**5. Works and projects**

 Below is the information of published scientific papers for 2019-2022 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Years** | Number of articles in peer-reviewed journals | Number of articles in journals recommended by CCSON | Number of articles in collections of international conferences | Numberofsecuritydocuments |
| 2019 | 7 | 7 | 78 | 8 |
| 2020 | 8 | 5 | 86 | 10 |
| 2021 | 8 | 7 | 115 | 12 |
| 2022 | 9 | 7 | 125 | 12 |

 For 2019-2022, applications for state grants for scientific and (or) scientific and technical projects have been submitted.

1. Development of an information system to support decision-making to eliminate the consequences of emergencies in the chemical industry. Supervisor: Doctor of Technical Sciences, Professor Ismailov B.R.

2. Fundamentals of dynamic modeling and computer modeling of pollution propagation during emergency discharges in water tank networks. Supervisor:Ph.D., Ass. Professor KurakbayevaS.D.

Kurakbaeva 3. Mathematical and computer modeling of cluster aggregation and swarming in sparse and dense open dispersed systems. Scientific supervisor: Doctor of Technical Sciences, Professor Ismailov B.R.

4. Modeling and optimization of the thermocatalytic pyrolysis process for obtaining nanomaterials from natural gas of Kazakhstan. Scientific supervisor: Candidate of Technical Sciences, associate professor Ismailov H.B.