VOLUME 7 No 2 JANUARY 2023

E-ISSN: 2622-3384 P-ISSN: 2527-9939



Analysis of Computer-Based Teaching Materials in Biology Learning Using Bibliometric Tools (Application of the SLNA Method)

Ida Yayu Nurul Hizqiyah^{1*}, Mia Nurkanti¹, Nia Nurdiani¹, Armansyah Putra², Meili Yanti³, Nurul Syifa¹

¹Pendidikan Biologi, FKIP, Universitas Pasundan, Jalan Tamansari No. 6-8 Kota Bandung, Jawa Barat ²Pendidikan Biologi Universitas Samawa Sumbawa Besar ³Pendidikan IPA, FKIP, Universitas Sulawesi Barat, Jalan Prof Baharudin Lopa, Majene, Sulawesi Barat

*Corresponding: <u>hizqiyah.bio.fkip@unpas.ac.id</u>

ABSTRACT

In this study, descriptive qualitative research about computer-based teaching materials in biotechnology was analyzed. The urgency of this research was to analyze the novelty and effectiveness of computer-based teaching materials. The subject of this research was computer teaching materials in biotechnology learning. In this study, researchers also analyzed 25 articles that had been filtered based on the topic of computer teaching materials. The analysis contained several components: title, year, doi, author, method, results, and conclusions. This study used Bibliometrix tools (SLNA method application) as the media used in analyzing these articles. To accomplish the aim and to respond to a recent call for research about learning materials, The findings of this study will help to produce a positive effect that is effective and flexible in biotechnology learning because it can visualize teaching materials in the form of images, videos, sounds, so that gives the impression that no boring when learning activities take place.

ARTICLE INFO

Keywords Computer Teaching Materials, Biology Learning, SLNA.

Received August 21, 2022

Revised January 14,2023

Accepted January 27, 2023

Published January 31, 2023

How to cite

Hizqiyah, I.Y.N., Nurkanti, M., Nurdiani, N., Putra, A., Yanti, M., & Syifa, N. (2023). Analysis of Computer-Based teaching Materials in Biology Learning Using Bibliometric Tools (Application of the SLNA Method). *Jurnal Mangifera Edu*, 7(2), 135-144. <u>https://doi.org/10.31943/mangiferaedu.v7i2.156</u>

INTRODUCTION

The development of science and technology is categorized as a primary need for all levels of society (Brown, 2019; Clark et al., 2018). Technological developments that occur have resulted in people having the opportunity and being able to take advantage of it (Astuti et al., 2019). Every human needs to be educated anytime to develop his potential and change his behavior for the better, in line with the prevailing values in society (Mulyadi et al., 2020; Prajapati et al., 2017). Learning must be specific to the context and experience that can make students have the desire and be able to carry out learning activities (Almareta & Paidi, 2020). Students' interest in learning can be increased by using







Jurnal Mangifera Edu

learning technology effectively in the classroom (Fitriyah et al., 2020; Haris, 2015; Parikesit et al., 2021; Unwin, 2019).

Most of the learning processes in an average school environment are still very conventional (Jafar, 2021). Teachers need to invite students to be actively involved in a lesson (Kranzfelder et al., 2019). If students are required to study more actively, then the level of understanding possessed by students will get results of around 90% (Ernawati et al., 2016). Moreover, to study biology, more emphasis is placed on understanding concepts and process skills that are carried out together (Anantyarta & Sholihah, 2020). In addition, scientific language is often used in biology, so that students understand biology learning material, these terms need to be visualized (Maryanti & Kurniawan, 2018). Knowledge of scientific names influences students' knowledge of the genus (Arifah et al., 2020).

Teaching materials in biology learning have been developed considering the various benefits obtained (Halimatussa'diah & Meilinda, 2015; Niemi & Kiilakoski, 2020). Even so, it is necessary to carry out a more in-depth study related to studies that discuss teaching materials, especially computer-based ones. This is done to obtain novelty information and opportunities for developing these teaching materials. This analysis is carried out by conducting theoretical studies through reading sources that develop in a study. This technique aims to be able to reveal various kinds of theories from learning biology which is more emphasized on understanding concepts and process skills that are carried out together as reference material in solving a problem being researched.

METHOD

This research uses data information collection techniques through various literature, books, articles from existing research results so that a new theory is obtained regarding the problem being analyzed which is a literature research (Colicchia et al., 2019; Mohajan, 2018; Sari & Asmendri, 2018). Therefore, library research really needs accurate data from various reliable sources (Khitous et al., 2020). In library research, a qualitative approach is used because according to Fadli (2021) a qualitative approach requires that researchers be able to identify the subject they want to study. So that it becomes a necessity to study the phenomena that are currently developing so that research can produce authentic data.

This study aims to determine the results of computer-based analysis of teaching materials in Bibliometric Tools-assisted biology learning (Application of the SLNA Method). This research was only conducted on computer-based teaching materials in biology learning on biotechnology material using the SLNA (Systematic Literature Network Analysis) method which is based on several applications (OpenRefine, Vosviewer, Bibliometrix, and Vosviewer).

This research has produced various information data regarding "Computer-based Learning Materials in Biology learning Biotechnology materials" because the focus of the qualitative approach lies in its importance and inductive nature. Qualitative research has a variety of different approaches, so the results of a qualitative approach can be in the form of descriptive data in written format (Yusanto, 2020). In this study, the instrument for data collection was the journal search engine application on Scopus. The selection of the Scopus data base is carried out to obtain quality-tested



136

articles so that the validity of the data used can be determined. The steps of the research procedure include:

1. Do a search for journal articles on Scopus by accessing the Scopus website via the link (https://www.scopus.com).

2. Perform data processing using the Open refine application, for the process of filtering data based on CSV data from Scopus.

3. Perform data processing using the Vosviewer application, processing data through the Vosviewer application to obtain visualization of existing keywords.

4. Perform data processing through the Tableau application which aims to alternative visualization of the information obtained.

5. Carry out data processing through the Bibliometrix application which aims to visualize data.

6. Selecting journal articles to be analyzed (20 pieces) based on application processing data.

After the data is obtained, the data in the form of articles is transferred or entered into the applications mentioned then the results in the form of images are analyzed descriptively.

RESULTS AND DISCUSSION

In this study, the analysis of journal articles carried out was as many as 25 articles sourced from Scopus. All of these articles were analyzed based on the characteristics of journal articles, such as title, year, author, DOI, keywords, methods, results of analysis, and conclusions. Each article has the same characteristics, namely its relation to computer-based teaching materials in biology learning on biotechnology material. Following are the results of the analysis of journal articles carried out on Scopus as the main data:

| No. | Tittle | Year | Result of Analysis |
|-----|---|------|--|
| 1. | The impact of using interactive animation in biology education at Moroccan Universities and student attitudes towards animation and ICT in general | 2022 | Research on the understanding of biology at Moroccan University was considered difficult to learn and understand, so an ICT-based animation teaching material was developed which aims to increase understanding related to biology learning and determine the effectiveness of the media in giving high marks in the student learning process. |
| 2. | Development that wants to become a great biology game as a computer learning media based on the human respiratory system | 2021 | Research conducted on the use of biology teaching materials using game media aims to understand the quality and formality of a teaching media using games that want to become a biology-based computer. |
| 3. | Interactive learning in programmed teaching of the subject "Based on natural sciences" at the pedagogical faculties of the Republic Macedonia (ICT tools in Biology education) | 2020 | An article regarding the development of ICT-based biology teaching materials in the Republic of Macedonia which aims as a basis for learning activities that can strengthen communication between teachers and students, manage student learning, and enable students in learning activities to be carried out together as well as to evaluate the learning process. |
| 4. | Effect of three different teaching tools in science education on students' attitudes toward computers | 2021 | The research was conducted based on a survey of various kinds of instructional media in science subjects to determine the effects of simulations and laboratory implementation activities, and comparisons of the use of teaching media regarding students' attitudes towards computers. |

Table 1. Results of Analysis of Journal Articles originating from Scopus





| 5. | Views of Grade 7 Students on Incorporating Computer Use Simulation and Laboratory Activities in Teaching Science | 2019 | The research was conducted based on a survey conducted on students to investigate views regarding the effectiveness of the combined use of computer simulations and laboratory activities in science classes in order to attract students' learning desires |
|-----|---|------|--|
| 6. | Multimedia tools in teaching and learning: A systematic review | 2020 | The research was conducted based on a survey regarding the effectiveness of using multi-media tools in the form of text and images that have multimedia components such as audio, video, animation and 3-D in the learning process so that students' learning performance abilities are increasing |
| 7. | Development of a computer-assisted biology teaching media to improve student learning outcomes | 2018 | Research conducted to develop teaching media using computers produces quality media that is considered suitable for use in biology learning in the classroom. |
| 8. | Conformity of Planning and Implementation ICT-Based Learning by Biology Teachers in High Schools | 2018 | The research was conducted based on a survey regarding the use of ICT-based learning materials which aims to determine the suitability of lesson plans in ICT-based lesson plans with the implementation of ICT-based learning by biology teachers in Palembang. |
| 9. | Students' ability to apply biotechnology in entrepreneurship | 2019 | The research was conducted based on a survey regarding the use of integrated learning materials in the contextual learning approach (CTL). This study aims to reveal the causes of students' low ability to apply bio-technology in order to make it relevant to the real world. |
| 10. | The Role of Technology in Dissemination Educational Sciences | 2018 | The research was conducted based on a survey regarding the use of distance learning materials (ODL) which aims to facilitate learning in the form of providing facilities for students to study so that they are flexible. |
| 11. | A new way of teaching business ethics: Evaluation of reality-based teaching media in cyberspace | 2020 | The research was conducted based on a survey regarding the evaluation of Virtual Reality-based learning media which aims to create a learning process that can motivate, and increase the effectiveness of learning felt by students. |
| 12. | The effectiveness of animated media for teaching biotechnology material in Indonesian rural elementary schools | 2020 | The research was conducted based on a survey regarding the use of animated media in biotechnology material in rural elementary schools which aims to attract students' interest so as to increase their interest in learning. |
| 13. | Development and Testing the Effectiveness of Biology Learning Multimedia | 2019 | In the research that has been carried out based on a survey regarding the development of Adobe Flash- based active multimedia in biology subjects, it produces data in the form of product feasibility levels and the success rate of student learning activities in class XI MAN 1 Central Maluku. |
| 14. | Socioscientific Issues in Science Education: An Opportunity to Include Education on Risk and Risk Analysis? | 2021 | The research was conducted based on the results of an analysis of Socioscientific Issues in science education which aims to increase content knowledge, the nature of science and to offer them practice in argumentation and decision-making. |
| 15. | Development of Augmented Reality in Bio- technology Processes As Supporting Media for Science Learning Modules | 2020 | Research conducted regarding the use of augmented reality learning media (augmented reality) in biotechnology lessons which aims to increase student enthusiasm for learning so that students have activeness, creative processes and the ability to innovate |
| 17. | Concept and Application of E-Learning in Biology Learning | 2018 | The research was carried out utilizing the literature method in providing knowledge concepts related to e- learning concepts and applications in biology learning. |
| 18. | Development of Learning Multimedia on Biotechnology Material | 2020 | In research conducted on the development of multimedia learning materials that aim to streamline learning for students with the help of the autoplay program |





| | using the Autoplay | | |
|-----|--|------|---|
| 19. | Program Development of active multi-media in web-based biology learning to prepare for the industrial revolution 4.0 | 2020 | Research on the development of biological interactive multimedia shows that communication between teachers and students requires media that can be accessed anywhere, anytime, and in large quantities. |
| 20. | Development of a Computer-aided Constructivistic Biology Module for High School Level Students in Class XI Even Semester | 2018 | Research on the development of computer-assisted Biology E-Modules is considered useful in streamlining learning and student learning outcomes |
| 21. | Development of teaching media in the form of Stop Motion Animation Videos for Biology Learning with the Picpac Application | 2018 | Research that has been carried out in developing learning media containing a set of stop motion animated videos for biology learning with the application of picpac was analyzed using the R&D method |
| 22. | Digital Literacy of Biology Teacher Candidates in the compilation of Audio Visual Aided Teaching Materials | 2020 | Research conducted develops the concept of digital literacy in creating innovative classes by making small flipcharts and learning films as part of their teaching materials. |
| 23. | Training in Making Teaching Materials based on Information Technology assisted by Camtasia Studio for Teachers at SMK Muhammadiyah 2 Muntilan Magelang | 2018 | The research carried out develops training in making teaching materials that are ready to be given to students both in the form of flash disks and uploaded to them school e-learning. |
| 24. | Development of Digital Modules as biology learning materials for Students in Class XI IPA | 2021 | Teaching materials in the form of e-modules in learning activities will make it easier for students to access material and are considered to save paper. |
| 25. | Development of Computer Based Learning Media (PBK) Using the Prezi App | 2019 | Research that develops computer-assisted learning media makes use of prezi properly in accordance with knowledge development procedures, so as to be able to encourage students to study hard. |

The results of the analysis of teaching materials carried out on Scopus journal articles as the main data source with the help of the SLNA method application which consists of using the OpenRefine, Vosviewer, Tableu, and Bibliometrix applications as supporting data sources. The following are the results of journal analysis conducted on Scopus. The main data was collected by reviewing a number of previously determined journal articles related to "Computer Teaching Materials in Biology Learning".



139

| Scopus | | | Search | Sources | Lists | SciVal 🤊 | 0 | Ŷ | 宜 | A |
|--|------------------|---|--------|---------|-------|----------|------|---|------------|-------|
| Start exploring Discover the most reliable, relevant, up-to-dat | e research All i | n one niace | | | | | | | | |
| | Affiliations | rr une prince. | | | | | | | Search tip | is () |
| Search within Article title, Abstract, Keywords | ~ | Search documents * *computer learning materials* | | | | | | | | đ |
| AND Y | | | | | | | | | | |
| Search within Article title, Abstract, Keywords | * | Search documents | | | | | | | | Û |
| + Add search field 📋 Add date range Ad | vanced docum | ent search > | | | | | Resi | t | Search | ۹ |

Figure 1. Searching for Journal Articles on Scopus with Keywords

The articles to be analyzed are filtered in advance according to the topic to be analyzed, in this study the topic taken is based on computer-based teaching materials.

| (144) WhatsApp × & VOSviewer - Downloa | 🗙 🌐 Public Download - Th 🛛 🖈 VOSviewer - Downloa 🗙 | 🗧 Scopus - Document : 🗙 🥹 Siti-Sapto | × + × | - ø × |
|---|---|---------------------------------------|-----------------------------|----------------------------|
| ← → C ≧ scopus.com/results/results.uri?so ∴ Apl G Gmail © YouTube ♀ Maps ∰ Ben | rt=plf-f&src=s&st1=*computer+learning+materials*&nlo=&nlr ta 💁 Terjemahkan | =8cnls=8csid=e261498c9150944006a0bb19 | 9613cb48d&sot=b&sdt=ci& 🖏 | 🖻 🚖 🚺 I 🔲 Deftar bacaan |
| INSTITUT TEKNOLOGI BANDUNG prevides by World Class University Program ITB | | | | ĺ |
| Scopus | | Search Sources Lists SciV | /al » ① Ļ | |
| 789 document resu | lts | | | |
| TITLE-ABS-KEY (*computer AND learning AN 2020)) AND (LIMIT-TO (DOCTYPE, "ar")) / | D materials*) AND(LIMIT-TO(OA, "all")) AND(LIMIT ND(LIMIT-TO(LANGUAGE, "English")) | TO (PUBYEAR , 2022) OR LIMIT-TO (| (PUBYEAR, 2021) OR LIMIT-TO | (PUBYEAR , |
| 🖉 Edit 🖾 Save 🖓 Set alert | | | | |
| Search within results | Documents Secondary documents Pater | nts | View Mendele | y Data (24825) |
| Refine results | De Analyze search results | Show all abstracts | Sort on: Date (newest) | × |
| Limit to Exclude | All ~ CSV export ~ Download View citation | n overview View cited by Save to li | s 🖨 🖾 🗇 | |
| Open Access | Document title | Authors | Year Source | Cited by |
| Type here to search | 0 🗏 🥁 💼 💽 🕿 🗠 (| 8 7 6 3 7 8 | 😂 29°C 🔨 🤠 🗳 🖮 🔇 | (a) 1:08 PM 1/29/2022 |

Figure 2. Screening Results of Articles on Scopus with the Keyword "Computer Teaching Materials"

On the keywords that were searched, 789 articles that were directly related to computer teaching materials were netted. Furthermore, the overall results of the data were collected and analyzed using supporting data in the form of the SLNA method application consisting of Open Refine, Vosviewer, Tableu, and Bibliometrix. Then a screening was carried out related to articles related to computer teaching materials in biology learning biotechnology material.







| | D C | U | E | | T |
|--|--|--|--|---|---|
| Paper | Title DOI | Year | LCS | GCS | |
| COOK GJR. 2018. INT J RADIAT ONCOL BIOL PHYS | CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/i.iirobp.2017.12.268 | 2018 | 0 | 63 | 2 |
| | | 2018 | 0 | | 7 |
| | | 2018 | 0 | | 2 |
| | | 2018 | 0 | | |
| | | | | | |
| | | 2018 | 0 | | ×. |
| | | 2018 | 1 | | |
| | DEVELOPMENT OF MACHINE TRANSLATION TECHNOLOGY FOR A\$ 10.1016/j.jbi.2018.07.018 | 2018 | 0 | 28 | В |
| HAM T, 2018, J BIOMECH ENG | USING HANDS-ON PHYSICAL COMPUTING PROJECTS TO TEACH CC 10.1115/1.4040226 | 2018 | 0 | 1 3 | 1 |
| PARONG J. 2018, J EDUC PSYCHOL | LEARNING SCIENCE IN IMMERSIVE VIRTUAL REALITY 10.1037/edu0000241 | 2018 | 0 | 200 | D |
| | | 2018 | 0 | | 6 |
| | | 2018 | 0 | | 2 |
| | | 2018 | 0 | | 6 |
| | | LULU | | | ۰. |
| | | 2018 | 0 | - | - |
| | | 2018 | 0 | | 3 |
| LORE KG, 2018, NEURAL NETW | A DEEP LEARNING FRAMEWORK FOR CAUSAL SHAPE TRANSFORM 10.1016/j.neunet.2017.12.003 | 2018 | 0 | 14 | 4 |
| GENOVIA JA, 2018, AIP CONF PROC | DEVELOPMENT OF A WEBQUEST AS INSTRUCTIONAL MATERIAL IF 10.1063/1.5019510 | 2018 | 0 | | 1 |
| | | 2018 | 0 | | 1 |
| | | 2018 | 0 | | 7 |
| | | 2018 | 0 | | 2 |
| | | 2020 | | | 2 |
| | | 2018 | 0 | - | 6 |
| TEKKUMRU-KISA M, 2018, PROC INT CONF LEARN SCI, ICLS | DESIGNING AN EDUCATIVE CURRICULUM EMBEDDED WITHIN AN INTERACTIVE WEB-BASED PLATFORM TO FACILITATE TEACHER LE | 2018 | 0 | 0 | D |
| BISHOP SM, 2018, ACTA NEUROCHIR SUPPL | MULTI-SCALE PEAK AND TROUGH DETECTION OPTIMISED FOR PE 10.1007/978-3-319-65798-1_39 | 2018 | 0 | 1 4 | 4 |
| AHLSTRAND E. 2018, BIOCHEM MOL BIOL EDUC | AN INTERACTIVE COMPUTER LAB OF THE GALVANIC CELL FOR STU10.1002/bmb.21091 | 2018 | 0 | | D |
| | | 2019 | 0 | | 0 |
| | | 2019 | 0 | | |
| | | 2019 | 0 | | 2 |
| | | 2019 | 0 | | |
| Sheet1 | | | | | |
| A | 8 C | D | E | F | |
| | | | | | |
| A | Title DOI | Year | LCS | GCS | |
| A | Title DOI CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 | | | GCS | 2 |
| A Paper COOK GJR, 2018, INT J RADIAT ONCOL BIOL PHYS | Title DOI | Year | LCS | GCS | |
| A Paper COOK GJR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAX JP, 2018, PLOS ONE | DOI TchallEnges AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 QFLOW LITE DATASET: A MACHINE-LEARNING APPROACH TO THE 10.1372/journal.pone.0205844 | Year 2018 2018 | LCS 0 0 | GCS | 7 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK JP, 2018, PLOS ONE COUNNEYA J-P, 2018, J MED LIBR ASSOC | Tide DOI CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ljrobp.2017.12.268 GPLOW LITE DATASET: A MACHINE LEARNING APPROACH TO THE 10.1371/journal.gone.0205944 HIGH-PERFORMACIC COMPUTING SERVICEF OR BIOINTANTIC 10.51592/jml.a2018.512 | Year 2018 2018 2018 | LCS 0 0 0 | 6CS 62 | 7 |
| A Paper COOK GJR, 2018, INT J RADIAT ONCOL BIOL PHYS ZVOLAK JP, 2018, JND S ONE COURNEYA J-P, 2018, JND LIBR ASSOC ROOMEY MK, 2018, INT J RADIAT ASSOC | Dol Dol CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OFLOW UTE DATASET: A MACHINE-LEARNING APPROACH TO THE 10.1372/journal.gone.0205844 HIGH-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5195/jimla.2018.512 SMULATION AS MORE THAN A TREATMENT-PLANNING TOOL: A 110.1016/j.ijrobp.2013.064 | Year 2018 2018 2018 2018 2018 | LCS 0 0 0 | GCS 62 | 7 2 8 |
| A Paper COOK GR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK JP, 2018, INTS ONE COURNEYA J-P, 2018, J MED UBR ASSOC ROOMEY MK, 2018, INT J RADIAT ONCOL BIOL PHYS TO \$, 2018, BIOCHE M MOL BIOL EDUC | THE DOI: 10.1016/j.ijrobp.2017.12.268 CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OFLOW LITE DATASET: A MACHINE LEARNING AMPROACH TO THE L0.1371/journal.gone.0030544 HIGH-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.15375/mla.2018.512 SIMULATION AS MORE THAN A TREATMENT-LANNING TOOL: A 13.01056/j.ijrobp.2013.05.064 WECHAT: NA PROIZABLE AND FERBURS SOCIAL APP SOFTWARE F1.01.0202/mb.21170 | Year 2018 2018 2018 2018 2018 | LCS 0 0 0 0 | GCS 62 18 18 | 7 2 8 6 |
| A Paper COOK CIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK JP, 2018, JNED UBR ASSOC COURNEY AJ, 2018, INT J RADIAT ONCOL BIOL PHYS TU 5, 2018, BIOCHEM MOL BIOL EDUC HASSNAZOEH J. 2018, JBI GIORE BIOL EDUC HASSNAZOEH J. 2018, JBI GIORE BIOL FORMATICS | Dot Dot CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OFLOW LITE DATASET: A MACHINE-LEARNING APROACH TO THE 10.1371/journal.gone.0205944 Indi-PREFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.3197/journal.gone.0205944 SIMULATION AS MORE THAN A TREATMENT - HANNING TOOL: A 10.1016/j.ijrobp.2018.05.064 WECHAT: AN APPLICABLE AND FLEXIBLE SOCIAL APP SOFTWARE F 10.1002/bm.21170 TRANSFERABLITY OF ARTIFICIAL NEEMA NETWORKS FOR CLINIC 10.1016/j.jiJ.2018.07.017 | Year 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 1 | GCS 6: 18 10 | 7 2 8 6 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK JP, 2018, PLOS ONE COURNEYA J-P, 2018, J MED LIBR ASSOC ROONEY MK, 2018, INT J RADIAT NONCOL BIOL PHYS TU S, 2018, BIOCHEM MOL BIOL EDUC HASSANZADEH H, 2018, J BIOMED INFORMATICS DEW KN, 2019, I BIOMED INFORMATICS | Doi DOI CHALENCES, AND PROMISES OF PET RADIOMICS 10.1016/j.jirohp.2017.12.268 OFLOW LITE DATASET: A MACHINE-LEARNING APPOACH TO THE 10.1371/journal.pone.0205844 High-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5155/jmla.2018.51.20 SIMULATION AS MORE THAN A TREATMENT - TAANING TOOL: A 10.1016/j.jirohp.2013.63.064 WECHAT: AN APPEARMENT COLAR HER SOCIAL APP SOFTWARE F 10.1020/j.jib.2013.07.017 TRANSFERABILITY OF ARTIFICIAL NEURAL NETWORKS FOR CLINICI.0.1016/j.jib.2018.07.018 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 1 0 | GCS 6. 18 18 18 28 | 7 2 8 6 8 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK JP, 2018, PLOS ONE COURNEYA J-P, 2018, J MED LIBR ASSOC ROONEY MK, 2018, INT J RADIAT NONCOL BIOL PHYS TU S, 2018, BIOCHEM MOL BIOL EDUC HASSANZADEH H, 2018, J BIOMED INFORMATICS DEW KN, 2019, I BIOMED INFORMATICS | Dot Dot CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OFLOW LITE DATASET: A MACHINE-LEARNING APROACH TO THE 10.1371/journal.gone.0205944 Indi-PREFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.3197/journal.gone.0205944 SIMULATION AS MORE THAN A TREATMENT - HANNING TOOL: A 10.1016/j.ijrobp.2018.05.064 WECHAT: AN APPLICABLE AND FLEXIBLE SOCIAL APP SOFTWARE F 10.1002/bm.21170 TRANSFERABLITY OF ARTIFICIAL NEEMA NETWORKS FOR CLINIC 10.1016/j.jiJ.2018.07.017 | Year 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 1 | GCS 6. 18 18 18 28 | 7 2 8 6 8 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK IP, 2018, PLOS ONE COURNEYA J-P, 2018, J. MED LIBR ASSOC ROOMEY MA, 2018, BIOCHEM MOL BIOL EDUC HASANXZOEH J. 2018, J. BIOMED INFORMATICS DEW KR, 2018 | Doi DOI CHALENCES, AND PROMISES OF PET RADIOMICS 10.1016/j.jirohp.2017.12.268 OFLOW LITE DATASET: A MACHINE-LEARNING APPOACH TO THE 10.1371/journal.pone.0205844 High-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5155/jmla.2018.51.20 SIMULATION AS MORE THAN A TREATMENT - TAANING TOOL: A 10.1016/j.jirohp.2013.63.064 WECHAT: AN APPEARMENT COLAR HER SOCIAL APP SOFTWARE F 10.1020/j.jib.2013.07.017 TRANSFERABILITY OF ARTIFICIAL NEURAL NETWORKS FOR CLINICI.0.1016/j.jib.2018.07.018 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 1 0 | GCS 67 18 10 28 | 7 2 8 6 8 8 |
| A Paper COOK GJR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWULAK JP, 2018, PLOS ONE COURNEYA J-P, 2018, J MED LIBR ASSOC ROONEY MK, 2018, INT J RADIAT NONCOL BIOL PHYS TU S, 2018, BIOCHEM MOL BIOL EDUC HASSANZADEH J. 2013, BIOMED INFORMATICS DEW KN, 2018, J BIOMED INFORMATICS HAM T, 2018, J BIOMECH ENG PARONS J, 2018, J EDUC FSYCHOL | Doi DOI CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OFLOW UTE DATASET: A MACHINE-LEARNING APROACH TO THE 10.1377/journal.pone.0205844 Indi-PERFORMANCE COMPUTING SERVICE FOR BIOINOMMATIC 10.51592(jmla.2018.512 SIMULATION AS MORE THAN A TREATMENT-LANNING TOOL: A 510.016/j.ijrobp.2017.02.058.05.064 WEYCHAT: AM PRUCABLE AND FLORING SOCIAL PROSTIVARE F10.1020/jmla.2018.57.017 DEVELOPMENT OF MACHINE TRANSLATION TECHNOLOGY FOR A 10.1016/j.jkl.2018.07.017 DEVELOPMENT OF MARCHINE TRANSLATION TECHNOLOGY FOR A 10.1016/j.jkl.2018.07.018 USING HANDS ON PHYSICAL COMPUTING RODICTS TOTACIL (10.1015/j.jkl.2018.07.018 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 1 0 0 0 | GCS 62 18 18 10 28 20 | 7 2 8 6 8 8 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK IP, 2018, PLOS ONE COURNEYA /P, 2018, JNED UBR ASSOC ROONEY MK, 2018, BIOL BIOL BR ASSOC ROONEY MK, 2018, BIOL BIOL BIOL BIOL HINSSANZAOLEH, 2018, JIAIONE BIOL BIOL RUSANZAOLEH, 2018, JIAIONE BIOL DEW KK, 2018, JIBIOME DINORMATICS DEW KK, 2018, JIBIOME DINORMATICS DEW KK, 2018, JIBIOME DINORMATICS PARONS, J2018, J EDUC PSYCHOL WAINEY M, 2018, GECCO - PROC GRIVET EVOL COMPUT CONF | Doi: DOI: CHALENCES, AND PROMISES OF PET RADIOMICS 10.1016/j.ijrohp.2017.12.268 OECOW LITE DATASET: A MACHINE-LEARNING APPROACH TO THE 10.3127/journal.pone.0030844 HIGH-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5195/jmla.2018.512 SIMULATION AS MORE THAN A TREATMENT - PANNING TOOL: A 110.016/j.jwob.2018.05.064 WECHAIX: NA OPPLICABLE AND FEISIE SOCIL APP SOTWARE F 10.00207.06.2110 DEVLOPMENT OF ARTIFICIAL REURA DE WORKS FOR CLINICI.0.1016/j.jk.2018.07.017 DEVLOPMENT OF MACHINE TRANSITION TECHNOLOGY FOR A 10.1016/j.jk.2018.07.018 USING HANDS ON PHYSICAL COMPUTING FORDECTS TO TECHCICI.0.1151/1.4040226 LEARNING SCIENCE IN MARESIVE WIRKUR LEARLING | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 0 0 0 0 0 0 0 | GCS 62 18 16 28 28 200 | 7 2 8 6 8 8 1 |
| A Paper COOK GJR, 2018, INT J RADIAT ONCOL BIOL PHYS ZVOLAK JP, 2018, JN ED UBR ASSOC ROONEY MK, 2018, INT J RADIA NONCOL BIOL PHYS TU 5, 2018, BIOCHEM MOL BIOL EDUC HASSNAZOEH J2018, JNI SI RADIAT NONCOL BIOL PHYS TU 52, 018, BIOCHEM MOL BIOL EDUC HASSNAZOEH J2018, J BIOMED INFORMATICS DEW KN, 2018, J BIOMED INFORMATICS DEW KN, 2018, J BIOMED INFORMATICS MAINT X, 2018, J BIOMED INFORMATICS WAINT M, 2018, GECCO - PROC GINET EVOL COMPUT CONF WALLON RC, 2018, J SC EDUC TEVENIOL | Doi: DOI: CHALENCES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OCI/OW LITE DATAST: A MACHINE-LEARNING APPROACH TO THE 10.1277/journal.pone.0030844 HIGH-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5195/jmla.2018.512 SIMULATION AS MORE THAN A TREATMENT - FAMILY TO LOS 1005/jmla.2018.512 SIMULATION AS MORE THAN A TREATMENT - FAMILY TO LOS 1005/jmla.2018.512 SIMULATION AS MORE THAN A TREATMENT - FAMILY TO LOS 1005/jmla.2018.00.004 SIMULATION AS MORE THAN A TREATMENT - FOLO2007 FOR as 21.10016/j.jmla.2018.07.007 DEVLOPMENT OF ANTI-ICAL NEURAL NET WORKS FOR CLINICI.0.1016/j.jmla.2018.07.007 SIMULATION AS MORE THAN A TREATMENT - TO LOS 1005/j.jmla.2018.07.007 DEVLOPMENT OF ANTI-ICAL NEURAL NET WORKS FOR CLINICI.0.1016/j.jmla.2018.07.007 SIMULATION AS MORE THAN AND TREATMEND OF POR 42.10.1016/j.jmla.2018.07.007 DEVLOPMENT OF MACHINEL SCHLAR LAY THAN THAN TO LOS 1005/j.jmla.2018.07.007 SIMULATION AS MORE THAN THE MACHINE FOLD AND TREATMEND AND TO TREATMENT TO LOS 1005/j.jmla.2018.07.007 LIBANING SCHLARE IN MILESSIYE WITUL REALTY 10.1037/s0400024 SIMULATION AS MORE THAN ANTIPARA THE MACHINE LEARNIN SCHLARE IN MILESSIYE AND THAN THE MACHINE LEARNIN SCHLARE IN MARKET AND TA SUBJECT TO TAKATY TO LOS 2051 AROBOT TO SHAPE YOUR NATURAL PLANT: THE MACHINE LEARNIN LISA/J2054553.2005316 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 | GCS 62 18 10 200 0 0 0 | 7 2 8 6 8 8 1 0 6 7 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK IP, 2018, PLOS ONE COUNEYEA/P, 2018, J MED LIER ASSOC ROOMEY MK, 2018, J RIO BIOL BOLC HOSSANZADEH, 2018, J BIOMED INFORMATICS DEW KK, 2018, J BIOMED INFORMATICS DEW KK, 2018, J BIOMED INFORMATICS DEW KK, 2018, J BIOMED INFORMATICS PARONG J, 2018, J EDUC FSYCHOL WAILYON RC, 2018, J SC EDUC TECHNOL SYNIA TV, 2018, BIS ECOUP TSOC CONF COMPUT CONF WAILYON RC, 2018, J SC EDUC TECHNOL SYNIA TV, 2018, BIS ECOUP TSOC CONF COMPUT VIS PATTERN | Doi: DOI: CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ljrobp.2017.12.268 OFLOW UTE DATASET: MARCHINE LEARNING AVPROACH TO THE 10.1371/journal.gone.00205844 Indi-PREPRORMANCE COMPUTING SERVICE FOR BIOINOMATIC 10.3375/jmla.2018.53.20 SIMULATION AS MORE THAN A TREATMENT-LANNING TOOL: A 10.1016/j.ljrobp.2017.12.268 VECHAT: AN APPLICABLE AND FEXIBLE SOCIAL APP SOTTWARE 10.1002/mb.21170 TRANSFERABILITY OF ARTIFICIAL INURAL NETWORKS FOR CLINIC 10.1016/j.jb.2018.07.018 DEVELOPMENT OF MACHINE TRANSITION TECHNOLOGY FOR A 50.1016/j.jb.2018.07.018 USING HANDS-ON PHYSICAL COMPUTING PROJECTS TO TEACH CL 10.1115/1.400226 LEARNING SCIENCE IN IMMERSIVE VIRTUAL REALITY 10.1037/edub000241 A ROBOT TO SHAPE YOUR NATUAL PLANT: THE MACHINE LEARN 10.1165/j.2025655.3305516 IMPLENTATION OF A CURRICULION-INTEGRATED COMPUTEN 10.1007/15056-01.97270-2 FEGMENTIZI- WE ABASED APPLICATION TO ROUCDARTIVE 510.1016/j.058.1018.836800 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 | GCS 62 18 18 28 200 6 | 7 2 8 6 8 8 1 0 6 7 6 |
| A Paper COOK GUR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK /P, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK /P, 2018, INT J RADIAT ONCOL BIOL PHYS TU S, 2018, BIOCHEM MIG BIOL EDUC HASSANZAOEH J. 2018, J BIOME DINFORMATICS DEW KN, 2018, J BIOME DINFORMATICS DEW KN, 2018, J BIOME DINFORMATICS DEW KN, 2018, J BIOME ONCOL BIOL MAN T, 2018, J EDUC FORCH ONCOL BIOL MAN T, 2018, J EDUC FORCH ONCOL BIOL MANION R, 2018, J SC EDUC TENCION SPINA TV, 2018, J SC EDUC TENNOL SP | Doi: DOI: CHALENCES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OCLOW, LIE DATAST: A MACHINE-LEARNING APPOACH TO THE 10.1277/journal.pone.0030844 HIGH-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5395/jmla.2018.512 SIMULATION AS MORE THAN A TREATMENT-PLANNING TOOL: 10.1016/j.ijrobp.2018.05.064 WECHAIT: AN PARTICABLE AND FLEXIBLE SOCIAL APP SOTIVARE / 10.1016/j.ijr.2018.07.007 TRANSFERBAILITY OF ARTIFICAL VEDRAL FOR UNDERS FOR CLINICI.0.1016/j.ijr.2018.07.007 DEVLOPMENT OF MARTIFICAL VEDRAL NET WORKS FOR CLINICI.0.1016/j.ijr.2018.07.017 LEARNING SCIENCE IN MARESIVE VERTURA REALTY LEARNING SCIENCE IN MERSIVE WITULA REALTY MILENNING NO FA CURRICULUM-INTEGRATEO COMUTER 10.1016/j.iz.2018.07.017 LEARNING SCIENCE IN MARESIVE WITULA REALTY MILENNING NO FA CURRICULUM-INTEGRATEO COMUTER 10.1016/j.iz.2018.07.018 LEARNING SCIENCE IN MARESIVE WITULA REALTY MILENNING NO FA CURRICULUM-INTEGRATEO COMUTER 10.1016/j.iz.2018.07.018 LEARNING SCIENCE IN MARESIVE WITULA REALTY MILENNING NO FA CURRICULUM-INTEGRATEO COMUTER 10.1016/j.iz.2018.07.017 LEARNING SCIENCE IN ANTERIAR DEVICU THE MARCHINE LEARNING INFORMETO COMUTER 10.1016/j.iz.2018.07.025 FEGMENTED: A WEB-BASED APPLICATION FOR COLLABORATIVE SI 10.119/SIS.2018.85.0500 MILINCINNE BOLDOGICAL SYNAPTIC TUNITONTIONTION TO MOUTTER 10.1 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | GCS 62 18 18 28 200 6 1 6 | 7 2 8 6 8 8 1 0 6 7 6 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK JP, 2018, PLOS ONE COURREYA JP, 2018, PLOS ONE COURREYA JP, 2018, JNT J RADIAT ONCOL BIOL PHYS TUS 2018, BIOCHEM MOL BIOL DIVORMATICS DEW KN, 2018, J BIOMED INFORMATICS HAM T, 2018, J BIOMED INFORMATICS PARONG J, 2018, J COU C GANET EVOL COMPUT CONF WAILON RC, 2018, J SC EDUC TECHNOL SARIAR O, 2018, ACS NANO MOEDIIONO S, 2018, PACS MANO | This DOI CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OFLOW LITE DATASET: AMACHINE LEARNING AMPROACH TO THE 10.1377/journal.pone.0050544 Indi-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.13573/journal.pone.0050544 INDI-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.15173/journal.pone.0050544 VECHAT: XM.PPUTUGABLE AND FERBUS SOCILL APP SOFTWARE F10.1002/jml.2018.512 SIMULATION AS MORE THAN A TREATMENT F-LANNING TOOL: A 10.1016/j.jivobp.2017.07 DEVELOPMENT OF MACHINE TRANSITION TECHNOLOGY FOR A 20.1016/j.jivobp.2017.07 DEVELOPMENT OF MACHINE TRANSITION TECHNOLOGY FOR A 20.1016/j.jivobp.2017.07 DEVELOPMENT OF MACHINE TRANSITION TECHNOLOGY FOR A 20.1016/j.jivobp.2017.01 LEARNING SCIENCE IN MERSING WITUR REALTY INIPLEMENTATION OF A CURRICULAR THE MACHINE LEARNIN 1145/3205455.3305516 IMPLEMENTATION OF A CURRICULUM-INTEGRATED COMPUTER 10.1007/s10956-017-9720-2 SEGMENTIZ: A WEB BAGO APPLICATION FOR COLLABORATIVE \$ 10.1007/s10956-017-9720-2 SEGMENTIZ: A WEB BAGO APPLICATION FOR COLLABORATIVE \$ 10.1007/s10956-017-9720-2 SEGMENTIZ: A WEB BAGO APPLICATION FOR COLLABORATIVE \$ 10.1007/s10956-017-9720-2 SEGMENTIZ: A WEB BAGO APPLICATION FOR COLLABORATIVE \$ 10.1007/s10956-017-9720-2 MEDIA INTERFACTUR LEARNING AND BOLOGY SUBJECTS TO THEM 10.1002/acannabas000 MIMICINNE BIOLOGICAL SINAPTIC FUNCTIONALITY | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | GCS 63 18 18 28 200 61 61 | 7 2 8 6 8 8 1 0 6 7 6 1 3 |
| A Paper CONG GIR, 2018, INT J RADIAT ONCOL BIOL PHYS CONGLAL JP, 2018, INT J RADIAT ONCOL BIOL PHYS COURNEYA J-P, 2018, J MED UBR ASSOC ROONEY MK, 2018, INT J RADIAT ONCOL BIOL PHYS TU 5, 2018, BIOCHEM MOL BIOL EDUC HASANXAZOEH J, 2018, J BIOME DINFORMATICS DEW KN, 2018, J BIOME DINFORMATICS DEW KN, 2018, J BIOME DINFORMATICS DEW KN, 2018, J BIOME DINFORMATICS PARONG J, 2018, J EDUC FOYCHOL WAHEY M, 2018, A BIOMECH ENG PARONG J, 2018, J ECI EDUC TECHNOL SINA TV, 2018, BEEC COMPUT SOC CONF COMPUT CONF WALLON RC, 2018, J SCI EDUC TECHNOL SINA TV, 2018, BEEC COMPUT SOC CONF COMPUT VIS PATTERN SARARA D, 2018, ACS NANO MOEDIIONO 5, 2018, PACC INT CONF INF COMPUT, ICIC LORK KO, 2018, RURAN ENW | Title DOI CHALENES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OCHOW LIE DARASET: A MACHINE LEARNING APPOACH TO THE 10.1371/journal.pone.00305844 HIGL-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5159/jmla.2018.512 SMILLATION AS MORE THAN THEATHENT FLAMMING TOORS. A 110.1016/j.ijrobp.2018.05.064 WECHAT: AN APPLICABLE AND FLEXIBLE SOCIAL APP SOFTWARE F 10.1002/bmls.21170 TRANSFERBALITY OF ANALITIECTAL WEDRAL TO TEACHOCIGO TORA L 20.1016/j.ijr.2018.07.017 DEVLODMENT OF MACHINE TRANSITION TECHNOLOGY FORA L 20.1016/j.ijr.2018.07.017 DEVLOTMENT OF MACHINE TRANSFLOR TO TEACHOCIGO TORA L 20.1016/j.ijr.2018.07.017 LIARNING SOENE IN MAR TESEVE WITULA REALITY MEDIA MATUSO OF MENTAL REALITY INDELEMENT OF MACHINE TRANSFLOR TECHNOLOGY FORA L 20.1016/j.ijr.2018.07.017 LIARNING SOENE IN MARESINE WITULA REALITY INDELEMENT OF A MACHINE LOWNIN TEGNATE DOWNITET NI.0007/1005-0017-2702-2 FEGMENTED: A WEB-BASED APPLICATION FOR OCLUBERONTET NI.0007/1005-0017-2702-2 FEGMENTED: A WEB-BA | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | GCS 62 18 18 28 200 61 61 | 7 2 8 6 8 8 1 0 6 7 6 1 3 4 |
| A Paper CONG GIR, 2018, INT J RADIAT ONCOL BIOL PHYS CONGLAL JP, 2018, INT J RADIAT ONCOL BIOL PHYS COURNEYA J-P, 2018, J MED UBR ASSOC ROONEY MK, 2018, INT J RADIAT ONCOL BIOL PHYS TU 5, 2018, BIOCHEM MOL BIOL EDUC HASANXAZOEH J, 2018, J BIOME DINFORMATICS DEW KN, 2018, J BIOME DINFORMATICS DEW KN, 2018, J BIOME DINFORMATICS DEW KN, 2018, J BIOME DINFORMATICS PARONG J, 2018, J EDUC FOYCHOL WAHEY M, 2018, A BIOMECH ENG PARONG J, 2018, J ECI EDUC TECHNOL SINA TV, 2018, BEEC COMPUT SOC CONF COMPUT CONF WALLON RC, 2018, J SCI EDUC TECHNOL SINA TV, 2018, BEEC COMPUT SOC CONF COMPUT VIS PATTERN SARARA D, 2018, ACS NANO MOEDIIONO 5, 2018, PACC INT CONF INF COMPUT, ICIC LORK KO, 2018, RURAN ENW | This DOI CHALLENGES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OFLOW LITE DATASET: AMACHINE LEARNING AMPROACH TO THE 10.1377/journal.pone.0050544 Indi-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.13573/journal.pone.0050544 INDI-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.15173/journal.pone.0050544 VECHAT: XM.PPUTUGABLE AND FERBUS SOCILL APP SOFTWARE F10.1002/jml.2018.512 SIMULATION AS MORE THAN A TREATMENT F-LANNING TOOL: A 10.1016/j.jivobp.2017.07 DEVELOPMENT OF MACHINE TRANSITION TECHNOLOGY FOR A 20.1016/j.jivobp.2017.07 DEVELOPMENT OF MACHINE TRANSITION TECHNOLOGY FOR A 20.1016/j.jivobp.2017.07 DEVELOPMENT OF MACHINE TRANSITION TECHNOLOGY FOR A 20.1016/j.jivobp.2017.01 LEARNING SCIENCE IN MERSING WITUR REALTY INIPLEMENTATION OF A CURRICULAR THE MACHINE LEARNIN 1145/3205455.3305516 IMPLEMENTATION OF A CURRICULUM-INTEGRATED COMPUTER 10.1007/s10956-017-9720-2 SEGMENTIZ: A WEB BAGO APPLICATION FOR COLLABORATIVE \$ 10.1007/s10956-017-9720-2 SEGMENTIZ: A WEB BAGO APPLICATION FOR COLLABORATIVE \$ 10.1007/s10956-017-9720-2 SEGMENTIZ: A WEB BAGO APPLICATION FOR COLLABORATIVE \$ 10.1007/s10956-017-9720-2 SEGMENTIZ: A WEB BAGO APPLICATION FOR COLLABORATIVE \$ 10.1007/s10956-017-9720-2 MEDIA INTERFACTUR LEARNING AND BOLOGY SUBJECTS TO THEM 10.1002/acannabas000 MIMICINNE BIOLOGICAL SINAPTIC FUNCTIONALITY | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | GCS 62 18 18 28 200 61 61 | 7 2 8 6 8 8 1 0 6 7 6 1 3 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAW, JP, 2018, PLOS DONE COURNEYA J-P, 2018, INTE J IARDIAT ONCOL BIOL PHYS CUURNEYA J-P, 2018, JI BIOMED INFORMATICS ID STATUS AND | Title DOI CHALENES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OCHOW LIE DARASET: A MACHINE LEARNING APPOACH TO THE 10.1371/journal.pone.00305844 HIGL-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5159/jmla.2018.512 SMILLATION AS MORE THAN THEATHENT FLAMMING TOORS. A 110.1016/j.ijrobp.2018.05.064 WECHAT: AN APPLICABLE AND FLEXIBLE SOCIAL APP SOFTWARE F 10.1002/bmls.21170 TRANSFERBALITY OF ANALITIECTAL WEDRAL TO TEACHOCIGO TORA L 20.1016/j.ijr.2018.07.017 DEVLODMENT OF MACHINE TRANSITION TECHNOLOGY FORA L 20.1016/j.ijr.2018.07.017 DEVLOTMENT OF MACHINE TRANSFLOR TO TEACHOCIGO TORA L 20.1016/j.ijr.2018.07.017 LIARNING SOENE IN MAR TESEVE WITULA REALITY MEDIA MATUSO OF MENTAL REALITY INDELEMENT OF MACHINE TRANSFLOR TECHNOLOGY FORA L 20.1016/j.ijr.2018.07.017 LIARNING SOENE IN MARESINE WITULA REALITY INDELEMENT OF A MACHINE LOWNIN TEGNATE DOWNITET NI.0007/1005-0017-2702-2 FEGMENTED: A WEB-BASED APPLICATION FOR OCLUBERONTET NI.0007/1005-0017-2702-2 FEGMENTED: A WEB-BA | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | GCS 62 18 18 28 200 61 7 61 61 | 7 2 8 6 8 8 1 0 6 7 6 1 3 4 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK JP, 2018, PLOS ONE COUMNEYA J-P, 2018, JNED UBR ASSOC ROOMEY MK, 2018, INT J RADIAT ONCOL BIOL PHYS TU S, 2018, BIOCHEM MOL BIOL EDUC HASANXADEH J. 2018, J BIOMED INFORMATICS DEW KN, 2018, J BIOMED INFORMATICS PARONG J, 2018, J EOUC PSYCHOL WAILOW RC, 2018, J SCI EDUC TECHNOL SPINA TV, 2018, J SCI EDUC TECHNOL GENCYLL, 2018, RASC ENVILLY GENCYLLA, 2018, JACE COMPUT SOC CONF COMPUT VIS PATTERN SMARA D, 2018, ADD CINF FONC GENCYLLA, JA, 2018, API CONF PROC TECHNOL SCI ENVILLANL TEW | Title DOI CHALENES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OCHOW LIE DARASET: A MACHINE LEARNING APPOACH TO THE 10.1371/journal.pone.00305844 HIGL-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5159/jmla.2018.512 SMULATION AS MORE THAN THEATMENT FLANNING TOOL: A110.1016/j.julop10.30.06.04 WECHAT: AN APPLICABLE AND FLEXIBLE SOCIAL APP SOFTWARE F 10.1002/bmlb.21170 TRANSFERBALITY OF ARTIFICAL WEDRAL HOR TWORK FOR CLIO.1016/j.jul.2018.07.017 DEVLODMENT OF MACHINE FLANNING APPOACHTO FOR A10.1016/j.jul.2018.07.017 DEVLODMENT OF MACHINE TRANSFLANT TO TEXHOLOGY FOR A10.1016/j.jul.2018.07.017 DEVLODMENT OF MACHINE TRANSFLANT TO TEXHOLOGY FOR A10.1016/j.jul.2018.07.017 DEVLOTOMENT OF MACHINE TRANSFLANT ON TECHNOLOGY FOR A10.1016/j.jul.2018.07.017 DEVLOTOMENT OF ANGHINE TRANSFLANT TO TEXHOLOGY FOR A10.1016/j.jul.2018.07.018 LIANING SOLED IN MERSING WITULA REALITY INDELEMATION F A VURTULA REALITY INDELEMATION F A VURTULA REALITY INDELEMATION F A VURTULA REALITY INDELEMATION F A CURRECULUMINTEGNATE DOMUTIEN 10.1016/j.10056.0127370-2 FERGMENTID: A WEB-BARED APPLICATION FOR COLLABORATIVE S IN.10109/JAC.2018.058272 MEDIA INTERACTIVE LEARNING AND BIOLOGY SUBJECTS IMPERING IND.10109/JAC.2018.05630 DEVELOPMENT OF A WEBOLOGULSTA SINSTRUCTIONAL MATERINAL 110.1063/j.SU51935510 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | LCS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | GCS 663 | 7 2 8 6 8 8 1 0 6 7 6 1 3 4 1 |
| A Paper COOK GR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK JP, 2018, PLOS ONE COUINEYA J-P, 2018, INT J RADIAT ONCOL BIOL PHYS TU S, 2018, BIOCHE MOR BIOL BERASOC ROOHEY MK, 2018, INT J RADIAT ONCOL BIOL PHYS TU S, 2018, BIOCHE NOB BIOL BUC HASSANZADEH H, 2018, J BIOMED INFORMATICS DEV KW, 2013, J BIOMED INFORMATICS DEV KW, 2013, J BIOMED INFORMATICS PARONG J, 2018, J EOL O PSYCHOL WALISM RC, 2013, SCE DUC TECHNOL SARIAR D, 2018, ACS NANO MOEDIION S, 2018, PHC OINF TH COMPUT, INF COMPUT, ICIC LOBE ROUCH JR, 2018, J ADV PHARM EDUC RES MALLAWARARCHCH W, 2028, J IADV PHARM EDUC RES | The DOI CIALLENES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OPLOW LITE DATASET: A MACHINE-LEARNING APPROACH TO THE 10.1371/journal.pone.0205844 Indin-PERFORMANCE COMPUTING SERVICE FOR BIOINORMATIC 10.13572/journal.pone.0205844 WEICHAI: AN APPROACH TO THE ID.1371/journal.pone.0205844 WEICHAI: AN APPROACH TO THE SERVICE FOR BIOINORMATIC 10.13572/journal.pone.0205844 WEICHAI: AN APPROACH TO THE SERVICE FOR BIOINORMATIC 10.13572/journal.pone.0205844 DEVELOPMENT OF ANTICIAL RELES SOCIL APP SOTIVARE F 10.1002/jbi.2018.07.007 DEVELOPMENT OF ARTICIAL NEURAL NETWORKS FOR CLINIC 10.1016/jbi.2018.07.017 DEVELOPMENT OF ARTICIAL REVAIL NOT REVISION FOR A \$10.1016/jbi.2018.07.018 USING HANDS ON PHYSICAL COMPUTING RODECTS TO TEACH CLIN.115/1.4040226 LEARNING SCIENCE IN MARESINE WITH REVAIL TO TEACH CLIN.115/1.4040226 LEARNING SCIENCE IN MERSINE WITH REVAIL REALTY MINICINE BOLOGICAL SYMPHET THE MACHINE LEARNING TO SCIENCE TO TEACH CLIN.115/1.4040226 LEARNING SCIENCIAL COMPUTING RODECOMUTER 10.1016/jaces00241 ARDBOT TO SHAPE YOUR NATURAL PLANT: THE MACHINE LEARNING 10.1545/305455.3305516 MINICUME BOLOGICAL SYMPHET TUNCTIONALITY WITH MIN TEAL 10.1126/304565.3305516 MINICUME BOLOGICAL SYMPHET TUNCTIONALITY MARTICAL 11.1016/3.00586127 MEEDIA INTERACTIVE LEARNING AND BIOLOGY SUBJECTS INFLEM 10.1105/3.0018.2018.856300 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | | GCS 673 112 118 118 118 118 118 118 118 118 118 | 7 2 8 6 8 8 1 0 6 7 6 1 3 4 1 1 7 |
| A Paper COOK GIR, 2015, INT J RADIAT ONCOL BIOL PHYS ZNOLAK JP, 2018, INT J RADIAT ONCOL BIOL PHYS ZNOLAK JP, 2018, JNED LIBR ASSOC ROOMEY MR, 2018, JNED LIBR ASSOC ROOMEY MR, 2018, JIGONED BIOL EDUC HASSNAZUGEH J2018, JIGONED BIOL EDUC HASSNAZUGEH J2018, JIGONED BIOREMATICS DEW KN, 2018, JIGONED INFORMATICS DEW KN, 2018, JIGONED INFORMATICS DEW KN, 2018, JIGONED INFORMATICS HANT, 72018, JIGOMED INFORMATICS DEW KN, 2018, JIGONE DINCORMATICS HANT, 72018, JIGOMED INFORMATICS HANT, 72018, JIGOMED INFORMATICS DEW KN, 2018, JIGONE DINCORMATICS HANT, 72018, JIGOMED INFORMATICS HANT, 72018, JIGOMED INFORMATICS DEW KN, 2018, JIGONED INFORMATICS HANT, 72018, JIGOMED INFORMATICS HANT, 72018, JIGE CCOMPLUT ACC CONF COMPUT CONF WALLON RC, 2018, JIGONE DINC GINT CONF INFORMUT VIS PATTERN SARKAR D, 2018, ACS NANO MOEDIION 5, 2018, ACIS LIDUC TECHNOL EMANUMARACHI V, 2018, INT LIMERG TECHNOL LEARN NAL, 2018, JINT LIMERG TECHNOL LEARN | Title DOI CHALLENES AND PROMISES OF PET RADIOMICS 10.1016/j.iji/pidp.2017.12.268 OCHOW LITE DATASET: A MACHINE LEARNING APPOACH TO THE 10.1371/journal.pone.00305844 HIGH-PERCIBINANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5159/jmla.2018.0.00544 SIMULATION AS MORE THAN THEARNING APPOACH TO THE 10.1371/journal.pone.00305844 HIGH-PERCIBINANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.5159/jmla.2018.0.064 WECHAT: AN APPLICABLE AND FLEXIBLE SOCIAL APP SOFTWARE / In 1002/nmlb.31170 DEVLODMENT OF MACHINE THEM THE ANNUMENT FOR ALION 10.1016/j.jk.2018.0.7017 DEVLOTMENT OF MACHINE TRUE AND TECHNOLOGY FOR AL 10.1016/j.jk.2018.0.7017 DEVLOTMENT OF MACHINE TRUE AREALITY 10.1017/de0400224 LEARNING SCIENCE IN IMMERSIVE WITULA REALITY 10.1017/de0400241 LEARNING SCIENCE IN MARESIVE WITULA REALITY 10.1017/de0400245 LEARNING SCIENCE IN MERSING AND BIOLOGY SUBJECTS INFERION DENDER 10.1016/j.10156-017-270-2 FERGEMENTID: A WEB BARED APPLICATION TO ROLLABORATIVE SI 10.1016/j.secumet.2017.12.003 DEVELOPMENT OF A WEBOLOGICAL SINSTRUCTIONAL MATERIAL THANSIGNIN 10.1016/j.secumet.2017.20.03 DESEM DEVELOPMENT OF A WEBOLOGICA | Year 2018 | | GCS 673 111 110 110 110 110 110 110 110 110 11 | 7 2 8 6 8 8 8 1 0 6 7 6 1 3 4 1 1 7 3 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAK, IP, 2018, PLOS ONE COUNENYA - JA, 2018, PLOS ONE COUNENYA - JA, 2018, JINT J BADIAT ONCOL BIOL PHYS TVS, 2018, BIOCHEM MOL BIOL BIOL PHYS TVS, 2018, BIOCHEM MOL BIOL BLUC HASSANZADEH H, 2018, J BIOMED INFORMATICS DEV KN, 2013, J BIOMED INFORMATICS PARONG J, 2018, J EDUC PSYCHOL WALLON RC, 2013, J SCI EDUC TECHNOL SARRAR O, 2018, ACS NANO MOEDIONO S, 2018, PAC ONF PROC PHOL CHEK KO, 2013, NEURAL NETW GRIOVIA JA, 2018, J ADV PHARM EDUC RES MALLAWARARCH VI, 2018, J IN ZHENR TECHNOL LEARN XAD, 2018, INT L MEMS TECHNOL LEARN XAD, 2018, INT L MEMS TECHNOL LEARN XAD, 2018, INT I MEMS TECHNOL LEARN XAD, 2018, CURR TO PMED | The DOI CHALLENES AND PROMISES OF PET RADIOMICS 10.1016/j.jirohp.2017.12.268 OPLOW LITE DATASET: A MACHINE-LEARNING APPROACH TO THE 10.1371/journal.pone.0025844 HIGH-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.13555/mla.2018.51.2 SIMULATION AS MORE THAN A TREATMENT - TANNING TOOL: A 10.1016/j.jirohp.2017.02.068 VECHAT: AN APPLICABLE AND FEDRILES SOCILL APP SOTTWARE F 10.1002/mb.21170 TRANSFERBAILITY OF ARTIFICIAL NURAL NETWORKS FOR CLINICI.0.1016/j.jis.2018.07.017 DEVELOPMENT OF MACHINE TRANSFATION TECHNOLOGY FOR A 10.1016/j.jis.2018.07.017 DEVELOPMENT OF MACHINE TRANSFATION TECHNOLOGY FOR A 10.1016/j.jis.2018.07.018 USING HANDS ON PHYSICAL COMPUTING RODECTS TO TECHCI CLI.0.1115/1.4040226 LEARNING SCIENCE IN MARESINE VIETULA REALITY INDELEMENT OF A CURRICULUMINITIGRATE ODOUTER 10.1016/j.Jaso5013.70056-001.7702-0 FERGMENTID: A WEB BASED APPLICATION FOR COLLOBORTITINE 10.0017/JOS6-001.79702-0 FERGMENTID: A WEB BASED APPLICATION FOR COLLOBORTITINE 10.01016/j.munet.2017.12.003 DEVELOPMENT OF A WEBDIGGY SUBJECTS MEEM 10.1106/j.acunano.7008272 MEDIA INTERACTIVE LEARNING AND BIOLOGY SUBJECTS IMPLEM 10.1106/j.acunano.7017.12.003 DEVELOPMENT OF A WEBDIGUES AN INSTRUCTIONAL AMATERIAL INI 10.106/j.acunano.7017.12.003 DEVELOPMENT OF A VEBOLUTS A INSTRUCTIONAL AMATERIAL INTO 10.03/J.5015510 ASSESMENT SUSLS IN CONTENT AND LANG | Year 2018 | | GCS 623 118 118 128 128 128 128 128 128 128 128 | 7 2 8 6 6 8 8 8 1 0 6 7 6 1 1 3 4 1 1 7 7 3 6 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZNYOLAK JR, 2018, INT J RADIAT ONCOL BIOL PHYS COURNEYA JP, 2018, JNED LIBR ASSOC ROOMEY MR, 2018, JI MED LIBR ASSOC ROOMEY MR, 2018, JI BIOMED INFORMATICS DEW KN, 2018, JI GOUE PHYS MAT, 7.2018, JI BIOMED INFORMATICS DEW KN, 2018, JI GOUE PHYS SARVAR D, 2018, ACS NANO MODELINON S, 2018, JI SCIE DUC TECHNOL SARVAR D, 2018, ACS NANO MODEDIUNO S, 2018, PROC INT CONF INF COMPUT, VIS PATTERN SARVAR D, 2018, ACIB, ANDO MODELINON S, 2018, PROL INT CONF INF COMPUT, VIS PATTERN SARVAR D, 2018, ACIB, ANDO MODELINON S, 2018, PROL INT CONF INF COMPUT, VIS PATTERN AND, 2018, INT LEMERS TECHNOL LEARN AND, 2018, JI SCIE DURS JN JI EMERS TECHNOL LEARN ARRASHE S, 2018, CUBR, TOP MED CHEM | The DOI CHALENES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OELOW LIE DATASET: A MACHINE LEARING APPOACH TO THE 10.1371/journal.pone.00305844 000000000000000000000000000000000000 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | | GCS 63 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 7 2 8 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAW, IP, 2018, PLOS ONE COUNREYA J-P, 2018, PLOS ONE COUNREYA J-P, 2018, INTE J LER ASSOC ROOMEY MK, 2018, INT J RADIAT ONCOL BIOL PHYS IT S, 2018, BIOCHE INCOMMATICS DEV KN, 2013, BIOMED INFORMATICS MAIL AND ARCHING BIOL DEVICE MAIL SUBJECT STATUS SATURAL DEVICE CONFIL SATURAL SUBJECT STATUS SATURAL DATA SATURAL SATURATION SATURAL SATURA SATURAL SATURAL SATURA SATURAL SATURA SATURAL | The DOI CHALLENES, AND PROMISES OF ET RADIOMICS 10.1016/j.jirohp.2017.12.268 OFLOW LITE DATASET: A MACHINE-LEARNING APPROACH TO THE 10.1371/journal.pone.0205844 HIGH-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.13555/mla.2018.51.2 SIMULATION AS MORE THAN A TREATMENT F-ANNING TOOL: A 10.1016/j.jirohp.2013.63.064 WECHAI: AN APPLICABLE AND FLORING SCHARE TO ADDOME.2010.0016/j.jirohp.2013.63.064 DEVELOPMENT OF ARTIFICAL NEURAL NETWORKS FOR CLINIC 10.1016/j.jirohp.2017.01 TRANSFERBAILITY OF ARTIFICAL NEURAL NETWORKS FOR CLINIC 10.1016/j.jirohp.2017.01 LEARNING SCHARE NO MACHINE SCHAL APP SOTHWARE 10.1002/j.jirohp.2017.01 TRANSFERBAILITY OF ARTIFICAL NEURAL NETWORKS FOR CLINIC 10.1016/j.jirohp.2017.01 LEARNING SCHARE NUMBERS WITH AL REALTY TO SHARE YOUR MATURAL COMPUTING RODECTS TO TEACH CLID.115/1.4040226 LEARNING SCHARE NUMLAIN FEGARED COMPUTER 10.1045/j.2064553.305516 IMPELENTITION OF A CURRELULIVIA. INTEGRATED COMPUTER 10.1045/j.2064553.305516 IMPELENTITION OF A CURRELULIVIA. INTEGRATED COMPUTER 10.1045/j.2064553.305516 IMPELENTITION OF ALCORDUCTION COLLABORATIVE \$10.1196/j.aceanno.7080272 MEDIA INTERACTIVE LEARNING AND BUDLOGY SUBJECTS IMPELIN 10.1196/j.aceanno.708272 MEDIA INTERACTIVE LEARNING AND BUDLOGY SUBJECTS IMPELIN 11.10.106/j.15802018.2013.20031 DEVELOPMENTO FA VEE BASED APULCATION AND MATERIAL 11.10.106/j | Year 2018 2018 2018 2018 2018 2018 2018 2018 | | GCS 623 114 114 114 114 114 114 114 114 114 11 | 7 2 8 6 6 8 8 8 1 0 6 7 6 1 3 4 1 1 7 3 6 0 4 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAW, IP, 2018, PLOS ONE COUNREYA J-P, 2018, PLOS ONE COUNREYA J-P, 2018, INTE J LER ASSOC ROOMEY MK, 2018, INT J RADIAT ONCOL BIOL PHYS IT S, 2018, BIOCHE INCOMMATICS DEV KN, 2013, BIOMED INFORMATICS MAIL AND ARCHING BIOL DEVICE MAIL SUBJECT STATUS SATURAL DEVICE CONFIL SATURAL SUBJECT STATUS SATURAL DATA SATURAL SATURATION SATURAL SATURA SATURAL SATURAL SATURA SATURAL SATURA SATURAL | The DOI CHALENES AND PROMISES OF PET RADIOMICS 10.1016/j.ijrobp.2017.12.268 OCHOW LITE DATASET: A MACHINE LEARING APPOACH TO THE 10.1371/journal.pone.00305844 000000000000000000000000000000000000 | Year 2018 2018 2018 2018 2018 2018 2018 2018 | | GCS 66: 11: 11: 11: 11: 11: 11: 11: 11: 11: | 7 2 8 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS CUOLINEYA: AP, 2018, INT J RADIAT ONCOL BIOL PHYS CUOLINEYA: AP, 2018, J BIOLE BIOL BIOL BASSOC ROONEY MK, 2018, J BIOLE BIOL BIOL BIOL BIOL HASSANZAUEH, 2018, J BIOME BIOL BIOL DEW KK, 2018, J BIOME DI INFORMATICS HAM, 7, 2018, BIOMECH ENG FROMINA, 2018, J SCIE DEUL TECHNOL SARKAR D, 2018, ACS NANO MOEDIIONO S, 2018, PICC INF COMPUT, VIS PATTERN SARKAR D, 2018, ACS NANO MOEDIIONO S, 2018, PIC OINF COMPUT, VIS PATTERN SARKAR D, 2018, ACS NANO MOEDIIONO S, 2018, J ROU FROME DI INFORMATICS DIENTAY, 2018, J DIS, J BHORE MENNE CHOVIAL J 2018, J AND PHARM EDUL RES MALLAWARACHCH V, 2018, J INT J BERIS TECHNOL LEARN ARRASHE S, 2018, CUIR TO MED CHEM ARRASHE S, 2018, J CUIR TO MED CHEM ARRASHE S, 2018, BUOLEM MOL BUOL EDUC | The DOI CHALLENES, AND PROMISES OF ET RADIOMICS 10.1016/j.jirohp.2017.12.268 OFLOW LITE DATASET: A MACHINE-LEARNING APPROACH TO THE 10.1371/journal.pone.0205844 HIGH-PERFORMANCE COMPUTING SERVICE FOR BIOINFORMATIC 10.13555/mla.2018.51.2 SIMULATION AS MORE THAN A TREATMENT F-ANNING TOOL: A 10.1016/j.jirohp.2013.63.064 WECHAI: AN APPLICABLE AND FLORING SCHARE TO ADDOME.2010.0016/j.jirohp.2013.63.064 DEVELOPMENT OF ARTIFICAL NEURAL NETWORKS FOR CLINIC 10.1016/j.jirohp.2017.01 TRANSFERBAILITY OF ARTIFICAL NEURAL NETWORKS FOR CLINIC 10.1016/j.jirohp.2017.01 LEARNING SCHARE NO MACHINE SCHAL APP SOTHWARE 10.1002/j.jirohp.2017.01 TRANSFERBAILITY OF ARTIFICAL NEURAL NETWORKS FOR CLINIC 10.1016/j.jirohp.2017.01 LEARNING SCHARE NUMBERS WITH AL REALTY TO SHARE YOUR MATURAL COMPUTING RODECTS TO TEACH CLID.115/1.4040226 LEARNING SCHARE NUMLAIN FEGARED COMPUTER 10.1045/j.2064553.305516 IMPELENTITION OF A CURRELULIVIA. INTEGRATED COMPUTER 10.1045/j.2064553.305516 IMPELENTITION OF A CURRELULIVIA. INTEGRATED COMPUTER 10.1045/j.2064553.305516 IMPELENTITION OF ALCORDUCTION COLLABORATIVE \$10.1196/j.aceanno.7080272 MEDIA INTERACTIVE LEARNING AND BUDLOGY SUBJECTS IMPELIN 10.1196/j.aceanno.708272 MEDIA INTERACTIVE LEARNING AND BUDLOGY SUBJECTS IMPELIN 11.10.106/j.15802018.2013.20031 DEVELOPMENTO FA VEE BASED APULCATION AND MATERIAL 11.10.106/j | Year 2018 2018 2018 2018 2018 2018 2018 2018 | | GCS 66: 11: 11: 11: 11: 11: 11: 11: 11: 11: | 7 2 8 6 6 8 8 8 1 0 6 7 6 1 3 4 1 1 7 3 6 0 7 4 1 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAW, PJ, 2018, PLOS ONE COUNIEVEX-IP, 2018, PLOS ONE COUNIEVEX-IP, 2018, INT J RADIAT ONCOL BIOL PHYS TUS 2018, BIOCHEM MOL BIOL BIOL PHYS TUS 2018, BIOCHEM MOL BIOL BUC HASSANZADEH H, 2018, J BIOMED INFORMATICS DEV KN, 2018, J BIOMED INFORMATICS SHARA 0, 2018, ACS ANNO MODEDIONO S, 2018, PHOC INT CONF INF COMPUT, LCIC LORE KG, 2018, NEURAL NETW GENOVIA J, 2018, J EEE COMPUT SOC CONF COMPUT, VIS PATTERN SARKAR 0, 2018, J ACS MIN THOM EDUC RES MALLAWARAACKOLV V, 2018, J IAOV PHARM EDUC RES MALHAWARAACKOLV V, 2018, J IAOV PHARM EDUC RES MALHAWARAACKOLV V, 2018, J IAOV PHARM EDUC RES MALHAWARAACKOLV V, 2018, J IAOV PHARM EDUC RES MALHAWARAKAKAKAN, 2018, CATA NEUROCONFOL COMPLEANN CO, 2018, BIOCHEM MOL BIOL EDUC AHIST V, 2018, J IAO THE INF CONFENS, TECHNOL EDUC | INT I RADAT ONCOL BIOL PHYS PAGE PHONE PHO | | | GCS 66: 11: 11: 11: 11: 11: 11: 11: 11: 11: | 7 2 8 8 8 8 8 8 1 0 0 6 7 6 1 1 3 4 1 1 7 7 3 6 5 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| Paper Dol CODE GRUE, MYS CALLENESS OF PET ADDIONALS 11.0161/j.pipe.2017.12.08 CODE ME, 2018, MT J RADIAT ONCOL BIOL BYNS CALLENESS OF PET ADDIONALS 11.0161/j.pipe.2017.12.08 CODENT ME, 2018, MT J RADIAT ONCOL BIOL BYNS CALLENESS OF PET ADDIONALS 11.0161/j.pipe.2017.12.08 CODENT ME, 2018, JT RADIAT ONCOL BIOL BYNS CALLENESS OF PET ADDIONALS 11.0161/j.pipe.2018.05.064 CODENT ME, 2018, JT RADIAT ONCOL BIOL BYNS TRANSFERMENT THAN AT TRANSFERMENT ADAMINESS OF PET ADMINISS O | | | | GCS 663 111 111 111 111 111 111 111 | 7 2 8 8 8 8 8 8 1 0 0 6 7 6 1 1 3 4 1 1 7 7 3 6 5 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| A Paper COOK GIR, 2018, INT J RADIAT ONCOL BIOL PHYS ZWOLAW, PJ, 2018, PLOS DONE COURNEYA J-P, 2018, PLOS DONE COURNEYA J-P, 2018, JIED LIBR ASSOC ROOMEY MK, 2018, INT J RADIAT ONCOL BIOL PHYS I'US 2018, BIOCHEM MOL BIOL BLOV HASSANZADEH H, 2018, J BIOMED INFORMATICS DEV KN, 2018, J COLD PHYS ANDIAL MARAARCAN, 2018, J ADV PHARM EDUC COMPUT, LICIC LIDRE KG, 2018, MICI MIT COMF INF COMPUT, LICIC LIDRE KG, 2018, J ADV PHARM EDUC RES MALLAWARAARCHON IV, 2018, J ADV PHARM EDUC RES MALLAWARAARCHON IV, 2018, J ATCH NEUROCINC HEAN SCI, LICS DISHOP SM, 2018, ACTA NEUROCONF KIN, SECHNOL LEARN AHISTINA, 2018, J CATA NEUROCONF KIN, J CEIANI SCI, LICLS MITH JN, 2015, J CLEZACT THANS COMPUT BIOL BIOINF | The DOI CHALLENES AND PROMISES OF PET RADIOMICS 10.1016/j.jirohp.2017.12.268 OFLOW LITE DATASET: A MACHINE-LEARNING APPROACH TO THE 10.1371/journal.pone.0205844 HIGH-PER ORAMINE COMPUTING SERVICE FOR BIOINFORMATIC 10.13555/mla.2018.51.2 SIMULATION AS MORE THAN A TREATMENT - PLANNING OFTWARE 11.00.0206.ml.21170 TRANSFERBAILITY OF ARTIFICAL NEURAL NEELS SCIAL JAP SOFTWARE 11.00.0206.ml.21170 TRANSFERBAILITY OF ARTIFICAL NEURAL NEEWORKS FOR CLINIC 10.1016/j.j.k.2018.07.017 DEVELOPMENT OF ANALYSIATION TECHNOLOGY FOR A 21.0105/j.j.k.2018.07.017 DEVELOPMENT OF ARTIFICAL NEURAL NEEWORKS FOR CLINIC 10.1016/j.j.k.2018.07.017 LEARNING SCIENCE IN MARESIVE WITHUR REALITY 10.0337/dodo00241 LEARNING SCIENCE IN MARESIVE WITHUR REALITY 10.0337/dodo00241 AR ROBOT TO SHAPE YOUR NATURAL PLANT: THE MACHINE LEARN IN 0.1145/j.3064553.305516 IMMERINE MORE CLINIC NOMLITY IN 0.0377/dodo00241 AR ROBOT OF A VEE BASED APPLICATION FOR COLLOBORTITY IS 10.017656-017.7270-2 ESGMENT3D-A WEE BASED APPLICATION FOR COLLABORATIVE S10.1190/JESI.2018.835800 MIMICINE BOLOGICAL SINAPTIC FUNCTIONAL MATERNAL IND 11.016/JL.2017.8280626 DEFILE ADDITION FAMILY AND TRUNCING BOLOGY SUBJECTS IMPERING IND 10.1091/AL.2017.8280626 DEFILE STATION FOR CLUSSING MEET STIMEREN ID.1190/JAC.2017.8280626 DESIGN OF YISJALE DUCATION REDUKTIONAL MATERNAL IND 10.05/J.S0171712.003 DEVELOPM | Year 2018 2018 2018 2018 2018 2018 2018 2018 | | GCS 663 111 111 111 111 111 111 111 | 7 2 8 6 8 8 8 1 0 6 7 6 1 3 4 1 1 7 3 6 0 7 6 1 3 4 1 1 7 3 6 0 0 8 8 8 8 7 6 7 6 7 6 7 7 6 7 7 8 8 8 8 8 |

Figure 3. Analysis Results of the Year Publishing Articles of Computer-Based Teaching Materials

In the Figure 3 it is known that 113 journal articles are sorted by year the longest to the latest. In 2018 there were 23 articles, in 2019 there were 34 articles, in 2020 there were 23 articles, in 2021 there were 32 articles, and in 2022 there were 1 article. The whole article discusses the same topic, namely computer -based teaching materials



Figure 4. The results of the analysis of the theme network related to the topic of computer -based teaching materials

The Figure 4 is shown the linkages between one topic to another. For example the topic of Machine Learning is related to the computational model, which means the computing model as a learning material used to simulate behavior or phenomenon using a computer. This means that there is a compatibility between 1 topic with another topic.

Keywords in Figure 4 shows keywords in article abstracts related to computer-based teaching materials on biotechnology material. One of them is the word deep learning. In the research article with the keyword deep learning carried out by the authors in Table 1, the results show that material considered difficult can be done with deep learning by utilizing ICT-based animation teaching material developed. This is done to increase understanding related to biology learning and determine the effectiveness of the media in giving high marks in the student learning process. The following keyword is related to computational models, where the keywords in this study were carried out by El Hammoumi et al., (2022). The results show that the survey results regarding the use of ICT-based learning materials show a positive attitude towards biology teachers. So that with the help of technology, they can develop teaching materials based on computational models. <u>Colclasure et al.</u> (2022) also conducted other research on computational models, the results of which show that student interest and learning outcomes were the factors found to be most influential to teachers' use of computational models. The deficiencies in the application of this method are the lack of resources and the lack of self-confidence of students. In the case of implementing a computational model, selfconfidence or self-efficacy is also so that one of the methods used is repetition so that the application of a computational model (Yang et al., 2022).

From these two keywords, the use of computer-based teaching materials makes it easier for teachers to overcome a number of things, especially those related to learning difficulties. Research on the development of biological interactive multimedia shows that communication between teachers and students requires media that can be accessed anywhere, anytime, and in large quantities (Palts & Pedaste, 2020). This is because the material in the teaching materials is presented in a more complex form, looks more real and of course more efficient because Teaching materials in the form of e-modules in learning activities will make it easier for students to access material and are considered to save paper (Hikmaturrosyidah & Rachmadiarti, 2022).

The application of computer-sharing teaching materials provides many conveniences for both teachers and students. This can be seen by the various complexities of learning problems encountered and can be solved by applying these teaching materials. Such a complex concept can be converted into a more understandable one with the addition of computer elements. Especially the problems related to effectiveness, where this teaching material is easy to use anytime and anywhere

CONCULSION

Computer Teaching Materials in Biotechnology Learning Using Bibliometrix Tools (Application of SLNA Method) resulting in the effectiveness of the use of computer teaching materials that produce positive influences that are effective and flexible in biology learning because it can visualize

142

MEdu



teaching materials into the form of images, sounds so as to give the impression that is not boring when Learning activities take place.

REFERENCES

- Almareta, R., & Paidi. (2020). The suitability of planning and implementing ICT-based learning by biology teachers in senior high school. *ACM International Conference Proceeding Series*. <u>https://doi.org/10.1145/3452144.3452244</u>
- Anantyarta, P., & Sholihah, F. N. (2020). Pengembangan Multimedia Pembelajaran Pada Materi Bioteknologi Menggunakan Program Autoplay. *Journal of Natural Science and Integration*, 3(1), 45. <u>https://doi.org/10.24014/jnsi.v3i1.9036</u>
- Arifah, T., Nabil, M., & Juliyanto, E. (2020). Hubungan Tingkat Penguasaan Nama Ilmiah Dengan Kemampuan Menentukan Genus Tumbuhan Oleh Mahasiswa Pendidikan Ipa Untidar. Indonesian Journal of Natural Science Education (IJNSE), 03(2), 366–371. https://doi.org/10.31002/nse.v2i1.475
- Astuti, Waluya, S. B., & Asikin, M. (2019). Strategi Pembelajan Dalam Menghadapi Tantangan Era Revolusi 4.0. *Seminar Nasional Pascasarjana 2019, 2*(1), 469–473. <u>https://proceeding.unnes.ac.id/index.php/snpasca/article/view/327</u>
- Brown, G. T. L. (2019). Technologies and infrastructure: costs and obstacles in developing large-scale computer-based testing. *Education Inquiry*, 10(1), 4–20. <u>https://doi.org/10.1080/20004508.2018.1529528</u>
- Clark, J. L., Algoe, S. B., & Green, M. C. (2018). Social Network Sites and Well-Being : The Role of Social Connection. *Current Directions in Psylogical Science*, 27(1), 32–37. https://doi.org/10.1177/0963721417730833
- Colclasure, B. C., Durham Brooks, T., Helikar, T., King, S. J., & Webb, A. (2022). The Effects of a Modeling and Computational Thinking Professional Development Program on STEM Educators' Perceptions toward Teaching Science and Engineering Practices. *Education Sciences*, 12(8). <u>https://doi.org/10.3390/educsci12080570</u>
- Colicchia, C., Creazza, A., Noè, C., & Strozzi, F. (2019). Information sharing in supply chains: a review of risks and opportunities using the systematic literature network analysis (SLNA). *Supply Chain Management*, *24*(1), 5–21. <u>https://doi.org/10.1108/SCM-01-2018-0003</u>
- El Hammoumi, S., Zerhane, R., & Janati Idrissi, R. (2022). The impact of using interactive animation in biology education at Moroccan Universities and students' attitudes towards animation and ICT in general. *Social Sciences & Humanities Open*, 6(1), 100293. https://doi.org/10.1016/j.ssaho.2022.100293
- Ernawati, R., Toharudin, U., Ibrahim, Y., & Yayu Nurul Hizqiyah``, I. (2016). Penerapan Model Pembelajaran Aktif-Kooperatif Tipe Lsa Terhadap Peningkatan Hasil Belajar Siswa Sma Pada Subkonsep Sistem Imun Manusia. *Didaktik : Jurnal Ilmiah PGSD STKIP Subang*, *2*(1), 90– 109. <u>https://doi.org/10.36989/didaktik.v2i1.40</u>
- Fadli, M. R. (2021). Memahami desain metode penelitian kualitatif. *Humanika*, 21(1), 33–54. https://doi.org/10.21831/hum.v21i1.38075
- Fitriyah, S. M., Imamyartha, D., Bilqis, M., Finali, Z., Latifah, A. A., & Harfiyani, A. I. (2020). The effectuality of animated media for teaching biotechnology materials in indonesian rural primary schools. *Journal of Physics: Conference Series*, *1563*(1). https://doi.org/10.1088/1742-6596/1563/1/012065
- Halimatussa'diah, H., & Meilinda, M. (2015). Pengembangan bahan ajar biologi dengan menggunakan modul berbasis karakter menurut al-quran pada materi sistem reproduksi di sma kelas xi ipa. *Jurnal Pembelajaran Biologi, 2*(1), 17–30.





144

MEdu

https://ejournal.unsri.ac.id/index.php/fpb/article/view/4722. https://doi.org/10.15294/jbe.v11i1.55256

- Haris, O. K. (2015). Good governance (Tata Kelola Pemerintahan Yang Baik) dalam Pemberian Izin oleh Pemerintah Daerah di Bidang Pertambangan. *Jurnal Yuridika*, *30*(1), 58–83. https://doi.org/10.20473/ydk.v30i1.4879
- Hikmaturrosyidah, N., & Rachmadiarti, F. (2022). Development Of Interactive E-Book Based On Multiple Intelligences Ecosystem Topic To Train Creative Thinking Skills. *Journal of Biology Education*, 11(1), 89–101. http://journal.unnes.ac.id/sju/index.php/ujbe. https://doi.org/10.15294/jbe.v1111.55256
- Jafar, A. F. (2021). Penerapan Metode Pembelajaran Konvensional Terhadap Hasil Belajar Fisika Peserta Didik. *Al Asma: Journal of Islamic Education*, *3*(2), 190. <u>https://doi.org/10.24252/asma.v3i2.23748</u>
- Khitous, F., Strozzi, F., Urbinati, A., & Alberti, F. (2020). A systematic literature network analysis of existing themes and emerging research trends in circular economy. *Sustainability* (*Switzerland*), 12(4). <u>https://doi.org/10.3390/su12041633</u>
- Kranzfelder, P., Lo, A. T., Melloy, M. P., Walker, L. E., & Warfa, A. R. M. (2019). Instructional practices in reformed undergraduate STEM learning environments: a study of instructor and student behaviors in biology courses. *International Journal of Science Education*, 41(14), 1944–1961. <u>https://doi.org/10.1080/09500693.2019.1649503</u>
- Maryanti, S., & Kurniawan, D. T. (2018). Pengembangan Media Pembelajaran Video Animasi Stop Motion Untuk Pembelajaran Biologi Dengan Aplikasi Picpac. *Jurnal BIOEDUIN: Program Studi Pendidikan Biologi*, 8(1), 26–33. https://doi.org/10.15575/bioeduin.v8i1.2922
- Mohajan, H. K. (2018). M P RA Munich Personal RePEc Archive Qualitative Research Methodology in Social Sciences and Related Subjects Qualitative Research Methodology in Social Sciences and Related Subjects. *UTC Journal of Economic Development, Environment and People*, *85654*(85654), 23-48. <u>https://mpra.ub.uni-muenchen.de/85654/1/MPRA_paper_85654.pdf</u>
- Mulyadi, D., Suryadi, S., & Aliyyah, R. R. (2020). Life Skills Education Program : Is it Beneficial for the Society? *Journal of Non Formal Education*, 6(2), 101–106. file:///C:/Users/SDN 27/Downloads/24456-64989-3-PB.pdf. <u>https://doi.org/10.15294/jne.v6i2.24456</u>
- Niemi, R., & Kiilakoski, T. (2020). "I Learned to Cooperate with my Friends and There Were no Quarrels": Pupils' Experiences of Participation in a Multidisciplinary Learning Module. *Scandinavian Journal of Educational Research*, 64(7), 984–998. <u>https://doi.org/10.1080/00313831.2019.1639817</u>
- Palts, T., & Pedaste, M. (2020). A model for developing computational thinking skills. *Informatics in Education*, *19*(1), 113–128. <u>https://doi.org/10.15388/INFEDU.2020.06</u>
- Parikesit, H., Adha, M. M., Hartino, A. T., & Upla, E. P. (2021). Implementasi Teknologi Dalam Pembelajaran Daring Di Tengah Masa Pandemik Covid-19. *Jurnal Pendidikan Kewarganegaraan Umdiksha*, 9(2), 545–554. <u>https://ejournal.undiksha.ac.id/index.php/JJPP/article/view/35090.</u> <u>https://doi.org/10.23887/jpku.v9i2.35090</u>
- Prajapati, R., Sharma, B., & Sharma, D. (2017). Significance Of Life Skills Education. ContemporaryIssuesinEducationResearch,10(1),1-6.https://files.eric.ed.gov/fulltext/EJ1126842.pdf.https://doi.org/10.19030/cier.v10i1.9875
- Sari, M., & Asmendri. (2018). Penelitian Kepustakaan (Library Research) dalam Penelitian Pendidikan IPA. *Penelitian Kepustakaan (Library Research) Dalam Penelitian Pendidikan IPA*, 2(1), 15. <u>https://ejournal.uinib.ac.id/jurnal/index.php/naturalscience/article/view/1555/1159.</u> <u>http://doi.org/10.15548/nsc.v6i1.1555</u>



MEdu 145

- Unwin, T. (2019). The Future Use of Technology in Education and Learning in the Commonwealth. *Round Table*, *108*(4), 447–458. <u>https://doi.org/10.1080/00358533.2019.1634891</u>
- Yang, J., Qi, X. F., Liu, R., Wang, L., & Sun, B. (2022). A computational model of TE-dominant noticing, repetition, prior knowledge and grammatical knowledge acquisition. *Reading and Writing*, 35(8), 1953–1974. <u>https://doi.org/10.1007/s11145-022-10275-5</u>
- Yusanto, Y. (2020). Ragam Pendekatan Penelitian Kualitatif. *Journal of Scientific Communication* (*Jsc*), *1*(1), 1–13. <u>https://doi.org/10.31506/jsc.v1i1.7764</u>