



ТОМСКИЙ  
ПОЛИТЕХНИЧЕСКИЙ  
УНИВЕРСИТЕТ



# Как подготовить обзор литературы

Ростислав Яворский

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# План

1. Ключевые слова (русские, английские)
2. Поиск более-менее релевантных статей (30-50-100)
3. Названия и аннотации (собрать, кластеризовать, отсортировать)
4. Переписать каждый раздел своими словами оставив 2-3 предложения на каждую ссылку

# Ключевые слова

**Шаг 1.** Написать несколько запросов в Google Scholar

**Шаг 2.** Просмотреть статьи, которые соответствуют теме, обратить внимание на ключевые слова, которые используются в названии и аннотации

**Шаг 3.** Написать несколько запросов в Google Scholar с новыми ключевыми словами

**Шаг 4.** Просмотреть статьи в выдаче, их ключевые слова

**Шаг 5.** Написать несколько запросов в Google Scholar...

# Список литературы

- Все более-менее релевантные статьи нужно сохранять в табличке
- Минимум 20-30 статей
- Рекомендую 50
- 100 это не предел (мой личный рекорд - 1000)

Год	Описание	Аннотация
2011	Боксерман, А. А., Власов, В. Н., Ушакова, А. С., Кокорев, В. И., & Чубанов, О. В. (2011). Промысловые исследования внутрипластовых окислительных процессов при термогазовом воздействии на породы баженовской свиты. Нефтяное хозяйство, (5), 78-82.	The challenge of the Bazhen's series deposits industrial development by thermal-gas method is discussed in this paper. The field exploration of thermal-gas method and laboratory were made before the pilot project performance. The composition history of gas and oil phases during the air injection period is presented. In-situ oxidation process due to thermal-gas effect is confirmed by the field investigations. One of the most significant results is the absence of the oxygen in associated gas which proves the fail-safety of further pilot project performance.
2006	Конторович, В. А., Калинина, Л. М., Бердникова, С. А., Лапковский, В. В., Поляков, А. А., & Соловьев, М. В. (2006). Геологическое строение и перспективы нефтегазонасности келловей-волжских отложений Чузиско-Чижалской зоны нефтегазонакопления. Геология, геофизика и разработка нефтяных и газовых месторождений, (1), 4-11.	Рассмотрены особенности геологического строения келловей-волжских отложений в Чузиско-Чижалской зоне нефтегазонакопления, расположенной на территории Томской области. Своеобразие рассматриваемой территории заключается в том, что она расположена в переходной области седиментогенеза - в зоне замещения преимущественно морских отложений васюганской свиты преимущественно континентальными осадками наунакской свиты. Это и предопределило полифациальный характер песчаных пластов, слагающих разрез горизонта Ю1. В процессе исследований на базе комплексной интерпретации данных сейсморазведки, ГИС и глубокого бурения проанализированы палеоструктурные и палеогеографические особенности строения района исследований, предопределившие условия формирования и темп осадконакопления песчаных пластов Ю11-2, и построена модель строения надугольного резервуара горизонта Ю1.
2010	Кокорев В. И. Основы управления термогазовым воздействием на породы Баженовской свиты применительно к геологическим условиям Средне-Надымского и Галяновского месторождений (Часть 1) //Нефтепромысловое дело. – 2010. – №. 6. – С. 29-32	В основу формируемого нового способа разработки залежей баженовской свиты было положено термогазовое воздействие, способное реализовать интеграцию теплового и гидродинамического воздействий. Положительное влияние последних на фильтрационно-емкостные характеристики пород баженовской свиты установлено в результате многолетних промысловых и лабораторных исследований.
2009	Алифиров А. С. Аммонитовая шкала волжского яруса Западной Сибири и ее палеонтологическое обоснование //Стратиграфия. Геологическая корреляция. – 2009. – Т. 17. – №. 6. – С. 77-89.	Ревизия имеющихся к настоящему времени определений волжских аммонитов из керна скважин Западной Сибири позволила уточнить перечень родов и видов, установленных на данной территории. Отсутствие надежных определений ряда таксонов указывает на недостаточно обоснованное выделение в Западной Сибири отдельных зон волжского яруса Приполярного Урала. Предлагается привести зональную шкалу волжского яруса Западной Сибири в соответствие с ее фактическим палеонтологическим обоснованием. Эта шкала хотя и опирается на североуральскую, но в отличие с последней является менее дробной.
2016	Конторович А. Э. Проблемы реиндустриализации нефтегазового комплекса России //Управление качеством в нефтегазовом комплексе. – 2016. – №. 1. – С. 7-9.	Для дальнейшего развитие экономики страны предлагается массово вовлекать в разработку мелкие мельчайшие месторождения баженовской свиты в Западной Сибири и куонамского комплекса в Восточной Сибири.
	Хамидуллин, Р. А., Калмыков, Г. А., Корост, Д. В., Балушкина, Н. С., & Бакай, А. И. (2013). Фильтрационно-емкостные свойства пород баженовской свиты. Вестник	Работа посвящена интерпретации результатов комплексных лабораторных петрофизических исследований образцов керна пород баженовской свиты из нескольких скважин на месторождениях

# Аннотации

После того как список готов, нужно просмотреть названия и аннотации, удалить ссылки которые не соответствуют выбранному направлению и разбить все статьи на группы по близким темам.

В каждой группе отсортировать по году публикации.

Получится достаточно большой документ, в котором на каждой странице несколько скопированных аннотаций (для этой версии удобно сделать шрифт небольшим и две колонки)

Уже в таком виде это представляет собой определенную ценность, поэтому рекомендую эту версию тоже сохранить.

10) *Harriot, Caroline E., Tao Zhang, and Julie A. Adams. "Evaluating the applicability of current models of workload to peer-based human-robot teams." In Human-Robot Interaction (HRI), 2011 6th ACM/IEEE International Conference on, pp. 45-52. IEEE, 2011.* see [84]

Human-Robot peer-based teams are evolving from a far-off possibility into a reality. Human Performance Moderator Functions (HPMFs) can be used to predict human behavior by incorporating the effects of internal and external influences such as fatigue and workload. The applicability of HPMFs to human-robot teams is not proven. The presented research focuses on determining the applicability of workload HPMFs in team tasks for first response mass casualty triage incidents between a Human-Human and a Human-Robot team. A model representing workload for each team was developed using IMPRINT Pro. The results from an empirical evaluation were compared to the model results. While significant differences between the two conditions were not found in all data, there was a general trend that workload in the human-robot condition was slightly lower than the workload experienced in the human-human condition. This trend was predicted by the IMPRINT Pro models. These results are the first to indicate that existing HPMFs can be applied to human-robot peer-based teams.

11) *Levin, Dan, Caroline Harriott, Natalie A. Paul, Tao Zheng, and Julie A. Adams. "Cognitive dissonance as a measure of reactions to human-robot interaction." Journal of Human-Robot Interaction 2, no. 3 (2013): 1-17.* see [129]

When people interact with intelligent agents, they likely rely upon a wide range of existing knowledge about machines, minds, and intelligence. This knowledge not only guides these interactions, but it can be challenged and potentially changed by interaction experiences. We hypothesized that a key factor mediating conceptual change in response to human-machine interactions is cognitive conflict, or dissonance. In this experiment, we evaluated whether interactions with a robot partner during a realistic medical triage scenario caused increased levels of cognitive dissonance relative to a control condition in which the same task was performed with a human partner. In addition, we evaluated whether heightened levels of dissonance affected concepts about agents. We observed increased cognitive dissonance after the human-robot interaction and found that this dissonance was correlated with a significantly less intentional (e.g., less human-like) view of the intelligence inherent to computers.

Keywords: Human-robot interaction, socially assistive robotics, exercise, elderly, intrinsic motivation, embodiment

12) *Gatsoulis, Yannis, Gursinder S. Virk, and Abbas A. Dehghani-Sani. "On the measurement of situation awareness for effective human-robot interaction in teleoperated systems." Journal of cognitive engineering and decision making 4, no. 1 (2010): 69-98.* see [70]

Several methods of measuring the situation awareness (SA) of a human who is teleoperating a robot are compared for the domain of urban search and rescue (USAR), to identify those

that have the greatest potential for developing more reliable and accurate ways of measuring SA for effectively operating robot systems. Such comparative studies are essential because SA has been identified as a key human factors issue since post-September 11, 2001, operations for effective task performance in (tele)robotics. This paper discusses the pros and cons of the main aspects that need to be included in developing reliable SA measurement methods from the related domain of air traffic control, in which SA has a long research history. These methods have been adapted and modified accordingly to address needs of teleoperating robot systems and have been tested in a realistic USAR simulated scenario developed especially for performing these assessments. The results were compared against each other as well as with existing measures. A new method of measuring task performance that is more appropriate for USAR is also presented and tested within the comparative studies.

13) *Zhao, Ran, Tammy Sinha, Alan W. Black, and Justine Cassell. "Socially-aware virtual agents: Automatically assessing dyadic rapport from temporal patterns of behavior." In International conference on intelligent virtual agents, pp. 218-233. Springer, Cham, 2016.* see [231]

This work focuses on data-driven discovery of the temporally co-occurring and contingent behavioral patterns that signal high and low interpersonal rapport. We mined a reciprocal peer tutoring corpus reliably annotated for nonverbal cues like eye gaze and smiles, conversational strategies like self-disclosure and social norm violation, and for rapport (in 30 s thin slices). We then performed a fine-grained investigation of how the temporal profiles of sequences of interlocutor behaviors predict increases and decreases of rapport, and how this rapport management manifests differently in friends and strangers. We validated the discovered behavioral patterns by predicting rapport against our ground truth via a forecasting model involving two-step fusion of learned temporal associated rules. Our framework performs significantly better than a baseline linear regression method that does not encode temporal information among behavioral features. Implications for the understanding of human behavior and social agent design are discussed.

14) *Hoogendoorn, Mark, and Jeremy Soumikol. "Evaluation of virtual agents utilizing theory of mind in a real time action game." In Proceedings of the 9th International Conference on Autonomous Agents and Multiagent Systems: volume 1-Volume 1, pp. 59-66. International Foundation for Autonomous Agents and Multiagent Systems, 2010.* see [93]

Within the domain of virtual agents, Theory of Mind reasoning is considered an important attribute to enable such agents to act in an intelligent fashion. Such ideas have been applied in various domains, ranging from serious games to virtual storytelling. Another interesting domain of application of agents attributed with Theory of Mind is the entertainment gaming industry, which poses a completely different goal upon the behavior of these agents, namely to bring the players a fun experience. To this end, this paper introduces an approach

to develop Theory of Mind agents for the entertainment gaming industry. Hereby, PRS is used for the reasoning of the agent, which has been extended with Theory of Mind reasoning capabilities. The behavior of the agent has been evaluated against two other agents (a simple reactive agent, and a memory-based agent) in an experiment that has been conducted in which 15 participants had to play against all agent types, and rate each one of them based upon certain criteria.

15) *Howard, Ayanna M. "A methodology to assess performance of human-robot systems in achievement of collective tasks." In Intelligent Robots and Systems, 2005 (IROS 2005), 2005 IEEE/RSJ International Conference on, pp. 90-95. IEEE, 2005.* see [95]

In this paper, we present a methodology to assess system performance of human-robot systems in achievement of collective tasks such as habitat construction, geological sampling, and space exploration. The methodology uses a systematic approach that assesses performance by incorporating capabilities of both human and robotic agents based on accomplishment of functional operations and effect of cognitive stress due to continuous operation by the human agent. In this paper, we provide an overview of the assessment system and discuss its implementation on a representative habitat construction task.

## VI. APPLICATION AREAS

1) *Leite, Iolanda, Carlos Martinho, and Ana Paiva. "Social robots for long-term interaction: a survey." International Journal of Social Robotics 5, no. 2 (2013): 291-308.* see [128]

As the field of HRI evolves, it is important to understand how users interact with robots over long periods. This paper reviews the current research on long-term interaction between users and social robots. We describe the main features of these robots and highlight the main findings of the existing long-term studies. We also present a set of directions for future research and discuss some open issues that should be addressed in this field.

Keywords: Human-robot interaction, Social robots, Long-term interaction, Longitudinal studies.

2) *Fasola, Juan, and Maja J. Mataric. "Using socially assistive humanrobot interaction to motivate physical exercise for older adults." Proceedings of the IEEE 100, no. 8 (2012): 2512-2526.* see [60]

In this paper, we present the design, implementation, and user study evaluation of a socially assistive robot (SAR) system designed to engage elderly users in physical exercise aimed at achieving health benefits and improving quality of life. We discuss our design methodology, which incorporates insights from psychology research in the area of intrinsic motivation, and focuses on maintaining engagement through personalized social interaction. We describe two user studies conducted to test the motivation theory in practice with our system. The first study investigated the role of praise and relational discourse in the exercise system by comparing a relational robot coach to a nonrelational robot coach. The

second study evaluated participant preferences regarding user choice in the task scenario. Both studies served to evaluate the feasibility and overall effectiveness of the robot exercise system. The results of both studies are presented; they show a strong user preference for the relational over the nonrelational robot in terms of enjoyableness, companionship, and as an exercise coach, varying user preferences regarding choice, and high user ratings of the system across multiple metrics. The outcomes of the presented user studies, brought together, support the motivational capabilities of the robot, and demonstrate the viability and usefulness of the system in motivating exercise in elderly users.

3) *Kidd, Cory D., and Cynthia Breazeal. "Robots at home: Understanding long-term human-robot interaction." In Intelligent Robots and Systems, 2008. IROS 2008. IEEE/RSJ International Conference on, pp. 3230-3235. IEEE, 2008.* see [106]

Human-robot interaction (HRI) is now well enough understood to allow us to build useful systems that can function outside of the laboratory. We are studying long-term interaction in natural user environments and describe the implementation of a robot designed to help individuals effect behavior change while dieting. Our robotic weight loss coach is compared to a standalone computer and a paper log in a controlled study. We describe the software model used to create successful long-term HRI. We summarize the experimental design, analysis, and results of our study, the first where a sociable robot interacts with a user to achieve behavior change. Results show that participants track their calorie consumption and exercise for nearly twice as long when using the robot than with the other methods and develop a closer relationship with the robot. Both are indicators of longer-term success at weight loss and maintenance and show the effectiveness of sociable robots for long-term HRI.

4) *Rosenthal, Stephanie, Joydeep Biswas, and Manuela Veloso. "An effective personal mobile robot agent through symbiotic human-robot interaction." In Proceedings of the 9th International Conference on Autonomous Agents and Multiagent Systems: volume 1-Volume 1, pp. 915-922. International Foundation for Autonomous Agents and Multiagent Systems, 2010.* see [183]

Several researchers, present authors included, envision personal mobile robot agents that can assist humans in their daily tasks. Despite many advances in robotics, such mobile robot agents still face many limitations in their perception, cognition, and action capabilities. In this work, we propose a symbiotic interaction between robot agents and humans to overcome the robot limitations while allowing robots to also help humans. We introduce a visitor's companion robot agent, as a natural task for such symbiotic interaction. The visitor lacks knowledge of the environment but can easily open a door or read a door label, while the mobile robot with no arms cannot open a door and may be confused about its exact location, but can plan paths well through the building and can provide useful relevant information to the visitor. We present

# Обзор

Превратить набор аннотаций в обзор это уже творческая работа.

В идеале нужно всё переварить, просмотреть полные тексты статей и сформулировать главную мысль каждой статьи своими словами.

Совсем хорошо - добавить от себя найденные связи между публикациями, общие методы и подходы, принципиальные отличия и т.п.

В результате должен получиться связный текст, описывающий состояние исследования в данной области, в который органично включаются ссылки на собранные статьи.



**Успеха!**