



نام و نام خانوادگی	کامران اخباری
مرتبه علمی	دانشیار
آدرس محل کار	پردیس علوم - دانشکده شیمی
تلفن	---
فکس	---
پست الکترونیک	akhbari.k@ut.ac.ir
آدرس وب سایت	---

تحصیلات

- 1) دکتری تخصصی، 1391، شیمی معدنی، دانشگاه تربیت مدرس
- 2) کارشناسی ارشد، 1386، شیمی معدنی، دانشگاه تربیت مدرس
- 3) کارشناسی، 1384، شیمی محض، دانشگاه شهید بهشتی

مقالات چاپ شده در نشریات بین المللی

- 1) Kamran Akhbari, and . "Modulating methane storage in anionic nano-porous MOF materials via post-synthetic cation exchange process." DALTON TRANSACTIONS 42, no. 14 (2013): 4786-4789.
- 2) Kamran Akhbari, and . "Solid-State Structural Transformations of Two Ag I Supramolecular Polymorphs to Another Polymer upon Absorption of HNO₃ Vapors." INORGANIC CHEMISTRY 52, no. 6 (2013): 2787-2789.
- 3) Maryam Mohammadi, Kamran Akhbari, , , Sang Woo Joo, Giuseppe Bruno, and Hadi Amiri Rudbari. "Synthesis of one-dimensional TiO₂ nano-structures from thermolyses of a new two-dimensional thallium(I) supramolecular polymer with secondary polyhaptο TI□□ interactions." JOURNAL OF ORGANOMETALLIC CHEMISTRY 733, no. 733 (2013): 15-20.
- 4) Kamran Akhbari, and . "Solid- and solution-state structural transformations in flexible lead(ii) supramolecular polymers." CRYSTENGCOMM 15, no. 44 (2013): 8915-8918.
- 5) Kamran Akhbari, , and Pascal Retailleau. "Effect of two sonochemical procedures on achieving to different morphologies of lead(II) coordination polymer nano-structures." ULTRASONICS SONOCHEMISTRY 20, no. 6 (2013): 1428-1435.
- 6) Kamran Akhbari, , , Veysel T. Yilmaz, and Orhan Buyukgungor. "Holodirected Coordination Sphere Around Lead(II) in Three-Dimensional Polymeric Structure; New Precursor for Preparation of Lead Oxide Sulfate Nano-Structures." JOURNAL OF MOLECULAR STRUCTURE 1074, no. 1074 (2014): 279.
- 7) Shiva Hojaghani, Kamran Akhbari, Moayed Hossaini Sadr, and . "Sonochemical syntheses of one-dimensional silver(I) supramolecular polymer: A precursor for preparation of silver nanostructure." INORGANIC CHEMISTRY COMMUNICATIONS 44, no. 44 (2014): 1-5.
- 8) Zhao-jun Lii, Sarah Karbalaei Khani, Kamran Akhbari, Ali Morsali, and Pascal Retailleau. "Achieve to easier opening of channels in anionic nanoporous metal-organic framework by cation exchange process." MICROPOROUS AND MESOPOROUS MATERIALS 199, no. 199 (2014): 93-98.
- 9) Kamran Akhbari, Saeideh Beheshti, Ali Morsali, Giuseppe Bruno, and Hadi Amiri Rudbari. "How the two factors of concentration and ultrasonic wave power affect on formation of kinetically or thermodynamically stable lead(II) complex nano-structures." INORGANICA CHIMICA ACTA 423, no. 423 (2014): 101-105.
- 10) Fatemeh Shahangi Shirazi, and Kamran Akhbari. "Solid-state thermal conversion of a nanoporous metal-organic framework to a nonporous coordination polymer." RSC Advances 5, no. 63 (2015): 50778-50782.
- 11) Kamran Akhbari, and Ali Morsali. "Direct Synthesis of Lead and Lead Chloride Nanoparticles via Simple One-Pot Calcination of One-Dimensional Lead(II) Coordination Polymer." Journal of Inorganic and Organometallic Polymers and Materials 25, no. 4 (2015): 930-935.

- 12) Maryam Moeinian, and Kamran Akhbari. "How the guest molecules in nanoporous Zn(II) metal-organic framework can prevent agglomeration of ZnO nanoparticles." *JOURNAL OF SOLID STATE CHEMISTRY* 225, no. 225 (2015): 459-463.
- 13) Fatemeh Shahangi Shirazi, and Kamran Akhbari. "Preparation of Zinc Oxide Nanoparticles from Nanoporous Metal-Organic Framework with One-Dimensional Channels Occupied with Guest Water Molecules." *INORGANICA CHIMICA ACTA* 436, no. 436 (2015): 1.
- 14) Kamran Akhbari, Nasim Band Bahman, Ali Morsali, and Pascal Retailleau. "The effect of thermolysis temperatures of two silver(I) supramolecular polymers on the formation of silver nanostructures." *Journal of the Iranian Chemical Society* 13, no. 1 (2015): 165-169.
- 15) Maryam Moeinian, and Kamran Akhbari. "Various Methods for Synthesis of Bulk and Nano Thallium(III) Oxide." *Journal of Inorganic and Organometallic Polymers and Materials* 26, no. 1 (2015): 1-13.
- 16) Maryam Moeinian, and Kamran Akhbari. "Solid-state synthesis of zinc oxide nano-structures with similar morphologies to their precursors and metal-organic frameworks topology." *Journal of the Iranian Chemical Society* 13, no. 3 (2015): 547-552.
- 17) Maryam Moeinian, Kamran Akhbari, Satoshi Kawata, and Ryuta Ishikawa. "Solid state conversion of a double helix thallium(i) coordination polymer to a corrugated tape silver(i) polymer." *RSC Advances* 6, no. 85 (2016): 82447-82449.
- 18) Elham Mirzadeh, and Kamran Akhbari. "Synthesis of nanomaterials with desirable morphologies from metal-organic frameworks for various applications." *CRYSTENGCOMM* 18, no. 39 (2016): 7410-7424.
- 19) Fatemeh Shahangi Shirazi, and Kamran Akhbari. "Linkers and coordinated solvent molecules; the two effective factors on formation of zinc oxide nanoparticles from metal-organic frameworks." *INORGANIC CHEMISTRY COMMUNICATIONS* 63, no. 63 (2016): 5-10.
- 20) Fatemeh Shahangi Shirazi, Kamran Akhbari, Satoshi Kawata, and Ryuta Ishikawa. "Effects of different factors on the formation of nanorods and nanosheets of silver(I) coordination polymer." *JOURNAL OF MOLECULAR STRUCTURE* 1123, no. 1123 (2016): 206.
- 21) Fatemeh Shahangi Shirazi, and Kamran Akhbari. "Sonochemical procedures; the main synthetic method for synthesis of coinage metal ion supramolecular polymer nano structures." *ULTRASONICS SONOCHEMISTRY* 31, no. 31 (2016): 51-61.
- 22) Maryam Moeinian, Kamran Akhbari, Jaurup Boonmak, and Sujittra Youngme. "Similar to what occurs in biological systems; irreversible replacement of potassium with thallium in coordination polymer nanostructures." *POLYHEDRON* 118, no. 118 (2016): 6-11.
- 23) Fatemeh Shahangi Shirazi, Kamran Akhbari, Satoshi Kawata, and Ken Kanazashi. "Reversible liquid assisted mechanochemical conversion of sodium coordination polymer nanorods to organosilver coordination polymer nanosheets." *INORGANIC CHEMISTRY COMMUNICATIONS* 74, no. 74 (2016): 31-34.
- 24) Zhaleh Moradi, Kamran Akhbari, Ferdinando Costantino, and Anukorn Phuruangrat. "Solid-state conversion of a three-dimensional sodium(I) coordination polymer with micro trigon morphology to two-dimensional silver(I) coordination polymer nanostructures." *POLYHEDRON* 121, no. 121 (2017): 33-40.
- 25) Yasamin Noori, and Kamran Akhbari. "Post-synthetic ion-exchange process in nanoporous metal-organic frameworks; an effective way for modulating their structures and properties." *RSC Advances* 7, no. 4 (2017): 1782-1808.
- 26) Elham Mirzadeh, and Kamran Akhbari. "Reversible adsorption and desorption of water in nanoporous copper(II) metal-organic nanocapsules." *JOURNAL OF POROUS MATERIALS* 24, no. 5 (2017): 1209-1214.
- 27) Yasamin Noori, Kamran Akhbari, Anukorn Phuruangrat, and Ferdinando Costantino. "Self-assembly through secondary interactions in formation of two-dimensional lead(II) supramolecular polymer with nanosheets morphology." *JOURNAL OF MOLECULAR STRUCTURE* 1130, no. 1130 (2017): 311-318.
- 28) Elham Mirzadeh, Kamran Akhbari, Anukorn Phuruangrat, and Ferdinando Costantino. "A survey on the effects of ultrasonic irradiation, reaction time and concentration of initial reagents on formation of kinetically or thermodynamically stable copper(I) metal-organic nanomaterials." *ULTRASONICS SONOCHEMISTRY* 35, no. 35 (2017): 382-388.
- 29) Yasamin Noori, Kamran Akhbari, Anukorn Phuruangrat, and Ferdinando Costantino. "Studies the effects of ultrasonic irradiation and dielectric constants of solvents on formation of lead(II) supramolecular polymer; new precursors for synthesis of lead(II) oxide nanoparticles." *ULTRASONICS SONOCHEMISTRY* 35, no. 35 (2017): 36-44.

- 30) Fatemeh Shahangi Shirazi, and Kamran Akhbari. "Sodium chloride nanorods from nanorods of one-dimensional pencil-shaped sodium coordination polymer." *Journal of the Iranian Chemical Society* 14, no. 7 (2017): 1519-1525.
- 31) Zhaleh Moradi, Kamran Akhbari, Anukorn Phuruangrat, and Ferdinando Costantino. "Studies on the relation between the size and dispersion of metallic silver nanoparticles and morphologies of initial silver(I) coordination polymer precursor." *JOURNAL OF MOLECULAR STRUCTURE* 1133, no. 1133 (2017): 172-178.
- 32) Zeinab Hazrati, Kamran Akhbari, and Anukorn Phuruangrat. "The effects of altering reaction conditions in green sonochemical synthesis of a thallium(I) coordination polymer and in achieving to different morphologies of thallium(III) oxide nanostructures via solid-state process." *ULTRASONICS SONOCHEMISTRY* 39, no. 39 (2017): 662-668.
- 33) Zhaleh Moradi, Kamran Akhbari, Anukorn Phuruangrat, and Ferdinando Costantino. "Passage of the Roughening Temperature Influence on the Crystalline Structure and Morphology of a Nano Metal–Organic Material." *Journal of Inorganic and Organometallic Polymers and Materials* 27, no. 6 (2017): 1712-1718.
- 34) Fatemeh Shahangi Shirazi, Kamran Akhbari, Jaurusup Boonmak, and Sujittra Youngme. "Solid-state mechanochemical conversion of one-dimensional pencil shaped sodium coordination polymer nanorods to corrugated tape silver coordination polymer nanoparticles." *INORGANIC CHEMISTRY COMMUNICATIONS* 82, no. 82 (2017): 6-10.
- 35) Maryam Moeinian, Kamran Akhbari, Jaurusup Boonmak, and Sujittra Youngme. "Three-dimensional Organometallic Thallium(I) Supramolecular Polymer Nanostructures Synthesized with Sonochemical Process." *ULTRASONICS SONOCHEMISTRY* 41, no. 41 (2017): 11-16.
- 36) Mao-lin Huu, Vahid Safarifard, Esmail Doustkhah, Sadegh Rostamnia, Ali Morsali, Nasrin Nouruzi, Saeideh Beheshti, and Kamran Akhbari. "Taking organic reactions over metal-organic frameworks as heterogeneous catalysis." *MICROPOROUS AND MESOPOROUS MATERIALS* 256, no. 256 (2018): 111-127.
- 37) Farid Mohaghegh, Kamran Akhbari, and Anukorn Phuruangrat. "Preparation of thallium nanomaterials from thallium(I) coordination polymers precursors synthesized by green sonochemical and mechanochemical processes." *ULTRASONICS SONOCHEMISTRY* 40, no. 40 (2018): 594-600.
- 38) Yasamin Noori, Kamran Akhbari, Anukorn Phuruangrat, and Ferdinando Costantino. "What can only occur in supramolecular systems; first solid-state conversion of micro to nanostructures without any treatment in environmental conditions." *ULTRASONICS SONOCHEMISTRY* 40, no. 40 (2018): 17-20.
- 39) Kamran Akhbari, Sepideh Karami, Anukorn Phuruangrat, and Zahra Saedi. "Irreversible replacement of sodium with thallium in sodium coordination polymer nanostructures by solid-state mechanochemical cation exchange process." *Journal of the Iranian Chemical Society* 15, no. 6 (2018): 1327-1335.
- 40) Elham Mirzadeh, Kamran Akhbari, and Jonathan White. "Mechanochemical conversion of nano potassium hydrogen terephthalate to thallium analogue nanoblocks with strong hydrogen bonding and straight chain metalophilic interactions." *APPLIED ORGANOMETALLIC CHEMISTRY* 32, no. 5 (2018): e4313.
- 41) Fatemeh Etessamifard, Kamran Akhbari, and Anukorn Phuruangrat. "Against to What Observed Up to Now, Formation of Silver Nanostructures with Appropriate Morphologies from Silver Coordination Polymer Precursors by Calcination Rather than Thermal Decomposition in Oleic Acid." *Journal of Inorganic and Organometallic Polymers and Materials* 28, no. 5 (2018): 1924-1931.
- 42) Zarin Moghadam, Kamran Akhbari, and Anukorn Phuruangrat. "Solid-state conversion of thallium(I) coordination polymer nanoparticles with cubic cage units to an organometallic silver(I) coordination polymer." *JOURNAL OF ORGANOMETALLIC CHEMISTRY* 861, no. 861 (2018): 105-111.
- 43) Kamran Akhbari, Sepideh Karami, and Zahra Saedi. "The effects of solvent and ultrasonic irradiation in synthesis of thallium(I) nano supramolecular polymers and use them as template for synthesis of thallium(III) oxide nanostructures with desirable morphology." *ULTRASONICS SONOCHEMISTRY* 42, no. 42 (2018): 640-646.
- 44) Elham Mirzadeh, Kamran Akhbari, and Jonathan White. "Irreversible exchange of potassium with thallium in coordination polymer nanostructures upon solid-state Mechanochemical process." *INORGANIC CHEMISTRY COMMUNICATIONS* 92, no. 92 (2018): 95-100.

- 45) Zarin Moghadam, Kamran Akhbari, Jonathan White, and Anukorn Phuruangrat. "Reversible desorption and absorption of water in a zinc-based coordination polymer nanostructure." POLYHEDRON 153, no. 153 (2018): 286-291.
- 46) Zarin Moghadam, Kamran Akhbari, and Anukorn Phuruangrat. "Irreversible conversion of nanoporous lead(II) metal-organic framework to a nonporous coordination polymer upon thermal treatment." POLYHEDRON 156, no. 156 (2018): 48-53.
- 47) Zarin Moghadam, Kamran Akhbari, and Anukorn Phuruangrat. "Lead(II) Coordination Sphere and Ligand Coordination Mode Changes During Removal of Water Molecule by Solid-state Thermal Conversion." ZEITSCHRIFT FUR ANORGANISCHE UND ALLGEMEINE CHEMIE 644, no. 23 (2018): 1641-1645.
- 48) Zarin Moghadam, Kamran Akhbari, Jonathan White, and Anukorn Phuruangrat. "A new potassium-based coordination polymer with hydrogen bonding and zigzag metalophilic interactions." APPLIED ORGANOMETALLIC CHEMISTRY e4613, no. e4613 (2018): e4613.
- 49) Elham Mirzadeh, Kamran Akhbari, and Anukorn Phuruangrat. "Irreversible solid-state metal ion exchange in cobalt(II) metal-organic nanocapsules synthesized by green mechanochemical process." Journal of the Iranian Chemical Society 16, no. 4 (2018): 707-714.
- 50) Roya Karimi Alavijeh, Saeideh Beheshti, Kamran Akhbari, and Ali Morsali. "Investigation of reasons for metal-organic framework's antibacterial activities." POLYHEDRON 156, no. 156 (2018): 257-278.
- 51) Sahar Usefi, Kamran Akhbari, Jonathan White, and Anukorn Phuruangrat. "Sonochemical synthesis of a two-dimensional supramolecular polymer with nanoporous morphology, linear thalophilic and covalent hydrogen-bonding interactions." APPLIED ORGANOMETALLIC CHEMISTRY 2018, no. 2018 (2018): e4747.
- 52) Maryam Hasheminezhad, Kamran Akhbari, and Anukorn Phuruangrat. "Solid-solid and solid-liquid conversion of sodium and silver nano coordination polymers." POLYHEDRON 166, no. 166 (2019): 115-122.
- 53) Sahar Usefi, Kamran Akhbari, and Anukorn Phuruangrat. "Green conversion of a three-dimensional organometallic coordination polymer to a three-dimensional organometallic supramolecular polymer upon mechanochemical 2-aminopyridine addition." APPLIED ORGANOMETALLIC CHEMISTRY 2019, no. e5081 (2019): .
- 54) Sahar Usefi, Kamran Akhbari, and Jonathan White. "Sonochemical synthesis, structural characterizations and antibacterial activities of biocompatible Copper(II) coordination polymer nanostructures." JOURNAL OF SOLID STATE CHEMISTRY 276, no. 276 (2019): 61-67.
- 55) Roya Karimi Alavijeh, Kamran Akhbari, and Jonathan White. "Solid-Liquid Conversion and Carbon Dioxide Storage in a Calcium-Based Metal-Organic Framework with Micro- and Nanoporous Channels." CRYSTAL GROWTH & DESIGN 19, no. 12 (2019): 7290-7297.
- 56) Sajjad Soltani, Kamran Akhbari, and Jonathan White. "Synthesis, crystal structure and antibacterial activity of a homonuclear nickel(II) metal-organic nano supramolecular architecture." POLYHEDRON 176, no. 176 (2020): 114301.
- 57) Sahar Usefi, Kamran Akhbari, Jonathan White, and Anukorn Phuruangrat. "Conversion of kinetically stable metal-organic product to thermodynamically stable one approved by thermal treatment and sonochemical reaction." JOURNAL OF MOLECULAR STRUCTURE 1203, no. 1203 (2020): 127443.

مقالات چاپ شده در نشریات داخلی

- 1) Maryam Moeinian, and Kamran Akhbari. "Effect of the Pillar Ligand on Preventing Agglomeration of ZnO Nanoparticles Prepared from Zn(II) Metal-Organic Frameworks." Nanochemistry Research 1, no. 1 (2016): 57-62.
- 2) Zarin Moghadam, Kamran Akhbari, Fahimeh Jamali, and Fatemeh Shahangishirazi. "All Procedures for the Synthesis of Silver Nanosheets." Nanochemistry Research 2, no. 2 (2017): 248.

3) یاسمین نوری و کامران اخباری. "سننتز سونوشیمیایی نانوساختارهای پلیمر کونوربیناسیونی سرب(II) و تجزیه حرارتی آنها جهت تهیه نانوساختارهای سرب(II) اکسید با مورفولوژی های مطلوب." نانومقیاس (انجمن نانوفناوری ایران) 3, 3 (1396): 219.

4) مریم معینیان، فاطمه شاهنگی شیرازی و کامران اخباری. "مروری بر نقش مولکول-های حلال کونوربینه شده، مهمان، لیگاند پیلار و اتصال دهنده-های دی کربوکسیلاتی در سنتز نانو ذره-های روی(II) اکسید از چارچوب-های فلز-آلی نانو متخلخل." شیمی و مهندسی شیمی ایران 37, 1 (1397): 1.

همایش‌های داخلی

- 1) Yasamin Noori, and Kamran Akhbari. "Studing of sel-assembly in formation of two-dimensional lead(II) suprmolecular polymer with nanosheets morphology via secondary interactions." 18th Iranian Inorganic Chemistry Conference, Mashhad.
- 2) Elham Mirzadeh, and Kamran Akhbari. "Reversible adsorption and desorption of water in nanoporous copper(II) metal-organic nanocapsules." 18th Iranian Inorganic Chemistry Conference, Mashhad.
- 3) Zhaleh Moradi, and Kamran Akhbari. "Mechanochemical Conversion of sodium(I) coordination polymer to silver(I) coordination polymer nanostructures." 18th Iranian Inorganic Chemistry Conference, Mashhad.
- 4) Zhaleh Moradi, and Kamran Akhbari. "How the morphologies of initial silver(I) coordination polymer can affect on size and dispersion of silver nanoparticles." 18th Iranian Inorganic Chemistry Conference, Mashhad.
- 5) Yasamin Noori, and Kamran Akhbari. "The effects of ultrasonic irradiation and dielectric constants of solvents on formation of lead(II) supramolecular polymer and nano structures." 18th Iranian Inorganic Chemistry Conference, Mashhad.
- 6) Zarin Moghadam, Zhaleh Moradi, and Kamran Akhbari. "Adsorption and desorption of water in nanoporous sodium metal-organic framework." Fourth Iran National Zeolite Conference, Golpaygan.
- 7) Sahar Usefi, Zhaleh Moradi, and Kamran Akhbari. "Synthesis of a new nanoporous metal-organic framework and Sodiom Solfute nanostructure from it." Fourth Iran national Zeolite Conference, Golpaygan.
- 8) Zarin Moghadam, and Kamran Akhbari. "Solid-state Conversion of a Thallium(I) Coordination Polymer to silver(I) Coordination Polymer Nanostructures." 19th Iranian Inorganic Chemistry Conference, Tehran.
- 9) Sahar Usefi, and Kamran Akhbari. "Solid-state conversion of a silver coordination polymer nanostructures to another one upon 2-aminopyridine addition." 19th Iranian Inorganic Chemistry Conference, Tehran.
- 10) Mahnoosh Zamani Isfahani, and Kamran Akhbari. "Antibacterial activity investigation of CuBDC loaded silk fibers." 21st Iranian Inorganic Chemistry Conference, Arak.
- 11) Roya Karimi Alavijeh, and Kamran Akhbari. "Curcumin encapsulated MIL-101(Fe) as a sustained release system." 21st Iranian Inorganic Chemistry Conference, Arak.
- 12) Sajjad Soltani, and Kamran Akhbari. "Loading of Chlorhexidine into theHKUST-1 MOF and EvaluatingTheir Antibacterial Performance." 21st Iranian Inorganic Chemistry Conference, Tehran.
- 13) Sajjad Soltani, and Kamran Akhbari. "Evaluation of Effective Factors in Antibacterial Performance in Layer- Pillared MOFs." 21st Iranian Inorganic Chemistry Conference, Arak.
- 14) Mojdeh Nakhaei, and Kamran Akhbari. "Synthesis, Characterization and Antibacterial Activity Study of MOF-5 and MOF-2." 21st Iranian Inorganic Chemistry Conference, Arak.

جوایز و افتخارات(در زمینه‌های مختلف مانند: طرح, مقاله, ...)

- 1) بهینه نمودن ذخیره ی گاز متان در چارچوب های فلز-آلی نانو متخلخل آنیونی با استفاده از فرایند پس‌اسنتزی ، بین المللی، خوارزمی، 1392/09/13
- 2) بیست و هفتمین جشنواره پژوهش و فناوری دانشگاه تهران، ملی، جشنواره پژوهش دانشگاه، 1397/09/26

فعالیت‌های اجرایی

- 1) طراحی و راه اندازی آزمایشگاه تحقیقاتی شیمی معدنی، 1392/07/01، 1394/06/01، ایران، تهران
- 2) تهیه کاتالوگ دانشکده شیمی، 1393/02/27، ایران، تهران
- 3) مسئول اجرایی و مشارکت در برگزاری کارگاه با عنوان "کاربرد پراش پرتو ایکس به روش پودری برای ساختارهای نانو"، 1393/05/01، 1393/08/01، ایران، تهران
- 4) استاد راهنمای دانشجویان دوره کارشناسی شیمی ورودی مهر 1393، 1393/06/30، 1394/06/30، ایران، تهران
- 5) داور بخش پوستر در حوزه نانوشیمی پنجمین کنفرانس بین المللی علوم و فناوری نانو، 1393/07/30، 1393/08/02، ایران، تهران
- 6) عضو شورای آموزشی دانشکده شیمی، 1393/09/06، 1395/09/06، ایران، تهران
- 7) نماینده دانشکده شیمی در برگزاری نمایشگاه یافته ها و دستاوردهای برگزیده پژوهش و فناوری دانشگاه تهران، 1393/12/11، 1393/12/13، ایران، تهران

- (8) عضو کمیته زئولیت انجمن شیمی ایران، 1395/03/12، 1397/03/12، ایران، تهران
- (9) عضو شورای آموزشی دانشکده شیمی، 1396/10/19، 1398/10/19، ایران، تهران
- (10) عضو کمیته زئولیت و مواد متخلخل انجمن شیمی ایران، 1397/03/13، 1399/03/13، ایران، تهران
- (11) مدیر بخش شیمی معدنی، 1397/11/10، 1399/11/10، ایران، تهران