

Luigi Brambilla

List of Publications by Year in descending order

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76
papers

1,815
citations

257450

24
h-index

315739

38
g-index

76
all docs

76
docs citations

76
times ranked

2876
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Structure of new carbonaceous materials: The role of vibrational spectroscopy. <i>Carbon</i> , 2005, 43, 1593-1609. | 10.3 | 92 |
| 2 | Structure of MgCl ₂ •TiCl ₄ complex in co-milled Ziegler-Natta catalyst precursors with different TiCl ₄ content: Experimental and theoretical vibrational spectra. <i>Journal of Molecular Catalysis A</i> , 2007, 263, 103-111. | 4.8 | 92 |
| 3 | Photo-degradation of a perylene-based organic luminescent solar concentrator: Molecular aspects and device implications. <i>Solar Energy Materials and Solar Cells</i> , 2013, 111, 41-48. | 6.2 | 82 |
| 4 | P(VDF-TrFE) nanofibers: structure of the ferroelectric and paraelectric phases through IR and Raman spectroscopies. <i>RSC Advances</i> , 2020, 10, 37779-37796. | 3.6 | 65 |
| 5 | Molecular Level Investigation of the Film Structure of a High Electron Mobility Copolymer via Vibrational Spectroscopy. <i>Macromolecules</i> , 2013, 46, 2658-2670. | 4.8 | 63 |
| 6 | Raman Dispersion and Intermolecular Interactions in Unsubstituted Thiophene Oligomers. <i>Journal of Physical Chemistry B</i> , 2007, 111, 1271-1276. | 2.6 | 62 |
| 7 | Phase transformation of calcium oxalate dihydrate•monohydrate: Effects of relative humidity and new spectroscopic data. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 128, 413-419. | 3.9 | 59 |
| 8 | Stability and transformation mechanism of weddellite nanocrystals studied by X-ray diffraction and infrared spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 14560. | 2.8 | 54 |
| 9 | Local Order in Liquid n-Alkanes: Evidence from Raman Spectroscopic Study. <i>Macromolecules</i> , 2005, 38, 3327-3333. | 4.8 | 51 |
| 10 | Fully Solution-Processed n-i-p Like Perovskite Solar Cells with Planar Junction: How the Charge Extracting Layer Determines the Open-Circuit Voltage. <i>Advanced Materials</i> , 2017, 29, 1604493. | 21.0 | 50 |
| 11 | Synthesis of Triply Fused Porphyrin-Nanographene Conjugates. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11233-11237. | 13.8 | 50 |
| 12 | Synthesis of calcium oxalate trihydrate: New data by vibrational spectroscopy and synchrotron X-ray diffraction. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 150, 721-730. | 3.9 | 44 |
| 13 | Wavelength-dependent Raman activity of D _{2h} symmetry polycyclic aromatic hydrocarbons in the D-band and acoustic phonon regions. <i>Chemical Physics</i> , 2004, 301, 81-93. | 1.9 | 43 |
| 14 | Structure of Donor Molecule 9,9-Bis(Methoxymethyl)-Fluorene in Ziegler-Natta Catalyst by Infrared Spectroscopy and Quantum Chemical Calculation. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11475-11484. | 3.1 | 43 |
| 15 | Regio-Regular Oligo and Poly(3-hexyl thiophene): Precise Structural Markers from the Vibrational Spectra of Oligomer Single Crystals. <i>Macromolecules</i> , 2014, 47, 6730-6739. | 4.8 | 42 |
| 16 | Overtone and combination features of G and D peaks in resonance Raman spectroscopy of the C ₇₈ H ₂₆ polycyclic aromatic hydrocarbon. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 757-764. | 2.5 | 41 |
| 17 | Adsorption of H ₂ on carbon-based materials: A Raman spectroscopy study. <i>Physical Review B</i> , 2005, 71, . | 3.2 | 36 |
| 18 | Anthracene/tetracene cocrystals as novel fluorophores in thin-film luminescent solar concentrators. <i>RSC Advances</i> , 2014, 4, 9893. | 3.6 | 35 |

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|----|--|------|-----------|
| 19 | Experimental and calculated vibrational spectra and structure of Ziegler-Natta catalyst precursor: 50/1 comilled MgCl ₂ -TiCl ₄ . <i>Macromolecular Symposia</i> , 2004, 213, 287-302. | 0.7 | 34 |
| 20 | IR spectroscopy of crystalline polymers from ab initio calculations: Nylon 6,6. <i>Vibrational Spectroscopy</i> , 2013, 66, 83-92. | 2.2 | 32 |
| 21 | Raman spectroscopy of polyconjugated molecules with electronic and mechanical confinement: the spectrum of <i>Corallium rubrum</i> . <i>Journal of Raman Spectroscopy</i> , 2012, 43, 1449-1458. | 2.5 | 31 |
| 22 | Biobased Janus molecule for the facile preparation of water solutions of few layer graphene sheets. <i>RSC Advances</i> , 2015, 5, 81142-81152. | 3.6 | 27 |
| 23 | Diamond graphitization by laser-writing for all-carbon detector applications. <i>Diamond and Related Materials</i> , 2017, 75, 25-33. | 3.9 | 26 |
| 24 | Environmental degradation of isotactic polypropylene plates as studied by positron annihilation lifetime spectroscopy. <i>Polymer</i> , 2003, 44, 1041-1044. | 3.8 | 25 |
| 25 | Polaron Confinement in n-Doped P(NDI2OD-T2) Unveiled by Vibrational Spectroscopy. <i>Chemistry of Materials</i> , 2019, 31, 6726-6739. | 6.7 | 25 |
| 26 | Physiological and biochemical impacts of graphene oxide in polychaetes: The case of <i>Diopatra neapolitana</i> . <i>Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology</i> , 2017, 193, 50-60. | 2.6 | 24 |
| 27 | Microscopic Analysis of the Different Perchlorate Anions Intercalation Stages of Graphite. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14246-14253. | 3.1 | 23 |
| 28 | Environmental degradation of a novel ethylene-propylene copolymer in thick sheets. <i>European Polymer Journal</i> , 2005, 41, 359-366. | 5.4 | 22 |
| 29 | Photogenerated cumulenic structure of adamantyl endcapped linear carbon chains: An experimental and computational investigation based on infrared spectroscopy. <i>Journal of Chemical Physics</i> , 2011, 134, 124512. | 3.0 | 22 |
| 30 | Evolution of the graphite surface in phosphoric acid: an AFM and Raman study. <i>Beilstein Journal of Nanotechnology</i> , 2016, 7, 1878-1884. | 2.8 | 22 |
| 31 | Domino Reaction for the Sustainable Functionalization of Few-Layer Graphene. <i>Nanomaterials</i> , 2019, 9, 44. | 4.1 | 22 |
| 32 | Predictive modeling of the vibrational quenching in emitting lanthanides complexes. <i>Synthetic Metals</i> , 2012, 161, 2693-2699. | 3.9 | 20 |
| 33 | A Novel Classification Method for Multispectral Imaging Combined with Portable Raman Spectroscopy for the Analysis of a Painting by Vincent Van Gogh. <i>Applied Spectroscopy</i> , 2013, 67, 1234-1241. | 2.2 | 20 |
| 34 | Selective edge functionalization of graphene layers with oxygenated groups by means of Reimer-Tiemann and domino Reimer-Tiemann/Cannizzaro reactions. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7749-7761. | 10.3 | 20 |
| 35 | Structural Characterization of Highly Oriented Naphthalene-Diimide-Bithiophene Copolymer Films via Vibrational Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2015, 119, 2062-2073. | 2.6 | 19 |
| 36 | Carbon Papers and Aerogels Based on Graphene Layers and Chitosan: Direct Preparation from High Surface Area Graphite. <i>Biomacromolecules</i> , 2017, 18, 3978-3991. | 5.4 | 19 |

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|----|--|-----|-----------|
| 37 | Facile and sustainable functionalization of graphene layers with pyrrole compounds. <i>Pure and Applied Chemistry</i> , 2018, 90, 253-270. | 1.9 | 19 |
| 38 | Characterization of Naturally Weathered Polypropylene Plates. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2006, 43, 535-554. | 2.2 | 18 |
| 39 | Polyhydroxylated few layer graphene for the preparation of flexible conductive carbon paper. <i>RSC Advances</i> , 2016, 6, 87767-87777. | 3.6 | 18 |
| 40 | Synthesis of Triply Fused Porphyrin-Nanographene Conjugates. <i>Angewandte Chemie</i> , 2018, 130, 11403-11407. | 2.0 | 18 |
| 41 | Incipient Anion Intercalation of Highly Oriented Pyrolytic Graphite Close to the Oxygen Evolution Potential: A Combined X-ray Photoemission and Raman Spectroscopy Study. <i>Journal of Physical Chemistry C</i> , 2019, 123, 1790-1797. | 3.1 | 18 |
| 42 | Nanoscale architectures for molecular electronics: Vibrational spectroscopy and structure of solid hexa-n-dodecyl-hexa-peri-hexabenzocoronene. <i>Journal of Chemical Physics</i> , 2005, 123, 144706. | 3.0 | 16 |
| 43 | Infrared and multi-wavelength Raman spectroscopy of regio-regular P3HT and its deuterio derivatives. <i>Journal of Raman Spectroscopy</i> , 2018, 49, 569-580. | 2.5 | 16 |
| 44 | Terracotta polychrome sculptures examined before and after their conservation work: contributions from non-invasive in situ analytical techniques. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 757-765. | 3.7 | 15 |
| 45 | Portable Raman versus portable mid-FTIR reflectance instruments to monitor synthetic treatments used for the conservation of monument surfaces. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 1733-1741. | 3.7 | 15 |
| 46 | Near IR to Red Up-Conversion in Tetracene/Pentacene Host/Guest Cocrystals Enhanced by Energy Transfer from Host to Guest. <i>Journal of Physical Chemistry C</i> , 2015, 119, 17495-17501. | 3.1 | 15 |
| 47 | Tuning the Solubility Parameters of Carbon Nanotubes by Means of Their Adducts with Janus Pyrrole Compounds. <i>Nanomaterials</i> , 2020, 10, 1176. | 4.1 | 15 |
| 48 | Hydrogen bonding in amylose/DMSO complexes studied by vibrational spectroscopy and density functional theory calculations. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 1110-1116. | 2.5 | 13 |
| 49 | Characterisation of an inclusion complex between cladribine and 2-hydroxypropyl- β -cyclodextrin. The work described in this article was carried out at Merck Serono SpA, Tiburtina Site, via L. Einaudi 11, 00012 Guidonia Montecelio, Roma, Italy. Some additional measurements were carried out at Dipartimento di Chimica, Materiali e Ingegneria Chimica "G. Natta", Politecnico di Milano, P. za Leonardo da Vinci 32, 20133 Milano, Italy. <i>Journal of Pharmaceutical Sciences</i> , 2008, 97, 2007-2006. | 3.3 | 12 |
| 50 | Outside rules inside: the role of electron-active substituents in thiophene-based heterophenanthrenes. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 10426-10437. | 2.8 | 12 |
| 51 | Effect of potassium on a model soot combustion: Raman and HRTEM evidences. <i>Aerosol Science and Technology</i> , 2016, 50, 405-415. | 3.1 | 12 |
| 52 | Stone/Coating Interaction and Durability of Si-Based Photocatalytic Nanocomposites Applied to Porous Lithotypes. <i>Materials</i> , 2018, 11, 2289. | 2.9 | 11 |
| 53 | A deep insight into the intrinsic healing mechanism in ureido-pyrimidinone copolymers. <i>Polymers for Advanced Technologies</i> , 2018, 29, 2899-2908. | 3.2 | 11 |
| 54 | Evidence of graphite blister evolution during the anion de-intercalation process in the cathodic regime. <i>Applied Surface Science</i> , 2020, 504, 144440. | 6.1 | 11 |

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|----|--|-----|-----------|
| 55 | Vibrational and nonlinear optical properties of amine-capped push-pull polyynes by infrared and Raman spectroscopy. <i>Carbon Trends</i> , 2021, 5, 100115. | 3.0 | 11 |
| 56 | Radiolytic degradation of hydrophilic PyTri ligands for minor actinide recycling. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2019, 322, 1663-1673. | 1.5 | 10 |
| 57 | Reduced Graphene Oxide Membranes as Potential Self-Assembling Filter for Wastewater Treatment. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 15. | 2.0 | 10 |
| 58 | Radiation-induced modifications on physico chemical properties of diluted nitric acid solutions within advanced spent nuclear fuel reprocessing. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2015, 304, 395-400. | 1.5 | 9 |
| 59 | Anharmonic overtones quenching in Er ³⁺ complexes. <i>Synthetic Metals</i> , 2009, 159, 2410-2412. | 3.9 | 8 |
| 60 | Edge Functionalized Graphene Layers for (Ultra) High Exfoliation in Carbon Papers and Aerogels in the Presence of Chitosan. <i>Materials</i> , 2020, 13, 39. | 2.9 | 8 |
| 61 | Strain-dependent vibrational spectra and elastic modulus of poly(p-phenylene terephthalamide) from first-principles calculations. <i>Polymer</i> , 2017, 116, 133-142. | 3.8 | 7 |
| 62 | Outdoor ageing of ethylene-carbon monoxide alternating copolymer. <i>Polymer Degradation and Stability</i> , 2000, 69, 133-142. | 5.8 | 6 |
| 63 | A Spectroscopic Approach to Carbon Materials for Energy Storage. , 0, , 23-53. | | 6 |
| 64 | Physico chemical properties of irradiated i-SANEX diluents. <i>Nukleonika</i> , 2015, 60, 893-898. | 0.8 | 6 |
| 65 | Pyrolyzed Hexakis(p-bromophenyl)benzene as Anode Material for Li Batteries. <i>Journal of the Electrochemical Society</i> , 2005, 152, A2023. | 2.9 | 5 |
| 66 | Photoactive Molecular Junctions Based on Self-Assembled Monolayers of Indoline Dyes. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 19774-19782. | 8.0 | 5 |
| 67 | Chemical and physical modifications of alternating ethylene-carbon monoxide copolymer by outdoor exposure. <i>Polymer</i> , 2001, 42, 3609-3625. | 3.8 | 4 |
| 68 | Poly(3-hexylthiophene-2,5-diyl): Evidence of different polymer chain conformations in the solid state from a combined study of regioregularity control and Raman spectroscopy. <i>Journal of Molecular Structure</i> , 2020, 1221, 128882. | 3.6 | 4 |
| 69 | Facile Edge Functionalization of Graphene Layers with a Biosourced 2-Pyrone. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 4082-4093. | 6.7 | 4 |
| 70 | Nanoscale structure and morphology of thin films of poly(2-chloroxylylene) synthesized by the CVD method on different liquids. <i>European Polymer Journal</i> , 2011, 47, 1725-1735. | 5.4 | 3 |
| 71 | Intramolecular interactions in polymethylene chains with polar end groups: The spectroscopic signature. <i>Journal of Molecular Structure</i> , 2012, 1009, 130-140. | 3.6 | 2 |
| 72 | Metal-enhanced Förster resonance energy transfer (ME-FRET) in anthracene/tetracene-doped crystal systems. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 30734-30739. | 2.8 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Experimental Symmetry Assignment of the D Band: Evidence from the Raman Spectra of Soluble "Molecular Graphite" AIP Conference Proceedings, 2005, , . | 0.4 | 1 |
| 74 | Study of the absorption spectra of Fricke xylene orange gel dosimeters. , 2015, , . | | 1 |
| 75 | Polyhydroxylated Nanosized Graphite as Multifunctional Building Block for Polyurethanes. Polymers, 2022, 14, 1159. | 4.5 | 1 |
| 76 | Nolomirole (CHF 1035): Polymorph detection from FT-Raman analysis. Journal of Molecular Structure, 2006, 788, 126-133. | 3.6 | 0 |