

David C Johnson

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/2930412/david-c-johnson-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

216
papers

3,892
citations

30
h-index

53
g-index

232
ext. papers

4,277
ext. citations

7.7
avg, IF

5.37
L-index

#	Paper	IF	Citations
216	Conductivity in Open-Framework Chalcogenides Tuned via Band Engineering and Redox Chemistry. <i>Chemistry of Materials</i> , 2022 , 34, 1905-1920	9.6	1
215	Understanding the Reactions Between Fe and Se Binary Diffusion Couples. <i>Chemistry of Materials</i> , 2021 , 33, 2585-2592	9.6	1
214	Influence of Nanoarchitectures on Interlayer Interactions in Layered BiMoSe Heterostructures. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 9469-9478	3.8	3
213	Cryogenic Laser Ablation Reveals Short-Circuit Mechanism in Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2021 , 6, 2138-2144	20.1	8
212	Substituent Effects in the Synthesis of Heterostructures. <i>Inorganic Chemistry</i> , 2021 , 60, 9598-9606	5.1	1
211	Predicting and Synthesizing Interface Stabilized 2D Layers. <i>Chemistry of Materials</i> , 2021 , 33, 5076-5084	9.6	1
210	Defects in Layered van der Waals Heterostructures: Implications for Thermoelectrics. <i>ACS Applied Nano Materials</i> , 2021 , 4, 7943-7953	5.6	0
209	Acceleration of Crystallization Kinetics in Ge-Sb-Te-Based Phase-Change Materials by Substitution of Ge by Sn. <i>Advanced Functional Materials</i> , 2021 , 31, 2004803	15.6	3
208	Synthesis and Electrical Properties of a New Compound (BiSe) _{0.97} (Bi ₂ Se ₃) _{1.26} (BiSe) _{0.97} (MoSe ₂) Containing Metallic 1T-MoSe ₂ . <i>Chemistry of Materials</i> , 2021 , 33, 6403-6411	9.6	2
207	Material considerations for thermoelectric enhancement via modulation doping. <i>Applied Physics A: Materials Science and Processing</i> , 2020 , 126, 1	2.6	1
206	Influence of Nanoarchitecture on Charge Donation and the Electrical-Transport Properties in [(SnSe) _{1+q}][TiSe ₂] _q Heterostructures. <i>Chemistry of Materials</i> , 2020 , 32, 5802-5813	9.6	4
205	Controlling the Self-Assembly of New Metastable Tin Vanadium Selenides Using Composition and Nanoarchitecture of Precursors. <i>Journal of the American Chemical Society</i> , 2020 , 142, 13145-13154	16.4	1
204	Synthesis of Metastable Inorganic Solids with Extended Structures. <i>ChemPhysChem</i> , 2020 , 21, 1345-1368	3.2	15
203	Synthesis and Characterization of [(PbSe)][TiSe] Isomers. <i>Inorganic Chemistry</i> , 2020 , 59, 10928-10937	5.1	2
202	Enhanced Low-Temperature Thermoelectric Performance in (PbSe)(VSe) Heterostructures due to Highly Correlated Electrons in Charge Density Waves. <i>Nano Letters</i> , 2020 , 20, 8008-8014	11.5	3
201	The Instability of Monolayer-Thick PbSe on VSe ₂ . <i>Chemistry of Materials</i> , 2020 , 32, 7992-8003	9.6	2
200	Investigating the Formation of MoSe and TiSe Films from Artificially Layered Precursors. <i>Inorganic Chemistry</i> , 2020 , 59, 12536-12544	5.1	4

199	Fast Fourier transform and multi-Gaussian fitting of XRR data to determine the thickness of ALD grown thin films within the initial growth regime. <i>Applied Physics Letters</i> , 2020 , 117, 213106	3.4	0
198	Designed Synthesis and Structure-Property Relationships of Kinetically Stable [(PbSe) _{1+m}](VSe ₂) ₁ (m = 1, 2, 3, 4) Heterostructures. <i>Chemistry of Materials</i> , 2019 , 31, 8473-8483	9.6	11
197	Strong Non-Epitaxial Interactions: Crystallographically Aligned PbSe on VSe ₂ . <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019 , 216, 1800896	1.6	8
196	Electronic structure of designed [(SnSe) _{1+m}](TiSe ₂) ₂ heterostructure thin films with tunable layering sequence. <i>Journal of Materials Research</i> , 2019 , 34, 1965-1975	2.5	2
195	Charge Transfer in Thermoelectric Nanocomposites: Power Factor Enhancements and Model Systems 2019 , 1-34		1
194	Growth of Nanocrystalline MoSe ₂ Monolayers on Epitaxial Graphene from Amorphous Precursors (Phys. Status Solidi B 2/2019). <i>Physica Status Solidi (B): Basic Research</i> , 2019 , 256, 1970015	1.3	
193	Synthesis, Characterization, and Ultralow Thermal Conductivity of a Lattice-Mismatched SnSe ₂ (MoSe ₂) _{1.32} Heterostructure. <i>Chemistry of Materials</i> , 2019 , 31, 5699-5705	9.6	10
192	Synthesis and Properties of (BiSe) _{0.97} MoSe ₂ : A Heterostructure Containing Both 2H-MoSe ₂ and 1T-MoSe ₂ . <i>Chemistry of Materials</i> , 2019 , 31, 5824-5831	9.6	11
191	Ultralow shear modulus of incommensurate [SnSe] _n [MoSe ₂] _n layers synthesized by the method of modulated elemental reactants. <i>Physical Review Materials</i> , 2019 , 3,	3.2	4
190	Magnetism and transport in transparent high-mobility BaSnO ₃ films doped with La, Pr, Nd, and Gd. <i>Physical Review Materials</i> , 2019 , 3,	3.2	6
189	Crystallography at the nanoscale: planar defects in ZnO nanospikes. <i>Journal of Applied Crystallography</i> , 2019 , 52, 1009-1015	3.8	3
188	Growth of Nanocrystalline MoSe ₂ Monolayers on Epitaxial Graphene from Amorphous Precursors. <i>Physica Status Solidi (B): Basic Research</i> , 2019 , 256, 1800283	1.3	1
187	Kinetics of the Topochemical Transformation of (PbSe) (TiSe) (SnSe) (TiSe) to (PbSnSe) (TiSe). <i>Journal of the American Chemical Society</i> , 2019 , 141, 922-927	16.4	2
186	Correlation between epitaxial strain and magnetic properties in La _{0.7} Sr _{0.3} CoO ₃ /La _{0.7} Sr _{0.3} MnO ₃ bilayers. <i>Journal of Applied Physics</i> , 2019 , 125, 082518	2.5	3
185	Ultralow thermal conductivity of turbostratically disordered MoSe ultra-thin films and implications for heterostructures. <i>Nanotechnology</i> , 2019 , 30, 285401	3.4	16
184	Synthesis of (BiSe) _{1+m} (Bi ₂ Se ₃) _{1+n} (BiSe) _{1+p} (TiSe) ₂ by Directed Self-Assembly of a Designed Precursor. <i>Chemistry of Materials</i> , 2019 , 31, 216-223	9.6	4
183	Kinetically Controlled Formation and Decomposition of Metastable [(BiSe)] [TiSe] Compounds. <i>Journal of the American Chemical Society</i> , 2018 , 140, 3385-3393	16.4	13
182	Structural Changes as a Function of Thickness in [(SnSe)]TiSe Heterostructures. <i>ACS Nano</i> , 2018 , 12, 12854-12958	16.2	12

181	Charge transfer in (PbSe) (NbSe) and (SnSe) (NbSe) ferecrystals investigated by photoelectron spectroscopy. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 055001	1.8	4
180	Insights into the Charge-Transfer Stabilization of Heterostructure Components with Unstable Bulk Analogs. <i>Chemistry of Materials</i> , 2018 , 30, 4738-4747	9.6	6
179	Sub-Monolayer Accuracy in Determining the Number of Atoms per Unit Area in Ultrathin Films Using X-ray Fluorescence. <i>Chemistry of Materials</i> , 2018 , 30, 6209-6216	9.6	25
178	Temperature-dependent synchrotron X-ray diffraction, pair distribution function and susceptibility study on the layered compound CrTe ₃ . <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2018 , 233, 361-370	1	3
177	Superconductive coupling in tailored [(SnSe) _{1+n}][M(NbSe ₂) ₁] multilayers. <i>Superconductor Science and Technology</i> , 2018 , 31, 065006	3.1	2
176	The Reaction between Mn and Se Layers. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2018 , 644, 1875-1880	1.3	1
175	Enhanced Cross-Plane Thermoelectric Transport of Rotationally Disordered SnSe via Se-Vapor Annealing. <i>Nano Letters</i> , 2018 , 18, 6876-6881	11.5	12
174	Correlation of Reduced Interlayer Charge Transfer with Antiphase Boundary Formation in BixSn _{1-x} Se _x NbSe ₂ Heterostructures. <i>European Journal of Inorganic Chemistry</i> , 2017 , 2017, 950-957	2.3	1
173	Long-Range Order in [(SnSe) _n][TiSe] Prepared from Designed Precursors. <i>Inorganic Chemistry</i> , 2017 , 56, 3499-3505	5.1	8
172	Cross-Plane Seebeck Coefficient Measurement of Misfit Layered Compounds (SnSe)(TiSe) (n = 1,3,4,5). <i>Nano Letters</i> , 2017 , 17, 1978-1986	11.5	20
171	Charge Density Wave Transition in (PbSe) _{1+n} (MSe ₂) _n Compounds with n = 1, 2, and 3. <i>Chemistry of Materials</i> , 2017 , 29, 5646-5653	9.6	13
170	Heterostructures containing dichalcogenides-new materials with predictable nanoarchitectures and novel emergent properties. <i>Semiconductor Science and Technology</i> , 2017 , 32, 093004	1.8	24
169	Same Precursor, Two Different Products: Comparing the Structural Evolution of In-Ga-O "Gel-Derived" Powders and Solution-Cast Films Using Pair Distribution Function Analysis. <i>Journal of the American Chemical Society</i> , 2017 , 139, 5607-5613	16.4	11
168	Impact of Relative Humidity during Spin-Deposition of Metal Oxide Thin Films from Aqueous Solution Precursors. <i>Chemistry of Materials</i> , 2017 , 29, 2921-2926	9.6	22
167	Modulation Doping in Metastable Heterostructures via Kinetically Controlled Substitution. <i>Chemistry of Materials</i> , 2017 , 29, 773-779	9.6	8
166	Experimental and theoretical investigation of the chromium-niobium-antimony system. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2017 , 232, 235-244	1	
165	Nonuniform Composition Profiles in Amorphous Multimetal Oxide Thin Films Deposited from Aqueous Solution. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 37476-37483	9.5	6
164	Superconducting Tin Selenide/Niobium Diselenide Ferecrystals. <i>Crystal Research and Technology</i> , 2017 , 52, 1700126	1.3	4

163	Designing Thermoelectric Materials Using 2D Layers 2017 , 93-122		1
162	Interface-Driven Structural Distortions and Composition Segregation in Two-Dimensional Heterostructures. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 14448-14452	16.4	8
161	Expanding the Concept of van der Waals Heterostructures to Interwoven 3D Structures. <i>Chemistry of Materials</i> , 2017 , 29, 8292-8298	9.6	11
160	Formation of a Selenide-Based Heterostructure From a Designed Precursor <i>Crystal Research and Technology</i> , 2017 , 52, 1700067	1.3	4
159	Interface-Driven Structural Distortions and Composition Segregation in Two-Dimensional Heterostructures. <i>Angewandte Chemie</i> , 2017 , 129, 14640-14644	3.6	1
158	Dynamic instabilities in strongly correlated VSe ₂ monolayers and bilayers. <i>Physical Review B</i> , 2017 , 96,	3.3	51
157	Structure-property relationships in non-epitaxial chalcogenide heterostructures: the role of interface density on charge exchange. <i>Nanoscale</i> , 2016 , 8, 14665-72	7.7	10
156	Corrosion Resistance of Atomic Layer Deposition-Generated Amorphous Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 30644-30648	9.5	16
155	Superconducting ferecrystals: turbostratically disordered atomic-scale layered (PbSe) _{1.14} (NbSe ₂) _n thin films. <i>Scientific Reports</i> , 2016 , 6, 33457	4.9	9
154	Rational design of efficient electrode-electrolyte interfaces for solid-state energy storage using ion soft landing. <i>Nature Communications</i> , 2016 , 7, 11399	17.4	66
153	Transport properties of VSe ₂ monolayers separated by bilayers of BiSe. <i>Journal of Materials Research</i> , 2016 , 31, 886-892	2.5	12
152	Confined lattice dynamics of single and quadruple SnSe bilayers in [(SnSe)(1.04)] _(m) [MoSe ₂] _(n) ferecrystals. <i>Nanoscale</i> , 2016 , 8, 856-61	7.7	2
151	Synthesis, structure and magnetic properties of crystallographically aligned CuCr ₂ Se ₄ thin films. <i>Journal of Alloys and Compounds</i> , 2016 , 671, 220-225	5.7	4
150	Non-uniform Composition Profiles in Inorganic Thin Films from Aqueous Solutions. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 667-72	9.5	16
149	Self-assembly of designed precursors: A route to crystallographically aligned new materials with controlled nanoarchitecture. <i>Journal of Solid State Chemistry</i> , 2016 , 236, 173-185	3.3	7
148	Determining Interplanar Distances from STEM-EDX Hyperspectral Maps. <i>Microscopy and Microanalysis</i> , 2016 , 22, 944-945	0.5	
147	The synthesis of [(PbSe) _{1+δ}](TiSe ₂) _n [(SnSe) ₂] _{1+δ} (TiSe ₂) _n heterostructures with designed nanoarchitectures by self assembly of amorphous precursors. <i>Nanoscale</i> , 2016 , 8, 13646-51	7.7	3
146	Conquering the Low-k Death Curve: Insulating Boron Carbide Dielectrics with Superior Mechanical Properties. <i>Advanced Electronic Materials</i> , 2016 , 2, 1600073	6.4	17

145	Application of HAADF STEM image analysis to structure determination in rotationally disordered and amorphous multilayered films. <i>Semiconductor Science and Technology</i> , 2016 , 31, 084003	1.8	6
144	Synthesis of a Family of $([\text{SnSe}]_{1+m})_n([\text{MoxNb}_{1-x}\text{Se}_2]_{1+n})_1([\text{SnSe}]_{1+m})_n([\text{NbxMo}_{1-x}\text{Se}_2]_{1+n})_1$ Superlattice Heterostructures ($m = 0, 1, 2, 3, 4$ and $0.8 \leq x \leq 1$). <i>European Journal of Inorganic Chemistry</i> , 2016 , 2016, 1225-1231	2.3	3
143	Amorphous Mixed-Metal Oxide Thin Films from Aqueous Solution Precursors with Near-Atomic Smoothness. <i>Journal of the American Chemical Society</i> , 2016 , 138, 16800-16808	16.4	17
142	Suppression of a Charge Density Wave in $([\text{SnSe}]_{1.15})_1(\text{VSe}_2)_1$ Ferecrystals Via Isoelectronic Doping with Ta. <i>Journal of Electronic Materials</i> , 2016 , 45, 4898-4902	1.9	5
141	Manufacturing of Smart Goods: Current State, Future Potential, and Research Recommendations. <i>Journal of Micro and Nano-Manufacturing</i> , 2016 , 4,	1.3	8
140	Structural Changes in 2D BiSe Bilayers as n Increases in $(\text{BiSe})(\text{NbSe})$ ($n = 1-4$) Heterostructures. <i>ACS Nano</i> , 2016 , 10, 9489-9499	16.7	11
139	Nanostructure, thermoelectric properties, and transport theory of V_2VI_3 and $\text{V}_2\text{VI}_3/\text{IVVI}$ based superlattices and nanomaterials. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016 , 213, 662-671	1.6	9
138	Effect of Local Structure of NbSe_2 on the Transport Properties of $([\text{SnSe}]_{1.16})_1(\text{NbSe}_2)_n$ Ferecrystals. <i>Chemistry of Materials</i> , 2015 , 27, 2158-2164	9.6	14
137	Phase width of kinetically stable $([\text{PbSe}]_{1+n})_1(\text{TiSe}_2)_1$ ferecrystals and the effect of precursor composition on electrical properties. <i>Journal of Alloys and Compounds</i> , 2015 , 645, 118-124	5.7	8
136	Characterization of Cr-rich Cr-Sb multilayer films: Syntheses of a new metastable phase using modulated elemental reactants. <i>Journal of Solid State Chemistry</i> , 2015 , 230, 254-265	3.3	4
135	Detection of nanoscale embedded layers using laboratory specular X-ray diffraction. <i>Journal of Applied Physics</i> , 2015 , 117, 185306	2.5	5
134	Misfit Layer Compounds and Ferecrystals: Model Systems for Thermoelectric Nanocomposites. <i>Materials</i> , 2015 , 8, 2000-2029	3.5	43
133	Structural Evolution of Iron Antimonides from Amorphous Precursors to Crystalline Products Studied by Total Scattering Techniques. <i>Journal of the American Chemical Society</i> , 2015 , 137, 9652-8	16.4	16
132	Synthesis and Thermal Properties of Solid-State Structural Isomers: Ordered Intergrowths of SnSe and MoSe_2 . <i>Journal of the American Chemical Society</i> , 2015 , 137, 8803-9	16.4	18
131	Structure, stability, and properties of the intergrowth compounds $([\text{SnSe}]_{1+m})_n(\text{NbSe}_2)_n$, where $m = n = 1-20$. <i>Journal of the American Chemical Society</i> , 2015 , 137, 4831-9	16.4	15
130	The Influence of Interfaces on Properties of Thin-Film Inorganic Structural Isomers Containing SnSe-NbSe_2 Subunits. <i>ACS Nano</i> , 2015 , 9, 4427-34	16.7	6
129	Charge transfer vs. dimensionality: what affects the transport properties of ferecrystals?. <i>Nanoscale</i> , 2015 , 7, 7378-85	7.7	10
128	Influence of Defects on the Charge Density Wave of $([\text{SnSe}]_{(1+n)})_1(\text{VSe}_2)_1$ Ferecrystals. <i>ACS Nano</i> , 2015 , 9, 8440-8	16.7	22

127	Tuning Electrical Properties through Control of TiSe ₂ Thickness in (BiSe) _{1+y} (TiSe ₂) _n Compounds. <i>Chemistry of Materials</i> , 2015 , 27, 6067-6076	9.6	14
126	Synthesis and Characterization of Quaternary Monolayer Thick MoSe ₂ /SnSe/NbSe ₂ /SnSe Heterojunction Superlattices. <i>Chemistry of Materials</i> , 2015 , 27, 6411-6417	9.6	18
125	Influence of interstitial V on structure and properties of ferecrystalline ([SnSe] _{1.15}) ₁ (V _{1+Se}) _n for n=1, 2, 3, 4, 5, and 6. <i>Journal of Solid State Chemistry</i> , 2015 , 231, 101-107	3.3	6
124	The Synthesis, Structure, and Electrical Characterization of (SnSe) _{1.2} TiSe ₂ . <i>European Journal of Inorganic Chemistry</i> , 2015 , 2015, 83-91	2.3	29
123	Structural and electrical properties of a new ([SnSe] _{1.16}) ₁ (NbSe ₂) ₁ polytype. <i>Journal of Alloys and Compounds</i> , 2015 , 619, 861-868	5.7	21
122	Density functional theory calculations of the turbostratically disordered compound ([SnSe] _{1+y}) _m (VSe ₂) _n . <i>Physical Review B</i> , 2015 , 91,	3.3	6
121	Demonstration of thin film pair distribution function analysis (tPDF) for the study of local structure in amorphous and crystalline thin films. <i>IUCrJ</i> , 2015 , 2, 481-9	4.7	41
120	Designed Synthesis of van der Waals Heterostructures: The Power of Kinetic Control. <i>Angewandte Chemie</i> , 2015 , 127, 15688-15692	3.6	8
119	Designed Synthesis of van der Waals Heterostructures: The Power of Kinetic Control. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 15468-72	16.4	27
118	Antiphase Boundaries in the Turbostratically Disordered Misfit Compound (BiSe) _(1+y) NbSe ₂ . <i>Inorganic Chemistry</i> , 2015 , 54, 10309-15	5.1	16
117	Synthesis of Inorganic Structural Isomers By Diffusion-Constrained Self-Assembly of Designed Precursors: A Novel Type of Isomerism. <i>Angewandte Chemie</i> , 2015 , 127, 1146-1150	3.6	1
116	In-plane structure of ferecrystalline compounds. <i>Crystal Research and Technology</i> , 2015 , 50, 464-472	1.3	30
115	Quantitative High Resolution Chemical Analysis of the (PbxSn _{1-x} Se) _{1+y} (TiSe ₂) _n Intergrowth System. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1327-1328	0.5	5
114	Kinetically Controlled Site-Specific Substitutions in Higher-Order Heterostructures. <i>Chemistry of Materials</i> , 2015 , 27, 4066-4072	9.6	22
113	Insights from STEM and NBED studies into the local structure and growth mechanism of misfit layered compounds prepared using modulated reactants. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2015 , 230, 45-54	1	5
112	Synthesis of inorganic structural isomers by diffusion-constrained self-assembly of designed precursors: a novel type of isomerism. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 1130-4	16.4	21
111	Structural and Electrical Properties of ([SnSe] _{1+y}) _m (NbSe ₂) ₁ Compounds: Single NbSe ₂ Layers Separated by Increasing Thickness of SnSe. <i>Chemistry of Materials</i> , 2015 , 27, 867-875	9.6	25
110	Suppressing a charge density wave by changing dimensionality in the ferecrystalline compounds ([SnSe] _{1.15}) ₁ (VSe ₂) _n with n = 1, 2, 3, 4. <i>Nano Letters</i> , 2015 , 15, 943-8	11.5	45

109	Preparation, formation, and structure of [(SnSe) _{1.04}] _m (MoSe ₂) _n intergrowth compounds (0 Inorganic Chemistry, 2015 , 54, 1091-9	5.1	7
108	Mentoring Graduate Students in Research and Teaching by Utilizing Research as a Template. <i>Journal of Chemical Education</i> , 2014 , 91, 200-205	2.4	6
107	Charge Transfer between PbSe and NbSe ₂ in [(PbSe) _{1.14}] _m (NbSe ₂) ₁ Ferrecrystalline Compounds. <i>Chemistry of Materials</i> , 2014 , 26, 1859-1866	9.6	34
106	Raman spectroscopy insights into the size-induced structural transformation in SnSe nanolayers. <i>Langmuir</i> , 2014 , 30, 8209-14	4	11
105	Synthesis of [(SnSe) _{1.16} □ _{0.09}] ₁ [(Nb _x Mo _{1-x})Se ₂] ₁ Ferrecrystal Alloys. <i>Chemistry of Materials</i> , 2014 , 26, 3443-3449	9.6	15
104	Synthesis and Systematic Trends in Structure and Electrical Properties of [(SnSe) _{1.15}] _m (VSe ₂) ₁ , m = 1, 2, 3, and 4. <i>Chemistry of Materials</i> , 2014 , 26, 2862-2872	9.6	27
103	Telluride misfit layer compounds: [(PbTe) _{1.17}] _m (TiTe) _n . <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 5672-5	16.4	25
102	Innenrücktitelbild: Telluride Misfit Layer Compounds: [(PbTe) _{1.17}] _m (TiTe ₂) _n (Angew. Chem. 22/2014). <i>Angewandte Chemie</i> , 2014 , 126, 5819-5819	3.6	
101	Telluride Misfit Layer Compounds: [(PbTe) _{1.17}] _m (TiTe ₂) _n . <i>Angewandte Chemie</i> , 2014 , 126, 5778-5781	3.6	7
100	Experimental and theoretical investigation of the new, metastable compound Cr ₃ Sb. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2014 , 229, 505-515	1	5
99	Synthesis and characterization of turbostratically disordered (BiSe) _{1.15} TiSe ₂ . <i>Semiconductor Science and Technology</i> , 2014 , 29, 064004	1.8	24
98	Synthesis, structure, and thermal conductivity of [(SnSe) _{1 + y}] _n [MoSe ₂] _n compounds. <i>Semiconductor Science and Technology</i> , 2014 , 29, 124007	1.8	10
97	Structural influence on transport properties in [(PbSe) _{1.00}] _m (MoSe ₂) _n misfit layered compounds. <i>Semiconductor Science and Technology</i> , 2014 , 29, 064007	1.8	3
96	Ferrecrystals: non-epitaxial layered intergrowths. <i>Semiconductor Science and Technology</i> , 2014 , 29, 064012.8	1.8	48
95	Characterization of Nonstoichiometric Ti _{1+x} Se ₂ Prepared by the Method of Modulated Elemental Reactants. <i>Journal of Electronic Materials</i> , 2013 , 42, 1647-1651	1.9	4
94	Local structure and defect chemistry of [(SnSe) _{1.15}] _m (TaSe ₂) ferrecrystals [A new type of layered intergrowth compound. <i>Journal of Alloys and Compounds</i> , 2013 , 579, 507-515	5.7	14
93	Avoiding Binary Compounds as Reaction Intermediates in Solid State Reactions. <i>Chemistry of Materials</i> , 2013 , 25, 3996-4002	9.6	22
92	Functional Ultrathin Films and Nanolaminates from Aqueous Solutions. <i>Chemistry of Materials</i> , 2013 , 25, 210-214	9.6	25

91	Size-dependent structural distortions in one-dimensional nanostructures. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 1982-5	16.4	26
90	Insights into the Self-Assembly of Ferecrystalline Compounds from Designed Amorphous Precursors. <i>Chemistry of Materials</i> , 2013 , 25, 1744-1750	9.6	24
89	Synthesis, Structure, and Properties of Turbostratically Disordered (PbSe) _{1.18} (TiSe ₂) ₂ . <i>Chemistry of Materials</i> , 2013 , 25, 2404-2409	9.6	45
88	Synthesis, structure and electrical properties of a new tin vanadium selenide. <i>Journal of Solid State Chemistry</i> , 2013 , 202, 128-133	3.3	39
87	Designed synthesis, structure, and properties of a family of ferecrystalline compounds [(PbSe) _{1.00}] _m (MoSe ₂) _n . <i>Journal of the American Chemical Society</i> , 2013 , 135, 11055-62	16.4	39
86	Size-Dependent Structural Distortions in One-Dimensional Nanostructures. <i>Angewandte Chemie</i> , 2013 , 125, 2036-2039	3.6	8
85	Steuerung grüninduzierter Phasenumwandlungen durch chemisch konzipierte Nanolamine. <i>Angewandte Chemie</i> , 2013 , 125, 13452-13456	3.6	4
84	Controlling size-induced phase transformations using chemically designed nanolaminates. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 13211-4	16.4	32
83	Structural and electrical properties of (PbSe) ₁ 16TiSe ₂ . <i>Emerging Materials Research</i> , 2012 , 1, 292-298	1.4	20
82	Structure of Turbostratically Disordered Misfit Layer Compounds [(PbSe) _{0.99}] ₁ [WSe ₂] ₁ , [(PbSe) _{1.00}] ₁ [MoSe ₂] ₁ , and [(SnSe) _{1.03}] ₁ [MoSe ₂] ₁ . <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2012 , 638, 2632-2639	1.3	23
81	Synthesis of [(SnSe) _{1.15}] _m (TaSe ₂) _n Ferecrystals: Structurally Tunable Metallic Compounds. <i>Chemistry of Materials</i> , 2012 , 24, 4594-4599	9.6	53
80	Methods of Electron Crystallography as Tools for Materials Analysis. <i>Solid State Phenomena</i> , 2012 , 186, 1-6	0.4	1
79	New Layered Intergrowths in the Sn-Mo-Se System. <i>Journal of Electronic Materials</i> , 2012 , 41, 1476-1480	1.9	26
78	New Compounds Consisting of Turbostratic Intergrowths: Ultra-low Thermal Conductivities and Tunable Electric Properties. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1329, 1		2
77	Probing the Effects of Alloying, Grain Size, and Turbostratic Disorder on Thermal Conductivity. <i>Science of Advanced Materials</i> , 2011 , 3, 639-645	2.3	18
76	Nucleation and growth kinetics of co-deposited copper and selenium precursors to form metastable copper selenides. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 9631-9637	5.7	11
75	Structural investigations of ferecrystals [(SnSe) _{1+x}] _m [TSe ₂] _n (T = Mo, Ta) by means of transmission electron microscopy 2011 ,		1
74	Synthesis of four new members of the (PbSe) _{1.16} (TiSe ₂) _n (n = 1, 2, 3, and 4) Family of ferecrystals 2011 ,		2

73	Synthesis of new ferecrystals (SnSe) _y (TSe ₂) where T = V and Ta 2011 ,		2
72	Influence of selenium vapor postannealing on the electrical transport properties of PbSe/WSe ₂ nanolaminates. <i>Journal of Materials Research</i> , 2011 , 26, 1866-1871	2.5	17
71	Effective atomic layer deposition procedure for Al-dopant distribution in ZnO thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2010 , 28, 1111-1114	2.9	25
70	In-plane thermal and thermoelectric properties of misfit-layered [(PbSe) _{0.99}] _x (WSe ₂) _x superlattice thin films. <i>Applied Physics Letters</i> , 2010 , 96, 181908	3.4	36
69	Rational Synthesis and Characterization of a New Family of Low Thermal Conductivity Misfit Layer Compounds [(PbSe) _{0.99}] _m (WSe ₂) _n <i>Chemistry of Materials</i> , 2010 , 22, 1002-1009	9.6	65
68	Synthesis and Properties of Turbostratically Disordered, Ultrathin WSe ₂ Films. <i>Chemistry of Materials</i> , 2010 , 22, 2750-2756	9.6	28
67	Vapor Annealing as a Post-Processing Technique to Control Carrier Concentrations of Bi ₂ Te ₃ Thin Films. <i>Journal of Electronic Materials</i> , 2010 , 39, 1981-1986	1.9	20
66	Synthesis and Electronic Properties of the Misfit Layer Compound [(PbSe) _{1.00}] ₁ [MoSe ₂] ₁ . <i>Journal of Electronic Materials</i> , 2010 , 39, 1476-1481	1.9	15
65	X-Ray Characterization of Low-Thermal-Conductivity Thin-Film Materials. <i>Journal of Electronic Materials</i> , 2009 , 38, 1402-1406	1.9	6
64	Lower limit to the lattice thermal conductivity of nanostructured Bi ₂ Te ₃ -based materials. <i>Journal of Applied Physics</i> , 2009 , 106, 073503	2.5	78
63	Structure of layered WSe ₂ thin films with ultralow thermal conductivity. <i>Journal of Materials Research</i> , 2008 , 23, 1064-1067	2.5	13
62	Low thermal conductivity in nanoscale layered materials synthesized by the method of modulated elemental reactants. <i>Journal of Applied Physics</i> , 2008 , 104, 033533	2.5	72
61	The synthesis and characterization of new [(BiSe) _{1.10}] _m [NbSe ₂] _n , [(PbSe) _{1.10}] _m [NbSe ₂] _n , [(CeSe) _{1.14}] _m [NbSe ₂] _n and [(PbSe) _{1.12}] _m [TaSe ₂] _n misfit layered compounds. <i>Journal of Solid State Chemistry</i> , 2008 , 181, 1701-1706	3.3	59
60	Determination of the composition of Ultra-thin Ni-Si films on Si: constrained modeling of electron probe microanalysis and x-ray reflectivity data. <i>X-Ray Spectrometry</i> , 2008 , 37, 608-614	0.9	58
59	Designed Synthesis of Families of Misfit-Layered Compounds. <i>European Journal of Inorganic Chemistry</i> , 2008 , 2008, 2382-2385	2.3	29
58	Synthesis and Properties of C _x Co ₄ Ge ₆ Se ₆ . <i>Chemistry of Materials</i> , 2007 , 19, 6615-6620	9.6	5
57	In-plane thermal conductivity of disordered layered WSe ₂ and (W) _x (WSe ₂) _y superlattice films. <i>Applied Physics Letters</i> , 2007 , 91, 171912	3.4	64
56	Ultralow thermal conductivity in disordered, layered WSe ₂ crystals. <i>Science</i> , 2007 , 315, 351-3	33.3	646

55	Synthesis of [(VSe ₂) _n] _{1.06} [(TaSe ₂) _n] Superlattices Using a Hybrid Approach: Self-Assembly of Amorphous Nanostructured Reactants. <i>Advanced Materials</i> , 2006 , 18, 118-122	24	7
54	Studies of the Coefficient of Thermal Expansion of Low-k ILD Materials by X-Ray Reflectivity. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 914, 1		3
53	The synthesis of [(Bi ₂ Te ₃) _x (TiTe ₂) _y] _{1.36} superlattices from modulated elemental reactants. <i>Journal of the American Chemical Society</i> , 2005 , 127, 7843-8	16.4	19
52	Preparation of [(Bi ₂ Te ₃) _x (HfTe ₂) _y] Superlattices. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 886, 1		
51	Design and synthesis of [(Bi ₂ Te ₃) _x (TiTe ₂) _y] superlattices. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 5296-9	16.4	29
50	Effects of Composition and Annealing on the Electrical Properties of CoSb ₃ . <i>Chemistry of Materials</i> , 2003 , 15, 3847-3851	9.6	30
49	Low-Temperature Preparation of High-Temperature Nickel Germanides Using Multilayer Reactants. <i>Chemistry of Materials</i> , 2003 , 15, 4200-4204	9.6	15
48	Suppression of binary nucleation in amorphous La-Fe-Sb mixtures. <i>Journal of the American Chemical Society</i> , 2003 , 125, 3589-92	16.4	6
47	The Synthesis of Ce-Filled CoSD ₃ and Characterization of its Magnetic and Structural Properties. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 793, 56		0
46	Synthesis of crystalline skutterudite superlattices using the modulated elemental reactant method. <i>Journal of the American Chemical Society</i> , 2003 , 125, 10335-41	16.4	15
45	Turbostratic Disorder in [(Bi ₂ Te ₃) _x (TiTe ₂) _y] Superlattices. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 793, 112		
44	Length-scale dependent variation of the first nucleated phase in nickel/bilicon multilayers. <i>Journal of Applied Physics</i> , 2003 , 94, 1252-1257	2.5	5
43	Selective Preparation of Nickel Silicides and Germanides Using Elemental Multilayers as Reactive Precursors. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 755, 1		
42	Composition dependence of the nucleation energy of iron antimonides from modulated elemental reactants. <i>Journal of the American Chemical Society</i> , 2001 , 123, 1645-9	16.4	27
41	Low-Temperature Synthesis of TiC, Mo ₂ C, and W ₂ C from Modulated Elemental Reactants. <i>Chemistry of Materials</i> , 2001 , 13, 3876-3881	9.6	8
40	Synthesis and Physical Properties of Skutterudite Superlattices. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 626, 231		
39	Development and Implementation of a New Industrial Internship Program in Polymer Synthesis and Processing. <i>The Chemical Educator</i> , 2000 , 5, 92-95		1
38	Bulk Synthesis of Completely and Partially Sn filled CoSb ₃ Using the Multilayer Repeat Method. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 626, 1021		0

37	Variations in the Conductive and Superconductive Properties of $\{[\text{TiSe}_2][\text{NbSe}_2]_m\}_n$ Superlattices as a Function of Superlattice Structure. <i>Chemistry of Materials</i> , 2000 , 12, 2894-2901	9.6	12
36	The Synthesis of Metastable Skutterudites and Crystalline Superlattices. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 626, 111		2
35	The Use of Ternary Cations to Control Nucleation: Avoiding Binary Compounds as Reaction Intermediates. <i>Journal of the American Chemical Society</i> , 1999 , 121, 3142-3149	16.4	14
34	Controlled synthesis of new compounds using modulated elemental reactants. <i>Current Opinion in Solid State and Materials Science</i> , 1998 , 3, 159-167	12	61
33	Variation of the Nucleation Energy of Molybdenum Silicides as a Function of the Composition of an Amorphous Precursor. <i>Journal of the American Chemical Society</i> , 1998 , 120, 5226-5232	16.4	20
32	Synthesis of Metastable Post-Transition-Metal Iron Antimony Skutterudites Using the Multilayer Precursor Method. <i>Chemistry of Materials</i> , 1998 , 10, 1096-1101	9.6	50
31	The Synthesis of Metastable Skutterudites Using Superlattice Reactants. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 545, 37		3
30	Synthesis of New Thermoelectrics Using Modulated Elemental Reactants. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 478, 211		0
29	The Selective Synthesis of Molybdenum Silicides from Modulated Elemental Reactants. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 481, 569		
28	Rational Synthesis of Metastable Skutterudite Compounds Using Multilayer Precursors. <i>Journal of the American Chemical Society</i> , 1997 , 119, 2665-2668	16.4	73
27	Systematic Study of New Rare Earth Element-Iron-Antimony Skutterudites Synthesized Using Multilayer Precursors. <i>Inorganic Chemistry</i> , 1997 , 36, 4270-4274	5.1	42
26	Controlling Solid-State Reaction Pathways: Composition Dependence in the Nucleation Energy of InSe. <i>Journal of the American Chemical Society</i> , 1996 , 118, 2422-2426	16.4	25
25	Synthesis of Designed W_mSe_2 Heterostructures from Superlattice Reactants. <i>Chemistry of Materials</i> , 1996 , 8, 1853-1857	9.6	10
24	Control of Reaction Pathway and the Nanostructure of Final Products through the Design of Modulated Elemental Reactants. <i>Chemistry of Materials</i> , 1996 , 8, 1625-1635	9.6	44
23	Designed Synthesis of Solid State Structural Isomers from Modulated Reactants. <i>Journal of the American Chemical Society</i> , 1996 , 118, 9117-9122	16.4	22
22	The Synthesis and Superconducting Behavior of Crystalline Superlattices: $(\text{TiSe}_2)_m(\text{NbSe}_2)_n$. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 441, 609		
21	The Preparation of Kinetically Stable Crystalline Compounds from Modulated Elemental Reactants. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 453, 685		
20	Low Temperature Synthesis of $\text{MO}_2\text{C}/\text{W}_2\text{C}$ Superlattices via Ultra-Thin Modulated Reactants. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 434, 75		2

- 19 Scanning Transmission X-Ray Microscopy Study of TiSe₂/NbSe₂ Superlattices. *Materials Research Society Symposia Proceedings*, **1996**, 441, 603
- 18 Kontrollierte Synthese von [TiSe₂]_m[NbSe₂]_n-Berstrukturen aus modulierten Reaktanten. *Angewandte Chemie*, **1996**, 108, 2805-2809 3.6 5
- 17 Multilayer Precursor Synthesis of New Copper-Tungsten Selenides. *Materials Research Society Symposia Proceedings*, **1995**, 382, 51
- 16 The Preparation of Crystalline NbSe₂/TiSe₂ Superlattices from Modulated Elemental Reactants. *Materials Research Society Symposia Proceedings*, **1995**, 382, 71
- 15 Electrical properties of a new amorphous molybdenum-selenium semiconducting compound produced by the annealing of ultrathin multilayer composites. *Journal of Applied Physics*, **1994**, 75, 2294-2296 2.5 1
- 14 Use of Superlattice Structure To Control Reaction Mechanism: Kinetics and Energetics of Nb₅Se₄ Formation. *Journal of the American Chemical Society*, **1994**, 116, 9136-9140 16.4 30
- 13 The Use of Superlattice Reactants in the Synthesis of Ternary CU-NB-SE Compounds. *Materials Research Society Symposia Proceedings*, **1994**, 346, 75
- 12 Deposition system for the synthesis of modulated, ultrathin-film composites. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1993**, 11, 3014-3019 2.9 74
- 11 Determination of atomic density profiles in synthetic multilayers by anomalous x-ray diffraction. *Applied Physics Letters*, **1993**, 62, 1771-1773 3.4 1
- 10 Effect of structural incoherence on the low-angle diffraction pattern of synthetic multilayer materials. *Journal of Applied Physics*, **1993**, 74, 905-912 2.5 9
- 9 Distinguishing Between Coherent Interdiffusion and Incoherent Roughness in Synthetic Multilayers Using X-Ray Diffraction. *Materials Research Society Symposia Proceedings*, **1992**, 280, 241 1
- 8 Low-temperature reaction of buried metal-silicon interfaces: the evolution of interfacial structure. *Chemistry of Materials*, **1992**, 4, 473-478 9.6 24
- 7 Controlling solid-state reaction mechanisms using diffusion length in ultrathin-film superlattice composites. *Journal of the American Chemical Society*, **1992**, 114, 4639-4644 16.4 72
- 6 Synthesis via Superlattice Reactants. *ACS Symposium Series*, **1992**, 355-368 0.4 3
- 5 The Control of Interfacial Reactions Via Length Scales of Ultrathin-Film Modulated Composites. *Materials Research Society Symposia Proceedings*, **1991**, 238, 629
- 4 Using Ultrathin-Film, Modulated Composites to Control the Reaction Mechanism of Ternary Compound Formation. *Materials Research Society Symposia Proceedings*, **1991**, 238, 665 1
- 3 The Evolution of Titanium-Silicon Interfaces as Monitored by X-Ray Diffraction. *Materials Research Society Symposia Proceedings*, **1991**, 238, 581 5
- 2 New synthetic approach to extended solids: selective synthesis of iron silicides via the amorphous state. *Journal of the American Chemical Society*, **1991**, 113, 3398-3403 16.4 75

1 Challenges in synthesis of heterostructures. *Journal of Materials Chemistry C*,

7.1 ○