

2021

- Ceccatelli Berti C., Gilea A.I., De Gregorio M.A., Goffrini P., Exploring yeast as a study model of pantothenate kinase-associated neurodegeneration and for the identification of therapeutic compounds, *International Journal of Molecular Sciences*, **2021**, *22*, 1, 293, 1, 21, [10.3390/ijms22010293](https://doi.org/10.3390/ijms22010293)
- Volpi S., Cancelli U., Neri M., Corradini R., Multifunctional delivery systems for peptide nucleic acids, *Pharmaceuticals*, **2021**, *14*, 1, 14, 1, 31, [10.3390/ph14010014](https://doi.org/10.3390/ph14010014)
- Delfino D., Mori G., Rivetti C., Grigoletto A., Bizzotto G., Cavozi C., Malatesta M., Cavazzini D., Pasut G., Percudani R., Actin-resistant dnase1l2 as a potential therapeutics for cf lung disease, *Biomolecules*, **2021**, *11*, 3, 410, 1, 20, [10.3390/biom11030410](https://doi.org/10.3390/biom11030410)
- Mantovani L., Tribaudino M., De Matteis C., Funari V., Particle size and potential toxic element speciation in municipal solid waste incineration (Mswi) bottom ash, *Sustainability (Switzerland)*, **2021**, *13*, 4, 1911, 1, 17, [10.3390/su13041911](https://doi.org/10.3390/su13041911)
- Giannetti D., Mandrioli M., Schifani E., Castracani C., Spotti F.A., Mori A., Grasso D.A., First report on the acrobat ant *Crematogaster scutellaris* storing live aphids in its oak-gall nests, *Insects*, **2021**, *12*, 2, 108, 1, 17, [10.3390/insects12020108](https://doi.org/10.3390/insects12020108)
- Ceccatelli Berti C., Di Punzio G., Dallabona C., Baruffini E., Goffrini P., Lodi T., Donnini C., The power of yeast in modelling human nuclear mutations associated with mitochondrial diseases, *Genes*, **2021**, *12*, 2, 300, 1, 28, [10.3390/genes12020300](https://doi.org/10.3390/genes12020300)
- Tamanini A., Fabbri E., Jakova T., Gasparello J., Manicardi A., Corradini R., Finotti A., Borgatti M., Lampronti I., Munari S., Dehecchi M.C., Cabrini G., Gambari R., A peptide-nucleic acid targeting miR-335-5p enhances expression of cystic fibrosis transmembrane conductance regulator (CFTR) gene with the possible involvement of the CFTR scaffolding protein NHERF1, *Biomedicines*, **2021**, *9*, 2, 117, 1, 21, [10.3390/biomedicines9020117](https://doi.org/10.3390/biomedicines9020117)
- Leonelli G., Chelli A., Consonni M., Lorenzo C., Gattinoni P., Multi-decadal dating of surface slope movements in forested DSGSD areas of the European Alps: detecting precipitation triggering factors, *Geografiska Annaler, Series A: Physical Geography*, **2021**, *103*, 1, 8, 32, [10.1080/04353676.2020.1813983](https://doi.org/10.1080/04353676.2020.1813983)
- Persico D., First fossil record of cave lion (*Panthera (Leo) spelaea intermedia*) from alluvial deposits of the Po River in northern Italy, *Quaternary International*, **2021**, *586*, 14, 23, [10.1016/j.quaint.2021.02.029](https://doi.org/10.1016/j.quaint.2021.02.029)
- Schifani E., Giannetti D., Csósz S., Castellucci F., Luchetti A., Castracani C., Spotti F.A., Mori A., Grasso D.A., Is mimicry a diversification-driver in ants? Biogeography, ecology, ethology, genetics and morphology define a second West-Palaeartic *Colobopsis* species (Hymenoptera: Formicidae), *Zoological Journal of the Linnean Society*, **2021**, , , 1, 27, <https://doi.org/10.1093/zoolinlean/zlab035>
- Giacomelli S., Leonelli G., Gemignani C.A., Chelli A., Geo-historical study for landslide hazard assessment in territory management: the Casaletto-Illica landslide in the Ceno Valley (Northern Apennines, Italy), *Journal of Maps*, **2021**, *17*, 3, 100, 110, <https://doi.org/10.1080/17445647.2021.1908186>
- Bianchi, Federica; Careri, Maria, Mass Spectrometry in Food Authenticity and Traceability, in: *Food authentication and traceability*, **2021**, Academic Press, Edited by:, Charis M. Galanakis, 101, 130, <https://doi.org/10.1016/B978-0-12-821104-5.00008-8>
- Giannetti D., Schifani E., Castracani C., Ghizzoni M., Delaiti M., Penner F., Spotti F.A., Mori A., Ioriatti C., Grasso D.A., Assessing ant diversity in agroecosystems: The case of italian vineyards of the adige valley, *Redia*, **2021**, *104*, 97, 109, <https://doi.org/10.19263/REDIA-104.21.11>
- Finotti A., Gasparello J., Casnati A., Corradini R., Gambari R., Sansone F., Delivery of Peptide Nucleic Acids Using an Argininocalix[4]arene as Vector, *Methods in Molecular Biology*, **2021**, *2211*, 123, 143, https://doi.org/10.1007/978-1-0716-0943-9_10

- Bacchi A., Mazzeo P.P., Cocrystallization as a tool to stabilize liquid active ingredients, *Crystallography Reviews*, **2021**, 27, 102, 123, <https://doi.org/10.1080/0889311X.2021.1978079>
- Pavesi A., Prediction of two novel overlapping ORFs in the genome of SARS-CoV-2, *Virology*, **2021**, 562, 149, 157, <https://doi.org/10.1016/j.virol.2021.07.011>
- Rossi I., Spagnoli G., Buttini F., Sonvico F., Stellari F., Cavazzini D., Chen Q., Müller M., Bolchi A., Ottonello S., Bettini R., A respirable HPV-L2 dry-powder vaccine with GLA as amphiphilic lubricant and immune-adjuvant, *Journal of Controlled Release*, **2021**, 340, 209, 220, <https://doi.org/10.1016/j.jconrel.2021.11.002>
- Manfredi N., Decavoli C., Boldrini C.L., Dolla T.H., Faroldi F., Sansone F., Montini T., Baldini L., Fornasiero P., Abbotto A., Multibranched Calix[4]arene-Based Sensitizers for Efficient Photocatalytic Hydrogen Production, *European Journal of Organic Chemistry*, **2021**, 2021, 2, 284, 288, <https://doi.org/10.1002/ejoc.202001296>
- Suppa A., Gorbi G., Marková S., Buschini A., Rossi V., Transgenerational effects of methyl farnesoate on *Daphnia pulex* clones: Male and ehippia production and expression of genes involved in sex determination, *Freshwater Biology*, **2021**, 66, 374, 390, <https://doi.org/10.1111/fwb.13644>
- Dhali R., Phan Huu D.K.A., Bertocchi F., Sissa C., Terenziani F., Painelli A., Understanding TADF: a joint experimental and theoretical study of DMAC-TRZ, *Physical chemistry chemical physics : PCCP*, **2021**, 23, 1, 378, 387, [10.1039/d0cp05982j](https://doi.org/10.1039/d0cp05982j)
- Kulichenko M., Fedik N., Monfredini A., Muñoz-Castro A., Balestri D., Boldyrev A.I., Maestri G., "Bottled" spiro-doubly aromatic trinuclear [Pd2Ru]+ complexes, *Chemical Science*, **2021**, 12, 1, 477, 486, [10.1039/d0sc04469e](https://doi.org/10.1039/d0sc04469e)
- Cappuccio G., Ceccatelli Berti C., Baruffini E., Sullivan J., Shashi V., Jewett T., Stamper T., Maitz S., Canonico F., Revah-Politi A., Kupchik G.S., Anyane-Yeboah K., Aggarwal V., Benneche A., Bratland E., Berland S., D'Arco F., Alves C.A., Vanderver A., Longo D., Bertini E., Torella A., Nigro V., D'Amico A., van der Knaap M.S., Goffrini P., Brunetti-Pierri N., Telethon Undiagnosed Diseases Program, Bi-allelic KARS1 pathogenic variants affecting functions of cytosolic and mitochondrial isoforms are associated with a progressive and multisystem disease, *Human Mutation*, **2021**, 42, 6, 745, 761, [10.1002/humu.24210](https://doi.org/10.1002/humu.24210)
- Stevanović N., Mazzeo P.P., Bacchi A., Matić I.Z., Đorđić Crnogorac M., Stanojković T., Vujčić M., Novaković I., Radanović D., Šumar-Ristović M., Sladić D., Čobeljić B., Anđelković K., Synthesis, characterization, antimicrobial and cytotoxic activity and DNA-binding properties of d-metal complexes with hydrazones of Girard's T and P reagents, *Journal of Biological Inorganic Chemistry*, **2021**, 26, 863, 880, [10.1007/s00775-021-01893-5](https://doi.org/10.1007/s00775-021-01893-5)
- Zangelmi E., Stanković T., Malatesta M., Acquotti D., Pallitsch K., Peracchi A., Discovery of a New, Recurrent Enzyme in Bacterial Phosphonate Degradation: (R)-1-Hydroxy-2-aminoethylphosphonate Ammonia-lyase, *Biochemistry*, **2021**, 60, 15, 1214, 1225, [10.1021/acs.biochem.1c00092](https://doi.org/10.1021/acs.biochem.1c00092)
- Portone A., Bellucci L., Convertino D., Mezzadri F., Piccinini G., Giambra M.A., Miseikis V., Rossi F., Coletti C., Fabbri F., Deterministic synthesis of Cu9S5 flakes assisted by single-layer graphene arrays, *Nanoscale Advances*, **2021**, 3, 5, 1352, 1361, [10.1039/d0na00997k](https://doi.org/10.1039/d0na00997k)
- Cera G., Cester Bonati F., Bazzoni M., Secchi A., Arduini A., Calix[6]arene-based Brønsted acids for molecular recognition and catalysis, *Organic and Biomolecular Chemistry*, **2021**, 19, 7, 1546, 1554, [10.1039/d0ob02393k](https://doi.org/10.1039/d0ob02393k)
- Pedrini A., Devi Das A., Pinalli R., Hickey N., Geremia S., Dalcanale E., The Role of Chain Length in Cucurbit[8]uril Complexation of Methyl Alkyl Viologens, *European Journal of Organic Chemistry*, **2021**, 2021, 10, 1547, 1552, [10.1002/ejoc.202100014](https://doi.org/10.1002/ejoc.202100014)
- Tribaudino M., Bersani D., Mantovani L., Pizzati M., Salviati G., Cathodoluminescence, Raman and scanning electron microscopy with energy dispersion system mapping to unravel the mineralogy and texture of an altered Ca Al-rich inclusion in Renazzo CR2 carbonaceous chondrite, *Journal of Raman Spectroscopy*, **2021**, 52, 1892, 1901, [10.1002/jrs.6234](https://doi.org/10.1002/jrs.6234)
- Bellassai N., D'Agata R., Marti A., Rozzi A., Volpi S., Allegretti M., Corradini R., Giacomini P., Huskens J., Spoto G., Detection of Tumor DNA in Human Plasma with a Functional PLL-Based Surface Layer and Plasmonic Biosensing, *ACS Sensors*, **2021**, 6, 6, 2307, 2319, [10.1021/acssensors.1c00360](https://doi.org/10.1021/acssensors.1c00360)

- Rossi F.P., Schito A., Manzi V., Roveri M., Corrado S., Lugli S., Reghizzi M., Paleo-thermal constraints on the origin of native diagenetic sulfur in the Messinian evaporites: The Northern Apennines foreland basin case study (Italy), *Basin Research*, **2021**, *33*, 4, 2500, 2516, [10.1111/bre.12566](https://doi.org/10.1111/bre.12566)
- Guagnini F., Pedrini A., Dalcanale E., Massera C., Multidentate, V-Shaped Pyridine Building Blocks as Tectons for Crystal Engineering, *Chemistry - A European Journal*, **2021**, *27*, 14, 4660, 4669, [10.1002/chem.202004918](https://doi.org/10.1002/chem.202004918)
- Pancrazzi F., Maestri G., Maggi R., Viscardi R., Oxidative Dearomatization of Phenols and Polycyclic Aromatics with Hydrogen Peroxide Triggered by Heterogeneous Sulfonic Acids, *European Journal of Organic Chemistry*, **2021**, *2021*, 5407, 5414, [10.1002/ejoc.202100861](https://doi.org/10.1002/ejoc.202100861)
- Mazzeo P.P., Pioli M., Montisci F., Bacchi A., Pelagatti P., Mechanochemical Preparation of Dipyridyl-Naphthalenediimide Cocrystals: Relative Role of Halogen-Bond and π - π Interactions, *Crystal Growth and Design*, **2021**, *21*, 5687, 5696, [10.1021/acs.cgd.1c00531](https://doi.org/10.1021/acs.cgd.1c00531)
- Cera G., Bazzoni M., Andreoni L., Cester Bonati F., Massera C., Silvi S., Credi A., Secchi A., Arduini A., Thioureidocalix[6]arenes Pseudorotaxanes, *European Journal of Organic Chemistry*, **2021**, *2021*, 5788, 5798, [10.1002/ejoc.202101080](https://doi.org/10.1002/ejoc.202101080)
- Boccacini M., Cammi R., Pagliai M., Cardini G., Schettino V., Toward an Understanding of the Pressure Effect on the Intramolecular Vibrational Frequencies of Sulfur Hexafluoride, *Journal of Physical Chemistry A*, **2021**, *125*, 6362, 6373, [10.1021/acs.jpca.1c02595](https://doi.org/10.1021/acs.jpca.1c02595)
- Bosi M., Seravalli L., Mazzolini P., Mezzadri F., Fornari R., Thermodynamic and Kinetic Effects on the Nucleation and Growth of ϵ/κ - or β -Ga₂O₃ by Metal-Organic Vapor Phase Epitaxy, *Crystal Growth and Design*, **2021**, *21*, 6393, 6401, [10.1021/acs.cgd.1c00863](https://doi.org/10.1021/acs.cgd.1c00863)
- Bazzoni M., Andreoni L., Silvi S., Credi A., Cera G., Secchi A., Arduini A., Selective access to constitutionally identical, orientationally isomeric calix[6]arene-based [3]rotaxanes by an active template approach, *Chemical Science*, **2021**, *12*, 18, 6419, 6428, [10.1039/d1sc00279a](https://doi.org/10.1039/d1sc00279a)
- Camedda N., Lanzi M., Bigi F., Maggi R., Maestri G., Ambient Synthesis of Tricyclic Naphthalenes via Stepwise Styryl-yne Dearomative Diels-Alder Cyclization, *Organic Letters*, **2021**, *23*, 6536, 6541, [10.1021/acs.orglett.1c02339](https://doi.org/10.1021/acs.orglett.1c02339)
- Morbioli I., Casnati A., Esko J.D., Tor Y., Sansone F., Calixarene-decorated liposomes for intracellular cargo delivery, *Organic and Biomolecular Chemistry*, **2021**, *19*, 6598, 6602, [10.1039/d1ob01055g](https://doi.org/10.1039/d1ob01055g)
- Marchetti D., Guagnini F., Lanza A.E., Pedrini A., Righi L., Dalcanale E., Gemmi M., Massera C., Combined Approach of Mechanochemistry and Electron Crystallography for the Discovery of 1D and 2D Coordination Polymers, *Crystal Growth and Design*, **2021**, *21*, 6660, 6664, [10.1021/acs.cgd.1c01058](https://doi.org/10.1021/acs.cgd.1c01058)
- Mazzeo P.P., Balestri D., Bacchi A., Pelagatti P., Stabilization of liquid active guests via nanoconfinement into a flexible microporous metal-organic framework, *CrystEngComm*, **2021**, *23*, 7262, 7269, [10.1039/d1ce00899d](https://doi.org/10.1039/d1ce00899d)
- Anzola M., Painelli A., Aggregates of polar dyes: Beyond the exciton model, *Physical Chemistry Chemical Physics*, **2021**, *23*, 14, 8282, 8291, [10.1039/d1cp00335f](https://doi.org/10.1039/d1cp00335f)
- Bigi F., Cera G., Maggi R., Wang Y., Malacria M., Maestri G., Is Aromaticity a Driving Force in Catalytic Cycles? A Case from the Cycloisomerization of Enynes Catalyzed by All-Metal Aromatic Pd³⁺ Clusters and Carboxylic Acids, *Journal of Physical Chemistry A*, **2021**, *125*, 10035, 10043, [10.1021/acs.jpca.1c07253](https://doi.org/10.1021/acs.jpca.1c07253)
- Balestri D., Mazzeo P.P., Perrone R., Fornari F., Bianchi F., Careri M., Bacchi A., Pelagatti P., Deciphering the Supramolecular Organization of Multiple Guests Inside a Microporous MOF to Understand their Release Profile, *Angewandte Chemie - International Edition*, **2021**, *60*, 18, 10194, 10202, [10.1002/anie.202017105](https://doi.org/10.1002/anie.202017105)
- Cera G., Giovanardi G., Secchi A., Arduini A., Merging Molecular Recognition and Gold(I) Catalysis with Triphoscalix[6]arene Ligands, *Chemistry - A European Journal*, **2021**, *27*, 40, 10261, 10266, [10.1002/chem.202101323](https://doi.org/10.1002/chem.202101323)
- Marmiroli M., Pagano L., Rossi R., De La Torre-Roche R., Lepore G.O., Ruotolo R., Gariani G., Bonanni V., Pollastri S., Puri A., Gianoncelli A., Aquilanti G., D'Acapito F., White J.C., Marmiroli N.,

- Copper Oxide Nanomaterial Fate in Plant Tissue: Nanoscale Impacts on Reproductive Tissues, *Environmental Science and Technology*, **2021**, *55*, 10769, 10783, [10.1021/acs.est.1c01123](https://doi.org/10.1021/acs.est.1c01123)
- Faroldi F., Bardi B., Tosi I., Doria S., Isopi J., Baldini L., Di Donato M., Marcaccio M., Sansone F., Terenziani F., Extremely fast triplet formation by charge recombination in a Nile Red/fullerene flexible dyad, *Journal of Materials Chemistry C*, **2021**, *9*, 10899, 10911, [10.1039/d1tc01885j](https://doi.org/10.1039/d1tc01885j)
 - Delledonne A., Morla-Folch J., Anzola M., Bertocchi F., Vargas-Nadal G., Köber M., Sissa C., Ventosa N., Painelli A., Increasing resonance energy transfer upon dilution: A counterintuitive observation in CTAB micelles, *Journal of Materials Chemistry C*, **2021**, *9*, 10952, 10964, [10.1039/d1tc02888j](https://doi.org/10.1039/d1tc02888j)
 - Shahana Nizar N.S., Sujith M., Swathi K., Sissa C., Painelli A., George Thomas K., Emergent chiroptical properties in supramolecular and plasmonic assemblies, *Chemical Society Reviews*, **2021**, *50*, 11208, 11226, [10.1039/d0cs01583k](https://doi.org/10.1039/d0cs01583k)
 - Riboni N., Spadini C., Cabassi C.S., Bianchi F., Grolli S., Conti V., Ramoni R., Casoli F., Nasi L., de Julián Fernández C., Luches P., Careri M., OBP-functionalized/hybrid superparamagnetic nanoparticles for *Candida albicans* treatment, *RSC Advances*, **2021**, *11*, 19, 11256, 11265, [10.1039/d1ra01112j](https://doi.org/10.1039/d1ra01112j)
 - Serafino A., Camedda N., Lanzi M., Della Ca' N., Cera G., Maestri G., Inter/Intramolecular Cascade of 1,6-Enynes Catalyzed by All-Metal Aromatic Tripalladium Complexes and Carboxylic Acids, *Journal of Organic Chemistry*, **2021**, *86*, 15433, 15452, [10.1021/acs.joc.1c01962](https://doi.org/10.1021/acs.joc.1c01962)
 - Sgarlata C., Schneider B.L., Zito V., Migliore R., Tegoni M., Pecoraro V.L., Arena G., Lanthanide Identity Governs Guest-Induced Dimerization in LnIII[15-MCCuIN(L-pheHA)-5]]³⁺ Metallacrowns, *Chemistry - A European Journal*, **2021**, *27*, 17669, 17675, [10.1002/chem.202103263](https://doi.org/10.1002/chem.202103263)
 - Boanini E., Gazzano M., Rubini K., Mazzeo P.P., Bigi A., Structural interplay between strontium and calcium in α -CaHPO₄ and β -SrHPO₄, *Ceramics International*, **2021**, *47*, 17, 24412, 24420, [10.1016/j.ceramint.2021.05.156](https://doi.org/10.1016/j.ceramint.2021.05.156)
 - Canossa S., Ferrari E., Sippel P., Fischer J.K.H., Pfattner R., Frison R., Masino M., Mas-Torrent M., Lunkenheimer P., Rovira C., Girlando A., Tetramethylbenzidine-TetrafluoroTCNQ (TMB-TCNQF₄): A Narrow-Gap Semiconducting Salt with Room-Temperature Relaxor Ferroelectric Behavior, *Journal of Physical Chemistry C*, **2021**, *125*, 25816, 25824, [10.1021/acs.jpcc.1c07131](https://doi.org/10.1021/acs.jpcc.1c07131)
 - Bergamonti L., Gentili S., Acquotti D., Tegoni M., Lottici P.P., Graiff C., Toxic metal sequential sequestration in water using new amido-aminoacid ligand as a model for the interaction with polyamidoamines, *Journal of Hazardous Materials*, **2021**, *410*, 124585, [10.1016/j.jhazmat.2020.124585](https://doi.org/10.1016/j.jhazmat.2020.124585)
 - Riboni N., Fornari F., Bianchi F., Careri M., A simple and efficient Solid-Phase Microextraction – Gas Chromatography – Mass Spectrometry method for the determination of fragrance materials at ultra-trace levels in water samples using multi-walled carbon nanotubes as innovative coating, *Talanta*, **2021**, *224*, 121891, [10.1016/j.talanta.2020.121891](https://doi.org/10.1016/j.talanta.2020.121891)
 - Rodriguez M., Bodini A., Escobedo F.J., Clerici N., Analyzing socio-ecological interactions through qualitative modeling: Forest conservation and implications for sustainability in the peri-urban bogota (Colombia), *Ecological Modelling*, **2021**, *439*, 109344, [10.1016/j.ecolmodel.2020.109344](https://doi.org/10.1016/j.ecolmodel.2020.109344)
 - Savi M., Bocchi L., Cacciani F., Vilella R., Buschini A., Perotti A., Galati S., Montalbano S., Pinelli S., Frati C., Corradini E., Quaini F., Ruotolo R., Stilli D., Zaniboni M., Cobalt oxide nanoparticles induce oxidative stress and alter electromechanical function in rat ventricular myocytes, *Particle and Fibre Toxicology*, **2021**, *18*, 1, 1, [10.1186/s12989-020-00396-6](https://doi.org/10.1186/s12989-020-00396-6)
 - Bianchi F., Fornari F., Riboni N., Spadini C., Cabassi C.S., Iannarelli M., Carraro C., Mazzeo P.P., Bacchi A., Orlandini S., Furlanetto S., Careri M., Development of novel cocrystal-based active food packaging by a Quality by Design approach, *Food Chemistry*, **2021**, *347*, 129051, [10.1016/j.foodchem.2021.129051](https://doi.org/10.1016/j.foodchem.2021.129051)
 - Volpi S., Rozzi A., Rivi N., Neri M., Knoll W., Corradini R., Submonomeric Strategy with Minimal Protection for the Synthesis of C(2)-Modified Peptide Nucleic Acids, *Organic Letters*, **2021**, [10.1021/acs.orglett.0c04116](https://doi.org/10.1021/acs.orglett.0c04116)
 - Gallego-Yerga L., de la Torre C., Sansone F., Casnati A., Mellet C.O., García Fernández J.M., Ceña V., Synthesis, self-assembly and anticancer drug encapsulation and delivery properties of cyclodextrin-

based giant amphiphiles, *Carbohydrate Polymers*, **2021**, 252, 117135, [10.1016/j.carbpol.2020.117135](https://doi.org/10.1016/j.carbpol.2020.117135)

- Fabbri E., Tamanini A., Jakova T., Gasparello J., Manicardi A., Corradini R., Finotti A., Borgatti M., Lampronti I., Munari S., Dehecchi M.C., Cabrini G., Gambari R., Treatment of human airway epithelial Calu-3 cells with a peptide-nucleic acid (PNA) targeting the microRNA miR-101-3p is associated with increased expression of the cystic fibrosis Transmembrane Conductance Regulator (CFTR) gene, *European Journal of Medicinal Chemistry*, **2021**, 209, 112876, [10.1016/j.ejmech.2020.112876](https://doi.org/10.1016/j.ejmech.2020.112876)
- Irwin Jungreis, Chase W Nelson, Zachary Ardern, Yaara Finkel, Nevan J Krogan, Kei Sato, John Ziebuhr, Noam Stern-Ginossar, Angelo Pavesi, Andrew E Firth, Alexander E Gorbalenya, Manolis Kellis, Conflicting and ambiguous names of overlapping ORFs in the SARS-CoV-2 genome: A homology-based resolution, *Virology*, **2021**, [10.1016/j.virol.2021.02.013](https://doi.org/10.1016/j.virol.2021.02.013)
- Feo A., Celico F., High-resolution shock-capturing numerical simulations of three-phase immiscible fluids from the unsaturated to the saturated zone, *Scientific Reports*, **2021**, 11, 1, 5212, [10.1038/s41598-021-83956-w](https://doi.org/10.1038/s41598-021-83956-w)
- Arcolego A., Bianchi F., Careri M., A sensitive microextraction by packed sorbent-gas chromatography-mass spectrometry method for the assessment of polycyclic aromatic hydrocarbons contamination in Antarctic surface snow, *Chemosphere*, **2021**, 282, 131082, [10.1016/j.chemosphere.2021.131082](https://doi.org/10.1016/j.chemosphere.2021.131082)
- Pilato S., Aschi M., Bazzoni M., Cester Bonati F., Cera G., Moffa S., Canale V., Ciulla M., Secchi A., Arduini A., Fontana A., Siani G., Calixarene-based artificial ionophores for chloride transport across natural liposomal bilayer: Synthesis, structure-function relationships, and computational study, *Biochimica et Biophysica Acta - Biomembranes*, **2021**, 1863, 10, 183667, [10.1016/j.bbamem.2021.183667](https://doi.org/10.1016/j.bbamem.2021.183667)
- Dieci G., Removing quote marks from the RNA polymerase II CTD 'code', *BioSystems*, **2021**, 207, 104468, [10.1016/j.biosystems.2021.104468](https://doi.org/10.1016/j.biosystems.2021.104468)
- Mattarozzi M., Riboni N., Maffini M., Scarpella S., Bianchi F., Careri M., Reversed-phase and weak anion-exchange mixed-mode stationary phase for fast separation of medium-, long- and very long chain free fatty acids by ultra-high-performance liquid chromatography-high resolution mass spectrometry, *Journal of Chromatography A*, **2021**, 1648, 462209, [10.1016/j.chroma.2021.462209](https://doi.org/10.1016/j.chroma.2021.462209)
- Bellin N., Spezzano R., Rossi V., Assessing the extinction risk of heterocypris incongruens (Crustacea: Ostracoda) in climate change with sensitivity and uncertainty analysis, *Water (Switzerland)*, **2021**, 13, 13, 1828, [10.3390/w13131828](https://doi.org/10.3390/w13131828)
- Beghi S., Cavaliere F., Manfredini M., Ferrarese S., Corazzari C., Beghi C., Buschini A., Polymorphism rs7214723 in CAMKK1: A new genetic variant associated with cardiovascular diseases, *Bioscience Reports*, **2021**, 41, 7, BSR20210326, [10.1042/BSR20210326](https://doi.org/10.1042/BSR20210326)
- Filonzi L., Vaghi M., Ardenghi A., Rontani P.M., Voccia A., Nonnis Marzano F., Efficiency of dna mini-barcoding to assess mislabeling in commercial fish products in Italy: An overview of the last decade, *Foods*, **2021**, 10, 7, 1449, [10.3390/foods10071449](https://doi.org/10.3390/foods10071449)
- Pavesi A., Origin, evolution and stability of overlapping genes in viruses: A systematic review, *Genes*, **2021**, 12, 6, 809, [10.3390/genes12060809](https://doi.org/10.3390/genes12060809)
- Pagani S., Voccia A., Leonardi S., Moschini L., Rontani P.M., Piccoli F., Marzano F.N., Strengths and weaknesses of different Italian fish indices under the water framework directive guidelines, *Water (Switzerland)*, **2021**, 13, 10, 1368, [10.3390/w13101368](https://doi.org/10.3390/w13101368)
- Bellin N., Racchetti E., Maurone C., Bartoli M., Rossi V., Unsupervised machine learning and data mining procedures reveal short term, climate driven patterns linking physico-chemical features and zooplankton diversity in small ponds, *Water (Switzerland)*, **2021**, 13, 9, 1217, [10.3390/w13091217](https://doi.org/10.3390/w13091217)
- Ferrari R., Grandi N., Tramontano E., Dieci G., Retrotransposons as drivers of Mammalian brain evolution, *Life*, **2021**, 11, 5, 376, [10.3390/life11050376](https://doi.org/10.3390/life11050376)
- Montalbano S., Degola F., Bartoli J., Bisceglie F., Buschini A., Carcelli M., Feretti D., Galati S., Marchi L., Orsoni N., Pelosi G., Pioli M., Restivo F.M., Rogolino D., Scaccaglia M., Serra O., Spadola G., Viola G.C.V., Zerbini I., Zani C., The aflatox[®] project: Approaching the development of new generation,

- natural-based compounds for the containment of the mycotoxigenic phytopathogen aspergillus flavus and aflatoxin contamination, *International Journal of Molecular Sciences*, **2021**, *22*, 9, 4520, [10.3390/ijms22094520](https://doi.org/10.3390/ijms22094520)
- Figuccia S., Degiorgi A., Ceccatelli Berti C., Baruffini E., Dallabona C., Goffrini P., Mitochondrial aminoacyl-trna synthetase and disease: The yeast contribution for functional analysis of novel variants, *International Journal of Molecular Sciences*, **2021**, *22*, 9, 4524, [10.3390/ijms22094524](https://doi.org/10.3390/ijms22094524)
 - Di Punzio G., Di Noia M.A., Delahodde A., Sellem C., Donnini C., Palmieri L., Lodi T., Dallabona C., A yeast-based screening unravels potential therapeutic molecules for mitochondrial diseases associated with dominant ant1 mutations, *International Journal of Molecular Sciences*, **2021**, *22*, 9, 4461, [10.3390/ijms22094461](https://doi.org/10.3390/ijms22094461)
 - Fortunati S., Giannetto M., Rozzi A., Corradini R., Careri M., PNA-functionalized magnetic microbeads as substrates for enzyme-labelled voltammetric genoassay for DNA sensing applied to identification of GMO in food, *Analytica Chimica Acta*, **2021**, *1153*, 338297, [10.1016/j.aca.2021.338297](https://doi.org/10.1016/j.aca.2021.338297)
 - Dhali R., Phan Huu D.K.A., Terenziani F., Sissa C., Painelli A., Thermally activated delayed fluorescence: A critical assessment of environmental effects on the singlet-triplet energy gap, *Journal of Chemical Physics*, **2021**, *154*, 13, 134112, [10.1063/5.0042058](https://doi.org/10.1063/5.0042058)
 - Carzaniga T., Zanchetta G., Frezza E., Casiraghi L., Vanjur L., Nava G., Tagliabue G., Dieci G., Buscaglia M., Bellini T., A bit stickier, a bit slower, a lot stiffer: Specific vs. nonspecific binding of gal4 to dna, *International Journal of Molecular Sciences*, **2021**, *22*, 8, 3813, [10.3390/ijms22083813](https://doi.org/10.3390/ijms22083813)
 - Orlandi F., Lanza A., Cabassi R., Khalyavin D.D., Manuel P., Solzi M., Gemmi M., Righi L., Extended "orbital molecules" and magnetic phase separation in Bi0.68Ca0.32MnO3, *Physical Review B*, **2021**, *103*, 10, 104105, [10.1103/PhysRevB.103.104105](https://doi.org/10.1103/PhysRevB.103.104105)
 - Fischer J.K.H., D'Avino G., Masino M., Mezzadri F., Lunkenheimer P., Soos Z.G., Girlando A., Relaxor ferroelectricity in the polar M2P-TCNQ charge-transfer crystal at the neutral-ionic interface, *Physical Review B*, **2021**, *103*, 11, 115104, [10.1103/PhysRevB.103.115104](https://doi.org/10.1103/PhysRevB.103.115104)
 - Pioli M., Orsoni N., Scaccaglia M., Alinovi R., Pinelli S., Pelosi G., Bisceglie F., A new photoactivatable ruthenium(II) complex with an asymmetric bis-thiocarbohydrazone: Chemical and biological investigations, *Molecules*, **2021**, *26*, 4, 939, [10.3390/molecules26040939](https://doi.org/10.3390/molecules26040939)
 - Masseroli A., Leonelli G., Morra di Cella U., Verrecchia E.P., Sebag D., Pozzi E.D., Maggi V., Pelfini M., Trombino L., An integrated approach for tracking climate-driven changes in treeline environments on different time scales in the Valle d'Aosta, Italian Alps, *Holocene*, **2021**, [10.1177/09596836211025974](https://doi.org/10.1177/09596836211025974)
 - Attar S.S., Pilia L., Espa D., Artizzu F., Serpe A., Pizzotti M., Marinotto D., Marchiò L., Deplano P., Insight into the Properties of Heteroleptic Metal Dithiolenes: Multistimuli Responsive Luminescence, Chromism, and Nonlinear Optics, *Inorganic Chemistry*, **2021**, , [10.1021/acs.inorgchem.1c00023](https://doi.org/10.1021/acs.inorgchem.1c00023)
 - Lomazzi M., Franceschi V., Bagnacani V., Vezzoni C.A., Donofrio G., Casnati A., Sansone F., A Structure-Activity Investigation on Modified Analogues of an Argininocalixarene Based Non-viral Gene Vector, *European Journal of Organic Chemistry*, **2021**, , [10.1002/ejoc.202100338](https://doi.org/10.1002/ejoc.202100338)
 - Favero A., Rozzi A., Massera C., Pedrini A., Pinalli R., Dalcanale E., Synthesis of quinoxaline cavitand baskets, *Supramolecular Chemistry*, **2021**, *29*, 6, 4076, 4087, [10.1080/10610278.2021.1917768](https://doi.org/10.1080/10610278.2021.1917768)
 - Hytönen M.K., Sarviaho R., Jackson C.B., Syrjä P., Jokinen T., Matiasek K., Rosati M., Dallabona C., Baruffini E., Quintero I., Arumilli M., Monteuiis G., Donner J., Anttila M., Suomalainen A., Bindoff L.A., Lohi H., In-frame deletion in canine PITRM1 is associated with a severe early-onset epilepsy, mitochondrial dysfunction and neurodegeneration, *Human Genetics*, **2021**, *140*, 1593-1609, [10.1007/s00439-021-02279-y](https://doi.org/10.1007/s00439-021-02279-y)
 - Lampronti G.I., Michalchuk A.A.L., Mazzeo P.P., Belenguer A.M., Sanders J.K.M., Bacchi A., Emmerling F., Changing the game of time resolved X-ray diffraction on the mechanochemistry playground by downsizing, *Nature Communications*, **2021**, *12*, 6134, [10.1038/s41467-021-26264-1](https://doi.org/10.1038/s41467-021-26264-1)
 - Boldrini C.L., Manfredi N., Montini T., Baldini L., Abbotto A., Fornasiero P., Calix[4]arene-based molecular photosensitizers for sustainable hydrogen production and other solar applications,

Current Opinion in Green and Sustainable Chemistry, **2021**, *32*, 100534,
[10.1016/j.cogsc.2021.100534](https://doi.org/10.1016/j.cogsc.2021.100534)

- Di Punzio G., Gilberti M., Baruffini E., Lodi T., Donnini C., Dallabona C., A yeast-based repurposing approach for the treatment of mitochondrial dna depletion syndromes led to the identification of molecules able to modulate the dntp pool, *International Journal of Molecular Sciences*, **2021**, *22*, 12223, [10.3390/ijms222212223](https://doi.org/10.3390/ijms222212223)
- Manzi V., Gennari R., Lugli S., Persico D., Roveri M., Gavrieli I., Gvirtzman Z., Synchronous onset of the Messinian salinity crisis and diachronous evaporite deposition: New evidences from the deep Eastern Mediterranean basin, *Palaeogeography, Palaeoclimatology, Palaeoecology*, **2021**, *584*, 110685, [10.1016/j.palaeo.2021.110685](https://doi.org/10.1016/j.palaeo.2021.110685)
- Carere M., Antocchia A., Buschini A., Frenzilli G., Marcon F., Andreoli C., Gorbi G., Suppa A., Montalbano S., Prota V., De Battistis F., Guidi P., Bernardeschi M., Palumbo M., Scarcelli V., Colasanti M., D'Ezio V., Persichini T., Scalici M., Sgura A., Spani F., Udroui I., Valenzuela M., Lacchetti I., di Domenico K., Cristiano W., Marra V., Ingelido A.M., Iacovella N., De Felip E., Massei R., Mancini L., An integrated approach for chemical water quality assessment of an urban river stretch through Effect-Based Methods and emerging pollutants analysis with a focus on genotoxicity, *Journal of Environmental Management*, **2021**, *300*, 113549, [10.1016/j.jenvman.2021.113549](https://doi.org/10.1016/j.jenvman.2021.113549)
- Schettini R., Pierrì G., Velardo A., Sissa C., Delledonne A., D'Amato G., Peluso A., Pragliola S., Tedesco C., Izzo I., Crystal structures and photoluminescence properties of chromium(III) complexes with 2-thenoyltrifluoroacetone ligand, *Journal of Molecular Structure*, **2021**, *1245*, 131023, [10.1016/j.molstruc.2021.131023](https://doi.org/10.1016/j.molstruc.2021.131023)
- Villa G., Florindo F., Persico D., Lurcock P., de Martini A.P., Jovane L., Fioroni C., Integrated calcareous nannofossil and magnetostratigraphic record of ODP Site 709: Middle Eocene to late Oligocene paleoclimate and paleoceanography of the Equatorial Indian Ocean, *Marine Micropaleontology*, **2021**, *169*, 102051, [10.1016/j.marmicro.2021.102051](https://doi.org/10.1016/j.marmicro.2021.102051)
- Bodini A., Dambacher J.M., Jordán F., Editorial: Looking Through the Mesh of a Net: The Challenge of Socio-Ecological Systems, *Frontiers in Ecology and Evolution*, **2021**, *9*, 785895, [10.3389/fevo.2021.785895](https://doi.org/10.3389/fevo.2021.785895)
- Berio L.R., Storti F., Balsamo F., Mitterpergher S., Bistacchi A., Meda M., Structural Evolution of the Parmelan Anticline (Bornes Massif, France): Recording the Role of Structural Inheritance and Stress Field Changes on the Finite Deformation Pattern, *Tectonics*, **2021**, *40*, e2021TC006913, [10.1029/2021TC006913](https://doi.org/10.1029/2021TC006913)
- Rogolino D., Naesens L., Bartoli J., Carcelli M., De Luca L., Pelosi G., Stokes R.W., Van Berwaer R., Vittorio S., Stevaert A., Cohen S.M., Exploration of the 2,3-dihydroisoindole pharmacophore for inhibition of the influenza virus PA endonuclease, *Bioorganic Chemistry*, **2021**, *116*, 105388, [10.1016/j.bioorg.2021.105388](https://doi.org/10.1016/j.bioorg.2021.105388)
- Bellin N., Calzolari M., Callegari E., Bonilauri P., Grisendi A., Dottori M., Rossi V., Geometric morphometrics and machine learning as tools for the identification of sibling mosquito species of the Maculipennis complex (Anopheles), *Infection, Genetics and Evolution*, **2021**, *95*, 105034, [10.1016/j.meegid.2021.105034](https://doi.org/10.1016/j.meegid.2021.105034)
- Bolpagni R., Vecchia A.D., Pioneer annual vegetation of gravel-bed rivers: First insights on environmental drivers from three Apennine streams, *Journal of Limnology*, **2021**, *80*, 2052, [10.4081/JLIMNOL.2021.2052](https://doi.org/10.4081/JLIMNOL.2021.2052)
- Raboni S., Montalbano S., Stransky S., Garcia B.A., Buschini A., Bettati S., Sidoli S., Mozzarelli A., A Key Silencing Histone Mark on Chromatin Is Lost When Colorectal Adenocarcinoma Cells Are Depleted of Methionine by Methionine γ -Lyase, *Frontiers in Molecular Biosciences*, **2021**, *8*, 735303, [10.3389/fmolb.2021.735303](https://doi.org/10.3389/fmolb.2021.735303)
- Manzi V., Roveri M., Argnani A., Cowan D., Lugli S., Large-scale mass-transport deposits recording the collapse of an evaporitic platform during the Messinian salinity crisis (Caltanissetta basin, Sicily), *Sedimentary Geology*, **2021**, *424*, 106003, [10.1016/j.sedgeo.2021.106003](https://doi.org/10.1016/j.sedgeo.2021.106003)
- Ghezzi M., Pescina S., Delledonne A., Ferraboschi I., Sissa C., Terenziani F., De Freitas Rosa Remiro P., Santi P., Nicoli S., Improvement of imiquimod solubilization and skin retention via tpgs micelles:

Exploiting the co-solubilizing effect of oleic acid, *Pharmaceutics*, **2021**, *13*, 1476, [10.3390/pharmaceutics13091476](https://doi.org/10.3390/pharmaceutics13091476)

- Serpe A., Pilia L., Balestri D., Marchiò L., Deplano P., Characterization and structural insights of the reaction products by direct leaching of the noble metals au, pd and cu with n,n'-dimethyl-piperazine-2,3-dithione/i2 mixtures, *Molecules*, **2021**, *26*, 4721, [10.3390/molecules26164721](https://doi.org/10.3390/molecules26164721)
- Hoshina K., Wang Y., Jiang S., Lozar F., Persico D., Villa G., Jordan R.W., Eocene calcareous nanofossils from southern Tibet: Paleooceanographic implications for the closure of the eastern Tethys Ocean, *Marine Micropaleontology*, **2021**, *167*, [102031](https://doi.org/10.1016/j.marmicro.2021.102031), [10.1016/j.marmicro.2021.102031](https://doi.org/10.1016/j.marmicro.2021.102031)
- Manzi V., Gennari R., Lugli S., Reghizzi M., Roveri M., A New Messinian 87Sr/86Sr Curve for the Ain El Beida Section (Morocco): An Atlantic Perspective of the Mediterranean Salinity Crisis, *Paleoceanography and Paleoclimatology*, **2021**, *36*, e2021PA004227, [10.1029/2021PA004227](https://doi.org/10.1029/2021PA004227)
- Stellingwerff M.D., Figuccia S., Bellacchio E., Alvarez K., Castiglioni C., Topaloglu P., Stutterd C.A., Erasmus C.E., Sanchez-Valle A., Lebon S., Hughes S., Schmitt-Mechelke T., Vasco G., Chow G., Rahikkala E., Dallabona C. Cecilia Okuma, MD, PhD, Chiara Aiello, Paola Goffrini, PhD, Truus E.M. Abbink, Enrico S. Bertini, and Marjo S. Van der Knaap, LBSL: Case Series and DARS2 Variant Analysis in Early Severe Forms With Unexpected Presentations, *Neurol Genet*, **2021**, *7*, e559, [10.1212/NXG.0000000000000559](https://doi.org/10.1212/NXG.0000000000000559)