

# Noboru Watanabe

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/698636/publications.pdf>

Version: 2024-02-01

75  
papers

1,390  
citations

331642

21  
h-index

361001

35  
g-index

75  
all docs

75  
docs citations

75  
times ranked

712  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | The complete optical spectrum of liquid water measured by inelastic x-ray scattering. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 6264-6266.   | 7.1 | 177       |
| 2  | Observation of a Molecular Frame(e,2e)Cross Section: An(e,2e+M)Triple Coincidence Study onH2. Physical Review Letters, 2005, 94, 213202.  | 7.8 | 79        |
| 3  | Bethe Surface of Liquid Water Determined by Inelastic X-Ray Scattering Spectroscopy and Electron Correlation Effects. Bulletin of the Chemical Society of Japan, 1997, 70, 719-726.   | 3.2 | 75        |
| 4  | Optical spectra of liquid water in vacuum uv region by means of inelastic x-ray scattering spectroscopy. Journal of Chemical Physics, 1998, 108, 823-825.   | 3.0 | 68        |
| 5  | Vibrational effects on valence electron momentum distributions of ethylene. Journal of Chemical Physics, 2012, 137, 114301.   | 3.0 | 51        |
| 6  | Observation of molecular frame (e,2e) cross section using an electron-electron-fragment ion triple coincidence apparatus. Journal of Electron Spectroscopy and Related Phenomena, 2004, 141, 83-93.   | 1.7 | 48        |
| 7  | Anisotropy of hexagonal boron nitride core absorption spectra by x-ray Raman spectroscopy. Applied Physics Letters, 1996, 69, 1370-1372.  | 3.3 | 45        |
| 8  | Coincidence Velocity Imaging Apparatus for Study of Angular Correlations between Photoelectrons and Photofragments. Japanese Journal of Applied Physics, 2006, 45, 1841-1849.   | 1.5 | 43        |
| 9  | Photoelectron-photoion-photoion momentum spectroscopy as a direct probe of the core-hole localization in C 1s photoionization of C <sub>2</sub> H <sub>2</sub> . Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, F285-F291.  | 1.5 | 39        |
| 10 | Static structure factor and electron correlation effects studied by inelastic x-ray scattering spectroscopy. Journal of Chemical Physics, 1998, 108, 4545-4553.   | 3.0 | 38        |
| 11 | (e,2e)and(e,3e)studies on double processes of He at large momentum transfer. Physical Review A, 2005, 72, .   | 2.5 | 38        |
| 12 | Absolute surface coverage measurement using a vibrational overtone. Journal of Chemical Physics, 2004, 120, 2879-2888.  | 3.0 | 35        |
| 13 | Two-step mechanisms in ionization-excitation of He studied by binary(e,2e)experiments and second-Born-approximation calculations. Physical Review A, 2007, 75, .  | 2.5 | 32        |
| 14 | Interference Effects on $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle$ Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 247 Td  | 7.8 | 31        |
| 15 | of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle$ $\langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 4 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle$ .<br>Phy. Inelastic X-ray scattering study on molecular liquids. Journal of Physics and Chemistry of Solids, 2000, 61, 407-409. | 4.0 | 29        |
| 16 | Vibronic effects on the low-lying electronic excitations in CO2 induced by electron impact. Journal of Chemical Physics, 2013, 138, 184311.   | 3.0 | 29        |
| 17 | Vibrational effects on valence electron momentum distributions of CH2F2. Journal of Chemical Physics, 2014, 141, 244314.  | 3.0 | 29        |
| 18 | Theoretical study of molecular vibrations in electron momentum spectroscopy experiments on furan: An analytical versus a molecular dynamical approach. Journal of Chemical Physics, 2015, 142, 094308.  | 3.0 | 28        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Two-step single-ionization mechanisms. <i>Physical Review A</i> , 2006, 73, .  | 2.5 | 27        |
| 20 | Non-dipole effects in the angular distribution of photoelectrons from the K-shell of N <sub>2</sub> molecule. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, L25-L34.              | 1.5 | 25        |
| 21 | Vibrational Effects on Electron Momentum Distributions of Outer-Valence Orbitals of Oxetane. <i>Journal of Physical Chemistry A</i> , 2016, 120, 6855-6863.  | 2.5 | 24        |
| 22 | Electron Momentum Spectroscopy Investigation of Molecular Conformations of Ethanol Considering Vibrational Effects. <i>Journal of Physical Chemistry A</i> , 2017, 121, 277-287.                                   | 2.5 | 22        |
| 23 | Experimental and theoretical study on generalized oscillator strengths of the valence-shell electronic excitations in CF <sub>4</sub> . <i>Journal of Chemical Physics</i> , 2011, 134, 064307.                    | 3.0 | 21        |
| 24 | Size-extensive calculations of static structure factors from the coupled cluster singles and doubles model. <i>Journal of Chemical Physics</i> , 1999, 111, 827-832.   | 3.0 | 20        |
| 25 | A highly sensitive electron momentum spectrometer incorporating a multiparticle imaging detector. <i>Measurement Science and Technology</i> , 2011, 22, 075602.  | 2.6 | 20        |
| 26 | Electron momentum spectroscopy of dimethyl ether taking account of nuclear dynamics in the electronic ground state. <i>Journal of Chemical Physics</i> , 2015, 143, 134309.  | 3.0 | 19        |
| 27 | Vibronic effects on the $1\sigma^+ 3s$ Rydberg excitation in CF <sub>4</sub> induced by electron impact. <i>Journal of Chemical Physics</i> , 2011, 134, 234309.   | 3.0 | 18        |
| 28 | Nondipole effects in the angular distribution of photoelectrons from the K-shell of the CO molecule. <i>Physical Review A</i> , 2006, 73, .  | 2.5 | 17        |
| 29 | Relationship between interference pattern and molecular orbital shape in (e, 2e) electron momentum profiles of SF <sub>6</sub> . <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2016, 209, 78-86. | 1.7 | 17        |
| 30 | Examination of (e,2e) scattering models by comparison of momentum profiles of noble gases between experiment and theory. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 3022.                               | 2.8 | 16        |
| 31 | Bethe surfaces and X-ray incoherent scattering factor for H <sub>2</sub> O studied by electron energy loss spectroscopy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2000, 112, 107-114.       | 1.7 | 14        |
| 32 | Electron momentum spectroscopy of valence satellites of neon. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2005, 142, 325-334.  | 1.7 | 13        |
| 33 | experiment for N <sub>2</sub> at large momentum transfer. <i>Physical Review A</i> , 2013, 87, .   | 2.5 | 13        |
| 34 | Oscillation of the electron-density distribution in momentum space: An (e,2e) study of H <sub>2</sub> at large momentum transfer. <i>Physical Review A</i> , 2014, 90, .   | 2.5 | 13        |
| 35 | Practical Means for the Study of Electron Correlation in Atoms. <i>Physical Review Letters</i> , 2004, 92, 223202.   | 7.8 | 12        |
| 36 | Observation of Giant Resonance Phenomena in the Two-Step Mechanism of Electron-Xe Collision. <i>Physical Review Letters</i> , 2007, 98, 013201.  | 7.8 | 12        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Vibrational effects on electron-impact valence excitations of SF <sub>6</sub> . <i>Physical Review A</i> , 2019, 99, .  | 2.5 | 11        |
| 38 | Generalized oscillator strengths of low-lying electronic excitations in acetylene. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020, 53, 075202.                       | 1.5 | 11        |
| 39 | Vibronic effects on the low-lying electronic excitations in N <sub>2</sub> O induced by electron impact. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014, 47, 155203. | 1.5 | 10        |
| 40 | Influence of molecular vibrations on the valence electron momentum distributions of adamantane. <i>Journal of Chemical Physics</i> , 2017, 146, .   | 3.0 | 9         |
| 41 | Radiative Auger spectra of several K and Ca compounds. <i>Journal of Physics Condensed Matter</i> , 1996, 8, 37-46.   | 1.8 | 8         |
| 42 | Electron-impact double ionization of He at large momentum transfer studied by second-order Born-approximation calculations. <i>Physical Review A</i> , 2008, 77, .                              | 2.5 | 8         |
| 43 | Electron-impact ionization of the water molecule at large momentum transfer above the double-ionization threshold. <i>Physical Review A</i> , 2011, 83, .                                       | 2.5 | 8         |
| 44 | ELECTRON CORRELATION AND COULOMB HOLE DEDUCED FROM X-RAY SCATTERING INTENSITIES: EXPERIMENTAL AND THEORETICAL STUDIES. , 2002, , 553-576.   |     | 7         |
| 45 | Interference effects on $(e, \hat{A}2e)$ electron momentum profiles: a comparative study for CCl <sub>4</sub> and CF <sub>4</sub> *. <i>European Physical Journal D</i> , 2016, 70, 1.          | 1.3 | 7         |
| 46 | Molecular-frame electron-scattering experiment on the dipole-forbidden $2\tilde{f}g^+1\tilde{\epsilon}g$ transition of N <sub>2</sub> . <i>Physical Review A</i> , 2017, 95, .                  | 2.5 | 7         |
| 47 | Stereodynamics of electron-induced dissociative ionization of N <sub>2</sub> studied by $(e, e+ion)$ spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 1063-1071.            | 2.8 | 7         |
| 48 | Development of an electron-ion coincidence apparatus for molecular-frame electron energy loss spectroscopy studies. <i>Review of Scientific Instruments</i> , 2018, 89, 043105.                 | 1.3 | 6         |
| 49 | Vibrational effects on generalized oscillator strengths of ammonia. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2021, 54, 135202.                                      | 1.5 | 6         |
| 50 | Calculation of X-ray scattering intensities by means of the coupled cluster singles and doubles model. <i>Journal of Computational Chemistry</i> , 2001, 22, 1315-1320.                         | 3.3 | 5         |
| 51 | Electron-impact ionization of N <sub>2</sub> at large momentum transfer above the double-ionization threshold. <i>Physical Review A</i> , 2012, 86, .   | 2.5 | 5         |
| 52 | Electron momentum spectroscopy study on the valence electronic structure of methyl formate. <i>Journal of Chemical Physics</i> , 2019, 150, 194306.   | 3.0 | 5         |
| 53 | $(e, e+ion)$ study on electron-induced dissociative ionization of O <sub>2</sub> . <i>Physical Review A</i> , 2019, 99, .   | 2.5 | 5         |
| 54 | $(e, 3e)$ collisions on Mg in the impulsive regime studied by the second Born approximation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2004, 37, 4551-4560.          | 1.5 | 4         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Theoretical study of generalized oscillator strengths for the low-lying electronic excitations of CH <sub>3</sub> Cl and CF <sub>3</sub> Cl. Journal of Physics B: Atomic, Molecular and Optical Physics, 2022, 55, 015201. | 1.5 | 4         |
| 56 | Momentum dependence of $\tilde{\epsilon}''$ — excitations of benzene rings in condensed phases. Journal of Electron Spectroscopy and Related Phenomena, 2001, 114-116, 933-937.   | 1.7 | 3         |
| 57 | Coulomb hole in N <sub>2</sub> , CO and O <sub>2</sub> deduced from X-ray scattering cross-sections. Molecular Physics, 2004, 102, 649-657.   | 1.7 | 3         |
| 58 | Forward and backward asymmetry in electron impact ionization of CO. Journal of Chemical Physics, 2020, 152, 164301.   | 3.0 | 3         |
| 59 | Electron correlation effects in N <sub>2</sub> and CO studied by X-ray scattering and CISD calculations. Molecular Physics, 2002, 100, 2839-2847.   | 1.7 | 2         |
| 60 | Temperature-Dependent Electron Momentum Spectroscopy on the Molecular Orbitals of Dimethyl Ether. Journal of Physical Chemistry A, 2020, 124, 10258-10265.  | 2.5 | 2         |
| 61 | Inelastic X-ray scattering in molecular liquids and electron correlation effects. Journal of Synchrotron Radiation, 1998, 5, 1052-1054.   | 2.4 | 1         |
| 62 | Electron impact ionization-excitation and double-ionization dynamics of He at large momentum transfer. Journal of Physics: Conference Series, 2009, 194, 012018.  | 0.4 | 1         |
| 63 | Multi-center interference effects on generalized oscillator strengths for the valence-shell electronic excitations of CF <sub>4</sub> . Journal of Physics: Conference Series, 2012, 388, 052051.                           | 0.4 | 1         |
| 64 | X-ray and Electron Scattering Studies on Electronic Structures and Electronic Excitation Dynamics of Molecules. Molecular Science, 2013, 7, A0059.  | 0.2 | 1         |
| 65 | Revisiting electron-correlation effects on valence shake-up satellites of neon. Physical Review A, 2019, 100, .   | 2.5 | 1         |
| 66 | Symmetry breaking in electron-impact dissociative ionization of linear symmetric molecules. Physical Review A, 2021, 104, .   | 2.5 | 1         |
| 67 | X-Ray Raman Spectra from Low-Z Elements. European Physical Journal Special Topics, 1997, 7, C2-347-C2-352.  | 0.2 | 1         |
| 68 | First steps towards two-electron momentum density measurements. AIP Conference Proceedings, 2003, , .   | 0.4 | 0         |
| 69 | (e,2e) and (e,3-1e) studies on double processes of He near the Bethe ridge. AIP Conference Proceedings, 2006, , .   | 0.4 | 0         |
| 70 | (e,3-1e) Reactions at Large Momentum Transfer: The Plane-Wave Second Born Approximation. AIP Conference Proceedings, 2006, , .  | 0.4 | 0         |
| 71 | Double Electron Excitation Dynamics Studied By (E, 2E) Electron Momentum Spectroscopy. , 2009, , .  |     | 0         |
| 72 | Carbon 1s electron momentum spectroscopy of CF <sub>4</sub> . Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 105201.  | 1.5 | 0         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Herzberg-Teller vibronic effects on electron-impact excitations of N <sub>2</sub> O. Journal of Physics: Conference Series, 2015, 635, 072032.  | 0.4 | 0         |
| 74 | EMS study of vibrational effects on electron momentum distributions of C <sub>2</sub> H <sub>4</sub> and CH <sub>2</sub> F <sub>2</sub> . Journal of Physics: Conference Series, 2015, 635, 072031. | 0.4 | 0         |
| 75 | Molecular-frame EELS experiment on inner-valence ionization of N <sub>2</sub> . Journal of Physics: Conference Series, 2017, 875, 062022.   | 0.4 | 0         |