

impact factor of green chemistry

impact factor of green chemistry is a critical metric used to evaluate the influence and prestige of scientific journals and research within the field of green chemistry. Green chemistry, also known as sustainable chemistry, focuses on designing products and processes that minimize environmental impact and promote sustainability. The impact factor serves as a quantitative measure reflecting the average number of citations to recent articles published in a particular journal. Understanding the impact factor of green chemistry journals helps researchers, institutions, and policymakers identify the most reputable sources and advances in eco-friendly chemical practices. This article explores the significance of the impact factor within green chemistry, factors influencing these metrics, key journals with high impact factors, and how the impact factor shapes the development and dissemination of sustainable chemical research. Additionally, the article discusses limitations and criticisms of the impact factor as a sole indicator of quality in the green chemistry domain.

- Understanding the Impact Factor in Green Chemistry
- Key Journals and Their Impact Factors
- Factors Influencing the Impact Factor of Green Chemistry Journals
- Role of Impact Factor in Advancing Green Chemistry Research
- Limitations and Criticisms of the Impact Factor

Understanding the Impact Factor in Green Chemistry

The impact factor (IF) is a widely recognized bibliometric indicator that measures the average number of citations received per paper published in a specific journal during the preceding two years. In the context of green chemistry, the impact factor reflects the journal's influence and relevance within the scientific community focused on sustainable chemical processes and environmental protection. This metric is used by researchers to decide where to publish their work, by librarians to select journals for their collections, and by funding bodies to assess research quality.

Definition and Calculation

The impact factor of green chemistry journals is calculated by dividing the total number of citations in a given year to articles published in the two previous years by the total number of "citable items" (usually articles and reviews) published in those two years. For example, if a journal received 500 citations in 2023 to papers published in 2021 and 2022, and the total number of citable articles in those years was 100, the impact factor would be 5.0. This metric helps quantify the journal's prominence and the relevance of research disseminated within green chemistry.

Significance in the Scientific Community

The impact factor of green chemistry journals is crucial for evaluating the quality and reach of research outputs related to sustainable chemical practices. High-impact journals are often perceived as more prestigious and authoritative, attracting high-quality submissions and wider readership. Consequently, publishing in journals with a strong impact factor can enhance the visibility and citation potential of research focused on reducing hazardous substances, promoting renewable resources, and improving energy efficiency in chemical manufacturing.

Key Journals and Their Impact Factors

Several leading journals specialize in green chemistry and related sustainable science fields, each with varying impact factors that reflect their influence. These journals prioritize publishing innovative research that aligns with the principles of green chemistry, such as waste minimization, safer solvents, and renewable feedstocks.

Notable High-Impact Journals

- **Green Chemistry:** This is one of the most prominent journals dedicated exclusively to green chemistry research. It consistently holds a high impact factor, reflecting its role in disseminating cutting-edge sustainable chemistry studies.
- **Journal of Cleaner Production:** Emphasizes interdisciplinary research on cleaner production and sustainable development, with a significant impact factor in environmental and chemical engineering fields.
- **ChemSusChem:** Focuses on sustainable chemistry and energy research, often recognized for its impactful contributions to green chemical innovations.

- **Environmental Science & Technology:** Although broader in scope, this journal publishes influential research on environmental chemistry, including green chemistry topics.

Impact Factor Trends

The impact factors of green chemistry journals have generally increased over the years, reflecting the growing importance and urgency of sustainable chemical research. This trend highlights the expanding interest and citation activity within this scientific domain, driven by global environmental challenges and regulatory pressures encouraging greener technologies.

Factors Influencing the Impact Factor of Green Chemistry Journals

Several factors affect the impact factor of journals specializing in green chemistry. Understanding these elements provides insight into why some journals achieve higher impact factors and how researchers can strategically position their work for maximum visibility.

Quality and Novelty of Published Research

Journals that publish high-quality, innovative research tend to receive more citations, boosting their impact factor. Breakthrough studies on environmentally benign chemical processes or novel catalysts for green synthesis often attract significant attention within the scientific community.

Scope and Interdisciplinary Reach

Journals covering broader aspects of sustainable science, including environmental chemistry, chemical engineering, and materials science, may have a wider audience, leading to higher citation rates. Interdisciplinary journals can therefore achieve higher impact factors by appealing to multiple scientific communities.

Publication Frequency and Article Types

The number of issues published annually and the balance between article types (original research, reviews, perspectives) influence citation patterns. Review articles typically garner more citations, positively affecting the journal's impact factor.

Indexing and Accessibility

Journals indexed in major scientific databases and offering open access options tend to have higher visibility, which can increase citations and, consequently, their impact factor. Accessibility plays a crucial role in disseminating green chemistry research to a broad audience.

Role of Impact Factor in Advancing Green Chemistry Research

The impact factor of green chemistry journals plays a pivotal role in shaping research directions, funding decisions, and academic recognition within the sustainable chemistry field.

Influence on Research Funding and Careers

Funding agencies and academic institutions often use impact factors as part of their criteria to evaluate research proposals and academic performance. Publishing in high-impact green chemistry journals can enhance grant success rates and career advancement for researchers focused on sustainability.

Encouraging Innovation and Collaboration

High-impact journals attract submissions from leading scientists worldwide, fostering innovation and collaboration in green chemistry. This dynamic exchange accelerates the development of new methodologies and technologies aimed at reducing environmental harm from chemical processes.

Guiding Policy and Industry Practices

Research published in top green chemistry journals often informs policymakers and industry leaders

seeking sustainable solutions. The impact factor helps identify influential studies that can shape regulations, product development, and industrial practices aligned with environmental goals.

Limitations and Criticisms of the Impact Factor

Despite its widespread use, the impact factor of green chemistry journals has several limitations and faces criticism regarding its effectiveness as a sole measure of research quality and impact.

Overemphasis on Citation Quantity

The impact factor focuses on citation counts without accounting for the context or quality of citations. Articles may be cited frequently for negative reasons or due to trends unrelated to scientific merit, which can distort true impact assessments.

Short Citation Window

The two-year citation window used for impact factor calculation may not fully capture the long-term influence of green chemistry research, which can have lasting effects beyond this period.

Disciplinary Variations

Citation behaviors differ across scientific fields. Green chemistry intersects multiple disciplines, making direct comparison of impact factors challenging, as some fields inherently have higher citation rates than others.

Potential for Manipulation

Some journals may engage in practices aimed at artificially inflating their impact factor, such as encouraging excessive self-citations or preferentially publishing review articles. These tactics can undermine the credibility of the metric.

Alternative Metrics

To address these shortcomings, alternative metrics like the h-index, CiteScore, and altmetrics have been proposed to provide a more comprehensive evaluation of research impact in green chemistry.

1. Encourages publishing high-quality sustainable chemistry research.
2. Facilitates identification of leading journals and studies.
3. Influences research funding and academic recognition.
4. Drives innovation and interdisciplinary collaboration.
5. Has limitations that necessitate complementary evaluation metrics.

Frequently Asked Questions

What is the impact factor of the journal Green Chemistry?

As of 2023, the impact factor of the journal Green Chemistry is approximately 11.034, reflecting its high relevance and influence in the field of sustainable and environmentally friendly chemical research.

Why is the impact factor important for the journal Green Chemistry?

The impact factor indicates the average number of citations received per paper published in the journal, serving as a metric for the journal's influence, quality, and relevance in the scientific community, particularly in the field of sustainable chemistry.

How does Green Chemistry's impact factor compare to other chemistry journals?

Green Chemistry typically has a higher impact factor compared to many traditional chemistry journals due to its focus on innovative, sustainable, and environmentally friendly chemical research, which is a rapidly growing and highly cited area.

Can the impact factor of Green Chemistry affect researchers' decision to publish there?

Yes, a high impact factor often attracts researchers seeking greater visibility and recognition for their work, making Green Chemistry a preferred journal for publishing cutting-edge sustainable chemistry research.

What factors contribute to the high impact factor of Green Chemistry?

Factors include the journal's focus on timely and relevant topics in sustainability, rigorous peer review process, publication of high-quality original research, reviews, and its interdisciplinary nature appealing to a broad scientific audience.

How frequently is the impact factor of Green Chemistry updated?

The impact factor is updated annually by Clarivate Analytics through the Journal Citation Reports, reflecting citation data from the previous two years.

Does the impact factor of Green Chemistry reflect the quality of individual articles?

While the impact factor indicates the overall influence of the journal, it does not necessarily reflect the quality or impact of individual articles, which can vary widely within the journal.

Are there alternative metrics to the impact factor for evaluating Green Chemistry?

Yes, alternative metrics include the h-index, CiteScore, Eigenfactor, and article-level metrics such as downloads and social media mentions, which provide a broader picture of the journal's and articles' impact.

How can authors increase their chances of publishing in Green Chemistry with a high impact factor?

Authors should focus on conducting innovative, high-quality research that addresses significant sustainability challenges, ensure clear and rigorous presentation of their work, and align their studies with the journal's scope and priorities.

Additional Resources

1. Green Chemistry and Its Impact on Environmental Sustainability

This book explores the principles of green chemistry and how they contribute to sustainable development.

It highlights innovative chemical processes designed to reduce waste and minimize environmental harm. Case studies demonstrate the positive impact of green chemistry in various industries, emphasizing the role of eco-friendly technologies.

2. Advances in Green Chemistry: Measuring Impact and Innovation

Focusing on recent advancements, this volume examines new methodologies and materials that enhance green chemistry's effectiveness. It includes detailed discussions on metrics and impact factors used to evaluate green chemistry's contributions to science and industry. Researchers and practitioners gain insights into emerging trends and their environmental benefits.

3. Impact Factor Analysis in Green Chemistry Research

This book provides an in-depth analysis of how impact factors are applied to green chemistry journals and publications. It discusses the significance of impact metrics in guiding research priorities and funding decisions. The text also addresses critiques and alternative measures for evaluating scientific impact in the field.

4. Green Chemistry for Sustainable Industrial Processes

Highlighting industrial applications, this book covers green chemistry techniques that improve efficiency and reduce toxic outputs. It examines how impact factors reflect the adoption of sustainable practices within manufacturing sectors. Practical examples illustrate the economic and environmental advantages of green chemistry integration.

5. Quantifying the Environmental Impact of Green Chemistry Innovations

This comprehensive guide focuses on methods to assess the environmental footprint of green chemistry innovations. It introduces lifecycle analysis, carbon footprint calculations, and other quantitative tools. The book aims to equip scientists and policymakers with approaches to measure and maximize green chemistry's positive impact.

6. Green Chemistry Education and Its Role in Shaping Research Impact

Addressing the educational aspect, this title discusses how teaching green chemistry influences research outputs and impact factors. It explores curriculum development, student engagement, and the promotion of sustainable scientific practices. The book underscores the importance of education in driving future green chemistry breakthroughs.

7. Global Perspectives on Green Chemistry Impact and Policy

This book offers an international overview of green chemistry's influence on environmental policies and regulations. It reviews case studies from different countries, showing how impact factors correlate with policy success. The text also discusses challenges and opportunities for harmonizing green chemistry standards worldwide.

8. Green Chemistry Metrics: Tools for Measuring Scientific and Environmental Impact

Focusing on metrics, this book details various tools used to evaluate the effectiveness of green chemistry research and applications. It covers citation-based impact factors, environmental indicators, and social impact

assessments. Readers learn to use these tools to promote transparency and accountability in green chemistry initiatives.

9. *Innovations in Green Chemistry: Impact on Industry and Society*

This volume highlights groundbreaking innovations in green chemistry and their broad societal impacts. It discusses how these advances influence industrial practices, public health, and environmental quality. The book emphasizes the role of scientific impact, including impact factors, in driving innovation adoption and policy formulation.

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impact factor of green chemistry: *Green Chemistry* Lalit Prasad, Shafat Ahmad Khan, Arvind Kumar Jain, Rajender S Varma, 2025-03-31 *Green Chemistry: A Path to Sustainable Development* provides updated information and knowledge on green chemistry, analyzes greener solutions for environmental sustainability, and includes principles and practices, metrics, green chemical technologies, and real-world applications. Chapters explore interdisciplinary approaches to green chemistry, as well as value added through by-products, conversion of waste to value added products, remodeling from a conventional approach to a greener approach, and the challenges, opportunities, and future scope of green chemistry. Finally, this book discusses green methodologies, processes, and new chemical development. - Evaluates greener approaches and methodologies for sustainability - Discusses new chemical processes and methodologies, recycling, and zero waste technologies - Explains broad spectrum utilization of greener products and processes in multi-product synthesis industries - Provides new insights for environmental sustainability, job opportunities, and economic development

impact factor of green chemistry: Green Chemistry Metrics Andrew P. Dicks, Andrei Hent, 2014-09-23 This contribution to SpringerBriefs in Green Chemistry outlines and discusses the four major green chemistry metrics (atom economy, reaction mass efficiency, E factor and process mass intensity), at a level that is comprehensible by upper-level undergraduates. Such students have previously received fundamental training in organic chemistry basics, and are ideally positioned to learn about green chemistry principles, of which metrics is one foundational pillar. Following this, other green metrics in common use are discussed, along with applications that allow important calculations to be easily undertaken. Finally, an introduction to metrics in the context of life cycle analyses is presented. It should be noted that no other available publication teaches green chemistry metrics in detail with an emphasis on educating undergraduates, whilst simultaneously providing a contemporary industrial flavour to the material.

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impact factor of green chemistry: Green Chemistry Solvents and Metrics Dr. Amol U. Khandebharad and Dr. Swapnil R. Sarda, 2025-02-21 Welcome to Green Chemistry Solvents and Metrics: An Integrated Approach for Sustainable Chemical Manufacturing. This book is a comprehensive and practical guide crafted for researchers, academics, and professionals in the fields of chemistry, chemical engineering, environmental science, and sustainability who are dedicated to incorporating green chemistry principles into their work. By addressing the selection and application of green solvents and using green metrics to assess environmental impact, this book offers tangible solutions for fostering sustainable chemical production. The Essence of Green Chemistry: Green chemistry stands at the forefront of scientific endeavors, seeking to develop chemical processes that curtail or eliminate the use and generation of hazardous substances. This book serves as a bridge between theory and application, delving into the principles of green chemistry, solvent selection, and the critical role of metrics in evaluating the ecological footprint of chemical processes. Audience and Objectives: Designed for researchers, students, and professionals in chemistry, chemical engineering, environmental science, and sustainability, this book strives to achieve several key goals: 1. Comprehensive Overview: Provide a thorough understanding of green chemistry and its associated metrics. 2. Practical Solutions: Offer actionable insights for sustainable chemical production. 3. Awareness Generation: Foster awareness about the significance of green chemistry and encourage its principles in chemical manufacturing. Navigating the Contents: Green Chemistry Solvents and Metrics is organized to cover fundamental principles, practical applications, and successful case studies. Topics include the principles of green chemistry, the selection and application of green solvents, and the use of metrics to evaluate environmental impact. Case studies underscore the real-world implementation of green chemistry principles, offering valuable insights into both challenges and opportunities within the chemical industry. A Personal Journey: Embedded within these pages is my journey into the realm of green chemistry. Fueled by a fascination with deep eutectic solvents (DES) and catalysts, my exploration led to transformative experiences, such as revolutionizing a multicomponent reaction traditionally reliant on toxic solvents. This journey serves as a testament to the transformative power of green chemistry and the potential it holds for sustainable chemical synthesis. The Role of Solvents and Metrics: The pivotal role of solvents in chemical processes cannot be overstated, and this book underscores their profound impact on environmental and economic sustainability. By embracing green solvents, we can reduce risks to human health and the environment while maintaining high levels of performance. Additionally, green metrics serve as invaluable tools, quantifying factors like waste generation, energy consumption, and toxicity to guide decision-making and drive the adoption of greener practices across industries. A Call to Action: Beyond serving as an educational resource, this book aspires to create a ripple effect in academia. It calls for the integration of green chemistry and metrics into academic curricula, empowering students with the knowledge and tools needed to prioritize environmental sustainability in their future endeavors. By embracing these concepts, we can collectively contribute to making the chemical industry more sustainable. I invite you to delve into the pages of Green Chemistry Solvents and Metrics: An Integrated Approach for Sustainable Chemical Manufacturing. May this journey inspire you to embrace green principles and join the collective effort to build a more sustainable future for the chemical industry. Happy reading!

impact factor of green chemistry: Green Chemistry and Engineering Anne E. Marteel-Parrish, Martin A. Abraham, 2013-10-10 Promotes a green approach to chemistry and chemical engineering for a sustainable planet With this text as their guide, students will gain a new outlook on chemistry and engineering. The text fully covers introductory concepts in general, organic, inorganic, and analytical chemistry as well as biochemistry. At the same time, it integrates such concepts as greenhouse gas potential, alternative and renewable energy, solvent selection and recovery, and ecotoxicity. As a result, students learn how to design chemical products and processes that are sustainable and environmentally friendly. Green Chemistry and Engineering presents the green approach as an essential tool for tackling problems in chemistry. A novel feature of the text is its integration of introductory engineering concepts, making it easier for students to move from

fundamental science to applications. Throughout this text, the authors integrate several features to help students understand and apply basic concepts in general chemistry as well as green chemistry, including: Comparisons of the environmental impact of traditional chemistry approaches with green chemistry approaches Analyses of chemical processes in the context of life-cycle principles, demonstrating how chemistry fits within the complex supply chain Applications of green chemistry that are relevant to students' lives and professional aspirations Examples of successful green chemistry endeavors, including Presidential Green Chemistry Challenge winners Case studies that encourage students to use their critical thinking skills to devise green chemistry solutions Upon completing this text, students will come to understand that chemistry is not antithetical to sustainability, but rather, with the application of green principles, chemistry is the means to a sustainable planet.

impact factor of green chemistry: Green Chemistry - I Dr. M. Umayavalli, Dr. S. Parvathy, Dr. Bhavani Boddeda, Mr. S Ganesan, 2024-01-22 The concept of green chemistry, which is often referred to as sustainable chemistry, is a chemical philosophy that promotes the development of products and processes that minimize or eliminate the use of hazardous compounds and the production of such substances. Green chemistry is an approach to chemistry that aims to minimize and avoid pollution at its source, in contrast to environmental chemistry, which is the study of chemistry that includes the natural environment and the substances that cause pollution in nature. Within the United States of America, the Pollution Prevention Act was enacted in the year 1990. With the aid of this legislation, a method of operation was developed for addressing pollution in a manner that was both creative and inventive. It aims to prevent issues from occurring in the first place. Companies have been able to reach commercial and social objectives while simultaneously benefiting the environment as a result of innovations and uses of green chemistry brought about by the field of education. Given that education is the precursor to implementation, a student must get training to apply chemistry in a more environmentally friendly manner. To serve as a textbook for a discipline-specific elective source, this book on green chemistry has been developed. This book was prepared with the intention of introducing the idea of green chemistry to students who are enrolled in college-level courses.

impact factor of green chemistry: Green Chemistry and Catalysis R. A. Sheldon, Isabella Arends, Ulf Hanefeld, 2007-04-09 This first book to focus on catalytic processes from the viewpoint of green chemistry presents every important aspect: ? Numerous catalytic reductions and oxidations methods ? Solid-acid and solid-base catalysis ? C-C bond formation reactions ? Biocatalysis ? Asymmetric catalysis ? Novel reaction media like e.g. ionic liquids, supercritical CO₂ ? Renewable raw materials Written by Roger A. Sheldon -- without doubt one of the leaders in the field with much experience in academia and industry -- and his co-workers, the result is a unified whole, an indispensable source for every scientist looking to improve catalytic reactions, whether in the college or company lab.

impact factor of green chemistry: Green Chemistry and Sustainable Chemical Processes Mr. Rohit Manglik, 2024-03-07 Focuses on designing chemical products and processes that reduce or eliminate hazardous substances to promote environmental sustainability.

impact factor of green chemistry: Green Chemistry and Green Engineering Shrikaant Kulkarni, Neha Kanwar Rawat, A. K. Haghi, 2020-12-22 This interdisciplinary and accessible new volume presents a broad range of application-based green chemistry and engineering research. The book familiarizes readers with the integration of tools and spell out the approaches for green engineering of new processes as well as improving the environmental risks of existing processes. The expert authors discuss the myriad opportunities and the challenges facing green chemistry today in both its theoretical and practical implementation. The book expands upon green chemistry concepts with the latest research and new and innovative applications, providing both the breadth and depth researchers need. Topics include solar energy, electrospinning of bio-based polymeric nanofibers, biotransformation, engineered nanomaterials in environmental protection, and much more.

impact factor of green chemistry: *Green Chemistry* Tatsiana Savitskaya, Iryna Kimlenka, Yin Lu, Dzmitry Hrynshpan, Valentin Sarkisov, Jie Yu, Nabo Sun, Shilei Wang, Wei Ke, Li Wang, 2021-07-17 This book investigates in detail the concepts and principles of green chemistry and related methodologies, including green synthesis, green activation methods, green catalysis, green solvents, and green design to achieve process intensification while at the same time ensuring process safety and promoting ecological civilization and environmental protection. Moreover, it incorporates elements of chemical management and chemical education, highlighting chemists' responsibility to protect humankind and foster green and sustainable development in chemistry. Combining Chinese and Belarus wisdom, this book is intended for those working in the chemical industry who are interested in environmental protection and sustainable development, as well as undergraduate and graduate students who are interested in green chemistry and related technologies.

impact factor of green chemistry: *Green Chemistry and Applications* Aide Sáenz-Galindo, Adali Facio, Raul Rodriguez-Herrera, 2020-11-25 Green chemistry is a work tool that can be applied in different areas such as medicine, materials, polymers, food, organic chemistry, etc., since it was propounded in the early 2000s. It has become a viable alternative for care, remediation and protection of the environment and has been implemented worldwide. In this book the twelve principles of green chemistry are presented in a simple way, with examples of the applications of green chemistry in numerous areas showcasing it as an ideal alternative for environmental care. It also provides information on current research being implemented at the pilot plant and industrial level. The book demonstrates the importance of the use of renewable raw materials, the use of catalysis and the implementation of alternative energy sources such as the use of microwaves and ultrasound in different separation and chemical processes.

impact factor of green chemistry: Green Chemistry Approaches to Environmental Sustainability Vinod Kumar Garg, Anoop Yadav, Chandra Mohan, Sushma Yadav, Neeraj Kumari, 2023-09-20 Green Chemistry Approaches to Environmental Sustainability: Status, Challenges and Prospective provides a comprehensive and complete overview of the emerging discipline of green chemistry and fundamental chemical principles. The book bridges the gap between research and industry by offering a systematic overview of current available sustainable materials and related information on new materials' suitability and potential for given projects. Along the way, the book examines natural and biodegradable materials while also presenting materials with multifunctional properties. Topics addressed in this book will be major accomplishments for sustainable developments in biofuels, renewable energies, and in the remediation of pollutants in water, air and soil. - Encompasses all aspects of green chemistry through an interdisciplinary approach - Addresses major accomplishments for sustainable development - Presents green chemistry as a philosophical approach whereby its core principle can attribute towards sustainable developments

impact factor of green chemistry: *Green Chemistry for Environmental Remediation* Rashmi Sanghi, Vandana Singh, 2012-01-20 The book explains the importance of chemistry in solving environmental issues by highlighting the role green chemistry plays in making the environment clean and green by covering a wide array of topics ranging from sustainable development, microwave chemical reaction, renewable feedstocks, microbial bioremediation, and other topics that, when implemented, will advance environmental improvement. Green Chemistry for Environmental Remediation provides insight on how educators from around the world have incorporated green chemistry into their classrooms and how the principles of green chemistry can be integrated into the curriculum. The volume presents high-quality research papers as well as in-depth review articles from eminent professors, scientists, chemists, and engineers both from educational institutions and from industry. It introduces a new emerging green face of multidimensional environmental chemistry. Each chapter brings forward the latest literature and research being done in the related area. The 23 chapters are divided into 4 sections: Green chemistry and societal sustainability including teaching and education of green chemistry Green lab technologies and alternative solutions to conventional laboratory techniques Green bio-energy sources as green technology

frontiers Green applications and solutions for remediation Green Chemistry for Environmental Remediation is an important resource for academic researchers, students, faculty, industrial chemists, chemical engineers, environmentalists, and anyone interested in environmental policy safeguarding the environment. Relevant industries include those in clean technology, renewable energy, biotechnology, pharmaceutical, and chemicals. Another goal of the book is to promote and generate awareness about the relationship of green chemistry with the environment amongst the younger generation who might wish to pursue a career in green chemistry.

impact factor of green chemistry: Green Chemistry for Environmental Sustainability - Prevention-Assurance-Sustainability (P-A-S) Approach Kinjal Shah, 2024-01-31 Green chemistry for environmental sustainability is an interdisciplinary science that seeks to reduce environmental problems and establish global sustainability. Given the recent development of energy-efficient technologies and the synthesis of green materials, research shows that green chemistry can be a powerful candidate for future technologies. This book discusses synthesis, catalysis, nanosynthesis, green processes, energy-efficient materials, biodegradable raw materials, and comprehensive environmental remediation, making it an excellent resource for aspiring researchers. This book explains what developments are taking place in green chemistry, why it is needed, what new methods can be used to break down traditional barriers, and how researchers can integrate them into their traditional research. To overcome barriers and achieve global environmental sustainability, this book focuses on a three-tiered strategy, namely, pollution and accident Prevention, safety and security Assurance, and energy and resource Sustainability (P-A-S). This book is also an excellent resource for environmental and sustainability managers to integrate new synthetic materials or technologies based on the principle of green chemistry into their traditional work. Ultimately, this book is aimed not only at academics or scientists but also at professionals without geopolitical boundaries.

impact factor of green chemistry: Green Chemistry for Beginners Anju Srivastava, Rakesh K. Sharma, 2021-07-14 With escalating concerns over the current state of our planet, the realization to work toward reducing our environmental footprint is gaining momentum. Scientists have realized that green chemistry is the key to reduce waste, rendering healthy environment, and improving human health. The 12 principles of green chemistry are the basic tenets that require understanding at the most fundamental level and implementation to promoting sustainable synthesis. This book discusses innovations in the form of greener technologies (superior green catalysts, alternate reaction media, and green energy sources) and elaborates their tremendous potential in combating the critical global challenges on the horizon. It intends to empower and educate students to grasp the key concepts of green chemistry, think out of the box and come up with new ideas, and apply the basic concepts in greening the world. It extensively covers the goals of the United Nation's 2030 Agenda of Sustainable Development, which can be successfully achieved with the aid of green chemistry. It also highlights cutting-edge greener technologies such as biomimicry, miniaturization, and continuous flow. Edited by two active green chemists, the book presents in-depth knowledge of this field and is extremely helpful for undergraduate, graduate, and postgraduate readers, as well as academic and industrial researchers.

impact factor of green chemistry: Paradigms in Green Chemistry and Technology Angelo Albini, Stefano Protti, 2015-12-08 This brief discusses the formation of modern "green chemistry" as a contribution to sustainability and the historic paths that lead to the key concepts of this discipline. Within this intellectual framework, the book tackles the 12 principles of green chemistry and the 12 principles of green chemical engineering as well as related financial and management issues; these facts are explored and reformulated in a focused set of paradigms. The best choice of a model for quantitative assessment (sufficiently specific to account for the many parameters involved but not excessively detailed to inhibit practical use) is discussed and examples of practical applications are presented.

impact factor of green chemistry: Green Chemistry Vinod K. Tiwari, Abhijeet Kumar, Sanchayita Rajkhowa, Garima Tripathi, Anil Kumar Singh, 2022-09-02 This book summarizes

fundamentals and advanced topics of green chemistry and highlights the importance and impact of green chemistry over traditional synthetic methods. It discusses about the importance and scope of the catalytic protocols in green chemistry and their application in daily life. Alternate green energy approaches discussed in this book underline the importance of efficiency enhancement with simultaneous energy demand reduction by replacing the dependence on non-renewable energy resources. Various topics covered in this book include green solvents, energy-efficient approach for organic synthesis, catalysis, biocatalysis, and green approach in pharmaceutically important molecules and drugs. The book will be a valuable reference for beginners, researchers, and professionals interested in sustainable green chemistry and their scope in allied fields.

impact factor of green chemistry: Green Chemistry Bela Torok, Timothy Dransfield, 2017-11-07 Green Chemistry: An Inclusive Approach provides a broad overview of green chemistry for researchers from either an environmental science or chemistry background, starting at a more elementary level, incorporating more advanced concepts, and including more chemistry as the book progresses. Every chapter includes recent, state-of-the-art references, in particular, review articles, to introduce researchers to this field of interest and provide them with information that can be easily built upon. By bringing together experts in multiple subdisciplines of green chemistry, the editors have curated a single central resource for an introduction to the discipline as a whole. Topics include a broad array of research fields, including the chemistry of Earth's atmosphere, water and soil, the synthesis of fine chemicals, and sections on pharmaceuticals, plastics, energy related issues (energy storage, fuel cells, solar, and wind energy conversion etc., greenhouse gases and their handling, chemical toxicology issues of everyday products (from perfumes to detergents or clothing), and environmental policy issues. - Introduces the topic of green chemistry with an overview of key concepts - Expands upon presented concepts with the latest research and applications, providing both the breadth and depth researchers need - Includes a broad range of application based problems to make the content accessible for professional researchers and undergraduate and graduate students - Authored by experts in a broad range of fields, providing insider information on the aspects or challenges of a given field that are most important and urgent

impact factor of green chemistry: Green Analytical Chemistry Mihkel Koel, Mihkel Kaljurand, 2019-03-13 Chemical analysis requires solvents, reagents and energy and generates waste. The main goal of green analytical chemistry is to avoid or reduce the undesirable environmental side effects of chemical analysis, while preserving the classic analytical parameters of accuracy, sensitivity, selectivity and precision. This book portrays the current and changing situation concerning adoption of the principles of green chemistry as applied to analysis. It begins by looking at the advantages of and problems associated with on-site analysis and how analytical techniques can lead to increased productivity, efficiency and accuracy, and thereby reduce the consumption of materials. It then focuses on sample preparation techniques minimising solvent consumption or using alternative solvents, concepts and methods of improving the 'greenness' of instrumental analysis where miniaturization is an important part, separation methods from the perspective of green analytical chemistry and chemometrics approaches, which can reduce or can even remove the need for conventional steps in chemical analysis. Aimed at graduates and novices just entering the field, managers of analytical research laboratories, teachers of analytical chemistry and green public policy makers, this title will be a useful addition to any analytical scientist's library.

impact factor of green chemistry: Green Chemistry and Agro-food Industry: Towards a Sustainable Bioeconomy Stéphanie Baumberger, 2024-04-22 The objective of the book is to show the complementarity and integration of food and non-food value chains for the development of a sustainable bioeconomy. One current challenge facing industry and the economy is to meet the needs of a growing world population while preserving the environment. The use of fossil energy resources for several decades has generated a decrease in reserves of these resources, together with a phenomenon of global warming due to the release of greenhouse gases into the atmosphere. More and more industrial sectors, including the chemical industry, are replacing fossil carbon with renewable carbon. The bioeconomy consists in using renewable biological resources to produce

food, materials, and energy. A bioeconomy based on the green chemistry and biotechnologies is developing worldwide, as a lever for reducing the ecological footprint of human activities. The book is articulated around six parts, each dedicated to a keystone of the interface between green chemistry and Agro-Food Industry.

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