

# Synthesis of mixed hypermetallic oxide BaOCa<sup>+</sup> an atom-ion hybrid trap

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Building one molecule from a reservoir of two atoms. <i>Science</i> , 2018, 360, 900-903.	6.0	171
2	3D Magneto-Optical Trap of Yttrium Monoxide. <i>Physical Review Letters</i> , 2018, 121, 213201.	2.9	137
3	Spectroscopy of Molecular Ions in Coulomb Crystals. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5797-5804.	2.1	16
4	Dipolar quantum logic for freely rotating trapped molecular ions. <i>Physical Review A</i> , 2018, 98, .	1.0	53
5	Quantum-state-controlled reactions between molecular radicals and ions. <i>Physical Review A</i> , 2018, 98, .	1.0	19
6	High-resolution collision energy control through ion position modulation in atom-ion hybrid systems. <i>Review of Scientific Instruments</i> , 2018, 89, 083112.	0.6	7
7	Optical Control of Reactions between Water and Laser-Cooled Be <sup>+</sup> Ions. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3555-3560.	2.1	37
8	Hypermetallic polar molecules for precision measurements. <i>Physical Review A</i> , 2019, 100, .	1.0	21
9	Cold hybrid ion-atom systems. <i>Reviews of Modern Physics</i> , 2019, 91, .	16.4	163
10	Isotope-selective chemistry in the Be <sup>+</sup> ( <sup>2</sup> S <sub>1/2</sub> ) + HOD → BeOD <sup>+</sup> /BeOH <sup>+</sup> + H/D reaction. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 14005-14011.	1.3	14
11	Measurement of charge exchange between Na and $\text{Ca}^+$ in a hybrid trap. <i>Physical Review A</i> , 2019, 99, .	1.0	10
12	Engineering Excited-State Interactions at Ultracold Temperatures. <i>Physical Review Letters</i> , 2019, 122, 233401.	2.9	8
13	Determination of CaOH and CaOCH <sub>3</sub> vibrational branching ratios for direct laser cooling and trapping. <i>New Journal of Physics</i> , 2019, 21, 052002.	1.2	40
14	Reaction blockading in a reaction between an excited atom and a charged molecule at low collision energy. <i>Nature Chemistry</i> , 2019, 11, 615-621.	6.6	41
15	Excitation-assisted nonadiabatic charge-transfer reaction in a mixed atom-ion system. <i>Physical Review A</i> , 2019, 99, .	1.0	9
16	Direct observation of bimolecular reactions of ultracold KRb molecules. <i>Science</i> , 2019, 366, 1111-1115.	6.0	147
17	Long-range versus short-range effects in cold molecular ion-neutral collisions. <i>Nature Communications</i> , 2019, 10, 5429.	5.8	53
18	Cold ion chemistry within Coulomb crystals. <i>Molecular Physics</i> , 2019, 117, 1934-1941.	0.8	18

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19	Interactions and chemical reactions in ionic alkali-metal and alkaline-earth-metal diatomic and triatomic systems. <i>Physical Review A</i> , 2020, 101, .	1.0	23
20	Reactions of translationally cold trapped $\text{CCl}^+$ with acetylene ( $\text{C}_2\text{H}_2$ ). <i>Journal of Chemical Physics</i> , 2020, 152, 234310.	1.2	13
21	Toward Ultracold Organic Chemistry: Prospects of Laser Cooling Large Organic Molecules. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6670-6676.	2.1	26
22	Robust Encoding of a Qubit in a Molecule. <i>Physical Review X</i> , 2020, 10, .	2.8	78
23	Isomer-selected ion-molecule reactions of acetylene cations with propyne and allene. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 20303-20310.	1.3	13
24	Dipole-Phonon Quantum Logic with Trapped Polar Molecular Ions. <i>Physical Review Letters</i> , 2020, 125, 120501.	2.9	21
25	Direct observation of ultracold atom-ion excitation exchange. <i>Physical Review A</i> , 2020, 102, .	1.0	6
26	Resonant collisional shielding of reactive molecules using electric fields. <i>Science</i> , 2020, 370, 1324-1327.	6.0	64
27	Ab initio electronic structure of the $\text{Sr}_2^+$ molecular ion. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020, 53, 135303.	0.6	3
28	<i>Ab initio</i> electronic structure of the $\text{Sr}_2^+$ molecular ion. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020, , .	0.6	0
29	Rotational-state-changing collisions between $\text{N}_2^+$ and $\text{Rb}$ at low energies. <i>Physical Review A</i> , 2020, 101, .	1.0	7
30	Two Cycling Centers in One Molecule: Communication by Through-Bond Interactions and Entanglement of the Unpaired Electrons. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1297-1304.	2.1	25
31	Cold and controlled chemical reaction dynamics. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 9180-9194.	1.3	42
32	Optical Mass Spectrometry of Cold $\text{RaOH}^+$ and $\text{RaOCH}_3^+$ . <i>Physical Review Letters</i> , 2021, 126, 023002.	2.9	22
33	Probing Fundamental Symmetries of Deformed Nuclei in Symmetric Top Molecules. <i>Physical Review Letters</i> , 2021, 126, 023003.	2.9	33
34	Life and death of a cold $\text{BaRb}^+$ molecule inside an ultracold cloud of $\text{Rb}$ atoms. <i>Physical Review Research</i> , 2021, 3, .	1.0	7
35	Cold chemistry: a few-body perspective on impurity physics of a single ion in an ultracold bath. <i>Molecular Physics</i> , 2021, 119, e1881637.	0.8	18
36	High-energy-resolution measurements of an ultracold-atom-ion collisional cross section. <i>Physical Review A</i> , 2021, 103, .	1.0	7

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37	An ion trap apparatus with high optical access in multiple directions. Review of Scientific Instruments, 2021, 92, 073201.	0.6	8
38	Long-range additive and nonadditive potentials in a hybrid system: Ground-state atom, excited-state atom, and ion. Physical Review A, 2021, 104, .	1.0	1
39	Determining reaction pathways at low temperatures by isotopic substitution: the case of $\text{BeD}^+ + \text{H}_2\text{O}$ . New Journal of Physics, 2021, 23, 115004.	1.2	4
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41	Nuclear spin conservation enables state-to-state control of ultracold molecular reactions. Nature Chemistry, 2021, 13, 435-440.	6.6	48
42	Ab initio electronic structure and prospects for the formation of ultracold calcium-alkali-metal-atom molecular ions. New Journal of Physics, 2020, 22, 073015.	1.2	13
43	Polyatomic molecules as quantum sensors for fundamental physics. Quantum Science and Technology, 2020, 5, 044011.	2.6	54
44	Magnetic tuning of ultracold barrierless chemical reactions. Physical Review Research, 2020, 2, .	1.3	13
45	Collision-induced spin-orbit relaxation of highly vibrationally excited NO near 1 K. Natural Sciences, 2022, 2, e20210074.	1.0	5
46	Magnetic properties and quench dynamics of two interacting ultracold molecules in a trap. Physical Chemistry Chemical Physics, 2020, 22, 28140-28153.	1.3	4
47	Advances in the study of ion trap structures in Quantum computation and simulation. Wuli Xuebao/Acta Physica Sinica, 2022, .	0.2	1
48	Spin qudit tomography and state reconstruction error. Physical Review A, 2021, 104, .	1.0	3
49	Quantum control of molecules for fundamental physics. Physical Review A, 2022, 105, .	1.0	21
50	Differential Cross Sections for Cold, State-to-State Spin-Orbit Changing Collisions of $\text{NO}(v=1)$ . <a href="#">Tj ETQq1 1 0,784314.jpg</a> /Over	1.1	1
51	Optical Frequency Combs for Molecular Spectroscopy, Kinetics, and Sensing. ACS Symposium Series, 0, , 61-88.	0.5	2
52	Chemistry Using Coulomb Crystals. ACS Symposium Series, 0, , 389-410.	0.5	5
53	Advances in the study of ion trap structures in quantum computation and simulation. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 133701.	0.2	0
54	Multivalent optical cycling centers: towards control of polyatomics with multi-electron degrees of freedom. Physical Chemistry Chemical Physics, 2022, 25, 154-170.	1.3	3

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