Curriculum vitae et studiorum

- Nome: Luca Bindi
- Luogo e Data di nascita:
- Laurea in Scienze Geologiche (15/11/1996) con la votazione di 110/110. Titolo della tesi di Laurea: "*Clinopirosseni delle vulcaniti di Ustica e del Vulture: implicazioni cristallochimiche per lo studio della genesi dei magmi*" (relatore: Prof. Silvio Menchetti).
- Dottorato di ricerca in "Mineralogia e Petrologia" (triennio 1998-2000). Titolo di dottore di ricerca ottenuto in data 02/03/2001. Titolo della tesi di Dottorato: "*Cristallochimica di meliliti naturali: il ruolo delle sostituzioni isomorfogene sulla stabilizzazione della struttura incommensurata*" (tutore: Prof. Silvio Menchetti).
- Assegno di ricerca (quadriennio 01/03/01-01/03/05) con un programma di ricerca dal titolo: "*Studio cristallochimico strutturale di minerali del gruppo della melilite*" (Responsabile del progetto: Prof. Silvio Menchetti).
- Dal 15/04/2003 al 30/06/2005 dipendente come tecnico scientifico categoria C1 (a tempo determinato – 83.33 %) presso la sezione di Mineralogia del Museo di Storia Naturale dell'Università di Firenze.
- Dal 01/09/2005 al 10/12/2006 dipendente come ricercatore a tempo determinato (settore scientifico disciplinare GEO/06) presso il Dipartimento di Scienze della Terra dell'Università di Firenze.
- Dal 11/12/2006 al 22/12/2011 dipendente come tecnico scientifico categoria EP in qualità di "Curatore delle Collezioni" presso la sezione di Mineralogia del Museo di Storia Naturale dell'Università di Firenze.
- Dal 01/12/2007 al 31/05/2011 Responsabile della sezione di Mineralogia del Museo di Storia Naturale dell'Università di Firenze.
- Dal 01/01/2009 associato all'Istituto di Geoscienze e Georisorse (sezione di Firenze) del CNR.
- Dal 23/12/2011 professore associato presso il Dipartimento di Scienze della Terra dell'Università di Firenze.
- Dal 01/09/2019 professore ordinario presso il Dipartimento di Scienze della Terra dell'Università di Firenze.
- Dal Luglio 2019 è Socio Corrispondente dell'Accademia dei Lincei.
- Dal 01/11/2020 al 31/10/2028 Direttore del Dipartimento di Scienze della Terra dell'Università di Firenze (2 mandati).
- Dal 01/11/2024 Membro del Senato Accademico dell'Università degli Studi di Firenze.
- Dal 01/11/2024 Membro della Commissione Ricerca del Senato Accademico dell'Università degli Studi di Firenze.

Premi e Riconoscimenti

Nazionali:

1) 2001 – Premio *Tesi di Dottorato* bandito dalla Società Italiana di Mineralogia e Petrologia (SIMP).

2) 2004 – Premio *Panichi* per la Mineralogia bandito dalla Società Italiana di Mineralogia e Petrologia (SIMP).

3) 2006 – Premio *Nardelli* bandito dalla Associazione Italiana di Cristallografia (AIC). *Medallist lecture* dal titolo "*Unusual crystallographic approaches to study complex minerals: The case of modulated and conductive compounds*" durante il Congresso AIC svoltosi a Ferrara nel periodo 18-21 Settembre 2006.

4) 2014 – Premio Speciale - Medaglia d'Oro - *Galileo* bandito dall'AMI (Associazione Micromineralogica Italiana) e dal Comune di Tavagnasco (TO).

Il premio gli è stato consegnato durante la prima *Distinguished Lecture for School* del 28 Novembre 2014 presso il comune di Tavagnasco (TO), intitolata: "*La storia dei minerali che non dovevano esistere. Una straordinaria avventura oltre i confini del mondo*", a cui hanno partecipato circa 1000 studenti. Il premio è stato assegnato per le seguenti motivazioni: "*Figura dell'eccellenza scientifica internazionale che ci ha insegnato a coniugare passioni, curiosità e domande con lo studio dei minerali (incluso i quasi), della loro bellezza e delle loro proprietà. Libertà di pensiero e autonomia intellettuale, talento innato nel comunicare la scienza, rendendocela vicina e familiare, sono caratteristiche dello scienziato che, infaticabile e consapevole, non si arrende all'ignoto e all'impossibile*".

5) 2015 – *Premio Presidente della Repubblica* dell'*Accademia Nazionale dei Lincei*. Il premio gli è stato consegnato durante l'Adunanza Solenne di chiusura dell'anno accademico (11/06/2015) presso la sede nazionale dei Lincei alla presenza del Presidente della Repubblica Sergio Mattarella (vedi sotto). La cerimonia si è poi ripetuta il 6 Marzo 2017 al Quirinale (https://youtu.be/RDUkX_0f50A).

Di seguito la motivazione sintetica trasmessa alla Presidenza della Repubblica: "*Il Prof. Luca Bindi ha 44 anni ed è autore di oltre 200 pubblicazioni su riviste internazionali qualificate, che gli hanno fruttato l'assegnazione di numerosi e sempre più prestigiosi riconoscimenti, graduati nel tempo verso mete sempre maggiori: il Premio Panichi della Società Italiana di Mineralogia e Petrologia nel 2004; il Premio Nardelli della Associazione Italiana di Cristallografia nel 2006; la Excellence Research Medal della European Mineralogical Union nel 2006; il Foreign Outstanding Young Researcher Award della Società Mineralogica Russa del 2007; il premio internazionale Luigi Tartufari per la Geologia dell'Accademia Nazionale dei Lincei nel 2010; la Medaglia d'Oro Galileo dall'Associazione Micromineralogica Italiana nel 2014. Luca Bindi ha contribuito alla scoperta di 47 nuove specie mineralogiche. Tra queste spicca, per essere stata citata come determinante nella citazione di conferimento del premio Nobel per la Chimica 2011 all'israeliano Dan Shechtman, quella della icosaedrite, primo quasicristallo naturale, rinvenuta in grani micrometrici nella meteorite di Khatyrka, nella montagne Koryak, penisola di Kamchatka, Russia. La scoperta di questo primo quasicristallo naturale, avvenuta nel 2009, ha aperto una nuova frontiera alla ricerca sullo stato solido, non solo fornendo all'Ingegneria dei materiali un'intera nuova categoria di composti da sintetizzare con un amplissimo potenziale d'uso, ma anche apportando concezioni innovative alle Geoscienze, all'Astrofisica e alla Cosmochimica. Questa scoperta ha posto fine a trent'anni di discussioni sulla stabilità o instabilità dei quasicristalli, che il Premio Nobel Shechtman aveva sintetizzato in laboratorio nel 1984 e ha ispirato la ricerca di nuove conformazioni simmetriche della materia solida con caratteristiche fisiche e chimiche che potrebbero tradursi in uno scatto in avanti dell'ingegneria, garantendo nuove utilizzazioni e applicazioni. Un nuovo quasicristallo, la decagonite, scoperto questo anno dal gruppo che fa capo a Bindi, ne è*

la prima conferma."

6) 2017 – *Premio Social* del contest "*On the Rocks*" (https://www.sgi-ontherocks.it/) della Società Geologica Italiana (https://www.youtube.com/watch?v=ZxSxDgc49fA&feature=youtu.be).

Internazionali:

1) 2006 – EMU (European Mineralogical Union) *Excellence Research Medal*. EMU *medallist lecture* dal titolo "*From the invalidity of the law of rational indices to the concept of superspace: A crystallographic excursion in the modulated world of minerals*" durante il Congresso EGU (European Geosciences Union) svoltosi a Vienna nel periodo 15-20 Aprile 2007. I motivi dell'assegnazione della medaglia sono stati pubblicati sulla rivista *Elements* (April 2007 Issue, Volume 3, number 2).

2) 2007 – *Foreign Outstanding Young Researcher Award - Russian Mineralogical Society*. *Medallist lecture* dal titolo "*The pearceite-polybasite group of minerals: An outstanding example of the close link between mineralogy and the most advanced fields of crystallography*" durante il Congresso "*Fedorov Session*" che si è svolto a San Pietroburgo nel periodo 8-10 Ottobre 2008.

3) 2010 – "*Premio Luigi Tartufari*" per la Geologia" dell'Accademia Nazionale dei Lincei. Il premio gli è stato consegnato durante l'Adunanza Solenne di chiusura dell'anno accademico (24/06/2010) presso la sede nazionale dei Lincei alla presenza del Presidente della Repubblica Giorgio Napolitano (vedi sotto).

4) Nel 2011 gli è stato dedicato un nuovo minerale, la *lucabindiite*, di formula $(K,NH_4)As_4O_6(Cl,Br)$ – vedi *American Mineralogist*, 98, 470-477.

5) Nel 2011 due suoi lavori scientifici riferiti alla scoperta del primo quasicristallo naturale sono stati citati nello "*Scientific Background on the Nobel Prize in Chemistry 2011 - The Discovery of Quasicrystals*" della *Nobel Committee for Chemistry - Royal*

Swedish Academy of Sciences.

6) E' stato eletto dalla Società Geologica Italiana (SGI) congiuntamente a quella di Mineralogia e Petrologia (SIMP), *Distinguished Lecturer* per l'anno 2014-2015 ed ha tenuto seminari in 9 sedi italiane.

7) E' stato eletto dalla *Österreichische Mineralogische Gesellschaft* (ÖMG) - Società Geologica e Mineralogica Austriaca - *Distinguished Lecturer* per l'anno 2016 ed ha tenuto seminari in 5 sedi austriache.

8) "*Top 100 most highly read articles of 2015*" on *Nature Scientific Reports*. Articolo: "*Natural quasicrystal with decagonal symmetry*".

9) "*Top 100 most highly read articles of 2016*" on *Nature Scientific Reports*. Articolo: "*Collisions in outer space produced an icosahedral phase in the Khatyrka meteorite never observed previously in the laboratory*".

10) Nel 2017 ha fatto parte del team vincitore del premio "*Mineral of the Year 2016*" della *International Mineralogical Association* con il minerale merelaniite (https://www.ima-mineralogy.org/Min_Year.htm) .

11) Nel 2018 gli è stato dedicato un pianetino [minor planet (92279)] con il nome *Bindiluca = 2000 DG*.

12) Nel 2018 è risultato vincitore insieme a Paul J. Steinhardt del Premio internazionale *Aspen Institute Italia per la collaborazione e la ricerca scientifica tra Italia e Stati Uniti*. I motivi dell'assegnazione della medaglia sono stati pubblicati sulla rivista *Elements* (April 2019 Issue, Volume 15, number 2).

13) Nel 2019 è stato eletto Socio Corrispondente dell'Accademia Nazionale dei Lincei.

14) Nel 2019 ha fatto parte del team vincitore del premio "*Mineral of the Year 2018*" della *International Mineralogical Association* con il minerale carmeltazite (https://www.ima-mineralogy.org/Min_Year.htm#2018) .

15) Nel 2019 è stato eletto *Fellow* della *Mineralogical Society of America*.

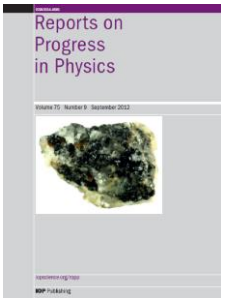
16) Nel 2023 gli è stata conferita la *Neumann Medal 2023*, la più alta onorificenza della *Mineralogical Society of Great Britain and Ireland*.

17) Nel 2023 gli è stato conferito il *Premio Pianeta Galileo* dedicato a studiosi che si siano distinti nell'ambito della divulgazione scientifica rivolta ai giovani. La cerimonia della premiazione è avvenuta il 14 dicembre nella Aula magna dell'Università degli Studi di Firenze.

18) Nel 2024 gli è stata assegnata la *Medaglia delle Scienze* dall'Accademia Nazionale delle Scienze detta dei XL. La cerimonia si è svolta a Roma presso la sede dell'Accademia nel maggio 2024.

19) Nel 2025 gli è stato assegnato il *Premio Leonardo 2025* per la Ricerca Scientifica dell'Associazione Croce del Sud di Salerno.

20) *Cover articles*:

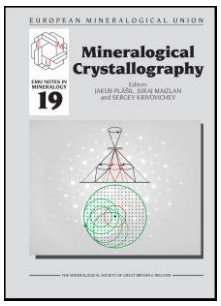


PNAS, 2012
"Extraterrestrial quasicrystals"

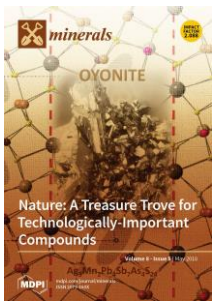
ROP, 2012
"Review paper on quasicrystals"

MM, 2014
"Review paper on quasicrystals"

MM, 2015
"As_4S_4, a new As sulfide"

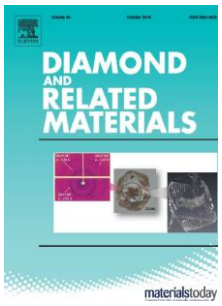


EMU Notes, 2017
"Quasicrystals"

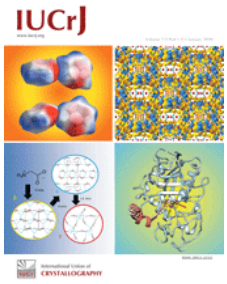


MINERALS, 2018
"Oyonite"

ZEIT. KRIST. 2018
"Zinkenite"

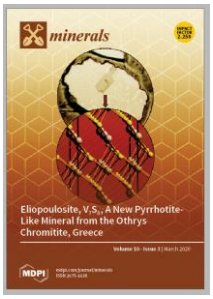


D&MR 2019
"Magnetic incl. in diamonds"



IUCrJ, 2020
"ilmajokite"

Rend. Lincei, 2020
"quasicrystals"



MINERALS, 2020
"eliopoulosite"

17) *Selected Media Coverage:*
Chemistry World, *Scientific American*, *Discovery*, *INFOX – Russian Sciences*, *Spektrumdirekt – Germany*, *Chemical and Engineering News*, *Discover Magazine*, *PhysicsToday*, *New Scientist*, *Scientific American*, *Live Science*, *BBC*, *Nature*, *Space.com*, *Dvice*, *Space Daily*, *Le Scienze*, *La Repubblica*, *La Nazione*, *Science Daily*, *Nature*, *NBC News*, *News Daily*, *Phys.Org*, *INAF*, *Herald Tribune*, *redOrbit*, *Discovery News*, *PhysicsToday*, *Livescience*, *French Tribune*, *Forbes*, *New Scientist*, *Phys.Org*, *IB Times, UK*, *Science World Report*, *Spektrum*, *Inverse*, *Origo*, *Nature Asia*, *Motherboard*, *La Repubblica*

Plenary lectures, Key Notes e Lectiones Magistrales

- 08 Ottobre 2008 – Saint Petersburg, Russia (*Plenary lecture*)
- 10 Settembre 2009 – FIST Rimini (*Key Note*)
- 30 Agosto 2010 – EMC26, Darmstadt, Germania (*Key Note*)
- 14 Settembre 2010 – SIMP (*Key Note*)
- 11 Novembre 2011 – ANMS, Padova (*Key Note*)
- 13 Gennaio 2012 – Accademia dei Lincei (Roma) (*Lectio Magistralis*)
- 23 Febbraio 2012 – Frontiera della Ricerca (Firenze) (*Lectio Magistralis*)
- 29 Maggio 2012 – CNR – Bologna (*Campus Colloquium*)
- 7 Settembre 2012 – LENS, Sesto Fiorentino (*Enrico Fermi Colloquium*)

- 28 Settembre 2012 – SISN, Trentino (*Key Note*)
- 04 ottobre 2012 – Princeton University, USA (*Lectio Magistralis*)
- 05 Ottobre 2012 – Harvard University, USA (*Lectio Magistralis*)
- 28 Settembre 2013 – Novosibirsk, Russia (*Plenary Lecture*)
- 04 Luglio 2014 – Congresso SISN, Napoli (*Key Note*)
- 21 Ottobre 2015 – Fersman Museum, Moscow, Russia (*Plenary Lecture*)
- 22 Ottobre 2015 – Moscow State University (*Plenary Lecture*)
- 13 Giugno 2016 – Accademia dei Lincei (Roma) (*Key Note*)
- 05 Giugno 2017 – Congresso AMAM-ICAM (Bari) (*Plenary Lecture*)
- 10 Agosto 2017 – SUSY2, Tavagnasco, Torino (*Plenary Lecture*)
- 22 Maggio 2018 – Accademia delle Scienze di Torino (*Key Note*)
- 01 Giugno 2018 – Leoben, Austria (*Key Note*)
- 02 Luglio 2018 – Congresso ISMANAM, Roma (*Key Note*)
- 09 Ottobre 2018 – Michigan Tech, USA (*Multi-disciplinary Colloquium*)
- 20 Agosto 2019 – Congresso ECM32, Vienna (*Key Note*)
- 19 Novembre 2019 – Congresso ICES2019, Bali (*Plenary Lecture*)
- 16 Gennaio 2020 – Swedish Academy of Sciences (*Lectio Magistralis*)
- 17 Gennaio 2020 – Swedish Natural History Museum (*Colloquium*)
- 6 Febbraio 2020 – Congresso Magnetismo Roma (*Plenary Lecture*)
- 13 Febbraio 2020 – Tucson Gem and Mineral Show (*Plenary Lecture*)
- 22 Ottobre 2020 – Bayreuth Geoinstitut (*Multi-disciplinary Colloquium*)
- 13 Maggio 2021 – Accademia dei XL (*Multi-disciplinary Colloquium*)
- 30 Giugno 2021 – INAF-IAPS (*Multi-disciplinary Colloquium*)
- 20 Dicembre 2021 – Università di Firenze (*Christmas Lecture*)
- 22 Dicembre 2021 – Università di Genova (*Christmas Lecture*)
- 21 Luglio 2022 – IMA Meeting, Lione (*Key Note*)
- 1 Giugno 2023 – Swedish Natural History Museum (*Colloquium*)
- 15 Febbraio 2024 – Accademia dei Lincei (*Multi-disciplinary Colloquium*)
- 20 Agosto 2024 – European Mineralogical Congress (*Plenary Lecture*)
- 28 Agosto 2024 – European Crystallographic Meeting (*Key Note*)
- 4 Settembre 2024 – Congresso SIMP-SGI Bari (*Key Note*)
- 26 Settembre 2024 – Evento Seed 2024, Perugia (*Lectio Magistralis*)
- 25 Novembre 2024 – Congresso Società di Fisica Sudamerica (*Plenary Lecture*)

Attività didattica

- Anno accademico 2001-2002: titolare del Corso di Metallurgia per il Corso di Laurea in Progettazione della Moda della Facoltà di Architettura.
- Anno accademico 2002-2003: ha coadiuvato la prof. Paola Bonazzi nel Corso di Metallurgia per il Corso di Laurea in Progettazione della Moda della Facoltà di Architettura.
- Anni accademici 2005-2006, 2006-2007, 2007-2008: ha svolto seminari di argomento mineralogico-cristallografico per il Corso di Dottorato in Scienze della Terra dell'Università di Firenze. Gli stessi seminari sono stati svolti per il Corso di Dottorato in Scienze della Terra di altre sedi universitarie italiane (Bari, Roma, Perugia, Milano, Padova).
- Anno accademico 2009-2010: è stato invitato come "*Visiting Professor*" presso l'Università dell'Iowa (U.S.A.) per tenere i corsi di mineralogia e cristallografia (*fall semester* 2009).
- Nel 1999 è stato nominato Cultore della Materia dal Consiglio di Corso di Laurea di Scienze della Terra della Facoltà di Scienze Matematiche, Fisiche e Naturali e, da allora, ha fatto parte della commissione di esami per il corso di Mineralogia e di Cristallografia per il Corso di Laurea in Scienze della Terra.
- Nel 2000 è stato nominato Cultore della Materia dal Consiglio di Corso di Laurea in Progettazione della Moda della Facoltà di Architettura ed ha fatto parte della commissione di esami per il corso di Mineralogia per il Corso di Laurea in Progettazione della Moda.
- Nel 2002 è stato nominato Cultore della Materia dal Consiglio di Corso di Laurea di Scienze Naturali della Facoltà di Scienze Matematiche, Fisiche e Naturali e, da allora, ha fatto parte della commissione di esami per il corso di Mineralogia per il Corso di Laurea di Scienze Naturali.
- Dal 1999 ad oggi ha svolto svariati seminari rivolti a dottorandi e assegnisti di ricerca.
- Relatore di 7 tesi magistrali; Relatore di 6 tesi triennali; Correlatore di 16 tesi triennali; Correlatore di 6 tesi magistrali; Tutore di 1 tesi di dottorato; Co-tutore di 2 tesi di dottorato.
- Dal 2011 è titolare dell'insegnamento di *Mineralogia* (6 CFU) per il Corso di Laurea triennale in Scienze Naturali dell'Università degli Studi di Firenze.
- Dal 2011 al 2019 è stato titolare dell'insegnamento di *Cristallochimica* (6 CFU) per il Corso di Laurea magistrale in Scienze e Tecnologie Geologiche dell'Università degli Studi di Firenze.
- Dal 2019 è titolare dell'insegnamento di *Geotermobarometria Cristallochimica* (6 CFU) per il Corso di Laurea magistrale in Scienze e Tecnologie Geologiche dell'Università degli Studi di Firenze.
- Dal 2020 è titolare dell'insegnamento di *Metodi di Analisi per Bio- e Geo-materiali* (6 CFU) per il Corso di Laurea magistrale in Scienze della Natura e dell'Uomo dell'Università degli Studi di Firenze.
- Dal 2018 al 2022 è stato membro del Collegio dei Docenti della Scuola di Dottorato in Scienze della Terra.
- Dal 2022 è membro del Collegio dei Docenti della Scuola di Dottorato in *Earth and Planetary Sciences*.

Soggiorni all'estero e spedizioni scientifiche

●Dicembre 2000 - Gennaio 2001 soggiorno presso il *Laboratoire de Cristallographie* dell'Università di Losanna (Svizzera).

●Marzo 2001 - Aprile 2001 soggiorno presso l'Istituto di Fisica di Praga (Repubblica Ceca).

●Giugno 2001 - Luglio 2001 soggiorno presso il *Laboratoire de Cristallographie* dell'Università di Losanna (Svizzera).

●Maggio 2005 - Giugno 2005 soggiorno presso lo *Institute of Experimental Mineralogy* dell'Università di Mosca (Russia).

●Dal 16/07/2011 al 13/08/2011 ha partecipato ad una spedizione scientifica internazionale organizzata dalla *Princeton University* (USA) in Chukotka (Russia nord-orientale) per cercare nuovi campioni possibilmente contenenti quasicristalli naturali. Alla spedizione hanno partecipato 20 persone (dalla Russia e dagli Stati Uniti).

●Novembre 2012 - Dicembre 2012 soggiorno presso lo *Princeton University* (USA).

●Dicembre 2014 - Gennaio 2015 soggiorno presso lo *Princeton University* (USA).

●Ottobre 2018 soggiorno presso la *Michigan Technological University* (USA).

Commissioni internazionali

- Nel biennio 2006-2007 ha fatto parte della *Commission on Ore Mineralogy* dell'*International Mineralogical Association* per definire i criteri da adottare per la nuova classificazione dei solfosali.
- Dal 01/01/08 al 01/04/13 ha fatto parte della *Commission on Museums* dell'*International Mineralogical Association* come delegato italiano.
- Dal 31/08/2011 al 31/05/2017 è stato *Consultant* della *Commission on Aperiodic Crystals* della *International Union of Crystallography*.
- Dal 01/01/2018 è membro della *Committee on Committees* della *Mineralogical Society of America*.

Commissioni dipartimentali e incarichi

- Dal 2013 fa parte del Gruppo di Riesame del Consiglio di Corso di Studi in Scienze e Tecnologie Geologiche dell'Ateneo di Firenze.
- Dal 2013 al 2014 è stato il responsabile per la Cooperazione e lo Sviluppo e dell'Internazionalizzazione del Dipartimento di Scienze della Terra dell'Università di Firenze.
- Dal 2014 è il responsabile per la Cooperazione e lo Sviluppo del Dipartimento di Scienze della Terra dell'Università di Firenze.
- Dal 2014 fa parte della Commissione Erasmus del Consiglio di Corso di Studi in Scienze Geologiche e in Scienze e Tecnologie Geologiche dell'Ateneo di Firenze.
- Dal 2015 è membro della Commissione di Indirizzo del Corso di Laurea in Scienze Naturali dell'Università di Firenze.

- Dal 2015 è il Responsabile della Qualità della Ricerca del Dipartimento di Scienze della Terra dell'Università di Firenze.
- 2016-2020 è stato vice-Presidente del Corso di Laurea triennale in Scienze Geologiche e del Corso di Laurea magistrale in Scienze e tecnologie Geologiche.
- Dal 2017 fa parte del Consiglio Scientifico della Fondazione PARSEC di Prato.
- Da Luglio 2018 è Presidente del CRIST – Centro di Cristallografia Strutturale dell'Università degli Studi di Firenze.
- Dal 01/11/2020 è Direttore del Dipartimento di Scienze della Terra dell'Università di Firenze
- Dal 30/10/2020 al 31/08/2022 è stato membro della 'cabina di regia' di UNIFI in rappresentanza dell'Area Scientifica per la messa a punto del primo POLA.
- Dal 08/11/2022 è membro della "Commissione Lincea per la Scuola" dell'Accademia dei Lincei.

Attività editoriale e societaria

- Dal 2007 fa parte dell'*Editorial Board* della rivista *European Journal of Mineralogy* come *Associate Editor*.
- Dal 2014 fa parte dell'*Editorial Board* della rivista *Mineralogy and Petrology* come *Associate Editor*.
- Dal 2015 al 2022 ha fatto parte dell'*Editorial Board* della rivista *Minerals* come *Associate Editor* e dal 2018 al 2022 è stato *Section Editor* per la parte riferita ai *New Minerals*.
- Dal 2022 fa parte dell'*Editorial Board* della rivista *Journal of Mineralogical and Petrological Sciences* come *Associate Editor*.
- Dal 2008 al 2016 ha fatto parte dell'*Editorial Board* della rivista *Periodico di Mineralogia* come *Associate Editor*.
- Dal 2019 fa parte dell'*Editorial Board* della rivista *Minerals* come *Section Editor – Mineralogy and Crystallography*.
- Nel 2017-2018 ha agito come *Guest Editor* dello *Special Issue* "*Deciphering the complexity of mineral structures*" della rivista *Zeitschrift für Kristallographie*.
- Nel 2017-2018 ha agito come *Guest Editor* dello *Special Issue* dedicato a Giovanni Ferraris e Stefano Merlino della rivista *European Journal of Mineralogy*.
- Nel quadriennio 2006-2010 ha fatto parte del Consiglio di Presidenza della Società Italiana di Mineralogia e Petrologia (SIMP) in qualità di Consigliere.
- Nel quadriennio 2010-2014 è stato Segretario della Società Italiana di Mineralogia e Petrologia (SIMP).

Attività nell'organizzazione di congressi

- Ha agito come *Co-Chair* per il microsimposio intitolato "*Crystal Chemistry and Crystallography of Aperiodic Crystals*" durante il XXI congresso internazionale di cristallografia IUCr di Osaka, Giappone (23-31 Agosto, 2008).
- Ha agito come *Chair* per il microsimposio intitolato "*Minerals as a treasure trove for advanced materials*" durante il XXXVIII congresso nazionale di cristallografia AIC di Salerno, Italia (20-23 Settembre, 2009).

- Ha fatto parte del Comitato Scientifico per il XXXVIII congresso nazionale di cristallografia AIC di Salerno, Italia (20-23 Settembre, 2009).
- Ha fatto parte del Comitato Scientifico per il congresso nazionale di mineralogia e petrologia SIMP di Ferrara, Italia (13-15 Settembre, 2010).
- Ha fatto parte del Comitato Scientifico per il congresso internazionale "*Aperiodic 2012*" di Cairns, Australia (2-7 Settembre, 2012).
- Ha fatto parte del Comitato Scientifico per il primo congresso nazionale congiunto SGI-SIMP di Milano (7-9 Settembre, 2014).
- Ha fatto parte del Comitato Scientifico per il congresso internazionale "*Aperiodic 2015*" di Praga, Repubblica Ceca (30 Agosto-4 Settembre, 2015).
- Ha agito come "*Theme Champion*" per il tema *Mineralogy* al 35th *International Geological Congress* (Cape Town, South Africa, 27/08/16-04/09/16).
- Ha agito come *Co-Chair* per il microsimposio intitolato "*Modular Aspects in Mineral Structures*" durante il congresso internazionale EMC2016 di Rimini, Italia (11-15 Settembre, 2016).
- Ha organizzato in qualità di *Chairperson* il secondo convegno internazionale sui sulfosali "*SuSy2*", agendo come *Convenor* di tutti i simposi del convegno, svoltosi a Tavagnasco, Italia (10-11 Agosto, 2017).
- Ha fatto parte del Comitato Scientifico per il congresso nazionale congiunto SGI-SIMP di Parma (16-19 Settembre, 2019).
- Ha agito come *Co-Chair* per il microsimposio intitolato "*Advanced Mineralogy*" durante il II International Congress on Earth Sciences in SE Asia di Bali, Indonesia (23-31 Novembre, 2019).
- Ha agito come *Co-Chair* per il microsimposio intitolato "*Exploring the diversity of Mineralogy*" durante l'EGU2020 meeting di Vienna (3-8 Maggio, 2020).

Partecipazione a progetti nazionali e internazionali

nazionali:

1) 1999 - M.I.U.R.-P.R.I.N. (ex-40%), Titolo del progetto: "*Trasformazioni, reazioni, ordinamenti nei minerali*"
2) 2001 - M.I.U.R.-P.R.I.N. (ex-40%), Titolo del progetto: "*Complessità strutturale e proprietà dei minerali: microstrutture, modularità, modulazioni*"
3) 2003 - M.I.U.R.-P.R.I.N. (ex-40%), Titolo del progetto: "*Aspetti microstrutturali e modulari nei minerali: analisi ed applicazioni*"
4) 2005 - M.I.U.R.-P.R.I.N. (ex-40%), Titolo del progetto: "*Dai minerali ai materiali: cristallochimica, microstrutture, modularità, modulazioni*"
5) 2007 - M.I.U.R.-P.R.I.N. (ex-40%), Titolo del progetto: "Complessità dei minerali: modulazione, transizione di fase, disordine strutturale"
6) 2009 - M.I.U.R.-P.R.I.N. (ex-40%), Titolo del progetto: "*Modularità, microstrutture e non-stechiometria nei minerali*"
7) 2012 - M.I.U.R.-P.R.I.N. (ex-40%), Titolo del progetto: "*Trapping and release of molecular and atomic species in geomaterials*"
8) 2017 - M.I.U.R.-P.R.I.N. (ex-40%), Titolo del progetto: "*TEOREM deciphering geological processes using Terrestrial and Extraterrestrial ORE Minerals*", prot. 2017AK8C32 (Principal Investigator), € 330,630.

9) 2022 - M.I.U.R.-P.R.I.N. (ex-40%), Titolo del progetto: "*An experimental minero-petrological model of sulphide-assisted Hg spEciation applied to volcano MonitoRing and sEdimentary recordS (HERMES)*", prot. 2022R35X8Z (Head of Research Unit), € 211,138.

10) Convenzione operativa 2019-2024 CNR-DTA – UNIFI-DST per la realizzazione del progetto "TUNINGEM (TUNING Electron Microprobe)", che riguarderà la messa a punto della nuova microsonda elettronica comprata dal DST-UNIFI grazie al progetto "Dipartimenti di Eccellenza" e la realizzazione di una banca dati di analisi chimiche su rocce, vetri silicatici e meteoriti (Principal Investigator), € 180,000.

11) Progetto infrastrutture UNIFI per l'acquisto di un microtomografo ad alta risoluzione (Principal Investigator), € 625,000.

12) Progetto "dipartimenti di eccellenza 2018-2022", referente di sede, € 6,650,000.

13) Progetto "dipartimenti di eccellenza 2023-2027", referente di sede, € 7,325,000.

14) 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2017, 2018 – ex-60%. Progetti di Ateneo di Unifi.

15) 2000 - progetto "giovani ricercatori", Titolo del progetto: "*La struttura incommensurata in meliliti naturali"*.

internazionali:

1) 2003 - INTAS [in collaborazione con Oleg Safonov e Yuriy Litvin (Institute of Experimental Mineralogy, Moscow, Russia) e Leonid Perchuk (Department of Petrology, Moscow State University, Russia)]. Titolo del progetto: "*On the influence of potassium in the structure of synthetic UHP clinopyroxenes*" (€ 11,600).

2) 2004 - NEDO [in collaborazione con Yuji Soejima (Department of Physics, University of Kyushu, Japan) Vladimir Dmitrienko ed Elena Ovchinnikova (Department of Physics, Moscow State University, Russia)]. Titolo del progetto: "*The resonant X-ray diffraction in two-dimensional modulated structures*" (€ 14,000).

3) 2006 - USNSF [in collaborazione con Robert Downs (Department of Geosciences, University of Tucson, Arizona, U.S.A.) e George Harlow (Department of Earth and Planetary Sciences, American Museum of Natural History, New York, U.S.A.)]. Titolo del progetto: "*High-Pressure Study of Some Large Ions in Mantle Minerals*" ($ 116,000).

4) 2007 - USNSF [in collaborazione con Peter J. Lu (Department of Physics, Jefferson Laboratory, Harvard University, Cambridge Massachusetts, U.S.A.) e Paul J. Steinhardt (Department of Physics, Princeton University, New Jersey, U.S.A.)]. Titolo del progetto: "*Natural quasicrystals: Ideal or actual state*?" ($ 27,500).

5) 2007 - USNSF [in collaborazione con Paul G. Spry (Department of Geological and Atmospheric Sciences, Iowa State University, U.S.A.)]. Titolo del progetto: "*Invisible gold in the minerals of the most important telluride deposits*" ($ 40,000).

6) 2010 - *Simons Foundation (New York) and private benefactors* [in collaborazione con Paul J. Steinhardt (Department of Physics, Princeton University, New Jersey, U.S.A.)]. Titolo del progetto: "*Natural quasicrystals*".

7) 2015 - PRIUS *Premier Research Institute for Ultrahigh-pressure Sciences* [in collaborazione con Tetsuo Irifune e Masayuki Nishi], project #2014-B43, Titolo del progetto: "*Structural study of phase H, ($MgSiH_2O_4$), a potential high-pressure carrier for water to the deep lower mantle*".

Principali aree di ricerca

La ricerca scientifica si è focalizzata principalmente su quattro principale aree:

a) *Cristallochimica di fasi del mantello* (e.g., clinopirosseni, granati, spinelli, fasi post-spinello, akimotoite, wadsleyite, ringwoodite, bridgmanite, majorite, Phase H, Phase B, Phase X, Phase B anidra);
b) *Strutture aperiodiche in fasi naturali* (e.g., melilite, fresnoite, calaverite, natrite, muthmannite, icosahedrite, decagonite, meneghinite, baumoite, merelaniite);
c) *Complessità strutturali nei minerali: superstrutture, geminazioni e pseudo-simmetrie* (e.g., melilite, pearceite, polybasite, samsonite, seeligerite, fantappièite, wakabayashilite, fettelite, sinnerite, kurilite, billingsleyite, calaverite, mutnovskite, empressite, zinkenite, spryite, balkanite, samsonite, meneghinite);
d) *Descrizione e caratterizzazione di nuove specie mineralogiche* (~100 nuovi minerali descritti);
e) *Mineralogia planetaria* (e.g., caratterizzazione e definizione della meteorite Khatyrka; caratterizzazione di fasi mineralogiche in meteoriti mostranti differenti gradi di shock: melliniite, icosahedrite, decagonite, hollisterite, stolperite, kryachkoite, hemleyite, steinhardtite, shenzhuangite, ringwoodite tetragonale, ringwoodite inversa, asimowite, elgoresyite, poirierite).

Tecniche utilizzate: diffrattometria a raggi X a cristallo singolo e da polveri; microanalisi (EMPA, SIMS), microscopia elettronica (SEM, TEM, HRTEM), spettroscopia (FTIR, Raman, Mössbauer, XAS-XANES).

Elenco delle pubblicazioni

Monografie

1. E.A. Matrosova, A.V. Bobrov, **L. Bindi** (2020) Geochemistry of chromium in the Earth's mantle. *Springer Monograph*, AISSN 2197-9545, ISSN 2197-9553 (electronic) Springer Geology ISBN 978-3-030-27017-9 ISBN 978-3-030-27018-6 (eBook) https://doi.org/10.1007/978-3-030-27018-6; pp. 135.
2. **L. Bindi** (2020) Natural Quasicrystals: the Solar System's hidden secrets. *Springerbrief in Crystallography*, ISSN: 2524-8596; ISSN 2524-860X (electronic) SpringerBriefs in Crystallography ISBN 978-3-030-45676-4 ISBN 978-3-030-45677-1 (eBook) https://doi.org/10.1007/978-3-030-45677-1.

su riviste internazionali:

1. **L. Bindi**, D. Cellai, L. Melluso, S. Conticelli, V. Morra, S. Menchetti (1999) Crystal chemistry of clinopyroxene from alkaline undersaturated rocks of the Monte Vulture Volcano, Italy. *Lithos*, 46, 259-274.
2. P. Bonazzi, **L. Bindi** (1999) Structural adjustments induced by heat treatment in ilvaite. *American Mineralogist*, 84, 1604-1612.
3. F. Olmi, C. Viti, **L. Bindi**, P. Bonazzi, S. Menchetti (2000) Second occurrence of okayamalite, $Ca_2SiB_2O_7$: chemical and TEM characterization. *American Mineralogist*, 85, 1508-1511.
4. G. Giuli, **L. Bindi**, P. Bonazzi (2000) Rietveld refinement of okayamalite, $Ca_2SiB_2O_7$: structural evidence for the B/Si ordered distribution. *American Mineralogist*, 85, 1512-1515.
5. **L. Bindi**, P. Bonazzi, J.G. Fitton (2001) Crystal chemistry of strontian soda melilite from nephelinite lava of Mt Etinde, Cameroon. *European Journal of Mineralogy*, 13, 121-125.
6. **L. Bindi**, M. Czank, F. Röthlisberger, P. Bonazzi (2001) Hardystonite from Franklin Furnace: a natural modulated melilite. *American Mineralogist*, 86, 747-751.
7. P. Bonazzi, **L. Bindi**, F. Olmi (2001). Reflectance variations in heat-treated ilvaite. *Mineralogy and Petrology*, 72, 249-257.
8. **L. Bindi**, P. Bonazzi, M. Dusek, V. Petříček, G. Chapuis (2001) Five dimensional structure refinement of natural melilite $(Ca_{1.89}Sr_{0.01}Na_{0.08}K_{0.02})(Mg_{0.92}Al_{0.08})(Si_{1.98}Al_{0.02})O_7$. *Acta Crystallographica*, B57, 739-746.
9. P. Bonazzi, **L. Bindi** (2002) Structural properties and heat-induced oxidation-dehydrogenation of manganoan ilvaite from Perda Niedda mine, Sardinia, Italy. *American Mineralogist*, 87, 845-852.
10. S. Menchetti, **L. Bindi**, P. Bonazzi, F. Olmi (2002) Disordered distribution of Cu in the crystal structure of leightonite, $K_2Ca_2Cu(SO_4)_4{\cdot}2H_2O$. *American Mineralogist*, 87, 721-725.
11. **L. Bindi**, O.G. Safonov, Y.A. Litvin, L.L. Perchuk, S. Menchetti (2002) Ultrahigh potassium content in the clinopyroxene structure: an X-ray single-crystal study. *European Journal of Mineralogy*, 14, 929-934.
12. **L. Bindi**, F. Tasselli, F. Olmi, A. Peccerillo, S. Menchetti (2002) Crystal chemistry of clinopyroxenes from Linosa Volcano, Sicily Channel, Italy: implications for modelling magmatic plumbing system. *Mineralogical Magazine*, 66, 953-968.
13. P. Bonazzi, **L. Bindi**, F. Olmi, S. Menchetti (2003) How many alacranites do exist? A structural study of non-stoichiometric As_8S_{9-x} crystals. *European Journal of Mineralogy*, 15, 283-288.
14. P. Bonazzi, **L. Bindi**, G. Parodi (2003) Gatelite-(Ce), a new REE-bearing mineral from Trimouns, French Pyrenees: crystal structure and polysomatic relationships with epidote and tornebohmite-(Ce). *American Mineralogist*, 88, 223-228.
15. **L. Bindi**, L.H. Rees, P. Bonazzi (2003) Twinning in natural melilites simulating a five-fold superstructure. *Acta Crystallographica*, B59, 156-158.
16. **L. Bindi**, O.G. Safonov, V. Yapaskurt, L.L. Perchuk, S. Menchetti (2003) Ultrapotassic clinopyroxene from the Kumdy-Kol microdiamond min, Kokchetav Complex, Northern Kazakhstan: occurrence, composition and crystal-chemical characterization. *American Mineralogist*, 88, 464-468.

17. P. Bonazzi, **L. Bindi**, G.P. Bernardini, S. Menchetti (2003) A model for the mechanism of incorporation of Cu, Fe and Zn in the stannite – kesterite series, Cu_2FeSnS_4 - Cu_2ZnSnS_4. *Canadian Mineralogist*, 41, 639-647.
18. O.G. Safonov, Y.A. Litvin, L.L. Perchuk, **L. Bindi**, S. Menchetti (2003) Phase relations of potassium-bearing clinopyroxene in the system $CaMgSi_2O_6$-$KAlSi_2O_6$ at 7 Gpa. *Contribution to Mineralogy and Petrology*, 146, 120-133.
19. P. Bonazzi, **L. Bindi**, V.I. Popova, G. Pratesi, S. Menchetti (2003) Alacranite, As_8S_9: structural study of the holotype and re-assignment of the original chemical formula. *American Mineralogist*, 88, 1796-1800.
20. **L. Bindi**, P. Bonazzi (2003) Low-temperature study of natural melilite $(Ca_{1.89}Sr_{0.01}Na_{0.08}K_{0.02})(Mg_{0.92}Al_{0.08})(Si_{1.97}Al_{0.03})O_7$: towards a commensurate value of the **q** vector. *Physics and Chemistry of Minerals*, 30, 523-526.
21. **L. Bindi**, V.I. Popova, P. Bonazzi (2003) Uzonite, As_4S_5, from the type-locality: X-ray single crystal study and lighting experiments. *Canadian Mineralogist*, 41, 1463-1468.
22. **L. Bindi**, C. Cipriani (2003) Plumbian baksanite from the Tyrny'auz W-Mo deposit, Baksan River valley, northern Caucasus, Russian Federation. *Canadian Mineralogist*, 41, 1475-1479.
23. **L. Bindi**, C. Cipriani (2003) Crystal structure refinement of winstanleyite, $TiTe_3O_8$, from the Grand Central Mine, Tombstone, Arizona. *Canadian Mineralogist*, 41, 1469-1473.
24. R. Avanzinelli, **L. Bindi**, S. Menchetti, S. Conticelli (2004) Crystallisation and genesis of peralkaline magmas from Pantelleria, Italy: an integrated petrological and crystal-chemical study. *Lithos*, 73, 41-69.
25. **L. Bindi**, C. Cipriani (2004) Museumite, $Pb_5AuSbTe_2S_{12}$, a new mineral from the gold-telluride deposit of Sacarîmb, Metaliferi Mountains, western Romania. *European Journal of Mineralogy*, 16, 835-838.
26. **L. Bindi**, C. Cipriani (2004) Ordered distribution of Au and Ag in the crystal structure of muthmannite, $AuAgTe_2$, a rare telluride from Sacarîmb, western Romania. *American Mineralogist*, 89, 1505-1509.
27. **L. Bindi**, C. Cipriani (2004) The crystal structure of skippenite, Bi_2Se_2Te, from the Kochkar deposit, southern Urals, Russian Federation. *Canadian Mineralogist*, 42, 835-840.
28. **L. Bindi**, P.G. Spry, C. Cipriani (2004) Empressite, AgTe, from the Empress-Josephine Mine, Colorado, USA: composition, physical properties and determination of the crystal structure. *American Mineralogist*, 89, 1043-1047.
29. **L. Bindi**, C. Cipriani (2004) Structural and physical properties of fischesserite, a rare gold-silver selenide from the De Lamar Mine, Owyhee County, Idaho, USA. *Canadian Mineralogist*, 42, 1733-1737.
30. **L. Bindi**, C. Cipriani (2004) Mazzettiite, $Ag_3HgPbSbTe_5$, a new mineral species for Findley Gulch, Saguache County, Colorado. *Canadian Mineralogist*, 42, 1739-1743.
31. **L. Bindi**, M. Rossell Abrodos, G. Van Tendeloo, P.G. Spry, C. Cipriani (2005) Inferred phase relations in part of the system Au-Ag-Te: an integrated analytical study of gold ore from the Golden Mile, Kalgoorlie, Australia. *Mineralogy and Petrology*, 83, 283-293.

32. **L. Bindi**, P. Bonazzi, L. Dei, A. Zoppi (2005) Does the bazhenovite structure really contain a thiosulphate group? A structural and spectroscopic study of a sample from the type-locality. *American Mineralogist*, 90, 1556-1562.
33. O.G. Safonov, L.L. Perchuk, Y.A. Litvin, **L. Bindi** (2005) Phase relations in the $CaMgSi_2O_6$-$KAlSi_3O_8$ join at 6 and 3.5 GPa as a model for formation of some potassium-bearing deep-seated mineral assemblages. *Contributions to Mineralogy and Petrology*, 149, 316-337.
34. **L. Bindi**, P. Bonazzi (2005) Incommensurate-normal phase transition in natural melilite: an *in situ* high-temperature X-ray single-crystal study. *Physics and Chemistry of Minerals*, 32, 89-96.
35. **L. Bindi**, S. Menchetti (2005) Structural changes accompanying the phase transformation between leadhillite and susannite: a structural study by means of *in situ* high-temperature single-crystal X-ray diffraction. *American Mineralogist*, 90, 1641-1647.
36. P. Bonazzi, G.I. Lampronti, **L. Bindi**, S. Zanardi (2005) Wakabayashilite, $[(As,Sb)_6S_9][As_4S_5]$: crystal structure, pseudosymmetry, twinning and revised chemical formula. *American Mineralogist*, 90, 1108-1114.
37. **L. Bindi**, S. Menchetti (2005) Garavellite, $FeSbBiS_4$, from the Caspari Mine, North-Rhine Westphalia, Germany: composition, physical properties and determination of the crystal structure. *Mineralogy and Petrology*, 85, 131-139.
38. **L. Bindi**, G. Pratesi (2005) Selenojalpaite, Ag_3CuSe_2, a new mineral species from the Skrikerum Cu-Ag-Tl selenide deposit, Småland, SE Sweden. *Canadian Mineralogist*, 43, 1373-1377.
39. **L. Bindi** (2005) Reinvestigation of the crystal structure of polyhalite, $K_2Ca_2Mg(SO_4)_4.2H_2O$. *Acta Crystallographica*, E61, i135-i136.
40. **L. Bindi**, P.G. Spry, G. Pratesi (2006) Lenaite from the Gies gold-silver telluride deposit, Judith Mountains, Montana, U.S.A.: occurrence, composition, and crystal structure. *Canadian Mineralogist*, 44, 207-212.
41. M. Zelenski, T. Balić-Žunić, **L. Bindi**, A. Garavelli, E. Makovicky, D. Pinto, F. Vurro (2006) First occurrence of iodine in natural sulfosalts: The case of mutnovskite, $Pb_2AsS_3(I,Cl,Br)$, a new mineral from Mutnovsky volcano, Kamchatka Peninsula, Russian Federation. *American Mineralogist*, 91, 21-28.
42. P. Bonazzi, **L. Bindi**, M. Zoppi, G.C. Capitani, F. Olmi (2006) Single-crystal diffraction and transmission electron microscopy studies of "silicified" pyrochlore from Narssârssuk, Julianehaab district, Greenland. *American Mineralogist*, 91, 794-801.
43. **L. Bindi**, R.T. Downs, G.E. Harlow, O.G. Safonov, Yu. A. Litvin, L.L. Perchuk, H. Uchida, S. Menchetti (2006) Compressibility of synthetic potassium-rich clinopyroxene: In situ high-pressure single-crystal X-ray study. *American Mineralogist*, 91, 802-808.
44. G. Pratesi, **L. Bindi**, V. Moggi-Cecchi (2006) Icosahedral coordination of phosphorus in the crystal structure of melliniite, a new phosphide mineral from the Northwest Africa (NWA) 1054 acapulcoite. *American Mineralogist*, 91, 451-454.
45. **L. Bindi**, M. Evain, S. Menchetti (2006) Temperature dependence of the silver distribution in the crystal structure of natural pearceite, $(Ag,Cu)_{16}(As,Sb)_2S_{11}$. *Acta Crystallographica*, B62, 212-219.
46. **L. Bindi**, V. Petříček, R.L. Withers, M. Zoppi, P. Bonazzi (2006) A novel high-temperature commensurate superstructure in natural bariopyrochlore: a structural

study by means of a multiphase crystal structure refinement. *Journal of Solid State Chemistry*, 179, 716-725.

47. P. Bonazzi, **L. Bindi**, G. Pratesi, S. Menchetti (2006) Light-induced changes in molecular arsenic sulfides: state of the art and new evidence by single-crystal X-ray diffraction. *American Mineralogist*, 91, 1323-1330.
48. M. Evain, **L. Bindi**, S. Menchetti (2006) Structural complexity in minerals: twinning, polytypism and disorder in the crystal structure of polybasite, $(Ag,Cu)_{16}(Sb,As)_2S_{11}$. *Acta Crystallographica*, B62, 447-456.
49. M. Evain, **L. Bindi**, S. Menchetti (2006) Structure and phase transition in the Se-rich variety of antimonpearceite, $[(Ag,Cu)_6(Sb,As)_2(S,Se)_7][Ag_9Cu(S,Se)_2Se_2]$. *Acta Crystallographica*, B62, 768-774.
50. **L. Bindi**, M. Dusek, V. Petříček, P. Bonazzi (2006) Superspace-symmetry determination and multidimensional refinement of the incommensurately modulated structure of a natural fresnoite. *Acta Crystallographica*, B62, 1031-1037.
51. **L. Bindi**, V. Dmitrienko, E. Ovchinnikova, Y. Soejima (2006) The resonant X-ray diffraction in Co-åkermanite: theory and experiment. *Crystallography Reports*, 51, 941-948.
52. **L. Bindi**, M. Evain, A. Pradel, S. Albert, M. Ribes, S. Menchetti (2006) Fast ionic conduction character and ionic phase-transitions in disordered crystals: The complex case of the minerals of the pearceite-polybasite group. *Physics and Chemistry of Minerals*, 33, 677-690.
53. **L. Bindi**, M. Zoppi, P. Bonazzi (2006) Plumbomicrolite from the Ploskaya Mountain, Keivy Massif, Kola Peninsula, Russia: composition and crystal structure. *Periodico di Mineralogia*, 75, 51-58.
54. L. Chelazzi, **L. Bindi**, F. Olmi, S. Menchetti, A. Peccerillo, S. Conticelli (2006) A lamproitic component in the high-K calc-alkaline volcanic rocks of the Capraia Island, Tuscan Magmatic Province: evidence from clinopyroxene crystal chemical data. *Periodico di Mineralogia*, 75, 75-94.
55. **L. Bindi**, M. Evain, S. Menchetti (2007) Complex twinning, polytypism and disorder phenomena in the crystal structures of antimonpearceite and arsenpolybasite. *Canadian Mineralogist*, 45, 321-333.
56. **L. Bindi**, P. Bonazzi (2007) Light-induced alteration of arsenic sulfides: A new product with an orthorhombic crystal structure. *American Mineralogist*, 92, 617-620.
57. **L. Bindi**, M. Evain (2007) Gram-Charlier development of the atomic displacement factors into mineral structures: The case of samsonite, $Ag_4MnSb_2S_6$. *American Mineralogist*, 92, 886-891.
58. P. Bonazzi, **L. Bindi** (2007) The crystal structure of ingersonite, $Ca_3Mn^{2+}Sb^{5+}{}_4O_{14}$, and its relationships with pyrochlore. *American Mineralogist*, 92, 947-953.
59. **L. Bindi**, M. Evain, P.G. Spry, S. Menchetti (2007) The pearceite-polybasite group of minerals: Crystal chemistry and new nomenclature rules. *American Mineralogist*, 92, 918-925.
60. **L. Bindi**, G. Pratesi (2007) Centric or acentric crystal structure for natural schmitterite, $UTeO_5$? New evidence from a crystal from the type locality. *Mineralogy and Petrology*, 91, 129-138.
61. **L. Bindi**, M. Evain, S. Menchetti (2007) Selenopolybasite, $[(Ag,Cu)_6(Sb,As)_2(S,Se)_7][Ag_9Cu(S,Se)_2Se_2]$, a new member of the pearceite-

polybasite group from the De Lamar Mine, Owyhee county, Idaho, USA. *Canadian Mineralogist*, 45, 1525-1528.

62. P. Bonazzi, **L. Bindi**, O. Medenbach, R. Pagano, G.I. Lampronti, S. Menchetti (2007) Olmiite, $CaMn[SiO_3(OH)](OH)$, the Mn-dominant analogue of poldervaartite, a new mineral species from Kalahari manganese fields (Republic of South Africa). *Mineralogical Magazine*, 71, 193-201.
63. **L. Bindi**, A. Bobrov, Yu.A. Litvin (2007) Incorporation of Fe^{3+} in phase X, $A_{2-x}M_2Si_2O_7H_x$, a potential high-pressure K-rich hydrous silicate in the mantle. *Mineralogical Magazine*, 71, 265-272.
64. **L. Bindi**, M. Evain, P.G. Spry, K.T. Tait, S. Menchetti (2007) Structural role of copper in the minerals of the pearceite-polybasite group: The case of the new minerals cupropearceite and cupropolybasite. *Mineralogical Magazine*, 71, 641-650.
65. Y. Moëlo, E. Makovicky, N.N. Mozgova, J.L. Jambor, N. Cook, A. Pring, W. Paar, E.H. Nickel, S. Graeser, S. KarupMøller, T. Balić-Žunić, W.G. Mumme, F. Vurro, D. Topa, **L. Bindi**, K. Bente, M. Shimizu (2008) Commission on Ore Mineralogy of the International Mineralogical Association: Report of the Sulfosalt Subcommittee. *European Journal of Mineralogy*, 20, 7-46.
66. P. Bonazzi, **L. Bindi** (2008) A crystallographic review of arsenic sulfides: Effects of chemical variations and changes induced by light exposure. *Zeitschrift für Kristallographie*, special issue "*Mineralogical Crystallography*", 223, 132-147.
67. **L. Bindi** (2008) When minerals become complex: An elementary introduction to superspace crystallography to describe natural-occurring incommensurately modulated structures. *Rendiconti dei Lincei (Scienze Fisiche e Naturali)*, 19, 1-15.
68. **L. Bindi**, C. Cipriani, G. Pratesi, R. Trosti-Ferroni (2008) The role of isomorphous substitutions in natural selenides belonging to the pyrite group. *Journal of Alloys and Compounds*, 459, 553-556.
69. **L. Bindi**, P. Bonazzi, P.G. Spry (2008) Effects of sulfur-for-selenium substitution on the structure of laphamite, $As_2(Se,S)_3$. *Canadian Mineralogist*, 46, 269-274.
70. **L. Bindi**, A. Garavelli, D. Pinto, G. Pratesi, F. Vurro (2008) Ordered distribution of I and Cl in the low-temperature crystal structure of mutnovskite, $Pb_2AsS_3(I,Cl,Br)$: An X-ray single crystal study. *Journal of Solid State Chemistry*, 181, 306-312.
71. M.F. Màrquez-Zavalìa, **L. Bindi**, M. Màrquez, S. Menchetti (2008) Se-bearing polybasite-*Tac* from the Martha Mine, Macizo del Deseado, Santa Cruz, Argentina. *Mineralogy and Petrology*, 94, 145-150.
72. A.V. Bobrov, Yu.A. Litvin, **L. Bindi**, A.M. Dymshits (2008) Phase relations and formation of sodium-rich majoritic garnet in the system $Mg_3Al_2Si_3O_{12}$–$Na_2MgSi_5O_{12}$ at 7.0 and 8.5 GPa. *Contributions to Mineralogy and Petrology*, 156, 243-257.
73. **L. Bindi**, T. Catelani, L. Chelazzi, P. Bonazzi (2008) Reinvestigation of the crystal structure of lautite, CuAsS. *Acta Crystallographica*, E64, i22.
74. **L. Bindi** (2008) Commensurate-incommensurate phase transition in muthmannite, $AuAgTe_2$: First evidence of a modulated structure at low-temperature. *Philosophical Magazine Letters*, 88, 533-541.
75. S. Nazzareni, P. Comodi, **L. Bindi**, O. Safonov, L. Perchuk, Yu. Litvin (2008) Synthetic hypersilicic Cl-rich mica in the phlogopite-celadonite join: A multimethodic characterization of the missing link between di- and tri-octahedral micas at high pressures. *American Mineralogist*, 93, 1429-1436.

76. R.L. Withers, L. Norén, T.R. Welberry, **L. Bindi**, M. Evain, S. Menchetti (2008) A composite modulated structure mechanism for Ag^{+} fast ion conduction in pearceite and polybasite mineral solid electrolytes. *Solid State Ionics*, 179, 2080-2089.
77. **L. Bindi** (2008) Routhierite, $Tl(Cu,Ag)(Hg,Zn)_2(As,Sb)_2S_6$. *Acta Crystallographica*, C64, i95-i96.
78. **L. Bindi**, M.D. Welch, P. Bonazzi, G. Pratesi, S. Menchetti (2008) The crystal structure of seeligerite, $Pb_3Cl_3IO_4$, a rare Pb-I-oxychloride from the San Rafaël mine, Sierra Gorda, Chile. *Mineralogical Magazine*, 72, 771-783.
79. **L. Bindi** (2009) Thermal expansion behavior of empressite, AgTe: A structural study by means of in situ high-temperature single-crystal X-ray diffraction. *Journal of Alloys and Compounds*, 473, 262-264.
80. P. Bonazzi, D. Holtstam, **L. Bindi**, P. Nysten, G.C. Capitani (2009) Multi-analytical approach to solve the puzzle of an allanite-subgroup mineral from Kesebol, Västra Götaland, Sweden. *American Mineralogist*, 94, 121-134.
81. P.F. Zanazzi, L. Chelazzi, P. Bonazzi, **L. Bindi** (2009) High-pressure structural behavior of ingersonite, $Ca_3Mn^{2+}Sb^{5+}{}_4O_{14}$: an *in situ* single-crystal X-ray study. *American Mineralogist*, 94, 352-358.
82. **L. Bindi**, S. Menchetti (2009) Adding further complexity to the polybasite structure: The role of silver in the *B* layer of the *M*2*a*2*b*2*c* polytype. *American Mineralogist*, 94, 151-155.
83. D. Mitolo, D. Pinto, A. Garavelli, **L. Bindi**, F. Vurro (2009) The role of the minor substitutions in the crystal structure of natural challacolloite, KPb_2Cl_5, and hephaistosite, $TlPb_2Cl_5$, from Vulcano (Aeolian Archipelago, Italy). *Mineralogy and Petrology*, 96, 121-128.
84. **L. Bindi**, F.N. Keutsch, C.A. Francis, S. Menchetti (2009) Fettelite, $[Ag_6As_2S_7][Ag_{10}HgAs_2S_8]$ from Chañarcillo, Chile: Crystal structure, pseudosymmetry, twinning, and revised chemical formula. *American Mineralogist*, 94, 609-615.
85. **L. Bindi**, A. Arakcheeva, G. Chapuis (2009) The role of silver on the stabilization of the incommensurately modulated structure in calaverite, $AuTe_2$. *American Mineralogist*, 94, 728-736.
86. **L. Bindi**, I.V. Pekov (2009) Crystal chemistry of extremely Cu-rich cupropearceite from the Sarbay mine, Northern Kazakhstan. *Zapiski Vsesoiusnogo Mineralnogo Obshchestva*, 5, 44-50.
87. M. Muniz-Miranda, C. Gellini, **L. Bindi** (2009) Surface-enhanced Raman spectroscopy for identifying rock composition. *Spectrochimica Acta, Part A: Molecular and Biomolecular Spectroscopy*, 73, 456-459.
88. M. Zelenski, A. Garavelli, D. Pinto, F. Vurro, Y. Moëlo, **L. Bindi**, E. Makovicky, E. Bonaccorsi (2009) Tazieffite $Pb_{20}Cd_2(As,Bi)_{22}S_{50}Cl_{10}$, a new chloro-sulfosalt from Mutnovsky volcano, Kamchatka Peninsula, Russian Federation. *American Mineralogist*, 94, 1312-1324.
89. M. Leitl, A. Pfitzner, **L. Bindi** (2009) Preferred ion diffusion pathways and activation energies for silver in the crystal structure of stephanite, Ag_5SbS_4. *Mineralogical Magazine*, 73, 17-26.
90. **L. Bindi**, P.J. Steinhardt, N. Yao, P. Lu (2009) Natural Quasicrystals. *Science*, 324, 1306-1309.
91. P.C. Voudouris, V. Melfos, P.G. Spry, **L. Bindi**, T. Kartal, K. Arikas, R. Moritz, M. Ortelli (2009) Rhenium-rich molybdenite and rheniite (ReS_2) in the Pagoni

Rachi-Kirki Mo-Cu-Te-Ag-Au deposit, northern Greece: Implications for the rhenium geochemistry of porphyry style Cu-Mo and Mo mineralization. *Canadian Mineralogist*, 47, 1013-1036.

92. A.V. Korsakov, M. Perraki, D.A. Zedgenizov, **L. Bindi**, K. Theunissen, P. Vandenabeele, A. Suzuki, D. Hutsebaut, H. Kagi (2010) Diamond-graphite relationships in ultrahigh-pressure metamorphic rocks from the Kokchetav Massif, northern Kazakhstan. *Journal of Petrology*, 51, 763-783.
93. F. Cámara, F. Bellatreccia, G. Della Ventura, A. Mottana, **L. Bindi**, M. Gunter, M. Sebastiani (2010) Fantappièite, a new mineral of the cancrinite - sodalite group with a 33-layer stacking sequence: occurrence and crystal structure. *American Mineralogist*, 95, 472-480.
94. A. Arakcheeva, **L. Bindi**, P. Pattison, N. Meisser, G. Chapuis, I. Pekov (2010) The incommensurately modulated structures of natural natrites at 120 and 293 K from synchrotron X-ray data. *American Mineralogist*, 95, 574-581.
95. **L. Bindi**, R.T. Downs, S. Menchetti (2010) The crystal structure of billingsleyite, $Ag_7(As,Sb)S_6$, a sulfosalt containing As^{5+}. *Canadian Mineralogist*, 48, 155-162.
96. F. Nestola, A. Guastoni, **L. Bindi**, L. Secco (2010) Dalnegroite, $Tl_{5-x}Pb_{2x}(As,Sb)_{21-x}S_{34}$, a new thallium sulfosalt from Lengenbach quarry, Binntal, Canton Valais, Switzerland. *Mineralogical Magazine*, 73, 1027-1032.
97. S. Nazzareni, P. Comodi, **L. Bindi**, L. Dubrovinski (2010) The crystal structure of gypsum-II by single-crystal synchrotron X-ray diffraction data. *American Mineralogist*, 95, 655-658.
98. V.L. Vinograd, O.G. Safonov, D. Wilson, L.L. Perchuk, **L. Bindi**, J.D. Gale, B. Winkler (2010) Atomistic model of diopside-K-jadeite ($CaMgSi_2O_6$-$KAlSi_2O_6$) solid solution. *Petrology*, 18, 447-459.
99. **L. Bindi**, G. Pratesi, P.G. Spry (2010) Crystallographic and chemical constraints on the nature of the proustite-pyrargyrite solid solution series. *American Mineralogist*, 95, 1725-1729.
100. **L. Bindi** (2010) Atheneite, $[Pd_2][As_{0.75}Hg_{0.25}]$, from Itabira, Minas Gerais, Brazil: Crystal structure and revision of the chemical formula. *Canadian Mineralogist*, 48, 1149-1155.
101. **L. Bindi**, F. Nestola, A. Guastoni, L. Secco (2010) The crystal structure of dalnegroite, $Tl_{5-x}Pb_{2x}(As,Sb)_{21-x}S_{34}$: A masterpiece of structural complexity. *Mineralogical Magazine*, 74, 999-1012.
102. P.J. Steinhardt, **L. Bindi** (2011) One upon a time in Kamchatka: The search for natural quasicrystals. *Philosophical Magazine*, 91, 2421-2426.
103. P. Bonazzi, **L. Bindi**, M. Muniz Miranda, L.Chelazzi, T. Rödl, A. Pfitzner (2011) Light-induced molecular change in synthetic $HgI_2 \cdot As_4S_4$: evidence by single-crystal X-ray diffraction and Raman spectroscopy. *American Mineralogist*, 96, 646-653.
104. **L. Bindi**, A.M. Dymshits, A.V. Bobrov, K.D. Litasov, A.F. Shatskiy, E. Ohtani, Y.A. Litvin (2011) Crystal chemistry of sodium in the Earth's interior: The structure of $Na_2MgSi_5O_{12}$ synthesized at 17.5 GPa and 1700 °C. *American Mineralogist*, 96, 447-450.
105. L. Chelazzi, T. Boffa Ballaran, **L. Bindi**, P. Bonazzi (2011) In situ high-temperature X-ray powder diffraction study of the synthetic $Ca_2Sb_2O_7$ weberite-type compound. *Periodico di Mineralogia*, 80, 145-153.

106. **L. Bindi**, S. Menchetti (2011) Fast ion conduction character and ionic phase-transition in silver sulfosalts: The case of fettelite $[Ag_6As_2S_7][Ag_{10}HgAs_2S_8]$. *American Mineralogist*, 96, 792-796.
107. **L. Bindi**, P.J. Steinhardt, N. Yao, P. Lu (2011) Icosahedrite, $Al_{63}Cu_{24}Fe_{13}$, the first natural quasicrystal. *American Mineralogist*, 96, 928-931.
108. M. Pagliai, P. Bonazzi, **L. Bindi**, M. Muniz-Miranda, G. Cardini (2011) Structural and vibrational properties of arsenic sulfides: alacranite (As_8S_9). *Journal of Physical Chemistry A*, 115, 4558-4562.
109. L. Chelazzi, T. Boffa Ballaran, F. Nestola, **L. Bindi**, P. Bonazzi (2011) High-pressure behavior of the synthetic $Ca_2Sb_2O_7$ weberite-type compound. *Solid State Sciences*, 13, 1092-1095.
110. **L. Bindi**, Y. Moëlo, P. Léone, M. Suchaud (2012) Stoichiometric arsenopyrite, FeAsS, from La Roche-Balue quarry (Loire-Atlantique, France): Crystal structure and Mössbauer study. *Canadian Mineralogist*, 50, 471-479.
111. O.G. Safonov, **L. Bindi**, V.L. Vinograd (2011) Potassium-bearing clinopyroxene: A review of experimental, crystal chemical and thermodynamic data with petrological applications. *Mineralogical Magazine*, 75, 2467-2484.
112. **L. Bindi**, C. Carbone, R. Cabella, G. Lucchetti (2011) Bassoite, $SrV_3O_7 \cdot 4H_2O$, a new mineral from Molinello mine, Val Graveglia, eastern Liguria, Italy. *Mineralogical Magazine*, 75, 2677-2686.
113. **L. Bindi**, F. Nestola, U. Kolitsch, A. Guastoni, F. Zorzi (2011) Fassinaite, $Pb_2^{2+}(SO_3S)(CO_3)$, the first mineral with coexisting carbonate and thiosulfate groups: Description and crystal structure. *Mineralogical Magazine*, 75, 2721-2732.
114. **L. Bindi**, J.M. Eiler, Y. Guan, L. Hollister, G.J. MacPherson, P.J. Steinhardt, N. Yao (2012) Evidence for the extra-terrestrial origin of a natural quasicrystal. *PNAS*, 109, 1396-1401.
115. **L. Bindi**, F. Keutsch, P. Bonazzi (2012) Menchettiite, $AgPb_{2.40}Mn_{1.60}Sb_3As_2S_{12}$, a new sulfosalt belonging to the lillianite series from the Uchucchacua polymetallic deposit, Lima Department, Peru. *American Mineralogist*, 97, 440-446.
116. P. Bonazzi, F. Keutsch, **L. Bindi** (2012) Manganoquadratite, $AgMnAsS_3$, a new manganese-bearing sulfosalt from the Uchucchacua polymetallic deposit, Lima Department, Peru: Description and crystal structure. *American Mineralogist*, 97, 1199-1205.
117. **L. Bindi**, F. Nestola, A. Guastoni, F. Zorzi, L. Peruzzo, T. Raber (2012) Te-rich canfieldite, $Ag_8Sn(S,Te)_6$, from Lengenbach quarry, Binntal, Canton Valais, Switzerland: Occurrence, description and crystal structure. *Canadian Mineralogist*, 50, 111-118.
118. U. Kolitsch, **L. Bindi**, F. Nestola, A. Guastoni, F. Zorzi, R. Poeverlein (2012) Fassinait, ein neues Bleimineral aus Italien, Österreich und Deutschland. *Lapis*, 37, 52-61.
119. **L. Bindi**, R.T. Downs, P.G. Spry, W.W. Pinch, S. Menchetti (2012) A chemical and structural re-examination of fettelite samples from the type locality, Odenwald, south-western Germany. *Mineralogical Magazine*, 76, 551-566.
120. G.O. Lepore, T. Boffa Ballaran, F. Nestola, **L. Bindi**, D. Pasqual, P. Bonazzi (2012) Compressibility of synthetic β-As_4S_4: *In situ* high-pressure single-crystal X-ray study. *Mineralogical Magazine*, 76, 963-973.
121. **L. Bindi**, P.J. Steinhardt (2012) The discovery of the first natural quasicrystal. A new era for mineralogy? *Elements*, 8, 13-14.

122. F. Camara, F. Nestola, **L. Bindi**, Guastoni A., Zorzi F., Peruzzo L., Pedron D. (2012) Tazzoliite: a new mineral with a pyrochlore-related structure from Euganei hills, Padova (Italy). *Mineralogical Magazine*, 76, 827-838.
123. S. Nazzareni, P. Comodi, **L. Bindi**, G. Garbarino, A. Bobrov (2012) Equation of state of Fe^{3+}-bearing phase-X. *Physics and Chemistry of Minerals*, 39, 553-559.
124. A.V. Bobrov, A.M. Dymshits, Yu.A. Litvin, **L. Bindi** (2012) The $Mg_3Al_2Si_3O_{12}$–$Na_2MgSi_5O_{12}$ system at pressures of 7.0 and 8.5 GPa and a temperature of 1300-1800 °C: Phase relationships and crystallization of Na-bearing majoritic garnet. *Moscow University Geology Bullettin*, 67, 289-297.
125. M.D. Welch, J. Konzett, **L. Bindi**, S.C. Kohn, D.J. Frost (2012) Structural variety in the high-pressure synthetic sheet-disilicate Phase-X, $A_{(2-x)}M_2Si_2O_7H_x$. *American Mineralogist*, 97, 1849-1857.
126. A. Guastoni, **L. Bindi**, F. Nestola (2012) Debattistiite, $Ag_9Hg_{0.5}As_6S_{12}Te_2$, a new Te-bearing sulphosalt from Lengenbach quarry, Binn valley, Switzerland: Description and crystal structure. *Mineralogical Magazine*, 76, 743-750.
127. **L. Bindi**, F. Nestola, A. Guastoni, L. Peruzzo, M. Ecker, R. Carampin (2012) Raberite, $Tl_5Ag_4As_6SbS_{15}$, a new Tl-bearing sulfosalt from Lengenbach quarry, Binn Valley, Switzerland: description and crystal structure. *Mineralogical Magazine*, 76, 1153-1163.
128. S.J. Mills, **L. Bindi**, M. Cadoni, A.R. Kampf, M.E. Ciriotti, G. Ferraris (2012) Paseroite, $PbMn^{2+}(Fe^{3+},\bullet)_2(V^{5+},Ti,\bullet)_{18}O_{38}$, a new member of the crichtonite group. *European Journal of Mineralogy*, 24, 1061-1067.
129. P.J. Steinhardt, **L. Bindi** (2012) In search of natural quasicrystals. *Reports on Progress in Physics*, 75, 092601-092611.
130. **L. Bindi**, A. Figini Albisetti, G. Giunchi, L. Malpezzi, N. Masciocchi (2012) Single-crystal X-ray study of Mg_2B_{25}. *Acta Crystallographica*, E68, i50.
131. A.M. Dymshits, A.V. Bobrov, **L. Bindi**, Y.A. Litvin, K, Litasov, A.F. Shatskiy, E. Ohtani (2013) Na-bearing majoritic garnet in the system $Na_2MgSi_5O_{12}$–$Mg_3Al_2Si_3O_{12}$ at 11–20 GPa: phase relations, structural peculiarities and solid solutions. *Geochimica et Cosmochimica Acta*, 105, 1-13.
132. **L. Bindi**, P.G. Spry, P. Bonazzi, E. Makovicky, T. Balić-Žunić (2013) Quadratite, $AgCdAsS_3$: Chemical composition, crystal structure and OD character. *American Mineralogist*, 98, 242-247.
133. P. Bonazzi, L. Chelazzi, **L. Bindi** (2013) Superstructure, crystal chemistry and cation distribution in filipstadite, a Sb^{5+}-bearing, spinel-related mineral. *American Mineralogist*, 98, 361-366.
134. **L. Bindi**, A. Schaper, H. Kurata, S. Menchetti (2013) The composite modulated structure of cupropearceite and cupropolybasite and its behavior toward low temperature. *American Mineralogist*, 98, 1279-1284.
135. G.J. MacPherson, C. Andronicos, **L. Bindi**, V.V. Distler, M. Eddy, J. Eiler, Y. Guan, L.S. Hollister, A. Kostin, V. Kryachko, W. Steinhardt, M. Yudovskaya, P.J. Steinhardt (2013) Khatyrka, a new CV3 find from the Koryak Mountains, Eastern Russia. *Meteoritics and Planetary Sciences*, 48, 1499-1514.
136. **L. Bindi**, N.E. Pingitore (2013) On the symmetry and crystal structure of aguilarite, Ag_4SeS. *Mineralogical Magazine*, 77, 21-31.
137. F. Zaccarini, E. Pushkarev, G. Garuti, J. Krause, G.P. Dvornik, C. Stanley, **L. Bindi** (2013) Platinum group minerals (PGM) nuggets from alluvial-eluvial placer

deposits in the Uktus concentrically zoned mafic-ultramafic complex (Central Urals, Russia). *European Journal of Mineralogy*, 25, 519-531.

138. **L. Bindi**, F. Zaccarini, G. Garuti, N. Angeli (2013) The solid solution between platinum and palladium in nature. *Mineralogical Magazine*, 77, 269-274.
139. V.M. Dekov, **L. Bindi**, G. Burgaud, S. Petersen, D. Asael, V. Rédou, Y. Fouquet, B. Pracejus (2013) Inorganic and biogenic As-sulfide precipitation at seafloor hydrothermal fields. *Marine Geology*, 342, 28-38.
140. L. Chelazzi, T. Boffa Ballaran, G.O. Lepore G.O., **L. Bindi**, P. Bonazzi (2013) High-pressure behaviour of synthetic weberite-type $Mn^{2+}_2Sb^{5+}_2O_7$: an *in situ* single-crystal X-ray study. *Solid State Sciences*, 21, 85-90.
141. S. Anashkin, A. Bovkun, **L. Bindi**, V. Garanin, Y. Litvin (2013) Kudryavtsevaite, $Na_3(Mg,Fe)(Fe,Ti)_2Ti_3O_{12}$, a new kimberlitic mineral. *Mineralogical Magazine*, 77, 327-334.
142. P. Voudouris, V. Melfos, P.G. Spry, **L. Bindi**, R. Moritz, M. Ortelli, T. Kartal (2013) Extremely Re-rich molybdenite from porphyry Cu-Au and Mo-Au deposits in northeastern Greece: mode of occurrence, causes of enrichment, and implications for gold exploration. *Minerals*, 3, 165-191.
143. **L. Bindi**, P. Voudouris, P.G. Spry (2013) Structural role of tellurium in the minerals of the pearceite-polybasite group. *Mineralogical Magazine*, 77, 419-428.
144. M. Zoppi, **L. Bindi**, T. Rödl, A. Pfitzner, P. Bonazzi (2013) Light-induced structural changes in $(HgBr_2)_3(As_4S_4)_2$: An X-ray single-crystal diffraction, Raman spectroscopy and *ab initio* study. *Solid State Sciences*, 23, 88-95.
145. **L. Bindi**, C. Carbone, D. Belmonte, R. Cabella, R. Bracco (2013) Weissite from Gambatesa mine, Val Graveglia, Liguria, Italy: occurrence, composition and determination of the crystal structure. *Mineralogical Magazine*, 77, 475-483.
146. **L. Bindi**, F. Nestola, L. De Battisti, A. Guastoni (2013) Dervillite, Ag_2AsS_2, from Lengenbach quarry, Binn Valley, Switzerland: occurrence and crystal structure. *Mineralogical Magazine*, 77, 3105-3112.
147. S.J. Mills, A.R. Kampf, A.M. McDonald, **L. Bindi**, A.G. Christy, U. Kolitsch, G. Favreau (2013) The crystal structure of parnauite: a copper arsenate-sulphate with translational disorder of structural rods. *European Journal of Mineralogy*, 25, 693-704.
148. **L. Bindi**, E. Makovicky, F. Nestola, L. De Battisti (2013) Sinnerite, $Cu_6As_4S_9$, from Lengenbach quarry, Binn valley, Switzerland: Description and re-investigation of the crystal structure. *Canadian Mineralogist*, 51, 851-860.
149. **L. Bindi**, P.J. Steinhardt (2014) Natural Quasicrystals. *2014 McGraw-Hill Yearbook of Science & Technology*, 242-244.
150. P. Bonazzi, G.O. Lepore, **L. Bindi**, C. Chopin, T. Husdal, O. Medenbach (2014) Perbøeite-(Ce) and alnaperbøeite-(Ce), two new members of the epidote - törnebohmite polysomatic series: chemistry, structure, dehydrogenation and clue for a sodian epidote end-member. *American Mineralogist*, 99, 157-169.
151. R. Avanzinelli, E. Braschi, S. Marchionni, **L. Bindi** (2014) Mantle melting in within-plate continental settings: Sr-Nd-Pb and U-series isotope constraints in alkali basalts from the Sicily Channel (Pantelleria and Linosa Islands, Southern Italy). *Lithos*, 188, 113-129.
152. E. Bykova, A.V. Bobrov, E.A. Sirotkina, **L. Bindi**, S.V. Ovsyannikov, L.S. Dubrovinsky, Y.A. Litvin (2014) X-ray single-crystal and Raman study of

knorringite, $Mg_3(Cr_{1.58}Mg_{0.21}Si_{0.21})Si_3O_{12}$, synthesized at 16 GPa and 1600 °C. *Physics and Chemistry of Minerals*, 41, 267-272.

153. A.V. Bobrov, Y.A. Litvin, A.V. Kuzyura, A.M. Dymshits, T. Jeffries, **L. Bindi** (2014) Partitioning of trace elements between Na-bearing majoritic garnet and melt at 8.5 GPa and 1500-1900 °C. *Lithos*, 189, 159-166.
154. **L. Bindi**, P.J. Steinhardt (2014) The quest for forbidden crystals. *Mineralogical Magazine*, 78, 467-482.
155. **L. Bindi**, F. Nestola, E. Makovicky, A. Guastoni, L. De Battisti (2014) Tl-bearing sulphosalts from Lengenbach quarry, Binn Valley, Switzerland: philrothite, $TlAs_3S_5$. *Mineralogical Magazine*, 78, 1-9.
156. C. Biagioni, P. Orlandi, M. Pasero, F. Nestola, **L. Bindi** (2014) Mapiquiroite, $(Sr,Pb)(U,Y)Fe_2(Ti,Fe^{3+})_{18}O_{38}$, a new member of the crichtonite group from Apuan Alps, Tuscany, Italy. *European Journal of Mineralogy*, 26, 427-437.
157. L.S. Hollister, **L. Bindi**, N. Yao, G.R. Poirier, C.L. Andronicos, G. MacPherson, C. Lin, V.V. Distler, M.P. Eddy, A. Kostin, V. Kryachko, W.M. Steinhardt, M. Yudovskaya, J.M. Eiler, Y. Guan, J.J. Clarke, P.J. Steinhardt (2014) Impact-induced shock and the formation of natural quasicrystals in the early Solar system. *Nature Communications*, 5, 4040.
158. **L. Bindi**, E. Sirotkina, A.V. Bobrov, T. Irifune (2014) Chromium solubility in perovskite at high pressure: The structure of $(Mg_{1-x}Cr_x)(Si_{1-x}Cr_x)O_3$ (with $x = 0.07$) synthesized at 23 GPa and 1600 °C. *American Mineralogist*, 99, 866-869.
159. **L. Bindi**, E. Sirotkina, A.V. Bobrov, T. Irifune (2014) X-ray single-crystal structural characterization of $MgCr_2O_4$, a post-spinel phase synthesized at 23 GPa and 1600 °C. *Journal of Physics and Chemistry of Solids*, 75, 638-641.
160. C. Biagioni, E. Bonaccorsi, Y. Moëlo, P. Orlandi, **L. Bindi**, M. D'Orazio, S. Vezzoni (2014) Mercury-arsenic sulfosalts from Apuan Alps (Tuscany, Italy). III. Arsiccioite, $AgHg_2TlAs_2S_6$, a new mineral from the Monte Arsiccio mine: occurrence, crystal structure, and crystal chemistry of the routhierite isotypic series. *Mineralogical Magazine*, 78, 101-117.
161. **L. Bindi**, P. Bonazzi, M. Zoppi, P.G. Spry (2014) Chemical variability in wakabayashilite: a real feature or an analytical artifact? *Mineralogical Magazine*, 78, 693-702.
162. **L. Bindi**, E. Sirotkina, A.V. Bobrov, T. Irifune (2014) Chromium solubility in $MgSiO_3$ ilmenite at high pressure. *Physics and Chemistry of Minerals*, 41, 519-526.
163. T. Malcherek, **L. Bindi**, M. Dini, M.R. Ghiara, A. Molina Donoso, F. Nestola, M. Rossi, J. Schlüter (2014) Tondiite, $Cu_3Mg(OH)_6Cl_2$, the Mg-analogue of herbertsmithite. *Mineralogical Magazine*, 78, 583-590.
164. P. Orlandi, C. Biagioni, **L. Bindi**, F. Nestola (2014) Ichnusaite, $Th(MoO_4)_2 \cdot 3H_2O$, the first natural thorium molybdate: occurrence, description, and crystal structure. *American Mineralogist*, 99, 2089-2094.
165. C. Biagioni, P. Orlandi, Y. Moëlo, **L. Bindi** (2014) Lead-antimony sulfosalts from Tuscany (Italy). XVI. Carducciite, $(AgSb)Pb_6(As,Sb)_8S_{20}$, a new Sb-rich isotype of rathite from the Pollone mine, Valdicastello Carducci: occurrence and crystal structure. *Mineralogical Magazine*, 78, 1775-1793.
166. **L. Bindi**, C. Biagioni, L. Ceccantini, M. Batoni, S. Menchetti (2014) Coquandite, $Sb_{6+x}O_{8+x}(SO_4)(OH)_x \cdot (H_2O)_{1-x}$ ($x = 0.3$), from the Cetine mine, Tuscany, Italy: crystal structure and revision of the chemical formula. *Mineralogical Magazine*, 78, 871-888.

167. **L. Bindi**, M. Tredoux, F. Zaccarini, D.E. Miller, G. Garuti (2014) Non-stoichiometric nickel arsenides in nature: the structure of orcelite, $Ni_{5-x}As_2$ (x = 0.25), from the Bon Accord oxide body, South Africa. *Journal of Alloys and Compounds*, 601, 175-178.
168. A. Garavelli, D. Pinto, D. Mitolo, **L. Bindi** (2014) Leguernite, $Bi_{12.67}O_{14}(SO_4)_5$, a new Bi-oxysulfate from the fumarole deposit of "La Fossa" crater, Vulcano, Aeolian Islands, Italy. *Mineralogical Magazine*, 78, 1629-1645.
169. F. Zaccarini, **L. Bindi**, G. Garuti, J.A. Proenza (2014) Rhutenium and magnetite intergrowths from the Loma Peguera chromitite, Dominican Republic, and relevance to the debate over the existence of platinum-group element oxides and hydroxides. *Canadian Mineralogist*, 52, 617-624.
170. V. Stagno, **L. Bindi**, Y. Shibazaki, Y. Tange, Y. Higo, H.-K. Mao, P. Steinhardt, Y. Fei (2014) Icosahedral AlCuFe quasicrystal at high pressure and high temperature and its implications for the stability of icosahedrite. *Scientific Reports*, 4, 5869.
171. P. Bonazzi, **L. Bindi** (2014) Determination of the tegengrenite superstructure: another case of tetrahedral Mn^{3+} in spinel-type minerals? *Mineralogical Magazine*, 79, 425-436.
172. C. Biagioni, **L. Bindi**, F. Zaccarini (2014) Crystal chemistry of mercury sulfosalts – Galkhaite, $Cs_{1-x}(Hg_{5+x}Cu_{1-x})As_4S_{12}$ ($x \approx 0$): crystal structure and revision of the chemical formula. *Canadian Mineralogist*, 52, 873-882.
173. **L. Bindi**, N. Yao, C. Lin, L.S. Hollister, G.J. MacPherson, G.R. Poirier, C.L. Andronicos, V.V. Distler, M.P. Eddy, A. Kostin, V. Kryachko, W.M. Steinhardt, M. Yudovskaya (2014) Steinhardtite, a new body-centered-cubic allotropic form of aluminum from the Khatyrka CV3 carbonaceous chondrite. *American Mineralogist*, 99, 2433-2436.
174. **L. Bindi**, W.W. Pinch (2014) Cameronite, $Cu_{5-x}(Cu,Ag)_{3+x}Te_{10}$ (x = 0.43), from the Good Hope mine, Vulcan, Colorado: crystal structure and revision of the chemical formula. *Canadian Mineralogist*, 52, 423-432.
175. **L. Bindi**, M. Nishi, J. Tsuchiya, T. Irifune (2014) Crystal chemistry of dense hydrous magnesium silicates: The structure of Phase H, $MgSiH_2O_4$ synthesized at 45 GPa and 1000 °C. *American Mineralogist*, 99, 1802-1805.
176. P. Orlandi, C. Biagioni, **L. Bindi**, S. Merlino (2015) Crystal chemistry of actinide molybdates: Nuragheite, $Th(MoO_4)_2 \cdot H_2O$, the second natural thorium molybdate and its relationships to ichnusaite and synthetic $Th(MoO_4)_2$. *American Mineralogist*, 100, 267-273.
177. G.O. Lepore, **L. Bindi**, A. Zanetti, M.E. Ciriotti, O. Medenbach, P. Bonazzi (2015) Balestraite, $KLi_2VSi_4O_{10}O_2$, the first member of the mica supergroup with octahedral V^{5+}. *American Mineralogist*, 100, 608-614.
178. **L. Bindi**, G. Pratesi, M. Muniz-Miranda, M. Zoppi, L. Chelazzi, G.O. Lepore, S. Menchetti (2015) From ancient pigments to modern optoelectronic applications of arsenic sulfides: Bonazziite, the natural analogue of β-As_4S_4 from Khaidarkan deposit, Kyrgyzstan. *Mineralogical Magazine*, 79, 121-131.
179. **L. Bindi**, A. Christy, S. Mills, M.E. Ciriotti, E. Bittarello (2015) New compositional and structural data validate the status of jamborite. *Canadian Mineralogist*, 53, 791-802.

180. E. Sirotkina, A.V. Bobrov, **L. Bindi**, T. Irifune (2015) Phase relations and formation of chromium-rich phases in the system $Mg_4Si_4O_{12}$-$Mg_3Cr_2Si_3O_{12}$ at 10-24 GPa and 1,600°C. *Contributions to Mineralogy and Petrology*, 169, 1-14.
181. **L. Bindi** (2014) Chemical and structural characterization of henryite, $(Cu,Ag)_{3+x}Te_2$ ($x \approx 0.40$): a new structure type in the (Ag)-Cu-Te system. *Solid State Sciences*, 38, 108-111.
182. **L. Bindi**, F. Nestola, S. Graeser, P. Tropper, T. Raber (2015) Eckerite, Ag_2CuAsS_3, a new Cu-bearing sulphosalt from Lengenbach quarry, Binn valley, Switzerland: description and crystal structure. *Mineralogical Magazine*, 79, 687-694.
183. **L. Bindi**, C. Biagioni, T. Raber, P. Roth, F. Nestola (2015) Ralphcannonite, $AgZn_2TlAs_2S_6$, a new mineral of the routhierite isotypic series from Lengenbach, Binn Valley, Switzerland. *Mineralogical Magazine*, 79, 1089-1098.
184. **L. Bindi**, E. Makovicky (2015) Crystal structure and chemistry of natural kutinaite from Černý Důl, Krkonoše, Czech Republic. *Mineralogical Magazine*, 79, 1099-1109.
185. **L. Bindi**, N. Yao, C. Lin, L.S. Hollister, C.L. Andronicos, V.V. Distler, M.P. Eddy, A. Kostin, V. Kryachko, G.J. MacPherson, W.M. Steinhardt, M. Yudovskaya, P.J. Steinhardt (2015) Natural quasicrystal with decagonal symmetry. *Scientific Reports*, 5, 9111.
186. **L. Bindi**, C.J. Stanley, P.G. Spry (2015) New structural data reveal benleonardite to be a member of the pearceite-polybasite group. *Mineralogical Magazine*, 79, 1213-1221.
187. **L. Bindi**, M.A. Cooper, A.M. McDonald (2015) Twinning and disorder in the crystal structure of kurilite, Ag_8Te_3Se: toward a new fast ionic conductor? *Canadian Mineralogist*, 53, 159-168.
188. **L. Bindi**, C.J. Stanley, P.G. Spry (2015) Cervelleite, Ag_4TeS: solution and description of the crystal structure. *Mineralogy and Petrology*, 109, 413-419.
189. **L. Bindi**, E. Sirotkina, A.V. Bobrov, T. Irifune (2015) Structural and chemical characterization of $Mg[(Cr,Mg)(Si,Mg)]O_4$, a new post-spinel phase with six-fold coordinated silicon. *American Mineralogist*, 100, 1633-1636.
190. **L. Bindi**, C. Biagioni, B. Martini, A. Salvetti, G. Dalla Fontana, M. Taronna, M.E. Ciriotti (2015) Tavagnascoite, $Bi_4O_4(SO_4)(OH)_2$, a new oxyhydroxy bismuth sulfate related to klebelsbergite. *Mineralogical Magazine*, 80, 647-657.
191. **L. Bindi**, O.G. Safonov, D.A. Zedgenizov (2015) Merwinite-structured phases as a potential host of alkalis in the upper mantle. *Contributions to Mineralogy and Petrology*, 170, 14 (1-11).
192. D. Pinto, A. Garavelli, **L. Bindi** (2015) Fluorite-related one-dimensional units in natural bismuth oxysulfates: the crystal structures of $Bi_{14}O_{16}(SO_4)_5$ and $Bi_{30}O_{33}(SO_4)_9(AsO_4)_2$. *Acta Crystallographica B*, 71, 514-523.
193. V. Stagno, **L. Bindi**, C. Park, S. Tkachev, V. Prakapenka, H.-K. Mao, R.J. Hemley, P.J. Steinhardt, Y. Fei (2015) Quasicrystals at extreme conditions: The role of pressure in stabilizing icosahedral $Al_{63}Cu_{24}Fe_{13}$ at high temperature. *American Mineralogist*, 100, 2412-2418.
194. **L. Bindi**, N. Yao, C. Lin, L.S. Hollister, C.L. Andronicos, V.V. Distler, M.P. Eddy, A. Kostin, V. Kryachko, G.J. MacPherson, W.M. Steinhardt, M. Yudovskaya, P.J. Steinhardt (2015) Decagonite, $Al_{71}Ni_{24}Fe_5$, a quasicrystal with decagonal symmetry from the Khatyrka CV3 carbonaceous chondrite. *American Mineralogist*, 100, 2340-2343.

195. **L. Bindi**, F.N. Keutsch, D. Topa (2015) How much copper can the pearceite structure sustain? The case of cupropearceite from Tsumeb, Namibia. *Periodico di Mineralogia*, 84, 341-350.
196. **L. Bindi**, M. Nishi, T. Irifune (2015) Partition of Al between Phase D and Phase H at high pressure: Results from a simultaneous structure refinement of the two phases coexisting in an unique grain. *American Mineralogist*, 100, 1637-1640.
197. C. Biagioni, **L. Bindi**, F. Nestola, R. Cannon, P. Roth, T. Raber (2016) Ferrostalderite, $CuFe_2TlAs_2S_6$, a new member of the routhierite new mineral fromì Lengenbach, Switzerland: occurrence, crystal structure, and emphasis on the role of iron in sulfosalts. *Mineralogical Magazine*, 80, 175-186.
198. F. Zaccarini, **L. Bindi**, E. Pushkarev, G. Garuti, R.J. Bakker (2016) Multi-analytical characterization of minerals of the bowieite-kashinite series from Niznhy-Tagil complex, Urals (Russia) and comparison with worldwide occurrences. *Canadian Mineralogist*, 54, 461-473.
199. P. Bonazzi, G.O. Lepore, **L. Bindi** (2016) Molecular versus layered structure in arsenic sulphides: The case of duranusite, As_4S. *European Journal of Mineralogy*, 28, 147-151.
200. **L. Bindi**, E. Sirotkina, A.V. Bobrov, F. Nestola, T. Irifune (2016) Chromium solubility in anhydrous Phase B. *Physics and Chemistry of Minerals*, 43, 103-110.
201. **L. Bindi**, C. Biagioni, B, Martini, A. Salvetti (2016) Ciriottiite, $Cu(Cu,Ag)_3Pb_{19}(Sb,As)_{22}(As_2)S_{56}$, the Cu-Analogue of Sterryite from the Tavagnasco Mining District, Piedmont, Italy. *Minerals*, **6**, 8.
202. H-J. Förster, **L. Bindi**, C.J. Stanley (2016) Composition and crystal structure of grundmannite, $CuBiSe_2$, the Se-analogue of emplectite, a new mineral from the El Dragón mine, Potosí, Bolivia. *European Journal of Mineralogy*, 28, 467-477.
203. **L. Bindi**, C.J. Stanley, Y.V. Seryotkin, V.V. Bakakin, G.A. Pal'yanova, K.A. Kokh (2016) The crystal structure of uytenbogaardtite, Ag_3AuS_2, and its relationships with gold and silver sulfides-selenides. *Mineralogical Magazine*, 80, 1031-1040.
204. **L. Bindi**, A. Tamarova, A.V. Bobrov, E.A. Sirotkina, O. Tschauner, M.J. Walter, T. Irifune (2016) Incorporation of high amounts of Na in ringwoodite: Possible implications for transport of alkali into lower mantle. *American Mineralogist*, 101, 483-486.
205. G.O. Lepore, **L. Bindi**, F. Di Benedetto, E. Mugnaioli, C. Viti, A. Zanetti, M.E. Ciriotti, P. Bonazzi (2016) A multimethodic approach for the characterization of manganiceladonite, a new member of the celadonite family from Cerchiara mine, Eastern Liguria, Italy. *Mineralogical Magazine*, 81, 167-173.
206. V.M. Dekov, O. Rouxel, K. Kouzmanov, **L. Bindi**, D. Asael, Y. Fouquet, J. Etoubleau, G. Burgaud, M. Wälle (2016) Enargite-luzonite hydrothermal vents in Manus Back-Arc Basin: Submarine analogues of high-sulfidation epithermal mineralization. *Chemical Geology*, 439, 36-57.
207. P.D. Asimow, C. Lin, **L. Bindi**, C. Ma, O. Tschauner, L.S. Hollister, P.J. Steinhardt (2016) Shock synthesis of quasicrystals with implications for their origin in asteroid collisions. *PNAS*, 113, 7077-7081.
208. **L. Bindi**, H.-J. Förster, G. Grundmann, F.N. Keutsch, C.J. Stanley (2016) Petříčekite, $CuSe_2$, a new member of the marcasite group from the Předbořice deposit, Central Bohemia Region, Czech Republic. *Minerals*, 6(2), 33.
209. J.A. Jaszczak, M.S. Rumsey, **L. Bindi**, S.A. Hackney, M.A. Wise, C.J. Stanley, J. Spratt (2016) Merelaniite, $Mo_4Pb_4VSbS_{15}$, a new molybdenum-essential member

of the cylindrite group, from the Merelani tanzanite deposit, Lelatema Mountains, Manyara Region, Tanzania. *Minerals*, 6, 115.

210. **L. Bindi**, C. Lin, C. Ma, P.J. Steinhardt (2016) Collisions in outer space produced an icosahedral phase in the Khatyrka meteorite never observed previously in the laboratory. *Scientific Reports*, 6, 38117.
211. E.A. Sirotkina, A.V. Bobrov, A.V. Spivak, **L. Bindi**, D.Yu. Pushcharovsky (2016) X-ray single-crystal and Raman study of $(Na_{0.86}Mg_{0.14})(Mg_{0.57}Ti_{0.43})Si_2O_6$, a new pyroxene synthesized at 7 GPa and 1,700 °C. *Physics and Chemistry of Minerals*, 43, 731-738.
212. **L. Bindi**, W.H. Paar (2016) Donharrisite, Ni_3HgS_3: Crystal structure and revision of the chemical formula. *Journal of Alloys and Compounds*, 682, 248-253.
213. G.O. Lepore, **L. Bindi**, G. Pedrazzi, S. Conticelli, P. Bonazzi (2017) Structural and chemical variations in phlogopites from lamproitic rocks of the Western Mediterranean Region. *Lithos*, 286-287, 191-205.
214. H.-J. Förster, **L. Bindi**, C.J. Stanley, G. Grundmann (2017) Hansblockite, $(Cu,Hg)(Bi,Pb)Se_2$, the monoclinic polymorph of grundmannite: a new mineral from the El Dragón mine (Bolivia). *Mineralogical Magazine*, 81, 629-640.
215. **L. Bindi**, F.N. Keutsch, M. Morana, F. Zaccarini (2017) Spryite, $Ag_8(As^{3+}_{0.5}As^{5+}_{0.5})S_6$: structure determination and inferred absence of superionic conduction of the first As^{3+}-bearing argyrodite. *Physics and Chemistry of Minerals*, 44, 75-82.
216. C. Biagioni, **L. Bindi** (2017) Ordered distribution of Cu and Ag in the crystal structure of balkanite, $Cu_9Ag_5HgS_8$. *European Journal of Mineralogy*, 29, 279-285.
217. M.D. Welch, **L. Bindi**, V. Petricek, J. Plasil (2016) Vacancy pairing and superstructure in the high-pressure silicate $K_{1.5}Mg_2Si_2O_7H_{0.5}$: a new potential host for potassium in the deep Earth. *Acta Crystallographica*, B72, 822-827.
218. **L. Bindi**, E. Sirotkina, A.V. Bobrov, M.J. Walter, D. Pushcharovsky, T. Irifune (2017) Bridgmanite-like crystal structure in the novel Ti-rich phase synthesized at transition zone condition. *American Mineralogist*, 102, 227-230.
219. E. Sirotkina, A.V. Bobrov, **L. Bindi**, T. Irifune (2017) Chromium-bearing phases in the Earth's mantle: Evidence from experiments in the MgO-SiO_2-Cr_2O_3 system at 10–24 GPa and 1600 °C. *American Mineralogist*, 103, 151-160.
220. **L. Bindi**, H. Putz, W.H. Paar, C.J. Stanley (2017) Omariniite, $Cu_8Fe_2ZnGe_2S_{12}$, the germanium-analogue of stannoidite, a new mineral species from Capitillas, Argentina. *Mineralogical Magazine*, 81, 1151-1159.
221. C. Lin, L.S. Hollister, G.J. MacPherson, **L. Bindi**, C. Ma, C.L. Andronicos, P.J. Steinhardt (2017) Evidence of redox reaction in the quasicrystal-bearing Khatyrka meteorite reveals multi-stage formation process. *Scientific Reports*, 7, 1637.
222. H.-J. Förster, **L. Bindi**, G. Grundmann, C.J. Stanley (2016) Quijarroite, $Cu_6HgPb_2Bi_4Se_{12}$, a new selenide from the El Dragón mine, Bolivia. *Minerals*, 6, 123.
223. C. Ma, C. Lin, **L. Bindi**, P.J. Steinhardt (2017) Hollisterite (Al_3Fe), kryachkoite $(Al,Cu)_6(Fe,Cu)$, and stolperite (AlCu): Three new minerals from the Khatyrka CV3 carbonaceous chondrite. *American Mineralogist*, 102, 690-693.
224. **L. Bindi**, W. Paar (2017) Jaszczakite, $[(Bi,Pb)_3S_3][AuS_2]$, a new mineral species from Nagybörzsöny, Hungary. *European Journal of Mineralogy*, 29, 673-677.

225. **L. Bindi**, E. Sirotkina, A.V. Bobrov, D. Pushcharovsky, T. Irifune (2017) Discovery of $MgTiSi_2O_7$: a new high-pressure silicate with weberite structure synthesized at transition zone conditions. *Physics and Chemistry of Minerals*, 44, 419-424.
226. N. Meisser, P. Roth, F. Nestola, C. Biagioni, **L. Bindi**, M. Robyr (2017) Richardsollyite, $TlPbAsS_3$, a new sulfosalt from the Lengenbach quarry, Binn Valley, Switzerland. *European Journal of Mineralogy*, 29, 679-688.
227. S. Menchetti, **L. Bindi**, D. Belakovskiy, F. Zaccarini (2017) Structural, chemical and spectroscopic re-examination of type uklonskovite leads to its redefinition. *Mineralogical Magazine*, 81, 1397-1404.
228. **L. Bindi**, M. Chen, X. Xie (2017) Discovery of the Fe-analogue of akimotoite from the shocked Suizhou L6 chondrite. *Scientific Reports*, 7, 42674.
229. **L. Bindi**, V. Petricek, C. Biagioni, J. Plasil, Y. Moëlo (2017) Could incommensurability in sulfosalts be more common than thought? The case of meneghinite, $CuPb_{13}Sb_7S_{24}$. *Acta Crystallographica*, B73, 369-376.
230. D. Holtstam, **L. Bindi**, U. Hålenius, U.B. Andersson (2017) Delhuyarite-(Ce) – $Ce_4Mg(Fe^{3+}{}_2W)_{\Sigma 3}\square(Si_2O_7)_2O_6(OH)_2$ – a new mineral related to the chevkinite group, from the Nya Bastnäs Fe-Cu-REE deposit, Sweden. *European Journal of Mineralogy*, 29, 897-905.
231. C. Hejny, **L. Bindi** (2017) Low-temperature behaviour of $K_2Sc[Si_2O_6]F$: determination of the lock-in phase and its relationships with fresnoite- and melilite-type compounds. *Acta Crystallographica*, B73, 923-930.
232. D. Holtstam, **L. Bindi**, U. Hålenius, U. Kolitsch, J. Mansfeld (2017) Ulfanderssonite-(Ce), a new Cl-bearing REE silicate mineral species from the Malmkärra mine, Norberg, Sweden. *European Journal of Mineralogy*, 29, 1015-1026.
233. V. Stagno, **L. Bindi**, P.J. Steinhardt, Y. Fei (2017) Phase equilibria in the nominally $Al_{65}Cu_{23}Fe_{12}$ system at 3, 5 and 21 GPa: Implications for the quasicrystal-bearing Khatyrka meteorite. *Physics of the Earth and Planetary Interiors*, 271, 47-56.
234. J. Oppenheim, C. Ma, J. Hu, **L. Bindi**, P.J. Steinhardt, P.D. Asimow (2017) Shock synthesis of five-component icosahedral quasicrystals. *Scientific Reports*, 7, 15629.
235. J. Oppenheim, C. Ma, J. Hu, **L. Bindi**, P.J. Steinhardt, P.D. Asimow (2017) Shock synthesis of decagonal quasicrystals. *Scientific Reports*, 7, 15628.
236. E. Sirotkina, **L. Bindi**, A.V. Bobrov, A. Tamarova, D. Pushcharovsky, T. Irifune (2018) X-ray single-crystal structural characterization of Na_2MgSiO_4 with cristobalite-type structure synthesised at 22 GPa and 1800 °C. *European Journal of Mineralogy*, 30, 485-489.
237. **L. Bindi**, P.J. Steinhardt (2018) How impossible crystal came to Earth: A short history. *Rocks and Minerals*, 93, 50-57.
238. M.M.M. Meier, **L. Bindi**, P.R. Heck, A.I. Neander, N.H. Spring, M.E.I. Riebe, C. Maden, H. Baur, P.J. Steinhardt, R. Wieler, H. Busemann (2018) Cosmic history and a candidate parent asteroid for the quasicrystal-bearing meteorite Khatyrka. *Earth and Planetary Science Letters*, 490, 122-131.
239. E. Sirotkina, **L. Bindi**, A.V. Bobrov, S.M. Aksenov, T. Irifune (2018) Synthesis and crystal structure of chromium-bearing anhydrous wadsleyite. *Physics and Chemistry of Minerals*, 45, 361-366.
240. **L. Bindi**, X. Xie (2018) Shenzhuangite, $NiFeS_2$, a new member of the chalcopyrite group from the Suizhou L6 chondrite. *European Journal of Mineralogy*, 30, 165-169.

241. **L. Bindi**, F.N. Keutsch (2018) Old defined minerals with complex, still unresolved structures: The case of stützite, $Ag_{5-x}Te_3$. *Zeitschrift für Kristallographie*, 233, 247-253.
242. C. Biagioni, **L. Bindi**, Y. Moëlo (2018) Another step toward the solution of the real structure of zinkenite. *Zeitschrift für Kristallographie*, 233, 269-277.
243. **L. Bindi**, D. Holtstam, G. Fantappiè, U.B. Andersson, P. Bonazzi (2018) Ferriperbøeite-(Ce),$[CaCe_3]_{\Sigma=4}[Fe^{3+}Al_2Fe^{2+}]_{\Sigma=4}[Si_2O_7][SiO_4]_3O(OH)_2$, a new member of the polysomatic epidote-törnebohmite series from the Nya Bastnäs Fe-Cu-REE deposit, Sweden. *European Journal of Mineralogy*, 30, 537-544.
244. **L. Bindi**, J. Plasil (2018) Preface of the special issue "*Deciphering the complexity of mineral structures*". *Zeitschrift für Kristallographie*, 233, 153-154.
245. Dekov, V., Garbe-Schönberg, D., Kamenov, G.D., Guéguen, B., Bayon, G., **L. Bindi**, Asael, D., Fouquet, Y. (2018) Redox changes in a seafloor hydrothermal system recorded in hematite-chalcopyrite chimneys. *Chemical Geology*, 483, 351-371.
246. **L. Bindi**, W.L. Griffin, W. Panero, E.A. Sirotkina, A. Bobrov, T. Irifune (2018) Synthesis of inverse ringwoodite sheds light on the subduction history of Tibetan ophiolites. *Scientific Reports*, 8, 5457.
247. **L. Bindi**, W.H. Paar, G.O. Lepore (2018) Montbrayite, $(Au,Ag,Sb,Pb,Bi)_{23}(Te,Sb,Pb,Bi)_{38}$, from the Robb-Montbray mine, Montbray, Quebec: Crystal structure and revision of the chemical formula. *Canadian Mineralogist*, 56, 129-142.
248. **L. Bindi**, R.F. Martin (2018) Edgarite, $FeNb_3S_6$, from the Khibina alkaline complex, Russia: Solution of the crystal structure. *Canadian Mineralogist*, 56, 259-264.
249. **L. Bindi**, C. Biagioni, F.N. Keutsch (2018) Oyonite, $Ag_3Mn_2Pb_4Sb_7As_4S_{24}$, a new member of the lillianite homologous series from the Uchucchacua base-metal deposit, Oyon district, Peru. *Minerals*, 8, 192.
250. E.A. Matrosova, A.V. Bobrov, **L. Bindi**, T. Irifune (2018) Phase Relations in the Model System SiO_2–MgO–Cr_2O_3: Evidence from the Results of Experiments in Petrologically Significant Sections at 12–24 GPa and 1600°C. *Petrology*, 26, 588-598.
251. H.-J. Förster, **L. Bindi**, G. Grundmann, C.J. Stanley (2018) Cerromojonite, $CuPbBiSe_3$, from El Dragón (Bolivia): a new member of the bournonite group. *Minerals*, 8, 420-434.
252. C. Andronicos, **L. Bindi**, V.V. Distler, L.S. Hollister, C. Lin, G.J. MacPherson, P.J. Steinhardt, M. Yudovskaya (2018) Comment on "Composition and origin of holotype Al-Cu-Zn minerals in relation to quasicrystals in the Khatyrka meteorite" by M. Ivanova et al. (2017) *Meteoritics and Planetary Sciences*, 53, 2430-2440.
253. **L. Bindi**, W.H. Paar, P. Leblhuber (2018) Gortdrumite, $Cu_{24}Fe_2Hg_9S_{23}$, from Leogang, Salzburg, Austria: crystal structure and revision of the chemical formula. *Mineralogical Magazine*, 82, 853-861.
254. D. Atencio, M.B. Andrade, **L. Bindi**, P. Bonazzi, M. Zoppi, C.J. Stanley, R. Kristiansen (2018) Kenoplumbomicrolite, $(Pb,\bullet)_2Ta_2O_6[\bullet,(OH),O]$: a complete characterization of the mineral from Ploskaya, Kola Peninsula, Russia, leading to a new mineral and mineral species. *Mineralogical Magazine*, 82, 1049-1055.

255. **L. Bindi**, F. Zaccarini, D.E. Miller, G. Garuti (2018) Tredouxite ($NiSb_2O_6$): another new Ni-phase from Bon Accord oxide body, South Africa. *European Journal of Mineralogy*, 30, 393-398.
256. **L. Bindi**, F.N. Keutsch, G.O. Lepore (2018) Structural and chemical study of weishanite, (Au,Ag,Hg), from the Keystone mine, Colorado, U.S.A.. *Mineralogical Magazine*, 82, 1141-1145.
257. **L. Bindi**, J. Pham, P.J. Steinhardt (2018) Previously unknown quasicrystal periodic approximant found in space. *Scientific Reports*, 8, 16271.
258. **L. Bindi**, C. Biagioni (2018) A crystallographic excursion in the extraordinary world of minerals: The case of Cu- and Al-rich sulfosalts. *Acta Crystallographica*, B74, 527-538.
259. D. Zhai, **L. Bindi**, P.C. Voudouris, J. Liu, S.F. Tombros, K. Li (2019) Discovery of Se-rich canfieldite [$Ag_8Sn(S,Se)_6$] from the Shuangjianzishan Ag-Pb-Zn deposit, NE China: A multimethodic chemical and structural study. *Mineralogical Magazine*, 83, 419-426.
260. P. Bonazzi, D. Holtstam, **L. Bindi** (2019) Gatelite supergroup minerals: Recommended nomenclature and review. *European Journal of Mineralogy*, 31, 173-181.
261. S. Nazzareni, F. Nestola, V. Zanon, **L. Bindi**, E. Scricciolo, M. Petrelli, M. Zanatta, G. Mariotto, G. Giuli (2019) Discovery of moissanite in a peralkaline syenite from the Azores Islands. *Lithos*, 324-325, 68-73.
262. E.A. Matrosova, L. Ismailova, A.V. Bobrov, E. Bykova, M. Bykov, K. Glazyrin, S.M. Aksenov, **L. Bindi**, D.Yu. Pushcharovsky, S.V. Ovsyannikov, L. Dubrovinsky (2019) Compressibility of two Na-rich clinopyroxenes: A synchrotron single-crystal X-ray diffraction study. *American Mineralogist*, 104, 905-913.
263. C. Ma, O. Tschauner, **L. Bindi**, J.R Beckett, X. Xie (2019) A vacancy-rich, partially inverted spinelloid silicate, $(Mg,Fe,Si)_2(Si,\square)O_4$, as a major matrix phase in shock melt veins of the Tenham and Suizhou L6 chondrites. *Meteoritics & Planetary Sciences*, 54, 1907-1918.
264. **L. Bindi**, F. Cámara, W.L. Griffin, J-X. Huang, S.E.M. Gain, S.Y. O'Reilly (2019) Discovery of the first natural hydride. *American Mineralogist*, 104, 611-614.
265. W.L. Griffin, S.E.M. Gain, **L. Bindi**, V. Toledo, F. Cámara, M. Saunders, S.Y. O'Reilly (2019) Carmeltazite, $ZrAl_2Ti_4O_{11}$, a new mineral trapped in corundum from volcanic rocks of Mt Carmel, northern Israel. *Minerals*, 8, 601.
266. F. Camara, **L. Bindi**, A. Pagano, R. Pagano, S.E.M. Gain, W.L. Griffin (2019) Dellagiustaite: A novel natural spinel containing V^{2+}. *Minerals*, 9, 4.
267. P. Elliott, J. Plasil, V. Petricek, J. Cejka, **L. Bindi** (2019) Twinning and incommensurate modulation in baumoite, $Ba_{0.5}[(UO_2)_3O_8Mo_2(OH)_3](H_2O)_{\sim 3}$, the first natural Ba uranyl molybdate. *Mineralogical Magazine*, 83, 507-514.
268. A.Y. Barkov, **L. Bindi**, N. Tamura, G.I. Shvedov, B. Winkler, C.V. Stan, W. Morgenroth, R.F. Martin, F. Zaccarini, C.J. Stanley (2019) Ognitite, NiBiTe, a new mineral species, and cobaltian maucherite from the Ognit ultramafic complex, Eastern Sayans, Russia. *Mineralogical Magazine*, 83, 695-703.
269. **L. Bindi**, F.E. Brenker, F. Nestola, T.E. Koch, D.J. Prior, K. Lilly, A.N. Krot, M. Bizzarro, X. Xie (2019) Discovery of asimowite, the Fe-analog of wadsleyite, in shock-melted silicate droplets of the Suizhou L6 and the Quebrada Chimborazo 001 CB3.0 chondrites. *American Mineralogist*, 104, 775-778.

270. F. Zaccarini, E. Ifandi, V. Tsikouras, T. Grammatikopolous, G. Garuti, D. Mauro, **L. Bindi**, C. J. Stanley (2019) Occurrence of new phosphides and sulfide of Ni, Co, V, and Mo from chromitite of the Othrys ophiolite complex (Central Greece). *Periodico di Mineralogia*, 88, 307-324.
271. M. Morana, **L. Bindi** (2019) Spiridonovite, $(Cu_{1-x}Ag_x)_2Te$ ($x \approx 0.4$), a new telluride from the Good Hope mine, Vulcan, Colorado (U.S.A.). *Minerals*, 9, 194.
272. H.-J. Förster, C. Ma, G. Grundmann, **L. Bindi**, C.J. Stanley (2019) Nickeltyrrellite, $CuNi_2Se_4$, a new mineral of the spinel supergroup from El Dragón, Bolivia. *Canadian Mineralogist*, 57, 637-646.
273. A.E. Lanza, M. Gemmi, **L. Bindi**, E. Mugnaioli, W.H. Paar (2019) Daliranite, $PbHgAs_2S_5$: determination of the incommensurately modulated structure and revision of the chemical formula. *Acta Crystallographica*, **B75**, 711-716.
274. E.A. Matrosova, M.D. Welch, A.V. Bobrov, **L. Bindi**, D.Yu. Pushcharovsky, T. Irifune (2019) Incorporation of Ti into the crystal structures of the high-pressure dense silicates Anhydrous Phase B and Superhydrous Phase B. *Physics and Chemistry of Minerals*, 46, 909-920.
275. M. Goudjil, E. Gutiérrez-Puebla, P. Bonazzi, E. Lunedei, D. Mezaoui, **L. Bindi** (2019) Synthesis and crystal structure of a series of stoichiometric (*n*)-ITB molybdenum-bronze oxides containing trivalent arsenic. *Zeitschrift für Kristallographie*, 234, 569-579.
276. M. Piazzi, M. Morana, M. Coisson, F. Marone, M. Campione, **L. Bindi**, A. Jones, E. Ferrara, M. Alvaro (2019) Multi-analytical characterization of Fe-rich magnetic inclusions in diamonds. *Diamond & Related Materials*, 98, 107489.
277. C. Biagioni, **L. Bindi**, D. Mauro, U. Hålenius (2019) Crystal-chemistry of sulfates from Apuan Alps (Tuscany, Italy). V. Scordariite, $K_8(Fe^{3+}_{0.67}€_{0.33})[Fe^{3+}_3O(SO_4)_6(H_2O)_3]_2(H_2O)_{11}$, a new metavoltine-related mineral. *Minerals*, 9, 702.
278. C. Biagioni, **L. Bindi**, A.R. Kampf (2019) Crystal-chemistry of sulfates from Apuan Alps (Tuscany, Italy). VII. Magnanelliite, $K_3Fe^{3+}_2(SO_4)_4(OH)(H_2O)_2$, a new sulfate from the Monte Arsiccio mine. *Minerals*, 9, 779.
279. A. Karlsson, D. Holtstam, **L. Bindi**, P. Bonazzi, M. Konrad-Schmolke (2020) Adding complexity to the garnet supergroup: monteneveite, $Ca_3Sb^{5+}_2(Fe^{3+}_2Fe^{2+})O_{12}$, a new mineral from the Monteneve mine, Bolzano Province, Italy. *European Journal of Mineralogy*, 32, 77-87.
280. W.L. Griffin, S.E.M. Gain, **L. Bindi**, J. Shaw, M. Saunders, J-X. Huang, F. Cámara, V. Toledo, S.Y. O'Reilly (2020) Extreme reduction: Mantle-derived oxide xenoliths from a hydrogen-rich environment. *Lithos*, 358-359, 105404.
281. **L. Bindi**, S.-H. Shim, T.G. Sharp, X. Xie (2020) Evidence for the charge disproportionation of iron in extraterrestrial bridgmanite. *Science Advances*, 6, eaay7893.
282. **L. Bindi**, A. Bendeliani, A. Bobrov, E. Matrosova, T. Irifune (2020) Incorporation of Mg in Phase Egg, $AlSiO_3OH$: Toward a new polymorph of Phase H, $MgSiH_2O_4$, a carrier of water in the deep mantle. *American Mineralogist*, 105, 132-135.
283. **L Bindi**, C.J. Stanley (2020) Natural versus synthetic quasicrystals: Analogies and differences in the optical behaviour of icosahedral and decagonal quasicrystals. *Rendiconti dei Lincei (Scienze Fisiche e Naturali)*, 31, 9-17.
284. C. Biagioni, **L. Bindi**, D. Mauro, M. Pasero (2020) Crystal-chemistry of sulfates from Apuan Alps (Tuscany, Italy). IV. Giacovazzoite, $K_5Fe^{3+}_3O(SO_4)_6(H_2O)_9 \cdot H_2O$,

the natural analogue of the β-Maus's Salt and its dehydration product. *Physics and Chemistry of Minerals*, 47, 7.

285. A.A. Zolotarev, S.V. Krivovichev, F. Camara, **L. Bindi**, E.S. Zhitova, F. Hawthorne, E. Sokolova (2020) Extraordinary structural complexity of ilmajokite: a multilevel hierarchical framework structure of natural origin. *IUCrJ*, 7, https://doi.org/10.1107/S2052252519016622.
286. A. Pisanu, M. Coduri, M. Morana, Y.O. Ciftci, A. Rizzo, A. Listorti, M. Gaboardi, **L. Bindi**, V.I. E. Queloz, G. Grancini, L. Malavasi (2020) Exploring the role of halide mixing in lead-free BZA_2SnX_4 two dimensional hybrid perovskites. *Journal of Materials Chemistry A*, 8, 1875-1886.
287. E.A. Matrosova, A.V. Bobrov, **L. Bindi**, D.Yu. Pushcharovsky, T. Irifune (2020) Titanium-rich phases in the Earth's transition zone and lower mantle: Evidence from experiments in the system $MgO–SiO_2–TiO_2(±Al_2O_3)$ at 10–24 GPa and 1600 °C. *Lithos*, 366-367, 105539.
288. **L. Bindi**, F. Zaccarini, E. Ifandi, B. Tsikouras, C. Stanley, G. Garuti, D. Mauro (2020) Grammatikopoulosite, NiVP, a new phosphide from the chromitite of the Othrys ophiolite, Greece. *Minerals*, 10, 131.
289. **L. Bindi**, F. Zaccarini, P. Bonazzi, T. Grammatikopoulos, B. Tsikouras, C. Stanley, G. Garuti (2020) Eliopoulosite, V_7S_8, a new sulfide from the podiform chromitite of the Othrys ophiolite, Greece. *Minerals*, 10, 245.
290. J. Hu, P.D. Asimow, C. Ma, **L. Bindi** (2020) First synthesis of a unique icosahedral phase from the Khatyrka meteorite by shock recovery experiment. *IUCrJ*, **7**, 434-444.
291. D. Holtstam, **L. Bindi**, A. Karlsson, J. Langhof , T. Zack, P. Bonazzi, A. Persson (2020) Kesebolite-(Ce), $CeCa_2Mn(AsO_4)[SiO_3]_3$, a new REE-bearing arsenosilicate mineral from the Kesebol mine, Åmål, Västra Götaland, Sweden. *Minerals*, 10, 385.
292. **L. Bindi**, Y. Moëlo (2020) Biagioniite, Tl_2SbS_2, from the Hemlo gold deposit, Marathon, Ontario (Canada): occurrence and crystal structure. *Mineralogical Magazine*, 84, 390-397.
293. **L. Bindi**, J. Jaszczak (2020) Richardsite, Zn_2CuGaS_4, a new gallium-essential member of the stannite group from the gem mines near Merelani, Tanzania. *Minerals*, 10, 467.
294. E.A. Matrosova, A.V. Bobrov, A.P. Tamarova, L. Bindi, D.Yu. Pushcharovsky, T. Irifune (2020) Sodium Silicates at the Boundary between the Transition Zone and the Lower Mantle: Compositional and Structural Patterns. *Doklady Earth Sciences*, 491, 150-154.
295. W.L. Griffin, S.E.M. Gain, M. Saunders, **L. Bindi**, O. Alard, V. Toledo, S.Y. O'Reilly (2020) Parageneses of TiB_2 in corundum xenoliths from Mt Carmel, Israel: Siderophile behaviour of boron under reducing conditions. *American Mineralogist*, 105, 1609-1621.
296. C. Biagioni, F. Zaccarini, P. Roth, **L. Bindi** (2020) Progress in the knowledge of "ruby silvers": New structural and chemical data of pyrostilpnite, Ag_3SbS_3. *Mineralogical Magazine*, 84, 463-467.
297. **L. Bindi**, M.D. Welch, A. Bendeliani, A. Bobrov (2020) Si-rich Mg-sursassite $Mg_4Al_5Si_7O_{23}(OH)_5$ with octahedrally-coordinated Si: a new ultra-high-pressure hydrous phase. *American Mineralogist*, 105, 1432-1435.

298. **L. Bindi**, V. Dmitrienko, P.J. Steinhardt (2020) Are quasicrystals really so rare in the Universe? *American Mineralogist*, 105, 1121-1125.
299. F. Zaccarini, **L. Bindi**, B. Tsikouras, T. Grammatikopoulos, C.J. Stanley, G. Garuti (2020) Arsenotučekite, $Ni_{18}Sb_3AsS_{16}$, a new mineral from the Tsangli chromitites, Othrys ophiolite, Greece. *Mineralogy and Petrology*, 114, 435-442.
300. C. Anzolini, K. Marquardt, V. Stagno, **L. Bindi**, D.J. Frost, D.G. Pearson, J.W. Harris, R.J. Hemley, F. Nestola (2020) Evidence for complex iron oxides in the deep mantle from FeNi(Cu) inclusions in a super-deep diamond. *PNAS*, 117, 21088-21094.
301. **L. Bindi**, A.C. Roberts, Biagioni, C. (2020) The crystal structure of alstonite, $BaCa(CO_3)_2$: an extraordinary example of "hidden" complex twinning in large single crystals. *Mineralogical Magazine*, 84, 699-704.
302. N. Tomioka, **L. Bindi**, T. Okuchi, M. Miyahara, T. Iitaka, Z. Li, T. Kawatsu, X. Xie, N. Purevjav, R. Tani, Y. Kodama (2020) Poirierite, a dense metastable polymorph of magnesium iron silicate in shocked meteorites. *Communications Earth & Environment*, 2, 16.
303. **L. Bindi**, M. Nespolo, S. Krivovichev, G. Chapuis, C. Biagioni (2020) Producing highly complicated materials. Nature does it better. *Reports on Progress in Physics*, 83, 106501.
304. **L. Bindi**, A.C. Roberts (2020) Thunderbayite, $TlAg_3Au_3Sb_7S_6$, a new gold-bearing mineral from the Hemlo gold deposit, Marathon, Ontario, Canada. *Mineralogical Magazine*, 84, 805-812.
305. **L. Bindi**, F. Cámara, S. Gain, W.L. Griffin, J.-X. Huang, M. Saunders, V. Toledo (2020) Kishonite, VH_2, and oreillyite, Cr_2N, two new minerals from the corundum xenocrysts of Mt Carmel, Northern Israel. *Minerals*, 10, 1118.
306. **L. Bindi** (2021) Copper in coloradoite, HgTe: Actual state or analytical artifact? *Crystallography Reports*, 66, 29-32.
307. I. Buganski, **L. Bindi** (2021) Insight into the structure of decagonite – the extraterrestrial decagonal quasicrystal. *IUCrJ*, 8, 87-101.
308. D. Holtstam, **L. Bindi**, A. Karlsson, J. Söderhielm, A. Zetterqvist (2021) Muonionalustaite, $Ni_3(OH)_4Cl_2{\cdot}4H_2O$, a new mineral formed by terrestrial weathering of the Muonionalusta iron (IVA) meteorite, Pajala, Norrbotten, Sweden. *GFF*, 143, 1-7.
309. S.V. Krivovichev, **L. Bindi** (2021) Correspondence on "$K_2Sb(P_2O_7)F$: Cairo Pentagonal Layer with Bifunctional Genes Reveal Optical Performance". *Angewandte Chemie*, 60, 3854-3855.
310. C. Biagioni, **L. Bindi**, K. Momma, R. Miyawaki, Y. Matsushita, Y. Moëlo (2021) Determination of the crystal structure and redefinition of tsugaruite, $Pb_{28}As_{15}S_{50}Cl$, the first lead-arsenic chloro-sulfosalt. *Canadian Mineralogist*, 59, 125-137.
311. D. Holtstam, **L. Bindi**, P. Bonazzi, H.-J. Förster, U. Andersson (2021) Arrheniusite-(Ce),$CaMg[(Ce_7Y_3)Ca_5](SiO_4)_3(Si_3B_3O_{18})(AsO_4)(BO_3)F_{11}$, a new member of the vicanite group, from the Östanmossa mine, Norberg, Sweden. *Canadian Mineralogist*, 59, 177-189.
312. **L. Bindi**, M. Morana (2021) Twinning, superstructure and chemical ordering in spryite, $Ag_8(As^{3+}_{0.50}As^{5+}_{0.50})S_6$, at ultra-low temperature: An X-ray single-crystal study. *Minerals*, 11, 286.

313. S. Tommasini, **L. Bindi**, M. Petrelli, P.D. Asimow, P.J. Steinhardt (2021) Trace element conundrum of natural quasicrystals. *Earth and Space Chemistry*, 5, 676-689.
314. V. Stagno, **L. Bindi**, S. Takagi, A. Kyono (2021) Can quasicrystals survive in planetary collisions? *Progress in Earth and Planetary Science*, 8, 27.
315. W.L. Griffin, S.E.M. Gain, M. Saunders, F. Camara, **L. Bindi**, D. Spartà, V. Toledo, S.Y. O'Reilly (2021) Cr_2O_3 in corundum: Ultra-high contents under reducing conditions. *American Mineralogist*, 106, 1420-1437.
316. **L. Bindi**, W. Kolb, G.N. Eby, P.D. Asimow, T.C. Wallace, P.J. Steinhardt (2021) Accidental synthesis of a previously unknown quasicrystal in the first atomic bomb test. *PNAS*, 118, 22 e2101350118.
317. E.A. Matrosova, A.V. Bobrov, **L. Bindi**, D. Yu. Pushcharovsky (2021 Titanium Minerals and Their Assemblages in the Earth's Mantle: A Review of Natural and Experimental Data. *Geochemistry International*, 59, 725-742.
318. **L. Bindi**, R. Sinmyo, E. Bykova, S. V. Ovsyannikov, C. McCammon, I. Kupenko, L. Ismailova, L. Dubrovinsky, X. Xie (2021) Discovery of Elgoresyite, $(Mg,Fe)_5Si_2O_9$: Implications for Novel Iron-Magnesium Silicates in Rocky Planetary Interiors. *ACS Earth and Space Chemistry*, 5, 2124-2130.
319. L. Malavasi, **L. Bindi**, M. Coduri, F. De Angelis, F. Fracassi, M. Gaboardi, A. Listorti, A. Mahata, C. Milanese, M. Morana, P. Quadrelli, M. Boiocchi, M. Striccoli, R. Chiara (2021) Role of Spacer Cations and Structural Distortion in Two-Dimensional Germanium Halide Perovskites. *Journal of Materials Chemistry C*, 9, 9899-9906.
320. A.Y. Barkov, **L. Bindi**, N. Tamura, R.F. Martin, C. Ma, B. Winkler, G.I. Shvedov, W. Morgenroth (2021) Fleetite, $Cu_2RhIrSb_2$, a new species of platinum-group mineral from the miass placer zone, Southern Urals, Russia. *Canadian Mineralogist*, 59, 423-430.
321. A.Y. Barkov, **L. Bindi**, E.A. Juárez-Arellano, N. Tamura, G. Shvedov, C. Ma, R.F. Martin (2021) Unnamed $Pt(Cu_{0.67}Sn_{0.33})$ from the River Bolshoy Khailyk, western Sayans, Russia, and a review of related compounds and solid solutions. *Minerals*, 11, 1240.
322. M. Miyahara, N. Tomioka, **L. Bindi** (2021) High-pressure minerals of terrestrial and extraterrestrial materials by shock metamorphism. *Progress in Earth and Planetary Science*, 8, 59.
323. D. Yu. Pushcharovsky, D.V. Balitsky, **L. Bindi** (2021) The Importance of Crystals and Crystallography in Space Research Programs. *Crystallography Reports*, 66, 934-939.
324. P. Bonazzi, **L. Bindi** (2021) Structural and chemical characterization of dienerite, Ni_3As, and its revalidation as mineralogical species. *Canadian Mineralogist*, 59, 1887-1898.
325. A.M. McDonald, I.M. Kjarsgaard, L.J. Cabri, K.C. Ross, D.E. Ames, **L. Bindi**, D.J. Good (2021) Oberthürite, $Rh_3(Ni,Fe)_{32}S_{32}$ and torryweiserite, $Rh_5Ni_{10}S_{16}$, two new platinum-group minerals from Marathon Deposit, Coldwell, Ontario, Canada: Descriptions, crystal chemical, considerations and comments on the, geochemistry of rhodium. *Canadian Mineralogist*, 59, 1833-1863.
326. N. Solomatova, R. Caracas, **L. Bindi**, P.D. Asimow (2022) *Ab initio* study of the structure and relative stability of $MgSiO_4H_2$ polymorphs at high pressures and temperatures. *American Mineralogist*, 107, 781-789.

327. S. Tommasini, **L. Bindi**, L. Savia, M.F. Mangler, A. Orlando, C.M. Petrone (2022) Critical assessment of pressure estimates in volcanic plumbing systems: The case study of Popocatépetl volcano, Mexico. *Lithos*, 408-409, 106540.
328. **L. Bindi**, P.J. Steinhardt (2022) Quasicrystals and the birth of the Atomic Age. *Physics Today*, 75, 62-63.
329. D. Holtstam, H.-J. Förster, K. Gatedal, **L. Bindi**, A. Karlsson (2002) Garpenbergite, $Mn_6\square As^{5+}Sb^{5+}O_{10}(OH)_2$, a new mineral related to manganostibite, from the Garpenberg Zn−Pb−Ag deposit, Sweden. *Mineralogical Magazine*, 86, 1-8.
330. D. Holtstam, **L. Bindi** (2022) Hiärneite: crystal structure, chemical formula and classification. *Mineralogical Magazine*, 86, 314-318.
331. **L. Bindi**, R.T. Downs (2022) Ferrofettelite, $[Ag_6As_2S_7][Ag_{10}FeAs_2S_8]$, a new sulfosalt from the Glasberg quarry, Odenwald, Germany. *Mineralogical Magazine*, 86, 340-345.
332. C. Dionigi, M. Goudjil, G. Ruani, **L. Bindi** (2022) The Effect of Short Chain Carboxylic Acids as Additives on the Crystallization of Methylammonium Lead Triiodide (MAPI). *Inorganics*, 10, 201.
333. **L. Bindi**, A. Dasgupta, P. Mukherjee, J. Gao, X. Yang, J.A. Jaszczak (2022) Misfit-generated structural and optical anisotropies of the natural MoS_2-PbS van der Waals heterostructure merelaniite. *Physical Review Materials*, 6, 115202.
334. S. Margheri, **L. Bindi**, P. Bonazzi, D. Holtstam (2022) Structural and spectroscopic study of well-developed crystals of parahibbingite, β-$Fe_2(OH)_3Cl$, formed from terrestrial weathering of the Muonionalusta iron meteorite. *Mineralogical Magazine*, 86, 891-896.
335. A.A. Bendeliani, A.V. Bobrov, **L. Bindi**, N.N. Eremin (2022) Ti and Cr in High-Pressure Mica: Experimental Study and Application to the Mantle Assemblages. *Petrology*, 30, 157-173.
336. **L. Bindi**, M.A. Pasek, C. Ma, J. Hu, G. Cheng, N. Yao, P.D. Asimow, P.J. Steinhardt (2023) Electrical discharge triggers quasicrystal formation in an aeolian dune. *PNAS*, 120, e2215484119.
337. F. Nestola, M.E. Regier, R.W. Luth, D.G. Pearson, T. Stachel, C. McCammon, M D. Wenz, S.D. Jacobsen, C. Anzolini, N. Tomioka, **L. Bindi**, J.W. Harris (2023) Extreme redox variations in a superdeep diamond from a subducted slab. *Nature*, 613, 85-89.
338. A.V. Bobrov, A.P. Tamarova, **L. Bindi**, E.A. Matrosova, A.A. Bendeliani, L.N. Kogarko, T. Irifune (2023) Na-bearing bridgmanite: Synthesis, phase relations and application to the origin of alkaline melts in the uppermost lower mantle. *Lithos*, 444-445, 107101.
339. **L. Bindi**, T. Feng, M.A. Pasek (2023) Routes to reduction of phosphate by high-energy events. *Communications Earth & Environment*, 4, 70.
340. C. Pereti, K. Bernot, T. Guizouarn, F. Laufek, A. Vymazalova, **L. Bindi**, R. Sessoli, D. Fanelli (2023) From individual elements to macroscopic materials: In search of new superconductors via machine learning. *npj Computational Materials*, 9, 71.
341. **L. Bindi**, G. Parisi (2023) Quasicrystals: Fragments of history and future outlooks. *Rendiconti Lincei*, 34, 317-320.
342. **L. Bindi**, F.N. Keutsch, D. Topa, U. Kolitsch, M. Morana, K.T. Tait (2023) First occurrence of the *M*2*a*2*b*2*c* polytype of argentopolybasite, $[Ag_6Sb_2S_7][Ag_{10}S_4]$: Structural adjustments in the Cu-free member of the pearceite-polybasite group. *Mineralogical Magazine*, 87, 561-567.

343. M. Goudjil, G.O. Lepore, **L. Bindi**, E. Mugnaioli, T. Baroni, D. Mezaoui, P. Bonazzi (2023) Synthesis and characterization of $AsO[(W,Mo)O_3]_{13}$, a new (6)-ITB Intergrowth Tungsten Bronze. *Journal of Solid State Chemistry*, 322, 123987.
344. V.M. Dekov, K. Yasuda, G. Kamenov, K. Yasukawa, B. Guéguen, A. Kano, T. Yoshimura, T. Yamanaka, **L. Bindi**, T. Okumura, R.A. Koski, D. Asael, D. Araoka, Y. Kato (2023) Mn-carbonate deposition in a seafloor hydrothermal system (CLAM field, Iheya Ridge, Okinawa Trough): Insights from mineralogy, geochemistry and isotope studies. *Marine Geology*, 460, 107055.
345. **L. Bindi** (2023) Thunderstruck! a quasicrystal made by lightning. *The Sciencebreaker*, 9, 3. https://thesciencebreaker.org/breaks/earth-space/thunderstruck-a-quasicrystal-made-by-lightning.
346. L. Chicchi, **L. Bindi**, D. Fanelli, S. Tommasini (2023) Frontiers of thermobarometry: GAIA, a novel Deep Learning-based tool for volcano plumbing systems. *Earth and Planetary Science Letters*, 620, 118352.
347. C. Ma, F. Cámara, **L. Bindi**, V. Toledo, W.L. Griffin (2023) First Terrestrial Occurrence of Kaitianite ($Ti^{3+}_2Ti^{4+}O_5$) from the Upper Mantle beneath Mount Carmel, Israel. *Minerals*, 13, 1097.
348. **L. Bindi**, X. Zhou, T. Deng, Z. Li, C. Wolverton (2023) Kanatzidisite: A Natural Compound with Distinctive van der Waals Heterolayered Architecture. *Journal of the American Chemical Society*, 145, 33, 18227-18232.
349. V. Stagno, **L. Bindi** (2023) Quasicrystals at high pressures and temperatures: a review. *Rendiconti Lincei. Scienze Fisiche e Naturali*, 34, 727-738.
350. V. Stagno, **L. Bindi**, B. Bonechi, S. Greaux, S. Aulbach, T. Irifune, S. Lupi, G. Marras, C.A. McCammon, M. Nazzari, F. Piccirilli, B.T. Poe, C. Romano, P. Scarlato (2018) Cubic Fe-majorite synthesized at 18-25 GPa and 1000 °C: implications for element transport, subducted slab rheology and diamond formation. *Scientific Reports*, 13, 15855.
351. M. Goudjil, G.O. Lepore, P. Bonazzi, D. Mezaoui, A. Mezzi, E. Bolli, F. Di Benedetto, **L. Bindi** (2023) A new layered phosphate: synthesis, crystal structure and influence of the mixed-valence molybdenum species on its spectroscopic and magnetic properties. *Zeitschrift für Kristallographie*, 238, 333-342.
352. C. Ma, Jinping Hu, M.D. Suttle, Y. Guan, T.G. Sharp, P.D. Asimow, P.J. Steinhardt, **L. Bindi** (2023) Al-Cu-Fe alloys in the solar system: Going inside a Khatyrka-like micrometeorite (KT01) from the Nubian Desert, Sudan. *Meteoritics & Planetary Sciences*, 58, 1642-1653.
353. C. Ma, F. Cámara, V. Toledo, **L. Bindi** (2023) Griffinite, Al_2TiO_5: A New Oxide Mineral from Inclusions in Corundum Xenocrysts from the Mount Carmel Area, Israel. *Crystals*, 13, 1427.
354. D. Holtstam, P. Casey, **L. Bindi**, H.J. Förster, A. Karlsson, O. Appelt (2023) Fluorbritholite-(Nd), $Ca_2Nd_3(SiO_4)_3F$, a new and key mineral for neodymium sequestration in REE skarns. *Mineralogical Magazine*, 87, 731-737.
355. Chi Ma, F. Cámara, **L. Bindi**, V. Toledo, W.L. Griffin (2023) New Minerals from Inclusions in Corundum Xenocrysts from Mt. Carmel, Israel: Magnéliite, Ziroite, Sassite, Mizraite-(Ce) and Yeite. *Materials*, 16, 7578.
356. Chi Ma, F. Cámara, **L. Bindi**, W.L. Griffin (2024) Toledoite, TiFeSi, a new mineral from inclusions in corundum xenocrysts from Mt Carmel, Israel. *Crystals*, 14, 96.
357. W.L. Griffin, **L. Bindi**, F. Cámara, C. Ma, S.E.M. Gain, M. Saunders, O. Alard, J.-X. Huang, J. Shaw, C. Meredith, V. Toledo, S.Y. O'Reilly (2024) Interactions of

magmas and highly reduced fluids during intraplate volcanism, Mt Carmel, Israel: Implications for mantle redox states and global carbon cycles. *Gondwana Research*, 128, 14-54.

358. G. Agrosì, P. Manzari, D. Mele, G. Tempesta, F. Rizzo, T. Catelani, **L. Bindi** (2024) A naturally occurring Al-Cu-Fe-Si quasicrystal in a micrometeorite from southern Italy. *Communications Earth & Environment*, 5, 67.
359. V. Dekov, Y. Furuma, B. Guéguen, L. Klose, K. Yasukawa, M. Morita, D. Asael, T. Yamanaka, **L. Bindi**, A. Koschinsky-Fritsche, B. Pracejus, Y. Kato (2024) Mineralogical and geochemical facets of the massive deposition of stibnite-metastibnite at a seafloor hydrothermal field (Wakamiko Crater, Kagoshima Bay, Ryukyu Volcanic Arc). *American Mineralogist*, 109, 1819-1833.
360. **L. Bindi**, C. Biagioni, H.-J. Förster, H.G. Adelmann (2024) Markwelchite, $TlPbSbS_3$, a new Tl–Pb sulfosalt from the hydrothermal deposit of Jas Roux, Hautes-Alpes, France. *Mineralogical Magazine*, 88, 503-509.
361. A. Taddei, **L. Bindi**, G.O. Lepore, H. Skogby, P. Bonazzi (2024) Crystallographic insights into monovalent thallium incorporation: Exploring hydropyrochlore structure for environmental remediation. *American Mineralogist*, https://doi.org/10.2138/am-2024-9289
362. G.O. Lepore, **L. Bindi**, F. D'Acapito, A.I. Landi, P. Bonazzi (2024) Insights into the structure of disordered layered lead oxychlorides: Twinning and short-range order in janchevite, $Pb_9VO_{10.25}\square_{0.75}Cl_{2.50}$. *American Mineralogist*, https://doi.org/10.2138/am-2024-9414
363. A. Taddei, P. Bonazzi, H.-J. Förster, P. Casey, D. Holtstam, A. Karlsson, **L. Bindi** (2024) Multi-analytical characterization of an unusual epidote-supergroup mineral from Malmkärra, Sweden: Toward the new (OH)-analogue of dollaseite-(Ce). *American Mineralogist*, https://doi.org/10.2138/am-2024-9438
364. **L. Bindi**, P. Bonazzi, L. Chelazzi, M.M.N. Franceschini, G.O. Lepore, M. Morana, G. Pratesi, A. Taddei, M. Zoppi, S. Menchetti (2024) Evidence of the existence of the As_4S_6 molecule produced by light exposure of alacranite, As_8S_9. *European Journal of Mineralogy*, 36, 615-622.
365. **L. Bindi**, Z. Xie, T.G. Sharp, X. Xie (2024) Unveiling deep Earth's hidden potential: Insights from a new high-pressure phase discovered in a shocked meteorite. *Discover Minerals*, 1, 1.
366. D. Fanelli, **L. Bindi**, L. Chicchi, C. Pereti, R. Sessoli, S. Tommasini (2024) A short introduction to neural networks and their application to Earth and Materials Science. *Rendiconti dei Lincei (Scienze Fisiche e Naturali)*, in press.
367. A Taddei, D. Holtstam, **L. Bindi** (2024) Hidden mineral treasures in rust samples of the Muonionalusta iron (IVA) meteorite. *Mineralogical Magazine*, accepted.
368. M. Morana, M. Pasek, T. Catelani, **L. Bindi** (2024) Mineralogical characterization of the Seffner fulgurite, Florida: Insights into lightning-induced petrogenesis. *American Mineralogist*, accepted.
369. J. Abbatiello, **L. Bindi**, M.A. Pasek (2024) Constraints on Iron Silicide Formation from a Fulgurite from Southwick Massachusetts. *Mineralogical Magazine*, accepted.
370. L. Barni, S. Tommasini, M. Morana, R. Avanzinelli, **L. Bindi** (2024) Machine learning geothermobarometry of volcano plumbing systems: the case study of ankaramite magma, Tenerife, Canary Islands. *Geochemistry*, submitted.

371. J. Hu, P.D. Asimow, C. Ma, P.J. Steinhardt, **L. Bindi** (2024) Quasicrystal synthesis by shock compression. *Communications Chemistry*, 7, 232.
372. M. Genge, M. Van Ginneken, C. Ma, M.D. Suttle, N. Almeida, N.T. Kita, M. Zhang, **L. Bindi** (2024) The first Al-Cu-alloy-bearing unmelted micrometeorite suggests contributions from the disrupted ureilite protoplanet. *Earth and Planetary Science Letters*, submitted.
373. A. Angellotti, G. Marras, M. Morana, S. Chariton, V. Stopponi, L. Medeghini, C. Romano, A. Correale, **L. Bindi**, F.V. Kaminsky, V. Stagno (2024) A unique lithospheric origin for a diamond from the Rio Sorriso area, Brazil. *Communications Earth & Environment*, submitted.
374. **L. Bindi** et al. (2025) Discovery of the first Earthborn quasicrystal approximant. *American Mineralogist*, accepted.
375. G. Agrosì et al. (2024) *Communications Earth & Environment*, submitted.

Capitolo di libri/monografie:

1. **L. Bindi**, P.J. Steinhardt (2015) Natural quasicrystals: A new frontier in mineralogy and its impact on our understanding of matter and the origin of the solar system. In "*Highlights in Mineralogical Crystallography*" (Armbruster T. & Danisi R.M., Eds.), De Gruyter, Berlin, Germany, pp. 109-125. (ISBN 978-3-11-041710-4).
2. **L. Bindi**, G. Chapuis (2017) Aperiodic Mineral Structures. In "*Mineralogical Crystallography*" (Plasil J., Majzlan J. & Krivovichev S., Eds.), *EMU Notes in Mineralogy*, Vol. 19, Chapter 5, pp. 213-254. (ISBN 978-0903059-5).
3. M. Patti, **L. Bindi**, L. Cecchini, B. Maglione (2020) Diagrams, Technology and New Materials: The Scientific Nature of Loris Cecchini's Artworks. In "*Science and Art: The Contemporary Painted Surface*" (A. Sgamellotti, B.G. Brunetti & C. Miliani, Eds.), The Royal Society of Chemistry, Chapter 18, 374-389.
4. **L. Bindi** (2023) Discovery of Fullerenes and Quasicrystals in Nature. In: Bindi, L., Cruciani, G. (eds) *Celebrating the International Year of Mineralogy*. Springer Mineralogy. Springer, Cham. https://doi.org/10.1007/978-3-031-28805-0_1.
5. **L. Bindi**, C. Biagioni, Y. Moëlo (2023) Sulfide Minerals. In Sulfides… D. Harlov and G. Pokrovski Eds. *In press*

su riviste nazionali:

6. **L. Bindi** (2001) Crystal chemistry of natural melilites: the role of isomorphous substitutions on the stabilization of the incommensurate structure. *Plinius*, 25, 31-34.
7. C. Cipriani, **L. Bindi** (2004) Le collezioni del Museo di Mineralogia di Firenze: I tellururi. *Museologia Scientifica*, 19, 283-296.
8. C. Cipriani, **L. Bindi**, R. Trosti-Ferroni (2005) Le collezioni del Museo di Mineralogia di Firenze: I seleniuri. *Museologia Scientifica*, 20, 189-205.
9. **L. Bindi**, C. Cipriani, G. Pratesi (2005) Le collezioni del Museo di Mineralogia di Firenze: gli "argenti rossi". *Museologia Scientifica*, 22, 151-165.

10. **L. Bindi**, C. Cipriani, I. Pandolfi, G. Pratesi, S. Menchetti (2005) Le collezioni mineralogiche del Museo di Storia Naturale di Firenze: il gruppo pearceite-polibasite. *Museologia Scientifica*, 22, 213-227.
11. L. Poggi, **L. Bindi** (2007) Museo di Storia Naturale dell'Università di Firenze: la sezione di Mineralogia. *Il Cercapietre*, 1-2, 41-45.
12. F. Bellatreccia, F. Cámara, **L. Bindi**, G. Della Ventura, A. Mottana, M. Gunter, M. Sebastiani (2009) La fantappièite, nuovo minerale del gruppo cancrinite - sodalite. *Il Cercapietre*, 1-2, 6-15.
13. **L. Bindi**, L. Poggi, L. Fantoni (2009) *Sezione di Mineralogia e Litologia*, in "Museo di Storia Naturale dell'Università degli Studi di Firenze – Guida alla visita delle Sezioni" a cura Barbagli F. e Pratesi G., Ed. Polistampa, Firenze, 219-255.
14. C. Balestra, **L. Bindi**, M. Ciriotti (2011) L'argandite della miniera di Gambatesa, Ne, Val Graveglia (GE): seconda segnalazione mondiale. *Micro*, 9, 90-93.
15. **L. Bindi** (2012) Dai mosaici del Penrose ai ghiacci siberiani: l'incredibile storia della scoperta del primo quasicristallo naturale. *Le Scienze Naturali nella Scuola*, 46, 37-43.
16. R. Bracco, C. Balestra, A. Pozzi, G. Finello, F. Castellaro, A.M. Callegari, M. Boiocchi, S.J. Mills, **L. Bindi**, C. Carbone, M.E. Ciriotti (2012) Coralloite, paseroite e bassoite: tre nuove specie in Liguria. *Micro*, 2, 78-96.
17. L. Poggi, G. Pratesi, **L. Bindi** (2012) Collezioni e Collezionisti. In: "Il Museo di Storia Naturale dell'Università di Firenze, Volume IV, Le collezioni mineralogiche e Litologiche", 83-126. Ed. Firenze University Press.
18. G. Tanelli, **L. Bindi**, F. Di Benedetto (2012) La scienza dei minerali: dalla selce ai materiali innovativi e alle nanotecnologie. In: "Il Museo di Storia Naturale dell'Università di Firenze, Volume IV, Le collezioni mineralogiche e Litologiche", 269-283. Ed. Firenze University Press.
19. **L. Bindi**, P.J. Steinhardt (2012) Quasicristalli naturali. In: "Il Museo di Storia Naturale dell'Università di Firenze, Volume IV, Le collezioni mineralogiche e Litologiche", 284-288. Ed. Firenze University Press.
20. C. Biagioni, **L. Bindi**, P. Orlandi, E. Michelucci, C. Bazzoni, M. Bernocchi, G. Mangoni (2014) Billingsleyite e fettelite. Nuovi ritrovamenti toscani. *Rivista Mineralogica Italiana*, 1, 26-31.
21. **L. Bindi** (2013) L'impossibile caduto dal cielo. *Le Scienze*, 544, 76-81.
22. C. Balestra, R. Bracco, E. Bittarello, M.E. Ciriotti, G. Frenna, **L. Bindi** (2014) I solfuri di Mn nelle miniere dellaVal Graveglia (Genova): nuovi dati. *Micro*, 4, 124-129.
23. **L. Bindi** (2019) Soluzioni solide: può questo concetto essere esteso ai quasicristalli? *Quaderni dell'Accademia delle Scienze di Torino*, 30, 61-72.

a carattere didattico-divulgativo:

L. Bindi (2007) ORO. 80 pag. Ed. Firenze University Press.
L. Bindi (2021) Quasicristalli: l'avventura di una scoperta. 262 pag. Tab Edizioni.

Elenco delle comunicazioni a congressi

internazionali:

1. P. Bonazzi and **L. Bindi**. Oxidation-dehydrogenation process induced by heat treatment in ilvaite. NATO ASI 1998. Il Ciocco, Italy.
2. O.G. Safonov, **L. Bindi**, Y.A. Litvin, L.L. Perchuk, S. Menchetti. Experimental and thermodynamic modeling of potassium-bearing clinopyroxene equilibria in the system $CaMgSi_2O_6$ – $KAlSi_2O_6$. Journal of Conference abstracts, vol. 7(1), 92 (EMPG-IX – Zurich 2002).
3. R. Avanzinelli, **L. Bindi**, S. Menchetti, S. Conticelli. Crystallisation condition and genesis of peralkaline magmas from Pantelleria, Italy: an integrated petrological and crystal-chemical study. IMA Congress – Edinburgh 2002 – Program with abstracts, 247.
4. O.G. Safonov, Yu. A. Matveev, Y.A. Litvin, L.L. Perchuk, **L. Bindi**, S. Menchetti. Ultrahigh pressure study of potassium-bearing clinopyroxene equilibria. IMA Congress – Edinburgh 2002 – Program with abstracts, 74.
5. **L. Bindi**, O.G. Safonov, Y.A. Litvin, L.L. Perchuk, S. Menchetti. Structural modifications induced by the incorporation of ultra-high amounts of potassium in the clinopyroxene structure. IMA Congress – Edinburgh 2002 – Program with abstracts, 71.
6. O.G. Safonov, L.L. Perchuk, Y.A. Litvin, **L. Bindi**, S. Menchetti. Experimental study of the potassium-bearing clinopyroxene equilibria: implication to the genesis of garnet-clinopyroxene rocks of the Kokchetav UHP complex (N. Kazakhstan). EMU Ultra-high pressure metamorphism Congress – Budapest, Hungary, 2003 – Program with abstracts, 36.
7. L.L. Perchuk, O.G. Safonov, **L. Bindi**, V. Yapaskurt, S. Menchetti. Composition and crystal chemistry of potassium-bearing clinopyroxene in the rocks of the Kokchetav Complex (N. Kazakhstan): an implication for magmatic origin. EMU Ultra-high pressure metamorphism Congress – Budapest, Hungary, 2003 – Program with abstracts, 41.
8. V. Yapaskurt, L.L. Perchuk, O.G. Safonov, **L. Bindi**, S. Menchetti. Potassium-bearing clinopyroxene from the Kokchetav Complex: composition, crystal-chemistry, and implication for formation from ultra-potassic UHP melt. 32nd International Geological Congress – Florence, 20-28 August 2004 – Program with abstracts, 79.
9. **L. Bindi**, C. Cipriani. Museumite, a new lead-gold sulpho-telluride from Sacaramb, Western Romania: occurrence, physical properties and crystal-chemical considerations. 32nd International Geological Congress – Florence, 20-28 August 2004 – Program with abstracts, 153.
10. V.L. Vinograd, O.G. Safonov, **L. Bindi**, S. Menchetti. Solid solution of potassium-bearing clinopyroxene: high-pressure synthesis, X-ray refinement, and lattice dynamics modeling. 32nd International Geological Congress – Florence, 20-28 August 2004 – Program with abstracts, 154.
11. V. Yapaskurt, L.L. Perchuk, O.G. Safonov, **L. Bindi**, S. Menchetti. Composition and crystal chemistry of potassium-bearing clinopyroxene in the rocks of the Kokchetav Complex (N. Kazakhstan): an implication for magmatic origin. 32nd International Geological Congress – Florence, 20-28 August 2004 – Program with abstracts, 154.

12. **L. Bindi**, P. Bonazzi. Incommensurately modulated structure in natural melilites. XX IUCr Congress – Florence, 23-31 August 2005 – Acta Crystallographica, A61, C24.
13. E. Ovchinnikova, V. Dmitrienko, **L. Bindi**, Y. Soejima. Near-Edge Forbidden Reflections in Resonant Diffraction by Modulated Crystals. XX IUCr Congress – Florence, 23-31 August 2005 – Acta Crystallographica, A61, C432.
14. V. Moggi-Cecchi, **L. Bindi**, G. Pratesi. A new iron-nickel phosphide from the Northwest Africa 1054 meteorite. 68th Annual Meteoritical Society Meeting, Gatlinburg, Tennessee, U.S.A., September 12-16, 2005. Meteoritics and Planetary Science, 40(9), A105-A105, Suppl. S.
15. **L. Bindi**, O.G. Safonov, R.T. Downs, L.L. Perchuk, Yu.A. Litvin, V.L. Vinograd, G.E. Harlow. Potassium-bearing clinopyroxene: crystal chemical and thermodynamic model. EGU Congress 2006 – Vienna, 2-7 April 2006 – Geophysical Research Abstracts, Vol. 8, 05899.
16. **L. Bindi**, M. Evain, A. Pradel, S. Albert, M. Ribes, S. Menchetti. Superionic phase-transitions in the minerals of the pearceite-polybasite group. ECM23 – Leuven, Belgio, 6-12 August 2006, Acta Crystallographica, A62, s189.
17. **L. Bindi**. From the invalidity of the law of rational indices to the concept of superspace: A crystallographic excursion in the modulated world of minerals. EGU Congress 2007 – Vienna, 15-20 April 2007 – Geophysical Research Abstracts, Vol. 9, 03215.
18. S. Nazzareni, P. Comodi, **L. Bindi**, O. Safonov, L. Perchuk, Yu. Litvin. X-ray single-crystal study on synthetic Si and Cl-rich mica: new implications on phlogopite and celadonite miscibility at high pressure. EGU Congress 2007 – Vienna, 15-20 April 2007 – Geophysical Research Abstracts, Vol. 9, 00839.
19. S. Nazzareni, P. Comodi, **L. Bindi**, O. Safonov, L. Perchuk, Yu. Litvin. Phlogopite-celadonite miscibility at high pressure: New evidence from a Si and Cl-rich synthetic mica. Frontiers in Mineral Sciences 2007. Cambridge, 26-28 June 2007.
20. **L. Bindi**, R.L. Withers, M. Evain, S. Menchetti. Structural disorder in natural pearceite-*T*2*ac*: A combined TEM and SCXREF study. ECM24 – Marrakech, Marocco, 22-27 August 2007 - Acta Crystallographica, A63, s267.
21. A. Kracher, **L. Bindi**, P. Bonazzi, J. Fournelle, E. Frahm, P.G. Spry. Large errors in electron microprobe analysis of laphamite, $As_2Se_{3-x}S_x$ ($x \sim 0.75$), due to uncertainties in ZAF correction parameters. American Geophysical Union Fall Meeting 2007. San Francisco, 10-14 December 2007, Abstract Volume, 254-255.
22. V.L. Vinograd, O.G. Safonov, D. Wilson, J.D. Gale, L.L. Perchuk, **L. Bindi**, B. Winkler (2008) Thermodynamic model of the $CaMgSi_2O_6$-$KAlSi_2O_6$ pyroxene solid solution. EGU Congress 2008 – Vienna, 13-18 April 2008 – Geophysical Research Abstracts, Vol. 10.
23. M. Muniz-Miranda, C. Gellini, **L. Bindi**. Surface-enhanced Raman scattering for the geological identification of rocks. GeoRaman 08. Ghent (Belgio), 2-6 June 2008.
24. S. Nazzareni, O. Safonov, P. Comodi, **L. Bindi**. Cl-rich phlogopite-celadonite mica: Synthesis, X-ray study, and petrological implications. Goldschmidt Conference, Vancouver (Canada), 7-12 August 2008. Geochimica et Cosmochimica Acta, 72, A674.

25. **L. Bindi**. The pearceite-polybasite group of minerals: An outstanding example of the close link between mineralogy and the most advanced fields of crystallography. Fedorov Session, Saint Petersburg (Russia), 8-10 October 2008.
26. O.G. Safonov, **L. Bindi**, V. Vinograd, L.L. Perchuk. Clinopyroxene as a host of potassium in the upper mantle: experimental, crystal chemical and thermodynamic evidences. Fedorov Session, Saint Petersburg (Russia), 8-10 October 2008.
27. P.C. Voudouris, V. Melfos, P.G. Spry, **L. Bindi**, T. Kartal, K. Arikas, R. Moritz, M. Ortelli. A new occurrence of rheniite (ReS_2) and telluride enrichment in the Pagoni Rachi-Kirki porphyry-style Mo-Cu-Ag-Au prospect, northern Greece. SGA2009, The Society for Geology Applied to Mineral Deposits Meeting, Townsville, Australia, August 17 – 20, 2009.
28. S. Menchetti, **L. Bindi**, F.N. Keutsch, C.A. Francis. Fettelite, $[Ag_6As_2S_7][Ag_{10}HgAs_2S_8]$: Structure, twinning, and revised chemical formula. ECM25 – Istanbul, Turkey, 16-21 August 2009 - Acta Crystallographica, A65, s174.
29. **L. Bindi**, M. Evain, S. Menchetti. When the minerals become complex: The case of the pearceite-polybasite mineral solid electrolytes. ECM25 – Istanbul, Turkey, 16-21 August 2009 - Acta Crystallographica, A65, s46.
30. S. Nazzareni, P. Comodi, L. Dubrovinsky, **L. Bindi**. The crystal structure and HP behavior of gypsum-II from synchrotron single-crystal and powder X-ray diffraction. 47th EHPRG Conference – Paris, France, 6-11 September 2009.
31. P. Bonazzi, **L. Bindi**, L.Chelazzi, M. Muniz Miranda, A. Pfitzner. Light-induced molecular change in synthetic $HgI_2 \cdot As_4S_4$: evidence from Raman spectroscopy and single-crystal X-ray diffraction. MISCA, Oviedo (Spain), 30 June – 3 July 2010.
32. P. Bonazzi, **L. Bindi**, C. Chopin, T.A. Husdal, G.O. Lepore. Structural study of members of the polysomatic series epidote-törnebohmite from Stetind pegmatite, northern Norway. IMA General Meeting, Budapest, August 21-27, 2010. Acta Mineralogica-Petrographica, 6, 742.
33. **L. Bindi**, S. Menchetti. HT-study on fettelite, $[Ag_6As_2S_7][Ag_{10}HgAs_2S_8]$: Ionic phase transition indicating the possible existence of different polytypes. IMA General Meeting, Budapest, August 21-27, 2010. Acta Mineralogica-Petrographica, 6, 742.
34. S. Nazzareni, P. Comodi, **L. Bindi**, A. Bobrov. Equation-of-State of Fe^{3+}-bearing phase-X. IMA General Meeting, Budapest, August 21-27, 2010. Acta Mineralogica-Petrographica, 6, 153.
35. G. Pratesi, **L. Bindi**, L. Poggi, L. Fantoni, M.C. Andreani, G. Scali. Between tradition and innovation: The new Mineralogical Section of the Natural History Museum of the University of Firenze. IMA General Meeting, Budapest, August 21-27, 2010. Acta Mineralogica-Petrographica, 6, 769.
36. L. Chelazzi, T. Boffa Ballaran, **L. Bindi**, P. Bonazzi. In situ high-temperature powder X-ray diffraction study of the synthetic $Ca_2Sb_2O_7$ weberite-type compound. IMA General Meeting, Budapest, August 21-27, 2010. Acta Mineralogica-Petrographica, 6, 715.
37. **L. Bindi**. Can Nature do what Man can do? The Search for Natural Quasicrystals. ECM26, Darmstad (Germany), 29 August – 2 September 2010 - Acta Crystallographica, A66, s2.
38. Y. Guan, **L. Bindi**, J. M. Eiler, L. Hollister, G. J. MacPherson, P. J. Steinhardt, N. Yao. Oxygen isotope evidence for the extra-terrestrial origin of the first natural

quasicrystal. 42nd Lunar and Planetary Science Conference, The Woodlands, Texas, March 7-11, 2011.

39. A.V. Bobrov, A.M. Dymshits, **L. Bindi**, K.D. Litasov, A.F. Shatskiy, E. Ohtani, Yu.A. Litvin. Na-bearing majoritic garnets in the system $Mg_3Al_2Si_5O_{12}$–$Na_2MgSi_5O_{12}$ at 11−20 GPa: solid solutions and structural peculiarities. Goldschmidt Conference 2011, Prague, Czech Republic, August 14-19.
40. **L. Bindi**, S. Menchetti. HT-behavior of fettelite: Fast ion conduction and ionic phase-transition. XXII IUCr Congress, Madrid, Spain, 22-30 August, 2011
41. M. Pasero, C. Biagioni, **L. Bindi**, C. Capalbo. Thermal behaviour (HT and LT) in minerals of the cryptomelane group. XXII IUCr Congress, Madrid, Spain, 22-30 August, 2011.
42. Y. Guan, **L. Bindi**, J. M. Eiler, L. Hollister, G. J. MacPherson, P. J. Steinhardt, N. Yao. Oxygen isotope evidence for the extra-terrestrial origin of the first natural quasicrystal. 6th Biennial Geochemical SIMS Workshop, Hawaii, 2-4 November, 2011.
43. **L. Bindi**, Y. Moëlo, P. Leone, M. Suchaud. Arsénopyrite stœchiométrique, FeAsS, de la carrière de La Roche-Balue (Loire-Atlantique, France): structure cristalline et étude Mössbauer. Mössbauer French Speaking Community International Meeting (GFSM2012); Rouen, France, 23-24 May 2012.
44. G. Giunchi, A. Figini Albisetti, A. Aprea, L. Malpezzi, N. Masciocchi, **L. Bindi**. XRD analysis of superconducting MgB_2 prepared by Reactive Mg Liquid Infiltration process. ECM27 – Bergen, Norway, 6-11 August 2012 - Acta Crystallographica, A68, s178.
45. **L. Bindi**, F. Nestola, A. Guastoni, L. Peruzzo, M. Ecker, R. Carampin. Raberite, $Tl_5Ag_4As_6SbS_{15}$, a new Tl-sulfosalt from Lengenbach quarry, Binn Valley, Switzerland. EMC 2012 – Frankfurt, Germany, 2-6 September 2012. (nota 45a).
46. G.O. Lepore, P. Bonazzi, **L. Bindi**, S. Conticelli. Crystal chemistry of phlogopites from ultrapotassic rocks with lamproitic affinity from the Western Mediterranean region: a preliminary study. EMC 2012 – Frankfurt, Germany, 2-6 September 2012.
47. P. Bonazzi, **L. Bindi**, C. Chopin, T.A. Husdal, G.O. Lepore. A new, sodian end-member of the epidote group in new members of the polysomatic epidote-törnebohmite series (i.e. the gatelite group). EMC 2012 – Frankfurt, Germany, 2-6 September 2012.
48. M. Welch, J. Konzett, **L. Bindi**, D. Frost. Structural variety in the high-pressure synthetic sheet-disilicate Phase-X, $A_{(2-x)}M_2Si_2O_7H_x$. EMC 2012 – Frankfurt, Germany, 2-6 September 2012.
49. A.V. Bobrov, A.M. Dymshits, **L. Bindi**, Y.A. Litvin, The major role of sodium: Experimental Study of phase equilibria, solid solutions and structural characteristics. Contemporary Problems Conference, 9-22 Maggio 2013, Syktyvkar, Russia.
50. E.A. Sirotkina, A.V. Bobrov, **L. Bindi**, T. Irifune. Experimental study of the system $Mg_4Si_4O_{12}$-$Mg_3Cr_2Si_3O_{12}$ at 12-25 GPa and 1600 °C. Goldschmidt Conference – Firenze, 25-30 August 2013. *Mineralogical Magazine*, **77**, 2218.
51. L.S. Hollister, C. Andronicos, **L. Bindi**, V.V. Distler, M. Eddy, J. Eiler, Y. Guan, A. Kostin, V. Kryachko, G.J. MacPherson, W. Steinhardt, M. Yudovskaya, P.J. Steinhardt, Natural Cu-Al-Fe metallic quasicrystals in the new CV3 meteorite find, Khatyrka. Goldschmidt Conference – Firenze, 25-30 August 2013. *Mineralogical Magazine*, **77**, 1313.

52. V. Stagno, **L. Bindi**, C. Murphy, Y. Fei, P.J. Steinhardt. High-pressure stability of synthetic $Al_{63}Cu_{24}Fe_{13}$ icosahedral quasicrystal. Goldschmidt Conference – Firenze, 25-30 August 2013. *Mineralogical Magazine*, **77**, 2251.
53. **L. Bindi**. The impossible fallen from the sky. III International Conference Crystallogenesis and Mineralogy – Novosibirsk, Russia, 27 Settembre – 1 Ottobre 2013. Abstract Volume, 13-14.
54. A.V. Bobrov, M. Bykov, E. Bykova, L. Dubrovinsky, **L. Bindi**. High-pressure bahavior of synthetic $Na_{0.884}Fe^{2+}_{0.199}Mg_{0.475}Si_{2.442}O_6$ clinopyroxene. Goldschmidt Conference – Sacramento, California, USA, 8-13 June 2014.
55. E.A. Sirotkina, **L. Bindi**, A.V. Bobrov, T. Irifune. Cr-rich phases in the MgO-SiO_2-Cr_2O_3 system at 10-25 GPa: composition, solid solutions, and structural features. Goldschmidt Conference – Sacramento, California, USA, 8-13 June 2014.
56. **L. Bindi**. The quest for natural quasicrystals: An incredible scientific adventure. First International Symposium on Sulphosalts. Binn, Switzerland, 9-10 August 2014.
57. F. Zaccarini, E. Pushkarev, G. Garuti, J. Krause, G.P. Dvornik, C. Stanley, **L. Bindi** (2014) Platinum-group elements (PGM) nuggets from the Ural-Alaskan type complex of Uktus (Central Urals, Russia): Genetic aspects. 12th International Platinum Symposium, Yekaterinburg, Urals, Russia, August 11-14 2014.
58. V. Stagno, **L. Bindi**, Y. Shibazaki, Y. Tange, Y. Higo, H.-K. Mao, P.J. Steinhardt, Y. Fei. Quasicrystals at HP-HT: implications for the stability of icosahedrite. IMA meeting, Johannesburg, South Africa, 1-5 September 2014.
59. T. Irifune, M. Nishi, J. Tsuchiya, Y. Tange, **L. Bindi** (2014) Discovery of a new dense hydrous magnesium silicate, phase H, under lower mantle conditions. 52nd EHPRG Meeting on High Pressure Science and Technology, Lyon, France, 7-12 September 2014.
60. L. S. Hollister, G.J. MacPherson, **L. Bindi**, C. Lin, Y. Guan, N. Yao, J. M. Eiler, P.J. Steinhardt (2015) Redox reactions between Cu-Al metal and silicates in the Khatyrka meteorite. 46th Lunar and Planetary Science Conference (2015), Houston, U.S.A.
61. **L. Bindi**, O. Safonov (2015) Merwinite as a host of alkalis in the mantle: synthesis and X-ray characterization. Goldschmidt Conference – Prague, 16-21 August 2015.
62. M.M.M. Meier, **L. Bindi**, H. Busemann, P.R. Heck, A. Isch Neander, Z.-X. Luo, C. Maden, N. Spring, P.J. Steinhardt, R. Wieler (2015) Shedding light on the origin of the quasicrystal-bearing Khatyrka meteorite. 78th Annual Meeting of the Meteoritical Society. Berkeley 27-31 July 2015, California (USA).
63. F. Zaccarini, **L. Bindi**, E. Pushkarev, G. Garuti, R.J. Bakker (2015) Minerals of the bowieite – kashinite series from the Svetly Bor complex, Urals, Russia, and comparison with worldwide occurrences. 8th European Conference of Mineralogy and Spectroscopy, ECMS2015. Rome, 9-11 September 2015.
64. **L. Bindi**. Capturing science in action: How quasicrystals form in outer space? MISCA, Tenerife (Spain), 21 June – 26 June 2016.
65. M. M. M. Meier, **L. Bindi**, H. Busemann, P.R. Heck, A.I. Neander, C. Maden, M. Riebe, N.H. Spring, P.J. Steinhardt, R. Wieler (2016) Cosmic-ray exposure and shock degassing ages of the quasicrystal-bearing Khatyrka meteorite. 47th Lunar and Planetary Science Conference (2016), Houston, U.S.A.
66. G.J. MacPherson, C. Lin, L.S. Hollister, **L. Bindi**, C.L. Andronicos, P.J. Steinhardt (2016) The Khatyrka meteorite: A summary of evidence for a natural origin of its

remarkable Cu-Al metal alloys. 47th Lunar and Planetary Science Conference (2016), Houston, U.S.A.

67. C. Ma, C. Lin, **L. Bindi**, P.J. Steinhardt (2016) Discovery of new Al-Cu-Fe minerals in the Khatyrka CV3 meteorite. 79th Annual Meeting of the Meteoritical Society, Berlin, Germany, 7-12 August 2016.
68. **L. Bindi**, C. Lin, C. Ma, P.J. Steinhardt (2016) Latest news from the Khatyrka meteorite. 2nd European Mineralogical Meeting, Rimini, Italy, 11-15 September 2016.
69. P. Bonazzi, **L. Bindi** (2016) Light-induced alteration of alacranite, As_8S_9. 2nd European Mineralogical Meeting, Rimini, Italy, 11-15 September 2016.
70. A.P. Tamarova, **L. Bindi**, A.V. Bobrov, E.A. Sirotkina, O. Tschauner, M.J. Walter, T. Irifune (2016) Na-Bearing Phases in the Deep Transition Zone and Lower Mantle: Composition, Structural Features and Na Transport to the Deep Earth. Goldschmidt Conference Abstracts #3053. Goldschmidt Conference – Yokohama, Japan, June 26th - July 1st 2016.
71. C. Lin, L. S. Hollister, **L. Bindi**, C. Ma, G.J. MacPherson, C.L. Andronicos, P.J. Steinhardt (2016) Natural quasicrystals: Application of petrology, mineralogy, and stratigraphy toward unraveling the mystery of formation of metallic Al-compounds in outer space. Geological Society of America Meeting, 25-28 September, Denver, Colorado.
72. E. Sirotkina, A.V. Bobrov, **L. Bindi**, T. Irifune (2017) Titanium-bearing phases in the Earth's mantle (evidence from experiments in the $MgO–SiO_2–TiO_2 \pm Al_2O_3$ system at 10–24 GPa). EGU Meeting, Vienna, Austria.
73. **L. Bindi** (2017) When material science meets planetary science: the discovery of natural quasicrystals. 2nd International Conference on Applied Mineralogy & Advanced Materials - 13th International Conference on Applied Mineralogy. Castellaneta Marina (TA), Italy, June 5-9, 2017.
74. Lin, C., Hollister, L.S., MacPherson, G.J., **Bindi, L.**, Ma, C., Andronicos, C.L., Steinhardt, P.J. (2017) Evidence about the formation history of natural quasicrystals in outer space, and the occurrence of stolperite. GSA Annual Meeting in Seattle, Washington, USA, Abstract#300621.
75. Hejny, C., **Bindi, L.** (2017) Low-temperature behaviour of $K_2Sc[Si_2O_6]F$: Determination of the lock-in phase and its relationships with fresnoite- and melilite-type compounds. Mitt. Österr. Miner. Ges., 163.
76. Sirotkina E.A., Bobrov A.V., **Bindi L.**, Irifune T. (2017) Titanium-bearing phases in the MgO-SiO2-TiO2±Al2O3 system at 10-24 GPa: phase relations, structural features and solid solutions / In: Magmatism of the Earth and Related Strategic Metal Deposits. Proc. XXXIV International Conf. (Miass, Russia, August 4-9, 2017). Moscow: GEOKHI RAS, 2017, p. 254-255.
77. Tamarova A.P., Bobrov A.V., Sirotkina E.A., **Bindi L.**, Irifune T. (2017) Phase associations and partitioning of minor elements upon partial melting of model pyrolite under the conditions of the transition zone and lower mantle of the Earth / In: Magmatism of the Earth and Related Strategic Metal Deposits. Proc. XXXIV International Conf. (Miass, Russia, August 4-9, 2017). Moscow: GEOKHI RAS, 2017, p. 284-285. *11th International Kimberlite Conference* (Gaborone, Botswana, 18-22 September 2017).
78. Bobrov A.V., Tamarova A.P., Sirotkina E.A., **Bindi L.**, Pushcharovsky D.Yu., Irifune T. (2017) Sodium-bearing phases in the transition zone and uppermost lower

mantle: Experimental and natural data. In: *11th International Kimberlite Conference* (Gaborone, Botswana, 18-22 September 2017). Extended Abstracts. Gaborone, Botswana, 2017. No. 11IKC-4634.

79. **L. Bindi** (2017) News from the quasicrystals adventure. *Second International Sulfosalts Symposium*, *SuSy2*, Tavagnasco, Torino (Italy), August 10-11, 2017.
80. M. Gemmi, A. Lanza, E. Mugnaioli, **L. Bindi**, W.H. Paar (2018) Electron diffraction tomography of modulated minerals: the crystal structure of daliranite. 31st European Crystallographic Meeting (22-27 August, 2018, Oviedo, Spain).
81. **L. Bindi** (2018) Once upon a time in Kamchatka: The extraordinary search for natural quasicrystals. 25th International Symposium on Metastable, Amorphous and Nanostructured Materials (ISMANAM 2018), Rome, July 2-6, 2018.
82. Tamarova A.P., Bobrov A.V., Sirotkina E.A., **Bindi L.**, Irifune T. (2018) Interphase partitioning of trace elements in the deep transition zone and uppermost lower mantle: evidence from experiments on partial melting of model pyrolite at 21-24 GPa and 1100-2400 °C. IMA meeting, Melbourne, Australia, August 2018.
83. Tamarova A.P., Bobrov A.V., Sirotkina E.A., **Bindi L.**, Irifune T. (2018) Sodium partitioning in the deep transition zone and lower mantle of the Earth upon partial melting. IMA meeting, Melbourne, Australia, August 2018.
84. Griffin W.L., Gain S.E.M., **Bindi L.**, Toledo V., Cámara F., Saunders M., O'Reilly S.Y. (2019) Carmeltazite, $ZrAl_2Ti_4O_{11}$, a new mineral from the volcanic rocks of Mt Carmel, northern Israel. Israel Geological Society Meeting, Kfar Blum 2019, Israel, March 2019. Abstract volume, page 130.
85. Hu, J., Ma, C., **Bindi, L.**, Asimow, P.D. (2019) First experimental synthesis of $Al_{62}Cu_{31}Fe_7$ icosahedral quasicrystals and their natural origin in a meteorite by impact processes. 21st Biennial Conference of the APS Topical Group on Shock Compression of Condensed Matter (SHOCK19), June 16-21, 2019, Portland, Oregon.
86. M. Morana, M. Piazzi, Enzo Ferrara, F. Marone, **L. Bindi**, A.P. Jones, M. Alvaro (2019) Magnetic inclusions in diamonds. "*Magnetic Crystallography*" school, Erice, June 2019.
87. F. Zaccarini, E. Ifandi, A. Sideridis, B. Tsikouras, T. Grammatikopoulos, G. Garuti, E. Pushkarev, **L. Bindi**, D. Mauro, C. Stanley (2019) Occurrence of rare phosphides in ophiolitic chromitites from Greece and Russia. Goldschmidt Conference, Barcelona, Spain, 18-23 August 2019.
88. A. Bobrov, **L. Bindi**, E. Matrosova, A. Tamarova, T. Irifune (2019) Minor Elements in Bridgmanite: Review of Experimental Data. Goldschmidt Conference, Barcelona, Spain, 18-23 August 2019.
89. E. Matrosova, A. Bobrov, **L. Bindi**, T. Irifune (2019) Experimental Study of the $MgSiO_3$–$MgTiO_3$ ($\pm Al_2O_3$) System at 10–24 GPa and 1600°C. Goldschmidt Conference, Barcelona, Spain, 18-23 August 2019.
90. **L. Bindi** (2019) Solar system secrets hidden in quasicrystals. European Crystallographic Meeting ECM32, Vienna, Austria, 18-23 August 2019.
91. **L. Bindi** (2019) Natural versus synthetic quasicrystals: Analogies and differences in the optical behaviour of icosahedral and decagonal quasicrystals. Convegno "Anisotropic properties of Matter", Accademia dei Lincei, Roma, 16-17 October 2019.

92. **L. Bindi** (2019) Solar system secrets hidden in quasicrystals. Second International Congress on Earth Sciences in SE Asia, Nusa Dua Bali, Indonesia, 18-20 November 2019.
93. S. Tommasini, **L. Bindi**, L. Savia, M.F. Mangler, A. Orlando, C.M. Petrone (2022) Critical assessment of pressure estimates in volcanic plumbing systems: the case study of Popocatépetl volcano, Mexico. Volcanic and Magmatic Studies Group Meeting 2022, Manchester, January 10-12 2022.
94. **L. Bindi** (2022) Iron-Magnesium Silicates in Rocky Planetary Interiors: Have we really discovered it all? IV High-Pressure Meeting, Moscow, January 17-19 2022.
95. P. Koutsovitis, P. Tsitsanis, F. Zaccarini, B. Tsikouras, C. Hauzenberger, T. Grammatikopoulos, **L. Bindi**, G. Garuti, K. Hatzipanagiotou (2022) Mantle metasomatism recorded upon bimodal chromitites (E. Chalkidiki, Greece): a tool to unravel metasomatic processes. EGU General Assembly, Vienna, April 3-8 2022.
96. C.M. Petrone, S. Tommasini, **L. Bindi**, L. Savia, M.F. Mangler, A. Orlando (2022) Critical assessment of pressure estimates in volcanic plumbing systems: the case study of Popocatépetl volcano, Mexico. EGU General Assembly, Vienna, April 3-8 2022.
97. J. Hannah, H. Stein, A. Zimmerman, **L. Bindi**, J.A. Jaszczak (2022) Cylindrical whiskers of merelaniite give Re-Os minimum age for close of Pan African deformation, Merelani tanzanite deposit, Tanzania. Goldschmidt Conference, Honolulu Hawai'i, July 10-15 2022.
98. N. Tomioka, M. Miyahara, **L. Bindi**, T. Okuchi (2022) High-pressure minerals in planetary materials: Witnesses of asteroid impact events. XXIII Meeting of the International Mineralogical Association, Lyon, July 18-22 2022.

nazionali:

99. **L. Bindi**, D. Cellai, L . Melluso, S. Conticelli, V. Morra and Silvio Menchetti. Crystal chemistry of clinopyroxenes from alkaline undersaturated rocks of the Monte Vulture Volcano, Italy. *Plinius*, 18, 55-56 (GEOITALIA 1997).
100. P. Bonazzi and **L. Bindi**. Oxidation-dehydrogenation process induced by heat treatment in ilvaite. *Plinius*, 20, 49 (SIMP-BARI 1998).
101. **L. Bindi** and P. Bonazzi. Superstructure and incommensurate modulation in hardystonite. XXIX Congresso Nazionale AIC, Real Museo Mineralogico Napoli, 7-9 Settembre, 1999.
102. **L. Bindi** and P. Bonazzi. Crystal chemistry of natural melilites: superstructure and incommensurate modulation in hardystonite. *Plinius*, 22, 52 (GEOITALIA 1999).
103. **L. Bindi**, P. Bonazzi, G. Giuli, F. Olmi and S. Menchetti. Crystal chemistry of natural melilites: rietveld study of okayamalite, $Ca_2SiB_2O_7$. *Plinius*, 22, 53 (GEOITALIA 1999).
104. **L. Bindi**, P. Bonazzi, and S. Menchetti. Occurrence of micro-spherules in 3.4-Gyr-old cherts from Warrawoona Group, Western Australia: the oldest extraterrestrial objects? *Plinius*, 24, 40 (SIMP-PAVIA 2000).
105. **L. Bindi**, F. Tasselli, F. Olmi, A. Peccerillo and S. Menchetti. Crystal-chemistry of clinopyroxenes from basic rocks of Linosa: a proposed magmatological model. *Plinius*, 24, 41-42 (SIMP-PAVIA 2000).

106. D. Duranti, **L. Bindi**, and S. Menchetti. Crystal chemistry of melilites from the carbonaceous chondrites CV (Allende and Vigarano) and CO (Lancé). *Plinius*, 24, 102-103 (SIMP-PAVIA 2000).
107. **L. Bindi**, P. Bonazzi, G. Pratesi and S. Menchetti. Crystal structure of seeligerite, a rare Pb-I-oxychloride. (FIST-Geoitalia 2001).
108. S. Menchetti, **L. Bindi**, L. Barletti, F. Olmi, P. Bonazzi. The crystal structure of leightonite, $K_2Ca_2Cu(SO_4)_4{\cdot}2H_2O$. (FIST-Geoitalia 2001).
109. **L. Bindi**, O.G. Safonov, Y.A. Litvin, L.L. Perchuk, S. Menchetti. On the mechanism of incorporation of ultra-high amounts of potassium in natural and synthetic clinopyroxenes. *Plinius*, 28, 65-66 (SIMP-Cosenza 2002).
110. P. Bonazzi, **L. Bindi**, G.P. Bernardini, S. Menchetti. Stannite-kesterite solid solution: A model for the substitutional mechanism. *Plinius*, 28, 69-70 (SIMP-Cosenza 2002).
111. P. Bonazzi, **L. Bindi**, F. Olmi, S. Menchetti. β-As_4S_4 and non-stoichiometric As_8S_{9-x} sulphide minerals: a critical review. *Plinius*, 28, 70-72 (SIMP-Cosenza 2002).
112. **L. Bindi** and P. Bonazzi. Incommensurate-commensurate phase transition in natural åkermanite: low-temperature dependence of the modulation wave vector. Volume dei riassunti Geoitalia 2003, 606-607.
113. **L. Bindi**, S. Menchetti, P. Bonazzi. Toward the crystal structure of bazhenovite. Volume dei riassunti GEOITALIA 2003, 608.
114. M. Zoppi, F. Olmi, **L. Bindi**, P. Bonazzi. Studio diffrattometrico in alta temperatura su un cristallo di stibiotantalite del giacimento di Varuträsk, Svezia: risultati preliminari. Volume dei riassunti GEOITALIA 2003, 656-657.
115. **L. Bindi** and S. Menchetti. Reversible phase transformation between leadhillite and heated-leadhillite (susannite): a structural study by means of in-situ single-crystal X-ray diffraction. XXXIV Congresso Nazionale AIC – Roma, 26-29 Settembre 2004 – Volume dei riassunti, 136.
116. **L. Bindi**, G.I. Lampronti, S. Zanardi, P. Bonazzi. La struttura cristallina della wakabayashilite, $[(As,Sb)_6S_9][As_4S_5]$: pseudosimmetria e geminazione. XXXIV Congresso Nazionale AIC – Roma, 26-29 Settembre 2004 – Volume dei riassunti, 123.
117. P. Bonazzi, **L. Bindi**, M. Zoppi, G.C. Capitani, F. Olmi. Incorporation of silicon in pyrochlore: an integrated XREF, SEM, EMPA, and TEM study. Volume dei riassunti GEOITALIA 2005, 232.
118. L. Chelazzi, **L. Bindi**, F. Olmi, A. Peccerillo, S. Conticelli, S. Menchetti. Clinopyroxenes from volcanic rocks of the Capraia Island, Italy: crystal chemical and petrological considerations. Volume dei riassunti GEOITALIA 2005, 234.
119. **L. Bindi**, R.T. Downs, G.E. Harlow, O.G. Safonov, Yu.A. Litvin, L.L. Perchuk, H. Uchida, S. Menchetti. High-pressure single-crystal X-ray study of synthetic potassium-rich clinopyroxenes: influence of potassium incorporation on elasticity and structural compression. Volume dei riassunti GEOITALIA 2005, 55.
120. S. Menchetti, **L. Bindi**, M. Evain. Non-harmonic description of disordered crystals: the complex case of the mineral pearceite, $(Ag,Cu)_{16}(As,Sb)_2S_{11}$. Volume dei riassunti GEOITALIA 2005, 229.
121. G. Giuli, E. Paris, P. Bonazzi, **L. Bindi**. XANES heat treated Mn-ilvaite. Volume dei riassunti GEOITALIA 2005, 237.
122. **L. Bindi**, V. Moggi-Cecchi, G. Pratesi. A new iron-nickel phosphide from the Northwest Africa 1054 meteorite. Volume dei riassunti GEOITALIA 2005, 215.

123. **L. Bindi**, P. Bonazzi. A new molecular arsenic sulfide, As_4S_{5-x}, produced by light-induced alteration of a non stoichiometric As_8S_{9-x} crystal: structure solution and comparison with related structures. Congresso AIC2006 – Ferrara, 18-21 Settembre 2006. Volume dei riassunti, MS1-P5.
124. **L. Bindi**, M. Dusek, V. Petříček, P. Bonazzi. Five-dimensional structure refinement of natural fresnoite and comparison with the closely related incommensurately modulated structure of melilite. Volume dei riassunti (SIMP - Cagliari 2006).
125. P. Bonazzi, **L. Bindi**. The pyrochlore-related crystal structure of ingersonite, $Ca_3MnSb_4O_{14}$. Volume dei riassunti (SIMP - Cagliari 2006).
126. **L. Bindi**, M. Evain, A. Pradel, S. Albert, M. Ribes, S. Menchetti. The pearceite-polybasite group of minerals: A masterpiece of structural complexity. Volume dei riassunti GEOITALIA 2007, 428.
127. S. Nazzareni, P. Comodi, **L. Bindi**, O. Safonov, L. Perchuk, Yu. Litvin. X-ray single-crystal characterization of a synthetic Si and Cl-rich mica on the phlogopite-celadonite joint. Volume dei riassunti GEOITALIA 2007, 123-124.
128. P. Bonazzi, D. Holtstam, **L. Bindi**, P. Nysten, G.C. Capitani. The mess that is "allanite" from Kesebol, Västra Götaland (Sweden). Volume dei riassunti GEOITALIA 2007, 430.
129. L. Chelazzi, **L. Bindi**, P. Bonazzi. Preliminary structural study of filipstadite, $(Mn^{2+},Mg)_2(Sb^{5+}_{0.5}Fe^{3+}_{0.5})O_4$: A twinned 3a x 3a x 3a spinel superstructure. Volume dei riassunti GEOITALIA 2007, 432.
130. **L. Bindi**. Can clinopyroxene be a leading host of potassium in the Earth's upper mantle? Evidences from crystal chemistry and thermodynamic modelling. SIMP-AIC join meeting, Sestri Levante (Genova), 7-12 Settembre 2008.
131. L. Chelazzi, P.F. Zanazzi, P. Bonazzi, **L. Bindi**. High-pressure structural behavior of ingersonite, $Ca_3Mn^{2+}Sb^{5+}_4O_{14}$: An *in situ* single-crystal X-ray study. SIMP-AIC join meeting, Sestri Levante (Genova), 7-12 Settembre 2008.
132. **L. Bindi**, S. Menchetti. Going inside the polybasite structure: The role of silver in the *B* layer of the -*M*2*a*2*b*2*c* polytype. SIMP-AIC join meeting, Sestri Levante (Genova), 7-12 Settembre 2008.
133. D. Mitolo, D. Pinto, A. Garavelli, **L. Bindi**, F. Vurro. The crystal structure of challacolloite, KPb_2Cl_5, and hephaistosite, $TlPb_2Cl_5$, from La Fossa Crater, Vulcano, Aeolian Islands, Italy. SIMP-AIC join meeting, Sestri Levante (Genova), 7-12 Settembre 2008.
134. S. Nazzareni, P. Comodi, L. Dubrovinsky, **L. Bindi**. The crystal structure and HP behavior of gypsum-II from synchrotron single-crystal and powder X-ray diffraction. Volume dei riassunti GEOITALIA 2009, 431.
135. **L. Bindi**, P.J. Steinhardt, N. Yao, P. Lu. Discovery of Natural Quasicrystals. Volume dei riassunti GEOITALIA 2009, 430.
136. **L. Bindi**, M. Evain, S. Menchetti. The low-temperature crystal structure of cupropearceite and cupropolybasite. Volume dei riassunti GEOITALIA 2009, 436.
137. F. Bellatreccia, F. Cámara, G. Della Ventura, A. Mottana, **L. Bindi**, M.E. Gunter, M. Sebastiani. Fantappièite, a new mineral of the cancrinite-sodalite group with a 33-layer stacking sequence: occurrence and crystal structure. Volume dei riassunti GEOITALIA 2009, 433.
138. L. Chelazzi, T. Boffa Ballaran, F. Nestola, **L. Bindi**, P. Bonazzi. Compressibility of the $Ca_2Sb_2O_7$ weberite-like compound: In situ high-pressure single-crystal X-ray diffraction study. XXXVIII congresso AIC, (2009) Book of Abstracts, 52.

139. P. Bonazzi, **L. Bindi**, A. Pfitzner. Light-induced reversible transition in $HgI_2 \cdot As_4S_4$: evidence by single-crystal X-ray diffraction. XXXVIII congresso AIC, (2009) Book of Abstracts, Atti, 95.
140. F. Cámara, **L. Bindi**, M. Tribaudino, F. Vescovi, A. Bacchi. New data on ilmajokite. Congresso SIMP, Ferrara, 13-15 Settembre 2010.
141. **L. Bindi**. New data on natural quasicrystals reveal new clues for their origin. Congresso SIMP, Ferrara, 13-15 Settembre 2010.
142. S. Nazzareni, P. Comodi, **L. Bindi**, A. Bobrov. Equation of state of Fe^{3+}-bearing phase-X. Congresso SIMP, Ferrara, 13-15 Settembre 2010.
143. **L. Bindi**, F. Keutsch, P. Bonazzi. Menchettiite, a new Ag-Pb-Mn-sulfosalt from Uchucchacua polymetallic deposit, Lima Department, Peru, belonging to the lillianite series. Volume dei riassunti GEOITALIA 2011.
144. P. Bonazzi, F. Keutsch, **L. Bindi**. Manganoquadratite, $AgMnAsS_3$, a new manganese bearing sulfosalt from Uchucchacua polymetallic deposit, Lima Department, Peru. Volume dei riassunti GEOITALIA 2011.
145. C. Carbone, **L. Bindi**, R. Cabella, G. Lucchetti. $SrV_3O_7 \cdot 4H_2O$, a new mineral from Molinello mine, Val Graveglia, eastern Liguria, Italy. Volume dei riassunti GEOITALIA 2011.
146. A. Guastoni, **L. Bindi**, F. Nestola, F. Zorzi, L. Nasdala. $Pb_2(CO_3)(S_2O_3)$, the first mineral with coexisting carbonate and thiosulfate groups from Trentini mine, Vicenza, Italy. Volume dei riassunti GEOITALIA 2011.
147. F. Cámara, F. Nestola, **L. Bindi**, A. Guastoni, F. Zorzi, D. Pedron. A new mineral with a pyrochlore-related structure from Euganei Hills, Padova (Italy). Volume dei riassunti GEOITALIA 2011.
148. G. Lepore, T. Boffa Ballaran, F. Nestola, **L. Bindi**, P. Bonazzi, D. Pasqual. Compressibility of synthetic β-As_4S_4: *In situ* high-pressure single-crystal X-ray study. Volume dei riassunti GEOITALIA 2011.
149. S. Menchetti, **L. Bindi**. Fast ion conduction character and ionic phase-transition in silver sulfosalts: The case of fettelite, $[Ag_6As_2S_7][Ag_{10}HgAs_2S_8]$. XXXIX congresso AIC (2011).
150. **L. Bindi**. La scoperta di quasicristalli naturali. Congresso ANMS, Padova, 9-11 novembre 2011.
151. **L. Bindi**, A.G. Christy, S.J. Mills, M.E. Ciriotti, E. Bittarello. Jamborite: la soluzione di un vecchio enigma mineralogico. Congresso AMI, Tavagnasco, 6-7 Giugno 2014.
152. **L. Bindi**. Natural quasicrystals: Messengers from outer space. Congresso SISN, Napoli, 3-4 Luglio 2014.
153. D. Pinto, A. Garavelli, D. Mitolo, **L. Bindi**. "La Fossa" crater at Vulcano, Aeolian Islands (Italy): A treasure trove of minerals important for material science. Primo congresso congiunto SGI-SIMP, Milano, 10-12 settembre 2014.
154. G.O. Lepore, **L. Bindi**, A. Zanetti, M.E. Ciriotti, O. Medenbach, P. Bonazzi. First occurrence of octahedral V^{5+} in micas: the case of the new mineral balestraite, $KLi_2VSi_4O_{10}O_2$. Primo congresso congiunto SGI-SIMP, Milano, 10-12 settembre 2014.
155. R. Avanzinelli, E. Braschi. S. Marchionni, **L. Bindi**, S. Conticelli. The within-plate Na-alkaline magmatism of the Pelagian Block (Southern Italy): Sr-Nd-Pb and U-series isotope constraints from Pantelleria, Linosa and Pachino-Capo Passero basalts. Primo congresso congiunto SGI-SIMP, Milano, 10-12 settembre 2014.

156. **L. Bindi**. Ultrafast growth of quasicrystals in shock-produced melts and its implications for the early solar nebula. Primo congresso congiunto SGI-SIMP, Milano, 10-12 settembre 2014.
157. Bonazzi P., Lepore G.O., **Bindi L.** (2015) Expanding the number of arsenic sulphides having a layered structure: duranusite, a new structural type related to arsenolamprite. Congresso SIMP-SGI-SOGeI-AIV, Firenze, 2-4 Settembre 2015.
158. Lepore G.O., **Bindi L.**, Bonazzi P., Ciriotti M.E., Di Benedetto F., Mugnaioli E., Viti C., Zanetti A. (2015) A multimethodic approach to the characterization of a Mn-rich celadonite from Cerchiara mine, Eastern Liguria, Italy. Congresso SIMP-SGI-SOGeI-AIV, Firenze, 2-4 Settembre 2015.
159. Zaccarini F., **Bindi L.**, Garuti G., Bakker R.J. (2015) The importance of a multimethodic approach for the characterization of platinum group minerals (PGM) and associated phases: some cases of study. Congresso SIMP-SGI-SOGeI-AIV, Firenze, 2-4 Settembre 2015.
160. Biagioni C., **Bindi L.**, Moëlo Y. (2015) Structural complexity in sulfosalts – "Cu-sterryite" and meerschautite: two new expanded derivative of owyheeite from Italy. Congresso SIMP-SGI-SOGeI-AIV, Firenze, 2-4 Settembre 2015.
161. M. Goudjil, E. Lunedei, **L. Bindi**, P. Bonazzi, G. Ruani, F. Mercuri, D. Mezaoui (2017) Anisotropy in molybdenum oxide bronzes: a theoretical, structural, electrical and spectroscopic characterization. Congresso AIC, Perugia, Giugno 2017.
162. **L. Bindi** (2017) How quasicrystals form in outer space. Congresso congiunto SIMP-SGI-SOGeI-AIV, Pisa, 4-6 Settembre 2017.
163. **L. Bindi** (2018) Soluzioni solide: può questo concetto essere esteso ai quasicristalli? "*Duecento anni di cristalli misti*", Accademia delle Scienze di Torino, 22-23 Maggio , 2018.
164. F. Cámara, **L. Bindi**, A. Pagano, R. Pagano (2018) Dellagiustaite: A novel natural spinel contaning V^{2+}. Congresso AIC, Roma, Giugno 2018.
165. **L. Bindi** (2018) Solid solution: Can this concept be applied to quasicrystals? Congresso AIC, Roma, Giugno 2018.
166. E. Scricciolo, S. Nazzareni, **L. Bindi**, V. Zanon, M. Petrelli, M. Zanatta, G. Giuli (2018) REE minerals and REE-bearing minerals from Agua de Pau syenites (Sao Miguel, Azores islands, Portugal). Congresso AIC, Roma, Giugno 2018.
167. A. Karlsson, D. Holtstam, **L. Bindi**, P. Bonazzi (2018) Adding complexity to the nomenclature of the garnet supergroup: Discovery of the new member $\{Ca_3\}[Sb^{5+}]_2(Fe^{3+}{}_2Fe^{2+})O_{12}$. Congresso SGI-SIMP, 12-14 Catania 2018.
168. **L. Bindi** (2018) From crystals to quasicrystals in the Khatyrka meteorite: There's plenty of room in the middle. Congresso SGI-SIMP, 12-14 Catania 2018.
169. V. Stagno, B. Bonechi, **L. Bindi**, S. Greaux, B.T. Poe, Claudia Romano, M. Nazzari, P. Scarlato (2018) Synthesis of majorite from omphacitic glass at deep mantle conditions sheds light on the rheology of the subducting oceanic crust. Congresso SGI-SIMP, 12-14 Catania 2018.
170. J. Hu, P.D. Asimow, C. Ma, **L. Bindi** (2019) New compositions of shock-synthesized AlCuFe icosahedral quasicrystals: implications for the impact origin of natural quasicrystals in the Khatyrka meteorite. XV Congresso di Scienze Planetarie, Firenze, 4-9 Febbraio 2019.

171. **L. Bindi** (2019) Collisions in outer space produced a vacancy-rich, partially inverted tetragonal ringwoodite in several shocked meteorites. Congresso SIMP-SGI, Parma, 16-20 Settembre 2019.
172. P. Bonazzi, **L. Bindi** (2019) Dienerite, Ni_3As: a mineralogical species to revalidate. Congresso SIMP-SGI, Parma, 16-20 Settembre 2019.
173. C. Biagioni, D. Mauro, **L. Bindi**, U. Hålenius, M. Pasero (2019) Giacovazzoite and scordariite, two new minerals related to metavoltine. Congresso SIMP-SGI, Parma, 16-20 Settembre 2019.

Firenze, 3 dicembre 2024