



crystals

IMPACT
FACTOR
2.670

CITESCORE
3.2

ANNUAL PUBLICATION REPORT 2022



Academic Open Access Publishing
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Annual Publication Report of *Crystals* in 2022

Crystals Editorial Office, January 2023

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1. Highlights

- The Media Processing Time has reduced to 30 days (from 31 days in 2021);
- The JCR category rank has risen to 12/26 (Q2) in “Crystallography”;
- 2931 new submissions were received in 2022 (a 20% increase);
- 1818 papers were published (a 14% increase);
- The Editorial Board team significantly increased to 511 members in total;
- The Section “Crystalline Ceramics” changed to “Polycrystalline Ceramics”.

2. Overview

Crystals (ISSN 2073-4352) is a peer-reviewed open access journal, published monthly online by MDPI, that covers all aspects of crystalline material research, including liquid crystals and biomolecular crystals.

Crystals was founded in 2011, and includes 12 Volumes; 6678 articles have been published to date; 622 articles have been cited 10 times or more (h-10 index).

Indexing: *Crystals* is indexed by the Science Citation Index Expanded (Web of Science), Scopus (Elsevier), and other databases.

Impact Factor: The updated Impact Factor for *Crystals* increased to 2.670 in 2021 (as shown in Figure 1). The 5-Year Impact Factor is 2.688. Citable items and citations have grown consistently in the last six years (Figure 2).



Figure 1. Trends in the Impact Factor of *Crystals* over the last 6 years.

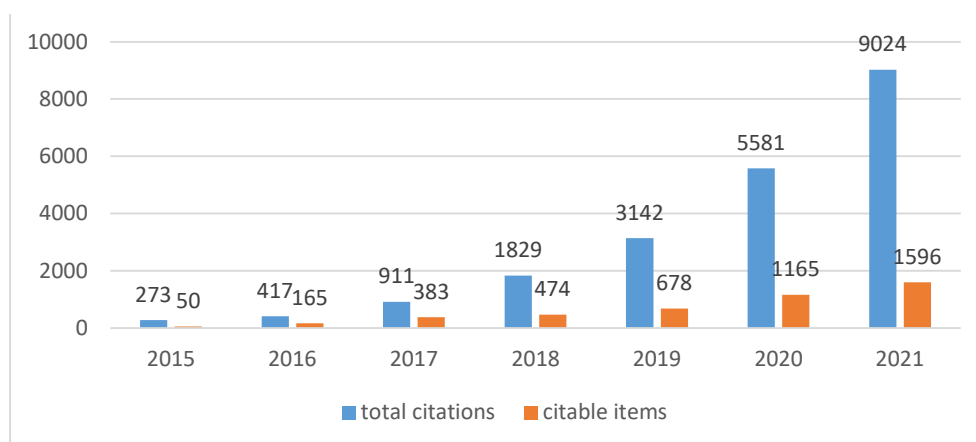


Figure 2. Citable items and citations for *Crystals* over the last 7 years.

3. Journal Statistics

3.1. Publication Trend

In total, 2931 submissions were received in 2022, with an annual growth of 20%; 1818 papers were published in 2022, with an annual growth of 14%. **Figure 3** shows the number of monthly publications in *Crystals*.

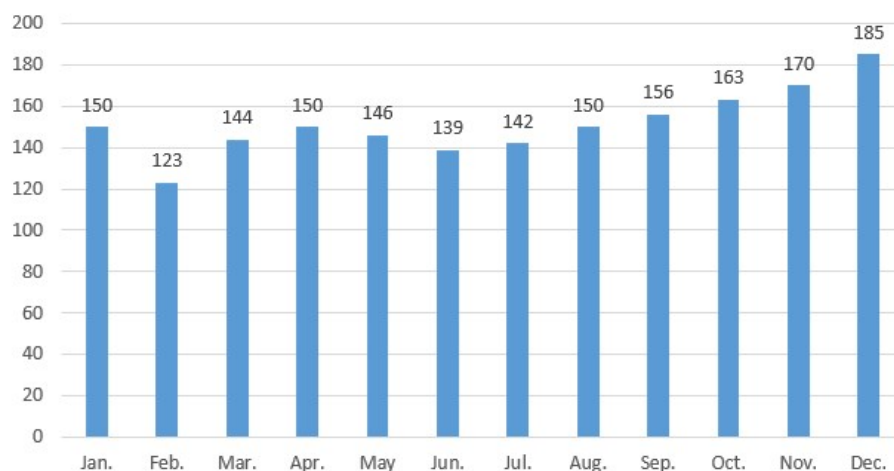


Figure 3. Monthly publications in 2022.

Figure 4 shows the annual publications and year-on-year growth rate for *Crystals* over the last five years.



Figure 4. Publications over the last five years.

In 2022, both the numbers of submissions and publications continued to increase, to 2931 and 1818, respectively. The rejection rate increased to 30%. **Figure 5** shows the trends in submissions, publications, and rejection rates over the past 3 years.

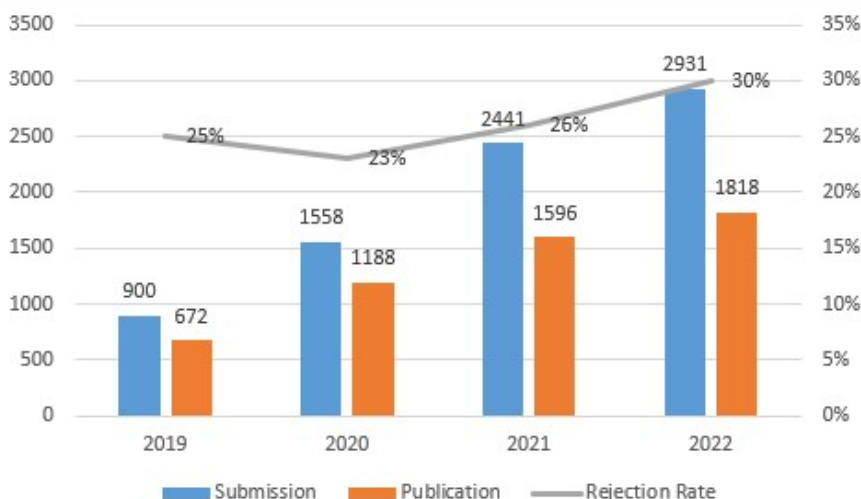


Figure 5. Submissions, publications, and rejection rates for the last 4 years.

The journal will keep growing and provide a professional and rapid processing service to authors and disseminate knowledge in a timely manner.

Among the number of publications in 2022, 81.57% (1483) of manuscripts were published in Special Issues, a 1.3% decrease compared with 2021. The journal benefits from the journal's operation model: we rely on Guest Editors to set up Special Issues (or Topic Collections) to invite contributions, maintaining a sustainable rate submissions every month. More efforts need to be paid to Special Issue projects in 2023, and we wish to receive more support from Editorial Board Members and Guest Editors.

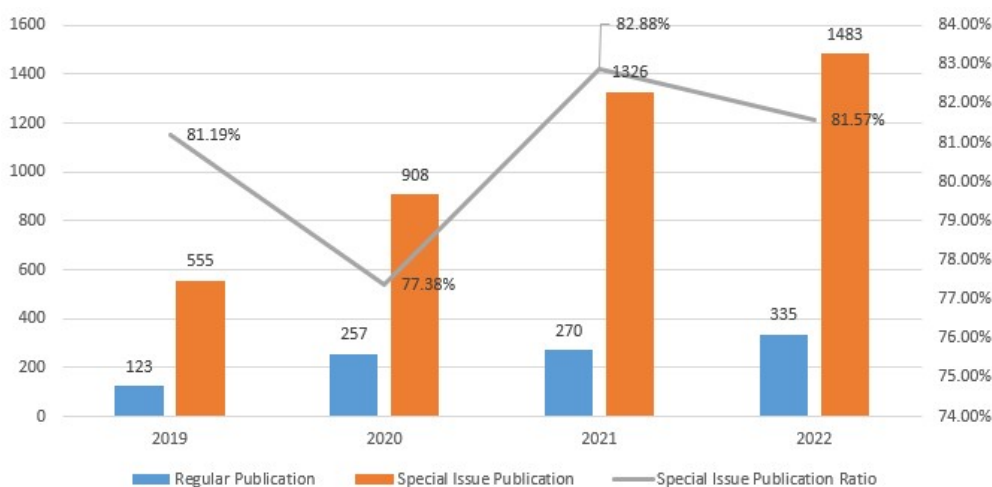


Figure 6. Special Issue and regular publications for *Crystals* over the last 4 years.

Crystals published an increased number of papers that received more attention from the scientific community. We are planning to set up the *Crystals* 2023 Best Reviewer Award, the *Crystals* 2023 Best Cover Award, and the *Crystals* 2022 Best Paper Award.

3.2. Author Distribution

Figure 7–9 show that for 2022 publications, the authors mainly came from Asia, Europe, and the USA. The top five countries for published papers were China (45.48%), Saudi Arabia (10.78%), Russia (8.0%), the USA (6.5%), and Germany (6.1%). The author distribution of published papers in 2022 was not exactly the same as the author distribution in the “Crystallography” and “Materials Science Multidisciplinary” categories of the Web of Science database in 2022. Authors from China, USA, India, and Russia contributed the most in the category of Crystallography in 2022. In addition, the United Kingdom and Italy do not appear in the top 10 countries for the author distribution of *Crystals*. Therefore, we need to take on more marketing activities to emphasize the journal's

reputation in North America and Europe in order to encourage scholars to submit suitable papers to *Crystals*.

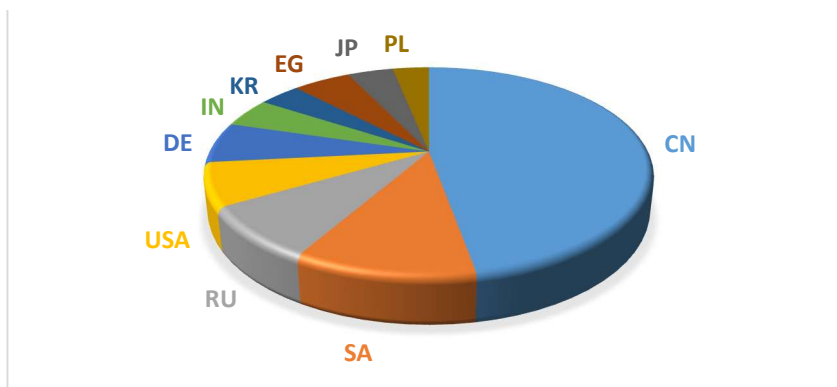


Figure 7. Author distribution of papers submitted to *Crystals* in 2022.

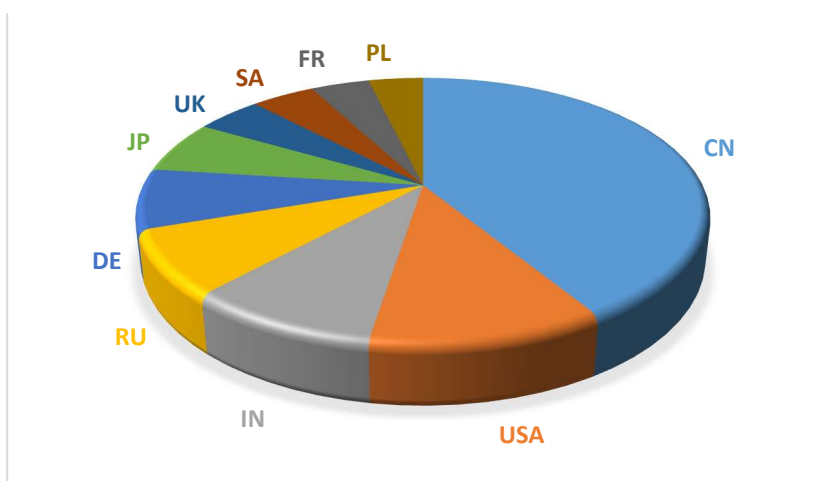


Figure 8. Author distribution for the "Crystallography" category in the WOS database in 2022.

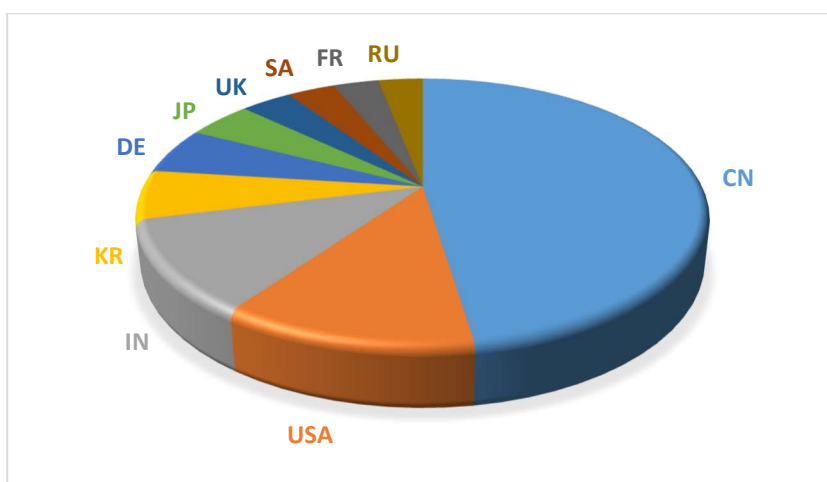


Figure 9. Author distribution for the "Materials Science Multidisciplinary" category in the WOS database in 2022.

3.3. Publication Types

Shown below are published papers by type in 2021 and 2022 (research articles still constituted the largest percentage for article type in *Crystals* in 2021). In 2022, 92.08% of the published papers were original research papers. Review papers maintained a publication rate of approximately 6.16%. In general, high-quality review papers receive more average citations compared with regular

research papers. We wish to continuously publish more systematic review in 2023, and will launch “Review Collections” in every Section. We encourage all our Editorial Board Members and Guest Editors to publish and/or invite review papers for *Crystals*.

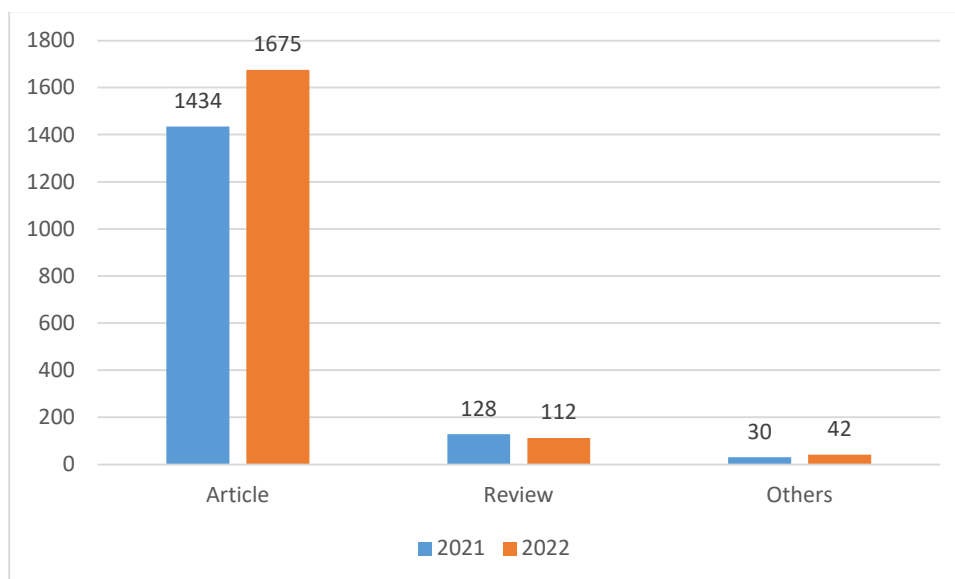


Figure 10. Types of papers published in 2022.

3.4. Publication Time and Editorial Process

The median publication time (MPT) in 2022 was 30 days (from submission to final publication), which was slightly lower than in 2020. A first decision was provided to authors approximately 12 days after submission, and acceptance for publication took 3 days (median values for papers published in this journal in 2021). We have consistently maintained the advantage of a rapid publication process.

Table 1. Submission process time in the last three years.

Year	Time from Submission to Final Publication (days)	Time from Submission to First Decision (days)	Time from Acceptance to Publication (days)
2020	31	13	3.0
2021	31	13	3.0
2022	30	12	3.0

3.5. Crystals’ Editorial Team

510+

Editorial Board Members

<https://www.mdpi.com/journal/crystals/editors>

800+

Guest Editors

https://www.mdpi.com/journal/crystals/special_issues

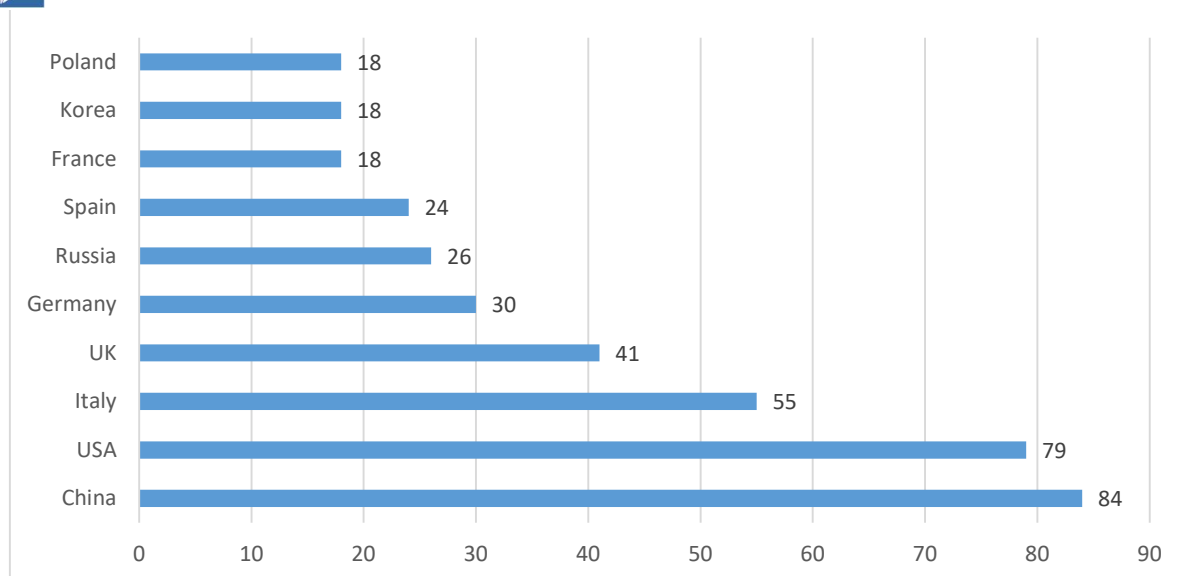


Figure 11. Top 10 nationalities of EBMs.

In 2022, the active participation of Editorial Board Members in promotional and editorial work directly increased the visibility and reputation of *Crystals*. We would like to express our thanks to all the Editorial Board Members who contributed to the development of the journal in 2022.

3.6. Online Readership

The total number of full-text reviews from the MDPI website was 4,072,330 in 2022, increasing by 17% compared with 2021. The Editorial Office put a lot of effort into collaborating with authors on the promotion of publications, such as promotion guidance, social media promotion, article banner production, and video abstract exhibitions. We will continue to put more effort into promotion projects in order to bring more attention to publications in *Crystals*.

Newly selected Editor's Choice Articles can be accessed online via: https://www.mdpi.com/journal/crystals/editors_choice.

Due to the restrictions as a result of the COVID-19 pandemic, we are still not able to perform as many marketing activities as usual. This year, we will continue to seek opportunities to cooperate with conferences/workshops, and wish to present 1–2 booths at various international events to promote the visibility of *Crystals*.

Article Views per Year Trend



* data as of 19 January 2023

Figure 12. Trend in article views per year.

At the end of 2021, *Crystals* had 3243 subscribers on mdpi.com; 793 new subscribers followed us in 2022. We will make a greater effort to invite our authors, reviewers, and editors to subscribe to our journal, where we may share information on newly published papers, related conferences, newly launched Special Issues, and journal news quarterly.

4. Sections and Special Issues

4.1. Section Status

We now have 12 Sections that cover most areas within the scope of the journal. Table 2 presents some basic data for each Section. The section "Inorganic Crystalline "Materials"

contributed the most papers in 2022. To better manage these 12 Sections, we will continue to work in close contact with the SEiCs to discuss potential Section development strategies, marketing analyses, etc., and will periodically report the Section status to the SEiC as well as to Section Editorial Board Members, via face-to-face talks or online meetings.

In addition, we announced three new Sections in 2021, namely, “Materials for Energy Applications”, “Alloys and Compounds”, and “Crystalline Ceramics”. Currently, the section “Crystalline Ceramics” does not have an Editor-in-Chief. We welcome all members of the Editorial Board to nominate themselves or recommend outstanding scholars for this SEiC position.

We sincerely hope that all of our EBMs will continue to enjoy working with *Crystals*.

Table 2. Brief section information.

Sections	Section Editor-in-Chief	Publications in 2022 *	EBMs by the end of 2022
Liquid Crystals	Prof. Dr. Charles Rosenblatt	60	50
Biomolecular Crystals	Prof. Dr. Abel Moreno	46	38
Crystal Engineering	Prof. Dr. Sławomir J. J. Grabowski	140	69
Industrial Crystallization	Prof. Dr. Heike Lorenz	33	12
Inorganic Crystalline Materials	Prof. Dr. Zongyou Yin	429	93
Organic Crystalline Materials	Prof. Dr. Neil Champness	57	27
Macromolecular Crystals	Prof. Dr. Jesús Sanmartín-Matalobos	31	15
Mineralogical Crystallography and Biomineralization	Prof. Dr. Wolfgang W. Schmahl	55	13
Hybrid and Composite Crystalline Materials	Prof. Dr. Leonid Kustov	134	26
Crystalline Metals and Alloys	Dr. Cyril Cayron	322	16
Materials for Energy Applications	Prof. Dr. Robert F. Klie	189	54
Polycrystalline Ceramics	Prof. Dr. Shujun Zhang	28	49

* we only included papers that have been included in Sections.

4.2. Special Issues in 2022

By the end of December 2022, we had 420 Special Issues that are open for submissions in 2023. The list can be found online at: https://www.mdpi.com/journal/crystals/special_issues.

Table 3 lists some of successful Special Issues in 2022.

Table 3. Some of the Special Issues and publications in 2022.

Special Issue	Publications
Feature Papers on "Hybrid and Composite Crystalline Materials" 2021-2022	35
Gem Crystals	32
Crystal Plasticity (Volume II)	27
Additive Manufacturing (AM) for Advanced Materials and Structures: Green and Intelligent Development Trend	21
Feature Papers in Crystal Engineering in 2022	19
Mineralogical Crystallography Volume II	17
Advances in Optoelectric Functional Crystalline Materials	14
Crystallographic Studies of Enzymes (Volume II)	12
Protein Crystallography: Achievements and Challenges	12
Advances in Functional Inorganic Materials Prepared by Wet Chemical Methods (Volume II)	11
State-of-the-Art Liquid Crystals Research in UK	11

4.3. Special Issue Reprint Books

Special Issue Reprints are available in online open access format and as physical books via a print-on-demand service. The Reprint books are listed in the Directory of Open Access Books (DOAB), Google Books, and WorldCat, and are available through several distribution platforms (e.g., Amazon). Special Issue Reprint books are convenient and effective, facilitating the promotion of publications by Guest Editors and the journal. In addition to the complimentary copies printed for Guest Editors, all Special Issue/Topical Collection contributors can purchase copies at a 20% discount.

Table 4. Some of the Special Issue books published in 2021.

		
Ingo Dierking (Ed.) https://www.mdpi.com/journal/crystals/special_issues/state-of-the-art-LC	Vladislav V. Gurzhiy (Ed.) https://www.mdpi.com/journal/crystals/special_issues/mineralogical_crystallography_ii	Ulrich Prah, Sergey Guk and Faisal Qayyum (Eds.) https://www.mdpi.com/journal/crystals/special_issues/plasticity_technologies
		
Hao Yi, Huajun Cao, Menglin Liu and Le Jia (Eds.) https://www.mdpi.com/journal/crystals/special_issues/additive_manufacturing_green	Kyeong Kyu Kim and T. Doohun Kim (Eds.) https://www.mdpi.com/journal/crystals/special_issues/Enzymes_II	Xiaoming Duan, Renqin Dou, Linjun Li and Xiaotao Yang (Eds.) https://www.mdpi.com/journal/crystals/special_issues/middle_infrared

5. Marketing and Promotion

5.1. Conference Collaboration

We cooperated with dozens of international conferences in 2022. We distributed journal flyers and provided special gifts for our Editorial Board Members, as well as some promotional memorabilia for conference attendees. It is very important for us to engage in face-to-face talks with scholars to understand what they care about and what we can do to provide a better service. Table 5 presents a list of some conferences which were attended by *Crystals* in 2022.

Table 5. Conference collaborations.

Conference Name	Date	Country
The 6th Symposium on Polymer Crystallization of the Chinese Chemical Society	2022-04-15	China
New Generation Photovoltaic for Space	2022-06-21	Italy
XXXVIII biennial meeting of the Spanish Royal Society of Chemistry	2022-06-27	Spain
28th International Liquid Crystal Conference	2022-07-24	Portugal
Flatlands beyond Graphene 2022	2022-08-28	Spain
6th International Conference on the Physics of Optical Materials and Devices	2022-08-29	Serbia
16th International Conference on Scintillating Materials & their Applications	2022-09-19	USA
The 8th World Conference on Photovoltaic Energy Conversion	2022-09-26	Italy
J2N 2022 (Journées Nationales Nanofils semiconducteurs)	2022-09-28	France
Materials Science & Technology 2022	2022-10-11	Singapore
2022 International Conference on Low-Dimensional Semiconductor Materials and Device Physics	2022-11-18	China

5.2. Awards

To help early-career investigators, we launched two Awards in 2022.

The winner of the **Crystals 2022 Young Investigator Award** was Prof. **Matia Biesuz**. Prof. Dr. Mattia Biesuz obtained a Ph.D. in “Materials Engineering” from the University of Trento (Italy) in 2017 after defending a thesis on flash-sintering mechanisms in alumina and glass-containing alumina ceramics. Since then, he has completed several research experiences as a PostDoc in China, the UK, the Czech Republic, and Italy.

His current research interests include various sintering technologies for the consolidation of ceramics (flash sintering, spark plasma sintering, cold sintering, and ultrafast high-temperature sintering), field-assisted ion exchange in glasses and glass-ceramics, porous materials, polymer-derived ceramics, and high-entropy compounds. His research has mostly focused on the underlying and peculiar physical-chemical effects triggered by electric fields during ceramics processing.

The winner of the **Crystals 2022 Best PhD Thesis Award** was **Dr. Soo-Ho Jo**, a postdoctoral researcher at the Department of Mechanical Engineering at Seoul National University, South Korea. He received his B.S and Ph.D. degrees in 2016 and 2021 from the Department of Mechanical and Aerospace Engineering at Seoul National University (Advisor: Byeng D. Youn), South Korea. His thesis has outstanding academic value, in that it integrates phononic-crystal-based wave tailoring with multiphysics (piezoelectric) phenomena for enhancing the energy-harvesting performance. His current research topics include (i) energy harvesting, (ii) phononic-crystal-incorporated ultrasonic transducers and sensors, (iii) metastructure-based wave manipulation, and (iv) the modeling, analysis, and design of static and dynamic structures using artificial intelligence.

5.3. Paper Promotions

To increase the visibility of our publications, we highly encourage authors to promote their papers on their social networks to make a bigger impact. *Crystals* now frequently uses social networks such as Twitter, and LinkedIn to promote some selected publications. We sincerely hope for interested people to follow us on:

- Twitter: [@Crystals_MDPI](https://twitter.com/Crystals_MDPI);
- LinkedIn: <https://www.linkedin.cn/injobs/in/crystals-mdpi/>.

Issue covers and title story covers have also been designed to increase the visibility of high-quality papers; the 12 cover papers are listed in Appendix B.

To devote more effort to the promotion of our publications, we have also launched a new project—Video Exhibition—for authors that have papers published in *Crystals*. Authors can apply to exhibit a video abstract to briefly introduce their published research. We envision that this will help the paper make a bigger impact, potentially attract more citations, and further establish authors' reputations.

5.4. Other Cooperations

Crystals continued its collaboration with the International Union of Crystallography (IUCr) by sponsoring the "Check CIF" program, together with IUCr, CCDC, ACS, Wiley, Elsevier, and RSC. We can direct our authors, editors, and reviewers to make use of the service. Please see the details which are available via the following link: <http://checkcif.iucr.org/>.

Crystals has sponsored the French Crystallography Association for two years; the logo and banners of *Crystals* are posted on the website of all conferences organized by the French Crystallography Association. Please see the details which are available via the following link: <https://www.afc.asso.fr/english/partnership>.

6. *Crystals*' 2023 Plans

The year 2022 was not easy. However, we are grateful that the journal still made a step forward, with help from all our editors and in-house staff. We maintained a steady publishing pace and a short processing time, and attracted more top experts to join our Board. In 2023, we will continue to work with our Editor-in-Chief, Section Editors-in-Chiefs, Editorial Board Members, and Guest Editors to provide the best services to our scholars; improve our journal reputation, impact, and visibility; and support our authors in promoting their research to further establish their reputation.

In 2023, we will maintain most of the current strategies to manage the journal. We will put more effort into developing different aspects of each Section, including publications, Board Members, Special Issue topics, marketing activities, etc. Our initial plans are presented in Table 7.

Table 7. Plans for 2023.

Types	Items	Progress
Manuscripts and Publications	Publications	Maintain a stable publication rate and continue to publish high-quality papers rapidly.
		➤ Promote via social media (Twitter, LinkedIn, Facebook, and official MDPI WeChat account);
		➤ Set up Awards to encourage authors to promote papers within their networks;
	Paper Promotion	➤ Regularly announce Issue covers, Editor's Choice, and title story papers;
		➤ Work closely with authors to promote published articles: paper promotion checklist, paper banners, etc.;
Journal Structure and Development		➤ Encourage authors to prepare video/graphical abstracts to enrich Video Exhibitions, which will be more attractive.
	Editorial Team	➤ Expand Section EBMs for new Sections to help Section EiCs to develop;
		➤ Strengthen the maintenance and management of Special Issues, and improve the average number of publications and quality of Special Issues;
		➤ Organize meetings with EBMs to discuss the direction and strategies for the journal.
	Section Management	➤ Work closely with Section EiCs and EBMs to develop strategies for each Section, and focus on the featured topics;
		➤ Perform marketing analysis for each Section and focus more on hot/new topics;
		➤ Launch Collections (Special Issues that are always open for

submissions) in every Section to collect comprehensive review articles from well-recognized scientists.

Special Issue Management	➤ Topic control and data mining/collection on hot topics;
	➤ Maintain close contact with Guest Editors and support their promotion activities;
	➤ Publish 10 papers on average in Special Issues;
	➤ Focus more efforts on promoting Special Issue publications;
	➤ Special Issue books, Special Issue call for reading.
Marketing Activities	➤ Lead 1-2 booths at international conferences;
	➤ Seek cooperation with conferences/workshops (including online events);
	➤ 2023 Editor's Choice Articles;
	➤ Organize regular journal Awards: <i>Crystals</i> 2023 Travel Award, etc.;
	➤ Send WeChat tweets.

Acknowledgments

We appreciate the great efforts and support from all Editorial Board Members (please find our list of editors at <http://www.mdpi.com/journal/crystals/editors>). They have all provided invaluable help in the development of the journal in the past year. We would like to give our special thanks to our Guest Editors for editing excellent and successful Special Issues of *Crystals*. Thanks to the hard work of all these excellent scientists, we could publish each issue smoothly and in a timely manner.

Appendix A: Bibliometrics.

Table A1. Top five most cited papers in the last 2 years.

No. of Citations	Title
49	Insight into Rare Structurally Characterized Homotrinary CuII Non-Symmetric Salamo-Based Complex
41	Comparative Hybrid Hartree-Fock-DFT Calculations of WO ₂ -Terminated Cubic WO ₃ as Well as SrTiO ₃ , BaTiO ₃ , PbTiO ₃ and CaTiO ₃ (001) Surfaces
37	Extraction–Pyrolytic Method for TiO ₂ Polymorphs ProductionExtraction–Pyrolytic Method for TiO ₂ Polymorphs Production
36	A Review on MoS ₂ Properties, Synthesis, Sensing Applications and Challenges
34	The Formation and Control of Ice Crystal and Its Impact on the Quality of Frozen Aquatic Products: A Review

Table A2. Top five most cited papers since 2011.

No. of Citations	Title
242	Crystal and Magnetic Structures in Layered, Transition Metal Dihalides and Trihalides
215	Not Only Hydrogen Bonds: Other Noncovalent Interactions
189	High Birefringence Liquid Crystals
139	σ -Hole Interactions of Covalently-Bonded Nitrogen, Phosphorus and Arsenic: A Survey of Crystal Structures
134	Epitaxial Graphene on SiC: A Review of Growth and Characterization

Appendix B: *Crystals* cover images for Issues 1–12; Volume 12.

 <p>Self-Localized Liquid Crystal Micro-Droplet Arrays on μCP Surfaces</p> <p>Volume 12 - Issue 1 January 2022</p>	 <p>Calibrating Detector Module Geometry Using Powder Diffraction Patterns</p> <p>Volume 12 - Issue 2 February 2022</p>	 <p>Liquid Crystal Beam Steering Angle Expander for LIDAR Applications</p> <p>Volume 12 - Issue 3 March 2022</p>
Volume 12, Issue 1	Volume 12, Issue 2	Volume 12, Issue 3
 <p>Structure-Based Modeling of the Mechanical Behavior of CLECs</p> <p>Volume 12 - Issue 4 April 2022</p>	 <p>Highly Efficient Contact Doping for High-Performance Phototransistors</p> <p>Volume 12 - Issue 5 May 2022</p>	 <p>Discovery, Invention and Serendipity: Cyanobiphenyls and Beyond</p> <p>Volume 12 - Issue 6 June 2022</p>
Volume 12, Issue 4	Volume 12, Issue 5	Volume 12, Issue 6
 <p>Effect on the Al-Mg-Si Alloy AA 6086</p> <p>Volume 12 - Issue 7 July 2022</p>	 <p>How Co and Cr Stabilize Strengthening Phases in Nickelbase Superalloys</p> <p>Volume 12 - Issue 8 August 2022</p>	 <p>Structural and Electronic Properties of Cu_3InSe_4</p> <p>Volume 12 - Issue 9 September 2022</p>
Volume 12, Issue 7	Volume 12, Issue 8	Volume 12, Issue 9
 <p>Biological Mineralization of Hydrophilic Intraocular Lenses</p> <p>Volume 12 - Issue 10 October 2022</p>	 <p>Three Trinuclear Cu(II) Polymorphs</p> <p>Volume 12 - Issue 11 November 2022</p>	 <p>Simulation of Axial and Radial Species Segregation in Floating Zone Si Growth</p> <p>Volume 12 - Issue 12 December 2022</p>
Volume 12, Issue 10	Volume 12, Issue 11	Volume 12, Issue 12