

Peer-reviewed journal articles

1)-A new supported TiO₂ film deposited on stainless steel for the photocatalytic degradation of contaminants of emerging concern

Murgolo S.; Yargeau V.; Gerbasi R.; Visentin F.; El Habra N.; Ricco G.; Lacchetti I.; Carere M.; Curri M.L.; Mascolo G.subjectTiO₂-based nanostructured catalystsubjectContaminants of Emerging ConcernsubjectElectrical Energy per OrderssubjectPhotocatalysissubjectToxicitysubjectTransformation Products.

Chemical engineering journal (Print) 318 (2017): 103–111.

<https://dx.doi.org/10.1016/j.cej.2016.05.125>

2)-Colloidal Nanocrystalline Semiconductor Materials as Photocatalysts for Environmental Protection of Architectural Stone

Francesca Petronella; Antonella Pagliarulo; Marinella Striccoli; Angela Calia; Mariateresa Lettieri; Donato Colangiuli; Maria Lucia Curri; Roberto Comparellisubjectcolloidal nanocrystalssubjectphotocatalysissubjectlimestonesubjectcoatingsubjectself-cleaningssubjecthydrophobicitysubjectstone protection

Crystals (Basel) 7 (2017).

<https://dx.doi.org/10.3390/cryst7010030>

3)-Multifunctional TiO₂/Fe_xO_y/Ag based nanocrystalline heterostructures for photocatalytic degradation of a recalcitrant pollutant

F. Petronella; A. Truppi; C. Giannini; T. Sibillano; M. Striccoli; M.L. Curri; R. Comparellisubjectnanocrystalline heterostructures

Catalysis Today 284 (2017): 100–106.

<https://dx.doi.org/10.1016/j.cattod.2016.11.025>

4)-One-pot conversion of Epoxidized Soybean Oil (ESO) into soy-based polyurethanes by MoCl₂O₂ catalysis

Pantone V.; Annese C.; Fusco C.; Fini P.; Nacci A.; Russo A.; D'Accolti L.subjectBio-based polyurethanesubjectCatalysissubjectOne-pot synthesissubjectOxidation

Molecules (Basel, Online) 22 (2017).

<https://dx.doi.org/10.3390/molecules22020333>

5)-Nanocomposite materials for photocatalytic degradation of pollutants

Petronella, F.; Truppi, A.; Ingrosso, C.; Placido, T.; Striccoli, M.; Curri, M. L.; Agostiano, A.; Comparelli, R.subjectNanocompositesubjectPhotocatalysissubjectTitanium dioxidesubjectSelf-cleaningssubjectWater treatmentsubjectNO_x

Catalysis Today 281 (2017): 85–100.

<https://dx.doi.org/10.1016/j.cattod.2016.05.048>

6)-Visible-light-active TiO₂-based hybrid nanocatalysts for environmental applications

Truppi, Alessandra; Truppi, Alessandra; Petronella, Francesca; Placido, Tiziana; Striccoli, Marinella; Agostiano, Angela; Agostiano, Angela; Curri, Maria Lucia; Comparelli, Roberto
subjectEnvironmental remediationsubjectHeterostructuresubjectNanomaterialssubjectNO_xsubjectOrganic pollutantssubjectPhotocatalysissubjectSelf-cleaning surfacessubjectSunlightsubjectTitanium dioxidesubjectVisible lightsubjectVOCs

Catalysts 7 (2017).

<https://dx.doi.org/10.3390/catal7040100>

7)-Functional Enzymes in Nonaqueous Environment: The Case of Photosynthetic Reaction Centers in Deep Eutectic Solvents

Milano, Francesco; Giotta, Livia; Guascito, Maria Rachele; Agostiano, Angela; Sblendorio, Stefania; Valli, Ludovico; Perna, Filippo M.; Cicco, Luciana; Trotta, Massimo; Capriati, Vito
subjectDeep eutectic solventssubjectCholine chloridesubjectMembrane proteinsubjectReaction centersubjectPhotosynthesis

ACS sustainable chemistry & engineering 5 (2017): 7768–7776.

<https://dx.doi.org/10.1021/acssuschemeng.7b01270>

8)-Transcriptomic analysis of nickel exposure in *Spingobium* sp ba1 cells using RNA-seq

Volpicella, M.; Leoni, C.; Manzari, C.; Chiara, M.; Picardi, E.; Piancone, E.; Italiano, F.; D'Erchia, A.; Trotta, M.; Horner, D. S.; Pesole, G.; Ceci, L. R.
subjectheavy metals

Scientific reports (Nature Publishing Group) 7 (2017).

<https://dx.doi.org/10.1038/s41598-017-08934-7>

9)-First moves towards photoautotrophic synthetic cells: In vitro study of photosynthetic reaction centre and cytochrome bc₁ complex interactions.

Altamura, Emiliano; Fiorentino, Rosa; Milano, Francesco; Trotta, Massimo; Palazzo, Gerardo; Stano, Pasquale; Mavelli, Fabio
subjectCytochrome bc₁ complexsubjectPhotosynthesissubjectPhotosynthetic reaction centresubjectProton gradientsubjectSynthetic biologysubjectSynthetic cells

Biophysical chemistry (Print) 229 (2017): 46–56.

<https://dx.doi.org/10.1016/j.bpc.2017.06.011>

10)-Evaluating the NO_x storage catalysts (NSC) aging: A preliminary analytical study with electronic microscopy

Bellebuono L.; Annese C.; Catucci L.; Colafemmina G.; Comparelli R.; Cotugno P.; Fracassi F.; Fusco C.; Nacci A.; D'Accolti L.
subjectElectronic microscopysubjectNO_x storage catalystssubjectThermal aging

Applied sciences 7 (2017).

<https://dx.doi.org/10.3390/app7101059>

11)-Luminescent CdSe@ZnS nanocrystals embedded in liposomes: A cytotoxicity study in HeLa cells

De Leo, Vincenzo; De Leo, Vincenzo; Milano, Francesco; Paiano, Aurora; Bramato, Roberta; Giotta, Livia; Comparelli, Roberto; Ruscigno, Silvia; Agostiano, Angela; Agostiano, Angela; Bucci, Cecilia; Catucci, Lucia; subjectquantum dots; subjectCdSe@ZnS; subjecttoxicity; subjectliposomes; subjectHeLa cell

Toxicology Research 6 (2017): 947–957.

<https://dx.doi.org/10.1039/c7tx00172j>

12)-NIR Emitting Nanoprobes Based on Cyclic RGD Motif Conjugated PbS Quantum Dots for Integrin-Targeted Optical Bioimaging

Depalo, N.; Corricelli, M.; De Paola, I.; Valente, G.; Iacobazzi, R. M.; Altamura, E.; Debellis, D.; Comegna, D.; Fanizza, E.; Denora, N.; Laquintana, V.; Mavelli, F.; Striccoli, M.; Saviano, M.; Agostiano, A.; Del Gatto, A.; Zaccaro, L.; Curri, M. L.; subjectNIR emitting quantum dots; subjectsilica-coated nanoprobe; subjectcyclic RGD peptides; subjectalpha nu beta 3 integrin receptors; subjecttargeted imaging

ACS applied materials & interfaces (Print) 9 (2017): 43113–43126.

<https://dx.doi.org/10.1021/acsami.7b14155>

13)-Liposome-modified titanium surface: A strategy to locally deliver bioactive molecules

Vincenzo De Leo and Monica Mattioli-Belmonte and Maria Teresa Cimmarusti and Annamaria Panniello and Manuela Dicarlo and Francesco Milano and Angela Agostiano and Elvira De Giglio and Lucia Catucci; subjectTitanium; subjectLiposome; subjectSupported vesicular layers; subjectCovalently bonded vesicular layers; subjectSurface-mediated drug delivery; subjectMG63 cells

Colloids and surfaces. B, Biointerfaces (Print) 158 (2017): 387–396.

<https://dx.doi.org/10.1016/j.colsurfb.2017.07.007>

14)-Highly oriented photosynthetic reaction centers generate a proton gradient in synthetic protocells

Altamura, Emiliano; Milano, Francesco; Tangorra, Roberto R.; Trotta, Massimo; Omar, Omar Hassan; Stano, Pasquale; Mavelli, Fabio; subjectphotosynthetic reaction centers; subjectgiant lipid vesicles; subjectartificial cells; subjectlight transductions; subjectproton gradient

Proceedings of the National Academy of Sciences of the United States of America 114 (2017): 3837–3842.

<https://dx.doi.org/10.1073/pnas.1617593114>

15)-Effect of ultrasound on the function and structure of a membrane protein: The case study of photosynthetic Reaction Center from Rhodobacter sphaeroides

De Leo, Vincenzo; De Leo, Vincenzo; Catucci, Lucia; Catucci, Lucia; Di Mauro, A. Evelyn; Agostiano, Angela; Agostiano, Angela; Giotta, Livia; Trotta, Massimo; Milano, Francesco; subjectDenaturations; subjectIntegral membrane proteins; subjectReaction Centers; subjectRhodobacter sphaeroides; subjectUltrasound

Ultrasonics sonochemistry (Print) 35 (2017): 103–111.

<https://dx.doi.org/10.1016/j.ultsonch.2016.09.007>

16)-Towards highly stable aqueous dispersions of multi-walled carbon nanotubes: the effect of oxygen plasma functionalization

Garzia Trulli, Marta; Garzia Trulli, Marta; Sardella, Eloisa; Sardella, Eloisa; Palumbo, Fabio; Palumbo, Fabio; Palazzo, Gerardo; Palazzo, Gerardo; Giannossa, Lorena Carla; Mangone, Annarosa; Comparelli, Roberto; Musso, Simone; Favia, Pietro; Favia, Pietro; Favia, Pietro; subject Colloidal stability; subject Multi walled carbon nanotubes (MWCNT); subject MWCNT functionalizations; subject Plasma processings; subject Powders functionalizations; subject Surface characterization

Journal of colloid and interface science (Print) 491 (2017): 255–264.

<https://dx.doi.org/10.1016/j.jcis.2016.12.039>

17)-Sorafenib delivery nanoplatform based on superparamagnetic iron oxide nanoparticles magnetically targets hepatocellular carcinoma

Depalo, Nicoletta; Iacobazzi, Rosa Maria; Valente, Gianpiero; Arduino, Ilaria; Villa, Silvia; Canepa, Fabio; Laquintana, Valentino; Fanizza, Elisabetta; Striccoli, Marinella; Cutrignelli, Annalisa; Lopodota, Angela; Porcelli, Letizia; Azzariti, Amalia; Franco, Massimo; Curri, Maria Lucia; Denora, Nunzio; subject superparamagnetic iron oxide nanoparticle; subject poly(ethylene glycol) (PEG)-modified phospholipid micelle; subject drug delivery; subject magnetic targetings; subject hepatocellular carcinomas; subject sorafenib

Nano research (Print) 10 (2017): 2431–2448.

<https://dx.doi.org/10.1007/s12274-017-1444-3>

18)-Enhanced photoactivity and conductivity in transparent TiO₂ nanocrystals/graphene hybrid anodes

Ingrosso, C.; Bianco, G. V.; Pifferi, V.; Guffanti, P.; Petronella, F.; Comparelli, R.; Agostiano, A.; Striccoli, M.; Palchetti, I.; Falciola, L.; Curri, M. L.; Bruno, G.; subject SENSITIZED SOLAR-CELLS; GRAPHENE ELECTROCHEMISTRY; CVD GRAPHENE; LAYER; FILMS; ELECTRODES; PHOTOANODES; PERFORMANCE; INTERFACE; SENSORS

Journal of Materials Chemistry A 5 (2017): 9307–9315.

<https://dx.doi.org/10.1039/c7ta01425b>

19)-Photolithography based on nanocrystals

Striccoli, Marinella; subject Nanocrystal; subject Photolithography

Science (N. Y., N.Y.) 357 (2017): 353–354.

<https://dx.doi.org/10.1126/science.aan8430>

20)-A push-pull silafluorene fluorophore for highly efficient luminescent solar concentrators

Gianfaldoni, Federico; De Nisi, Francesca; Iasilli, Giuseppe; Panniello, Annamaria; Fanizza, Elisabetta; Striccoli, Marinella; Ryuse, Daiki; Shimizu, Masaki; Biver, Tarita; Pucci, Andrea; subject solar concentrator; subject Fluorophores

RSC advances 7 (2017): 37302–37309.

<https://dx.doi.org/10.1039/c7ra08022k>

21)-Modification of Gold Electrodes with Bacterial Reaction Centres Immobilized by Laser Induced Forward Transfer (LIFT) Technique for Amperometric Herbicide Detection

Guascito, M. R.; Chatzipetrou, M.; Chirizzi, D.; Trotta, M.; Massaouti, M.; Giotta, L.; Milano, F.; Zergioti, I. *subjectPhotosynthetic reaction centressubjectRhodobacter sphaeroidessubjectphotocurrentsubjectinhibition type amperometric biosensorsubjectherbicide* *Procedia technology* 27 (2017): 195–196.

<https://dx.doi.org/10.1016/j.protcy.2017.04.083>

Other publications (journals without peer review, book reviews, etc.)

1)-A program for the solution of chemical equilibria among multiple phases

Ciriaco, Fulvio; Trotta, Massimo; Milano, Francesco
subjectChemical equilibriums
subjectUBIQUINONE
subjectENERGY
subjectBINDING

Advances in Artificial Life, Evolutionary Computation, and Systems Chemistry, edited by Rossi, F; Piotto, S; Concilio, S, pp. 188–197. Berlin: Springer International Publishing AG, 2017

https://dx.doi.org/10.1007/978-3-319-57711-1_17

info:cnr-pdr/source/autori:Ciriaco, Fulvio; Trotta, Massimo; Milano, Francesco/titolo:A program for the solution of chemical equilibria among multiple phases/titolo_volume:Advances in Artificial Life, Evolutionary Computation, and Systems Chemistry/curatori_volume:Rossi, F; Piotto, S; Concilio, S/editore:

/anno:2017

2)-Reductive Amination Vs "Click" Reaction On The Grafting Of Polysaccharides Onto Janus Silica

D. Barsi; A. Bianchi; M. Corricelli; M. L. Curri; A. Farah; M. Bertoldo
subjectnanomaterials
subjectJanus particles
subjectpolysaccharides

European Polymer Conference 2017, Lione (Fr), 02/07/2017, 07/07/2017

<http://www.cnr.it/prodotto/i/377521>

info:cnr-pdr/source/autori:D. Barsi; A. Bianchi; M. Corricelli; M. L. Curri; A. Farah; M. Bertoldo/congresso_nome:European Polymer Conference 2017/congresso_luogo:Lione (Fr)/congresso_data:02/07/2017, 07/07/2017/anno:2017/pagina_da:/pagina_a:/intervallo_pagine:

3)-Liquid crystalline DNA: A smart polymer with a variety of applications ranging from photonics to plasmonics

De Sio, Luciano; De Sio, Luciano; Annesi, Ferdinanda; Placido, Tiziana; Placido, Tiziana; Comparelli, Roberto; Pane, Alfredo; Curri, Maria L.; Umeton, Cesare; Umeton, Cesare; Bartolino, Roberto
subjectDNA
subjectHolography
subjectNanomaterials
subjectPlasmonics

Hybrid Polymer Composite Materials, edited by Vijay Kumar Thakur Manju Kumari Thakur Asokan Pappu, pp. 409–421. Cambridge: Woodhead Publishing, 2017

<https://dx.doi.org/10.1016/B978-0-08-100785-3.00013-9>

info:cnr-pdr/source/autori:De Sio, Luciano; De Sio, Luciano; Annesi, Ferdinanda; Placido, Tiziana; Placido, Tiziana; Comparelli, Roberto; Pane, Alfredo; Curri, Maria L.; Umeton, Cesare; Umeton, Cesare; Bartolino, Roberto/titolo:Liquid crystalline DNA: A smart polymer with a variety of applications ranging from photonics to plasmonics/titolo_volume:Hybrid Polymer

Composite Materials/curatori_volume:Vijay Kumar Thakur Manju Kumari Thakur Asokan Pappu/editore:

/anno:2017

4)-Magnetic Solid Lipid Nanoparticles for Magnetically Targeted Delivery of Sorafenib for Treatment of Hepatocellular Carcinoma

Fabio Vischio(a); Nicoletta Depalo(a); Ilaria Arduino(b); Silvia Villa(c); Fabio Canepa(c); Elisabetta Fanizza(a; d); San Hee Lee(e); Byung Chul Lee(e); Rosa Maria Iacobazzi(f); Valentino Laquintana(b); Angela Lopedota(b); Annalisa Cutrignelli(b); Maria Principia Scavo(f); Marinella Striccoli(a); Angela Agostiano(a; d); M. Lucia Curri(a); Nunzio Denora(b)subjectDrug deliverysubjectSorafenibsubjectMagnetic nanoparticlessubjectSolid lipid nanoparticles

XXVI Congresso Nazionale della Società Chimica Italiana, Paestum, 10-14/09/2017

<http://www.cnr.it/prodotto/i/377880>

info:cnr-pdr/source/autori:Fabio Vischio(a), Nicoletta Depalo(a), Ilaria Arduino(b), Silvia Villa(c), Fabio Canepa(c), Elisabetta Fanizza(a,d), San Hee Lee(e), Byung Chul Lee(e), Rosa Maria Iacobazzi(f), Valentino Laquintana(b), Angela Lopedota(b), Annalisa Cutrignelli(b), Maria Principia Scavo(f), Marinella Striccoli(a), Angela Agostiano(a,d), M. Lucia Curri(a), Nunzio Denora(b)/congresso_nome:XXVI Congresso Nazionale della Società Chimica Italiana/congresso_luogo:Paestum/congresso_data:10-14/09/2017/anno:2017/pagina_da:/pagina_a:/intervallo_pagine:

5)-Magnetically Targeted Delivery of Sorafenib to Liver Using Solid Lipid Nanoparticles for Treatment of Hepatocellular Carcinoma

Nicoletta Depalo(a); Fabio Vischio(a); Ilaria Arduino(b); Silvia Villa(c); Fabio Canepa(c); Elisabetta Fanizza(a; d); Byung Chul Lee(e); Valentino Laquintana(b); Angela Lopedota(b); Annalisa Cutrignelli(b); Maria Principia Scavo(f); Marinella Striccoli(a); Angela Agostiano(a; d); M. Lucia Curri(a); Nunzio Denora(b)subjectDrug deliverysubjectSorafenibsubjectMagnetic nanoparticles

ANNIC 2017, Roma, 18-20/10/2017

<http://www.cnr.it/prodotto/i/377884>

info:cnr-pdr/source/autori:Nicoletta Depalo(a), Fabio Vischio(a), Ilaria Arduino(b), Silvia Villa(c), Fabio Canepa(c), Elisabetta Fanizza(a,d), Byung Chul Lee(e), Valentino Laquintana(b), Angela Lopedota(b), Annalisa Cutrignelli(b), Maria Principia Scavo(f), Marinella Striccoli(a), Angela Agostiano(a,d), M. Lucia Curri(a), Nunzio Denora(b)/congresso_nome:ANNIC 2017/congresso_luogo:Roma/congresso_data:18-20/10/2017/anno:2017/pagina_da:/pagina_a:/intervallo_pagine:

6)-Magnetic Lipid Based Nanovectors for the Targeted Delivery of Sorafenib towards Treatment of Hepatocellular Carcinoma

Nicoletta Depalo(a); Fabio Vischio(a); Ilaria Arduino(b); Rosa Maria Iacobazzi(f); Silvia Villa(c); Fabio Canepa(c); Elisabetta Fanizza(a; d); Byung Chul Lee(e); Valentino Laquintana(b); Marinella Striccoli(a); Angela Agostiano(a; d); Nunzio Denora(b); M. Lucia Curri(a)subjectDrug deliverysubjectSorafenibsubjectMagnetic nanoparticles

CONFERENZA DI DIPARTIMENTO 2017, DSCTM, Alghero, 19-20/10/2017

<http://www.cnr.it/prodotto/i/377904>

info:cnr-pdr/source/autori:Nicoletta Depalo(a), Fabio Vischio(a), Ilaria Arduino(b), Rosa Maria Iacobazzi(f), Silvia Villa(c), Fabio Canepa(c), Elisabetta Fanizza(a,d), Byung Chul Lee(e), Valentino Laquintana(b), Marinella Striccoli(a), Angela Agostiano(a,d), Nunzio Denora(b), M. Lucia Curri(a)/congresso_nome:CONFERENZA DI DIPARTIMENTO 2017, DSCTM/congresso_luogo:Alghero/congresso_data:19-20/10/2017/anno:2017/pagina_da:/pagina_a:/intervallo_pagine:

7)-Biomedical application di "hot" gold nanorods/DNA complexes

Annesi F1.; Pane A1.; Qualtieri A.2; Placido T.3; Basta F.1; Comparelli R.3; Caracciolo G.4; Pozzi D.4; Curri M.L.3; Agostiano A.3; 5; De Sio L.1; 6; Bartolino R.7; 8subjectgold nanorodsubjectplasmon resonancesubjectDNA

NOMA 2017, "Novel Optical Materials and Applications" 13th Mediterranean Workshop and Topical Meeting, June 4-10, 2017

<http://www.cnr.it/prodotto/i/385344>

info:cnr-pdr/source/autori:Annesi F1., Pane A1., Qualtieri A.2, Placido T.3, Basta F.1, Comparelli R.3, Caracciolo G.4, Pozzi D.4, Curri M.L.3, Agostiano A.3,5, De Sio L.1,6, Bartolino R.7,8/congresso_nome:NOMA 2017, "Novel Optical Materials and Applications" 13th Mediterranean Workshop and Topical Meeting/congresso_luogo:/congresso_data:June 4-10, 2017/anno:2017/pagina_da:/pagina_a:/intervallo_pagine: