold" *Chem. Phys. Chem.*, **2016**, 17, 1829 – 1834.
324. D. Genovese, A. Aliprandi, E.A. Prasetyanto, M. Mauro, Michael Hirtz, Harald Fuchs, Y. Fujita, H. Uji-I, S. Lebedkin, M. Kappes, L. De Cola
"Mechano- and photochromism from bulk to nanoscale: data storage on individual self-assembled ribbons" *Adv. Funct. Mater.*, **2016**, 26, 5271–5278.
323. B. Ergün, L. De Cola, H.-J. Galla, N. S. Kehr
"Surface mediated stimuli responsive organic molecules delivery from porous carrier to adhered cells" *Adv. Healthcare Mater.*, **2016**, 5, 1588–1592.
322. M. Döbbelin, A. Ciesielski, S. Haar, S. Osella, M. Bruna, A. Minoia, L. Grisanti, T. Mosciatti, F. Richard, E. A. Prasetyanto, L. De Cola, V. Palermo, R. Mazzaro, V.

- Morandi, R. Lazzaroni, A. C. Ferrari, D. Beljonne, P. Samori
"Light-enhanced liquid-phase exfoliation and photoswitching current in graphene-azobenzene composites" *Nature Commun.*, **2016**, 7, 11090 - 11100.
321. R. Castagna, A. Bertucci, E.A. Prasetyanto, M. Monticelli, D. Valter Conca, M. Massetti, F. Damin, M. Chiari, L. De Cola, R. Bertacco
"Reactive microcontact printing of DNA probes for highly dense hybridization platforms" *Langmuir*, **2016**, 32, 3308–3313.
320. J. M. Fernandez-Hernandez, E. Longhi, R. Cysewski, F. Polo, H.- P. Josel, L. De Cola
"Photophysics and electrochemiluminescence of bright cyclometalated Ir(III) complexes in aqueous solutions" *Anal. Chem.*, **2016**, 88, 4174–4178.
319. K. Zarschler, L. Rocks, N. Licciardello, L. Boselli, E. Polo, K. Pombo Garcia, L. De Cola, H. Stephan, K. A. Dawson
"Ultrasmall inorganic nanoparticles: State-of-the-art and perspectives for biomedical applications" *Nanomedicine: Nanotechnology, Biology, and Medicine* **2016**, 12, 1663–1701.
318. C. Bizzarri, C. Fléchon, O. Fenwick, F. Cacialli, F. Polo, M. D. Gálvez-López, C.-H. Yang, S. Scintilla, Y. Sun, R. Fröhlich, L. De Cola
"Luminescent neutral Cu(I) complexes: synthesis, characterization and application in solution-processed OLED"
ECS J. Solid State Sci. Technol., **2016**, 5, R83-R90.
317. P. Ai, M. Mauro, L. De Cola, A. A. Danopoulos, P. Braunstein
"A bis(diphosphanil)-N-heterocyclic carbene Au complex as synthon for rigid AuAg₂ arrays and Au₅ and Cu₆ luminescent double arrays"
Angew. Chem. Int. Ed., **2016**, 55, 3338-3341.
316. L. Maggini, I. Cabrera, A. Ruiz-Carretero, E. A. Prasetyanto, E. Robinet, L. De Cola
"Breakable mesoporous silica nanoparticles for targeted drug delivery"
Nanoscale, **2016**, 8, 7240-7247.
315. L. Maggini, L. Travaglini, I. Cabrera, P. Castro-Hartmann, L. De Cola
"Biodegradable peptide-silica nanodonuts" *Chem. Eu. J.*, **2016**, 22, 3697-3703.
314. X. Zhang, A. Ciesielski, F. Richard, P. Chen, E. A. Prasetyanto, L. De Cola, P. Samori
"Modular graphene-based 3D covalent networks: functional architectures for energy applications" *Small*, **2016**, 12, 1044-1052.
313. E.A. Prasetyanto, A. Bertucci, D. Septiadi, R. Corradini, P. Castro-Hartmann, L. De Cola
"Breakable hybrid organo-silica nanocapsules for protein delivery"
Angew. Chem. Int. Ed., **2016**, 55, 3323-3327 (internal cover).
312. C.-H. Lai, J. Hütter, C.-W. Hsu, H. Tanaka, S. Varela-Aramburu, L. De Cola, B. Lepenies, P. H. Seeberger
"Analysis of carbohydrate-carbohydrate interactions using sugar-2 functionalized silicon nanoparticles for cell imaging"
Nano Lett., **2016**, 16, 807-811.
311. A. Aliprandi, M. Mauro, L. De Cola
"Controlling and imaging biomimetic self-assembly" *Nat. Chem.*, **2016**, 8, 10-15 (cover of the issue).

310. A. Galstyan, A. R. Naziruddin, C. Cebrian-Avila, A. Iordache, C. G. Daniliuc, L. De Cola, C. A. Strassert
"Correlating the structural and photophysical features of pincer luminophores and monodentate ancillary ligands in Pt(II) phosphors"
Eur. J. Inorg. Chem., **2015**, 36, 5822-5831 (cover of the issue).
309. M. E. Robinson, D. J. Lunn, A. Nazemi, G. R. Whittell, L. De Cola, I. Manners
"Length control of supramolecular polymeric nanofibres based on stacked planar platinum(II) complexes by seeded-growth" *Chem. Commun.*, **2015**, 51, 15921-15924.
308. J. Prock, C. Strabler, W. Viertl, H. Kopacka, D. Obendorf, T. Müller, E. Tordin, S. Salzl, G. Knör, M. Mauro, L. De Cola, P. Brüggeller
"Unusual stability of dyads during photochemical hydrogen production"
Dalton Trans., **2015**, 44, 20936-20948.
307. A. Bertucci, E. A. Prasetyanto, D. Septiadi, A. Manicardi, E. Brognara, R. Gambari, R. Corradini, L. De Cola
"Combined delivery of temozolomide and anti-miR221 PNA using mesoporous silica nanoparticles induces apoptosis in resistant glioma cells"
Small, **2015**, 11, 5687-5695.
306. A. Greco, L. Maggini, L. De Cola, R. De Marco, L. Gentilucci
"Diagnostic implementation of fast and selective integrin-mediated adhesion of cancer cells on functionalized zeolite L monolayers"
Bioconjugate Chem., **2015**, 26, 1873-1878.
305. A. Aliprandi, D. Genovese, M. Mauro, L. De Cola
"Recent advances in phosphorescent Pt(II) complexes featuring metallophilic interactions: properties and applications"
Chem. Lett., **2015**, 44, 1152-1169.
304. W. Mróz, R. Ragni, F. Galeotti, C. Botta, E. Mesto, L. De Cola, G. M. Farinola, U. Giovanella
"Influence of electronic and steric effects of substituted ligands coordinated to Ir(III) complexes on the solution processed OLED properties"
J. Mater. Chem. C: Materials for Optical and Electronic Devices, **2015**, 3, 7506-7512.
303. C. Cebrián, M. Natali, D. Villa, M. Panigati, M. Mauro, G. D'Alfonso, L. De Cola
"Luminescent supramolecular soft nanostructures from amphiphilic dinuclear Re(I) complexes" *Nanoscale*, **2015**, 7, 12000-12009.
302. M. El Garah, N. Marets, M. Mauro, A. Aliprandi, S. Bonacchi, L. De Cola, A. Ciesielski, V. Bulach, M. W. Hosseini, P. Samorì
"Nanopatterning of surfaces with mono- and hetero bi-metallic 1D coordination polymers: a molecular tectonics approach at the solid/liquid interface"
J. Am. Chem. Soc., **2015**, 137, 8450-8459.
301. V. Barna, L. De Cola "Mirrorless dye doped ionic liquid lasers"
Optics express, **2015**, 23, 11936-45.
300. A. Colombo, F. Fiorini, D. Septiadi, C. Dragonetti, F. Nisic, A. Valore, D. Roberto, M. Mauro, L. De Cola "Neutral N^CN terdentate luminescent Pt(II) complexes: their synthesis, photophysical properties and bio-imaging application"
Dalton Trans., **2015**, 44, 8478-8487.

299. A. R. Naziruddin, A. Galstyan, A. Iordache, C.-G. Daniliuc, C. A. Strassert, L. De Cola
"Bidentate NHC⁺pyrozoate ligands in luminescent platinum(II) complexes"
Dalton Trans., **2015**, 44, 8467-8477.
298. N. K. Allampally, C.-G. Daniliuc, C. A. Strassert, L. De Cola
"Tuning the structural and photophysical properties of cationic Pt(II) complexes bearing neutral bis(triazolyl)pyridine ligands" *Inorg. Chem.*, **2015**, 54, 1588-1596.
297. M. Mydlak, C.-H. Yang, C.-Han, F. Polo, A. Galstyan, C.-G. Daniliuc, M. Felicetti, J. Leonhardt, C. A. Strassert, L. De Cola
"Sterically hindered luminescent Pt^{II}-phosphite complexes for electroluminescent devices" *Chem. Eur. J.* **2015**, 21, 5161-5172.
296. S. Fibikar, G. Luppi, V. Martínez-Junza, M. Clemente-León, L. De Cola
"Manipulation and orientation of zeolite L using a magnetic field"
Chem. Plus. Chem., **2015**, 80, 62-67.
295. S. Zhang, R. Pattacini, P. Braunstein, L. De Cola, E. Plummer, M. Mauro, C. Gourlaouen, C. Daniel
"Synthesis, structure, and optical properties of Pt(II) and Pd(II) complexes with oxazolyl- and pyridyl-functionalized DPPM-type ligands: a combined experimental and theoretical study" *Inorg. Chem.*, **2014**, 53, 12739-12756.
294. N. K. Allampally, M. Bredol, C. A. Strassert, L. De Cola
"Highly phosphorescent supramolecular hydrogels based on platinum emitters"
Chem. Eur. J., **2014**, 20, 16863-16868.
293. J.M. Fernandez-Hernandez, L. De Cola, H. J. Bolink, M. Clemente-Leon, E. Coronado, A. Forment-Aliaga, A. Lopez-Munoz, D. Repetto
"White light-emitting electrochemical cells based on the Langmuir-Blodgett technique"
Langmuir, **2014**, 30, 14021-14029.
292. E. Miyako, J. Russier, M. Mauro, C. Cebrián, H. Yawo, C. Ménard-Moyon, J. A. Hutchison, T. W. Ebbesen, M. Yudasaka, S. Iijima, L. De Cola, A. Bianco
"Photofunctional nanomodulator for bioexcitation"
Angew. Chem. Int. Ed., **2014**, 53, 13121-13125.
291. R. Soldati, A. Aliprandi, M. Mauro, L. De Cola, D. Giacomini
"Beta-lactam bio-conjugates bearing luminescent platinum(II) tags: synthesis and photophysical characterization"
Eur. J. Org. Chem., **2014**, 32, 7113-7121.
290. C. Bizzarri, C. Strabler, J. Prock, B. Trettenbrein, M. Ruggenthaler, C.-H. Yang, F. Polo, A. Iordache, P. Brüggele, L. De Cola
"Luminescent dinuclear Cu(I) complexes containing rigid tetraphosphine ligands"
Inorg. Chem., **2014**, 53, 10944-10951.
289. A. Bertucci, H. Lülff, D. Septiadi, A. Manicardi, R. Corradini, L. De Cola
"Intracellular delivery of peptide nucleic acid and organic molecules using zeolite-L nanocrystals" *Adv. Healthcare Mater.*, **2014**, 3, 1812-1817.
288. C. Cebrián, J. de Mata Muñoz, C. A. Strassert, P. Prieto, A. Díaz-Ortiz, L. De Cola, A. De la Hoz
"Synthesis of bright alkenyl-1H-1,2,4-triazoles. A theoretical and photophysical study"
Chem. Plus. Chem., **2014**, 79, 1489-1497.

287. C. Wang, Y. Fang, L. Wen, M. Zhou, Y. Xu, H. Zhao, L. De Cola, W. Hu, Y. Lei "Vectorial diffusion for facile solution-processed self-assembly of insoluble semiconductors: a case study on metal phthalocyanines" *Chem. Eur. J.*, **2014**, *20*, 10990-10995.
286. H. Lülff, A. Bertucci, D. Septiadi, R. Corradini, L. De Cola "Multifunctional inorganic nanocontainers for DNA and drug delivery into living cells" *Chem. Eur. J.*, **2014**, *20*, 10841-10845 (cover of the issue).
285. M. Mauro, A. Aliprandi, C. Cebrián Ávila, D. Wang, C. Kübel, L. De Cola "Self-assembling of a neutral platinum(II) complex into highly emitting microcrystalline fibers through metallophilic interactions" *Chem. Commun.*, **2014**, *50*, 7269-7272.
284. D. Septiadi, A. Aliprandi, M. Mauro, L. De Cola "Bio-imaging with neutral luminescent Pt(II) complexes showing metal···metal interactions" *RSC Adv.*, **2014**, *4*, 25709-25718.
283. N. S. Kehr, B. Ergün, H. Lülff, L. De Cola "Spatially controlled channel entrances functionalisation of zeolites L" *Adv. Mat.*, **2014**, *26*, 3248–3252.
282. M. Mauro, A. Aliprandi, D. Septiadi, N. S. Kehr, L. De Cola "When self-assembly meets biology: luminescent platinum complexes for imaging applications" *Chem. Soc. Rev.*, **2014**, *43*, 4144-4166.
281. I. Maturi, T. de Queiroz, R. Jinjun, L. De Cola, A.S.S. de Camargo, H. Eckert "Luminescent hybrid materials based on covalent attachment of Eu(III)-tris(bipyridinedicarboxylate) in the mesoporous silica host MCM-41" *Dalton Trans.*, **2014**, *43*, 8318-8330.
280. S. Soman, J. C. Manton, J. L. Inglis, Y. Halpin, B. Twamley, E. Otten, W. R. Browne, L. De Cola, J. G. Vos, M. T. Pryce "New synthetic pathways to the preparation of near-blue emitting heteroleptic Ir(III)N6 coordinated compounds with microsecond lifetimes" *Chem. Commun.*, **2014**, *50*, 6461 – 6463.
279. D. Weber, S. Botnaras, D. V. Pham, A. Merkulov, J. Steiger, R. Schmechel, L. De Cola "A facile solution-doping method to improve a low-temperature zinc oxide precursor: towards low-cost electronics on plastic foil" *Adv. Funct. Mat.*, **2014**, *24*, 2537-2543.
278. N. Darmawan, C.-H. Yang, M. Mauro, R. Froelich, L. De Cola, C.-H. Chang, Z.-J Wu, C.-W. Tai "Highly efficient blue and deep-blue emitting zwitterionic iridium(III) complexes: synthesis, photophysics and electroluminescence" *J. Mater. Chem. C*, **2014**, *2*, 2569-2582.
277. I. Stengel, C.- A. Strassert, L. De Cola, P. Bäuerle "Tracking intramolecular interactions in flexibly linked binuclear Platinum (II) complexes" *Organometallics*, **2014**, *33*, 1345-1355.
276. S. Ramachandra, C. A. Strassert, D. N. Reinhoudt, D. Vanmaekelbergh, L. De Cola "Bidirectional photoinduced energy transfer in nanoassemblies of quantum dots and luminescent metal complexes" *Z. Naturforsch*, **2014**, *69b*, 263-274.
275. E. A. Prasetyanto, P. Manini, A. Napolitano, O. Crescenzi, M. d'Ischia, L. De Cola

- "Towards eumelanin@zeolite hybrids: pore size-controlled 5,6-dihydroxyindole polymerization" *Chem. Eur. J.*, **2014**, *20*, 1597-1601.
274. L. Maggini, M.-E. Füstös, T. W. Chamberlain, C. Cebrián Ávila, M. Natali, M. Pietraszkiewicz, O. Pietraszkiewicz, M.-V. Diudea, E. Székely, K. Kamarás, L. De Cola, A. Nicolaevitch Khlobystov, D. Bonifazi
"Fullerene-driven efficient encapsulation of a luminescent Eu(III) complex inside carbon nanotubes" *Nanoscale*, **2014**, *6*, 2887–2894.
273. F. Cucinotta, A. Guenet, C. Bizzarri, W. Mroz, C. Botta, B. Milián Medina, J. Gierschner, L. De Cola
"Energy transfer at the zeolite L boundaries: towards new photo- and electro-responsive materials" *Chem. Plus. Chem.*, **2014**, *79*, 45-57.
272. A. Szarpak-Jankowska, C. Burgess, L. De Cola, J. Huskens
"Cyclodextrin-modified zeolites: host-guest surface chemistry for the build-up of multifunctional nanocontainers" *Chem. Eu. J.*, **2013**, *19*, 14925-14930.
271. J. M. Fernandez-Hernandez, S. Ladouceur, Y. Shen, A. Iordache, X. Wang, L. Donato, S. Gallagher-Duval, M. de Anda Villa, J. D. Slinker, L. De Cola, E. Zysman-Colman
"Blue light emitting electrochemical cells incorporating triazole-based luminophores" *J. Mater. Chem. C*, **2013**, *1*, 7440-7452.
270. M. B. S. Botelho, M. D. Gálvez-López, L. De Cola, R. Q. Albuquerque, A.S.S. de Camargo
"Towards the design of highly luminescent Europium(III) complexes" *Eu. J. Org. Chem*, **2013**, 5064-5070.
269. N. Darmawan, C.-H. Yang, M. Mauro, M. Raynal, S. Heun, J. Pan, H. Buchholz, P. Braunstein, L. De Cola
"Efficient near-UV emitters based on cationic bis-pincer iridium(III) carbene complexes" *Inorg. Chem.*, **2013**, *52*, 10756-10765.
268. D. Weber, R. Sharma, S. Botnaras, D.V. Pham, J. Steiger, L. De Cola
"Base-etch removal of a ligand shell in thin films of ZnO nanoparticles for electronic applications" *J. Mat. Chem. C.*, **2013**, *1*, 7111-7116.
267. E. Mesto, F. Scordari, M. Lacalamita, L. De Cola, R. Ragni, G. Farinola
"The correct assignment of stereochemistry in di- μ -dichlorido-bis{bis[2-(5-benzylsulfonyl)-3-fluoro-2-(pyridin-2-yl)phenyl- κ^2 , N, C¹]iridium(III)} toluene monosolvate" *Acta Cryst.*, **2013**, *69*, 480-482.
266. M. Becker, L. De Cola, A. Studer
"Assembly of linear chains consisting of alternating silica beads and zeolite L crystals by nitroxide exchange reactions"
J. Mat. Chem. C., **2013**, *1*, 3287-3290 (cover of the issue).
265. H. Lülff, A. Devaux, E. A. Prasetyanto, L. De Cola
"Porous nanomaterials for biomedical applications" *In Organic Nanomaterials*, Eds: Torres, Tomas, Bottari, Giovanni, Wiley, **2013**, 487-508.
264. D. Weber, S. Botnaraş, D.V. Pham, J. Steiger, L. De Cola
"Functionalized ZnO nanoparticles for thin-film transistors: support of ligand removal by non-thermal methods" *J. Mater. Chem. C*, **2013**, *1*, 3098-3103.

263. Z. Li, L. De Cola, C. Krampe, J. Hüve, J. Klingauf, G. Luppi, M. Tsotsalas, K. Riehemann "Internalization pathways of anisotropic disc-shaped zeolite L nanocrystals with different surface properties in HeLa cancer cells" *Small*, **2013**, 9, 1809-1820.
262. E. Molenbroek, N. Straathof, S. Dück, Z. Rashid, J. H. van Lenthe, M. Lutz, A. Gandubert, R. J. M. Klein Gebbink, L. De Cola and S. Bonnet "Zinc coordination to the bapby ligands in homogenous solutions and at liposomes: zinc detection via fluorescence enhancement" *Dalton Trans.*, **2013**, 42, 2973-2984.
261. J. Fernández-Hernández, J. Beltran, V. Lemaur, M.D. Galvez-Lopez, C.-H. Chien, F. Polo, E. Orselli, R. Fröhlich, J. Cornil, L. De Cola "Iridium(III) emitters based on 1,4-disubstituted-1H-1,2,3-triazoles as cyclometalating ligand. Synthesis, characterization and electroluminescent devices" *Inorg. Chem.*, **2013**, 52, 1812-1824.
260. C. Cebrián, M. Mauro, D. Kourkoulos, P. Mercandelli, D. Hertel, K. Meerholz, C. A. Strassert and L. De Cola "Luminescent neutral platinum complexes bearing an asymmetric N^NN ligand for high-performance solution-processed OLEDs" *Adv. Mat.*, **2013**, 25, 437-442.

Books

1. Editor of the book: "Molecular Wires: From Design to Properties", L. De Cola, ed. Springer: Berlin, Germany, 2005, Vol. 257
2. Co-editor of the book: "Supramolecular Chemistry", L. De Cola, ed. Kluwer: Dordrecht, The Netherlands, 1992

Patents

41. L. De Cola, G. Alonci, S. Perretta
"Injectable hybrid alginate hydrogels and uses thereof"
PCT Int. Appl. (2019), WO 2019053269 A1 20190321.
40. L. De Cola, G. Alonci, S. Perretta, P. Riva, F. Fiorini,
"Injectable hydrogels, production methods, pharmaceutical and cosmetic compositions"
PCT Int. Appl. (2018), WO 2018134268 A1 20180726.
39. L. De Cola, T. Baumert, L. Maggini, Giglio, Valentina; Dentinger, Mike
"Disintegratable porous organosilica or organometallic oxide nanoparticles and uses thereof as vehicles for controlled delivery of siRNA"
PCT Int. Appl. (2018), WO 2018162676 A1 20180913.
38. H.-P. Josel, T. Oelschlaegel, G. Prencipe, L. De Cola, E. Longhi, C.-W. Hsu
"Preparation of multifunctionalized silicon nanoparticles for electrochemiluminescence based detection methods"
PCT Int. Appl. (2018), WO 2018037060 A1 20180301
37. L. De Cola, D. Genovese, V. Barna
"Random lasing photo-curable composition for use as random lasing gain medium"
PCT Int. Appl. (2017), WO 2017182663 A1 20171026.
36. L. De Cola, D. Genovese, V. Barna
"Random lasing photo-curable composition for use as random lasing gain medium"
Eur. Pat. Appl. (2017), EP 3236547 A1 20171025
35. F. Biedermann, D. Septiadi, E. A. Prasetyanto, P. Chen, L. De Cola
"Functionalized conjugates of nanoporous cryst. three-dimensional material as highly selective artificial neurotransmitter receptors for binding of small molecule analytes"
Eur. Pat. Appl. (2017), EP 3225590 A1 20171004
34. L. De Cola, M. Mauro, N. S. Kehr, C. A. Strassert
"Platinum complexes and their use"
PCT Int. Appl. (2015), WO 2012-EP53586
33. L. De Cola, E. A. Prasetyanto, A. Bertucci, D. Septiadi
"Disintegratable core/shell silica particles for encapsulating and releasing bioactive macromolecules"
PCT Int. Appl. (2015), WO 2015189402 A1 20151217.
32. L. De Cola, L. Maggini, E. A. Prasetyanto

- “Disintegrable porous organometal oxide material”
PCT Int. Appl. (2015), WO 2015107087 A1 20150723.
31. L. De Cola, L. Maggini, E. A. Prasetyanto
“Disintegrable porous organometal oxide material”
Eur. Pat. Appl. (2015), EP 2894186 A1 20150715.
 30. L. De Cola, M. Mauro, C. Cebrian Avila, A. Aliprandi,
“Platinum complexes as mechanochromic and piezochromic compounds”
Eur. Pat. Appl. (2015), EP 2873711 A1 20150520.
 29. L. De Cola, M. D. Galvez-Lopez, J.-P. Catinat
“Light emitting transition metal complexes based on hexadentate ligands”
Eur. Pat. Appl. (2014), EP 2712909 A1 20140402.
 28. L. De Cola, S. Dueck, R. Cysewski, H. Y. Cheng, J.-P. Catinat
“Transition metal complexes comprising asymmetric tetradentate ligands”
PCT Int. Appl. (2014), WO 2014033050 A1 20140306.
 27. C. A. Strassert, L. De Cola, M. Mydlak, C. – H. Yang, M. Felicetti, J. Leonhardt
“New platinum(II) cyclometalated aryl phosphite complexes as triplet emitters for
OLED applications”
PCT Int. Appl. (2014), WO 2014033223 A1 20140306.
 26. L. De Cola, S. Dueck, R. Cysewski, M. D. Galvez Lopez, J. – P. Catinat
“Transition metal complexes comprising symmetric tetradentate ligands”
PCT Int. Appl. (2014), WO 2014033044 A1 20140306.
 25. C. A. Strassert, L. De Cola, M. Mydlak, C. – H. Yang, M. Felicetti, J. Leonhardt
“New platinum(II) cyclometalated aryl phosphite complexes as triplet emitters for
OLED applications”
Ger. Offen. (2014), DE 102012108129 A1 20140306.
 24. F. Bergmann, R. Cysewski, L. De Cola, S. Dziadek, J. M. Fernandez Hernandez, H. –
P. Josel, C. Seidel
“New iridium-based complexes for ECL”
PCT Int. Appl. (2014), WO 2014019709 A2 20140206.
 23. F. Bergmann, R. Cysewski, L. De Cola, S. Dziadek, J. M. Fernandez Hernandez, H.
– P. Josel, C. Seidel,
“New iridium-based complexes for ECL”
From PCT Int. Appl. (2014), WO 2014019707 A2 20140206.
 22. R. Cysewski, L. De Cola, J. M. Fernandez Hernandez, H. - P. Josel, E. Longhi, G. H.
M. Vondenhoff
“New bis-iridium-complexes for manufacturing of ECL-labels”
PCT Int. Appl. (2014), WO 2014019710 A1 20140206.
 21. F. Bergmann, R. Cysewski, L. De Cola, S. Dziadek, J. M. Fernandez Hernandez, H. –
P. Josel, E. Longhi, C. Seidel
“New iridium-based complexes for ECL”
PCT Int. Appl. (2014), WO 2014019711 A1 20140206.
 20. F. Bergmann, R. Cysewski, L. De Cola, S. Dziadek, J. M. Fernandez Hernandez, H.
– P. Josel, C. Seidel

- “Preparation of cyclometalated phenylphenanthridene iridium-based complexes for ECL”
PCT Int. Appl. (2014), WO 2014019708 A1 20140206.
19. S. Heun, N. Koenen, C.- H. Yang, L. De Cola
“Metal complexes comprising condensed heteroaromatic rings”
PCT Int. Appl. (2013), WO 2013174471 A1 20131128.
18. L. De Cola, H. Stephan, R. Bergmann, A. Ruffani, Alexander
“Functionalised silicon nanoparticles”
PCT Int. Appl. (2013), WO 2013087734 A2 20130620.